THE EXPANDING SCOPE OF INTERNATIONAL BANKING REGULATIONS AND ITS IMPACT ON BANKING GOVERNANCE IN HONG KONG AND MACAU SARS

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ABSTRACT

The evolution of international banking regulatory standards in Basel regime has been quite phenomenal in recent years. What started as an exclusive club of G10 member states has ultimately become a pioneering institution of global following. The Basel accords, in spite of being non-binding in nature, have been widely adopted by both member and non-member jurisdictions. The scope and ambit of the Basel regime have witnessed a gradual expansion over the past three decades covering all major aspects of prudential regulation. The present paper examines how Basel regulatory accords have been responsive to various banking supervisory needs since its inception and particularly at critical junctures to address regional or global financial crises. The paper identifies the expanding scope of the banking standards in successive Basel regimes and its influence on specific domestic regulatory mechanisms. The impact of the Basel regulatory standards, as a non-binding soft law source, upon Hong Kong SAR being a member of the Basel regime and an international financial center is examined. Similarly, its influence upon Macau SAR, not being member of Basel and with a relatively small banking industry is examined. Finally, the paper evaluates the merits and demerits of changes introduced by the Basel accords and the implementing measures in Hong Kong and Macau SARs.

Key Words: International Banking Standards, Basel Regulatory Framework, Prudential Regulation, Capital and Risk Regulation, Hong Kong Banking Regulation, Macau Banking Regulation.

Introduction

The unprecedented scale of the global impact triggered by the US financial crisis has exposed the interdependence between national financial markets and accentuated the need for effective international regulatory standards. Such a need is particularly discernible in the banking sector, where existing international standards have proved to be inadequate. The Basel Committee on Banking Supervision (Basel Committee) has promptly responded with the new BASEL III regulatory standards that are specifically aimed at shielding banks against potential future risks. BASEL III takes a comprehensive and arduous approach in addressing such risks, which includes macro and micro prudential regulations, improvements in management of risk and transparency, better governance and stringent disclosure requirements.

The question of how far BASEL III is distinctly capable of preventing future crises calls for a closer scrutiny of the improvements it proposes in comparison with the BASEL II. Even if BASEL III positively stands such a scrutiny, its ultimate success may still depend on other externalities that are country specific. As the Basel accords are recommendatory in nature, they are non-binding upon states and require national legislation to provide any legal force. Even though the previous Basel accords, namely Basel I and II, have been generally followed by both Basel member jurisdictions and non-members, the non-binding nature of the accords has resulted in diversity among national implementation. Similar concern looms with regard to the implementation of Basel III. As some states and emerging economies have perceived BASEL III to be more onerous and capable of putting their banks at a disadvantage, it may not achieve wider acceptance like the previous accords. The differing perceptions and diverse regulatory responses clearly indicate that any assessment of the effectiveness of the BASEL III standards should transcend its independent merits and examine other externalities that may influence its success. The Basel banking regulatory standards being a non-binding soft law source leads to the common concerns like lax domestic responses or disparity in domestic adaptations. Therefore, the present paper not only examines the Basel accords but also scrutinizes individual responses of a Basel member and a non-member jurisdiction.

Hong Kong, as a leading international financial center, has adopted its own path in embracing the BASEL standards over the years, in spite of becoming a BASEL member only in 2010. The present paper examines the distinct regulatory response in Hong Kong to identify the scope and extent of BASEL implementation and its future direction. Specific legislative changes introduced in Hong Kong to improve its competitiveness and its efforts to keep up with other major international financial centers are identified. In contrast to the situation of Hong Kong, how non-members of Basel with relatively small banking sector have responded to the Basel banking standards is examined with a close study of Macau SAR. The paper highlights that Macau,

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although being a neighboring jurisdiction of Hong Kong and consequently expected to be under a constant pressure to keep up with similar banking standards, has paved its own path in adopting only the necessary minimum standards to meets its local banking needs. However, the paper identifies some concrete traces of emerging willingness of Macau to adopt a wider range of Basel III standards, which could be attributed to inevitable need to avert any perception of relative weakness of the banking sector in Macau SAR.

The major motivation of this study is to identify how international regulatory standards have been responsive to national regulatory needs and whether its soft law nature has resulted in diverse impacts among member and non-member jurisdictions like Hong Kong and Macau SARs. The paper first identifies key regulatory standards introduced under the first two Basel accords in order to set the stage for comparison with the more contemporary developments under the Basel regime. Moreover, such exploration will also facilitate the study of Hong Kong's response to the first two Basel accords as a non-member jurisdiction and its subsequent response to Basel III as a member jurisdiction, as well as to compare the response of Macau SAR. The next part of the paper analyzes the major changes introduced in BASEL III in comparison with previous standards including the BASEL II. Then it closely evaluates specific implementation measures in Hong Kong and examines relevant legislative changes introduced. The next part of the paper highlights how Macau SAR has a limited mandate in embracing some of the Core Principles of Basel banking standards and how the same has expanded to more the adoption of more concrete standards under Basel II. This part of the paper also examines the emerging interest of Macau in embracing Basel III standards in order to demonstrate its plan for a wider adoption. The next part of the paper evaluates the merits and demerits of the major evolutionary stages of Basel regime and highlights the potential strength of Basel III in addressing the major challenges arising from the global financial crisis. The concluding part of the paper evaluates and compares the regulatory response of the two SARs and highlights the limitations of the relevant findings of this study in recommending the future normative direction for international banking regulatory standards.

The Foundation and Transformation of Regulatory Standards in Basel I and Basel II

The works of Basel Committee, which was originally targeted at improving the banking practices among the member states of G10, have developed into a widely recognized set of international banking standards over the years. The standards, which had a more narrow focus in the beginning years, have inevitably expanded its scope and ambit to cater to the new challenges arising out of globalization and the ensuing interdependency of global financial markets and international banking institutions. It is interesting to note that the original purpose of setting up the Basel Committee by G10 member states was to address 'international' banking risks. Even in early seventies, national banks were found to have been exposed to the risks of banking collapse in other markets triggered by the failure of controlled exchange rates systems[1]. What started as an *ad hoc* cooperation soon turned into permanent feature fulfilling the needs to develop supervisory standards over banks in G10 member states and beyond[2]. Although, the decisions of the Basel Committee are recommendatory in nature, member jurisdictions tend to consistently implement its standards albeit through varying forms of legislative measures.

To avoid regulatory arbitrage and provide a level playing field, the Committee monitors the implementation of its standards at national levels. It facilitates the supervisory bodies across home and host member jurisdictions to share information and other responsibilities in regulating cross border entities of banks. In pursuit of enhancing the effectiveness of supervision of cross border banking, the Committee has also sought the input and cooperation of supervisory bodies from non-member jurisdictions. Such involvements, as well as the desire to improve their competitiveness, have increasingly motivated non-member jurisdictions to voluntarily adopt a set of Core Principles[3] of the Basel Committee ("BCPs"). Beyond the measures to enhance supervision, the Basel Committee is widely renowned for its contributions in producing regulatory standards through three major accords of Basel I, II and III. The question of capital adequacy of banking institutions to balance various forms of risks has been

[1] See Peter M. Garber, "The Collapse of the Bretton Woods Fixed Exchange Rate System", in Michael D. Bordo and Barry Eichengreen, (eds.) (1993). *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform.* Chicago: University of Chicago Press. (pp. 461-494).

[2] At present the Basel Committee has 28 members namely Argentina, Australia, Belgium, Brazil, Canada, China, European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg , Mexico, Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States . The Committee also has state and institutional observers namely Chile, Malaysia, UAE, Bank for International Settlements, Basel Consultative Group, European Banking Authority , European Commission and the International Monetary Fund.

