e-BUSINESS AND THE BANKING SECTOR[1]

This speech examines the implications of internet banking for banks and their customers in Hong Kong and the issues and concerns that the regulator needs to take into account.

Introduction

I am pleased to be here to talk to you about the implications that the trend towards e-business will have for the banking industry in Hong Kong. In doing so, I would ask you to ignore the recent gyrations in the prices of "dot.com" stocks on stock markets around the world. That is really a side issue to the real question of how the Internet will transform the way in which banks and their customers do business. It is no exaggeration to say that how to handle the challenge posed by the Internet and technology in general is currently the biggest strategic challenge in banking today. Banks which ignore the Internet and the opportunities which it offers will do so at their peril.

Banking over the Internet is likely to take off in Hong Kong because there is the necessary supply of financial services from a wide range of sophisticated local and foreign banks, the necessary demand to use these services from a technologically aware population and the necessary infrastructure to enable the business to be conducted. As regards the physical infrastructure for e-business, the penetration rates for the various forms of electronic delivery channel in Hong Kong are already among the highest in the world. For example:

- Over 50% of the population have personal computers
- 80% of households have access to broadband
- 55% of the population use mobile phones

The legal framework in Hong Kong is also supportive of electronic commerce. The recently passed Electronic Transactions Ordinance puts digital signatures on the same legal basis as their written counterparts and provides for the recognition of certification authorities. Both of these measures provide an essential underpinning to do business over the Internet.

Extent of Internet Banking in Hong Kong

To what extent are banks in Hong Kong already involved in internet banking? So far only a relatively few banks have installed websites that allow for banking transactions to be conducted. This is partly because of the freeze on system changes caused by the Year 2000 problem. But now that Year 2000 issue is safely out of the way the other local banks and a number of the foreign banks are catching up fast. So far the main emphasis has been on the provision of retail banking services over the Internet. This is natural given the importance of retail banking products such as mortgages and credit cards in Hong Kong. Stock trading over electronic channels, particularly using mobile phones, is another natural product to be offered to retail customers. It may indeed be the area where the fastest growth is seen, particularly with the advent of the new WAP mobile phone technology and the Stock Exchange's new AMS/3 trading system.

However, it is also important that banks do not neglect business-to-business (B2B) commerce. It is here that the greatest opportunities for the banks may lie, because of the high transaction volumes involved. A number of banks have already formed joint ventures with commercial companies to pursue e-commerce initiatives. I must confess that I find the details of the "concept" underlying some of these joint ventures a little hazy. But the general thrust is clear. The banks concerned will provide the necessary payment gateways to facilitate the e-commerce. And they also hope to be able

1 This is the text of the speech delivered by David Carse, Deputy Chief Executive of the Hong Kong Monetary Authority, at the British Chamber Luncheon on 12 April 2000.

to acquire the customer base and supplier chain of their business partners and to exploit the resultant cross-selling opportunities. Some banks are even going further and are providing a technological platform on which companies can manage the relationship with their suppliers and buyers on an end-to-end basis. Cash management and payment facilities are of course part of the service.

Impact of Internet Banking on Banks

Developments such as these have a momentum of their own. The necessary technology is there, or shortly will be, and market competition dictates that it will be increasingly exploited. However, the question arises as to what will be the impact on the bottom line of the banks. Quite clearly the Internet does offer banks the chance to cut costs. It is often cited that the cost of conducting a transaction over the Internet may be only one-hundredth of the cost of doing the same transaction via a bank teller. On the revenue side, it is also accepted wisdom that the Internet provides banks with much greater opportunities to cross-sell products to their customers. This is because the Internet enables banks to collect and analyse information about their customers in a much more systematic way than before and to engage in what is known as "mass customisation" of their products. In other words, banks will have the ability to tailor individual products more precisely to the needs and tastes of individual customers, and to do this on a mass scale. Instead of "one size fits all" you have "one size fits one". This should help banks to retain their customers, and hopefully to sell them more products.

That, I stress, is the theory. It will take some time to turn it into reality. The potential of the Internet to reduce operating expenses for banks depends on their ability to migrate customers onto the new low cost channel and to close the resultant surplus branches or convert them into sales outlets rather than transaction centres. While this process is going on the banks will have to increase their information technology (IT) spending on both front and back end systems - which will add to operating expenses through increased depreciation charges. This will need to be backed up by increased spending on IT experts, who are currently in short supply, and on the advertising required to promote the internet banking service.

