The new Economics of Banking

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‘Banking is essential to a modern economy: banks are not!’
(*Business Week*)

‘The winners in this game will not necessarily all be banks, and not all present banks will be players in the new game’.
(Andre Levy-Lang, Chairman of Paribas writing in the *Financial Times*).

‘An implication of a conclusion that banks have lost much if not all of their specialness is that banks no longer have a competitive advantage. ... If our financial institutions and markets were being created for the first time in the 1990s banks might not be among the surviving institutions.’ (F. Edwards, 1993)

‘Banks have no future. Their economic purpose is redundant. To survive they must find another role ... It is a dangerous truth, for in seeking to avoid it, bankers assume ever greater risks’.
(Peter Norman, *Financial Times*).

‘A company is not characterised by what it happens to be doing or by the products it happens to be producing at this moment in time...To define a company by the products it is making is a very dangerous, short-termist attitude’.
(Ale de Hoost, former Chief Strategist, Shell International, speaking on BBC Radio 4).

‘Reports of my death are greatly exaggerated’.
(Mark Twain)

1. Introduction

The objective of this paper is to offer an overall view of the banking industry, to pose a series of questions about the future of banking, and in particular to focus on two central issues:

- the long run, secular pressures impinging on the banking industry; and
- the way these pressures may be resolved in three dimensions:
  (1) the changing structure of the banking industry,
  (2) the business operations of banks, and
  (3) the structure of the banking firm.

The structure of the paper is as follows. Section 2 outlines the general context of the study suggesting that around the world banks face formidable challenges to their historic monopolies and comparative advantages: banks are no longer the monopoly suppliers of banking services. Section 3 considers the question of whether banks are in secular decline. This is followed in Section 4 by a consideration of the theory of the banking firm and whether the factors emphasised in the literature as giving rise to the existence of banks (information advantages, market imperfections etc.) are themselves being eroded. This section also considers the potential vulnerability of banks to a loss of their traditional monopolies and comparative advantages

Section 5 poses a series of distinctions and basic questions of relevance when considering whether banks are in secular decline. In section 6 a more detailed consideration is given to the pressures operating on the banking industry. The central thesis is that it is the *combination* of pressures that is unique in the current phase of the evolution of the banking industry, and that technology is changing the fundamentals of banking business. Particular reference is made to new patterns of competition as a result of declining entry barriers. Section 7 considers the entry of non-financial companies (such as supermarkets) into banking and retail financial services markets.

The implications of these secular pressures on the banking industry are discussed in Section 8 in terms of: (1) their impact on the structure of the financial system and banking industry; (2) the business operations of banks; and (3) the organisational structure of the banking firm. Particular reference is made to the trend towards securitisation. The likely strategic responses of banks are analysed in Section 9 beginning with a discussion of the fundamentals of banking (banks' core competencies) and how they can be used in different ways dependent on competition, prevailing technology, regulation, the power of entry barriers, and the strategic objectives of potential new competitors. Section 10 reviews the empirical evidence and offers a critical assessment of two dominant trends in the banking industry: consolidation and diversification.

The implications for organisational structure of the banking firm are reviewed in Section 11 with a discussion of the concept of *Contract Banking*: banks as managers of contracts with customers and internal and external suppliers of processes. This is followed in Section 12 by a brief consideration of the distinction between wholesale and retail banking. An overall assessment is offered in Section 13.

2. The General Context

Banks have traditionally played the key role in the financial system by acting as financial intermediaries between ultimate savers and borrowers. As asset transformers, they have accepted deposits with one set of characteristics and created assets with a different set; in particular, they have engaged in maturity transformation with debt contracts on both sides of the balance sheet. They have also been the central mechanism within the payments system. For these and other reasons (notably a potential danger of deposit which may cause solvent banks to become insolvent, and the systemic consequences that could thereby accrue), banks have traditionally been regarded as 'special' within the financial system. For the same reasons they have also been subject to more intensive regulation than other types of financial institution.

The nature of what a bank does has changed radically over the past few years, and it will change further in the years ahead. The type of institutions conducting banking business has also changed. With respect to the first issue, banks conduct a much wider range of business than simply taking in deposits and making loans (their traditional financial intermediation business). Banks have become financial services firms, and in many countries off-balance sheet income of banks exceeds income earned from traditional financial intermediation business. It is no longer clear precisely what a bank is, what business it conducts, or what should define appropriate business for a bank. *What* a bank is is no longer clearly-defined.

At the same time as banks have been diversifying and re-defining their business, a wide range of new types of firms have begun to supply traditional banking services: transactions deposits, savings accounts and a range of loans. Such firms include supermarkets, utility companies, insurance companies, mutual funds and even a car manufacturer (BMW in Germany). There is little, if anything, that banks do that could not now equally be done by markets, non-bank financial institutions, and non-financial firms. In other words, banks have lost their traditional monopoly advantages. Banks are even losing their monopoly in the payments system. The idea of a bank as a middle-man in the payments process is being challenged by the removal of physical media and the development of electronic media: e-money. Some payments systems exclude banks altogether. This range of issues raises the question: *who* is a bank?

Three strands emerge in this paper:

(1) banks have become potentially vulnerable in their traditional business as alternative firms have begun to offer some traditional banking services, and new ways (e.g. markets and financial instruments) have emerged to satisfy customer demands that have traditionally been met through bank products and services,

(2) banks have considerably widened the range of services and products they supply and have become less dependent upon their traditional financial intermediation business, and

(3) banks have come to exploit their core competencies (information, risk analysis, monitoring etc.) in a variety of ways other than traditional on-balance sheet business.

A central theme is that the fundamental economics of banking are changing and that, over the next decade and beyond, the banking industry (and financial systems in general) are likely to be subject to substantial structural and operational change. Some of the

traditional monopolies and inherent comparative advantages possessed by banks are being eroded. The pressures impinging on banks are changing the fundamental economics of banking and have the potential to transform the structure of the industry, the type of business undertaken by banks, the type and range of institutions conducting banking business, and the way that traditional banking business is undertaken. They are also likely to affect the internal structures of the banking firm as banks move towards a structure of *Contract Banking.*

Banks around the world face formidable challenges. In particular, as entry barriers into banking services are eroded, banks are increasingly facing competition from a wider range of actual and potential suppliers of banking services: the capital markets, money markets, non-banking financial institutions, and also 'non-financial banking institutions'. In addition, the development of electronic banking has in some countries enabled foreign banks to enter hitherto relatively closed domestic retail banking markets.

3. Are Banks in Decline?

In some respects the relative role of traditional banks in the financial system is declining and the value of the banking franchise is being eroded. Bisignano (1998) suggests that one of the most significant changes in the past decade in the structure of the financial industry has been the relative decline in the proportion of total financial assets held by depository institutions. There is a substantial literature (mainly related to the banking system in the US) that discusses these propositions. The usual evidence cited includes:

- the declining share of bank loans in total corporate sector borrowing;
- the shift towards corporate sector borrowing in the commercial paper market (the immediate competitor to banks);
- the loss of corporate lending business to finance companies;
- the declining share of US personal sector savings flows going to banks; and
- the spectacular growth of money market mutual funds.
- the trend towards securitisation in many national and international markets;
- the entry of non-bank financial institutions into traditional banking markets;
- the emergence of a new set of non-financial companies (such as supermarkets) in the markets for retail and wholesale financial services;
- non-banks offering payments facilities; and
- the development of in-house company banks.

Banks are no longer the exclusive suppliers of banking services. The debate about banks possibly being in secular decline is more evident in the US than in other countries. In some European countries, for instance, banks have been more protected through a legacy of regulation which has restricted competition; the capital market is less developed than in the US, and entry barriers have been more powerful. Bisignano (1990) notes a more tolerant attitude in some European countries towards cartels and regulation which have restricted competition. In Japan, banks in the past have to some extent been protected by the close relationship they hold with their large corporate customers. This now seems to be breaking down under the pressure of an unprecedented banking crisis.

Regulatory approaches are now changing and universally regulation has become less protective of banks as public policy priorities have shifted towards enhancing efficiency through competition. Although pressures on the banking industry may have been more pronounced in the US, Browne (1992) cites international evidence that banks are losing market share in lending business. Peter Martin of the *Financial Times* also considers how the traditional role of banks is in decline (Martin 1998).

However, great care is needed when translating the banks' loss of share in lending business (particularly to the corporate sector) to the more general notion that banking as an industry, and banks as firms, are in secular decline. The two are synonymous only to the extent that the role of banks in financial intermediation is measured by the volume of assets on the balance sheet, and that banks do not compensate for the loss of some business by diversifying into other areas. A central theme to be developed in later sections is that banks have certain core competencies or market advantages (e.g., information, risk analysis, etc.) and that these can be used in a variety of different ways amongst which making loans and holding them as assets on the balance sheet is only one. The key to developing effective competitive strategies lies in identifying core competencies; making judgements about

how they can be used, and in selecting the markets in which they can be exploited. The final stage is to select specific products and services to serve the markets chosen.

The value added by banks (the ultimate measure of their role in the financial system) is wider than the measure of bank assets. A later section argues that bank loans are in truth a bundled collection of *processes* (origination, risk analysis, administration, etc.) and that banks may supply these component services without holding the ultimate asset on the balance sheet. A different perspective emerges if banks are viewed as suppliers of financial services (including the component processes of loans) rather than as institutions which hold assets on the balance sheet. Focus on the latter may exaggerate the declining role of banks.

In fact, even in the US, data indicate that there is no clear evidence of banks being in secular decline when the focus is value added, and when allowance is made for diversification into new business much of which is conducted off the balance sheet. Boyd and Gertler (1994) make adjustments to balance sheet data to account for the different risk characteristics of different types of bank assets, and apply national income accounts data to the measurement of value added by banks. They conclude that there is no unambiguous evidence that banks are in decline in the US. Similar conclusions are found in Kaufman and Mote (1994).

4. The Banking Firm

A simple representation of the banking firm (Figure 1) serves to illustrate the analysis to follow. If all other interest rates are given, intermediaries (deposit-taking institutions) face an exogenous upward sloping supply curve of deposits (S_D), indicating that the supply of deposits made available to it rises as its own deposit interest rate rises. For a given supply curve of deposits, the institution's endogenous supply of loans (S_L) is also a rising function of the loan interest rate. The interest margin (PQ) (the supply price of financial intermediation) must cover the institution's non-deposit costs (management and technology etc.), the cost of capital (which will increase as either the required capital-assets ratio or the cost of capital rises), the risk premium charged on loans, tax payments, and the institution's retained profits. The margin that can be earned will be influenced by competitive pressures. The demand curve for loans is given by D_0. In equilibrium the volume of deposits and loans is OT and the institution pays a deposit rate of i_0 and charges a loan rate of i_1. Clearly, this is a simplification of the business operation of a financial firm and ignores important questions about the pricing of different assets and deposits, different risk premia charged, and decisions about the structure of the loan and asset portfolio. It also ignores off-balance-sheet business. While important in practice, these complications need not be incorporated for the purposes at hand.

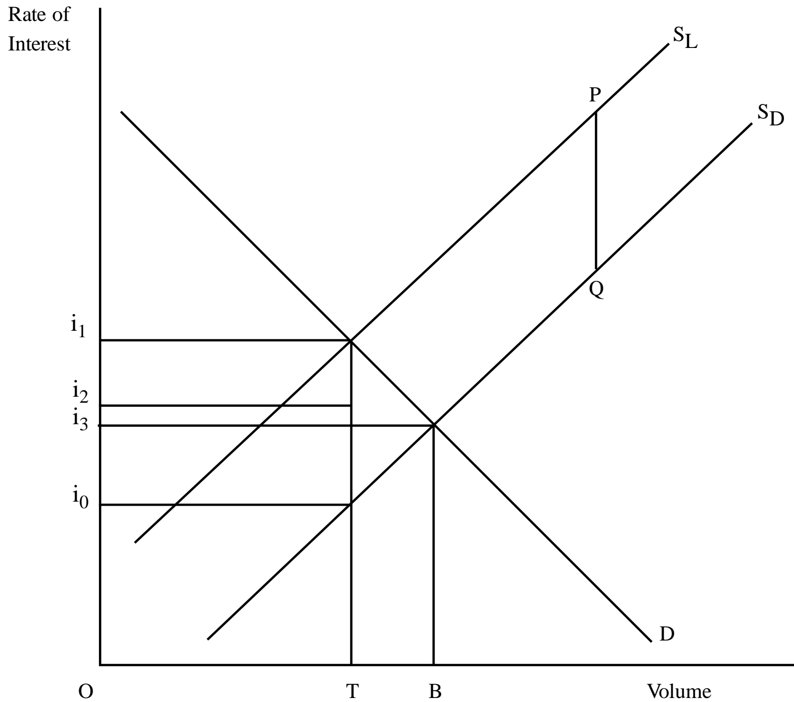
In Figure 1 the cost per unit of intermediation is represented by the interest rate differential i_0i_1 and the total cost of intermediation in the economy is (i_0i_1 x OT). If direct deals between ultimate lenders and borrowers (potential depositors to, and borrowers from, banks) were costless, both could gain by by-passing banks (the process of *disintermediation*). For the same volume of business OT, at a rate of interest such as i_2 the borrower would pay a lower rate of interest and the lender would receive a higher rate of interest than by dealing through a bank. Alternatively, if the supply curve of funds made available directly to borrowers were the same as that offered to banks, the volume of deals would rise to OB at a rate of interest i_3.

In effect the banks' margin (i_0i_1) represents the cost paid in the economy for the intermediation services of banks.

The fact that banks are used (even though they are costly) indicates that direct and capital market deals are not costless and that either borrowers and/or depositors are prepared to pay for the services of banks. Anything that either increases this cost (and forces banks to widen the margin), or lowers the benefits offered by banks, represents a potential loss of business to banks. This is because either alternative mechanisms become relatively cheaper or more efficient, or that the costs of the intermediation services of banks are deemed to be too high. This leads to a consideration of the theory of the banking firm: the economic rationale for the existence of banks, and why society is prepared to pay for their services. A central analytical issue is what the benefits are that makes society willing to pay $i_0i_1 \times$ OT for the services of banks.

As with any firms, banks exist for one of two generic reasons:
- they may have a particular expertise enabling them to do what other firms cannot do: they possess certain monopoly attributes and capabilities, or
- they do what can be done by others but they possess certain comparative advantages which give them a competitive advantage in the market place.

Figure 1: The Banking Firm



It follows that any firm becomes potentially vulnerable if it loses a monopoly power (i.e. others become able to do what was previously the exclusive preserve of the firm(s) in question), or its comparative advantages are eroded. In some areas of business banks have historically had monopoly powers and comparative advantages. However, both are now under question in that there is now virtually nothing a bank does which could not be done by others.

4.1 The Vulnerability of Banks

Banks could be said to be vulnerable for six general reasons:

- their monopoly powers are being eroded as alternative suppliers of traditional banking services emerge;
- banks may be losing some of their comparative advantages in the provision of traditional services;
- the supply price of financial intermediation may have risen: the lending margin has widened;
- the costs of alternative suppliers of intermediation services have fallen;
- consumers may value the services of banks less, or their preferences may switch to alternative suppliers; and
- some of the factors that give rise to the existence of banks may themselves have become less powerful.

Each of these is now considered in turn as a background to the subsequent discussion of the secular pressures on the banking industry.

4.1.1 Monopoly erosion

In many ways, banks have lost some of their traditional monopolies. In particular, the development of technology has lowered entry barriers as has the process of deregulation. The process of *deconstruction* (considered in detail below) also means that new suppliers can offer competition to banks because they are no longer required to provide the full range of banking services, or undertake all of the processes involved in supplying banking services. In addition, consumers now have more information about a wider range of alternatives to bank deposits for holding liquid funds. The development of money market mutual funds, for instance, (some of which incorporate payments facilities), also challenges the traditional monopoly of banks in the supply of transactions balances.

A core competence of a bank is the information base which results from managing customers' bank accounts. However, banks are losing some of their traditional information monopolies as information technology has the effect of increasing the supply, and reducing the cost, of information to a wider range of suppliers of financial services. For instance, information technology enables supermarkets to use loyalty cards to build up a profile of customers by analysing their expenditure patterns in the store. This general trend is reinforced by more public disclosure of information by companies and the development of rating agencies which are able to analyse information and assess firms' credit-standing.

4.1.2 Comparative advantage erosion

New technology and declining entry barriers have also challenged some of the traditional comparative advantages possessed by banks. In particular, disclosure laws have eroded some of the information advantages traditionally held by banks. The development of unit trusts and money market mutual funds also allow consumers to have diversified portfolios even with relatively small investments. The development of credit scoring techniques also means that the credit standing of borrowers can be assessed without the necessity of the information derived through an institution maintaining a borrower's current account. The growth of rating agencies further challenges banks' traditional information and monitoring advantages.

4.1.3 Own margin (supply price)

Clearly, if the banks' supply price of financial intermediation rises (as measured by the interest margin) banks may become relatively less competitive vis-à-vis alternative suppliers of intermediation services. This may be because they are locked into a traditional cost structure due partly to having invested substantially in a branch network which is no longer the only means of delivering financial services. In addition, competitive pressures have eroded the ability of banks to engage in cross-subsidy pricing which in turn implies that previously subsidised parts of the business are less viable to the extent that banks are forced through competition to lower the price of previously subsidising components of the business.

For similar reasons, competition has eroded endowment profits to the extent that competition is forcing banks to pay rates of interest on a higher proportion of deposits, and the rates of interest paid have moved closer to market levels. The power of competition is evident in the pressure on banks throughout the world to cut costs: by reducing the numbers employed and by closing branches. In other words, banks are under considerable competitive pressure to lower the supply price of financial intermediation and to narrow the lending margin.

4.1.4 Lower costs of alternative suppliers

For the same reason, if the costs of alternative suppliers of traditional banking services have fallen relative to those of banks, the latter become vulnerable. In particular, financial innovation and the power of new technology has tended to increase the relative competitiveness of the capital market *vis-à-vis* banks. New delivery technology has also lowered the cost of alternative suppliers of financial services (e.g. supermarkets) to the extent that they no longer need to develop a branch network. Further, to the extent that regulatory costs imposed on banks are higher than those imposed on alternative suppliers of some of the services provided by banks, regulation has the effect of increasing the relative competitiveness of non-bank suppliers of banking services. A later section considers various factors that enable new entrants (such as supermarkets) to compete effectively with traditional banks.

4.1.5 Valuation of services

If consumers value the services offered by banks less than in the past, or their preferences shift to alternative suppliers, banks again become vulnerable. Borrowers may choose to have a more diversified structure of debt and to become less dependent on banks for the supply of credit. As financial markets have broadened and deepened, markets increasingly offer a wider choice of facilities than has been the case in the past. This is particularly powerful for corporate borrowers to the extent that competitive pressures in capital markets have become global in nature.

4.2 The Existence of Banks

It is also necessary to consider the extent to which some of the traditional factors that give rise to the existence of banks and enhance their role in the financial system may have become less powerful. The traditional theory of the banking firm (the so-called 'existence' literature) emphasises eight elements which underlie the role of banks and create a rationale for their existence:

- information advantages;
- imperfect markets;
- the theory of delegated monitoring;
- control;
- the insurance role of banks;
- commitment theories;
- regulatory subsidies; and
- the special role of banks in the payments system.

Given their importance in the theory of banking, and the potential vulnerability of banks, each of these is now considered.

4.2.1 Information advantages

Several theoretical approaches to the existence of the banks focus upon various information problems in financial transactions, and how banks are able to handle them more efficiently than the capital market or bilateral transactions between savers and borrowers. Banks have a comparative advantage over capital markets when information on enterprises and their projects are not easily transferred to open markets, when problems arise over monitoring borrowers' behaviour, when for competitive reasons firms do not wish to make information publicly available, and when borrowers do not wish to be subject to the discipline of continuous public scrutiny. With personal customers, banks gain valuable information by managing their bank accounts as transactions through the

account reflect customers' income, wealth and expenditure patterns. The information rationale for financial intermediation is that banks can solve *ex ante* (adverse selection) and *ex post* (moral hazard) contracting problems more efficiently than can be done either directly between ultimate borrowers and lenders, or through markets.

Bisignano(1998) suggests that "The transformation of financial systems, from highly intermediated to more capital market orientated, and from bank intermediated to intermediation by non-bank financial institutions, is closely linked to the generation and distribution of information on potential borrowers." Several factors are operating to erode some of the banks' traditional information advantages *vis-à-vis* alternative suppliers of intermediation services. Firstly, technological developments have reduced the cost of acquiring and accessing information for alternative suppliers. Secondly, rating agencies have developed both to make information more widely available and accessible, and to assess information on behalf of potential investors. This is of particular value to capital market transactors. Thirdly, disclosure laws (most especially in the United States and the UK) have been extended with the effect that companies now disclose more information. This means that, in some cases, information which was previously a private advantage to the bank has become more of a 'public good'. In each of these ways banks' information advantages have been eroded.

