TWIN PEAKS: A THEORETICAL ANALYSIS

ANDREW SCHMULOW¹

Advocate of the High Court of South Africa,
Visiting Researcher, Oliver Schreiner School of Law,
University of the Witwatersrand, Johannesburg and
Principal, Clarity Prudential Regulatory Consulting Pty Ltd.

I ABSTRACT

This paper provides a theoretical analysis of the Twin Peaks method of financial system regulation, with particular reference to the Australian iteration of the model. This includes a description of how Twin Peaks functions, its historical development, and its strengths and weaknesses. An analysis is also provided of an important bifurcation from the Australian model, as it as has been emulated elsewhere in the world, namely the jurisdictional location of the bank regulator.

IIINTRODUCTION

This article presents a theoretical analysis of the 'Twin Peaks' model of financial system regulation², with particular reference to the Australian iteration.

The purported benefits of this research are two-fold: first, in the aftermath of the global financial crisis (hereinafter 'GFC'), any

¹ BA Honours LLB (Witwatersrand) PhD (Melbourne).

² Originally proposed by Taylor in Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, no. 20, Centre for the Study of Financial Innovation, December, 1995.

model of financial system regulation that has the potential to create a greater degree of financial system stability is worth investigating.³ Secondly, an understanding of the strengths and weaknesses of the Twin Peaks model may be of benefit to academics and policy-makers alike.

Of the four models currently in use internationally, 'Twin Peaks' is widely regarded as the best suited to this task⁴.

This model has now been held up as the most effective model to address the flaws in unregulated or thinly regulated markets where the most problematic issues arose in the GFC.⁵

The Australia iteration of Twin Peaks serves as the touch-stone for this research, because Australia was first to adopt Twin Peaks, has the longest experience in operating this model, has recently subjected the model to a rigorous independent review (the Financial System Inquiry⁶), and in other countries where Twin Peaks is being adopted, it is the Australian model which is being emulated. The latest example

_

³ For more on the benefits of financial system stability, see: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", Paper presented at the World Bank seminar *Aligning Supervisory Structures with Country Needs*, Washington, DC, series editor: The World Bank, 6th and 7th June 2006, p 5.

⁴ John C. Coffee, Jr. & Hillary A. Sale, "Redesigning the SEC: Does the Treasury have a better idea?", *Virginia Law Review*, Vol. 95 (June, 2009), p 774. Alex Holevas, "Twin Peaks: The envy of the world", 'News', *Wealth Professional*, 22 February, 2012. See also John Manley, "Dutch regulator says "Twin Peaks" supervision best", 'Financial Regulatory Forum', *Reuters*, US ed., 9 October, 2009; International Monetary Fund, *Financial Sector Supervision: The Twin Peaks Model - Technical Note*, in 'Financial Sector Assessment Program Update - Kingdom of The Netherlands-Netherlands, IMF Country Report', no. 11/208, International Monetary Fund (IMF), June/July, 2011, p 12ff, for IMF analysis of the model's strengths.

⁵ Financial Markets Authority (FMA), "Presentation by Sean Hughes to the New Zealand Capital Markets Forum", 'News, Speeches', 17 March, 2011.

⁶ Financial System Inquiry, *Financial System Inquiry Final Report*, Commonwealth Government of Australia, November, 2014.

of which is the adoption of the Australian model by the Republic of South Africa.⁷

As a regulatory structure, it is the envy of many in other countries, and more recent regulatory architecture reforms in other countries are often based on what is described as the Australian 'Twin Peaks' approach8

Moreover, Australia, and in particular its regulatory regime, fared better than most other countries during the GFC.⁹ Consequently a clear and balanced account of the strengths and weaknesses inherent in Twin Peaks, it is hoped, will facilitate debate on, and understanding of, the model.

The article commences with a description of Twin Peaks, followed by an historical account of the conditions in the United Kingdom that gave rise to the original proposal¹⁰.

Next, the article examines the deficiencies of Twin Peaks. This is followed by an analysis of an important variation in the model, as it exists in various countries, namely the jurisdictional location of the bank regulator, and the implications thereof.

.

⁷ Republic of South Africa National Treasury, *A safer financial sector to serve South Africa better*, in 'National Treasury Policy Document', National Treasury, Republic of South Africa, 23 February, 2011; Financial Regulatory Reform Steering Committee, *Implementing a twin peaks model of financial regulation in South Africa*, Financial Services Board, 1 February, 2013; Republic of South Africa National Treasury, "Implementing Twin Peaks Regulation in South Africa", *Media Statement*, (1 February, 2013), (accessed: 19 December, 2014), published electronically; A. J. Godwin & A.D. Schmulow, "The Financial Sector Regulation Bill In South Africa: Lessons From Australia", *South African Law Journal* (forthcoming, 2015); *Financial Sector Regulation Bill*, 11 December, 2013, (Republic of South Africa).

⁸ Alan Erskine, *Regulating the Australian Financial System*, in 'Funding Australia's Future', Australian Centre for Financial Studies, July, 2014, p 43.

⁹ Jennifer G. Hill, *Why Did Australia Fare So Well in the Global Financial Crisis?*, in 'The Regulatory Aftermath Of The Global Financial Crisis, in Sydney Law School Research Paper', no. 12/35, 20 May, 2012, p 16 ff.

¹⁰ Michael W. Taylor, December, 1995.

Finally, the article presents concluding observations.

III WHAT IS TWIN PEAKS?

(a) A definition

A Twin Peaks regulatory model comprises two peak regulators: one, the objective of which is financial system stability; and a second, the objective of which is market conduct and consumer protection. ¹¹ In Australia these are the Australian Prudential Regulation Authority (APRA), and the Australian Securities and Investments Commission (ASIC) respectively. The title is somewhat of a misnomer, in that the National Central Bank (NCB), which in Australia is the Reserve Bank of Australia (RBA), has responsibilities as the Lender of Last Resort (LLR) ¹², and overall responsibility for financial stability. ¹³ Consequently it may be more correct to call the Australian model of Triple Peak system.

The underlying paradigm of Twin Peaks is known as 'regulation by objective', 14 that is to say regulation the purpose of

¹¹ Working Group on Financial Supervision, *The Structure of Financial Supervision*. *Approaches and Challenges in a Global Marketplace*, in 'Special Report', Group of Thirty, Consultative Group on International Economic and Monetary Affairs, Inc., 2008, p 24. For a complete analysis of the four approaches to financial regulation, see also: David T. Llewellyn, op cit. For a more complete exposition of what is involved with financial system regulation, and conduct of business and consumer protection, see: ibid, p 6.

¹² Glenn Stevens, "Liquidity and the Lender of Last Resort", in Speeches, published by Reserve Bank of Australia, 15 April 2008, accessed: 24 September, 2015.

¹³ Reserve Bank of Australia, "*Role of the Reserve Bank in Maintaining Financial Stability*", in *Financial Stability*, published by Reserve Bank of Australia, 2001-2015, accessed: 24 September, 2015.

¹⁴ Gregg D. Killoren, "Comparative Analysis of Non-U.S. Bank Regulatory Reform and Banking Structure", *Law & Business*, edited by CCH Incorporated, in 'Banking & Finance', 2009, p 10. See also: Paulson, Jr., Henry M., Robert K. Steel, David G. Nason, Kelly Ayers, Heather Etner, John Foley III, Gerry Hughes, Timothy Hunt,

which is to '[achieve] particular and concrete outcomes' 15. This paradigm enjoys a number of advantages. These include:

- regulators can be more effective, with each having clear objectives (outcomes) that do not overlap;
- regulators can, as a result, be more accountable and more focused¹⁶ on achieving those outcomes;
- it creates checks and balances between agencies, and their objectives¹⁷;
- it allows each regulator to create its own culture that best suits its objectives; and
- it allows each regulator to acquire expertise specifically required to meet its objectives.¹⁸

(b) A brief critique of the Australian regulatory philosophy In Australia, the bank regulator, APRA, uses as risk-based model¹⁹ to regulate the financial system.²⁰

Kristen Jaconi, Charles Klingman, C. Christopher Ledoux, Peter Nickoloff, Jeremiah Norton, Philip Quinn, Heidilynne Schultheiss, Michael Scott, Jeffrey Stoltzfoos, Mario Ugoletti & Roy Woodall, *The Department of The Treasury Blueprint For A Modernized Financial Regulatory Structure*, The Department of The Treasury, March, 2008.

¹⁵ Bryane Michael, Say Hak Goo & Dariusz Wojcik, "Does Objectives-Based Financial Regulation Imply a Rethink of Legislatively Mandated Economic Regulation? The Case of Hong Kong and Twin Peaks Financial Regulation", *Social Science Research Network* (12 November, 2014), p 1/4ff.

¹⁹ Julia Black, "OFR: the historical context", Chap. 2, in *Outcomes-Focused Regulation, A Practical Guide*, edited by Andrew Hopper QC & Gregory Treverton-

¹⁶ See also: David T. Llewellyn, op cit, p 26.

¹⁷ Richard K. Abrams & Michael W. Taylor, *Issues in the Unification of Financial Sector Supervision*, in 'IMF Working Paper', no. WP/00/213, International Monetary Fund, December, 2000, p 17.

¹⁸ C. Goodhart, P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, "The institutional structure of financial regulation", Chap. 8, in *Financial Regulation: Why, How and Where Now?*, in 'Business & Economics', 2013, p 156/7.

Risk-based prudential regulation focuses on activities that pose the greatest risk to the regulators' statutory obligations, as well as other, key goals. ²¹ This approach has been adopted in the UK, the Netherlands, Canada, the United States, Hong Kong, Ireland, is recommended by the 2012 standards of the OECD's Financial Action Task Force, and is proposed for adoption by the Joint Committee of European Supervisory Authorities. ²² It is the method preferred by the World Bank, the IMF and the Basel Committee. ²³

As such, [this risk-based] approach is predicated on outcomes and thus has a natural affinity to [Outcomes Focused Regulation]: where conduct breaches a rule but does not have a substantive impact on, for example, consumer protection, the regulator will not act, or at least will not treat the issue as a matter of priority... a focus on risks not rules. ²⁴

Risk-based supervision is now seen as the hallmark of good regulation at the global level. ... IOSCO ... recommends to supervisors that they take a 'risk-based approach' [25]. The revised Basel Core Principles for Banking Supervision issued in 2012 require supervisors to adopt effective risk-based

Jones QC, in 'Legal Handbooks', series editor: The Law Society, 2011, p 9. For a history of risk-based financial regulation, see: Julia Black, "Regulatory Styles and Supervisory Strategies", Chap. 8, in *The Oxford Handbook of Financial Regulation*, edited by Niamh Moloney, Eilís Ferran & Jennifer Payne, August, 2015, p 261.

²⁰ For a history of the development of different philosophical approaches to regulation, see: Julia Black, "OFR: the historical context", op cit, p 8ff.

²¹ Ibid, p 9.

²² Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 261 ff.

²³ Ibid, p 265.

²⁴ Julia Black, "OFR: the historical context", op cit, p 9.

²⁵ See: The International Organization of Securities Commissions (IOSCO), Guidelines to Emerging Market Regulators Regarding Requirements for Minimum Entry and Continuous Risk-Based Supervision of Market Intermediaries, Final Report, The International Organization of Securities Commissions (IOSCO), December, 2009, p 9ff.

systems[26] ... The Financial Stability Board (FSB)'s recommendations[27] for the supervision of globally systemic financial institutions (GSIFIs) echoes the call for a risk-based approach.28

There are aspects of a risk-based approach that are to be commended.²⁹ Most notably there is an acknowledgement that in a rules-based paradigm of financial system regulation, regulators are often over-burdened by rules – rules which cannot be enforced in every firm, for every transaction, on every occasion. Selecting what to prioritise is, therefore, necessary and, according to Black³⁰ '[t]hese selections have always been made, but risk-based frameworks both render the fact of selection explicit and provide a framework of analysis in which they can be made.'

... pick important problems and fix them.31

Pragmatic as this approach may sound, it leads to several unintended consequences which, in turn, undermine the overall efficacy of this regulatory paradigm. These include:

• the assumption that regulators are smart enough to 'foresee the unforeseeable'.³² Put differently, there is an assumption

²⁶ See: Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision*, Bank for International Settlements, September, 2012, p 4, § 12.

²⁷ See: Financial Stability Board, *Increasing the Intensity and Effectiveness of SIFI Supervision*, in 'Progress Report to the G20 Ministers and Governors', Financial Stability Board, 1 November, 2012, p 7.

²⁸ Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 264.

²⁹ See: Bruce Carruthers, ""Objectives Based Regulation:" buzzword du jour?", *Out of the Crooked Timber of Humanity, No Straight Thing Was Ever Made*, Blog, 2 April, 2008, [Accessed: 22 July, 2015].

³⁰ Julia Black, "OFR: the historical context", op cit, p 9.

³¹ Malcolm K. Sparrow, *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance*, series edited by Council for Excellence in Government, 2000, p 9.

that regulators will know from where the next financial crisis will come and, consequently, correctly identify which types of risks and what forms of conduct to prioritise. But, as was seen during the GFC, this assumption is not always correct:

... indeed with respect to the global financial crisis more broadly, assumptions that had been made as to how markets would react in particular scenarios proved significantly misplaced, with risk events that had been anticipated to occur once in several lives of the universe were occurring every day.³³

- the model itself may incorrectly prioritise which risks to avoid, as distinct from a failure to identify the risk at all, and this was evident from the conclusions reached in the aftermath of the failure of HIH³⁴;
- there exists the potential for process-induced myopia. That is
 to say, a focus on the process upon which risk-based
 regulation relies, without paying sufficient attention to issues
 that are outside the scope of what is covered by the process.

If little scope is given in practice for those engaged in working within the framework to work outside it where they see the need, the framework will always be prey to events that those working within it were not given the room to say they had seen.³⁵

8

³² What Black refers to as 'blind spots'. Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, Vol. 28, no. 1 (January, 2006), p 23.

³³ Julia Black, *Learning from Regulatory Disasters*, in 'LSE Law, Society and Economy Working Papers', no. 24/2014, London School of Economics and Political Science, 2014, p 14.

³⁴ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 23.

³⁵ Ibid, p 23.

Anecdotal evidence suggests that criticism of the APRA, and challenges to the organisation's prevailing orthodoxies are in danger of being met with hostility³⁶;

- there is, as a consequence, a lack of predictive certainty for the regulatees, as to what forms of conduct will be sanctioned and what forms not;
- this in turn encourages a capricious regulatory environment, particularly where different individuals in the regulators take different approaches, or have different priorities;
- an unpredictable regulatory environment, brought about by changes in the prevailing political climate³⁷;
- the potential for regulatees to encourage regulatory forbearance by either arguing that the proposed sanctions pose a greater risk to the regulated entity and therefore the entire financial system, than the misconduct itself³⁸; or
- the potential for regulatees to encourage forbearance by arguing that similar conduct was expressly authorised by the regulator in the past, (constituting, as it did then, an acceptable risk);
- what Llewellyn³⁹ refers to as the 'Christmas tree effect'⁴⁰, in which the regulator's remit steadily increases as perceptions

-

³⁶ This anecdotal evidence is based upon my own tenure at APRA in late 2013, and informal discussions with colleagues.

³⁷ See: Julia Black, "OFR: the historical context", op cit, p 10. See also: Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 24 ff, where she asserts that politically, a falling bank, acceptable to the regulator, may be unacceptable to those in the community who stand to lose their deposits. To this can be added political pressure from bank owners for the bank to be rescued, despite the regulator's willingness to allow the bank to fail.

³⁸ Caroline Binham & Jonathan Guthrie, "FCA: On the wrong side of the argument?", "The Big Read, Comment', *Financial Times* 2 July, 2015, 7:29 pm.

³⁹ David T. Llewellyn, op cit, p 23.

of risk increase - with a wide array of ancillary functions, both to the point of over-burden and to the point of distraction from what should be core activities:

perceptions of risk are exactly that: perceptions. While APRA
has attempted to create a methodology around the assessment
of risk, and to lessen the impact upon the assessment of risk of
individual perceptions, risk assessment is not and never will
be as "rational" [or] as consistent in substance as its form
suggests.'41

Both these approaches - outcomes-based regulation and risk-based regulation – have as their over-arching paradigm principles-based regulation, in that neither focus on systems and processes, but on outcomes. Principles-based regulation, as an over-arching paradigm too, has its deficiencies. A principles based model sets-forth broad principles to be followed, as opposed to prescriptive, inflexible rules governing specific activities, and requiring minimum standards of conduct.

...means moving away from reliance on detailed, prescriptive rules and relying more on high-level, broadly stated rules or principles to set the standards by which regulated firms must conduct business. The term 'principles' can be used simply to refer to general rules, or also to suggest that these rules are implicitly higher in the implicit or explicit hierarchy of norms than more detailed rules: they express the fundamental obligations that all should observe.⁴²

⁴⁰ Citing Michael Taylor & Alex Fleming, *Integrated Financial Supervision: Lessons from Northern European Experience*, in 'Policy Research Working Paper', no. 2223, The World Bank, September, 1999, p 13, § 2.24.

⁴¹ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 24.

⁴² Julia Black, *Principles Based Regulation: Risks, Challenges and Opportunities*, paper presented at the 'Presentation by Julia Black on Principles Based Regulation to be followed by A Conversation with the Regulators', Sydney Supreme Courthouse

So regulators, instead of focussing on prescribing the processes or actions that firms must take, should step back and define the outcomes that they require firms to achieve. Firms and their management will then be free to find the most efficient way of achieving the outcome required.⁴³

In 2008 the Australian Law Reform Commission Report into privacy put forth the following statement by Curtis to explain the advantages of a principles based regulatory regime:

By encouraging organisations to recognise the business advantages of good personal information handling practices and regulating their behaviour accordingly, government regulators can minimise regulatory intervention and red tape. ... our regulatory approach where a legislative framework is balanced by an emphasis on business privacy awareness and self-regulation. ... inculcate the values and objectives ... rather than just the superficial rules. ... organisations ... will understand the ideas behind the laws—the principles—and will not become as confused by detailed technology-specific regulations.⁴⁴

(Banco Court), Sydney, NSW, edited by The Discipline of Business Law, Faculty of Economics and Business, University of Sydney, Wednesday 28th March 2007, p 3. ⁴³ Ibid, p 5.

44 Curtis, quoted in Professor David Weisbrot (President), Professor Les (Commissioner in McCrimmon charge), Professor Rosalind Croucher (Commissioner), Justice Berna Collier (part-time Commissioner), Justice Robert French (part-time Commissioner), Justice Susan Kenny (part-time Commissioner) & Justice Susan Kiefel (part-time Commissioner), For Your Information: Australian Privacy Law and Practice (ALRC Report 108), in 'Publications', no. 108, Vol. 1, Part A, Chapter 4. 'Regulating Privacy', Australian Law Reform Commission, 12 August, 2008, § 4.16. See further: Australian Government, The Treasury, "Statement of Expectations — Australian Prudential Regulation Authority", series edited by Australian Government, The Treasury, in Statements of Expectations, published by Australian Government, The Treasury, Undated, accessed: 9 October, 2015, p 2.

These sentiments, expressed in respect of privacy regulations, have been expressed in similar vein to support the supposed advantages of a principles based regulatory regime, for the financial system.⁴⁵

There is, however, a difference between information privacy regulations and financial system regulations, and one so crucial that it undermines the supposed advantages of the principles based model: financial system regulations almost always contain an opportunity cost to the regulatee, in addition to the mere compliance cost.⁴⁶ Put differently, in the financial system the costs of full regulatory compliance are potentially significantly higher,⁴⁷ and the degree of convenience to the bank for non-compliance significantly greater.⁴⁸ In this regard it is questionable whether Black is correct when she asserts

⁴⁵ Julia Black, *Principles Based Regulation: Risks, Challenges and Opportunities*, op cit, p 2/7ff.

the distinction that such services are incomplete contracts, relational rather than transactional, see: David T. Llewellyn, "Trust and confidence in financial services: a strategic challenge", *Journal of Financial Regulation and Compliance*, Vol. 13, no. 4 (2005), p 334/339/340/341; Shyam Bhati, "An Analysis of the Financial Services Regulations of Australia", *International Review of Business Research Papers*, Vol. 4, no. 2 (March, 2008), p 14ff. Cf. David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 5, who argues that compliance has a cost, but not a price. As a result consumers will, he argues, regard regulation as a free good, and over demand it, thus creating an inexorable tendency towards over regulation. This view, however, fails to adequately account for instances where industry pressure has succeeded in rolling-back regulation. See: Arthur E. Wilmarth Jr., "Turning a Blind Eye: Why Washington Keeps Giving In to Wall Street", *University of Cincinnati Law Review*, Vol. 81, no. 4/4 (2013).

⁴⁷ For more on this from a perspective of risk methodology and game theory, and the so-called 'prisoner's dilemma', or what in economics is referred to as the 'tragedy of the commons', see: Patrick McConnell, *Systemic Operational Risk: Theory, Case Studies and Regulation*, 2015, p 404/5.

⁴⁸ See Steven L. Schwarcz, "Systemic Risk", *The Georgetown Law Journal*, Vol. 97, no. 1 (2008), p 206, quoted in Patrick McConnell, op cit, p 50/1.

that: '[r]egulatees have to take more responsibility for ensuring that they are achieving the right outcomes, not just going through the right processes ⁴⁹ ' as this does not adequately take account of the compulsions, inherent in financial regulation, for regulatees to constantly look for ways to lessen the impact of the regulations to which they ought to adhere; not just including, but especially in respect of outcomes.

Add to this the heady mixture created by a regulatory paradigm that is more one of managing conduct than enforcing discipline, ⁵⁰ located within an overall strategy that seeks, at least initially, to be co-operative and collegial as opposed to confrontational, ⁵¹ and seeks by negotiated settlement to define outcomes more general than specific, and it is no wonder that goals shift and outcomes become malleable.

