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1.1 Introduction

1.1.1 Purpose and scope

The Hong Kong Monetary Authority ("HKMA") commissioned the study of the Hong Kong banking sector to assist in developing an appropriate strategy to effectively supervise and regulate the sector as changes occur during the next five years. Specifically, the purpose of the study was to:

- Conduct a strategic review of the banking sector in Hong Kong and analyse current and future competitive pressures expected during the next five years, in order to assess the sector's ability to compete effectively in this market.

- Assess the impact that the certain features of the present regulatory regime have on the current and future development of the market, including factors which will benefit (and impede) the success of Hong Kong banks, both locally and internationally.

- Assess whether the HKMA's supervisory operations are prepared for these developments.

- Make recommendations for any necessary changes to regulations and the supervisory approach in light of the above.

It should be emphasised that the study was not intended to be an all encompassing review of the supervisory regime in Hong Kong, but rather a focused study of the Hong Kong banking sector, within the terms of reference set out by the HKMA, and the consequent implications for the supervisory regime.

1.1.2 Approach and methodology

Overall approach

The study was divided into two major phases:

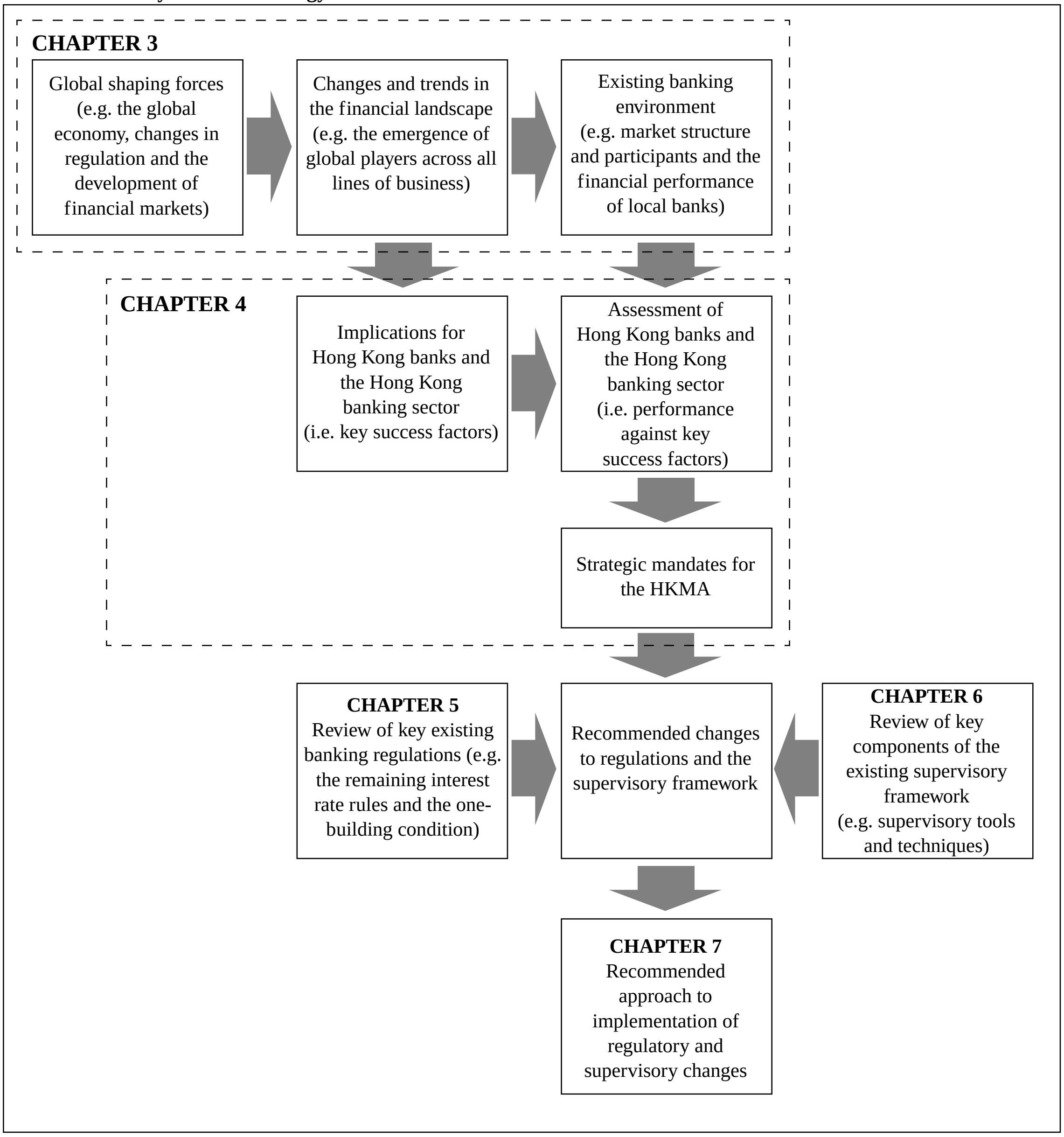
- ***Phase one*** – examined the strategic outlook for the banking sector in Hong Kong over the next five years. This included an assessment of the current strengths and weaknesses of the banking sector and the opportunities and threats it faces, taking into account the impact of global and local trends and issues. Phase one also included an analysis of the impact of certain features of the current regulatory system, namely the three-tier system of authorization, the one-building condition, the method of entry of foreign banks and the remaining Interest Rate Rules ("IRRs") of the Hong Kong Association of Banks ("HKAB").

- ***Phase two*** – considered the adequacy and effectiveness of the HKMA's current approach to banking supervision, in the light of potential changes to the banking sector as revealed in the results of phase one of the study.

Analytical methodology

The methodology used during the study to complete analysis and develop recommendations is summarised below (see Chart 1.1.1):

Chart 1.1.1 Analytical methodology overview



Source: KPMG/Barents analysis

Project team

The project team comprised staff from KPMG Hong Kong, Barents Group LLC and the HKMA. The composition of this team provided the experience and knowledge of the local market, as well as the international expertise needed to ensure that considerations were taken in a broader perspective. A steering committee, comprised of senior management of the HKMA and KPMG Hong Kong, was established to monitor and review the progress of the study.

1.2 Strategic review of the Hong Kong banking sector – key findings

1.2.1 Approach and structure of the strategic review

Developing a five year vision for the HKMA's regulatory and supervisory framework requires a thorough evaluation of Hong Kong's banking sector, both in its current form and how it is likely to evolve, given global and regional drivers of change. We have therefore completed a six-part strategic review of the Hong Kong banking sector:

- ***Hong Kong banking sector overview*** – the role of the HKMA, various existing regulations affecting banking, Hong Kong's role as a regional financial centre, the market (participants, structure and principal activities) and the financial performance of local banks versus peer banks in other countries.

- ***Global shaping forces*** – five major forces are driving an unprecedented level of change in global and local financial markets. These are the global economy, changes in regulation, technological innovation and the development of new skills, changing customer needs and demographic trends and the continued development of financial markets.

- ***Global banking trends and changes*** – financial markets and participants are responding to global shaping forces in five different ways. These are structural reshaping and strategic reconfiguration, an increasing focus on efficiency and customer management, continued disintermediation, changing and increasing risk profiles and a focus on special events, namely Year 2000 and the Asian crisis. These responses are fundamentally reshaping the nature of banking and the overall financial landscape.

- ***Hong Kong bank performance assessment*** – banking trends and changes highlight what banks must do well to compete effectively in the emerging financial landscape. Seven key success factors have been identified going forward for local Hong Kong banks. An assessment has been made against each.

- ***Hong Kong banking sector performance assessment*** – a number of key success factors are relevant at a sector-level also. Fifteen sector-level key success factors were identified, that Hong Kong must address for banks and the sector to continue to develop as a financial centre, given the shaping forces and resultant banking trends. An assessment has been made against each, although not all are within the scope of this study and have not been covered in detail.

- ***Strategic outlook assessment*** – the above analysis has enabled a strategic assessment of Hong Kong banks and the Hong Kong banking sector, including strengths and weaknesses. This has resulted in four major strategic mandates being identified for the HKMA and various associated regulatory and supervisory considerations.

1.2.2 Banking sector overview

Regulatory setting

The HKMA and its role in banking regulation

The HKMA was established on 1 April 1993 via the merger of the Office of Exchange Fund and the Office of the Commissioner of Banking. The Banking Ordinance ("the Ordinance") sets out the legal framework for banking supervision in Hong Kong. The objectives of the Ordinance are set out in its long title:

> "*To regulate banking business and the business of taking deposits and to make provision for the supervision of authorized institution so as to provide a measure of protection to depositors and to promote the general stability and effective working of the banking system, and to provide for matters incidental thereto or connected therewith*."

The Ordinance deals with both banks and other deposit-taking institutions, which are defined as authorized institutions. Accordingly, in its role as the banking regulator, the objective of promoting general stability and effective working of the banking system is one of the principal functions of the HKMA.

Banking regulations in Hong Kong can generally be classified into the following two categories:

- regulations concerning the structure of the market; and

- regulations that promote safety and stability of the banking system on an on-going basis.

Banking regulations affecting market structure

- ***Three-tier system*** – authorized institutions are defined as banks, restricted licence banks ("RLBs") and deposit-taking companies ("DTCs"), creating three distinct tiers under the licensing system. Only authorized institutions may carry on the business of deposit-taking and RLBs and DTCs are restricted in the types of deposits they may accept (in terms of minimum amount and term). Only banks can offer savings and current accounts. However, there is no distinction made in the permissible types of lending or investment business in which the different tiers of authorized institutions can engage.

- ***One-building condition*** – a foreign bank's authorization is granted subject to the one-building condition. This means such banks may only maintain offices in one building for the purpose of conducting *banking business*[1] (deposit taking in the case of RLBs) or the entering into or arranging of any other financial transactions. The condition also allows institutions to maintain, in a separate building or buildings, one separate regional office and one separate back-office, to meet operational requirements. Of the 144 foreign banks operating in Hong Kong, only 37 have *multi-branch* status (i.e. are not subject to the one-building condition).

- ***Market entry criteria*** – there are a number of criteria that new entrants must satisfy in order to become authorized and participate in the Hong Kong banking market. These minimum criteria for authorization are listed under the Seventh Schedule to the Ordinance. They cover a broad range of considerations and focus on the general quality and ability of the applicant to conduct banking business (conduct savings and current accounts) or deposit-taking business in Hong Kong.

[1] Banking business under the Ordinance refers to savings and current accounts.

Banking regulations affecting safety and stability

- ***Framework for business conduct and guidelines*** – in addition to regulations that provide the necessary framework in which banking business can be conducted, the HKMA also issues guidelines setting out the manner in which it will exercise its functions under the Banking Ordinance. A number of these guidelines, such as those on financial disclosure, are designed to enhance or assist in maintaining the stability of the banking sector.

- ***Capital adequacy ratio ("CAR")*** – locally incorporated banks in Hong Kong are required to adhere to the Basle minimum of 8% capital adequacy requirement (i.e. 8% of risk weighted assets). In addition, locally incorporated banks are advised individually (on an undisclosed basis) to meet institution-specific minimum capital adequacy ratios.

- ***Liquidity ratio*** – all authorized institutions in Hong Kong are required to meet a minimum monthly average liquidity ratio of 25%. This is calculated as the ratio of liquefiable assets (e.g. marketable debt securities and loans repayable within one month) to qualifying liabilities (basically all liabilities due within one month).

- ***Lender of last resort*** – the HKMA has the role of lender of last resort in Hong Kong. The Exchange Fund provides the resources for the HKMA to act in this capacity. In this role, the HKMA would consider whether a particular situation would give rise to systemic implications before committing any public funds to support troubled institutions.

Other relevant banking regulations

- ***The interest rate rules ("IRRs")*** – certain types of HK$ deposits offered by banks in Hong Kong are subject to the IRRs issued by the HKAB, which was established on 12 January 1981 under its own Ordinance. All licensed banks in Hong Kong, being members of HKAB, are required to observe these rules, which generally relate to the maximum rate of interest a bank can offer for certain types of deposits. At present, the IRRs set the maximum interest rate for savings accounts and time deposits of less than HK$500,000, with a term less than (but not including) seven days. Additionally, the rules disallow interest to be paid on current accounts.