[3] The principles mainly pertain to the supervisory powers, responsibilities and functions of the national supervisory bodies and their prudential regulations. Among the total of 29 principles, majority of them are related to prudential regulation covering the issues of corporate governance; risk management process; capital adequacy; credit risk; problem assets, provisions and reserves; concentration risk and large exposure limits; transactions with related parties; country and transfer risks; market risks; interest rate risk in the banking book; liquidity risk; operational risk; internal control and audit; financial reporting and external audit; disclosure and transparency and abuse of financial services. See Basel Committee on Banking Supervision (2012). *Core Principles for Effective Banking Supervision.* Bank for International Settlements: Basel, pp.79 available online at http://www.bis.org/publ/bcbs230.pdf. ("BCPs 2012"). The BCPs are often used as the benchmarks in assessments of banking standards in both member and non-member jurisdictions. For example, see the assessment of banking standards in Macau SAR carried out by the International Monetary Fund, in which it used the previous version of the BCPs, which contained only 25 principles. See infra n.43. See Basel Committee on Banking Supervision (2006). *Core Principles for Effective Banking Supervision.* Bank for International Settlements Press & Communications: Basel, pp.7. ("BCPs 2006").

a major concern of all the three accords, although the latter two accords have substantially increased the scope of their coverage to effectively address new forms of challenges.

The capital adequacy concerns arising out of the impact of the debt crisis in Latin America in early eighties called for the need for new approaches in measuring credit risks and capital standards. In 1988, the Basel I introduced a new capital and credit risk measurement system using a weighted approach to address diverse national standards among member jurisdictions. It specifically sought to reduce capital risks[4] of banks by requiring them to maintain a standard ratio of capital to weighted risk assets[5]. To assess the capital adequacy of banks, Basel I not only recommended the use of a weighted risk ratio (which was calculated using capital involving different categories of assets weighted against various risks) but also recognized specific elements pertinent in computing the relevant capital and related risks. Basel I delineated the constituent elements in computing the capital in two major categories namely the core capital and supplementary capital. Basel I provided a framework of assessing credit risks by prescribing risk weights to different categories of on-balance-sheet assets[6]. Interestingly, the Basel I frame work also encompassed credit risk arising out of off-balance-sheet exposures of banks[7].

After its initial introduction in 1988, Basel I framework continued to evolve in the nineties through specific amendments and further refinements. However, the Asian financial crisis in the late nineties prompted some criticism over Basel and the ensuing changes in banking supervision in different countries ignited the thoughts for reinvigorating the accord[8]. Towards the end of the decade, a proposal for a new capital adequacy framework replacing Basel 1 was made and consequently a new Basel II Revised Capital Framework was introduced in 2004. But the limitation of its focus only on the banking books, soon after lead to a further consolidation of the Framework to encompass the treatment of trading books of banks. The consolidated version of Basel II released in 2006 went beyond minimum capital standards set out in Basel I and introduced new elements like advanced risk measurement methods, internal assessment procedures and disclosure requirements comprehending both the banking and trading books of the banks[9].

Basel II prescribed three major sets of standards (referred as three pillars) to enhance the supervisory regulations governing the capital adequacy of internationally active banks. The first pillar, while continuing to emphasize on the minimum capital requirements, substantially expanded the provisions of Basel I. The second pillar offered a scheme of supervisory review to assess capital adequacy of banks and the third pillar sought to strengthen the market discipline through effective disclosure requirements. Distinct features were introduced in addressing all the three pillars. One of the significant improvements introduced in Basel II framework was the range of risks addressed across the three pillars. Apart from credit risk, Basel II took cognizance of other pertinent risks like market risk, operational risk, equity risks and interest rate risk.

Basel II provided more sophisticated methods of calculation of risks. Basel II provided an option for calculating the credit risk either through a ‘standardized approach’, utilizing external credit assessments or an ‘internal ratings based approach’ (IRBA), employing the internal credit risk rating systems of the banks with the approval of the relevant national supervisor. Basel II also recognized the use of an ‘advanced’ internal ratings based approach (A-IRBA). Moreover, banks were required to assess the credit risk under a ‘securitization framework’. In determining regulatory capital requirements of a bank under Basel II, the exposure of relevant transactions to different types of securitisations[10] was prescribed as an essential element for consideration. While the minimum capital requirements under Basel II was calculated taking into account of credit, market and operational risks, the minimum standard ratio of capital to weighted risk (Capital Adequacy Ratio or ‘CAR’) still remained at 8% as was prescribed under the Basel I. However, improvements have been introduced in determining regulatory capital and risk weighted assets in the process of calculation of minimum capital requirements.

Basel II had also introduced more methods of calculation, in assessing other types of risks newly comprehended under its framework. For example, in addition to the standardized approach, the Basel II recognized a Basic Indicator Approach (BIA) and various Advanced Measurement Approaches (AMAs) in assessing operational risks and an Internal Models Approach (IMA) in assessing the market risk. In calculating the risk-weighted capital ratio for the purpose of determining the minimum capital requirements, Basel II utilized a definition that required the identification of the ‘regulatory capital’ (RC) and ‘risk weighted

[4] The credit risk is the central focus of Basel I, which also comprehends within itself the country transfer risk. However, Basel I clearly acknowledges that banks could also face other forms of risks like investment risk, interest rate risk, exchange rate risk and concentration risk. See *infra* note 5, para 31.

[5] The standard ratio of capital to weighted risk was set at 8% (including a core capital element of at least 4%). See Basle Committee on Banking Supervision. (1988). *International Convergence of Capital Measurement and Capital Standards*. Para.44. available online at http://www.bis.org/publ/bcbs04a.pdf. (Basel I).

[6] See Annex 2, *ibid*.

[7] See Annex 3, *ibid*.

[8] See Rudi Bonte, et.al. (1999) “Supervisory Lessons to be drawn from the Asian Crisis” Basel Committee on Banking Supervision Working Papers, No.2. pp. 1-59.

[9] See Basel Committee on Banking Supervision (2006), *International Convergence of Capital Measurement and Capital Standards A Revised Framework Comprehensive Version.* (Basel, Switzerland: Bank for International Settlements Press & Communications). pp.333. (Basel II).

[10] Referred as ‘securitisation exposure’ it may involve a traditional securitisation or a synthetic securitisation or the characteristics of both. For example, securitisation exposures could involve asset-backed securities, mortgage-backed securities, credit enhancements, liquidity facilities, interest rate or currency swaps, credit derivatives, and cash collateral accounts. See Basel II, Para 541.

assets' (RAs). Basel II provided a more comprehensive and methodical approach in computing these core elements. Different tiers of capital[11], grouped according to the nature of their stability and risk observing capacity, could be included in computing the RC albeit within a prescribed limit. Similarly, Basel II recognized different approaches in measuring the RAs. Finally, Basel II also mandated a specific set of deductions to be made from the capital components used in calculating the risk-weighted capital ratio. The above distinct features of Basel II ultimately improved the accuracy of the determination process of the minimum capital to ensure a better stability of banking institutions.

The drastically expanding scope of Basel II naturally raised questions of its acceptance by national regimes. However, studies in response to the concerns of resistance by national authorities have revealed a huge majority of states including many non-member jurisdictions accepting the higher standards in Basel II[12]. In spite of the fact that Basel II regulations were widely implemented by many states including the USA, the global financial crisis and its adverse impacts on banks could not be prevented. The inability of Basel II in addressing some of the underlying causes of the financial crisis raised concerns about its effectiveness. For example, financial innovation of banks, which was also sought to be addressed by Basel II, was found to have been one of the contributing factors of the financial crisis originating the US. The failure to effectively regulate financial innovation in the US resulted in the offering of unsustainable financial and derivative instruments linked to sub-prime mortgages to institutional and individual consumers worldwide. Moreover, when US as an implementing member of Basel II (which also comprehended securitization) could not prevent the sub-prime mortgage crisis, the effectiveness of some of the new Basel II features were subjected to doubts. Some critics even questioned whether the capital regulation of banks inspired by Basel I and II has been instrumental in exacerbating the subprime mortgage crisis[13].

