World Financial Centers
New Horizons in Insurance & Banking
Swiss Re

Executive Summary

Operating from major global centers such as London, New York, and Tokyo, financial intermediaries (FIs) help clients manage risk, channel funds from savers and investors to businesses seeking capital, and facilitate the clearing and settlement of payments. Prominent examples of FIs include banks, insurers, securities firms, mutual funds, and pension funds. Since 1952, the assets of US FIs have grown at an average annual pace 2.4 percentage points above GDP growth. The US banking, insurance, and securities industries have expanded their share of nominal output since 1980, even though their aggregate share of the private workforce has declined.

FIs are changing in response to a wide range of social and economic forces. Financial deregulation makes it easier for FIs to cross industry and national borders. Technological progress reduces costs, stimulates innovation, and allows FIs to reengineer their value chains. The advent of online trading, for example, has radically altered the competitive landscape for stockbrokers. A growing focus on share-holder value pressures the management of FIs to deploy capital more efficiently by entering new markets, exiting others, making acquisitions, and returning capital to shareholders. In recent years, M&A activity among FIs has surged.

As FIs strive to offer clients new and innovative services, the following trends will continue to unfold:

- Corporations will increasingly raise funds through securities issuance, prompting commercial banks to enter new fee-based businesses;
- As global economic integration continues to deepen, FIs will grow increasingly circumspect about undertaking cross-border and cross-sector mergers and acquisitions to enter new markets;
- Though FIs will maintain their largely distinct value propositions, convergence will occur in asset management and risk management, especially in the wholesale arena;
- As FIs pursue a growing range of strategies, the (manufacture) of financial products will grow increasingly separate from their distribution;
- Ageing populations saving for retirement will continue to fuel the rapid growth of private pension plans, mutual funds, and insurance products with an asset accumulation component.

The Performance of Financial Intermediaries

The world largest FIs

Any performance assessment of the different classes of FIs is sensitive to the measure used. One plausible measure is revenue. When ranked by year 2000 revenues, 115 of the 500 largest companies in the world are FIs. Ninety percent of these firms, which collectively hold USD 33 trillion of assets, are either banks or insurers (Tables 1 and ***2).*** The largest banks (56 in total) hold nearly three times the assets of the largest insurers (48 in total) and generate roughly similar revenues. Among these large insurers, life & health companies collectively have more than twice the revenues and assets of property & casualty companies, yet less stockholders equity.

Securities firms figure far less prominently among the largest FIs, with only five among their ranks. Their revenues, assets, and equity each amount to less than 5% of the aggregate. These totals are modest in part because they exclude the substantial securities industry activity undertaken by FIs that are categorized as banks. Pension funds do not appear in these rankings because they are generally not separate entities, but integral parts of corporations and government agencies. Mutual funds are also absent. Their ability to execute a large volume of transactions using comparatively few resources means that they, like securities exchanges, generate relatively modest revenues and profits.

The world largest financial intermediaries, as measured by year 2000 revenues, are predominantly banks and insurers.

Industry	No. of Companies	Revenue US$ Trillion	Share of total Revenue (%)	Assets US$ Trillion	Share of total assets in (%)	Shareholders equity US$ trillion	Share of total shareholders equity (in %)
Banks	56	1.44	43.0	21.33	64.3	0.91	52.8
Insurers	48	1.39	41.6	7.63	23.0	0.56	32.8
Life & health	32	0.93	27.8	5.35	16.1	0.24	14.0
Property & Casualty	16	0.46	13.8	2.28	6.9	0.32	18.8
Diversified financials	6	0.35	10.5	2.7	8.2	0.17	10.0
Securities	5	0.16	4.8	1.51	4.6	0.07	4.4
Total	115	3.34	100.0	33.17	100.0	1.72	100.0

Source: Fortune (Global 500)

