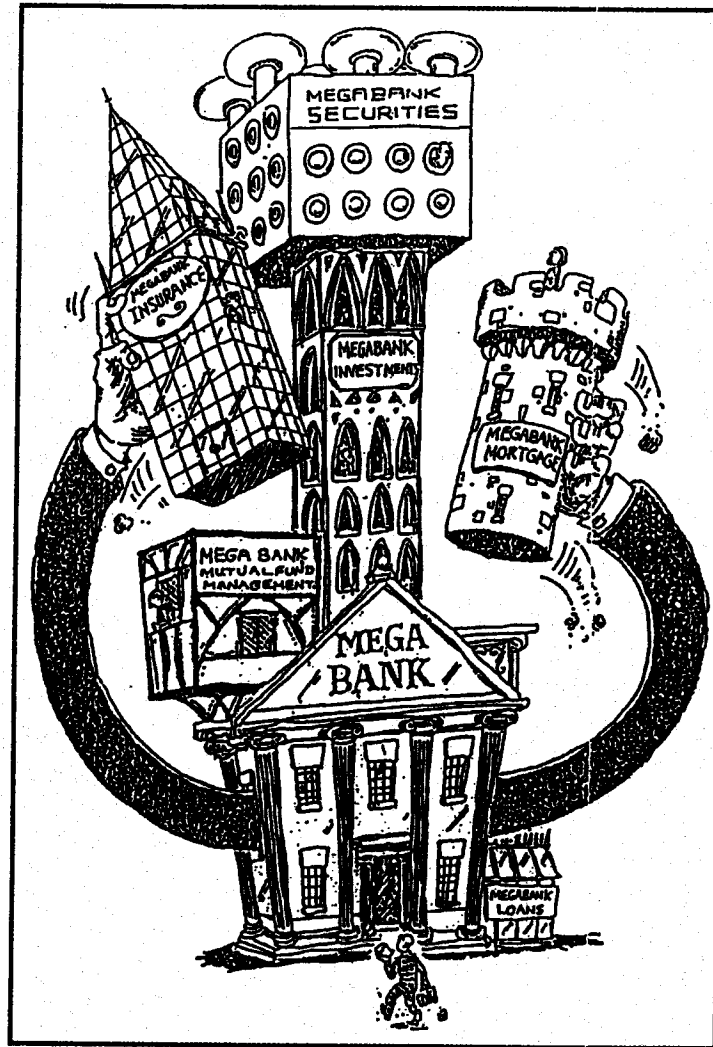


Banking and Insurance

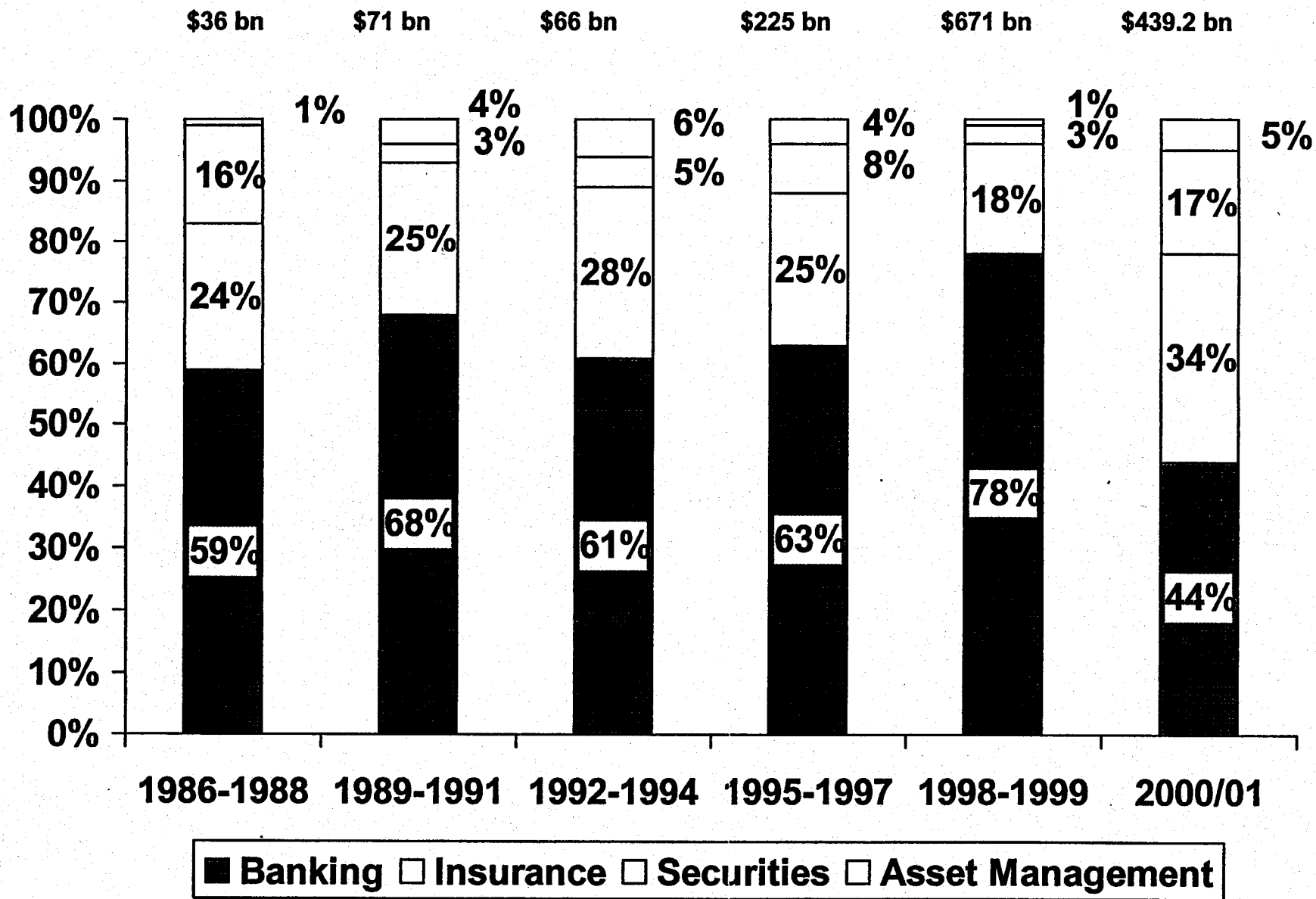
- **General Trends**
- **Advantages and Disadvantages of Bank – Insurance Consolidation**
- **Citicorp and Allianz as Examples**
- **Is There Another Way**
- **Conclusions**