- ***Depositor protection*** – in the case of a liquidation of a bank, depositors in Hong Kong are entitled to have priority over other creditors for recovery of their deposits, "up to a maximum of HK$100,000 to each depositor". This provides a measure of protection for small depositors in the absence of an explicit deposit insurance scheme.

Market participants and structure

Hong Kong is a major international financial centre, with a total of 350 authorized institutions, 172 of which are incorporated outside Hong Kong (see Table 1.2.1):

Table 1.2.1 Number of authorized institutions operating in Hong Kong in each tier

	Incorporated in Hong Kong	Incorporated outside Hong Kong	Total
Banks	31	144	175
Restricted licence banks	39	26	65
Deposit-taking companies	108	2	110
Total	**178**	**172**	**350**

Source: HKMA, June 1998

The local banking market has four quite distinct groups of competitors, with two of those groups dominating the market:

- The HSBC Holdings plc ("the HSBC Group"), which controls four local banking groups (HongkongBank, Hang Seng Bank, HSBC Investment Bank Asia and Wayfoong Finance);
- foreign banks (principally the Bank of China ("BOC") Group, Standard Chartered Bank and Citibank);
- other smaller local banking groups; and
- all other independent RLBs and DTCs.

The main business focus of local banks is domestic retail banking and corporate/commercial lending. All (with the exception of the HSBC Group and, to a lessor extent, the Bank of East Asia) have limited operations outside Hong Kong. Property related lending (especially mortgages) dominates local bank retail lending. For example, in 1997, mortgages accounted for 78% of total lending to individuals and property development and investment lending accounted for 33% of total corporate lending.

The development of Mainland China has been (and will continue to be) a key factor in the growth of corporate lending in Hong Kong.

Hong Kong's position as a major international financial centre is supported by a large contingent of foreign authorized institutions, including 144 banks. Their presence is also indicative of the status of Hong Kong as a major centre for trade within the region and a convenient base from which to enter the market in Mainland China. The importance of foreign authorized institutions in Hong Kong is illustrated by their significant share of corporate and trade finance lending (over 60%), retail lending (over 35%) and lending for use outside Hong Kong (over 95%). Foreign authorized institutions also account for a significant share of total deposits (48%).

The significant local market presence of foreign authorized institutions (especially banks) tends to be a unique feature of the Hong Kong banking sector, compared to other countries. In general, foreign banks with a branch network (multi-branch banks) compete directly with the local banks in most aspects of their business and their operations are very similar to local banks. Banks, which are subject to the one-building condition, on the other hand, tend to concentrate on areas such as investment banking, corporate finance and offshore lending activities, for which a branch network is less important.

Financial performance of local banks

A high-level comparison[2] of the performance of five local Hong Kong banks was completed as part of the strategic review. Comparisons were based on commonly used performance ratios averaged over a three-year period (1995 to 1997). These ratios included post-tax return on equity ("ROE"), gearing ratio, post-tax return on assets ("ROA") and cost/income ratio. For purposes of this comparison, local Hong Kong banks were grouped (based on balance sheet size) as either large (i.e. HongkongBank and Hang Seng Bank) or medium-sized/smaller (e.g. Bank of East Asia and Wing Hang bank).

Major points to note regarding both large and medium-sized/smaller local bank performance are as follows:

- ***Gearing ratio*** – local Hong Kong banks are not typically highly geared. For example, Hang Seng Bank maintained lowest average gearing of the group (8.0x), compared to an average of 16.5x for the group. Lower gearing of local banks in Hong Kong reflects conservative capital adequacy ratios.

- ***Post-tax ROE*** – local Hong Kong banks compared favourably in terms of post-tax ROE, despite lower gearing. Hong Kong's lower corporate tax rate (compared to countries such as the UK and the USA) is a contributing factor (to both post-tax ROE and post-tax ROA).

- ***Post-tax ROA*** – local Hong Kong banks have comparatively high ROAs (e.g. 1.6% for HongkongBank and 2.3% for Hang Seng Bank respectively versus a large bank average of 1.1%). High ROAs for both large and medium/smaller sized local banks are significantly driven by lower operating expenses relative to total assets (e.g. 0.9% and 1.3% respectively for Hang Seng Bank and HongkongBank vs. an average of 2.2%).

More efficient operations for Hong Kong banks are, however, offset by lower net interest and other income contributions, especially when compared to peers in the US. For example, in the US other operating income ranged from 2.1% to 3.2% of total assets, compared to 1.1% and 0.8% for HongkongBank and Hang Seng Bank.

Lower net interest contributions, for all Hong Kong banks in 1997, in part, reflect volatile interbank interest rates during the last quarter. This volatility was largely due to pressures on the HK$/US$ peg from speculative attacks. The general increase in competition for local HK$ deposits, especially time deposits, has also reduced net interest income by pushing up deposit interest rates and therefore the cost of funds for banks.

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2 Hong Kong banks were compared to selected peer banks in the United States ("US"), the United Kingdom ("UK"), Australia, the Netherlands and Singapore.

The financial impact of the recent economic downturn on local banks is evidenced by published interim 1998 results for 12 locally listed banks. In summary, pre-tax profit for these banks fell by an average of 28% or HK$677m. This fall is largely due to increases in charges for doubtful debts, rather than increases in operating expenses or decreases in income. Charges for doubtful debts increased by an average of 150%.

Conclusions regarding the banking sector

Hong Kong has a sound, safe and quite dynamic banking sector. The regulatory setting comprises many of the attributes found in other leading financial sectors. Overall, Hong Kong banks compare favourably to international standards in terms of post-tax ROE and ROA and efficiency.

The Hong Kong banking sector also has a number of unique characteristics which need to be evaluated in considering potential changes in the HKMA's supervisory and regulatory framework. These include:

- several regulatory controls which impede full open market competition (i.e. the three-tier system, the remaining IRRs and the one-building condition);

- a highly concentrated domestic market structure, dominated by three banking groups;

- a relatively large number of smaller banks which participate in the banking sector at a minimal level, in terms of individual market shares;

- a high concentration of property related lending;

- growing lending for investment in Mainland China;

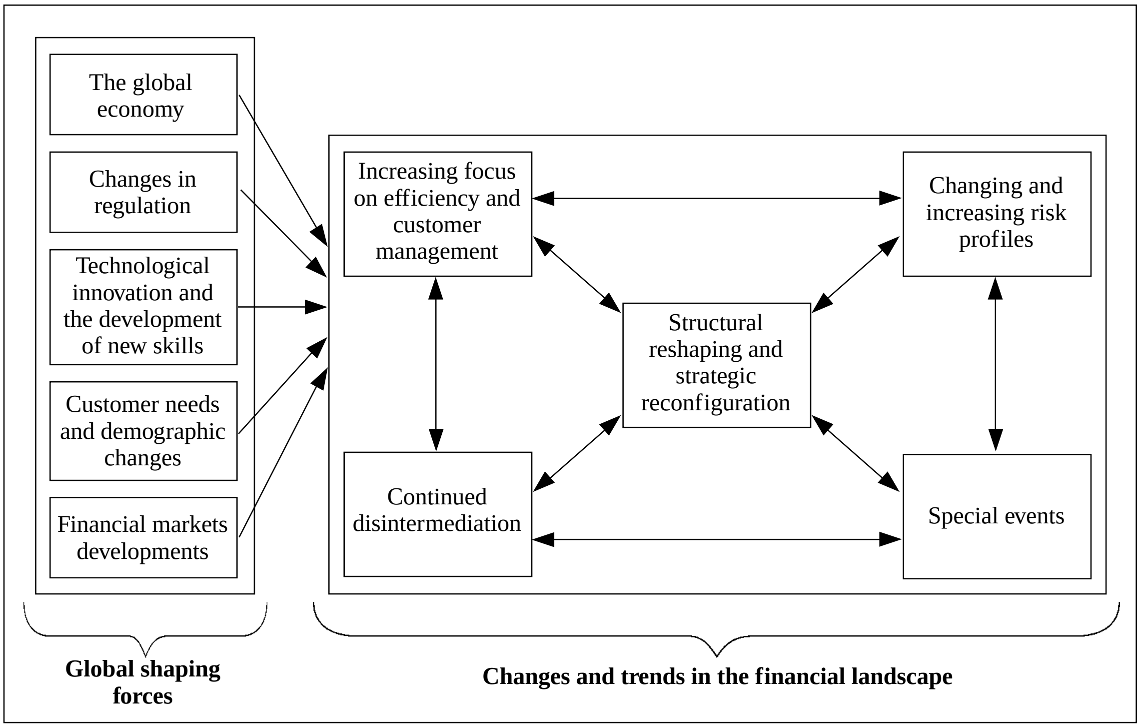
- high levels of capital (and consequently low gearing) and high liquidity levels by international standards; and

- a sharp increase in non-performing loans related to the Asian crisis, although ratios are still relatively low by international standards.

1.3 Global shaping forces

Hong Kong, both as a local banking market with a large representation of global players and as an international financial centre, is subject to changes and developments in the global financial landscape. It is therefore essential to build a thorough understanding of the forces driving change, how market participants will respond to these forces and what changes these responses imply. An overview of shaping forces and trends and their interaction is provided in Chart 1.3.1 below:

Chart 1.3.1 Interaction between global shaping forces and banking trends



Source: KPMG/Barents analysis

1.3.1 The global economy

Economic growth and development over the past two decades has been a key driver of the development of financial services. Increasing cross-border capital flows, exponential growth in international trade, closer linkages among world economies and the creation of regional trading blocks are all forging major changes in how financial players and regulators interact. However, more recently, the Asian crisis and the contagion effect on other emerging markets are having a profound effect on banking.

Over the next three to five years, addressing the Asian crisis (and potentially emerging global economic crisis) will dominate the global economic landscape and will continue to have a profound impact on Hong Kong's banking sector. The most likely scenario is that global economic growth will return over time and Asia will once again lead growth indicators. However, the potential difficulties in the development path of Mainland China, combined with a possible dilution in Hong Kong's role as the dominant Mainland China financial centre, will require careful consideration in assessing how Hong Kong's banking market and broader financial sector will evolve.

1.3.2 Changes in regulation

Deregulation of financial, capital and trade markets has facilitated the development of the global financial markets. Social security and superannuation legislation has significantly altered savings patterns and further fuelled the development of capital markets. Reductions in regulatory barriers have opened banking markets to foreign competition, spurred pricing wars, enabled consolidation and facilitated the emergence of global financial institutions. Changes in regulations have been and will remain a dominant force in driving the evolution of banking and all financial markets.

The Asian crisis is providing contradictory forces in regulatory reform in the region. On the one hand, the crisis is accelerating the pace of reform in the region through changes enforced by multilateral entities as part of overall rescue packages. On the other hand, some governments and some economists are advocating imposition of greater controls to enable troubled markets to address their problems before returning to more open policies. Overall, we expect that market forces will prevail and liberalisation will continue in the medium to long-term. However, the longer the crisis persists and the greater its severity, the greater the risk that protectionism will gain favour and act as a real threat to increased openness.

1.3.3 Technological innovation and the development of new skills

Developments in technology (lower costs, more powerful software, broader and wider access to communications and advances in databases) are major enablers of change in all areas of banking and financial management including:

- the development of new products;
- improvements in the efficiency of operations;
- electronic distribution and delivery of products; and
- improvements in risk management.

The introduction of new skills and specialisations to banking is further facilitating these developments, with statisticians, marketers, sales technicians, decision science experts and other *non-traditional* bankers replacing *traditional* bank officers to drive the pace of change in financial services. The future will see these technological innovations and developments gain pace and continue to drive changes in banking.

1.3.4 *Customer needs and demographic changes*

Customer needs are one of the major forces driving change in financial markets. The key developments influencing customer needs are population growth and ageing, increasing education levels, changing work patterns and increasing consumer wealth. As a consequence of these trends, Hong Kong consumers now rely more on the financial sector and have greater exposure to banks in general (e.g. though the provision of investment and deposit services). Their future well-being is much more dependent on the efficiency and soundness of banks overall. In a broader context, changes in demographics and in consumer needs have and will continue to cause fundamental shifts the way in which consumers interact with banks:

- ***Product and services preferences*** – demand for broader non-traditional financial products and the need for different products through different lifecycle stages is likely to increase. Additionally the need to have access to specialist financial advice is likely to increase, along with the desire for *bundled* financial solutions, to increase overall convenience and improve the ability to manage finances.

