The Churn Among Firms

Recycling America's Corporate Elite

NOTHING LASTS FOREVER. The maxim is particularly apt when it comes to America's dynamic economy. Each day brings something new. Companies expand into new markets, and they downsize. They add new products and discontinue others. In three short years, an enterprise like Amazon.com can go from start-up to a market value of $17 billion—surpassing even that of century-old Sears.[1] Boeing buys McDonnell Douglas; Citicorp absorbs Travelers; Exxon merges with Mobil. These events are only a sampling of the way our economy continually shifts. Recent generations have witnessed mind-boggling transformations in the way we work, what we consume and how we do business. Change may be the only constant in our vibrant capitalist system.

A few years ago, the Federal Reserve Bank of Dallas' Annual Report focused on economic change. An essay titled "The Churn: The Paradox of Progress" examined the economic forces that continually roil labor markets.[2] Jobs are created and destroyed as new ideas, new products, new technologies, new markets and new forms of industrial organization upset the status quo. The essay emphasized that this relentless, unsettling mechanism—what economist Joseph Schumpeter called "creative destruction"[3]—isn't a curse on the capitalist system. To the contrary, it is the way to economic progress and higher living standards.

Economic forces don't agitate only labor markets, though. They also produce a corresponding "churn" among employers. Companies, just like jobs, are in a constant state of flux. Every day, new firms are born. Every day, some enterprises gain sales and profits while others lose them. Every day, companies merge, divest, downsize and go out of business. As with the churn of employment, this process is ultimately healthy for the economy.[4] It shifts resources to more productive uses, and it rewards companies for giving consumers better products, greater variety and lower prices.

The churn is most apparent among small enterprises, which are often launched with great energy and optimism but too little financing and experience. Some start-ups do make it, but small businesses fail at a high rate.[5] This sector of the economy would serve as a good illustration of the churn at work, but data on small private companies are sketchy. Larger, publicly held companies are only part of the economy, but regular reports on their activities produce a comprehensive and reliable picture of the shifting fortunes of American business.

A series of five snapshots of the corporate elite provides a long-term view of the churn among firms (*Table 1*). In the early years of this century, companies engaged in the production of metals, oil, meatpacking and basic machinery dominated the U.S. economy. They were, in their own ways, the technology leaders of their day. They introduced new products and new production methods and emerged as national suppliers to an early industrial economy.

Although General Electric, AT&T and the big oil companies have remained among the largest U.S. industrial concerns decade after decade, newcomers are always driving toward the top of the rankings. At the end of World War II, the producers of everyday products—for example, Coca-Cola and Kodak—made the top 20, evidence the nation had begun its move from mass production to mass consumption. In the past decade, such companies as Microsoft, Intel and Cisco Systems have jumped into the top echelon, testimony to the microchip's growing importance to the American economy. The rankings of Merck, Pfizer, Bristol-Myers Squibb and Eli Lilly reflect the advances in pharmaceuticals.

The churn is as relentless in the corporate sector as it is in the labor market. Of today's 100 largest public companies, only five are holdovers from the top 100 of 1917. Half the firms in the top 100 are newcomers over just the past two decades. Although flux is a constant for the economy, the evidence suggests that the pace has picked up. In the 60 years after 1917, it took an average of 30 years to replace half the companies in the top 100. Between 1977 and 1998, supplanting half the top 100 required an average of 12 years, nearly tripling the turnover rate.[6]

Market Capitalization Soars

Expanding the inquiry to cover *all* publicly held U.S. companies, ranked by change in market capitalization since 1990, provides a more detailed portrait of the economy's shifting ground. During the current eight-year expansion, the market value of the overwhelming majority of companies has increased. Indeed, the total market capitalization of U.S. companies has soared from $2.6 trillion to almost $10 trillion during the decade.[7] Beneath the surface, however, a lot of churning has occurred. To depict the changing fortunes of America's companies, we looked at the relative performance of market capitalization—firms moving up and down in the pecking order. When the market-value ranking of Cisco Systems, a major Internet supplier, jumped from 956 in 1990 to 15 in 1998, it reflected vast shifts in how consumers are spending their money. Oshkosh B'Gosh, a maker of children's clothing, dropped from 967 to 2,479, suggesting it didn't fare as well.

