

## **Basel III and Its New Capital Requirements, as Distinguished from Basel II**

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### **Abstract**

*From July 1988 when the original Basel Accord, Basel I, was introduced until January 2013 when Basel III implementation began, over the past 25 years, capital adequacy requirements have emerged as the dominant form of regulation for maintaining the financial soundness of banks. The rationale for reserving regulatory capital is to allow a bank, when under financial stress, to draw upon a pool of reserved funds comprised of shareholders' equity and its retained earnings, providing a buffer against a bank's unexpected losses. The Basel Committee on Banking Supervision ("**Basel Committee**") issued a consultative document in December 2009 titled "Strengthening the Resilience of the Banking Sector," often referred to by practitioners as "Basel III." Though a consultative document, the Basel Committee saw it as a set of proposed changes to the Basel II framework that was first issued in 2004. A comprehensive reform package, Basel III draws lessons from the global financial crisis of 2007-2009, one of them being the banking sectors in many countries had built up excessive on- and off-balance sheet leverage that was accompanied by a gradual erosion of the quantity and quality of the capital base. Basel III strengthens and redefines the global capital framework by raising banks' capital adequacy ratios and requiring banks to build up its capital defenses in periods when credit is at excessive levels, upholding a financially sound banking system that is the backbone of a functional market economy; because a market economy needs a financially sound banking*

*system for raising capital and extending credit. Despite its relatively long five year phase-in period, Basel III is stricter than Basel II; and, Basel III, like its predecessors, does not have enforcement mechanisms due to its soft-law nature. Focusing especially on Basel III's capital adequacy requirement, this article aims to examine Basel III's implementation and measures for reducing systemic risk, its improvement from Basel II as well as its impact on trade finance, project finance and small- and medium-sized enterprises ("SMEs").*

## **Introduction**

The principal purpose of Basel III is to enhance the resiliency of financial institutions by (1) creating global standards for liquidity; (2) introducing a leverage ratio as complement to the risk-based Basel II framework; (3) raising substantially the quantity and quality of the Tier 1 capital base; and (4) introducing two new concepts: the first, a 'capital conservation buffer,' which would be complemented by the second, a 'counter-cyclical buffer.'<sup>1</sup> The Basel Committee started regulating banks through its capital because every one of its member countries has a capital adequacy requirement. In fact, regulation of capital has been at the core of the Basel regime since Basel I in 1988. Capital regulation can also, at least in theory, obviate

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<sup>1</sup> Suggested by Mark Carney, the former Governor of the Bank of Canada, at a speech delivered at the 64<sup>th</sup> plenary meeting of the Group of Thirty Nations (G-30), held on 2-4 Dec 2010. The focus of the session was regulatory reform and Basel III, as well as regulatory challenges. For more details, *see*

<http://www.group30.org/images/PDF/ReportPDFs/OP81.pdf> (last visited 25 Jun 2012)

the moral hazard of banks being ‘too big to fail’ as it forces banks to internalize the externality of the social cost of bank failures by requiring them to hold more capital in the form of shareholders’ equity.

Basel II was a firm-specific regulatory regime. It operated under the flawed presumption that the whole financial system could be protected and regulated by effectively monitoring each individual firm.<sup>2</sup> Whereas, “Basel III is BOTH (*sic*) a firm-specific, risk-based framework and a system-wide, systemic risk-based framework,”<sup>3</sup> yet the term Basel III is not premised on any official title, remarked Deputy General Manager Hervé Hannoun, of the Bank for International Settlements (“**BIS**”). Professor Richard J. Herring of the Wharton School of the University of Pennsylvania also suggested that “the Basel Committee have studiously avoided the term ‘Basel III’; they would rather think of it as an addition to Basel II.”<sup>4</sup> The latter’s remark is evidenced by the Basel Committee’s<sup>5</sup> issuance of reform documents titled “Enhancements to the Basel II

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<sup>2</sup> Heidi Mandanis Schooner & Michael W. Taylor, *Global Bank Regulation Principles and Policies*, Academic Press (2010), at 285-286

<sup>3</sup> Hervé Hannoun, “The Basel III Capital Framework: A Decisive Breakthrough”, at 3. Available at <http://www.bis.org/speeches/sp101125a.pdf> (last visited 20 Aug 2012)

<sup>4</sup> YouTube, interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania. He discussed the reasoning behind the new capital-adequacy requirements in Basel III, some shortcomings of Basel III and how the financial services industry will cope with it. Available at [http://www.youtube.com/watch?v=pRSMYn2CU2s&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=pRSMYn2CU2s&feature=youtube_gdata_player) (last visited 12 Jan 2012)

<sup>5</sup> The Basel Committee (on Banking Supervision), established by central bank governors of the G-10 member countries in 1974, now has 27 members, comprising Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom (UK) and the United States (US). The Basel Committee sets the guidelines for world-wide regulation of banks; it also provides

Framework”<sup>6</sup> and “Revisions to the Basel II Market Risk Framework.”<sup>7</sup> Basel III is essentially a set of add-ons to Basel II; as part of the global initiatives to strengthen the financial regulatory system following the global financial crisis of 2007-2009, Basel III has been endorsed by the Financial Stability Board (“FSB”)<sup>8</sup> and the Group of 20 (“G-20”) leaders<sup>9</sup> during the G-20 Seoul Summit in 2010.<sup>10</sup> The stated aims of the Basel III is to improve the quality, consistency and transparency of the capital base, to ensure large financial institutions are in a better position

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the forum for discussion and agreement of international regulation on the conduct of banking and regular cooperation on banking supervisory matters. To serve its purpose, the Basel Committee is best known for its international standards on capital adequacy; the Core Principles for Effective Banking Supervision; and the Concordat on cross-border banking supervision.

<sup>6</sup> The document, finalized in Jul 2009, is available at <http://www.bis.org/publ/bcbs157.pdf> (last visited 7 Nov 2012)

<sup>7</sup> The consultative document was issued in Jan 2009, available at <http://www.bis.org/publ/bcbs148.pdf> (last visited 7 Nov 2012) and final version of this document was published in Jul 2009. <http://www.bis.org/publ/bcbs158.htm> (last visited 7 Nov 2012).

<sup>8</sup> The FSB is an international body that monitors and makes recommendations on the global financial system which was established after the G-20 London Summit in Apr 2009. The FSB is a successor to the Financial Stability Forum (FSF). The FSB’s board includes G-20 member states, FSF members and European Commission.

<sup>9</sup> The Basel Committee on Banking Supervision, Consultative Document, “Strengthening the Resilience of the Banking Sector”, Executive Summary. The consultative document is available at <http://www.bis.org/publ/bcbs164.htm> (last visited 5 Dec 2011).

<sup>10</sup> The G-20 leaders at the Seoul Summit (from 11-12 Nov 2010) endorsed the Basel III framework and the FSB’s policy framework for reducing the moral hazard of systemically important financial institutions (“SIFIs”), including the work processes and timelines set out in the report submitted to the Seoul Summit. SIFIs are defined as “financial institutions whose disorderly failure, because of their size, complexity and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity.” Available at <http://www.basel-iii-accord.com/> (last visited 31 Jan 2012)

to absorb losses on an on-going concern or gone-concern basis, improve risk management and strengthen corporate governance disclosures.<sup>11</sup>

During and subsequent to the global financial crisis of 2007-2009, the G-20<sup>12</sup> emerged as an executive coordinator of global economic regulation among international governance institutions to set standards, monitor enforcement and compliance and aid recovery. To ensure general consensus and build on existing frameworks, the G-20 worked through the FSB and partnered with international institutions including the International Monetary Fund (“**IMF**”), the Basel Committee, the Organization for Economic Cooperation and Development (“**OECD**”), the World Trade Organization (“**WTO**”), the International Association of Insurance Supervisors (“**IAIS**”) and the International Organization of Securities Commission (“**IOSCO**”).<sup>13</sup> The recent prominence of the G-20 demonstrates that trans-governmental regulatory networks (“**TRNs**”) as a new possibility (other than a formal treaty) in tackling those challenges brought by globalization which, tested by the global financial crisis of 2007-2009, is a mixed blessing. A treaty comes with a number of built-in challenges. First, treaty-making requires an enormous amount of diplomatic and political effort in order to reach both consensus and compromise among the parties concerned. Second, a treaty’s legally binding nature tends to make negotiating parties reluctant to nail down any definite texts so as to protect them with flexibility for future contingencies. Third, just as a treaty-making process is tortuous, so is its amending process.

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<sup>11</sup> YouTube, “Basel III and Dodd Frank”, a presentation by Mike Jacobs Jr. Available at [http://www.youtube.com/watch?v=DEf47gapyqk&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=DEf47gapyqk&feature=youtube_gdata_player) (last visited 29 Jul 2012)

<sup>12</sup> G-20, which comprises 19 countries and the European Union (EU), is a group of the world’s major economies.

<sup>13</sup> Sungjoon Cho and Claire R. Kelly, “Promises and Perils of New Global Governance: A Case of the G-20”, *Chicago Journal of International Law* 12.2 (Winter 2012), 491-562.

That is why a regulatory treaty, once fixed, is hard to amend for subsequent ever-changing regulatory environment.<sup>14</sup> Basel III does not have legally binding effect as it was devised by G-20 through TRNs; hence it is only soft-law by nature and embodies a regulatory framework based on group consensus rather than a treaty. The G-20's coordination of these TRNs to confront the crisis revealed a whole regime far greater than the sum of its parts. The experience of the G-20 in response to global financial crisis of 2007-2009 offers a propitious pathway toward such a new paradigm of global lawmaking and global governance. However, G-20's success needs to be examined more rigorously; empirical confirmations are still limited and any attempt to quantify these successes may suffer from a selection bias.<sup>15</sup> Compared to the Group of Ten (“G-10”) countries, the G-20 is a much more heterogeneous group with countries that represent most of the world's GDP.<sup>16</sup> Therefore in the decision-making process, it reflects a broader range of interests. Basel III is the G-20's response to the global financial crisis of 2007-2009, though on a more individual basis, the Basel Committee may have gained insights from other efforts “undertaken in response to the need to address gaps inherent in Basel II, reflected by the solutions and results generated and proposed by the Turner Review and the De Larosiere Report—such proposals and measures being aimed specifically at addressing and mitigating pro-cyclical effects induced by Basel II.”<sup>17</sup>

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<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Supra* note 4, YouTube interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania

<sup>17</sup> Marianne Ojo, “Basel III and Responding to the Recent Financial Crisis: Progress Made by the Basel Committee in Relation to the Need for Increased Bank Capital and Increased Quality of Loss Absorbing Capital”, SSRN working paper. Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1680886](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1680886) (last visited 24 Nov 2011)

## **Basel III (as Distinguished from Basel II)**

Basel III maintains the capital adequacy ratio defined by Basel II as the bank's total risk-adjusted assets ('the denominator') against its total capital ('the numerator'). Basel III not only changed the numerator but also the denominator.<sup>18</sup> Due to space constraints, this article focuses mainly on the numerator (i.e., capital) of the equation. Much of the criticism of Basel III has been directed at the numerator in the capital adequacy calculation (especially, what can be included as Tier 1 capital<sup>19</sup>); but the danger lies with the denominator as well. The risk-weighting approach of Basel III as a continuation from Basel II invites criticisms on Basel III, as long as that approach is not changed. The global financial crisis of 2007-2009 already indicated Basel III does not effectively address Basel II issues since banks are still exposed to AAA-rated debt backed by its underlying assets (i.e., pools of subprime mortgage loans) which turned out not to be risk-free at all.<sup>20</sup> Basel III does not fully address problems arising from highly risky subprime mortgage loans packaged as risk-free AAA-rated collateralized debt obligations

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<sup>18</sup> Vanessa Le Leslé and Sofiya Avramova, "Revisiting Risk-Weighted Assets ['RWAs']—Why Do RWAs Differ Across Countries and What Can Be Done About It?", IMF Working Paper WP/12/90, released on 1 Mar 2012. Available at <http://www.imf.org/external/pubs/cat/longres.aspx?sk=25807.0> (last visited 25 Jan 2013)

<sup>19</sup> Core Tier 1 capital includes common equity and retained earnings.

