

# **Chapter I**

## **Patterns of consolidation**

### **1. Introduction**

This chapter provides a comprehensive overview of the patterns of consolidation in the financial services sector during the 1990s. The main focus is on three important groups of financial institutions: depository institutions (banks), insurance companies and securities firms. Thirteen countries – those in the G10 plus Spain and Australia – are included in the study. As a supplementary discussion, Annex I.1 describes securities exchanges in the United States, Japan and Europe and any associated consolidation.

Several methods of consolidation are discussed in the chapter, including mergers, acquisitions, joint ventures and strategic alliances. These transaction types are defined and quantitative data presented and discussed. In addition, data on the condition, performance, structure and concentration of each country's commercial banking and insurance industries are presented to highlight patterns, particularly those associated with consolidation. Concentration of certain financial activities on a global basis is also examined to assess the importance of the world's largest financial firms.

The chapter is organised as follows: Section 2 discusses several of the methods that are used by firms to consolidate. Section 3 presents extensive data and discussion of merger and acquisition activity. More limited data and discussion on joint ventures and strategic alliances are also provided. Section 4 focuses on the structure of the financial services industry and has three main parts. First, the banking and insurance industries of each country are discussed. Second, some basic international comparisons are made. Third, the global role of banking and securities leaders is examined. The chapter ends with a brief conclusion.

### **2. Methods of consolidation**

In general terms, consolidation of the financial services sector involves the resources of the industry becoming more tightly controlled, either because the number of key firms is smaller or the rivalry between firms is reduced. Consolidation may result from combinations of existing firms, growth among leading firms, or industry exit of weaker institutions. This chapter focuses primarily on the first of these causes.

There are several alternatives for firms combining with each other. Each has its strengths and weaknesses and may be particularly appropriate in certain situations. Section 3 presents data on two classes of methods: (1) mergers and acquisitions and (2) joint ventures and strategic alliances.

The primary methods of consolidation employed by firms are mergers and acquisitions. With both of these methods, two formerly independent firms become commonly controlled. Throughout this chapter, the terms merger and acquisition are used interchangeably to refer to transactions involving the combination of two independent firms to form one or more commonly controlled entities. The distinction between a merger and an acquisition is somewhat vague. A merger is often defined as a transaction where one entity is combined with another so that at least one initial entity loses its distinct identity. Thus, full integration of the two firms takes place and control over a single entity can easily be exercised. An acquisition is often

classified as a transaction where one firm purchases a controlling stake of another firm without combining the assets of the firms involved. Relative to acquisitions, mergers provide a greater level of control, because there is only one corporate entity to manage. Acquisitions are most appropriate when there are operational, geographic or legal reasons to maintain separate corporate structures.

Mergers and acquisitions are also sometimes distinguished by defining mergers as transactions involving two firms that are of essentially equal size, while acquisitions are transactions where one party clearly obtains control of another. A partial, or non-controlling, acquisition is similar to an acquisition of a controlling interest, except that, as the name implies, the acquiring firm does not establish control. Such deals encourage cooperation between potential rivals, because they establish a common interest among the firms. Partial acquisitions may also serve as a first step for firms before engaging in more complete consolidations of control.

Joint ventures and strategic alliances enable firms to work together without either firm relinquishing control of its own operations and activities. Strategic alliances are partnerships between independent firms that involve the creation of tangible or intangible assets. The level of collaboration is often fairly low and focused on a well-defined set of activities, services or products. Strategic alliances may be most appropriate for the exchange of technical information and sophisticated knowledge or when there are legal, regulatory or cultural constraints making a more thorough collaboration difficult or illegal. Moreover, relative to mergers and acquisitions, strategic alliances generally involve lower formation and dissolution costs. Like partial acquisitions, strategic alliances may enhance cooperation among firms or serve as a first step towards a merger or acquisition.

A joint venture, which may be viewed as a type of strategic alliance, occurs when two or more independent firms form and jointly control a different entity, which is created to pursue a specific objective. This new entity typically draws on the strengths of each partner. Joint ventures facilitate consolidation, because they enable firms to develop strong ties. Joint ventures may also serve as a precursor to more comprehensive consolidation such as mergers.

### **3. Patterns in transaction activity**

In this section, patterns in mergers and acquisitions and patterns in joint ventures and strategic alliances are examined over the 1990s for deals involving financial firms. The data were obtained from Securities Data Company (SDC), which attempts to collect information on all transactions involving large and medium-sized firms. With the mergers and acquisitions (M&A) data, the analysis only includes those deals in which both of the participating firms were from the financial sector. With joint ventures and strategic alliance data, only deals where the shared business arrangement is classified as financial in nature are included.

Constructing transactions data that are accurate, comprehensive and comparable across countries is inherently difficult, and although SDC appears to have done a good job, there are likely to be differences in the availability of data across countries that could influence reported figures. In addition, it is highly likely that at least some deals include firms with improperly classified industries or countries.<sup>7</sup>

In the M&A data, financial firms are classified as operating in one of three industries: banking, insurance or securities/other. Investment banks are classified as securities firms. The announcement date is used to determine when the transaction took place. Only deals that were completed or still pending as of May 2000 were included; all cancelled deals were excluded.

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<sup>7</sup> As a result of improper classifications and other issues associated with obtaining accurate and consistent data, some of the figures reported in the tables in Annex A exhibit minor inconsistencies.

The number of M&A deals, total deal value and average deal value are reported in the tables in Data Annex A for a variety of groupings based on the country and industry of the participants in each year of the 1990s, as well as for the entire decade.<sup>8</sup>

Joint venture and strategic alliance data are not as comprehensive as M&A data. The annual and decade total number of deals in each country is reported, as is the breakdown between cross-border and within-border deals. Cross-border agreements are defined as those deals in which the firms sponsoring the joint venture or strategic alliance were not all located in the same country. Therefore, within-border transactions involve sponsoring firms that were all from a single country. The distinction between cross- and within-border agreements is based solely on the location of the firms sponsoring the venture. Therefore, the tables present no information regarding the country of the venture itself relative to the country of the sponsoring firms.

A more detailed description of the source of the transactions data, as well as the definitions, screens and classifications that are used, is provided in Data Annex A. The annex also presents transactions tables. Table A.1 presents global figures on M&A activity between 1990 and 1999. Tables A.2 to A.4 provide aggregate figures for the North American, Pacific Rim, and European countries included in the study, and Tables A.5 to A.17 provide separate data for each of those countries. The number of joint ventures and strategic alliances is reported in Table A.18. It is important to note that the data collected by SDC are not comprehensive or free of errors. However, most large deals are included and the data should provide an excellent foundation for analysing patterns in transactions.

## **Mergers and acquisitions**

Mergers and acquisitions are methods of consolidation where a change in control takes place through a transfer of ownership. These two methods, which are not distinguished from each other in this chapter, strongly bind the participating firms and can have a substantial effect on economic structure. For purposes of the tables and discussion, M&A activity is defined as occurring when ownership by one financial firm of another goes from less than 50% to more than 50%. Such a change generally results in an unambiguous transfer of corporate control.

### ***Broad global patterns***

SDC reports that in the 1990s there were more than 7,300 deals in which a financial firm in one of the 13 countries included in this study was acquired by another financial firm (Table A.1). The value of these deals was roughly USD 1.6 trillion.<sup>9</sup> Over the same period, financial firms in these countries made roughly 7,600 acquisitions with a similar estimated value. The differences between the two sets of figures are attributable to cross-border deals involving a firm in a country not included in this study and a firm in a country that is included.<sup>10</sup>

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<sup>8</sup> Value is not always released by participating firms. Therefore, average value, which is total value divided by the number of deals with a reported value, does not always equal total value divided by the total number of deals.

<sup>9</sup> Deal value is a somewhat ambiguous term as SDC obtains its estimates from announcements available from public sources. In the case of share exchanges, the deal value is based on the market price of shares. In the case of a merger of equals, the transaction value is calculated as the value of shares that are exchanged. Values are also not based on a consistent date relative to the merger process, as the recorded transaction value may vary during the period between announcement and consummation of a deal as information becomes available or deal terms are changed during post-announcement negotiations. The value is reported in nominal terms, so changes over time are influenced at least somewhat by inflation.

<sup>10</sup> In some deals, a firm in one of the 13 countries purchased a firm located outside the group of 13, and in other deals, a firm from elsewhere made an acquisition in one of the 13. The former would only be included when deals are classified by acquirer. Likewise, the latter would only be included when classification is based on the target. Deals involving two firms from the 13 reference countries are included regardless of whether deals are classified by target or acquirer.

The level of M&A activity involving financial firms increased during the 1990s, with strong growth both in the number and in the average value of M&A transactions. In the last three years of the decade, there were nearly 900 transactions annually involving the acquisition of a financial company in one of the 13 reference countries. These deals were associated with an estimated total value of almost USD 400 billion per year. These levels represent a nearly threefold increase in the number of deals observed in 1990 and roughly a tenfold increase in total value per year. Similar patterns exist among deals in which the acquirer was a financial firm in one of the 13 countries under examination. The increase in activity between 1990 and 1999 may be somewhat exaggerated, because the SDC database excluded deals with a reported value below USD 1 million before 1992.

The rapid growth in total M&A transaction value was accompanied by an increase in the estimated size of the average transaction, which was roughly similar to the growth of the market value of financial sector stocks over the same period. In the last three years of the decade, there was a dramatic rise in the number of and value associated with large M&A deals. This pattern is demonstrated in Table I.1, which reports the annual number and aggregate value of mergers and acquisitions that involved a financial firm in one of the 13 countries as the target and that had a reported value of at least USD 1 billion.

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Table I.1  
**Financial sector mergers and acquisitions with value greater than USD 1 billion**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number	8	10	6	11	14	23	21	49	58	46
Value (USD bn)	26.5	22.1	12.4	39.7	23.7	113.0	59.0	233.0	431.0	291.0

Source: Thomson Financial, SDC Platinum.

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Most of the M&A activity during the decade involved banking firms. About 60% of deals involved the acquisition of a banking organisation. Securities/other firms were targets in about a quarter of deals, and acquisitions of insurance firms only constituted about 15% of transactions. Interestingly, banking deals accounted for about 70% of the value of all deals, while securities/other acquisitions comprised only about 11%.<sup>11</sup>

#### *Global patterns by same/different countries and industries*

To further examine patterns for different types of M&A activity, deals are placed into one of four groups based on whether the transactions involved firms in the same or different countries and industries. The first group examined comprises domestic, same-industry deals. The data clearly indicate that most of the M&A consolidation activity in the financial services sector during the 1990s involved firms operating in the same industry and from the same country (Table A.1). Such transactions accounted for more than 70% of total activity measured in terms of both the number of deals and the value of deals. The prevalence of same-country, same-industry activity may reflect regulatory constraints in some countries prohibiting cross-border and cross-industry mergers.

Because domestic, same-industry deals are so prevalent, observed patterns of consolidation are generally not strongly influenced by whether deals are classified by the country and industry of

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<sup>11</sup> When deals are classified by the industry of the acquirer, the results are similar.

the acquirer or of the target. Therefore, most of the discussion in this chapter regarding patterns of M&A activity focuses on deals classified by target. However, distinctions between results based on target and acquirer classifications are noted when they are important.