A principles-based approach does not work with individuals who have no principles.⁵²

Indeed, one could argue that if it is outcomes that are set as benchmarks, as opposed to processes, 53 then all that is required in

⁵⁰ Julia Black, *Principles Based Regulation: Risks, Challenges and Opportunities*, op cit, p 19/20.

⁴⁹ Julia Black, "OFR: the historical context", op cit, p 11.

⁵¹ Ian MacNeil, "Enforcement and Sanctioning", Chap. 10, in *The Oxford Handbook of Financial Regulation*, edited by Niamh Moloney, Eilís Ferran & Jennifer Payne, in 'Part III, Delivering Outcomes and Regulatory Techniques', 1st ed., August, 2015, p. 285; A.D. Schmulow, *Approaches to Financial System Regulation: An International Comparative Survey*, in 'The Centre For International Finance and Regulation (CIFR) Research Working Paper Series', no. 053/2015 / Project No. E018, The Centre For International Finance and Regulation (CIFR), January, 2015, p. 21 ff.

⁵² Hector Sants, Chief Executive Officer, Financial Services Authority. Quoted in Larry Elliott & Jill Treanor, "Revealed: Bank of England disarray in the face of financial crisis", 'Economy', *The Guardian* 7 January, 2015.

⁵³ Professor David Weisbrot (President), Professor Les McCrimmon (Commissioner in charge), Professor Rosalind Croucher (Commissioner), Justice Berna Collier

order to encourage regulators to forebear, is to re-negotiate the outcomes. A clearer and more straightforward objective than renegotiating a myriad of complex processes.

A further important factor determining the efficacy of regulators is the political climate in which they operate⁵⁴. This will affect the robustness of enforcement, and it may extend to the vigour with which principles are first determined and later adjusted. The degree to which the United States' Congress is beholden to Wall Street,⁵⁵ and the pushback against the FSA⁵⁶ in the UK are instructive.

And fashions, even in regulation, change. In the UK, Antony Jenkins, the patron saint of conduct risk, has just been unceremoniously dumped as CEO of Barclays Bank, ostensibly for concentrating on managing the bank's toxic conduct rather than making profits. The conduct risk pendulum may already be

(part-time Commissioner), Justice Robert French (part-time Commissioner), Justice Susan Kenny (part-time Commissioner) & Justice Susan Kiefel (part-time Commissioner), 12 August, 2008, § 4.6.

⁵⁴ The very decision to regulate is political, and the form and extent thereof, ideological. Benedict Sheehy & Donald Feaver, "Designing Effective Regulation: A Normative Theory", *University of New South Wales Law Journal*, Vol. 38, no. 1 (1 January, 2015), p 394, and at 418: "Although the decision is ultimately made by a political body, such as the executive or legislature, the selection choice is frequently subverted at much earlier stages in the policy-making process. Ideology, political influence and even an adherence to intellectual fashion by advisers and experts all influence the decision."

⁵⁵ Arthur E. Wilmarth Jr., *University of Cincinnati Law Review*, op cit; L. Randall Wray, "Setting the Record Straight One More Time: BofA's Rebecca Mairone Fined \$1Million; BofA Must Pay \$1.3Billion", *New Economic Perspectives*, (2 August, 2014), (accessed: 26 June, 2015), published electronically; Edward Wyatt, "Promises Made, Then Broken, By Firms in S.E.C. Fraud Cases", 'Business Day', *New York Times*, New York ed. 8 November, 2011.

⁵⁶ Anonymous, "Britain's bank-basher-in-chief is toppled", 'Web-only article', *The Economist*, Britain ed. 17th July, 2015; Caroline Binham & Jonathan Guthrie, op cit; Tim Wallace, "FCA chief Martin Wheatley ousted by George Osborne", 'Finance, Banks and Finance', *The Telegraph* Friday, 17 July, 2015.

beginning to swing back and the current fashion for piousness may be fading.⁵⁷

At first glance, Wall Street's ability to block Dodd–Frank's implementation seems surprising. After all, public outrage over Wall Street's role in the global financial crisis impelled Congress to pass Dodd–Frank in 2010 despite the financial industry's intense opposition. Moreover, scandals at systemically important financial institutions (SIFIs) have continued to tarnish Wall Street's reputation since Dodd–Frank's enactment. However, as the general public's focus on the financial crisis has waned—due in large part to massive governmental support that saved Wall Street—the momentum for meaningful financial reform has faded.⁵⁸

A cogent and continuing example of the political power of regulatees over regulators is the manner in which major banks in Australia and elsewhere are permitted to determine their own internal risk ratings. Put differently, IRB⁵⁹ models, as they are known, permit the bank to determine whether it is complying with overall prudential principles. A model which gives rise to a dangerous conflict of interest,⁶⁰ and one that is now being dismantled.⁶¹

Discussed below is an analysis of practical failures experienced in Australia under the Twin Peaks regime.

⁵⁷ Pat McConnell, "ASIC's Fashion Faux-Pas", 'Business & Economy', *The Conversation*, 13 July, 2015 4.25pm AEST. See also: Kathleen C. Engel & Patricia A. McCoy, "Turning a Blind Eye: Wall Street Finance of Predatory Lending",

Fordham Law Review, Vol. 75, no. 4 (March, 2007), p 2040;

⁵⁸ Arthur E. Wilmarth Jr., *University of Cincinnati Law Review*, op cit, p 1283.

⁵⁹ Internal ratings-based.

⁶⁰ An example of what, according to Sheehy *et al*, is a form of 'internal incoherence'. Benedict Sheehy & Donald Feaver, *University of New South Wales Law Journal*, op cit, p 417.

⁶¹ David Henry & Emily Stephenson, "Fed may shun global risk rules banks spent billions to meet", 'Economy', *Reuters*, US ed. Wednesday, 4 June, 2014, 9:16pm EDT.

(c) Adoption

Twin peaks was introduced in Australia in 1998, in response to the recommendations of the Wallis Inquiry.⁶² The original proposal was not Australian, however. It was first suggested by an Englishman, Michael Taylor, in 1995⁶³, principally as a reaction to the 'blurring of the boundaries' phenomenon⁶⁴ in the financial services sector in the UK; an issue to which this paper will return.

⁶² The Report recommended the establishment of a Corporations and Financial Services Commission (CFSC), later ASIC, (Stan Wallis, Bill Beerworth, Professor Jeffrey Carmichael, Professor Ian Harper & Linda Nicholls, *Financial System Inquiry*, The Treasury, 31 March, 1997, p 235), and the creation of the Australian Prudential Regulation Commission (APRC), later APRA (ibid, p 298).

⁶³ Michael W. Taylor, December, 1995, and subsequently: Michael W. Taylor, *Peak Practice: How to reform the UK's regulatory system*, no. 23, Centre for the Study of Financial Innovation, October, 1996; Michael W. Taylor, *'Twin Peaks' Revisited... a second chance for regulatory reform*, no. 89, Centre for the Study of Financial Innovation, September, 2009; Michael W. Taylor, "The Road from "Twin Peaks" - and the Way Back", *Connecticut Insurance Law Journal*, Vol. 16, no. 1 (2009-2010); Michael Taylor, "Welcome to Twin Peaks", *Central Banking Journal*, Electronic Article (17 August, 2010); Michael W. Taylor, "Regulatory reform after the financial crisis - Twin Peaks Revisited", Oxford, UK, in 'Law and Finance Senior Practitioner Lectures', Wednesday 16 February 2011; Michael Taylor, "Regulatory reform after the financial crisis. *Twin Peaks* revisited", Chap. 1, in *Institutional Structure of Financial Regulation: Theories and International Experiences* edited by Robin Hui Huang & Dirk Schoenmaker, in 'Part I, Fundamental theories', series editor: Routledge Research in Finance and Banking Law, 1st ed., 2014.

⁶⁴ Henriëtte Prast & Iman van Lelyveld, *New Architectures in the Regulation and Supervision of Financial Markets and Institutions: The Netherlands*, in 'DNB Working Paper', no. 021/2004, De Nederlandsche Bank, 21 December, 2004, p 6/12ff/25; Eric J. Pan, "Structural Reform of Financial Regulation", *Transnational Law & Contemporary Problems*, Vol. 19, no. 3 (Winter, 2011), p 830; Clive Briaullt, "The rationale for a single national financial services regulator", *Financial Services Authority Occasional Paper*, no. 2 (1999), p 6/12/13/26; Heidi Mandanis Schooner & Michael Taylor, "United Kingdom and United States Reponses to the Regulatory

Since its introduction in Australia, the model has been adopted in a number of countries. These include the Netherlands, ⁶⁵ New Zealand, ⁶⁶ the United Kingdom, ⁶⁷ Switzerland, ⁶⁸ Qatar, ⁶⁹ and Spain. ⁷⁰

South Africa⁷¹ is in the process of adopting this method of financial regulation. France⁷² and Germany⁷³ use elements of it.

Challenges of Modern Financial Markets", *Texas International Law Journal*, Vol. 38, no. 2 (Spring, 2003), p 320ff.

⁶⁵ A.D Schmulow, January, 2015, p 33ff; Henriëtte Prast & Iman van Lelyveld, 21 December, 2004, p 2/14/15.

⁶⁶ Toby Fiennes & Cavan O'Connor-Close, "The evolution of prudential supervision in New Zealand", *Reserve Bank of New Zealand: Bulletin*, Vol. 75, no. 1 (March, 2012), p 5/10.

⁶⁷ See Financial Conduct Authority, "*About us*", series edited by Financial Conduct Authority, published by Financial Conduct Authority, 2014, accessed: 25 September, 2014 and Prudential Regulation Authority, "*About the Prudential Regulation Authority*", series edited by Bank of England, in *Prudential Regulation Authority*, published by Bank of England, 2014, accessed: 25 September, 2014.

⁶⁸ A.D Schmulow, January, 2015, p 35ff; Eddy Wymeersch, "The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors", *European Business Organization Law Review (EBOR)*, Vol. 8, no. 2 (June, 2007), 14.

⁶⁹ A.D Schmulow, January, 2015, p 36ff.

 $^{^{70}}$ Ibid, p 38ff.

⁷¹ National Treasury, Republic of South Africa, Financial Sector Regulation Bill, Comments Received on the First Draft Bill Published by National Treasury for Comments in December 2013 (Comment Period from 13 December 2013 - 07 March 2014), in 'Documents for Public Comments - 2nd Draft Financial Sector Regulation Bill', Vol. 1, National Treasury, Republic of South Africa, December, 2014; A.J. Godwin & A.D Schmulow, The Financial Sector Regulation Bill In South Africa: Lessons From Australia, in 'The Centre For International Finance and Regulation (CIFR) Research Working Paper Series', no. 052/2015 / Project No. E018, The Centre For International Finance and Regulation (CIFR), January, 2015.

⁷² A.D Schmulow, *Approaches to Financial System Regulation: An International Comparative Survey*, ibid no. 053/2015 / Project No. E018, p 10ff, C. Goodhart, P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, op cit, p 185ff.

⁷³ A.D Schmulow, January, 2015, p 14ff. C. Goodhart, P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, op cit, p 185ff.

(d) How it functions

The essence of Twin Peaks is a regulatory model which ascribes equal importance to, and equal but separate jurisdictional authority over, two core functions: one, the maintenance of financial system stability, and two, market conduct and consumer protection.⁷⁴ Crucially, the model eschews the concept of a lead regulator⁷⁵: each agency must single-mindedly fulfil its own remit.⁷⁶

This ideal - separate but equal regulators - each with its own bailiwick, has much to commend it. After all, it is easy enough to understand the importance of the system stability regulator as a defence against financial crises. In the aftermath of the GFC however, and the market misconduct and consumer abuse that gave rise to the subprime disaster, and then metastasized into a worldwide series of financial crises, there is left little doubt that for financial system stability, the market conduct objective is equally important.

...morphed the subprime crisis into a virulent global financial crisis.⁷⁷

have identified many billions of dollars of fraudulent loans originated by Countrywide[78] that were sold fraudulently to

⁷⁴ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 27.

⁷⁵ For a description of a 'Lead Regulator' model, see: C. Goodhart, P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, op cit, p 164; Gregg D. Killoren, op cit, p 9.

⁷⁶ Gregg D. Killoren, op cit, p 10, David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 27.

⁷⁷ Frederic S. Mishkin, *Over the Cliff: From the Subprime to the Global Financial Crisis*, in 'NBER Working Paper Series', no. 16609, National Bureau of Economic Research, December, 2010, p 4; Steve Denning, "Lest We Forget: Why We Had A Financial Crisis", *Forbes*, (22 November, 2011), published electronically.

⁷⁸ 'In 2006 Countrywide financed 20% of all mortgages in the United States, at a value of about 3.5% of United States GDP, a proportion greater than any other single mortgage lender.' Ray Martin, "Bank of America's great mortgage give-

Fannie and Freddie through false representations and warranties. ... 97% of the Countrywide loans reviewed by Ambac ... had false reps and warranties. Countrywide also engaged in widespread foreclosure fraud. ... examined by a truly independent body has found widespread fraud — in loan origination, loan sales, appraisals, and foreclosures. ... one financially sophisticated entity after another found widespread fraud by Countrywide in the entire gamut of its operations, the administration, the industry ... Countrywide made hundreds of thousands of fraudulent loans ... It fraudulently foreclosed on large numbers of loans. It victimized hundreds of thousands of people and hundreds of financial institutions, causing hundreds of billions of dollars of losses. It has defrauded more people, at a greater cost, than any entity in history ... The financial media treats Bank of America as if it were a legitimate bank rather than a "vector" spreading the mortgage fraud epidemic throughout much of the Western world.⁷⁹

away", series edited by CBS Money Watch, in CBS News, published by CBS Interactive Inc.. 9 May, 2012, 10:32 am, accessed: 26 September, 2015. Bank of America purchased the ailing sub-prime lender in January 2008, for US\$ 2.5 billion, in a deal that subsequently incurred losses for Bank of America in excess of US\$ 50 billion. Rick Rothacker, "The deal that cost Bank of America \$50 billion – and counting", 'News, Business, Banking', The Charlotte Observer, 16 August, 2014. Bank of America covered those losses with a US\$ 45 billion dollar, taxpayer-funded, bail-out from the Troubled Asset Relief Program (TARP). Pro Publica, Bailout Recipients, in 'Bailout Tracker, Tracking Every Dollar and Every Recipient', Pro Publica, 24 September, 2015.

⁷⁹ L. Randall Wray, op cit. See also: Edward Wyatt, op cit. For a full list of firms fined for financial malpractice and fraud related to the GFC, see: U.S. Securities and Exchange Commission, *SEC Enforcement Actions. Addressing Misconduct That Led To or Arose From the Financial Crisis*, U.S. Securities and Exchange Commission, 26 May, 2015.

(e) Separate but equal

The separation of the consumer protection function from the system stability function is the cornerstone and, supposedly, one of the principal advantages of a Twin Peaks system.⁸⁰

In theory, protection of retail consumers would not be subordinated to financial system stability. ⁸¹ Indeed, in theory, guarding consumers might in fact positively affect system stability by, *nipping in the bud*, malpractices that, while initially only detrimental to consumers, ultimately become systemic risks. ⁸² Examples of market misconduct giving rise to the GFC are, in this regard, instructive:

Neither predatory lending nor the selling of mortgages on false pretences caused the crisis. But they surely made it worse, both by helping to inflate the housing bubble and by creating a pool of assets guaranteed to turn into toxic waste once the bubble burst.⁸³

⁸⁰ Stan Wallis, Bill Beerworth, Professor Jeffrey Carmichael, Professor Ian Harper & Linda Nicholls, 31 March, 1997, in 'Overview, Introduction', p 29ff; Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 1; Michael W. Taylor, "Regulatory reform after the financial crisis - Twin Peaks Revisited", op cit, p 5ff; David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 16/27.

⁸¹ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 28.

⁸² See further: ibid, p 10, § 2.

⁸³ Paul Krugman, "Looters in Loafers", 'Opinion', *New York Times*, New York ed. 19 April, 2010. See also: Debra Cassens Weiss, "SEC Accuses Goldman Sachs of Selling Mortgage Investment Designed to Fail", *ABA Journal, Law News Now*, Securities Law, (9:58 am, 16 April, 2010), (accessed: 25 June, 2014), published electronically. Goldman Sachs was fined US\$ 3.15 billion by the Federal Housing Finance Agency for misstating the quality of investments sold to Fannie Mae and Freddie Mac. The 15th bank to settle such claims. Benjamin Snyder, "*Goldman Sachs in \$3.15 billion settlement with federal regulators*", series edited by Fortune, in *Finance*, published by Time, Inc., 22 August, 2014, 7:50 pm EDT, accessed: 26 September, 2015. At least one Goldman Sachs trader, Fabrice Tourre, has been held financially liable – not imprisoned however - for creating financial products

Whether in practice this equality between consumer protection and system stability eventuates is debatable. It is arguable that systemic instability, by virtue of its potential severity, will always attract a more vigorous response from regulators, than would consumer protection, and historically there is evidence of that not only in the United States,⁸⁴ but in the United Kingdom⁸⁵ and Australia as well.⁸⁶

(f) Conclusion

Ideally then a Twin Peaks model will give equal priority to financial system stability, through a separate bank prudential regulator, as it will market conduct and consumer protection, through a separate consumer protection and market conduct regulator. In theory then, Twin Peaks aims to safeguard consumers as vigorously as it does the stability of the financial system.

In theory, Twin Peaks is better suited to performing these functions than any of the other systems of financial system regulation

specifically designed, to fail, which he then bet against. Aaron Smith & James O'Toole, "'Fabulous Fab' held liable in Goldman fraud case", series edited by CNN Money, in News, published by Cable News Network, 1 August, 2013, 6:21 pm ET, accessed: 26 September, 2015.

⁸⁴ For the need to address past regulatory failures, see: Daniel K. Tarullo, "Good Compliance, Not Mere Compliance", Paper presented at the Federal Reserve Bank of New York Conference, "Reforming Culture and Behavior in the Financial Services Industry", New York, NY, series editor: Federal Reserve Bank of New York, 20 October 2014, p 9/10; Lawrence G. Baxter, "Capture Nuances in Financial Regulation", *Wake Forest Law Review*, Vol. 47, no. 3 (Fall, 2012), p 547.

⁸⁵ For proposals to address this phenomenon, see: HM Treasury, Bank of England & Financial Conduct Authority, *How fair and effective are the fixed income, foreign exchange and commodities markets? Consultation document*, Bank of England, October, 2014, p 4/21/22/48. The outcome of this review was not yet available at time of writing.

⁸⁶ See: V WEAKNESSES AS COMPARED TO OTHER MODELS (c) Australia's Twin Peaks failures: ASIC and the financial advice scandals.

currently employed elsewhere in the world.⁸⁷ It is potentially more cost effective, and makes a more optimal use of specialist staff. As a model, it is also more likely to give expression to the goal of regulatory competitive neutrality, through the avoidance of inconsistencies and opportunities for arbitrage.⁸⁸

Twin peaks achieves all this through better regulatory focus, independence between the two peaks, one-stop shopping for aggrieved consumers seeking relief, an avoidance of conflicts of interest between regulators too disparate, or internal conflicts of interest with regulators too few, greater jurisdictional certainty, an avoidance of issues falling between the gaps because of too many regulators, potentially greater capacity for foreseeing and avoiding crises, an avoidance of turf-wars, greater certainty for the regulatees, closer alignment with the Basel Core Principles and the G2089 and, last but

_

⁸⁷ Erlend W. Nier, Jacek Osiński, Luis I. Jácome & Pamela Madrid, *Institutional Models for Macroprudential Policy*, in 'IMF Staff Discussion Note', no. SDN/11/18, International Monetary Fund, 1 November, 2011, p 15/16. See also: De Nederlandsche Bank, "*IMF publishes its report on financial sector and supervision in the Netherlands*", in *News*, published by De Nederlandsche Bank, 22 June, 2011, accessed: 9 January, 2015; Michael Taylor, "Regulatory reform after the financial crisis. *Twin Peaks* revisited", op cit; Dirk Schoenmaker & Jeroen Kremers, "Financial stability and proper business conduct. Can supervisory structures help to achieve these objectives?", Chap. 2, ibid; Professor Jeffrey Carmichael, "Implementing Twin Peaks. Lessons from Australia", Chap. 5, ibid in 'Part II, International experiences'; Brooke Masters, "Focus on G20 vow to raise financial standards", 'Front Page', *The Financial Times*, Morning ed. 15 October, 2009 03:00 am; John Manley, op cit; Eric J. Pan, *Transnational Law & Contemporary Problems*, op cit, p 822, Michael W. Taylor, *Peak Practice: How to reform the UK's regulatory system*, October, 1996, p 7.

⁸⁸ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 19.

⁸⁹ Brooke Masters, op cit.

by no means least, its superior performance during the GFC in practice, in Australia⁹⁰.

In times of distress, Twin Peaks can, in theory, tolerate bank failure⁹¹, provided the bank is not of systemic importance.⁹²

However, Twin Peaks has its shortcomings and its deficiencies, including its potential to be overwhelmed by the failure of a systemically important bank precipitating financial contagion, the potential to be blindsided by unforeseeable circumstances, and regulatory forbearance as with ASIC and the financial advice scandals in Australia. Put differently, Twin Peaks' superiority in theory is not always borne out by practice.

These and other deficiencies will be explored in greater detail, below.

IV HISTORICAL DEVELOPMENT

(a) The UK

Prior to the advent of Twin Peaks, the UK's financial sector had so many different overseers for conduct and systemic issues that it was described as constituting an 'alphabet soup' 93 of regulators. Taylor argued that those arrangements led to conflicts of interest, 'confusion and damage'. 94

⁹⁰ John F. Laker, "APRA: The Global Financial Crisis And Beyond", Paper presented at the The Australian British Chamber of Commerce, Melbourne, 26 November 2009, pp 1/5.

⁹¹ Financial System Inquiry, November, 2014, pp 12/24.