Some of the key improvements introduced in Basel II have also come under criticism. The ability of the new methods of calculation of risks to achieve the objectives of the accord had been questioned. For example, the A-IRBA method introduced in Basel II was not only found to be highly complex and not reflective of realities in the banking industry but also incapable achieving any high levels of risk sensitivity[14]. Therefore, the A-IRBA method was criticized to have the risk of creating as many problems as it solved! Moreover, Basel II was criticized for not having sound provisions addressing the risks that caused the global financial crisis namely the liquidity risk or risks associated with high leverage rate or excessive credit. While Basel II framework comprehended several types of risk coverage ratios, there was no explicit or sufficient emphasis to minimum liquidity ratio, liquidity coverage ratio (LCR) or leverage ratio. Moreover, Basel II did not treat systemically important banks distinct from others, and consequently no effective measures aimed at shielding the economically crucial banks or systemically important institutions were present. A wider range of such concerns soon prompted a rethinking on the part of the Basel Committee members, who have since proposed a revised regulatory framework in Basel III accord, which is sought to be implemented in different phases during this decade.

Key Improvements in BASEL III Regulatory Framework

Realizing the limitations of Basel II in addressing the financial crisis, the Basel Committee initially took a piece meal approach[15] in improving the shortcomings of Basel II. The Committee first released some specific measures immediately after the onset of the global financial crisis to address issues like liquidity risk[16] and securitization[17] to enhance Basel II framework (Basel II enhancements (or) Basel 2.5) with regard to all the three pillars. For example, the enhancements comprehended more market risks and increased the capital charge requirements through the introduction of a new incremental risk charge ("IRC") based on the exposure of banks in their banking and trading books[18]. However, subsequently when the need to produce a more comprehensive revision of Basel II became inevitable, Basel III was introduced in 2010. One of striking feature of Basel III is the prescription that global systemically important financial institutions (SIFIs) should meet additional standards, apart from

[11] For example, Tier 1 capital referred as core capital mainly includes equity capital and disclosed reserves of banks and Tier 2 capital referred as supplementary capital consist of undisclosed reserves, revaluation reserves, general provisions/general loan-loss reserves, hybrid debt capital instruments and subordinated term debt. Apart from these two tiers, Basel II also conditionally allows the banks to use a third tier consisting of short-term subordinated debt for a specific purpose of meeting a proportion of the capital requirements for market risks. See para 49 (i)-(xiv) *ibid*.
[12] See for example, Andrew Cornford (2006) "The Global Implementation of Basel II: Prospects and Outstanding Problems" in UNCTAD, *Policy Issues in International Trade and Commodities Study Series No. 34* (Geneva: United Nations Conference on Trade and Development) pp.29.
[13]See M. A. Petersen, (2009) "Did Bank Capital Regulation Exacerbate the Subprime Mortgage Crisis?" *Discrete Dynamics in Nature and Society*, Vol. 2009, PP.34. See also Jesús Saurina and Avinash D. Persaud. (June 2008)," Will Basel II Help Prevent Crises or Worsen Them?" *Finance & Development* .pp.29-33.
[14] See Daniel K. Tarullo (2008) *Banking on Basel: The Future of International Financial Regulation*. (Washington: Peterson Institute for International Economics). pp.256 at p.189.
[15] The good example in this regard was the attempt to improve the provisions governing market risk under the Basel II. See Basel Committee on Banking Supervision (2009), *Revisions to the Basel II market risk framework*, (Basel, Switzerland: Bank for International Settlements Press and Communications) pp.29.
[16] See Basel Committee on Banking Supervision (2008), *Principles for Sound Liquidity Risk Management and Supervision*, (Basel, Switzerland: Bank for International Settlements Press and Communication) pp.38.
[17] See Basel Committee on Banking Supervision (2009), *Enhancements to the Basel II framework*, (Basel, Switzerland: Bank for International Settlements Press and Communications) pp.35.
[18] See Basel Committee on Banking Supervision (2009). *Guidelines for Computing Capital for Incremental Risk in the Trading Book*, (Basel, Switzerland: Bank for International Settlements Press and Communications).pp.7.

those prescribed for regular banks in Basel III. A specific methodology of identifying the SIFIs is prescribed and depending on the degree of their systemic importance, different levels of additional capital requirements (mainly consisting of equity capital) are prescribed to enhance their loss observing capacity. The three pillars introduced in Basel II are substantially enhanced (either through revisions or adding supplemental provisions) both in terms of capital requirements as well as risks against which they are weighted.

Other than the improved risk based capital requirements, Basel III also requires the banks to maintain a prescribed leverage ratio and prevent excessive leverage. The expansion of the scope of Basel III to categorically address leverage of banking operations is one of the significant additions arising from the experience of the global financial crisis. Drawing from the dire consequences of lack of liquidity of banks during the financial crisis, Basel III has also introduced a comprehensive set of regulatory standards[19] to ensure that banks have sufficient liquid assets to sustain during periods of financial distress. Basel III, not only warrants the banks to meet prescribed liquidity standards but also the national supervisors to continuously monitor the liquidity related risks among individual banks and across the overall banking sector. The new rules require banks to achieve a Liquidity Coverage Ratio (LCR) and a Net Stable Funding Ratio (NSFR) aimed at shielding against short and long term liquidity drains respectively. Pillar II and III have also been improved under Basel III with new features like enhanced risk management and governance of banks, increased disclosure requirements of a range of risk exposures, and improved methods of calculation of capital ratios.

The capital framework under Basel III is revised using a two pronged approach by improving the quality of capital reserves and taking a better cognizance of associated risks. Firstly, Basel III attaches greater importance to common equity in constituting the minimum capital for banks. From hindsight, it was clear that common equity of banks took much of the bearing of credit losses and therefore required strengthening under Basel III. Therefore, in defining capital and prescribing its components, Basel III mainly includes 'common equity' as Tier 1 capital in building up the regulatory capital of the banks. In order to avert individual jurisdictions following different definitions of capital, Basel III clearly prescribes three different categories of capital (grouped under two tiers[20]) that should form the constituent part of the regulatory capital. In mandating a minimum total regulatory capital of 8.0% of risk weighted assets, common equity is required to be at least 4.5% of such assets. Basel III also provides a detailed list of instruments that can qualify for inclusion in each category of capital in the two tiers and the set of common and specific criteria they should fulfill. The detailed approach of prescribing, not only a list of instruments but also a relevant set of criteria for them, demonstrates the determination to ensure the quality of the regulatory capital under Basel III.

Basel III has attached greater importance to the creation of buffers in order to tackle certain actions of banks and related consequences during periods of financial crisis. Drawing from the experience of the financial crisis, when banks continued to indulge in various forms of distributions like dividends or compensation packages to prevent any suspicion of weakness, Basel III prescribes a range of capital conservation measures. Such distributions caused dent upon capital buffers that were not sufficiently reinvigorated before returning to further lending activities during the financial crisis. These actions not only made individual banks more vulnerable but also increased pro-cyclical effects on the whole banking system, ultimately resulting in a wider mayhem. To prevent similar consequences, Basel III recommends the creation of two different buffers namely 'capital conservation buffer' and 'counter-cyclical buffer'. Capital conservation buffer is required over and above the minimum regulatory capital prescribed under Basel III. When the buffers are depleted during a crisis, discretional distributions by banks have to be reduced to conserve internally generated capital to rebuild the buffers. Basel III prescribes a capital conservation buffer consisting of common equity of 2.5%[21], above the regulatory minimum capital requirement of 4.5% discussed earlier. The capital buffer requirement, however, are to be implemented starting from 2016 within a period of two years and this period may be shortened by national authorities.