The largest FIs, as ranked by year 2000 revenues, in US$ billion

Banks	Life & health insurance	Property & Casualty insurance	Diversified financials	Securities firms
Deutsche Bank 67.1	AXA 92.8	Allianz 71.0	Citigroup 111.8	Morgan Stanley Dean Witter 45.4
J.P. Morgan Chase 60.1	ING Group 71.2	State Farm 47.9	General Electric Capital Services 66.2	Marrill Lynch 44.9
Credit Suisse 59.3	Nippon Life 68.1	American Int Group 46.0	Fannie Mae 44.1	Goldman Sachs Group 33.0
Bank of America 57.7	CGNU 61.5	Munich Re Group 40.7	Freddie Mac 30.0	Lehman Brothers 26.4
BNP Paribas 57.6	Assicurazioni Generali 53.3	Zurich Financial Services 37.4	American Express 23.7	Nomura Securities 11.8
Mizuho Holdings 52.1	Dai-ichi Mutual Life 46.4	Berkshire Hathaway 34.0	Household International 12.0	
HSBC Holdings 48.6	Prudential (UK) 43.1	Allstate 29.1		
UBS 47.3	TIAA- CREF 38.1	Royal & SunAlliance 25.6		
Fortis 43.8	Sumitomo Life 37.5	Loews 20.7		
ABN AMRO 43.4	Metlife 31.9	Swiss Re. 18.7		

Source: Fortune (Global 500)

The profitability of FIs

FIs generate substantial profits worldwide. Last year, the world largest banks and insurers earned profits of nearly USD 100 billion and USD 60 billion respectively -roughly equivalent to the GDPs of Ireland and Chile. Although they ranked as the first- and third-most profitable industries in absolute terms, banks and insurers earned a comparatively lacklustre return on equity (ROE) of 11%.Diversified financial companies and securities firms earned ROEs twice this amount.

As US profitability data illustrate, the high ROEs of securities firms are offset by a fundamental disadvantage: extreme volatility. Securities firms were unprofitable in eleven of the thirty years from 1970-99.
Insurers, whose profits were also cyclical, lost money in just two of these years. Banks, by contrast, turned a profit each year.

Asset holdings of FIs

Asset holdings provide further insight into the economic importance of financial intermediaries. Consistent US data on these holdings date back to 1952. As of March 31, 2001, five types of financial intermediary - depository institutions, insurers, securities brokers and dealers, pension funds, and mutual funds - collectively held USD 26.9 trillion of assets, more than triple the (inflation-adjusted) USD 8.3 trillion they held at the end of 1980.
This aggregate growth, which reflects increasing wealth, is perhaps not surprising. A more relevant question is whether the assets of each class of FIs have grown faster, slower, or in line with the overall economy. A simple measure that addresses this question is the ratio of FI assets to GDP. This measure, taken in aggregate for US depository institutions, insurers, securities firms, pension funds, and mutual

funds, grew from 0.87 in 1952 Q1 to 2.55 in 2001 Q1. This implies that Fl assets have grown 2.4 percentage points per year faster than GDP, on average, since 1952.

Taken individually, each of the major classes of FIs has also experienced asset growth in line with or more rapid than GDP growth. Assets of FIs without substantial stock market investments - depository institutions and non-life insurance companies - have grown slightly more rapidly than GDP.

Since 1980, US pension assets have grown at an annual pace five percentage points faster than depository institution assets. If this trend continues, these assets will surpass US bank assets by mid-2006 - a marked change of the competitive landscape. By that time, the assets of US mutual funds might also exceed those of depository institutions or pension funds.

Comparable data for Japan and the UK confirm that banks have been losing asset share in these markets as well, while pension funds and mutual funds have become larger holders of assets. The forces underlying these trends, which we discuss later, are widespread.

Workforce size and output of FIs in the US
Interestingly, US banks and insurers have reduced their shares of the national workforce but increased their share of nominal GDP. The workforce share of securities firms has grown, but its share of nominal GDP has grown even faster.

The leading players

Banks
Of the world fifty largest banks, as measured by revenues, 29 are European, 11 North American, and eight Asian. The European megabanks together hold USD 12 trillion of assets, more than half of the group aggregate assets of USD 20 trillion. From year-end 1991 through mid-2001, annual stock returns averaged 19% for US banks, 14% for European banks, and minus 10% for Japanese banks.

Insurers
Europe and North America each have seventeen of the world 48 largest insurers, as measured by revenues. Asia has an additional twelve of these firms. From year-end 1991 through mid-2001, annual stock returns have averaged l8^{0}/s for US insurers, 11% for European insurers, and minus 3% for Japanese insurers.