• General Trends

Mega-conglomerates – Dream or Nightmare?

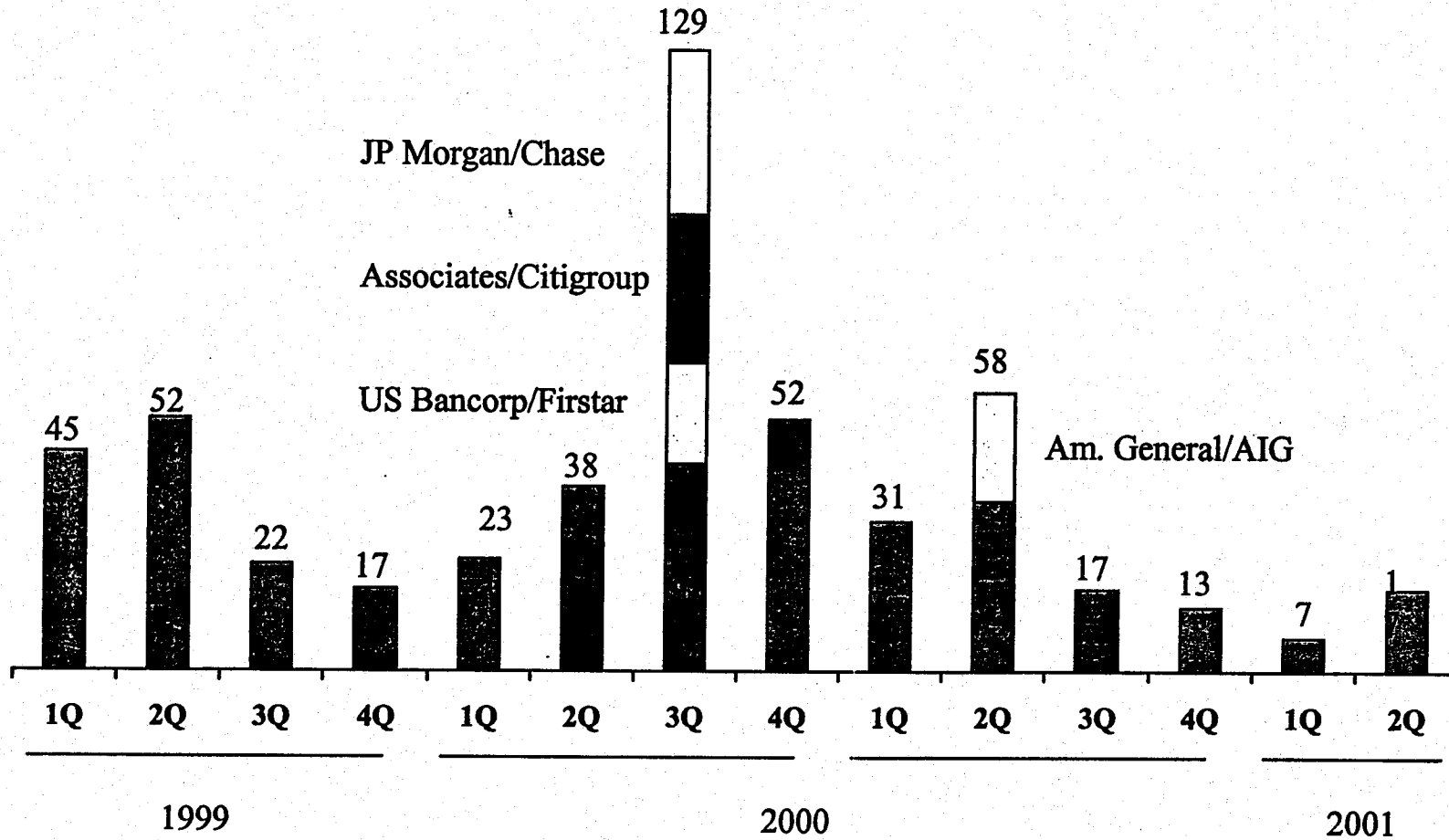


Worldwide Financial Services Merger Volume, 1986-2001



Financial M&A Volume, U.S. Target, 1999-2002 Q2