- ***Distribution channel preferences*** – demand for greater convenience and lower cost access to banks and other financial services providers is likely to increase.

- ***Brand/supplier relationships*** – the need to access a broader array of products, either through a single provider or multiple institutions, is likely to increase. Similarly, consumers of financial services are increasingly likely to *shop around* for better value and more attractive service or value propositions.

Banks will need to recognise these patterns and respond, or suffer increased attrition and reduced penetration of consumers' business. Regulators also need to recognise these changes and ensure financial providers can efficiently, effectively and safely cater to changing consumer needs.

1.3.5 *Financial markets developments*

Explosive growth in global financial markets, the development of new complex financial products and increasing linkages between countries are forces which are driving fundamental changes in how companies raise capital and manage their risk.[3] Additionally, these forces are also driving the investment vehicles consumers have access to and demand, and are reshaping the traditional role that banks play as intermediaries. As banks continue to drive the development of financial markets through their positions as intermediaries, or through product innovation, the HKMA must ensure that new product, pricing and service initiatives are conducted with a high degree of effectiveness (i.e. meeting both efficiency and safety standards). Likewise, as customers demand access to financial market instruments to address their expanding needs and requirements, the HKMA needs to make sure the banking system is able to respond with the appropriate level of innovation and efficiency and is not constrained by competitive barriers.

These forces interact in complex ways to drive the way in which market participants, customers and regulators interact. For example, Australian banks' retail business has been driven by customers' demands for a broader array of banking and investment products, the development of retirement schemes products and the offerings available from foreign competitors, which participate in the local market. Australian regulators, in response, have created a *super-regulator* to better regulate and supervise the convergence of these product areas.

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3 For example, floating rate debt issues in other countries and currencies, coupled with interest rate swaps to provide fixed rate securities for investors.

1.4 Changes and trends in the financial landscape

The above global shaping forces have and will continue to interact to reshape the future of banking and the broader financial landscape. How these forces will impact the banking environment depends on the reactions of market participants (institutions and major corporates), consumers and regulators. The purpose of this study is ultimately to recommend adjustments to the HKMA's regulatory and supervisory framework so that it can properly accommodate and facilitate changes which will provide positive benefits at an institutional and consumer level, while effectively limiting any risks inherent in these changes.

Developing an appropriate view on the market going forward requires a broader understanding of the scope and nature of changes that are likely to occur over the next five years. Five broad areas of change which are redefining banking have been considered as part of this study.

1.4.1 Structural reshaping and strategic reconfiguration

As market participants seek to exploit opportunities posed by the forces of change and address the resultant challenges, they will recreate their own organisation structures and redefine their business operations (e.g. through acquisitions, alliances, outsourcing arrangements, entering new businesses and exiting others). These strategic moves will continue to reshape financial services as we know it today, namely through:

- the emergence of global players across all business segments;
- continuing consolidation;
- blurring of financial boundaries and traditional business lines;
- entry of non-traditional competitors; and
- outsourcing arrangements and other alliances.

These moves will pose ongoing challenges to regulators and require responses, which facilitate the benefits of industry redefinition, while satisfactorily controlling potential risks.

1.4.2 Increasing focus on efficiency and customer management

Forces of change are re-defining the way in which banks compete. The need to focus much more acutely on costs and customer relationships is already a reality and will continue to become more critical over the next five years. Those banks that fail to develop the required capabilities will ultimately lose shareholder value, be acquired or perish.

As this new reality emerges, banks will rely, to a much greater extent, on technology and more sophisticated management techniques. This in turn will expose banks to greater management complexity as well as increased and more complicated risks.

Consumers will be the ultimate winners as they have greater access to better and more sophisticated value propositions that are priced attractively. The HKMA's challenge is to ensure its regulatory framework can respond and benefit from changes as they occur, while avoiding the potential adverse implications of increasing risk.

1.4.3 *Continued disintermediation*

Forces of change will continue to drive the development of capital markets globally, with particular development in the Asia region, once the crisis subsides. The attractiveness of cheaper financing and access to equity capital will result in corporates continuing to shift from intermediaries to markets for funding. Similarly, the flow of investment will increase from growing pension funds and the shift in savings from property markets to securities, as property values stabilise. Demand for investment vehicles, combined with falling margins, will increase the pace of asset securitisation across Asian markets. Banks, in turn, will need to seek other strategies to replace lost revenue, while regulators must deal with the ebbs and flows of capital from one sector to another.

1.4.4 *Changing and increasing risk profiles*

All of these trends imply that banks will continue to be exposed to new and different types of risk. The refocusing towards efficiency and customer management implies greater and more complex operating risk. The shift from large corporates to consumer, small and medium-sized enterprises implies different, and in some ways, more complex credit risk. Continued globalisation and growing capital markets imply an ever-increasing array of complex derivative instruments and unpredictable volatility patterns. Technology and new skills provide better tools to manage these new risks for those institutions that have access. Regulators must also adopt and enhance their risk-based supervisory policies to provide adequate levels of supervision in this new environment.

While trends in banking are making risk management more complex, developments in technology and the introduction of new skills are providing banks with better management capabilities to address the increasing complexity. Banks need to ensure their risk management capabilities evolve along with (or ahead of) their business strategies. Regulators must also keep ahead of sector developments to properly maintain safety and soundness.

1.4.5 *Special event risks – Asian crisis and Year 2000*

While all of the trends mentioned above will most certainly be part of the evolving financial landscape over the next five years and beyond, the unique nature and pervasive implications of the Asian crisis and Year 2000 require special consideration by market players and regulators. Depending on how the crisis evolves, financial sectors might be exposed to a prolonged period of higher risk and lower growth. The additional risk of Year 2000 requires special attention and a co-ordinated effort from institutions and regulators, across all financial sectors to avoid potential catastrophe.

From a regulatory perspective, there is most certainly a need to increase monitoring and supervisory intensity. Following through (and perhaps enhancing) existing special programmes dealing with the Asian crisis and Year 2000 is also prudent. Regulators (across sectors and across geographies) will also want to continue much more active and frequent communication as these events unfold. Finally, an increase in stress-testing and event modelling will help better understand likely risks and develop appropriate responses.

1.4.6 *Key success factors*

These trends have implications for banks in terms of what they must do well to effectively compete in the changing banking environment. For example, increasing risks require more sophisticated risk management capabilities. These trends also have implications for what Hong Kong must do at a sector-level, to flourish in this environment. For example, effective risk-based supervision capabilities are required to effectively regulate banks in the emerging environment. Key success factors for banks and the banking sector are summarised below (see Table 1.4.1):

Table 1.4.1 Key success factors for banks and the banking sector

Key success factors – banks	Key success factors – sector
➢ Ability to deliver complete product lines ➢ Strong focus on consumer/small businesses ➢ Advanced technology and delivery systems ➢ Sophisticated risk management capability ➢ Efficient operations/systems ➢ Strong brand differentiation ➢ Robust human resource management	➢ Sustainable source of banking business ➢ Well-developed financial infrastructure ➢ Conducive regulatory environment ➢ Sound supervisory process ➢ Transparency of the banking sector ➢ Free and open markets ➢ Level playing field ➢ Well-developed capital market ➢ Well-developed legal infrastructure ➢ High-level of corporate governance ➢ Educated and productive workforce ➢ Manageable cost of living ➢ Low levels of corruption ➢ Efficient transport/telecommunications ➢ Robust physical infrastructure

Source: KPMG/Barents analysis

1.5 Bank assessment – key success factors

Based on the assessment of each of the key success factors discussed above, we have provided a high-level comparison between local Hong Kong banks and banks in the US, the UK, Australia and Singapore (see Table 1.5.1). Hong Kong banks have been separated into two groups for this purpose:

- larger banks; and
- smaller/medium sized Hong Kong banks.

Table 1.5.1 Bank key success factor performance comparison

Key success factors – banks	Larger Hong Kong banks	Smaller Hong Kong banks	United States	United Kingdom	Australia	Singapore
Complete product lines	●	◑	●	●	●	◕
Strong focus on consumer/ small businesses	◕	◑	●	◕	◕	◕
Advanced technology and delivery systems	◕	◑	●	◕	◕	◕
Sophisticated risk management capability	◕	◔	●	◕	◕	◑
Efficient operations/ systems	◕	◑	◕	◕	◑	◑
Strong brand differentiation	◕	◔	◕	◕	◕	◑
Robust human resource management	◕	◔	◕	◕	◕	◑

Source: KPMG/Barents analysis, interviews ● = Favourable ○ = Unfavourable

Overall, the larger Hong Kong banks compare favourably with other countries, while there is scope for improvement in the performance of smaller banks:

- ***Risk management capabilities*** – while many appear to be focusing on developing better market risk management, there will also be a need to upgrade credit and operating risk management skills to address the increased risk associated with the Asian crisis and to compete more effectively in the market.
- ***Brand differentiation*** – while not critical in the past, as competition intensifies, better marketing and brand development will become more critical to retaining customers and selling a more advanced and diverse product range.
- ***Human resource management*** – better skills are more and more critical to success in a more complex banking environment.

As the local banking market is subject to more global competitive pressures, other capability issues will become more notable with the smaller banks. For example, as global and larger regional players consolidate their operations for the Asia region, local banks will be subject to an increasing *scale disadvantage*. In addition, as new technology developments are deployed in the market place, local banks will have an increasingly difficult time maintaining parity. The competitive pressures may oblige local banks to pursue one of two strategies in the longer term:

- merge and become larger (either with other local banks or with international banks); or
- focus more narrowly on one activity or a smaller segment in the market (e.g. target becoming the leader in development of internet banking or focus on consumer finance).

1.6 Sector assessment – key success factors

The Hong Kong banking sector has developed to become one of world's major banking centres, while the HSBC Group has become one of the largest and most profitable banking groups in the world. At the same time, rapid economic growth and protection of the domestic sector has resulted in there continuing to be a large number of small banks. Although the advent of the Asian crisis, and the resulting period of volatility, have combined to halt the trend of increasing profits, due largely to increasing bad debts and stagnant growth, the sector nevertheless currently remains profitable and well capitalised by world standards. However, the impact of the economic situation has yet to be felt in all areas, and as increasing levels of unemployment and corporate liquidations occur, there will be stress placed on the sector.

The supporting banking sector infrastructure (including legal, technological, physical, regulatory and human resources) compares favourably by all measures with other countries that were benchmarked. Compared to other Asian centres, Hong Kong appears to be more attractive, except possibly in terms of the cost of living factor. An overall summary of Hong Kong, in terms of the sector-level key success, is provided below (see Table 1.6.1):

Table 1.6.1 Sector-level key success performance comparison

Key success factors – sector	Hong Kong	United States	United Kingdom	The Netherlands	Australia	Singapore	Malaysia
Sustainable source of banking business	◑	●	●	◑	◑	◑	◔
Well-developed financial infrastructure	◕	●	●	●	●	◕	◑
Conducive regulatory environment	◕	◕	◕	●	◕	◕	◑
Sound supervisory process	◕	●	●	●	◕	◑	◔
Transparency of the banking sector	◑	◕	◕	◕	◑	◔	◔
Free and open markets	◕	●	●	●	●	◕	○
Level playing field	◕	◕	●	◑	◑	◔	◔
Well-developed capital market	◑	●	●	●	◕	◑	◑
Well-developed legal infrastructure	●	●	●	●	●	●	◑
High level of corporate governance	◕	●	●	●	●	●	◑
Educated and productive workforce	●	●	●	●	●	●	◕
Manageable cost of living	◔	◕	◑	◑	●	◑	◑
Low levels of corruption	●	●	●	●	◕	●	◕
Efficient transport/ telecommunications	●	●	●	●	●	●	●
Robust physical infrastructure	●	●	●	●	●	●	●

Source: KPMG/Barents analysis, interviews ● = Favourable ○ = Unfavourable

Although Hong Kong is attractive overall, there are certain specific areas of weakness (e.g. the lack of depth in the capital markets, which will require time to further develop). While the existing banking regulations, by and large encourage a stable environment for banks to operate in a competitive manner, there are exceptions to this which impact banks' ability to compete on a level playing field.

