

Technology Slowdown - How Serious?

May 2000



Freeman & Co.

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Welcome to Freeman & Co.'s report on trends in the investment banking industry. We want to provide our clients, friends and future clients with data that will identify trends that may be helpful to their business decisions.

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- *Compensation and Incentive Plans*

We encourage you to share your thoughts and look forward to hearing from you.

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I. Executive Summary

- During the last year, the “new economy” industries - Technology, Telecom and Media - have been primary drivers of investment banking profits. More than three-fourths of all initial public offerings were in these industries.
- Recent market volatility has caused a back-up in the IPO market, particularly in the “new economy” sectors.
- A prolonged slowdown in the IPO market could adversely affect investment banking revenues and profit margins.
- However, the IPO “window” has closed before, and then reopened stronger than ever. Industry sectors traditionally rotate in and out of favor.

What are the implications of a Technology IPO slowdown?

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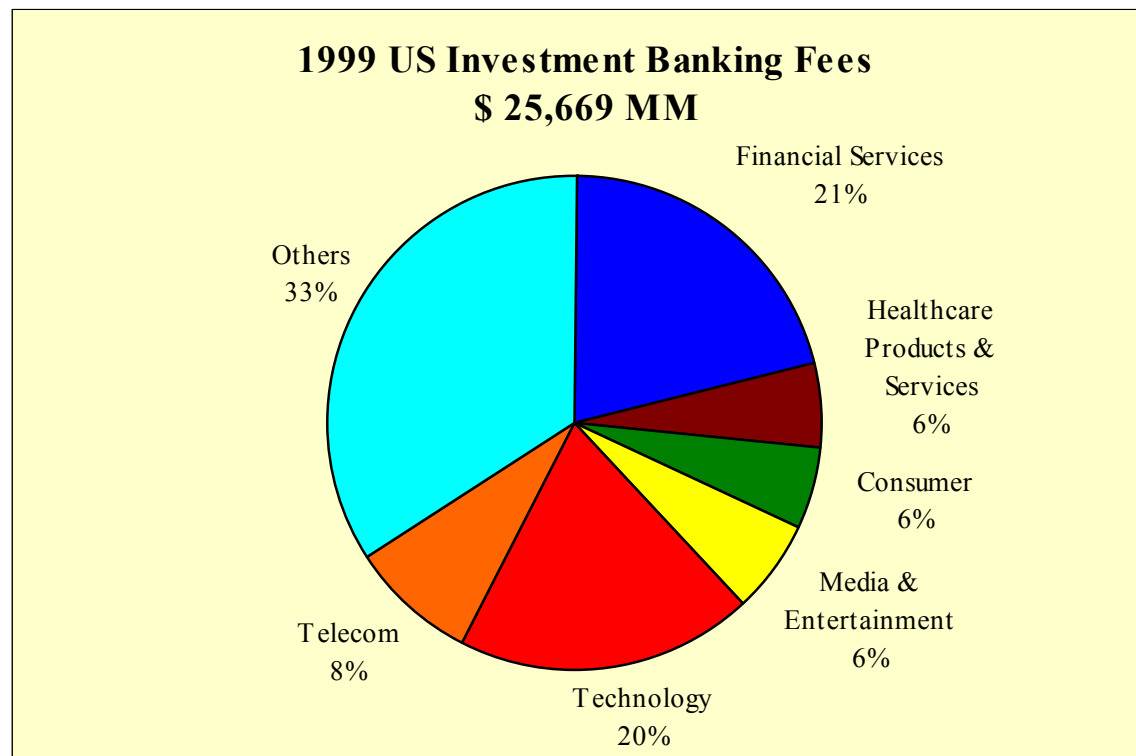
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II. Market Overview

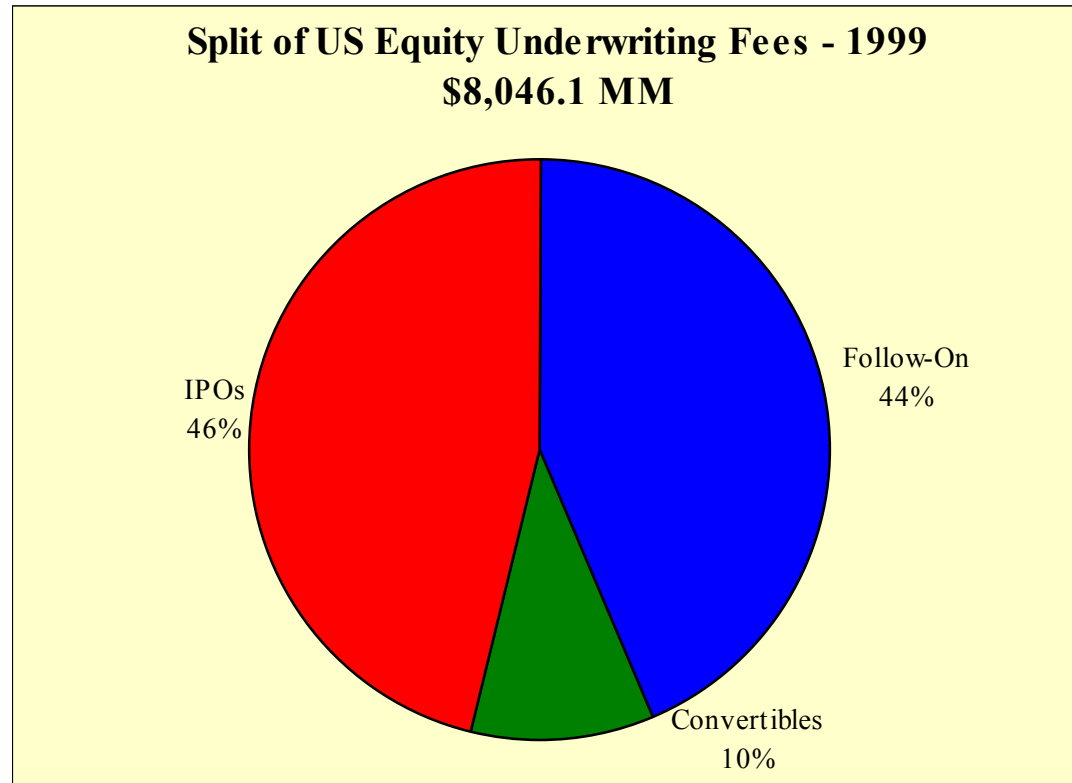
- Although Financial Services remained the largest overall revenue generating sector in 1999, Technology, Telecom and Media generated about one-third of total Street fees.