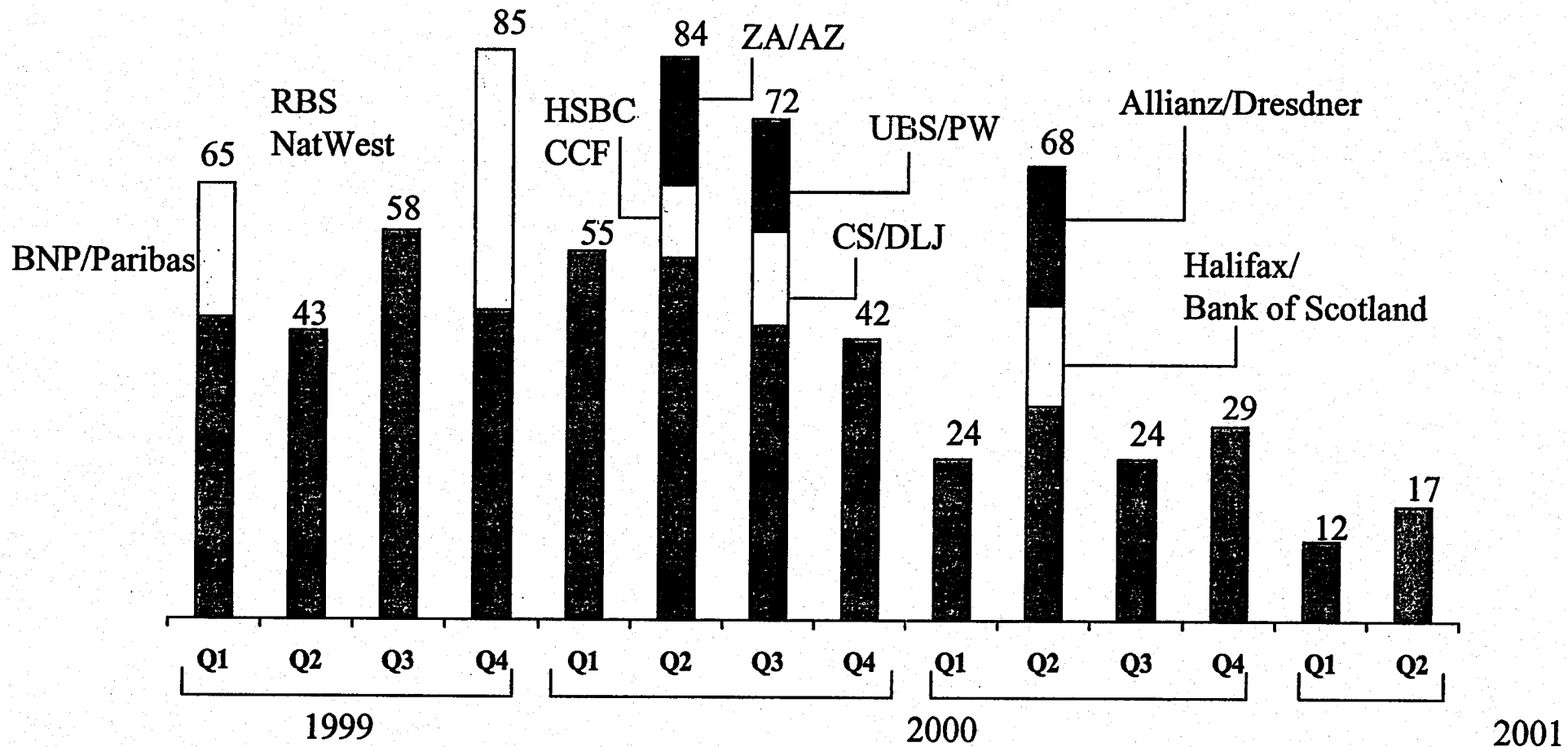
\$ Billions



Sources: J.P. Morgan M & A Research, Thomson Financial

Financial M&A Volume, European Involved, 1999-2002 Q2

\$ Billions



Number of deals:

