

Trends in Domestic and International Banking

MINI-CONTENTS

- 1.1 INTRODUCTION
- 1.2 DEREGULATION
- 1.3 FINANCIAL INNOVATION
- 1.4 GLOBALIZATION
- 1.5 PROFITABILITY
- 1.6 THE FUTURE
- 1.7 CONCLUSION
- 1.8 SUMMARY

1.1 INTRODUCTION

The main thrust of this chapter is to introduce the major changes that have taken place in the banking sector and to set the context for later discussion. Aggregate tables and statistics are employed to highlight the nature of the changes. It should also be noted that many of these changes are examined in more detail later on in the book. It is also necessary at this stage to explain the nature of various ratios that we will use throughout this text. The relevant details are shown in Box 1.1.

Banking is not what it used to be. In an important study, Boyd and Gertler (1994) pose the question, 'Are banks dead? Or are the reports grossly exaggerated?' They conclude not dead, nor even declining, but evolving. The conventional monotask of taking in deposits and making loans remains in different guises, but it is not the only or even the main activity of the modern bank. The modern bank is a multifaceted financial institution, staffed by multiskilled personnel, conducting multitask operations. Banks have had to evolve in the face of increased competition from both within the banking sector and without, from the non-bank financial sector. In response to competition, banks have had to restructure, diversify, improve efficiency and absorb greater risk.

2 THE ECONOMICS OF BANKING

BOX 1.1 Illustration of the derivation of key ratios

Simple stylized examples of a bank's profit and loss (income) account and its balance sheet are shown below. Note in these accounts, for the purpose of simplicity, we are abstracting from a number of other items such as bad debts and depreciation and taxation.

Stylized Balance Sheet

<i>Assets</i>	£	<i>Liabilities</i>	£
Cash	100	Sight deposits	3000
Liquid assets	1000	Time deposits	2500
Loans and advance	6000	Bonds	1000
Fixed assets	200	Equity	800
<i>Total</i>	<i>7300</i>		<i>7300</i>

Stylized Profit and Loss (Income) Account

	£
Interest income	700
+ Non-interest (fee) income	600
Less interest expenses	600
Less operating expenses	500
= <i>Gross profit</i>	<i>200</i>

The key ratios are easily derived from these accounts as demonstrated below:

Return on assets (ROA)	= $(200/7300) \times 100 = 2.7\%$
Return on equity (ROE)	= $(200/800) \times 100 = 25\%$
Net interest margin (NIM)	= $[(700 - 600)/7000] \times 100 = 1.4\%$ (the denominator is interest-earning assets)
Leverage (LEV)	= $7300/800 = 9.1$
Operating expense (OE) ratio	= $(500/7300) \times 100 = 6.8\%$

Note the relationship between ROA, ROE and LEV: $ROE = ROA \times LEV$. Because of this relationship LEV is often referred to as the equity multiplier.

Banks across the developed economies have faced three consistent trends that have served to alter the activity and strategy of banking. They are (i) deregulation,¹ (ii) financial innovation and (iii) globalization. We will see that the forces released by each of these trends are not mutually exclusive. The development of the eurodollar market² arose out of a

¹ Since the global banking crisis of 2007–8, this trend has come to a halt and is in the process of reversing on itself. It is too early to tell whether this represents a new trend of re-regulation or a temporary halt to the trend of deregulation.

² The term 'eurodollar' is a generic term for deposits and loans denominated in US dollars but placed outside the jurisdiction of the USA. Eurocurrency is any currency deposited outside the domestic market. So euro-sterling will be sterling deposits outside the UK and euro-yen would be yen deposits held outside Japan.

desire to circumvent regulation in the USA (eurocurrency banking is examined in Chapter 5). Deregulation of the interest ceiling on deposits led to the financial innovation of paying variable interest rates on demand deposits. Deregulation has also allowed global forces to play a part in the development of domestic banking services, which were thought to have barriers to entry.

There have been a number of comprehensive surveys of the process of financial innovation and deregulation in developed-economy banking systems.³ This chapter describes the trends in banking that have arisen as a result of the forces of deregulation, financial innovation and globalization over the last two decades of the twentieth century. These trends were interrupted in the period 2007–08 by the global banking crisis that followed the subprime mortgage crisis in the USA culminating in the collapse of the investment bank Lehman Brothers in September 2008. This book attempts to demonstrate the value of economic theory in explaining these trends prior to the banking crisis and in understanding the implications of policy that followed on after the crisis.

1.2 DEREGULATION

The deregulation of financial markets and banks in particular has been a consistent force in the development of the financial sector of advanced economies during the last quarter of the twentieth century. Deregulation of financial markets and banks has been directed towards their competitive actions, but this has been accompanied with increased regulation over the soundness of their financial position. This is called ‘prudential control’ and is discussed further in Chapter 12. Consequently, there is a dichotomy as far as the operations of banks are concerned: greater commercial freedom (i.e. deregulation) but greater prudential control (i.e. more regulation).

Deregulation consists of two strands: removal of impositions of government bodies such as the Building Societies Act, discussed below, and removal of self-imposed restrictions such as the building society cartel whereby all the societies charged the same lending rates and paid the same deposit rates. The process of deregulation across the developed economies has come in three phases but not always in the same sequence. The first phase of deregulation began with the lifting of quantitative controls on bank assets and the ceilings on interest rates on deposits. In the UK, credit restrictions were relaxed, starting with competition and credit control⁴ in 1971. In the USA it began with the abolition of regulation Q in 1982.⁵ In the UK, the initial blast of deregulation had been tempered by imposition of the ‘corset’⁶ during periods of the 1970s to constrain the growth of bank deposits and, thereby, the money supply. By the beginning of the 1980s, exchange control had ended in the UK and the last vestige of

³ See, in particular, Baltensperger and Dermine (1987), Podolski (1986) and Gowland (1991).

⁴ The policy termed ‘competition and credit control’ removed direct controls and encouraged banks to compete more aggressively.

⁵ Regulation Q set a ceiling on the interest rate that banks could pay on time deposits. The object was to protect savings and loan associations (roughly the equivalent of UK building societies) from interest rate competition.

⁶ This was a policy whereby banks were compelled to lodge non-interest-bearing deposits at the Bank of England if the growth of their interest-bearing deposits grew above a specified level. The basic idea was to prevent banks from competing for funds.