The average value of domestic, same-industry transactions was much greater in the latter half of the decade than in the first half. The average deal value was under USD 150 million for the period up to 1994 and jumped to USD 500 million between 1995 and 1999. Transaction value was especially large at the end of the decade, averaging about USD 800 million over the last two years.

The banking industry represented by far the largest share of domestic, same-industry M&A activity. Approximately 68% of all deals and 78% of the value of such deals involved a bank being acquired. A landmark year for domestic banking mergers was 1995, when the average value of transactions quadrupled compared to the previous two years. The average value of bank M&A transactions generally increased throughout the second half of the decade.

The second type of domestic deal involves firms that operated in the same country and different industries. Although these deals were the second most common type of transaction, they only accounted for about 15% of all deals, whether measured by number or value. There was a fairly steady increase in the overall number of deals throughout the decade. In terms of the value of transactions, 1998 was a year of very large deals. The aggregate deal value during that year was nearly USD 110 billion, about half of the 10-year total, and the average value exceeded USD 1.3 billion. These deals often resulted in the creation or substantial growth of large, complex banking organisations.

As with the case of domestic, same-industry transactions, mergers with banks as targets represented the most common type of deal as measured by value. However, securities firms were more important than observed in the case of domestic, same-industry transactions. Average values for domestic, cross-industry deals with targets from each industry were comparable to the average levels for similar domestic, same-industry deals, with the exception of the insurance industry, where same-industry deals were larger on average.

Cross-border, same-industry deals are examined next. When deals are classified by the country and industry of the acquirer, there are about 250 more deals than when deals are classified by target. This discrepancy indicates that, in the aggregate, firms located in the 13 reference countries were net acquirers of firms in their own industry. In other words, firms in the 13 countries acquired more same-industry firms in countries not in the study than were purchased by firms in those non-study countries.

During the 1990s, the total value of acquisitions of firms located in reference countries by foreign firms operating in the same industry amounted to about USD 140 billion, a figure that corresponds to nearly 10% of the total transactions in the financial sector over the period. Such activity grew throughout the decade. Nevertheless, the impact of various impediments to cross-border consolidation, including economic, operational and regulatory barriers, is evidenced by the large differences in the level of domestic and cross-border activities in all three industries.

A particularly striking contrast between domestic and cross-border consolidation involving same-industry firms was the relative importance of different industries. In particular, insurance firms were frequently involved in buying foreign rivals, as the acquisition of insurance companies accounted for about 40% of all deals and nearly half of total transaction value. In contrast, banking deals, which were very prevalent in domestic consolidation, accounted for only about one third of the number and value of all cross-border, same-industry activity. Insurance transactions were prevalent throughout the period under review, but were particularly important after 1997.

Finally, the least common type of deal was cross-industry, cross-border consolidation. There were only about 250 such M&A transactions with a target from a country included in the study and roughly 330 such deals with an acquirer from one of the 13 countries. The average transaction in this category typically involved a lower value than deals with firms that shared a

country, industry or both. Similarly to all other categories of consolidation, cross-border and cross-industry deals became both more frequent and larger during the second half of the 1990s, especially in the last three years of the decade. International, cross-border deals helped facilitate the creation and growth of large and complex financial institutions.

As with the international, same-industry transactions, financial firms in the 13 countries were acquirers more frequently and for more value outside their domestic country than they were targets of foreign firms. There were also important differences in the industry composition of deals in which the firms from the reference countries were the targets and those where they were the acquirers. When a firm from one of the 13 countries was acquired, it was commonly a bank (57% of total value) or, to a lesser extent, a securities/other firm (25%). In contrast, overseas acquisitions by firms in one of the 13 countries often involved a purchase by a securities/other firm (48%) or insurance company (33%).

### *Patterns in individual regions and countries*

Even though some general patterns are evident on a global level, a number of differences in the patterns of M&A activity in various countries existed in the 1990s (Tables A.5 - A.17). The relative importance of M&A activity, as measured by total deal value over the decade divided by GDP over the period, differed substantially across countries. In Germany, Japan and Canada, this measure was less than 0.5%, whereas in Switzerland, Belgium, the United States and the United Kingdom, it exceeded 1% regardless of whether deals are classified by target or acquirer.

Countries also differed in the extent to which their firms engaged in international mergers. In the United States and Japan, almost all deals involved two firms from the home country. In contrast, when one of the firms was located in Belgium, half of all deals, accounting for about 40% of all value, involved an international transaction. Classifying by target or acquirer generally makes little difference in the relative importance of foreign and domestic deals, except in the case of the Netherlands. Dutch firms made some large overseas acquisitions that raised their cross-border figures when deals are classified by acquirer relative to when deals are classified by target.

Although there were differences across countries in the relative amount of activity within and across industries, those differences tended to be smaller than those observed within and across borders. In Japan, Spain and the United States, a large amount of M&A activity involved firms operating in the same industry.<sup>12</sup> Among the countries with firms that engaged in a lot of cross-industry activity was Belgium, which also had firms that engaged in a lot of cross-border deals.

The particular industries in which targets and acquirers operated varied by country. In the United States, targets and acquirers were frequently banks, a finding that is consistent with domestic banking deals being highly prevalent in the United States. In other countries, such as Australia, Canada, the Netherlands and the United Kingdom, banking deals were not nearly as common. In Japan, almost half of all deals involved firms in the securities/other industry, but these deals were very small and accounted for very little value. In contrast, the banking industry accounted for about half of all deals, yet virtually all of the value of deals.

Although countries generally exhibited similar patterns in M&A activity, there were substantial differences in patterns across time. Comparing the last three years of the decade (1997-99) to the first seven (1990-96) reveals that Canada and, to an even greater extent, Japan experienced very large increases in the average annual number of deals. In contrast, firms in France, Switzerland and the Netherlands were involved in fewer deals annually as both targets and acquirers.

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<sup>12</sup> The relatively modest amount of cross-industry activity in Japan and the United States in the 1990s may have been largely due to legal restrictions, whereas the relative lack of such activity in Spain may have been largely attributable to an already high level of cross-industry ownership.

Average deal value reveals a somewhat different and more consistent picture. Nearly all countries exhibited a higher average deal value at the end of the decade. In seven countries, the average value of a deal involving a home-country firm was at least three times as high during the last three years as during the first seven. Most notable is Switzerland, where the average value of purchased firms was almost 30 times more at the end of the decade. This difference is due largely to a small number of very large firms being acquired or engaging in mergers, primarily in 1997. When deals are classified by acquirer, acquisitions averaged twice as much in the last three years than in the first seven in 10 countries. Belgian firms made acquisitions that were nearly 15 times larger. The only countries that showed a decline in average deal value were Japan (by target and by acquirer) and the Netherlands (by target). Japan's decline was attributable to one huge deal in 1995 and the drop in the Netherlands was due to several large deals in the early part of the decade.

In the remainder of this section, patterns in M&A activity for the countries included in this study are examined more closely on a regional basis. Nations are placed into one of three geographic regions – North America, the Pacific Rim and Europe. In both North America and the Pacific Rim, there are only two countries, one of which is much larger than the other. Therefore, because a regional discussion would be very similar to a discussion of the larger country, the text focuses on each country separately. In Europe, the discussion is not organised on a country-by-country basis. Instead, area-wide patterns are described more thoroughly, and data from individual countries are introduced as supporting evidence. This approach seems more appropriate for Europe given that there are nine nations with strong economic ties, many of which are fairly comparable in size.

## *North America*

### *United States*

The global M&A picture was dominated by firms located in the United States. During the 1990s, deals involving US firms, classified either by the country of the target or by that of the acquirer, accounted for about 55% of all financial deals, measured by either number or total value of transactions (Table A.5). The intense consolidation activity in the United States was driven, at least in part, by changes in the regulatory framework, a variety of technological changes, and intense pressure for cost reductions and revenue enhancements in segments of the industry (see the Causes chapter for a more thorough discussion of the causes of consolidation).<sup>13</sup>

In particular, the data reflect the reaction of the US banking industry to the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, which greatly relaxed interstate banking and branching restrictions. Although many of the deals in the United States were domestic bank-to-bank transactions throughout the decade, the average value of such deals rose considerably in the latter part of the 1990s. Very large banking companies were increasingly expanding the geographic footprint of their operations by buying other very large banks. In 1998, several extremely large deals took place including BankAmerica-NationsBank, Wells Fargo-Norwest, and Banc One-First Chicago NBD.

Domestic, cross-industry merger activity represented 11% of the total financial sector consolidation activity by number of transactions and 14% by value. This picture, however, is misleading, as most of the domestic, cross-industry transaction volume, in terms of value, took place in the 1997-98 period. During these years, there were some large deals, especially those involving banks. Indeed, the value of banking acquisitions rose to more than USD 80 billion in

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<sup>13</sup> The relatively high level of measured activity for US firms may also reflect a potential bias in the coverage of the database as discussed in Annex A, whereby deals among US firms may be more highly represented than deals involving firms from other countries.

1998, accounting for almost two thirds of the total value of domestic, cross-industry deals in the entire decade. One of the most important and unique financial deals in this period was the 1998 merger between Citicorp, which was a bank holding company, and Travelers, which was an insurance and securities firm.<sup>14</sup> Cross-industry deals involving the acquisition of non-bank financial companies peaked around 1996-97. Earlier in the decade, restrictions on bank activities limited the level of domestic, cross-industry consolidation activity.

Acquisitions of US financial firms by foreign, same-industry firms increased in the late 1990s, as three quarters of the overall deal value associated with such acquisitions arose between 1997 and 1999. Likewise, US firms also increased the rate at which they purchased foreign firms that operated in their own industry. Of special note, firms headquartered in the United States made foreign acquisitions more frequently than their foreign counterparts made US acquisitions, but the size of the purchases made by US firms was smaller. During the decade, acquisitions of foreign firms by US firms had an estimated average value (roughly USD 300 million) which was less than half the value of acquisitions by foreign firms of US firms (roughly USD 800 million), suggesting that foreign firms may have been more focused on larger, more mature firms.

Cross-border, cross-industry deals were rare in the 1990s, but many of the deals of this type involved US firms in the securities/other industry, as either acquirer or target. US banks were also not uncommon targets of such deals.

### *Canada*

In Canada, consolidation activity was fairly modest in the first half of the 1990s (Table A.6). During this period, M&A activity was characterised by a small number of transactions between small and medium-sized financial firms. However, in later years, a greater number of transactions took place, including some large deals, especially in the banking and insurance industries. Of particular note was a merger between two Canadian banking concerns (TD Bank Financial Group and CT Financial Services) announced in 1999.