The development of information technology also increases the availability and access to information to institutions other than banks. There is something of a vicious or virtuous circle: as capital markets become more efficient, firms have a greater incentive to disclose more information in order to secure access to capital market facilities. In turn, this increased supply of information enables the capital market to function more efficiently and to act as a greater competitor to banks in their lending business. As noted by Bisignano (1990): 'The comparative advantage that banks have in obtaining, and assessing the creditworthiness of borrowers and of resolving the asymmetric information problems, appears to be declining, primarily in those countries with increasingly sophisticated capital markets'. In various ways, therefore, banks are losing some of their traditional information advantages that have been the core of their comparative advantage.

4.2.2 Imperfect markets

One general theory of the banking firm is that banks exist because financial markets are imperfect and incomplete. However, the process of 'spectrum filling' (approaching the Arrow-Debreu state) reduces the number and extent of discontinuities in the range of market instruments. Borrowers now have a wider range of capital market instruments. Van Horn (1985) argues that securitisation and financial innovation take us closer to a world of complete markets. In addition, new information and trading technology has reduced information and transaction costs in capital markets relative to bank lending costs, (Karaken, 1987).

Technology has also reduced transactions costs in capital markets and, as already noted, has had the effect of reducing information costs and making information more publicly available for the capital markets. In general, the more complete are contracts the easier they are to securitise and the process of financial innovation generally has this effect: it enables more complete contracts to be constructed. Overall, market pressures have been eroding the market imperfections and incompleteness which have given rise to the banks' comparative advantage over markets, (Eisenbeis, 1990).

The net result is that markets have become more significant competitors to banks. Merton and Bodies (1995) point to current trends in the competition between banks and markets and postulate a theoretical case where a complete set of markets evolves.

4.2.3 Delegated monitoring

As contracts are necessarily incomplete, borrowers need to be monitored to ensure that their behaviour maximises the probability that loans will be repaid. The question is who is best able to undertake such monitoring bearing in mind that it is a costly activity. In parallel with analyses which emphasise information problems is a strand which emphasises the role of banks as monitors of behaviour. In effect, investors (who become depositors in banks) delegate the monitoring role (both in assessing projects and monitoring subsequent behaviour) to banks which have two comparative advantages: (i) economies of scale in monitoring; and (ii) an ability to reduce the cost of monitoring by diversification (Diamond, 1984). Diamond's model incorporates monitoring costs and shows that, because direct investors would be duplicating monitoring costs, and that to some extent monitoring and evaluation is a public good that no-one has an incentive to provide, financial intermediation can be the most efficient monitoring method. This is one way of dealing with asymmetric information and moral hazard of borrowers (e.g., changing behaviour after a loan has been made). Banks reduce information and incentive problems via monitoring the firm. A major theory of the banking firm is that of delegated monitoring: ultimate lenders choose to delegate such monitoring activity to banks because they have advantages in this area. However, along with the increased availability and lower cost of public information, the development of rating agencies also challenges the traditional role of banks as delegated monitors. As noted by Mayer (1994), monitoring can become a fee-based activity rather than an integral part of the bank loan process. Bisignano (1998) also questions the alleged superior information, screening and monitoring role of banks and notes that other intermediaries may be equally efficient at such activity.

4.2.4 Control theory

Allied to monitoring is the related concept of control. A bank is in a better position to solve moral hazard problems on loan transactions through superior control mechanisms. It is more able to exercise control over the behaviour of borrowers than can individuals and (sometimes) the capital market. Firstly, it is able to devise and enforce incentive compatible contracts by, for instance, demanding an equity stake in the company (common in some countries), by setting conditions on the loan, and by establishing performance clauses for different tranches of a loan. Secondly, it can enforce loan contracts (and signal that it will always do so) which dispersed lenders often find uneconomic to do. Thirdly, the bank may demand a management stake in the company. Fourthly, it is able to demand collateral which enhances the incentive for the borrower to behave in the interests of the bank.

In these ways a bank is able to act as a proxy share-holder even without an equity stake. At the same time, widely dispersed share-holdings may be an inefficient way of exercising control. Thus the distinction between debt and equity in the role of control should not be drawn too rigidly. Overall, banks may have lower control and enforcement costs. However, as shareholdings in companies become more concentrated in the hands of a smaller number of large institutional shareholders, they in turn are able to exercise control more effectively. This again challenges one of the banks' traditional comparative advantages.

4.2.5 Insurance role of banks

Banks implicitly provide some insurance services that insurance companies are unable to provide because the risks do not meet the standard characteristics of explicitly insurable risks: losses being readily observable and verifiable (no asymmetric information), the absence of moral hazard inducing the insured to behave in a manner that is prejudicial to the interests of the insurer, and the diversifiability of risks.

Lenders face the risk that they may need funds before the maturity of a non-marketable loan. Liquidity needs are unexpected but not highly correlated between transactors. By pooling risks (having a large number of depositors each with uncertain future liquidity needs) the bank is able to predict its own requirement to meet its depositors' liquidity needs. The greater the number of depositors the more predictable is the liquidity requirement, and the bank is able to minimise its own holdings of liquid assets to meet this demand. By pooling risks the bank is able to provide liquidity insurance to risk-averse depositors facing private liquidity risks. It is this that enables banks to hold non-marketable assets. As put by Dowd (1996): 'The bank thus transforms imperfectly marketable, longer term assets into fully marketable, short-term liabilities, and in the process provides its debt-holders with insurance against the contingency that they will be caught short by an unexpected liquidity shock'. The development of unit trusts and money market mutual funds has the effect of eroding the banks' traditional advantage as suppliers of liquidity insurance. Consumers who traditionally maintain liquidity in banks are now able to earn a higher rate of return in money market funds while at the same time securing the advantages of liquidity. This is especially the case in those funds which also offer payments facilities.

4.2.6 Regulatory subsidy

A further strand of analysis focuses not upon intrinsic advantages possessed by banks, but upon the implicit subsidies they receive through various forms of protective regulation; deposit insurance, implicit lender-of-last resort facilities, and regulation that limits competition, etc. Regulation may accentuate whatever economic advantages banks possess and may in the process create economic rents for banks. There is a powerful strand in the history of regulation based upon the alleged dangers of 'excessive competition' (Llewellyn, 1986). Regulation frequently has the effect of limiting competitive pressures and sustaining restrictive practices and cartels. However, the general trend of deregulation means that these protections have been gradually eroded. To the extent that regulation previously sustained excess capacity, the process of deregulation is likely to reveal the extent of such over-capacity. An industrial structure built up in a protected and uncompetitive environment is likely to be unsustainable in more competitive market conditions. In general, regulation has become less protective of the banking industry as public policy priorities have increasingly been given to enhancing competition and efficiency in financial systems.

4.2.7 Payments advantage

Some theories of the banking firm emphasise the advantage that banks have because they have a monopoly in, and are an integral part of the payments system. However, banks are also losing their monopolies in this sector of the financial system. The development of money market mutual funds and unit trusts with payments facilities offers a challenge to the banks' traditional monopoly in this area. Similarly, the development of credit and debit cards erodes this same monopoly, and an increasing proportion of transactions can now be executed without the need for even a temporary stock of funds in a traditional

bank account. The development of electronic barter has the potential to undermine banks' traditional monopoly in the payments system.

In general, this is a threat to banks based on a challenge to two traditional assumptions: that transactions require money; and that only banks can issue money. Money is a convenient facility as it means that transactors do not need information about the standing of the payer as would be the case if payments were made through the transfer of other assets. However, technology also facilitates the verification of the standing of transactors: a particular example is the development of smart cards. Information can now be easily stored in such cards which in turn can be issued by a variety of firms other than banks.

4.3 Assessment

In various ways, therefore, the related pressures of competition, deregulation, financial innovation and technology have eroded some of the comparative advantages of banks in their traditional financial intermediation business. In addition, new information and trading technology has reduced information and transactions costs in capital markets relative to bank lending costs. Financial innovation and technology (together with the development of rating agencies) are eroding transactions and information costs and market imperfections which have been the basis of banks' efficiency and comparative advantage over capital markets. Historically, regulation has tended to exaggerate the comparative advantages possessed by banks because, to some extent, it created something of a protected market environment.

In effect, banks in some countries are losing their predominant role as deposit takers and lenders to companies. Market pressures are eroding the market imperfections which gave rise to the banks' comparative advantage over intermediation in capital markets (Eisenbeis, 1990). Financial innovation and technology are also eroding transactions and information costs and market imperfections which are the basis of financial institutions' efficiency over direct credit markets. Banks' own cost structures (including the cost of capital) may also have eroded some of their comparative advantages. The recent loan loss experience of banks in many countries suggests that banks are also subject to problems associated with asymmetric information and inefficient monitoring which some models of the banking firm highlight as one of the banks' potential major comparative advantages.

5. Some Basic Distinctions and Questions

Banks are no longer the monopoly supplier of banking services, but neither are they restricted exclusively to traditional banking business. When considering strategic issues in banking it is, therefore, necessary to make three fundamental distinctions:

- between the demand for traditional banking services and the position of banks in supplying those services;
- between these traditional services and the actual business conducted by banks; and
- the distinction between *industries* and *markets*.

An instructive analogy is found with the history of the stage-coach industry. In the 1860s it would have been correct to predict that the demand for travel services would rise exponentially: the *market* for travel was expanding. But it would have been a mistake to assume that stage coaches (an industry) would continue to be a dominant supplier of the service. Stage coach companies disappeared not because the demand for travel declined, but because new methods of providing travel services emerged. Conversely, it would have been a mistake to assume that stage coach companies could only provide stage-coach or even travel services. As Wells Fargo demonstrated, there was the option of re-defining the business in a fundamental way. Indeed, Wells Fargo became most successful and profitable at the time its traditional business was in decline. The company took a radical, strategic view of the future and was prepared to fundamentally change the nature of its business.
Companies in any industry may become vulnerable in three circumstances:

- consumer preferences for products and services change;
- demand shifts away from traditional firms as entry barriers decline and new suppliers become available; or
- consumer preferences change as alternative ways of satisfying demand emerge.

Although the demand for banking services will continue to rise (and probably relative to incomes), this does not mean that institutions called ‘banks’ will automatically be the suppliers of these services. However, neither does it follow that banks in the future will be conducting only the banking business they have conducted in the past.

This leads to the third distinction noted above: between industries and markets. Stage coach firms declined because they focused on a particular *product* (the stage coach form of travel) rather than the *market* for travel services. They viewed themselves as being in the stage coach business rather than the travel business: they were product, rather than market, orientated. Failure to distinguish between *industry* and *markets* can be a major error in strategic planning in any firm.

5.1 Some Basic Questions

Having outlined some of the traditional analysis and theory of banks and why they exist, five questions are now posed:

- Are banks necessary for banking?
- Is banking necessary for banks?
- Is banking a declining industry?
- Are banks declining firms?
- Will the traditional integrated structure of the banking firm survive?

5.1.1 Are banks necessary for banking?

It would appear that the answer to this is 'No' in that there is now little that banks do that could not equally be done by markets, non-bank financial institutions or non-financial banking institutions. As entry barriers are eroded a wider range of competitors has emerged: Department Stores, supermarkets, companies such as GEC, Virgin Atlantic, a range of 'industrial banks', unit trusts and money market funds, telephone companies etc. Alternative firms can and do provide some traditional banking services. Some life assurance companies have recently obtained banking licences and offer a range of banking services. For instance, the Scottish Widows life assurance offers four savings deposit accounts (including an instant access account). Similarly, Standard Life and the Prudential Corporation offer a branchless deposit and mortgage lending operations. Marks & Spencer has a banking licence and sells a range of financial services and products and also makes general loans to retail customers. Some supermarket stores (Tesco, Sainsbury, and Safeway) offer limited banking facilities and offer a rate of interest on credit balances significantly higher than traditional banks. The Virgin Group sells a range of financial products and offers some banking services: deposits, loans, mortgages.

For incumbents, the devising of viable competitive strategies is particularly challenging when it is not clear or certain who *future* competitors will be (because the economics and competitive strategies of new-entrants are difficult to fathom simply because they are different from incumbents), and also when new entrants are competing in a business which is subsidiary to their mainstream but which is a core business of incumbents. The latter consideration may have the effect of raising the contestability of a business in that, because it is not a core business of a new-entrant, exit barriers may be low.

5.1.2 Is banking necessary for banks?

Again the answer seems to be 'No' except in the purely tautological sense that 'banking' might be defined as anything that banks do. In principle, banks need not be restricted to 'banking' business any more than Wells Fargo was restricted to stage coaching. Just as insurance companies have diversified into banking, so banks have diversified into insurance. Overall, the traditional distinctions between different types of financial institution have been eroding rapidly and substantially, and even to the extent that it is debatable whether, in a decade's time, there will be clearly recognisable institutions called 'insurance companies', 'banks' etc.

The question arises as to whether there are *economic* or *regulatory* limits on the extent to which banks can diversify from their traditional financial business. The dominant trend is that banks have diversified considerably into a wide range of financial services. It remains to be seen whether, on any significant scale, they will diversify into non-financial business. The question also arises as to whether there must be a 'core' banking business to support a wide range of other financial and even non-financial services.

A possible sign of the times was the prospect that National Westminster Bank might sell office supplies. In 1996 the bank was reported as considering using its purchasing power to supply a wide range of stationary items to its own business customers and other companies (*Financial Times*, 1996). However, such plans did not materialise. Nevertheless, the bank has established a group to explore business opportunities outside traditional areas of financial services.

5.1.3 Is banking a declining industry?

Posing the question immediately raises the issue of what the precise nature of banking is. Banks undertake many kinds of business most especially as, over time, they have diversified substantially into a wide range of financial services. For purposes of this analysis, what might be termed 'traditional banking' refers to the financial intermediation business (accepting deposits with one set of characteristic and creating or holding assets with a different set) that banks conduct in their particular fashion. The key characteristics of banks in the conduct of financial intermediation business may be summarised as follows: debt contracts dominate both sides of the balance sheet; banks are highly geared as the equity base is only a small proportion of their debt contracts; assets (especially loans) are non-marketable; loans are held on the balance sheet until maturity; loans are made on the basis of inside information; the loans held on the balance sheet are fixed in value and not re-priced on the basis of market signals; and the liabilities of banks are defined as 'money' and form the core of the payments system.

A major question is whether, to any significant extent, banking could be said to be a declining industry in that the financial intermediation services provided by banks can be supplied more economically by institutions other than 'banks' and through markets. Historically, industries in some countries have declined because of various factors operating individually or in combination: the development of external competition, declining entry barriers (often due to new technology), the development of superior technology outside the traditional industry, the removal of protective regulation or subsidies, a switch in consumer demand away from traditional suppliers, and the emergence of alternative ways to satisfy demand. Some of these factors which have caused other industries to decline are now recognisable in banking. In three areas in particular, it could be said that banking is to some extent a declining industry: on-balance sheet, large corporate sector business (where the capital market has become a powerful competitor); standard retail loans (where a process of *secondary securitisation* has developed, e.g., with mortgages), and in the payments system.

5.1.4 Are banks declining firms?

This is not the same question as the last. A traditional industry can be in decline though not each and every firm within it. It clearly depends upon what strategic responses are made and the extent to which existing firms within an industry are able to re-define the nature of their business and diversify away from areas where traditional advantages are being eroded. While stage coaching became a declining industry, Wells Fargo was not a declining firm.

5.1.5 Will the traditional bank structure survive?

The traditional banking firm is vertically integrated in that it manufactures and provides the products and services it offers to customers, and undertakes all of the component processes of the products and services it offers. The concept of *contract banking* challenges this traditional structure. The trend is likely to be towards sub-contracting banking services and processes to external specialist companies with the bank being a manager of a set of internal and external contracts. In effect, a bank becomes a broker between the customer and a set of outside contractors whose activities make up the range of banking products and services. This is considered further in Section 11.

6. Secular Pressure on the Banking Industry

Over the next decade, banking as an industry, and banks as firms, are likely to face substantial structural change. The business of banking, the operation of the banking firm, and the structure of the industry are likely to change radically. There are three main reasons why the changes in the financial system are likely to be so substantial:
(1) a powerful *combination* of pressures operating on the industry,
(2) because some of the pressures (notably technology) challenge the core of financial business: *information, processing* and *delivery*, and
(3) because, as entry barriers are declining, competition is not only intensifying but coming from new types of competitors.
It is largely technology, and what follows from it, that will transform the banking and financial services industries, and change the fundamental economics of banking.

The dominant and inter-related pressures faced by the banking industry may be summarised as follows:
- competitive pressures are increasing and coming from a wider range of competitors;
- banking markets have become more *contestable*;
- the finance industry is becoming increasingly globalised and subject to global competitive pressures;
- entry barriers into banking are declining;
- this has resulted in excess capacity: with respect to the number of firms, infrastructure, capital, and technology;
- the potential for *deconstruction* (the unbundling of products and processes with each being supplied separately) allows 'cherry picking' and lowers entry barriers as new entrants are not required to offer the whole service or product;
- competition is operating asymmetrically: banking can be invaded from outside more easily than banks can diversify out of finance;
- changes in regulation and the process of de-regulation are offering less protection to banks;
- information, trading and delivery technology is transforming all aspects of banking business and the banking industry;
- the potential for cross-subsidies is being eroded;
- consumer trends are changing;
- pressure on cost structures is mounting;
- increased competition coming from the capital market, and
- capital market pressure to maximise shareholder value.

The evolution of national banking systems, and the business of banks in particular countries, is always and everywhere influenced by a combination of *country-specific* and *global* pressures. In the years ahead the relative role of these two sets of forces is likely to change with global pressures becoming more decisive than country-specific factors. Thus, the structure of, say, the Belgian banking system and the business operations of banks in Belgium will come to be more influenced by global pressures (those that impact on banks in all countries) than factors specific to Belgium. Put another way, the pressures operating on banks in Belgium will have much in common with those influencing the Spanish banking system. This is partly because the dominant pressures are themselves global in nature. This might suggest that differences between national banking systems could

become less pronounced. In Europe this is likely to be reinforced by the adoption of a common currency.

In practice, the timing, speed and intensity of the pressures vary from country to country and in some countries regulation continues to offer a degree of protection to the value of the banking franchise. Nevertheless, as competition becomes increasingly global in nature, and many of the pressures (e.g., technology) are universal, no nationality of banks will be immune from the pressures operating on the banking industry. However, the necessary adjustment may be impeded in some countries by, for instance, labour laws which make it difficult or expensive to close branches, amalgamate, and reduce the number of employees. If the UK example is representative, where the reduction in the number of people employed in banks has been substantial, banks in some European countries could become locked into a cost structure which could undermine the local banks competitiveness *vis-à-vis* foreign banks and new types of competitors.

6.1 Competition

The overwhelming pressure will continue to be increased competition. Effective competition can emerge through many alternative routes: (1) the existence of similar competing firms in the industry; (2) a high degree of *contestability* in the industry and in particular low entry and exit barriers, or (3) because consumers have alternative ways of satisfying their demands and are not dependent upon the products offered by particular firms. Customers' demands for banking services and products are *derived demands*: i.e. they are not valued in themselves but for the contribution they make to the underlying demand that needs to be satisfied. There are various alternative ways in which the underlying demand can be met, and markets are one.

Competition is not a new phenomenon in banking. However, three particular aspects of the way competition is evolving give it a new dimension:

- entry barriers are declining and hence banks face competitive pressure from a wider, and more diverse, range of competitors;
- as a result of de-regulation, the regulatory environment has become less protective of the banking industry; and
- competition has increasingly become global in nature.

Banks have come to face more intense competition on both sides of the balance sheet: for deposits and loans. On the liabilities side, banks in many countries face increased competition from unit trusts, money market funds and life assurance companies. In many countries (the UK in particular) the proportion of personal sector assets in the form of liquid deposits is decreasing while that in illiquid, longer term insurance and investment products is rising. Some major life assurance companies have recently secured banking licenses in order to compete for traditional deposits.

There is now a wider range of substitutes for bank deposits. Browne (1992) notes the impact of financial innovation: 'financial innovation has now provided savers with greater flexibility in managing their portfolios by enhancing the available instrument choice, and by making existing instruments more accessible'. Consumers also have more choice and are able to accept some asymmetric information risks in return for a higher interest rate whereas historically they have, to some extent, been locked in to bank deposits. Financial innovation, and the creation of new instruments, also enable risks to

be hedged. Put another way, part of the returns to intermediation have now been appropriated directly by the saver rather than deposit-taking intermediaries.

It is partly because of these trends that banks in some countries now offer unit trust facilities within their Group so that deposits lost by the bank are not lost to the Group overall. In effect, an original process of disintermediation (depositors at banks switching to markets) has been followed by a countervailing process of *re*-intermediation as banks have themselves come to offer market instruments for investors. On the assets side, competition for loan business comes from capital and money markets and other institutions.

6.2 Banking markets have become more *Contestable*

The power of competition to constrain the behaviour of incumbent firms in an industry is not so much indicated by the degree of competition prevailing at any point in time, but the extent to which the market is *contestable*. A market is said to be contestable if entry and exit barriers are low: i.e. it is easy for new firms to enter an industry but also easy for them to exit. The latter will be the case when sunk costs (i.e. costs that cannot be recovered at the point of exit) are low. In such a market environment, competition is not measured by the number of firms currently in an industry. If entry and exit barriers are low, incumbent firms will be under pressure to behave as if they were operating in a market with many competitors. If incumbent firms' costs, profits or prices are excessive, new firms will easily enter and this threat of entry constrains the behaviour of incumbent firms.