4 THE ECONOMICS OF BANKING

credit control had been abolished.⁷ Greater integration of financial services in the EU has seen more controls on the balance sheets of banks being lifted.⁸

The second phase of deregulation was the relaxation of the specialization of business between banks and other financial intermediaries, allowing both parties to compete in each other's markets. In the UK this was about the opening up of the mortgage market to competition between banks and building societies in the 1980s. The Building Societies Act 1986 in turn enabled building societies to provide consumer credit in direct competition with the banks and specialized credit institutions. In the USA, the Garn–St Germain Act 1982 enabled greater competition between the banks and the thrift agencies. A further phase came later in 1999 with the repeal of the Glass–Steagall Act (1933)⁹ which separated commercial banking from investment banking and insurance services.

The third phase concerned competition from new entrants as well as increasing competition from incumbents and other financial intermediaries. In the UK, new entrants include banking services provided by major retail stores and conglomerates (Tesco Finance, Marks & Spencer, Virgin) and also the new financial arms of older financial institutions that offer online and telephone banking services (Cahoot – Bank Santander (UK), Egg – launched by the Prudential in 1998 and subsequently sold to Citigroup). In the USA, new entrants are the financial arms of older retail companies or even automobile companies (Sears Roebuck, General Motors). Internationally, GE Capital owned by General Electric is involved in industrial financing, leasing, consumer credit, investment and insurance. At its peak in 2008 this segment of General Electric accounted for nearly 40% of its total revenue of \$178bn.¹⁰

1.3 FINANCIAL INNOVATION

'Financial innovation' is a much overused term and has been used to describe any change in the scale, scope and delivery of financial services.¹¹ As Gowland (1991) has explained, much of what is thought to be an innovation is the extension or imitation of a financial product that already existed in another country. An example is the introduction of variable-rate mortgages into the USA when fixed rates were the norm and of fixed-rate mortgages into the UK where variable rates still remain the dominant type of mortgage.

It is generally recognized that three common but not mutually exclusive forces have spurred on financial innovation. They are (i) instability of the financial environment, (ii) regulation and (iii) the development of technology in the financial sector. Financial environment instability during the 1970s was associated with volatile and unpredictable inflation, interest rates and exchange rates and, consequently, increased demand for new instruments to hedge against these risks. Regulation that tended to discriminate against certain types of financial intermediation led

⁷ In the UK, hire purchase control had been abolished by 1981.

⁸ For a review, see Vives (1991).

⁹ The Financial Services Competition Act (1999) allows commercial banks to have affiliated securities firms in the USA.

¹⁰ Annual Report www.ge.com. Since 2008 the contribution of GE Capital to the total revenues of GE has fallen to 31% of a consolidated revenue of \$147bn in 2012.

¹¹ A dated but excellent survey of financial innovation in banking can be found in the Bank for International Settlements (BIS, 1986) report.

to regulatory arbitrage whereby financial institutions relocated offshore in weakly regulated centres. It was the regulation of domestic banks in the USA that led to the development of the eurodollar market offshore. At the same time, technological development has created a means of developing a wide range of bank products and cost reductions, thus meeting the demand for new instruments mentioned above. The advance of technology can be viewed in the same way as Schumpeter's waves of technological innovation and adaptation. The first wave can be thought of as the application of computer technology in the bank organization. This would not only be bank specific but also be applicable to all service-sector enterprises that are involved in the ordering, storing and disseminating of information such as, for example, rating agencies. The second wave involves the application of telecommunication and computer technology to the improvement of money management methods for the consumer. The third wave involves the customer information file, which enables financial institutions to gather information about the spending patterns and financial needs of their clients so as to get closer to the customer. The fourth wave is the further development of electronic payment methods, such as smart cards, e-cash and online and home banking services.

Technological financial services are spread through competition and demand from customers for services provided by other banks and financial intermediaries. Figure 1.1 describes the process of financial innovation.

The three forces of financial instability, regulation and technology put pressure on banks to innovate. Innovation also creates a demand for new financial products which feed back into the banking system through customer reaction and demand. The influence of the three factors and the feedback from customer demand for financial services are shown in Figure 1.1.

Goodhart (1984) identified three principal forms of structural change due to financial innovation. They are in turn:

1. The switch from asset management to liability management.
2. The development of variable-rate lending.
3. The introduction of cash management technology.

Asset management fitted easily into the post-war world of bank balance sheets swollen with public sector debt and quantitative controls on bank lending. The basic idea behind the concept of asset management is that banks manage their assets regarding duration and type of

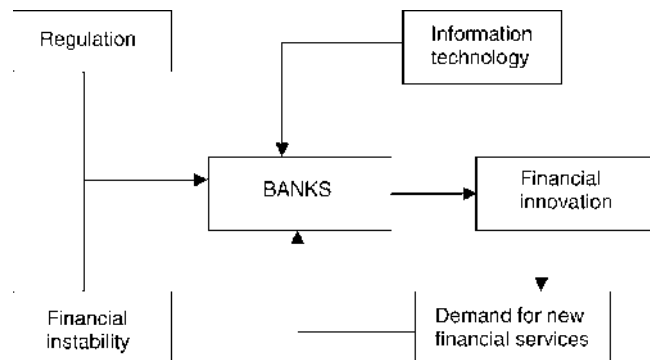


FIGURE 1.1 The Process of Financial Innovation.

6 THE ECONOMICS OF BANKING

lending subject to the constraint provided by their holdings of reserve assets. The move to liability management (namely their ability to create liabilities by, for example, borrowing in the interbank market) came in the USA by banks borrowing from the offshore eurodollar market (often from their own overseas branches) in an attempt to circumvent the restrictions of regulation Q. The ceiling on the rate payable on deposits drove savers to invest in securities and mutual funds. In the UK, liability management was given a boost with the Competition and Credit Control Act 1971. With asset management, the total quantity of bank loans was controlled by restriction, and deposits were supplied passively to the banking system.

Volatile inflation and interest rates during the 1970s led to the further development of variable-rate lending. Blue-chip customers always had access to overdraft facilities at variable rates, but during the 1970s more and more companies switched to variable-rate loans (linked to the London interbank offer rate – LIBOR). Banks were able to lend to customers subject to risk, competitive pressure and marginal costs of lending. The total stock of bank loans became determined by the demand for bank credit (this implies a near-horizontal supply of bank loans curve). The development of liability management and variable-rate lending led to the rapid expansion of bank balance sheets. Banks managing their liabilities by altering interest rates on deposits and borrowing from the interbank market satisfied the demand for bank loans. Thus, the simplest type of financial innovation was the development of interest-bearing demand deposits which enabled banks to liability-manage.