Source: Thomson Financial Securities Data, Freeman & Co. estimates

II. Market Overview

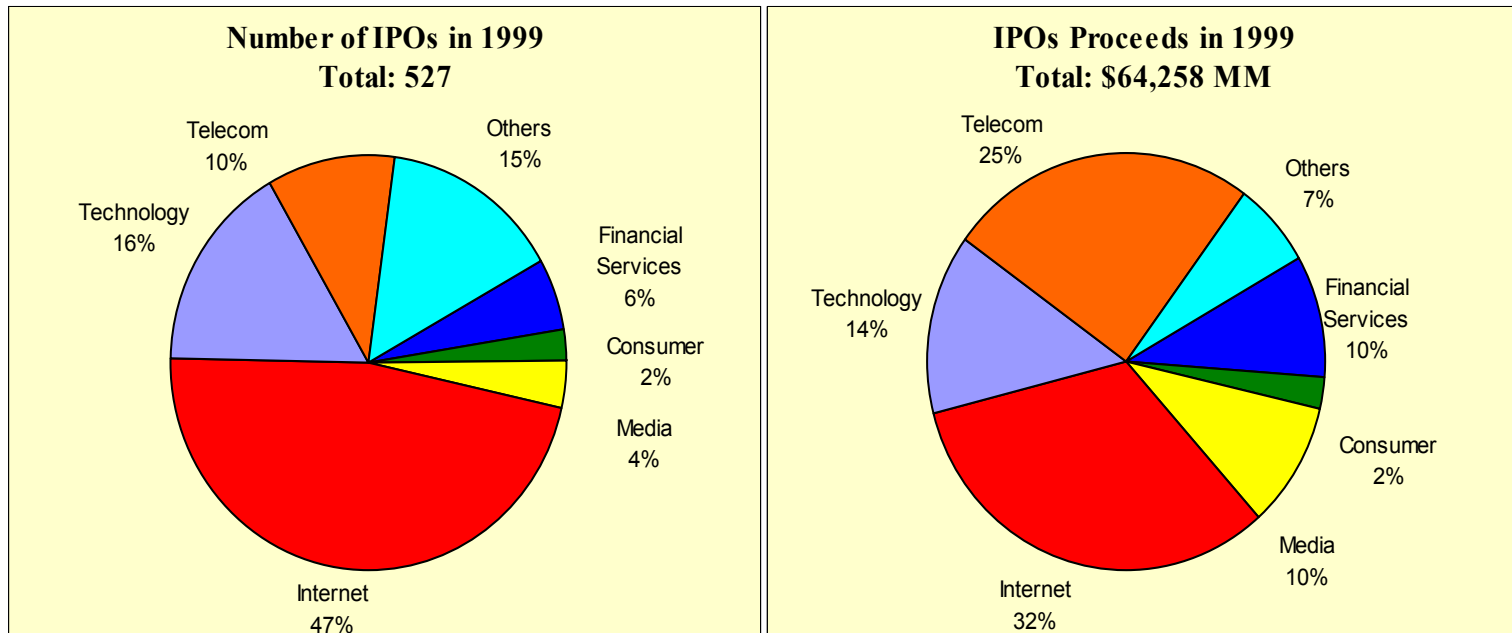
- Almost half of 1999's \$8.0 billion in equity underwriting revenues was IPO driven.



Source: Thomson Financial Securities Data, Freeman & Co. estimates

II. Market Overview

- More than three-fourths of 1999's 527 IPOs were in "new economy" industries: Media, Telecom, Internet and Technology.
- Over 80% of IPO proceeds (\$56 billion) were in these industries.



Source: IPO.com, Inc.

II. Market Overview

- Major investment banks have increased their dependence on IPOs, as online brokerage and electronic trading resulted in reduced commission margins.
- For example, in 1999, Goldman Sachs generated 9% of its revenues from IPOs and other stock underwriting and Morgan Stanley generated 7% of its revenues from these businesses.
- These two firms underwrote almost half the \$22.6 billion in new issues and generated approximately one-third of the \$4.8 billion in underwriting commissions in the first quarter.

Investment Bank	1999 EPS	Increase over 1998	Profits from Equity UW
Goldman Sachs	\$6.95	NA	9%
Lehman Brothers	\$8.15	57%	9%*
Merrill Lynch	\$6.17	65%	11%*
Morgan Stanley Dean Witter	\$4.10	66%	7%

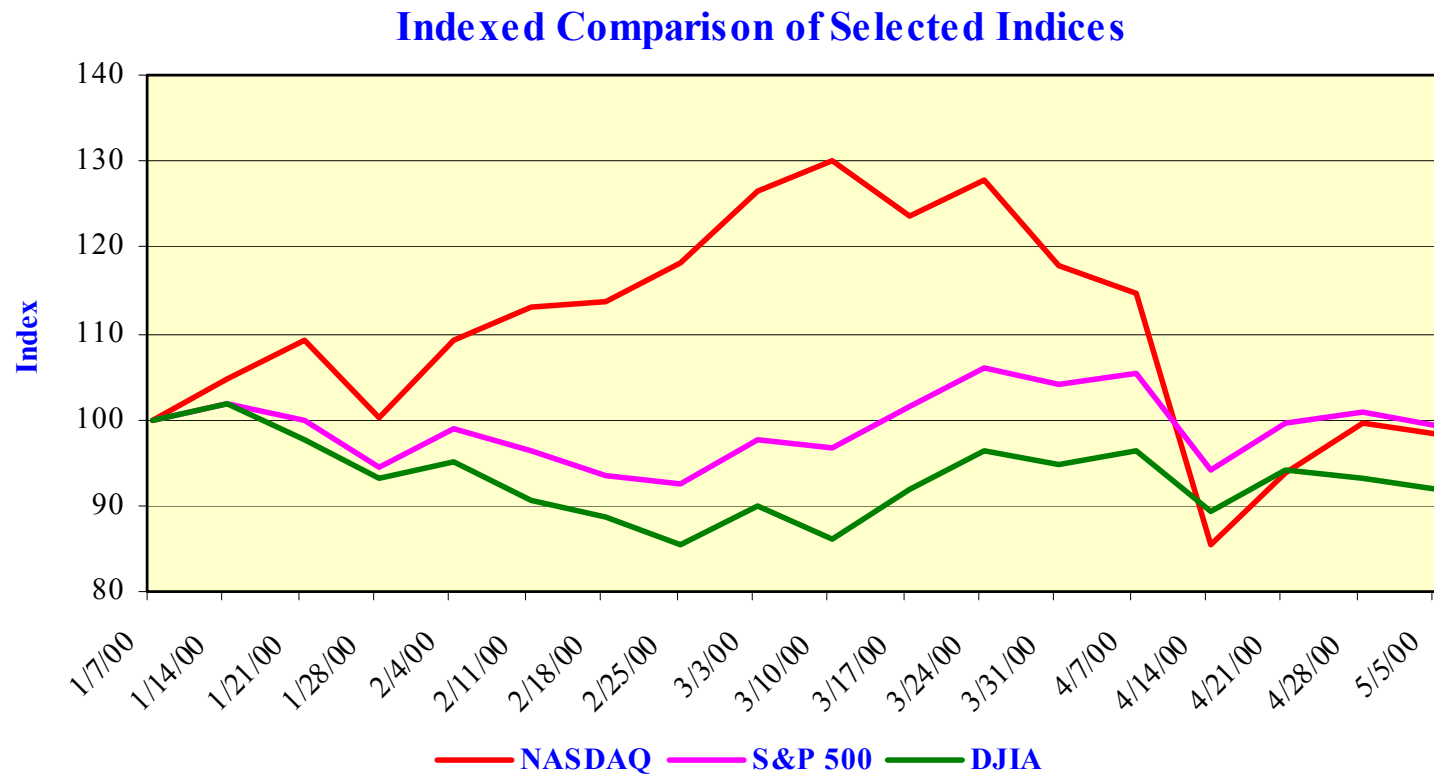
Source: Bloomberg

Note: * From 1999 Annual Report

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III. Effects of Market Volatility

- On April 14, 2000, the NASDAQ suffered its largest percentage drop (9.7%) in history. Other indices also dropped. Since then, the market has been highly volatile.