<sup>20</sup> N.M., "Basel III—Third Time's the Charm", *The Economist*, published on 13 Sep 2010. Available at [http://www.economist.com/hk/blogs/freexchange/2010/09/basel\\_iii](http://www.economist.com/hk/blogs/freexchange/2010/09/basel_iii) (last visited 25 Jan 2013)

instruments (“CDOs”).<sup>21</sup> Another related criticism towards Basel III is that it permits banks and credit rating agencies to decide the risk of asset base. The root cause of the criticism was that Basel II encouraged banks to identify and manage their risks, hence internal risk models were allowed for calculating the required capital for credit, market and operational risks. However, the quantitative risk modelling which should require sufficient data history and available data covering a complete economic cycle proved to be less robust than necessary when subjected to extreme stress conditions. As evidenced in the global financial crisis of 2007-2009, a number of banks that had to be bailed out were well capitalized as defined under Basel II but which failed to capture on- and off-balance sheet risks and credit derivative exposures. Basel III requires more equity to be held against risk-weighted assets. In practice, the onus will fall on the banks to find ways of reducing the perceived riskiness of their asset base in order to generate higher return on equity. Due to the aim of reducing the perceived, rather than the actual, riskiness, the effectiveness of Basel III therefore has already been questioned, suggesting Basel III is a tool designed to bolster market confidence rather than promoting large-scale reforms that depositors or investors have long been hoping for.<sup>22</sup> Some critics even argued that the need for higher capital adequacy requirements under Basel III is impractical and it may not even prevent the next crisis but create one.<sup>23</sup> One sees that Basel III places great emphasis on capital, although other measures related to liquidity, leverage and systemic risks should also be treated with equally significant importance. From a historical perspective, Basel II applied risk-weighted capital

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<sup>21</sup> Alex Preston, “Basel III Is Not Just Window Dressing”, published on 28 Sep 2010. Available at <http://www.newstatesman.com/economy/2010/09/basel-iii-banks-capital-assets> (last visited 25 Jan 2013)

<sup>22</sup> *Id.*

<sup>23</sup> Jeff Horwitz, “Risk Lies in Risk-Based Capital Approach of Basel”, *American Banker*, Vol. 175, No. 108, 15 Jul 2010.



regulation regime (as inherited from Basel I) that used *backward-looking* models for risk assessment. This contributed to creating a pro-cyclical (destabilizing) tendency for capital provisioning to amplify the economic cycle and such approach was adopted with the assumption that equity can buffer and absorb losses if non-performing assets need to be written-off.<sup>24</sup> That is, under the capital requirements of Basel I and Basel II, banks reacted quickly to avoid balance sheet insolvency (which may trigger an immediate insolvency) through several methods, including (1) avoidance of large exposures to one single borrower, (2) collateralization of loans, (3) entering into covenants that allow the bank to request refund of a loan if a debtor's credit deteriorates, or (4) securitization that allows the bank to remove assets from its balance sheet. These methods created a trend whereby banks diversified their investments and assumed allocating risk was safer; however such recalculating of risks was not necessarily sufficient to remove risk.<sup>25</sup> Basel III thus provides a *forward-looking* model which requires banks to hold more equity (capital) against future losses and prepare liquid assets that can be converted into cash in case of funding shortage.<sup>26</sup> As such, banks are expected to hold more capital and low-yield liquid assets and reduce the size of their balance sheets; if and when there is a shortage of capital, banks are to curtail lending to clients to ensure adequate cash at hand.

Excessive leveraging fuelled the global financial crisis of 2007-2009. Moving risky loan exposures off balance sheet and manipulating the regulatory arbitrage between the trading book

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<sup>24</sup> Stephen Valdez & Philip Molyneux, *An Introduction to Global Financial Markets*, (Chippenham and Eastbourne: Palgrave MacMillan) (2010), 6<sup>th</sup> ed., at 470.

<sup>25</sup> Jan Dalhuisen, *Transnational Comparative, Commercial, Financial and Trade Law*, 4<sup>th</sup> ed., vol. 3, Financial Products, Financial Services and Financial Regulation, (Oxford: Hart Publishing) (2010), at 526

<sup>26</sup> The Economist, "Capital Punishment Measuring the Price of Regulation", 10 Sep 2011.

and banking book were just a few tricks commonly employed by banks in order to make the most use out of their capital. The Basel III reforms of 2010 raised banks' capital requirements for the trading book and complex securitization exposures,<sup>27</sup> introduced a stressed value-at-risk (“VaR”) capital requirement,<sup>28</sup> and introduced higher capital requirements for the so-called re-securitizations in both the banking book and the trading book. Banking book constitutes the account where a bank's conventional transactions (e.g., loans, bonds, deposits, and revolving credit facilities) are recorded.<sup>29</sup> Given most of these instruments are, on average, of a long-term nature and are intended to be held until maturity, they are not traded on a regular basis. In fact, most tend to be quite illiquid. From an accounting viewpoint, assets held in the banking book are recorded at their historical costs. This means any profits or losses are not accounted for until these instruments are either sold or reach maturity. In contrast, a trading book comprises instruments that are held explicitly with trading intent,<sup>30</sup> hence its name. Instruments recorded in the trading book (e.g., interest rate risk<sup>31</sup>) tend to be traded frequently and are short-term in

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<sup>27</sup> Complex securitization exposures were a major source of losses for many internationally active banks during the global financial crisis of 2007-2009, arising from and connected to complex derivative financial instruments that are created by applying the financial technology tool known as securitization.

<sup>28</sup> The VaR capital requirement is based on a 12-month period of significant financial stress. See Basel Committee on Banking Supervision, *supra* note 9, “Strengthening the Resilience of the Banking Sector”, para 19.

<sup>29</sup> Gunter Meissner, *Credit Derivatives Application, Pricing and Risk Management* (Oxford: Blackwell Publishing) (2005), at 88.

<sup>30</sup> In addition, a trading book instrument can also exist in order to hedge other positions in the trading book.

<sup>31</sup> Interest rate risk is explicitly captured in the trading book under Pillar 1 capital regime, but subject to Pillar 2 requirements in the banking book. Since the major differences between the banking book and the trading book are their respective valuation techniques, different capital treatments for the same risk (i.e., interest rate risk) on either side of the boundary is a major contributor to arbitrage opportunities. See Basel Committee on Banking Supervision,

nature (usually less than six months). Where business accounting is concerned, the instruments eligible to be held in the trading book have to be “marked-to-market” on a daily basis and thus any profit or loss is accounted for immediately in the profit and loss account.<sup>32</sup>

Under Basel II, for capital allocation purposes, securities and loans were either held in the banking book if they were to be held to maturity or the trading book if they were to be readily sold. Items in the banking book required much more capital than items in the trading book, thus providing banks a large incentive to avoid holding assets to maturity.<sup>33</sup> A fundamental problem with this structural design was that as banks became more inclined to distribute (by securitizing) their loan assets, they became less inclined to maintain rigorous lending standards. That is because by distributing or securitizing these mortgage loans into CDOs, banks can substantially reduce or eliminate their credit risk exposures to debtors, with the risk being passed onto investors who purchase these CDOs. Banks that were heavily involved with this type of financial engineering would no longer be concerned whether the borrower (of subprime mortgage loans) could ultimately repay the loan. Another related problem is pro-cyclicality (detail of which will be expounded further below), as the value for mortgage-backed securities held in the trading book must be marked-to-market. Basel III attempts to eliminate the regulatory arbitrage between the banking book and the trading book by requiring significantly higher capital for the trading book and introducing incremental risk capital charge.

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Consultative Document “Fundamental Review of the Trading Book”, released in May 2012, at 6. Available at <http://www.bis.org/publ/bcbs219.pdf> (last visited 26 Jan 2013)

<sup>32</sup> Gunter Meissner, *supra* note 29, *Credit Derivatives Application, Pricing and Risk Management*.

<sup>33</sup> Peter King, “Basel III: An Overview”, Banking & Fin. Services Pol’y Rep., May 2011, at 1.3.

In the Basel III reforms of 2010 under the heading “Pillar 1-Risk Coverage on Trading Book,” there are significantly higher capital requirements for trading and derivatives activities, as well as complex securitizations held in the trading book<sup>34</sup> versus the banking book.<sup>35</sup> Hence the cornerstone of Basel III changes concern Pillar 1 and how capital requirements have been increased so as to reduce the probabilities of bank collapse.<sup>36</sup> In the global financial crisis of 2007-2009, it was observed that capital charge fell short in the trading book because Basel II focused primarily on the banking book; however, the major losses came from the trading book where complex structured financial instruments like CDOs were held. The capital shortage problem can be linked with the bank’s change of business model, from ‘originating to hold’ (“OTH”) to ‘originating to distribute’ (“OTD”). Traditional banking products (e.g., residential mortgages held to maturity) that used the OTH model are usually booked in the banking book; whereas, products that are securitized that used the OTD model are usually booked in the trading book. Under the OTH model, the mortgages will be held by the bank until it reaches maturity; under the OTD model, however, the bank will instead take the mortgages off its balance sheet and turn them into various debt products to be sold to investors through a financial engineering process known as securitization. For OTD products, they are marked-to-market daily while products in the banking book are booked at historical costs. Basel III tries to eliminate the regulatory arbitrage between the two books and requires significantly higher capital for the

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<sup>34</sup> Trading book holds banks’ alternative assets, especially those with complex securitization exposures such as CDOs.

<sup>35</sup> Banking book holds banks’ traditional assets such as loans.

<sup>36</sup> Co-Pierre Georg, “Basel III and Systemic Risk Regulation – What Way Forward”, Working Papers on Global Financial Markets No. 17, released on Jan 2011. Available at <http://www.gfinm.de/images/stories/workingpaper17.pdf> (last visited 24 Jan 2013)

trading book and introduction of a stressed VaR framework to help mitigate any pro-cyclicality that exists. An incremental risk capital charge would be applied that estimates the default and migration risks of unsecured credit products but also takes into account of liquidity. In addition, the Basel III reforms of 2010 also raised the standards of the Pillar 2 supervisory review process and strengthened Pillar 3 for more and proper information market disclosures.

