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Securitisation, the Financial Crisis and the Need for Effective Risk Retention

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Abstract
Securitisation is an important financing technique. Following the financial crisis, reform activities in relation to pitfalls of securitisation have been underway. In particular, following the financial crisis, a significant debate has raged globally about whether risk retention mechanisms before the crisis were effective. The idea is to align the incentives of originators/securitisers and investors in order to prevent the negative impact caused by the originate-to-distribute model. If the effective risk retention and due diligence goals are achieved, securitisation may continue to deliver its benefits to investors, and the full implementation of the reforms in the EU and the USA will act as a deterrent and inject confidence in the markets.

Keywords: securitisation, risk retention, incentives, IOSCO, Credit Requirements Directive Article 122a, SEC Act s.15G.

'… greed, for lack of a better word, is good.'**

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** The famous quote by the fictional character Gordon Gekko in the film 'Wall Street' (1987).

1. Introduction

Securitisation is a product of market needs and commercial practice. It is an innovative financing technique which 'efficiently allocates risk with capital [and] enables companies to access capital markets directly'.[1] By disintermediation, where banks as intermediaries of funds are removed from the financing cycle,[2] securitisation converts loans or assets that are not normally tradable (such as consumer receivables) into tradable securities. In this way, finance can be raised faster than by way of deposits.[3] Thus, the risk inherent in assets on loan is efficiently channelled to the financial markets. However, due to its complex and technical nature,[4] securitisation lacks transparency, which means that its private law processes that shift the credit risk from originators to investors are often misunderstood by the public. The complex nature of securitisation and other structured finance transactions needs to be understood against the background that their failure may lead to the risk originator's failure.[5] These technicalities have been coupled with risky business and lending decisions which leave a narrow or no margin for errors. Although it is generally argued that securitisation as a financing technique played a significant role in the run-up to the financial crisis,[6] the IMF Global Financial Stability Report[7] clearly established that:

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[1] S. Schwarcz, 'The Future of Securitization', Duke Public Law and Legal Theory Research Paper Series No. 223 (November 2008), at p. 1.

[2] S. Schwarcz, 'Too Big to Fail?: Recasting the Financial Safety Net', Duke Public Law and Legal Theory Research Paper Series No. 235 (March 2009), at p. 2.

[3] See, generally, F.J. Fabozzi and V. Kothari, 'Securitization: The Tool of Financial Transformation' (2007), Yale ICF Working Paper No. 07-07.

[4] For the complex nature of the technique, see, e.g., J.C. Hull, *Fundamentals of Futures and Options Markets*, 7th edn. (Boston, Pearson 2010), at pp. 189-202; H. Davies, *The Financial Crisis: Who Is to Blame?* (Cambridge, Polity Press 2010), at p. 138 et seq. Long before the financial crisis, Professor Roy Goode raised the particular issue of the complexity of securitisation and other derivatives transactions and the danger of sliding into illegal areas in financial transactions, noting succinctly that '[t]he increasingly abstract nature of markets, in which a variety of complex derivatives can be traded separately from the underlying physical transactions, raises in acute form the question how to distinguish trading and hedging from gambling and speculation', R. Goode, *Commercial Law in the Next Millennium* (Sweet and Maxwell 1997), at p. 7.

[5] S. Schwarcz, 'The Public Responsibility of Structured Finance Lawyers', 1 *Capital Markets Law Journal* (2006) p. 6.

[6] See, e.g., 'The Main Point About Black Swans and Credit Crises', *Financial Times*, Letters, 17 May 2008: 'As George Soros put it: "Securitisation had the effect of transferring risk from people who are supposed to know risk and know the borrowers to people who don't."'; 'Life Could Yet Follow Death for the Idea of Securitization', *Financial Times*, Comments, 3 October 2007.

[7] *Containing Systemic Risks and Restoring Financial Soundness*, IMF Global Financial Stability Report (April 2008) ('IMF Report 2008'), available at: <http://www.imf.org/external/pubs/cat/longres.cfm?sk=21707.0> (accessed 14.11.2011).

> securitization … was not the problem – it was a combination of lax underwriting standards in the U.S. mortgage market, the concomitant extension of securitization into increasingly complex and difficult to understand structures, collateralized by increasingly lower quality assets and a favourable financial environment in which risks were insufficiently appreciated.[8]

Regulation of securitisation and other unregulated financial market products has become the pivotal point of discussion during the financial crisis. As securitisation is a product of financial markets and commercial practice, there seems to be no clear statute or regulation that governs the interests, incentives and contractual positions of parties. Party autonomy seems to govern the market participants' financial interests.[9] This has been further encouraged by the deregulation of financial markets. Transparency (or the adequacy of transparency), investor sophistication and agency costs (whether the incentives of originators and investors are misaligned and whether originators should retain risk) have been significant in the role that securitisation played during the period leading up to financial crisis. However, the particular pressure point among these is whether and how originators (or securitisers) should retain risk in securitised receivables. It is believed that a substantive carve-out based on the type of securitisation, assets and securities is helpful in aligning, at least to a certain degree, the interests of investors and originators. A number of reform activities have taken place globally and regionally to address the particular issue of risk retention by originators with the intention of aligning the interests of investors and originators and of making it difficult for originators to remove these securitised assets from their balance sheets. It is argued that these limitations on reckless practices of securitisation will lead to more responsibility taken in underwriting, rating and due diligence.

In this article, issues related to securitisation that led to loss of investor confidence in this financing technique is subjected to greater scrutiny. The overarching theme of the article is that securitisation is important and that there is a need for stricter and meaningful regulation, particularly regarding risk retention by originators for the purposes of aligning their incentives with those of investors. Section 2 examines securitisation's pitfalls and impact on the financial crisis. Section 3 considers the need to have effective risk retention mechanisms. In this perspective, it looks at risk retention requirements in securitisation as designated under the International Organisation of Securities Commissions (IOSCO) Recommendations, the EU Capital Requirement Directive and the proposed reforms in the

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8 Ibid., at pp. xiii-xiv.

9 For a similar view, see Goode, *supra* n. 4, at p. 11, arguing that '[t]he derivatives market has given rise to a wondrous array of contractual and securitisation devices which enable market participants to package financial assets, loans and investments in whatever way best suits their needs to secure such benefits as hedging, arbitrage, reduction of balance sheet assets and the minimisation of tax liabilities.'

US (entering into force in April 2013). Looking ahead, the article suggests that the reform activities in relation to originators' risk retention which are aimed at aligning incentives are, generally speaking, very detailed and take into account various options in different types of securitisation scenarios. However, it is argued that the more significant amounts of risk are retained, the more confidence there will be in the securitisation market. Section 4 concludes.

2. SECURITISATION: AN INNOCENT FINANCING TECHNIQUE?

Securitisation has been developed as an alternative method to raise finance in order to overcome the undercapitalisation risk of banks[10] which may expose them to distress. Securitisation can, firstly, increase bank liquidity by reducing banks' undercapitalisation risks and, secondly, spread their credit risk to financial markets in order to reduce banks' regulatory capital requirements.[11] In the US, from 1930s to 1970s, as a result of the Glass-Steagall Act, commercial banks were tightly regulated and were prohibited from speculating on their depositors' savings.[12] This Act effectively separated commercial banking from investment banking and established the Federal Deposit Insurance Corporation (FDIC).[13] Around the world, loans have been traditionally extended through deposits which are guaranteed by governments.[14] Particularly in the late 1960s, with the increased demand for mortgages, banks in the United States developed a model that enabled them to raise finance faster (without the need to limit their funding to deposits) and in a more balanced way than other methods of raising finance. According to these latter methods, banks were pooling portfolios of mortgages the cash flows of which were then securitised and sold on to investors.[15] The significance of this type of raising finance lies in the United States Government's 'full faith and credit' through the Government National Mortgage Association (GNMA), in the sense that GNMA

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[10] See T. Congdon, *The Debt Threat: The Dangers of High Real Interest Rates for the World Economy* (Oxford, Blackwell 1988), at p. 198.

[11] See, generally, Y. Altunbas, L. Gambacorta and D. Marques, 'Securitisation and the Bank Lending Channel' (December 2007), European Central Bank Working Paper Series No. 838, at p. 5; see also A. Kokkinis, 'Rethinking Banking Prudential Regulation: Why Corporate Governance Rules Matter', *Journal of Business Law* (2012) p. 611, at p. 622, noting that '[e]xtensive use of securitisation, …, was widely used before the recent financial crisis to circumvent capital adequacy ratios by removing assets from banks' balance sheets'.

[12] Banking Act of 1933 H.R. 5661. The preamble to the Act states: 'An Act to provide for the safer and more effective use of the assets of banks, to regulate interbank control, to prevent the undue diversion of funds into speculative operations, and for other purposes.'

[13] FDIC provides insurance on deposits and effectively protects depositors against bank runs.

[14] For a list and comparison of deposit insurance/protection schemes, see <http://www.hmrc.gov.uk/drafts/schemes-comp-fscs.pdf> (accessed 5.02.2012).