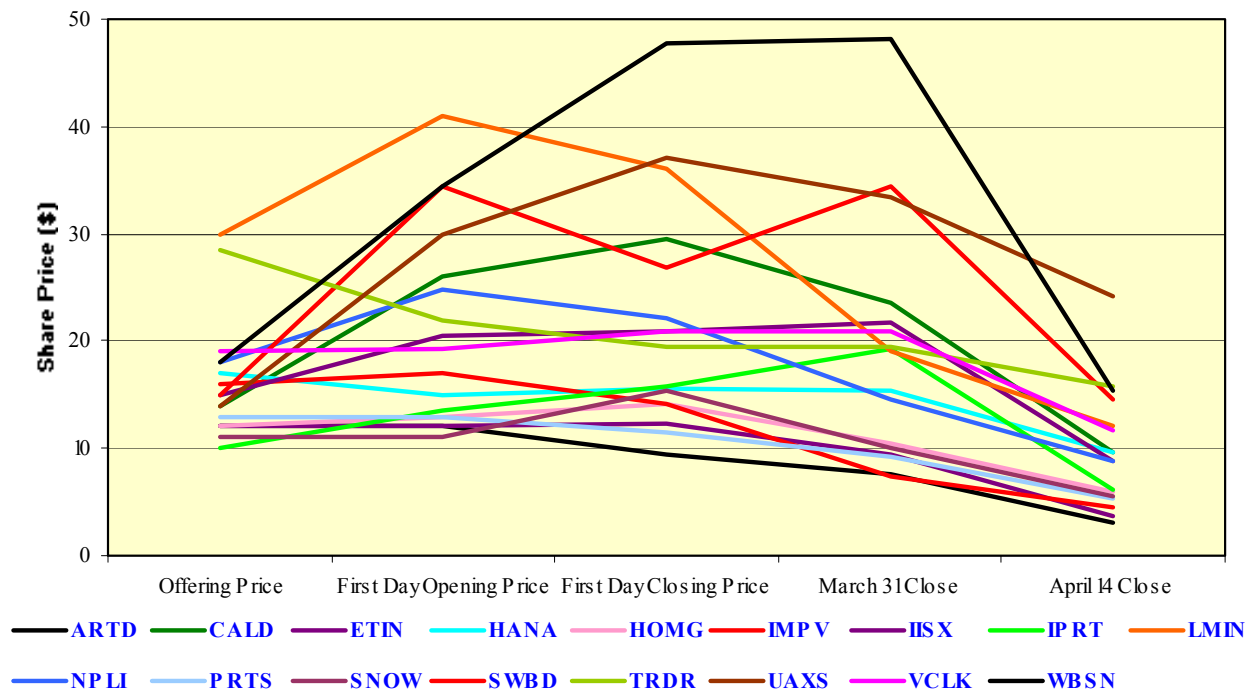


Source: Bloomberg

III. Effects of Market Volatility

- As of April 14, 2000, on average, the Internet service companies that went public in March had declined 56% from their IPO prices.

Price Analysis of March 2000 Internet Service IPOs

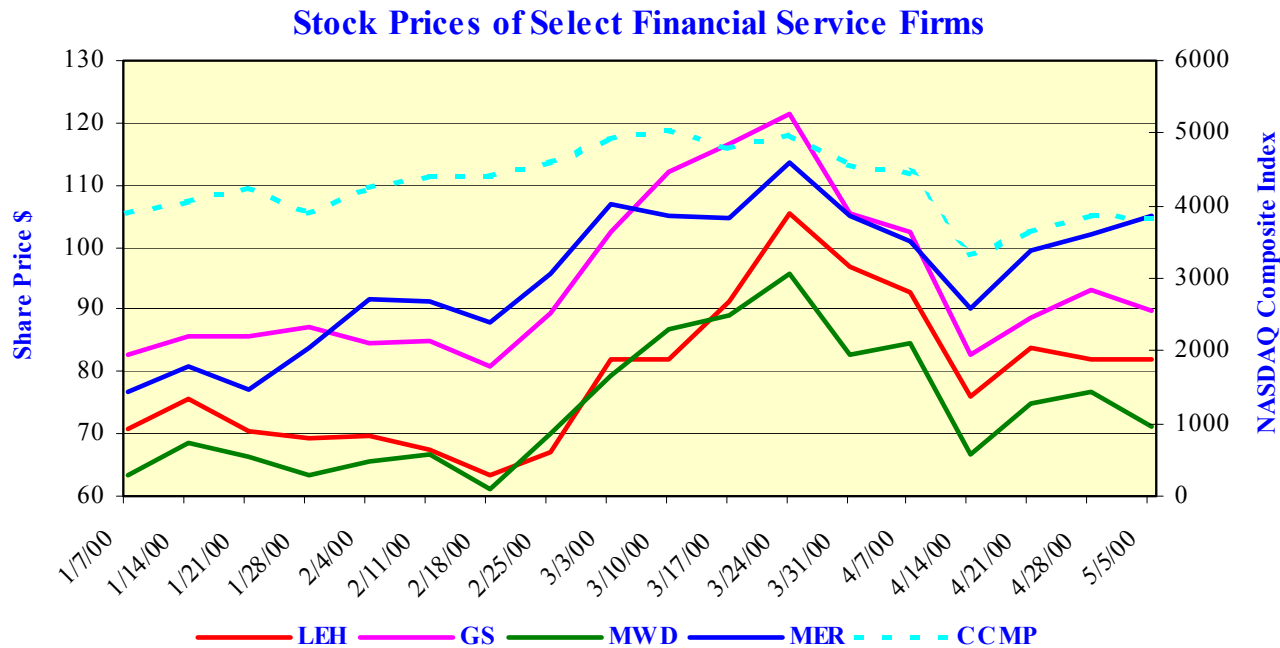


Source: IPO.com, Bloomberg

Note: ARTD: Artistdirect, CALD: Caldera Systems, ETIN: Etinum, HANA: Hanaro Telecom, HOMG: Homegrocer.com, IMPV: Improvenet, IISX: Integrated Information Systems, IPRT: Iprint.com, LMIN: Lastminute.com, NPLI: Netpliance, PRTS: Partsbase.com, SNOW: Snowball.com, SWBD: Switchboard, TRDR: Trader.com, UAXS: Universal Access, VCLK: Valueclick, WBSN: Websense

III. Effects of Market Volatility

- On April 14, 2000, when the NASDAQ dropped 9.7%, Lehman Brothers' stock price dropped 20%, while Goldman Sachs fell 14%, Morgan Stanley slid 13% and Merrill Lynch lost 11% of its value.
- The outlook for IPOs directly affects the P/E's of major investment banking stocks.