For the economy as a whole, it's been a dynamic time. Two entirely new

Table 1
America's Top 20

Rank	1917	1945	1967	1987	1998 (August)
1	U.S. Steel	AT&T	IBM	IBM	General Electric
2	AT&T	General Motors	AT&T	Exxon	Microsoft
3	Standard Oil of New Jersey	DuPont	Kodak	General Electric	Coca-Cola
4	Bethlehem Steel	Standard Oil of New Jersey	General Motors	AT&T	Exxon
5	Armour & Co.	General Electric	Standard Oil of New Jersey	General Motors	Merck
6	Swift & Co.	Union Carbide	Texaco	DuPont	Wal-Mart
7	International Harvester	Humble Oil & Refining	Sears, Roebuck	Ford	Pfizer
8	DuPont	Sears, Roebuck	General Electric	Merck	Intel
9	Midvale Steel & Ordnance	U.S. Steel	Polaroid	Amoco	IBM
10	U.S. Rubber	Texas Co.	Gulf Oil	Digital Equipment	Procter & Gamble
11	General Electric	Coca-Cola	DuPont	Philip Morris	Philip Morris
12	International Mercantile Marine	Standard Oil of Indiana	Xerox	Chevron	Bristol-Myers Squibb
13	American Smelting & Refining	Standard Oil of California	Minnesota Mining & Manufacturing	Sears, Roebuck	Lucent Technologies
14	Anaconda Copper Mining	Chrysler	Standard Oil of California	Mobil	Johnson & Johnson
15	Standard Oil of New York	Kodak	Mobil	BellSouth	Cisco Systems
16	Phelps Dodge	Gulf Oil	GTE	Kodak	AT&T
17	Singer	International Nickel	Avon	Standard Oil	American International Group
18	Jones & Laughlin Steel	Socony-Vacuum Oil	Hewlett-Packard	Hewlett-Packard	Berkshire Hathaway
19	Westinghouse Electric	Kennecott Copper	Procter & Gamble	Coca-Cola	Eli Lilly
20	American Tobacco	Pennsylvania Railroad	Standard Oil of Indiana	Wal-Mart	SBC Communications

NOTE: Rankings are based on market value.

SOURCES: *Forbes*, July 13, 1987 (1917, 1945, 1967, 1987); Standard & Poor's Compustat database (1998).

categories of companies have emerged in the 1990s—biological products and computer communications (Internet). In eight years, hundreds of new firms have entered the rankings and zoomed past such established companies as Tandy, Sunbeam and Pizza Inn. Falling in the rankings, however, doesn't necessarily mean failure. An overwhelming majority of companies increased their market value. For example, Sears, Roebuck and Co.'s value on financial markets nearly doubled from 1990 to 1998. Nevertheless, Sears' ranking in corporate America fell 66 places—from 87 to 153, proving that even well-run, profitable enterprises have found it difficult to stay up with the streaking Microsofts and Intels.

The gainers during 1990–98 were technology, finance and health care. Consumer products, both perishables and durables, maintained their large chunk of the economic pie. The share of market capitalization slipped in recent years for utilities, energy and basic materials. Some highlights from the data:[8]

