

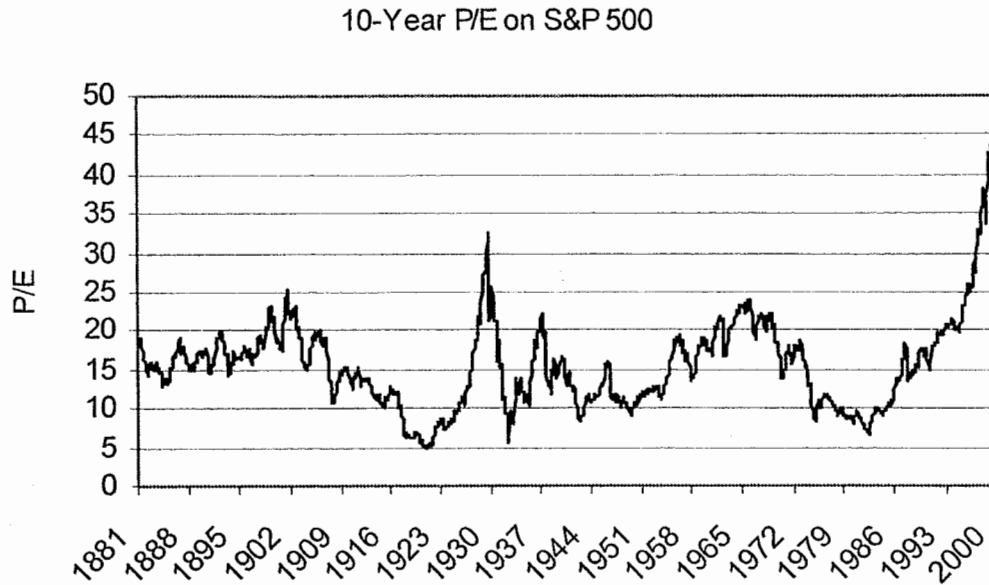
Table 6.2: Famous Bubbles

Bubble	Initial Displacement	Smart-Money Response	Sustaining the Bubble	Authoritative Blessing	Crash	Political Reaction
Dutch Tulipmania (1630s)	Mosaic viruses produce interesting looking tulips; prosperity of Holland	Selective breeding of tulips; purchase by "insiders" of broken tulips that can only reproduce slowly and asexually	Development of tulip speculation contracts, which can be signed before notaries; appearance of trading	??	1637	??
South Sea Bubble (1710-1720)	Profits from conversion of government debt; supposed monopoly on trade with Spanish ruled parts of America	Insiders buy up debt in advance of the conversion scheme, then profit by presenting debt for full conversion	Development of coffee house network for speculation; new subscriptions	Government approval; royal involvement	1720	ex post facto punishing directors; restrictions on use of the corporate form
Mississippi Bubble (1717-1720)	Rapidly growing trade with the New World; Law's success as a financial organizer	Law plan to make money and acquire power by securitizing the French debt	Government support; large expansion of credit by Law's bank to support further purchases	Official government support. Duke of Orleans imprisons critics of Law—the president of the Parlement de Paris and others	1720	Fall of Law; end of efforts to reform French finances until 1787
British first railway boom (1845-6)	End of Depression; excitement over the new means of transportation	Many new railroad projects	Ponzi schemes by George Hudson (i.e. use this railroad's capital to pay the last railroads dividends)	Parliamentary bills passed for every railroad suggesting government approval; close links between George Hudson and London Society	No Crash gradual decline	Reform of accounting standards; requirement that dividends be paid only out of earnings, not out of capital.
U.S. 1873 railway boom and crash	End of the Civil War; settlement of the American west	Construction of government subsidized railroads	Additional railroad charters; expectation that subsidies would continue	Henry Varnum Poor and Charles Frances Adams	1873 - Bankruptcy of Jay Cooke & Co., beginning of mid 1870's depression	??
Argentine Loans (1880s)	Strong demand on world markets for the staple products of Argentinian agriculture; large profits made by early investors	Investment flows from Britain to Argentina; expansion of railway network; construction of social overhead capital	New issues on the London exchange; creation of joint-stock companies to speculate in Argentinian land	Foreign investors "grossly misled.... by Argentinian president" Barings' express optimism that the situation might improve (hoping to avoid bankruptcy)	Baring Bros. Bankruptcy November 1890	Coup d'etat in Argentina; laws discriminating against foreign investment