Most other domestic, same-industry activity was not very significant. More than half of such deals involved firms in the securities/other industry, but these transactions tended to be very small, with an average deal value under CAD 50 million. The most frequent targets of domestic, cross-industry merger activity were banks. However, with domestic, cross-industry deals, securities/other firms were both the most active acquirers and the largest targets, and insurance firms were engaged in the largest deals as acquirers. Many of the cross-border deals involving Canadian firms, as either acquirer or target, were relatively modest in size.<sup>15</sup>

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<sup>14</sup> The merger between Citicorp and Travelers to form Citigroup did not violate the provisions of the Glass-Steagall Act or the Bank Holding Company Act, which restricted the securities and insurance activities of bank holding companies, because the Board of Governors of the Federal Reserve had the authority to allow Citigroup to operate for as long as five years before requiring a divestiture of certain activities that might be considered impermissible. The issue of whether the deal violated existing laws and regulations became irrelevant with the passage of the Financial Services Modernization Act in 1999.

<sup>15</sup> There is one cross-border, same-industry transaction in the banking industry that may raise questions. The database shows this particular deal as the merger/takeover of Newcourt Credit Group Inc (classified by SDC as a Canadian “credit institution”) by CIT Group Inc (a US “credit institution”). “Credit institutions” are classified as banks in the analysis conducted in this chapter. While this classification might not be highly relevant in this case, classifying credit institutions as banks is appropriate in the context of other countries included in the study.

## ***Pacific Rim***

### *Japan*

Merger and acquisition activity in the Japanese financial sector was rather subdued for nearly the entire 1990s (Table A.7). Before 1999, there were few acquisitions of firms in either the banking or securities/other industries and even fewer acquisitions of Japanese insurance companies. The main deals that took place during this period of modest M&A activity were a series of transactions by Mitsubishi Bank, which purchased a majority interest in Nippon Trust in 1994 before merging with Bank of Tokyo in the following year. Also, Taiyo Kobe Bank and Mitsui Bank merged to become Sakura Bank, and Kyowa Bank and Saitama Bank merged to become Asahi Bank at the start of the decade. A number of deals in the middle and late 1990s took place as a result of financial distress among the acquired institutions.

The pattern of modest M&A activity that persisted throughout much of the decade changed dramatically in 1999. Nearly half of all Japanese deals that took place in the 1990s occurred in that final year. Moreover, except for the 1995 Nippon Trust-Mitsubishi Bank merger, the 1999 deals tended to be larger than those in previous years. Many of the 1999 deals were among the nation's top banks and were a product of government efforts to resolve those banks' bad loan situations and improve their longer-term profitability. Only a handful of significant cross-border acquisitions took place in the 1990s that involved Japanese financial companies as either acquirers or targets. However, several distressed Japanese banks and insurance companies were acquired during the decade, especially in the second half. The average value of cross-border deals involving Japanese acquirers was extremely low and was much smaller than the value of such deals with Japanese targets.

### *Australia*

The number of deals between domestic, same-industry Australian firms increased slightly over the 1990s, but not steadily and not by much (Table A.8). However, most large deals of that type were generally concluded during the second half of the decade. Several more very large same-industry deals might have taken place, but mergers between the country's four largest banking organisations were ruled out by the government because of their likely effect in reducing competition. An important factor driving mergers involving insurance firms was the gradual conversion of mutual firms to stock firms. This "demutualisation" increased the opportunities for consolidation.

Domestic, cross-industry M&A activity, which was concentrated in the second half of the 1990s, involved a relatively large number of acquisitions by banks of firms in the securities/other industry. An important factor driving some cross-industry acquisitions, especially those by banks, was a desire to acquire asset management capacity in order to participate in the growth of the private pension provision market. The overall number of domestic, cross-industry transactions was not only half of same-industry activity, but the average value of cross-industry deals was lower as well.

There were only a handful of significant cross-border acquisitions of Australian financial companies during the 1990s, many of which involved firms in the same industry. One significant cross-border deal involved the takeover of an Australian insurance company in 1995. Australian firms were engaged in slightly fewer, but larger, international cross-industry deals as acquirers than as targets.

### *Europe*

Roughly two thirds of European M&A activity in the 1990s, as measured by the total value of transactions involving the acquisition of a European financial firm, occurred during the last three years of the decade (Table A.4). Overall, firms in the European countries included in this study engaged in fewer, but generally larger transactions than North American institutions. The total value of all European deals, however, was only about half that of North American deals.

Merger activity, as measured by the value of firms acquired, was primarily concentrated in the banking industry, which accounted for about 65% of the total. Insurance was the second most active industry at roughly 25%. In both the banking and insurance industries, average European acquisition values were substantially higher than averages in North America. In contrast, values were lower in European deals involving firms in the securities/other industry.

The number of domestic, same-industry transactions showed a less pronounced upward trend in Europe than in North America during the decade. However, important differences exist in the patterns of domestic, same-industry consolidation activity among individual European countries. In Belgium, Italy, Spain, the Netherlands and the United Kingdom, most, and in some cases almost all, of such activity, measured by value, occurred in the last two years of the decade.

Other differences in the patterns of domestic, same-sector deals also existed, as Belgium, Spain and Switzerland exhibited a high concentration of transaction activity in the banking industry, primarily in terms of value. In several European countries, at least one large transaction took place that led to the creation of a dominant domestic institution (eg Bayerische HypoVereinsbank in Germany, UBS in Switzerland).

Among European countries, the United Kingdom was home to the largest amount of domestic, same-sector transaction activity, accounting for about 25% of the number and 30% of the total value of such deals in Europe. This finding is consistent with the casual observation that the increased integration of European financial and capital markets prompted many UK (as well as non-UK) financial institutions to seek a foothold in London or expand their existing operations in that financial centre.

As with the other global regions, domestic, cross-industry consolidation in Europe was less common than domestic, same-industry activity. Compared to North America, however, domestic, cross-industry consolidation exhibited a different pattern over time in terms of the number of firms being acquired. In Europe, the number of acquisitions remained fairly steady in the latter half of the decade, although registering a one-year slump in 1998.

While the overall number of domestic, cross-industry deals was roughly the same in the two regions, the average European deal was valued at about USD 300 million, which was about one third lower than in North America. Both regions experienced a surge in the average value of transactions in 1997 and 1998. This surge resulted in the average value of European, cross-industry targets during this two-year period being about four times the average for the remainder of the decade. Interestingly, the dip in the number of domestic, cross-industry transactions in 1998 coincided with the peak in the total value of deals, with the greatest share of that value involving purchases of banks.

A distinguishing feature in Europe was the relative importance of domestic, cross-industry acquisitions of insurance firms. Transactions in the insurance industry represented the second largest group in terms of total value and exhibited a high average deal value. The total value of such transactions accounted for at least half the value of all domestic, cross-industry activity in Germany, France, Spain and Switzerland. In all of these countries, however, the importance of insurance deals was the result of a few large transactions, as acquisitions of banks outnumbered those that involved the purchase of insurance companies.

Domestic, cross-industry patterns in Belgium, Switzerland and the Netherlands shared an important similarity. In all three countries, there were relatively few, albeit very large, acquisitions, which enabled conglomerates pairing banking concerns with insurance companies (“bancassurance”) to emerge. In fact, in Belgium and the Netherlands, the aggregate value of domestic, cross-industry consolidation exceeded the value of domestic, same-industry transactions.

International mergers and acquisitions involving European firms accounted for a large share of all cross-border, same-industry activity. In fact, European firms were targets in 65% of such transactions. These deals correspond to transactions valued at roughly USD 65 billion. More

importantly, however, same-sector foreign acquisitions by European financial companies over the 1990s exceeded USD 120 billion. Overall, European firms were therefore large same-industry net acquirers, in that they were purchasers of foreign firms (in terms of number and value) more than they were targets.

Overall, insurance was the leading industry in cross-border, same-industry transactions in European countries. This pattern holds, although just barely in some cases, with both the number and average value of transactions, as well as when deals are classified either by the country of the target or by that of the acquirer. In six of the nine European reference countries, more than half of the value associated with the purchase of domestic firms by foreign financial institutions involved transactions with domestic insurance firms. Such deals were particularly important in Germany, Italy, the Netherlands and Switzerland.

A difference exists between the typical size of cross-border, same-industry transactions involving European banks when such firms were targets and when they were acquirers. The average deal value associated with the acquisition of a European bank by a foreign bank was about USD 200 million. This figure is less than half the average value associated with deals involving a European bank buying a foreign bank.

Finally, cross-border, cross-industry acquisitions of European financial firms represented more than 60% of the number and value of all international, cross-industry deals. European banks were particularly popular targets, as the total value of acquisitions of European banks by foreign non-banks was more than two times greater than the value of deals involving the other two financial industries combined. While most of the activity in terms of value took place after 1997, especially in Belgium, Germany, Italy and the United Kingdom, the acquisition of European banking interests by foreign non-banking firms showed an early peak in 1990-93, when a few large deals took place. Overall, European firms were net acquirers with respect to cross-border, cross-industry transactions.

### **Joint ventures and strategic alliances**

In this section, joint ventures and strategic alliances are defined as agreements where two or more entities combine resources to form a new, mutually advantageous business arrangement to achieve predetermined objectives. In addition to participating in the venture, the original firms continue to operate as they had before their alliance. Joint ventures and strategic alliances are a weaker method of binding two firms together than mergers and acquisitions.

The data presented in Table A.18 reveal several of the same patterns as those observed with the M&A data. First, activity volume increased over the decade, especially in the last few years. Of the roughly 3000 deals recorded by SDC, about half took place in either 1998 or 1999. In contrast, about one quarter of all agreements occurred in the five-year period between 1990 and 1994. Second, the United States accounted for much of the activity. Nearly half of all the joint ventures and strategic alliances involved the creation of a US entity.

Third, within-border ventures, defined as deals involving “parent” firms from a single country, were 50% more prevalent than cross-border ones. However, within-border deals were not nearly as universally common as with M&A activity. In fact, with ventures involving the creation of a European or Pacific Rim entity, cross-border transactions were, in aggregate, more common than within-border deals. In Europe, there were about 50% more cross-border joint ventures and strategic alliances than within-border agreements, and in the Pacific Rim, cross-border deals were about 25% more common. Among all deals, cross-border joint ventures and strategic alliances were more common than cross-border mergers and acquisitions. This difference is consistent with the belief that ventures and alliances are highly useful in cases where mergers and acquisitions may be difficult, such as when firms from different countries are involved.

## Summary of key patterns in transactions activity

Merger and acquisition activity generally increased during the 1990s, especially during the last three years of the decade when average deal value increased substantially. Over the entire period, several types of deals were prevalent. Transactions involving firms located in the same country and operating in the same industry were by far the most common type of deal. In addition, M&A activity frequently involved firms in the banking industry. Finally, firms in the thirteen countries included in this study were, in the aggregate, acquirers more often than they were targets and were involved in deals with greater total value as acquirers than as targets.

In addition to several important common trends, some key differences characterised the M&A activity of various countries during the decade. The value of such activity varied across nations and was relatively low in Germany, Japan and Canada (below 0.5% of GDP over the decade by target and acquirer) and relatively high in Belgium, Switzerland, the United States and the United Kingdom (greater than 1.0% of GDP). In the United States, a large share of activity, in terms of both number and value of deals, involved domestic, banking mergers. In other countries, most notably Belgium, deals tended to more heavily involve firms from different countries or different industries. Also, some countries, such as Canada, experienced a substantial increase in the number and average value of deals towards the end of the decade, whereas others, such as the Netherlands, did not experience an end-of-decade spike.