Securities firms
In recent decades, a group of six investment banks commonly referred to as the (bulge bracket) - Morgan Stanley, Merrill Lynch, Goldman Sachs, First Boston, Salomon Brothers, and Lehman Brothers has dominated US investment banking. Since the mid-1990s, Merrill, Goldman, and Morgan Stanley (known as the MGM group) further increased their market share to become a (superbulge) bracket with leading positions in the profitable equity underwriting and merger advisory businesses. Stock brokerage, another important line of business for securities firms, has been hotly contested in recent years with the advent of Internet trading.

Mutual funds
In recent years, as the number of banks has dwindled, the number of mutual funds has mushroomed. From 1995 to 2000, total assets under management worldwide more than doubled, reaching USD 12 trillion.

Mergers and acquisitions among FIs
In recent years a surge in merger and acquisition (M&A) activity has fundamentally altered the competitive landscape for financial intermediaries. Since 1998, there have been numerous deals in the US, Europe, and Japan with price tags exceeding USD 15 billion.

All but three of twenty-five largest mergers in the financial services sector have occurred since 1998.

Acquirer	Target	Value of deal US$ Billions	Date Effective	Country of target

Travelers group	Citicorp	72.6	1998	US
NationsBank Corp.	Bank America Corp.	61.6	1998	US
Royal Bank of Scotland Group	National Westminster Bank PLc	38.5	2000	UK
Norwest Corp.	Wells Fargo Capital	34.4	1998	US
Chase Manhattan Corp.	JP Morgan & Co. inc.	33.6	2000	US
Citi Group Inc.	Associates First capital Corp.	31.0	2000	US
Banc One Corp.	First Chicago NBD Corp.	29.6	1998	US
Shareholders	Associates First capital Corp	26.6	1998	US
Union Bank of Switzerland	Schweizerischer Bankverein	23.0	1998	Switzerland
Berkshire Hathaway Inc.	General Re. Group	22.3	1998	US
Firstar Corp.	US Bancorp.	21.1	2001	US
Allianz AG.	Dresdner Bank AG	19.7	2001	Germany
Zurich Allied AG.	Allied Zurich PLC	19.4	2000	UK
Zurich Versicherungs GmbH	BART Industries PLC- Financial	18.4	1998	UK
American International Group	SunAmerica Inc.	18.1	1999	US
First Union Corp.	CoreStates Financial Corp.	17.1	1998	US
UBS AG.	Painewebber Group Inc.	16.5	2000	US
Fleet Financial Group Inc.	BankBoston Group	15.9	1999	US
Lloyds Bank PLC	TSB Group PLC	15.3	1995	UK

An extensive study covering thirteen developed economies during the 1990s identified 7,300 deals in which a Fl was acquired. The aggregate value of these deals was roughly USD 1.6 trillion both the number of deals and their total value increased sharply throughout the decade. During the final three years of the decade, there were nearly 900 deals annually, associated with an annual deal volume of almost USD 400 billion. Comparing this with a total market capitalization of USD 5 trillion for financial companies worldwide suggests that approximately eight percent of financial service firms were the target of an acquisition each year from 1997-99.

The nature of M&A activity

International and cross-industry mergers were the exception rather than the rule. About 70% of total activity, both in number of deals and their value, involved firms in the same industry and from the same country. The next most common type of deal, accounting for about 15% of transactions, was between firms in the same country but different industries. Cross-border, same-industry deals accounted for about 10% of all transactions. Cross-industry, cross-border deals, the least common type, accounted for just 30% of transactions. These deals, moreover, were of smaller average value than deals between firms that shared a country, industry or both.
Banks represented the largest share of domestic, same-industry M&A. About 68% of transactions and 78% of the value of these deals were a bank being acquired.
These mergers facilitated substantial banking industry consolidation. In the six largest industrial economies, the number of banks declined by 7,700, or about a third, from 1990 to 1999 Industry concentration increased. For the six countries, the combined market share of the five largest banks grew from an average of 30% to 36% over the course of the decade.