The pace of technological innovation in banking has seen the development of new financial products that have also resulted in a decline in unit costs to their suppliers – the banks. Credit cards, electronic funds transfer (EFT), automated teller machines (ATMs) and point-of-sale (POS) machines have had the dual effect of improving consumer cash management techniques and reducing the costs of delivery of cash management services. A good example is the use of debit cards over cheques. The costs of clearing a cheque are 35p per item, compared with 7p per debit card transaction.¹²

1.4 GLOBALIZATION

The globalization of banking in particular has paralleled the globalization of the financial system and the growth in multinational corporations in general. To some extent, banking has always been global. The internationalization of banking in the post-war world has resulted from the ‘push’ factors of regulation in the home country and the ‘pull’ factors of following the customer.¹³ This explanation of the internationalization of banking fits particularly well with the growth of US banking overseas. Restrictions on interstate banking¹⁴ impeded the growth of banks, and restrictions on their funding capacities drove US banks abroad. The by-product of this expansion was the creation of the eurodollar market in London – the most liberally regulated environment at the time. The ‘pull’ factor was provided by the expansion of US multinationals into Europe. US banks such as Citibank and Bank of America expanded into Europe with a view to holding onto their prime customers. Once established in Europe,

¹² Association of Payment Clearing Services information office, www.apacs.org.uk

¹³ An overview of the determinants of the internationalization of financial services is given by Walter (1988).

¹⁴ The Bank Holding Act 1956 effectively prohibited interstate banking.

they recognized the advantages of tapping into host-country sources of funds and of offering investment-banking services to new clients.

Canals (1997) typifies the globalization process in terms of three strands. The first is the creation of a branch network in foreign countries. The most notable example of this strategy has been Citigroup and Barclays. The second strand is merger or outright takeover. The third strand is an alliance supported by minority shareholding of each other's equity. The 1980s and 1990s saw a raft of strategic alliances and takeovers in the EU, beginning with Deutsche Bank's purchase of Morgan Grenfell in 1984.¹⁵

The trend towards harmonization in regulation has also facilitated the globalization process. Initially this stemmed from the attempt to create a 'level playing field' through the 1988 Basel Accord. The creation of a single market in the EU and the adoption of the Second Banking Directive 1987–8 was done with a view to creating a single passport for banking services. The second directive addressed the harmonization of prudential supervision, the mutual recognition of supervisory authorities within member states and home-country control and supervision. The result of further integration of the EU banking market will see a stronger urge to cross-border financial activity and greater convergence of banking systems in Europe.¹⁶

Further impetus for the globalization of banking comes from the WTO General Agreement on Trade in Services (GATS). The provisions of GATS include (a) removal of capital account restrictions, (b) allowing market access, (c) ensuring equivalent regulatory treatment for foreign banks as domestic banks and (d) a move towards harmonizing regulatory practice with international best practice. While there have been great inroads made into formerly protected banking markets by the large developed-economy banks, frictions in the process have been caused by judicial and administrative impediments that hinder foreign banks from expanding too fast in domestic markets.¹⁷

The progressive relaxation of capital controls has added to the impetus for globalization in banking. Table 1.1 shows the increasing foreign currency position of the major banking economies since 1983. Foreign claims refer to claims on borrowers resident outside the country in which the bank has its headquarters.¹⁸ The rapid growth of foreign asset exposure is particularly striking in the case of the UK, which has seen foreign currency assets increase their share from under 20% of total assets in 1983 to over 53% in 2013.

The pace of globalization in banking was intensified by the increasing trend to securitization (securitization is examined in greater detail in Chapter 9). 'Securitization' is a term that describes two distinct processes. First, it can be thought of as the process by which banks unload their marketable assets – typically mortgages and car loans – onto the securities market. These are known as asset-backed securities (ABSs). Secondly, it can be thought of as the process of disintermediation whereby the company sector obtains direct finance from the international capital market with the aid of its investment bank. Large companies are frequently able to obtain funds from the global capital market at more favourable terms than they could from their own bank. Banks have often led their prime customers to securitize, knowing that while they lose out on their balance sheets, they gain on fee income.

¹⁵ For a recent review of trends in the EU, see Dermine (2003).

¹⁶ For an analysis of convergence of banking systems, see Mullineux and Murinde (2003).

¹⁷ See Murinde and Ryan (2003).

¹⁸ The figures include the foreign currency loans of the branches of domestic banks located in foreign countries.

8 THE ECONOMICS OF BANKING

TABLE 1.1 Total foreign claims (\$bn)

Country	1983	1988	1993	1998	2003	2006	2013*
France	70.8	97.8	115.5	189.7	1353.4	2614.6	3491
Germany	33.7	93.2	179.6	399.5	2576.8	3541.9	3626
Japan	61.1	338.9	405.9	295.9	1238.2	1854.3	4401
Switzerland	16.7	36.5	51.8	83.9	1565.0	2462.4	2341
UK	85.8	99.4	184.9	338.5	1637.4	3094.6	4292
USA	21.4	162.3	179.3	305.0	838.4	1333.7	3798

Source: BIS.

* March 2013.

1.5 PROFITABILITY

The forces of competition unleashed by the deregulatory process have had stark implications for bank profitability. Banks faced competition on both sides of the balance sheet. Table 1.2 shows the evolution of bank profitability measured by the return on assets (ROA) – see Box 1.1. The effect of financial innovation and globalization has been to expand banks' balance sheets in both domestic and foreign assets. Profits as a percentage of assets declined in most cases both as balance sheets expanded and as competition put pressure on profitability. However, the banks of some countries have been successful in reducing costs and restoring ROA, but the pressure on profits has been a consistent theme.

Table 1.2 shows that ROA tends to be procyclical (vary positively with the business cycle) but in general it has been declining. Figures for 2006 show that the USA has been singularly successful in maintaining profitability, while ROA in the UK has declined sharply. Banks in Switzerland have been able to maintain their position over the past 25 years. In the case of France and Japan, the ROA for the year 2006 is higher than that for 1979. But in most cases the corresponding figures are lower. Taking out the effects of the cycle tends to confirm the common pattern of declining ROA. The figures for 2008 show the effects of the global banking crisis on the profits of the banks in the major banking economies. The figures for

TABLE 1.2 Return on assets (%)

Country	1979	1984	1989	1994	1999	2001	2003	2006	2008	2012*
France	0.3	0.2	0.3	0.0	0.5	0.7	0.5	0.7	-0.1	0.4
Germany	0.5	0.7	0.7	0.5	0.4	0.2	-0.1	0.3	-0.3	0.0
Japan	0.4	0.5	0.5	0.1	0.0	-0.7	0.1	0.6	-0.2	0.3
Switzerland	0.6	0.7	0.7	0.4	0.9	0.5	0.6	0.3	-1.0	0.6
UK	1.8	0.9	0.2	1.1	1.4	0.9	0.7	0.7	-0.6	0.1
USA	1.1	0.8	0.8	1.7	2.0	1.8	1.3	1.2	-0.1	1.2

Source: OECD (2011).