According to a survey we recently conducted, banks expect cost savings from the Internet to be minimal over the next four years. The extra spending I have described will therefore result in a net increase in operating expenses. It should however be acknowledged that the extra expense from depreciation and associated operating expenses does not seem to be considerable at this stage. On average, it amounts to about 1.5% of total operating expenses, which is minimal compared with the extra amount which the banks have "spent" on bad debt charges over the last two years. But we still at the early stages of the spending on the new technology and the expectation must be that these costs will rise rather than diminish over time as banks are obliged by competition to improve the quality and sophistication of their systems.

That is the cost side of the equation. If we look at revenues from the Internet, the picture is also uncertain in the short term. Some of the early movers in internet banking in Hong Kong seem to have demonstrated the ability to attract new customers by means of the Internet. But for the industry as a whole this is a zero sum game - winners of new customers mean that there must be losers. However, banks in general can win if they succeed in selling more products to their existing customers. There is certainly potential to do this in Hong Kong where the "cross-sell ratio" of about two products per customer is presently relatively low. The Internet offer the chance to increase this ratio, but it will take time to do this and it presupposes that the opportunities which the Internet offers for enhanced customer relationship management will be exploited to the full.

However, the revenue gains from cross selling will be at least partly offset by increased price transparency. The Internet reduces the cost of information and makes it easier for customers to compare prices and to shop around. Internet portals and other aggregators of price information are already springing up in Hong Kong, as they have done elsewhere, to facilitate this process. The effect will inevitably be to give a further boost to competition in banking services and to bring down prices.

The net impact of the Internet on banks' profitability over the next few years is therefore at best uncertain. However, the general view is that the banks have no alternative but to embrace the Internet even if, as one banker said to me, at this stage you win "respect rather than revenue". In other words, an internet capability will be necessary to retain credibility in the eyes of customers and to prevent them from moving to those banks which do offer such a service. It will also be necessary to enable banks to fend off the threat from new, low-cost entrants. These could include "virtual banks" who offer their services wholly or mainly over the Internet and therefore have a different cost-structure and image from conventional banks; "e-lenders" who do not take deposits but use the Internet to provide lending products such as mortgages or credit cards; and the portals and aggregators who bring together price and product information from various service providers and may increasingly seek to interpose themselves between the banks and their customers. The risk from the banks' point of view is that they may lose the customer relationship and end up merely as suppliers of commodity products.

Advantages of Conventional Banks over Virtual Banks

However, all is not lost for the conventional banks. They are certainly not defenceless in the face of these threats. The available evidence from other countries so far suggests that the multi-channel model of distribution - otherwise known as "clicks and mortar" - is working best. This is where the internet channel operates alongside other means of distribution including the branch network. It does appear that customers do prefer, and feel reassured by, a physical presence to which they can have access, particularly if something goes wrong. The other side of this coin is that the success of the virtual bank model is so far unproven. Certainly, they do not seem to have been particularly successful in the United States. Indeed, there are recent reports that a number of the virtual banks have felt obliged to set up physical branches in order to compete more effectively.

The traditional banks also have the advantage of established brand names. That means that they have already made a large part of the investment required to build up the trust and name recognition that will persuade customers to do business with them over the Internet. The virtual banks have to start from scratch and many are finding, like other internet retailers, that this requires a lot of money to be spent on advertising - hence the high rate of "cash burn" experienced by these companies.

The incumbent banks also have the advantage in funding terms over those internet upstarts who want to get into the lending business. It is one thing to find people willing to borrow from you on attractive terms, it is another to find a ready supply of funds that you can lend out at a profit. And in Hong Kong, the supply of surplus Hong Kong dollars is in the hands of the local banks and the large foreign banks with extensive retail networks.

But the traditional banks cannot afford to be complacent. They have to be prepared to meet the challenge of the Internet. This means getting it right in terms of quality of customer service and range of products. They must also ensure that the Internet is not simply an add-on but is fully integrated with their existing systems and with their customer databases. This is necessary to facilitate straight through processing of transactions and the cross selling I have been talking about.

Concerns of Regulators

The Internet also offers challenges to regulators because we have been used to a physical framework of reference. In the physical world it is relatively straightforward to control what happens within your own jurisdiction, for example in terms of who is allowed to take deposits from the general public. However, once we move into cyberspace, it becomes possible for foreign banks to use their websites to attract deposits from a particular jurisdiction without going anywhere near it. Of course, this is also possible at present through placing advertisements in the print media and there are rules in the Banking Ordinance to control such advertisements. However, the global reach of the Internet greatly increases the ability to attract deposits across geographical boundaries.