Banking markets (rather than necessarily the banking industry) have become more contestable. The distinction is made because it is now possible for banking products and services to be unbundled and for new firms to enter some banking markets without offering the full range of traditional banking products and services. Several factors have raised the contestability of banking markets:

- The development of information technology increases the supply, and lowers the cost, of information, and enables new entrants to access and process information.
- Regulatory barriers have been eased as regulation has become less restrictive about the type of firms that are able to offer banking services and products and, where necessary, acquire banking licences.
- The development of credit-scoring techniques, coupled with greater access to information, enables new entrants to assess credit risks without having the experience gained though managing a borrower's bank account over a period of years. This lowers the economies of scope advantages traditionally possessed by banks.
- The process of *deconstruction* (the ability to decompose banking products and services into their component parts with each supplied by different firms) means that new firms can enter a market and compete without undertaking all of the processes involved in a particular product. It also means that new entrants are able to offer banking services without having to incur substantial fixed costs at the outset. This concept is discussed in more detail in a later section.
- Securitisation also means that loans need no longer be held permanently on the balance sheet of an originating institution (see later section).
- The emergence of *Contract Banking* (banks out-sourcing some processes) also makes it easier for new firms to enter banking markets. A particular implication of out-sourcing is that scale becomes less significant in that a small firm is able to buy-in economies of scale from external suppliers of some component services.

- As new forms (most especially telephonic) of delivering banking services have emerged and developed rapidly, the branch network (traditionally an entry barrier) has become relatively less significant. New entrants are able to offer banking services without the necessity of an extensive and costly branch network with concomitant heavy fixed costs.
- In some banking markets (notably wholesale lending) the steady globalisation of banking markets has made local markets increasingly contestable as large-scale borrowers have access to global banking markets.
- The development of Internet facilities for banking products and services has also enhanced the contestability of banking markets. Above all, the Internet means that search costs for consumers and advertising costs for suppliers have been lowered substantially. It also means that distance between supplier and consumer becomes less significant.
- Many bank products have become increasingly commoditised (Santomero, 1999) and sold almost exclusively on the basis of price. The commoditisation of some financial products has made such markets more contestable and made competition more perfect than in the past.
- Consumers have become more prepared to 'unbundle' banking products (i.e. regard each product as an independent transaction rather than as part of a total banking package). This makes banking markets more contestable as new competitors are able to focus on a narrow range of products and need not offer the full range of banking products and services.
- Linked with this, consumers have become less conservative about the type of firm (including non-financial firms such as supermarkets) they are prepared to deal with when conducting banking operations and buying banking products and services.

These considerations are important when judging the nature of the competitive environment in which banks operate. They are also relevant when making judgements about the competition implications of bank mergers, (this is discussed in a later section).

6.3 Globalisation

Competition has increasingly become global in nature in three respects:
- some customer groups have global financing options and are able to arbitrage between domestic, foreign, and international banks and capital markets;
- banks are not restricted to business within their own country; and
- as a result of regulatory entry barriers having declined, it has become easier for banks to locate in foreign countries.

Banks and financial markets face increasing competitive pressures emanating from a global financial system: the geographical domain in which competition operates has widened. National banking systems are increasingly in competition with each other as national financial systems effectively become sub-sets of a global system. This has a tendency to equalise the price of some banking services, to compete away relative inefficiencies and monopoly profits that might exist between different national systems, and to some extent to reduce the extent of structural differences between national systems.

6.4 Declining Entry barriers

A major determinant of the intensity of competition in any industry is the strength of entry barriers: the ability of new firms to enter a particular line of business. Competition frequently intensifies in an industry not because existing firms begin to behave differently or develop new strategies autonomously, but because an existing stable equilibrium and pattern of behaviour is disturbed by new entrants.

There are several reasons why entry barriers are declining:

- The development of information technology enables new entrants to access and process customer information. This is further facilitated by the ability of financial firms to develop partnership links with specialist technology companies.
- Developments in new forms of delivery (e.g. telephonic) enable new entrants to exploit new technology as easily as incumbents. Technology has eroded the comparative advantage secured through a branch network which historically has acted as a powerful entry barrier to the extent that it was the dominant form of delivery of some financial services.
- *De-construction* (the unbundling of products and services into their component parts) enables new entrants to compete by sub-contracting some of the processes involved in financial services. This lowers entry barriers in three ways: (1) new firms can compete without themselves undertaking all of the processes involved in a particular service; (2) it enables entry without the requirement of substantial up-front fixed costs which are involved with some processes, and (3) new firms are able to enter without having all of the necessary expertise as gaps in expertise (e.g. investment management) can be bought in from other firms.
- Scale has also become less important to the extent that processes can be sub-contracted as, with lower fixed costs through sub-contracting, economies of scale can be bought-in from specialist providers of processing services. Scale economies are in *processes* rather than firms which means that, if processes can be sub-contracted, economies of scale can be secured by firms of varying size.
- Regulation with respect to allowable business has generally become less restrictive.
- Consumers have become less restrictive in their image of suppliers of financial services. The idea of non-financial companies, for instance, supplying banking and financial services is now more acceptable in consumers' minds than in the past. Consumers have become less compartmentalised in their approach to financial services suppliers.
- In addition, in many cases of non-financial firms entering banking business, the ease of entry has been facilitated by banks being prepared to act as partners. This is the case, for instance, with supermarkets. This is partly a case of different institutions applying their respective comparative advantages within a joint venture.

These factors make it easier both for new firms to enter financial services markets and also for existing specialist firms to diversify into a wider range of financial services.

Competitive pressures intensify most powerfully when competition develops from outside the traditional industry as entry barriers decline. This is partly because new entrants often have different cost structures, are less bound by fixed costs, and are often more prepared to challenge traditional industry practices. The implied increased *contestability* of financial services markets poses competitive threats to financial institutions. New firms may enter financial markets but also have the capacity to subsequently exit the market at low cost. This may mean that there is a constant inflow and outflow of new

competitors. The range of new competitors may constantly change as each new entrant experiments with financial business which may, or may not, prove to be permanently profitable. Such ‘hit and run’ competition offers permanently higher competition to incumbents even though the population of competitors may be constantly changing.

6.5 Exit Barriers

While entry barriers have declined, exit barriers for new entrants are also low, though not negligible. Low *exit* barriers for newcomers pose as substantial a competitive threat as do low *entry* barriers. New firms are more likely to enter an industry if exit barriers are also low. Entry barriers into financial services have declined, and this is combined with low *exit* barriers for *new entrants* but high exit barriers for *incumbents*. This combination of entry and exit barriers represents a powerful new element to competition in the retail financial services sector. New delivery mechanisms, and the reduced need for a branch network, simultaneously lower both entry and exit barriers for new entrants: the original need for a branch network to be effective in delivering retail financial services acted as both a high entry and exit barrier.

6.6 Deconstruction

The process of *de-construction* also lowers entry barriers into some banking markets. A standard bank loan (such as a mortgage) can be decomposed into three main components: origination, management and asset-holding. A loan has to be originated (a borrower located), subsequently administered (interest rate set and collected), and held on a balance sheet. This is traditionally undertaken as a single process by a lending institution. And yet different agents may have comparative advantages in different parts of the process and there is no necessary presumption that a single institution is the most efficient at undertaking all three parts of the process. Thus a bank may have an advantage in originating loans (e.g., through the branch network) and administrating them, and yet face a capital or funding constraint in funding loans and holding them on the balance sheet. In which case it can originate and administer loans which, for a fee, are effectively sold to other institutions which have a comparative advantage (perhaps because of lower funding and capital costs) in holding them as assets. In the UK, for example, foreign banks have been significant holders of mortgage assets which have been originated and administered by building societies. In these cases different institutions exploit their particular comparative advantages. In general, specialist providers are often more efficient than others.

A further example is the process of *securitisation* of bank loans: a bank makes a loan and temporarily holds it on the balance sheet, but subsequently securitises it on the capital market. Equally, in some cases the monitoring of borrowers may be undertaken by rating agencies: monitoring does not have to be part of the credit process although this usually is the case with bank loans. As noted by Joss (1996), banks are increasingly looking at core elements of their business on a stand-alone basis rather than as necessarily part of an integrated business.

One of the major pressures in the banking industry in the years ahead is likely to be the deconstruction process where each institution concentrates on that part of the business and those processes in which it has a comparative and competitive advantage. In a similar way, developments in the application of options and asset pricing theory, securitisation,

and the evolution of contingent claims and guarantees, have also led to a *de-construction* of the services traditionally provided by banks into their constituent components. Some of these services can now feasibly be provided more efficiently in the capital market. For instance, the general development of 'pass-through' securities and securitisation in general has resulted in a segmentation of the origination, servicing, credit-evolution, and pricing of credit risk from the credit intermediation function.

6.7 Asymmetric Competition

To some extent, competition works asymmetrically in the finance industry: developments in technology, and the general erosion of entry barriers into banking, means that it is easier for non-bank financial institutions and non-financial institutions to diversify into banking than it is for banks to diversify out of financial services. Thus, while Marks & Spencer offers a range of financial services (including loans), Barclays Bank does not sell men's and women's clothes and frozen food. Similarly, a subsidiary of British Petroleum has a banking licence but National Westminster Bank does not drill for oil!

As entry and regulatory barriers are eroded banks are likely to face competition from a wider range of competitors. Several examples in many countries can be cited where new entrants have been able to compete with banks in supplying some traditional banking services. In-house banks such as Volvo in Sweden, British Petroleum in the UK, Renault in France, have all been able to internalise some of their banking operations and, to some extent, provide a limited range of banking services to others. Some large corporate customers have become more credit-worthy, and have a higher credit rating, than their bankers. In which case it is not surprising that they both displace banks and to some extent offer banking services to others. Two of the largest corporate lenders in the United States are the General Electric Company and the Ford Motor Company. In some countries, car manufacturers have acquired their own banks for the provision of credit to sales agents. In the US, industrial and transportation companies, manufactures and retailers have acquired insurance companies, finance companies and leasing operations. Again in the US, General Motors and IBM offer short term money market facilities and commercial loans to companies The largest issuer of credit cards in the US is a brokerage house: Dean Witter.

And yet to date, the extent to which banks have diversified outside of finance is very limited. This is partly due to regulation which often limits the ability of banks to diversify out of finance more than the ability of non-financial companies to diversify into banking and financial services. It is not an uncommon business strategy to respond to a decline in the value of an existing franchise by seeking to extend the franchise through diversification. The significance of the asymmetric nature of competition is that banks are impeded in their strategy of extending the scope of the banking franchise in response to its declining value in traditional markets and business areas.

6.8 Regulation

Regulation has the potential to create and sustain *economic rents* and protection. This protection frequently leads to increased costs, strong profits, and excess capacity. Historically, regulation in banking has been protective and has often had the effect of limiting balance sheet growth and the allowable range of business that banks can undertake. It has also had the effect of limiting competition on the premise that 'excessive

competition' in banking can lead to increased risk and potential systemic hazards. Regulation in banking has often condoned restrictive practices and anti-competitive devices, and has in general had the effect of limiting price competition. In turn, profits in this regulated industry have been reasonably assured; there has been a high value to the banking franchise, and risks in banking have been comparatively low as various forms of credit-rationing have been the norm. At the same time, costs tended to rise to exploit the economic rents created by a protective environment, and non-price competition has dominated over price competition. This in turn has created an excessive cost structure. All of this created incipient excess capacity: capacity in the banking industry that is viable while the protection lasts but proves to be unsustainable in the absence of that protection.

The universal trend is that public policy priorities have shifted towards enhancing banking efficiency through competition, and in the process public policy has become less protective of the banking industry. As competition in banking becomes increasingly globalised, the ability of individual countries to stand aside from this general trend is strictly limited.

6.9 Technology

Our starting point is simple: *technology is transforming the fundamental economics of financial services* just as it has with many other industries. However, unlike in other industries, finance technology is changing both the *production* and *distribution* economics simultaneously. The theoretical discussion in the early part of the paper indicates that the fundamental cores of banking business are: *information, risk analysis monitoring*, and *trading*. In addition we may add *processing* and *delivery*. These are the core elements of banking. Technology is changing the underlying economics of each of these core business components.

The power of technology will be, and has been, decisive: it acts as both a threat and an opportunity to banks. It enables existing services to be provided more efficiently; enables new services to be offered; increases the economies of scale in bank processing; enhances management's access to information; lowers entry barriers in some areas, and changes the economics of delivery. Technology has the power to transform the basic economics of any industry. In this respect banking is no different from other industries which have been transformed by technology. Technology has the potential to increase the availability and reduce the cost of information. This is a potentially powerful force as it both reinforces and challenges one of the banks' major core competencies: information. Given that banks are ultimately in the 'information business', anything that impacts on the availability, cost and management of information must have a decisive influence on their business.

The potential of the Internet is both a threat and an opportunity for banks as with all suppliers of banking and financial services. It has the potential to challenge two aspects of the basic economics of banking: information and delivery. By its very nature it increases consumers' access to a wide range of information, and adds a further dimension to the delivery of financial products. 'Instant trading' on the Internet has become commonplace in the US and the technology exists for its development in the UK and many other countries.

To date, it is largely technology companies in joint-ventures with banks that are developing the potential for 'home banking' and allowing a wide range of standard banking and other financial transactions (payments, funds transfer, securities transaction, purchases of financial products) to be conducted from the home at any time of any day. Software packages (e.g. Quicken) have been developed to make this an easy and readily accessible option. Both hardware and software companies could come to challenge the banks in some aspects of their core business. Whether, in the course of time, banks could become disintermediated on a major scale remains to be seen.

In the course of time, the Internet could become the dominant medium for relatively simple and standard transactions. In the US, several banks have formed joint-ventures with a group of computer companies to provide a 'financial services superhighway'. Banks are experimenting with electronic shopping malls and several banks and building societies in the UK offer services through the Internet.

The potential impact of the Internet on banking is substantial:

- the marginal cost of transactions is virtually zero;
- distance between consumer and supplier becomes meaningless and of no economic significance; this may result in more cross-border competition;
- it is usually the case that the consumer pays the access costs;
- as an increasing number of rival banks and financial firms open net sites and home pages, the cost of information to the consumer and the search costs for rival services and products become very low which in itself increases competitive pressures in the market;
- the transactions costs of switching between competitors are reduced which is likely to have the effect of eroding customer loyalty;
- it further erodes the necessity to have a branch network to supply financial services and further erodes entry barriers.

While, for many consumers in the early stages, access to Internet facilities may appear formidable, this will ease as Internet Financial Directories develop. Several currently exist in the UK to facilitate easy access for consumers and lower search costs for rival products. Thus, TrustNet, Insurance Mail, Infotrade, and Financial Information Net Directory offer facilities such as comparable data for products and services; general market information; information on the full range of personal financial topics; price and terms quotations, and on-line trading.

6.10 Excess Capacity

If entry barriers are declining faster and more substantially than exit barriers, it is almost inevitable that excess capacity will emerge in an industry. However, the existence of excess capacity does not mean that new firms will not enter. If new entrants believe they have a competitive advantage *vis-à-vis* incumbents, it may still be rational to enter an industry which has excess capacity. In some areas this has occurred in financial services. The corollary is that there is more pressure on incumbents to adjust. The manner in which excess capacity is removed in the banking industry will be one of the major strategic issues that banks will face in the years ahead. As long ago as 1992 the Bank for International Settlements identified: 'the elimination of excess capacity in segments of the financial industry' as one of the key future issues.

Compared with other industries, the concept of 'excess capacity' is more difficult to define and measure in banking, as output and hence capacity is more difficult to measure. Five alternative components can be identified:

6.10.1 Excess Capital

There is almost certainly an excessive volume of capital in the global banking industry in that, given the market and competitive conditions, it is unlikely that the required rate of return on capital can be earned in the long run. It may be that the market is not big enough to support the current volume of embedded capital in the traditional banking industry. The total volume of capital could be excessive for two reasons: regulation might impose an unsustainable capital requirement on banks, and/or the business environment might have changed in a way that means the industry as currently structured, and the amount of business it is able to conduct, can no longer support current capital levels. This may be because new firms have entered or because demand has shifted away from banks (e.g., switched to the capital market).

Excess capital (capital in excess of what is needed to support the current or expected level of assets) raises the required rate of return on assets in order to service the capital base. However, the same competitive conditions that have caused banks to lose some lending business also make it difficult to increase the rate of return on assets. Faced with excess capital, a bank has three broad strategic options:

- expand the balance sheet perhaps by making more risky loans which may have the effect of eroding lending margins and, if this induces banks to make loans without incorporating the true risk premium, in the end to a destruction of capital;
- make acquisitions (e.g., purchase an insurance company) although there is ample empirical evidence that banks with excess capital often pay a premium when making acquisitions and this makes it difficult to subsequently earn a sufficient risk-adjusted rate of return on the investment; or
- repay capital to shareholders.

The last option may be the optimum strategy if regulation limits the extent to which bank capital can be deployed in new business areas which does not, of course, limit where shareholders can invest externally to the bank. Many banks in the US, and some in the UK (e.g., Barclays, NatWest, Halifax), have made repayments of equity capital to shareholders. Shareholders have more options to allocate capital externally than banks have internally. In other words, capital may be more valuable to shareholders when it is passed back to them to use outside the bank than when it is retained inside the bank.

It is possible to have global excess capital in banking even while each individual bank believes it is short of capital. The two are not contradictory. If each individual bank is seeking to increase its share of a limited market, its own capital may be insufficient to support its planned business profile. But in aggregate banks may have too much capital for the total amount of profitable business that is available. In other words, the sum of individual bank's desired capital may be excessive in terms of the available volume of business for the industry as a whole. There may be excess capital in aggregate even though each bank considers itself to be short of capital because the planned or targeted volume of business of each bank sums to greater than the total available.

6.10.2 Too many banks

It is also evident that in the global banking industry there are too many individual banking firms which prevents the exploitation of economies of scale. Although the empirical evidence with respect to economies of scale in bank firms is inconclusive, there are clear economies of scale in bank processes. Banks may merge in order to secure these economies. It is almost certain that there are economies of scale that can be reaped which are being denied by the current structure of the banking industry in many countries. It is likely, therefore, that there will be a consolidation movement in the banking industry.

6.10.3 Excessive Infrastructure

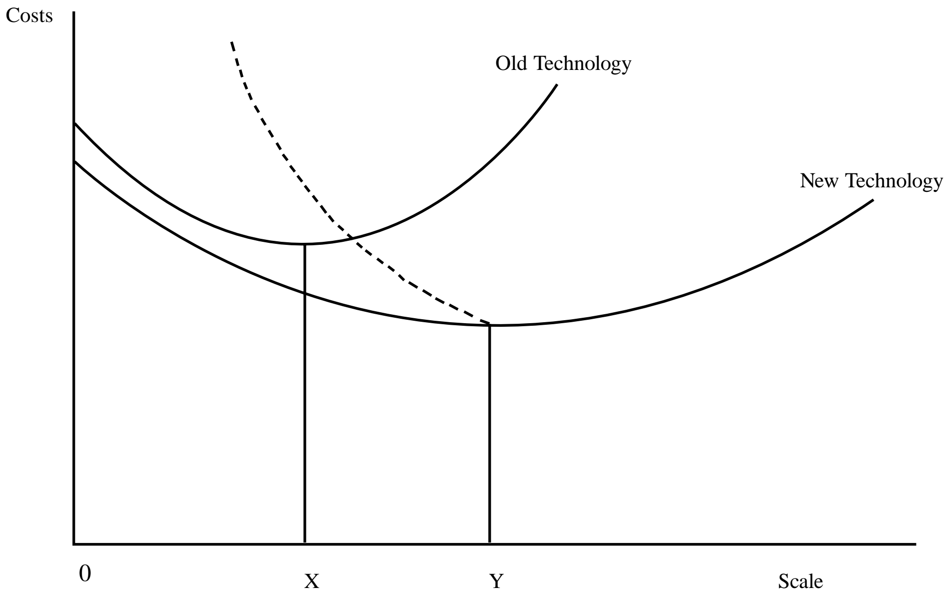
A third concept of 'excess capacity' relates to the basic infrastructure and branch network rather than the number of banks *per se.* In most countries the number of branches is excessive with an implicit duplication of banking infrastructure: fixed costs and delivery facilities. This excess capacity can be reduced either by individual banks closing their branches or by merging banks and closing overlapping branches. In the 1992 abortive bid by Lloyds Bank for Midland Bank, a central argument was the need to rationalise the British banking system (and most especially the duplication of the branch network). The view was that this could be undertaken most efficiently through the latter route. In effect, a co-ordinated strategy can be more effective than all banks acting unilaterally given that, in some cases, a major benefit from a branch closure can accrue to a competitor which is able to absorb a larger customer base from the bank which closes a branch without adding to its own costs. Put another way, the transactions costs of branch closures may be lower when undertaken following a merger compared with each bank acting unilaterally. In many countries bank mergers have been motivated by a strategy of reducing the infrastructure of the combined bank. An alternative strategy when faced with excess distribution capacity is to attempt to supply more products and services through it. Faced with excess distribution capacity banks have two broad strategic alternatives: reduce capacity or pass more business through existing capacity. In this respect, there is a close parallel between excess capacity in capital and infrastructure.