* Author estimates based on Bankscope data.

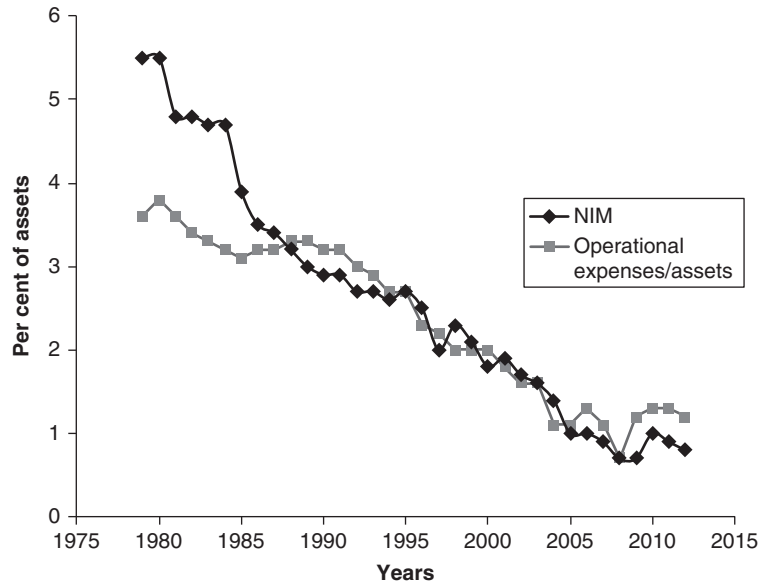


FIGURE 1.2 Net Interest Margin and Operating Expenses, Barclays Group UK 1979–2012.

Source: Abstract of Bank Statistics (British Bankers Association).

2012 show how quickly the US banks have bounced back and the continued struggle for profitability with the European banks. It is too early to say whether the downward trend in ROA will continue in the decade following the banking crisis.

Figure 1.2 illustrates a similar decline in net interest margin (NIM) for the Barclays Group in the UK. At the end of the 1970s the consolidated NIM of the Barclays Group was 5.5%, but by 2012 it had fallen to under 1.0%. A similar picture can be seen for operational expenses. Declining NIM puts downward pressure on costs and banks have innovated their delivery by developing online and telephone banking, but the decline in the cost-asset ratio also shows the rapid growth in assets in the 2000s.

Prior to the major deregulatory forces of the 1980s, bank margins were relatively wide and also influenced by the level of interest rates. The rise in interest rates that accompanied a rise in inflation increased margins because a significant proportion of deposits (i.e. sight deposits) paid no interest, whereas all assets except the minimal deposits at the Bank of England earned interest linked to the official bank rate. This was known as the *endowment effect*, which comprises two components – the net interest margin and the net interest spread:

$$\begin{aligned} \text{Endowment effect} &= \text{net interest margin} - \text{net interest spread} \\ \text{Net interest margin} &= \text{net interest income} / \text{interest-earning assets} \\ \text{Net interest spread} &= \text{rate received in interest-earning assets} \\ &\quad - \text{rate paid on interest-earning deposits} \end{aligned}$$

10 THE ECONOMICS OF BANKING

TABLE 1.3 Net interest margins

Country	1979	1984	1989	1994	1999	2001	2003	2006	2008	2012*
France	2.6	2.5	2.0	1.4	0.7	1.0	0.9	0.7	0.5	1.0
Germany	2.0	2.5	2.0	2.2	1.5	1.2	1.3	1.4	1.3	0.8
Japan	1.8	1.2	1.0	1.3	1.4	1.3	1.2	1.1	1.1	0.8
Switzerland	1.1	1.3	1.4	1.4	0.9	1.1	1.2	0.9	0.8	0.8
UK	3.9	3.0	3.2	2.4	1.2	1.8	1.7	1.2	0.9	1.0
USA	1.3	3.3	3.3	3.8	3.5	3.3	3.2	2.9	2.9	2.5

Source: OECD (2011).

* Author estimates based on Bankscope data.

The innovation of interest-bearing demand deposits reduced the endowment effect during the early 1980s. Competition from within the banking system and from non-bank financial intermediaries (NBFIs) saw spreads declining in the late 1980s. Table 1.3 shows the general trend in net interest margins for selected economies. Except for the USA, where there has been a rebuilding of interest margins up to 1994, most countries show a low, cyclical but declining margin. It is also noticeable that the net interest margin is substantially higher in the USA than in the other countries listed. The same applies to a lesser extent to the UK. Except for France the global banking crisis has not impeded the downward trend in NIM. However, it is likely that spreads will widen in the post-crisis period reflecting the heightened riskiness of the environment and NIM may flatten out in the future.

A clearer picture can be seen in Figure 1.3, which shows the net interest margin for domestic and international lending for the Barclays Group. The steepest decline in the net

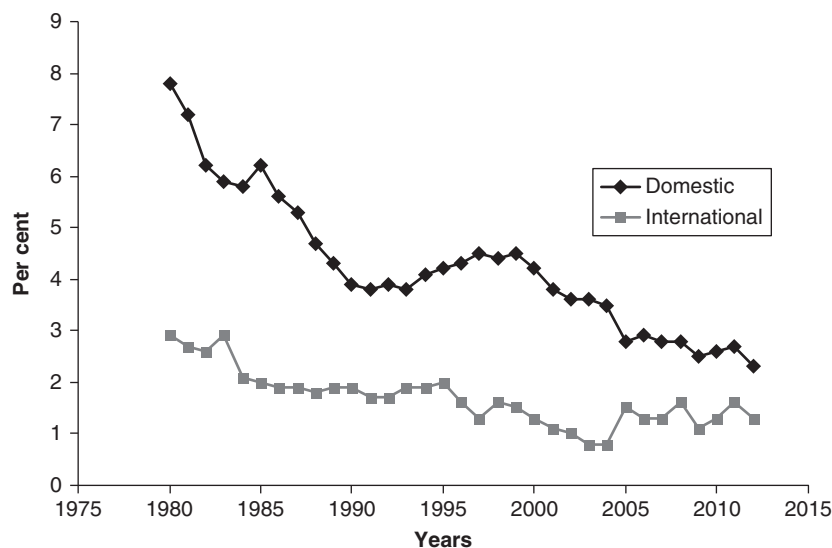


FIGURE 1.3 Net Interest Margins, Barclays Group 1979–2012.

