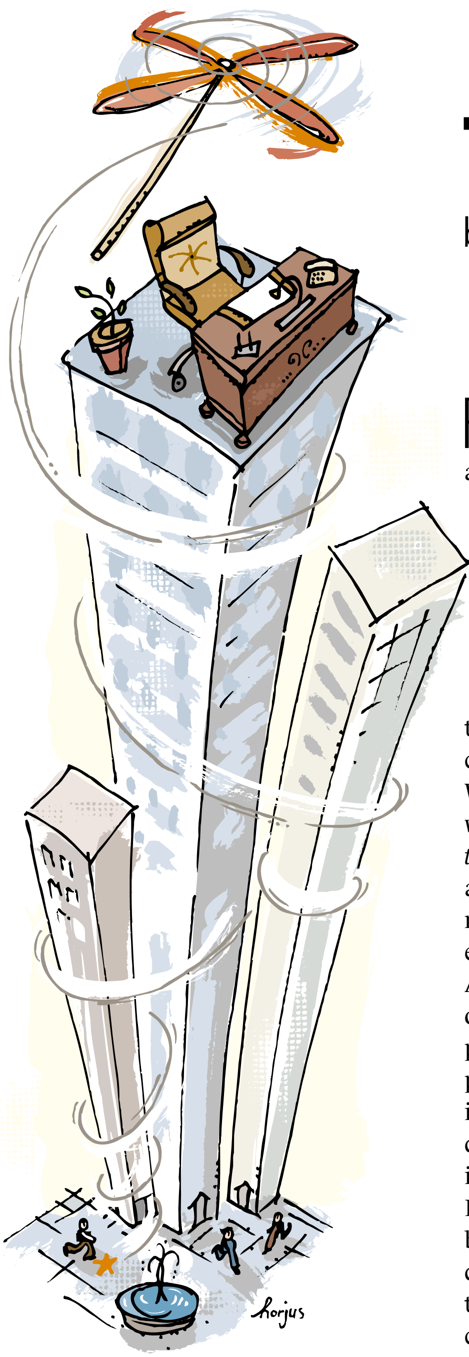
The route to the executive suite and the attributes of the individuals who get there have changed over the past 20 years, even in the largest and most stable companies.

The New Road to the Top

by Peter Cappelli and Monika Hamori



PETER HORJUS

From the 1950s through the 1970s, American executives looked a lot alike. They tended to be model organization men (indeed, they were virtually all male) who stuck faithfully with the companies that first hired them, and they climbed methodically up the corporate ladder until, at last, they retired.

The dominant notion during this time was that a business career ran its course *inside* a corporation. William H. Whyte, the *Fortune* magazine editor whose 1956 classic book *The Organization Man* made the phrase famous, asked what was seen at the time as a novel question: Why would executives ever leave their firms? He cited a Booz Allen study showing that executives only left their first employers if the companies could not deliver on their implicit promise of upward mobility. Then in the 1960s and 1970s, the intricate details of real careers were mapped out in a series of studies such as Rosabeth Moss Kanter's famous account of inbreeding at the pseudonymous "Indisco" corporation. There were hints throughout the 1970s that things were changing. But for the most part, the question of whether executive careers had altered in any significant way would not be rigorously examined for more than a decade.

Our research puts executive careers under the microscope once again. In a study comparing *Fortune* 100 executives in 1980 with their counterparts in 2001, we have quantified a transformation that until now has been largely anecdotal. While executives in 1980 looked pretty much like those in previous decades, a dramatic shift in careers, and in executives themselves, began in the years after 1980. Today's top managers of *Fortune* 100 companies are fundamentally different: They are younger, more of them are female, and fewer were educated at elite institutions. They're also making it to the top faster. They're taking fewer jobs along the way, and they increasingly move from one company to another as their careers unfold.

In this article, we'll describe our study and highlight its key findings. And we'll examine what the transformed environment means for executives who are mapping out careers in this newly charted territory.

How Has the *Fortune* 100 Changed?

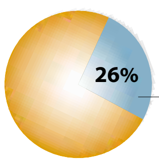
Before we present our findings on how executives and their career tracks changed between 1980 and 2001, it's important that we explore how the *Fortune* 100 itself transformed. Changes in the size, age, and management structure of the companies, as well as the list's industry concentration, contributed to the evolution of executive careers.