Regulators also need to consider how existing risks to which banks are exposed may be accentuated by the Internet. Most obviously, although banks are faced with all sorts of security risks in their day to day activities, the Internet poses new challenges because of its open nature. Security for transactions over the Internet is probably the biggest concern among customers and thus forms the biggest barrier to customer acceptance of this new medium. There is no easy answer to the security problem. The technology does exist to provide protection but it requires continuous review and upgrading to keep it effective. Otherwise loopholes can emerge in apparently secure systems which can be exploited by hackers.

Security is very much at the forefront of the minds of the Hong Kong Monetary Authority (HKMA) when we talk to banks about their plans for internet banking. Generally, we will try to satisfy ourselves about the security of the proposed systems by requiring the bank concerned to obtain an assessment report from an independent expert. But we also need to be able to understand such reports, to be able to identify relevant issues and to ask the right questions. This means that, as regulators, we need to upgrade our own skills and to recruit people with the right expertise.

Policy Framework for Internet Banking

The HKMA is currently in the process of developing its policy framework for internet banking. In particular, we have recently issued for consultation a set of draft guidelines on virtual banks[2] which, as I mentioned previously, conduct their business wholly or mainly over the Internet. This reflects the fact that some local banks have already indicated their intention to set up such banks. For the purposes of this speech, I will confine myself to talking about the main features of the guidelines.

The first point to make is that we have no objection to the emergence of virtual banks in Hong Kong but we want this to happen in a non-disruptive manner. The underlying theme of our guidelines is therefore to remind the sponsors of virtual banks that such banks must have substance rather than simply being a concept. Nor should they be blinded by the technology and see this as an automatic guarantee of success. Virtual banks are the same as conventional banks in the sense that they are entrusted with other people's money and must be able to lend it out, and invest it, safely. The rules of prudent banking are not suspended just because you sell your services on the Internet.

Virtual banks therefore need to have a sensible and coherent business plan which addresses the various types of risk with which they are faced and which strikes an appropriate balance between acquisition of market share and earning a reasonable rate of return. It is not unusual for a start-up operation to lose some money at the beginning because it takes some time to build up the business and offset initial expenses. But we would be concerned if large and prolonged losses were being deliberately planned in order to win market share. This could damage public confidence in the bank concerned and be disruptive to the rest of the industry. The example of other electronic retailers has shown that the policy of selling products at a loss to build up market share will in most cases be self-defeating, leading to what I have seen described as "dotcom burnout". There is no point, as a quote in a recent newspaper article reminded us, of losing money on every sale and then trying to make it up on the volume.

2 The Guideline on the *Authorisation of Virtual Banks* under section 16(10) of the Banking Ordinance was issued by the Hong Kong Monetary Authority (HKMA) on 5 May 2000. A copy of the Guideline can be found at the HKMA website (http://www.hkma.gov.hk)

For those who are planning to set up virtual banks in Hong Kong, there are two aspects of our draft guidelines that are particularly relevant. The first is that under the current legislation, a locally incorporated virtual bank cannot be newly established other than through conversion of an existing locally incorporated authorised institution. In other words, it is not possible to set up a new virtual bank from scratch along the lines of the Egg Bank in the UK. The second aspect is that a local virtual bank should be at least 50% owned by a well-established bank or other supervised financial institution. This is in keeping with the HKMA's long-standing general policy, but we think that it is particularly important in the case of virtual banks because they are new ventures which could subject to higher risks in the initial years of operation. It is important therefore that they have a strong, experienced parent standing behind them.

As you may be aware, we are in the process of further deregulating the banking sector, and it is possible that we shall re-examine restrictions of this kind at some stage in the future. However, at present we regard them as a sensible means of easing our way gently into the world of virtual banking.

Conclusion

I will conclude by emphasising that the Internet is not a passing phase. I do believe that it is going to transform the way in which banking is carried on, not just in Hong Kong but around the world. This not only offers fresh opportunities for the banks, but also presents them with strategic challenges which are probably unprecedented. One of these is how to manage the process of consolidation, which must inevitably come to Hong Kong and to which the Internet is likely to give further impetus. Our role as regulators is not to stand in the way of these developments but to try to ensure that they can take place in a safe and sound manner.