[15] See, generally, Hull, *supra* n. 4, at p. 189 et seq.

guarantees investors payment of principal and interest on mortgage-based securities that are insured by qualifying government departments.[16] The 1970s and 1980s saw increased public debt and a rise in interest rates, which led to loss of investor and creditor confidence in the market. The complications caused by the increased dollar interest rates impacted on sovereign borrowers, particularly in some developing Latin American countries where borrowers were mainly commodity producers.[17] This led to different securitisation techniques whereby securities were created backed by assets without the guarantee provided in mortgage-backed securities. However, assets in asset-backed securitisations are different from collaterals in mortgage-based securitisations (i.e., immovables). The value of the latter may be volatile depending on the financial markets and the political and economic climate. Thus, there seems to be more certainty in asset-backed securitisations than in mortgage-backed securitisations. The ratings of mortgage-backed securitisations were based and rated on formulas similar to those used in asset-backed securitisations, hence the triple-A rating of the majority of mortgage-backed securities of subprime borrowers. Furthermore, the subprime loans which were converted into securitised bonds and incorporated with other asset-backed bonds were sold to investors who were not necessarily sophisticated enough to realise the risks posed by the financial markets.[18]

2.1 Securitisation's role in the financial crisis

The financial crisis has its roots in the American subprime mortgage crisis and proved to have links to a number of interrelated financial, sociological and legal trends.[19] These trends can be summarised as follows: the growth of wealth and its utilisation in investments, whether or not in an effective way; the financial sector and individuals' ability to take risk; and deficiencies in corporate governance and financial supervision.[20] Economists have explained growth and utilisation of wealth

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[16] At: <http://www.ginniemae.gov/about/about.asp?Section=About> (accessed 23.11.2011). These include the Federal Housing Association and the Department of Veteran Affairs. The Federal National Mortgage Association (Fannie Mae), established in 1938, and the Federal Home Loan Mortgage Corporation (Freddie Mac), established in 1968 (chartered by Congress in 1970), are two other government-sponsored enterprises that securitise or buy mortgage loans originated by lenders. This provides liquidity to lenders so that they can lend more to their borrowers. See <http://www.fanniemae.com/portal/index.html> and <http://www.freddiemac.com> (accessed 5.01.2012).

[17] See Congdon, *supra* n. 10, at pp. 195-198.

[18] See, generally, O. Bar-Gill, 'The Law, Economics and Psychology of Subprime Mortgage Contracts', 94 *Cornell Law Review* (2009) p. 1073, at p. 1082 et seq.

[19] For a perspective on the roots of the financial crisis and the measures to limit its damage, see, e.g., F.S. Mishkin, 'Over the Cliff: from the Subprime to the Global Financial Crisis', 25 *Journal of Economic Perspectives* (2011) p. 49.

[20] T. Cowen, 'Three Trends and a Train Wreck', *New York Times*, 17 October 2008, available at: <http://www.nytimes.com/2008/10/19/business/19view.html> (accessed 10.11.2011). For the

from left-wing[21] and conservative perspectives.[22] According to the former view, while globalisation[23] was introduced to reduce wealth inequality by stabilising financial markets and providing equal opportunities for both developed and developing economies in access to credit, it failed in this mission and caused a domino collapse of economies and financial institutions.[24] Securitisation and other innovative financing techniques were employed to counterbalance the economic problems affecting consumers and businesses.[25] Counter-arguments challenged the income and wealth inequality and the effects of globalisation on the crisis.[26] The role of securitisation in the financial crisis has also been debated. Some commentators argued that securitisation did not weaken underwriting standards as lending and borrowing decisions were based on FICO scores,[27] while others suggested that the declining house prices had caused the subprime crisis and that the originators were retaining risk in the securitisation food chain.[28] The opposing view suggested that securitisation degraded traditional underwriting standards by allowing the originate-to-distribute model and reducing the dynamic underwriting standards, replacing them with statistical analysis and the ability to screen loans, thereby creating a less transparent market. This, in turn, led banks to increase their

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causes of the credit boom, see also A. Wilmarth, 'The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis', 41 *Connecticut Law Review* (2009) p. 963, at p. 1005 et seq., mentioning the following four causes of the credit boom: the Federal Reserve Board's monetary policies, the role played by financial conglomerates, the currency exchange rate policies of Asian and oil-exporting countries, and mass psychology and belief in the potential continuity of the credit boom and prices.

[21] See, e.g., *Report of the Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System*, available at: <http://www.un.org/ga/president/63/commission/financial_commission.shtml> (accessed 10.11.2011).

[22] See, e.g., <http://www.federalreserve.gov/newsevents/speech/bernanke20070206a.htm> (accessed 10.11.2011); J. Parker and A. Vissing-Jorgensen, 'Who Bears Aggregate Fluctuations and How?' (2009), NBER Working Paper No. 14665.

[23] J. Stiglitz, *Globalization and Its Discontents* (London, Penguin Books 2002), at p. 9.

[24] *Supra* n. 21, at p. 14.

[25] *Supra* n. 21, at p. 26, where the report states that '[t]he negative impact of stagnant real incomes and rising income inequality on aggregate demand was largely offset by financial innovation in risk management and lax monetary policy that increased the ability of households to finance consumption by borrowing, especially in the United States and in some other developed countries such as the United Kingdom. … social protection systems that provided partial compensation for stagnating income in a context of high unemployment were financed through increased public deficits and public debts.'

[26] See, generally, Parker and Vissing-Jorgensen, *supra* n. 22.

[27] E.g., G. Bhardwaj and R. Sengupta, 'Where's the Smoking Gun? A Study of Underwriting Standards for US Subprime Mortgages' (2008), Federal Reserve Bank of St. Louis Working Paper Series No. 2008-036A. Subprime borrowers are those whose scores, according to FICO (Fair Isaac Corporation), are below 620. See <http://www.fico.com/en/Products/Scoring/Pages/FICO-Score.aspx> (accessed 12.12.2011).

[28] E.g., G. Gorton, 'The Panic of 2007', Federal Reserve Bank of Kansas City (2008), available at: <http://www.kc.frb.org/publicat/sympos/2008/Gorton.08.04.08.pdf> (accessed 11.02.2012).

leverage levels. Increasing leverage levels led to thin capitalisation, which might be regarded as one of the causal elements of the financial crisis.[29]

In the early 2000s, the US Federal Reserve reduced interest rates to facilitate economic growth. Favourable economic conditions during that period, such as low interest rates and lending availability to subprime borrowers, led both borrowers and lenders to take more risky financial decisions. This, in turn, led banks to increase their securitisation and originate-to-distribute models, which shifted the risk to investors (rather than requiring banks to hold their loans until maturity and concentrate the credit risk in the balance sheets) without adequate transparency, risk retention or explanation of legal processes.[30] The rationale for lending to subprime borrowers in the pre-crisis period was the appreciation of property prices, which increased the appetite to sell houses. This stimulated the sale of houses and increased the role of the private sector in the securitisation process, causing a shift from government agencies like Freddie Mac and Fannie Mae to investment banks. As a result, in exchange for higher yields, the latter securitised subprime mortgages.[31] This seems to be the root of misaligned incentives (originators are only interested in pooling receivables and distributing them without retaining risks). Similar arguments equally applied in the UK market, where, through the widespread use of securitisation and other unregulated financing techniques, low-cost credit was made available.[32] The G20 Declaration of the Summit of Financial Markets and the World Economy succinctly identified the causes of the financial crisis as follows:

> During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an

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[29] E.g., K. Eggert, 'The Great Collapse: How Securitization Caused the Subprime Meltdown?', 41 *Connecticut Law Review* (2009) p. 1257; K. Eggert, 'Beyond "Skin in the Game": The Structural Flaws in Private-Label Mortgage Securitization That Caused the Mortgage Meltdown', Testimony before the Financial Crisis Inquiry Commission (23 September 2010); see also L. Cox, B. Dorudi, et al., 'United Kingdom Regulatory Reform: Emergence of the Twin Peaks', *Compliance Officer Bulletin* (2012) p. 1, at pp. 4-5. See also R. Tomasic and F. Akinbami, 'Towards a New Corporate Governance After the Global Financial Crisis', 22 *International Company and Commercial Law Review* (2011) p. 237, at pp. 239-240.

[30] See, e.g., *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* (7 April 2008), at p. 1, available at: <http://www.financialstabilityboard.org/publications/r_0804.pdf> (accessed 14.11.2012); see also A. Arora, 'The Global Financial Crisis: A New Global Regulatory Order', *Journal of Business Law* (2010) p. 670, at p. 672.

[31] B. Keys, T. Mukherjee, A. Seru and V. Vig, 'Did Securitization Lead to Lax Screening? Evidence from Subprime Loans', in R. Kolb, ed., *Lessons from the Financial Crisis: Causes, Consequences and Our Economic Future* (John Wiley & Sons 2010) p. 217, at p. 218. For a summary of the system, see, e.g., A. Paolini, 'Lending Sub-prime and Advising on Financial Investments from a D&O Perspective', *Journal of Business Law* (2012) p. 432, at pp. 433-434.

[32] *The Turner Review. A Regulatory Response to the Global Banking Crisis* (March 2009), at pp. 13-16 and 29-32, available at: <http://www.fsa.gov.uk/pubs/other/turner_review.pdf> (accessed 20.01.2012).