Although the *Fortune* 100 comprises the most stable corporations in the world, there has been considerable churn in the list. Only 26% of the companies on it in 1980 were there in 2001. (See the exhibit "Turnover at the Top.")

The changes in the *Fortune* 100's makeup dramatically highlight the continuing shift in the United States toward a service economy. The decline of the manufacturing sectors on the list (from 17% to 1% of the total) and the rise of financial services (from zero to nearly 17%) are especially striking. (See the exhibit "A Shifting Industry Mix.")

Despite turmoil in the economy over the past two decades, the *Fortune* 100 companies in 2001 were significantly older, on average, than the firms on the list in 1980. Their sales revenues were also much higher–the companies' combined sales rose fourfold in a period when U.S. prices rose 115%. Despite this expansion, average employment in these companies grew by only 34%.

Turnover at the Top



Fortune 100 Companies in 2001

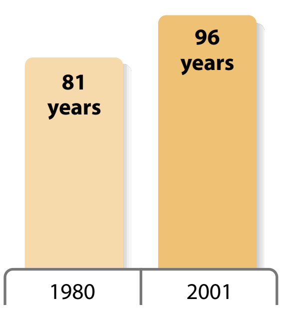
Only 26% of companies in the 2001 *Fortune* 100 were also in the 1980 list.

Boeing
Caterpillar
Chevron
Coca-Cola
Conoco
Dow Chemical
DuPont
Exxon Mobil
Ford
General Electric
General Mills
General Motors
Georgia-Pacific
Honeywell
IBM
International Paper
Johnson & Johnson
Lockheed Martin
Marathon Oil
PepsiCo
Philip Morris
Phillips Petroleum
Procter & Gamble
Texaco *(became ChevronTexaco in 2001)*
Union Pacific
United Technologies

Compared with *Fortune* 100 companies in 1980, those in 2001…

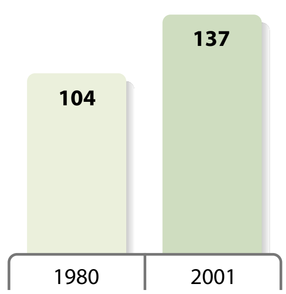
were older

Average company age



and had more employees.

Average workforce size (thousands)



A Shifting Industry Mix

Percentage of *Fortune* 100 executives in each industry

Industry	1980	2001
Aerospace	7.4	4.2
Agriculture	1.1	–
Automotive	6.9	2.4
Business services	.6	.9
Chemicals	6.0	3.2
Communications	3.4	9.1
Computers	2.6	8.9
Construction	.6	–
Consumer products	–	.9
Electric utilities	5.7	5.4
Energy	20.4	12.8
Entertainment	–	.3
Financial services	–	16.6
Food	12.0	4.7
Health care	.7	5.3
Insurance	–	5.9
Manufacturing	17.3	1.1
Paper	4.5	2.1
Photography	1.0	–
Retail	2.6	14.4
Steel	5.4	.7
Transportation	1.7	.9
Wholesale trade	–	1.0

How Have *Fortune* 100 Executives Changed?

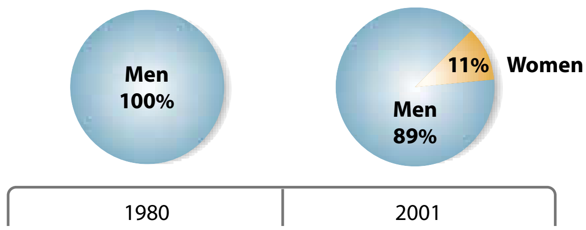
With a clear picture of how the characteristics of the *Fortune* 100 have changed, we turn now to the attributes and career experiences of executives holding top positions. We examined age, gender, promotions, years of education, nature and number of educational institutions, tenure within companies, and the time it took executives to achieve their positions. Like the *Fortune* 100 itself, *Fortune* 100 executives have undergone a transformation in the last two decades.

While women filled just 11% of executive positions in 2001, that's a substantial improvement; in 1980, the figure was zero. The women who joined the *Fortune* 100 executive ranks differed from their male counterparts. They were significantly younger; they were less likely to have been lifetime employees; they spent less time, on average, in each of their jobs; and they got to the executive ranks much faster.