Source: Abstract of Bank Statistics (British Bankers Association).

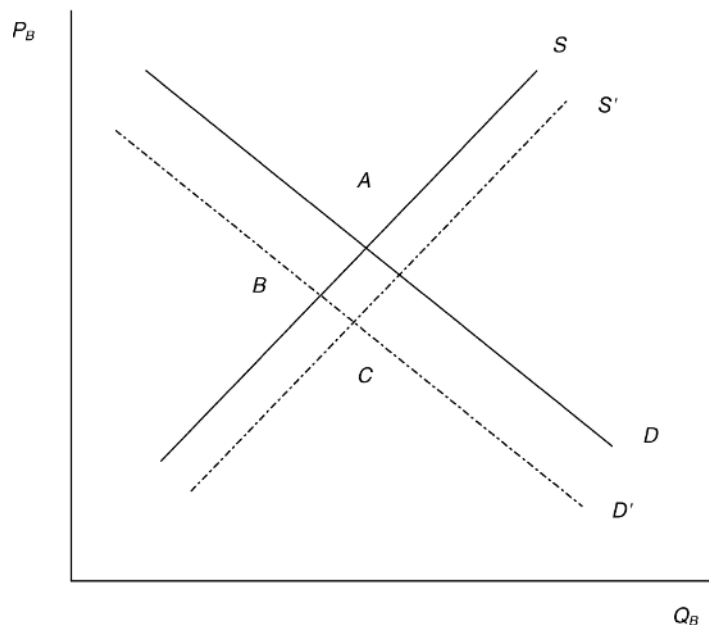


FIGURE 1.4 Competition from NBFIs.

interest margins is in the domestic sector where competition from incumbents and new entrants was the fiercest. The slower decline in net interest margins on international balances indicates the strength of competition that already existed in this arena. The traditional bank faces competition on both sides of the balance sheet. On the assets side, banks are faced with competition from specialist consumer credit institutions, NBFIs and the forces of disintermediation. On the liability side, banks face competition from mutual funds and an array of liquid savings products offered by NBFIs. The economics of the competitive process can be described by Figure 1.4, which shows equilibrium at point *A* for bank services. The demand for bank services is a bundled entity of balance sheet services like loan advances and deposit-taking, and off-balance sheet services like guarantees, credit lines and insurance. The price of the bundled service is P_B and the total quantity is Q_B (not illustrated on the axes). The demand for bank services falls from *D* to *D'* in response to competition from NBFIs and the forces of disintermediation. Normally, a new equilibrium would be defined at point *B*, but banks are unable to exercise the same exit strategies as other commercial firms. Banks cannot just close down without causing problems to the banking system and, ultimately, the payments system. Hence, the banks have to lower their cost structure so as to reach equilibrium at a point such as *C*.

This is further demonstrated in Figure 1.5 which shows that, faced with a fall in demand for its services resulting in a fall in the price of its services from P_B to P'_B (not shown on the axis), an individual bank can only restore profitability by reducing its costs. Both fixed costs and variable costs have to be reduced to move the AC schedule down so that the cost falls to P'_B where price equals marginal and average total costs.¹⁹

¹⁹ Note in this exposition we are assuming the existence of perfect competition.

12 THE ECONOMICS OF BANKING

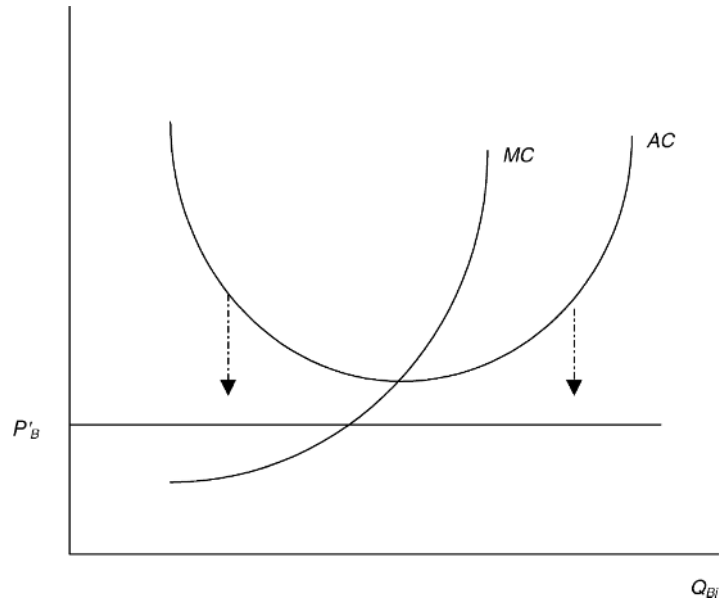


FIGURE 1.5 Fall in Prices and Unit Costs.

Restructuring of the banking system to lower operational costs has taken the form of downsizing through defensive merger and staff shedding. Table 1.4 shows the extent of this trend internationally. Where merger has resulted in economies of scale, unit costs have been reduced through consolidation, branch closures and labour shedding. Figure 1.6 shows how merger results in lower costs through exploiting economies of scale. The merged bank is able to close branches and concentrate branch business on surviving branches. The increased business of the joint bank shown by the increase in quantity of bank activity from Q_{B1} to Q_{B2} is conducted at a lower unit cost shown by the fall in price from P_{B1} to P_{B2} .

TABLE 1.4 Bank restructuring (number of institutions*)

Country	1980	1992	1995	2001	2003	2004	2005	2008
France	1033	1701	1453	1108	895	383	373	338
Germany	5355	3517	3500	2575	2076	1995	1934	1816
Japan	—	141	149	138	131	129	126	123
Switzerland	478	434	382	327	301	299	295	282
UK	796	665	560	385	356	356	335	338
USA	14 423	12 370	9983	8175	7851	7701	7598	7153

* Including savings, mutual and co-operative banks.

Source: OECD (2011).