6.10.4 Technology Capacity

In many areas of financial processing, the impact of new technology is twofold: it creates more substantial economies of scale (lower average costs), and it increases the volume at which the optimum scale is reached (lowest point on the average cost curve). This is illustrated in Figure 2. In a competitive market, a financial firm is under pressure to minimise costs and to move to the lowest possible level of average costs. In terms of Figure 2, the objective is to move to output OX with old technology but to OY with new technology. A firm which had the optimum scale with old technology may nevertheless be less economic than larger competitors with new technology. Indeed, installing new technology may (because of high fixed costs) conceivably imply higher costs at the previous optimum level of output (see dotted line in Figure 2). If the firm cannot move to OY, it may secure the necessary economies of scale by sub-contracting the relevant process. Thus, while the development of technology may appear to be adverse for small firms, they may be able to offset this by sub-contracting.

Developments in technology have themselves impacted on capacity in that new technology vastly increases the capacity of banks to supply services. It is unlikely that, given the economies of scale in new technology, the current number of banks can be

Figure 2



sustained as they cannot all apply new technology to its most economic extent. And yet banks individually will attempt to do so. This is a case of the fallacy of composition: what is viable for an individual bank is not necessarily so for all banks taken together. This is discussed further in Section 11.

6.10.5 Personnel

Similar arguments apply to personnel. As technology and capital replaces people in the economics of banking, so excess personnel capacity emerges. This is one of the many ways in which the fundamental economics of banking are changing. In the UK, for instance, the number of people employed by the six largest clearing banks has declined substantially over the past few years. As already noted, in many European countries labour market laws impose constraints on banks reducing the number of employees.

6.11 Erosion of Cross-Subsidies

Cross-subsidisation is a common pricing strategy in multi-product firms including banking where, because competitive conditions between different banking markets are not homogeneous, prices of individual 'products' (e.g., loans to different types of customer) do not accurately reflect relative costs and risks. There are several reasons why, in the past at least, cross-subsidies have been sustained in banking: high entry barriers to new-comers which effectively protected the subsidising business components from external poaching; banking was considered to be a bundled service; customer loyalty to the full-service concept of banks has been strong; search costs for consumers have been high; banks lacked data on the detail of their cost structures; and banks had a concept of 'fairness' which made them reluctant to differentiate substantially between customers even in the face of different costs and risks between them. Cross-subsidies exist between different customers, products and processes.

This necessarily implies 'subsidising' and 'subsidised' products, which also presupposes an ability to segment markets. As competition intensifies, however, and particularly as economic or regulatory entry barriers are lowered, it is frequently 'subsidising' markets which are targeted by new entrants and this erodes the 'excess profits' earned by existing suppliers. This in turn forces a change in pricing strategies which, on the assumption that the original cross-subsidisation was designed to raise overall profits, has the effect of eroding aggregate profits. It is partly because banks cross-subsidise parts of their business that new competitors have been able to enter some niche segments of banking business. However, this entry is also likely to erode banks' ability to sustain cross-subsidies.

In many countries, banks earn significant endowment profits through 'free resources' (reserves and interest-free deposits). As these endowment profits have been eroded due to competitive pressures and the deregulation of interest rates, a significant traditional source of profits has become less powerful. Historically, the existence of endowment profits due to banks' access to cheap retail funds has acted as an entry barrier to foreign banks. To the extent that the cost of retail deposits rises towards the level of wholesale funds, the implicit competitive advantages enjoyed by banks with access to retail funds is eroded and foreign banks and new suppliers are able to compete on less disadvantageous terms.

Cross-subsidies within banks are becoming vulnerable both because entry barriers are declining and because of the process of *deconstruction* noted earlier. The general prediction is that, as competition develops, the potential for banks to engage in cross-subsidising pricing behaviour will be eroded. This would be a further factor eroding overall profitability.
The erosion of cross-subsidies has the effect of raising costs on some services, lowering profits, and, for reasons associated with endowment profits, lowering entry barriers. How cross-subsidies operate in UK banks current account services is considered in Drake and Llewellyn (1995), and Llewellyn and Drake (1995).

6.12 Consumer Trends

Consumers expectations and demands are also changing, and likely to change yet further, as a result of the secular pressures identified, and especially the greater competitive pressures evident in the market for retail financial services:
- consumers will become increasingly aware of greater competitive pressures in the industry, and they seek to exploit this to their advantage;
- there will be increased demand for higher standards and greater reliability;
- it is almost certain that consumers will come increasingly to demand convenience and quicker access to financial services and products;
- consumers are likely to demand more choice in the range of products and in the range of financial services;
- in particular, a wider range of access and delivery mechanisms will be demanded;
- with access to more and cheaper information, consumers will become more sophisticated in their demands and will, in turn, come to demand more information about what is being offered by financial firms.

Overall, consumers will increasingly recognise the change in the balance of bargaining advantage between them and the suppliers of financial services, and will change behaviour accordingly. The consumer has increasingly become aware of choice.

At the same time, banking products and services have become increasingly unbundled. This is partly enhanced by financial innovation and the increased transparency that now exists which in turn is in part a product of competitive pressures. The position has been put well by the Reserve Bank of Australia in its evidence to the Wallis Committee: '..services previously offered in a package (e.g. housing loan and savings accounts) are being unbundled. As a result the consumer of any basic financial service – such as a savings account – is confronted with a spectrum of choices, with only fine gradations of difference between them.' The evidence is that consumers are increasingly unbundling banking serves and products.

6.13 Cost Structures

Across the board, financial institutions are under pressure to cut costs. This is seen in the substantial reduction in staff numbers in the UK clearing banks. This has been induced by three major pressures: the impact of increased competition; the erosion of entry barriers and the emergence of new low-cost suppliers of financial services, and the specific impact of technology which has radically changed sustainable cost structures in financial services. Institutions are required to develop cost management *strategies* rather than one-off cost cutting exercises. A new culture of cost-management has emerged as a permanent and continuing feature of competitive strategies.

6.14 Capital Markets and Securitisation

Banks face competition from the capital market and short-term money markets. The recent substantial growth of commercial paper markets in the US, France, Spain and Japan, for instance, demonstrates the power of markets to displace banks traditional financial intermediation role. Both depositors and borrowers now have a wider range of capital market instruments, and in some cases companies seek capital market finance to widen the source of funds (funding diversification) and to reduce their dependency on banks. Securitisation and financial innovation lead to more complete markets, (Llewellyn, 1985).

In addition, new information and trading technology has reduced information and transactions costs in capital markets relative to bank lending costs. Financial innovation and technology (together with the development of rating agencies) are eroding transactions and information costs and market imperfections which have historically been the basis of banks' efficiency and comparative advantage over capital markets. The capital market has also been particularly innovative, and the wider range of funding, along with risk management instruments, has increased the attractiveness of the capital market for many corporate sector borrowers. The process of *spectrum filling* (Llewellyn, 1985) widens the range of capital market instruments available for borrowers and lenders. Bisignano (1998) also observes that the impact of greater competition and innovations in contracts has been to erode the returns to financial intermediation, and to shift funding activity into markets rather than banks. More generally, Merton and Bodies (1995) suggest that the evolution of financial systems is in essence a competition between organised external markets and financial intermediaries. The development of money market mutual funds and the like also demonstrates that markets also compete with banks on the liabilities side of the balance sheet.

6.15 Capital Market Pressure

The capital market is becoming more demanding and is imposing more discipline on bank management's to raise efficiency and to focus on the rate of return on capital rather than, say, balance sheet size or market share, as the focus of business objectives. In many cases this represents a marked cultural change and requires new approaches to management and the conduct of banking business. This is most especially the case in some Continental European markets where traditionally capital market pressure has been weak. This new focus is in part a product of the increasing globalisation of banking and financial markets.

7. New Entrants into Banking

Several insurance companies have recently diversified into deposit-taking and banking. Insurance companies are offering telephone, branchless banking operations for savings deposits, mortgages and consumer loans, i.e. a limited range of profitable products.

Thus, competition between banks and life assurance companies is operating in both directions: banks and building societies have diversified into the manufacture of life assurance products, and the response of life offices to the incursion of deposit-taking institutions into their traditional preserve has been to invade banking markets. Scottish Widows has a banking licence and offers a range of savings deposits accounts and a narrow range of other banking products and services. The Prudential Corporation runs a branchless deposit and mortgage lending operation. Standard Life (which is the largest mutual life assurance institution in Europe) offers instant-access accounts at the top end of the range offered by banks, and plans to offer mortgages.

There is an obvious rationale for life assurance companies in the UK to offer some banking and especially deposit-taking services. Firstly, in the face of a traditional franchise being undermined by new entrants, it is a common (though not always profitable) strategic response to seek to widen the scope of the franchise by diversifying into other areas. Secondly, it is a move which closes up the spectrum between the savings products offered by deposit-taking institutions and life assurance offices. Thus banks and building societies traditionally offer good short-term savings deposits but uncompetitive long-term products. Life offices, on the other hand, offer good long-term savings products but very poor short-term facilities: the penalties for early surrender of life assurance policies, for instance, are substantial. There is something of a discontinuity in the spectrum of savings facilities. Life assurance offices, by virtue of their long term liabilities, might be able to break into this spectrum more easily than banks and building societies. Thirdly, as with firms in other sectors of the financial system, life assurance firms are seeking to diversify by offering a wider range of financial services and products to their existing substantial customer base. Fourthly, as a result of the boom in the sales of life assurance policies in previous decades (partly associated with endowment mortgages marketed by building societies) life assurance offices stand to lose substantial volumes of assets and liabilities as these past policies mature unless they can offer maturing policy-holders alternative assets. A significant proportion of the funds generated by maturing policies is lost, in the first instance, to banks and building societies ahead of more permanent investment. Life offices aim to capture this transitional business with the expectation that, by so doing, they have a greater opportunity to sell other long-term products to a captive customer base.

A constant theme of this paper has been the impact of declining entry barriers enabling a wider range of financial and non-financial companies to enter banking and retail financial services markets. Such entry strategies are frequently on the basis of joint-ventures with banks forming strategic links with partners who are potentially also major competitors. In the UK, a range of non-financial companies have entered banking and retail financial services markets on a significant scale; obvious examples are Marks and Spencer, Virgin Atlantic, three major supermarkets and several new issuers of credit cards such as General Motors.

Table 1

Summery of Financial Service Initiatives

Retailer	Bank	Arrangement	Accounting	Start Date	1st year Financial Performance	Company view of profits
Sainsbury	Bank of Scotland	Joint Venture 55% Sainsbury	P&L: Subsidiary, full results consolidated with 45% minority offset B/S: Total assets on balance sheet	Feb 97	£15-20m loss in total £8m-£11m loss – Sainsbury's share post minority	Break even expected by Dec 98
Tesco	Royal Bank of Scotland, inc. Direct Line subsidiary. (Also Scottish Widows: strategic partners with RBOS)	Joint Venture 49.5% Tesco	P&L: Associate, equity account for share of pretax profit/loss B/S: 49.5% net assets held as investment	Feb 97 (previously with NatWest)	£30m loss in total £15m – Tesco share*	Break even expected medium term
Safeway	Abbey National	Strategic Partnership	No income, save on transaction costs	November 96		
Wm. Morrison	Midland	Rental Agreement	Rental income	May 97		
Asda	Lloyds TSB	Rental Agreement	Rental income	December 97		

Source: Companies
** Original estimate £10m*

It is also evident that consumers' perceptions have changed in that they are more prepared to consider purchasing financial services and products from 'non-traditional' suppliers than was the case only a few years ago. Just as financial and non-financial firms have diversified, so too has the consumer with respect to the firms they are prepared to consider as 'financial' firms.

7.1 Common Characteristics

The entry of non-traditional suppliers of banking services significantly intensifies competitive pressures and the degree of contestability of financial services markets. There are several common characteristics about such new entrants, and which account for their strategies:

- Entry barriers are low for reasons already outlined.
- New entrants are able to exploit new forms of delivery almost as easily as their bank competitors.
- Exit barriers are low partly because of the scale of entry. Banking and financial services are a comparatively small part of the new entrants' business, and exit can be undertaken without fundamentally changing the nature of the business. New entrants are competing in business which is core to existing financial firms but peripheral to their own. In addition, new entrants are able to enter banking business without the necessity of high up-front fixed costs.
- They all have a core competence and reputation in retailing and an image of quality, reliability and customer service.
- New entrants are usually highly focused in the product range, and do not offer the full range of financial services offered by banks: they are able to choose those parts of the business of incumbents in which they judge they have a competitive advantage. Unlike their banking competitors, they are not under pressure to offer the full range of (in some cases, unprofitable) banking services.
- This focus is partly associated with the banks' pricing policies which frequently create cross subsidies: uneconomic services are sustained in part by subsidies from other parts of the business. The new entrant, on the other hand, is able to price services without cross-subsidies as, in some cases, they choose products which banks are pricing so as to subsidise other parts of the business. In effect, new entrants are able to 'cherry pick'. This is particularly evident in the deposit market where some supermarkets are offering considerably higher rates of interest than are banks. This in turn is partly a reflection of the cross-subsidies within banks: 'free banking' is paid for largely through low interest rates on retail deposits.
- New entrants tend to be highly focused within the value-chain. With the potential for *deconstruction,* much of the high-cost processing is subcontracted to specialists including, in some case, bank competitors or partners.
- In many cases overall costs are lower than in incumbent firms.
- Because of the ability to sub-contract large segments of processing, and effectively buy into economies of scale through specialist processors, new companies are able to operate with comparatively low fixed costs.
- New entrants also avoid legacy costs in that they do not have an existing cost structure based on past technology. In effect, they are able to avoid the transactions costs of re-engineering the business to adapt to current conditions, and to technology in particular.
- New entrants are able to establish systems consistent with current regulatory requirements. They are not faced with the need to adapt existing systems to new requirements.

Table 2

Retailer's Products by Market Sector

	Sainsbury	**Tesco**	**Safeway**	**Morrison**	**M&S**
Liquid savings	Instant access account Christmas saver account	Instant access account	Direct instant access savings account	Bonus savings account	-
Consumer credit	Gold Visa card Classic Visa card Loans	Visa card Loans on trial	-	-	M&S Chargecard Loans
Mortgages	Flexible mortgage launched, Fixed rate planned	Planned	-	-	-
Banking	-	Clubcards plus Travel money	ABC bonus	-	M&S budget card
Long term savings	-	Planned	-	-	Life assurance, Unit trusts. PEPs Pension
Personal Insurances	Home insurance (underwritten by Royal Sun Alliance)	Travel insurance on trial to 450k by direct mail (underwritten by Direct Line)	-	-	-

Source: Companies

- In most cases, new firms are able to exploit the value of a franchise associated with their brand name. The idea of a 'brand value' is that it stands for something which is more than the product itself. The new entrants tend to be household names associated with companies for which the consumer has a high degree of trust built up through a long association independently of financial services. In effect, new entrants believe they can 'brand' the financial products or services being sold, i.e. the name attached to the product adds value in consumers' minds because of the general reputation of the company. One of the key functions of a brand is 'quality certification' which is especially significant in cases where, as with many financial contracts and services, the consumer is unable to determine quality at the point of purchase, and where the post-sale behaviour of the seller can affect the value of the product to the consumer.
- Retailers which have begun to offer retail financial services have very large customer bases. For instance, Sainsbury/Homebase has a customer base of 13.5 million, Tesco has 10 million, and Safeway has 6.5 million. This compares with 20 million for the Halifax, 15 million for Lloyds TSB, 10 million for Barclays, and 6.5 million for NatWest.
- Each of the retailers has a substantial data base about customers associated with their loyalty cards. The buying pattern of households in a supermarket over the period of a year generates substantial information about the profile of each customer. This goes some way towards challenging banks' traditional information advantages.

7.2 Supermarkets as Banks

A recent development in the evolution of competition in retail financial services in the UK has been the entry of supermarkets on a significant scale. Three major supermarket companies in particular (Safeway, Sainsbury, and Tesco) have entered the market in partnership with banks to offer a range of retail financial services.

The type of financial services, and methods of delivery, of five supermarket chains is given in tables 1 and 2. Table 1 summarises the financial services initiatives of the major retailers, and table 2 outlines the products on offer by each.

SAFEWAY is the country's third largest food retailer with close on six million holders of its *ABC Loyalty Card*. In November, 1996 it unveiled a strategic partnership with Abbey National to launch debit and credit cards, unsecured loans, household insurance and mortgages. The new card is based on Abbey National's *Visa Electron* which can be used as a debit or credit card to pay for goods at 70,000 other retail outlets. This represents a major extension to the facilities offered on the original Safeway *ABC Card* and makes it a considerably more attractive and flexible proposition for customers. It is planned to offer a 'household management account' enabling customers to put funds aside for household items such as groceries and electricity and gas bills. Card holders also have twenty-four hour access to telephone banking facilities.

SAINSBURYS has around fourteen million customers. Having launched a loyalty card in June 1996, it had around seven million holders by November of the same year. In the same month it announced that, during 1997, it would launch Sainsbury's Bank in partnership with the Bank of Scotland which would have a 45 per cent ownership stake; the bank was launched in February 1997. The new bank offers a range of accounts, a debit card, two credit cards, personal loans, savings products and mortgages. The Sainsbury Bank is a direct operation: a telephone facility within Sainsbury stores enables the company to sell credit cards, savings accounts, mortgages and other loans. The com-

Table 3

Retailer's Products by Market Sector

	Sainsbury	Tesco	Safeway	Morrison	M&S
Instant Access Accounts	6.5%	6.5%	£50+ 4% £500+ 6.75% £1000+ 7.3% £2500+ 7.4%	4.25% basic +1.75 bonus	-
Credit/Chargecards	Gold Visa card 14.7% Classic Visa card 18.5%	16.9%	-	-	Up to £1000 27.8% £1000+ 22.0%
	Gold fee £25 in Yr if <£3000 spent Classic fee £10 in Yr 2 if used <10x 1% Reward discount on Sainsbury's shopping 0.5% Reward discount on non-JS shopping	No annual fee 1% Clubcard discount on all shopping 10 Clubcards points on each £1 of interst paid			With direct debit Up to £1000 20.3% £1000 22.9%
Loans	Up to £4999 13.7% £5000-£15000 12.7%	£1000-£1999 14.7% £2000-£2999 13.7% £3000-£7499 13.3% £7500-£15000 10.9%	-	-	£500-£2999 18.9% £3000-£4999 16.9% £5000-£9999 15.9% £10000-£15000 14.9% Rates are 1% lower for Chargecard holders
Banking	-	4% credit balance 9.9% debit balance	5% credit balance up to £600 1% credit balance £600+ No debit facility	-	1.6% credit balance 25.8% debit balance
Mortgages	-	75%-95% LTV 8.2% variable <75% LTV 7.95%	-	-	-

Source: Companies
** interest rates effective from 2nd March 1998*

pany also has plans to enter the personal pensions market. It issues its own Visa credit card, the use of which adds Reward Points for purchases in Sainsbury stores. It also offers a monthly savings plan.

TESCO was the pioneer of supermarket loyalty cards having launched its Clubcard in February, 1995. Around eight and a half million customers have joined the scheme. In June 1996 it launched *Clubcard Plus* which is an account offering a rate of interest of 5 per cent on credit balances which is a considerably higher interest rate than offered by any bank on comparable accounts. Customers have access to credit at an interest rate of 9 per cent. The accounts are administered by, and the deposits are on the balance sheet of, the Royal Bank of Scotland. The company also plans to offer personal pension products through an association with Scottish Widows, and envisages having financial advisers available in their stores. The Tesco Bank was formed in February 1997 on the basis of a joint venture with Royal Bank of Scotland. Customers have access to call-centres in the stores.

VIRGIN DIRECT offers a wide range of financial services with access by telephone. It has a successful Tracker Fund and offers various investment products, life assurance and mortgages. It has recently launched a new ‘all in one’ bank account based on mortgages.

In March 1997, Sainsbury and Tesco were offering significantly higher interest rates on deposits (especially on small balances) compared with banks and building societies. Safeway was very competitive but only for balances of £500 or less. A comparison of interest rates (at the time of writing) is given in table 3. These are all competitive compared with traditional bank deposits. At the time of writing, Tesco had the lowest interest rate on personal loans in excess of £7k.

The potential of supermarket banks is substantial. For instance, Sainsbury Bank secured 100,000 accounts within the first eight weeks of operation and currently has 700,000 deposit accounts amounting to £1.5 billion. This already makes it larger than all but the largest fourteen building societies. The average balance is around £3K

Market research, and the growth of balances invested in savings accounts at the ‘new banks’, indicates that consumers are flexible in the type of firms they view as credible for the offer of financial services.

A recent market research exercise indicates, however, that it is the simple and short-term products (such as current and savings accounts) which score highest in terms of willingness to buy from a supermarket. In the survey, 16.6 percent of customers expressed a willingness to hold a current account with a supermarket bank, 16 percent would hold a savings account and 15 percent a credit card. At the other end of the spectrum, the figures for Peps, mortgages and personal pensions were all around 10 percent.

A possible problem for supermarkets is that the more preferred (and simple) products are not very profitable. However, consumer attitudes can change substantially over time and the new financial firms have the opportunity to extend their franchise as credibility grows.