- Companies on the upswing include Disney and Time Warner, a reflection of the rise of information and entertainment. Holding its place among the corporate elite was McDonald's, the quintessential expression of America's taste for fast food. Starbucks, the ubiquitous purveyor of coffee, came out of nowhere to rank among the 500 largest U.S. companies.
- The number of pharmaceutical companies increased by 103 between 1990 and 1998—going from 65 to 168. Every pharmaceutical company in business for the entire period moved up in the rankings, marching ahead on new treatments for AIDs, impotence and other conditions. Genentech, a firm working on DNA products, leaped over 303 enterprises in market value.
- Prepackaged software has been one of the economy's high fliers. The number of publicly traded companies rose from just 58 in 1990 to 328 by 1998. Microsoft shot straight to the top ranks of corporate America. Oracle, Computer Associates, BMC Software, Compuware, PeopleSoft and other software manufacturers also improved their positions among public companies.
- Led by industry giants Intel and Texas Instruments, producers of semiconductors and related devices increased their value relative to the market. Others in this group include Micron Technology, Maxim Integrated Products, Linear Technology and Altera Corp.
- Results have been mixed among telecommunications businesses. Some of the biggest names slipped—AT&T, BellSouth, GTE Corp. and US West, for example. The expanding long-distance market allowed Sprint, MCI and WorldCom to improve their positions even before the latter two companies merged.
- In financial services, the biggest banks tended to get bigger and move up in the rankings, a fact that shouldn't surprise after a decade of highly publicized mergers. Wachovia, Sun Trust and First Chicago resisted the urge to merge and lost ground. There were 182 new savings institutions—most of them small, regional operations.
- For security brokers and dealers, the great bull market of the 1990s has paid off handsomely. Morgan Stanley, Paine Webber and Merrill Lynch leapfrogged over hundreds of companies. Charles Schwab, leader of a new breed

TABLE 2
THEY COME AND THEY GO

Selected shrinking industries	Number of establishments 1970	1996
Fur goods	980	133
Barber shops	24,577	4,499
Asbestos products	133	30
Drive-in theaters	1,567	408
Leather and leather products	3,430	1,938
General merchandise stores	25,032	14,797
Glass containers	128	78
Brooms and brushes	449	278
Trailer parks and campsites	6,419	3,984
Bowling centers	9,215	5,735
Concrete block and brick	1,332	901
Manufactured ice	800	578
Variety stores	14,439	10,848
Radio and television repair	7,953	6,212
Labor organizations	20,376	19,536
Selected expanding industries		
Videotape rental	0	20,816
Computer and data processing services (1975)	6,517	88,911
Carpet and upholstery cleaning	816	8,879
Prepackaged software (1975)	1,522	9,084
Vocational schools	1,188	6,816
Movie production and services	2,922	14,680
Semiconductors and related devices	291	1,052
Amusement parks	362	1,174
Chocolate and cocoa products (1975)	51	165
Car washes	4,624	13,334
Political organizations	928	2,579
Office and computing equipment	923	2,112
Eating and drinking places	233,048	466,386
Colleges and universities	1,855	3,663
Florists	13,865	26,728
Tour operators (1988)	2,464	4,725
Dental offices	63,817	113,054
Internal combustion engines	162	277
Passenger car rental	2,556	4,231
Pharmaceuticals	1,041	1,637
Aircraft	163	255
Plastic bottles (1988)	280	437
Aircraft engines and parts	247	355
Physical fitness facilities (1990)	7,723	10,720
Hotels and motels	34,674	45,252
Travel agencies (1988)	22,609	28,735
Space vehicle equipment (1975)	39	45
Beauty shops	70,967	81,872

NOTE: Establishments are classified based on their major activity.

SOURCE: U.S. Bureau of the Census *County Business Patterns*, various years.

of discount brokers, showed the most striking gain, moving up 733 notches to 311th place.