\$10 BN +	3	2	1	2	1	2	3	0	0
\$1-10 BN	5	8	8	10	13	16	9	10	5

Source: JP Morgan M&A Research, Thomson Financial

Sectoral Merger Intensities

RANK **\$VOL.**

Electric, Gas, and Water Distribution	6	378870.5	1268	4	304662.5	1608
➔ Insurance	<u>7</u>	340629.2	2919	3	350086.5	2504
Investment & Commodity Firms,Dealers,Exchanges	8	335258.6	3627	11	171581.5	4600
Electronic and Electrical Equipment	9	310202.7	3085	13	113099.2	2699
Food and Kindred Products	10	303080.0	2159	8	207966.9	5103
Motion Picture Production and Distribution	11	297504.0	859	43	19995.7	641
Drugs	12	291857.7	1565	5	234442.5	1210
Measuring, Medical, Photo Equipment; Clocks	13	281102.4	3609	26	52944.3	1951
Prepackaged Software	14	245695.5	4613	34	39527.0	2788
Chemicals and Allied Products	15	227609.6	1942	9	172304.2	2508
➔ Credit Institutions	<u>16</u>	203138.8	877	37	30818.7	509
➔ Real Estate; Mortgage Bankers and Brokers	<u>17</u>	188469.1	3829	6	208646.3	3562
Health Services	18	184048.7	3968	48	15547.3	691
Communications Equipment	19	182094.1	1360	32	43354.1	896
Computer and Office Equipment	20	171776.2	1629	45	17887.9	706
Printing, Publishing, and Allied Services	21	166779.7	2721	15	104526.4	3643
Hotels and Casinos	22	161412.7	1490	19	84529.8	1446
Machinery	23	161392.2	2727	21	68536.6	3894
Transportation Equipment	24	152552.6	1055	18	89348.7	1938
Metal and Metal Products	25	138550.5	2732	12	118601.7	3947
Transportation and Shipping (except air)	26	130483.3	1784	16	96617.4	4082
Paper and Allied Products	27	129724.7	756	17	91237.2	1489
➔ Savings and Loans, Mutual Savings Banks	<u>28</u>	116649.4	3212	57	957.3	14
Retail Trade-General Merchandise and Apparel	<u>29</u>	103291.5	715	30	45332.8	704

Volume of In-Market Mergers & Acquisitions in the United States and Europe, 1985-2001

(millions of U.S. dollars and percent)

Acquiring Institution	Target Institution								
	World Total			U.S.			Europe		
	Banks	Securities	Insurance	Banks	Securities	Insurance	Banks	Securities	Insurance
Commercial Banks	1364 (47.6%)	120 (4.2%)	69 (2.4%)	593 (51.7%)	28 (2.4%)	0.4 (0.0%)	406 (43.3%)	35 (3.7%)	55 (5.9%)
Securities Firms	104 (3.6%)	340 (11.9%)	86 (3.0%)	13 (1.1%)	188 (16.4%)	34 (3.0%)	37 (3.9%)	65 (6.9%)	33 (3.5%)
Insurance Companies	166 (5.8%)	62 (2.2%)	555 (19.4%)	75 (6.5%)	19 (1.7%)	194 (16.9%)	70 (7.5%)	14 (1.5%)	222 (23.7%)
			78.9			85			73.9

Source: Thomson Financial Securities Data.

Size and Profitability

Top 20 Banks

Name	Average Total Assets		Average P/E	
	1992-2001	Rank	1992-2001	Rank
Mizuho Holdings Inc	1,291,074	1	34	2
Citigroup Inc	695,896	2	19	10
Deutsche Bank AG	589,126	3	34	3
UBS AG	571,953	4	20	9
Sumitomo Matsui Bank Corp.	504,125	5	90	1
HSBC Holdings	455,423	6	14	15
BNP Paribas	428,868	7	20	8
Hbos PLC	427,881	8	17	11
Credit Suisse Group	405,780	9	30	4
Credit Agricole	403,196	10	13	16
ABN Amro Holding NV	400,142	11	12	20
JP Morgan Chase & Company	364,748	12	16	14
Societe Generale	361,453	13	12	17
Bank Of America Corp.	359,721	14	12	18
Bayerische HypoVereinsbank	356,411	15	28	5
Barclays PLC	345,905	16	12	19
Commerzbank	298,731	17	24	7
Credit Lyonnais	269,344	18	16	12
Lloyds TSB Group PLC	231,265	19	16	13
Royal Bank Of Scotland Group PLC	177,730	20	25	6