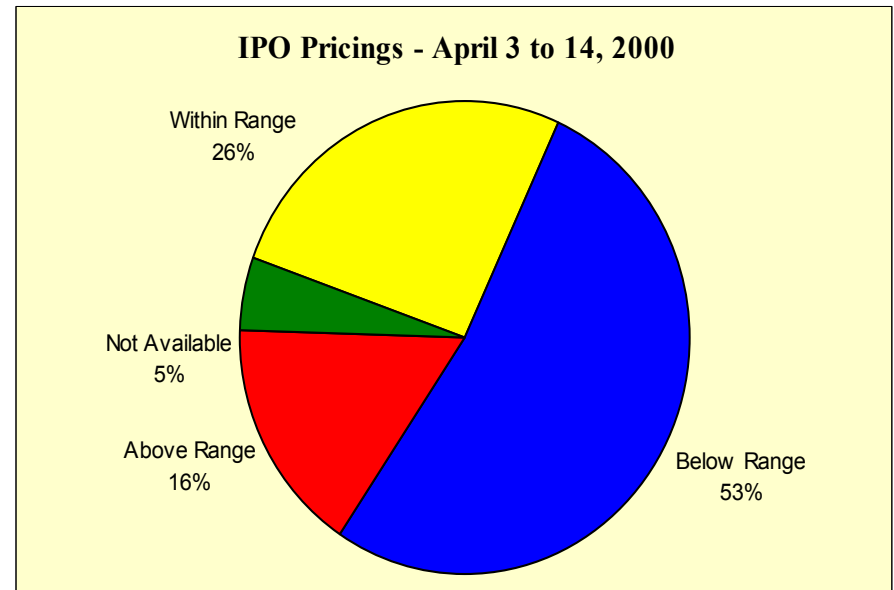
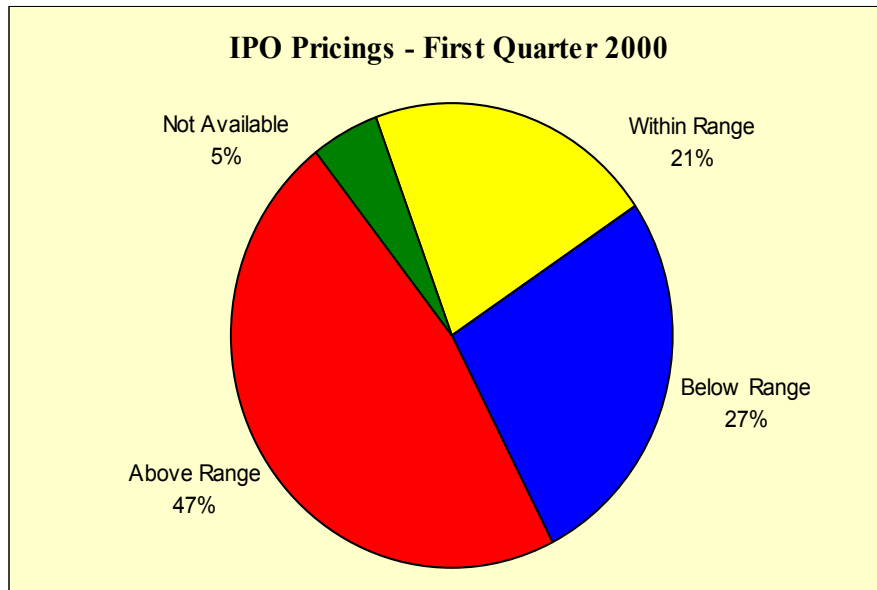


Source: Bloomberg

Note: GS: Goldman Sachs, LEH: Lehman Brothers, MER: Merrill Lynch, MWD: Morgan Stanley Dean Witter, CCMP: NASDAQ

III. Effects of Market Volatility

- During this period of intense market volatility, the weakness in the market was clearly evident, as many IPOs traded below their initial pricing range.
- During the first quarter of the year, 27% of IPOs traded below their initial pricing ranges. However, in early April this rate increased to 53%.



Source: Thomson Financial Securities Data

Note: Range refers to offer price as it relates to the most recent amended price range in SEC filing

III. Effects of Market Volatility

- Quotes by several market players indicate that the IPO market may be slowing down:

“The forward calendar is evaporating. Expect further deterioration in the secondary and primary market for new issues. All but the largest and most liquid issuers should avoid the current market environment”

Ernesto Cruz, Credit Suisse First Boston, Head of ECM, April 18, 2000

“I think if it [market woes] continues, the whole underwriting calendar will diminish, if not stop, depending on how nasty things get.”

Joseph Missett, CIBC World Markets, Head of ECM, April 17, 2000

“The IPO market’s dead, venture capital gains are suspect and even trading volumes are being questioned.”

Charles Peabody, Mitchell Securities, April 17, 2000

III. Effects of Market Volatility

- The slowdown has resulted in the postponement or cancellation of many IPOs.

Leaders in Pulled Deals - Jan 1 to May 3, 2000⁽¹⁾

Underwriter	Proceeds (\$ MM)	Mkt. Share	No. of Issues
Credit Suisse First Boston	1,764.3	22.4	18
Merrill Lynch	714.7	9.1	5
Salomon Smith Barney	553.9	7.1	5
Deutsche Banc Alex. Brown	403.3	5.1	4
Lehman Brothers	375.9	4.8	6
Chase Manhattan	284.3	3.6	5
US Bancorp	281.9	3.6	3
Societe Generale	260.8	3.3	5
Fleet Boston	165.1	2.1	4
Prudential Securities	154.5	2.0	3