- Some specialty retailers did well. Staples and Office Depot jumped up sharply. So did Ross clothing outlets, the Gap and Abercrombie & Fitch. Among grocery stores, Safeway, Kroger, Fred Meyer and Publix moved up.[9] The success of Amazon.com and other Internet retailers was just part of a boom that resulted in the creation of 55 new, publicly held catalog and mail-order houses. Wal-Mart held its own, but other variety stores slid, with Kmart down 239 places and Venture Stores falling 8,025 spots. Department stores are losing favor: only one of 12 existing chains gained ground.
- Air transportation was a mixed bag. Stock prices reflected the success of low-cost airlines. Continental surged more than 1,100 places; Southwest and US Airways rose, too. Traditional carriers slipped in the rankings, with UAL Corp., parent of United Airlines, falling 265 places.
- Many old-line restaurant chains lost their luster. Of the 54 public companies operating eating places from 1990 to 1998, 52 fell in the rankings. Luby's, Shoney's, Spaghetti Warehouse and Sizzler all declined at least 1,682 spots.[10] Eighty-six new restaurant companies emerged in the 1990s, evidence that Americans are dining out more often. Jumping into the corporate rankings at relatively high spots were the companies behind Planet Hollywood, Papa John's Pizza and Outback Steakhouse.
- As the economy moved toward technology and services, basic industries continued their relative declines. The tally of companies falling in the corporate rankings: 88 of 91 crude oil and natural gas producers, 10 of 12 agricultural companies, all 10 woven-fabric mills, 11 of 12 women's clothing stores, 44 of 46 electric utilities and all shoe manufacturers except athletic footwear kingpins Nike and Reebok.

The Establishment View

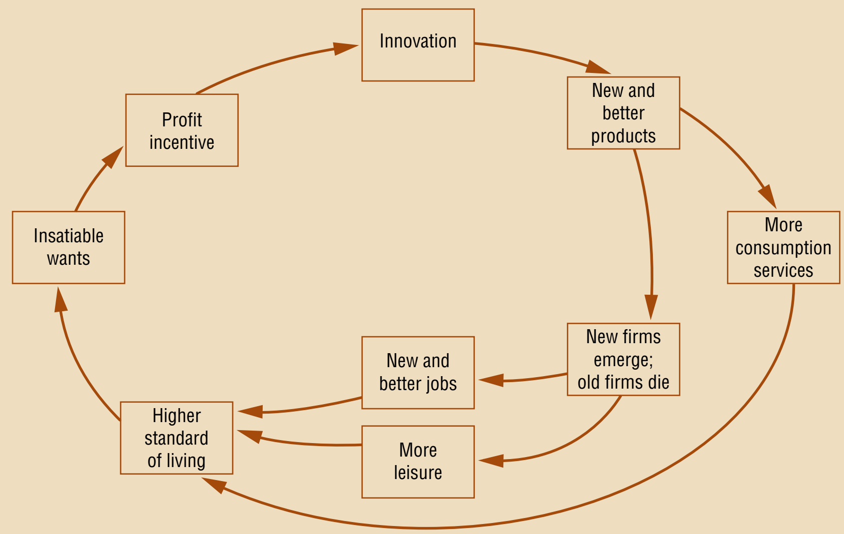
Market value isn't the only measure of corporate America's ups and downs. While market value anticipates future profits—and thus future sales—the same patterns are often already apparent in companies' current sales.[11] An entirely separate view of the churn, however, comes from looking at the total number of establishments (publicly and privately held) in each industry (*Table 2*). Fur goods showed the largest decline from 1990 to 1996, most likely a reflection of changing tastes and animal rights campaigns. Once health concerns became paramount, asbestos producers went into decline. Movie buffs aren't going to drive-ins anymore. Among the other businesses experiencing declines are barber shops, broom and brush manufacturing, bowling alleys, manufactured ice, and radio and television repair.

Consumers' preferences and new technologies lie behind the biggest winners. Videotape rentals have boomed as the VCR has become a fixture in American households. New technology also lies behind the boom in prepackaged software, semiconductors and computing equipment. As Americans have gotten wealthier, they've spent a greater part of their disposable income on entertainment and services. So the country has more movie production, more amusement parks, more eating and drinking establishments and more travel-related businesses. It has more carpet cleaners and car washes. The demands of health-conscious Americans have also given rise to nearly 3,000 new physical fitness facilities in just the past six years.

Appreciating the Churn

The churn among firms illustrates that a free enterprise system never stands still. Constant, sometimes unsettling change is an indispensable part of what could be called the Great American Growth Machine. At its core are consumers and their endless list of needs, wants, conveniences, amusements and luxuries. Unlimited wants clash with the fundamental fact of limited resources—a.k.a. scarcity. We can't have everything we want, but we can satisfy more of our desires if we conserve and stretch our resources. For employers and workers, it means boosting productivity, the driving force for higher wages. For consumers, it means shop-

CHART 1
HOW PROGRESS HAPPENS



ping for the best value. The system works because of competition: companies vie for customers, making more money if they're able to cut costs while offering consumers a better deal (*Chart 1*).