Currency: USD

Scaling Factor: Millions

Source: ThomsonFinancial

Top 20 Insurance Companies

Name	Average Premium Earned 1992-2001	Rank	Average P/E 1992-2001	Rank
Allianz	40,966	1	47	4
AXA	35,687	2	26	8
Generali	25,288	3	39	7
Zurich Financial Services	25,160	4	(14)	20
American International Group Inc	23,047	5	24	10
Muenchener Rueckversicherung	21,452	6	89	2
Aviva	20,482	7	131	1
Allstate Corporation	20,118	8	13	15
ING Groep NV	18,657	9	12	16
Prudential PLC	17,322	10	22	12
Millea Holdings Inc	15,795	11	61	3
Cigna	14,750	12	17	14
Metlife Inc	13,898	13	40	6
Swiss Reinsurance Company	12,202	14	(12)	19
Hartford Financial Services Group Inc	9,458	15	1	18
Berkshire Hathaway	7,573	16	47	5
RAS RNC	7,160	17	24	11
AMP Limited	6,206	18	7	17
Aflac Incorporated	6,014	19	17	13
Chubb Corp.	5,103	20	26	9

Currency: USD

Scaling Factor: Millions

Source: ThomsonFinancial

Evidence Linking Size with Profitability

- At least for top 20 banks and top 20 insurance companies very little correlation between size and profitability measured by P/E ratio.

However

Perceived Other Advantages of the Bank Assurance Model

- Economies of Scale on the Cost Side
- Economies of Scope on the Cost Side
- X-efficiencies
- Economies of scope from cross-selling
- Diversification and risk reduction
- Too Big To Fail Subsidy

Perceived Other Advantages of the Bank – Assurance Model

- **Conflicts of Interest and Reputational Harm**
- **Multiple Regulators**

The Evidence So Far: Economies of Scale

- Strong evidence of scale economies for small banks i.e., <\$100 million in asset size (1990s average)
- Little evidence for banks larger than \$5 billion in asset size (1990s average)
- Measured scale economies account for less than 5% of banking unit-costs
- No evidence so far of economies of superscale

The Evidence So Far: Economies of Scale, cont'd...

- No evidence of scale economies in insurance or securities firms above industry median size
- Strong evidence of scale economies in specific activity lines (e.g., custody, asset management, transactions processing, etc.)

The Evidence So Far: Economies of Scope

- Some evidence of cost diseconomies of scope among U.S. banking firms
- Strong evidence of cost diseconomies of scope among large banks
- No available tests of cost economies of scope yet among insurance companies, securities firms or financial conglomerates

The Evidence So Far: Operating Efficiency (X-efficiency)

- Strong evidence of significant x-efficiency differences among banks in various size classes.
- Banking average operating efficiency is about 20% above low-cost producer decile in terms of unit costs.
- Possible X-efficiency link to size a IT infrastructures.
- Some evidence of x-efficiency differences among European insurers.

The Evidence So Far: Demand Economies of Scope

- Few empirical tests on revenue, growth and profit effects of cross-selling.
- Demand economies of scope likely to be highly specific to product-line and client segmentation – most likely life insurance, pension business. *- customer relationship effects*
- Maybe heavily determined by characteristics of distribution infrastructures and technologies.

DIVERSIFICATION

Bank – Assurance and Risk, Cont'd...

- How big are diversification of earnings benefits from insurance.
- Saunders-Walter finds gains of up to 1/3 in risk reduction in US via mergers.
Similar findings of substantial gains for banks and life insurance (less so property insurance companies) more recently by New York Fed.
- Importance of TBTF subsidy will vary across countries.

Bank – Assurance and Risk

- How risky is insurance underwriting?
- If a big loss occurs in the insurance subsidiary or department will the bank be harmed?
 - > Upstreaming fees/dividends or direct profit effects
 - > Inter-affiliate loans
 - > Pure contagion (name association)

Conflicts of Interest in Financial Conglomerates

- Salesperson's stake & biased advice (e.g., recent scandals, Citigroup, Chase, etc.)
- Tie-in sales as condition of lending
- Information transfers and conflicts among clients

Regulation → NET REGULATORY BURDEN

- Some European countries have a single national regulator for banks and insurance
- Some European countries have different regulators
- The U.S. has 3 regulators for banks and 50 (state regulators for insurance companies)
- Potential for regulatory chaos.

Examples and Lessons

1. Citicorp/Travelers

- On April 6, 1998 when Citicorp announced its acquisition its stock price rose 26% and Travelers rose 18%.
- On December 19, 2001 when Citicorp announced its plans to spin-off Travelers Property Casualty, Citicorps stock price rose 3%.

Why were the acquisition and spin-off both good news?