The average *Fortune* 100 top executive in 2001 was more than four years younger than the top executive in 1980 and slightly more educated, at least as measured by years in school. (The higher level of education corresponds to an increase in education for the general population during this period.) The nature of their education changed more dramatically: In 1980, undergraduate degrees from Ivy League and other elite schools were relatively common, while degrees from public institutions were relatively rare; by 2001, the importance of an elite education had clearly fallen, and companies had opened their doors to publicly schooled candidates.

Peter Cappelli *(cappelli@wharton.upenn.edu) is the George W. Taylor Professor of Management and the director of the Center for Human Resources at the University of Pennsylvania's Wharton School of Business in Philadelphia.* ***Monika Hamori*** *(Monica.Hamori@ie.edu) is an assistant professor of human resources management at Instituto de Empresa in Madrid, Spain.*

Women Join the Ranks of Top Execs



Younger, Faster, and More Mobile

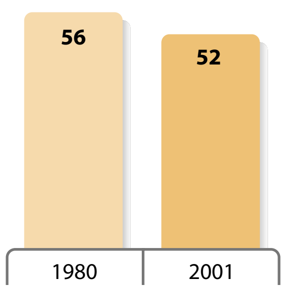
Female and male *Fortune* 100 executives in 2001

	Women	Men
Average age	47	52
Began career at current company	32%	47%
Average time in each job	3.4 years	4.0 years
Average time from first job to current position	21 years	25 years

Compared with *Fortune* 100 executives in 1980, those in 2001…

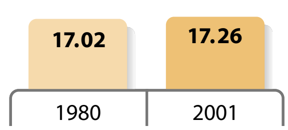
were younger,

Average age

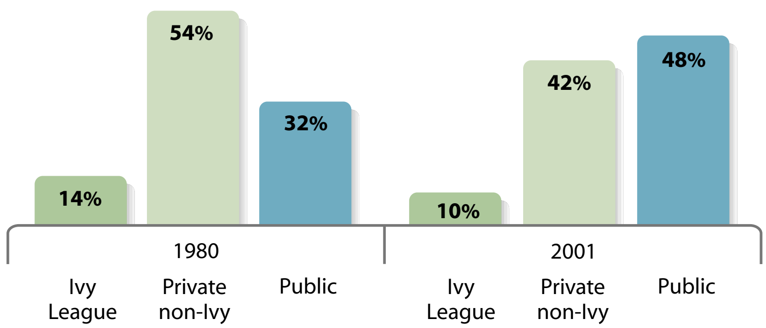


more educated,

Average years of education



and less likely to have attended elite undergraduate institutions.



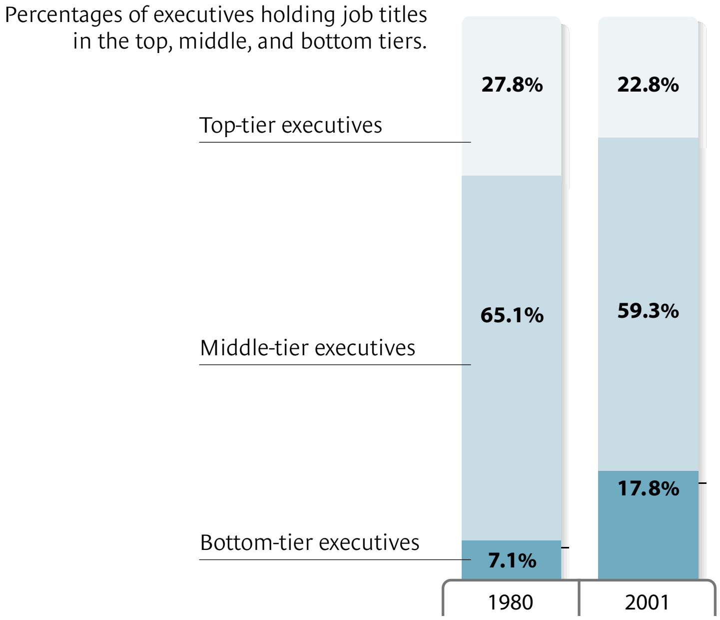
How Have the Experiences of *Fortune* 100 Executives Changed?

Executives are moving up faster than they once did. The journey from first job to executive suite is shorter – by four years, on average – than it was a generation ago, and it involves fewer stops along the way. Though executives stay on each rung nearly as long as they used to, today's career ladder seems to have fewer rungs, and they're spaced farther apart. That is, the average promotion entails a greater leap in responsibility. This trend is consistent with the widespread perception that corporate hierarchies are flattening.