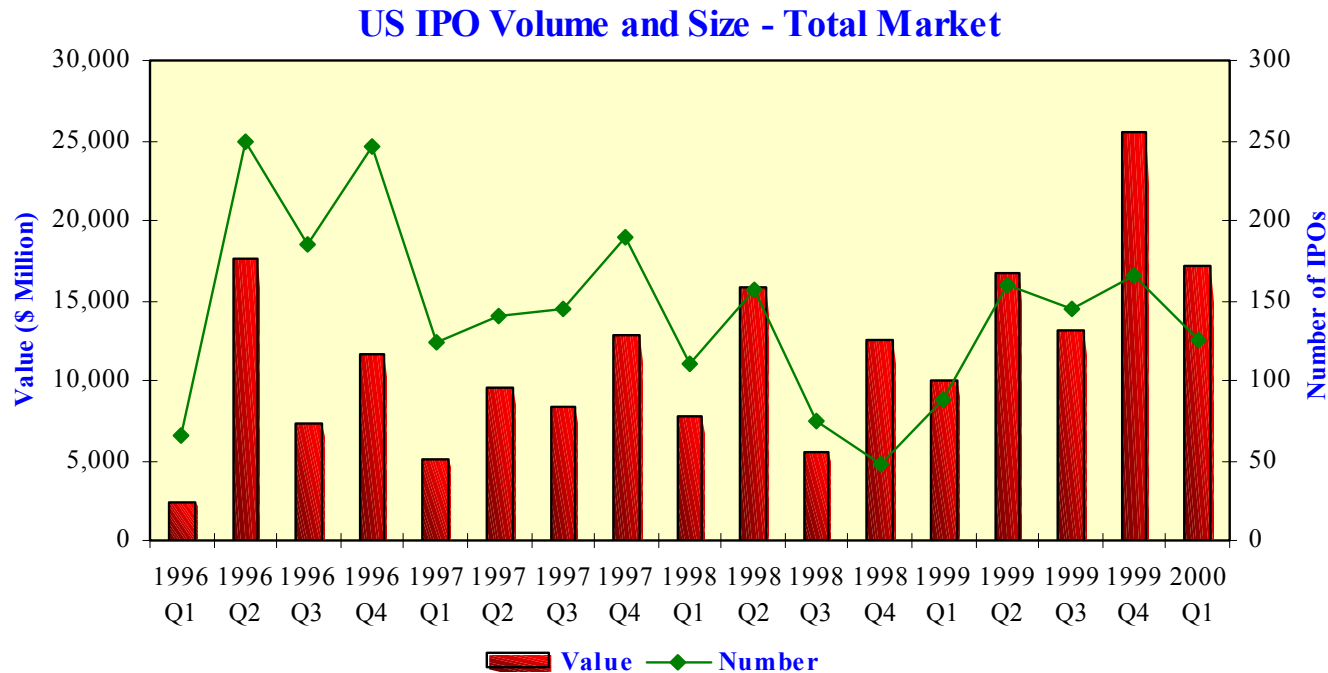
Source: Thomson Financial Securities Data

⁽¹⁾ Postponed and withdrawn equity issues, full credit to book runner (equal if joint book runner)

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IV. IPO Market Analysis

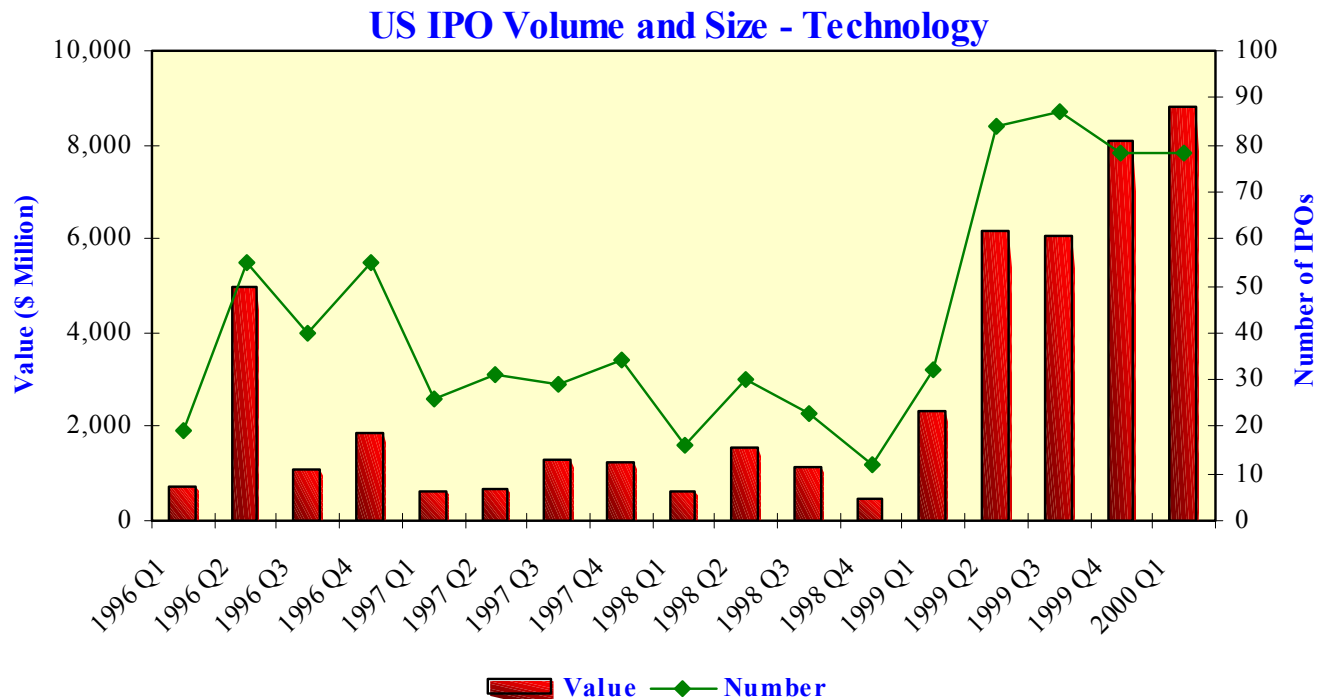
- A study of the IPO market from 1996 to date shows several market slowdowns. Yet, after each slowdown, the market rebounded.
- The duration of the slowdown will determine its overall impact on profitability.



