

## **Chapter 3**

### **BASEL III IMPLEMENTATION: CHALLENGES AND OPPORTUNITIES IN CAMBODIA**

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#### **1. Introduction**

##### **1.1 Objective and Scope of Study**

The Basel Agreement of 1993 explicitly incorporated the different credit risks of assets both on balance sheet and off-balance sheet into the calculation of capital adequacy. The revision of this accord in 1998 allowed the inclusion of market risk into risk-based capital in the form of an add-on to the ratio of 8% for the credit risk exposure. This certainly provided a fundamental framework for capital adequacy of the banks and financial institutions. The Bank for International Settlements (BIS) phased in and fully implemented these risk-based capital ratios on January 1993, under what has become known as Basel I.

Basel I has been criticised as having too little risk-sensitivity and it did not give bankers, supervisors, or the marketplace meaningful measures of risk. This is partly due to the complexity and sophistication of banking activities. Other criticisms included the broad risk weightings and there is no explicit capital requirement to include market risk and operational risk in the calculation of the capital adequacy ratio. Capital arbitrage has also been identified in light of the banks exploiting the difference between regulatory capital and economic capital.

Given the problem raised above, the Basel Committee for Banking Supervision (BCBS) revised Basel I in order to close the gap. The updated version is known as Basel II. Basel II definitely provides a more detailed and flexible framework to address the capital framework. The new Basel Accord consists of three mutually reinforcing pillars, notably, Minimum Capital Requirement, Supervisory Review Process and Market Disciplines, which together

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contribute to the safety and soundness of the financial system. Basel II better aligns capital requirements and the way banks manage their actual risk.

Pillar 1 covers the regulatory minimum capital requirements for credit, market, and operational risk. Basel II allows for a range of options for addressing credit, market risk and operational risk. There are two options for the measurement of credit risk. The first is the standardised approach, and the second is an internal ratings-based (IRB) approach. The standardised approach is similar to that of the 1993 accord, but is more risk-sensitive. Under the IRB approach, banks are allowed to use their internal estimates of borrower creditworthiness to assess credit risk in their portfolios. However, it is subject to methodological and disclosure standards approved by the regulator. Two different approaches are available for market risk: Standardised and Internal Ratings-based approach, and three different approaches are available for the measurement of operational risk: the Basic Indicator, Standardised, and Advanced Measurement approaches.

In Pillar 2, the BIS highlights the importance of the regulatory supervisory review process as a critical complement to the minimum capital requirements. Specifically, Basel II created procedures through which regulators ensure that each bank has sound internal processes in place to assess the adequacy of its capital and set targets for capital that are commensurate with the bank's specific risk profile and control environment.

In Pillar 3, the BIS encourages market discipline by developing a set of requirements for the disclosure of capital structure, risk exposures, and capital adequacy. Such disclosure requirements allow the market participants to assess critical information describing the risk profile and capital adequacy of banks.

In summary, Basel II brings a more coherent relationship between how supervisors assess regulatory capital and how they supervise banks. But the biggest win of the entire Basel II project is that it should make the financial system safer. It encourages continuous improvement in risk-measurement and risk management in banks.

Among the benefits of Basel II implementation, the allocation of bank capital is better matched to specific bank risks, resulting in more efficient pricing and allocation of funds. Banks are also encouraged to manage their risks more closely and avoid a build-up of unintended risk, reducing the opportunities for regulatory capital arbitrage. More importantly, the international banking system as a whole should face less systemic risk and regulators are accorded more flexibility at the national level. However, there are also disadvantages which affect some banks,

particularly the smaller banks and banks in the emerging economies, such as banks in Cambodia. Small banks and regulators find it difficult to implement the Basel standards because implementation is very costly and very complex for staff and regulators. In addition, the implementation requires a large amount of historical data. The most striking problem that was observed during the last financial crisis is that liquidity risk was not directly addressed.