The Basel Committee is also strengthening the capital requirement for counterparty credit risk (“**CCR**”) on over-the-counter (“**OTC**”) derivatives and repurchase agreements (“**repos**”) by requiring that these exposures be measured using stressed inputs. While the Basel II capital charge covered the risk of counterparty default, it did not explicitly address marked-to-market losses associated with a deterioration in the credit quality of a counterparty (i.e., credit valuation adjustments (“**CVA**”) risk). In other words, CVA is the market value of CCR.<sup>37</sup> Under Basel III, banks must hold capital for marked-to-market losses associated with the deterioration of a counterparty’s credit quality. The Basel II framework addressed CCR only in terms of defaults and credit migrations. However, it is estimated that “roughly two-thirds of CCR losses during the credit crisis were due to CVA and only about one-third were due to actual defaults.”<sup>38</sup> The point remains that marked-to-market losses due to CVA were not directly capitalized under Basel II and this may have contributed to the credit crisis during the global financial crisis of 2007-2009. Lehman Brothers Holdings Inc.’s (“**Lehman Brothers**”) bankruptcy and American International Group’s (“**AIG**”) near bankruptcy indicated that the very low capital charge on OTC derivatives did not capture the systemic risk associated with the interconnectedness and

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<sup>37</sup> Michael Pykhtin & Dan Rosen, “Pricing Counterparty Risk at the Trade Level and Credit Valuation Adjustment Allocations”, *The Journal of Credit Risk*, vol. 6, no. 4, (Winter 2010-2011), 3 at 4.

<sup>38</sup> *Id.*

potential cascade effects in these markets. To address this problem, the Basel Committee and FSB have endorsed central clearing and trade reporting on OTC derivatives. Also, Basel III enhances the capital base requirements to cater for CCR. In addition to the capital requirements that aim to cover default risk, banks are required to provide an additional capital charge to cover the risk of potential marked-to-market losses due to the default of their counterparties. In addition to the capital charge for deterioration in the creditworthiness of the counterparties, Basel III also promotes the clearing of OTC instruments through central counterparties (known also as central counterparty clearing houses) (“CCPs”). Derivatives counterparty credit exposures to CCPs will continue to have preferential capital treatment, recognizing that such exposure is low-risk. As such, Basel III requires CCPs to set aside capital for a very low risk weight (in the range of 1% to 3%), rather than the current zero capital requirement. This new measure is viewed as the Basel Committee’s attempt to address the “too connected to fail” problem.<sup>39</sup> On the other hand, higher capital requirements for bilateral OTC derivative will likely increase incentives to use CCPs and Exchanges. CCPs need to be appropriately managed and capitalized such that they do not create a new concentration of systemic risk. Put another way, by applying a lower risk weight to OTC instruments associated with central clearing services, Basel III aims to provide initiatives for settlements through CCPs that may help curtail systematic risks in the market.

Although Basel III has a relatively long phase-in period of five years, it is expected to weather future financial crises. This expectation is because under the Basel III framework banks will be more robust and more resistant to the adverse movement of market conditions. Basel III

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<sup>39</sup> Anonymous, “The Basel III Capital Framework”, available at [www.betterregulation.com/doc/7/16657](http://www.betterregulation.com/doc/7/16657), published on 25 Nov 2010. (last visited 28 Jan 2013)

is designed to provide for a gradual phasing in of the new capital requirements from 2013 to 2019; among them, some are heightened standards and others newly-added, when compared to Basel II.<sup>40</sup> For a complete list of Basel III's phase-in arrangements (dating from 1 January 2013 to 1 January 2019), one may refer to "Annex 2: Phase-in arrangements," a press release by "Group of Governors and Heads of Supervision announces higher global minimum capital standards."<sup>41</sup> Basel III is not a matter of if but when. Basel III is bound to be implemented though its commencement date (originally set at 1 January 2013) has been delayed in some countries.<sup>42</sup>

Unlike Basel II's regulatory framework that is firm-specific, Basel III takes a more global approach. Basel III changed and reshaped the international banking regulatory framework, from political, financial and economic perspectives. Politically, Professor Herring suggested that Basel III is reflective of a new governance system for the international financial market. Before 2009, the top level governing body in the Basel Committee was the Group of Ten ("**G-10**") leading countries, which were all rich countries as those countries controlled about 80% of the world's financial activities. Therefore, when the Basel Committee was established in 1974 by the central bank governors of the G-10 countries, it made sense for them to be the governing body. Consequently, the central banks of the G-10 countries were members to the Basel

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<sup>40</sup> Bank for International Settlements, "Implementation of the Basel III Framework", press release, issued on 14 Dec 2012. Available at <http://www.bis.org/press/p121214a.htm> (last visited 17 Dec 2012).

<sup>41</sup> "Annex 2: Phase-in Arrangements", a Basel Committee press release dated on 12 Sep 2010. Available at <http://www.bis.org/press/p100912b.pdf> (last visited 3 Aug 2012)

<sup>42</sup> Jim Brunsten, "EU Said to Weigh Bank Debt Rule Delay in Blow to Basel Timetable", on-line news released on 28 Jan 2013. Available at <http://www.bloomberg.com/news/2013-01-28/eu-said-to-weigh-bank-debt-rule-delay-in-blow-to-basel-timetable.html> (last visited 29 Jan 2013)

Committee and in turn, the Basel Committee reported to the G-10 countries. Note that of these 10 countries, there was only one Asian country, Japan. In more recent years, the whole balance of economic power and wealth has shifted to Asia, especially to China. So it no longer makes sense to have G-10 countries make rules for the world's financial system, along with a Basel Committee that is not representative enough of the world's major developing economies. For this very reason, the G-20 includes member states such as China, India, Brazil, South Korea and Indonesia.<sup>43</sup> Economically, the G-20 is a much more heterogeneous group, with countries that account for more than 80% of the gross world product and 80% of world trade. It is therefore not surprising that the Basel Committee has now 27 members, representing both the developed and emerging economies.<sup>44</sup> Therefore in the decision-making process, it reflects a broader range of interests. On 14-15 November 2008, the G-20 met in Washington, D.C. and agreed to an action plan to stabilize the global economy and to implement measures to prevent future crises. Financially, Basel III still contains a number of mistakes arising from Basel II, and the most serious mistake is in ignoring the numerator, the risk-adjusted capital (“**RAC**”), omitting it as a factor to be considered for a more radical reform.<sup>45</sup> The RAC standard is supposedly to be compared with the risk-weighted assets; the latter is supposed to reflect how risky the assets are. It is suffice to say, the riskier the capital is, the more capital the bank is required to have on reserve. One big problem in regard to the equation in Basel III is the definition of “capital,” which has no uniform definition. Professor Herring suggested that there can be as many as 10

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<sup>43</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania.

<sup>44</sup> For the Basel Committee's 27 members, *see* footnote 5 of this article.

<sup>45</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania.



different definitions for capital used in different countries. For example, in the US, capital includes a large portion of loan-risk reserves; in Japan, capital includes unrealized capital gains on real estate and stock; and in France, capital includes preferred shares.<sup>46</sup> All this implies that Basel III can potentially be demanding on banks, especially international banks, in complying with the capital rules set by their host countries. Perhaps this is the reason why Professor Herring concluded that Basel III is in many ways a marked change as it is tidying up some mistakes made by Basel II, although it is not to suggest that the Basel III actually corrected them.<sup>47</sup>

Regulation of capital has been at the core of the Basel regime since the days of Basel I.<sup>48</sup> Under Basel III, as under its predecessors Basel I and Basel II, a bank is required to maintain a minimum capital ratio of 8% at all times which is to consist of: (1) Tier 1 capital of at least 6%, of which at least 4.5% must be in the form of common equity, represented by ordinary shares and bank's retained earnings. The remaining 1.5% may be made up of "additional going concern capital," which is subject to strict conditions to ensure that it is equity-like in its loss-absorbing ability; (2) Tier 2 capital of 2%. Tier 2 capital may have more debt-like characteristics than Tier 1 capital, but it must nevertheless be deeply subordinated and meet strict criteria as to its loss-absorption.<sup>49</sup> In addition, Basel III imposes a "capital conservation buffer," which requires another 2.5% of common equity to be maintained by the bank. For raising capital quantity,

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<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

<sup>48</sup> Edward Chan and Matthew Worth, "Basel III and Project Finance", published by Linklaters in Jul 2011. Available at <http://hb.betterregulation.com/external/A13781114.pdf> (last visited 6 Aug 2012)

<sup>49</sup> *Id.*

Basel III requires a bank to hold 7% of common equity (including a minimum 4.5% and conservation buffer 2.5%) while Basel II only required 2% (to be common equity), though Basel III maintains the same minimum capital level of 8%, as in Basel II. Once the capital conservation buffer is included and with certain new deductions from capital, by 2019, banks will need to hold nearly four times the amount of common equity currently required to cover exposures; additionally, under Basel II regime, numerous complex sophisticated hybrid instruments were permitted to count as Tier 1 capital, all of these will be phased out under Basel III.<sup>50</sup>

The different levels of capital requirements under Basel II and Basel III are shown below in Table 1.

Table 1: Capital Requirements Under Basel II and Basel III

% of Risk-weighted Assets	Micro-prudential Capital Requirements							Macro-prudential Measures	
	Common Equity			Tier 1 Capital		Total Capital		Counter-cyclical Buffer	Surcharge for SIFIs**
	Minimum	Conservation Buffer	Required	Minimum	Required	Minimum	Required		
<b>Basel II</b>	2	N/A*	-	4	-	8	-	N/A*	
<b>Basel III</b>	4.5	2.5	7.0	6	8.5	8	10.5	0-2.5	Additional Loss-absorbing

<sup>50</sup> *Id.*

									Capacity
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\*N/A=Not Applicable

\*\*SIFIs=Systemically Important Financial Institutions

Basel III raises the level and quality of capital for banks to keep in their reserves. When the complete Basel III packages are implemented, banks' common equity will need to be at least 7% of the risk-weighted assets, compared to a Basel II level of 2% common equity. This increase is before taking account of the changes to definitions (of Tier 1 capital and Tier 2 capital) and risk weights which may affect the increase in capital. Also, the 7% figure includes a 2.5% capital conservation buffer which is designed to be drawn on in difficult times. The rest of Tier 1 capital (that is, 6% of Tier 1 capital subtracted by 4.5% common equity within Tier 1 capital, giving rise to 1.5% of Tier 1 capital) and Tier 2 capital (2%) amount to another 3.5% of risk-weighted assets under Basel III.<sup>51</sup>

(1) Various Minimum Capital Requirements

Four kinds of equity capital are contained in Basel III. Further details and the ramifications and changes associated with each one of them are provided below.

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<sup>51</sup> Youtube, "Basel III--An Overview of the Basel III Framework". Available at [www.basel-iii-association.com](http://www.basel-iii-association.com) (last visited 25 Jul 2012)

(1.1) Tier 1 capital will be increased from 4% to 6%. Banks will have five years (2013-2018) to implement such changes.

Basel III tightens the definition of Tier 1 capital, being fully loss absorbent regulatory capital, on a going-concern basis. In addition, a new definition of Tier 2 capital is streamlined, by removing the distinction between upper and lower tiers. Tier 2 capital is expected to bear losses on a contingency basis, or gone-concern basis in case of insolvency.<sup>52</sup> Tier 3 capital is abolished. Double counting problem can potentially hamper the efficacy of Basel III in actually increasing the quantity of a bank's capital. Since Tier 1 capital is pretty stringent, the issue will be left to Tier 2 capital. Tier 2 capital can be seen as complimentary but a counterpoint to that is whether there is a duplicating function.<sup>53</sup> As mentioned before in the 'Introduction' section of this article, Basel III tightened the definition for capital. Under the old definition, there were Tier 1 capital, innovative Tier 1 capital, upper and lower Tier 2 capital, and Tier 3 capital, each with its own limits which was sometimes a function of other capital elements. To avoid duplicating functions, Basel III's new change is a step in the right direction.