The Post Office has announced that it has plans to market retail financial services. Given its existing branch network, customer through-put, and guaranteed access to consumers because of the services it provides to a wide range of customer groups, its potential is

substantial. It could become a major distributor of retail financial products. It currently plans to sell low-cost health insurance products, life assurance products, critical-illness insurance, travel insurance, and personal banking services in conjunction with The Co-Operative Bank.

7.3 Market Impact

It would be wrong to measure the impact of new entrants in terms of their market share. It is unlikely that customers will close existing bank accounts in order to shift business to the new entrants. This is partly because the latter do not offer the full range of banking services.

The impact on banks and other financial firms derives not so much from market share considerations as through the impact on competitive conditions. Although the market share of new entrants may not become significant, the overall impact could be large because it forces incumbents to respond by offering services at lower cost and/or higher quality. Markets in financial services have, as a result, become more contestable and this, rather than market share, impacts on the incumbents' competitive behaviour.

The potential of supermarkets should not be underestimated. Every time they have entered a new field, incumbents have suffered both in terms of market share and profits, For instance, supermarkets now have a 25 percent market share of petrol sales.

In addition to the general arguments outlined above, supermarkets have several specific advantages when offering banking and financial services:

- They have an existing branch network independently of that required to deliver financial services. The marginal cost of adding an in-store financial services centre is small.
- The throughput of customers is very substantial. Sainsburys, for instance, claims that 25 per cent of the adult population passes through one of its' branches each week.
- Stores are conveniently located and have attractive opening hours.
- Coupled with this, and unlike with banks and other financial firms, consumers are required to visit supermarkets on a regular basis and for reasons other than to purchase financial services or conduct financial transactions.
- Given existing customer relationships, supermarkets may be able to tie-in the consumer and increase customer loyalty both to the existing business and new business areas. The debit card concept helps retailers to lock in consumers' money particularly if the funds can be spent only in the store (e.g. Tesco).
- Supermarkets are able to use loyalty cards to gain potentially valuable information about customers. In addition to the information required in the original application form, the subsequent use of the card, and the observed pattern of expenditure in the store over a long period, supplies a profile of the customer that can be used to sell financial services. This was a major factor behind Marks & Spencer's decision to offer its Chargecard.

A major issue is the extent to which retailers will prove to be successful at banking and financial services. One critique is that they may not be successful because it involves a loss of focus. On the other hand, they may still have focus to the extent that they are extending their core competence of retailing into a new area; the supermarkets are effectively extending their brand name into a wider range of services.

While retailing may be a core competence of the new entrants, there remains a significant difference between groceries and financial services in that the former is transactions-orientated whereas the latter is relationship-orientated. Although supermarkets have attempted to develop a relationship with customers, this is still different in nature from the relationship a financial firm has with its customers because of the nature of the contracts involved.

It is also the case that new entrants in the UK have come into the market at that phase of the economic cycle where banking and retail financial services are most profitable. They may be over-estimating the average profitability of financial services over the full length of an economic cycle, and under-estimating the magnitude of loan losses that occur in the downswing of economic cycles. It is evidently the case that, given the nature, strength and duration of the recent cyclical upswing in the UK, there has never before been a period of comparable length which has been more conducive to profitability in banking and retail financial services.

A key issue is how far a brand can be stretched. The ultimate danger is that retailers could suffer 'brand contamination' due to a failure in the new areas of business. If a brand loses credibility in one area, that virus can contaminate everything that bears its name. The potential downside risk may be greater than the possible benefits. Diversification out of traditional areas may prove to be a high-risk strategy for some new entrants.

In addition, there is a danger that the brand could become contaminated if, in a cyclical downswing in the economy, supermarket banks are required to foreclose on loans to their customers.

The experience of the US might be instructive. Most of the retail stores that at one time diversified into retail financial services (Sears-Roebuck is a prime example) subsequently exited the market.

7.4 Problems for Incumbents

The new entrants pose a substantial threat to incumbent financial services firms. Incumbents face several difficulties in making strategic responses:

- to some extent they are locked into a cost structure that is difficult to address in the short run;
- they have high fixed costs;
- their brands are weak and often have, at best, a neutral public image;
- they are often wedded to cross-subsidy pricing strategies;
- they are often committed to providing the full range of financial products and services;
- the new entrants are in some cases targeting their most profitable customers.

Devising appropriate competitive strategies is particularly difficult when competition comes from new firms whose underlying economics are different. This is one of the central strategic challenge for traditional financial services firms.

7.5 An alternative view

These new banks have, on the face of it, increased competitive pressures in those banking markets (mainly deposits) in which they operate. There is, however, an alternative view

based on customer segmentation by existing banks. All banks segment the customer base and offer different rates of interest for different types of deposit (e.g. size and maturity). There are limits to the extent that banks are able to offer different interest rates to different customers for precisely the same type of deposit. Customers vary in the extent to which they move accounts in response to better terms. This means that, if a bank raises its deposit rates in order to keep mobile funds, the marginal cost is high because the higher rate has to be paid on all accounts including those that would not have migrated. Partnering with a new bank (e.g. supermarket bank) avoids this problem and effectively extends the degree of customer segmentation. The higher rate of interest is paid on those deposits that shift to the new bank (which is jointly owned by the losing bank) without the necessity of paying the higher rate of interest on dormant deposits. In effect, what the supermarket banks are doing is enabling existing partner banks the scope to offer different customers different rates of interest for the same type of deposit.

8. Implications of Secular Pressures

A central theme of this paper has been that it is the *combination* of pressures operating on the banking industry that is unique, and which is likely to induce major structural change in banking to an extent which will transform the industry. Major implications are likely to follow from this combination of pressures, and in three dimensions in particular:
(1) for the structure of financial systems in general and banking sectors in particular;
(2) for the business operations of banking firms and the way banking business is conducted, and
(3) for the organisational structure of the banking firm.

These are considered in turn in the following sections. The remainder of this section considers three structural implications: the structure of the financial system; *primary* securitisation; and consolidation in the global banking industry.

8.1 Structure of the Financial System

The pressures identified are likely to have a major impact on the structure of the financial system. Some of the implications may be summarised as follows:

- it is likely that banks will continue to lose some of their traditional business on both sides of the balance sheet;
- the relative role of banks in financial intermediation business is likely to decline;
- the structure of the industry will change with a further concentration into a smaller number of larger firms;
- it is likely that a greater differentiation will emerge between different types of banks: comprehensive financial conglomerates, retail financial conglomerates, core-cluster institutions, specialist institutions, etc. The industry is likely to become less homogeneous as different strategies are adopted. As different banks adopt differentiated strategies, a major issue in the future evolution of banking systems will be the conflict between specialist and conglomerate banks;
- the capital market will become a more significant source of funds for the corporate sector as companies by-pass banks (*primary securitisation*) and banks come to securitise a larger proportion of their retail loans (*secondary securitisation*);
- a wider range of institutions other than banks will provide basic banking services; and
- institutional investors will have an increased role in the savings and investment process.

8.2 Capital Markets and Securitisation

In some models of banking, the existence of banks is viewed as an endogenous response to imperfect and incomplete markets. In a world of zero transactions costs, complete and symmetrically available information, with a complete set of markets to cover all possible future states, there would be no role for banks as financial intermediaries (i.e. their role in accepting deposits with one set of characteristics and creating assets with a different set). Although these conditions are not met in practice, the process of financial innovation and the creation of a wider range of financial instruments (*spectrum filling*) has reduced the degree of market imperfections and incompleteness, (Llewellyn, 1985 and 1992), and the number and extent of discontinuities in the range of market instruments.

Borrowers now have considerably more choice of instruments in the capital market than in the past.

In addition, banks' own cost structures (including the cost of capital) may also have eroded some of their comparative advantages. This has been accentuated by the lesser ability (due to increased competition) of banks to cross-subsidise corporate lending business. In addition, the development of financial markets has offered appreciable improvements in the form of better price formation and versatile risk management. The growth of rating agencies has also to some extent challenged the *ex ante* screening and *ex post* monitoring of firms which have traditionally been undertaken by banks.

As technology increases the supply, and lowers the cost, of information banks have been losing some of their traditional advantages (e.g., information and monitoring) *vis-à-vis* the capital market for corporate sector business. In many countries, banks have been losing share in the financing of the corporate sector. It is also the case that very large corporate customers are able to borrow on the capital market more cheaply than the banks themselves. A further factor in the securitisation trend has been the introduction of new standardised financial instruments suited for mass trade in secondary markets, (Horngren, 1990). In addition, the development of new analytical methods for valuing complex contingent claims, (particularly the Black-Scholes model in the valuation of options) has contributed to the development of organised markets for standardised options. A further decisive factor has been the rapid development of information technology which, *inter alia*, has meant that the bundling and unbundling of financial assets into new packages that might be of interest to investors has become feasible for trading in organised secondary markets.

The growing institutionalisation of personal savings, and the scale of institutionalised savings, has reinforced other factors inducing financial flows through markets rather than banks.

The trend towards securitisation has, therefore, been a product both of changes in the market and economic environment, and shifts in the relative efficiency of bank and capital market facilities. Bisignano (1998) argues as follows: "the recognition that similar assets but with different idiosyncratic information and risk characteristics can be pooled to form an asset pool which can be turned into marketable securities has reduced assumed informational advantages of some intermediaries, in particular banks." On the other hand, the same process of financial innovation has in several respects also eroded the distinction between banking and capital market facilities: many capital market instruments are based upon floating interest rates; banks have become holders of capital market instruments; many instruments (swaps being an obvious example) straddle banking and capital markets, and others (Note Issuance Facilities (NIFs) and Revolving Underwriting Facilities (RUFs)) combine banking and capital market instruments. It is also the case that banks are involved in the arranging of these facilities for corporate clients and hence it is not business that is entirely lost.

Banks have traditionally specialised in providing and holding loans that are not readily marketable. The growth of securitisation implies a potential decline in the demand for services traditionally provided by banks, especially for the corporate sector. Overall, the capital market has become a more formidable competitor to banks and this is likely to develop further in an increasing number of countries.

The capital market will become a more serious competitor to banks in Europe as a result of the common currency and move towards European Monetary Union. This is because, for the first time, a set of small national capital markets which have been divided by currency and exchange risk barriers, will become a single unified Europe-wide capital market with concomitant advantages of breadth, depth and economies of scale which fragmented and small national capital markets do not have.

In effect, banks in some countries are losing their predominant role as deposit-takers and lenders to companies. Joss (1996) argues that banks are losing some of their traditional advantages, and that there are categories of traditional lending business (such as standardised consumer credit and large corporate loans) that banks are no longer suited to fund. He argues that: ‘It is mostly borrowers with unique, non-standard credit needs that will rely heavily on banks and finance companies for their funding requirements’.

Securitisation does not necessarily pose a serious threat to banks. Two views may be identified: the *Market* and *Banker* schools, (Gardener, 1986). The former implies a continuing and inexorable decline in the traditional role of banks. More extreme proponents within this school go further and postulate that securitisation marks the potential demise of many kinds of banks altogether as they lose their comparative advantage in exploiting market imperfections. The alternative school argues that securitisation is merely one further step in the development of the modern banking firm, and that banks will continue to adapt and innovate in response to changing market conditions. In particular, banks will participate in the securitisation process by acting as brokers and arrangers. In the process the traditional intermediation role will be displaced by arranging, placing and underwriting business.

In general, a central issue in the future evolution of national financial systems will be growing competition and tension between banks and capital and money markets. Financial innovation has enhanced the relative attractiveness of capital markets for many large, corporate borrowers. It implies that the way banks earn profits from their corporate customers will shift more towards off-balance sheet business and fees (including associated with their customers’ capital market activity) compared with the interest margin on on-balance sheet business.

8.3 Consolidation of Structure

The combined pressures identified earlier are likely to induce a further consolidation into a smaller number of larger banks within the banking industry. The BIS (1992) notes that ‘forces are obliging many banks to consolidate...whether the competition stems from within the industry or outside it, from other financial intermediaries, open capital markets or even non-financial companies themselves’. A ‘merger movement’ has become a pronounced feature of the US banking industry, and there has also been a marked increase in the number of mergers and acquisitions in banking in Europe (notably Scandinavia), and other parts of the world. Overall, the likely trend in many countries is for a reduction in the number of independent banking units and a concentration into a smaller number of larger units.

The position has been put in this way by Berger *et al.,* (1999): ‘The financial services industry is consolidating around the globe. Mergers and acquisitions among financial institutions are occurring at a torrid pace in the US, may occur at a rapid pace in the near

Table 4

Poor returns in European Banking

Post-tax profits as % of assets

	1990	1991	1992	1993	1994	Average
Northern Europe						
Belgium	0.22	0.20	0.17	0.26	0.24	0.22
Denmark	-0.25	-0.04	-1.22	-0.40	-0.03	-0.23
Finland	0.26	-0.84	-2.67	-1.44	-1.22	-1.18
France	0.27	0.30	0.17	0.02	-0.06	0.14
Netherlands	0.37	0.37	0.37	0.42	0.43	0.39
Norway	-0.70	-3.07	-0.28	0.97	1.17	-0.38
Sweden	0.16	2.00	0.21	0.04	0.82	0.65
UK	0.38	0.23	-0.14	0.48	0.76	0.40
Average	0.09	-0.11	-0.39	0.14	0.26	0.00
Central Europe						
Austria	0.33	0.34	0.28	0.42	0.37	0.35
Germany	0.22	0.24	0.22	0.26	0.27	0.24
Switzerland	0.40	0.44	0.44	0.56	0.45	0.46
Average	0.26	0.52	0.15	0.32	0.49	0.35
Southern Europe						
Italy	0.52	0.50	0.32	0.16	0.04	0.31
Portugal	na	1.18	0.85	0.79	0.49	0.66
Spain	0.95	1.05	0.82	0.12	0.59	0.71
Average	0.39	0.66	0.47	0.37	0.39	0.45
Europe average	0.25	0.36	0.08	0.28	0.38	0.27

Source: CECD

future in Europe under monetary union, and may be part of the solution to problems of financial distress in Asia and elsewhere. Moreover, we may be on the brink of a new wave of M&As between large banking organisations and other types of financial service providers world-wide'.

Several factors account for the growth in merger and consolidation activity in global banking over the past few years: the evolution of technology which has increased the economies of scale in banking (Berger, *et al.*, 1999); the increasing focus on shareholder value as the ultimate business focus by bank managements; the increased focus on risk analysis, management and control by banks and the fact that new tools of financial engineering and risk management may be more efficiently produced by larger institutions (Berger, *et. al.*, 1999); consolidation being viewed in many countries whose banks have experienced serious distress in recent years as a solution to excess capacity problems, and the generally increased degree of globalisation of the banking industry which has encouraged banks to focus on the scale of their operations, and has induced cross-border mergers and acquisitions on a larger scale than in the past.

There are various reasons why banks seek mergers or acquisitions as part of the consolidation process in the global banking industry:

- *Economies of scale*: In many aspects of banking (notably bank processes) economies of scale have been rising over time. One way for banks to become more efficient by exploiting economies of scale is to become big through merger or acquisition. Some banks are seeking mergers or acquisitions on the assumption that it is necessary to be very large if they are to remain competitive in national and international banking markets. While this view does not go without challenge, there is no doubt that in some cases it has been a powerful motive.

- *Technology*: One of the factors raising economies of scale in banking is the impact of new information, processing, trading and delivery technology. The motive for some bank mergers is to secure economies of scale in technology. New technology is often very expensive to install, and the advantage of being big is that the full economic use of new technology is often only feasible on the basis of a very large scale of operations. The cost of technology is very high and has become a major aspect of the cost structure of banks. In this regard, some banks cite the cost of installing new technology as a major motive for a merger.

- *Competition*: The pressure of competition (both from other banks, non-bank financial institutions and new competitors such as supermarkets, etc.) is a major impetus for some banks to merge or become bigger through acquisitions. It is not unusual in other industries for consolidation to develop after competitive pressures have become more intense.

- *Profitability*: Linked with competition is the dimension of profitability. In general, we find that European banking is characterised by often low rates of return (see table 5), a fragmented structure with a large number of comparatively small banks in many countries, and evident over-capacity both in terms of the number of banks and the basic infrastructure (notably, the branch network). In many European countries competition has eroded profitability and rates of return on assets and capital. In many cases shareholders believe that banks are not sufficiently profitable as they are currently structured. The average rate of return on assets in European banks in the early 1990s was 0.27 percent (Table 4). If the required rate of return on equity is around 15 percent,

the rate of return on assets would need to rise to 0.75 percent. Shareholders often view mergers and acquisition as a route to increased profitability. This is partly because, in some cases, it is easier for two banks to cut costs when they combine (e.g. through closing duplicated branches and down-sizing on excessive staff numbers) than if each operates independently. There does seem to be some correlation between the degree of concentration in the banking industry and the level of profitability.

- *Capital market pressure*: The capital market is generally imposing more discipline on bank managements to raise efficiency and to focus on the rate of return on capital (rather than, say, balance sheet size or market share) as the focus of business objectives.

- *Diversification*: In many cases, banks seek a merger or acquisition as a means of diversification and as an alternative to building up their own diversified business portfolio from a zero base. Notwithstanding a possible 'bid premium', a bank may judge that the costs of acquiring an existing successful business are lower than building up new business from base. The acquisition route has several advantages over organic growth: economies of scale are attained immediately; there are fewer learning costs; the business purchased is already successful, and it does not add to the industry capacity of the new business area.

- *Efficiency gains*. The objective of securing efficiency gains is a central motive in many mergers and acquisitions in the financial sector. Such gains may be generated through four alternative routes: (1) through economies of scale, (2) through the potential to raise X-efficiency, (3) via economies of scope when a merger or acquisition links different product ranges, and (4) by lowering the overall risk profile of the bank when businesses with different risk characteristics are merged. Several studies of European bank mergers and acquisitions suggest that the potential for efficiency gains may be a dominant motive. In the US, acquiring banks appear to be more cost-efficient than target banks on average, (Berger & Humphrey, 1992; Piloff & Santomero, 1998). Another US study finds that acquiring banks are more profitable and have smaller non-performing loans than targets (Peristiani, 1993). Simulation exercises also indicate that substantial efficiency gains are possible if best-practice banks merge with less efficient banks (Savage, 1991; Shaffer, 1993).

  Several studies of European bank mergers and acquisitions also suggest that the potential for efficiency gains may be a dominant motive. For instance, Focarelli *et al.* (1998) suggest that large, profitable banks tend to be acquirers while small, unprofitable banks tend to be targets. Also, Vander Vennet (1997) finds that large, efficient banks tend to acquire small, less efficient institutions.

  Efficiency may also be improved by M&As if greater diversification improves the risk trade-off faced by the enlarged institution. Diversifying M&As may also improve efficiency in the long run by expanding the skill set of managers (Milbourn, *et al.*, 1999).

- *Lower the Cost Base*: A major motive is to cut costs, such as back-office costs which are often cited as an area for efficiency gains through mergers. In many cases it is easier for two banks to cut costs when combined than when each attempts to do so individually. The most obvious example relates to the basic infrastructure (and hence employment) of the bank. In some cases two banks each plan to reduce the number of

branches but neither does so because of a fear that the major benefit is derived by the competitor bank which may be able to absorb the lost franchise of the other without raising its own costs. The net result is that, while both banks recognise the need to reduce the size of the branch network, neither bank makes any move. If the two combine, a more rational and efficient branch structure can be created by considering the two banks as a whole.

- *Risk profile*: New tools of financial engineering and risk management may be more efficiently produced by larger institutions. There may be a systemic advantage to the extent that large, diversified banks are less likely to fail. One study of the US (Hughes, *et al*., 1999) looked directly at the diversification gains from improvements in the risk profile of banks. The conclusion was that when organisations are larger in a way that creates geographical diversification, efficiency tends to be higher and insolvency risks tend to be lower. There seem to be clear risk-profile gains from operating in several states in the US. A similar conclusion was found in Hughes, *et al*., 1999.

- *The 'Too Big To Fail' principle*: In some cases, mergers and acquisitions may be motivated by an implicit view that large banks are either more secure than small banks or, if they do get into difficulty, there is a greater probability that the bank will be rescued. This may be of benefit to mangers and owners. To the extent that this view is also held by customers, a large bank may be able to secure deposits more cheaply than small banks because the implied risk premium is lower.

- *Critical Mass*: In some markets it may be necessary to achieve a fairly high critical mass before the business becomes profitable. In competitive markets which exhibit economies of scale, there may be a need to develop critical mass on a fairly large scale. Bisignano (1998) also suggests that there may be "reputational externalities" resulting from size.

- *Protective*: A bank may merge with, or acquire, another bank as a protective device. This could emerge in one of two ways. One option is to merge with bank X in order to be protected from a forced take-over by bank Y. Alternatively, banks may merge simply to reduce the probability that they will be viewed as a future bid target. Size is, to some limited extent, a protection in the market for corporate control.

- *Market share*: A bank may seek an acquisition in order to increase its market share or to protect an existing market position in the context of threats to it. A general motive for a merger or acquisition may simply be to secure a degree of market control.

- *Managerial ambitions*: Mergers and acquisitions may also be motivated by managers wishing to build empires or maximise their own utility, such as expectations that remuneration packages for managers may be bigger in larger banks. Amel (1996) suggests that the acquisition behaviour of banks may be motivated more by managers ambitions than by the interests of shareholders. Boyd and Graham (1994) also show that remuneration packages of bankers are significantly related to size rather than the profitability of banks.