The framework acknowledged that the winners in Basel II are large and active banks, particularly international banks with sophisticated and good risk management systems, large and low risk banks and the banks with large housing loan portfolios, while the losers are smaller banks with weak risk management systems, poorly capitalised banks, banks specialising in the high yield loan market, and retail banks with mainly non-mortgage loans.

The introduction of Basel III was driven by the failure of Basel II in preventing the global financial crisis. The new Basel framework responds to the comments and statement of the G20 as well as policymakers and commentators, and their collective assessment with regard to loopholes or weaknesses that may have contributed to the financial crisis. The goals of Basel III are strengthening global capital and liquidity regulations with the goal of promoting a more resilient banking sector; and improving the banking sector's ability to absorb shocks arising from financial and economic stress. The deployment of these goals, involves several objectives, which include increase in quality and quantity of capital, reduction in leverage, increase in short-term liquidity coverage, increase in long-term stable balance sheet funding and the strengthening of risk capture, most notably counterparty risk. Most of the Asian countries are in the early stages of implementing Basel III.

The Cambodian banking system is in the process of integrating with the rest of the world. Thus, it is necessary for Cambodia to adopt the international best practice and the Basel Accords, including the New Basel Accord (Basel III). Based on the evolution, rational, components and timelines of implementation, it is important for the regulatory authority, banks and financial institutions to make a strong commitment on this matter.

The scope and objectives of this study are to:

- Identify the opportunities and challenges in implementing Basel III for the Cambodian financial system and economy;

- Review the impact of Basel III on individual banks and financial institutions, and the implications and concerns for banking supervision; and
- Explore the options regarding the Basel III implementation.

## **1.2 General Outline of Paper**

- Overview of financial system and risk assessment of the Cambodian banking system
- Assessment of the impact of Basel III on the Cambodian banking system
- Issues and Challenges of Basel III implementation in Cambodia
- The way forward and strategic options to implement Basel III
- Conclusion

## **2. Overview of Financial System and Risk Assessment**

### **2.1 General Overview of Financial System of Cambodia**

Historically, the banking system in Cambodia was completely destroyed in 1975 and there were no financial services from 1975 to early 1979. The banking sector was re-established with a mono-banking system, with the National Bank of Cambodia (NBC) as the only bank operating and performing central and commercial banking functions through a network of provincial branches. After its establishment, the NBC literally had to reconstruct the financial sector from ground up. The financial sector was subsequently liberalised and the liberalisation proceeded rapidly in Cambodia from 1993 onward. After the introduction of the Central Bank Law and Banking Law, together with a series of regulations, the banking system was successfully migrated to a two-tier system.

By the end of 2011, the banking sector consists of 31 commercial banks, 7 specialised banks and 32 microfinance institutions, of which 7 were licensed as Microfinance Deposit Taking Institutions, and 29 registered rural credit operators. In general, the banking sector grew significantly. Total asset increased by 24.39% year-on-year, while credit grew by 33%. Total asset to GDP reached 63% in 2011 (56% in 2010). Total credits and deposits to GDP both increased to 34% and 41%, respectively, from 28% and 37% in the previous year.

In line with the expansion of banking operations, the NBC, which is the regulatory and supervisory body of the banking sector, has put in place a number

of safeguard measures by constantly revising and updating its regulations, particularly fine-tuning the risk management framework to take into account the international best practice and the Basel Core Principles.

As a result, the financial health of banking institutions has been improving and has been proven to cope well with the effect of the global crisis. For example, the year 2009 proved to be a challenging one for the growth of the banking system. Nevertheless, despite the slowdown of credit and deposit growth, the impact of the global financial crisis was manageable for the banking sector. Public confidence in the banking sector remained moderate, with deposits chalking up growth of 32% in 2009.

## **2.2 Risk Oversight Assessment and Vulnerabilities**

Risk-taking policies is the responsibility of the board of directors and they are reviewed in light of the prevailing financial conditions in the banking and financial institutions. Mandated by regulations, such policies shall establish the prohibited activities, risk tolerance and aversion principles, essentially in the form of minimum liquidity and solvency buffers, and overall risk concentration limits and policies aimed at dealing with crisis situations (contingency planning).