Source: Thomson Financial Securities Data

IV. IPO Market Analysis

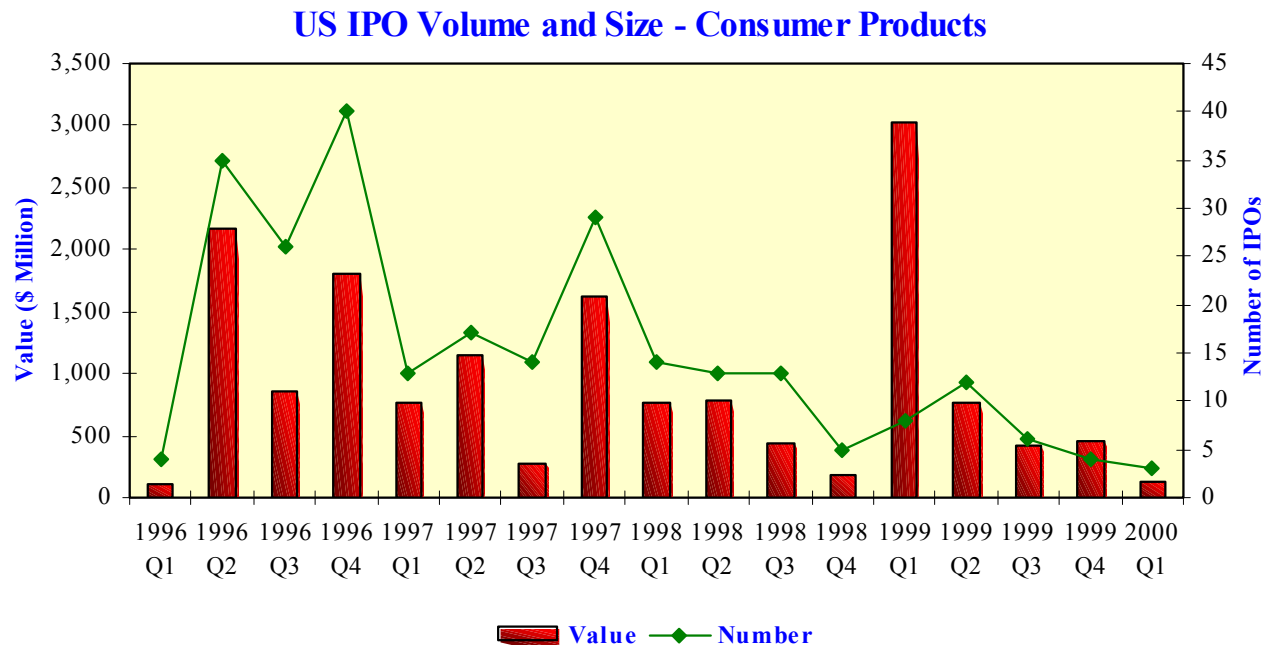
- A similar analysis of the Technology sector reveals that the IPO market was slow for a considerable period in 1997 and 1998.
- From 1998 to 1999, Technology IPO revenues increased almost five-fold. The number of deals tripled during the same period.



Source: Thomson Financial Securities Data

IV. IPO Market Analysis

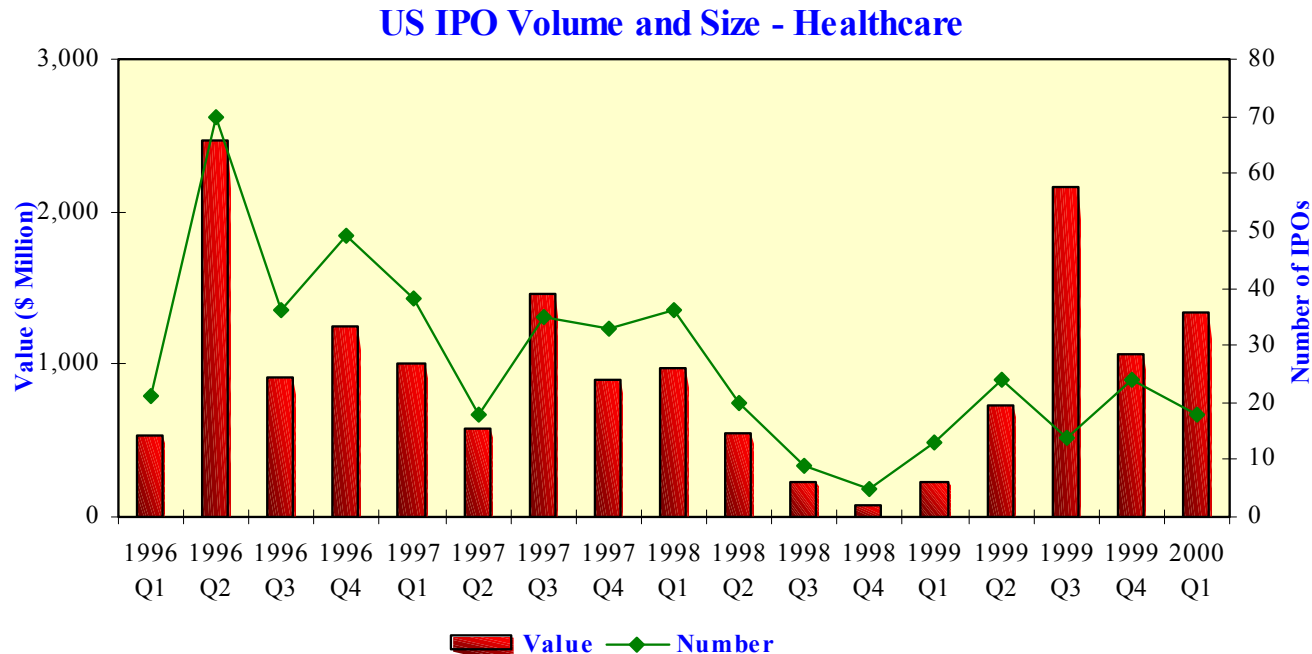
- Other sectors, including Consumer Products, have also shown IPO cyclicality.
- This sector is fairly counter-cyclical to the Technology sector, but has generally displayed a downward trend (except for the 1Q 1999 Pepsi Bottling Group spin-off of \$2.3 billion).



Source: Thomson Financial Securities Data

IV. IPO Market Analysis

- Similarly, the Healthcare sector has also displayed IPO cyclicalities.
- The Healthcare services sub-sector, which drove IPO business in 1996-97, slowed considerably in 1998.



Source: Thomson Financial Securities Data

IV. IPO Market Analysis

- The current decline in IPO offerings could have a cascading effect on the revenues and stock prices of the leading investment banks.
- This dependence on new issue revenues has made many of the investment banks vulnerable to stock market volatility.

“If there is a general shelving of IPOs, and it lasts for a quarter of two, which is typically how long it does, then the (financial) stocks will be very subdued for a while”

Guy Moszkowski, analyst at Salomon Smith Barney, April 14, 2000

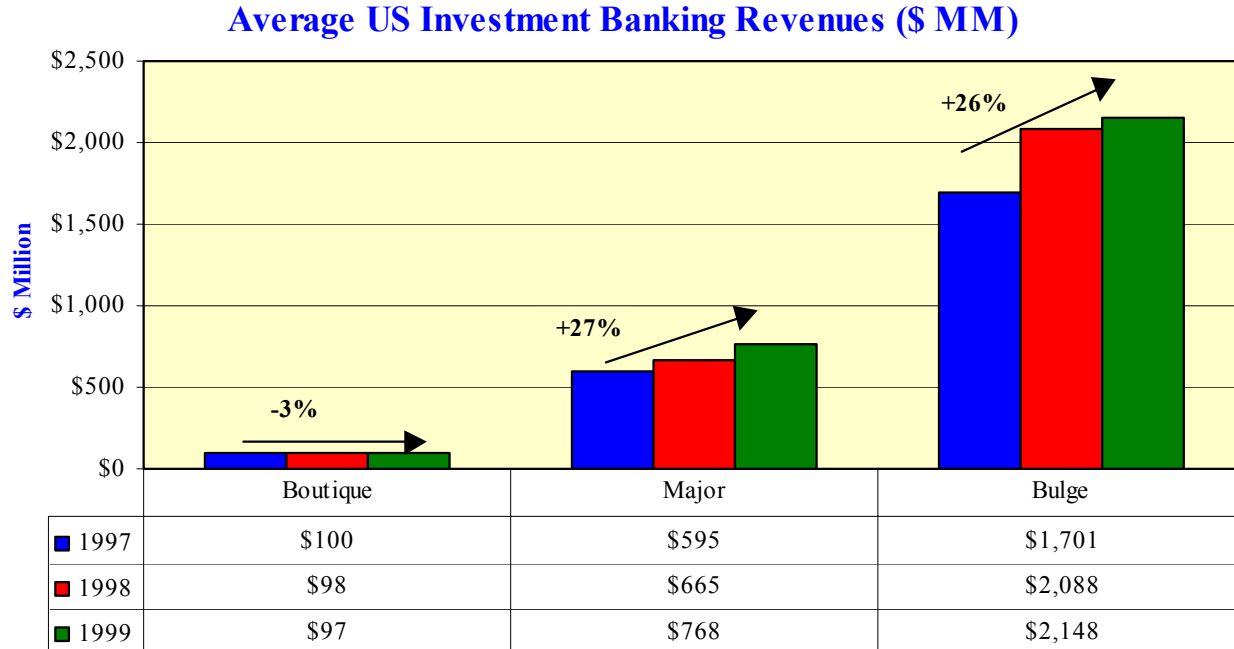
“Evidence is mounting that equity underwriting are beginning to be deferred and/or cut... Persistent weak markets would raise the specter of reduced trading volume... Concern that operating leverage may turn negative especially given that competition for talent has been leading to increasingly lucrative compensation guarantees.”