(1.2) Common equity capital is now increased to 4.5%, from 2%. Banks will have five years (2013-2018) to implement the changes.

Basel III raised this capital requirement by increasing the numerator in the calculation of the bank's capital requirement. The 'quantity' of capital will be increased incrementally in which

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<sup>52</sup> Peter Went, "Basel III Accord: Where Do We Go from Here", SSRN working paper, at 4.

<sup>53</sup> *Supra* note 11, YouTube, "Basel III and Dodd Frank", a presentation by Mike Jacobs Jr.

the core equity capital regulatory requirement is raised from the current 2% to 4.5%. This may be seen as a substantial increase from Basel II in which there was only 0.5% capital increase from Basel I. That is because regulators believe common equity is a better quality of capital. The additional 2.5% is an attempt to make investors recognize that the financial market can decline without making banks unsafe. In principle, when the bank starts to eat into that buffer, they must stop paying dividends and there may be some sanctions on bank employees' salaries. In practice, Professor Herring suggested that the Basel Committee may have inadvertently created another problem<sup>54</sup> as, by not paying dividends, this could easily dampen the confidence in the market. Banks do not want to be in a position of not being permitted to pay dividends; moreover, a temporary (rather than long-term) loss could be viewed by investors as an indication of financial difficulty instead. From a good corporate governance perspective, such confidence crisis should be avoided and the bank's reputation, upheld. And indeed they can. Even with Basel II's lower capital requirement, most banks voluntarily maintain a buffer above the minimum capital requirement because they are uncertain whether they will make a profit or loss next year. Under this circumstance, one question arises whether this additional buffer (i.e., an increase of 2.5%) is necessary. It is also unclear whether that is the best way to handle banks' capital buffer. Professor Herring suggested that instead of banning the distribution of dividends, there should be some sanctions, but ideally they will have to be graduated from something more trivial to something more serious. A bank may as well be using something colloquially called a 'CoCo' (Contingent Convertible, a mandatory convertible debt), which allows the bank to get a tax benefit (for the bank is required to make interest payments) and to get the equity when the

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<sup>54</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania.

bank needs it.<sup>55</sup> Essentially, CoCo is debt but changes to equity when a crisis is triggered. In light of this shifting nature and quality, CoCo can work as ‘bailing bonds’ that can be very helpful for the bank to meet increased capital requirement in Basel III. Issuing contingent bonds like CoCos would be more advantageous to the bank because until an investor exercises the option, the bank does not need to count shares in its calculation of diluted earnings.<sup>56</sup> In view of the accounting advantage of CoCos, issuing convertible debt by the bank could arguably provide the relief without causing pain and confidence loss to the investors when the bank stops paying dividends.

### (1.3) Basel III proposes to move the risk-adjusted assets to Pillar 2

The third new capital requirement is more innovative but, before one delves into the new changes, one must bear in mind that Basel III maintains the capital adequacy ratio defined by Basel II as the bank’s total risk-weighted assets against its total capital. That is,

$$\text{Capital Ratio} = \frac{\text{Capital}}{\text{Risk-weighted Assets}}$$

Basel III’s proposal to move the risk-adjusted assets to Pillar 2 reflects one of the huge costs of having risk-adjusted lending requirements that made Basel II more pro-cyclical than it

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<sup>55</sup> *Id.*

<sup>56</sup> <http://www.investopedia.com/terms/c/contingentconvertible.asp#axzz2BVnEYXcJ> (last visited 7 Nov 2012)

otherwise would have been.<sup>57</sup> On the one hand, as the economy improves, risk decreases, so the denominator goes down, and assuming capital is the same or has been increased (because the bank's retained earnings has increased); then the figure of lending capacity will increase so the economic boom will be even larger. But as the economy deteriorates, the risk increases and therefore the denominator increases, and as the bank suffers losses, capital declines; then in order to maintain the original denominator associated with risk-adjusted assets, banks are going to reduce its lending even more. The problem of pro-cyclicality can be further exacerbated now that Basel III imposes standardized 'stress test' on all banks (savings banks and merchant banks alike<sup>58</sup>) by compelling them to have sufficient liquidity available during a period of 30 days of stressed conditions. In normal conditions, one can expect the loan to be reimbursed completely at its maturity date; this however is not the case during the stress test window of 30 days; then, only partial outstanding debt repayment (e.g., 50%) serves to reimburse the bank.<sup>59</sup> For example, assuming the bank's collectable loans are reduced by half as a result of its receiving only 50% outstanding debt repayment, then, the bank's risk-weighted assets will also be reduced by half. That is because a bank's collectable loans are treated as a form of its risk-weighted assets under

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<sup>57</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania.

<sup>58</sup> The difference between savings banks and merchant banks are that savings banks are specialized in the collection of deposits while the merchant banks, in lending to large corporations. The fundamental differences in their business operations will affect their respective abilities in maintaining the capital levels required by Basel III. Understandably, it will be easier for savings banks than merchant banks to achieve maintaining the Basel III capital ratios.

<sup>59</sup> YouTube, "Basel III", a presentation by BNP Paribas Fortis. The video presentation is based on life presentations by Lars Machenil (CFO BNP Paribas) and Walter Rosenhek (Basel III Program Manager BNP Paribas Fortis). (last visited 25 Jul 2012)

accounting rules. Let us further assume that the bank's capital remains the same, this will add more emphasis to the point that the bank is forced to lend more when liquidity is least available so as to maintain the same level of risk-weighted assets, otherwise risking falling below Basel III's capital requirement ratio.<sup>60</sup> Another issue inherent with this proposal is that Pillar 2 capital will not be transparent because of the secret agreement between banks and their regulators. The proposal is intended to slow the bank's expansion so it will not have a bigger crash of credit. Yet, the Basel Committee seems to have over-emphasized that liquidity is the most important thing. After the global financial crisis of 2007-2009, the regulators used public funds to flood the market with liquidity in the hope of preventing a systemic crisis; and that is likely the reason the Basel Committee thought that liquidity is important.<sup>61</sup> With the EU debt crisis likely to drive the global economy into another recession and the US unemployment rate at 7.6%<sup>62</sup> (which is a persistently high unemployment rate), the global economy has slowed down and its future prospect is uncertain. The lack of investment activities further drives up the overall credit costs for banks which, under the Basel III framework, are required to put in reserve higher-level regulatory capitals for absorbing systemic, market, counterparty credit and counter-cyclical risks. Many banks would reasonably be predicted to fail in the stress tests as well as fail in coming up with more required capital. They would fail because they would not normally have the ability to

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<sup>60</sup> *Id.*

<sup>61</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania

<sup>62</sup> In the latest report issued by the US Department of Labor's Bureau of Labor Statistics, it reported that the latest unemployment rate is 7.6% as of May 2013. *See* <http://data.bls.gov/timeseries/LNS14000000> *See also* [http://www.huffingtonpost.com/2013/06/07/may-jobs-report-unemployment-rate\\_n\\_3401718.html](http://www.huffingtonpost.com/2013/06/07/may-jobs-report-unemployment-rate_n_3401718.html) (last visited 18 Jul 2013)



bear additional costs for obtaining the required capitals (either under Pillar 1 or Pillar 2) as those are expensive or practically impossible to get. That may be the reason why Peter Went sees that Basel III could only have a limited impact. For actual numbers, according to a Quantitative Impact Study, “[the] change in capital requirement beyond the existing VaR [i.e., value-at-risk] estimate (using data from the most recent one-year period) and the stressed VaR for a one-year period of significant stress is likely to increase the capital requirements 3-4 times.”<sup>63</sup>

#### (1.4) Leverage ratio is introduced under Basel III

The fourth new capital requirement introduced by Basel III is the leverage ratio that will put a cap on how much leverage a bank can have in relation to the size of its balance sheets. In the years leading up to the global financial crisis of 2007-2009, banks’ balance sheets had grown significantly. Basel III insists on limiting this growth and even incentivizes banks to take initiatives to reduce them. The way to do so is by putting a limit on the size of the activities a bank can develop, compared to its own capital. A leverage ratio has thus been developed to rein in the size of banks’ balance sheets.<sup>64</sup> The introduction of a leverage ratio is another distinctive feature of Basel III. In the Basel III reforms of 2010, the Basel Committee proposed a minimum Tier 1 capital leverage ratio of 3%, starting from 2013 (or 2015, as it later suggested). The leverage ratio is expected to capture both on- and off-balance sheet exposures and derivatives.<sup>65</sup>

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<sup>63</sup> Peter Went, *supra* note 52, “Basel III Accord: Where Do We Go from Here”, at 6.

<sup>64</sup> *Supra* note 59, YouTube, “Basel III”, a presentation by BNP Paribas Fortis.

<sup>65</sup> Settor Amediku, “Was Basel III Necessary and Will it Bring about Prudent Risk Management in Banking”?, SSRN working paper, at 11. Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1769822](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1769822) (last visited 24 Nov 2011).

To supplement the broader risk capital requirements and the increased regulatory capital levels, the Basel Committee set a new risk-invariant leverage ratio to act as a backstop to the traditional risk-based capital requirements.<sup>66</sup> The global financial crisis of 2007-2009 revealed that many banks were highly leveraged though they reported strong Tier 1 capital ratios. The leverage ratio will be implemented and assessed during a five year parallel run period, before subjecting this regulatory metric for further review and calibration, in anticipation of full inclusion as a Pillar 1 capital requirement.<sup>67</sup> It will help contain the high level of leverage in the banking system and provide additional support for the risk-based requirements. Less leverage is the main reason why US banks are in less trouble than European ones for the latter “have a leverage ratio as high as 50%, meaning assets to tangible equity were so large that banks must be perfect to be able to survive. In Switzerland, they too put in a leverage ratio, because their banks are simply just too big to save. But the other European banks are not sure whether they want to do it.”<sup>68</sup> The compromise that the Basel Committee would likely make is to set a 3% leverage ratio although it will be under Pillar 2. To make it effective, there will be rules prohibiting banks from counting loans received from governments as Tier 1 capital. The lobbying groups for major European banks warn that this practice will send the world economy into recession or depression because, if the Basel Committee raises requirements on capital, then banks in Europe are going to raise spreads on loan. In that scenario, banks will lend less than they are now. That may explain why the compromise ended up being the buffer time, i.e., the long phase-in period for Basel III.

Professor Herring did not dismiss the lobbying groups’ viewpoints entirely, saying “when you

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<sup>66</sup> Peter Went, *supra* note 52, “Basel III Accord: Where Do We Go from Here”, at 5.