> adequate appreciation of the risks and failed to exercise proper due diligence. … weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system.[33]

During the pre-crisis period, originators excessively exposed themselves to securitisation practices which allowed them 'to off-load part of their credit exposure, thereby lowering regulatory pressures on capital requirements and raising new funds'.[34] Banks were transferring their loans from borrowers to special purpose vehicles and then to financial market investors under the originate-to-distribute model. Thus, banks that were excessively relying on securitisation had, seemingly, better capital structures.[35] This was achieved by transferring their credit risk to special purpose vehicles and then on to investors rather than keeping it on the balance sheet until the borrowers' repayment. That means that securitisation 'removes the loans from the banks' balance sheets and enables the banks to expand their lending faster than they would otherwise be able to'.[36] Subprime borrowers may not have had sophisticated financial information, exposing them to predatory lending.[37] It is this feature of securitisation that misled investors as well as borrowers. Rising house prices were the fundamental reason why banks lent to people with poor credit histories in the expectation that even if they defaulted in their payments, it would be possible to sell these houses without banks incurring any actual losses. In other words, the idea was to sell and recover any monies before the maturity of these securities arising from subprime mortgage securitisations. These were high-risk loans because there was no guarantee that subprime borrowers would be able to repay. These loans were gathered and sold to investment firms and SPVs. Rating agencies, rather traditionally, gave high ratings to mortgage-backed securities because the default rate on those securities was traditionally lower than on asset-backed securities. The underwriting standards for those types of assets were different from the normal securitisation practices. Despite the fact that securities were backed by subprime mortgages, they were continuously rated highly and the lack of liquidity in those highly rated securities

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33 See G20 Declaration on the Summit of Financial Markets and the World Economy, at p. 1, available at: <http://www.g20.org/images/stories/docs/eng/washington.pdf> (accessed 7.11.2011). For similar factors, see also Eggert, *supra* n. 29.

34 See Y. Altunbas, S. Manganelli and D. Marques-Ibanez, 'Bank Risk During the Financial Crisis. Do Business Models Matter?' (November 2011), European Central Bank Working Paper Series No. 1394, at p. 15; for a similar view, see A. van Rixtel and S. Craido, 'The Contribution of Structured Finance to the Financial Crisis', in Kolb, ed., *supra* n. 31, p. 239, at p 244.

35 Ibid., Altunbas, et al., at p. 15.

36 Hull, *supra* n. 4, at p. 201.

37 For contractual design features of subprime mortgage contracts and their effects on unsophisticated borrowers, see Bar-Gill, *supra* n. 18, at p. 1096 et seq.

due to defaults on the mortgage payments led to the collapse of the securitisation market.[38]

It is also argued that the repeal of the 1933 Glass-Steagall Act[39] provisions by the 1999 Gramm-Leach-Bliley Act, removing the strict separation between investment and commercial banks, has a clear significance in this process.[40] The Glass-Steagall Act prohibited commercial banks from utilising their depositors' money to speculate in risky financial market transactions. Their main duty was to take deposits and lend to borrowers, thus acting as a financial intermediary. Merging the operations of investment and commercial banks led to undercapitalisation of banks as they built up excessive leverage (i.e., the money they borrowed from markets exceeded the amount of own money or deposits on their balance sheets).[41] Furthermore, banks also relaxed their lending standards, which enabled lending to uncreditworthy borrowers. Irresponsible lending and further leveraging increased the risk levels of banks, because they misaligned their incentives with those of investors. The liquidity squeeze became a significant problem for banks in the run-up to the financial crisis.[42] The trend of reckless risk taking continued as a result of the deregulation of financial products, which began by the enactment of the Commodity Futures Modernisation Act of 2000, declaring attempts at regulation of futures and derivatives illegal (s.103), thus allowing risk-increasing self-regulation.[43] This amendment made it quite difficult for the

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[38] See generally J.J. de Vries Robbé, *Securitization Law and Practice in the Face of the Credit Crunch* (Alphen aan den Rijn, Kluwer 2008), at pp. 7-8; see also A. Sloan, 'House of Junk. A Close-up of One Deal Shows How Subprime Mortgages Went Bad', *Fortune*, 29 October 2007, pp. 117-124.

[39] The Act also prohibited floating interest rates, thus effectively capping interest rates (Regulation Q). This was repealed in the early 1980s. For the implications of the repeal of the Glass-Steagall Act and for background and criticism of these legislative activities, see, e.g., J. Stiglitz, 'Capitalist Fools', *Vanity Fair*, January 2009.

[40] For further information, see, e.g., F. Yeager, N. Seitz, et al., 'US Legislation Designed to Improve Corporate Governance: An Exploration', 33 *Company Lawyer* (2012) p. 25, at pp. 30-31; N. Seitz, J. Gilsinan, et al., 'The US Subprime Mortgage Crisis: What Have We Learned?', 31 *Company Lawyer* (2010) p. 355, at p. 358 et seq.

[41] See, e.g., Altunbas, Manganelli and Marques-Ibanez, *supra* n. 34, at p. 34, stating that '… the distress experienced during the financial crisis was driven by ex-ante bank size, undercapitalisation, and the degree of credit expansion in the years preceding it. The bank funding structure seems to be of significance, with those banks relying on large deposit base suffering less than those more dependent on market funding.' As part of a regulatory approach to systemic risk, *reducing leverage* might work. For further information, see S. Schwarcz, 'Systemic Risk', 97 *Georgetown Law Journal* (2008) p. 193, at p. 223 et seq.

[42] See Davies, *supra* n. 4, at pp. 50-53. It was argued that the liquidity squeeze was a result of the neglect of liquidity regulation because central banks would help banks if liquidity were needed, thus, in fact, putting the risk onto central banks.

[43] On self-regulation, see, e.g., J. Black, 'Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a "Post-Regulatory" World', 54 *Current Legal Problems* (2001) p. 103.

Commodity Futures Trading Commission to try and regulate credit default swaps[44] since it allowed eligible parties to slip through the net of the Commodities Exchange Act (CEA). However, ironically, this was presented as 'legal certainty'.[45] This point is significant in that, without meaningful regulation of innovative financial transactions, the market may grow unregulated to the detriment of the global economy.[46] It has been argued that deregulation has affected banks' dependency on financial markets, which may lead to loss of confidence and a run on banks when market funding becomes sparse, in which case financial institutions that are funded mainly through deposits will be preferable. This is because deposits provide more predictable funding and are guaranteed by governments, as opposed to market funding by volatile and deregulated financial markets.[47] Recently, proposals have been made to prohibit banks from engaging in certain types of risk-taking activities. The most significant one is the Volcker Rule, which prohibits banks from entering into proprietary trading and acquiring an ownership interest in a hedge fund or private equity fund.[48] However, there are also views opposing the

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[44] For the legal nature of credit default swaps, see, e.g., M. Smith, 'The Legal Nature of Credit Default Swaps', *Lloyd's Maritime and Commercial Law Quarterly* (2010) p. 386. A credit default swap (CDS) is an insurance contract which protects an investor who owns bonds of a company and purchases an insurance policy to protect it from the default of these bonds. CDS are useful products to manage credit risks that banks may experience. The risk of default is assumed by an insurance company. If the default occurs, the buyer of the insurance policy may sell the bonds issued by the company, at the amount that would have been payable if there were no default, to the seller of the insurance. The CDS are regulated through clearing houses which require banks to deposit their trades as well as their future contracts, but no further regulation that may prevent systemic risk is in place. It has been argued that '[b]anks bought them to reduce the amount of capital they were required to hold against investments … [i.e.] to avoid regulation. Because they owned the swap, banks claimed they no longer had the risk of a default of the bond', see E. Dinallo, 'We Modernised Ourselves into This Ice Age', *Financial Times*, 30 March 2009. On CDS, see, e.g., Hull, *supra* n. 4, at pp. 497-507; E. Andrews, M. De la Merced and M. Walsh, 'Fed's $85 Billion Loan Rescues Insurer', *New York Times*, 16 September 2008.

[45] S.103 Legal Certainty for Excluded Transactions. The CFMA also inserted a provision (s.118) in the CEA to the effect that the CEA will supersede and pre-empt any state law that prohibits or regulates 'bucket shops'. In a number of early 20th century decisions, most notably in *Gatewood* v. *North Carolina* 27 S. Ct. 167, 168 (1906), the term was defined as follows: 'an establishment, nominally for the transaction of a stock exchange business, or business of a similar character, but really for the registration of bets or wagers, usually for small amounts, on the rise or fall of the prices of stocks, grain, oil, etc., there being no transfer or delivery of the stock or commodities nominally dealt in.' See also, e.g., *State* v. *McGinnis* 51 S.E. 50 N.C. 1905; *Board of Trade of Chicago* v. *Odell Commission Co. (C.C.)* 115 Fed. 574; *Smith* v. *Tel. Co.* 84 Ky. 664, 2 S.W. 483.

[46] For the background to the dispute and criticism of non-regulation of complex financial derivatives, see, e.g., Davies, *supra* n. 4, at pp. 71-75.