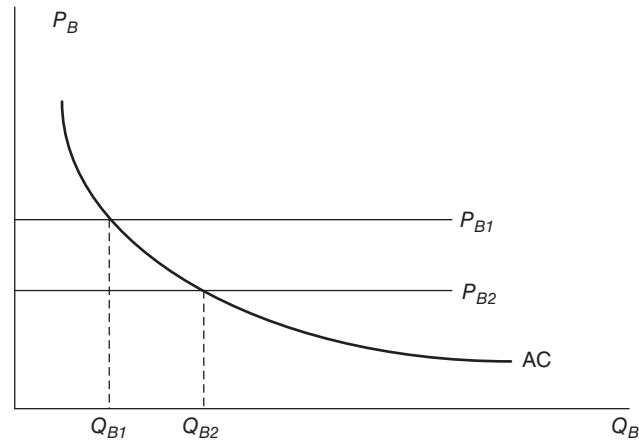


FIGURE 1.6 Mergers and Cost Reduction.

TABLE 1.5 Operational costs (%) as a percentage of total assets

Country	1979	1984	1989	1994	1999	2001	2003	2006	2008	2012 *
France	1.2	2.0	1.6	1.5	1.2	1.6	1.3	1.1	0.9	1.2
Germany	2.0	2.2	1.2	1.9	1.7	1.7	1.3	1.3	1.1	1.1
Japan	1.4	1.1	0.8	1.0	1.0	0.9	0.9	0.9	0.9	0.8
Switzerland	1.5	1.4	1.6	1.8	1.8	1.4	1.5	1.5	1.2	1.8
UK	3.6	3.2	3.3	2.6	1.9	1.8	1.9	1.6	1.5	1.2
USA	2.6	3.0	3.4	3.8	3.8	3.5	3.3	3.1	2.9	2.9

All banks. Source: OECD (2011).

* Author estimates based on Bankscope data.

In the UK, cost reduction has been conducted by branch closure, staff shedding and, in some cases, merger or takeover. Table 1.5 shows the evolution of operational costs, as a percentage of assets, for the banks of different countries. Figure 1.2 also shows the decline in operating costs for the Barclays Group. The extent of branch closures in the UK can be seen in the decline in the total number of branches of five major banks – Barclays, National Westminster, Lloyds, Midlands (later rebranded as HSBC following its acquisition in 1992) and TSB²⁰ – shown in Figure 1.7.

In most countries, operational costs have declined as the pressure on profitability has driven banks to increase productivity by using technology intensively (online and telephone banking) and force down unit costs. This is seen clearly in the case of the UK, Germany and Japan. Note that the changes for the USA are significantly different from those

²⁰ The merger of Lloyds and TSB to form Lloyds-TSB led to the closure of a number of joint branches. The take over of Woolwich by Barclays bank in 2000 is reflected in a jump in Barclays branch numbers as the Woolwich branches were rebranded in 2004.

14 THE ECONOMICS OF BANKING

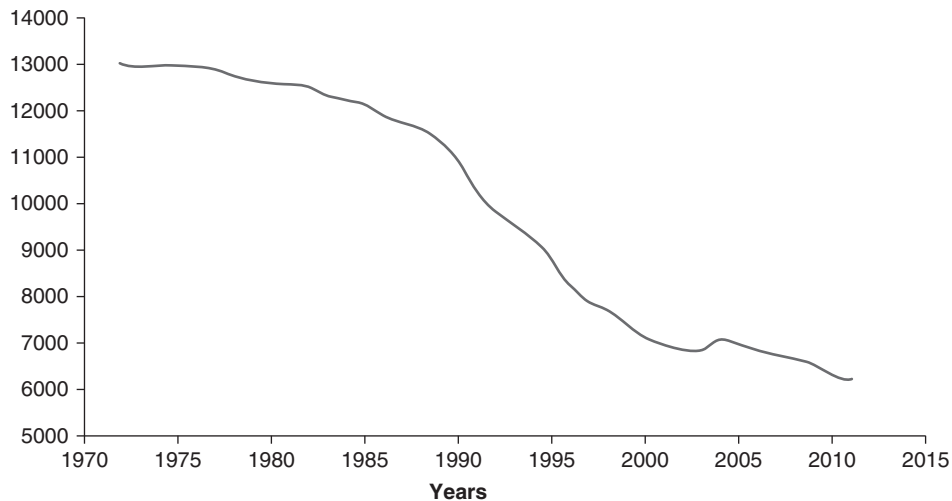


FIGURE 1.7 Bank Branches, Top Five Banks UK 1972–2011.

Source: Abstract of bank statistics.

experienced by the other countries in Table 1.5. Operating expenses are much higher and have actually risen during some of this period.

Competition is generally viewed as a good thing as it generates allocative, productive and dynamic efficiency. However, competitive pressure has driven banks to consolidate, with the threats that concentration has for market power and consumer welfare. However, consolidation is not necessarily anticompetitive. Banks have seen increased competition from incumbents, non-bank financial firms and even non-financial firms. They have seen an erosion of their monopoly power because deregulation combined with technology has lowered entry barriers. Comparative advantage has been eroded with new disclosure laws that have struck at the heart of the confidentiality advantages of banking. In particular, the Know Your Customer (KYC) laws associated with money laundering activity have placed banks in the insidious position of policing their own clients, counter to the traditional confidentiality qualities associated with the bank–customer relationship. The development of unit trusts and money-market mutual funds has enabled consumers to diversify their portfolios even with relatively small investments rather than tie them up in low-yielding time deposits. So, in terms of its core business of balance sheet activity, technology and financial innovation have made competition more real from the threat of entry. Technology has lowered the barriers to entry, which makes banking markets contestable. The threat of entry ensures that incumbent banks will behave in a competitive manner.

One of the products of competition on the balance sheet has been diversification. Banks have diversified into non-intermediary financial services, ranging from investment brokerage to insurance. One of the results of this has been the spectacular growth in off-balance-sheet (OBS) activity. OBS activity as a percentage of gross income has grown in all developed-economy banks. In many banks, OBS accounts for nearly half of gross income. Table 1.6 provides a representative list of OBS activity undertaken by banks, and Table 1.7 shows how it has grown internationally. The share of OBS activity has grown dramatically in most

TABLE 1.6 Summary of OBS activities

Contingent claims	Financial services
Loan commitments	Loan-related services
Overdraft facilities	Loan origination
Credit lines	Loan servicing
Back-up lines for commercial paper	Loan pass-throughs
Standby lines of credit	Asset sales without recourse
Revolving lines of credit	Sales of loan participations
Reciprocal deposit agreements	Agent for syndicated loans
Repurchase agreements	
Note issuance facilities	Trust and advisory services
	Portfolio management
Guarantees	Investment advisory services
Acceptances	Arranging mergers and acquisitions
Asset sales with recourse	Tax and financial planning
Standby letters of credit	Trust and estate management
Commercial letters of credit	Pension plan management
Warranties and indemnities	Trusteeships
Endorsements	Safekeeping
	Offshore financial services
Swap and hedging transactions	
Forward foreign exchange contracts	Brokerage/agency services
Currency futures	Share and bond brokerage
Currency options	Mutual fund brokerage
Cross-currency swaps	General insurance brokering
Interest rate swaps	Real estate agency
Interest rate caps, collars and floors	Travel agency
Investment banking activities	Payment services
Securities and underwriting	Data processing
Securities dealership/distribution	Network arrangements
Gold and commodities trading	Cheque clearing house services
	Credit/debit cards
Export–import services	Point-of-sale machines
Correspondent bank services	Home and online banking
Trade advice	Cash management systems
Export insurance services	
Counter-trade exchanges	

Source: Lewis (1991).