The Net Benefits from Bank-Life Insurance Linkages Dominate Those Bank Property Casualty Linkages

Why

- Economies of scope may be more extensive e.g. cross-selling life and pension business.
- Economic rents in the life insurance industry appear to be higher than property-casualty insurance (strong evidence of this in U.S.).

The Net Benefits from Bank-Life Insurance Linkages Dominate Those Bank Property Casualty Linkages, Cont'd....

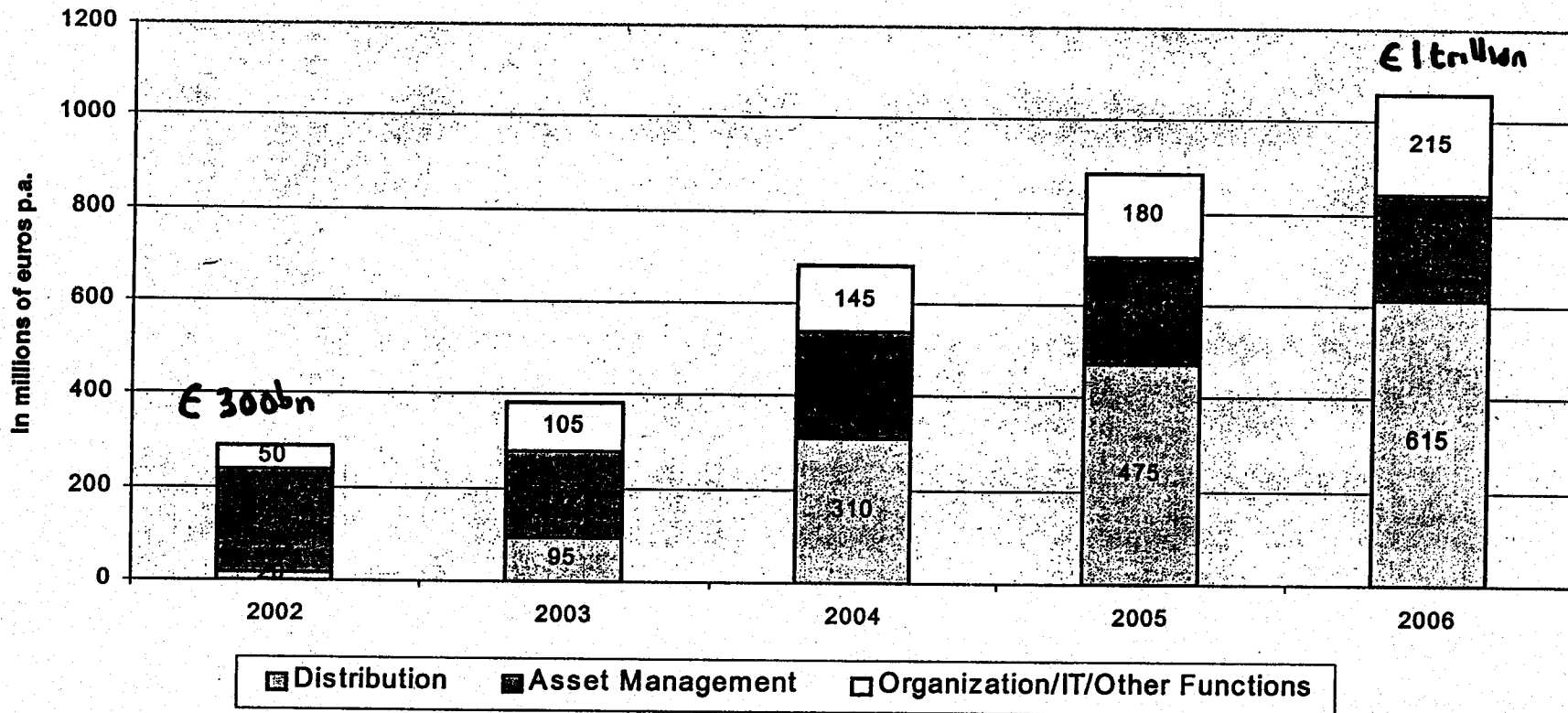
- Diversification benefits greater between banking and life insurance and banking and property casualty insurance (evidence in U.S. also supports this).