⁹² Jeremy Cooper, "The integration of financial regulatory authorities—the Australian experience", Paper presented at the Comissão de Valores Mobiliários (Securities and Exchange Commission of Brazil), 30th Anniversary Conference 'Assessing the Present, Conceiving the Future', Rio de Janeiro, Brazil, 4-5 September 2006, p 5.

⁹³ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p. 7.

⁹⁴ Ibid, p 1/3.

Britain's system for regulating financial services, as was once said of its Empire, has been acquired in a fit of absence of mind.⁹⁵

The UK had a Byzantine system of disparate regulators, with each being assigned a jurisdiction defined by the type of entity being regulated. Contemporaneously, the financial system was increasingly experiencing a 'blurring of the boundaries' between different kinds of financial institutions. Banks were combining with insurers, and investment banks with stockbroking firms. Added to this was the presence of large, systemically important building societies⁹⁶.

The combination of these factors was identified as necessitating an over-arching financial services regulator whose purpose it would be to ensure the stability of the financial system.⁹⁷

This idea – one, combined financial services regulator - became the first half of a more substantial proposal – 'Twin Peaks'. Taylor ⁹⁸ argued for a fusion of the multiple regulators then in existence - regulators charged with banking, securities, insurance, and investment management. These regulators included the Bank of England, the Building Societies Commission, ⁹⁹ and the Securities and Investments Board (SIB)¹⁰⁰.

Under Taylor's plan, a new financial services regulator would henceforth assume authority for all deposit-taking institutions¹⁰¹ and,

⁹⁶ Ibid, p 4.

⁹⁵ Ibid, p 2.

⁹⁷ Ibid, p 1.

⁹⁸ Andrew Hilton, *UK financial supervision: a blueprint for change*, in 'Centre for the Study of Financial Innovation Working Paper', no. 6, Centre for the Study of Financial Innovation, May, 1994.

⁹⁹ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 3.

¹⁰⁰ Andrew Hilton, May, 1994, p 2.

 $^{^{101}\,\}text{Michael}$ W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 4.

crucially, would no longer simply enforce bank regulations against individual transactions. It would be charged with ensuring the overall stability of the financial system, by regulating bank capital and the control of risk¹⁰².

Specifically, Taylor envisaged that the bank regulator would address 'financial soundness of institutions – including capital adequacy and large exposure requirements, measures relating to systems and controls and provisioning policies, and the vetting of senior managers to ensure that they possess an appropriate level of experience and skill.' 103

The collapse of Barings Bank ¹⁰⁴ in 1995 provided further impetus ¹⁰⁵ for the adoption of a single bank regulator.

Under Taylor's proposal a second regulator would then be created, charged with protecting consumers from unscrupulous operators: a market conduct and consumer protection regulator, ¹⁰⁶ whose remit it would be to ensure that consumers were treated fairly and honestly¹⁰⁷, by protecting them against 'fraud, incompetence, or the abuse of market power.' ¹⁰⁸ Measures would include restrictions on the advertising, marketing and sale of financial products, as well as minimum fit and proper standards for salespeople. ¹⁰⁹

¹⁰² Ibid, p 1.

¹⁰³ Ibid, p 3.

¹⁰⁴ For more on this see: Stephen Fay, *The Collapse of Barings*, 1997; Adam Tickell, "Making a melodrama out of a crisis: reinterpreting the collapse of Barings Bank", *Environment and Planning D: Society and Space*, Vol. 14, no. 1 (1996); and for a critical theory analysis: Andrew D. Brown, "Making sense of the collapse of Barings Bank", *Human Relations*, Vol. 58, no. 12 (2005).

¹⁰⁵ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 2.

¹⁰⁶ Ibid, p 1.

¹⁰⁷ Ibid, p 1.

¹⁰⁸ Ibid, p 3.

¹⁰⁹ Ibid, p 3.

In the event of conflict between the two regulators, the Chancellor of the Exchequer would provide a resolution.

According to Taylor, 110 this would address four issues simultaneously:

- that henceforth a wide range of financial firms would have to be regarded as systemically important;
- ii. that sprawling and disparate regulatory agencies be regarded as presenting opportunities for regulatory arbitrage, 111 and turf battles over jurisdiction; 112
- iii. that in the ever increasing cases of financial conglomerates, a group-wide perspective on financial soundness would be addressed;¹¹³
- iv. and that rare and specialist expertise and limited supervisory resources would be pooled, instead of duplicated by overlapping.

'The benefits of Twin Peaks are clear. The proposed structure would eliminate regulatory duplication and overlap; it would create regulatory bodies with a clear and precise remit; it would establish mechanisms for resolving conflicts between the

¹¹⁰ Ibid, p 4.

¹¹¹ And ibid, at p 7: [the same phenomenon that creates the potential for regulatory arbitrage also creates] the possibility for important issues to 'disappear down the gaps', and ... among consumers [confusion is created] by an "alphabet soup" of regulators. See also: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 10, § 1.

¹¹² Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 11.

¹¹³ At p 5, ibid, Taylor discusses the issue of psychological contagion, that is to say a collapse in depositor confidence, not because an entity is directly involved in a loss, but because another entity – a subsidiary – another part of the same conglomerate, is involved in a loss. This possibility - that retail depositor panic can set-off a bank run across all associated entities - underscores the importance of a whole-of entity approach to regulation. See also: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 9.

objectives of financial services regulation; and it would encourage a regulatory process which is open, transparent and publically [sic] accountable.'114

These examples show why structure does, and should matter, if we wish to create an efficient, effective system of financial services regulation.¹¹⁵

Llewellyn ¹¹⁶ takes a contrary view, arguing that specialist agencies are easier to hold to their objectives. In Australia, however, the failures that have occurred under each of the two, integrated regulators, have not been due to confusion over objectives. ¹¹⁷

Similarly, Llewellyn argues that integrated agencies are more likely to suffer reputational harm, due to the failures of one particular division within the agency and, as a result, consumer confidence in the regulator may be weakened. This does comport with the Australian experience in relation to the manner in which the market conduct and consumer protection agency has handled the financial advice scandals.

27

¹¹⁴ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 1. See also David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 28.

¹¹⁵ Michael W. Taylor, *Peak Practice: How to reform the UK's regulatory system*, October, 1996, p 17.

¹¹⁶ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 26.

¹¹⁷ See further, pp 40-42, below.

¹¹⁸ See for example his remarks at: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 28.

¹¹⁹ See further p 43, below.

(b) Australia¹²⁰

The 'Twin Peaks' model was proposed by, and implemented on the conclusion of the Wallis Commission of Inquiry in 1997. 121 This replaced eleven separate regulators. 122 To wit, Australia separated the market conduct and consumer protection authority – the Australian Securities and Investment Commission (ASIC) – from the bank regulator – the Australian Prudential Regulation Authority (APRA) – and the National Central Bank (NCB) – the Reserve Bank of Australia (RBA). 123 In 1999 APRA moved to a risk-based approach to supervision. 124

Under Twin Peaks, the RBA was tasked with, *inter alia*, overall responsibility for the financial system, and as lender of last resort (LLR). ¹²⁵ The Australian model could, therefore, reasonably have been described as a three-peak model, with each peak created as

¹²⁰ Elements of this section appeared in substantial part in a previous article, published as a working paper by the Centre for International Finance and Regulation: A.D Schmulow, January, 2015, p 40ff.

¹²¹ Stan Wallis, Bill Beerworth, Professor Jeffrey Carmichael, Professor Ian Harper & Linda Nicholls, 31 March, 1997. See also: Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 4/5.

¹²² Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 5.

¹²³ Also created was the Australian Competition and Consumer Commission (ACCC). If the ACCC is to be included, then the Australian model is in fact a 'quad peak' model. David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 17.

¹²⁴ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 5/6.

¹²⁵ John Trowbridge, "The Regulatory Environment - A Brief Tour", Paper presented at the National Insurance Brokers Association (NIBA) Conference, Sydney, NSW, 22 September 2009, Table, p 2.

an independent, statutory body. ¹²⁶ By that it is meant a statutory body, independent of other statutory bodies, such as ASIC. It must not be taken to mean that APRA is statutorily independent of government. It is not. APRA is in fact subject to limited direction from the Minister. ¹²⁷

In 2002¹²⁸ APRA codified its risk-based approach to financial regulation with the introduction of the 'probability and impact rating system' (PAIRS)¹²⁹, as well as a 'supervisory oversight and response system' (SOARS)¹³⁰.

PAIRS is a framework for assessing how "risky" an institution is vis-à-vis APRA's objectives; SOARS is meant to determine how officials respond to that risk.¹³¹ While PAIRS examines a number of internal risk indices,¹³² a glaring omission is its failure to provide a formal assessment of industry-wide risks¹³³, which are particularly germane in an industry susceptible to contagion.

PAIRS differentiates the risk profile of regulated institutions into five categories: low, lower medium, upper medium, high, and

¹²⁶ Australian Securities and Investments Commission Act (Cth), No. 51 of 2001, (Australia); Australian Prudential Regulation Authority Act (Cth), No. 50 of 1998, (Australia); Reserve Bank Act (Cth), No. 4 of 1959, (Australia).

¹²⁷ S 12, Australian Prudential Regulation Authority Act (Cth), No. 50 of 1998.

¹²⁸ Australian Prudential Regulation Authority, *Probability and Impact Rating System*, Australian Prudential Regulation Authority, June, 2012, p 5.

¹²⁹ For more, see: Australian Prudential Regulation Authority, "Supervision", series edited by Australian Prudential Regulation Authority, in *About APRA*, published by Australian Prudential Regulation Authority, accessed: 31 July, 2015; Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 10ff.

¹³⁰ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 8ff.

¹³¹ Ibid, p 8.

¹³² See: ibid, p 11.

¹³³ Ibid.

extreme.¹³⁴ A similar system was used in the UK prior to the GFC and the ensuing collapse of Royal Bank of Scotland. As a result the efficacy of this ratings matrix is questionable. Assessing the ratings system used to assess the riskiness of Royal Bank of Scotland, Hosking states:

The report is a blizzard of acronyms and bogus science: RBS was scored as a "medium high minus"[135] risk, whatever that is ... 136

A key aspect of PAIRS is that it works on a multiplier not a linear scale.¹³⁷ This results in a higher SOARS scale, which in turn compels a more aggressive supervisory response.¹³⁸

In terms of the potential impact of a regulated entity on the financial system, these are divided into four categories: low, medium, high and extreme. This rating is determined relative to the regulated entities total Australian resident assets, 'subject to a management override that can raise or lower the impact depending on senior management's assessment'. 140

¹³⁴ Chapter 8 - Probability of failure, Australian Prudential Regulation Authority, "Probability and Impact Rating System", in About APRA, Probability and Impact Rating System, published by Australian Prudential Regulation Authority, June 2012, accessed: 5 August, 2015.

¹³⁵ Financial Services Authority, *The failure of the Royal Bank of Scotland*, in 'Financial Services Authority Board Report', Financial Services Authority, December, 2011, Part 2, Chap. 3, p. 260.

¹³⁶ Patrick Hosking, "More lever-arch files wouldn't have saved RBS", 'Opinion', *The Times*, Monring ed., 13 December, Tuesday, 13 December, 2013.

¹³⁷ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 12.

¹³⁸ Ibid.

¹³⁹ Chapter 9 - Impact of failure, Australian Prudential Regulation Authority, "Probability and Impact Rating System", op cit.

¹⁴⁰ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 13.

There was little science involved in determining the dividing lines between the ratings, it was more a question of whether the overall result seemed to make sense...¹⁴¹

What this flexibility belies, however, is a lack of coherent methodology. Rather, reliance is made on intuition and supposition, and there is a wealth of evidence from psychology that 'gut instincts' are frequently unreliable. Evidence of the failure of this approach is to be found in the rogue trading scandal at National Australia Bank, which resulted in losses of \$360 million to the bank, and which APRA ascribed to 'cultural issues.' 143

While the Australian model provides a high degree of statutory independence for the system stability regulator, ¹⁴⁴ APRA, it is to a degree answerable to the Treasurer, ¹⁴⁵ and both APRA ¹⁴⁶ and ASIC ¹⁴⁷ to the Federal Parliament by way of submission of Annual Reports. This comports with what Taylor envisaged for the model with either Ministerial or Parliamentary oversight. ¹⁴⁸

The second peak – ASIC – is responsible for market conduct and consumer protection. It was argued such a system would be more likely to resolve fragmentation, provide clarity of ambit, be more cost-effective due to rulebook simplification, and improve accountability - more likely, but not assuredly - as the recent failings of ASIC in

 142 See for example the work of Kahneman, 2002 Nobel Laureate in Economic

Authority, 23 March, 2004, p.6.

¹⁴¹ Ibid.

Sciences, in: Daniel Kahneman, *Thinking, Fast and Slow*, 1st ed., 2011.

143 Australian Prudential Regulation Authority, *Report into Irregular Currency Options Trading at the National Australia Bank*, Australian Prudential Regulation

¹⁴⁴ S 11, Australian Prudential Regulation Authority Act (Cth), No. 50 of 1998.

¹⁴⁵ S 12, ibid, p. 4/5.

¹⁴⁶ S 59, ibid.

¹⁴⁷ S 136, Australian Securities and Investments Commission Act (Cth), No. 51 of 2001.

¹⁴⁸ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p. 11.

Australia have demonstrated.¹⁴⁹ If the consumer protection and market conduct regulator do prove effective, then advantages accrue to consumers for a "one-stop shop" ¹⁵⁰ for complaints against a regulated firm.

In terms of inter-agency co-operation and co-ordination, the Australian model addresses this through various memoranda of understanding.¹⁵¹

Whereas the legislative framework for regulatory coordination is high-level and outcomes-focused, it does not, however, provide detailed provisions as to the nature of co-ordination or how it should be achieved.¹⁵² Instead, s 10A of the *APRA Act*¹⁵³ provides in general terms as follows:

(1) The Parliament intends that APRA should, in performing and exercising its functions and powers, have regard to the desirability of APRA coordinating with other financial sector supervisory agencies, and with other agencies specified in regulations for the purposes of this subsection. (2) This section does not override any restrictions that would otherwise apply to APRA or confer any powers on APRA that it would not otherwise have.

The RBA has asserted that cultivating a culture of coordination, under which the main focus is on regulatory performance,

-

¹⁴⁹ Adele Ferguson, "Hearing into ASIC's failure to investigate CBA's Financial Wisdom", 'Business Day', *The Sydney Morning Herald* 3 June, 2014; Adele Ferguson & Deb Masters, "Banking Bad", in Four Corners, *Audiovisual Material*, Documentary, 5 May, 2014; Jane Lee, Cameron Houston & Chris Vedelago, "CBA customers lose homes amid huge fraud claim", 'Victoria', *The Age* 29 May, 2014.

¹⁵⁰ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p. 11.

¹⁵¹ Anonymous, *Memorandum of Understanding*, The Reserve Bank of Australia and The Australian Prudential Regulation Authority, 12 October, 1998.

¹⁵² A. J. Godwin & A.D. Schmulow, *South African Law Journal*, op cit., p 9 of the article.

¹⁵³ Australian Prudential Regulation Authority Act (Cth), No. 50 of 1998.

rather than regulatory structure, is crucially important. The Assistant Governor (Financial) of the RBA has attributed the efficacy of coordination between the regulators in Australia to a culture -

'where we regard cooperation with the other agencies as an important part of our job, and there is a strong expectation from the public and the government that we will continue to do so...Key aspects [of coordination] include an effective flow of information across staff in the market operations and macroeconomic departments of a central bank and those working in the areas of financial stability and bank supervision. Regular meetings among these groups to focus on risks and vulnerabilities and to highlight warning signs can be very valuable. A culture of coordination among these areas is very important in a crisis because, in many instances, a stress situation is first evident in liquidity strains visible to the central bank, and the first responses may be calls on central bank liquidity.'154

The success Australia achieved in addressing the challenges arising out of the Global Financial Crisis, and the 2010 Sovereign Debt Crisis, has been attributed to this flexible approach to interagency co-operation. ¹⁵⁵ Indeed, in interviews conducted with the

_

¹⁵⁴ Malcom Edey, "Macroprudential Supervision and the Role of Central Banks", Paper presented at the Regional Policy Forum on Financial Stability and Macroprudential Supervision Hosted by the Financial Stability Institute and the China Banking Regulatory Commission, Beijing, PRC, in 'Speeches', 28 September 2012.

¹⁵⁵¹⁵⁵ There are other, credible arguments to be made that the supervisory regime in Australia was incidental to Australia's success during the GFC. Australian banks were, on the whole, 'vanilla'. That is to say they were not heavily exposed to mortgage backed securities or collateralised debt obligations. One senior executive at ANZ Bank claimed this was as much foresight as luck: they had identified problems in trading markets and chose not to participate. Stephen Bell & Andrew Hindmoor, *Masters of the Universe, Slaves of the Market*, in 'Business & Economics, Banks & Banking', 2015, p 270-273. Australian banks also enjoyed a strong deposit base, they were not reliant upon wholesale funding, had a strong

regulators in Australia it was evident that over-prescription, or formalisation, would have stifled this flexibility. 156

To facilitate this co-operation, Australia has established the Council of Financial Regulators (CFR),¹⁵⁷ the purpose of which is to oversee inter-agency co-operation.

The CFR is the coordinating body for Australia's main financial regulatory agencies. Its membership comprises APRA, ASIC, the RBA and the Treasury. ... It is a non-statutory interagency body, and has no regulatory functions separate from those of its four members. ... CFR meetings are chaired by the Reserve Bank Governor, with secretariat support provided by the RBA. They are typically held four times per year but can occur more frequently... As stated in the CFR Charter, the meetings provide a forum for:

- identifying important issues and trends in the financial system, including those that may impinge upon overall financial stability;
- ... appropriate coordination arrangements for responding to actual or potential instances of financial instability, and helping to resolve any issues where members' responsibilities overlap; ...

Much of the input into CFR meetings is undertaken by interagency working groups, which has the additional benefit of promoting productive working relationships and an appreciation of cross-agency issues at the staff level.

The CFR has worked well since its establishment and, during the crisis in particular, it has proven to be an effective means of

domestic lending portfolio, and were restricted in their own mortgage lending activities. Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 47, fn 129.

 156 A. J. Godwin & A.D. Schmulow, *South African Law Journal*, op cit., p 12 of the article.

¹⁵⁷ The Council of Financial Regulators, "*The Council of Financial Regulators*", series edited by The Council of Financial Regulators, published by Reserve Bank of Australia, 2001-2014, accessed: 14 July, 2014.

coordinating responses to potential threats to financial stability...

The experience since its establishment, and especially during the crisis, has highlighted the benefits of the existing non-statutory basis of the CFR.'158

While this arrangement may have succeeded in insulating Australia from the ravages of the GFC in respect of system stability, the Australian regulatory model has not fared as well in respect of combatting market misconduct, or the protection of consumers, as the financial advice scandals at the Commonwealth Bank (CBA) and Macquarie Bank have demonstrated. ASIC's paltry performance in addressing these malpractices at CBA and Macquarie were heavily criticised by an inquiry led by the Upper House of Australia's Federal Parliament. Considering the international fashionability of Twin Peaks, and in particular the influence of the Australian model, the failures and shortcomings of ASIC – one half of the two peaks – has been a significant and sobering practical failure.

In its Final Report, the Australian Financial System Inquiry has recommended that Australia establish a Financial Regulator Assessment Board, the purpose of which would be to annually provide advice to the Government on how financial regulators have implemented their mandates, and 'provide clearer guidance to

Bank of Australia, March, 2014, p 66.

¹⁵⁸ Reserve Bank of Australia, Submission to the Financial System Inquiry, Reserve

¹⁵⁹ Adele Ferguson, op cit; Adele Ferguson & Deb Masters, op cit; Adele Ferguson & Ben Butler, "Commonwealth Bank facing royal commission call after Senate financial planning inquiry", 'Banking and Finance', *The Sydney Morning Herald*, Business Day ed. 26 June, 2014.

¹⁶⁰ Senator Mark Bishop (Chair), Senator David Bushby (Deputy Chair), Senator Sam Dastyari, Senator Louise Pratt, Senator John Williams, Senator Nick Xenophon, Senator David Fawcett & Senator Peter Whish-Wilson, *Performance of the Australian Securities and Investments Commission*, Parliament of Australia, The Senate, June, 2014.

regulators in Statements of Expectation and increase the use of performance indicators for regulator performance.' 161

This proposal has precedent in the UK, which has established a Financial Policy Committee (FPC), the remit of which is to look for the roots of the next crisis. 162 Its concern is to identify, monitor and take action to remove or reduce systemic risks. It has a secondary objective, which is to support the economic policy of the Government. 163

(c) The Netherlands 164

The Kingdom of the Netherlands was second to adopt a 'Twin Peaks' approach in 2002 ¹⁶⁵, retaining prudential supervision within De Nederlandsche Bank NV ¹⁶⁶ ('The Dutch Bank' (DNB)). This is similar to the arrangement in the UK, but distinct from Australia, where the prudential regulator (APRA) is separate from the NCB.

_

¹⁶¹ Financial System Inquiry, November, 2014, Recommendation 27, 'Regulator accountability', in Chapter 5, 'Regulatory system', p. 239 ff.

 $^{^{162}}$ Jill Treanor, "Farewell to the FSA – and the bleak legacy of the light-touch regulator", 'Business', *The Guardian/The Observer* 24 March, 2013.

¹⁶³ Financial Policy Committee, "*Financial Policy Committee*", series edited by Bank of England, in *Financial Stability*, published by Bank of England, 2014, accessed: 26 September, 2014.

¹⁶⁴ Elements of this section appeared in a previous article, published as a working paper by the Centre for International Finance and Regulation: A.D Schmulow, January, 2015, p 33ff.