Going forward, one of the most important key success factors that will determine the attractiveness of Hong Kong as an international financial centre, is a sustainable source of banking business for participants in the market. There appear to be limited opportunities for lending growth in the domestic market in the near future. The growth of corporate loans is showing a long-term decline and the principal area where domestic growth may come from is increased property loans, which are already the largest concentration of loans in most banks portfolios. In addition, disintermediation and competition from non-bank financial institutions ("NBFIs") will place more pressure on banks in terms of business growth.

The emergence of Mainland China as a global economic power and the increasing integration of Hong Kong and Mainland China represent long-term opportunities for banks in Hong Kong. As a consequence, the focus of banking in Hong Kong is shifting more towards a geopolitical centre for southern China, although Hong Kong still retains all the necessary qualifications as a pre-eminent regional financial centre.

The huge market potential in Mainland China, and the consequent attractiveness of Hong Kong is, however, qualified by the uncertainty over the speed that this market will develop. Hong Kong banks do not have access to special regulatory privileges, despite geographic proximity. Nevertheless, with increasing economic integration the banking sector is well poised to benefit from this trend. However, it should be noted that whilst the sector in general should benefit from this trend, the main beneficiaries are expected to be larger international banks which possess the necessary key success factors (e.g. strong brand names and risk management skills) to compete effectively in a developing market.

There remains significant potential in the retail market for fee-based products and services. In particular, introduction of the Mandatory Provident Fund ("MPF") should boost the demand for financial services locally, and banks in Hong Kong are positioning themselves to take advantage of this development.

In terms of non-banking related sector-level success factors (e.g. good legal system or physical infrastructure), Hong Kong appears to be on a par with most developed centres in the world. In this regard, Hong Kong should maintain an edge over competition from Mainland China cities such as Shanghai, until they develop the necessary underlying financial and economic infrastructure.

1.7 Strategic outlook for Hong Kong banking

The strategic review of Hong Kong's banking sector and the major forces which are evolving the broader global financial landscape provide a compelling back-drop for considering changes to HKMA's supervisory and regulatory framework. Hong Kong is fortunate in that its banking sector and overall supervisory/regulatory setting provide a solid foundation from which to evolve and respond to future opportunities and challenges. Nevertheless, history highlights the importance of progressing from a position of strength rather than waiting for a more profound crisis to force evolution.

The strategic assessment of Hong Kong's banking sector highlights many of the sector's positive features, which account for its solid performance and good standing within the regional and the broader global financial environment:

- Strong regulatory and supervisory setting characterised by independence, open free market orientation, sound prudential framework (reflecting BIS principles) and progressive supervisory framework.

- Within this setting, the banking sector has maintained high safety and soundness standards, delivered impressive financial performance and compares favourably to international standards (particularly in efficiency and loan loss levels).

- However, the recent Asian crisis has resulted in some emerging problems, specifically increasing problem loans and a high-level of interest rate and liquidity volatility.

The sector's features also contribute to several unique characteristics, particularly when compared to other banking sectors globally:

- relatively high market share concentration in three banking groups;

- a large number of small independent institutions;

- significant foreign bank participation in the local retail banking market;

- high concentration of lending in residential housing and property related finance;

- several remaining barriers to full open competition (i.e. the remaining IRRs, the one-building condition and non-disclosure of financial information for foreign banks with local branches); and

- international trade and capital flows that are highly dependent on Mainland China.

While these characteristics have not impaired development in the past, and in fact may have contributed to some of the more positive features of Hong Kong's financial environment, their likely influence on future development needs to be carefully assessed.

As trends in banking evolve, banks and the financial sector will be exposed to a number of positive developments and major opportunities associated with a more competitive and dynamic environment. For example, the increased competitiveness will induce more efficient behaviour and force all participants to *improve their game*. This in turn will result in continued acceleration of product and delivery channel innovations, which will provide corporates and consumers with more effective and efficient service propositions for meeting their financial requirements. A more integrated market place overall (across both sectors and geographies) will work to minimise inefficiencies and distortions which, overtime, should improve pricing mechanisms and reduce volatility levels.

At the same time, these trends will introduce a number of new challenges and increase overall complexity and the level of risk banks and the sector will be exposed to. For example, greater competition (from both new global and existing Hong Kong players) will put pressure on a number of banks to upgrade their capabilities. Increased competition and lower margins could also induce new pricing structures, characterised by more prevalent transaction pricing, which could cause initial mis-pricing and adverse public sentiment as the market adjusts. In addition, the increased level of risk associated with many of the trends will expose banks with weak risk management capabilities to losses. The potential for a prolonged Asian crisis and severe Year 2000-related problems perhaps represents the most significant challenge, particularly over the next three years.

Against this back drop, Hong Kong banks, and the sector overall, have a number of strengths which should enable them to exploit many of the opportunities while addressing the challenges. However, Hong Kong banks and the sector also have a number of weaknesses (some stemming from its unique characteristics mentioned above) which could impede their ability to exploit the benefits of changes while exposing them to problems associated with the challenges. Strengths and weaknesses at an institution and sector level are summarised below in Table 1.7.1 below:

Table 1.7.1 Strengths and weaknesses of Hong Kong banks and the Hong Kong banking sector

BANKS	SECTOR
Strengths	**Strengths**
➢ Several world-class competitors with a major local presence, which provide access to leading trends and developments, and have world-class capabilities in most areas critical to surviving and thriving in the emerging environment. ➢ Hong Kong banks overall are extremely efficient, are well-capitalised and are entering the Asian crisis with high quality credit portfolios. ➢ The majority of the local banks are planning initiatives to improve their technology, product delivery channels, risk and general management capabilities.	➢ Strong, independent bank regulation and supervision. ➢ Well developed underlying financial infrastructure. ➢ Modern and effective legal system. ➢ Educated and productive labour force. ➢ Presence of strong domestic and international banks. ➢ Leading regional financial centre, which has attracted several world-class institutions. ➢ High degree of transparency for local banks, including reliable loan loss reporting. ➢ Positive recent developments, namely Mandatory Provident Fund, CMU settlement and the discount window.
Weaknesses	**Weaknesses**
➢ Need for some banks to upgrade market, credit and operating risk management capabilities. ➢ High concentration of risk assets in property-related activities. ➢ Need to improve cash flow lending capabilities at some banks. ➢ Need to upgrade technology capabilities in a number of banks to achieve product and delivery channel innovation. ➢ Need to upgrade management information and profitability systems in a number of banks. ➢ Certain skill and capability gaps among middle management in a number of banks.	➢ Lack of depth and liquidity to the capital markets. ➢ Certain barriers to free and open competition, namely remaining interest rate rules and the one-building condition. ➢ Lack of full disclosure of competitive and market information. ➢ Future growth opportunities in traditional Hong Kong banking markets. ➢ A large number of smaller institutions which participate on a small scale in the financial sector but require full supervision. ➢ Potential for regulatory gaps as financial boundaries are blurred and non banks enter the market. ➢ Recent increase in interest rate and deposit market volatility and international uncertainty over the HK$/US$ peg.

Source: KPMG/Barents analysis

These strengths and weaknesses, in the broader context of a rapidly changing global financial landscape, must be carefully weighed in considering improvements to the HKMA's regulatory and supervisory framework. More specifically, the HKMA should consider evolving its regulatory and supervisory frameworks to improve the banking sector's ability to adapt to the new emerging environment and incorporate the positive elements of change, while mitigating and effectively managing the risks implied by the challenges. Overall, the strategic assessment of the banking sector and the changing financial landscape suggest four major mandates that need to be considered in improving the HKMA's regulatory and supervisory framework. These mandates, and their associated regulatory and supervisory considerations, are summarised below (see Table 1.7.2):

Table 1.7.2 Strategic mandates to improve the HKMA's regulatory and supervisory framework

Strategic mandates	Regulatory and supervisory considerations
➢ ***Regulatory and supervisory framework*** – to ensure that the regulatory and supervisory framework for Hong Kong remains appropriate, given the evolving financial markets.	➢ Potential regulatory and supervisory gaps created by blurring of traditional boundaries. ➢ Need for increased supervisory co-operation and harmonisation across functional areas. ➢ Reaction to the introduction of a broad array of new products and delivery channels. ➢ Increasing linkage between Hong Kong and other Asian banking, financial and capital markets.
➢ ***Development of the financial system*** – to improve the competitive environment to ensure the positive benefits of global and local trends develop in the Hong Kong market, and Hong Kong remains an attractive international financial centre.	➢ Rationale for removing barriers to free and open competition (e.g. market entry criteria and the one-building condition). ➢ Potential implications of more open competition on smaller local market participants (e.g. removal of the remaining IRRs). ➢ Need to address/react to merger activity. ➢ Increasing economic integration with Mainland China. ➢ Ability of local banks to access Mainland China. ➢ Maintaining relative competitiveness with other financial centres for Mainland China (vs. e.g. Shanghai) and regional processing and/or headquarters (vs. e.g. Singapore).
➢ ***Safety and stability of the banking system*** – to ensure increasing levels of risk associated with global and local trends are prudently managed and that Hong Kong's exposure to systemic risk is mitigated.	➢ Adequacy and effectiveness of the HKMA's risk-based approach to supervision. ➢ Adequacy and effectiveness of safety nets in Hong Kong (e.g. depositor protection and lender of last resort). ➢ Response to likely increase in remote processing and outsourcing arrangements. ➢ Capital requirements of local banks. ➢ Potential increased exposure to property market.
➢ ***Efficiency and integrity of the financial system*** – to increase the level of transparency, both within the banking sector and across financial and capital markets, to allow the forces of market discipline to work more effectively.	➢ Emerging need for higher standards of sector-level disclosure to support capital markets, through improved transparency at the sector level. ➢ Emerging need for higher standards of institution-level disclosure, to improve operation of the market discipline mechanism and reduce the likelihood of rumour-driven runs.

Source: KPMG/Barents analysis

1.8 Banking regulatory review – key findings and recommendations

1.8.1 Introduction

Through the strategic review and the assessment of the Hong Kong banking sector we identified certain specific issues, which needed more in depth study and analysis. These issues all relate to areas where we consider that the sector as a whole (not individual banks) is affected and where we suggest the HKMA develop a mandate to improve overall banking sector regulation. Issues include the remaining barriers to free and open competition (i.e. the three-tier system, the one-building condition and certain market entry criteria), standards of financial disclosure, depositor protection, the role of the HKMA as lender of last resort and the remaining interest rate rules.

Key conclusions and recommendations regarding each regulatory issue are summarised below. However, the individual recommendations should not be viewed in isolation as they are interrelated. The impact of implementing all recommendations would represent a considerable development to the current banking environment, in terms of both structure and regulation.

1.8.2 Three-tier system

A tiered approach to bank licensing is necessary in Hong Kong because all banks are allowed full access to the retail market. A tiered system can distinguish between banks that are qualified to accept small deposits and institutions that should be restricted to other types of deposits for prudential reasons.

In the past, the three-tier system has provided the HKMA with a means of segmenting the market and providing licensing discretion in support of safe and stable banking. Despite this, there are problems associated with the current approach. It is a complex system and there is a significant duplication of licenses within banking groups. Additionally, the structure of access to small deposits is not in line with the minimum capital requirements for locally incorporated authorized institutions.

Going forward, the need to distinguish RLBs from DTCs no longer appears necessary in view of market developments (e.g. the blurring of financial markets, consolidation trends in other markets and the fact that the market share of independent RLBs and DTCs has declined to less than 2%).

Recommendations

Simplifying the three-tier system to address these issues appears to be a logical way forward for Hong Kong as an international financial centre. We also consider that the policy objective of protecting depositors, and therefore the general stability of the sector, can be achieved more efficiently through a simplified structure. Accordingly, we recommend that the HKMA consider converting the licensing system to a two-tier system, an example of which is outlined below (see Table 1.8.1):

Table 1.8.1 Recommended two-tier system

	Banks	Restricted licence banks
Limitation on deposit size	No restrictions	No small deposits allowed
Current & savings accounts	No restrictions	Not allowed

Source: KPMG/Barents analysis

The essential distinctions between the two-tiers are the ability to conduct banking business (i.e. offer current and savings accounts) and access to smaller deposits.