Various other behaviors of the banks were found to have increased the system wide pro-cyclical effects. This ultimately resulted in adverse effects beyond the banking sector, which Basel III addresses through the creation of two levels of counter cyclical buffers and a range of other measures. The relevant measures aim to maintain the leverage ratio of banks, stifle cyclical effects arising out of minimum capital requirements, promote stronger provisioning practices, protect banking sector from excess credit growth and create counter cyclical buffers[22]. The counter cyclical buffers are left for member jurisdictions to enforce, when they detect excess aggregate credit growth. Upon detection, a designated authority in a member jurisdiction may impose among other prudential measures, a 'national counter cyclical buffer' on its banks ranging anywhere between 0 to 2.5 % of the risk weighted assets. Individual banks also face a 'bank specific countercyclical buffer' at a similar range based on the geographic composition of their portfolio of credit exposures.

[19] These standards supplement the *Principles for Sound Liquidity Risk Management and Supervision* issued by the Basel Committee in 2008 as an immediate response to the failure of some leading banks due to the drain in liquidity arising out of the global financial crisis. See *supra* n.16.

[20] Other than the common equity, tier 1 includes another category (additional tier 1) and altogether the two categories in tier 1 should be at least 6% of the total of the regulatory capital. In such a case, tier 2 capital would constitute the remaining two percent of the total regulatory capital. See Basel Committee on Banking Supervision (2010). *Basel III: A global regulatory framework for more resilient banks and banking systems*, (Basel, Switzerland: Bank for International Settlements Communications). (as revised in June 2011).para.50. (Basel III).

[21] See Para 129 *ibid*.

[22] See Paras 20-31 *ibid*.

Basel III addresses a new range of risk exposure of banks (like derivatives related exposure) that came to the limelight during the financial crisis. Moreover, Basel III seeks to reduce the adverse effects of reliance on external credit rating. Basel III has introduced an improved mechanism to effectively address risks like counterparty credit risk (CCR) and risks associated with credit valuation adjustments (CVA). It requires banks to introduce enhanced counterparty credit risk management and imposes different testing requirements to reduce counterparty credit risk under Pillar II. Banks are encouraged to assess their own exposure to different risks to determine the appropriateness of the related risk weights and reduce the reliance on external ratings of the exposure. Supervisors of member jurisdiction are required to regularly assess external credit assessment institutions to ensure they meet prescribed criteria including relevant industry standards like the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies.

Basel III regulates both on and off balance sheet leverage of banks to prevent excess leverage and at the same time provides additional protection against associated risks and its measurement errors. Basel III prescribes a leverage ratio, which is not only intended to protect the banks but also to reduce the effects of any deleveraging measures upon the broader financial system and the economy as a whole. It also introduces a standard method of calculation of the leverage ratio for member jurisdictions, new ways of measurement of risks and safeguards to protect against risks. The leverage ratio is calculated meticulously on a continuous basis taking into account the monthly and quarterly leverage ratios with due regard to the capital and total risk exposure measures of a bank[23]. In determining the risk exposure measures of the bank, Basel III interestingly requires both on and off balance sheet risks to be taken into account.

Basel III has introduced several features to enhance the supervisory review process of Pillar 2 and made changes to Pillar III disclosure provisions. Under the Pillar 2, certain banks are required to establish a collateral management unit to deal with issues arising out of margin calls and Basel III enumerates their functions and responsibilities in detail. As discussed earlier, banks are also required to improve the CCR management system under Pillar II. In this regard, the banks are required to establish a CCR control unit and conduct independent reviews of the CCR management system through internal auditing process to enhance supervision of both collateral and CCR management by banks[24]. While Pillar 2 enhancements were introduced and made effective with immediate effect[25], the changes in Pillar 3 were continued to be introduced and made effective subsequently[26]. When lack of proper disclosure by banks was found to be one of the major reasons for inability of the market to deduct the weaknesses of the banks during the last financial crisis, Basel III brought changes to disclosure requirements under pillar 3. Basel III disclosure requirements enhance transparency with regard to the constituent elements in regulatory capital[27] and improve market discipline. Some of the key requirements for disclosure include elements of regulatory capital, regulatory adjustments, limits and minima of different capital elements, features of capital instruments issued, explanation of calculations of different ratios relating to regulatory capital, and the terms and conditions that are parts of all instruments included in regulatory capital[28]. Basel III warrants that banks should also disclose their leverage ratio and its component parts in the future[29].

Finally, in response to the lacuna of international rules governing liquidity of banks, Basel III has proposed new global liquidity standards for banks. Firstly, the Basel Committee recommended some basic principles of liquidity risk management soon after the onset of the global financial crisis[30]. Subsequently, Basel III liquidity framework has been introduced, which prescribes two *minimum* standards of liquidity and a set of monitoring metrics to ensure consistency in related cross-border supervision. The two major requirements under Basel II warranting the banks to maintain the LCR and the NSFR discussed earlier are aimed at ensuring unencumbered liquidity of banks in the short and long terms respectively. The LCR is aimed at shielding banks from liquidity contingencies over a period of 30 days. The LCR is intended to offset net cash outflows arising out of sudden stress from circumstances like significant downgrade of banks public credit rating, loss of deposits, increase in secured funding haircuts or derivative collateral calls, etc. The objective of the NSFR, on the other hand is to address liquidity needs of banks over a one-year period to counter both on and off balance sheet liquidity risks[31]. To harmonize the monitoring of liquidity risk profiles of banks by supervisors of different implementing jurisdictions, Basel III requires them to verify certain common minimum types of information to detect vulnerability[32].

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[23] See Paras 153-167, *ibid*.
[24] See the summary of some of the related improvements at para 106, *ibid*.
[25] The Pillar 2 enhancements were made effective from 2009 soon after their introduction.
[26] Pillar 3 requirements are to be enforced by banks from 2011 and the Basel Committee continued to release more specific instruments to supplement the disclosure provisions after Basel III. See *infra* n.29.
[27] For example, banks are required to disclose certain items included by banks in constituting their common equity capital like for example, investments in the common shares of unconsolidated financial institutions, mortgage servicing rights (MSRs) and certain deferred tax assets (DTAs). See para 88, *supra* n.20.
[28] See para 91-92, *supra* n.20.
[29] See Basel Committee on Banking Supervision (2012). *Composition of capital disclosure requirement*s, (Basel, Switzerland: Bank for International Settlements Communications). pp.24.
[30] See *Supra* n.16.
[31] For example, the NSFR requires banks to maintain a minimum amount of stable sources of funding relative to the liquidity profiles of their assets (reflected in the balance sheet) and also develop potential for contingent liquidity needs arising from off-balance sheet commitments. See para.42. *Supra* n.20.
[32] See para 43. *Supra* n.20. However, the national supervisors are permitted to use additional information in the monitoring process in order to detect country specific liquidity risks.

Regulatory Response of Hong Kong SAR to Basel Banking Standards

As a leading international financial center, Hong Kong has been an ardent follower of Basel regulatory standards. Hong Kong being a special administrative region (SAR) of People's Republic of China (PRC) enjoys a unique international legal personality. Hong Kong, although is not a state could undertake international legal obligations in certain international organizations as an independent member. Under the Basic Law of Hong Kong, which is its constitutional document, Hong Kong enjoys greater autonomy on economic matters and could establish international economic relations and undertake related obligations on its own. For example, Hong Kong has been a founding member of the World Trade Organization (WTO) even before the accession of PRC and actively partakes in various other international economic forums. It is interesting to note that although Hong Kong became a member of the Basel Committee only in 2009, it had been implementing both Basel I and II from the very beginning as a non-member.