¹⁶⁵ International Monetary Fund, *Kingdom of the Netherlands: Publication of Financial Sector Assessment Program Documentation—Technical Note on Financial Sector Supervision: The Twin Peaks Model*, in 'Financial Sector Assessment Program Update, IMF Country Report No. 11/208', International Monetary Fund, July, 2011, Table 1, p. 6. See also: Henriëtte Prast & Iman van Lelyveld, 21 December, 2004.

¹⁶⁶ De Nederlandsche Bank, *DNB Supervisory Strategy 2010 - 2014*, in 'Suprainstitutional perspective, strategy and culture', De Nederlandsche Bank, April, 2010, p. 21; Eddy Wymeersch, *European Business Organization Law Review (EBOR)*, op cit, p. 16.

The Dutch copied the Australian approach, particularly as it applied to supervisory strategy - PAIRS and SOARS - both of which the Dutch regulator, the DNB, adopted. 167

While the Netherlands managed to stave-off the worst of the GFC, success for the Dutch authorities in an economy with such an important financial sector was not achieved without 'drastic' 168 government intervention. 169

Total foreign claims of Dutch banks amounted to over 300% of GDP. The Dutch financial system therefore depended heavily on external developments. Only the Belgian and Irish banking sectors were in a similar position. The European average was less than half the Dutch figure at 135% of GDP. ... exposure of Dutch banks to the United States also was the highest in Europe, at 66% of GDP. ... whereas the average of European banks had kept limited exposure of less than 30% of GDP. By contrast, the exposure of Dutch banks to hard-hit Eastern European countries was at 11% of GDP just above the European average of 8% of GDP.170

Intervention during the crisis took the form of measures to stimulate employment through construction and housing (€ 6 billion); capital injections for banks and insurers (€ 20 billion); state guarantees for banks (€ 200 billion); a guarantee on all deposits up to

¹⁶⁷ Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 262.

¹⁶⁸ De Nederlandsche Bank, Annual Report 2009, De Nederlandsche Bank NV, 24 March, 2010, p 37, and Chart, p 45.

¹⁶⁹ See further: Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 47, fn 128.

¹⁷⁰ Maarten Masselink & Paul van den Noord, "The Global Financial Crisis and its effects on the Netherlands", ECFIN (Economic analysis from the European Commission's Directorate-General for Economic and Financial Affairs) Country Focus, Vol. 6, no. 10 (4 December, 2009), p. 3.

€100,000¹¹¹¹; the nationalisation of the Fortis/ABN AMRO (€ 16.8 billion) and ING banking groups (€ 10 billion), comprising 85 per cent of the Dutch banking sector,¹¹²² and the SNS REAAL insurance and banking group (€ 3.7 billion)¹¹³; and a reform of the financial system and the capital levels that had been enforced to date. Thereafter the Dutch government was compelled to drastically reduce spending in order to reduce its deficit.¹¹⁴

In the aftermath of the crisis, the conclusions reached about the performance of the Dutch regulators were less than positive:

Both in the run-up to and during the credit crisis, supervisory instruments fell short in several areas. These deficiencies emerged in both the scope and the substance of supervision. The trend towards lighter supervision, reflecting developments within the financial sector as well as changed social attitudes, has gone too far.¹⁷⁵

This finding supports the conclusions reached in the analysis of the performance of the UK regulatory authorities during the GFC, namely that regulatory architecture alone is not a panacea against financial crisis. Doubtless regulatory architecture is part of the solution, but no more so than the capacity of the regulator to foresee,

published by Ministry of General Affairs, undated, accessed: 11 January, 2015.

¹⁷¹ Ministry of Finance, Government of the Netherlands, "The Netherlands and the credit crisis", series edited by Ministry of General Affairs, in Financial Policy,

¹⁷² Martin Van Oyen, "Ringfencing Or Splitting Banks: A Case Study On The Netherlands", *The Columbia Journal of European Law Online*, Vol. 19, no. 1 (Summer 2012), p. 6.

¹⁷³ Thomas Escritt & Anthony Deutsch, "Netherlands nationalizes SNS Reaal at cost of \$5 billion", *Reuters*, US ed. Friday, 1 February, 2013, 6:30 am.

¹⁷⁴ Ministry of Finance, Government of the Netherlands, op cit.

¹⁷⁵ De Nederlandsche Bank, *DNB Supervisory Strategy 2010 - 2014 and Themes 2010*, De Nederlandsche Bank, April, 2010, p. 5.

at times, the unforeseeable, ¹⁷⁶ and regulate accordingly, and the willingness of the regulator to enforce its regulations.

V WEAKNESSES AS COMPARED TO OTHER MODELS

Space constraints do not permit a detailed examination of all the deficiencies that have been observed in existing Twin Peaks structures and, moreover, not all these deficiencies are exclusive to Twin Peaks. The most notable deficiency not exclusive to Twin Peaks is its failure to cover non-bank financial institutions (NBFIs), or so-called *shadow banks*¹⁷⁷.

Instead, this paper will analyse the vulnerability of the model to bank runs; the limitations of the model as noted by the HIH Royal Commission ¹⁷⁸; the failures of the Australian Securities and Investments Commission; and Twin Peaks' failure in the Netherlands during the GFC, as outlined above.

(a) Bank runs & contagion

Banks are unlike other entities in one crucial respect: a failure in one bank can cause the failure of a different, unrelated bank, even one that is profitable and solvent.

More than anything else, it is the systemic risk phenomenon associated with banking and financial institutions that makes them different from gas stations and furniture stores. It is this factor—more than any other—that constitutes the fundamental

future? No, we cannot; but yes, we must act as if we do.'

¹⁷⁶ See for example: Mary Douglas & Aaron Wildavsky, *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*, revised ed., 1983, p 1, where the authors state: 'Can we know the risks we face, now or in the

¹⁷⁷ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 4.

¹⁷⁸ The HIH Royal Commission, *Report of the HIH Royal Commission*, The HIH Royal Commission, 16 April, 2003.

rationale for the safety net arrangements that have evolved in this and other countries. 179

This widely investigated phenomenon, 'contagion', and efforts to prevent it occurring, or at least mitigate its effects, are a core concern of the regulatory models, Twin Peaks or otherwise.

Contagion is a term used to describe the spillover [sic] ... effects of shocks from one or more firms to others. It is widely considered to be both more likely to occur in banking than in other industries and to be more serious when it does occur. Bank (depository institution) contagion is of particular concern if adverse shocks, such as the failure or near-failure of one or more banks, are transmitted in domino fashion not only to other banks and the banking system as a whole, but beyond to the entire financial system and the macro economy. The risk of widespread failure contagion is often referred to as systemic risk. 180

Typically, contagion originates with a bank run; that is to say, a situation in which a large number of bank customers attempt to withdraw their funds at once, and bank reserves are inadequate.¹⁸¹

Depositor panic in a failing bank can spread to depositors of other institutions. The resulting large-scale withdrawals from banks that are third parties to the original, failing bank can cause rapid insolvency in even profitable, well-capitalised and solvent banks. The

¹⁸⁰ George G. Kaufman, "Bank contagion: A review of the theory and evidence", *Journal of Financial Services Research*, Vol. 8, no. 2 (April, 1994), p 123.

¹⁷⁹ E. Gerald Corrigan, "The Banking-Commerce Controversy Revisited", *Federal Reserve Bank of New York Quarterly Review*, Vol. 16, no. 1 (1991), p 3.

¹⁸¹ For a detailed discussion of bank runs, see: Charles W. Calomiris & Gary Gorton, *The Origins of Banking Panics: Models, Facts, and Bank Regulation*, paper presented at the Rodney L. White Center for Financial Research, The Wharton School, November 1990, p 222/223; Ted Temzelides, "Are Bank Runs Contagious?", *Federal Reserve Bank of Philadelphia Business Review* (November/December, 1997), p 3/10ff.

cascading withdrawals-cum-insolvencies can become a full-blown financial crisis. 182

This susceptibility to contagion is an unavoidable consequence of how banks make money: they engage in maturity mismatching – that is to say, they borrow money short-term from demand depositors, and lend it longer-term, to homebuyers and the like.

It is the fundamental mismatch between bank demand-deposit liabilities ... and the illiquid, risky, and opaque loans collateralizing (sic) those insured deposits that gives rise to the current ... problem.¹⁸³

Secondly, banks engage in a transformative function¹⁸⁴: they transform opaque and illiquid assets into transparent and liquid liabilities. The effect of which, however, is that banks cannot liquidate assets fast enough in the face of widespread demand-depositor withdrawals. The ensuing fire sale of assets will invariably further damage a bank's balance sheet.¹⁸⁵

¹⁸² For more, see: Governor Daniel K. Tarullo, "Rethinking the Aims of Prudential Regulation", Paper presented at the Federal Reserve Bank of Chicago Bank Structure Conference, Chicago, Illinois, series editor: Board of Governors of the Federal Reserve System, in 'Speeches', 8 May 2014, p 8.

¹⁸³ R. C. Merton & Z. Bodie, *Deposit insurance reform: a functional approach*, paper presented at the Carnegie-Rochester Conference on Public Policy, Vol. 38, 1993, p 5. Maturity mismatching was a significant contributor to the collapse of the Indonesian banking system during the Asian Crisis. P. Srinivas & D. Sitorus, "The Role of State Owned Banks in Indonesia", Paper presented at the Brookings/IMF/World Bank conference on "The Role of State-Owned Financial Institutions: Policy and Practice" being held during April 26-27, 2004, Washington, DC, series editor: The World Bank, 2003, p 17; A. Crockett, "International Financial Arrangements: Architecture and Plumbing", Paper presented at the Third David Finch Lecture, University of Melbourne, 12 November 1999.

¹⁸⁴ For more on the transformation function, see: Douglas W. Diamond & Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity", *Journal of Political Economy*, Vol. 91, no. 3 (June, 1983), p 402.

 $^{185}\,\text{For more}$ on asset stripping by banks in times of distress, see: R. C. Merton & Z. Bodie, op cit, p 14/15.

Consequently, while the argument can be made, and strongly, that Twin Peaks is the optimal model for financial system regulation, it is not a model that guarantees everlasting bank solvency, nor does it claim to be able to prevent the collapse of individual banks, particularly in light of the unique vagaries and phenomena that affect them. Taylor acknowledges this 186, as do the Australian authorities (as the next section, dealing with HIH, will demonstrate).

While there are steps in place to manage the exit of a bank from the financial system, through such methods as 'living wills' 187, Twin Peaks nonetheless does not have an answer when the collapse of one bank leads to widespread depositor panic and widespread financial firm distress. It is, therefore, susceptible to being overwhelmed by a crisis.

The interconnectedness of financial institutions can also result in the failure of one player quickly affecting others. This applies particularly in the banking sector, and can occur either because other institutions are directly or indirectly exposed to a failed bank or because of a loss of confidence amongst banks in each other's ability to meet future obligations when they fall due, thus triggering a liquidity freeze as evidenced at the start of the GFC. Moreover, the public may lose trust in the banking system and a bank run may ensue. Although the Reserve Bank's role of lender of last resort means that it has an effective response to any bank runs, these situations can easily spill over to the real economy; for example, in the form of a credit crunch. A key objective of prudential regulation and supervision is to reduce these risks. 188

¹⁸⁶ Michael W. Taylor, "Twin Peaks": A regulatory structure for the new century, December, 1995, p 10.

¹⁸⁷ Elizabeth Fry, "Too big to bail: Aussie banks need a living will", 'Banking', *Asia-Pacific Banking & Finance* Monday 4 May, 2015.

¹⁸⁸ Toby Fiennes & Cavan O'Connor-Close, *Reserve Bank of New Zealand: Bulletin*, op cit, p 6.

A further potential weakness presented by a model in which a bank regulator is combined with an insurance regulator, relates to the assets and liabilities of banks versus insurers. Insurers have long-term liabilities, ill-defined in value. Conversely, insurance company assets are generally marketable, with transparent values. Banks on the other hand have relatively short-term liabilities with assets which are illiquid, and whose assets are opaque. According to Thompson¹⁸⁹, the applicable prudential supervisory regimes are, therefore, different and he casts doubt on the efficiencies in bringing the two together.¹⁹⁰

In Australia APRA, the prudential regulator, subsists of internal divisions focused alternatively on specialist institutions (Specialised Institutions Division – SID) and diversified institutions (Diversified Institutions Division – DID). 191 According to Llewellyn 192, however, this is still no guarantee that supervisors will communicate and co-ordinate more effectively, than if they were located in separate, specialist supervisory agencies.

(b) Australia's Twin Peaks failures: the collapse of HIH

When HIH insurance collapsed on March 15 2001, it was the second largest insurance company in Australia. This made HIH's collapse one

¹⁸⁹ Graeme Thompson, "Regulatory Policy Issues in Australia", Paper presented at the The Future of the Financial System, Sydney, NSW, edited by Malcom Edey, series editor: Reserve Bank of Australia Economic Group, in 'RBA Annual Conference', Vol. 1996, 8-9July 1996, p 257.

¹⁹⁰ For more on this, and issues surrounding 'X-inefficiencies' – inefficiencies not of scale but of resource allocation, and evidence derived from the Irish and Finish models, see: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 22/3.

¹⁹¹ Australian Prudential Regulation Authority, *Annual Report 2014*, Australian Prudential Regulation Authority, 13 October, 2014, p 186.

 $^{^{192}}$ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 22.

of the biggest in Australian corporate history, ¹⁹³ and heralded the adoption of a new, risk-based approach to financial regulation, modelled on that of the Canadian regulator, the Office of the Superintendent of Financial Institutions. ¹⁹⁴ HIH was a regulated entity, under the jurisdiction of the system stability regulator APRA, at the time of its collapse.

After HIH's collapse, the Royal Commission constituted to investigate the incident found as follows:

APRA did not cause or contribute to the collapse of HIH. Nor could it have taken steps to prevent the failure of the company. APRA could not be expected to provide a guarantee that no company it regulated would ever fail. However, the regulatory function was designed to minimise the possibility that a general insurance company would fail. The system gave APRA the ability to detect the early warning signs that a company might fail. APRA's failure to pick up the many signs that HIH was heading towards statutory and commercial insolvency highlighted a number of systemic weaknesses in its administration of the regulatory system. 195

APRA's regulation of the HIH group was inadequate ... there was a systemic failure in APRA to escalate the issues they identified to an appropriate level. Throughout 2000 and 2001 APRA missed every opportunity to act upon the warning signs that HIH was heading towards statutory and commercial insolvency. 196

Two implications emanate from this: the first is that weaknesses in the application of the model can bring the model

¹⁹³ Rob Curtis, "Solvency as a Focal Point of Prudential Regulation: Supervisory Lessons and Challenges", Chap. 6, in *The Future of Insurance Regulation and Supervision: A Global Perspective*, edited by Patrick M. Liedtke & Jan Monkiewicz, 2011, p 93.

¹⁹⁴ Julia Black, "Regulatory Styles and Supervisory Strategies", op cit, p 262.

¹⁹⁵ The HIH Royal Commission, 16 April, 2003, § 24.1.2.

¹⁹⁶ Ibid, § 24.1.13.

undone. Several problems arise as a result. One such problem is that there are no guarantees that problems of application will be discovered through reviews and inquiries. The possibility remains that problems of application will only be discovered through failure or distress, as happened with HIH. This presents the possibility that the system stability regulator can be blind-sided by a bank's failure.

Other obstacles to adequate and consistent application relate to the adequate resourcing of the regulator ¹⁹⁷, the creation of the appropriate culture within the regulator ¹⁹⁸, and the degree to which parliament is captured by the financial industry. ¹⁹⁹

The second implication from the HIH Royal Commission finding is that in Australia - the leading proponent of Twin Peaks - it is accepted that the model will have to tolerate, from time to time at least, individual bank failure. That position persists to this day.²⁰⁰

APRA does not pursue a zero failure objective. APRA cannot eliminate completely the risk that a regulated entity might fail and it recognises that any attempt to do so would impose unnecessary burden on regulated entities and harden the arteries of the financial system. ... Government's Statement of Expectations of APRA that "...prudential regulation cannot and should not seek to guarantee a zero failure rate of prudentially

¹⁹⁸ APRA acknowledged that its 'light-touch' culture was responsible for its failures with HIH. John Garnaut, "Watchdog licks its wounds after commission mauling", 'Business', *The Sydney Morning Herald* 16 January, 2003. Failures in the UK during the GFC were similarly attributed to the inadequacies of the light touch. Jill Treanor, op cit.

¹⁹⁷ A. Campbell & R. Lastra, "Revisiting the Lender of Last Resort", *Banking and Finance Law Review*, Vol. 24, no. 3 (June, 2009).

¹⁹⁹ For the extent of this problem in the United States, see: Arthur E. Wilmarth Jr., *University of Cincinnati Law Review*, op cit.

²⁰⁰ Australian Prudential Regulation Authority, *Supporting Materials for Assessment Against the Basel Core Principles*, in 'IMF Financial Sector Assessment Program — Australia', Australian Prudential Regulation Authority, 2006, p 7.

regulated institutions or provide absolute protection for market participants (including consumers)."²⁰¹

In light of the interconnectedness of financial entities, and in particular banks, the question arises whether it is realistic to assume that the financial system can indeed tolerate the failure of a single bank? Or whether the failure of even a single, small bank could endanger the financial system, and therefore necessitate that a failing bank be rescued by the taxpayer? If, in reality, a modern financial system is to be regarded as so interconnected that it cannot, in fact, tolerate a bank failure, then this presents a further critical point of failure for the Twin Peaks model: it cannot foresee all the circumstances in which a bank may fail, yet it cannot tolerate such a failure.

 \dots clearly demonstrate that small institutions can pose their own challenges to stability... 202

risk-based regulation may nonetheless be neither as "rational" nor as consistent in substance as its form suggests.²⁰³

... however, to the individual who has just suffered financial loss because of the failure of a small bank... unlikely to share

http://www.apra.gov.au/AboutAPRA/documents/Statement-of-Expectations-from-Treasurer-20-Feb-07.pdf., p 2.

Australian Prudential Regulation Authority, *Probability and Impact Rating System*, June, 2012, p 7. See also: Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 8; Charles Littrell, "*The APRA approach to insurance supervision*", series edited by Australian Prudential Regulation Authority, in *Speeches*, published by Australian Prudential Regulation Authority, 16 May, 2003, accessed: 2 August, 2015, p 1; Financial System Inquiry, November, 2014, pp 4/11/24/36; The Treasury Australian Government, The Treasury Commonwealth Government of Australia, "*Statement of Expectations for the Australian Prudential Regulation*

²⁰² Financial Stability Board, 1 November, 2012, p 2.

²⁰³ Julia Black, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, op cit, p 23.

APRA's view that APRA was perfectly justified ... Targeted regulation is inevitably going to conflict with public demands for universal protection.²⁰⁴

(c) Australia's Twin Peaks failures: ASIC and the financial advice scandals²⁰⁵

The Australian regulatory model has not always fared well in respect of combatting market misconduct, or the protection of consumers, as the financial advice scandals at the Commonwealth Bank (CBA) and Macquarie Bank have demonstrated. ²⁰⁶ ASIC's inadequate performance and undue delays in addressing these malpractices at CBA and Macquarie were criticised by an inquiry led by the Upper House of Australia's Federal Parliament. ²⁰⁷ Considering the international fashionability of 'Twin Peaks', and in particular the influence of the Australian model, the failures and shortcomings of ASIC – one half of the two peaks – has been a significant and sobering practical failure.

As Bhati points out 208, consumer requirements of trust are especially high in the provision of financial services. Consequently it

²⁰⁴ Ibid, p 24.

²⁰⁵ Elements of this section appeared in substantial part in a previous article, published as a working paper by the Centre for International Finance and Regulation: A.D Schmulow, January, 2015, p 46ff.

²⁰⁶ Adele Ferguson, op cit; Jane Lee, Cameron Houston & Chris Vedelago, op cit; Adele Ferguson & Deb Masters, op cit; Adele Ferguson & Ben Butler, op cit. For more on the cultural drivers underscoring changes in the ethics of banking, see: Ross Buckley, "Australia's banking culture: What has gone wrong?", 'Comment', *The Canberra Times*, 16 June, 2015, 16 June, 2015.

²⁰⁷ Senator Mark Bishop (Chair), Senator David Bushby (Deputy Chair), Senator Sam Dastyari, Senator Louise Pratt, Senator John Williams, Senator Nick Xenophon, Senator David Fawcett & Senator Peter Whish-Wilson, June, 2014.

²⁰⁸ Shyam Bhati, *International Review of Business Research Papers*, op cit, p 20.

is argued that ASIC by exercising its powers, to license ²⁰⁹, set standards for ²¹⁰, and apply enforcement regimes, both criminal ²¹¹ and civil ²¹² against financial service providers, encourages consumers to assume regulated providers act appropriately. When a firm acts improperly, and ASIC fails to act, then consumer confidence in financial services is eroded ²¹³, which in turn is inimical to the goal of creating thriving, healthy markets.

Furthermore, it is questionable whether the strategy employed by ASIC, which relies heavily on self-regulation²¹⁴ and industry codes of conduct²¹⁵, is appropriate or trustworthy; especially in light of recent experiences.

²⁰⁹ Schedule 1 (Financial Services and Markets), Chapter 7 (Financial services and markets), Part 7.6 (Licensing of providers of financial services), especially Division 2 (Requirement to be licensed or authorized), s 911A-D, *Financial Services Reform Act (Cth)*, No. 122 of 2001, (enacted: 27 September), (Australia).

²¹⁰ Schedule 1 (Financial Services and Markets), Chapter 7 (Financial services and markets), Part 7.6 (Licensing of providers of financial services), especially Division 3 (Obligations of financial services licensees), s 912A-F, ibid.

²¹¹ Schedule 1 (Financial Services and Markets), Chapter 7 (Financial services and markets), Part 7.7 (Financial services disclosure), Division 7 (Enforcement), Subdivision A (Offences), s 952A-M, ibid.

²¹² Schedule 1 (Financial Services and Markets), Chapter 7 (Financial services and markets), Part 7.7 (Financial services disclosure), Division 7 (Enforcement), Subdivision B (Civil liability), s 953A-C, ibid.