This tiered system would provide a framework that allows both a flexible means of entry to the banking market for new overseas participants, while, at the same time, providing a means of protection for small depositors. The key issue with the proposed two-tier approach is the definition of *small deposits*, as this affects the depositor protection aspects of the system. There are essentially two main options which can be considered in defining small deposits:

- an amount based on a study of the current deposit market (i.e. the distribution of accounts), which could be adjusted for inflation on a periodic basis; or

- a fixed amount of HK$500,000 (i.e. the current distinction between the deposits that banks and RLBs can accept).

Access to the RTGS system

A related issue raised by a number of institutions is the means used to determine access to the RTGS system. At present, only fully licensed banks are allowed to participate in the RTGS system. This matches the distinction between fully licensed banks and other authorized institutions in terms of banks' ability to operate current accounts, a de facto requirement of which is access to clearing and payment systems.

However, in the emerging market, where institutions are increasingly involved in securities transactions, restricting RLBs' access may place them at a competitive disadvantage, given the significant amount of interbank transactions they would conduct as part of this business (i.e. they would have to pay transaction fees to clearing banks for their settlement functions). Certain RLBs' business requirements can, in fact, exceed those of some smaller banks in this regard.

We have found no other reasons (theoretical or otherwise) that require access to RTGS to be set based solely on an institution's licensing status. It may therefore be appropriate that this issue be reviewed in conjunction with a change towards a two-tier structure, and a more appropriate means of defining access considered.

1.8.3 The one-building condition

The one-building condition perpetuates an uneven playing field for banks in Hong Kong and places restrictions on banks' ability to effectively and efficiently carry out their operations. The concept of restricting certain foreign banks to a fixed number of buildings is inconsistent with a desire for open markets, especially when some foreign banks (37 out of 144) are able to have branch networks and others are not.

The role of branches in banking is also going through a period of rapid change, largely due to the development of new technologies. For example, many customer transactions, that were previously performed in branches, can be performed using electronic delivery channels. Although branches will still be required in the future, their relevance to certain types of transactions may decrease. All banks will therefore need to reassess the use for their branch networks and the cost effectiveness of maintaining them.

From a market entry perspective, the development of new delivery channels is also likely to lower the barrier to entry that established branch networks represent.

Recommendations

The one-building condition no longer appears to be appropriate to Hong Kong and acts as a barrier to competition. At the same time, there is a risk that its removal could result in an increased level of competition, which could be detrimental to banking sector stability. Ultimately, we recommend that it should be removed completely to provide a level playing field for all participants, and to allow banks to determine their level of investment in a branch network versus other product delivery channels.

In order to minimise the risk of systemic instability, the HKMA should consider phasing in the relaxation of this policy to allow foreign branch banks (and foreign branch RLBs) to operate no more than three branches[4] for a set period, with further relaxation of the policy subject to a review at that time.

1.8.4 Market entry criteria

The focus of this study, in reviewing authorization criteria, has been to assess whether the ease and form of market entry for potential market participants is appropriate. In this context, five types of market entry criteria for authorized institutions have been considered (see Table 1.8.2):

Table 1.8.2 Entry criteria for authorized institutions

	Locally incorporated banks	**Foreign bank branches**	**RLBs**	**DTCs**
Size criteria	Total assets > HK$4b Total deposits > HK$3b	Total assets > US$16b	No size criteria	
Capital requirement	HK$150m	No branch capital required	HK$100m (for locally incorporated RLBs) No branch capital required (for foreign incorporated RLBs)	HK$25m
Association with Hong Kong	Must in the opinion of the HKMA be closely associated with Hong Kong	Not applicable	Not applicable	Not applicable
Time period	Must have been an RLB or DTC for 10 years	Required to have maintained a local representative office for 1-2 years	No specified time for a locally incorporated institution In practice foreign banks should have maintained an LRO for 1-2 years.	
Ownership	For all authorized institutions the HKMA must be satisfied as to the fitness and propriety of controllers of these institutions. The HKMA policy is that a person who intends to hold more than 50% of the share capital of an authorized institution incorporated in Hong Kong should be a well-established bank or other supervised financial institution in good standing in the financial community and with appropriate experience.			

Source: HKMA

4 If all foreign branch banks and RLBs subject to the existing one-building condition were to open 2 new branches, this would increase the number of branches in Hong Kong by approximately 13%.

Recommendations

Assets size criteria for foreign banks

Hong Kong has opted for a minimum assets size requirement of US$16 billion for the *whole banking group* for foreign banks, effectively blocking full participation in the banking sector by smaller foreign banks, even if they are comparatively well capitalised. The primary benefits of this approach have been that it has still allowed access by major international banks, which have contributed significantly to Hong Kong's status as an international financial centre. It is also a transparent measure that foreign financial institutions must meet in order to enter the Hong Kong market as banks.

The presumption that large balance sheets are automatically equated with sound and prudently managed institutions is sometimes wrong. However, there are other authorization criteria that can appropriately address this issue.

We consider that the assets size criterion for foreign branches should be maintained. This criterion does not appear to have deterred any market entrants and provides a means for the HKMA to filter out smaller applicants who may not require a full banking licence but which, at the same time, have a means of entry as RLBs or DTCs.

Capital requirements for locally incorporated banks

Locally incorporated institutions' minimum capital requirements have not been updated since 1989. During this period, cumulative inflation has been approximately 95%. It would therefore be appropriate to reconsider the level of minimum capital for local authorized institutions. In addition, the capital requirement for locally incorporated banks appears to be out of line with the minimum asset requirement. For example, the capital to asset ratio of most local banks indicates that, in practice, a new local bank would need to have substantially higher initial capital in order to meet minimum asset size criteria (due to CAR requirements).

We therefore recommend that the HKMA consider increasing the minimum capital requirements to take into account inflation, and to bring into line the minimum capital and minimum assets criteria for locally incorporated banks. Based on inflationary effects alone, the amount of minimum capital should be approximately HK$300 million. We also recommend that the minimum capital requirements for RLBs and DTCs be reviewed at the same time (but in the context of any moves to simplify the three-tier system).

Foreign branch capital

Foreign branch capital (or an equivalent) is required by a number of countries for several reasons. However, in the context of Hong Kong, the need for a form of branch capital would appear to relate principally to the need to strengthen depositor protection. In the context of the current liquidation laws, imposing a branch capital requirement would not significantly improve the current depositor protection scheme. Additionally, it is likely that such a requirement would reduce the attractiveness of Hong Kong as an international financial centre. Further, the absence of a foreign branch capital requirement would not be unique to Hong Kong, as there are a considerable number of countries in the same situation (e.g. most European countries have no branch capital requirements). Therefore, we do not see any need for the current situation to be changed.

Time period and association with Hong Kong

These criteria appear over burdensome and unnecessarily restrictive in determining the qualifications of new market entrants (such as any RLB or DTC) wishing to fully participate in the market. This has the effect of reducing the level of competition.

We recommend that the HKMA consider reducing the time period to three years, which should be sufficient for institutions to gain a clear understanding of the local market and for the HKMA to assess management skills and systems to operate in the local banking sector.

The requirement to be closely associated with Hong Kong no longer appears to be relevant in view of globalisation trends, the fact that the local banking sector is already well established and is inconsistent with the ability of a foreign bank to purchase a local bank. Therefore we recommend that the HKMA considers relaxing this criterion.

Relaxing the one-building condition, in itself, would provide more flexibility to new and existing foreign participants. Therefore, the timing of any change to these criteria should be reviewed only after the impact of relaxing the one-building condition has been fully ascertained.

Ownership

As regards the ownership criterion (i.e. the fitness and propriety of controllers and majority ownership by a bank or financial institution), we consider that this acts as a very strong control over bank ownership and helps ensure that bank owners are *fit and proper*. Since non-banks are able to enter the market through joint ventures and as minority shareholders, we do not see any need for this situation to be changed.

1.8.5 Financial disclosure

Efforts made to date to improve banks' financial disclosure have been led by the HKMA, working closely with the banking industry and the accounting profession. The results of this initiative are embodied in the *Best Practice Guide on Financial Disclosure by Authorized Institutions*, with which all non-exempt authorized institutions incorporated in Hong Kong are expected to comply.

Foreign branch banks in Hong Kong, on the other hand, are not required to publish any information on their activities in Hong Kong, although they are required to have available in their branches a copy of their parent bank's accounts. These accounts are prepared and published in accordance with accounting and regulatory standards of their home countries, which may vary considerably. This lack of financial disclosure is not commensurate with the substantial market share of foreign banks and limits the effectiveness of the market discipline mechanism in the sector.

This issue is also important from a level playing field aspect. Foreign banks, competing in the same market as local banks, have much more information available to them concerning the activities of their competitors, than is the case for local banks.

Recommendations

The HKMA has issued a consultation paper to require limited financial disclosure by foreign bank branches. We view this as an important step forward in closing the transparency gap that presently exists. The HKMA should also continue its work on reviewing and updating the disclosure requirements of all authorized institutions, to ensure that they are in line with international and local market developments. In addition, it would be appropriate for the HKMA to take an active role in promoting understanding among the general public of disclosed financial information.

1.8.6 Depositor protection

Consumer protection may either be in the form of an implicit or explicit protection scheme. Explicit protection schemes are formalised with rules set out in advance on the nature and extent of protection, timing, funding and other relevant details (e.g. deposit insurance schemes). Implicit protection is generally provided at the discretion of the government and is generally more ad hoc, although there is usually an *understanding* that the government will step in to bail-out depositors and other creditors of a failed institution.

In Hong Kong, the government has taken over insolvent banks on a number of occasions, which can be construed as providing implicit protection. However, following the take-over of Overseas Trust Bank in 1986, the government clearly stated that such intervention should not be taken for granted. Therefore, implicit protection is not assured and, in the case of BCC HK Limited, the Hong Kong government did not step in to rescue the bank and it was placed in liquidation. By providing protection to individual banks in this manner, the government is exposed to criticism of discrimination or unfairness.

Explicit consumer protection can also entail certain side effects, which can have quite pronounced social costs (e.g. increased moral hazard[5], adverse selection[6] and costs that may outweigh the benefits). The principal benefit of explicit consumer protection is that consumers are assured of a measure of compensation in the event of a non-systemic failure of any bank. Additionally, it can raise consumer confidence which enhances the general stability of the banking sector.

Explicit depositor protection exists in Hong Kong in the form of the priority payment scheme in the case of a bank failure[7]. However, full recovery of customers' deposits, even up to HK$100,000, is not necessarily guaranteed as this requires sufficient assets to be available at the time of liquidation. This scheme is intended to provide a degree of consumer protection as small depositors are able to gain priority over other creditors in their claim over the assets of a failed bank. As the scheme does not provide for immediate pay-out to depositors, its ability to mitigate the risk of bank runs and the possibility of systemic risk is limited.

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[5] Moral hazard is when bank management are incented to take greater risks if depositors are protected.

[6] Adverse selection is when depositors are incented to take greater risks as they can achieve higher returns without any additional risk.

[7] Under the Companies Ordinance, in the event of a bank liquidation, depositors are entitled to receive priority for their deposits up to a maximum of HK$100,000. This scheme was introduced in 1995, following the liquidation of BCC HK Ltd, to cover the deposits of small depositors in banks. The scheme is applicable to both local banks as well as foreign branch banks but does not cover the deposits of DTCs or RLBs.

In the past, depositors have not lost their savings due principally to the government's willingness to intervene[8]. As the deposit base of banks grow, the cost of implicit protection, and consequently the burden on the government, will only increase in the future. Even in the event of a failure of a small bank, the sums involved are likely to be substantial, running into billions of Hong Kong dollars. Coupled with the fact that the existing explicit scheme does not appear to have sufficiently raised the *crisis of confidence* threshold to avoid bank runs, there is a strong case for enhancements to be made. A scheme developed to remove the implicit protection provided by the government and designed to increase the *crisis of confidence* threshold would appear to be a logical step forward.