- *Global Reach*: in some areas (notably investment banking) banks may merge in order to secure a global reach in a particular line of business. It is generally argued that banks will only be able to develop profitable investment banking strategies if they have a

global presence. For this to be feasible they need to be very large. This was one factor in the merger between the Swiss Bank Corporation and the Union Bank of Switzerland. That having been said, it is generally argued that only a few genuinely global investment banks will survive.

- *The crisis motive*: In some cases, a merger or acquisition may be the solution to either a systemic crisis or problems encountered by individual banks. It is not uncommon for the regulatory authorities to seek to deal with a problem bank by brokering a take-over of the bank by a stronger institution. This has been a common response in the United States. In the Scandinavian banking crisis of the early 1990s, many banks were either rescued or taken temporarily into state control. After adjustments had been made to their balance sheets, they were subsequently privatised and in many cases the new owners were existing banks. In some cases (such as in Latin America) the regulatory authorities have also taken the opportunity of a financial crisis to consolidate the banking industry. A similar remedy is often recommended for Japan. A restructuring of the banking industry following a systemic crisis has also occurred in several countries in South East Asia.

- *The European Single Market*: Within the European Union, the development of the single market in banking and financial services is likely to emerge as a major factor in the consolidation of the banking industry. As competition intensifies as a result of more cross-border freedom to sell financial services, and easier access is given to foreign markets through location, banks are likely (in the first instance) to respond by mergers within their own countries. A second stage could be the emergence of cross-border merger activity in European banking.

- *The Single European Currency*: One of the major specifically European factors will be the move towards full monetary union within the European Union and the development of the common currency. In effect, the common currency will remove a major barrier (exchange rate risk and foreign currency transactions costs) to the development of a truly single market in the European Union. In many ways the common currency will accelerate trends, and accentuate pressures, that are already evident within Europe.

While these may be the explicit or implicit motives behind the current wave of mergers in he global banking industry, the empirical evidence is less certain. This is discussed in a later section. It is also evident that, as is often the case in banking, there is something of a herd instinct operating with banks tending to follow a trend that is apparent in their competitors. In a situation of uncertainty and incomplete information, Alchian (1950) suggests that “modes of behaviour replace optimum equilibrium conditions as guiding rules for action.” Under some circumstances, risk averse managers have incentives to follow the behaviour of others even if they themselves have doubts about its wisdom.

9. Strategic Responses: the Business of Banks

The pressures identified require banks to take a radical approach to strategic planning. The pressures outlined earlier have major implications for the type of business conducted by banks and the way business is conducted. New analysis and perceptions may be needed about the nature of the industry, the business of the banking firm, the way that banks provide their services, and the range of services offered. In particular, there is a need to distinguish between: the fundamental characteristics of banking, what banks actually do, and the way they do it.

With respect to the business of banks, and how this will alter as a result of the pressures identified earlier, focus is likely to be upon: (1) the fundamental core competencies of banks and how they can be used in changed circumstances; (2) the optimal degree of diversification for banks; (3) the central role of cost management strategies; (4) pricing and cross subsidies; (5) the creation of portfolios of alternative delivery mechanisms; (6) secondary securitisation, and (7) the further development of off-balance-sheet business. These are discussed in turn in the remainder of this section.

9.1 The Fundamentals of Banking

The starting point is to identify the fundamentals, or core competencies, of the banking firm: i.e. what gives banks competitive advantage. The fundamentals are essentially:

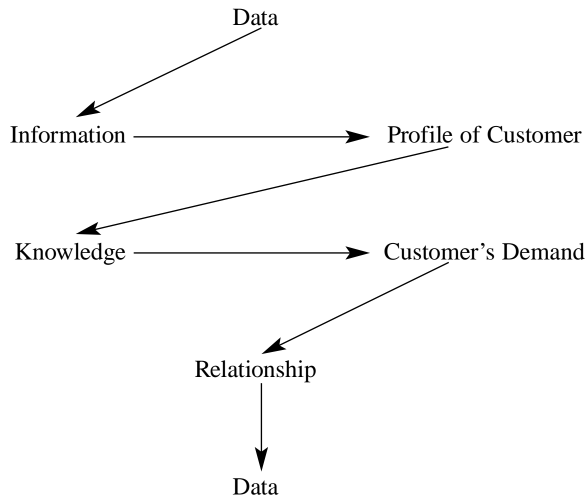
- information advantages;
- risk analysis expertise;
- monitoring of borrowers and enforcement of loan contracts;
- broking potential (bringing various counterparties together);
- delivery capacity;
- acting as the core of the payments system which acts as the first point of contact with customers;
- trust in the eyes of consumers.

A bank's overwhelming advantage is the information it has on the customer base which is obtained through economies of scale, investment in information systems and expertise, and economies of scope or synergies. By managing a customer's account, and through the bank's continuous monitoring of customers, a bank necessarily acquires information that can be used in various ways. Information gained through one part of the business operation can be used in others. One reason, for instance, why banks in Germany have a particularly close relationship with their large corporate customers is the accumulation of information gained by the banks through the continuous monitoring of their customers, and much of this information cannot readily be transferred either to other banks or to the capital market. Alternatively, the customer may choose not to make information public for competitive reasons but is willing to share it with its banker on an exclusive basis. In this way the bank gains a monopoly advantage over its competitors including the capital market most especially in cases where disclosure laws are not demanding.

Banks are essentially in the 'information business'. In this regard, banks need to focus on two elements: the gathering, storing and retrieval of *data* (which in itself is of little value), and the transformation of data into usable *information*. Banks have a great deal

of data but there is also enormous potential to transform this into valuable information. Within the information loop (Figure 3) a distinction is made between data and information. The bank has a substantial amount of miscellaneous, low-value *data* about its customers. This needs to be transformed into high-value *information* (for a profile of its customers) and in turn into *knowledge* about what the customer is likely to demand. Through this transformation of basic data the bank has the potential to build up an enduring relationship with customers which in turn provides more data.

Figure 3: Information Loop



The seven core elements outlined above represent what might be regarded as banks' core-competencies. In essence, banks have traditionally used their comparative advantages to specialise in the provision, holding and monitoring of loans that are not readily marketable. However, the same competencies can be used in a variety of other ways. For example, information advantages can be used by a bank to make loans, to underwrite capital market issues of their customers, to conduct broking operations, or as a basis for cross-selling a variety of products and services. They can also be used to signal the credit-worthiness of their customers to the capital market. There is no unique way in which core competencies can be used. It was noted in an earlier section that the skill in developing competitive strategies in a changing market environment is to identify core competencies and in which (sometimes new) sets of markets they can be applied with comparative advantage.

Thus, the question 'what is the business of banks?' is different from the question 'what do banks do?'. The position has been put well by Ale de Hoost who generalises the idea to all companies:

> *A company is not characterised by what it happens to be doing or by the products it happens to be producing at this moment in time... To define a company by the products it is making is a very dangerous, short-termist attitude.*

9.2 Use of Core Competencies

While banks' core-competencies may be permanent and enduring, how they are exploited at any point in time is influenced by a combination of current technology; regulation; the power of entry barriers; competition; and the strategic objectives of potential new competitors.

When formulating business strategies, in an environment where the banking industry is subject to substantial structural change, a bank needs to identify at the outset:
- its particular and basic *core competencies*;
- which *markets* these competencies can effectively service;
- the range of *products* and services to offer in these markets, and
- the particular way that core competencies are to be applied which may be different from the way they have been applied in the past.

In the final analysis, the successful development of corporate strategy is ultimately a question of defining core competencies, and developing alternative ways of exploiting them.

Given the competitive pressures banks now face, and the other secular pressures identified earlier, the business profile of banks is likely to change significantly over the coming years:
- while much of what banks currently do will gravitate towards markets (*primary* and *secondary* securitisation), banks will be able to exploit their core competencies (e.g., information and risk analysis) to service this process for their customers;
- banks will move yet further in the direction of financial services firms and conglomerates of separate businesses rather than purely financial intermediaries;
- a declining proportion of banks' income will be earned through the net interest margin and from on-balance-sheet business;
- off-balance sheet business will develop further;
- a wider range of delivery channels will be offered to customers;
- new ways will emerge for conducting traditional banking business;
- the internal management of banks will continue to change with increasing emphasis on cost-management strategies, pricing strategies, the sustainability of cross-subsidies; and increased emphasis on risk analysis and management. Increasingly, it will be the risk-adjusted rate of return on capital that will be banks' ultimate strategic focus rather than considerations such as balance sheet size;
- the structure of the banking firm will change – banks will move in the direction of *contract banking* and emphasis given to core competencies where banks become managers of internal and external contracts on behalf of their customers (see below);
- a greater differentiation between banks will emerge as individual banks choose different positions in the strategy matrix (see below).

In the face of increasing non-traditional competition, together with the growth in domestic and international capital markets, banks are attempting to diversify and redefine their businesses. The traditional financial intermediation role of banks (most especially with respect to the corporate sector) is likely to become a relatively less important part of the overall business. The universal trend towards *bancassurance* (see Borio and Filosa, 1994 and Llewellyn, 1995), where insurance and deposit-taking are mixed within the same firm, is a powerful example of diversification. In turn, this will erode what are in some countries traditional or regulatory-imposed distinctions between the six major sectors of

finance: commercial banking, investment banking, securities trading and broking, insurance, and fund management. There has already been a blurring of the distinctions between different types of financial institution in many countries (see Borio and Filosa, 1994).

Diversification

A major feature of banking in recent years has been the trend towards diversification into a wider range of financial services. As this has become a defining feature of banking, it is worth considering why a bank might wish to diversify.

- It is sometimes a route to achieve *economies of scale* in the business as diversification almost invariably means that the bank becomes bigger.

- *Economies of Scope*: the central rationale of diversification is the potential for economies of scope or synergies: two or more goods or services can be produced at lower cost combined than individually. If fixed costs (branch network, technology etc.) can be shared between services, economies may be derived through diversification. There may also be personnel and skill economies and benefits to be derived from reputation. Above all, information economies of scope may be significant. A bank derives information from managing a customer's basic bank account, and this information may be utilised in other services.

- Bank management may believe they have *lower costs* or other market advantages compared with existing suppliers of financial services. If a service is being supplied under non-competitive conditions, there is scope for banks (or any new entrant) to compete away the implicit economic rents.

- A bank may be induced to diversify simply to gain *economic power* or competitive advantage through being bigger and offering a wider range of services to a possibly larger client base.

- A diversified bank may *minimise information and monitoring costs* through providing a wide range of services. Instead of assessing credit-worthiness of a customer on a separate basis for each financial transaction, an integrated account requires only one such information cost.

- Banks may seek to exploit a *potentially valuable resource*: e.g. the delivery system through a nation-wide branch network. Although the development of delivery technology may be eroding this comparative advantage, banks have been conscious that they have a large customer base and easy access to it for a wide range of services that could be delivered through the branch network.

- In terms of banks' risk profile, and dependent upon the nature, size and correlation of risks, diversification has the potential to *reduce portfolio risk* in the overall business structure. It provides a diversified source of income not all of which is dependent on interest rates and financial intermediation through the balance sheet. Diversification also offers strategic opportunities to respond to shifts in demand and changes in market conditions.

- Diversification may be viewed as developing a more *intensive and extensive customer relationship* with the potential to 'tie-in' the customer to a more secure and continuing

relationship. It may be the case that the more services a consumer purchases from a bank, the less likely he/she is to shift between banks as the transactions costs of switching are higher.

- As a result of financial innovation, many insurance products have become more akin to savings than insurance *per se*. Competition between banks and insurance companies for personal sector savings business has made banking and insurance products increasingly similar and competitive. In addition, insurance-type savings products were a major growth area during the 1980s. The offering of insurance products has, for some banks, become a natural part of their competitive strategy as insurance companies have increasingly been encroaching on banks' traditional business. In effect, as financial innovation has reduced the rigid demarcations between banking and insurance *products*, diversification into insurance by banks has represented a parallel form of institutional structural change: new institutional structures have been a reflection of financial innovation in products.

- In many countries during the 1980s, the personal sector invested heavily in insurance products, and insurance or insurance-related products offered by insurance companies gained substantial market share. As some banks have developed a strategy of giving a strategic priority to the retail sector, they have not been able to ignore this growing area of personal sector business. As a result of increased competition for personal sector funds, banks have seen their retail deposit-base undermined and become more expensive.

- Demographic trends, including future pressure on state pension provision, are viewed as favourable to the future development of savings, insurance and pensions products.

- Banks may also seek to exploit customers' perceptions that there are advantages in purchasing services from a single institution, i.e. there may be *consumer economies of scope* as well as producer economies. Such economies may derive from lower search, information, monitoring and transactions costs.

There are, therefore, powerful reasons why banks around the world are diversifying. Whether the alleged advantages and rationale are real in practice is a different issue and this is discussed in a later section.

9.3 Cost Strategies

As already noted, there will be increasing pressure for all institutions in the financial services sector to develop dynamic cost management strategies. The more competitive market environment means that price competition will become more important. In the past, institutions have often competed with each other in ways that effectively increase costs because of the absence of powerful price competition. It is likely, however, that this will be reversed as increasingly institutions will be under pressure to reduce their cost structures. This is even more likely to be the case to the extent that financial products become increasingly homogenised.

In practice, significant reductions in costs require a major restructuring of branch networks and the number of employees given that, for banks and building societies, the cost structure is determined largely by the branch network and the number of employees.

Table 5

Direct v. Branch Selling					
Variable mortgage rates		**Instant access accounts – £10,000**		**Personal loans – £3,000 over 3 years**	
*Direct sellers**	*Std var.*	*Direct sellers*	*Rate*	*Direct sellers*	*APR*
Bradford & Bingley Mortgages Direct	5.99%	Direct Line	5.50%	Direct Line	13.9%
Direct Line	6.05%	First Direct	3.50%	First Direct	14.9%
First Direct	6.49%	Prudential Banking	4.40%		
First Mortgage	5.95%	Scottish Widows	5.20%		
*Traditional sellers**		*Traditional sellers*		*Traditional sellers*	
Halifax	6.99%	Halifax (Liquid Gold)	3.10%	Abbey National	15.9%
Nationwide[1]	6.74%	Nationwide (Cashbuilder)	3.35%	Barclays Bank	17.9%
Woolwich	6.99%	Woolwich (Prime Gold)	2.80%	Lloyds Bank	16.9%
Alliance & Leicester	6.99%	Alliance & Leicester (Instant Access)	2.60%		

* For existing borrowers only
[1] With effect from 1 December 1996

Source: 'Moneyfacts', Sunday Times
Figures compiled on 14 November 1996

All the major clearing banks have announced major staff-reduction plans to take effect over the next few years, along with a rationalisation of the branch network. For instance, in 1996 National Westminster announced that it would be cutting at least 10,000 staff in its retail banking divisions over the following four years and that around 200 branches would be closed; this follows a staff reduction of 8,000 in the previous two years. It is estimated that the new programme of cuts will reduce the number of employees by over 25 per cent. In the insurance industry, staff numbers were cut by 38,000 (10 per cent) between 1991 and 1995 and it is evident that there will be further big reductions.

Overall, banks will be under constant pressure to manage costs strategically and to seek economies wherever they can be secured. A major issue is how far banks can go in this process without a fundamental re-engineering of the business: this is discussed below in the context of *contract banking*.

9.4 Pricing and Cross-Subsidies

As already noted in an earlier section, cross-subsidisation is a common pricing strategy in multi-product firms including banks. This necessarily implies an ability to segment markets. As competition intensifies, however, and particularly as economic or regulatory entry barriers are lowered, it is frequently 'subsidising' markets which are targeted by new entrants and this erodes the 'excess profits' earned by existing suppliers. This in turn forces a change in pricing strategies.

Traditionally, pricing has not been a major feature of competitive strategy in retail financial services. However, the pricing of financial services has recently become a strategic issue and will become more so in the future. Because of the wide variety of pricing methods used in financial services (e.g. *implicit pricing, explicit pricing* and *margin pricing*: discussed in Llewellyn and Drake, 1995) consumers are often unable to determine how much they are paying for a particular service or product. In addition to pricing becoming a more significant issue, there has been a growing consumer demand for more transparency in the pricing of financial services, and regulators have also demanded greater disclosure. Disclosure is itself a factor increasing the extent of price competition.

The general prediction is that, as competition develops yet further, the potential for banks and financial firms generally to engage in cross-subsidising pricing behaviour will be eroded. The case for eliminating cross-subsidies in the payments system is outlined in Drake and Llewellyn (1993 and 1995). In these two papers, the case for making explicit charges for payments services is based on: (1) the objective of eliminating cross-subsidies, and (2) creating incentives for consumers to behave in a way that lowers bank costs. This is a particular example of a more general case. Several building societies now charge fees on some small-balance accounts. Overall, competition is likely to lead increasingly to an unbundling of financial products as competition develops within the different components of bundled products.

More generally, the combination of lower entry barriers, *de-construction*, and the ability to unbundle basic product lines suggests that financial firms will increasingly be under pressure to focus on precise pricing of all products and services on a non-cross-subsidisation basis.

Figure 4: Delivery Matrix

Customer Group							
		1	**2**	**3**	**4**	**...**	**N**
Product/Service	A	+	•	•	◊		◊
	B	+	•	÷	*		*
	C	+	+	+	+		+
	D	+	◊	*	÷		÷
	...						
	N	+	÷	◊	÷		*

+ • ◊ ÷ * are delivery mechanisms.

Examples of customer groups:	Individuals: High-wealth individuals small firms: medium-sized firms; large firms: governments, etc.
Examples of produts and services:	Loans: deposits; life assurance mortgages; payment services, etc.
Examples of delivery systems:	Branches: telephone; postal; TV; personal computers.

9.5 Delivery/Access Channels

A major strategic issue to be addressed by all financial services firms is the role of technology in changing the economics of delivering financial services, (Howcroft, 1987). Technology has a major impact on the way banking and financial services are delivered. In particular, it reduces the dependence on the branch network as a core delivery mechanism. In this respect, what historically has been one of the banks' and building societies' major competitive advantages (the branch network which acted as an effective entry barrier) may have become one of their most difficult problems. This is because a significant part of the cost structure is determined by the basic infrastructure. With the development of new technology, a wide range of alternative delivery mechanisms becomes available and most especially through electronic media: ATMs, fixed and wireless telephone, home banking, interactive television, proprietary PC-based services, interactive multi-media kiosks, the internet etc. Financial services firms are having to offer a wide range of access routes. However, adding new distribution channels adds another layer of costs while not in itself removing the overheads of the branch network.

Overall, therefore, devising an optimum mix of delivery or, what perhaps should be termed *access routes*, will present a major strategic challenge for all financial institutions and other suppliers of retail financial services.

The likely future pattern is that banks and building societies will develop delivery matrices (Figure 4) with differentiations made both between products and services on the one hand, and different customer groups on the other. Banks and building societies will offer choice of access routes. Figure 4 indicates that a given service will be offered to different customer groups through a range of alternative delivery channels, and that a

given customer will also use a range of alternative delivery mechanisms. *Choice in delivery will be a key element in successful competitive strategy.* However, this is likely to be expensive as, to allow for customer choice, excess capacity may be needed in each delivery mode. This in turn is likely to lead to the explicit charging for different delivery mechanisms. In addition, new types of branches are emerging: machine-based, video conferencing with access to staff, 'banking malls', multi-media kiosks etc. Their location is also changing as some banks seek to place some types of branch in strategic locations such as stores with a substantial customer through-put.

Developments in technology mean that financial systems are substantially over-supplied with infrastructure and overlapping delivery systems through a duplication of branch networks. Delivery strategies will be developed at two levels: a rationalisation of the branch network, and diversification in the structure of delivery systems. *Direct* banking falls into two categories: (1) *Telephone-based*: financial firms offer terms and conditions which are similar to their branch-based accounts, but attract customers with the convenience of a telephone service which is manned at all hours of the day, every day of the year, and (2) *Postal-based*: banks and building societies target large deposits by offering above-average rates of interest, offset by the low costs of running efficient processing centres which handle postal business only. Judging by recent experience, the immediate target market for telephone-based direct banking is 10-20% of the population. However, the eventual potential may be much higher, since acceptance of new ideas can gradually diffuse through the entire population, especially when a new service appeals particularly to younger people.

There has been a clear shift towards direct lending by banks and building societies which is generally less costly than traditional delivery routes through the branch network (Table 5), although around 50% of mortgages have traditionally been sold through intermediaries such as estate agents, IFAs etc. Direct lending is set to become a major form of delivery in the financial services sector. One estimate suggests that around 20 per cent of mortgages could be marketed through the direct route. One of the consequences is that it makes it easier for regionally-based firms to compete nationally. It seems very likely that, in the mortgage market in particular, direct sales will become a more significant delivery mechanism. It is likely that all the major mortgage lenders will be in the direct mortgage business within the next few years. This also offers potential for smaller societies which can, thereby, extend their geographical reach providing a larger volume of lending can be funded.