²¹³ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 41.

²¹⁴ See for example Schedule 1 (Financial Services and Markets), Chapter 7 (Financial services and markets), Part 7.7 (Financial services disclosure), Division 3 (Regulation of market licensees), Subdivision A (Licensee's obligations), s 792A (General obligations), (c), *Financial Services Reform Act (Cth)*, No. 122 of 2001. See also Standards Australia, "*The Australian Standard on Compliance Programs*", AS 3806-2006, published by Standards Australia, Sydney, NSW, 9 March, 2006.

²¹⁵ Shyam Bhati, *International Review of Business Research Papers*, op cit, p 20.

(d) A current proposal in Australia, aimed at addressing past failures
In its Final Report, the Australian Financial System Inquiry has
recommended that in the future Australia establish a Financial
Regulator Assessment Board (FRAB), the purpose of which would be
to provide advice annually to the Government on how financial
regulators had implemented their mandates, and 'provide clearer
guidance to regulators in Statements of Expectation and increase the
use of performance indicators for regulator performance.'216

The FRAB's role would be to act as a Devil's Advocate, while testing methodologies, questioning conclusions, and challenging prevailing orthodoxies of thought and belief in its ongoing assessment of the performance of the two peaks.

In behavioural economics, such "concurrence" across a group is called groupthink. ... Groupthink ... is unhealthy because, not only do people start to think alike, it is only a short step to believing people who are singing a different tune should be excluded and thrown out of the chorus. Dissent can be destructive, but the role of the Devil's Advocate is well-understood to be valuable, drawing out important questions people would rather not answer. ... [the FRAB would comprise of] knowledgeable experts, crucially not tied to regulators, with a diverse membership that would "act as a safeguard against the FRAB being unduly influenced by the views of one particular group or industry sector".217

-

²¹⁶ Financial System Inquiry, November, 2014, Recommendation 27, 'Regulator accountability', in Chapter 5, 'Regulatory system', p. 239 ff. See also: Andrew Schmulow, "Time for Abbott Government and ASIC to get serious about Australian banksters", 'Business', *Independent Australia*, 10 August, 2015; Pat McConnell, "War on banking's rotten culture must include regulators", 'Business & Economy', *The Conversation*, 4 June, 2015 2.14pm AEST.

²¹⁷ Pat McConnell, "War on banking's rotten culture must include regulators", op cit. See further: Julie May, "Regulatory board to beef up watchdog accountability", 'News / Financial Planning', *Financial Observer, Daily News for Financial Services Professionals*, 10 December, 2014; Marion Williams, "APRA and ASIC need

Crucially, this proposal aims to introduce an arms-length between those conducting the assessment – the FRAB - and those being assessed. Apart from insulating the assessors - the FRAB - from a tendency towards the kinds of concurrence²¹⁸ that exists within the regulators, such distance will also, it is argued, be more likely to tease out instances of where the regulators have, or may become, suborned by the entities which they regulate, or by other powerful vested industry interests. If nothing more, an FRAB would constitute a double redundancy, a fail-safe, the aim of which would be to pick-up the problems that the regulators may have overlooked.

In addition, an FRAB could be expected to have a positive impact upon the corporate culture of the two peak regulators. Llewellyn points out that corporate culture within a regulator determines the extent to which it holds itself accountable, the way it exercises its discretion (which in turn affects its efficacy and its credibility, authority and public standing, and its ability to be a role model to regulatees for their own standards of corporate governance), the extent to which regulators continue to earn the public's trust and grow in esteem, the ease by which the regulator can be captured or subjected to undue political influence, the appropriate use of its own, considerable resources, and its ability to acquire and maintain international credibility.²¹⁹

This proposal has precedent in the UK, which has established a Financial Policy Committee (FPC), the remit of which is to look for

cultural shift", 'Banking', Asia-Pacific Banking and Finance, 9 March, 2015;

Andrew Schmulow, "To clean up the financial system we need to watch the

watchers", 'Business & Economy', *The Conversation*, 4 March, 2015 2.11 pm AEDT; Ruth Williams, "Merit in oversight board for ASIC, but only if it's got teeth",

^{&#}x27;Business Day', *The Sydney Morning Herald*, 28 January, 2015.

²¹⁸ This comports with anecdotal observations made by the author at APRA during the period October to December 2013.

 $^{^{219}}$ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 41.

the roots of the next crisis.²²⁰ Its role is to identify, monitor and take action to remove or reduce systemic risks. It has a secondary objective, which is to support the economic policy of the Government.²²¹

VI VARIATIONS IN THE MODEL

It should be noted that Twin Peaks is a work in progress. Among the countries that now use this model - Australia, New Zealand, the Netherlands and the United Kingdom - differences exist. One key difference between the Australian model and those of the other countries listed, is to be found in the jurisdictional location of the system stability regulator.

(a) Monopolistic versus Non-monopolistic Location of the Bank Regulator

While in Australia the prudential regulator is an entity separate from the National Central Bank (NCB) – the Reserve Bank of Australia (RBA) - such non-monopolist arrangements are not universal. That is to say, there are instances where the regulator is part of the NCB (monopolist regimes), and others where the regulator is separate (non-monopolist regimes).²²²

There is no definitive answer as to which regime is preferable, but the available evidence favours a non-monopolist approach. The advantages and disadvantages of each are as follows:

(i) The monopolist approach

The monopolist approach has a number of advantages. Chief among these are the synergies and efficiencies enjoyed by locating the

²²⁰ Jill Treanor, op cit.

²²¹ Financial Policy Committee, op cit.

²²² David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 28.

regulator within the NCB. ²²³ The converse of which, is that in a bifurcated system there will, of necessity, be a degree of overlap between the information gathering activities of the NCB and the prudential regulator. ²²⁴ As the NCB will always collect information about individual banks, purely by virtue of its role in the conduct of monetary policy, ²²⁵ an argument can be made that the most efficient arrangement is to build on this, and locate the prudential authority within the NCB.

Indeed some argue²²⁶ that when a financial system is under strain, it is infeasible for the entity that regulates the entire system to be separate from the entity that regulates each financial firm, and this has been the view of De Nederlandsche Bank.

Further, in jurisdictions lacking a strong tradition of independent regulatory agencies, advantages may be gained by locating the regulator within an NCB, provided the NCB has a strong tradition of independence²²⁷. The Republic of South Africa serves as a good example. South Africa is the most recent adopter of Twin Peaks, and the South African Reserve Bank (SARB) will house the new Prudential Authority (PA). The SARB's independence is enshrined in the South African Constitution.

'The South African Reserve Bank, in pursuit of its primary object, must perform its functions independently and without fear, favour or prejudice, but there must be regular consultation between the Bank and the Cabinet member responsible for national financial matters.' 228

²²⁴ Ibid, p 30.

²²³ Ibid, p 30.

²²⁵ Ibid, p 30.

²²⁶ Ibid, p 30.

²²⁷ See further: ibid, p 11, § 9.

²²⁸ Chapter 13, s 224(2), *Constitution of the Republic of South Africa*, No. 108 of 1996, (enacted: 1996), (Republic of South Africa). For an analysis of the degree of independence enjoyed by the SARB see: D. Schmulow & L. Greyling, "Monetary

However, as Nevin asserts:

'So essentially, the SARB and the finance ministry-controlled national treasury are the monetary authority in South Africa, although the Constitution expressly enshrines the SARB's independence ... The apparent contradiction - being independent on the one hand and having joint authority over monetary matters with the finance ministry on the other - tends to cause confusion amongst South Africans and seemingly friction between the SARB and the government.'229

This position has precedent, because it is not infrequently the case that the NCB enjoys a measure of statutory, if not constitutional independence.²³⁰ This independence and reputational status are easier to extend to a prudential authority located within the NCB, than without. But, of course, the converse is also true: a failure by the prudential authority located within an NCB will damage the reputation of the NCB ²³¹. Moreover, the mere presence of the prudential authority within the NCB will contaminate the purity of the monetary stability objectives of the NCB, by introducing bank safety and soundness considerations.²³²

Conversely the NCB may be able to gain valuable insights into the state of the economy by conducting the activities of the Prudential

Policy in the New South Africa: Economic and Political Constraints", *South African Journal of Economics*, Vol. 64, no. 3 (September, 1996), p 176.

²²⁹ Tom Nevin, "How independent is the South-African Reserve Bank?", African Business, no. 332 (June, 2007), p 32.

²³⁰ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 31.

²³¹ See the remarks made by SARB Governor, Dr Chris Stals, quoted in C. Goodhart, P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, op cit, p 170/1. See also Stals' solution through enactment of separate legislation for the PA and the SARB, ibid, p 171.

²³² David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 31.

Authority (PA).²³³ Heller²³⁴ and Di Noia *et al*²³⁵ state that an ability to influence bank policy through regulatory pressure may add to the efficacy of monetary policy. ²³⁶ They argue that due to the interrelationship between the activities of the NCB and the PA, coordination is a necessary prerequisite.²³⁷ Management of the payments system to contain systemic risk may also require access, control and monitoring of the participants in the system.²³⁸

Doubtless this assertion - the necessity of co-ordination - is correct. However, it is not correct to argue that co-ordination, of necessity, precludes two separate entities, as analysis of the Australian model demonstrates²³⁹.

According to Haubrich, the information advantages derived from a monopolistic approach are 'particularly needed in times of financial crisis, when only direct supervision can deliver the essential

²³³ Carmine Di Noia & Giorgio Di Giorgio, "Should banking supervision and monetary policy tasks be given to different agencies?", *International Finance*, Vol. 2, no. 3 (November, 1999), p 367. The authors cite a study into the US economy in which confidential supervisory information on bank ratings allowed the Federal Reserve to make more accurate predictions on macro-economic variables such as rates of inflation and unemployment. Ibid, p 367.

²³⁴ H. Robert Heller, "Prudential supervision and monetary policy", Chap. 11, in *International Financial Policy: Essays in Honour of Jacques J. Polak*, September, 1991, p 272.

²³⁵ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 367.

²³⁶ See also: Vasso P. Ioannidou, "Monetary Policy And Bank Supervision", Paper presented at the Federal Reserve Bank of Chicago Conference on Bank Structure and Competition, *Federal Reserve Bank of Chicago Conference on Bank Structure and Competition Proceedings*, Chicago, II, series editor: Federal Reserve Bank of Chicago, in 'Federal Reserve Bank of Chicago Conference on Bank Structure and Competition Proceedings', May 2002, p 2.

²³⁷ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 367.

²³⁸ Ibid, p 368, citing Charles Goodhart & Dirk Schoenmaker, "Institutional separation between supervisory and monetary agencies", *Giornale degli economisti e annali di economia*, Vol. 51, no. 9/12 (October-December, 1992), p 370.

²³⁹ See: IV HISTORICAL DEVELOPMENT, (b) Australia, pp 28ff, above.

information on time.' ²⁴⁰ Similarly, a central bank supervising the banking system may be better placed to know whether a bank seeking assistance from the NCB as lender of last resort is insolvent, or simply illiquid. ²⁴¹ However, as Goodhart *et al* ²⁴² argue, 'the revealed preference of monetary authorities has been to rescue banks running into difficulties, so long as there appeared to be any risk of a systemic knock-on effect' ²⁴³ and that, consequently, the argument in favour of an NCB being better placed to know whether a bank seeking credit merits assistance, does not hold. Additionally Haubrich's argument does not of necessity exclude a non-monopolist approach. Close coordination, as currently exists in Australia, between the NCB and the

²⁴⁰ Joseph G. Haubrich, "Combining bank supervision and monetary policy", *Economic Commentary* (November, 1996), p 4.

²⁴¹ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 368. See also: Vasso P. Ioannidou, "Does monetary policy affect the central bank's role in bank supervision?", *Journal of Financial Intermediation*, Vol. 14, no. 1 (January, 2005), p 61.

²⁴² Charles Goodhart & Dirk Schoenmaker, "Should the Functions of Monetary Policy and Banking Supervision Be Separated?", *Oxford Economic Papers*, Vol. 47, no. 4 (October, 1995), p 549.

²⁴³ Vasso P. Ioannidou, "Does monetary policy affect the central bank's role in bank supervision?", *Journal of Financial Intermediation*, op cit, p 61.

PA, with clearly defined processes, ²⁴⁴ may provide the necessary mechanisms for systemic stability. ²⁴⁵

Moreover, a separation between the PA and the NCB may serve to insulate the NCB from the reputational harm²⁴⁶ associated with the failure of a regulated institution, as was the case with the collapse of the Australian insurer, HIH.²⁴⁷

(ii) The non-monopolist approach

In selecting to separate the PA from the NCB, and thereby adopt a non-monopolist approach, the Wallis Commission²⁴⁸ set forth its main reasons as entailing avoiding the inefficiencies of combining deposit

²⁴⁴ Anonymous, *Memorandum of Understanding*, 12 October, 1998; The Council of Financial Regulators, op cit: 'In the CFR, members share information, discuss regulatory issues and, if the need arises, coordinate responses to potential threats to financial stability. The CFR also advises Government on the adequacy of Australia's financial regulatory arrangements'; and The Council of Financial Regulators, *Memorandum of Understanding on Financial Distress Management between the Members of the Council of Financial Regulators*, The Reserve Bank of Australia, The Australian Prudential Regulation Authority, The Australian Securities and Investments Commission and The Treasury of the Commonwealth of Australia, 18 September, 2008.

²⁴⁵ Contra, see Vasso P. Ioannidou, "Does monetary policy affect the central bank's role in bank supervision?", *Journal of Financial Intermediation*, op cit, p 61, fn 3: 'This argument assumes that it is not possible for a third party, responsible for bank supervision, to transfer information effectively to the [Lender of Last Resort]. This assumption is clearly debatable. However, it seems more plausible during periods of financial instability, since the speed and the degree with which the condition of an institution deteriorates is significantly higher during periods of financial instability. Moreover, it is in "bad" times that institutions are more likely to "cook" their books and hide their true condition. Hence, under these circumstances direct supervision could help deliver the essential information on time.'

²⁴⁶ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 369.

²⁴⁷ See: The HIH Royal Commission, 16 April, 2003.

²⁴⁸ Stan Wallis, Bill Beerworth, Professor Jeffrey Carmichael, Professor Ian Harper & Linda Nicholls, 31 March, 1997.

taking, insurance and superannuation regulation carried out by a 'central bank whose primary operational relationships are with banks alone and whose operational skills and culture have long been focused on banking'; that separation would clarify that there are no guarantees of solvency for any financial institution, or its promises; and that separation would enable both the RBA (NCB) and the APRC (now APRA – the PA) to focus on their primary objectives, while clarifying lines of accountability²⁴⁹

While empirical evidence in support of a non-monopolist approach remains scant, one survey ²⁵⁰ finds that inflation is 'considerably higher and more volatile' in countries where the PA is located within the NCB.²⁵¹ In addition, a non-monopolist regulatory approach can be said to comport more closely with the Core Principles of Basel III - in particular Principle 2²⁵² - and is often synonymous with a more competitive financial system.²⁵³

Di Noia *et al* ²⁵⁴ find evidence of this in higher lendingborrowing spreads in countries with a PA integrated into the NCB, as

²⁴⁹ Ibid, p 21.

²⁵⁰ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit.

²⁵¹ Ibid, pp 361, 372. According to their research, anywhere from 50 per cent to 100 per cent higher. Ibid, p 370. See also David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 29. Contra, see: Vasso P. Ioannidou, "Monetary Policy And Bank Supervision", op cit, p 1.

²⁵² Principle 2 states '– *Independence*, accountability, resourcing and legal protection for supervisors: The supervisor possesses *operational independence*, transparent processes, sound governance, budgetary processes that do not undermine *autonomy* and adequate resources, and is accountable for the discharge of its duties and use of its resources. The legal framework for banking supervision includes legal protection for the supervisor.' (Emphasis added). Basel Committee on Banking Supervision, September, 2012, p 10 § 41. See also David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 41.

²⁵³ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 373.²⁵⁴ Ibid, p 373/4.

well as the other indicators of bank profitability and efficiency, both of which are lower in countries with an integrated, monopolist NCB-PA structure. For example, staff costs are on average 50 per cent higher, and bank reserves as much as 300 per cent higher, in monopolist jurisdictions. Crucially, such a major difference in reserves between monopolist and non-monopolist countries is ascribed to the difference in the way in which the compulsory reserve requirement is employed between the two. In the former this requirement is used both as a monetary policy tool and a form of depositor protection. ²⁵⁵ Furthermore, countries with monopolist regimes are typified by higher non-bank deposits, and less intensive use of the interbank market. ²⁵⁶

Banking sectors in 'monopolist' countries are more protected and somehow less developed and efficient than those in 'non-monopolist' countries.²⁵⁷

There are, in addition, conflicts of interest²⁵⁸ that ought to be considered when locating the PA. The NCB's focus is primarily a macro-prudential one, whereas the PA's focus is chiefly micro-prudential. Consequently, as lender of last resort, the NCB may find itself under pressure to assist regulated institutions when the PA is located within the NCB. It is argued that such conflicts of interest are best avoided.

For example, a typical conflict that may arise is that the NCB is concerned with the stability of the banking system, primarily for the effect that that instability may have on the payments system, its capacity to transmit monetary policy signals, and the costs associated with its lender of last resort function in a crisis.²⁵⁹ Conversely, the

²⁵⁵ Ibid, p 375.

²⁵⁶ Ibid, p 376.

²⁵⁷ Ibid, p 376.

²⁵⁸ See also: ibid, p 368.

²⁵⁹ Ibid, p 367.

PA's primary concern is monetary stability, for the effect it has on interest rates and possibly exchange rates²⁶⁰ and, in turn, the effect those factors have on bank profitability and, by implication, bank soundness.

Within this more usual context, the conflict of interest may arise between the monetary authorities, who wish for higher rates (e.g. to maintain an exchange rate peg, to bear down on inflation, or to reduce the pace of monetary growth), and the regulatory authorities who are frightened about the adverse effects such higher rates may have upon the bad debts, profitability, capital adequacy and solvency of the banking system.²⁶¹

The corollary to this is when the monetary authority displays a preference for lower interest rates: if, in such an environment, bank profitability is typically low, or bank balance sheet structures are vulnerable to lower interest rates, then a further lowering of interest rates may contribute to greater bank vulnerability, and may be opposed by the PA. This potentially creates an irreconcilable tension between the PA and the NCB. Conversely, excessive focus on the PA's concerns in the setting of monetary policy may worsen bank fragility in the long run.²⁶²

The sign on the estimated coefficient of monetary policy indicates that when the Fed tightens monetary policy, it becomes less strict in bank supervision (i.e., an increase in interest rates or a decrease in reserves is associated with a lower probability of intervention). One possible explanation is that the Fed tends to be less strict on bank supervision in order to compensate banks for the extra pressure it puts on them when it tightens monetary policy. The Fed might be interested

²⁶⁰ Ibid, p 367.

²⁶¹ Charles Goodhart & Dirk Schoenmaker, "Institutional separation between supervisory and monetary agencies", *Giornale degli economisti e annali di economia*, op cit, p 361.

²⁶² H. Robert Heller, op cit, p 273.

in compensating troubled banks either because it is concerned about possible adverse effects from bank failures on its reputation or because it is concerned about possible knock-on effects. After all, the Fed is responsible for maintaining the stability of the financial system and it is responsible for the supervision of some of the biggest banks in the United States.²⁶³

A further instance for potential conflicts of interest between the NCB and the PA include the expectation that the NCB will be influenced by stability considerations, when determining monetary policy,²⁶⁴ or that the NCB may employ open market operations and access to the discount window as a supervisory instrument.²⁶⁵

Lastly, Di Noia $et\ al^{266}$ assert that conflicts may arise between macro (monetary) and micro (regulatory) policy, in that monetary policy tends to be anti-cyclical, whereas regulatory policy tends to be pro-cyclical. ²⁶⁷ Di Noia $et\ al^{268}$ cite an example where, during an economic slowdown, a bank's non-performing assets may increase, precipitating higher loan-loss provisioning rules, and pressure from the regulator to increase the quality of the bank's portfolio. As Tuya et

²⁶³ Vasso P. Ioannidou, "Does monetary policy affect the central bank's role in bank

supervision?", Journal of Financial Intermediation, op cit, p 60.

²⁶⁴ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 369.

²⁶⁵ José Tuya & Lorena Zamalloa, "Issues on Placing Banking Supervision in the Central Bank", Chap. 26, in *Frameworks for Monetary Stability: Policy Issues and Country Experiences. Papers presented at the sixth seminar on central banking, Washington, D.C., March 1-10, 1994*, edited by Tomás J.T. Baliño & Carlo Cottarelli, series editor: the International Monetary Fund, December, 1994, p 680.

²⁶⁶ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 369.

²⁶⁷ Charles Goodhart & Dirk Schoenmaker, "Institutional separation between supervisory and monetary agencies", *Giornale degli economisti e annali di economia*, op cit, p 362.

²⁶⁸ Carmine Di Noia & Giorgio Di Giorgio, *International Finance*, op cit, p 369.

 al^{269} point out, this leads to a restriction in credit at precisely the time when monetary policy should be expansionary.²⁷⁰

VII CONCLUSION

The wisdom of the objectives-based architecture [has] been borne out to a considerable extent by the Australian experience. "This model avoids the conflict of objectives faced by regulators under virtually every other architecture. Where an agency faces multiple objectives there is a danger ... that one will, for whatever reason, dominate the other in terms of visibility with senior management and/or allocation of resources (as appears to have been the case with Northern Rock in the UK)."271

The Twin Peaks regime has principally six advantages. First, by assigning each regulatory agency a single objective, there is maximum regulatory focus.