Recently, the G22 Working Party on Strengthening Financial Systems has recommended that each country put in place explicit depositor protection arrangements, with a clear specification of the nature of protection provided and the means for defraying the costs. The Working Party is also encouraging the Basle Committee on Banking Supervision to develop guidelines for deposit insurance, with particular emphasis on measures to reduce moral hazard. They also note that there are alternative forms of depositor protection schemes (apart from deposit insurance) which may be considered.

A funded deposit insurance scheme is an option that has been taken up by the majority of developed financial centres and there is a clear trend towards this form of depositor protection. Therefore, the possibility of some form of deposit insurance in Hong Kong should not be ruled out.

One alternative to deposit insurance would be to enhance the existing priority payment scheme by introducing a mechanism whereby depositors would be able to get immediate pay-out for part of their deposits (up to a set amount), rather than having to wait for the full process of liquidation[9]. The principal drawback of this scheme is that the funding required to achieve immediate pay-out would probably need to come from the government. The government might have to be prepared to take on the priority claims and, with it, the liquidation risk. Requiring all banks to keep a certain percentage of their priority claims deposits under an asset maintenance arrangement (e.g. all banks would keep a reserve with the HKMA of Exchange fund bills) could provide a source of funds for such a pay-out and mitigate the risk of loss to the government. Additionally, the immediate pay-out for depositors could be limited to a proportion of their priority deposits. The remainder of their priority deposits would still be covered as priority creditors. In this way, the government and the depositors both share the burden of liquidation risk.

Recommendations

We consider that an enhanced form of explicit depositor protection, with the aim of improving consumer confidence and thus the general stability of the sector, would be beneficial in Hong Kong, and would bring Hong Kong into line with international practices. However, before any such scheme can be implemented, it would have to first address the concerns (e.g. moral hazard and cross-subsidisation) of all participants involved. Therefore, we recommend that the HKMA (in conjunction with the government) consider the alternatives available (e.g. either deposit insurance or enhancing the priority claims scheme), by way of a more detailed study on the various forms of explicit depositor protection.

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8 Although as previously noted the government did not intervene in the case of BCC HK Limited, depositors eventually received a dividend of 100% in the liquidation.

9 There would have to be some form of indemnity or guarantee provided to the liquidator by the government in the event of payments wrongly made. The rights of other preferential creditors in a liquidation, including the expenses and remuneration of the liquidator as determined under the Companies Ordinance, would also have to be considered.

In addition, the effectiveness of the current scheme in relation to foreign banks is uncertain as, in practice, in the liquidation of a foreign branch bank in Hong Kong, the liquidator would only be able to apply assets based in Hong Kong to pay-out the priority claims depositors. Therefore, the HKMA should review whether it would be feasible to set an asset maintenance requirement for foreign branch banks, to improve the effectiveness of the existing priority payment scheme as a measure of depositor protection. Such a requirement is likely to be in the form of a set amount of assets to be held in Hong Kong, sufficient to meet priority claims under the Companies Ordinance.

1.8.7 Lender of last resort

The official lender of last resort in Hong Kong is the HKMA. The means available for this purpose are provided by the Exchange Fund[10], which the HKMA manages on behalf of the Financial Secretary. The HKMA has general discretion on whether to provide any assistance as the lender of last resort. However, some broad principles have been set out concerning the circumstances in which the HKMA may provide such assistance[11]. These are:

- whether the failure of the individual bank would, either by itself or through the creation of a domino effect, damage the stability of the exchange rate or the monetary or financial systems;

- the assistance of the lender of last resort would only be provided after the bank has exhausted its own liquidity resources and commercial sources of finance; and

- the liquidity support is only provided to institutions which are solvent and then only on the basis of security and at rates which are commercial, if not penal.

Although the HKMA has articulated its position regarding the role of lender of last resort, there is no official policy document setting this out. Additionally, there is still a substantial level of uncertainty in the market in this respect. There is a large number of participants in the sector who are either unaware that there is actually a lender of last resort, or are unclear as to the conditions under which the HKMA would provide this assistance.

Recommendations

In view of the market uncertainty concerning the role of lender of last resort, we consider that it would be appropriate for the HKMA to take steps to reassess and clarify its role in this regard. It would be appropriate for the HKMA to formalise its policy in this area and to explain this policy, especially to market participants.

10 Following the Exchange Fund (Amendment) Ordinance 1992, which provided for the establishment of the HKMA, it is now clear that the Exchange Fund can also be used to maintain the stability and integrity of the monetary and financial systems of Hong Kong, except where that would conflict with the primary purpose of maintaining exchange rate stability.

11 HKMA Quarterly Bulletin April 1994.

1.8.8 *Interest rate rules*

The Consumer Council in its report *Are Hong Kong Depositors Fairly Treated?*[12] recommended that the interest rate caps on time, savings and demand deposits be removed. The HKMA's response to this report was as follows:

> "*We endorse the principle that there should be more competition in retail interest rates as it would encourage product innovation and greater efficiency. This is also in line with our conviction about the free market philosophy and the practice of it. What is equally important is the need to strike the right balance between two different, although not mutually exclusive objectives, i.e. to encourage more competition vis-à-vis the need to maintain stability in the monetary and banking systems.*"

Following this, partial deregulation of the IRRs took place in two phases:

- ***Phase 1 (1 October 1994)*** – removal of the interest rate cap on time deposits fixed for more than 1-month; and

- ***Phase 2 (3 January 1995)*** – removal of the interest rate cap on deposits fixed for more than 7-days up to 1-month.

It was intended to relax further the remaining interest rate caps on short-term time deposits, and 7-day time deposits were deregulated in November 1995.

Although the Consumer Council also proposed to release the interest rate cap on current and savings accounts, it was decided that these rules should continue for the time being. The HKMA's comments in this regard were as follows:

> "*The additional steps proposed by the Consumer Council in respect of demand and savings deposits could have much more serious consequences because of the size of these deposits. Before deciding to proceed with these measures, it would be necessary to review carefully the impact of the removal of the interest rate cap on time deposits. It is therefore premature to make a commitment to any further changes in the IRR.*"

The effect of partial deregulation on consumer choice is summarised by the following table (see Table 1.8.3):

Table 1.8.3 Effect of deregulation on HK$ deposits accepted by banks

HK$500,000 or more		**Non-regulated**				
Up to HK$499,999	**IRRs regulated deposits**			**Phase 2**	**Phase 1**	
	Current accounts	Savings accounts	Up to 6-days	7-days up to 1-month	1-month up to 15-months	Over 15-months

Note: Consumers could always place deposits of HK$100,000 or more with DTCs for any maturity of 3-months or more at competitive interest rates, since DTCs are not subject to the IRRs.

Source: KPMG/Barents analysis

[12] A summary and conclusion prepared by the Consumer Council Steering Group on Financial Services based on the consultants report "An Evaluation of the Banking Policies and Practices in Hong Kong – focusing on their impacts on consumers", 28 February 1994.

Since partial deregulation, the HKMA has been monitoring the impact that this deregulation has had on the market, through a survey of the 40 authorized institutions which accept the majority of HK$ deposits. We have reviewed the findings from this survey and updated them up to June 1998. The impact of deregulation on four major areas, in particular, has been considered. These are the underlying growth of different types of deposit, the volatility of the deposit base[13], the volatility of interest rates and the overall impact that deregulation has had on bank profitability. Our conclusions in each of these areas for the 40 institutions are as follows:

- ***Deposit growth*** – deregulated time deposits have continued to grow at a far more rapid pace than the underlying growth rates of the deposit base. At the same time, the rate of growth of IRRs regulated deposits has been very low. These deposits at present account for HK$387 billion (approximately 27% of total HK$ deposits), compared to HK$372 billion (42% of total HK$ deposits) in September 1994.

- ***Deposit volatility*** – deregulation has had an impact on deposit volatility in that it increases the potential for movement of deposits between different maturities, different banks and different currencies. This potential is often realised at times of uncertainty, as has been evidenced during the Asian crisis. In contrast, prior to the Asian crisis, there had been a relatively long period of stability in banks' deposit bases, even though deposits had been deregulated. While the majority of deposit volatility (since the Asian crisis began) has occurred in deposits that were never subject to the IRRs (i.e. HK$500,000 or more), deregulated deposits have also become more volatile.

- ***Interest rate volatility*** – following partial deregulation of the IRRs, banks adjusted their interest rates on the newly deregulated accounts to closely match Hong Kong Interbank Offer Rates ("HIBOR") rates. This has continued to be the situation even during the Asian crisis, although the difference between the rates quoted for deregulated deposits and HIBOR has, at times, increased and the volatility of all HIBOR-based deposit interest rates has increased substantially. Additionally, individual banks have sometimes been prepared to pay *preferential* or unquoted rates to attract deposits. In some instances, preferential interest rates have been in excess of HIBOR, which implies greater interest rate volatility than is evidenced by the quoted rates of individual banks.

- ***Bank profitability*** – increased competition for HK$ deposits during the Asian crisis (principally reflected in the volatility of deposits and interest rates) is having a significant impact on banks' profitability. In 1998, net interest margins for local banks have decreased by approximately 7% or 17 basis points, when compared with the first half of 1997[14]. Additionally, this overall fall conceals wide variations among individual banks (e.g. due to differing deposit base structures and loan portfolios).

This increased competition for deposits, coupled with declining asset quality, has raised some concerns over the stability of the sector as a whole. However, this should also be viewed in the context of the exceptional situation caused by the Asian crisis. Nevertheless, the potential impact of further deregulation of the IRRs on the profitability of the banks (and therefore increasing potential systemic risk) is one of the most important issues in the assessment of the IRRs in the current environment, and warrants in-depth and careful analysis. Our findings in this regard are summarised in the following section.

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[13] Deposit volatility has been reviewed in terms of deposit movements between different maturity of deposits, deposit movements between banks and deposit movements between different currencies.

[14] *Source:* HKMA (internal)

Assessment of the IRRs

The IRRs have provided a measure of underlying stability in the retail deposit and residential mortgage markets. However, the IRRs limit competition for certain deposits and raise questions about efficient allocation of resources. In deciding whether the remaining IRRs should be deregulated, a number of issues need to be considered, principally, whether the long-term impact of restricting competition is outweighed by the need for interest rate stability.

From the perspective of consumer choice and fair returns to depositors, the argument generally used by the banks is that consumers receive other services in lieu of higher interest payments. This, however, results in inefficiency in the pricing of products and provides a subsidy to banks in the form of cheaper funding, which may discourage the forces of consolidation. This subsidy is provided at the expense of savers, which is neither efficient nor equitable. With the IRRs removed, interest costs are likely to rise and this may lead to a consolidation in the industry, as has been experienced in other countries where interest rates have been deregulated. The fewer remaining institutions will be more efficient and provide more competitive interest rates to savers.

While continuing the status quo is a reasonable regulatory decision during the current financial crisis, it is difficult to defend as a long-term stance, given the competitive reach of the global financial sector. Shielding Hong Kong banks from this process will handicap the strongest banks from effectively responding to these forces by reducing the incentive to do so in their home market. It is essential, however, that the process of further deregulation is carefully managed, to avoid potential instability in the banking sector.

Given the importance of the IRRs, two models were developed to measure the potential impact of interest rate deregulation on banking sector interest expense. Both models used interest rate and deposit data available up to the end of 1997:

- firstly, an econometric model was developed to assess the potential impact of revoking the IRRs on savings accounts and time deposits. This model reviewed the impact of the 1994-95 deregulation of time deposit accounts on deposit movements, through to the end of 1997; and

- secondly, a predictive model was developed to estimate the financial impact of interest rate deregulation (based on the results of the econometric model) for the 40 banks holding the majority of HK$ deposits[15].

As the models were designed to focus on deposit movements and interest expense, the models did not address the issue of how banks would seek to preserve net interest margins through changes in lending activities (e.g. increases in lending rates to compensate for increases in funding costs).

[15] These were the 40 institutions included in the HKMA interest rate survey.