[47] On these points, see Altunbas, Manganelli and Marques-Ibanez, *supra* n. 34, at pp. 15-16.

[48] For further information, see Davies, *supra* n. 4, at pp. 80-81; D. Tarullo, 'The Volcker Rule', Testimony by Mr Daniel K. Tarullo before the Subcommittee on Capital Markets and Government Sponsored Enterprises and the Subcommittee on Financial Institutions and Consumer

Volcker rule, suggesting that universal banking was not the main problem, but rather the quality of securities issued by banks in the period leading up to the crisis.[49]

2.2 Pitfalls of securitisation

The main pitfalls of securitisation are insufficiency of transparency and disclosure, difficulties in determining investor suitability to appreciate risks, and the inadequacy of risk retention by originators. Additionally, the financial crisis has confirmed that investors over-relied on ratings by credit agencies, which applied the same criteria for rating asset-backed securities as for mortgage-backed securitisations. Credit rating agencies provided AAA ratings for most products, even though they belonged to subprime borrowers.[50] The complex nature of financial markets and transactions was 'due to demand by investors for securities that meet their investment criteria and their appetite for ever higher yields'.[51] However, the significant risk of securitisation was the transfer of risk with little due diligence from the originator to investors, resulting in fewer incentives to screen the quality of loans securitised and failure to adequately retain the risk in those securitised loans.[52]

As securitisation has an extremely complex and technical structure and involves certain risks (such as interest rate and prepayment risks), it lacks the desired level of transparency on the basis of which the quality of loans and the level of risk can be determined by investors. Professor Schwarcz argues that the disclosure of risks involved in mortgage-backed securities proved insufficient and the complex nature of securitisation as well as the length of documentation in the offering of these

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Credit, Committee on Financial Services, US House of Representatives, Washington DC, 18 January 2012. The Conservative Party banking reform paper suggested similar solutions. See, generally, 'From Crisis to Confidence: Plan for Sound Banking', Policy White Paper (July 2009), available at: <http://www.conservatives.com/News/News_stories/2009/07/Our_plan_for_sound_banking.aspx> (accessed 11.11.2012). In October 2009, Bank of England Governor Mervyn King suggested restructuring banks in addition to regulating them and discussed the impracticality of arguments against the separation of commercial and investment banks. See speech by Mervyn King, Governor of the Bank of England to Scottish Business Organisations, Edinburgh (20 October 2009), available at: <http://www.bankofengland.co.uk/publications/speeches/2009/speech406.pdf> (accessed 10.11.2011).

[49] See, e.g., <http://www2.lse.ac.uk/fmg/events/conferences/2012/Basel_Conference/Eugene percent20White.pdf>, at p. 11 et seq. (accessed 5.4.2012).

[50] T. Hurst, 'The Role of Credit Rating Agencies in the Current Worldwide Financial Crisis', 30 *Company Lawyer* (2009) p. 61.

[51] P. Green and J. Jennings-Mares, 'Demand That Gave Rise to Complexity', *Financial Times*, 4 July 2008.

[52] See G. Caprio Jr, A. Demirguc-Kunt and E.J. Kane, 'The 2007 Meltdown in Structured Securitization: Searching for Lessons, Not Scapegoats', Policy Research Working Paper 4756 (September 2008), at p. 15 et seq.

securities has had an impact on the insufficiency of information in this market.[53] Ideally, the information on the products should be openly available to investors. Investors rely on ratings by credit rating agencies and the agencies are paid by originators. Insufficiency of transparency occurred at different levels and dimensions of securitisation, creating a conflict of interest. These included valuation, pricing and concentration of risk.[54] The complex nature of mortgage-backed securitisation led to insufficiency of disclosure, as investors were not certain about the value of the securities they had invested in, thus exposing them to credit risk. This is also called the 'concentration of risk', whereby lack of detailed reporting of exposures caused the market participants to be non-informed of the risks, which then 'led to a reluctance to engage with counterparties [and] pushed up spreads and reduced liquidity further'.[55] It has been argued that disclosure in complex securitisation transactions cannot be a decisive solution as 'complexity increases the amount of information that must be analysed in order to value the investment with a degree of certainty'.[56] Furthermore, it was also argued that in those complex transactions and structuring models, investors reviewing those documents might not realise the legal consequences of the transactions.[57] In the absence of adequate transparency, investors generally relied on credit agencies' ratings in their investment decisions.[58] However, these ratings, which were generally and generously attributed to bonds at the highest possible value, did not consider the fact that receivables from subprime mortgages were incorporated into receivables from asset securitisations, thus, in the event of the originator's bankruptcy, creating a package deal in which toxic portfolios could not be separated from non-toxic ones. Additionally, the IMF report has pointed out that the off-balance-sheet entities (such as commercial paper conduits or special investment vehicles) have not been transparent to regulators.[59]

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53 S. Schwarcz, 'Disclosure's Failure in the Subprime Mortgage Crisis', 3 *Utah Law Review* (2008) p. 1109, at p. 1110; S. Schwarcz, 'Information Asymmetry and Information Failure: Disclosure Problems in Complex Financial Markets', in W. Sun, J. Stewart and D. Pollard, eds., *Corporate Governance and the Global Financial Crisis* (Cambridge University Press 2011) p. 95, at pp. 98-99.

54 W. Dudley, 'Lessons Learned from the Financial Crisis' (2009), remarks at the Eighth Annual BIS Conference, at p. 3, available at: <http://www.bis.org/review/r090708a.pdf> (accessed 11.11.2012).

55 Ibid., at p. 3.

56 Schwarcz, 'Information Asymmetry and Information Failure: Disclosure Problems in Complex Financial Markets', *supra* n. 53, at p. 99.

57 Ibid.

58 See H. McVea, 'Credit Rating Agencies, the Subprime Mortgage Debacle and Global Governance: The EU Strikes Back', 59 *International and Comparative Law Quarterly* (2010) p. 701, at p. 706 et seq.

59 IMF Report 2008, *supra* n. 7, at p. 69.

In the context of the transparency and disclosure arguments, the private law processes of securitisation may have a negative impact on third parties (i.e., unsecured creditors of the originator) by reducing the assets available to unsecured creditors. As unsecured creditors, unlike secured creditors, will be subject to the *pari passu* principle, according to which in the event of bankruptcy of the originator the distribution will be made on an equal footing, unsecured creditors' proportion of claims will be reduced. This is because the originator will transfer to the SPV those assets and receivables that can attract higher rates. Unsecured creditors, unlike secured creditors, may not have the monitoring ability to assess the credit risk of the originator (debtor), even though they charge a higher interest rate[60] to compensate for their monitoring costs. Thus, unsecured creditors will be left with a higher credit risk.[61]

Investors' sophistication or suitability is part of the problem. Investors expect certain characteristics in securitised products. These include the strength of the origin of the securitised receivables (the larger the pool, the lower the risk of non-payment), the quality of assets and low credit risk (risk retention by the originator), the stability of the interest rates applicable to debtors of the underlying assets, and credit enhancement by the originator whereby the originator creates distinct classes of securities with distinct risks and short maturity.[62] It has been established that, in the pre-financial crisis period, investors did not scrutinise the products they were purchasing, but rather trusted the seller or the originator.[63] The IMF Report of 2009 pointed out that issuers of securities 'relied on originator representations and warranties regarding the quality of the loans and the underwriting process that turned out to be inadequate [as occasionally] the originators lacked the capital and liquidity to make good on their warranties'.[64] Therefore, in order for there to be

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60 On the efficiency of secured credit and monitoring issues, see, e.g., T.H. Jackson and A.T. Kronman, 'Secured Financing and Priorities Among Creditors', 88 *Yale Law Journal* (1979) p. 1143; A. Schwartz, 'Security Interests and Bankruptcy Priorities: A Review of Current Theories', 10 *Journal of Legal Studies* (1981) p. 1. For unsecured creditors' carve-out proposals, see, e.g., E. Warren, 'Making Policy with Imperfect Information: The Article 9 Full Priority Debates', 82 *Cornell Law Review* (1997) p. 1373.

61 L.R. Lupica, 'Asset Securitization: The Unsecured Creditor's Perspective', 76 *Texas Law Review* (1998) p. 595, at p. 627 et seq.

62 S. Scott and P.A. Wellons, *International Finance Transactions, Policy and Regulation*, 4th edn. (New York, Foundation Press 1997), at pp. 771-772, noting that '[n]ot all assets have these features, … [and] [m]ortgages most readily fit the criteria'.

63 See R.G. Rajan, 'The Past and Future of Commercial Banking Viewed Through an Incomplete Contract Lens', 30 *Journal of Money, Credit & Banking* (1998) p. 524, at p. 540, noting that the '… reasons they can do so is that the greater integration of markets has increased the frequency of transactions any single player undertakes. Reputation not only becomes easier to build, but also more important to maintain as banks fund loans through their placing power rather than their balance sheets.'

64 IMF, *Global Financial Stability Report* (October 2009) ('IMF Report 2009'), at p. 100, available at: <http://www.imf.org/external/pubs/ft/gfsr/2009/02/index.htm> (accessed 11.11.2012).

diligent loan underwriting and monitoring, a workable policy on risk retention must be in place.