Second, there are significant potential synergies in bringing together all regulators of a particular market. APRA, for example, was able to bring together best practices from banking and insurance regulation to create a stronger framework for both. APRA was also one of the first agencies to apply a broad risk-based supervisory approach to all prudentially regulated sectors of the financial system. Similarly, Australia was one of the first countries in the world to

_

²⁶⁹ José Tuya & Lorena Zamalloa, op cit, p 670.

²⁷⁰ For more on the correlation between an expansionary monetary policy and a monopolist regulatory structure, see: David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 29; H. Robert Heller, op cit, p 272.

²⁷¹ Alan Erskine, July, 2014, p 43, citing Professor Jeffrey Carmichael, "Regulation by Objective – The Australian Approach to Regulation: Statement to the US Senate Committee on State Homeland Security and Governmental Affairs", Washington, DC, in 'Statement to the US Senate Committee on State Homeland Security and Governmental Affairs', 21 May 2009, p 6.

introduce a single licensing regime for market participants, by bringing all markets under ASIC's purview.

Third, bringing all prudentially regulated entities under the one roof is conducive to eliminating regulatory arbitrage. ²⁷² Prior to the creation of APRA there were at least three different types of institutions able to issue demand deposits in Australia. These were regulated by nine different agencies. Following its creation, APRA introduced a fully harmonised regime for all deposit-taking institutions. These are now regulated as "Authorised Deposit-taking Institutions" (ADIs) under a single licensing regime. This coherence over deposit taking was important in preventing a shadow-banking sector from emerging in Australia.

Fourth, bringing all prudentially regulated institutions under one roof should facilitate a more consistent and effective approach to regulating financial conglomerates. APRA has been at the forefront of international efforts to develop a framework for consolidated supervision of conglomerates.

Fifth, allocating a single objective to each regulator minimises the overlap between agencies and the inevitable turf wars that accompany such overlaps. There are always grey areas in practice, however neat the principles might appear in theory. The greatest potential overlaps are between prudential regulation and systemic stability regulation on the one hand (to the extent that prudential soundness provides one of the key foundation stones for systemic stability), and between prudential and conduct regulation on the other (to the extent that they each involve regulation of different aspects of the same institutions). Notwithstanding the potential for overlap, these have tended to diminish rather than amplify with time and experience. In part this is a consequence of the clear lines of responsibility in each

²⁷² Cf David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 22.

situation. And, in part, it is a consequence of the determination by the key parties to co-operate in the interests of the system as a whole.

Sixth, the allocation of a single objective to each agency should minimise cultural clashes. As a general rule, conduct agencies are dominated by lawyers. Prudential agencies, in contrast, are typically dominated by accountants, economists, and finance experts. When these two groups are combined in the same agency there can be a clash of cultures as one seeks to dominate the other.²⁷³

A fairly typical phenomenon of financial regulation, is that in most countries, the regulatory system was designed in response to a financial system which, thanks to innovation, no longer exists. ²⁷⁴ Consequently, financial innovation also requires regulatory system reform. On balance, Twin Peaks is the regulatory paradigm most well-suited to respond to these innovations. It is to be expected, therefore, that an increasing number of countries will, over time, adopt this system. Twin Peaks is not, however an irrevocable guarantee of financial system stability.

New structures do not guarantee better regulation. More appropriate structures may help but, fundamentally, better regulation comes from stronger laws, better-trained staff and better enforcement. Any country that thinks that tinkering with the structure of agencies will, by itself, fix past shortcomings is doomed to relive its past crises.²⁷⁵

²⁷³ Professor Jeffrey Carmichael, "Regulation by Objective – The Australian Approach to Regulation: Statement to the US Senate Committee on State Homeland Security and Governmental Affairs", op cit, p 6/7.

²⁷⁴ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 9.

²⁷⁵ Professor Jeffrey Carmichael, "Australia's Approach to Regulatory Reform", Chap. 3, Making the Structural Decision, in *Aligning Financial Supervisory Structures with Country Needs*, edited by Jeffrey Carmichael, Alexander Fleming & David T. Llewellyn, in 'WBI Learning Resource Series', series editor: World Bank Institute, 2004, p 95/6.

... institutional structure does not in itself guarantee effective regulation and supervision, and it would be hazardous to assume that changing the structure of regulatory institutions is itself a panacea. What institutional structure does is establish the framework in which to optimise a regulatory regime. In effect, institutional structure provides the architecture of regulation and supervision.²⁷⁶

To this must be added a regulatory culture that enshrines, as Das $et\ al^{277}$ assert, independence, accountability, transparency, and integrity. If the contention contained in this paper is correct, that regulators, and particularly prudential regulators, are required to foresee the unforeseeable, then in addition there should be a culture that rewards regulators that display those characteristics of independence, accountability, transparency and integrity, while inculcating a culture of curiosity and robust self-criticism.

With apologies to Winston Churchill²⁷⁸, Twin Peaks is not the end. It is not even the beginning of the end. It is merely the end of the beginning.

²⁷⁶ David T. Llewellyn, "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", op cit, p 42.

²⁷⁷ Udaibir C. Das & Marc Quintyn, *Crisis Prevention and Crisis Management: The Role of Regulatory Governance*, in 'IMF Working Paper', no. WP/02/163, International Monetary Fund, September, 2002, p 48.

²⁷⁸ Churchill's address to The Lord Mayor's Luncheon, Mansion House, 10 November, 1942. The original quote reads: "Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning. Henceforth Hitler's Nazis will meet equally well armed, and perhaps better armed troops. Hence forth they will have to face in many theatres of war that superiority in the air which they have so often used without mercy against others, of which they boasted all round the world, and which they intended to use as an instrument for convincing all other peoples that all resistance to them was hopeless....". The Churchill Society, "The Lord Mayor's Luncheon, Mansion House, "The End of the Beginning", November 10, 1942", published by The Churchill Society, Undated, accessed: 8 October, 2015.

VIII REFERENCES

- Abrams, Richard K. & Michael W. Taylor, *Issues in the Unification of Financial Sector Supervision*, series edited by David S. Hoelscher, in *'IMF Working Paper'*, no. WP/00/213, Monetary and Exchange Affairs Department, International Monetary Fund, published by International Monetary Fund, Washington, DC, December 2000, pp 1-32, http://www.imf.org/external/pubs/ft/wp/2000/wp00213.pdf.
- Australian Prudential Regulation Authority Act (Cth), No. 50 of 1998, (Australia)
- Australian Securities and Investments Commission Act (Cth), No. 51 of 2001, (Australia)
- Anonymous, "Britain's bank-basher-in-chief is toppled", 'Web-only article', *The Economist*, Britain ed., published by The Economist Newspaper Limited, London, UK, 17th July, 2015, http://www.economist.com/news/britain/21659145-ousting-citys-fiercest-watchdog-suggests-more-emollient-political-mood-britains.
- Constitution of the Republic of South Africa, No. 108 of 1996, (enacted: 1996), (Republic of South Africa)
- Financial Sector Regulation Bill, 11 December, 2013, (Republic of South Africa)
- Financial Services Reform Act (Cth), No. 122 of 2001, (enacted: 27 September), (Australia)
- Anonymous, *Memorandum of Understanding*, The Reserve Bank of Australia and The Australian Prudential Regulation Authority, published by The Australian Prudential Regulation Authority, Sydney, NSW, 12 October 1998, pp 1-3, http://www.apra.gov.au/MediaReleases/Documents/Memorandum-of-Understanding-Reserve-Bank-of-Australia-and-APRA.PDF.
- Reserve Bank Act (Cth), No. 4 of 1959, (Australia)
- Australian Government, The Treasury, "Statement of Expectations Australian Prudential Regulation Authority", series edited by Australian Government, The Treasury, in Statements of Expectations, published by Australian Government, The Treasury, Canberra, ACT, Undated, accessed: 9 October 2015, http://www.treasury.gov.au/~/media/Treasury/PolicyTopics/Public Policy and Government/Statements of Expectations/Downloads/PDF/APRA Statement of expectations.ashx.
- Australian Government, The Treasury, The Treasury Commonwealth Government of Australia, "Statement of Expectations for the Australian Prudential Regulation Authority", 1-8, http://www.apra.gov.au/AboutAPRA/documents/Statement-of-Expectations-from-Treasurer-20-Feb-07.pdf.
- Australian Prudential Regulation Authority, *Annual Report 2014*, series edited by Australian Prudential Regulation Authority, Australian Prudential Regulation Authority, published by Australian Prudential Regulation Authority, Sydney, NSW, 13

- October 2014, pp 1-192, http://www.apra.gov.au/AboutAPRA/Publications/Documents/1410-AR-2013-Full.pdf.
- Australian Prudential Regulation Authority, *Probability and Impact Rating System*, series edited by Australian Prudential Regulation Authority, Australian Prudential Regulation Authority, published by Australian Prudential Regulation Authority, Sydney, NSW, June 2012, pp 1-26, http://www.apra.gov.au/CrossIndustry/Documents/PAIRS-062012-External-version.pdf.
- Australian Prudential Regulation Authority, "Probability and Impact Rating System", in About APRA, Probability and Impact Rating System, published by Australian Prudential Regulation Authority, Sydney, NSW, June 2012, accessed: 5 August 2015, http://www.apra.gov.au/AboutAPRA/Pages/PAIRS-1206-HTML.aspx.
- Australian Prudential Regulation Authority, *Report into Irregular Currency Options Trading at the National Australia Bank*, series edited by Australian Prudential Regulation Authority, Australian Prudential Regulation Authority, published by Australian Prudential Regulation Authority, Sydney, NSW, 23 March 2004, pp 1-87, http://www.trialchemy.com.au/files/APRA_23rd_March_2004.pdf.
- Australian Prudential Regulation Authority, "Supervision", series edited by Australian Prudential Regulation Authority, in About APRA, published by Australian Prudential Regulation Authority, Sydney, NSW, accessed: 31 July 2015, http://www.apra.gov.au/AboutApra/Pages/Supervision.aspx.
- Australian Prudential Regulation Authority, Supporting Materials for Assessment Against the Basel Core Principles, in 'IMF Financial Sector Assessment Program Australia', Australian Prudential Regulation Authority, published by Australian Prudential Regulation Authority, Sydney, NSW, 2006, pp 1-126, http://www.apra.gov.au/aboutapra/documents/imf-adifinancial-sector-assessment-program.pdf.
- Basel Committee on Banking Supervision, Core Principles for Effective Banking Supervision, Basel Committee on Banking Supervision, Bank for International Settlements, published by Bank for International Settlements, Basel, Switzerland, September 2012, pp 1-79, http://www.bis.org/publ/bcbs230.pdf.
- Baxter, Lawrence G., "Capture Nuances in Financial Regulation", Wake Forest Law Review, Vol. 47, no. 3, Fall, 2012, pp: 537, http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=52 66&context=faculty_scholarship.
- Bell, Stephen & Andrew Hindmoor, *Masters of the Universe, Slaves of the Market*, in 'Business & Economics, Banks & Banking', published by Harvard University Press, Cambridge, MASS,

- 2015, 400 pages, pp 1-400, 978-0-674-74388-5, https://books.google.com.au/books?id=U6PLBgAAQBAJ.
- Bhati, Shyam, "An Analysis of the Financial Services Regulations of Australia", *International Review of Business Research Papers*, Vol. 4, no. 2, March, 2008, pp: 13-25, http://www.irbrp.com/static/documents/March/2008/14233757 14.pdf.
- Binham, Caroline & Jonathan Guthrie, "FCA: On the wrong side of the argument?", "The Big Read, Comment', *Financial Times*, published by The Financial Times Ltd., London, UK, 2 July, 2015, 7:29 pm, http://www.clmr.unsw.edu.au/sites/default/files/content_files/fca_on_the_wrong_side_of_the_argument_-_ft.pdf.
- Black, Julia, Learning from Regulatory Disasters, in 'LSE Law, Society and Economy Working Papers', no. 24/2014, Law Department, London School of Economics and Political Science, published by London School of Economics and Political Science, London, UK, 2014, pp 1-17, http://eprints.lse.ac.uk/60569/1/WPS2014-24_Black.pdf.
- Black, Julia, "Managing Regulatory Risks and Defining the Parameters of Blame: A Focus on the Australian Prudential Regulation Authority", *Law & Policy*, Vol. 28, no. 1, January, 2006, pp: 1-30, http://www.heinonline.org.ezp.lib.unimelb.edu.au/HOL/Page?handle=hein.journals/modlr71&div=6&collection=journals&set_as_cursor=1&men_tab=srchresults&terms=Black,Julia&type=matchall.
- Black, Julia, "OFR: the historical context", Chap. 2, in *Outcomes-Focused Regulation, A Practical Guide*, edited by Andrew Hopper QC & Gregory Treverton-Jones QC, in 'Legal Handbooks', series editor: The Law Society, published by Law Society Publishing, London, UK, 2011, pp 7-20, 9781907698095,

 http://bookshop.lawsociety.org.uk/ecom_lawsoc/public/saleproduct.jsf?catalogueCode=9781907698095.
- Black, Julia, Principles Based Regulation: Risks, Challenges and Opportunities, paper presented at the 'Presentation by Julia Black on Principles Based Regulation to be followed by A Conversation with the Regulators', Sydney Courthouse (Banco Court), Sydney, NSW, edited by The Discipline of Business Law, Faculty of Economics and Business, University of Sydney, published by London School of Economics and Political Science, Sydney, Wednesday 28th March 2007, 1-25, pp http://eprints.lse.ac.uk/62814/.
- Black, Julia, "Regulatory Styles and Supervisory Strategies", Part III. Delivering Outcomes and Regulatory Techniques, Chap. 8, in *The Oxford Handbook of Financial Regulation*, edited by Niamh Moloney, Eilís Ferran & Jennifer Payne, published by Oxford University Press, Oxford, UK, August, 2015, pp 217-

- 253, 978-0-19-968720-6, http://ukcatalogue.oup.com/product/9780199687206.do.
- Briaullt, Clive, "The rationale for a single national financial services regulator", *Financial Services Authority Occasional Paper*, no. 2, 1999.
- Brown, Andrew D., "Making sense of the collapse of Barings Bank", Human Relations, Vol. 58, no. 12, 2005, pp: 1579-1604, 0018-7267
- Buckley, Ross, "Australia's banking culture: What has gone wrong?", 'Comment', *The Canberra Times*, published by Fairfax Media, Ltd, Canberra, ACT, 16 June, 2015, 16 June, 2015, http://www.canberratimes.com.au/comment/australias-banking-culture-what-has-gone-wrong-20150616-ghp4ct.html.
- Calomiris, Charles W. & Gary Gorton, *The Origins of Banking Panics: Models, Facts, and Bank Regulation*, paper presented at the Rodney L. White Center for Financial Research, The Wharton School, published by University of Pennsylvania, Philadelphia, PA, November 1990, pp 104, http://finance.wharton.upenn.edu/~rlwctr/papers/9011.PDF.
- Campbell, A. & R. Lastra, "Revisiting the Lender of Last Resort", *Banking and Finance Law Review*, Vol. 24, no. 3, June, 2009, pp: 453-497.
- Carmichael, Professor Jeffrey, "Australia's Approach to Regulatory Reform", Chap. 3, Making the Structural Decision, in Aligning Financial Supervisory Structures with Country Needs, edited by Jeffrey Carmichael, Alexander Fleming & David T. Llewellyn, in 'WBI Learning Resource Series', series editor: World Bank Institute, published by The International Bank for Reconstruction and Development/The World Washington, DC, 2004, pp 93-113, 0-8213-6002-7. http://elibrary.worldbank.org.ezp.lib.unimelb.edu.au/doi/pdf/1 0.1596/0-8213-6002-7.
- Carmichael, Professor Jeffrey, "Implementing Twin Peaks. Lessons from Australia", Chap. 5, in *Institutional Structure of Financial Regulation: Theories and International Experiences* 1st ed., edited by Robin Hui Huang & Dirk Schoenmaker, in 'Part II, International experiences', series editor: Routledge Research in Finance and Banking Law, published by Routledge Oxford, 2014, pp 1-280, 978-0415726870, http://reader.eblib.com.au.ezp.lib.unimelb.edu.au/(S(3p00djfcp cig4a0teuad2cfh))/PrintProcess.aspx?p=122&m=2&c=122,123 ,124,125,126,127.
- Carmichael, Professor Jeffrey, "Regulation by Objective The Australian Approach to Regulation: Statement to the US Senate Committee on State Homeland Security and Governmental Affairs", Washington, DC, in 'Statement to the US Senate Committee on State Homeland Security and Governmental Affairs', published by Senate of the United States of America, 21 May, 2009, pp 1-8.

- Carruthers, Bruce, ""Objectives Based Regulation:" buzzword du jour?," *Out of the Crooked Timber of Humanity, No Straight Thing Was Ever Made*, Blog, 2 April, 2008, [Accessed: 22 July, 2015], Twin PeaksThe Theory(Oxford).docx.
- Coffee, John C., Jr. & Hillary A. Sale, "Redesigning the SEC: Does the Treasury have a better idea?", *Virginia Law Review*, Vol. 95, June, 2009, pp: 707-785, http://www.heinonline.org.ezp.lib.unimelb.edu.au/HOL/Page? handle=hein.journals/valr95&id=715&collection=journals&index=journals/valr.
- Cooper, Jeremy, "The integration of financial regulatory authorities—the Australian experience", Paper presented at the Comissão de Valores Mobiliários (Securities and Exchange Commission of Brazil), 30th Anniversary Conference 'Assessing the Present, Conceiving the Future', Rio de Janeiro, Brazil, published by Australian Securities & Investment Commission, 4-5 September, 2006, pp 1-14, http://download.asic.gov.au/media/1339352/integration-financial-regulatory-authorities.pdf.
- "The E. Gerald, Banking-Commerce Controversy Corrigan, Revisited", Federal Reserve Bank of New York Quarterly 1. 1991, 0147-6580, Review. Vol. 16. no. http://pd3rz7eg6w.search.serialssolutions.com/?ctx ver=Z39.8 8-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr id=info:sid/summon.serialssolutions.com&rft val fmt= info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=The+

Banking-

Commerce+Controversy+Revisited&rft.jtitle=Federal+Reserv e+Bank+of+New+York+Quarterly+Review&rft.au=Corrigan %2C+E.+Gerald&rft.date=1991-01-

 $\underline{01\&rft.pub} = \underline{Federal} + \underline{Reserve} + \underline{Bank} + of + \underline{New} + \underline{York\&rft.issn} = \\0147 -$

<u>6580&rft.volume=16&rft.issue=1&rft.spage=1&rft.externalDo</u> cID=904956.

- Crockett, A., "International Financial Arrangements: Architecture and Plumbing", Paper presented at the Third David Finch Lecture, University of Melbourne, 12 November, 1999, pp 16, http://www.bis.org/speeches/sp991115.htm.
- Curtis, Rob, "Solvency as a Focal Point of Prudential Regulation: Supervisory Lessons and Challenges", Chap. 6, in *The Future of Insurance Regulation and Supervision: A Global Perspective*, edited by Patrick M. Liedtke & Jan Monkiewicz, published by Palgrave Macmillan, New York, NY, 2011, pp 87-108,

https://books.google.com.au/books?id=bbZeAQAAQBAJ&lpg=PA93&ots=Egl_UnYdKg&dq=This makes HIH one of the biggest collapses in Australian corporate history.&pg=PA93-v=onepage&q&f=true.