For the predictive model, one base-case (i.e. 1997 actual data) and 10 scenarios were devised and reviewed. The scenarios were selected to show the effect of partial deregulation (e.g. only for savings accounts or current accounts) and full deregulation, under a number of different interest rate environments. The predictive model demonstrated that the impact on banks' interest expense would vary considerably, depending on the change in interest rates and the type of deregulation (e.g. whether current accounts or savings accounts or both were deregulated). The following four scenarios illustrate the impact of deregulation under differing circumstances (see Table 1.8.4):

Table 1.8.4 Impact of releasing the remaining IRRs (under four scenarios)

	Actual data for 1997	Deregulation of savings accounts		Deregulation of current accounts	Full deregulation
	Base case	Case 1	Case 2	Case 3	Case 4
Effective interest rates on:					
Current accounts	0.00%	0.00%	0.00%	4.13%	5.68%
Savings accounts	4.13%	4.71%	5.68%	4.13%	5.68%
Total interest expense (HK$million)	175,729	176,817	181,167	180,195	187,310
Increase in interest expense (HK$million)	–	1,088	5,438	4,466	11,581
Net interest margins:[1]					
Local banks	2.51%	2.42%	2.28%	2.32%	2.02%
Foreign banks	1.13%	1.10%	1.04%	1.06%	0.94%
Both local and foreign	1.66%	1.63%	1.51%	1.54%	1.35%
Decrease in net interest margin for local banks:					
% reduction	–	3.6%	9.2%	7.6%	19.5%
Basis point reduction	–	9bp	23bp	19bp	49bp

Note: [1] Net interest margins = net interest income divided by average interest earning assets
Source: KPMG/Barents analysis

Based on these numbers, full deregulation of the IRRs could have a significant financial impact on the interest expense of banks, particularly for local banks. On the assumptions set out above, and on the basis of 1997 data, the potential impact on net interest margins of local banks could be as high as 49 basis points. To put this into context, the decline in net interest margins for all local banks in the period from June 1997 to June 1998 (reflecting the impact of the Asian crisis) was only 17 basis points. Therefore, the impact of full deregulation is potentially far greater than that experienced during the Asian crisis.

It is also likely that banks would act to pass on or mitigate these such cost increases in the form higher customer fees and/or lending rates. Any increase in mortgage rates could adversely affect the property market.

Recommendations

In the longer-term, deregulation brings with it a number of benefits, including more efficient intermediation and improved product choice for consumers. However, actions taken to deregulate the remaining IRRs have the potential to increase the recent reductions in profitability of banks and also sector instability. We therefore consider that deregulation of the remaining IRRs should not occur at this particular time, when there is already increased systemic risk in the financial sector. Once this period of market volatility has subsided, we recommend the HKMA take steps to assess whether deregulation could be achieved without a significant adverse impact on systemic risk of the sector. Given the difficult operating conditions expected for banks during 1999, no deregulation is recommended next year.

In determining the timing of any further deregulation, we recommend that changes should only be introduced after a specified period of stability, characterised by relative containment of risk. The containment of risk could be measured using a wide range of monetary, financial and market indicators and monitoring of these indicators should commence during 1999. Additionally, not all banks currently have the products, systems, risk management capabilities and/or balance sheet structures that would enable them to compete in a fully deregulated interest rate environment. Consequently, if the HKMA and the HKAB move towards further interest rate deregulation, such reforms would be more prudently implemented if phased in over a period of time.

There are only three separate types of accounts or deposits that remain to be deregulated (i.e. current accounts, savings accounts and time deposits up to 6-days). In determining how and when to deregulate these types of accounts in a phased manner, we have considered the likely impact of the deregulation of each on sector stability and individual banks' ability to compete. Bearing these considerations in mind, one possible scenario is outlined below (subject to monitoring of indicators during 1999 and following each stage of deregulation):

- ***Stage 1*** – remove interest rate restrictions on time deposits with a maturity of 24-hours up to 6-days;

- ***Stage 2*** – allow interest to be paid on current accounts up to an agreed interest rate cap; and

- ***Stage 3*** – remove all remaining interest rate restrictions.

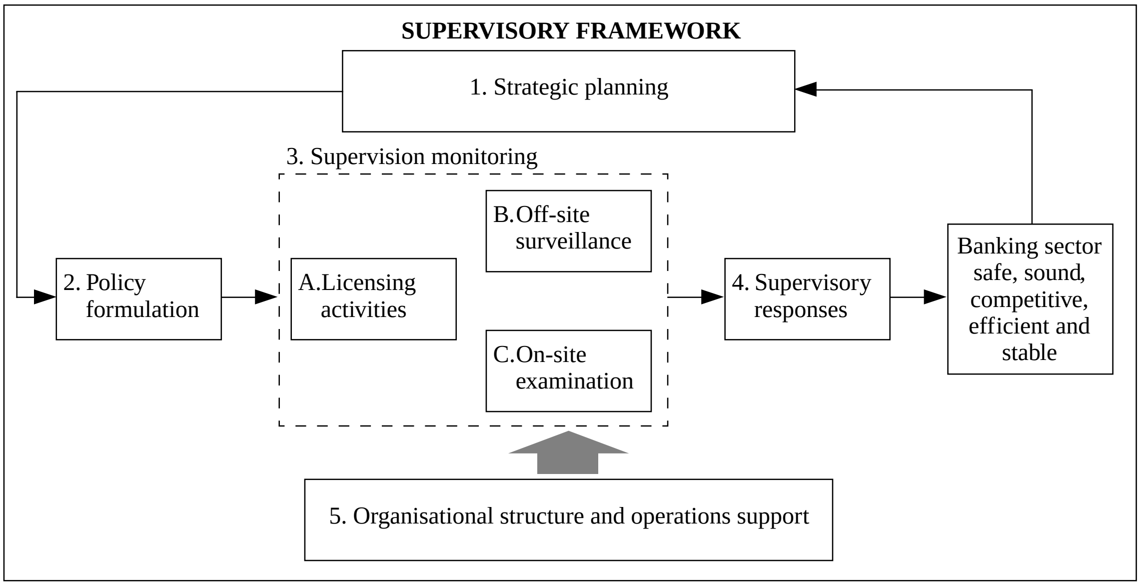
1.9 Supervisory review – key findings and recommendations

1.9.1 Introduction

The HKMA continues to refine its risk-based supervisory approach, which is similar to that found in advanced countries that were used for benchmarking purposes. While the HKMA supervisory process is strong, some enhancements need to be made to the risk assessment system as the HKMA implements risk-based supervision. In addition, the HKMA faces a number of organisational management challenges, including increasing staff capabilities and providing a comprehensive career development programme.

At the request of the HKMA, we reviewed five key components of its bank supervision process – organisational structure, supervisory tools and techniques, supervisory polices and guidelines, human resources and the quality and volume of information. These components cannot be assessed in isolation and effective supervision requires an understanding of the linkages between each. Our assessment of the HKMA's supervisory process was therefore conducted using the following assessment framework (see Chart 1.9.1):

Chart 1.9.1 Framework of assessment



Source: KPMG/Barents analysis

Key conclusions and recommendations regarding each component of the supervisory framework are summarised below.

1.9.2 Strategic planning

The HKMA has a supervisory philosophy that will allow it to respond to market changes identified in its financial sector. However, to stay abreast of the market changes identified, to implement risk-based supervision throughout the HKMA and to achieve its goals and objectives more quickly and effectively, the HKMA should formalise its strategic planning process. The strategic planning process should include setting goals and objectives to carry out the HKMA's vision and action plans to achieve the stated goals and objectives.

1.9.3 *Policy formulation*

The HKMA should formalise a risk assessment framework and develop a process to ensure that new policies are integrated into the supervisory process and applied consistently across the organisation.

Risk assessment framework

The HKMA's current supervisory approach requires enhancements to further develop the HKMA's ability to be proactive in response to current and emerging risks. The HKMA should formalise a risk assessment framework to actively identify material and emerging problems that are institutional or systemic. This will ensure that appropriate supervisory strategies for monitoring and addressing such risks are developed and that HKMA resources are allocated most effectively and efficiently.

Formalising its risk assessment framework would require the HKMA to identify risks in the Hong Kong context and develop standards for evaluating these risks. For each risk identified, the quantity or level of exposure and the quality of an institution's risk management processes would need to be assessed. This requires the development of standards for determining whether an institution's risk exposures are excessive, using the assessments made regarding the quantity of risk and quality of risk management.

Together, these assessments would form the basis for each institution's *risk profile*, which would be used to develop institution-specific supervisory strategies. While the HKMA evaluates these issues today, having a more systematic approach will help ensure that assessments are performed consistently across the organisation.

The risk assessment framework adopted by the HKMA should work in tandem with its CAMEL[16] rating system. Specifically, the risk assessment framework should allow for the identification and evaluation of risks that are not explicitly addressed in the CAMEL rating system (e.g. strategic and reputation risk). The HKMA should also consider developing a separate CAMEL component for rating risk management capabilities, or expanding its current CAMEL guidance to more explicitly address this component. The HKMA should also review its CAMEL rating system, and the procedures guiding this process, so that it is clear as to how non-traditional banking risks are factored into the existing rating structure.

Quality assurance programme

The HKMA should establish a formalised programme for quality assurance, to ensure that it continues to deliver consistent, high quality bank supervision. Benchmark country supervisors are focusing on ways to ensure the consistent application of policies and procedures, particularly when adopting the risk-based supervisory approach. A quality assurance process can be helpful during the transition to risk-based supervision, to ensure that supervisory staff understands the new concepts and standards. Thereafter, given that risk-based supervision requires judgements about the quality of risk management, first independently and then in relation to the level of risk exposure, a quality assurance process can help ensure that staff is applying evaluation standards consistently across the organisation. The HKMA should explore this issue further with other supervisors, particularly in the United Kingdom and the United States, where the process has been formalised.

[16] CAMEL is an internationally recognised framework for assessing Capital adequacy, Asset quality, Management, Earnings and Liquidity. An overall or composite rating is expressed through the use of a numerical scale of 1 through 5 in ascending order of supervisory concern.

1.9.4 *Supervisory monitoring*

Licensing activities

The HKMA has adequate guidelines governing licensing activities, and it has responded to the need for more detailed guidelines on mergers and acquisitions. As an additional measure to improve efficiency, the HKMA should consider requesting financial pro-forma information from applicants in the same format as the standard return captions. This would allow officers to more clearly track the success of management's efforts once the new operation is initiated, and to react in a timely fashion to divergence from the financial plan.

Off-site surveillance activities

The HKMA's off-site surveillance activities are well supported by strong ratio and peer group analyses. The HKMA's process for analysing systemic issues is also commendable. However, integrating risk-based supervision into off-site surveillance activities should enhance the supervisory process. For example, the current *corporate profile* provides relevant background and historical information, but it should also contain the *risk profile* of the institution. This information would include the identification of all risks within an institution, an evaluation of the level of risk, and the quality of risk management within the institution.

Additionally, new guidelines and procedures, which incorporate risk-based supervision, should be developed for tripartite and prudential meetings, to ensure that discussions are focused on the significant risks of an institution.

The quality of HKMA's forward-looking analysis should be improved by increasing system capabilities, including more detailed procedures for financial modelling and *what-if* scenario modelling. In all of these efforts, adoption of the recommended risk assessment framework would help ensure that the identification and evaluation of risk in the off-site function is conducted in a consistent and uniform manner across organisational units.

The HKMA has a comprehensive set of regulatory returns from which to conduct bank-specific and systemic analyses. However, risk analysis and modelling capability could be improved by realigning the presentation of balance sheet and income statement components. If income statement components were broken down by product type (similar to the balance sheet) yield analysis would be more comprehensive.

On-site examination activities

The on-site examination philosophy of performing targeted examinations has been effective for the HKMA in terms of supervising the financial sector and channelling resources. However, adopting the recommended risk assessment framework should improve the conclusions drawn from on-site examinations. Procedures for on-site activities should be enhanced to include detailed guidelines or standards for evaluating risk management systems. The HKMA should consider issuing position papers, clearly identifying the standards for overall risk management processes and systems for authorized institutions. This would help develop a common understanding and improve prospects for more cohesive implementation of the new focus. The internal and external examination report should be revised to incorporate conclusions from the risk assessment.