Joint venture and strategic alliance data reveal some of these same patterns. The number of agreements increased over the decade, especially in the last few years, and the United States accounted for a large portion of all such ventures. Although agreements involving firms from a single country were more prevalent among all ventures and alliances than cross-border agreements, the latter were actually more common outside the United States.

## 4. Patterns in the structure of the financial sector

In this section, key structural measures of the commercial banking and insurance industries are examined for each country with the primary focus being elements associated with consolidation. Some international comparisons are also made. In addition, features of banking and certain securities and over-the-counter derivatives activities are examined on a global basis. This section of the chapter illustrates some of the effects that the transaction activity discussed in the previous section has had on financial structure.

The primary data used in the chapter, which were collected from national authorities with the help of the OECD and other sources, are well suited to an analysis of particular industries in individual countries. However, extensive cross-country comparisons are difficult to make due to a lack of consistency. According to the OECD, “international comparisons in the field of income and expenditure accounts of banks are particularly difficult due to considerable differences in OECD countries as regards structural and regulatory features of national banking systems, accounting rules and practices, and reporting methods.”<sup>16</sup> Comparisons of insurance data are similarly difficult. A detailed description of the data and how they were collected is provided in Data Annex B. The annex also presents Tables B.1 to B.13 with banking and insurance data for each country. Table B.14 presents some of the key measures from Tables B.1 to B.13 in a way that makes it easy to view all countries simultaneously.

Most of the data in the section relate to the banking and, to a lesser extent, insurance industries. Only a limited amount of securities data is presented. The discrepancy in the volume of data covering the different industries is driven largely by availability. Obtaining sufficient country-

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<sup>16</sup> Organisation for Economic Co-operation and Development (1999a).

specific banking and insurance data was easier than collecting securities data. Nonetheless, available securities data are presented to illustrate key patterns.

Before discussing each country's financial sector, a brief historical background is provided. Around 1980, there were two basic models for the relationship between commercial banking and securities activities. One, which could be called the "Glass-Steagall" model, involved a legal separation of the two activities; Japan and the United States were good examples of this model. The second, which could be referred to as the "universal bank" model, permitted financial institutions to engage in both commercial banking and securities activities. A somewhat related issue is the degree to which insurance was separate from banking and securities activities.

Another key feature of a country's financial sector was the degree to which capital markets were active and developed. In 1980, capital markets were well developed in Canada, the United States and the United Kingdom. In contrast, capital markets were generally not well developed in the other countries in this study. Firms there relied primarily on banks for long-term funds. Although the characteristics of a country's financial sector in 1980 influenced the consolidation patterns observed in subsequent years, a country's starting point was not necessarily a predictor of subsequent consolidation activity.

## **Country-by-country analysis**

### ***North America***

#### ***United States***

The US financial services sector has traditionally consisted of three largely distinct types of firms – depository institutions (banking), securities firms and insurance firms. This segmentation is primarily attributable to various laws that have defined the scope of activities in which particular types of financial firms may engage. Throughout the late 1980s and 1990s, the severity of the separation was weakened, and the Financial Services Modernization Act, which was passed and signed into law in late 1999, removed most of the remaining barriers among banking, securities and insurance activities. This law did, however, seek largely to retain the long-standing barrier between financial services and non-financial commerce. The US securities industry is large and well developed, with many of the leading securities firms (investment banks) in the world being headquartered in the United States.

The number of firms in each financial segment in the United States is large in comparison with most other industrial countries, particularly in the case of depository institutions. The large number of depository institutions in the United States is due, in large part, to historical restrictions on interstate and intrastate banking and branching. Most restrictions on intrastate banking and branching and some restrictions on interstate banking and non-banking financial activities were eliminated by 1990. The Riegle-Neal Interstate Banking and Branching Efficiency Act eliminated remaining restrictions on interstate branching as of 1 June 1997, making nationwide banking possible and spawning numerous interstate mergers and acquisitions.

There are, and have been, three main types of depository institutions in the United States: (1) commercial banks, (2) thrift institutions (savings banks and savings and loan associations) and (3) credit unions.<sup>17</sup> Thrifts and credit unions tend to be small and provide basic banking services

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<sup>17</sup> Deposits up to USD 100,000 held at any of these types of institutions are protected by federal deposit insurance. Savings and loan associations used to have a separate deposit insurance system (FSLIC) from commercial banks and savings banks (FDIC), but FSLIC was integrated into the FDIC in 1989 after the savings and loans crisis of the 1980s.

to households.<sup>18</sup> Commercial banks are the largest and most important group of depository institutions. They typically serve both households and businesses and engage in the widest variety of financial activities. Most commercial banks are owned by bank holding companies, which may not only control multiple commercial banking institutions, but may operate thrifts and financial, non-depository subsidiaries as well.

Changes in the structure of the banking industry clearly reflect the extensive consolidation that took place in the United States during the 1990s (Table B.1). Between 1990 and 1999, the total number of commercial banks and thrifts decreased by about one third from roughly 15,000 to 10,000. This dramatic decrease was accompanied by substantial growth, in both absolute and relative terms, by the largest institutions. The top 100 commercial banks increased their size, in terms of total assets and assets relative to GDP, and the very largest banks controlled an increasing share of the industry. Relative to GDP, the overall banking industry in the United States decreased during the period.

The life segment of the US insurance industry experienced more modest changes during the 1990s. Although the number of institutions steadily declined, concentration only changed by a small amount, with the direction of the change varying by the number of firms incorporated into the measure. The non-life segment experienced a different pattern of change than the life segment. The number of firms increased slightly, but concentration rose as well. As a share of GDP, both the life and non-life industries grew during the decade, but the non-life industry barely grew, whereas the life industry grew at a more rapid rate.

### *Canada*

For several decades, the Canadian financial system has been based on five principal types of institutions: chartered banks, trust and loan companies, the cooperative credit movement, life insurance companies and securities dealers. These different types of firms traditionally operated separately. Banks entered the securities business following a legislative change in 1987 that allowed banks to invest in such firms.

In 1992, consolidation was further facilitated with the passage of legislation that permitted financial firms to provide most financial services unless expressly prohibited from doing so.<sup>19</sup> In 1992, in order to ensure that banking issues are periodically reviewed, the duration of the sunset clause incorporated in Canadian banking legislation was changed to five years from 10 years. As earlier, life insurance companies and all deposit-taking institutions were restricted in their holdings of equity in commercial enterprises. In 1999, legislation allowed foreign banks to establish commercially oriented branches in Canada. Legislation was introduced in 2000 to further ease ownership restrictions, allow more flexible holding company structures, facilitate joint ventures and strategic alliances, and ease entry requirements by allowing small, closely held financial institutions, including banks, to exist. However, the legislation was not passed before Parliament ended its activities prior to the November 2000 federal election.

The 2000 legislative initiative included guidelines (non-legislative) for the review of merger proposals of major banks. A formal and transparent merger review process was established for banks with equity in excess of CAD 5 billion. The guidelines were established after the Minister of Finance rejected two proposed mergers among leading Canadian banks on the basis that the deals would have resulted in an unacceptable level of concentration, a significant reduction in competition and reduced policy flexibility to address future prudential issues that might arise.

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<sup>18</sup> Throughout the 1980s and 1990s, many thrift institutions faced less restrictive limitations on branching, interstate banking and non-bank activities than commercial banking organisations.

<sup>19</sup> The new laws included the Bank Act, Trust and Loan Companies Act, Insurance Companies Act and Cooperative Credit Associations Act.

The number of commercial banks in Canada increased substantially in the 1980s before declining somewhat in the 1990s (Table B.2). The large rise in the earlier decade was driven by the initial entry of foreign banks, which was allowed starting in 1980. Despite increased entry by foreign banks, the leading Canadian domestic banks, of which there were five during the 1990s, tended to be very large and traditionally controlled most of the banking activity in Canada. The dominance of the largest banks increased substantially during the decade. Moreover, the overall banking industry grew during the 1990s, as assets-to-GDP nearly doubled.

The number of life insurance companies did not change much during the late 1990s. Moreover, although concentration for the five largest life firms increased during the latter part of the decade, concentration levels for the one, ten and fifteen largest firms remained virtually unchanged. The number of non-life insurance companies (largely property and casualty firms) also remained steady in the latter half of the 1990s. Several insurance firms recently converted from mutual to stock ownership.

## ***Pacific Rim***

### *Japan*

For many years, the Japanese financial sector has been compartmentalised. Specifically, banking, securities and insurance activities have traditionally been segmented by regulatory measures with financial institutions competing within narrowly defined industries.<sup>20</sup> Banks can be classified into the following groups: (1) city banks, which conduct wholesale banking activities and maintain large branch networks, (2) long-term credit banks, which engage in long-term lending and issue long-term debentures, (3) trust banks, (4) regional banks and (5) second tier regional banks. In addition, there are groups of smaller, more specialised deposit-taking institutions that include (6) shinkin banks,<sup>21</sup> (7) credit cooperatives and (8) agricultural and fishery cooperatives and others. Often, groups (1), (2) and (3) are considered “major banks” and groups (1)-(5) are called “commercial banks.” In addition, the government-operated postal savings system has had a significant market share.

Divisions began to change in the late 1990s in response to more intense global competition, the announcement of extensive legislation (Big Bang) in 1996, and other, more gradual deregulation of the financial sector. During the decade, Japan’s economy experienced protracted problems that emanated from a large and rising volume of bad debts associated with the property and stock market collapses of the late 1980s. In the face of these problems, several Japanese financial institutions (eg banks, long-term credit banks and securities firms) failed, were acquired by another entity, or were taken over by the government. Much of the financial sector consolidation in terms of the decline in the number of institutions in Japan was driven by balance sheet deterioration in the midst of a broader economic decline.

Little consolidation took place in the Japanese banking industry. The number of firms did not change much between 1980 and 1999, although the number of smaller institutions not classified as banks declined sharply during that period (Table B.3).<sup>22</sup> There was a modest reduction in the

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<sup>20</sup> For more details of the Japanese financial market, see Ito (1992).

<sup>21</sup> Shinkin banks are smaller deposit-taking institutions that specialise in taking deposits and lending in the community.

<sup>22</sup> The number of banks increased from 150 in 1994 to 173 in 1995, because of a classification change whereby trust bank subsidiaries were classified as banks. The number of credit cooperatives declined from 475 in 1980 to 407 in 1990 and 322 in 1998.

number of banks at the end of the 1990s as a result of some bank failures.<sup>23</sup> Other indicators show that Japanese banks retrenched during the 1990s. Relative to GDP, total bank assets fell modestly and large bank assets declined substantially through much of the decade. Concentration measures also tended to decline modestly. The slow growth of the 1990s provides a stark contrast to the rapid growth of the 1980s, especially among large banks. In the late 1980s and early 1990s, large Japanese banks occupied high places in the world rankings in terms of asset size.<sup>24</sup> However, distress in the banking industry and a lack of consolidation resulted in only one bank remaining among the top 10 in 1998.