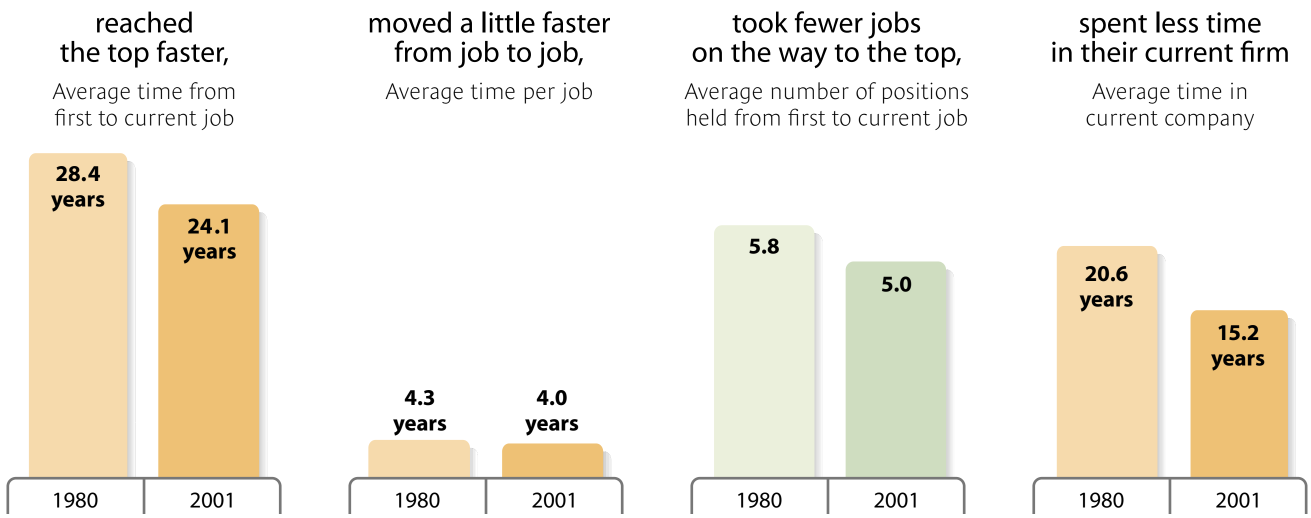
We also found that executives aren't staying put the way they once did. There was an eight-point decline between 1980 and 2001 in the percentage of top executives who spent their entire careers at the same companies. A related statistic, average tenure for these executives in their companies, dropped by more than five years (median tenure, which is less sensitive to extreme values, dropped even more, by 7.5 years).

Finally, we measured a considerable change in the distribution of executives by job responsibility between 1980 and 2001. Not all companies have exactly the same hierarchy of titles, but most have three tiers – CEO and chair level, EVP level, and VP level. Thus, it's more revealing to look at changes in the percentages of individuals in each tier than at changes in titles. We found that the percentages in the top and middle tiers declined, while the percentage in the lower tier expanded substantially, again supporting the perception that corporate hierarchies have become flatter.

Corporate Hierarchies are Flattening



Compared with executives in 1980, executives in 2001…



What Are the Career Implications?

Some of the most important lessons from our study and related work by other researchers derive from the finding that different types of firms offer different prospects for advancement. It's clear, for instance, that there are huge advantages to working in a growing firm. Executives are much more likely to be promoted in firms with healthy growth rates than in stagnating companies. (See the sidebar "Speed to Top Depends on Industry.") Further evidence from the data suggests that, other things being equal, younger firms offer faster advancement, perhaps because of their tendency to have flatter hierarchies.

The firms that have been big for a long time – those in the *Fortune* 100 in 1980 and again in 2001 – seem to handle career advancement and development differently from others. General Electric, Procter & Gamble, and the like provide extensive training and development opportunities. They also offer relatively long promotion ladders – hence the common notion that these "academy companies" are great to have been *from.* They are faster moving and leaner than they were in 1980, but they still offer greater stability and predictability than other large corporations and so are very attractive for some people, not only as a place to begin a career but as a place to complete one. Younger companies and restructuring firms may offer great opportunities for rapid advancement, but those opportunities come with uncertainty – you could be in line for a top job and see your career derailed by a reorganization.