It is also the board's responsibilities to establish an appropriate general framework for an internal control system aimed at establishing an effective control system. The system approved by board is subject to periodic assessment. The board has the power to establish board level committees to closely monitor the internal control, audit and risk management functions.

The responsibility for safe and sound banking operations and for the bank's compliance with the applicable laws and regulations rests with management of the banks and financial institutions. In addition, adequate internal control is also required to be established to support management in the exercise of its responsibilities, allow for early identification, assessment and management of risk and support risk-awareness, and provide for responsive implementation of corrective actions. Internal control is set up at a consolidated level to effectively support risk identification, measurement, monitoring and control.

Currently, the risk management framework and internal control of the banks and financial institutions are monitored closely by the NBC. Foreign branch subsidiaries seem to have better risk management framework than the locally incorporated banks.

## **2.3 Status of the Application of Basel Capital Adequacy Framework**

The key challenge for banks and financial institutions is deciding how best to implement a solution that will allow them to comply with Basel III, how to operate the systems and processes for improved operational effectiveness, and how to understand and ultimately reduce their capital requirements.

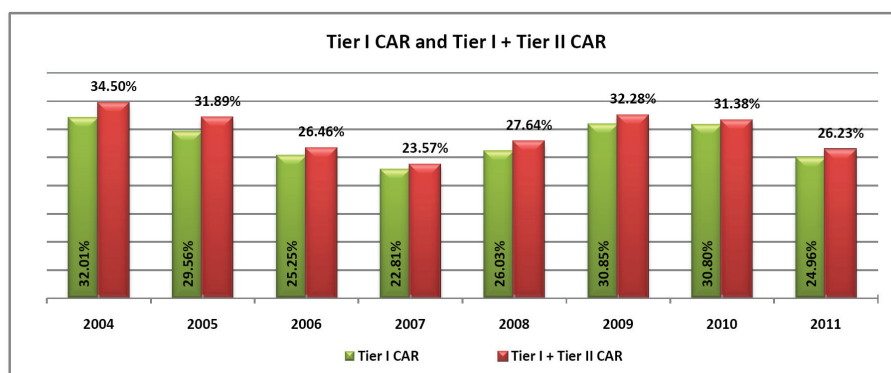
Cambodia is presently transitioning to Basel II. Its long-term goal is to be in full compliance with the Basel II requirements. While the Basel III requirements are complimentary to the Basel II requirements, Cambodia is opting for both Basel II and III as a long-term goal. Some of the requirements under Basel II and III have been fulfilled. However, there is still much to be done for the financial sector to achieve full compliance. Under Pillar I, the calculation of the capital adequacy ratio in relation to the minimum capital requirement has been simplified according to the Basel III requirement, but still lacking behind is the capital charge for credit risk, market risk, and operational risk. With regard to Pillars II and III, the requirements have been partially adopted.

## **3. Assessment of Impact of Basel Standards**

### **3.1 Current Level and Adequacy of Capital of Individual Banks or Banking Groups in Terms of Key Performance Indicators for Capital**

Implementing the Basel III is not a priority for financial sector development in Cambodia. Given the stage of Cambodia's development, the coverage of the Basel III is somehow irrelevant. The main idea proposed by the Basel III such as capital buffer, leverage, and liquidity rule are not the key issues for the safety and soundness of the banking sector as well as for the financial sector in Cambodia. The banking sector in Cambodia is already highly capitalised. The minimum capital adequacy ratio is 15% compared with the international standard of 8%.

**Figure 1**



The solvency ratio dropped from 31.38% as of end-2010 to 26.23% as of end-2011, but still remained above the prudential limit and the early-warning threshold. This decrease is mainly due to rapid credit expansion, thus an increase in risk-weighted asset. Tier I Capital is 24.96% showing a strong stable capital base of banks in 2011.