There is also little sign of consolidation in the Japanese insurance industry. The number of life insurance companies more than doubled, primarily due to deregulation and the entry of 13 firms in 1996. Moreover, concentration ratios remained fairly steady between 1980 and 1997, before dropping suddenly in 1998. Both the number of non-life insurance companies and industry concentration remained stable. The two segments of the insurance industry showed little growth in the level of premiums written throughout the 1990s.

### *Australia*

The Australian financial system in 1980 was strongly segmented along institutional lines. While there were no formal restrictions separating banking, insurance and securities activities, competition was played out within, not across, these lines. The bulk of financial intermediation was conducted through the banking system, which included five private banks, nine government-owned banks (which included two trust banks), and two foreign banks which, for historical reasons, were permitted to operate as branches. In addition, other, smaller deposit-taking institutions (building societies and credit unions) operated as well. With the aforementioned two exceptions, the banking system was closed to foreign entry. Together, banks, merchant banks and finance companies met the bulk of corporate borrowing demand in Australia, and only limited use was made of direct borrowing through the issue of corporate securities. Life insurance and pension funds comprised the remaining significant segment of the financial sector. Although the majority of life insurance companies were foreign-owned, the industry was dominated by one large domestic firm (AMP Society).

The opening of the banking system to foreign competition, which initially occurred in 1984 for a limited number of firms, but was expanded to all foreign firms in 1992, had a large effect on the banking industry. Deregulation, which allowed banks to compete against finance companies in the wholesale market and building societies and credit unions in the retail market, also influenced the industry. Some domestic banks consolidated their merchant banking and finance company affiliates into one entity.

Regarding consolidation, government policy ruled out mergers among any of the four major banks and, until 1997, mergers between the four major banks and the top two or three life insurance institutions. Currently, the only significant restriction in place concerns not permitting mergers among the four major banks, the so-called “four pillars” policy.

Financial deregulation and the opening of the banking industry to foreign competition has resulted in an increase in the number of banks in Australia over the past 15 years (Table B.4). In this deregulated environment, nine large building societies converted to banks. During the 1990s all of the government-owned banks were privatised or sold. Notwithstanding the increase in bank numbers, the Australian banking industry has been consistently dominated by four major banks – the Commonwealth Bank, ANZ, Westpac and National Australia Bank.

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<sup>23</sup> Seven housing loan companies (Jusen) failed in 1995. Several banks failed in the 1990s including Hyogo Bank, an exchange-listed regional bank, in 1995, Hokkaido Takushoku Bank, a city bank, in 1997, and Long-Term Credit Bank and Nippon Credit Bank in 1998.

<sup>24</sup> Data on the largest banks in the world were obtained from various issues of *The Banker* (see Table B.15).

Concentration was initially high, but did not change much in the 1990s, although there was a drop in the middle of the decade, before a modest increase towards the latter part of the 1990s.

Consolidation had little impact on the structure of the insurance industry. Not only did the number of life and non-life insurance companies remain fairly steady throughout the 1990s, but concentration also declined. These patterns were observed during a period when both the life and non-life segments of the insurance industry grew substantially.

## *Europe*

### *Common characteristics of European banking*

There were several important and widely shared characteristics of the banking industry in Europe. First, European banks tended to operate in accordance with the universal banking principle. This principle encompasses two elements: banks may engage in a full range of securities activities in a direct way rather than through separately incorporated subsidiaries and banks may closely link themselves to non-bank firms, by either equity holdings or board participations. Firms in Germany, Sweden and Switzerland were the best examples of universal banks.

The second feature of the European banking industry was a fairly high level of government involvement. There was widespread public ownership of banks, especially in Germany, Italy, Spain and France, although, beginning in the late 1980s, important privatisation took place in certain countries. Moreover, regulations were frequently stringent regarding interest rates on deposit and loans. Also, credit and capital market controls existed in all European countries, except Germany, the Netherlands and, to a lesser extent, Switzerland.

Third, capital markets played a limited role around 1980. Equity markets were generally small and had low market capitalisations in all countries except the Netherlands and Switzerland. Markets for government bonds were more developed, especially in countries with large public debts like Belgium and Italy.

The final feature of European banking was the generally limited role of institutional investors, which were particularly unimportant in Italy and Spain, but somewhat more important in Sweden, the Netherlands and Switzerland. Restrictions on bank ownership of insurance companies were generally binding, especially in Belgium, France and the Netherlands. Regulations were even more constraining on insurance companies holding equity stakes in banks.<sup>25</sup>

### *Belgium*

Belgian commercial banks, which have been the dominant entities in the financial sector, can be classified as universal banks to the extent that they conduct investment banking activities, especially in connection with public debt operations. Also, in the early 1990s, banks were allowed to perform activities in the equity markets through the acquisition or creation of specialised securities firms. Some large banks were permitted to become market-makers in the secondary market for public bonds. This activity was opened to foreign banks in 1998. Banks have not traditionally had significant holdings in non-financial corporations or insurance companies, as this role has been the limited preserve of several large holding companies.

Government ownership of the so-called public credit institutions is another feature of the banking system in Belgium. These institutions were established to grant long-term credit on favourable terms to specific sectors (eg cities, agriculture and small commercial businesses), but evolved during the 1990s to become much more similar to commercial banks. In fact, some

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<sup>25</sup> Office for Official Publications of the European Communities (1997).

public credit institutions were privatised during the decade. The Belgian banking industry also consists of small private savings banks and highly specialised institutions including mortgage companies and finance companies.

The high level of public debt in Belgium partially explains the weakness in the issuance of bonds by private, non-financial corporations. However, equity markets became more fully developed after a 1982 fiscal package that was aimed at stimulating share issues and equity holdings by individuals. In general, limited capital markets increased corporate dependence on banks.

The dynamism of the insurance industry may have been impaired by very strict rules restricting the ownership of such companies and the start-up of insurance subsidiaries by banks. Nonetheless, composite insurance firms, which engage in a wide range of insurance activities, played a much larger role in the financial sector by the end of the 1990s.

Consolidation began influencing the banking industry around the middle of the 1990s. The total number of banks actually increased in the early part of the decade, before reversing course and decreasing (Table B.5). The drop was especially pronounced after 1996 as a result of mergers and acquisitions. Mergers were initially confined to small and medium-sized banks, but a few deals involved large banks towards the end of the decade. As a result of these large mergers, the number of large banks declined and concentration increased in the last few years of the decade.

Consolidation also appears to have influenced the insurance industry. Over the decade, the number of non-life insurance companies fell by almost half, and the number of life companies fell by roughly a quarter. Most of the drop in the number of non-life companies occurred in 1994. The drop in this year may reflect the exclusion from the data after 1993 of branches of foreign companies whose head offices were situated in the European Economic Area. Premium levels indicate that growth was fairly modest in the non-life segment, but robust in the life segment.

### *France*

Until the early 1980s, banking activity in France was governed by a set of regulations adopted in the 1940s that favoured a high degree of specialisation within the financial sector. The main division was between commercial banks and investment banks, although this basic classification was supplemented by the presence of many specialised banks. Specialisations were typically based on such features as the average maturity of credits, industry served (eg agriculture), type of credit provided (eg export financing), and degree of control exercised by the monetary authorities. State-owned mutual and cooperative banks were particularly prominent among the specialised banks. In addition, two special institutions governed by special laws played an important role: the postal financial service and the “Caisse des dépôts et consignations.”

The role of the state in the French banking industry increased in the beginning of the 1980s, when prominent commercial banks were nationalised. However, this development was soon reversed during two periods of privatisation. The first period took place in the late 1980s and involved banks like Société Générale, Crédit Commercial de France and Banque Indosuez. The second period occurred in the 1990s. For instance, Banque Nationale de Paris was privatised in 1993 and Crédit Lyonnais was sold in 1999.

Banks could operate insurance companies, but faced very restrictive rules regarding starting up and acquiring equity stakes in such firms. In the life insurance industry, the largest firms were limited companies. Mutual companies played a much larger role in non-life insurance.

Although the financial sector was highly segmented, a progressive tendency towards universal banking was felt even before 1980. This evolution was decisively reinforced with the adoption of the Banking Act of 1984, which abolished the legal distinctions between commercial banks,

investment banks and other specialised institutions, thereby establishing a full-blown universal banking system.<sup>26</sup> This evolution towards universal banking was further reinforced by a greater involvement of banks in life insurance activities (“bancassurance”) after the liberalisation brought about by the single European market.

Significant consolidation took place among French banks in the 1990s, as revealed by the large reduction in the total number of institutions (Table B.6). This decline was primarily driven by a decrease in the number of small banks, and because much of the consolidation activity involved small banks, concentration was largely unaffected. The French banking industry did not grow much over the decade, as assets-to-GDP remained fairly steady, although it was relatively high throughout.

The life insurance industry also experienced change. The number of firms declined modestly, the industry became more concentrated, and the size of the industry increased dramatically, almost tripling as a share of GDP. The structure of the non-life segment experienced greater change, as the number of firms fell by a third and concentration rose fairly sharply. Much of the increase in concentration followed the privatisation of public companies. The overall size of the industry grew only fairly modestly.

### *Germany*

In Germany, banks have traditionally been free to operate as universal banks. However, the concept of universal banks has to be qualified in several respects: Banks have been able to carry out the full range of commercial banking and investment banking activities, but some restrictions required the separation of banking and insurance. Nonetheless, banks have collaborated with insurance companies primarily through strategic alliances and, to a lesser extent, cross-participations. Aside from the currently four big privately owned universal banks (Deutsche Bank, Bayerische Hypo- und Vereinsbank, Dresdner Bank and Commerzbank), specialised financial institutions, mortgage banks and small local cooperative banks have played an important role and led to a German banking market that has been multi-layered, with a large number of institutions. Publicly-owned banks (Landesbanken and Sparkassen (savings institutions)) were fairly important in Germany and their presence in the industry remained virtually unchanged during the 1990s, although there was a lot of consolidation among the savings banks. The postal giro agencies were merged into the Postbank, which is being privatised.

An important tax change was adopted in 2000 that will exempt German banks (and all other corporations) from corporate tax on capital gains associated with the sale of participating interests from 2002 onwards. This legislation is expected to encourage banks to dispose of some of their industrial interests.

Germany had a tradition of cross-shareholdings between banks and insurance companies. As a result, banks chose to collaborate with insurance companies rather than develop in-house bancassurance. These relationships were further encouraged by conservative marketing practices. Tied agents dominated the life and non-life insurance industries, although brokers played a significant role as well as in the life insurance sector.

Equity and corporate bond markets were both quite small and largely dependent on the banking industry. This dependence was increased by the issuance of medium-term notes by the banking industry. Deregulation proceeded at a slow pace in Germany due to the liberal starting point. Stock market regulations were relaxed in the 1980s, enabling banks to gain better access to securities activities.

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<sup>26</sup> The 1984 Banking Act redefined the notion of credit institutions.

During the 1990s, the German banking industry experienced both substantial consolidation and growth. The number of banks declined by about a third from 4,700 to 3,200, primarily as a result of consolidation among savings and cooperative banks (Table B.7). As a result, consolidation appears to have had little effect on concentration among the largest banks. At the same time that the industry consolidated, total assets increased relative to GDP. In addition, the ratio of deposits to assets decreased during the decade, suggesting that much of the increase in banking assets may have been due to an increase in non-depository activities conducted by German universal banks.