The irony is that while the academy companies remain the gold standard for career management, fewer and fewer corporations appear to be following that model. We wonder whether academy companies are simply the last to change or whether in 20 years, the *Fortune* 100 will still include companies that make extensive investments in their managers and executives.

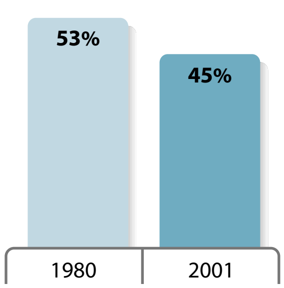
Inside Strategies

Another set of lessons concerns what happens to executives inside companies. Prior research suggested that through the 1970s, marketing was the preferred track into the executive suite, but the results here suggest that finance now offers by far the best path (it offered the best path in 1980, too, but consulting and – surprisingly – human resources were closer behind). The finance track will remain the dominant path to the C suite as long as the investor community wields a powerful influence on corporations.

Career research also offers insights about when it's best to move on. An individual's advancement may slow for reasons beyond his or her control, such as problems with immediate supervisors and changes in company strategies that reward different backgrounds. As the average age of executives in the highest jobs decreases, delays in promotions become more damaging to a manager's odds of getting to the top. An objective look at the company's prospects can help a manager decide whether to sit tight and hope the situation improves or move to a different company or division. Take a zero-based budgeting approach, as an investor would: If you were not already an employee, would you invest your human capital in this company, given its plans and current situation?

and were less likely to be "lifers."

Percentages of executives spending their entire careers in one company



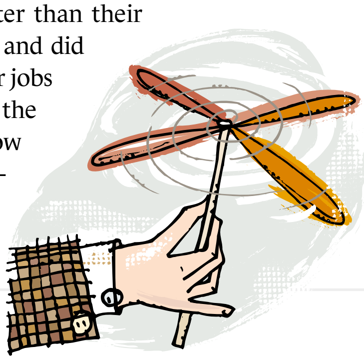
How the Study Was Done

We focused on *Fortune* 100 companies because they had the scale to manage internal employee development and career programs. These are the companies most likely to be able to retain the traditional model of organizational careers, so it's likely that the changes we measured would be greater in smaller corporations. We chose the baseline year 1980 because it immediately preceded the watershed recession of 1981. We wanted to see whether the early 1980s represents a major transition point in executive careers, as conventional wisdom holds. We used 2001 for comparison because when we began the project (in 2003), 2001 offered the most recent reliable data.

We examined each company's top ten executives – the ones who truly directed its strategic decisions. In the many cases where the tenth executive was one of several with the same title, we included all the people with that title. For more detail on our methodology and outcomes, please see www.nber.org/papers/w10507.

Another approach is to look around and ask, "Have I been here longer than others in this job?" If the answer is yes, this may be a good time to move on. Research suggests that the odds of advancement fall as a person's tenure in a job grows. Individuals who advance to the top tend to be among the youngest in their cohorts–possibly because talent and ability get spotted early, possibly because of "halo" or reputation effects.

We think the most important finding in this study is that executives in 2001 got to the top faster than their 1980 counterparts and did so by holding fewer jobs along the way (see the earlier section "How Have the Experiences of *Fortune* 100 Executives Changed?"). But it may not necessarily follow that working for a company with few levels is the way to move up quickly. Anecdotal evidence suggests that such firms tend not to promote from within because they believe there's too great a gap in required competencies from rung to rung. So they hire from outside. Therefore, it may be easiest to move toward the top by doing well in a small company–as CFO, say–then taking the same job in a larger one. Another important point is that holding a general manager job with profit-and-loss responsibility seems to be a prerequisite for the highest positions, perhaps because the ability to run a business is considered transferable; success in running a $10 million organization is a powerful recommendation for a job running a $100 million organization.



But the data are not clear on whether people should jump from company to company to get ahead. Our 2001 findings show that executives who stayed in the same corporations for their entire careers got to the top as quickly as their firm-hopping colleagues–a change from the situation a generation ago–but far fewer executives are spending their careers in one company. So perhaps only those who are advancing quickly choose to stay put.

Women in the Executive Suite

For female executives, the data are both discouraging and encouraging. While women were disproportionately scarce

Speed to Top Depends on Industry

Our current research, as well as previous work by others, suggests that companies in fast-growing industries offer better prospects for advancement. For example, the two industries offering executives the fastest paths to the top in 2001 were wholesale trade and financial services, industries that had no companies big enough to be in the *Fortune* 100 in 1980.