With many competitors, there's a constant drive to find new ways to meet consumers' needs—that is, to innovate. Companies offer lower prices, better performance, new features, catchier styling, faster service, more convenient locations, higher status, aggressive marketing or attractive packaging. Innovation comes in constant waves: inventions of new goods and services, improvements to existing products and increases in the efficiency of the factory, farm and office. The interplay of innovation and competition roils the status quo. New firms and industries emerge to take the market from existing ones. Surviving firms reorganize production using more, newer and better tools, making workers more productive. Consumers' tastes and expectations evolve. Companies that can no longer deliver what consumers want at ever-cheaper prices don't survive.

As with the churn of jobs, there's no mistaking where the change in America's corporate pecking order is taking us—to a postindustrial economy that provides what Americans want. We may lament the tragedies of the churn's downside, but we shouldn't lose sight of its very powerful and important upside: it makes us better off.

What's really going on is a healthy recycling of resources. In other words, it's conservation, not carnage.

—W. Michael Cox
Richard Alm

Notes

[1] On December 22, 1998, Sears, Roebuck and Co.'s market capitalization was $15.8 billion, compared with $17 billion for Amazon.com.

[2] Federal Reserve Bank of Dallas, 1992 Annual Report.

[3] Schumpeter (1950, p. 83).

[4] Although typically scorned, hostile takeovers, too, are a vital part of the economy's health-revitalization process. Corporate raiders and liquidators, in essence, act like an autoimmune system for the economy—surrounding, terminating and removing bad management practices that plague company profitability, thereby restoring the overall economy to health.

[5] In 1997, 83,384 businesses failed in the United States, most of them small enterprises. Over the past quarter century, the failure rate doubled—from 44 per 10,000 concerns in 1970 to 88 in 1997—again, indicative of a faster churn.

[6] Further discussion of downsizing and economic churn can be found in Cox and Alm (1999, Chapter 6).

[7] With the exception of Amazon.com and Sears, all market values in this article are calculated as of August 1998. All rankings (including those of Sears and Amazon.com) are also as of August.

[8] Again, the analysis involves publicly traded companies only.

[9] Kroger and Fred Meyer announced a $13 billion merger in October 1998.

[10] In September 1998, Consolidated Restaurant Cos. announced it would buy Spaghetti Warehouse in a $60 million deal. Once the transaction is completed, Spaghetti Warehouse will disappear from the corporate rankings.

[11] Because tomorrow is more uncertain than today, rankings based on market value are generally more volatile than those based on sales; but market value data more clearly reveal coming shifts in employment and sales.

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The Churn According to Schumpeter

"Most new firms are founded with an idea and for a definite purpose. The life goes out of them when that idea or purpose has been fulfilled or has become obsolete or even if, without having become obsolete, it has ceased to be new. That is the fundamental reason why firms do not exist forever. Many of them are, of course, failures from the start. Like human beings, firms are constantly being born that cannot live. Others may meet what is akin, in the case of men, to death from accident or illness. Still others die a 'natural' death, as men die of old age. And the 'natural' cause, in the case of firms, is precisely their inability to keep up the pace in innovating which they themselves had been instrumental in setting in the time of their vigor." Schumpeter (1939, pp. 94–95)

"Individual innovations imply, by virtue of their nature, a 'big' step and a 'big' change. A railroad through new country, i.e., *country not yet served by railroads, as soon as it gets into working order upsets all conditions of location, all cost calculations, all production functions within its radius of influence; and hardly any 'ways of doing things' which have been optimal before remain so afterward."* Schumpeter (1939, p. 101)

"The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation—if I may use that biological term—that incessantly revolutionizes the economic structure from within, *incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and every capitalistic concern has got to live in."* Schumpeter (1950, p. 83)