3. Risk retention by originators and securitisers

Following the financial crisis, suggestions have been made to reduce the risks involved in securitisation, the most significant one being the originators' credit risk retention requirement in the securitisation deal. Risk retention is 'the meaningful exposure to the credit risk of a securitization's underlying assets that cannot be removed, sold, or hedged for a specified period of time'.[65] Risk retention revolves around the question of who takes responsibility for defaults and non-payment by investors. The main interest of an investor is to maximise his wealth, and credit agencies' ratings play a significant role in the purchase decision. Once the originator originates and distributes the receivables, he retains little interest in the quality of securitised receivables. As the originator's credit risk is effectively distributed to the financial markets, his incentive to monitor the quality of receivables or the creditworthiness of his borrowers reduces. Risk retention by the originator improves loan quality by having better underwriting standards, provides diligent origination and 'reduces risks to financial stability arising from incentive and informational asymmetries between the investor and earlier securitization chain participants'.[66] This process is often known as the 'skin in the game'.

Risk retention prevents originators from originating and distributing high risk and poor quality loans under the securitisation method without retaining economic risk until the relevant securitisation is concluded.[67] The ability to raise finance in securitisation, like in factoring,[68] depends on the quality of the assets rather than on the creditworthiness of the originator. Credit risk retention has thus more relevance at origination. If the originator's loan is good, risk retention will provide additional security for investors. The loss of investors' confidence during the pre-financial crisis period has been attributed to the peculiar link between securitisation and incentives. There was competition among loan originators and securitisers in their

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[65] 'Macroeconomic Effects of Risk Retention Requirements', Timothy F. Geithner, Chairman, Financial Stability Oversight Council, 18 January 2011, at p. 16, available at: <http://www.treasury.gov/press-center/press-releases/Pages/tg1027.aspx> (accessed 11.11.2012).

[66] Ibid.

[67] For an analysis of market collapse, causes and recommendations, see *Wall Street and the Financial Crisis: Anatomy of a Financial Collapse. Majority and Minority Staff Report. Permanent Subcommittee on Investigations, United States Senate*, Committee on Homeland Security and Governmental Affairs (13 April 2011), at pp. 158-159, available at: <http://www.hsgac.senate.gov/download/?id=273533f4-23be-438b-a5ba-05efe2b22f71> (accessed 11.11.2012).

[68] See L. Klapper, 'The Role of Factoring for Financing Small and Medium Enterprises' (2005), World Bank Policy Research Working Paper 3593.

subprime lending practices and securitisations.[69] Originators transferred their credit risks without appropriately screening the quality of the loans. As the securitisation food chain turned more complex,[70] the link between originators and investors became too weak or too remote, which had a negative impact on 'incentives for proper screening and due diligence along the chain … [which could] contribute to a lowering of lending standards and a gradual deterioration in the credit quality of assets included in the collateral pools of securitised instruments'.[71] However, during that period, originators lost interest in protecting the integrity of the overall financial market and rather protected their economic interest, creating misaligned incentives.

The originator essentially prefers to hold the assets off balance sheet (or to isolate his credit risk by assigning his assets) in order to reduce his vulnerability that may be created by the difference between capital requirements and trading books. A high difference between capital requirements and trading books is a sign of inadequate capital. Thus, in order to avoid capital charges which may be imposed upon banks due to inadequate capital levels, banks sell these book debts (keeping them off their balance sheet) in the form of a true sale to SPVs.[72] However, the Turner Review observed that:

> [a]t the individual bank level, the classification of these as off-balance sheet proved inaccurate as a reflection of the true economic risk, with liquidity provision commitments and reputational concerns requiring many banks to take the assets back on balance sheet as the crisis grew, driving a significant one-off increase in measured leverage.[73]

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[69] As early as 2001, FDIC released extended guidance in relation to subprime lending practices and provided a non-exhaustive list of credit risk characteristics posed by subprime borrowers. These include two or more 30-day delinquencies in the last 12 months, judgment, foreclosure or repossession in the last 24 months, bankruptcy in the last 5 years, relatively high default probability evidenced by credit history score and imbalanced debt service-to-income ratio. Available at: <http://www.fdic.gov/news/news/press/2001/pr0901a.html> (accessed 11.12.2011). For an interesting discussion, see Bar-Gill, *supra* n. 18, at p. 1087 et seq.

[70] E.g., in order to make mezzanine tranches (which are rather difficult to market compared to equity and senior tranches) more marketable, financiers repackaged mezzanine tranches, and risks associated with them were re-securitised so as to receive higher yields. These are called asset-backed securities, collateralised debt obligations (ABS CDOs). Arguably, these types of risk structuring made securitisations more complex. For further information, see, e.g., Hull, *supra* n. 4, at p. 192 et seq.

[71] See, e.g., I. Fender and J. Mitchell, 'Incentives and Tranche Retention in Securitisation: A Screening Model' (September 2009), BIS Working Paper No. 289, at p. 2. See also R.G. Rajan, 'Has Financial Development Made the World Riskier?' (Washington DC, 2005), NBER Working Paper No. 11728, arguing that market-friendly regulation is necessary to reduce incentives in order to prevent excessive risk taking.

[72] Davies, *supra* n. 4, at pp. 47-48.

[73] See *supra* n. 32, at p. 20.

On the other hand, investors prefer to increase their profit either through short-term investment products (commercial paper)[74] or through bonds that are products of securitisation. Studies have established that in the period leading up to the financial crisis 'there may have been insufficient "skin in the game" for some lenders'.[75] This means that, as originators distributed their credit risk through securitisation, they did not have the incentive to monitor the quality of the receivables or the creditworthiness of the borrowers. Some economists[76] seem to blame securitisation itself without looking at the human input or errors in the process,[77] while others acknowledge the significance of securitisation and point to the importance of risk retention to reduce financial risk. Before the financial crisis, in a securitisation transaction, the originator did not have any responsibility, which reduced incentives to screen the creditworthiness of the borrowers, thus leading to irresponsible lending practices.[78]

There are compelling reasons why originators should be strictly required to retain credit risk in the securitisation chain. Firstly, it is a quality control mechanism ensuring that products of originators have the necessary quality that match the value stated by them and do not contain any toxic assets.[79] This may also serve as an approval for credit enhancement whereby the stronger risk retention demonstrates the strength of the underlying assets. However, the significant problem which originators may wish to prevent is that as securitisation requires a

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[74] Commercial paper is a short-term mechanism that provides funding to banks. Banks sell commercial paper with short maturities to investors (who are, in a sense, lenders to banks), and banks provide investors with guarantees that they will be paid by the maturity date.

[75] B. Keys, T. Mukherjee, A. Seru and V. Vig, 'Did Securitization Lead to Lax Screening? Evidence from Subprime Loans', 125 *The Quarterly Journal of Economics* (2010) p. 307, at p. 355.

[76] See, e.g., J. Stiglitz, 'Houses of Cards', *Guardian*, 9 October 2007, noting that '… securitisation contributed to bad lending: in the old days, banks that originated bad loans bore the consequences; in the new world of securitisation, the originators could pass the loans onto others…'. While the criticism of banks' irresponsible lending practices may be justified, this does not apply to securitisation because the said lending practices involve human input/greed.

[77] For human greed or input, see, e.g., R. Lastra and G. Wood, 'Responses to the Financial Crisis', *Journal of International Banking Law and Regulation* (2011) p. 307, at p. 308. For earlier indications of corporate greed, see T. Frankel, *Trust and Honesty: America's Business Culture at a Crossroad* (OUP 2006), at p. 92 et seq.

[78] See, e.g., A.S. Blinder, 'Six Fingers of Blame in the Mortgage Mess', *New York Times*, 30 September 2007, pointed out that '[securitization] has lubricated the market and made mortgages more affordable. We certainly don't want to end it. But securitization sharply reduces the originator's incentive to scrutinize the creditworthiness of borrowers. After all, if the loan goes sour, someone else will be holding the bag. We need to find ways to restore that incentive, perhaps by requiring loan originators to retain a share of each mortgage.'

[79] For a similar view, see, e.g., D.L. Batty, 'Dodd-Frank's Requirement of "Skin in the Game" for Asset-Backed Securities May Scalp Corporate Loan Liquidity', 15 *North Carolina Banking Institute* (2011) p. 13, at p. 41, noting that '[risk retention] requirements are based on the idea that the "securitizer" is selling assets that it would never buy itself to a market that lacks the securitizer's knowledge about the quality of the underlying asset backing the security'.