Das, Udaibir C. & Marc Quintyn, Crisis Prevention and Crisis Management: The Role of Regulatory Governance, series

- edited by International Monetary Fund, in *'IMF Working Paper'*, no. WP/02/163, Monetary and Exchange Affairs Department, International Monetary Fund, published by International Monetary Fund, Washington, DC, September 2002, pp 1-67, https://www.imf.org/external/pubs/ft/wp/2002/wp02163.pdf.
- De Nederlandsche Bank, *Annual Report 2009*, 600 ed., series edited by De Nederlandsche Bank NV, De Nederlandsche Bank NV, published by De Nederlandsche Bank NV, Amsterdam, NL, 24 March 2010, pp 1-203, http://www.dnb.nl/en/binaries/DNB Annual Report 2009_tcm47-234201.pdf.
- De Nederlandsche Bank, DNB Supervisory Strategy 2010 2014, series edited by De Nederlandsche Bank, in 'Suprainstitutional perspective, strategy and culture', Nederlandsche Bank, published by De Nederlandsche Bank, Amsterdam, NL. April 2010, pp http://www.dnb.nl/en/binaries/DNB Supervisory Strategy 2010-2014 tcm47-238092.pdf.
- De Nederlandsche Bank, *DNB Supervisory Strategy 2010 2014 and Themes 2010*, series edited by De Nederlandsche Bank, De Nederlandsche Bank, published by De Nederlandsche Bank, Amsterdam, NL, April 2010, pp 1-38, http://www.dnb.nl/en/binaries/DNB Supervisory Strategy 2010-2014 and Themes 2010_tcm47-230507.pdf.
- De Nederlandsche Bank, "IMF publishes its report on financial sector and supervision in the Netherlands", in News, published by De Nederlandsche Bank, Amsterdam, NL, 22 June, 2011, accessed: 9 January 2015, http://www.dnb.nl/en/news/news-and-archive/nieuws-2011/dnb254424.jsp.
- Denning, Steve, "Lest We Forget: Why We Had A Financial Crisis", *Forbes*, (22 November, 2011), published electronically by Forbes.com LLC, Jersey City, NJ, http://www.forbes.com/sites/stevedenning/2011/11/22/5086/.
- Di Noia, Carmine & Giorgio Di Giorgio, "Should banking supervision and monetary policy tasks be given to different agencies?", *International Finance*, Vol. 2, no. 3, November, 1999, pp: 361-378, 1468-2362, https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/detail?vid=3&sid=341ea424-bf13-40af-b0a8-4c3fb0b91028%40sessionmgr115&hid=120&bdata=JnNpdGU9ZWhyc3OtbGl2ZO%3d%3d.
- Diamond, Douglas W. & Philip H. Dybvig, "Bank Runs, Deposit Insurance, and Liquidity", *Journal of Political Economy*, Vol. 91, no. 3, June, 1983, pp: 401-419, http://owww.jstor.org.library.vu.edu.au/stable/pdfplus/1837095.pdf?acceptTC=true.
- Douglas, Mary & Aaron Wildavsky, *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*, revised ed., published by University of California Press, Oakland, CA, 1983, 224 pages, pp 1-232, 9780520907393,

- http://site.ebrary.com/lib/unimelb/reader.action?docID=10676 258.
- Edey, Malcom, "Macroprudential Supervision and the Role of Central Banks", Paper presented at the Regional Policy Forum on Financial Stability and Macroprudential Supervision Hosted by the Financial Stability Institute and the China Banking Regulatory Commission, Beijing, PRC, in 'Speeches', published by The Reserve Bank of Australia, Sydney, NSW, 28 September, 2012, sponsored by the Financial Stability Institute and the China Banking Regulatory Commission, http://www.rba.gov.au/speeches/2012/sp-ag-280912.html.
- Elliott, Larry & Jill Treanor, "Revealed: Bank of England disarray in the face of financial crisis", 'Economy', *The Guardian*, published by Guardian News and Media Limited, London, 7 January, 2015, http://www.theguardian.com/business/2015/jan/07/revealed-bank-england-disarray-financial-crisis.
- Engel, Kathleen C. & Patricia A. McCoy, "Turning a Blind Eye: Wall Street Finance of Predatory Lending", Fordham Law Review, Vol. 75, no. 4, March, 2007, pp: 2039-2103, https://web-a-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=6 &sid=ae920ab7-6acc-4ea7-acc6-68ba96e982a2%40sessionmgr4002&hid=4207.
- Erskine, Alan, *Regulating the Australian Financial System*, in 'Funding Australia's Future', Australian Centre for Financial Studies, published by Australian Centre for Financial Studies, Melbourne, Vic, July 2014, pp 1-54, http://fundingaustraliasfuture.com/sites/fundingaustraliasfuture.com/files/papers/Regulating the Australian Financial System.pdf.
- Escritt, Thomas & Anthony Deutsch, "Netherlands nationalizes SNS Reaal at cost of \$5 billion", *Reuters*, US ed., published by Thomson Reuters, Hague/Amsterdam, Friday, 1 February, 2013, 6:30 am, http://www.reuters.com/article/2013/02/01/usdutchfinance-cenbank-idUSBRE9100G920130201.
- Fay, Stephen, *The Collapse of Barings*, published by W. W. Norton & Co, New York, New York and London, 1997, 320 pages, 978-0393337402, http://trove.nla.gov.au/work/15598115.
- Ferguson, Adele, "Hearing into ASIC's failure to investigate CBA's Financial Wisdom", 'Business Day', *The Sydney Morning Herald*, published by Fairfax Media, Sydney, NSW, 3 June, 2014, http://www.smh.com.au/business/hearing-into-asics-failure-to-investigate-cbas-financial-wisdom-20140602-39ept.html.
- Ferguson, Adele & Ben Butler, "Commonwealth Bank facing royal commission call after Senate financial planning inquiry", 'Banking and Finance', *The Sydney Morning Herald*, Business Day ed., published by Fairfax Media, Sydney, NSW, 26 June, 2014, http://www.smh.com.au/business/banking-and-

- <u>finance/commonwealth-bank-facing-royal-commission-call-after-senate-financial-planning-inquiry-20140625-3asy6.html.</u>
- Ferguson, Adele & Deb Masters, "Banking Bad", in Four Corners, Audiovisual Material, Documentary, Four Corners/Fairfax Publishing, Australian Broadcasting Corporation, Sydney, NSW, 5 May, 2014, http://www.abc.net.au/4corners/stories/2014/05/05/3995954.ht
- Fiennes, Toby & Cavan O'Connor-Close, "The evolution of prudential supervision in New Zealand", *Reserve Bank of New Zealand: Bulletin*, Vol. 75, no. 1, March, 2012, pp: 1-13, http://www.rbnz.govt.nz/research_and_publications/reserve_b ank_bulletin/2012/2012mar75_1fiennesOconnorClose.pdf.
- Financial Conduct Authority, "About us", series edited by Financial Conduct Authority, published by Financial Conduct Authority, London, 2014, accessed: 25 September 2014, http://www.fca.org.uk.
- Financial Markets Authority (FMA), "Presentation by Sean Hughes to the New Zealand Capital Markets Forum", 'News, Speeches', published by Financial Markets Authority, New Zealand Government, Auckland, NZ, 17 March, 2011, http://www.fma.govt.nz/news/speeches/presentation-by-sean-hughes-to-the-new-zealand-capital-markets-forum/.
- Financial Policy Committee, "Financial Policy Committee", series edited by Bank of England, in Financial Stability, published by Bank of England, London, 2014, accessed: 26 September 2014, http://www.bankofengland.co.uk/financialstability/pages/fpc/default.aspx.
- Financial Regulatory Reform Steering Committee, *Implementing a twin peaks model of financial regulation in South Africa*, series edited by the Financial Services Board, in Twin Peaks, Financial Services Board, published by the Financial Regulatory Reform Steering Committee, Pretoria, RSA, 1 February 2013, pp 1-77, http://www.fsb.co.za/Departments/twinpeaks/Documents/TwinPeaks 01Feb/2013Final.pdf.
- Financial Services Authority, *The failure of the Royal Bank of Scotland*, in *'Financial Services Authority Board Report'*, Financial Services Authority, published by Financial Services Authority, London, December 2011, pp 1-450, http://www.fsa.gov.uk/pubs/other/rbs.pdf.
- Financial Stability Board, *Increasing the Intensity and Effectiveness of SIFI Supervision*, series edited by FSB Supervisory Intensity and Effectiveness group (SIE), in 'Progress Report to the G20 Ministers and Governors', FSB Supervisory Intensity and Effectiveness group (SIE), Financial Stability Board, published by Financial Stability Board, Basel, CH, 1 November 2012, pp 1-32,

- http://www.financialstabilityboard.org/wp-content/uploads/r_121031ab.pdf.
- Financial System Inquiry, *Financial System Inquiry Final Report*, series edited by The Treasury of the Australian Government, The Treasury, Commonwealth Government of Australia, published by The Australian Government, the Treasury, Canberra, ACT, November 2014, pp 1-320, http://fsi.gov.au/files/2014/11/FSI_Final_Report.pdf.
- Fry, Elizabeth, "Too big to bail: Aussie banks need a living will", 'Banking', *Asia-Pacific Banking & Finance*, published by Australian Financial Publications, Sydney, NSW, Monday 4 May, 2015.
- Garnaut, John, "Watchdog licks its wounds after commission mauling", 'Business', *The Sydney Morning Herald*, published by Fairfax Media, Sydney, NSW, 16 January, 2003, http://www.smh.com.au/articles/2003/01/15/1042520673643.h tml.
- Godwin, A. J. & A.D. Schmulow, "The Financial Sector Regulation Bill In South Africa: Lessons From Australia", *South African Law Journal*, forthcoming, 2015.
- Godwin, A.J. & A.D Schmulow, *The Financial Sector Regulation Bill In South Africa: Lessons From Australia*, series edited by The Centre For International Finance and Regulation (CIFR), in *'The Centre For International Finance and Regulation (CIFR) Research Working Paper Series'*, no. 052/2015 / Project No. E018, The Centre For International Finance and Regulation (CIFR), published by The Centre For International Finance and Regulation, Sydney, NSW, January 2015, pp 1-22, http://www.cifr.edu.au/assets/document/WP052-2015 Godwin E018 The Financial Sector Regulation Bill.pdf.
- Goodhart, C., P. Hartmann, D.T. Llewellyn, L. Rojas-Suarez & S. Weisbrod, "The institutional structure of financial regulation", Chap. 8, in *Financial Regulation: Why, How and Where Now?*, in 'Business & Economics', published by Taylor & Francis, Hoboken, NY, 2013, pp 142-189, 9781135116316, https://books.google.com.au/books?id=x1QKM0gVZ9MC.
- Goodhart, Charles & Dirk Schoenmaker, "Institutional separation between supervisory and monetary agencies", *Giornale degli economisti e annali di economia*, Vol. 51, no. 9/12, October-December, 1992, pp: 353-439, 0017-0097, http://www.jstor.org/stable/23247860.
- Goodhart, Charles & Dirk Schoenmaker, "Should the Functions of Monetary Policy and Banking Supervision Be Separated?", *Oxford Economic Papers*, Vol. 47, no. 4, October, 1995, pp: 539-560, 0030-7653, http://www.jstor.org/stable/2663543.
- Haubrich, Joseph G., "Combining bank supervision and monetary policy", *Economic Commentary*, November, 1996, pp. 1-6, 0428-1276,
 - $\frac{http://www.clevelandfed.org/research/commentary/1996/1196.}{htm}.$

- Heller, H. Robert, "Prudential supervision and monetary policy", Chap. 11, in *International Financial Policy: Essays in Honour of Jacques J. Polak*, published by the International Monetary Fund, Washington, DC, September, 1991, pp 269-281.
- Henry, David & Emily Stephenson, "Fed may shun global risk rules banks spent billions to meet", 'Economy', *Reuters*, US ed., published by Thomson Reuters, New York/Washington, Wednesday, 4 June, 2014, 9:16pm EDT, http://www.reuters.com/article/2014/06/05/us-banks-regulations-insight-idUSKBN0EF09U20140605.
- Hill, Jennifer G., Why Did Australia Fare So Well in the Global Financial Crisis?, 2012 ed., series edited by E. Ferran, N. Moloney, J. G. Hill & Coffee, Jr., J. C., in 'The Regulatory Aftermath Of The Global Financial Crisis, in Sydney Law School Research Paper', no. 12/35, published by Cambridge University Press (Book), University of Sydney Law School (Working Paper), Sydney, NSW, 20 May 2012, pp 203-300, http://ssrn.com/abstract=2063267.
- Hilton, Andrew, *UK financial supervision: a blueprint for change*, series edited by Centre for the Study of Financial Innovation, in *'Centre for the Study of Financial Innovation Working Paper'*, no. 6, Centre for the Study of Financial Innovation, published by Centre for the Study of Financial Innovation, London, UK, May 1994, pp 1-13, http://books.google.com.au/books?id=kIpUYAAACAAJ.
- HM Treasury, Bank of England & Financial Conduct Authority, *How fair and effective are the fixed income, foreign exchange and commodities markets? Consultation document*, Fair and Effective Markets Review, Bank of England, published by Bank of England, London, UK, October 2014, pp 1-67, http://www.bankofengland.co.uk/markets/Documents/femr/consultation271014.pdf.
- Holevas, Alex, "Twin Peaks: The envy of the world", 'News', *Wealth Professional*, published by Key Media Pty Ltd, Sydney, NSW, 22 February, 2012, http://www.wealthprofessional.com.au/news/twin-peaks-the-envy-of-the-world-122530.aspx.
- Hosking, Patrick, "More lever-arch files wouldn't have saved RBS", 'Opinion', *The Times*, Monring ed., published by Times Newspapers Limited, London, 13 December, Tuesday, 13 December, 2013, http://www.thetimes.co.uk/tto/opinion/columnists/article32560 69.ece.
- International Monetary Fund, Financial Sector Supervision: The Twin Peaks Model Technical Note, in 'Financial Sector Assessment Program Update Kingdom of The Netherlands-Netherlands, IMF Country Report', no. 11/208, Monetary and Capital Markets Department, International Monetary Fund (IMF), published by International Monetary Fund (IMF),

- Washington, DC, June/July 2011, pp 1-14, https://www.imf.org/external/pubs/ft/scr/2011/cr11208.pdf.
- International Monetary Fund, Kingdom of the Netherlands-Netherlands: Publication of Financial Sector Assessment Program Documentation—Technical Note on Financial Sector Supervision: The Twin Peaks Model, in 'Financial Sector Assessment Program Update, IMF Country Report No. 11/208', Monetary and Capital Markets Department, International Monetary Fund, published by International Monetary Fund, Washington, DC, July 2011, pp 1-14, http://www.imf.org/external/pubs/ft/scr/2011/cr11208.pdf.
- Ioannidou, Vasso P., "Does monetary policy affect the central bank's role in bank supervision?", *Journal of Financial Intermediation*, Vol. 14, no. 1, January, 2005, pp: 58-85, 1042-9573, http://www.sciencedirect.com/science/article/pii/S1042957304

000269.

- Ioannidou, Vasso P., "Monetary Policy And Bank Supervision", Paper presented at the Federal Reserve Bank of Chicago Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago Conference on Bank Structure and Competition Proceedings, Chicago, Il, series editor: Federal Reserve Bank of Chicago, in 'Federal Reserve Bank of Chicago Conference on Bank Structure and Competition Proceedings', published by Federal Reserve Bank of Chicago, Chicago, Il, May, 2002, pp 1-18, sponsored by Federal Reserve Bank of Chicago.
- Kahneman, Daniel, *Thinking, Fast and Slow*, 1st ed., published by Farrar, Straus and Giroux, New York, NY, 2011, 499 pages, pp 1-499, 978-0-374-27563-1.
- Kaufman, George G., "Bank contagion: A review of the theory and evidence", *Journal of Financial Services Research*, Vol. 8, no. 2, April, 1994, pp: 123-150, 0920-8550, <a href="http://ocontent.ebscohost.com.library.vu.edu.au/pdf10/pdf/1994/1MW/01Apr94/5877790.pdf?T=P&P=AN&K=5877790&S=R&D=bth&EbscoContent=dGJyMNHX8kSeqK84yOvqOLCmr0qeprZSsaq4Sq6WxWXS&ContentCustomer=dGJyMPGnr0yzrbNJuePfgeyx44Dt6fIA.
- Killoren, Gregg D., "Comparative Analysis of Non-U.S. Bank Regulatory Reform and Banking Structure", Law & Business, edited by CCH Incorporated, in 'Banking & Finance', published by Wolters Kluwer, New York, NY, 2009, pp 1-14, http://business.cch.com/bankingfinance/focus/news/comparative.pdf.
- Krugman, Paul, "Looters in Loafers", 'Opinion', *New York Times*, New York ed., published by The New York Times Company, New York, NY, 19 April, 2010, pp A23, http://devo.lbl.gov/~dhaxton/Site_6/Articles_files/Op-Ed_Columnist Looters in Loafers NYTimes.com_1.pdf.
- Laker, John F., "APRA: The Global Financial Crisis And Beyond", Paper presented at the The Australian British Chamber of

- Commerce, Melbourne, published by Australian Prudential Regulation Authority, Sydney, NSW, 26 November, 2009, pp 1-9, http://www.apra.gov.au/Speeches/Documents/26Nov09-JL-ABCC-Melb.pdf.
- Lee, Jane, Cameron Houston & Chris Vedelago, "CBA customers lose homes amid huge fraud claim", 'Victoria', *The Age*, published by Fairfax Media, Melbourne, Vic, 29 May, 2014, http://www.theage.com.au/victoria/cba-customers-lose-homes-amid-huge-fraud-claim-20140528-394se.html.
- Littrell, Charles, "The APRA approach to insurance supervision", series edited by Australian Prudential Regulation Authority, in Speeches, published by Australian Prudential Regulation Authority, Sydney, NSW, 16 May, 2003, accessed: 2 August 2015, http://www.apra.gov.au/Speeches/Pages/03_11.aspx.
- Llewellyn, David T., "Institutional Structure of Financial Regulation and Supervision: The Basic Issues", Paper presented at the World Bank seminar Aligning Supervisory Structures with Country Needs, Washington, DC, series editor: The World Bank, published by The World Bank, Washington, DC, 6th and 7th June, 2006, pp 1-45, sponsored by The World Bank, http://siteresources.worldbank.org/INTTOPCONF6/Resources/2057292-1162909660809/F2FlemmingLlewellyn.pdf.
- MacNeil, Ian, "Enforcement and Sanctioning", Chap. 10, in *The Oxford Handbook of Financial Regulation*, 1st ed., edited by Niamh Moloney, Eilís Ferran & Jennifer Payne, in 'Part III, Delivering Outcomes and Regulatory Techniques', published by Oxford University Press, Oxford, UK, August, 2015, pp 816, 978-0-19-968720-6, https://books.google.com.au/books?id=yrdRCgAAQBAJ&lpg=PA285&ots=n9E_ESNSDV&dq=financial_regulators_cooperative_not_confrontational&pg=PA285_regulators_v=onepage&q&f=true.
- Manley, John, "Dutch regulator says "Twin Peaks" supervision best", 'Financial Regulatory Forum', *Reuters*, US ed., published by Thomson Reuters, 9 October, 2009, http://blogs.reuters.com/financial-regulatory-forum/2009/10/09/dutch-regulator-says-twin-peaks-supervision-best/.
- Martin, Ray, "Bank of America's great mortgage give-away", series edited by CBS Money Watch, in CBS News, published by CBS Interactive Inc.. New York, NY, 9 May, 2012, 10:32 am, accessed: 26 September 2015, http://www.cbsnews.com/news/bank-of-americas-great-mortgage-give-away/.

- Masselink, Maarten & Paul van den Noord, "The Global Financial Crisis and its effects on the Netherlands", ECFIN (Economic analysis from the European Commission's Directorate-General for Economic and Financial Affairs) Country Focus, Vol. 6, no. 10, 4 December, 2009, pp: 1-7, 1725-8375, http://ec.europa.eu/economy_finance/publications/publication16339_en.pdf.
- Masters, Brooke, "Focus on G20 vow to raise financial standards", "Front Page', *The Financial Times*, Morning ed., published by The Financial Times Ltd., London, 15 October, 2009 03:00 am, http://www.ft.com/intl/cms/s/0/0f7f1bee-b923-11de-98ee-00144feab49a.html axzz3OIUgUYaw.
- May, Julie, "Regulatory board to beef up watchdog accountability", 'News / Financial Planning', Financial Observer, Daily News for Financial Services Professionals, published by BenchMark Media Pty Ltd, Sydney, NSW, 10 December, 2014, http://www.financialobserver.com.au/articles/regulatory-board-to-beef-up-watchdog-accountability.
- McConnell, Pat, "ASIC's Fashion Faux-Pas", 'Business & Economy', *The Conversation*, published by The Conversation Media Group, Melbourne, VIC, 13 July, 2015 4.25pm AEST, https://theconversation.com/asics-fashion-faux-pas-44590.
- McConnell, Pat, "War on banking's rotten culture must include regulators", 'Business & Economy', *The Conversation*, published by The Conversation Media Group, Melbourne, VIC, 4 June, 2015 2.14pm AEST, http://theconversation.com/war-on-bankings-rotten-culture-must-include-regulators-42767.
- McConnell, Patrick, *Systemic Operational Risk: Theory, Case Studies and Regulation*, published by Risk Books, a Division of Incisive Media Investments Ltd, London, UK, 2015, 472 pages, pp 1-472, 9781782722182, http://riskbooks.com/systemic-operational-risk-theory-case-studies-and-regulation.
- Merton, R. C. & Z. Bodie, *Deposit insurance reform: a functional approach*, paper presented at the Carnegie-Rochester Conference on Public Policy, Vol. 38, published by North-Holland, 1993, pp 1-34.
- Michael, Bryane, Say Hak Goo & Dariusz Wojcik, "Does Objectives-Based Financial Regulation Imply a Rethink of Legislatively Mandated Economic Regulation? The Case of Hong Kong and Twin Peaks Financial Regulation", *Social Science Research Network*, 12 November, 2014, http://dx.doi.org/10.2139/ssrn.2523346.
- Ministry of Finance, Government of the Netherlands, "The Netherlands and the credit crisis", series edited by Ministry of General Affairs, in Financial Policy, published by Ministry of General Affairs, Den Haag, undated, accessed: 11 January 2015, http://www.government.nl/issues/financial-policy/how-did-the-netherlands-handle-the-credit-crisis.
- Mishkin, Frederic S., Over the Cliff: From the Subprime to the Global Financial Crisis, series edited by National Bureau of

- Economic Research, in 'NBER Working Paper Series', no. 16609, National Bureau of Economic Research, published by National Bureau of Economic Research, Cambridge, MA, December 2010, pp 1-32, http://www.nber.org/papers/w16609.
- National Treasury, Republic of South Africa, Financial Sector Regulation Bill, Comments Received on the First Draft Bill Published by National Treasury for Comments in December 2013 (Comment Period from 13 December 2013 07 March 2014), in 'Documents for Public Comments 2nd Draft Financial Sector Regulation Bill', Vol. 1, National Treasury, National Treasury, Republic of South Africa, published by Republic of South Africa National Treasury, Pretoria, RSA, December 2014, pp 1-233, http://www.treasury.gov.za/public comments/FSR2014/FSR Bill Comments Matrix 10 Dec 2014.pdf.
- National Treasury, Republic of South Africa, "Implementing Twin Peaks Regulation in South Africa", *Media Statement*, (1 February, 2013), (accessed: 19 December, 2014), published electronically by the National Treasury, Republic of South Africa, Pretoria, RSA, pp. 1-2, https://www.fsb.co.za/Departments/twinpeaks/Documents/MediaReleaseTwinPeaks.pdf.
- National Treasury, Republic of South Africa, A safer financial sector to serve South Africa better, series edited by Republic of South Africa National Treasury, in 'National Treasury Policy Document', National Treasury, National Treasury, Republic of South Africa, published by Republic of South Africa National Treasury, Pretoria, RSA, 23 February 2011, pp 1-85, http://www.treasury.gov.za/documents/national-budget/2011/Asafer financial sector to serve South Africa better.pdf.
- Nier, Erlend W., Jacek Osiński, Luis I. Jácome & Pamela Madrid, *Institutional Models for Macroprudential Policy*, in '*IMF Staff Discussion Note*', no. SDN/11/18, Monetary and Capital Markets Department, International Monetary Fund, published by International Monetary Fund, Washington, DC, 1 November 2011, pp 1-25, http://www.imf.org/external/pubs/ft/sdn/2011/sdn1118.pdf.
- Pan, Eric J., "Structural Reform of Financial Regulation", *Transnational Law & Contemporary Problems*, Vol. 19, no. 3, Winter, 2011, pp: 796-867, https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=2
 https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=2
 https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=2
 https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=2
 https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer?vid=2
 <a href="https://web-b-ebscohost-com.ezp.lib.unimelb.edu.au/ehost/pdfviewer/pdfviewer/pdfviewer/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdfviewer/ehost/pdf
- Paulson, Jr., Henry M., Robert K. Steel, David G. Nason, Kelly Ayers, Heather Etner, John Foley III, Gerry Hughes, Timothy Hunt, Kristen Jaconi, Charles Klingman, C. Christopher Ledoux, Peter Nickoloff, Jeremiah Norton, Philip Quinn, Heidilynne Schultheiss, Michael Scott, Jeffrey Stoltzfoos, Mario Ugoletti & Roy Woodall, *The Department of The Treasury Blueprint For A Modernized Financial Regulatory Structure*, series