9.6 Further Securitisation

Secondary securitisation is the process through which assets originally held on the balance sheet of a bank (or building society) are packaged and sold to a capital market institution which is funded by issuing securities. In effect secondary securitisation is the conversion of cash flows from a portfolio of assets into negotiable instruments which are sold to investors, are secured on the underlying assets, and carry one or more forms of credit enhancement. In most cases assets are securitised off the balance sheet of the originator. One rationale of securitisation is that finance can be raised at finer rates in the capital market to fund assets than is the case when the originator raises funds directly to fund the assets on its own balance sheet. It is a flexible technique which can be adjusted to different types of originator, using different types of assets, and a variety of funding methods. The securitisation vehicles are not required to hold capital to the extent (if at all)

required of banks as the vehicles do not have deposit-type liabilities. The economics of securitisation is discussed in detail in Pais (1998).

In the US, over two-thirds of residential mortgages and half the credit card receivables are now funded through wholesale markets via securitisation programmes. In Australia, about half of all housing loans from mortgage originators are funded by mortgage-backed securities issued by special purpose vehicles.

The basic idea of securitisation is simple. A portfolio of assets originated, and originally held on an institution's own balance sheet, is sold to either a finance vehicle established specifically for the purpose, or to an existing institution (e.g. an insurance company) which raises capital market funds for the purpose. The funds raised by the vehicle are used to purchase the assets sold by the originator. During the life of the transaction, the cash flows received by the originator from the underlying assets are passed to the funding vehicle which are used to make payments by the vehicle to its investors. Although the assets continue to be administered by the originator, they act as security for the investment in the funding vehicle.

Increasingly, banks will come to securitise a significant proportion of their assets and this will have major implications. First, it implies that fee income will become an increasing proportion of banks' total income relative to margin income. Secondly, it implies that the relative size of the capital market and banks in the financing of the corporate sector will shift towards the capital market. Thirdly, it also implies that the liquidity of banks' balance sheet will increase to the extent that they hold securitised assets on the balance sheet. In effect, the securitisation of assets and the banks' holdings of such assets, means that one of the traditional special characteristics of banks (the holding of non-marketable assets) is being challenged. Fourthly, the nature of banking business will change as banks become managers of securitised assets (*Economist*, 1992). It may also mean that banks will increasingly operate as originators and packagers of credit risk which are ultimately assumed by others. In some senses, securitisation undermines much of what banks have traditionally been paid for: analysing non-standardised credit and holding them in the form of non-tradable assets against their own capital.

Securitisation does not mean that banks lose corporate sector business. Large firms will continue to use banks for loans even though they may be able to borrow more cheaply in capital markets. There are several reasons for this:
- lines of credit with banks acting as an insurance against adverse developments in the capital market;
- it allows borrowers to develop a diversified liability structure;
- bank borrowing acts as a signal to the market of the borrower's credit-worthiness and the bank's judgement based on inside information; and
- capital market issues are frequently accompanied by back-up lines of bank credit and guarantees.

The further development of securitisation will mean that the role of banks in the process of company financing will change. It also implies that the rate of growth of banks' balance sheets is likely to be lower in the future than in the past. At the same time, the process of securitisation in its various forms means that the traditional rigid distinction between capital market and bank financing will increasingly become less evident.

In the final analysis, banks exploit their comparative advantages and this can be done in various ways. Securitisation is an example of this. Securitisation does not mean that banks lose business altogether, but that they use their comparative advantages in different ways in the securitisation process: as underwriters; offering parallel loans; through credit enhancement facilities; holding assets in securitised form by purchasing the bonds issued by capital market institutions to buy the portfolio of loans from the bank; acting as brokers and arrangers, etc. The nature of banks' business will change in the process as will the form of remuneration: fees rather than margin.

Securitisation could lead to a reconfiguration of banking. Even with widespread securitisation, the incremental value of banks can largely be preserved. Banks will originate and service assets, while also processing the attendant risk in order to sustain these activities. Banks will therefore continue to screen and monitor borrowers, design and price financial claims, and provide risk management services.

For these reasons, the relationship between banks and the capital market is both competitive and complementary.

In many ways the development of a common currency in Europe will accelerate trends (including towards *primary* and *secondary* securitisation), and accentuate pressures on the banking industry that are already evident within Europe. The creation of monetary union and a common currency will have a major impact on all dimensions of European banking and not only with respect to the obvious implications for foreign currency trading. One of the major impacts will be on the balance between banking and capital market business. The common currency will have the effect of creating, for the first time, a single, unified capital market in place of around twelve small and fragmented national markets. As the new unified European capital market will be large, it will begin to reap the economies of scale that exist within the UK and American capital markets. By definition it will also eliminate exchange rate risks within Europe. For all these, and other, reasons it is likely that the capital market will increase its efficiency relative to that of banking systems in Europe and, as a result, it is likely to become a yet more formidable competitor to banks. The net result is likely to be more financial flows involving the capital market that would previously have been channelled through banks.

9.7 Off-Balance-Sheet Business

Banks are able to use their core competencies in a variety of different ways and not only through on-balance-sheet loans. There has been a trend in many countries for off-balance-sheet business and income to rise as a proportion of banks' total business and income. This trend is likely to continue. There is a powerful parallel between on- and off-balance-sheet business in two respects: the same basic functions and services are being provided, and the same core-competencies (e.g., a bank's information advantage) are being applied. Lewis (1988) shows that this applies to the two major areas of off-balance-sheet business: contingent claims (loan commitments, guarantees, swaps and hedge transactions, and investment banking activities), and financial services (loan-related services, trust and advisory services, brokerage and agency services etc.). Thus on- and off-balance-sheet business are alternative ways of exploiting the same core competencies. For instance, an information advantage can be used either to make on-balance-sheet loans (with profit earned through the interest margin) or to offer a guarantee or back-up line of

credit to a borrower making a capital market issue (with profit earned through fee income).

10. The Strategy Matrix: a Critique of Current Trends

The two dominant trends in banking strategy (size and diversification) can be represented on a strategy matrix as described in Figure 5. The general trend is for banks to seek to move from left to right along the horizontal axis of the matrix (i.e. to become larger), and from top to bottom (i.e. to become more diversified). As already noted, this is sometimes a combined strategy as some mergers take place not only to secure economies of scale but also as a means of acquiring a more diversified business structure. In other words, the global trend is towards the bottom right hand segment of the matrix.

While this has become something of a conventional wisdom, the strategy does not go without challenge in both dimensions: scale and diversification. It is by no means self-evident that economies of scale are dominant in banks (and hence that only very large banks can be competitive and will survive), or that being widely diversified is the only route to success. Both aspects are now considered in turn.

It is increasingly becoming the conventional wisdom that, assuming there to be economies of scale in banking, competitive pressures will force more consolidation in the global banking industry (more in some countries than others dependent, in part, upon the starting position). There is an enormous literature on the empirical evidence regarding economies of scale and scope and the implications of bank mergers and acquisitions. In general the evidence has been less than conclusive, though most studies fail to find evidence of significant economies of scale (except for very small banks) or economies of scope.

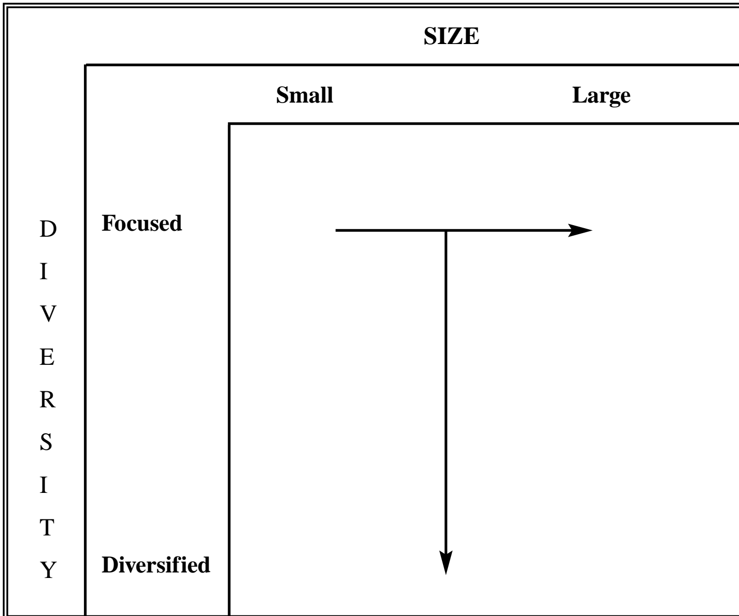
There are, however, three major limitations to these studies. Firstly, most relate to US experience (where the regulatory environment is quite different from most other countries, e.g. with respect to geographical diversification). Secondly, there is some evidence that, partly due to developments in technology, scale economies have increased over the 1990s. This suggests that studies using data from the 1980s are likely to understate the benefits of large scale and mergers and acquisitions. A third limitation is that many of the studies are of a static nature in that they make comparisons of the cost structure of existing small, medium and large banks. This may understate the potential economies of scale to be derived through consolidation where three of the explicit motives are to secure efficiency gains, to cut costs, and to remove duplicated infrastructure.

Empirical studies on the efficiency effects of mergers focus on the two main potential components of efficiency gains: *economies of scale* and *X-efficiency*, and on the evidence regarding the efficiency of diversification. Economies of scale relate to the impact on average costs of becoming larger and moving towards the lowest point on the average cost curve. The latter considers the effect of a merger in inducing a firm to move to the most efficient operation for firms of its size.

X-Efficiency

Ex ante there is substantial *potential* for X-efficiency improvement from consolidation in the financial services industry as efficiency differences between firms are significant. Berger *et al.,* (1999) suggest that, on the basis of a review of empirical research that has been conducted in this area, gains of around 20 percent or more of total industry costs

Figure 5



are possible. However, studies of mergers and acquisitions that have taken place seem to indicate that, in practice, US banking generally shows very little or no cost X-efficiency improvements on average from the M&As of the 1980s, (Berger & Humphrey, 1992; Rhoades, 1993; DeYoung, 1997; Peristiani, 1997). If there were technological gains from consolidating branches, etc. these may have been offset by managerial difficulties in monitoring the larger organisations, conflicts in corporate culture, or problems in integrating systems.

A review of the empirical evidence also suggests that, with respect to the impact of mergers and acquisitions on X-efficiency, the effect may depend on the type of M&A being undertaken, the motivations behind it, and the manner in which management implements its plans, (Frei, *et al.*, 1995; Frei & Harker, 1996, Calomiris & Karceski, 1998; Rhoades, 1998).

10.1 (1) Reservations on Scale

There are several reasons to be cautious about the conventional argument about the existence of economies of scale as a rationale for bank mergers, and about the efficiency of diversification:

- *Limited evidence*. An enormous amount of research has attempted to identify and measure economies and diseconomies of scale in banks. The results are, at best, inconclusive and ambiguous. Overall, except with comparatively small banks, there is little support for the proposition that large banks have lower average costs than smaller banks. Economies of scale seem to be exhausted at comparatively low levels. In fact, there is some evidence that increasing size has the effect of raising unit costs.

The overwhelming conclusion is that the major determinant of a bank's cost level is not size *per* se but its own internal efficiency. In other words, the variation in costs between banks of similar size is greater than that between banks of different size.

Many research studies of financial institution scale efficiencies in the late 1980s and early 1990s used US data from the 1980s. The consensus finding was that the average cost curve had a relatively flat U-shape with medium-sized banks being slightly more scale efficient than both large and small banks. Only small banks had the potential for economically efficient scale efficiency gains. The location of the lowest point on the average cost curve differed between studies but was usually between about $100 million and $10 billion in assets. For a review of the empirical evidence see: Hunter and Timme (1986), Berger, *et al*., (1987); Berger, *et al*., (1999); Ferrier and Lovell (1990); Hunter, *et al*., (1990); Noulas, *et al*., (1990); Berger and Humphrey (1991); Mester (1992); Bauer, *et al*., (1993), and Clark (1996). Although there were differences between the studies, almost all suggested there were no significant scale efficiencies to be gained, and possibly some slight scale efficiency losses to be suffered, from mergers and acquisitions involving large banks. As put by Bisignano (1998) in the context of a wave of bank mergers: "with reference to banks a puzzle exists, since there is little empirical analysis which confirms the existence of significant economies of scale in banking.....the merger-acquisition wave in banking is difficult to understand."

However, some recent research using different econometric techniques, different efficiency concepts, and/or more recent data from the 1990s, suggests that there may be more substantial scale, scope and product-mix efficiency gains available from consolidation. For instance, Berger and Mester (1997) found 1990s data displayed substantial cost scale economies of the order of about 20 percent of costs, for bank sizes up to about $10-25 billion of assets. It would appear that the potential for scale economies has increased in the 1990s compared with earlier periods. This may be associated with the development of technology noted in earlier sections.

- *Banks v Banking.* When considering economies of scale, a distinction must also be made between banks and bank processes. Individual bank processes (cheque clearing, credit card administration, etc.) do show economies of scale. Combining the two conclusions seems to suggest that there are no clear economies of scale in **banks** (in that large banks do not consistently have lower average costs than smaller banks) but they do exist in **banking**. This is an important conclusion as, while competitive pressures will force banks to lower their costs, there are other ways of achieving economies of scale in bank processing other than by being a big bank. For instance, banks can establish joint ventures to conduct their processes, or can also sub-contract or outsource some of their processes to third party suppliers. In effect, banks can buy-in economies of scale. The fact that there might be economies of scale in banking does not mean that banks need to be big to secure them.

- In some European countries, labour and social security laws and regulations make it difficult and/or expensive for firms to reduce employment costs which, in many instances, is the main rationale for a bank merger.

- *The track record.* Experience also indicates that mergers are not always successful in achieving their objectives. There are many examples in many industries. Looking at the industrial experience more generally (i.e. not only in finance), we find that only

about half the mergers that have taken place achieve their objectives. There are numerous examples of mergers that have subsequently been unwound. Overall, the empirical evidence about the success of take-overs, and the market for corporate control, is very mixed. It cannot be said that the market works perfectly. In the US, for instance, many of the conglomerates created by mergers and acquisition activity have subsequently been unbounded .

- *Dis-economies of scale.* Emphasis is usually given in public debate to economies of scale. However, there can also be dis-economies of scale: i.e. average costs rise beyond a certain size of firm. There are many possible reasons for this: inability of management to control a very large organisation; more bureaucratic procedures; weakening of innovation in large bureaucracies, etc. There is nothing in the theory of economies of scale that suggests that the average cost curve continues to fall as size increases.

- *Transactions costs***.** Leaving aside the ultimate end result of a merger, there is ample evidence that the transactions costs of merging two very large organisations can sometimes be substantial and divert management attention for some considerable time. Even if, in general, large banks are more efficient than small banks, it does not automatically follow that merging two banks will achieve economies.

- *Size is not itself a sustainable competitive advantage.* It is an illusion to believe that size in itself creates competitive advantage on a sustainable basis. There are many factors that determine the competitiveness of any financial firm, but size *per se* is not one of them.

In a recent study, the management consultancy firm Mitchell Madison noted that merger activity among European banks has accelerated in the last eighteen months. Bank mergers and acquisitions rose sharply in 1997 and 1998 and also into 1999. And yet it concludes that most mergers in the banking sector have failed to deliver value to shareholders. The study concluded that, over the past decade, returns to shareholders of the acquiring bank had under-performed the rest of the sector in 60 percent of cases.

10.2 (2) Reservations on Diversification

As has already been noted, one of the motives for consolidation in the banking industry is a strategy of diversification where banks, with different product and service mixes, combine to create a more diversified overall business structure. There are also questions regarding the economics of diversification and it is not invariably a successful strategy. Indeed, there is some dispute between those banks which believe a diversified business structure is likely to be most successful, as opposed to others who adopt the alternative strategy: focusing upon core business where they have a known competence and market strength. Empirical evidence with respect to this debate is difficult to derive with certainty, and that which exists is inconclusive and ambiguous.

Some research indicates economies of scope with large banks especially through the economic use of information technology. On the other hand, other reviews fail to find unambiguous support for economies of scope or synergies. Considering the evidence related to universal banking, we fail to find unambiguous support for economies of scope. The overall conclusion is that the alleged advantages of universal banking tend to be over-emphasised. In a survey conducted for an OECD study, the conclusion was: ‘on the basis

of 108 studies carried out between 1982 and 1991, existing methodological approaches do not yield conclusive results as to the existence of significant economies of scale and scope in the financial industry, and that, at the cost-efficiency level, the effects of organisational inefficiency (failure to attain cost control and efficiency at the management level) are much more important'. In the UK some banks have begun to 'de-diversify' by selling off parts of their non-core business. For instance, one of the largest banks (Lloyds-TSB) divested more than it acquired in both 1997 and 1998. In other industries, and in many countries, large conglomerates are being broken up on the basis that the company is valued more highly as a set of separate businesses than as a combined conglomerate.

Diversification, and the evolution of financial conglomerates, is not without its hazards, and not all analysts of financial institutions are convinced about the business efficiency of financial conglomerates. In some respects, structures in finance have been moving against the trend in the industrial sector where the business efficiency of conglomerates has been challenged, and some have been broken up into their component parts. The challenge to financial conglomerates can be made on business and regulatory criteria.

With respect to business criteria, the main arguments emphasised are:

- The alleged case for financial conglomerates is based ultimately on economies of scope which in practice often fail to materialise. Most of the empirical research on economies of scope fails to find conclusive evidence of their existence. For instance, very few cost savings have been found in studies that investigate the consolidation of the outputs of different banks, (Berger, *et al.*, 1987; Hunter, *et al.,* 1990; Pulley & Humphrey, 1993; Noulas, *et al.*, 1993; Ferrier, *et al.*, 1993). However, while scope economies are a *sufficient* condition, they are not *necessary* to make diversification a viable strategy.

- The management challenges of controlling and developing a highly diversified business, and what can become an unwieldy bureaucracy, can be formidable. This may impose diseconomies of both scale and scope. Economies of scope are likely to be bounded by the increased difficulty of managing efficiently a complex, non-focused organisation. Only in very efficiently organised firms are internal markets competitive with external markets. So the argument becomes circular: internal markets are efficient if the firm is efficient, but what makes the firm efficient?

- Problems and conflicts may arise because of the different cultures, traditions and working practices of different facets of a financial conglomerate. Each may contaminate the other to the detriment of all.

- There is some evidence suggesting that management expenses per unit of output tend to rise as the product range widens.

- The management requirement of introducing a new business may be substantial and under-estimated with the result that, not only is the new business not particularly successful, managerial diversion may undermine existing business.

- The consumer's image of traditional businesses may be contaminated by an unsuccessful venture into new areas.

- The regulation and compliance costs of a diversified business may be very high. The more diversified is a bank the more regulatory jurisdictions it is subject to, and the greater are the compliance costs associated with regulatory requirements designed to guard against consumers being exploited by a conglomerate's potential conflicts of interest.

Two reservations are entered about the uncertain empirical evidence, in addition to the evident methodological and statistical problems associated with the studies. With substantial development of information and delivery technology, together with the new emphasis on cost control in banks, evidence on the basis of past performance may be a poor guide to potential future economies of scope. Secondly, the existence of economies of scope is a sufficient, but not necessary, condition for banks to diversify as such strategies may be motivated by reasons other than cost economies.

10.3 The public policy dimension

Any consolidation within the banking industry necessarily has serious public policy issues to consider not the least because the consolidation of the banking industry into a smaller number of larger units may have implications for competition. A conflict may emerge in this dimension of public policy. On the one hand, governments will wish to encourage the development of more efficient banking systems within their countries and this may be an argument in favour of allowing more consolidation. At the same time, European banks will be under competitive pressure in some markets from the giant American banks that are currently being formed. A public policy dilemma is likely to emerge in this area as, although the giant banks being created in the US are very large compared with many European banks, their market share within the US remains comparatively small and does not in itself raise serious competition issues. It has been estimated, for instance, that the market share of the combined Citicorp and Travellers banks will still be less than 10 percent of the US market. On the other hand, any European bank that might be created through mergers that would come anywhere near the size of Citigroup would have a virtual monopoly within its own country.

The resolution of this dilemma depends largely upon the definition of 'market' with respect to competition issues. The logic of the European single market and common currency, with low entry barriers for banks, is that the domain of the market should be the European Union area as a whole rather than individual countries within it. The logic of the European Union is that mergers and consolidation should be allowed providing they do not significantly reduce competition within the Union as a whole even though it might imply that a single bank would be dominant in any one country. In other words, the domain of competition policy should be Union-wide rather than national. Nevertheless, some governments may hesitate before accepting this logic and fully ceding issues of competition policy in banking to the Union. This is likely to become a serious issue to be considered.

There are public policy issues over and above the general impact on competition:
- the efficiency of the payments system;
- the vulnerability of the financial system and access to safety-net arrangements;
- the risk profile of institutions; and
- access to credit by small firms.

Payments system
Consolidation can have several effects on the efficiency of the payments system. Firstly, mergers reduce the amount of payments processing because payments between consolidating banks become 'on us' items, and hence do not require inter-bank transfers. Secondly, many of the remaining inter-bank payments may be cleared more quickly because there are fewer endpoints to which to send payments information or instruments. Thirdly, consolidation might improve efficiency by allowing banks to find more efficient means to exchange payments. It might also allow banks to form more efficient payments networks which is not possible with a more fragmented banking system. There is some evidence, for instance, that countries with more consolidated banking systems make greater use of electronic payments systems, (Humphrey, *et al*., 1996). Consolidation may also raise scale efficiency in back-office operations and in processing.