'true sale' transfer from the originator to the SPV, in case of bankruptcy of the originator or where the balance sheet shows a certain high percentage of retained securitised assets, this may be considered as a charge disguised as a sale. The main problem is that the retained amount may not be high enough to provide relief for investors. From another viewpoint, although banks transfer loans and risks from their balance sheets, thus increasing their capital ratios against trade books for capital adequacy purposes,[80] these transactions may, for accountancy reasons, be required to be kept on balance sheet to demonstrate the true nature of the transfer.[81] Nevertheless, it is important to retain acceptable levels of risk in the products to demonstrate the strength of and confidence in the products sold to investors. Secondly, risk retention may lead to responsible lending in the sense that originators will adhere to the same moral values (i.e., investment and expansion of business within the limits of the rule of law and ethical values) as investors. In other words, if originators retain risk in the tranches sold to investors 'this encourages them to make the same lending decisions that the investors would make'.[82] This approach also has the potential to prevent gambling and/or so-called 'casino banking'. Thirdly, risk retention may also lead to the point where originators become the 'administrators of the mortgages (collecting interests, making foreclosure decisions etc.) … [and that] their decisions as administrators are in the best interests of investors'.[83] The position of secured creditor and debtor may be used as a metaphor to illustrate the administration argument. The power granted to the secured creditor by the security interest on the collateral enables the secured creditor to control the debtor's business decisions. The debtor has the obligation to protect the value of the assets during the time when there is security over the assets,

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[80] Lenders need to hold a total adequacy ratio capital of 8 per cent of risk-weighted assets and Tier 1 [equity capital and disclosed reserves] capital of 4 per cent of risk-weighted assets. See IMF Report 2009, *supra* n. 64, at p. 12. Under Basel III requirements, banks have to achieve a 7 per cent ratio of core capital (Tier 1) to risk-weighted assets (and not total assets, thus safe securities are not considered as assets) by 2019. The current ratio is 4 per cent. See also V.V. Acharya and M. Richardson, 'Causes of the Financial Crisis', 21 *Critical Review* (2009) p. 195; Rajan, *supra* n. 63, at p. 541, notes that '[a] bank that wants to profitably lend to high-quality credits has to either bolster its capital so that its own credit quality improves, or find a convincing way to commit to the market that it will keep only high-quality loans on its balance sheet. … Rather than lending to a firm and keeping the loan at high cost on its balance sheet, it makes sense for the bank to lend only on a contingent basis – when all other sources of funds dry up and the firm is a high risk.'

[81] Financial Reporting Standard 5 (FRS5): Reporting the Substance of Transactions, requires that 'the substance of an entity's transactions is reported in its financial statements. This requires that the commercial effect of a transaction and any resulting assets, liabilities, gains and losses are shown and that the accounts do not merely report the legal form of a transaction.' Available at: <http://www.frc.org.uk/asb/technical/standards/pub0100.html> (accessed 10.01.2012).

[82] Hull, *supra* n. 4, at p. 198.

[83] Ibid.

and should refrain from entering into wealth-reducing transactions.[84] Thus, retaining risk and becoming administrator of the mortgages may lead originators to take prudent business decisions that are in the best interests of investors and will prevent wealth reduction. According to similar arguments, originators in complex securitisation deals may be required to absorb risk by retaining, for example, the equity tranche (which is the lowest-ranked tranche of securities and retained in non-mortgage securitisations).[85] In relation to the latter point, although originators retained some risk in the equity tranche before the financial crisis,[86] the insignificance of the equity tranche held compared to mezzanine and senior tranches render these earlier examples of risk retention somewhat symbolic. This is because equity tranches are unrated tranches that absorb losses when the portfolio of receivables they belong to underperforms. Thus, returns that may be expected from equity tranches are not guaranteed.[87] Furthermore, as originators sold or hedged the risk in equity tranches, risk retention in equity tranches did not provide effective alignment of incentives.[88] Successful risk retention in equity tranches requires high-quality loans (i.e., loans to creditworthy borrowers) and positive economic conditions.[89] In the absence of these factors, originators are less inclined to monitor the loans provided to borrowers. Equity tranches were purchased by hedge funds and securitisers of collateral debt obligations, which reduced the significance of risk retention by originators.[90] Originators may hold mezzanine tranches and in the event of their exhaustion, the vertical risk retention method, whereby the originator retains a certain percentage in each tranche, may be employed.[91] The significance of vertical risk retention is that financial institutions do not need to have a high capital requirement, as may be the case under horizontal retention, but hold certain levels of capital for each tranche without the ability to

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[84] On the nature of security affording control and expansion of business, see, e.g., A. Schwartz, 'Priority Contracts and Priority in Bankruptcy', 82 *Cornell Law Review* (1997) p. 1396; R.J. Mann, 'Explaining the Pattern of Secured Credit', 110 *Harvard Law Review* (1997) p. 625, at p. 683; G. Triantis, 'Secured Debt Under Conditions of Imperfect Information', 21 *Journal of Legal Studies* (1992) p. 225; J. Armour, 'The Law and Economics Debate About Secured Lending: Lessons for European Lawmaking?', in H. Eidenmüller and E.M. Kieninger, eds., *The Future of Secured Credit in Europe, European Company and Financial Law Review*, Special Volume 2 (2008) p. 3, at p. 8.

[85] Schwarcz, 'Information Asymmetry and Information Failure: Disclosure Problems in Complex Financial Markets', *supra* n. 53, at p. 104.

[86] I. Fender and J. Mitchell, 'The Future of Securitisation: How to Align Incentives?', *BIS Quarterly Review* (September 2009) p. 27, at p. 36.

[87] S.L. Schwarcz, 'Private Ordering of Public Markets: The Rating Agency Paradox', *University of Illinois Law Review* (2002) p. 1, at p. 6, arguing that equity securities 'have neither a specified maturity date nor a contractually fixed principal amount'.

[88] Fender and Mitchell, *supra* n. 86, at pp. 36-37.

[89] IMF Report 2009, *supra* n. 64, at p. 101.

[90] Eggert, *supra* n. 29, at pp. 1292-1293.

[91] See, generally, Fender and Mitchell, *supra* n. 71.

consolidate the securitisation. Under horizontal retention they must have a higher rate of capital and consolidate the securitisation transactions. Senior and mezzanine tranches provide substantive compensation to originators. This situation is explained in the House of Commons Financial Stability and Transparency Report:

> … the least risky, or 'senior', tranche has the first claim on payments from the pooled mortgages. The 'senior' tranche has the highest credit rating, often triple-A investment grade, but receives a lower rate of interest than the other tranches. After the senior claims are paid, the middle or mezzanine tranche receives its payments. Mezzanine represents greater risk and usually receives below-investment grade credit ratings and a higher rate of return. The lowest, or equity, tranche receives payments only if the senior and mezzanine tranches are paid in full. The equity/first-loss tranche absorbs initial losses. Equity tranches are therefore the most risky tranche and consequently often unrated, but as a consequence offer the highest rate of return. This process, whereby losses are applied to more 'junior' tranches before they are applied to more 'senior' tranches, is known as subordination and is one, albeit important, form of credit enhancement.[92]

Amendments to the current incentivisation system have been proposed by IOSCO, the EU and the USA. These include retaining credit risk in the equity tranche, a vertical risk retention structure in all tranches, and a percentage share. In the early stages of the financial crisis, the amendments to the current incentivisation scheme in the EU and the USA were criticised for being unsophisticated or too flexible and for the fact that the choice of amount and form was left to the originator, which might not lead to the best results.[93]

3.1 Reform efforts by IOSCO regarding unregulated financial markets and products

The IOSCO Task Force on Unregulated Financial Markets and Products ('Task Force') was set up in response to the reform and as part of the medium-term action for enhancing sound regulation which required a 'review of the scope of financial regulation, with special emphasis on institutions, instruments, and markets that are currently unregulated, along with ensuring that all systemically-important institutions are appropriately regulated'.[94] An action plan was set up by the Group of Twenty (G20) at its meeting[95] in Washington DC on 15 November 2008. This

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92 House of Commons, *Financial Stability and Transparency (Sixth Report)* HC 371 2007-2008, para. 60.

93 E.g., Fender and Mitchell, *supra* n. 71, at p. 32.

94 G20 Declaration on the Summit of Financial Markets and the World Economy, *supra* n. 33, at p. 2.

95 Ibid.

Action Plan to Implement Principles for Reform[96] set out a comprehensive road map for the implementation of principles for reform in financial markets. These principles include strengthening transparency and accountability, enhancing sound regulation, promoting integrity in financial markets, reinforcing international cooperation, and reforming international financial institutions. In September 2009, the Task Force issued a final regulatory report on transparency and oversight in unregulated markets and products, with particular emphasis on securitisation and credit default swaps.[97] The essence of the recommendations articulated in the Final Report is, mainly, to improve investor confidence in the post-financial crisis period by introducing greater transparency in securitisation transactions and similar unregulated financial market products. The Task Force focused mainly on securitisation due to its significant contribution to credit availability, systemic risk and restoration of international capital flow as well as its role in the global financial crisis.[98] The survey on the implementation of securitisation recommendations was published in March 2011, establishing that most measures formulated in the recommendations would be implemented. The recommendations involve the introduction of greater transparency through regulatory actions in order to assist financial market regulators and financial services authorities, thereby aiming to improve investor confidence following the financial crisis. The recommendations include the requirement for originators to retain long-term economic exposure to the securitisation to balance the interests of originators and investors; enhanced transparency through disclosure by issuers; independence of service providers from issuers in order to ensure that service providers do not influence an investor's decision to purchase securitised products; providing investors with initial and ongoing information on underlying asset pool performance; and strengthening investor suitability. Recommendation 1.1 contains the requirement for 'originators and/or sponsors to retain a long-term economic exposure to the securitisation in order to … align interests in the securitisation value chain'.[99] This is supported by three principles, namely that any retention requirement must be considered in light of the impact of the reform on domestic securitisation markets, that it has to regard the quality of the underlying collateral backing the securities, and that it should consider the legal processes of securitisation in the relevant jurisdiction. The Implementation Report pointed out that there was no clarity with regard to the form

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[96] Ibid., at p. 6 et seq.