The Hong Kong Monetary Authority (HKMA) acts as the supervising authority of banking and financial institutions (generally referred as authorized institutions (AIs)) to ensure banking stability in Hong Kong. Hong Kong has always been interested to implement Basel standards not only to strengthen local banks but also to provide a level playing field to international banks (especially those originating from the jurisdictions implementing Basel standards), that are interested to operate in its territory. Hong Kong initially adopted the Basel I recommendations through a specific schedule (schedule 3) of its domestic legislation namely the Banking Ordinance (BO), which has since under gone amendments to reflect newer standards introduced by the Basel Committee. The BO is supplemented with related supervisory guidelines and technical notes issued by HKMA. When the new standards were introduced in Basel II, interestingly they were perceived to have the potential to not only strengthen the banking sector but also offer new business opportunities to banks in Hong Kong[33]. Although, the major banks in Hong Kong were willing to adopt the sophisticated capital and risk assessment methods like the IRBA in Basel II, the implementing rules provided the flexibility for the smaller banks to choose a standardized approach and the very small financial institutions a more 'simplified approach' (a simple varient of Basel I with an added operational capital charge)[34].

HKMA prepared to implement all the three pillars of Basel II in Hong Kong by the end of 2006 in conjunction with the implementation time table prescribed by Basel II for member jurisdictions. For implementing Pillar 1, Hong Kong proposed a 'menu approach', where by individual AIs had the choice to pick from several approaches to capital measurement. However, the choice was subjected to the satisfaction of HKMA that the chosen approach was appropriate to the nature and scale of their banking activities. Hong Kong realized the need to introduce amendments to its BO in order to incorporate the new methods of calculation of CARs under Basel II and also to extend the scope of its application to Bank Holding Companies (BHCs). Given the improvements in the Basel II and the need to provide a responsive legal mechanism for any future change in standards, the HKMA proposed an interesting legislative approach. Deviating from the past practice of incorporating the capital requirement standards in the BO, the HKMA proposed a 'rule making approach', where by the BO would mainly be modified to empower the HKMA with rule making powers to implement the new Basel II standards. Through this approach the details of the actual implementation of the new capital framework had to be carried out through subordinate rules (with a status as subsidiary legislation). The rule making process normally involves consultation with the industry stakeholders, a statutory consultation process and an ultimate negative vetting process by the Legislative Council of Hong Kong (HK Legco.). As a result two major set of rules were introduced in Hong Kong namely the Capital Rules and Disclosure Rules.

The amendment to the BO was carried out through the Banking (Amendment) Ordinance 2005 (BAO 2005), which granted the rule-making power to HKMA to prescribe how the CAR should be calculated and how AIs should disclose relevant financial information. Interestingly, the BAO 2005 also provided for a Capital Adequacy Review Tribunal (CART) to hear appeals from the decisions of HKMA relating to capital adequacy under the new rules. Subsequently, in 2006 the HKMA introduced a detailed set "Capital Rules" and "Disclosure Rules" elaborating the implementation of Basel II requirements and sought its enforcement in Hong Kong from 2007. In 2007, the AIs were first allowed to choose either a basic or standardized approach or the IRBA in calculating the risk weighted capital requirements and subsequently the AIRBA from 2008. Interestingly, the HKMA was empowered to evaluate and set the minimum CARs for the AIs within the percentage range of 8-16%[35]. The Capital Rules issued elaborated how the CAR and various associated risks like the credit, operational and market risks could be calculated by the AIs[36]. The rules also elaborated the process of determination of capital base by the AIs and the methodologies to calculate different types of risks and addressed the issues arising in asset securitization. The Disclosure Rules, on the other hand mandated three sets of disclosure requirements for AIs incorporated in Hong Kong. Firstly, the rules prescribed disclosure requirements for the AIs under a basic approach. Then it prescribed an additional set of disclosure requirements for AIs under the standardized approach and the IRBA or AIRBA respectively. Rules of disclosure were separately prescribed for AIs incorporated overseas.

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[33] For example, the improved risk management in Basel II was considered as capable of enhancing the ability of Hong Kong banks to assess and lend to specific sectors like the Small and Medium Enterprises (SMEs) and to offer sophisticated financial products like derivatives. See HKMA. (2004). "The New Capital Accord ("Basel II")" LC Paper No. CB(1)2254/03-04(03), pp.6. at para 16.

[34] See *id*. at para 17.

[35] See HKMA (2010), *Supervisory Policy Manual*, (Hong Kong: Hong Kong Monetary Authority) V.2 – 04.06.10, Section 3.3.1.These percentage ratios have since been updated to reflect more recent standards under Basel III. See HKMA (2012), *Supervisory Policy Manual*, (Hong Kong: Hong Kong Monetary Authority) CA-G-5 V.3 – 28.12.12, Section 3.5.

[36] For example, under the the rules individual AIs may be required to calculate the CAR using a different basis like a solo (or solo-consolidated) basis and/or consolidated basis.

Finally, the CART established under the BAO 2005 provided the possibility of challenging certain decisions of HKMA with regard to the capital adequacy calculation approach to be adopted by an AI.

After the onset of the global financial crisis, when the Basel Committee started to refurbish the Basel II in order provide some immediate enhancements to the capital standards, Hong Kong became a formal member of the Committee in June 2009. It also started to implement the Basel II enhancements released by the Basel Committee in the following month. Hong Kong implemented the Basel II enhancements relating to Pillar 2 immediately and sought to implement the enhancements relating to Pillar 1 and Pillar 3 from 2012. [37] It introduced amendments to the capital and disclosure rules and made some necessary refinements and clarifications after consulting the banking industry in the process of implementing the Basel II enhancements.

Subsequently, when Basel III was created, Hong Kong being a member of the Basel Committee committed itself to follow the implementation plan proposed. It also felt the need to keep up with other major financial centers in the region and elsewhere, who were gearing up to bring their national regimes in par with (in some cases even higher than) the Basel III standards. Interestingly, through a quantitative survey in 2010, HKMA reconfirmed that Hong Kong banks were well placed to undertake the higher regulatory standards prescribed by Basel III. For example, the general traits of Hong Kong banks like high capital assets with a large proportion of common equity along with the complementary nature of the already applicable Capital Rules in Hong Kong are considered to be congenial for the implementation of Basel III standards.

Moreover, Hong Kong banks are also perceived to be capable of meeting the new leverage and liquidity standards under Basel III. Hong Kong is convinced that the long transition period provided under Basel III would provide the opportunity to observe and ensure that local banks can cope well and address any adverse impacts. The implementation of Basel III warranted amendments to the BO and the statutory rules relating to capital and disclosure. Therefore, the Banking (Amendment) Ordinance 2012 was passed in 2012, which not only provided the necessary legal framework for Basel III but also empowered the HKMA to introduce detailed rules relating to new capital, liquidity and leverage standards. As a first step, Hong Kong started the implementation of some of the Basel III standards in 2013 according to the transitional timeline provided by the Basel Committee and introduced relevant rules. Other than the implementation of Basel III minimum standards, Hong Kong is also contemplating the possibility of introducing certain higher standards to meet local needs in consultation with the relevant stakeholders. However, some other member jurisdictions that have committed to implement capital standards higher than the minimum prescribed in Basel III seem to have a more ambitious plan than Hong Kong[38].