Citicorp retained the life and pension business of Travelers

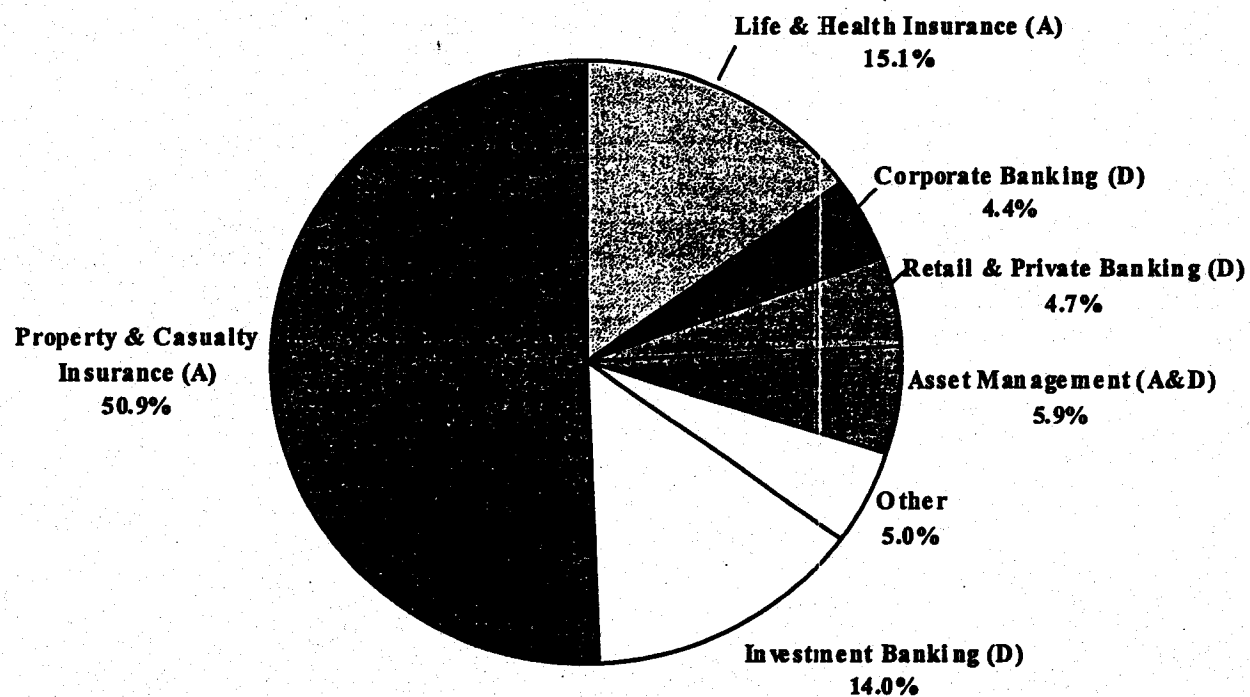
2. Allianz/Dresdner

PERCEIVED SYNERGIES

ALLIANZ - DRESDNER Expected Annual Net Synergies from Business Segments and Functional Areas (2002-06)