Judah S. Kraushaar, analyst at Merrill Lynch, April 17, 2000

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V. Implications for Investment Banks

- From 1997 to 1999, overall investment banking revenues increased.
- The firms with the largest revenue increase during the bull market were the bulge and major bracket firms.

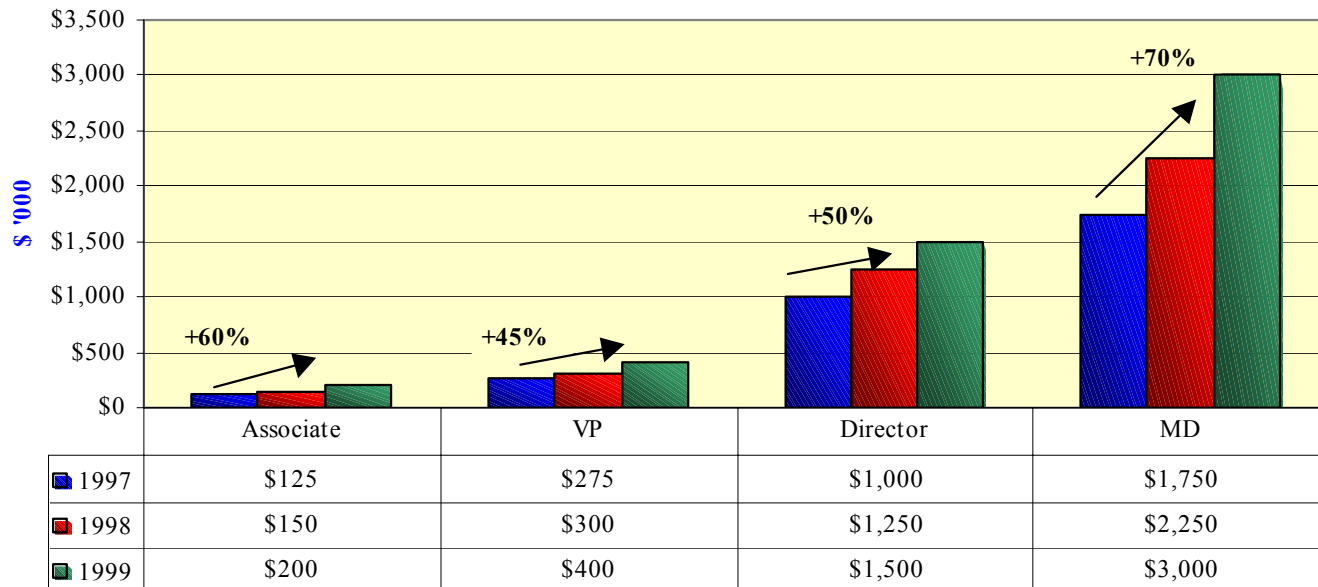


Source: Thomson Financial Securities Data, Freeman & Co. estimates

V. Implications for Investment Banks

- During the same period, the costs of investment banking departments grew at a much faster rate than revenues.
- Compensation has been the biggest source of cost increases.

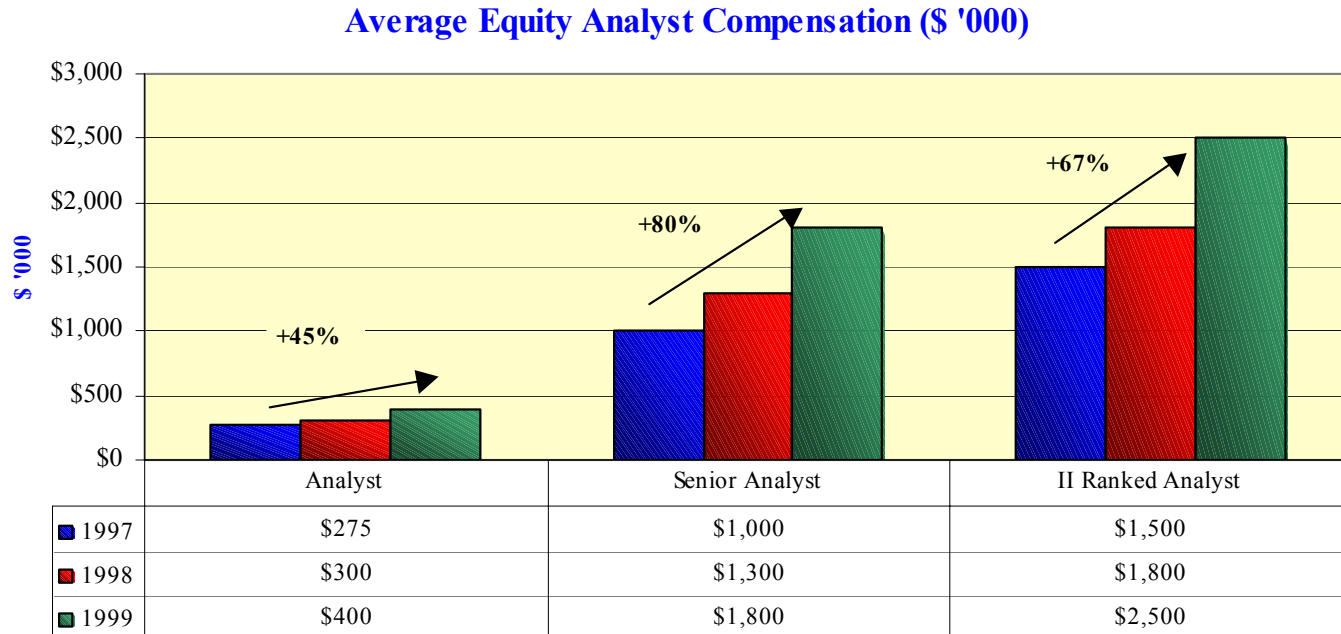
Average Investment Banker Compensation (\$ '000)



Source: Executive Search firms, Freeman & Co. estimates

V. Implications for Investment Banks

- Research department costs and compensation grew at a similar pace to investment banking costs.
- As research analysts have become key relationship builders, research salaries are now almost on par with investment banking compensation.