In order to follow the implementation plan of Basel III, starting from 2013 HKMA has been consistently updating its domestic banking regulatory regime on various fronts. The two major set of rules relating to capital and disclosure were amended regularly by HKMA in recent years. The Capital Rules were amended every year since 2012[39] and the Disclosure Rules have been amended twice[40]. HKMA has taken efforts to introduce several templates for disclosure of regulatory capital as well as the LCR, leverage ratio and transitions arrangements. To commence the implementation of the Basel III liquidity standards, HKMA has introduced the Banking (Liquidity) Rules and a Banking (Liquidity Coverage Ratio - Calculation of Total Net Cash Outflows) Code in 2014. In furtherance of implementing the leverage ratio standards under Basel III, HKMA has also introduced a detailed Leverage Ratio Framework.

HKMA has carried out several consultations with the stake holders regarding specific standards introduced in Basel III namely those pertaining to Countercyclical Capital Buffer, Geographic Allocation of Private Sector Credit Exposures, and Return of Information for Assessment of Systemically Important Authorized Institutions, Systemically Important Banks, etc. A New Supervisory Policy Manual addressing the Systemically Important Banks (SIBs) has been published recently. It introduces the approaches for assessment of systemic importance of AIs in Hong Kong and the supervisory measures to be applied to those AIs that are ultimately assessed to be SIBs globally or domestically[41]. HKMA has elaborated its approach for the recognition of External Credit Assessment Institutions (ECAIs) for the purposes of determining the calculation of credit risk in respect of securitization and non-securitization exposures[42]. A cursory analysis of various measures taken by HKMA in recent times indicates that Hong Kong is very much in the path of adopting Basel III according to the expected time table of the Basel Committee. Preliminary indications show that many of the member jurisdictions of Basel III have already started the implementation process. However, the ultimate success of Basel III very much depends on how individual jurisdictions could effectively achieve a fine balance between the need to adopt the new international standards and at the same time meet the demands of the local stake holders.

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[37] See Financial Services and the Treasury Bureau. (2008), "Progress in Implementation of Basel II Enhancements and Plan to Implement Basel III" *Hong Kong Monetary Authority Paper CB(1)2361/10-11(04),* pp.8

[38] For example, countries like India and Singapore have indicated that they will adopt a total capital ratio higher than the minimum prescribed under Basel III. See Annex D, Financial Services and the Treasury Bureau.(2012), "Progress in Implementation of Basel III Standards in Hong Kong" *Hong Kong Monetary Authority Paper CB(1)2035/11-12(04),* pp.8

[39] See Banking (Capital) (Amendment) Rules 2012, Banking (Capital) (Amendment) Rules 2013 and Banking (Capital) (Amendment) Rules 2014.

[40] Banking (Disclosure) (Amendment) Rules 2013 and Banking (Disclosure) (Amendment) Rules 2014.

[41] See HKMA. (2015), *New Supervisory Policy Manual (SPM) Module CA-B-2: Systemically Important Banks*, V1 – 18.02.2015, pp.31.

[42] Under the Banking (Capital) Rules of Hong Kong See Cap.155L dated 09/02/2012.

Basel Compliance of Macau SAR as a Non-member Jurisdiction

Unlike Hong Kong, which is a major international financial center, Macau is a very small territory with its banking sector mainly dominated by non-local banks that have established subsidiaries or branches in Macau. Therefore, as an offshore financial center (OFC), Macau has been subjected to the OFC Assessments by International Monetary Fund (IMF) and was found to have been largely in compliance with various Basel standards. Even though Macau is not a member of the Basel Committee, the IMF OFC assessment of Macau in 2009[43] concluded that it has achieved a high level of compliance with the BCPs 2006[44]. This is a stark improvement since Macau was assessed by IMF in 2002. The IMF OFC assessment of 2002[45] discovered that Macau was mostly compliant with BCPs 1997[46] with a full compliance of 16 principles and a large compliance of 8 principles. However, it fell short with regard to one important principle relating to money laundering. Macau was also found to have followed the Basel standards in defining capital, method of calculation of risks and the related deductions to be made from the capital.

The IMF OFC assessment 2002 resulted in some recommendations, which have since been mostly complied with. The 2002 assessment recommended Macau to require its banks to include market risk in calculating the Basel capital adequacy ratio, to provide more resources for identification of banking risks and development of supervisory guidelines, to identify and monitor concentration of risks, to provide guidelines about quality of investments, to classify country risk exposure and introduce minimum provisioning policy, to conduct formal assessment of market risks and interest rate risks, and improve anti-money laundering measures and monitoring. The assessment called upon Macau to grant its banking supervisory body namely the Macau Monitoring Authority (AMCM) the financial decision making power and provide for operational independence.

The IMF OFC assessment 2009 found that several of the recommendations made in IMF OFC assessment 2002 have since been implemented by Macau except the recommendation seeking operational independence[47] for AMCM. Macau has already fulfilled the core recommendations like the inclusion of market risk in the calculation of Basel capital adequacy ratio, issuing of guidelines governing various risks and the identification, monitoring and measurement of such risks. Therefore, the IMF OFC assessment 2009 reiterated its recommendation to grant operational independence to AMCM. The assessment pointed out that in spite of the fact that the head of Macau SAR (the Chief Executive) has never interfered in the operations of AMCM, the fundamental lack of its freedom could diminish its ability to ensure financial stability. It argued that although Macau has provided[48] relevant legal framework for corrective and remedial measures to address difficulties encountered by banks, the final power of implementation with the Chief Executive could prevent AMCM to take timely actions.

The 2009 assessment recommended amendment to relevant legislation to remove the role of the Chief Executive and grant full legal powers to AMCM over a range of banking supervisory issues[49]. The assessment called upon the banks to offer equal terms in granting loans to related parties[50] and unrelated third parties. It suggested improvements in detection of trends and indicators[51] to cultivate a systemic risk analysis framework for the banking sector in order to ultimately achieve an early warning system.

Other than the compliance with the BCPs, Macau also took measures to implement Basel II standards. Macau recommended a simplified standardized approach for its banks to calculate credit risk and it provided an option to its banks to choose from among two different methods to calculate operational risks[52]. Priority was given to the implementation of measures addressing operational risks and relevant impact study was conducted. Interestingly, the Basel II implementation in Macau focusing on Pillar 3 sought to benefit from the experience of Hong Kong[53] by following a similar approach but customized to the local needs of Macau SAR. With regard to Pillar 2, Macau choose to take an approach of issuing guidelines for banks to manage risks not comprehended under Pillar 1. As of 2013, Macau has made some concrete progress with regard to the implementation of the Basel II standards.

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[43] See International Monetary Fund. (2011) *Macao Special Administrative Region of the People's Republic of China: Report on Observance of Standards and Codes (ROSC) -– Basel Core Principles for Effective Banking Supervision,* (Washington: IMF), IMF Country Report No. 11/265, pp.24.

[44] See *Supra* n.3.

[45] See International Monetary Fund (2002) *Macao SAR- Special Administrative Region of the People's Republic of China Assessment of the Regulation and Supervision of the Financial Sector Banking*, Monetary and Exchange Affairs Department, International Monetary Fund, pp. 122.

[46] See Basle Committee on Banking Supervision (1997) *Core Principles for Effective Banking Supervision.* Basle, September 1997, pp. 44. ("BCPs 1997")

[47] The lack of such independence indicates that Macau did not fulfill BCPs Standard 1.2 recommending independence. See BCPs 2006, *Supra* n.3.

[48] In compliance with the relevant BCPs, See Principle 1.4 on legal powers, BCPs 2006, *Supra* n.3.

[49] For example, one of the important powers specifically pointed out by OFC assessment 2009 was the full decision making power to AMCM in order to provide corrective actions and remedial powers of supervision in furtherance of Principle 23 of BCPs 2006. See *supra* n.3.