<sup>67</sup> *Id.*

<sup>68</sup> *Supra* note 4, YouTube, an interview with Professor Richard J. Herring of the Wharton School of the University of Pennsylvania.

break down the argument into pieces, there is an element of truth through what banks are saying. From the standard finance point of view, if [the capital is raised], [banks] should be compensated in a lower cost of debt, but that is not going to happen for banks in general, because [the governments] have guaranteed all of their debt.”<sup>69</sup> Consequently, banks are not going to get the relief as they might expect. That is why the relatively long phase-in period of five years is thought to be helpful. It is more expensive for banks to raise capital through issuing new shares so the banks have calculated the time they need to retain their earnings to meet these ratios. Unsurprisingly, the longer it takes for Basel III’s actual implementation, the less effective Basel III might be. This concern may provide grounds for Professor Herring to counter-argue that given the low interest rate environment that has been maintained for a long time, there is an inherent spread for banks which is so large that there is some reason to believe that they have already been subsidized with their retained earnings.<sup>70</sup> Banks can therefore be expected to use some of their retained earnings to meet the additional capital requirement. Although if the economy continues to worsen and we have a double recession, banks will still be unprepared to deal with it.

In a working paper published by BIS in July 2012, evidence is presented that 87 large international banks that were rescued took on a higher risk in their loan books before the crisis than banks that were not rescued, especially in their domestic markets.<sup>71</sup> In the global financial

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<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> Michael Brei and Blaise Gadanecz, “Public Recapitalizations and Bank Risk: Evidence from Loan Spreads and Leverage”, Bank for international Settlements Working Papers No 383, released in Jul 2012. Available at [www.bis.org/publ/work383.htm](http://www.bis.org/publ/work383.htm) (last visited 1 Aug 2012)

crisis of 2007-2009, numerous governments injected public funds to rescue banks that were considered “too big to fail.” Moral hazard risk was cited as reasons against bailing out “too big to fail” banks whose high leverage practice was blamed for causing their bankruptcy or near bankruptcy. According to the same BIS working paper, the balance sheets and syndicated loan portfolios of those 87 large international banks (approximately half of them were rescued during the crisis) were analyzed for the period from 2000 to 2010. The paper’s finding suggested that after the crisis, although the banks’ appetite for risk started diminishing in early 2009, there was no consistent evidence to support the impression that rescued banks reduced their risk exposure relatively more than non-rescued banks during the crisis.<sup>72</sup> The paper’s finding perhaps will lend some weight to those skeptics who believed Basel III will only have limited impact on large banks’ current lending practices.

(2) Capital Conservation Buffer (New Requirement Under Basel III)

Capital conservation buffer is not part of the minimum capital requirement as stated above; instead, if a bank does not hold capital in excess of this buffer, it will face restrictions on payouts of dividends, share buybacks and bonuses. This means no bank is likely to treat the capital conservation buffer as optional.<sup>73</sup> In order to operate without such limits on earnings distributions, after adding in this buffer, the bank will have to maintain common equity, Tier 1 capital, and total capital ratios of 7%, 8.5% and 10.5%, respectively.

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<sup>72</sup> *Id.*

<sup>73</sup> Edward Chan and Matthew Worth, *supra* note 48, “Basel III and Project Finance”.

### (3) Counter-cyclical Capital Buffer (New Requirement Under Basel III)

Counter-cyclical buffer ensures that banks build their capital defenses when times are good and when additional capital can be readily obtained at an attractive or less expensive price. Then, when the financial cycle turns downward and the system-wide risks crystallize, authorities can release the buffer to ensure the flow of credits is not constrained by regulatory capital requirements imposed on banks.<sup>74</sup> The design of the buffer is for the purpose of strengthening banks' credit-facilitating ability in a financial downturn or crisis so that banks can still be comfortable in extending credit under the rubric of capital regulation. The key now is to employ a trigger which shall act as an indicator for deploying the buffer. Research has shown that one of the best indicators is the performance of the private sector credit-to-GDP ratio as it has some significant advantages. First, the credit-to-GDP ratio has historically been a leading indicator of banking crises in various countries. Second, it is readily available and not subject to large revisions. Third, it is less prone to strategic manipulation by individual financial institutions to which the buffer would be applied.<sup>75</sup> As the GDP level varies from country to country, for the ratio to function as an optimal indicator, it will rely on the central bank to actively monitor market trends and take into account the increase or decrease of the money supply in the economy in order to facilitate the continuous growth of the national economy.

Another advantage for introducing the counter-cyclical capital buffer is to prevent banks from going into early or unnecessary insolvency by allowing them to draw from the (counter-cyclical) capital buffer when it is so triggered. Counter-cyclical measures can help restore a disruptive economy and prevent individual banks from failing; by contrast, pro-cyclical trends

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<sup>74</sup> Mark Carney, "Countercyclical Capital Buffers and Basel III", in G-30 Occasional Paper 81.

<sup>75</sup> *Id.*

work against them. To combat pro-cyclicality, under the old (Basel II) capital framework, banks would be required to increase their capital when it is most expensive to get. In attempting to protect reputation as well as to preserve talents (so there will be no ‘brain drain’ during critical times), banks are inclined to keep distributing dividends and compensation bonuses; the result is a reduction in bank lending. The asymmetric information problem suggests that when the financial market becomes murky, the lack of information will contribute to the spread of recessionary pressures to banks which have minimal or no information about each other; the result is that banks would stop lending to each other because of the mutual distrust of the counterparty’s ability to repay the loan in full. When the situation worsens and further spawns into a crisis, what often follows is a credit crunch which may result in a severe reduction in the availability of external finance, thus curtailing banks’ lending capacities and revenue growth. Designed as a counteractive measure, the new counter-cyclical capital buffer is one key element that distinguishes Basel III from Basel II and, if done well, can be a real improvement. Note that in July 2010, the Basel Committee sought comments by 10 September 2010 for its consultative document titled ‘Countercyclical Capital Buffer Proposal.’<sup>76</sup> The Basel Committee made clear that a counter-cyclical buffer within a range of 0% to 2.5% of common equity or other fully loss absorbing capital will be implemented ‘according to national circumstances,’ implying that certainly flexibility is given and necessary for executing the new capital requirement. The counter-cyclical capital buffer will be phased in from January 2016 and will be fully effective by January 2019; before then, the required ratio corresponding to the designated year is 0% (2015), 0.625% (2016), 1.25% (2017), 1.875% (2018) and 2.5% (2019).

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<sup>76</sup> Basel Committee on Banking Supervision, Consultative Document, “Countercyclical Capital Buffer Proposal”. Available at [www.bis.org/publ/bcbs172.pdf](http://www.bis.org/publ/bcbs172.pdf) (last visited 29 Jul 2012)

(4) Additional Capital Reserve for Financial Conglomerates (New Requirement Under Basel III)

In December 2011, the Joint Forum<sup>77</sup> issued a set of guiding principles titled “Principles for the Supervision of Financial Conglomerates,” which stressed the important significance of this peculiar capital requirement. Additional capital for systemically important banks, which was not seen in Basel II, is now imposed for large bank conglomerates.

As mentioned above, due to the relative long phase-in period (five years), the new counter-cyclical capital buffer requirement would not have an immediate effect, but only an incremental one. The counter-cyclical buffer (0% to 2.5%), together with increased Tier 1 capital (to 8.5%) and Tier 2 capital (2.0%) would require a bank to basically hold about 13% of its total risk-weighted assets against its risk exposures. This of course only applies to average or smaller banks. One must note that the aforementioned 13% risk-based capital requirement is assessed on a stand-alone basis only for individual banks; for systemic important financial institutions (“SIFIs”), with only 28 of them in the world<sup>78</sup>, additional loss-absorbing capacity, as

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<sup>77</sup> According to the Bank for International Settlements, the Joint Forum was established in 1996 under the aegis of BCBS, IOSCO and IAIS “to deal with issues common to the banking, securities and insurance sectors, including the regulation of financial conglomerates.” Information available at <http://www.bis.org/bcbs/jointforum.htm> (last visited 13 Jun 2013)

<sup>78</sup> Financial Stability Board (“FSB”) “Update of Group of Global Systemically Important Banks (G-SIBs)”, published on 1 Nov 2012. Available at [http://www.financialstabilityboard.org/publications/r\\_121031ac.pdf](http://www.financialstabilityboard.org/publications/r_121031ac.pdf) (last visited 5 Dec 2012). According to this report, the number of G-SIBs is reduced by one overall, from 29 to 28. In an

manifested by an additional 1% to 2.5% of risk-weighted assets, is to be met with common equity. This group of SIFIs, or G-SIFIs, is required to meet higher capital requirement as a result of higher supervisory expectations for their risk management functions, data aggregation capabilities, risk governance and internal controls.<sup>79</sup> The FSB report, issued in November 2012, further suggested that the group of systemically important banks (“**G-SIBs**”) designated in November 2011 or November 2012 must meet the higher expectations for data aggregation capabilities and risk reporting by January 2016. And for those banks designated in subsequent annual updates, they will need to meet these higher expectations within three years of its designation.<sup>80</sup> A G-SIB is defined as a financial institution whose distress or disorderly failure, because of its size, complexity in organizational and management structures and systemic

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earlier publication in Nov 2011, the FSB identified an initial group of G-SIFIs, namely 29 G-SIBs, using a methodology developed by the Basel Committee. As at Nov 2012, the updated list suggests that two banks have been added to the initial list of 29 G-SIBs while three banks have been removed from it. These 28 G-SIBs, in alphabetical order within each bucket, are Citigroup, Deutsche Bank, HSBC, JP Morgan Chase (four of them in ‘Bucket 4’, with additional loss absorbency capital of 2.5% required); Barclays and BNP Paribas (both in ‘Bucket 3’, with additional loss absorbency capital of 2.0% required); Bank of America, Bank of New York Mellon, Credit Suisse, Goldman Sachs, Mitsubishi UFJ FG, Morgan Stanley, Royal Bank of Scotland, UBS (eight of them in ‘Bucket 2’, with additional loss absorbency capital of 1.5% required); Bank of China, BBVA, Groupe BPCE, Group Crédit Agricole, ING Bank, Mizuho FG, Nordea, Santander, Société Générale, Standard Chartered, State Street, Sumitomo Mitsui FG, Unicredit Group and Wells Fargo (fourteen of them in ‘Bucket 1’, with additional loss absorbency capital of 1% required). The FSB noted in its Nov 2011 report that the group of G-SIFIs is to be updated annually based on new data and published by the FSB each November; therefore, it can be expected that in the next time, the group of G-SIBs will be updated in Nov 2013.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*



interconnectedness, would cause significant disruption to the wider financial system and economic activity.<sup>81</sup>

#### (5) Basel III's Forward-Looking Provisions

Basel III proposes forward-looking (ex-ante) provisions to help clarify issues relating to counterparty credit risk (“CCR”), counterparty valuation adjustment (“CVA”) and wrong-way risks (“WWR”). WWR is defined by the International Swaps and Derivatives Association, Inc. (“ISDA”) as the risk that “occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty.”<sup>82</sup> In short, WWR arises when the counterparty default risk and credit exposure increase together. The ISDA working group distinguishes between specific WWR and general (or conjectural) WWR. Specific WWR arises through poorly structured transactions (such as those collateralized by one’s own or related party’s shares) while the general WWR occurs “where the credit quality of the counterparty may for non-specific reasons be held to be correlated with a macroeconomic factor which also affects the value of derivatives transactions.”<sup>83</sup> The global financial crisis of 2007-2009 showed the practical role and impact of CVA that the marked-to market losses due to CVA were not directly capitalized. Consequences of CVA are now reflected in accounting and capital rules; CVA must be priced

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<sup>81</sup> Comment on G-SIBs by Global Financial Markets Association (“GFMA”). *See* <http://www.gfma.org/initiatives/g-sibs/g-sibs/> (last visited 5 Dec 2012)