- edited by The Department of The Treasury, The Department of The Treasury, The Department of The Treasury, published by United States Government The Department of The Treasury, Washington, DC, March 2008, pp 1-218, http://www.treasury.gov/press-center/press-releases/Documents/Blueprint.pdf.
- Prast, Henriëtte & Iman van Lelyveld, New Architectures in the Regulation and Supervision of Financial Markets and Institutions: The Netherlands, in 'DNB Working Paper', no. 021/2004, Division Supervisory Policy, De Nederlandsche Bank, published by De Nederlandsche Bank, Amsterdam, NL, 21 December 2004, pp 1-30, http://www.dnb.nl/binaries/Working Paper 21 tcm46-146678.pdf.
- Pro Publica, *Bailout Recipients*, in 'Bailout Tracker, Tracking Every Dollar and Every Recipient', Pro Publica, published by Pro Publica Inc., New York, NY, 24 September 2015, https://projects.propublica.org/bailout/list.
- Professor David Weisbrot (President), Professor Les McCrimmon (Commissioner in charge), Professor Rosalind Croucher (Commissioner), Justice Berna Collier (part-time Commissioner). Justice Robert French (part-time Commissioner), Justice Susan Kenny (part-time Commissioner) & Justice Susan Kiefel (part-time Commissioner), For Your Information: Australian Privacy Law and Practice (ALRC Report 108), series edited by Australian Law Reform Commission, in 'Publications', no. 108, Vol. 1, Part A, Chapter 4. 'Regulating Privacy', Australian Law Reform Commission, published by Australian Law Commission, Sydney, NSW, 12 August 2008, pp 233-256, http://www.alrc.gov.au/publications/4. Regulating Privacy/regulatory-theory.
- Prudential Regulation Authority, "About the Prudential Regulation Authority", series edited by Bank of England, in Prudential Regulation Authority, published by Bank of England, London, 2014, accessed: 25 September 2014, http://www.bankofengland.co.uk/pra/pages/about/default.aspx.
- Reserve Bank of Australia, "Role of the Reserve Bank in Maintaining Financial Stability", in Financial Stability, published by Reserve Bank of Australia, Sydney, NSW, 2001-2015, accessed: 24 September 2015, http://www.rba.gov.au/finstability/rba.html.
- Reserve Bank of Australia, *Submission to the Financial System Inquiry*, series edited by the Financial System Inquiry, Reserve Bank of Australia, published by the Financial System Inquiry, Sydney, NSW, March 2014, pp 1-249, http://fsi.gov.au/files/2014/04/Reserve_Bank_of_Australia.pdf.
- Rothacker, Rick, "The deal that cost Bank of America \$50 billion and counting", 'News, Business, Banking', *The Charlotte Observer*, published by The McClatchy Company, Charlotte,

- NC, 16 August, 2014, http://www.charlotteobserver.com/news/business/banking/article9151889.html.
- Schmulow, A.D, Approaches to Financial System Regulation: An International Comparative Survey, series edited by The Centre For International Finance and Regulation (CIFR), in 'The Centre For International Finance and Regulation (CIFR) Research Working Paper Series', no. 053/2015 / Project No. E018, The Centre For International Finance and Regulation (CIFR), published by The Centre For International Finance and Regulation, Sydney, NSW, January 2015, pp 1-63, http://www.cifr.edu.au/assets/document/WP053-2015 Godwin E018 Approaches to Financial System Regul.pdf.
- Schmulow, Andrew, "Time for Abbott Government and ASIC to get serious about Australian banksters", 'Business', *Independent Australia*, published by Independent Australia, Isle of Capri, QLD, 10 August, 2015, https://independentaustralia.net/business/business-display/time-for-asic-and-other-regulators-to-get-serious-about-australian-banksters,8036.
- Schmulow, Andrew, "To clean up the financial system we need to watch the watchers", 'Business & Economy', *The Conversation*, published by The Conversation Media Group, Melbourne, VIC, 4 March, 2015 2.11 pm AEDT, http://theconversation.com/to-clean-up-the-financial-system-we-need-to-watch-the-watchers-38359.
- Schmulow, D. & L. Greyling, "Monetary Policy in the New South Africa: Economic and Political Constraints", *South African Journal of Economics*, Vol. 64, no. 3, September, 1996, pp: 175-192, http://onlinelibrary.wiley.com.ezp.lib.unimelb.edu.au/store/10.1111/j.1813-6982.1996.tb01127.x/asset/j.1813-6982.1996.tb01127.x.pdf?v=1&t=hxkgzn1w&s=982851cad602f6ef5915b3eab2adf7b55b5542c6.
- Schoenmaker, Dirk & Jeroen Kremers, "Financial stability and proper business conduct. Can supervisory structures help to achieve these objectives?", Chap. 2, in *Institutional Structure of Financial Regulation: Theories and International Experiences* 1st ed., edited by Robin Hui Huang & Dirk Schoenmaker, in 'Part I, Fundamental theories', series editor: Routledge Research in Finance and Banking Law, published by Routledge Oxford, 2014, pp 1-280, 978-0415726870, 51,52,53,54,55,56,57,58.
- Schooner, Heidi Mandanis & Michael Taylor, "United Kingdom and United States Reponses to the Regulatory Challenges of Modern Financial Markets", *Texas International Law Journal*, Vol. 38, no. 2, Spring, 2003, pp. 317-346,

- http://www.tilj.org/content/journal/38/num2/Schooner-Taylor317.pdf.
- Schwarcz, Steven L., "Systemic Risk", *The Georgetown Law Journal*, Vol. 97, no. 1, 2008, pp: 193-249, http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=1008326.
- Senator Mark Bishop (Chair), Senator David Bushby (Deputy Chair), Senator Sam Dastyari, Senator Louise Pratt, Senator John Williams, Senator Nick Xenophon, Senator David Fawcett & Senator Peter Whish-Wilson, *Performance of the Australian Securities and Investments Commission*, series edited by Economics References Committee, Economics References Committee, Parliament of Australia, The Senate, published by The Senate Parliament of Australia, Canberra, ACT, June 2014, pp 1-519, http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/committee/economics_ctte/ASIC/Final_Report/report.pdf.
- Sheehy, Benedict & Donald Feaver, "Designing Effective Regulation:
 A Normative Theory", *University of New South Wales Law Journal*, Vol. 38, no. 1, 1 January, 2015, pp: 392-425, 0313-0096, <a href="https://content-ebscohost-com.ezp.lib.unimelb.edu.au/ContentServer.asp?T=P&P=AN&K=101545392&S=R&D=a9h&EbscoContent=dGJyMNHr7ESep7c4yOvqOLCmr02eprBSrqm4SbCWxWXS&ContentCustomer=dGJyMPGotU%2BzqrRIuePfgeyx44Dt6fIA."
- Smith, Aaron & James O'Toole, "'Fabulous Fab' held liable in Goldman fraud case", series edited by CNN Money, in News, published by Cable News Network, Atlanta, GA, 1 August, 2013, 6:21 pm ET, accessed: 26 September 2015, http://money.cnn.com/2013/08/01/news/companies/tourregoldman-verdict/.
- Snyder, Benjamin, "Goldman Sachs in \$3.15 billion settlement with federal regulators", series edited by Fortune, in Finance, published by Time, Inc., New York, NY, 22 August, 2014, 7:50 pm EDT, accessed: 26 September 2015, http://fortune.com/2014/08/22/goldman-sachs-in-3-15-billion-settlement-with-federal-regualtors/.
- Sparrow, Malcolm K., *The Regulatory Craft: Controlling Risks*, *Solving Problems, and Managing Compliance*, series edited by Council for Excellence in Government, published by Brookings Institution Press, Washington, DC, 2000, 346 pages, pp 1-346, 0-8157-8065-6, https://books.google.com.au/books?id=wAdUjtKxyQYC&printsec=frontcover&hl=en-v=snippet&q=fix&f=false.
- Srinivas, P. & D. Sitorus, "The Role of State Owned Banks in Indonesia", Paper presented at the Brookings/IMF/World Bank conference on "The Role of State-Owned Financial Institutions: Policy and Practice" being held during April 26-27, 2004, Washington, DC, series editor: The World Bank, published by The World Bank, 2003, pp 1-49,

- http://info.worldbank.org/etools/docs/library/156393/stateowned2004/pdf/srinivas_rolesobsindonesia.pdf.
- Standards Australia, "*The Australian Standard on Compliance Programs*", AS 3806-2006, published by Standards Australia, Sydney, NSW, 9 March, 2006, pp 1-25, http://www.saiglobal.com/PDFTemp/Previews/OSH/as/as3000/3800/3806-2006.pdf
- Stevens, Glenn, "Liquidity and the Lender of Last Resort", in Speeches, published by Reserve Bank of Australia, Canberra, ACT, 15 April 2008, accessed: 24 September 2015, http://www.rba.gov.au/speeches/2008/sp-gov-150408.html.
- Tarullo, Daniel K., "Good Compliance, Not Mere Compliance", Paper presented at the Federal Reserve Bank of New York Conference, "Reforming Culture and Behavior in the Financial Services Industry", New York, NY, series editor: Federal Reserve Bank of New York, published by Federal Reserve Bank of New York, New York, NY, 20 October, 2014, pp 1-12,
 - http://www.federalreserve.gov/newsevents/speech/tarullo2014 1020a.htm.
- Tarullo, Governor Daniel K., "Rethinking the Aims of Prudential Regulation", Paper presented at the Federal Reserve Bank of Chicago Bank Structure Conference, Chicago, Illinois, series editor: Board of Governors of the Federal Reserve System, in 'Speeches', published by Board of Governors of the Federal Reserve System, 8 May, 2014, sponsored by The US Federal Reserve System, May, 2014, sponsored by The US Federal Reserve System, http://www.federalreserve.gov/newsevents/speech/tarullo2014 0508a.pdf.
- Taylor, Michael, "Regulatory reform after the financial crisis. *Twin Peaks* revisited", Chap. 1, in *Institutional Structure of Financial Regulation: Theories and International Experiences* 1st ed., edited by Robin Hui Huang & Dirk Schoenmaker, in 'Part I, Fundamental theories', series editor: Routledge Research in Finance and Banking Law, published by Routledge Oxford, 2014, pp 1-280, 978-0415726870, http://reader.eblib.com.au.ezp.lib.unimelb.edu.au/(S(3po0djfcpcig4a0teuad2cfh))/PrintProcess.aspx?
- Taylor, Michael, "Welcome to Twin Peaks", Central Banking Journal, 17 August, 2010, Electronic Article, http://www.centralbanking.com/central-banking-journal/feature/2042899/welcome-twin-peaks.
- Taylor, Michael & Alex Fleming, *Integrated Financial Supervision:*Lessons from Northern European Experience, in 'Policy Research Working Paper', no. 2223, The World Bank, published by The World Bank Group, Washington, DC, September 1999, pp 1-33, http://elibrary.worldbank.org.ezp.lib.unimelb.edu.au/doi/pdf/10.1596/1813-9450-2223.

- Taylor, Michael W., *Peak Practice: How to reform the UK's regulatory system*, series edited by the Centre for the Study of Financial Innovation, no. 23, Centre for the Study of Financial Innovation, published by the Centre for the Study of Financial Innovation, October 1996, pp 1-19.
- Taylor, Michael W., "Regulatory reform after the financial crisis Twin Peaks Revisited", Oxford, UK, in 'Law and Finance Senior Practitioner Lectures', published by the Said Business School, Wednesday 16 February, 2011, pp 19, sponsored by the Faculty of Law, University of Oxford, http://www.law.ox.ac.uk/event=10961.
- Taylor, Michael W., "The Road from "Twin Peaks" and the Way Back", *Connecticut Insurance Law Journal*, Vol. 16, no. 1, 2009-2010, pp: 61-96, http://insurancejournal.org/wp-content/uploads/2011/07/Abstract-2.pdf.
- Taylor, Michael W., 'Twin Peaks' Revisited... a second chance for regulatory reform, series edited by the Centre for the Study of Financial Innovation, no. 89, Centre for the Study of Financial Innovation, published by the Centre for the Study of Financial Innovation, London, UK, September 2009, pp 1-32.
- Taylor, Michael W., "Twin Peaks": A regulatory structure for the new century, series edited by the Centre for the Study of Financial Innovation, no. 20, Centre for the Study of Financial Innovation, published by the Centre for the Study of Financial Innovation, London, UK, December 1995, pp 1-18.
- Temzelides, Ted, "Are Bank Runs Contagious?", Federal Reserve Bank of Philadelphia Business Review, November/December, 1997, pp: 1-14, http://www.phil.frb.org/research-and-data/publications/business-review/1997/november-december/brnd97tt.pdf.
- The Churchill Society, "The Lord Mayor's Luncheon, Mansion House, "The End of the Beginning", November 10, 1942", published by The Churchill Society, London, UK, Undated, accessed: 8 October 2015, http://www.churchill-society-london.org.uk/EndoBegn.html.
- The Council of Financial Regulators, "The Council of Financial Regulators", series edited by The Council of Financial Regulators, published by Reserve Bank of Australia, Sydney, NSW, 2001-2014, accessed: 14 July 2014, http://www.rba.gov.au/fin-stability/reg-framework/cfr.html.
- The Council of Financial Regulators, *Memorandum of Understanding* on Financial Distress Management between the Members of the Council of Financial Regulators, series edited by The Council of Financial Regulators, The Reserve Bank of Australia, The Australian Prudential Regulation Authority, The Australian Securities and Investments Commission and The Treasury of the Commonwealth of Australia, published by The Council of Financial Regulators, Sydney, NSW, 18 September 2008, pp 5, http://www.cfr.gov.au/about-cfr/mou/mou-cfr-fdm.pdf.

- The HIH Royal Commission, *Report of the HIH Royal Commission*, The HIH Royal Commission, published by The HIH Royal Commission, Sydney, NSW, 16 April 2003, http://www.hihroyalcom.gov.au/finalreport/index.htm.
- The International Organization of Securities Commissions (IOSCO), Guidelines to Emerging Market Regulators Regarding Requirements for Minimum Entry and Continuous Risk-Based Supervision of Market Intermediaries, Final Report, series edited by Emerging Markets Committee (EMC), Emerging Markets Committee (EMC), The International Organization of Commissions (IOSCO), published by Securities International Organization of Securities Commissions (IOSCO), Madrid, ES, December 2009, pp http://www.iosco.org/library/pubdocs/pdf/IOSCOPD314.pdf.
- Thompson, Graeme, "Regulatory Policy Issues in Australia", Paper presented at the The Future of the Financial System, Sydney, NSW, edited by Malcom Edey, series editor: Reserve Bank of Australia Economic Group, in 'RBA Annual Conference', published by Reserve Bank of Australia, Sydney, NSW, Vol. 1996, 8-9July, 1996, pp 252-270, sponsored by Reserve Bank of Australia, 0 642 25621 7, http://www.rba.gov.au/publications/confs/1996/pdf/thompson.pdf.
- Tickell, Adam, "Making a melodrama out of a crisis: reinterpreting the collapse of Barings Bank", *Environment and Planning D: Society and Space*, Vol. 14, no. 1, 1996, pp: 5-33, 0263-7758, http://www.envplan.com/abstract.cgi?id=d140005.
- Treanor, Jill, "Farewell to the FSA and the bleak legacy of the light-touch regulator", 'Business', *The Guardian/The Observer*, published by Guardian News and Media Limited, London, 24 March, 2013, http://www.theguardian.com/business/2013/mar/24/farewell-fsa-bleak-legacy-light-touch-regulator.
- Trowbridge, John, "The Regulatory Environment A Brief Tour", Paper presented at the National Insurance Brokers Association (NIBA) Conference, Sydney, NSW, published by National Insurance Brokers Association (NIBA), Sydney, NSW, 22 September, 2009, pp 1-7, sponsored by Australian Prudential Regulation Authority, http://www.apra.gov.au/Speeches/Documents/NIBA-Sep-2009.pdf.
- Tuya, José & Lorena Zamalloa, "Issues on Placing Banking Supervision in the Central Bank", Chap. 26, in *Frameworks for Monetary Stability: Policy Issues and Country Experiences. Papers presented at the sixth seminar on central banking, Washington, D.C., March 1-10, 1994*, edited by Tomás J.T. Baliño & Carlo Cottarelli, series editor: the International Monetary Fund, published by the IMF Institute and Monetary and Exchange Affairs Department, International Monetary Fund, Washington 1994, Washington, DC, December, 1994,

- pp 663-690, 9781557754196, http://www.elibrary.imf.org.ezp.lib.unimelb.edu.au/doc/IMF07 1/02625-9781557754196/02625-9781557754196/Other_formats/Source_PDF/02625-9781455227495.pdf.
- U.S. Securities and Exchange Commission, SEC Enforcement Actions.

 Addressing Misconduct That Led To or Arose From the Financial Crisis, U.S. Securities and Exchange Commission, published by U.S. Securities and Exchange Commission, Washington, DC, 26 May 2015, http://www.sec.gov/spotlight/enf-actions-fc.shtml.
- Van Oyen, Martin, "Ringfencing Or Splitting Banks: A Case Study On The Netherlands", *The Columbia Journal of European Law Online*, Vol. 19, no. 1, Summer 2012, pp: 6-15, http://www.cjel.net/wp-content/uploads/2012/08/van-oyen.pdf.
- Wallace, Tim, "FCA chief Martin Wheatley ousted by George Osborne", 'Finance, Banks and Finance', *The Telegraph*, published by Telegraph Media Group Limited, London, UK, Friday, 17 July, 2015, http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/11746504/Coup-in-the-City-as-George-Osborne-ousts-UKs-top-financial-regulator-Martin-Wheatley.html.
- Wallis, Stan, Bill Beerworth, Professor Jeffrey Carmichael, Professor Ian Harper & Linda Nicholls, *Financial System Inquiry*, series edited by The Treasury of the Commonwealth Government of Australia, The Treasury, published by The Treasury, Australian Government, Canberra, ACT, 31 March 1997, pp 1-771, http://fsi.treasury.gov.au/content/FinalReport.asp.
- Weiss, Debra Cassens, "SEC Accuses Goldman Sachs of Selling Mortgage Investment Designed to Fail", *ABA Journal, Law News Now*, Securities Law, (9:58 am, 16 April, 2010), (accessed: 25 June, 2014), published electronically by American Bar Association, Chicago, II, http://www.abajournal.com/news/article/sec_accuses_goldman_sachs_of_selling_mortgage_investment_designed_to_fail/.
- Williams, Marion, "APRA and ASIC need cultural shift", 'Banking', *Asia-Pacific Banking and Finance*, published by Australian Financial Publications Pty Ltd, Sydney, NSW, 9 March, 2015, https://www.australianbankingfinance.com/banking/apra-and-asic-need-cultural-shift/.
- Williams, Ruth, "Merit in oversight board for ASIC, but only if it's got teeth", 'Business Day', *The Sydney Morning Herald*, published by Fairfax Media, Sydney, NSW, 28 January, 2015, http://www.smh.com.au/business/merit-in-oversight-board-for-asic-but-only-if-its-got-teeth-20150127-12z7zy.html.
- Wilmarth Jr., Arthur E., "Turning a Blind Eye: Why Washington Keeps Giving In to Wall Street", *University of Cincinnati Law Review*, Vol. 81, no. 4/4, 2013, pp: 1283-1446, http://scholarship.law.uc.edu/cgi/viewcontent.cgi?article=1154 &context=uclr.

- Working Group on Financial Supervision, *The Structure of Financial Supervision. Approaches and Challenges in a Global Marketplace*, series edited by Group of Thirty, in *'Special Report'*, Group of Thirty, Consultative Group on International Economic and Monetary Affairs, Inc., published by Group of Thirty, Washington, DC, 2008, pp 1-249, http://www.group30.org/images/PDF/The Structure of Financial Supervision.pdf.
- Wray, L. Randall, "Setting the Record Straight One More Time: BofA's Rebecca Mairone Fined \$1Million; BofA Must Pay \$1.3Billion", *New Economic Perspectives*, (2 August, 2014), (accessed: 26 June, 2015), published electronically, http://neweconomicperspectives.org/2014/08/setting-record-straight-one-time-bofas-rebecca-mairone-fined-1million-bofa-must-pay-1-3billion.html.
- Wyatt, Edward, "Promises Made, Then Broken, By Firms in S.E.C. Fraud Cases", 'Business Day', *New York Times*, New York ed., published by The New York Times Company, New YTork, NY, 8 November, 2011, http://www.nytimes.com/2011/11/08/business/in-sec-fraud-cases-banks-make-and-break-promises.html? _r=0.
- Wymeersch, Eddy, "The Structure of Financial Supervision in Europe: About Single Financial Supervisors, Twin Peaks and Multiple Financial Supervisors", *European Business Organization Law Review (EBOR)*, Vol. 8, no. 2, June, 2007, pp: 237-306, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=946695.