[50] See Principle 11 of BCPs 2006 on Exposure to Related Parties, *supra* n.3

[51] See Principle 19 of BCPs 2006 relating to Supervisory Approach, *supra* n.3

[52] The options contemplated for the banks were the 'basic indicator approach' and the 'standardized approach'. See International Monetary Fund (2011) *Macao Special Administrative Region of the People's Republic of China: Financial Sector Stability Assessment*, IMF Country Report No. 11/264, Washington: International Monetary Fund, Page 21, Para 37.

[53] The experience of Singapore was also taken as a reference. See *ibid*.

Firstly, in 2011, Macau SAR implemented the Basic Indicator Approach propounded in Basel II and the final rules governing the same have since come into force. Similarly, Macau implemented the Pillar 3 standards of Basel II in 2013 and brought relevant final rules into force. In the same year, Macau also made strides in the implementation of the Standardized Approach albeit the relevant regulations have only been drafted and published[54]. Interestingly, Macau started to take some preliminary steps for the implementation of Pillar 2 standards as it started a supervisory review of internal capital adequacy assessment process of its banks. But the drafting of the relevant regulations have not been completed. However, Macau considers that the Basel II Internal Ratings Based approaches, both at foundational and advanced levels, are not applicable[55] to its regulatory framework. The Standardized/Alternative Standardized Approach and Advanced Measurement Approaches in Basel II also got a similar reception in Macau.

Macau indicated that the Basel 2.5 enhancements are not applicable as its banks are typically "traditional without any securitization or significant trading"[56]. However, this lack of interest is not reflected in the plans to embrace Basel III accord in Macau SAR. Out of the eight major sets of standards prescribed under Basel III, Macau has indicated only one as not applicable to its banking environment. As Macau is a small territory and its banks do not have worldwide operations or exposure, the Basel III standard relating to global systemically important banks is considered to be not applicable[57]. With regard to seven other key standards recommended in Basel III, namely those relating to liquidity levels, definition of capital; risk coverage, capital conservation buffer, countercyclical capital buffer, leverage ratio and domestic systemically important banks, Macau has expressed its willingness to implement all of them. The implementation plan indicates that priority will be given to implementation of liquidity standards in Macau banks with relevant rules expected in 2015, while the implementation measures for the remaining five standards are expected by 2016[58]. Although, the local banks did not have any serious effect from the global financial crisis, the fact that the crisis had an adverse impact on infrastructural growth in the local gaming industry during the relevant periods seems to have motivated the interest to implement the pertinent Basel III standards like the liquidity levels of banks. Moreover, the comprehensive plans of Hong Kong to embrace Basel III will inevitably inspire Macau to keep up with the implementation of relevant standards in order to avert any risks or perception of relative weaknesses in the banking system of Macau SAR.

The Impact and Effectiveness of the Basel Regime

The international banking regulatory standards have witnessed some of the rapid developments and changes over the past decade than any other regulatory field. Much of the changes are attributable to the global financial crisis, which has warranted an overhaul of the whole banking governance system. The causes and consequences of the global financial crisis have reinforced the inevitable need for effective harmonization of national regulatory mechanisms through a strong global regulatory framework. This is critical in order to provide a level playing field for international banks. Moreover, it is essential to ensure that lack of harmonized standards and consequent downfall of some banks do not cause a ripple effect and bring down other banks around the world, which are increasingly intertwined in a globalized world. It is intriguing to note that the Basel regime, which had a limited original mandate among the G10, ultimately turned out to be a widely embraced regime even among non-members.

Unlike some of the other international economic forums, which were viewed skeptically by developing countries due to the dominant involvement of developed economies, the Basel regime commands a wider acceptance. The wider acceptance of the Basel regime should be mainly attributed to its emphasis on developing sound banking practices, which is seen more of a genuine effort to build industrial standards rather than an attempt to impose the standards desirable by developed economies. Moreover, the Basel regime has primarily taken a soft law approach distinct from such international economic forums that typically take a binding normative approach. In spite of the non-binding soft law nature, the Basel standards in Basel I, II and III have been recognized as the global benchmarks in banking regulation. Even though the three Basel accords have evolved considerably over time, the method of capital and credit risk measurement system using a weighted approach as introduced in Basel I still remains as a corner stone of the regulatory framework. Moreover, the initiative to address both on and off balance sheet risks in Basel I evidences a pioneering vision to comprehend unconventional market oriented risks, which has become a typical characteristic of modern financial markets.

The expansion of Basel II Revised Capital Framework to comprehend the trading books of banks demonstrates the constant attempt of the regime to align its standards to newly evolving risk exposures. The three pillars approach introduced in Basel II has become the foundation of the modern banking regulatory framework. The advanced risk measurement methods, internal assessment procedures and disclosure requirements in Basel II have expanded the scope and ambit of the regime and continued to be prominent in subsequent revisions of the accord. Even though the improvements laid down in Basel II have been quite sophisticated, they proved to be insufficient in shielding the banks from the global financial crisis within few years of its implementation. This evidences the need for the Basel regime to continuously monitor the faster phase in which banking

[54] Financial Stability Institute (2014), *FSI Survey: Basel II, 2.5 and III Implementation*, Bank of International Settlement, p.14. ("*FSI Survey 2014*")

[55] The indication of 'not applicable' in the FSI Survey 2014, however, could mean that the respondent jurisdiction is either not planning to implement or is planning to implement the component but does not know the year in which it will be implemented. See Explanatory Note 3 of Section One: Survey Responses on Basel II Implementation of *FSI Survey 2014*, p.2.

[56] Macau has indicated that there is no revision plan with regard to Basel 2.5 enhancements. See Section Two: Survey responses on Basel 2.5 Implementation in *FSI Survey 2014*, p.28.

[57] See Section Three: Survey responses on Basel III implementation in *FSI Survey 2014*, p.43.

[58] See *ibid*.

practices and financial markets evolve and accordingly strengthen the regulatory framework. Although the prompt reaction of the Basel regime to the financial crisis reveals its resilience to combat new and emerging challenges, the experience calls for a preemptive approach than providing remedial measures.

Some of the major causes of banking failures during the financial crisis namely the lack of liquidity, high leverage etc., should have been effectively foreseen by the Basel regime. Such expectation is justified by several factors. Firstly, the crisis mainly brewed over a period of time in one of the Basel member jurisdiction, which had an effective supervisory mechanism and where the second and third pillars of Basel II have already been implemented. Secondly, causes like low liquidity or high leverage are well known factors capable of causing distress in banking operations and resulting consequences could not be defended as an unexpected development. Although, much of the causes of the crisis are attributable to the deregulated environment in the US, the lack of emphasis on liquidity or leverage ratios in Basel II at the time of the crisis was quite obvious. There is no evidence of any lax in implementation of Basel II in US. The fact that the crisis originated in US in spite of its ardent following of the regime leads to a possible conclusion that the Basel II regime was inherently weak and therefore was incapable of preventing the crisis. Similarly, the lack of distinction between different types of banks under Basel II did not require special measures to strengthen systemically important banks. This did not provide the possibility to prevent the failure of crucial banks and thereby contain the crisis within the banking sector or limited jurisdictions.