The structure of the life insurance industry was not influenced much by consolidation in the 1990s: the number of firms declined modestly and concentration increased by a very small amount. Concentration among non-life firms showed similarly small increases, although the number of firms fell from about 400 to 330. Both industries grew relative to GDP.

### *Italy*

Italian banks have traditionally faced regulations related to the funding needs of the government. Segmentation existed within the banking industry, with savings banks playing a particularly important role. Moreover, regulation explicitly differentiated between short- and long-term lending banks. In this framework, the so-called special credit institutions provided medium- and long-term financing to the corporate sector. Banks also traditionally faced geographic restrictions that limited their ability to establish branches. Most banking restrictions were removed during the 1980s, so banks faced increasingly less restrictive regulations on their ability to lend, branch and hold participations in non-financial companies.

State involvement in the banking industry was very important at the beginning of the 1980s. However, this involvement declined significantly from the mid-1990s, with the privatisation of several institutions.<sup>27</sup> Nonetheless, despite the privatisations, the state retained an indirect influence on many banks via its role in the so-called “fondazioni” (joint stock companies holding stakes in several banks).

The role of insurance companies was limited at the beginning of the 1980s despite a more liberal regulatory framework. The main channel of distribution constituted tied agents, especially in the non-life segment of the industry. Nearly all large insurance firms offer a wide range of life and non-life products.

Consolidation had a pronounced effect on the Italian banking industry in the 1990s. The number of banks steadily declined, falling by more than a third (Table B.8). At the same time, concentration increased substantially. For example, the largest 10 banks controlled almost two fifths of deposits in 1992 but that figure increased to three fifths by 1999. After growing fairly rapidly in the first few years of the decade, the banking industry actually shrank relative to GDP, possibly due to the effect of economic liberalisation and privatisation.

The limited data available for the Italian insurance industry do not suggest that there was sizeable consolidation. Between 1991 and 1997, the number of life insurance companies increased, while the number of non-life insurance firms declined by about the same amount. Also during this time, total life insurance premiums grew dramatically, whereas non-life insurance premiums grew at a more modest rate.

### *Netherlands*

The Dutch financial landscape underwent a major change at the beginning of the 1990s. Large-scale mergers and closer cooperation among savings banks resulted in a more concentrated

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<sup>27</sup> The most prominent privatised banks were Banca Commerciale Italiana, Credito Italiano and Istituto Mobiliare Italiano. The privatisation wave followed the adoption of the 1993 Banking Law (“Testo Unico” or unified text), which allowed banks to pursue market objectives as opposed to social functions.

banking industry. The process of liberalisation and deregulation, which started as early as the 1970s, made large advances as universal banks that provided an array of services in commercial banking, investment banking and insurance were permitted to emerge. Both the equity and bond markets were highly developed relative to other continental European countries.

In general, Dutch authorities did not impose substantial regulation. The sole significant rule was a strict institutional separation between the money market and the capital market, with each market having its own participants, structure and customs. Partly in response to the mature conditions at home, the largest institutions shifted their focus abroad and became substantial players in international markets. In contrast, penetration into the Netherlands by foreign institutions has remained limited. During the decade under observation, no major financial upheavals occurred. Moreover, the government sold its remaining holdings in commercially relevant institutions.

The insurance industry exhibited a historically close relationship to the banking industry, with bancassurance taking off quite early in the Netherlands as compared to other countries. However, brokers were by far the most prominent distribution channels for insurance companies. Another important feature of insurance was the prevalence of mutual companies in the non-life segment.

Consolidation had a large, but unique, effect on the banking industry. The total number of banks did not change much in the 1990s, in large part due to high levels of new entry (Table B.9). Concentration did, however, rise by a few percentage points. In addition, the largest banks grew substantially. Between 1990 and 1998, the aggregate assets of the three largest banks as a percentage of GDP more than doubled. Increased large bank presence may be due, to a large extent, to the merger of ABN and AMRO in 1991 and several significant foreign acquisitions by ING, a leading Dutch bank. The overall banking industry also grew quickly during the decade, but not as fast as the largest banks.

The number of life insurance companies increased over the 1991-97 period, primarily in 1997. In contrast, the number of non-life firms decreased dramatically. However, much of the drop (over 350 firms) took place between 1994 and 1995 and probably reflects changes in the data whereby reinsurance companies, exempted small local mutuals and branches of foreign insurers with a head office within the EU/EEA were no longer included after 1994.

### *Spain*

The Spanish financial sector is characterised by universal banking, whereby banking groups include firms that engage in insurance, asset management and securities activities. Banks can also hold equity stakes in non-financial companies. This relationship between banks and non-financial companies in Spain has had a considerable historical tradition, dating back to the establishment of the so-called industrial banks in 1962. However, the traditional activities of industrial banks were gradually taken over by larger banks in the 1970s and 1980s, and the historical segmentation between industrial-merchant banks and commercial banks withered away. Strict geographical limits were also imposed on banks, which had to be distinguished as national, regional or local banks according to their size and the number of provinces in which they operated. Ties between insurance companies and banks were historically close in Spain (the main insurance companies were bank affiliates), but banks faced strict regulatory constraints, especially as regards the distribution of insurance products. Tied agents constituted the main distribution channel of insurance products.

Starting in the mid-1980s, regulations such as interest rate controls, branching restrictions, solvency and investment requirements, accounting rules and entry constraints were relaxed or harmonised, which increased the level of competition in the financial sector. Trading on the Spanish stock market was very thin, exhibited a low degree of transparency, and was dominated by a small number of institutions. Bond markets were equally underdeveloped. However, a drastic reform of the equity market began in 1988 to address some of the problems.

Consolidation had a relatively minor effect on the Spanish banking industry. There was a modest decline in the total number of banks in the 1990s and a small increase in the number of commercial banks (Table B.10). Concentration figures generally remained steady between 1992 and 1997. However, more recent figures, which are not reported, are likely to be higher as a result of the mergers between Banco Santander and Banco Central Hispanoamericano (to create BSCH) and between Banco Bilbao Vizcaya and Argentaria (to create BBVA). Banks exhibited modest growth relative to GDP in the early part of the 1990s, but no growth thereafter.

The number of life insurance companies declined by about 20% from 1990 to 1997. This consolidation was accompanied by a nearly fourfold increase in premiums collected. The number of non-life companies fell by a comparable amount on a percentage basis. However, that segment grew much less rapidly over the period.

### *Sweden*

In Sweden, banking and insurance have traditionally remained separate. In the late 1970s, the banking industry included commercial banks, saving banks and cooperative banks, with commercial banks operating as universal banks. Each savings bank was self-owned, independent and required to confine its activities to a well-defined geographical area. In addition, specialised lenders such as mortgage institutions also operated in Sweden. At the time, a few large commercial banking groups and insurance groups dominated their industries.

In the early 1990s, banks and insurance companies were allowed to own shares in each other and be part of the same holding company. Cross-industry consolidation was further encouraged in the mid-1990s with legislation that opened the pension savings market to banks and other financial companies. In addition, savings banks and cooperative banks were permitted to change legal status and become limited liability companies in 1991-92. This change had a large effect on the structure of the banking industry. In the early 1990s, about 10 of the larger saving banks transformed into a new banking group with a parent holding company. Also, the 12 central cooperative banks were merged and subsequently transformed into a single commercial bank.

The banking industry in Sweden exhibited several patterns that were in contrast to most other countries examined in this study. First, as previously mentioned, the cooperative banks merged into one commercial bank in 1992, which accounts for the substantial decline in the number of banks in that year and is also likely to have contributed to the increased concentration in the early part of the decade (Table B.11). Also in 1992, the largest savings banks were transformed into one banking group. It should be noted that this transaction influenced the structure of the industry, but possibly not the reported figures, which are based on institution-level, not organisation-level, data.

Besides these two events, the Swedish banking industry went through a further consolidation involving all the major banking groups. The result was a further decrease in the number of large institutions from six to four. At the same time, between 1992 and 1998 the number of banks increased somewhat due to foreign entry and the establishment of several new, so-called niche banks that competed mainly in the household deposit market. During this time, the banking industry declined relative to GDP in the first part of the decade, before growing rapidly in the latter part.

The available data suggest that the insurance industry was largely unaffected by consolidation. Both the life and non-life segments saw their membership increase by roughly 25% during the 1990s. Between 1990 and 1998, both segments experienced healthy growth, as each roughly doubled in size relative to GDP.

### *Switzerland*

The Swiss banking and, to a lesser degree, insurance industries are characterised by a two-tier structure. The first tier is internationally oriented and, at year-end 1999, consisted of two large banks, two large insurance companies and some smaller private banks and insurance groups that focus either on private banking or life insurance, including asset management. The large banks

are universal banks with substantial investment banking activities that place them among the global leaders in underwriting and brokerage operations.

Large banks and insurance companies were active in the consolidation process of the 1990s on a domestic and cross-border level, and large financial conglomerates emerged as a result. Besides the consolidation of insurance firms and banks, some institutions expanded into asset management abroad.

The second tier consists of a large, heterogeneous group of small, domestically focused banks and insurance companies. This group includes cantonal banks (state-owned), regional banks, Raiffeisen banks (credit cooperatives) and, in another category with a clear focus on a foreign client base, foreign banks. In the early 1990s, Switzerland experienced asset deflation in the real estate market followed by a prolonged period of stagnation, which led to a significant restructuring and consolidation in the banking industry. Many regional banks were acquired by larger domestic competitors, and global financial conglomerates emerged.

The importance of the banking industry in Switzerland is evidenced by the very high level of assets, relative to GDP, held by all banks throughout the decade (Table B.12). Moreover, asset levels grew throughout the period and, by 1997, assets were nearly five times larger than annual GDP. Four large banks accounted for most of this growth and, by 1997, they controlled assets three times larger than GDP. Increased concentration accompanied large bank growth. Concentration figures are only reported up to 1997 and therefore do not fully reflect the increase in concentration over the decade, because they omit the effects of the 1998 merger of two very large Swiss banks – Union Bank of Switzerland and Swiss Banking Corporation. During the 1990s, the number of banks in the industry, which started at just over 450, fell by about 100. However, this decrease was not attributable to fewer commercial banks, which maintained fairly stable numbers.

Consolidation had little impact on the insurance industry. The number of both life and non-life firms increased, albeit modestly, during the 1990s. The level of life insurance premiums more than doubled, suggesting that the segment enjoyed healthy growth, but the level of non-life premiums remained stable. The insurance sector was important in Switzerland, partly due to the significance of asset management activities and the development of private pension schemes.

### *United Kingdom*

The UK financial sector was dominated by a relatively small number of large banks in 1980, along with a larger number of building societies, insurance firms, credit unions and friendly societies.<sup>28</sup> Strict regulations restricted the ability of institutions to compete across traditional lines of business, but regulatory reforms during the 1980s and 1990s removed many of those barriers. This deregulation allowed for the development of more universal banking. Restrictions on building societies' activities were further liberalised in 1997.