Source: Executive Search firms, Freeman & Co. estimates

V. Implications for Investment Banks

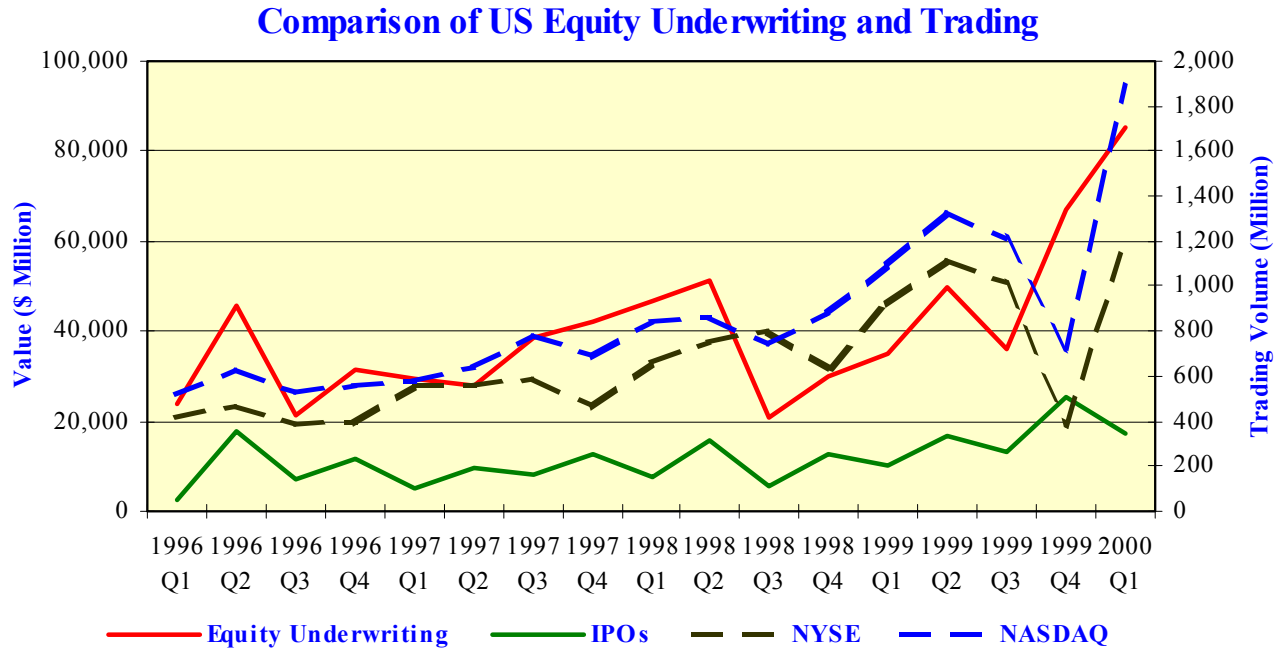
- To retain and attract star performers, many investment banks have offered large guaranteed two or three year compensation packages.
- In an attempt to stem the flow of analysts and associates to dot-com companies, many firms now offer larger bonus pools, guaranteed salaries and investment rights in venture capital funds.
- For example, Donaldson Lufkin & Jenrette is offering its first-year associates packages that could reach \$1 million over two years. Goldman Sachs has awarded two million shares to 8,000 junior employees.

“According to some estimates, investment banks may find their payrolls about 30% too high if the market goes to a slowdown similar to that at the end of 1998...the greatest risk from fixed bonuses in a downturn is to staff moral.”

Source: Financial Times, May 9, 2000

V. Implications for Investment Banks

- Every slowdown in IPO and secondary revenues has historically been accompanied by a subsequent decline in trading volume.
- A simultaneous decline in both underwriting and trading revenues could seriously affect the profit margins of investment banks.



Source: Bloomberg, Thomson Financial Securities Data

V. Implications for Investment Banks

- The chart below highlights the potential fee loss caused by various declines in “new economy” IPOs.

\$ Million	Estimated Loss in IPO Revenues			
	1999 Proceeds	-10%	-20%	-30%
Media	\$6,658	5,992	5,327	4,661
Internet	\$22,579	20,321	18,063	15,805
Technology	\$9,566	8,610	7,653	6,696
Telecom	\$17,258	15,532	13,806	12,081
Total Proceeds	\$56,061	\$50,455	\$3,598	\$3,149
Est. Fees (7%)	\$3,924	\$3,532	51,406	44,981
Est. Drop in Fees		-\$392	\$900	\$1,349

Source: IPO.com, Inc.

V. Implications for Investment Banks

- Overall, Wall Street analysts predict that big brokerage firms could face earnings declines of as much as 20% as compared to Q1, 2000 earnings.

“Clearly we are hitting a cyclical slowdown. Fixed income related businesses will drop 30% or more from last quarter and stock underwriting will slip 25%. Wall Street firms shouldn’t expect to be bailed out by revenues generated by M&A, which will remain flat with last quarter.”

Source: Richard Strauss, analyst at Goldman Sachs, May 10, 2000

“Both equity and fixed income underwriting are much weaker. The fact is that the recent cut in estimates (5 to 15% for Q2, 2000 for Bear Stearns, Lehman Brothers and Goldman Sachs) that we have been compelled to make are surprising modest.”

Source: Guy Moszkowski, analyst at Salomon Smith Barney, May 11, 2000

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VI. Conclusion

- The IPO “window” has historically opened and closed, with different sectors rotating in and out of favor.
- The Technology boom is significant in its overall magnitude. The most likely scenario might be that Technology IPOs could drop to their 1997-1998 levels for a few quarters, and then return to a level below their 1999 peak.
- The duration of the Technology IPO drought will determine its profit impact. Overall investment banking and trading revenues are likely to drop in 2000, despite the excellent first quarter.
- The slowdown in equity underwriting is exacerbated by the lukewarm reception of two recent mega-deals: the AT&T wireless tracking stock and the Met Life IPO.
- The high yield new issue market has been moribund this year, but its weak performance was masked by the blow-out performance of equities and M&A.

VI. Conclusion

- Some out-of-favor sectors, such as Energy and Consumer Products, could pick up some of the slack, but they are small in size by comparison.
- This situation will be manageable, unless there is a concurrent and significant drop in several other fee generating areas such as M&A, high grade and/or syndicated loans.
- Technology M&A is likely to pick up as IPOs decline and weaker companies need to sell as an exit strategy.
- Profit margins for investment banks, especially the smaller players, are likely to get squeezed, due to the high fixed investment banking and research costs.