<sup>82</sup> ISDA’s reply to questions on the calculation of regulatory capital for counterparty risk, issued on 7 Sep 2001 (hereinafter “ISDA’s reply”), available at [http://www.isda.org/c\\_and\\_a/pdf/RGresserLetter-Sept701.pdf](http://www.isda.org/c_and_a/pdf/RGresserLetter-Sept701.pdf) (last visited 13 Jun 2013)

<sup>83</sup> ISDA’s reply, *Id.*

for derivative portfolios. To that end, the general WWR is important to consider because it may reduce systematic impacts of the reduction in the value of a portfolio if and when counterparty risk exposure crystallizes. Basel III compliance firms are thus advised to create capabilities to capture forward-looking pro-forma data into the models<sup>84</sup> (for banks' capital calculations or risk-tests) and develop methodologies to incorporate risk weights and mitigate the effect of central clearinghouse counterparties such as national stock exchanges.<sup>85</sup> For modelling, it is suggested that systems should share common models and provide consistent measures across risk types, including cash flow, asset-liability management, liquidity management and CCR management, for banks to capture consistent risk-weighted assets.<sup>86</sup> The forward-looking provision is also seen in the combat against pro-cyclicality. For example, to provide timely or more relevant information for stakeholders (e.g., customers and prudential regulators) to take actions when it is deemed necessary to address the risks and exposures facing financial institutions, the approach would require banks to disclose relevant and better information to investors, depositors and other market participants such as prudential authorities and regulators.<sup>87</sup> It is noted that the disclosure

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<sup>84</sup> Using models for capital calculations as an example, Basel III compliance firms (i.e., these banks) shall use consistent data and systems (used to reconcile data across different risk categories) to allow the business line user to break down the differences between regulatory capital and economic capital (both capitals are used to cover liquidity leverage) into sources of risk, such as name concentration, sector concentration and migration risk.

<sup>85</sup> Amit Patni, "Basel III is Here". Available at <http://www.infosys.com/industries/financial-services/white-papers/Documents/basel-here.pdf> (last visited 7 Aug 2012)

<sup>86</sup> *Id.*

<sup>87</sup> Jaime Caruana, "Financial Stability and Risk Disclosure". Available at <http://www.bis.org/speeches/sp111222.pdf> (last visited 7 Aug 2012). This is a keynote speech made by Mr Jamie Caruana (the General Manager for Bank for International Settlements), who addressed to the Financial Stability Board ("FSB") Roundtable on risk disclosure, in Basel on 9 Dec 2011.

of information would be delayed due to the timing of reporting--meaning the timing of disclosure would cause delay to carrying out actions of promoting the counter-cyclical measures. For the forward-looking provisions to be effective, the national bank regulators would have to work on the policy aspect in detailing the actual measures, for example, strengthening banks' capital and liquidity requirements. General Manager Jamie Caruana of the BIS suggested:

“Risks often appear precisely in the areas to which market participants and public authorities have paid the least attention, and about which they have demanded the least accurate information. Given these limits to [their] understanding, [they] need to be prudent. This means protecting the system against the unknown and unexpected, for example by strengthening capital and liquidity buffers at institutions and initial margin in traded markets.”<sup>88</sup>

In order to reduce the cyclicity of minimum capital requirements under Pillar 1, the Basel Committee proposes to use a ‘downturn probability of default’ (similar to the existing requirement of ‘downturn loss given default’) in the capital calculations. As an additional measure, the Basel Committee promotes stronger provisioning practices by advocating a change of accounting standards towards an ‘expected loss approach’ in order to capture actual losses more transparently and be less pro-cyclical than the current ‘incurred loss approach’ to provisioning. In this regard, the Basel Committee and the International Accounting Standards Board (“IASB”) is working towards this new approach of disclosure in relation to an expected

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<sup>88</sup> *Id.*

loss approach.<sup>89</sup> More recently, it has been reported that ‘extra-financial information’ is also being considered for disclosure to investors and analysts as for the majority of investors and analysts surveyed, it is very relevant or relevant to investment decision-making or analysis.<sup>90</sup>

## **Basel III’s Economic Impacts**

### (1) On Trade Financing and Project Financing

In October 2011, the Basel Committee issued rules for the treatment of trade finance under the Basel III capital framework, following consultations with the World Bank, the World Trade Organization and the International Chamber of Commerce, for the purpose of evaluating the impact of Basel II and Basel III on trade finance, albeit mainly in the context of how they affect developing countries.<sup>91</sup> Trade finance is one of the staples of corporate banking across the world, whereby the bank’s services include providing trade credit insurance, export factoring and

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<sup>89</sup> “Basel Committee proposals for ‘Strengthening the Resilience of the Banking Sector’—New Rules or New Game?”, provided by PriceWaterhouseCoopers. Available at <http://www.pwc.com/gx/en/banking-capital-markets/assets/PwC-basel-proposal.pdf> (last visited 7 Aug 2012)

<sup>90</sup> Global accounting news by Deloitte, posted on 6 Aug 2012; available at <http://www.iasplus.com/en> (last visited 7 Aug 2012). According to which, the so-called “extra-financial information” includes environmental, social and governance information and other non-financial information.

<sup>91</sup> Basel Committee on Banking Supervision, “Treatment of Trade Finance under the Basel Capital Framework”. Available at <http://www.bis.org/publ/bcbs205.pdf> (last visited 23 Jan 2013)

forfeiting.<sup>92</sup> Project financing provides an important source of funding for an array of long-term capital-intensive project developments vital to modern economies such as infrastructure building of roads, railways, hospitals, telecommunication systems, etc. Basel III's regulatory framework increases the size of the capital buffer lenders must hold against losses and requires that banks better match the duration of their own funding to their loans. A publication specializing in country risk assessments published a report suggesting that "Basel III will increase the risk-weighting attached to all off-balance sheet items from the current 20% to 100%; this means that banks will have to increase their capital for asset-backed loans by a factor of five. That said, as the [Basel Committee's] definition of off-balance sheet items include standby letters of credit and trade letters of credit (among others), the risk-weighting of traditional trade finance instruments (which represent around 30% of world trade) is set to increase significantly as well."<sup>93</sup> To that end, some commentators suggested that raising banks' effective cost would potentially crimp world trade, an unfortunate irony given that trade finance is one of the least risky forms of bank lending. That is because, statistically speaking, default rates are "typically

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<sup>92</sup> Export factoring is a service provided by some large international banks for an exporter which allows the exporter to borrow from the bank that arranges to obtain payment directly from the importer. Export factoring thus helps improve the exporter's cash flow. International traders are increasingly using factoring to finance their international short-term credit sales. In trade finance, forfaiting involves the purchasing of an exporter's receivables, which are the amount that importers owe the exporter. See International Trade Administration, US Department of Commerce, "Trade Finance Guide: A Quick Reference for U.S. Exporters", Available at [http://export.gov/build/groups/public/@eg\\_main/@tradeguide/documents/webcontent/eg\\_main\\_043219.pdf](http://export.gov/build/groups/public/@eg_main/@tradeguide/documents/webcontent/eg_main_043219.pdf) (last visited 14 Aug 2012)

<sup>93</sup> Anonymous, "Focus: The Business Impact of Basel III", D&B International Risk & Payment Review, issued in Nov. 2010. Available at <http://dnb.typepad.com/blog/2010/12/focus-the-business-impact-of-basel-iii.html> (last visited 23 Jan 2013)

well under 1% of loans made and stood at under 0.03%, according to analysis by the International Chamber of Commerce.”<sup>94</sup> Many banks thus blame the Basel III rules on bank funding for the market’s woes as the combination of higher capital reserves and focus on addressing asset mismatches is undermining interest in large, longer-term project finance loans.<sup>95</sup>

Basel III’s new capital requirements will affect corporate banks specializing in trade finance and lending. This may well be one of the reasons why the B-20<sup>96</sup> taskforce group (which includes the leaders of global banks HSBC, Citigroup, BNP Paribas, DBS and insurer MetLife) wants global regulators to rethink their rules on CCR and the liquidity rules that require banks to hold easy-to-sell assets in case of a market crisis as these requirements will add to the banks’ capital costs. This will affect banks at different levels; some (emerging market) countries with limited financial markets will be impacted more than others with mature and fully developed financial markets (such as the US, EU countries and Japan). The Financial Times reported that the Basel Committee “might widen the definition of liquid assets but that it was far less sympathetic to complaints that banks will now have to hold more capital against trade finance

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<sup>94</sup> Richard Morrow & Chien Mi Wong, “Basel III Rules Could Constrain Global Trade Finance Growth”, a report by Asia Money, issued on 10 May 2012. Available at <http://www.asiamoney.com/Article/3026137/Basel-III-rules-could-constrain-global-trade-finance-growth.html> (last visited 23 Jan 2013)

<sup>95</sup> Robin Wigglesworth, “Infrastructure Projects Face Funding Gap”, Financial Time, 2 May 2012.

<sup>96</sup> B-20 is an international forum aimed at fostering dialogue between governments and the global business community. One of the B-20’s main objectives is to provide G-20 leaders with meaningful recommendations from the private sector for attaining global economic growth and social developments. See the official website for B-20 Summit in 2012, <http://www.b20.org/whatis.aspx> (last visited 13 Jun 2013)

and project finance lending.”<sup>97</sup> This means that the Basel III capital requirements may be tempered for wider or easier application but they are bound to be enforced by global regulators. We are moving to a risk-based system which call for changes in bank capital regulation since banks’ calculation of assets will focus more on their risk base.

## (2) On SMEs

When Basel III is fully implemented, the cost of capital will be much more expensive. Basel III requires banks to lower their risk-weighted assets and because capital will be more expensive to acquire if banks were to issue new shares in the market, banks would be more inclined to lend to Triple A (“AAA-rated”) companies rather than SMEs (i.e., small-and-medium sized enterprises).<sup>98</sup> Ironically, SMEs, in comparison to Triple A companies, are more dependent on bank loans for generating its companies’ capital because they typically have limited financial resources to do so and fewer channels for satisfying their borrowing needs. Whether this is an unintended problem caused by Basel III is a policy question. Governments (especially those in Asia’s emerging markets) have historically enacted measures to benefit SMEs; as a result, the regulators may think or even hope that financial institutions should realize their social function to meet SMEs’ capital needs. For this reason, some commentators are more critical about Basel III’s efficacy, suggesting Basel III will only have limited impact as it decreases but does not eliminate systemic risk in the banking system.<sup>99</sup> As noted below, Basel

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<sup>97</sup> Brooke Masters, “Taskforce Calls for Changes in Basel III”, Financial Times, 14 Jun 2012.

<sup>98</sup> YouTube, video by Citibank on Basel III. Available at [http://www.youtube.com/watch?v=3-zTUn1BORc&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=3-zTUn1BORc&feature=youtube_gdata_player) (last visited 22 Dec 2011)

<sup>99</sup> YouTube, “A Closer Look at Basel III Finds Cleaning Up Regulatory Reform Almost a Wash”, a presentation based on research by UC Berkeley business and finance professors. They suggest that Basel III will have only

III can have a negative impact on SMEs due to the increased capital requirements (including the mandatory 7% capital reserve, 3% leverage ratio and the discretionary counter-cyclical capital buffer) imposed on banks, which have traditionally been the major funding source for SMEs.