The 1986 Big Bang reforms of the London Stock Exchange achieved extensive deregulation, including elimination of practices that had restricted the entry of new participants into London's markets. The wave of mergers and acquisitions that followed these changes resulted in many UK securities firms being acquired by domestic retail banks and foreign investors.

There was a dramatic expansion in the number of banks competing in the United Kingdom during the 1980s from about 350 in 1980 to roughly 500 in 1990 (Table B.13). This increase was primarily due to the growth of international banking and also partly due to building

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<sup>28</sup> Friendly societies have a long history of making mutual provisions for members and their relatives against loss of income through sickness or unemployment and for retirement. The provision of life and accident insurance and small-scale savings products is the staple of most societies. According to the UK Treasury, there were approximately 270 societies with total funds of GBP 12 billion and at least 5 million estimated members as of March 1999.

societies becoming banks after converting from mutual to stock ownership. Subsequent consolidation in the 1990s, however, reduced the number of banks by almost 20%. Surprisingly, concentration ratios among the largest one and five banks in the UK banking industry fell in the 1990s, while concentration among the top 10 and 15 rose only very modestly. In all cases, concentration fell during the late 1990s. Relative to GDP, industry assets grew at a healthy rate throughout the decade, with much of this growth arising from the expansion of international banks operating from London.

The number of life insurance companies declined steadily throughout most of the 1990s. However, there were no significant changes in concentration ratios until the late 1990s. While the concentration ratios of the largest firm showed little change, those of the largest five, 10, and 15 firms increased substantially in 1998. This increase may be due to several mergers involving large insurance companies. The number of non-life insurance companies climbed slightly. Increases in the concentration ratios within the non-life industry were more consistent than those found in the life industry. This may reflect the higher level of merger activity of the largest non-life firms relative to the largest life insurance firms.

### **International comparisons**

Although the data presented in Tables B.1 to B.13 are not well suited for international comparisons, certain large and important differences are clearly observable, especially in the banking industry. Table B.14 presents key banking and insurance data in a manner that enables figures for all countries to be examined simultaneously.

The banking industry in the United States was particularly unique, as a result of strict limitations on branching and interstate banking, as well as on bank activities. Throughout the decade, the United States had many more banks and lower concentration levels than other countries (with the possible exception of Germany). Although both numbers have moved towards most of the world, there was still a substantial difference at the end of the decade. Moreover, as measured as a share of GDP, the banking industry was relatively less important than elsewhere.

Other countries exhibited distinguishing characteristics as well. In about half of the countries included in this study, concentration levels were extremely high throughout the decade, as a small group of banks controlled a substantial share of deposits. These highly concentrated countries include North American (Canada), European (Belgium, France, Netherlands, Sweden and possibly Switzerland) and Pacific Rim (Australia) countries. Also, in several countries, both highly and not highly concentrated, concentration increased substantially over the decade. The largest banks in Belgium, Canada, Italy and the United States generally showed a pattern of controlling a rapidly increasing share of banking deposits. In contrast, the largest banks in Japan and the United Kingdom experienced no change or even a modest decline in their share of total bank deposits.

At the end of the decade, the banking industry was very important in four European countries: Belgium, Netherlands, Switzerland and the United Kingdom. In all four, banking assets were more than three times annual GDP during the late 1990s. In the United States, where the banking industry was relatively small, banking assets did not exceed 100% of GDP at any time in the 1990s. In Switzerland and the Netherlands, bank assets relative to GDP increased by well over 100 percentage points over the decade, contributing to the prominent position of the banking industry in those countries in the late 1990s.

International comparisons of insurance data are even more difficult to make than with bank data, in part because insurance data are reported for only about half of the countries in the study. Nonetheless, notable differences exist among the countries for which insurance data are

available.<sup>29</sup> At the end of the decade, concentration in the life insurance segment was high in Australia, Canada, France and Japan, and low in Germany and the United States. Also, the countries for which non-life data are available can be classified into two well-defined groups: Australia, Germany and the United States were less concentrated than France, Japan and the United Kingdom.

Concentration tended to decline in Japan and Australia, with the leading Australian firms tending to control a declining share of the non-life segment as well. Finally, as measured by assets-to-GDP, the insurance industry was relatively important in Sweden and Switzerland and relatively unimportant in the United Kingdom.

### Global financial leaders

Analysing the banking and insurance industries of each country is very helpful for an examination of the effects of consolidation on those industries in each country. However, the analysis does not shed any light on the impact of consolidation on a global basis. In this section, such an analysis is conducted on the banking and securities industries.

Table I.2 indicates that the consolidated assets of the largest banks in the world increased relative to the GDP of the 13 countries included in this study during the last two decades of the century. The largest banks include banks from all over the world, not just the 13 reference countries, but many of the largest banks, especially the very largest ones, are located in one of the 13 reference countries. Because the GDP numbers in the denominator only reflect the 13 countries examined in this study, the figures account for only about half of total world output. Therefore, the figures reported in the table overstate the relative importance of the largest banks on a global basis.

Relative to GDP, the consolidated assets of the largest banks steadily increased. Assets of the top 50 banks in the world exceeded 70% of the combined GDP in 1998, while the same ratio was just above 35% in 1980. The top 20 banks' ratio increased from almost 20% in 1980 to nearly 40% in 1998. These dramatic changes clearly illustrate the growth of the leading banks in the world relative to the economies of the countries included in this study.

Table I.2  
Assets of the world's largest banks to G13 GDP  
(in percentages)

	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998
Top 20	19.5	31.6	35.2	34.2	36.0	36.5	37.5	36.8	38.1	39.8
Top 30	25.5	40.3	44.4	44.1	46.3	47.0	48.5	49.0	51.1	52.7
Top 40	30.8	47.0	51.5	51.5	54.1	55.1	56.8	56.8	61.4	63.2
Top 50	35.4	52.8	57.6	57.6	60.5	61.9	64.0	66.0	69.0	71.2

G13 refers to the 13 countries included in this study. Sources: Asset data: *The Banker*, various issues. GDP: IMF, *International Financial Statistics*, CD-ROM, March 2000.

<sup>29</sup> Life insurance companies in Canada are allowed to issue some types of annuities with deposit-like characteristics. In Canada, life insurance companies continue to be generally restricted by legislation from directly accepting deposits.

At the same time that the largest banks were becoming increasingly important, the identity of the very largest banks was changing over time. In particular, as Table B.15 shows, the distribution of the home countries of the 10 largest banks in the world (by assets) was not stable over the years. The number of banks from Japan grew in the 1980s, but fell during the 1990s. Large mergers in the late 1990s enabled several banks from the United States to enter the ranks of the largest institutions.

The largest institutions have also played an important role in the securities industry. Table I.3 reports the annual share of total worldwide debt and equity underwriting associated with the largest underwriter, as well as the share of those activities accounted for by the top five and 10. The data indicate that although there has not been an increase in the share of overall activity conducted by the leading firms, underwriting has been dominated by a fairly small group of players. It should be noted that much of the underwriting measured in the table reflects activity in the United States. Nonetheless, firms that are large in the United States also tend to be global players with a sizeable presence in many countries.

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Table I.3  
**Concentration of worldwide debt and equity underwriting**  
(in percentages)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Top 1	12.1	12.9	13.0	12.9	12.6	13.6	13.0	13.7	14.1	12.5
Top 5	43.9	47.1	48.2	46.3	44.3	44.8	44.3	50.0	49.7	46.7
Top 10	63.2	68.2	71.0	67.9	65.3	63.5	64.1	70.9	71.2	68.2

Source: *Investment Dealers' Digest*, various issues.

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Table I.4 is similar to Table I.3 with the exception that only worldwide equity underwriting data are presented. The levels of concentration are roughly equivalent to those observed with both debt and equity underwriting. However, equity underwriting actually became somewhat less concentrated during the decade. Nonetheless, the 10 largest firms accounted for more than 60% of underwriting activity (measured in US dollars) in 1999.

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Table I.4  
**Concentration of worldwide equity underwriting**  
(in percentages)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Top 1	13.7	14.4	13.7	13.9	9.7	10.5	9.9	12.1	14.1	10.9
Top 5	50.7	48.8	50.7	42.3	33.3	35.8	38.7	37.3	43.9	43.0
Top 10	69.0	68.4	69.0	60.3	51.8	52.4	55.2	53.9	61.3	61.2

Source: Thomson Financial, SDC Platinum.

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Table I.5 illustrates that in 1999 leading securities firms had a large presence in a variety of other securities activities. Typically about half of the leading firms were headquartered in the

United States. The names, levels of activity and market shares of the largest firms in the activities listed below, as well as several other securities activities, are presented in Table B.16.

**Table I.5**  
**Global concentration of various securities activities, 1999**  
(in percentages)

Securities activity	Top 1	Top 5	Top 10
International equities <sup>1</sup>	16.2	56.2	75.8
International European equities <sup>1</sup>	19.2	58.4	81.2
International US equities <sup>1</sup>	23.9	83.8	96.6
International IPOs <sup>1</sup>	15.9	59.1	76.1
US Market IPOs <sup>2</sup>	20.7	67.7	87.3
Syndicated loan arrangers - euromarkets <sup>3</sup>	8.0	29.8	47.8
Syndicated loan arrangers - US markets <sup>3</sup>	19.3	59.9	74.0
International bonds <sup>1</sup>	8.9	37.7	63.3
Public euro and global bonds <sup>1</sup>	10.0	40.5	67.1

Sources: <sup>1</sup> Capital Data-Bondware. <sup>2</sup> Thomson Financial Securities Data. Data exclude closed-end funds and rank ineligible issues. <sup>3</sup> Capital Data-Loanware.

On a global basis, over-the-counter (OTC) derivatives markets are not as highly concentrated as securities activities. Table I.6 reports various concentration measures for several types of OTC derivatives activities at several points in the late 1990s. Although there are not enough data to identify a trend, the table indicates that concentration increased between December 1998 and December 1999. Not truly global, the data nonetheless reflect the total derivatives volume in several large countries (France, Germany, Italy, Japan, Switzerland, the United Kingdom and the United States).

**Table I.6**  
**Concentration of various OTC derivatives activities**  
(in percent)

Instrument type	Date	Top 3	Top 5	Top 10
Foreign exchange	Dec 1998	23.5	34.3	55.5
	June 1999	26.3	38.3	57.4
	Dec 1999	29.4	42.0	60.7
Interest rate	Dec 1998	23.9	32.6	50.6
	June 1999	26.1	35.2	54.4
	Dec 1999	27.6	36.7	56.2
Total	Dec 1998	22.3	31.5	48.5
	June 1999	25.6	34.3	52.7
	Dec 1999	27.2	36.0	54.7

Source: National authorities.

## Summary of key structural patterns in the financial sector

During the 1990s, several key patterns emerged in the financial sectors of the various countries included in this analysis that suggest that consolidation had a substantial impact. In particular, the banking industry was affected a great deal. First, the number of institutions decreased in nearly all countries, as mergers and acquisitions appear to have thinned the ranks. Between 1990 and 1999, about half of the countries in this study experienced a decline of greater than 20% in the total number of banks. During that period, only Belgium, Australia and Japan increased the number of banks, and Japan's increase was due to a definition change while Belgium's change was very small.