The HKMA should develop more comprehensive policies and procedures for interest rate risk management, information technology and fiduciary activities. These can be additional chapters to the current *On-site Examination Manual*, with separate and more detailed procedures developed for these specialist areas.

The HKMA has stated its supervisory cycle for local and foreign institutions in its policies and procedures. The current system has sufficient flexibility to make changes in the supervisory plans if deemed warranted. The HKMA should fully integrate risk-based supervision into the supervisory cycle, using risk profiles to develop institution-specific supervisory strategies.

1.9.5 Supervisory responses

The HKMA's process for corrective action has been successful in the past. The initiatives taken by senior management to institute a process for following up on all exceptions noted during the examinations are applauded. However, to help ensure that corrective and remedial actions are taken expeditiously and fairly, the HKMA should develop guidance indicating the circumstances under which the various types or degrees of supervisory actions should be taken. By outlining levels of supervisory responses, such guidance will encourage supervisory staff to deal with weaknesses at an early stage, by less formal measures. Furthermore, if shared with financial institutions (and we believe they should be), policies and procedures for taking corrective action can encourage bank management to identify and address their own problems, to avoid the HKMA's taking action or to mitigate the severity of the action likely to be taken.

1.9.6 Organisational structure and operational support

Organisational structure

The HKMA has taken appropriate steps to reorganise its supervision and policy departments over the past few years. In addition, it has recognised the need to use and create *specialist* teams to execute policy. The current organisational structure is effective in carrying out supervisory activities. However, the HKMA should continue to build specialist teams to address increased risks in its financial sector and should develop guidelines on how specialists will be used in on- and off-site monitoring activities. In addition, the HKMA should revisit the time spent on on-site and off-site activities, after conducting initial risk assessments using a formalised framework.

The HKMA should recruit externally for a bank information technology specialist, as expertise in this area is needed in the short-term. Bank information technology specialists should possess the technical expertise to evaluate the adequacy of bank information technology or systems during bank examinations. They also need to be able to provide senior management with an objective assessment of authorized institutions' plans during technical presentations.

Fiduciary specialists should be able to evaluate authorized institutions' activities in private banking, investment advisory services and pension products under the Mandatory Provident Schemes Ordinance. Given current levels of activity in private banking and advisory services, the HKMA can develop internally the expertise necessary to supervise authorized institutions' fiduciary activities over the medium-term. Consideration should be given to hiring at least one individual with local expertise, while at the same time identifying staff to develop additional expertise over the longer-term. Until such a group is functional, general guidance on these activities should be expanded and appropriate procedures developed.

In addition, HKMA has been proactive in centralising some aspects of the licensing and merger and acquisition functions so that *case officers* can work more effectively. The HKMA should complete this step, centralising all licensing activities in the Banking Policy Department.

Staffing, performance management and career development

The HKMA needs to increase the capability of staff. The HKMA's staff must have a clear understanding of all the elements of the risk assessment framework and the ability to make the qualitative judgements it requires. A fully executed risk assessment framework would place increasing demands on the current staff and would necessitate varying degrees of knowledge and skills at each staff level. Thus, the HKMA should define the core capabilities (skills and knowledge) necessary at each staff level to implement revisions to the risk-based approach.

The HKMA does not have a structured career development programme and the current structure of the organisation provides, fully, for only limited upward mobility. The HKMA should consider and review incentives to retain its highly effective and productive staff, while instituting alternatives to deal with below average performance.

Training

To increase the quality and level of staff skills, the HKMA should conduct a training needs assessment that incorporates an analysis of the required skills to carry out its enhanced supervisory approach and current skill set of its staff. The results of this assessment would help determine:

- gaps in skills and knowledge;
- the curriculum of supplementary training programmes;
- individual training and improvement plans; and
- plans for hiring *experts* from industry.

Given the importance of the training function and the skills required in this area, the HKMA should consider developing a separate training unit outside of the human resource function, with the objective of elevating its profile within the supervisory department. If this option is not pursued, the HKMA should improve communication between human resources and line staff on training needs.

The HKMA has an internal introductory supervisory course and uses industry experts for supplemental training. The HKMA should improve the effectiveness of formal classroom training, with structured on-the-job training that corresponds to individual training plans and performance appraisals.

If a new risk assessment framework is developed, it will be essential for the HKMA to develop a training programme that focuses on the evaluation of risk management at institutions. The HKMA should consider working with large institutions in creating an internship programme which would allow examiners to spend one or two months with the bank learning risk management concepts.

Management information systems

The HKMA receives comprehensive financial and statistical information on authorized institutions in a relatively timely and efficient manner. However, the HKMA should focus on:

- improving its supervisory database (mostly with non-financial information);
- training its staff in its use; and
- developing a process to keep information current and accurate.

The HKMA should incorporate survey information that is useful for *continuous supervision* into the system database. This is also important because this information is currently being stored on a PC hard drive, which exposes the HKMA to loss of data.

The HKMA should enhance its supervisory database. While there are fields available in the database to record supervisory information, they are not complete or fully utilised. The HKMA should develop a more comprehensive supervisory database that covers bank-specific information such as supervisory strategies, supervisory history, risk profiles, risk ratings and outstanding corrective actions. This supervisory database should include examination planning reports and tools (e.g. a recording mechanism for resources required and used by type of institution and activity). The HKMA should consider using the US as a model, as it has one of the more comprehensive databases for supervisory information that is user-friendly.

The data contained in the Enhanced Prudential Supervision System ("EPSS") can generate standard ratio calculations in established formats. However, modelling needs require examiners to download data and create spreadsheet models that differ across divisions. The HKMA should improve its system capability so that financial modelling and scenario testing can be conducted. The HKMA should consider reviewing the systems used by either the US or the Netherlands, both of which have established systems and procedures.

1.9.7 Other considerations regarding the supervisory framework

The global trends in financial markets indicate that financial markets are blurring, as financial institutions cross both geographic and traditional product boundaries to seek and exploit new market opportunities, meet intensified competition from non-bank providers of financial services and meet customers' demands for new products and services.

Each of these global trends will pose increased risks to individual financial institutions and increased risk to the banking system in Hong Kong, as they have in other countries. We therefore believe that the HKMA should have a mandate to ensue that the supervisory and regulatory framework for Hong Kong remains appropriate.

1.10 Road map for regulatory and supervisory change

Although the recommendations relating to the supervisory approach could be implemented unilaterally by the HKMA, we consider that the two sets of recommendations, both regulatory and supervisory, would best be implemented in parallel using a phased approach. This is because both are largely driven by the same underlying forces and trends in the global banking environment. For example, the need to open up the market to increased competition in order to strengthen local banks' ability to compete will, at the same time, require improved supervisory processes to ensure that these banks are capable of dealing with such an environment.

We therefore propose three phases of implementation for regulatory and supervisory recommendations.

Phase 1 – enhanced risk-based supervision (1999)

The focus of Phase 1 is to allow the HKMA, in particular the supervisory approach, to be better positioned to address the risks and increased competition within the market place, prior to substantive changes to the regulatory framework. No deregulation of IRRs is undertaken during Phase 1, due to the expected difficult operating environment in 1999. Monitoring of key indicators (in preparation) is however proposed.

Phase 2 – market restructuring (2000 to mid 2001)

During Phase 2, the focus shifts away from the supervisory approach towards implementing a revised market structure. However, implementation of the enhanced supervisory approach should continue. Unlike Phase 1, which is principally internal to the HKMA, in Phase 2, the restructuring of the market may be expected to require considerable consultation with external parties. This consultation process should be started during Phase 1, to help speed up the process of implementation. The first two stages of the three-stage removal of the remaining IRRs are completed during this phase (subject to continued monitoring of key indicators).

Phase 3 – market liberalisation (mid 2001 to end 2002)

Once the improved supervisory approach has been implemented and the market structure has been revised, it would be appropriate to reconsider the remaining barriers to a free and open market. Phase 3 concentrates on this area. However, if the recommended study concerning the need for explicit depositor protection (to be completed during Phase 2) requires changes to existing arrangements (e.g. the introduction of deposit insurance), then it would be appropriate to begin implementation of this prior to further liberalisation of the market.

Key recommendations to be implemented during each phase are summarised in Table 1.10.1 that follows, while a high-level implementation plan is provided in Table 1.10.2:

Table 1.10.1 Proposed implementation approach for key recommendations

Phases	Regulatory recommendations	Supervisory recommendations
Phase 1 – enhanced risk-based supervision	*To enhance safety and stability:* ➢ Introduce financial disclosure by foreign branch banks (limited disclosure introduction in progress). ➢ Clarify the HKMA's role as lender of last resort. *To enhance competitiveness:* ➢ Relax the one-building condition to allow three branches for foreign banks. ➢ Begin monitoring process prior to start of deregulation of IRRs.	➢ Develop a formal strategic planning process. ➢ Develop a formalised risk assessment framework and quality assurance programme. ➢ Integrate risk management principles into the off-site surveillance activities. ➢ Revise on-site surveillance activities to more explicitly evaluate institutions' risk management capabilities. ➢ Develop guidelines as to types and degrees of supervisory responses. ➢ Define core capabilities, revise job descriptions and the performance management process, develop a formalised career development programme, perform a training needs assessment and expand the current training curriculum. ➢ Create additional specialist teams. ➢ Enhance the supervisory database and management information systems. ➢ Assess risks associated with longer term economic integration with Mainland China.
Phase 2 – market restructuring	*To enhance safety and stability:* ➢ Raise minimum capital requirements for local authorized institutions. ➢ Study of alternatives to enhance explicit depositor protection. *To enhance competitiveness:* ➢ Simplify the three-tier system. ➢ Reassess access criteria for RTGS. ➢ Stage 1 of deregulation of the IRRs (time deposits up to 6-days). ➢ Stage 2 of deregulation of the IRRs (current accounts).	➢ Assess supervisory gaps and/or overlaps and options to address.
Phase 3 – market liberalisation	*To enhance safety and stability:* ➢ Implementation of enhanced explicit depositor protection scheme. *To enhance competitiveness:* ➢ Stage 3 of deregulation of the IRRs (remove all remaining interest rate caps). ➢ Reduce the time period and relax the association with Hong Kong entry criteria.	

Source: KPMG/Barents analysis

Table 1.10.2 High-level implementation plan – key regulatory and supervisory recommendations

	Phase 1				Phase 2						Phase 3					
	1999				2000				2001				2002			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Supervisory recommendations																
Develop a formal strategic planning process.	■															
Develop a formalised risk assessment framework and quality assurance programme.	■	■	■	■												
Integrate risk management principles into the off-site surveillance activities.			■	■	■	■		continue to implement the process of enhanced risk-based supervision								
Revise on-site surveillance activities to more explicitly evaluate institutions' risk management capabilities.			■	■	■	■										
Develop guidelines as to types and degrees of supervisory responses.			■	■												
Define core capabilities, revise job descriptions and the performance management process, develop a formalised career development programme, perform a training needs assessment and expand the current training curriculum.		■	■						ongoing training							
Create additional specialist teams.				■												
Enhance the supervisory database and management information systems.			■	■												
Assess risks associated with longer-term economic integration with Mainland China.	■	■														
Assess supervisory gaps and/or overlaps and options to address.						■	■									
Regulatory recommendations																
Introduce financial disclosure by foreign branch banks (limited disclosure introduction in progress).	■	■														
Clarify the HKMA's role as lender of last resort.	■															
Relax the one-building condition to allow three branches for foreign banks.	■		review before further relaxing												■	
Simplify the three-tier system.		consultation period					■	■	■	■						
Raise minimum capital requirements for local authorized institutions.										■						
Assess RTGS access criteria.										■						
Study to enhance explicit depositor protection.					■	■										
Implementation of enhanced depositor protection scheme.											■	■	■	■		
Begin monitoring process prior to the start of deregulation of IRRs.	review															
Stage 1 deregulation of the IRRs (time deposits up to 6-days).					■											
Stage 2 deregulation of IRRs (current accounts).						review			■							
Stage 3 de-regualtion of IRRs (remaining interest rate caps).										review			■			
Relax time period and association with Hong Kong entry criteria.															■	■

Source: KPMG/Barents analysis