Benefits and risks of mergers and acquisitions

FIs frequently cite potential economies of scale and scope as motives for a merger. Although this is a logical response to the opportunities that have arisen due to financial deregulation, there is little clear evidence that mergers consistently realize these benefits. Studies show that while scale economies do exist, the benefits cease to be meaningful beyond a certain threshold that today medium-sized FIs far exceed.
A second potential benefit of mergers between FIs is risk reduction through the diversification of activities and locations. A recent study for the US suggests that the merger of a bank with a life insurer might reduce the volatility of the resulting firm return on equity because of the lack of synchronization across industry profitability cycles. The potential diversification gains from uniting a bank with a non-life insurer or securities firms are less compelling. Mergers also offer opportunities to diversify internationally. Among the six largest industrial economies, the median correlation of banking profitability is just 0.21, which suggests that the bank profitability cycles of these countries are largely independent.

A third motive underlying FI mergers is the opportunity for cross selling. Nonetheless, mergers between firms in different industries, where cross selling opportunities are most pronounced, are only a minority of transactions.
Mergers and acquisitions pose risks as well. Mergers create additional risk due to the difficulty of monitoring and controlling the actions of individual employees in consolidated organizations. These challenges are especially severe for mergers that are cross border or cross industry. A recent study of 78% M&A deals each valued at more than USD 1Billion found that 55% of transactions within an industry succeeded, but only 32% of transactions across industries did.

Value proposition for financial intermediaries

FIs provide ways for individuals to save for the future, for businesses to fund their growth, and for individuals and businesses to manage their risks. This section examines the value propositions for various types of FIs.

Collaboration among FIs
The roles of FIs are evolving. Some FIs are constantly reinventing their core value propositions, blurring the distinctions between intermediaries. This happens when, for example, banks manufacture and distribute insurance products or securities firms package and redistribute insurance risk.. As a result, it is sometimes argued that classifying intermediaries by the functions they perform (e.g. risk transformers) is more meaningful than using traditional industry classifications (e.g. insurers). Despite this blurring of boundaries, each type of FI retains distinctive characteristics that differentiate it from the others.
The evolving pattern of financial services includes growing competition and collaboration among intermediaries. FIs have adopted a variety of strategies in serving their increasingly sophisticated clientele. Two examples of the collaboration among FIs, in evidence throughout the world, are bancassurance and the acquisition of asset management firms by insurance companies.
Bancassurance, the provision of insurance products through banks, has developed into a major insurance distribution channel in Europe, where regulatory barriers are less restrictive than in other markets Life products are more easily sold through banks than non-life products.
FIs have pursued a variety of bancassurance strategies, from loose alliances, to joint ventures, and to fully integrated operations. Allianz recent acquisition of Dresdner is one notable example. European banks such as Fortis and ING are trying to replicate their success in other markets. Bancassurance will grow steadily in importance as a distribution channel outside of Europe, notably in emerging markets. The growth of bancassurance reflects several broad industry trends, discussed below, including: growing competition; a desire to expand existing distribution networks through cross-selling; banks desire for diversification; financial deregulation; and the pursuit of cost efficiencies.
In recent years, insurers have concluded many sizeable acquisitions of asset management companies to enable them to tap into the wealth management market . Major deals include Allianz acquisition of Pimco Advisors and Old Mutual acquisition of United Asset Management.

Major acquisitions of investment advisors by insurers, 1995 -2001

Date	Target	Type	Acquirer	Assets Under Management US$ billion
11/9	Pimcio Advisors L.P.	Institutional	Allianz	256
06/00	United Asset Management	Diversified	Old Mutual	188
06/97	Scudder, Stevens & Clark Inc	Diversified	Zurich Group / Kemper	120
06/00	Sanford Bernstein & Co.	Institutional	Alliance Capital Mgmt. L.P	86
03/00	Gartmore investment management	Diversified	Nationwide Financial Services	86
04/95	Kemper Corporation	Mutual Fund	Zurich Insurance	65
09/00	Phoenix Investment partners	Diversified	Phoenix Home life Mutual	61
11/97	Oppenheimer Capital (67%)	Institutional	Pimco Advisers L.P	60
02/97	Oppenheimer Capital (33%)	Institutional	Pimco Advisers L.P	48
10/00	Alleghany Asset Mgmt.	Institutional	ABN AMRO Holding NV	45
10/00	Nicholas Applegate Capital Mgmt	Institutional	Allianz AG	43
08/00	MasterLink Securities Investment Trust	Diversified	Prudential Co. of America	42
08/98	Frank Russell Company	Institutional	Northweastern Mutual life	41
12/00	Foreign & Colonial Mgmt.Ltd	Institutional	Eureko NV	38