[97] *Unregulated Financial Markets and Products – Final Report*, Technical Committee of the International Organisation of Securities Commissions (September 2009) <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD301.pdf> (accessed 12.11.2012).

[98] Ibid., at pp. 5 and 13, paras. 15 and 38.

[99] *Task Force on Unregulated Financial Markets and Products. Implementation Report*, Technical Committee of the International Organisation of Securities Commissions (March 2011), at p. 7, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD348.pdf> (accessed 12.11.2012).

of risk retention (i.e., whether it concerned a fixed percentage or a risk-based approach for risky assets).[100]

3.2 Reforms regarding risk retention in the EU

In the EU, the amendments to the Credit Requirements Directive (CRD)[101] introduced a minimum 5 per cent originator risk retention requirement (Article 122a) to align the interests of originators and investors.[102] Article 122a requires that 'credit institutions in the European Union [should] invest only in securitisations where they have applied appropriate due diligence and where the originators have an incentive to act diligently in the underwriting of the loans to be securitised'.[103] The Article requires investors to conduct due diligence, originators to disclose the relevant information to investors for the purposes of due diligence and issuers and originators to retain the credit risk. The significance of the minimum level of risk retention (5 per cent), which may be higher depending on the risks associated with underlying assets and the transparency level rather than with a specific form, is that misalignment of incentives differs in different securitisations and that the crucial point is the investor's ability to appreciate the risk in that securitisation.[104] The EU impact report noted that:

> a regulatory minimum retention level appears very relevant as a regulatory backstop mechanism to improve market resilience in time when bubbles build up [and] such regulatory backstop should not be set too high. For relatively transparent securitisations where the information disadvantage of investors is small, the moderate 5% minimum may actually constitute the adequate level … a higher than necessary retention requirement could potentially imply that certain non-bank issuers would find securitisations not an attractive business model anymore, meaning that they leave the markets and thereby reduce competition among lenders.[105]

The amendment to the CRD highlights problems with weak underwriting standards caused by the originate-to-distribute model, which does not allow credit risk

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[100] Ibid., at pp. 7-8.

[101] Art. 122a Directive 2006/48/EC.

[102] For a criticism of the fixed percentage approach, see, e.g., H. Scott, *International Finance: Transactions, Policy and Regulation*, 16th edn. (Foundation Press 2009), at p. 240 et seq., arguing that 'the fixed percentage approach applicable to all or a broad range of securitisation transactions … cannot adequately account for the distinct nature of securitisation markets…'.

[103] Report from the Commission to the Council and the European Parliament, 'Expected Impact of Article 122a of Directive 2006/48/EC' (COM (2010)262 final (28.5.2010)), at p. 2.

[104] Ibid., at pp. 5-6.

[105] Ibid., at p. 6.

retention. Article 122a requires that for a credit institution to be exposed to the credit risk the originator must disclose explicitly to the credit institution that it will retain a net economic interest which cannot be less than 5 per cent. The amendment requires originators to disclose the level of retention and ensure that investors have the necessary access to the relevant data and apply the same standard to the loans securitised and exposures on their trading books. These amendments aim to strengthen the quality of origination and disclosure. The disclosure requirements for originators, in addition to the risk retention requirements as specified above, stipulate that they disclose the amount and details of the retained exposures. This will establish flexibility, and investors will be able to determine the size and form of risk retention by originators. Accordingly, when investing in securitisation as a securitiser, a credit institution must obtain confirmation from the originator, sponsor or the original lender that the minimum 5 per cent risk has been retained. The credit institution, as a securitiser, is also required, when investing in securitisation, to inform the regulators that it has thorough understanding of the risks and securitisation positions and thus has complied with the due diligence requirements. If the credit institution acts as a sponsor or originator, it has to apply the same credit criteria to exposure to be securitised as it applies to exposures to be held in its book. Along the same lines, the credit institution as a sponsor or originator has to disclose to investors the level of its retention commitment to maintain a net economic interest in the securitisation, thus fulfilling the disclosure requirement.

In Article 122a(1), the retention of net economic interest, providing different options, has been defined as vertical slice retention (retaining risk in each of the tranches until loans have been paid); securitisation of revolving exposures[106] whereby the originator's interest of no less than 5 per cent is retained; retention of randomly selected exposures (which corresponds to the US Securities Exchange Act's equivalent exposures); and horizontal retention of the first loss (equity) tranche or other similar tranches with similar severe risk profiles.[107] The latter two options in particular have been criticised for requiring retention on the basis of nominal value rather than risk-weighted exposure.[108] It is clear that the equity tranche entails more risk weight than the mezzanine tranche and requires a higher percentage of risk retention based on risk-weighted exposures rather than on nominal values.[109] This would also align the amendments with the Basel II

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[106] Securitisation of revolving exposures is securitisation of receivables whereby investors agree to purchase receivables payable to the originator (e.g., credit card receivables or trade receivables) in the future through a forward agreement and the yields previously collected are distributed to the investors upon expiry of the revolving period. This is a valuable method of securitising non-liquid receivables, as without this method, the pool will mature before the investors can purchase.

[107] Art. 122a(1).

[108] E.g., K. Hawken and M. Bake, 'Welcome Flexibility', *IFLR* (June 2009) p. 43.

[109] See also IMF Report 2009, *supra* n. 64, at p. 105.

requirements terminology, where the term 'risk weight' is used. By providing for various options, the amendment takes into account different types of securitisation transactions and thus underlines the significance of risk retention by originators. Article 122a will affect any EU credit institution that has securitised products on its banking or trading books and has a wide scope of application in that it applies to non-EU institutions selling securitisation tranches to EU credit institutions. An originator or sponsor cannot hedge the retained economic interest[110] but may enter into risk management hedging and remain exposed to credit risk. Article 122a aims

> to disallow hedging that eliminates a sponsor's, originator's or original lender's exposure to the credit quality of the specific exposures that have been securitised and to seek to balance this objective with another, of ensuring that sponsors, originators and original lenders still have sufficient flexibility to risk-manage their exposure to broader changes in the credit quality of the asset classes, collateral, or macroeconomic variables to which they are exposed via their lending activities, securitisation activities, or otherwise.[111]

Therefore, Article 122a does not allow originators, sponsors or original lenders to purchase credit default swaps (insurance) to protect themselves from this credit risk when they retain credit risk under vertical slice risk retention, revolving exposures risk retention and horizontal (first loss) risk retention. If the credit risk is retained under randomly selected exposures, originators, sponsors or original lenders are not allowed to hedge the credit risk. This is believed to be an efficacious method to prevent reducing the effectiveness of credit risk retention arrangements.

Article 122a contains certain exemptions[112] according to which the retention requirement will not apply where claims have been guaranteed by governments, central banks, institutions with a risk weight of 50 per cent, and multilateral development banks (as these are deemed as low risk),[113] and where transactions have been based on a transparent index and on syndicated loans, CDS and purchased receivables (as these do not constitute securitisation). It could be argued that the exemption of governmental or other claims should not have been included in the legislative text, because in the absence of clear evidence in terms of quality of rating agencies' ratings of these claims and in light of the recent sovereign debt crisis, even though claims are guaranteed by a government or other entity, they may

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[110] Art. 122a(1), stating that the sponsor's, originator's or original lender's retained economic interest 'shall not be subject to any credit risk mitigation or any short positions or any other hedge'. But cf.: under the Securities Exchange Act 15G, the originator may hedge against his share of the credit risk. See *infra* n. 122 'Developments in Banking' and the accompanying comment.

[111] Guidelines to Article 122a of the Capital Requirements Directive, para. 39 (31 December 2010).

[112] Art. 122a(3).

[113] *Supra* n. 103, at p. 8.

still be considered as credit risk. However, the Committee of European Banking Supervisors (CEBS)[114] does not consider these exemptions to constitute a circumvention of the risk retention requirements under the CRD.[115]

3.3 Reforms regarding risk retention in the USA

In the USA, similar amendments are being made to the Securities Exchange Act of 1934 (SEA) as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, section 941(b), which added section 15G to the SEA. The proposed reform in the USA will enter into force in April 2013. A report prepared in January 2011,[116] under section 946 of the Dodd-Frank Act, discussed a number of factors that need to be considered as part of the reform in risk retention. It concluded that securitisation was an important source of raising finance and, within the securitisation food chain, risk retention by originators or securitisers was important for having ongoing exposure, and that risk retention could lead to better lending decisions.[117] The report further suggested a number of objectives that should be incorporated into a risk retention framework, including aligning incentives without distorting the basic structure of securitisation, promotion of greater certainty, efficiency of capital allocation, flexibility in the framework, and allowing a broad range of participants to engage in lending activities. As to the form of risk retention, the report provided three options: 5 per cent vertical risk retention, 5 per cent equity tranche retention (horizontal first loss), and 5 per cent retention (equivalent exposures) of a 'representative sample of all the assets that are transferred to the issuing entity'.[118]

The rule, provided by section 941b in SEA 15G,[119] requires that (a) a minimum of 5 per cent credit risk will be retained by the securitiser for any asset that is (i) not a qualified residential mortgage that is sold through the issuance of an asset-backed

114 See <http://www.c-ebs.org/documents/Publications/Advice/2009/article-122a/Advice.aspx> (accessed 27.3.2012).

115 *Supra* n. 103, at pp. 8-9.