TABLE 1.7 Net non-interest income as % of gross income

Country	1979	1984	1989	1994	1999	2003	2006	2008	2012*
France	17.0	13.0	21.4	48.0	67.0	56.7	62.2	51.7	48.5
Germany	27.2	25.9	36.0	25.4	42.7	24.4	29.1	10.0	22.0
Switzerland	44.0	38.7	38.3	54.6	64.4	52.1	64.8	46.3	74.2
UK	41.3	40.0	37.6	42.8	40.7	48.7	58.7	35.5	42.1
USA	34.7	34.2	30.0	34.4	43.1	44.5	43.4	40.2	51.3

Commercial banks. Source: OECD (2011).

* Author estimates based on Bankscope data.

countries. It has particularly grown in France. The increase in the share of OBS activity in the UK and USA has been only moderate and highlights the strength of competition for other financial services between banks, other financial intermediaries and non-financial companies offering financial services (Sears, GE, Virgin, Marks & Spencer, etc.). Non-interest income makes up nearly half of total income for banks in the developed economies.

With the lifting of quantitative controls on lending and deposit-taking, and faced with increased competition and the loss of prime clients to the capital markets, banks have taken greater risks in expanding their balance sheets.

Deregulation has been replaced with re-regulation, with prudential regulations on capital adequacy (regulation and systemic risk are examined in Chapter 12). The safety net of the lender of last resort raises problems of creating moral hazard. An often-heard argument is that the climate of competition and deregulation has led to adverse incentives, with banks taking on excessive risk and making imprudent loans.

1.6 THE FUTURE

While banks have opened their doors to sell new products, they also let in myriad new risks associated with this activity. Risks on the balance sheet remain, but risk management systems have been developed that have ushered in an age of technocracy. Credit ratings are available from the many rating agencies, but internal models such as credit scoring and the use of proprietary models such as Creditmetrics have reduced the judgemental influence of the branch manager. Securitization is used as a capital-raising and risk-managing strategy. The recognition of market risk has spawned an industry of internal model application such as value at risk, and organizational, fraud and dominance risk has created the relatively new area of operational risk management (see Allen *et al.*, 2004).

However, there are risks associated with consolidation. If there are large social costs of bank failure, the trend towards consolidation could create conditions of 'too big to fail', which enables the bank to exploit unpriced risk from the hidden subsidy of the central bank and financial authorities, creating additional risks associated with moral hazard. Weak regulatory authorities may find themselves captured by the very banks they hoped to control by opening the banking system to external competition. It can be argued that weak regulatory forbearance was a contributory factor to the global banking crisis of 2008.

Risks have also emerged from the greater interaction of the banks with capital markets. Hedge fund and private equity fund activity is often debt financed, with banks taking a significant position. The collapse of LTCM has shown that central banks cannot ignore the systemic implications of the failure of non-bank financial institutions for the financial system because of the exposure of the commercial banks.²¹

It is also claimed that competition can be excessive in banking. Market power may moderate risk-taking activity (Vives, 2001). A bank with more market power enjoys higher profits and has more to lose from excessive risk-taking. The erosion of monopoly power has seen increased risk-taking which, it can be argued, has resulted in increased financial fragility following deregulation and liberalization. It is easy to be sanguine about the negative effects of excess competition. First, the banks that threaten entry will bid margins down to the point where monopolistic competition is sustained. No external bank would want to enter a market that exhibits conditions of perfect competition. Secondly, the empirical evidence shows that within continental Europe and even in the UK, where the banking market is relatively open, the market has remained largely under conditions of monopolistic competition relating to its balance sheet activity throughout the deregulatory period of the 1980s and 1990s.²² However, much of the perceived stability of the banking system was shattered by the onset of the global banking crisis of 2008.

At the beginning of this chapter we stated that banking is not dead but evolving. The question is, evolving into what? Llewellyn (2006, 1996) provided us with a glimpse into banking in the twenty-first century. The banks have faced competition in specific financial products, where competitors have cherry-picked the most profitable areas of banking. This has forced the banks to unbundle the complete service they previously provided in bundled form. The traditional bundling of financial services has enabled the banks to conduct cross-subsidization with an opaque pricing strategy. The obvious example is cost-free cheque accounts. The bank in the future may be forced into unbundling its services and providing a more transparent pricing strategy.

The twenty-first century bank may include the following features:

1. Deconstruction – the process of decomposing services into their component parts which can then be priced and provided separately.
2. Capital allocation – many banks at the turn of the century in the developed economies found themselves with excess capital, meaning too much capital necessary to support the existing or expected level of assets. In response, banks did one or all of the following: expanded the balance sheet by taking on more risky loans; made an acquisition; made share buy-backs. Following the losses from the global banking crisis, banks will build capital in the short term, which will drive up spreads and increase fees.
3. Cross-subsidization will be eroded as new entrants pick out the services that are the most profitable.
4. Banks will separate core competencies from delivery. The banking firm has advantages in information gathering and confidentiality, risk analysis, monitoring of loans, enforcement of

²¹ Long Term Capital Management (LTCM) was a hedge fund that collapsed in 1998 requiring the Federal Reserve to organize a \$3.6 billion bailout with its creditors.

²² See Matthews *et al.* (2007) for a study of the UK, and Casu and Girardone (2006) for a study of continental Europe.

18 THE ECONOMICS OF BANKING

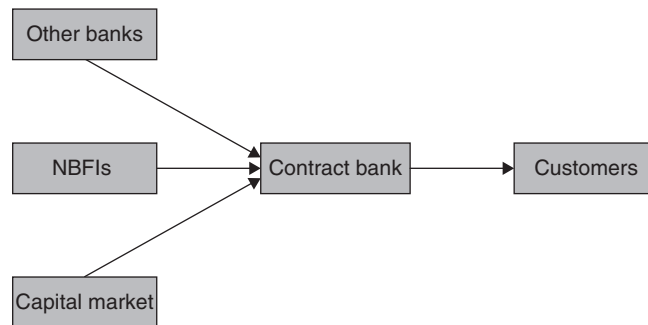


FIGURE 1.8 Organization of the Contract Bank.

loan contracts and brokerage. These will be separated from delivery in that the bank would act as a vessel to service customer needs from in-house and outsourced venues.