The average capital adequacy ratio in the system is almost double the minimum requirement. The component of the capital is not even an issue given that the capital contains largely common equity and Tier I capital. Complex financial instruments accounted in the capital are not eligible. Average equity in relation to total assets is around 30% which is another reflection of strong capital base and low degree of leverage. Without a well developed financial market and capital market, complex financial instruments are absent in Cambodia and investment in such instruments in overseas market is implicitly prohibited.

### **3.2 Assessment of Capital Level in Terms of Enhanced Capital Requirements of Basel under Different Capital Components**

Under the Law on National Bank of Cambodia (LNBC) and the Law on Banking and Financial Institutions (LBFI), all banks are required to establish and maintain a minimum capital level. Foreign bank branches must have a fully paid-up capital endowment of at least equal to the minimum capital for locally incorporated covered entities. Additionally, all covered entities must be able to

prove that their assets minus related potential losses and intangibles exceed their liabilities to third parties by an amount of at least equal to the minimum capital. And all banks shall meet a solvency ratio in compliance with international standards.

The regulation on Banks' Solvency Ratio requires that all banks shall have a net worth to aggregate credit risk exposure of not less than 15%. This exceeds the Basel requirement for internationally active banks. By the regulation on calculation, Banks' Net Worth consisting of the Tier I equivalent is called 'Base Net Worth', and the sum of the Tier I and Tier II equivalent is called 'Total Net Worth'. In the Tier II capital computation, discretion is given to the NBC, allowing the addition of revaluation reserves, subordinated debt and other items, based on the NBC's agreement. The calculation does not consider a market risk component, which is relevant, as dealing in precious metals, raw materials and commodities, are authorised activities. Although such activities are not widely conducted, industry representatives expressed interest in having their banks deal in precious metals, raw materials and commodities. Further, the calculation does not require the deduction of subordinated debt issued by a Cambodian bank or financial institution, which would avoid 'double leveraging' of the capital in the industry.

### **3.3 Current Level and Adequacy of Liquidity of Individual Banks or Banking Group in Terms of Key Performance Indicators for Liquidity**

The issues related to liquidity are also of less concern to Cambodia. Banking institutions are highly liquid. They maintain their liquidity basically in the form of cash and placement with banks. The idea proposed by Basel III on liquidity which includes liquidity coverage ratio and net stable funding ratio, is crucial, but it is somewhat complex for implementation. The coverage of one-month stress period for both cash inflow and outflow is almost impossible to identify due to the lack of reliable data and information. Long-term funding is less available for most banks, which cause serious concern for them to comply with the requirement of net stable funding ratio.

## **4. Issues and Challenges of Implementing Basel Standards**

The most significant challenge facing banks in the implementation of Basel III is the need of balancing the interests of banking business against the needs of the regulator. Of course, the implementation has an impact on risk and finance and there are also implications among the different countries taking different approaches to Basel III. There are many issues surrounding the management



of data quality and stress testing, auditing of the regulatory data, the complexities of managing Basel I, II and III side-by-side, and the challenges of integrating disparate back office banking systems into a cohesive Basel III management framework. In this section, an attempt is made to examine the regulatory constraints, level of coverage, profitability, liquidity requirement and other issues, such as cross-border transactions, and to inquire how to achieve the economic growth objective.

#### **4.1 Regulatory Constraints**

As mention earlier, Cambodia is not opting for the Basel III implementation in the near term. However, some of the recommendations under Basel III have been taken into account. The main part of the regulatory framework has been revised to reflect the concept of Basel III. This includes regulatory framework on capital, liquidity, assets quality, governance, and also the regulatory framework. The supervisory framework has now moved from rule-based supervision to risk-based supervision. This completely revises both the supervisory approach and supervisory technique. The function of onsite and offsite examination has been integrated to further enhance risk assessment capacity and understand more the risk profile of the institutions. Data and information flow have also been upgraded to provide a complete picture of the institutions' position on a timely basis. Supervisory resources have also been enhanced through the recruitment of new staff to cope with the growing number of financial institutions and the scale of banking operation in the country. Despite this progress, some issues in respect of the supervisory framework remain as major issues, especially with regards to the enforcement of the prudential rule relevant to the Basel III recommendations. The requirements for capital surcharge and leverage ratio have been adopted, but the enforcement of these requirements involves political considerations. On the other hand, enforcement of the liquidity requirements under Basel III is more a technical issue as liquidity is of less concern to Cambodian banks. Supervisory capacity is another major concern. Capacity building in gearing up for the Basel III requirements remains limited for the supervisors as well for the bankers. Extensive capacity building is needed to ensure effective enforcement of the prudential regulations under Basel III.