Stability of the financial system
A major public policy issue in bank mergers is the impact on the stability of the financial system. In particular, there is concern that if large banks fail the systemic consequences are potentially more serious, and the moral hazard associated with the Too-Big-To-Fail principle is accentuated. It also makes it more difficult to organise industry rescue operations by other banks purchasing failed banks.

Risk profile
On the other hand, there is a systemic advantage to the extent that large, diversified banks are less likely to fail. One study of the US (Hughes, *et al*., 1999) looked directly at the diversification gains from improvements in the risk profile of banks. The conclusion was that when organisations are larger in a way that creates geographical diversification, efficiency tends to be higher and insolvency risks tend to be lower. There seems to be clear risk-profile gains from operating in multiples states in the US. A similar conclusion was found in Hughes, *et al*., 1996.

This creates something of a public policy dilemma: while the probability of a large and diversified bank failing may be reduced though consolidation, the seriousness of any failure that does occur is greater.

Small firms
In many countries (notably the UK, Canada, Australia) the impact of bank consolidation on competition in the small-firm sector of the banking market, and the availability of credit to small firms, are particular concerns. There are several US studies of the impact of bank consolidation on the volume of lending to small firms. The general finding is that consolidations of large banks tend to reduce small business lending, whereas consolidations involving small organisations tend to increase small business lending. Some studies also find that banks in more concentrated markets tend to charge higher rates on small business loans (Berger & Hannan, 1989, 1997; Hannan, 1991).

Several studies investigate the impact of bank mergers and acquisitions on lending to small businesses. The most notable are: Keeton, 1996, 1997; Peek & Rosengren, 1996, 1998; Strahan & Weston, 1996, 1998; Craig & Santos, 1997; Kolari & Zardkoohui 1997a,b; Zardkoohi & Kolari, 1997; Walraven, 1997; Berger, *et al*., 1998. The most common findings are that mergers of large banks tend to reduce lending to small businesses, whereas consolidations involving small banks tend to increase lending to small firms.

However, there is also evidence that the negative effects are partly offset by increased lending to small firms by other institutions in the same local market, (Berger, *et al*., 1998). A study of Italian banks found that M&As have tended to reduce lending to small businesses by the consolidated institution, with larger reductions when larger banks were involved (Sapienza, 1998).

10.4 Assessment

As in many areas, fashion often plays a role in the evolution of bank strategies: decisions are often made on the basis of very limited evidence and simple assumptions about what is likely to be successful. There is a danger of a conventional wisdom emerging: that only large and highly diversified banks will survive in the strongly competitive environment that will emerge in the next few years. This could be an illusion. Success will be determined by considerations internal to the bank (management efficiency, etc.) rather than applying any particular model on the size-diversification matrix. For a bank to think otherwise, and to build strategies exclusively on a particular model in the size-diversification matrix, is a delusion, and potentially a dangerous one for it would divert attention away from what really matters: having a clear and credible strategy, and being good at doing what the bank chooses to do.

11. The Paradigm of Contract Banking

The third dimension where the pressures outlined earlier are likely to have a major impact is with respect to the nature and structure of the banking firm. Traditional banking involves a joint production technology that produces deposit, lending and transactions services within a given institution. This structure has faced an increasing challenge from separate production technologies. In this way technology can fundamentally change the basic economics of the financial firm.

The underlying economics of the banking firm are changing radically. The conventional image of a bank is of a vertically integrated firm providing each of the sub-components of particular services and products: it provides the whole product or service. As a bank has a range of services and products the image is of a vertically and horizontally integrated firm. However, the basic economics of the banking firm has already begun to change, and the process is likely to accelerate in the years to come. A two-fold distinction needs to be made: between *delivery* and *manufacture* of banking services, and between the services and products the customer ultimately demands (e.g., loans) and the components and processes that go to make up those products and services.

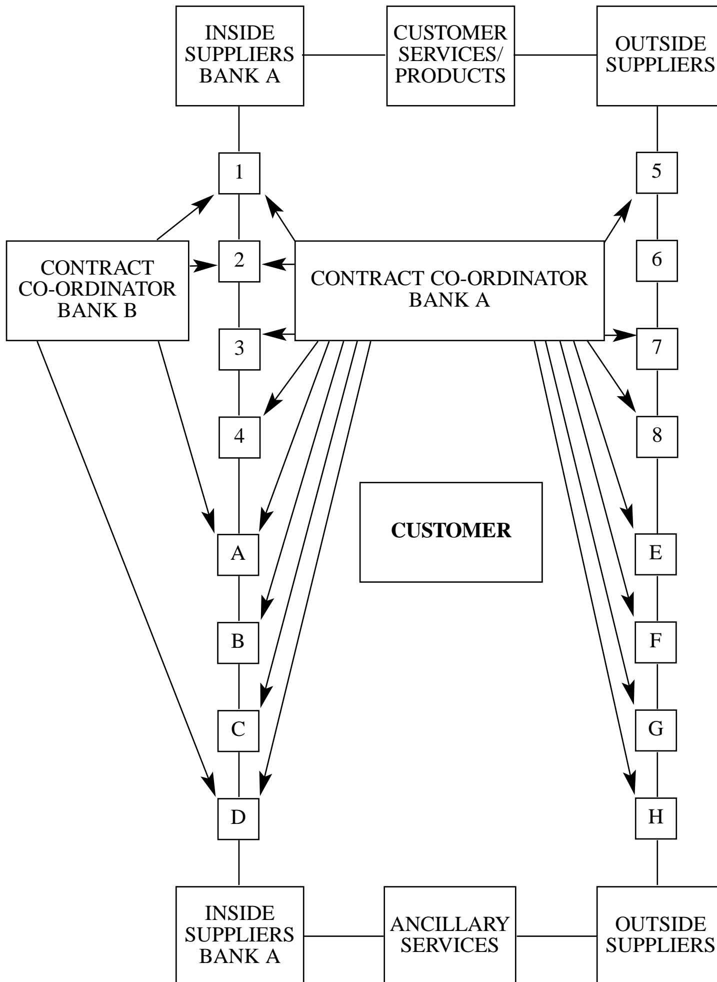
It is instructive to consider industries other than banks because, to some extent, banks are moving towards the model adopted by firms in other industries. When a customer buys a car, for instance, the appearance is that the company presents to the customer an integrated service. In fact, of the many thousands of parts that go to make the car the company itself produces virtually none. Most of what is presented to the customer is a re-packaging of products manufactured by other companies to the company's specification, design requirements and standards. The reasons for this are obvious: the economies of scale are different in the manufacture of the various component parts, and different suppliers have different comparative advantages and expertise. In other words, for the motor company the transactions costs of combining contracts for the external supply of components are less than the economies of scale that could be derived from manufacturing all of the component parts. What the car company does (the value it adds) is essentially three-fold: it maintains a customer interface; it efficiently manages a complex set of external contracts, and it has a particular expertise (or core competency) in design and assembly.

The experience of other industries has been put by Brynan (1988):

> '*In other industries experiencing these twin difficulties, one important response is to disaggregate and restructure integrated suppliers, usually through spin-offs, mergers, joint ventures, or shared production. In this process one complex business system is unbundled and reformed into several simple ones, with each stage in the production function now performed by a cost-effective participant. In the restructuring process redundant capacity is eliminated. We have seen such restructuring in the automobile industry, where even the largest manufacturers use parts manufactured by speciality companies and distribute cars through independent dealers. Similarly, in the petroleum industry, exploration and production is increasingly separated from refining and marketing.*'

This process, common in the manufacture of goods, has not been the norm in banking where traditionally the banking firm has offered an integrated service by itself providing

Figure 6: Example of a Contract Banking Structure



the service and their components itself. However, as already noted, the process of *deconstruction* (components of products and services are identified separately) changes this picture. It enables particular sub-components of products or services to be sub-contracted (out-sourced) and supplied by other firms on a contract basis. Similarly, *deconstruction* enables a bank to provide a particular sub-component of a service to competitors. Thus, a bank may sub-contract the administration of its credit card operation while at the same time export to other banks its risk analysis capacity. The potential exists because the economies of scale in bank processes vary. By sub-contracting a particular process, a small bank may be able to buy into economies of scale that it could not achieve itself.

A bank is a complex firm and within it four key roles are distinguished:
- a customer interface and the management of customer relationships;
- the supply of a range of products and services;
- a range of ancillary services (services which are not explicitly demanded by the customer but which are an integral part of what **is** demanded, e.g., risk analysis and administration); and
- a supplier of alternative delivery mechanisms.

Thus the banking firm can be viewed as a firm which has an interface with a customer base (supplying a range of apparently integrated products and services) and demanding a series of support services in order to supply the services. A distinction is made between the final products and services that the customer demands and the bank supplies (e.g., loans), and the various components of each product or service (e.g., risk analysis, administration etc.).

The central issue is which of the components are to be supplied internally, which are to be sub-contracted, and which are exported. Core-competencies of particular banks are relevant in this. Thus, what may appear to a customer as an integrated product or service is in fact a series of *deconstructed* components which may or may not be supplied from within the bank.
The bank defines the components and decides which are to be supplied internally and which sub-contracted. In effect, a series of contracts are established by the contracting bank with internal and external suppliers. This is illustrated in Figure 6. The customer has a demand for a series of products and services (1,2,3 etc.) and has a contract with a bank (a contract co-ordinator) to supply those services. The bank in turn has a series of contracts with internal and external suppliers of those services and products (the arrows show the supply of contracts). The sub-components of these products and services (i.e. A,B,C etc.) may also be supplied either internally or externally. Thus Bank A has contracts with internal suppliers of components A,B,C and D, but sub-contracts components E,F,G and H. Similarly, Bank B buys in from Bank A products 1 and 2 and components A and D.

What might be termed *contract banking* implies a bank offering a full range of services but where the bank co-ordinates inputs from a wide range of different companies. The core is a contract the bank has with its customers to supply a set of services or products of a particular standard. In turn, the bank contractor has a set of contracts with a range of internal and external suppliers of the components of these ultimate products and services. The value added by the bank contractor is in the management of these contracts. The concept of *contract banking* is discussed more fully in Llewellyn (1997).

Various forms of out-sourcing are available: third-party processors, service bureaux, and facilities management contractors. In addition, two or more parties might establish a joint venture to undertake certain activities on a joint basis.

A major form of out-sourcing is third-party processing on a line-of-business basis. Those functions that are most automated or specialised tend to be the most out-sourced partly because this is where economies of scale potential are greatest. As already noted, developments in information technology have lowered the cost of performing information-intensive activities providing economies of scale can be reaped. Examples of out-sourcing include: mortgage processing, credit card administration, check processing, network operations and management, credit card issuance, student loan processing, trust processing, securities safe-keeping, ATM driving/switching, retail lockbox, Applications Development and Management, data centre and balance reporting. As technology becomes more intense and specialised and requires heavy investment, it tends to be disaggregated, i.e. technology operations are broken apart and split up amongst a number of highly specialised technology companies which supply similar services to several banks.

There are several reasons why out-sourcing is undertaken and why it has become an increasingly common feature in banking:

- to reap economies of scale that cannot be obtained internally;
- to avoid installing excess capacity to cope with peak-load problems;
- some technology projects last only for a short period;
- some areas may be too specialised to be undertaken internally;
- skills can be enhanced when technologists work on several projects;
- a particular expertise may not be available internally and may be uneconomic to acquire;
- increased flexibility in the use of technology;
- to spread costs and risks;
- to break an internal monopoly when services are supplied exclusively internally;
- to change the cost structure: lower fixed costs.

Above all, a major advantage of out-sourcing is that it transforms fixed costs into variable costs and hence reduces the requirement for, often large, up-front costs in developing and adapting processing facilities. If a firm conducts its own processing, for instance, it pays and must recoup through the pricing of its products and services, both the large fixed and small variable costs of the process. On the other hand, if it sub-contracts the process it pays the supplier a proportion of the supplier's fixed costs plus the variable costs. The whole procedure is economic if the higher variable and transactions costs through out-sourcing are less than the savings on fixed costs. In addition, the out-sourcing firm may find it economic to out-source even when this condition is not met because of the sharing of risks and the greater flexibility it secures through minimising its infrastructure and fixed costs. In general, firms with low fixed costs and capacity are more flexible than those with high fixed costs even if the variable costs are higher.

If external contracts are made, issues arise about setting performance standards, monitoring standards, and sometimes moral hazard problems when the external supplier has a lesser stake in the outcome than the bank itself. However, these are not fundamentally different issues from those that arise when internal suppliers are involved. The key question is whether these functions can be performed more efficiently with internal or external contracts. Clearly, the costs involved in the monitoring of external

contracts is part of the overall judgement when deciding upon internal or external contracts. In some cases the costs of monitoring external contracts, including potential moral hazards, may be prohibitive.

If there are significant economies of scale in a particular process a bank can secure these economies in one of four ways: by being big; by out-sourcing; by forming joint ventures with others, or by the bank investing in a process and supplying the excess capacity to others. As an example of the last-mentioned, a bank may decide to establish a cheque processing facility and to provide the same service to others.

In a competitive market all firms (including banks) are under pressure to gain cost advantages wherever they can be secured. In some cases banks may have gone as far as they can in cutting costs without a more fundamental re-engineering of the business such as is implied in *contract banking*. If technology has the effect of increasing the economies of scale, the issue becomes how banks can reap such economies. As noted, economies can be secured either internally or externally but in some cases it may require a fundamental re-engineering of the bank. However, paradoxically, the technology which increases the economies of scale in bank processes, combined with the ability to de-construct products and services and have components priced and supplied independently. This also means that both small and large banks can co-exist, and that there will be greater variety in the structure of banking firms. This is because economies of scale are in bank processes rather than in banks *per se*.

As a result of these trends the concept of the fully integrated bank is becoming out-dated. In effect, the bank is a 'manager of contracts' (internal and external) on behalf of its customers. This involves a new definition of the business of banks and a new way of managing relationships with customers. Under the model of *contract banking* the essential functions of a contractor bank are to:

- maintain the customer interface;
- design products and services;
- set standards;
- establish internal and external contracts;
- monitor suppliers (internal and external contract holders);
- enforce standards;
- protect against moral hazard most especially when contracting with outsiders; and
- create a set of internal and external incentive-compatible contracts.

The skill is to manage these contracts more effectively and efficiently than alternative suppliers. In this sense, a bank is no different from any other firm.

At its extreme, the possibility of the *virtual bank* emerges. This has an interface with its customers and seemingly supplies a set of integrated services and products. And yet it may do nothing itself other than manage a set of contracts with external suppliers. It is a contractor of other firms' products and services and a co-ordinator of a network of contracts and services. It is, in effect, a broker between the customer and the ultimate supplier of services which go to make up the final products and services demanded by the customer. This may mean that comparatively small *virtual banks* can exist side by side large banks. They may provide the full range of banking services with the customer being unaware that the bank is in truth a network of alliances with specialist providers.

What in practice is likely to emerge is a spectrum of different types of bank. At one end of the spectrum will be the traditional fully-integrated bank which, because of the economies of scale in bank processes, will be very large. At the other end of the spectrum will lie the *virtual bank*. In practice, the majority of banks will lie within the polar boundaries of the spectrum, with some services being provided internally and others out-sourced. It is ultimately a question of the balance between internal and external contracts and many alternative structures are likely to emerge.

The development of out-sourcing means that there can be a role for the small bank in a market and technology environment where many banking operations require large scale to be economic. While there will be a trend towards more consolidation in the banking industry, there will still be a place for the smaller bank though it will not have the traditional structure. An implication of much of the analysis of this paper is that banks will be under constant pressure to cut and contain costs as a permanent feature of strategy. The economies of scale to be derived through the application of technology will be one of the routes of this pressure. However, if economies of scale relate predominantly to bank *processes* rather than *institutions*, and external contracts can be managed efficiently, the existence of economies of scale does not mean that only large banks can be competitive and survive.

Two conflicting pressures are emerging. On the one hand, technology (to the extent that it raises economies of scale) leads to the emergence of large banks and the consolidation of the banking industry. On the other hand, and working against this trend, the process of *de-construction* and *contract banking* mean that there are alternative ways of securing the competitive advantages of economies of scale.

12. Wholesale v. Retail Business

Throughout the previous analysis *ad hoc* distinctions have been drawn between wholesale and retail banking business. Many of the pressures identified are more evident in wholesale than retail sectors of banking business. In order to formalise the distinction the arguments are summarised in Table 7. While the pressures and outcomes are more evident in wholesale business (where competition from markets has been particularly powerful) they are developing in retail business and the differences are eroding.

13. Assessment

In various ways the related pressures of competition, declining entry barriers, de-regulation, financial innovation, and technology have eroded some of the comparative advantages of banks in their traditional financial intermediation business. They are also transforming the fundamental economics of banking.

Regulation in the past to some extent exaggerated the comparative advantages of banks because it created something of a protective market environment. Now, because of de-regulation, banks in some countries are losing their predominant role as deposit-takers and lenders to companies. Market pressures are also eroding the market imperfections which gave rise to the banks' comparative advantages over intermediation by capital markets. Financial innovation and technology are eroding transactions and information costs and market imperfections which have been the basis of banks' efficiency over direct credit markets. In addition, trends in banks' own cost structures (including the cost of capital) may also have eroded some of their comparative advantages.

Above all, banks are no longer the exclusive suppliers of banking services: there are many traditional activities of banks that can now be undertaken equally well by markets and other types of financial and non-financial companies. In addition, with the exponential development of information, trading and delivery technology, the value added in the banking business is increasingly passing away from banks to specialist technology companies.

The overall impact of these factors can be focused in a general proposition: *the value of the banking franchise is being eroded.* For all the reasons discussed, banking markets are less the exclusive preserve of banks. As put by Bisignano (1990): 'With the decline in the franchise value of banks, the banking systems in some countries are shrinking'.

On the face of it, banking operates in a competitive environment. However, over the past few years the rates of return on equity of the major UK banks have been very high, and higher than in other sectors of the economy. In fact, they have been amongst the highest in the world. They have also varied considerably between banks and on a year-by-year basis. Of course, the risk characteristics (and hence the cost of capital) need to be considered. It is likely that recent rates of return are deceptive: they are strongly cyclical and the past few years have been exceptionally conducive to bank profitability; banks have recently been through major cost-cutting programmes; provisions and loan losses have been very low; the impact of new entrants is yet to be seen; banks are able in the short run (but only the short run) to distinguish (and price separately) marginal and average business. It is also the case that the demand for banking and financial services has been growing strongly and profitability has undoubtedly benefited from this.

There is no doubting the recent high profitability of British banks. If the pressures outlined in earlier sections materialise in a powerful way, such profitability may prove to be temporary.

Table 7

Wholesale vs Retail Banking

Issue	**Wholesale**	**Retail**
Internal Competition	Intense	Weaker but newcomers important as: (i) behave differently; (ii) exit barriers low
Entry Barriers	Disappearing	Barriers remain in some areas
Exit Barriers	Low	High for incumbents but low for newcomers
Regulation	Declining (?)	Increasing
Technology	Advancing rapidly	Advancing rapidly
Competition from non-banks financial	Increasing rapidly	Rising but limited to selected business areas
Competition from non-banks: non-financial	Increasing rapidly	Rising but limited to selected business areas
Competition from markets	High	Low but rising
Cross-border competition	Intense	Very low
Diversification	Increasing rapidly	Increasing rapidly
Securitisation	High	Low
Contrast Banking	Will occur	Will occur
Excess capacity	High	Rationalisation but more obstacles
De-construction	Developing	Developing
Payments	Challenge of markets	Challenge of markets
Customer loyalty	Low	High because of transactions costs

However, even if this is the case, it does not necessarily mean a pessimistic outlook for *banking firms* as the business of the banking firm is likely to change towards the provision of a wider range of financial services relative to the traditional financial intermediation and on-balance sheet role. Banks are not so much in decline as re-creating themselves in a different way.

The successful development of corporate strategy is ultimately a question of defining comparative advantages, and developing alternative ways of exploiting such advantages. Thus, while banks may continue to have information advantages with respect to their customers, this does not necessarily mean they are only to be exploited in the form of making loans and/or holding loans on the balance sheet. Information advantages can be exploited in many other ways such as servicing the capital market. While banks may lose market share in some of their traditional markets, they will gain and develop other business and use their core competencies in different ways.

The combination of diversification, *deconstruction* and *contract banking* implies that banks are diversifying horizontally but becoming more specialist vertically. The management challenges to doing this successfully are formidable.

A series of secular pressures on the banking industry has been identified including the impact of declining entry barriers in widening the range of competitors. Two contrasting views may be summarised. At one end of the spectrum is the view that banks are losing their historic comparative advantages and that their role in the financial system is in permanent decline.

The alternative polar view is that the pressures are transitory and that many of the new entrants will find they have no enduring core competencies in financial services. The truth is likely to be within the two polar cases. Banks will continue to be subject to secular pressures which are moving against banks. They nevertheless retain powerful core competencies and these can be exploited in new ways and in different markets. Banks' core competencies will limit the extent of any secular decline. However, this may require a radical review of what business banks are in, and how core competencies can be exploited for competitive advantage. It may also require a restructuring of the banking firm.

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