5. The crisis has slowed down the process of securitization but the forces of securitization will re-emerge when banks are stronger. Banks will once again gravitate towards delivery of financial services for which the capital market would be a greater source of funds than the traditional deposit (securitization).

6. A higher proportion of the bank's income will come from off-balance sheet business.

The structure of the bank will change and could move in the direction of what Llewellyn (1996) terms 'contract banking'.

What contract banking means is that the bank will have a contract to deliver financial services to its customers. In the same way as a car manufacturer has a contract to deliver a car to a client and will source the components from all over the world, a bank will do the same. Figure 1.8 illustrates the concept of the contract bank. The contract bank will deliver financial services to the customer and will source certain services from other banks, and other financial services from non-bank financial institutions (NBFIs) and the capital market. The contract bank will absorb the risks of dealing with multiple sources and supply a range of financial services to its customers consistent with a 'one-stop-shop' or universal bank where all financial services are produced under one entity.

It is tempting to say that the shift from bricks and mortar to online and e-banking will presage a move towards the 'virtual bank', but that would be too simplistic. The anonymity of virtual banking destroys customer loyalty. While offering the convenience of e-banking to many customers, branches would possibly redefine their services to capture a growing wealthy clientele.²³

The global banking crisis of 2008 will have delayed the evolution of the banking system to the Llewellyn vision of 'contract banking' as regulation bears down on the banks in the wake of the most destructive global banking crisis since the 1930s. Banks will, in the immediate future, face more pressing demands on capital, liquidity and operations. Further, banking is

²³ The Economist, 16 June 2007, had a report on the Umpqua Bank in western USA that has replaced the traditional bank teller with 'universal associates' who earn their salary from commission on sales of financial products. The branch has a budget to spend on flowers for unwell clients, ice cream on a hot day, plush sofas, books and free internet surfing.

likely to be dictated by the regulatory precepts that stem from the Dodd-Frank Act in the USA, the Report of the Independent Commission on Banking in the UK and Basel 3 from the Bank for International Settlements. The popular disdain for the bonus culture associated with bankers, the scandals of the manipulation of LIBOR and the sale of Payment Protection Insurance (PPI) have created an atmosphere of distrust as politicians and pundits find advantage in 'bashing bankers'. Banks have responded by focusing on their core activity, simplifying management structures, investing in restoring trust and changing governance (KPMG, 2013).

The European sovereign debt crisis will alter the risk weights of certain types of OECD government debt as dynamic weights reflecting market conditions will replace the static weights of Basel 1. Research reported in Beck (2011) links corporate governance to risk-taking which will result in regulators paying closer attention to the 'fit and proper' requirements of Board members. Similarly regulators will be looking to design capital, liquidity and activity restrictions that will force the banks to internalize the repercussions of their risk-taking and in particular the costs of failure.²⁴

1.7 CONCLUSION

This chapter has reviewed the major trends in international banking during the latter quarter of the twentieth century. As noted at the beginning of the chapter, the major trends were (i) deregulation, (ii) financial innovation and (iii) globalization. These were common to banks in most countries, although there were some intercountry differences, and are explicable in terms of the forces of deregulation, financial innovation and globalization. As a result, banks have faced pressure on profits and interest rate margins. In response, they have downsized, diversified, restructured and expanded balance sheets. Bank strategies in response to these trends have come to a halt in the post-crisis regime of re-regulation. Bank behaviour in the short run is likely to be dominated by an optimal response to the tightening regulatory regime. In the remaining chapters of this book, we aim to use economic theory to explain the response of banks to increasing competitive pressure, deregulation and re-regulation, and to examine the question as to whether there is something special about banks that needs a protective belt not afforded to other commercial enterprises.

1.8 SUMMARY

- Banks across the developed world have faced three consistent trends: (a) deregulation, (b) financial innovation and (c) globalization.
- Deregulation has three phases:
 - It began with the removal of legal and quantitative restrictions on bank activity.
 - The second phase was the abolition of artificial barriers between types of financial intermediary and financial services.

²⁴ Whether the swathe of regulations emanating from the ICB and Basel 3 will have the desired effect is questionable (Matthews, 2013).

20 THE ECONOMICS OF BANKING

- The third phase was the encouragement of greater competition from non-bank financial intermediaries, non-intermediary financial firms and conglomerate organizations.
- Financial innovation was the outcome of three specific forces: (a) financial instability, (b) financial regulation and (c) technological innovation. The three principal forms of structural change due to financial innovation are:
 - The switch from asset to liability management.
 - The further development of variable-rate lending.
 - The introduction of cash management technology.
- Globalization of banking has paralleled the globalization of the financial system and the growth in multinationals.
- The forces of competition unleashed by deregulation have seen banks fighting to maintain profitability.
- Across most of the developed economies there has been a decline in net interest margins, reduction in unit costs, restructuring through downsize and merger and increase in diversification as banks have moved into traditionally non-banking financial services.
- The bank of the future is very likely to be a financial institution like the current universal banks that provide all types of banking and financial service. However, unlike the modern universal bank, the bank of the future may be a contract bank that will supply all financial services but source individual services from other financial institutions.
- The global banking crisis will focus regulation on altering the risk appetite of banking and as banks adjust to the new regulatory environment, the vision of contract banking may be pushed further into the future as banks will concentrate on core activities.

QUESTIONS

- 1 What have been the principal trends in international banking during the last two decades of the twentieth century?
- 2 What have been the three phases of bank deregulation during the 1980s and 1990s?
- 3 It has been suggested that financial innovation has been the result of three interacting forces. What are these?
- 4 What are the three principal forms of structural change in banking owing to financial innovation, as identified by Goodhart (1984)?
- 5 What are the three strands in the globalization of banking identified by Canals (1997)?
- 6 What has been the long-term trend in net interest margin and bank profitability? Why has this occurred?

TEST QUESTIONS

- 1 Examine the international trends in commercial banking in the past two decades. Analytically account for the trends and, on the basis of your account, comment and make a projection on the future of banking in the next decade.
- 2 Are banks dead or are the reports grossly exaggerated?