#### **4.2 Level of Coverage**

In the case of Cambodia, some but not all of the requirements under Basel III are adopted and/or will be adopted in the long term. Recommendations inappropriate to Cambodia will not be considered. Basel III provides ground for

further development of the financial system and offers some main tools for safeguarding the stability of the financial system.

- Effects of Basel on different types of institutions
- Whether the framework to be standardised

#### **4.3 Attract New Capital and Challenges for Enhancing Capital Level**

- Lower dividends, ROE and profitability

#### **4.4 Adaptation with New Liquidity Requirement**

- Availability of instruments and risks
- Short-term vs. long-term funding
- Increased cost and impact on profitability
- Impact on pricing and margins
- Impact on lending

### **5. Way Forward and Strategic Options**

#### **5.1 Discussion with Banks on Impact Assessment and Examine Possible Strategies**

- Capital and liquidity management strategies
- Divestments/wind-downs
- Redesign of business models and portfolio focus
- Active balance sheet management

#### **5.2 Readiness for Implementation of Basel at Desired Level and Time Plan**

Some challenges remain in the implementation of Basel II and III in Cambodia. The implementation is heavily dependent on the availability and quality of the data, resources, and infrastructure support. The transformation of Cambodia from a centrally planned economy to a free market economy and the transformation of the banking sector from mono- banking to a two-tier banking

system in the 1990s saw the emergence of the banking sector. From there to the new millennium, the banking sector operated without proper legal and regulatory support. The banking law was promulgated in November 1999 and it led to a complete restructuring of the banking sector. The banking sector entered a new era upon completion of the restructuring exercise in 2002 with the banking institutions coming under the oversight of a regulatory and supervisory authority. From 2005, the banking sector expanded rapidly, and consistent and more reliable data started coming on-stream. Both the regulatory authority and the banking institutions are continuing their efforts in organisational restructuring and are reporting steady progress.

The banking institutions in Cambodia are extremely pragmatic. Of the 39 banks, six banks cover more than 80% of the banking system. Compulsory implementation of Basel II for large banks can be a good option. However, banks are constrained by their unique circumstance and conditions in their adoption of Base II. Resources in some banks prove to be adequate while in some others, that is not the case. This requires a proper assessment of the condition of individual banks for the implementation. Foreign banks with parent banks which have implemented the Basel II have a competitive head-start, compared with the local banks which need to labour from ground up. This may give rise to competitive issues and charge of unequal treatment.

The lack of infrastructure support for the implementation of the Basel II and III is a major concern. The lack of credit rating and credit information limit the option on credit risk assessment and the capital charge on credit risk. The development and implementation of infrastructure, i.e. credit bureau, credit rating agency, and accounting framework require a long lead-time. In addition, the regulatory and supervisory frameworks need to be ready for the implementation of the Basel II and III. Currently, the legal frameworks are being modified to accommodate the adoption of the Basel Accord requirements. Supervisory capacity building is also taking place to address all the implementation issues.

## **6. Conclusion**

No one would deny that the financial system needs to be strengthened to deal with the new challenges Cambodia faces. It is all the more surprising, therefore, that we are again hearing proposals to slow the speed of adjustment so as to not jeopardise the recovery. To achieve the stated goals of the reform, sufficient resources will be needed on the part of banks, supervisors and auditors.

This effort is necessary as another crisis could turn out worse. There is no alternative to strengthening the system. And that will only be possible if we implement Basel III and other reforms globally, fully, and consistently.