Bubble	Initial Displacement	Smart-Money Response	Sustaining the Bubble	Authoritative Blessing	Crash	Political Reaction
1920s Florida Land Boom	Great winter climate; closeness to centers of American population; prosperity of the 1920's	Building of railroads; development of Miami; land development projects;	Subdivisions; creation of a network of real estate offices selling Florida land.	William Jennings Bryan boosts Florida land; close connections between mayors and developers	1926	Fraud prosecutions
1920s U.S. Stock Market Boom	Decade of fast growth in the 1920s; end of fears of post WWI deflation; rapid expansion of mass production	Expansion of supply of shares; creation of new closed-end funds	Regional exchanges; growth of margin accounts and brokers' loans	Blessings from Coolidge, Hoover, Mellon and Irving Fisher	October 1929 and following	Glass-Steagall Act; creation of SEC; public utility holding company act; election of FDR
1920s U.S. utility stocks boom	Expansion of demand for power; economies of scale	High leverage; expansion of scale to capture economies	Creation of public utility holding companies with cascades of control	??	October 1929 and following	Breakup of large utilities, TVA a byproduct; substantial government regulation of utility industries
1960s Conglomerate mergers in the US	Two decades of a rising stock market during which investing in growth stocks had been profitable	Emergence of professional conglomerates; Harold Geneen's ITT, Textron, Teledyne, etc.	Stock swaps to create apparent earnings growth	Harvard endowment takes large positions in National Student Marketing; McGeorge Bundy urges institutions to invest aggressively	1970-1971	Reform of accounting practices; Williams Act

Did we have a bubble in the market in 1998-1999?

-Valuations have been extraordinary

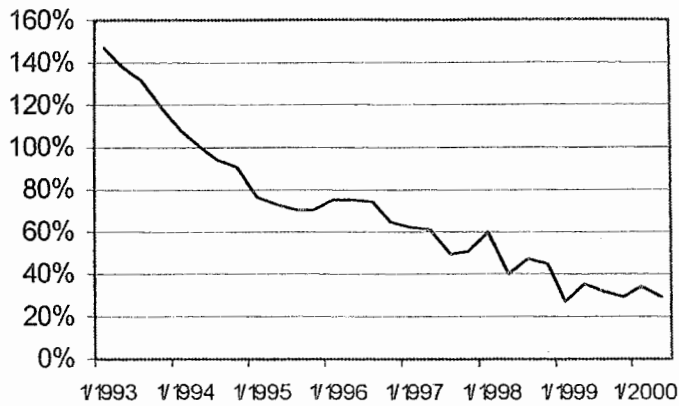


- Even by recent standards

Average P/Es Over Different Periods

Period	Average 10-Year P/E	Average 1-year P/E
1891-Present	15.5	14.5
1946-Present	16.6	14.9
1970-Present	16.6	15.4
1980-Present	18.5	17.0
June 2000	43.9	32.2

CSCO's 3-Year Annualized Growth in EPS



Statistics for 20-year Growth of Real S&P 500 Earnings

1891-2000	
Compound Real Earnings Growth	1.4% ³⁴
Maximum Real 20-year Earnings Growth	7.5%
Minimum Real 20-year Earnings Growth	-6.6%
1946-2000	
Compound Real Earnings Growth	1.5%
Maximum Real 20-year Earnings Growth	6.8%
Minimum Real 20-year Earnings Growth	-1.3%