116 *Supra* n. 65.

117 Ibid., at p. 30.

118 Ibid., at pp. 20-21. However, the risk retention requirement under the Dodd-Frank Act has been criticised as an attempt to prevent further financial crisis with unintended consequences for syndicated loans, whereby administrative agents of those loans may be treated as originators and come under the scope of the Act's risk retention requirement. For these criticisms, see, e.g., C. Vitello, 'The Wall Street Reform Act of 2010 and What It Means for Joe & Jane Consumer', 23 *Loyola Consumer Law Review* (2010) p. 99; Batty, *supra* n. 79, at p. 18 et seq.; S. Vydyula, 'Raising the Blinds: Effects of the Dodd-Frank Act's Risk Retention Requirement on International Firms Seeking Financing Through U.S. Markets', 10 *Journal of International & Business Law* (2011) p. 413, at p. 415 et seq.

119 Securities Exchange Act of 1934 [as amended through P.L. 112-90, approved January 3, 2012].

security or (ii) is a qualified residential mortgage that is sold through the issuance of an asset-backed security if one or more of the assets that collateralise the assets are not qualified residential mortgages, or (b) less than 5 per cent of the credit risk will be retained by the securitiser for an asset that is not a qualified residential mortgage that is sold through the issuance of an asset-backed security by the securitiser if the originator of the asset meets the underwriting standards stipulated in the Act. The rule exempts 'qualified residential mortgages' as the securities collateralised by these types of mortgages are less likely to default, because these loans have been subjected to stricter conditions and a higher degree of verification (section 15G(e)(4)), including documentation on the borrower's income and the ratio of income to debt. The securitiser will not be required to retain credit risk if all the assets that collateralise the securities are qualified residential mortgages. However, concerns have been raised about the narrow definition of qualified residential mortgages as well as about the amount that needs to be set aside by the securitisers.[120] There are other exemptions that the federal banking agencies (i.e., FDIC, Federal Reserve, Office of the Comptroller of the Currency) and the Securities Exchange Commission may jointly adopt provided that the underwriting standards for the securitisers and originators are of high quality and that consumers' and businesses' access to credit is encouraged by securitisers and originators through appropriate risk management practices. These exceptions include financial assets or loans made by any institution subject to supervision by the Farm Credit Administration and by residential, multifamily or health care facility mortgage loan assets guaranteed by the United States or agencies of the United States, except the Federal Mortgage Association and the Federal Home Loan Mortgage Corporation (i.e., Fannie Mae and Freddie Mac). As regards commercial mortgages, risk retention may include either a specified amount or percentage, or retention of the first loss (equity tranche). Another significant reform under section 15G is the allocation of risk between originators and securitisers. The federal banking agencies and the Securities Exchange Commission shall have the authority to reduce the percentage of risk retention required of the securitiser by the risk percentage required of the originator. In doing so, the Securities Exchange Commission will consider whether the assets sold by the originator to the securitiser have low credit risk, whether there are misaligned incentives where the originator employed imprudent origination practices, and whether the risk retention obligations have any impact on consumers' and businesses' access to credit.[121]

Although this reform provides some certainty and protection to investors by, to a certain extent, aligning the interests of originators, securitisers and investors, it is

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[120] E.g., letter, dated 2 August 2011, from Representatives Spencer Bachus and Barney Frank to the Secretary of Housing and Urban Development, the Chairman of FDIC, the Chairman of SEC, the Chairman of the Federal Reserve, et al.

[121] Securities Exchange Act of 1934, Sec. 15G.

a compromise. This is because the roots of the financial crisis can be found in mortgage-based securitisation where incentives were misaligned and residential mortgages that were sold to subprime borrowers were securitised and mixed with asset-based securities. It is also a compromise in that residential mortgages have been exempted from the risk retention requirements through detailed regulations that will be enacted to supplement the Securities Exchange Act of 1934. The form and percentage of risk retention (e.g., base risk retention, vertical or horizontal risk retention by sponsors, L-shaped risk retention, or retention by the sponsor of a representative sample) have not been clarified in the Act and have been left to the discretion of the federal banking agencies and the Securities Exchange Commission. This will be achieved through regulations to be laid down by the federal banking agencies and the Securities Exchange Commission. Furthermore, retention of less than 5 per cent of the credit risk for an asset that is not a qualified residential mortgage if the originator meets the underwriting standards (section 15G(c)) seems vague, because the underwriting standards of these assets, which could be commercial loans, auto loans or commercial mortgages, could be different and the percentage of risk retention might vary. Moreover, allocating risk between originators and securitisers carries the danger of financial institutions purchasing assets from other originators and securitising them because they can share the risk with those originators whereby their risk percentage is reduced to the level of the originator's percentage. This is more advantageous for securitisers because they do not have to securitise their own in-house assets (in which they are originators and securitisers and cannot share the risk). It has been argued that '[a]ggregate risk retention could be significantly diluted if securitizers reduce their credit risk by sharing it with originators, and originators evade much of their risk by hedging against it'.[122] Section 15G(c)(1) does not allow securitisers to hedge the credit risk. Thus, it has been argued that the Act's regulatory attempts are not forceful enough to tackle the issues that may arise from ever-changing financial innovation.[123]

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[122] 'Developments in Banking and Financial Law: 2010-2011', 30 *Review of Banking & Financial Law* (2010-2011) p. 1, at p. 49. It noted that '… the higher the percentage of risk assigned to originators, the less effective retention requirements will be at eliminating the same moral hazards that previously prompted irresponsible lending and the issuance of risky loan-backed securities'. See also R.M. Hynes, 'Securitization, Agency Costs, and the Subprime Crisis', 4 *Virginia Law & Business Review* (2009) p. 231, at p. 243.

[123] For shortcomings of the Dodd-Frank Act in terms of regulation, see D. Awrey, 'Regulating Financial Innovation: A More Principles-based Proposal?', 5 *Brooklyn Journal of Corporate, Financial and Commercial Law* (2011) p. 273, at p. 273; A. Wilmarth, 'The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem', 89 *Oregon Law Review* (2011) p. 951; S. Block-Lieb and E.J. Janger, 'Reforming Regulation in the Markets for Home Loans', 38 *Fordham Urban Law Journal* (2011) p. 681; Batty, *supra* n. 79.

4. CONCLUSIONS

Securitisation offers a low-cost funding option for the originator and provides improved liquidity. It also offers the originator the flexibility to remove the securitised asset from the balance sheet so that these assets (loans and receivables owed to the originator) do not weigh down the balance sheet, and thus the capital adequacy versus trade books ratio of the originator is improved. Securitisation diversifies credit risk for the originator and enables him to use different sources of funding, thereby increasing his liquidity levels; banks are able to provide further loans depending on business cycle conditions and their credit risk.

The excessive use of originate-to-distribute models in securitisation without meaningful credit risk retention contributed to increasing house prices and led to the decline of underwriting standards. This process illustrated the distinct incentives of originators, securitisers and investors. Securitisation, when used properly, is an effective method of raising finance. However, a more coherent and transparent system of securitisation and a better understanding of its limits may help prevent further crisis resulting from securitisation. Reforms in the EU and USA show resemblances. Both reform activities provide exemptions, although these do not help align incentives. The EU reform clearly sets out the form and percentage of retention of net economic interests, whereas the same cannot be said of the US reform. Studies have revealed that 'performance is better when the originator retains skin in the game as a result of affiliation with the deal sponsor or the loan servicer'.[124] However, it is also clear that, before the financial crisis, originators and lenders had voluntarily kept some of the credit risk in their portfolios and that this did not prevent the markets from collapsing. It would have been better had both the EU and US reforms, requiring compulsory credit risk retention, provided variable risk retention percentages.[125]

It is clear that IOSCO's recommendations offer a general framework for legislators based on the principle that originators must retain economic interest in securities sold to investors. Reforms in the EU and the USA as well as IOSCO's recommendations will align the incentives of originators, securitisers and investors, and these reforms will act as a deterrent and inject confidence into the markets. It is believed that no actual regulation will ever be effective against the innovativeness of financial markets. However, if the effective risk retention and due diligence goals are achieved, securitisation may continue to deliver its benefits to investors.

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[124] See, e.g., C. Demiroglu and C.M. James, 'How Important Is Having Skin-in-the-Game? Originator-Sponsor Affiliation and Losses on Mortgage-Backed Securities', *AFA 2012 Chicago Meetings* (January 2012), at p. 26.

[125] 'Developments in Banking', *supra* n. 122, at pp. 49-50.