03/00	Bankers Trust Australia group	Diversified	Principal Mutual Holding	26
04/01	Conning corp.	Institutional	Swiss Reinsurance Co.	20

It is interesting to note that eleven of the deals listed in Table 13 are cross-border. Of these, eight are the purchase of a US asset manager by a European insurer. This is in sharp contrast to the largest FI mergers, which include just three cross-border transactions. Two forces appear to be at play. First, because the US asset management market is large and well established, it is a logical destination for European insurers seeking to diversify internationally and across product lines. Second, these acquisitions may represent the purchase of equity market skills needed to compete more effectively in response to the growing equity culture in Europe.

What is driving change?

Financial disintermediation

Ours is the age of (equitisation). Financial innovation, declining costs of securitisation, and the increasing sophistication of market participants have enabled securities issuance to displace bank lending as the major source of capital for large corporations. Increasing demand for securities by pension and mutual funds has stimulated securities issuance. Between 1998 and 2000, worldwide debt and equity issuance exceeded USD 4 trillion each year. Although the pace of issuance has slowed in late 2001, nearly USD 2.5 trillion was raised in the first half of the year Issuance in recent years is double what it was in the early 1990s.

Deregulation

Regulatory changes shape financial market developments and are shaped by them. Many countries have pursued regulatory reform to facilitate the development of the financial services sector. Quite often, however, regulatory reform lags behind changes that have already occurred in the marketplace. The recent removal of vestiges of the Depression-era Glass-Steagall Act in the US, for example, came after many of the longstanding boundaries between different financial industries had already been dis-mantled. FIs have repeatedly exhibited the ability to circumvent regulatory barriers.

The development and liberalization of Japan financial markets provides an example of how deregulation affects market efficiency and the pace of innovation. With the removal of restrictive regulations, market competition has increased steadily and transaction costs have declined. The forces of change have also induced a major realignment of FIs in the market.

Globalization

Deregulation has been instrumental in the globalization of financial services and the convergence of financial service provisions in certain industry sectors. The IMF defines globalization of finance and financial risk in terms of four characteristics.

1. Technology-empowered precision finance - the ability to unbundle, repackage, price and redistribute financial risks;
2. integration of financial markets and players into a single global marketplace;
3. blurring of boundaries between financial institutions; and
4. Formation of global financial conglomerates that provide services that cut across sectors.

The globalization of risks and markets has accelerated in recent decades. National boundaries, time zones, and geographical distance are less of a barrier to international capital raising and capital allocation than they once were. Technological progress and the relaxation of capital controls have allowed corporations to invest and raise funds overseas more readily. Global foreign direct investment (FDI) flows grew at an annual average rate of 17.2% between 1982 and 1999, resulting in an eight-fold increase in the stock of FDI. This is nearly triple the *5.8%* annual growth rate of world output over the same period. Against this backdrop, financial institutions have moved across regional and sectoral boundaries to serve the needs of their international clients and to tap into new markets.
FIs are taking advantage of deregulation to enter other financial industries, to cross-sell products, and to provide more customer-orientated rather than product-focused services. Financial convergence has several dimensions. From a product perspective, convergence takes place at both the retail and the

wholesale level. The introduction of insurance-linked securitisation is an example of wholesale convergence of capital market and insurance products. Bancassurance, on the other hand, illustrates the use of an established retail network to cross-sell additional financial products.

The growth in the number and size of cross-sectoral mergers over the past decade is both a consequence and manifestation of convergence. The emergence of broad financial groups such as Citigroup, HSBC, ING, Zurich and Allianz also reflects the forces of convergence. Convergence is not restricted to M&A activity. It can also entail partnerships and joint ventures, which allow financial institutions to cross-sell products, offset risk profiles, share services and gain access to multiple distribution channels. Engaging in multiple activities enables a Fl to allocate capital in a way that offers better risk-return characteristics.

Technological progress

Technological developments, including the introduction of web-enabled solutions, have multiple impacts on the provision of financial services. Both the cost and efficiency of service delivery are improved.