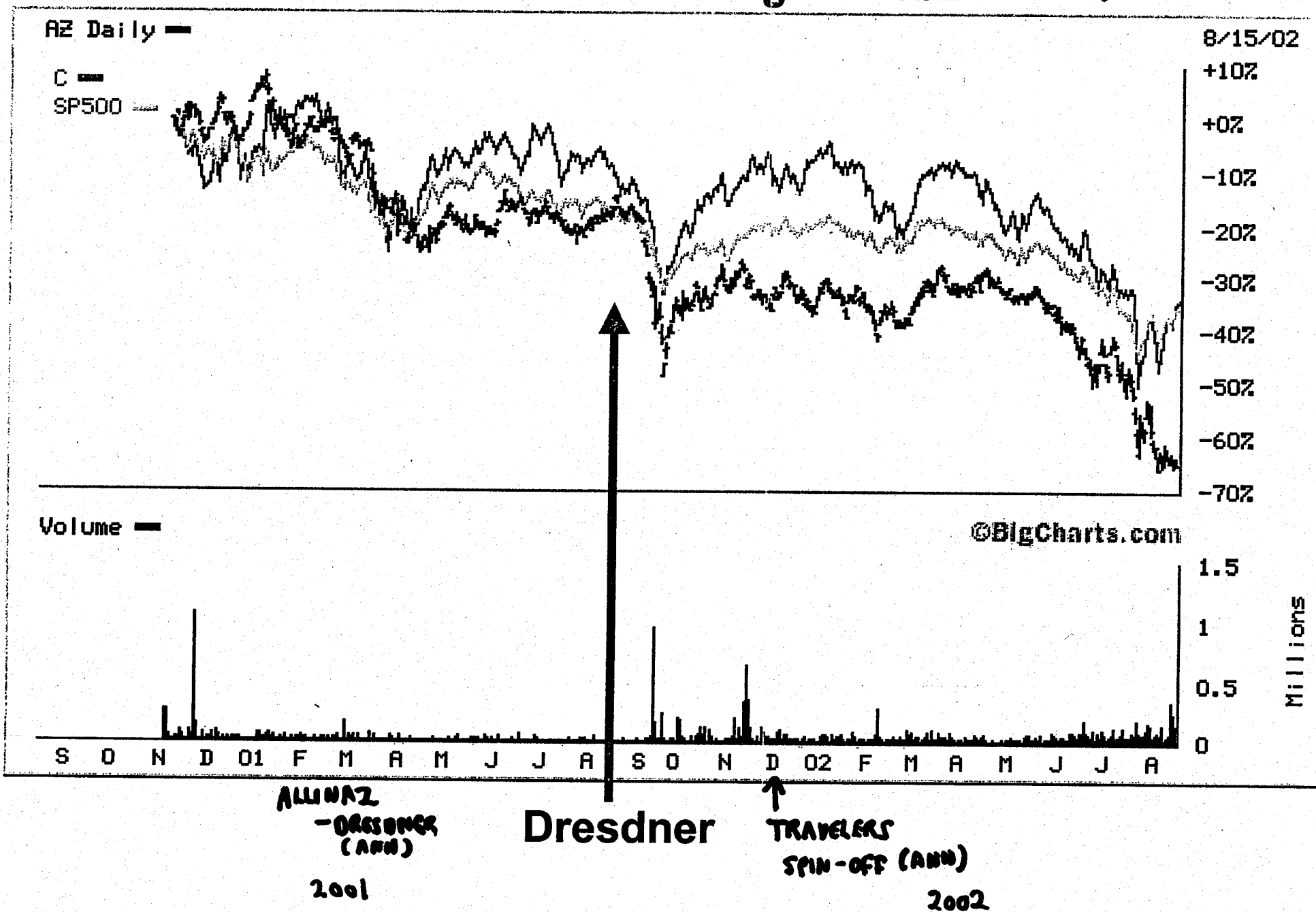


Allianz – Dresdner Pro Forma Earnings Contribution, 2000 (Total = \$6.1 billion)



Source: Wall Street Journal, 2 April, 2001

Share Price Performance Allianz – Citigroup – S&P 500 Nov. 2000 – 16 August 2002 (ADRs)



Is this just due to bad timing (e.g., recession)

or

AND 9/11

Bank – Property/Casualty mergers negative NPV investments?

Alternatively

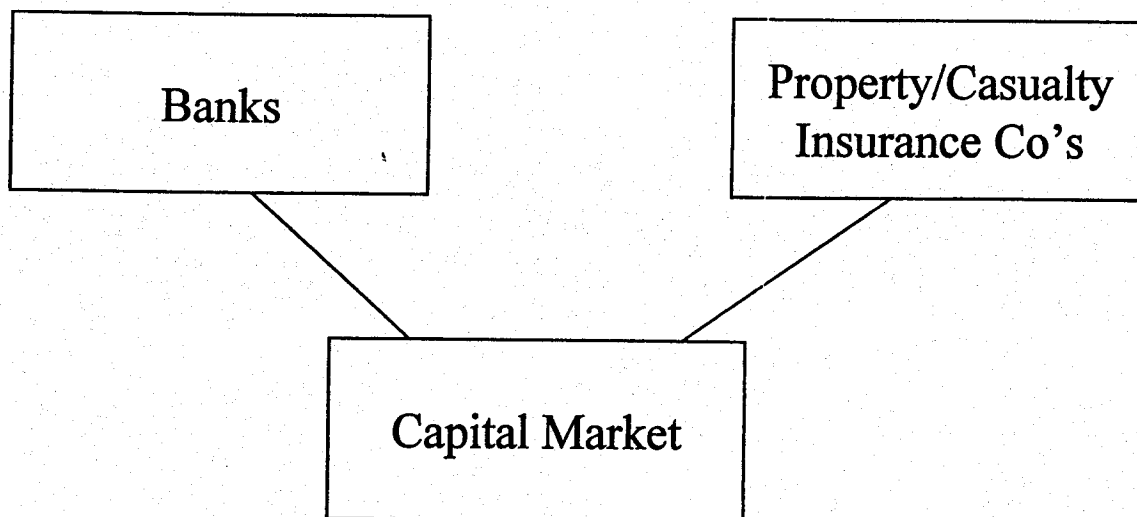
Is there another way for banks and property/casualty insurers to enter each others business lines without merging?

One Possibility

The Capital market route

The Capital Market Route

Banks and insurance companies can enter each others risks "business lines"
Through the capital markets/derivative markets.



- Derivatives

Credit Derivatives (Swaps, Options etc...)

Securitization; Loan Trading

; CLO's. CBO's

Operation Risk Insurance

Catastrophe Derivatives (Options Etc..)

Catastrophe Bonds

Letters of Credit

Long-term

The Capital Market route may turn out to be the most flexible and profitable approach for bank – property/casualty insurance linkages

Short-term

SO FAR PRETTY DISASTROUS FOR RE-INSURERS AND SOME

INSURERS WITH LARGE LOSSES ON CREDIT DERIVATIVES

AND CDO'S DUE TO RISING CORPORATE DEFAULTS

WSJ Nov 29, 2002