### **Remaining Problems and Gaps in Basel III**

#### (1) Pillar 1 Minimum Capital Requirement

As noted before, total risk-weighting remain unchanged in Basel III. As total risk-adjusted assets ('the denominator' in the total risk-weighting formula) consists primarily of a bank's loan portfolio, banks would continue to use regulatory capital arbitrage to maintain capital level. Basel III therefore does not address the risk management problem seen in Basel II. In light of this, bank loans under Basel III, by continuing the regulatory framework of Basel II, would still be grouped into four 'baskets': Category 1, Category 2, Category 3 and Category 4, with different percentage of risks associated with its respective forms of obligations.<sup>100</sup>

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limited impact although it is a framework of global regulatory standards aimed at making the banking system more resilient and therefore more resistant to systemic risks. (last visited 15 Jan 2012)

<sup>100</sup> Douglas W. Arner, "The Global Credit Crisis of 2008: Causes and Consequences", *The International Lawyer*, vol. 43, no. 1, (2009), 91 at 100-101. See also Douglas W. Arner, *Financial Stability, Economic Growth, and the Role of Law* (New York: Cambridge University Press) (2007) at 211. According to Professor Arner, a bank's "total risk-adjusted assets are primarily composed of a bank's loan portfolio. Loans (and related debt instruments) are grouped into four 'baskets': Category 1, Category 2, Category 3 and Category 4. Each category groups different forms of obligations together very loosely on the basis of simple risk classifications and assigns a weighting to those assets: Category 1: Primarily Organization of Economic Cooperation and Development (OECD) country and local



Particularly intriguing is Category 1, comprised primarily of OECD country and local government securities, where a 0% of risk weighting is being assigned. As the European sovereign debt crisis (“**the Eurozone crisis**”) is an on-going financial crisis, fears of a sovereign debt crisis developed among investors as a result of the rising government debt levels around the world (due to banking system bailouts). Also worrying is the downgrading of government debt in weaker Eurozone states such as Greece and Spain. For that, one would find it hard to believe that the now de-stabilizing Greek sovereign debt should deserve a 0% in its risk weighting.

Second, a capital conservation buffer is only required when times are ‘good, and therefore one must ask whether or not ‘now’ is a good time. In this regard, a clear definition for ‘good time’ remains an open question to be answered by Basel III. The market prospects currently suggest slow global economic growth or recovery for an extendable period of time, owing to the fact that the world economy is still under the residual effect of the global financial crisis of 2007-2009 and that the Eurozone crisis is still unresolved. It can be reasonably predicted that the times will be either relatively good or bad in the foreseeable future. A definitive meaning for ‘good time’ is desirable, to ensure that Basel III’s new capital requirement will be complied without exceptions.

## (2) Credit Rating Agency Problem

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government securities—0%, Category 2: Primarily interbank claims—20%, Category 3: Primarily debt secured by real property—50%, Category 4: All other obligations, including, most importantly, private sector corporate debt—100%”.

Basel III did not fully address the credit rating agency (“CRA”) problem. It is a fact that the banking industry is still very much dependent on crediting rating agencies. Bank regulators will try to scrutinize the extent banks are relying on the CRAs. Basel III can work to encourage banks to benchmark, so if they are still relying on CRAs’ ratings, they will have something to fall back on. Under Basel II, banks were already encouraged to find secondary source or model-based alternatives—two different approaches to measuring credit risk were proposed: a standardized approach and an internal ratings-based approach. Regulators will thus take a very dim view if banks were to outsource the credit rating system to CRAs; resulting in, for example, a situation whereby a bank will accept a default credit rating from Standard & Poor’s, Moody’s or Fitch and decides that that rating will be directly applied to its own internal modelling. Instead, banks should rely on their own historical data, form their own views and have a better model that is more predictable to their particular circumstance such as the way they lend to their portfolio composition. That will be the intent for provisioning the advanced model (i.e., the internal ratings-based approach) under Basel III. Although banks may have their data limitations, the problem varies from one bank to another. Data limitations may still be a better way than to over-rely on CRAs. With more competitions among CRAs and better models being created to more correctly assess the credit rating, perhaps one is allowed to be more optimistic about the prudential banking standards in the future.<sup>101</sup>

### **Implementation of Basel III**

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<sup>101</sup> *Supra* note 11, YouTube, “Basel III and Dodd Frank”, a presentation by Mike Jacobs Jr.

In April 2012, the BIS issued a progress report on Basel III implementation which detailed the status of Basel III adoption as of March 2012.<sup>102</sup> The result shows wide support of the new Basel III framework by the world's major economies. Out of the 28 countries or economic zones being assessed, Hong Kong SAR, Japan and Saudi Arabia have, by far, made the greatest advancement by having not only their draft regulation passed (by their respective legislative body) but also the final rules published for the ultimate implementation of Basel III within their respective jurisdiction. Australia, Brazil, Canada, China, India, Singapore, Switzerland and the EU have each made satisfactory progress by having either launched or ended public consultation, published its draft regulation or released final rules that are expected to come into force soon. Similar progress results are also seen in France, Germany, Luxembourg, the Netherlands and the UK; all of those countries have followed the EU process by having the third compromise text published. Russia's draft legislations are still under development while Argentina has on-going work to draft preliminary documents; accordingly, their progress is comparatively slower and more moderate. Surprisingly, as of April 2012, the US had not yet had their draft regulation published, although public consultation was planned for the second quarter of 2012. Supposedly, the US lawmakers had to take extra time to ensure that Basel III rulemakings can be coordinated with applicable work on implementation of the Dodd-Frank Act, the regulatory reform legislation.

As to when Basel III would actually be implemented, it depends on each country's condition since some countries' liquidity risk is more indigenous and others are more

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<sup>102</sup> Bank for International Settlements & Basel Committee on Banking Supervision, "Progress Report on Basel III Implementation", Apr 2012. Available at <http://www.bis.org/publ/bcbs215.pdf>

exogenous.<sup>103</sup> One can reasonably expect that market pressure will push the hands of regulators of the more exogenous economies to implement the new Basel III framework so as to ensure that there is a level playing field within the banking sector. For example, the US, being the world's largest economy, has in 2010 incorporated the key elements in Basel III into its domestic law (i.e., the Dodd-Frank Act) in attempting (1) to improve accountability and transparency in the financial system, (2) to end "too big to fail" market speculation and thus moral hazard, (3) to protect the American taxpayers by ending bailouts through injection of public funds, and (4) to prevent the country's economy being stymied by system-wide risks. In juxtaposition of Basel III and the Dodd-Frank Act, one can see that the new framework has been strengthened and the trading book reform will be a big part of this. Moreover, CCR, repo securities and other financing activities are addressed. The idea is to let regulators plug these gaps, so if a financial downturn or crisis strikes again, the risks or shocks will not be transmitted through derivatives and fencing channels. As a result of this concern, a central clearing system has been suggested to be put in place.<sup>104</sup> While this inference focuses on the US financial system, it is equally applicable to the experiences of the UK and the EU.

At its meetings from 13-14 December 2012, the Basel Committee discussed the progress of the capital adequacy reforms under Basel III, as the Committee has been actively monitoring on a continuing basis the progress of members in implementing the Basel III package of regulatory reforms.<sup>105</sup> More recently, in January 2013, the Basel Committee revealed that only

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<sup>103</sup> *Supra* note 11, YouTube, "Basel III and Dodd Frank", a presentation by Mike Jacobs Jr.

<sup>104</sup> *Id.*

<sup>105</sup> Bank for International Settlements, "Implementation of the Basel III Framework", press release, issued on 14 Dec 2012. Available at <http://www.bis.org/press/p121214a.htm> (last visited 17 Dec 2012)

11 member jurisdictions met the deadline of 1 January 2013, while the remaining 16 are set to be publishing the final set of Basel III regulations in 2013.<sup>106</sup> This means that while some jurisdictions have not been able to meet the planned start date, a large number has already begun introducing the new capital requirements as planned on 1 January 2013, as suggested by Chairman Stefan Ingves of the Basel Committee.<sup>107</sup> In April 2013, the Basel Committee issued an updated “Progress Report on Implementation of the Basel Regulatory Framework,” providing a high-level review of Basel Committee members’ progress in adopting Basel II and Basel III as of end March 2013.<sup>108</sup> The April 2013 report essentially updates the Committee’s October 2012 report to G-20 Finance Ministers and Central Bank Governors; the latter reviewed Basel Committee members’ progress in introducing the Basel standards ahead of the globally agreed start date of 1 January 2013.<sup>109</sup>

According to Bloomberg News, the EU, like the US, missed the January 2013 deadline to start phasing in parts of Basel III. The Basel Committee agreed earlier in January 2013 to delay and alter another key part of the package designed to ensure banks have enough liquid assets in a financial crisis. The EU is weighing a one-year delay to the deadline for lenders to disclose

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<sup>106</sup> These 11 member jurisdictions are Australia, Canada, China, Hong Kong SAR, India, Japan, Mexico, Saudi Arabia, Singapore, South Africa and Switzerland. *Id.*

<sup>107</sup> *Id.*

<sup>108</sup> See recent publication by the Basel Committee. Available at <http://www.bis.org/publ/bcbs247.htm> (last visited 3 May 2013)

<sup>109</sup> The information is acquired from the Basel Committee’s official website. Available at <http://www.bis.org/publ/bcbs234.htm> (last visited 3 May 2013)

whether they meet a debt ratio. Specifically, EU nations may seek to push the start date for mandatory disclosure of this so-called leverage ratio from 1 January 2015 to 1 January 2016.<sup>110</sup>

## **Conclusion**

The global financial crisis of 2007-2009 revealed that many banks held insufficient capital buffers and, as such, they were unable to absorb any large systemic trading losses.<sup>111</sup> This, in turn, triggered or exacerbated a downturn in the real economy. To avoid destabilizing the economy, afflicted banks were forced to reduce their leverage and so the de-leveraging process began. As investors already lost confidence in the market and inter-bank lending became cost-prohibitive or difficult to get (primarily due to the asymmetric information problem), liquidity quickly dried up and the credit crunch soon pushed the economy further into recession. Due to a pro-cyclical deleveraging process, the global financial crisis of 2007-2009 was amplified as banks scrambled to sell assets either at a discount or fire sale price in order to meet Basel II capital reservation requirements. Basel II was thus criticized for aggravating the pro-cyclicality problem during the global financial crisis of 2007-2009. As the banking business became more global and more competitive (considering the shadow banking system vying for banks' core business), commercial and investment banks became more interconnected through an array of opaque and complex structured transactions which gave rise to the bankruptcy or

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<sup>110</sup> *Supra* note 42, Jim Brunsten, "EU Said to Weigh Bank Debt Rule Delay in Blow to Basel Timetable".

<sup>111</sup> Bank for International Settlements & Basel Committee on Banking Supervision, "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems", issued in Dec 2010 (rev. Jun 2011). Available at <http://www.bis.org/publ/bcbs189.pdf> (last visited 5 Jul 2012).

near-bankruptcy of numerous multinational financial institutions. Some of them were considered to be “too big to fail,” requiring government bailouts using public funds. The concern of systemic risk ultimately forced the public sector to step in with unprecedented injection of liquidity, capital support and guarantees, exposing taxpayers to losses typically associated with the aggressive, highly-leveraged investment decisions made in the private sector’s board room meetings. Recognizing that failure to capture derivative related exposures was another key destabilizing factor during the crisis, Basel III thus requires additional capital base for banks to engage in such dealings. It is safe to say that Basel III is designed to deter or at least minimize the systemic risk in any future financial crisis.