Technological progress also makes possible new financial instruments, enabling corporations nd financial institutions to re-design their balance sheet exposures. The ability to unbundle and repackage financial risks offers an institution more flexibility n adapting itself to its preferred risk profile. Technology also makes national boundaries less relevant. Virtual financial institutions (e.g. banks, insurers) already exist and could grow increasingly prominent.
E-initiatives are attracting increasing attention in corporate boardrooms. New business platforms can re-engineer financial companies value chains to lower cost and improve efficiency. According to one study of direct insurers, modern information technologies offer cost savings in the range of 12% for personal lines and 9% for commercial lines) The potential to create a niche market to service one part of the value chain for other FTs could encourage some companies to specialize.

Wealth accumulation
Ageing populations and a growing accumulation of wealth around the globe have focused FIs attention on the business of asset accumulation. As noted above, mutual funds and private pension funds have been able to sustain strong growth over the last decade as a result of the swelling pools of savings. This is because individuals have perceived a growing need for private pensions in view of governments inability to finance public pension plans adequately. Opportunities to manage household assets underlie many recent mergers.

The competition to manage household financial wealth has intensified over the last decade. As a result of financial innovation and deregulation, the spectrum of products available to households has widened. Bank deposits are losing appeal as a savings vehicle while mutual and pension funds are gaining in importance.
A number of forces are redefining the competitive landscape in global financial markets, and the roles of FIs. Here are some key developments:

Prospects: What lies ahead?

A number of forces are redefining the competitive landscape in global financial markets, and the roles of Fis. Here are some key developments.

Declining relative importance of banks as allocators of capital
Securities (debt and equity) issuance will continue to grow in importance as a source of funds for corporations, while commercial banks broaden their revenue bases to include more income from fees and services. The squeeze of loan margins will remain a major deterring factor for bank lending. Large commercial banks are also increasingly active in underwriting securities, thus competing directly with investment banks.

Is the equitisation trend due chiefly to the long bull-run of the global stock markets? While cyclical factors have played a role, we think a structural shift has occurred as well, due to: (1) increased information and transparency that allows investors to better understand new securities issues; *(2)* corporations keen to diversiFy their sources of funding; and (3) commercial banks seeking more fees and service income to strengthen and diversify their revenue streams.

Globalization strategy rethink

Global economic integration will continue to deepen. The V/TO accession of China, for example, will likely perpetuate the pace of globalization. However FIs will become increasingly dubious about the efficiency of cross-border/ cross sector mergers and acquisitions as a strategy to position themselves globally. If the past pattern of development holds, many of the recent financial sector M&As will prove unsuccessful. Financial and technological innovations are, meanwhile, making it easier to operate globally without engaging in costly M&A activities.

Financial convergence - narrowly focused

The strong value propositions maintained by different FIs suggest that convergence will not happen at all level of financial services. In fact, the overlapping of FIs value propositions is taking place in only a few areas. We expect that competition among FIs will be most intense in (1) underwriting of securities (including risk securitisation) and (2) asset management business. On the other hand, FIs will cooperate mainly in retail distribution of financial products through each other distribution networks, particularly for the purpose of asset accumulation.

The insurance industry will retain its dominant role in risk underwriting, while other FIs (particularly investment banks and reinsurers) will help corporations in risk financing and insurers in redistributing their risk portfolios. Retail distribution of financial products (e.g. bancassurance) will be another area where convergence will have an impact.

Unbundling of manufacturing and distribution; origination and risk carrying of financial products

As convergence progresses, the manufacturing and distribution of financial products will increasingly be separated. At the same time, the risk underwriting business will see increasing incidences where origination and risk bearing by insurers will be unbundled. Examples include bancassurance and securitisation of insurance risk. The main themes revolve around the re-engineering of Fl value chains and the adoption of a suitable risk profile. Future FIs will be more customer-oriented and adopt open architecture rather than proprietary systems.

There is a basic distinction between liquid and illiquid financial assets and risks. Liquid assets and risks can be readily off-loaded from the balance sheets of FIs and traded on exchanges. Illiquid assets and risks, on the other hand, tend to be produced and distributed by the same institution and retained on its balance sheet.

Financial centre developments gear towards expected growth in asset accumulation and disposal

The ageing population of developed markets will continue to bolster the asset management business. All FIs are geared towards offering services in asset management. Looking ahead, product developments and business strategies will increasingly focus on retail asset management. One contributing factor is the fact that pension and asset management are significantly less capital-intensive businesses than investment banking and P&C (re)insurance.