In spite of the prompt response to the crisis, the initial attempt of the Basel Committee to rescue the Basel II regime through enhancement measures was susceptible to criticism. However, the comprehensive plan to overhaul the system through Basel III has subdued such criticism and the focus has since shifted to the proposed measures in Basel III. The effectiveness of the new measures are continued to be studied and major jurisdictions have started preparatory measures for implementation. Although the long implementation phase of Basel III spanning over a period of 7 years could be seen skeptically by some critics, the wide array of changes introduced, as well their potential burden on banking institutions justifies the recognition of a gradual implementation. In particular, the recognition of transitional arrangements within Basel III is a prudent move as it would keep any lackluster response from member jurisdictions under check. It is interesting to note various motivations like the need to prevent regulatory arbitrage, the urge to keep up with regulatory improvement of major banking and financial centers, the desire to protect vulnerable segments like financial consumers and other economic stake holders, etc are driving national jurisdictions to embrace Basel III.

The new areas of regulation brought within the purview of Basel III are reinforcing the hopes for the continued prominence of the Basel regime. The major enhancements to the quality of the capital and range of risks comprehended are capable of strengthening pillar I to withstand future shocks. The two pronged approach in improving internal risk management and external supervisory standards under the pillar two would make banks less susceptible to inadvertent risky practices. The new disclosure requirements comprehending information like securitization exposures, off balance sheet stakes and explanations relating to methods of calculations of ratios and risks are no doubt capable of improving the overall transparency and the accountability to the market under Pillar III. The two other striking additions namely the liquidity standards and focus on systemically important banks are undeniably major boosters for the long term sustainability of the Basel III framework. The emphasis on globally systemic financial institutions exemplifies the drive of Basel III to nurture national regimes to be increasingly outward looking and it is a crucial move to ensure stability in international financial markets. Based on the above findings it can be concluded that the Basel Regime has been quite responsive to the national banking regulations during different periods of regional or global economic distresses. Although, some of its initial responses in the immediate aftermath of the global financial crisis have been subjected to criticism, the subsequent response with a comprehensive overhaul of the regulatory standards has reinforced the effectiveness of the Basel Regime.

Concluding Remarks

Given the fact that different national regimes have taken specific domestic measures in the wake of the global financial crisis to address concerns of various stake holders like the banking industry and the financial consumers is expected to result in some inevitable diversity among national implementation of Basel III. Such a trend is said to be already visible even among major implementing members of the Basel regime. It is essential to ensure that the diversity does not dilute the effectiveness of core features of the Basel III. However, major international financial centers like Hong Kong would be motivated to demonstrate a strict compliance with Basel III in order to avoid any risk of perception of lower regulatory standards. Since such perception will have a negative impact of its attractiveness as a financial center, HKMA has been consistently referring and citing the Basel III implementation plans of other major international financial centers. In spite its own furnishing of evidence that Hong Kong banks have always been holding capital standards much higher than those prescribed in Basel III, HKMA is determined to seek regulatory enforcement of Basel III capital standards in Hong Kong. Under such circumstances, the motivation for regulatory prescription of an already prevalent practice seems to be mainly driven by the need to avoid any perception of comparative regulatory disadvantage.

Although regulatory enforcement is better than reliance on industry best practices, it is necessary to ensure that any such regulatory prescription does not end up being just a cosmetic change. However, the analysis of the regulatory response in Hong Kong reveals a rigorous implementation process in the true spirit of enhancing the domestic legal regime to safeguard the banking industry and other relevant stake holders in the market. For example, the negative experiences of the global financial crisis in Hong Kong like the promotion and sale of high risk foreign derivative products and the consequent loss to various individual and institutional stake holders have exposed their vulnerability. Therefore, there is a wider expectation that Hong Kong has to improve its banking regulatory mechanism to protect the interest of local banks and consumers. The review of

various implementing measures by HKMA both as a non-member and a member of the Basel regime primarily indicates a choice for a binding regime to ensure certainty in the implement international banking standards. At the same time, the regulatory mechanism of a rule based approach adopted in Hong Kong provides the necessary flexibility to ensure responsiveness to the local needs and evolving standards. The constant consultation with various stakeholders at every stage of implementation of the ambitious Basel III along with conscious effort to keep up with its prescribed transition plans reinforces a fine balance between domestic and international banking interests. Maintaining such a balance is crucial for the continued prominence of Hong Kong as a leading global financial center.

The Basel principles and standards, Macau has chosen to implement is reflective of the typical characteristics of its banking sector including its relatively small size and the domination of non-local banks. The OFC assessments carried out by IMF and the FSI survey on Macau banking industry clearly reveals that Macau has been selective in implementing the Basel principles and standards in the past. In contrast to Hong Kong, Macau seems to have a more limited response in embracing the Basel regime, but this should be attributed to several factors that distinguish the banking sectors of the two SARs. For example, the choice of Macau to adopt the path of providing guidelines to the banks instead of a supervisory review mechanism for managing certain risks, as well its rejection of certain methodologies like the internal rating based approaches should be seen more as a need based decision than an outright rejection of those methods or approaches. However, since the global financial crisis Macau seems to have taken a more ambitious path in planning to implement Basel III standards.

In comparison with Basel II or 2.5, the number of Basel III standards planned for implementation in Macau is higher. While many standards from Basel II and in Basel 2.5 were found to be not applicable to Macau, most of the standards of Basel III in the FSI survey are being planned for implementation. The high rate of growth of Macau's economy and the consequent expansion in banking activities along with the experience of some adverse impact caused by the global financial crisis could be seen as the key elements driving Macau's comprehensive interest over Basel III standards. Some of the Basel III enhancements, which Macau plans to implement like the more comprehensive risk coverage and the related definition of the risk adjusted capital, will improve capital standards of Macau Banks although they have been in the past characterized as traditional with a limited exposure to trading or securitization. Macau has also responded positively to the recommendations of the OFC Assessments by introducing improvements in key areas of concerns like money laundering although concerns on the operational freedom of the banking supervisory body continued to linger. The related concern expressed about potential implications on the ability of the supervisory body to react promptly does not seem to alarming as the existing regulatory mechanism had proved to be sufficiently responsive and effective during past crises.

In the past, both Hong Kong and Macau were not members of the Basel Committee and the scope and extent of regulatory responses to Basel standards were mainly dictated by the needs and interest of their respective banking sectors. Hong Kong's subsequent membership in the Basel Committee as well as its urge to keep up with the phase of Basel III implementation by other international financial centers in the region are expected to expedite the regulatory changes in Hong Kong. Macau's plan to widely adopt Basel III standards, as a non-member of the Basel regime, is commendable although Macau should be wary of the risks of falling behind in introducing related domestic regulatory changes in the absence of the above driving factors as in the case of Hong Kong. Although, the findings reveal different degree of national responses in Hong Kong and Macau, it could not be attributed to the soft law nature of the Basel regulatory standards or the difference in membership in the Basel Committee. The responses of these two jurisdictions have been mainly driven by the needs of their respective local banking industry and there is no concrete evidence to suggest otherwise.

The wider adoption of the Basel regulatory standards by many other jurisdictions also reconfirm the conclusion that the inherent normative limitations of the Basel regime or the lack of membership in the Basel Committee have not adversely affected the acceptance of the Basel standards by the international community. Although, the Basel standards command a wider following, there is no guarantee that the expanding scope of the standards, especially in Basel III, will ultimately achieve rigorous uniform national implementation. Therefore, it is recommended that the core and critical elements in Basel III regime, like those aimed at preventing globally systemic risks, should be given serious consideration for possible incorporation into binding international legal instruments in the future. Given the typical policy preference to avoid any perception of national regulatory arbitrage in the light of the global financial crisis, the potential for success of any such binding international legal instrument is relatively high. The narrow objectives of the present study as well as the limitation of its findings mainly in the context of two small specific jurisdictions of Hong Kong and Macau SARs however do not permit to make sweeping recommendations in this regard. Therefore, it is highly recommended that future studies aimed at systematically examining the viability of binding international instruments on specific banking standards should be undertaken before seeking a higher normative order for international banking standards.

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