The second effect of consolidation on various banking industries was that large banks grew relatively more important, as indicated by growth in various measures of deposit concentration. Such measures increased in all countries except Japan and among the very largest banks in the United Kingdom. In Japan, decreasing concentration stemmed from a relatively modest level of consolidation activity and the financial distress experienced by the largest banks. Japanese concentration may increase in the future if planned mergers among its largest banks are completed. Finally, the banking industry grew relative to GDP in all countries except Japan, which experienced the aforementioned financial distress, and the United States, where banks faced increasing competition from other financial firms such as mutual fund companies and specialised lenders.

The sizeable increase in concentration in banking that is reported in the tables may actually understate the growing dominance of leading banks. Concentration measures are based on total deposits, and so the influence of off-balance sheet activities is not included. These activities, which increased in level throughout the 1990s, have been and continue to be dominated by large banks. Therefore, concentration measures that include them, along with traditional bank activities (ie lending and deposit-taking), would be likely to reflect a higher and faster growing level of concentration over the course of the decade. Table B.17 presents data on the notional size of global OTC derivatives markets between 1992 and 1999, and the quadrupling of total notional size over the period clearly illustrates the rapid growth that has taken place.

The data are less comprehensive and patterns related to consolidation less consistent in the insurance industry. In both the life and non-life segments, the number of firms showed no consistent patterns across countries: the number fell in some countries and increased in others. Interestingly, for a given country, the change in the life segment did not appear related to the change in the non-life segment. Although concentration data lean slightly towards greater concentration in both segments, the patterns are very weak and only reflect about half of the countries. As a result, there is little convincing evidence to suggest that the insurance industry became more concentrated in the 1990s. The industry does, however, appear to have grown. In all countries where data are available for 1990 and 1998, the insurance industry (both life and non-life) grew relative to GDP.

Although the aforementioned patterns are reflective of patterns observed in the banking and insurance industries of the 13 countries included in this study, important distinctions among countries existed. Individual countries exhibited clear differences in both the level and growth rate of concentration and industry size. However, one must be extremely cautious in making international comparisons, as the data are not well suited to such analysis.

Most of the analysis in this section involves independently looking at the financial sectors of individual countries. However, an examination of the largest banks and underwriters in the world reveals that the largest firms are important on a global basis. Relative to the GDP of the 13 countries included in this study, the assets held by the largest 20, 30, 40, and 50 banks in the world increased a great deal during the 1980s and 1990s. Notably, the composition of the home countries of the largest 10 banks in the world changed a great deal over time.

Regarding the securities industry, although there was little change in the concentration of leading worldwide underwriting activity, the largest firms accounted for a substantial share of activity. Concentration figures from the end of the decade also reveal that many specific

securities activities were largely controlled by a small group of leading institutions. OTC derivatives markets were less concentrated.

## **5. Conclusion**

The 1990s saw dramatic change in the financial services industries of the 13 countries examined in this study. Much of this change was driven by consolidation in its various forms. Mergers, acquisitions, joint ventures and strategic alliances are the most common methods, with each involving a different level of control and integration and each being preferable in certain circumstances.

Consolidation activity was brisk during the decade and generally increased throughout. Most mergers and acquisitions, in terms of both the number and value of deals, involved firms in the same industry and from the same country. Moreover, banks accounted for a large share of the M&A activity that took place during the 1990s. The level of joint venture and strategic acquisition activity also increased throughout the decade, especially in the last two years. Deals of this type more often involved firms from the same countries than from different ones, but this result is driven by the United States, which accounted for a large share of all ventures, particularly within-border ventures.

M&A activity contributed to a decreased number of banks and increased concentration in the banking industries of most of the countries included in this study. The insurance industries were not as clearly influenced by consolidation. During the decade under review, the size of the banking and insurance industries in most countries tended to increase relative to GDP. Finally, at the end of the decade, worldwide securities activities were largely controlled by a small group of leading institutions, whereas over-the-counter derivatives markets exhibited more modest levels of concentration.

Collecting data that are consistent across nations and over time is a very difficult and complex task. Nonetheless, the information that is presented in this chapter can be effectively used to illustrate important patterns that emerged. Certain clear and important distinctions among countries can be observed in measures such as the level, growth and nature of consolidation activity and the level and growth of concentration and industry size. However, data must be analysed with caution, especially with respect to international comparisons.

## **Annex I.1**

### **Securities exchanges and consolidation**

#### **United States<sup>30</sup>**

The New York Stock Exchange (NYSE) is the largest stock exchange in the United States. Other smaller stock exchanges include the American Stock Exchange (AMEX), Chicago Stock Exchange, Philadelphia Stock Exchange, Pacific Stock Exchange, Boston Stock Exchange and Cincinnati Stock Exchange. These exchanges are linked by the Intermarket Trading System, which enables market participants at one of the exchanges to direct an order to any of the other exchanges.

Equities are also traded via the National Association of Securities Dealers Automated Quotation System (NASDAQ). Although not a formal exchange, NASDAQ links dealers via a network of computers. Traditionally, nearly all large corporations listed their shares on the NYSE. However, this pattern changed somewhat in recent years, because many firms listed on the NASDAQ operate in the fast-growing high-technology sector and decided to remain listed on NASDAQ as they grew. In fact, some of the largest firms in the world now trade over NASDAQ.

There are three large exchanges that specialise in the trading of futures contracts. They are the Chicago Board of Trade, Chicago Mercantile Exchange (CME) and New York Mercantile Exchange (NYMEX). Securities options are primarily traded on the Chicago Board Options Exchange, as well as on some other securities exchanges. There are also a number of smaller futures exchanges.

Consolidation among the leading exchanges in the United States has been fairly modest in recent years. In 1994, New York's two largest futures exchanges, NYMEX and the Commodity Exchange, combined. In 1998, NASDAQ merged with AMEX to create the NASDAQ-AMEX Market Group.

There are two primary developments currently taking place among the securities exchanges. First, smaller exchanges have been experiencing difficulties attracting members and face pressure to consolidate. Second, exchanges have moved towards restructuring their corporate forms by converting from mutual to stock ownership. Exchanges believe that being stock-owned will enable them to more easily consolidate and acquire capital for investment in technology.

#### **Japan**

The integration of Japanese regional stock exchanges accelerated in the 1990s. Traditionally, there were nine stock exchanges, but at the end of the decade, there were six. However, one major and one minor exchange dominate. About 90% of transactions are carried out on the Tokyo Stock Exchange (TSE), and a majority of the other transactions are carried out on the Osaka Securities Exchange (OSE). The concentration of the stock exchanges is mainly a result of cheaper and simpler communication tools.

The OSE created a new section with NASDAQ in 2000. Although listings were limited in the first few months, this new section will enable Japanese venture capital companies to offer their stocks and it will permit NASDAQ companies to be traded in Japan in the near future. It is also planned that shares of Japanese venture companies will be traded over NASDAQ.

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<sup>30</sup> The discussion in this section is drawn heavily from Austin (1995).

Separate from the stock exchanges, there is JASDAQ, an over-the-counter trading system, managed by Japan Securities Dealers Association. The JASDAQ has operated since 1983, with a computerised system since 1991. At the end of 1999, the total capitalisation of TSE was JPY 456 trillion (roughly USD 4 trillion), while the total capitalisation of JASDAQ was JPY 27 trillion.

Although affiliation and cooperative agreements between Japanese and foreign exchanges have been made, an outright merger has not been pursued. Therefore, the venture between NASDAQ and OSE was an exception, rather than a trendsetter, at least until now.

Futures exchanges exhibit more competition than the equity exchanges. The Nikkei 225 futures have been traded on the OSE, Singapore's SIMEX and Chicago's CME. The SIMEX trading volumes of Nikkei 225 increased in the early 1990s after transactions costs in Osaka were increased. No consolidation is planned among the exchanges that trade futures.

## Europe

The integration of organised securities exchanges in Europe gained momentum in recent years due to growing competition between traditional European exchanges and competition both from foreign exchanges and from private, electronic exchanges like Instinet (the so-called proprietary networks). The advent of the euro has played an important catalytic role in this process by eliminating substantial currency risk and thereby encouraging investors to trade assets by sectors rather than by countries and to be more concerned about liquidity. In this more competitive environment, agreements and alliances may be critical for achieving full economies of scale and transforming technological progress into a competitive edge.<sup>31</sup>

As regards stock exchanges and derivatives markets, the first wave of consolidation, which took place in the second half of the 1990s, exhibited a clear regional or domestic flavour. For instance, in 1998 the OM Stockholm Stock Exchange<sup>32</sup> and the Copenhagen Stock Exchange signed an agreement to set up a common Nordic market, NOREX, which is based on cross-membership and provided for sharing the SAX-2000 trading system and the same trading rules. In 2000 a letter of intent was signed with an additional five exchanges (Norway, Iceland, Estonia, Latvia and Lithuania). The Deutsche Börse was formed in 1993 by the merger of eight regional stock exchanges in Germany. This new exchange promoted the merger between the German and the Swiss derivatives markets in 1996 to form Eurex, the leading European derivatives market. The Dutch and Belgian primary markets merged with their derivatives markets and clearing systems, giving way to AEX in 1997 and BEX in 1999, respectively.

The most recent mergers have a more pan-European flavour. The merger between Paris Bourse, the AEX and BEX to form Euronext was completed in September 2000. Euronext is incorporated as a Dutch limited company and offers trading in equities, bonds and derivatives. The structure of Euronext is designed to preserve various subsidiaries and maintain strong links with local investors through a decentralised structure. Trading in blue-chip equities is offered in Paris, trading in derivatives in Amsterdam, and trading in small or medium-sized companies in Brussels. Trading is based on the French NSC system, already sold worldwide to about 20 exchanges.

Despite persistent efforts over the last two years, a pan-European stock exchange has remained an elusive goal. In May 2000, the London Stock Exchange and Deutsche Börse announced their plan to merge operations in what was to be a significant step towards the pan-European goal. The two exchanges proposed the adoption of a common trading platform and the concentration

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<sup>31</sup> See Abraham and Pirard (1999).

<sup>32</sup> The OM Stockholm Stock Exchange was itself constituted in 1998 by the merger of the Swedish Stock Exchange with the derivatives exchange OM.

of different market segments in one or the other physical location. However, the plan collapsed in September 2000 under the weight of scepticism regarding dual currency listings, the absence of consolidation of the post-trade settlement systems, and the cost to smaller brokers of adopting a new platform. As a consequence, both exchanges are likely to pursue independent routes to consolidation.

Continental European government bond markets were more closely integrated after the advent of the euro. A common trading platform was created for the most liquid government bonds of seven major euro area issuers (Belgium, Germany, Spain, France, Italy, the Netherlands and Austria). This screen-based system is called Euro-MTS and is based on the Italian system MTS-PCT. This system was recently enhanced so as to enable its participants to trade repurchase agreements (repos) on different ranges of maturity. Other initiatives have been undertaken such as Reuters' development of a trading platform for repurchase agreements. No significant integration has occurred regarding the infrastructure of corporate bond markets.

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