Financial service is considered to be a type of public service or public utility. The adoption and implementation of Basel III can be used to improve government’s monitoring responsibility and quality and if so done, the unnecessary liquidity injection (provided by many country authorities in the midst of financial crisis) can be avoided, and so too the moral hazard. That is because banks will now rely mostly on their internal funding sources, rather than external government funding programs (backed by taxpayers’ money) to weather financial storms, foreseeable or not. In this regard, the Bank of Canada “conservatively estimate that the long-term net benefits of less frequent financial crises resulting from [Basel III] reforms will average, for G-20 economies, 30 per cent of GDP in present-value terms, or about 10 trillion dollars.”<sup>112</sup> Basel III is therefore a macro-prudential tool applied to international banks for increasing their true loss-absorbing capitals against losses typically associated with an increase in system-wide risk. If such dynamic and forward-looking provisions had been in place, according to the Federal Reserve Bank of Boston, the industry would not have needed TARP (“Troubled Asset

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<sup>112</sup> Mark Carney, *supra* note 74, “Countercyclical Capital Buffers and Basel III”, at 11.

Relief Program”) in late 2008 as banks would have more robust finances and capability of self-absorbing losses.<sup>113</sup>

Basel III’s forward-looking provisions should technically seed reform in three areas: enhancing authority’s supervisory management and oversight abilities, maintaining financial stability and eliminating banks’ excessive risk taking and build-up against insufficient capital buffers to absorb present or future losses. Basel III will likely result in a significant deleveraging process within banks, especially those dubbed as “global systemically important banks.” Basel III has more teeth than Basel II and it reflects changes already seen in the market. According to a recent report by Bloomberg News, “[m]ore stringent capital requirements introduced by regulators to prevent lending practices that exacerbated the financial crisis have made it more expensive for banks to extend loans, and prompted lenders in Europe to pledge more than [US]\$1 trillion of balance-sheet cuts.”<sup>114</sup> Nevertheless, Basel III’s relatively long five-year phase-in period will crystallize challenges to new rules that are going to be imposed on banks, suggested by Moody’s Investor Service.<sup>115</sup> At the same time, there is going to be market pressure for the banks to comply faster than the scheduled pace. This is going to be interesting

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<sup>113</sup> *Id.*, at 12.

<sup>114</sup> “Merger Loans Most Since 2008 as AB InBev Borrows: Credit Markets”, on-line report by Bloomberg, on 2 Aug 2012.

<sup>115</sup> YouTube, IIR’s Basel III conference 2011 (last visited 12 Jun 2012). The conference took place in Sydney, Australia on 24-25 Mar 2011. This video featured an interview with Patrick Winsbury, Senior Vice-President of Moody’s Investors Service, whereby Mr Winsbury expressed Moody’s view on bank capital rules and other questions such as (1) how are Australian banks coping with Basel III and how does this compare with banks overseas; (2) how will Basel III impact bank credit quality and ratings; and (3) will Basel III truly assist in preventing or alleviating another global financial crisis?



dynamics to watch.<sup>116</sup> But Basel III is just one building block; there are other elements to be considered, such as coordination of different accounting standards as well as national governments' treatment or recognition of what constitutes as liquid capital. In Australia, for example, covered bonds<sup>117</sup> are not considered by regulators as liquid capital; consequently, they do not count into bank's required capital base. This explains why Australian banks received less negative impact from the last financial crisis.<sup>118</sup> Now, with the heightened capital requirements under Basel III, banks must increase their profits without reliance on selling complex financial products as seen during the global financial crisis of 2007-2009 (e.g., repackaging highly risky subprime mortgage loans as risk-free AAA-rated debt). The G-20 prudential regulators, while implementing the Basel III requirements, will have to closely monitor their banks to prevent them from engaging in market irregularities that have not been contemplated by Basel III.

The Basel Committee identified that the severity of the global financial crisis of 2007-2009 was caused by excessive use of leverage, accompanied by the erosion of the capital base and exacerbated by insufficient capital buffers. The short-term problems became long-term problems and we are still dealing with the aftermath of the financial crisis. To safeguard banks from future financial crises, a buffer above the minimum level would be desirable so that it would be large enough to absorb losses in an average financial crisis. The median capital loss in a crisis is suggested to being about 5% of risk-weighted assets; this is why the combination of

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<sup>116</sup> *Id.*

<sup>117</sup> Covered bonds are a funding instrument that provides banks with long-term funding when banks issue them. It is worth noting that covered bonds “typically receive a triple-A rating because they offer investors security over the loans backing the debt and over the bank itself as unsecured creditors should it default.” Anonymous, “Kiwibank bonds up”, a business report by Timaru Herald (New Zealand), 26 Apr 2013.

<sup>118</sup> *Supra* note 115, YouTube, IIR's Basel III conference 2011.

the conservation buffer and the counter-cyclical buffer (under Basel III) totals to 5% of risk-weighted assets.<sup>119</sup> The buffers under Basel II were not enough to absorb the resulting credit risk losses, nor could it cope with the banks' off-balance sheet risk exposures. Essentially, there was not enough capital in the US financial system to absorb the contagion of crisis, and the epic centre of the crisis rapidly spread to other countries. This exposed a lot of problems in the internal and external financial systems. Therefore, one of the objectives of Basel III was to improve and strengthen the prudential regulatory framework; in this regard, Basel III looks at both the micro- and macro-prudential approaches, addressing the risks that can happen under various systems. As micro and macro systems are inter-related, when an individual financial institution is more resilient, the system as a whole should be more resilient. In light of this, the Basel Committee instituted some fundamental reforms to help individual financial institutions withstand stress and to address the pro-cyclicality problem under Basel II.<sup>120</sup> Basel III has the potential to reduce the pro-cyclicality problem, but because the Basel Committee only keeps data for banks' minimum capital adequacy requirement and not for pro-cyclical buffers, bank regulators must get more relevant data and build early warning systems. The benefits are somewhat hypothetical but the costs are tangible. Bank supervisors can measure them to assess whether the system-building is cost-effective or cost-prohibitive. Although it is likely that Basel III might not work as designed, bank regulators are at least hoping for collateral benefits such as a better financial system that results from the Basel III collaborative efforts. Basel III is a bit ambitious—it could have been simpler. Given that the current state of the global banking industry is not in good financial health, layering on regulations does not guarantee a resolution;

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<sup>119</sup> Mark Carney, *supra* note 74, “Countercyclical Capital Buffers and Basel III”, at 11.

<sup>120</sup> *Supra* note 11, YouTube, “Basel III and Dodd Frank”, a presentation by Mike Jacobs Jr.

but resolutions could lie in simplifying the prudential regulation and having a simple and robust model of banking regulation. This would assist the bank regulators to be able to detect early signs of crisis by establishing an early warning system through analyzing historical and quantitative data to improve standard modelization. Bank regulators need a microeconomic view.<sup>121</sup>

Unfortunately, Basel III did not make provisions for the shadow banking system that arguably contributed or aggravated the global financial crisis of 2007-2009; this omission could seriously hamper the effectiveness of Basel III. Worse still, the slowdown of the global economy in 2012-2013 may further challenge any national measures towards prudential regulations. Bloomberg News reported that China, “with an economy slowing more aggressively than the authorities perhaps want, the imperative to crack down on shadow financing becomes increasingly conflicted.”<sup>122</sup>

Note that Basel III apply only to international banks; had the same capital reserve standards applied to domestic banks, who are generally financially sound and healthy, it would likely render many of them to become problem banks. As the global economy might likely go into recession, in order to stabilize economic growth, central banks like the People’s Bank of China (“PBC”), instead of raising banks’ capital reserves as required by Basel III, has recently taken measures to lower banks’ reserve requirement ratio (“RRR”) by 50 basis points as from 5 December 2011. By fine-tuning national prudent monetary policy, this cut would lower the RRR

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<sup>121</sup> *Id.*

<sup>122</sup> Anonymous, “China Slowdown Stymies Plan to Curb Shadow-Banking Risks”, Bloomberg News, 17 Jul 2012. Available at <http://mobile.bloomberg.com/news/2012-07-16/china-slowdown-stymies-plan-to-curb-shadow-banking-risks?category=%2F> (last visited 17 Jul 2012).

to 21% for large commercial banks and 17.5% for small- and mid-sized banks; accordingly, an estimated CNY396 billion (US\$62.38 billion) in capital will be released into the market.<sup>123</sup> The result of the reduced RRR rate is that it will ease banks' credit crunch caused by a high RRR, suggested the chief economist at the Bank of Communications in China.<sup>124</sup> Lowering RRR has been shown to translate automatically into higher loan growth; in a move to help boost liquidity and support economic growth, the PBC again cut banks' RRR by 0.5% (i.e., 50 basis points), effective 18 May 2012.<sup>125</sup> After this latest cut, the RRR is reduced to 20% for large financial institutions (down from the previous cut in February 2012 to 20.5%). According to Bloomberg News, a 50 basis point cut in RRR in February 2012 added CNY 350-400 billion (approximately US\$63.4 billion) to the domestic financial market.<sup>126</sup> Incidentally, this reduction would also encourage the banking industry to increase lending to SMEs, which would not likely to be achieved by Basel III as previously explained. China is the world's second largest economy, also known as the locomotive of the world's economy; therefore, the PBC's recent cut in RRR rate serves as a reminder of how a national government, despite being a Basel III member, can reverse Basel III requirements (for raising banking capital ratios) by changing macroeconomic

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<sup>123</sup> Jinhai Liu, "China to Lower RRR for First Time in Three Years", Xinhua news. Available at [http://news.xinhuanet.com/english2010/business/2011-11/30/c\\_131280177.htm](http://news.xinhuanet.com/english2010/business/2011-11/30/c_131280177.htm) (last visited 21 Jul 2012)

<sup>124</sup> *Id.*

<sup>125</sup> Andrew Galbraith, "China Central Bank Cuts Reserve Requirement Ratio by 0.5 Percentage Point", The Wall Street Journal (Asia Edition), 12 May 2012. Available at <http://online.wsj.com/article/SB10001424052702304203604577399760781648348.html> (last visited 13 Jun 2013)

<sup>126</sup> Lisa Lin and Lifei Zheng, "China Lowers Banks' Reserve Requirements to Support Growth", Bloomberg News, 12 May 2012. Available at <http://www.bloomberg.com/news/2012-05-12/china-cuts-banks-reserve-requirements-to-sustain-growth-1-.html> (last visited 13 Jun 2013)

control policies. Worse still, if member countries are competing to lower banking capital levels in order to stimulate national economies, this could pose a potential threat for Basel III to be carried out at a satisfactory level. If this is the case, one would not be surprised at why a commentator even suggested that Basel III is likely to fail and thus Basel IV is already in the making. Basel IV is said to be based on negative rates, including the so-called ‘conservation anti-deflation Basel IV buffer’ that will be designated by BIS to give banks an extra source of capital to draw on during “deflation periods of stress.”<sup>127</sup>

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<sup>127</sup> Miloslav Hoschek, “Basel IV Rules Based on Negative Rates”, Available at <http://www.finextra.com/community/fullblog.aspx?blogid=4951> (last visited 21 Jul 2012)