More important, however, are data showing that in both 1980 and 2001, executives reached the top more quickly in industries that were undergoing structural change. These industries were built on emerging or quickly changing technologies or required new competencies–and therefore needed a new generation of executives. Consider the steel industry, which in 1980 was one of the most stable. Executives advanced slowly, taking almost 31 years to rise to the top. Steel was certainly not a growth industry from 1980 to 2001. But it has been wracked by consolidations and restructurings that have created promotion opportunities for executives with different skills. By 2001, steel offered one of the fastest paths to the top–just over 23 years.

Mean Time to Top in Years, by Industry

In years, ranked from greatest decrease to greatest increase

Industry	1980	2001	Change
Steel	31	23.6	–7.4
Business services	32	25.5	–6.5
Electric utilities	28.5	23.7	–4.8
Communications	28.2	24.4	–3.8
Health care	27	23.2	–3.8
Food	28.7	25.2	–3.5
Energy	28.4	26	–2.4
Chemicals	28.6	26.6	–2.0
Aerospace	29.7	27.8	–1.9
Computers	25.8	25	–0.8
Retail	23.9	23.8	–0.1
Manufacturing	28.5	28.8	+0.3
Automotive	28.4	29	+0.6
Paper	26.1	28.4	+2.3
Industries that weren't on the Fortune *100 in 1980*			
Wholesale trade	–	21.6	–
Financial services	–	22.7	–
Insurance	–	23.6	–
Consumer products	–	26.3	–
Entertainment	–	29.8	–

among the most senior executives in 2001 – and scarcer still in CEO jobs – those who arrived got there faster and at a younger age than their male colleagues. We're not sure why these women, so few in number, progressed so quickly. Perhaps they faced more career hurdles and were therefore more qualified than their male counterparts by the time they reached the executive suite.

If women had been distributed throughout the corporate suite as men were, we would have expected the percentage of female executives holding any given position to have been the same as the percentage of male executives. But women in the highest positions – CEOs, board chairs, vice chairs, and presidents – constituted only 10% of all the executive women in our 2001 survey, whereas men in those positions represented 25% of the male executives. The six female CEOs in the *Fortune* 100 were just 5% of the women; male CEOs made up 13% of the men.

Although women were excluded from the most senior positions, they were not relegated to the bottom. They disproportionately outnumbered men in important midtier positions such as senior vice president and executive vice president, and they were disproportionately outnumbered by men in lower executive positions such as vice president and group vice president.

The prevalence of female executives was fairly even across the categories of company size and company age, but not across industries. Women made up 32% of the top executives in health care, 25% in consumer products, and 17% in financial services. There were virtually no women executives in machinery manufacturing, chemicals, entertainment, or wholesale trade (companies such as Costco). For certain industries, the disparity might be attributable to the numbers of women taking entry-level jobs 20 years ago – there were many female nurses, for example, and relatively few female chemical engineers. But there was no comparable disparity in entry-level jobs in the entertainment industry.

The huge gaps in the numbers of

Young Firm, Old Firm

We wondered whether the changes in company practices and executive attributes – reduced organizational tenure, faster promotions, lower executives age, and so on – represented new approaches to corporate operations that were more likely to be characteristics of newer firms.

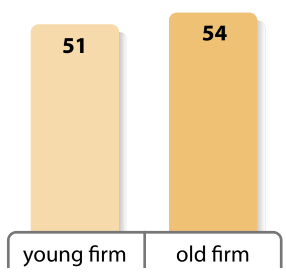
We compared younger firms in the 2001 *Fortune* 100 – that is, corporations that had been in existence 30 years and less – with older firms on the list. Younger companies do have younger executives, perhaps not surprisingly, but they don't have more women than the older corporations. And although we found slightly more public and fewer Ivy grads at younger firms, the education differences are not statistically significant. Executives in younger firms were far less likely to have begun their careers there, and their average organizational tenure was about half that for executives in older firms. Executives from younger companies also got to the top faster, apparently because they moved more frequently from company to company and because there were fewer steps in their promotion ladders. Although they spent about the same amount of time in each job as the executives in older firms, they held fewer positions before being promoted into the executive ranks.

These results reinforce the prevalent perception that the age of companies has an important influence on executive experiences and that the youngest firms – presumably the fastest growing – do the most recruiting of outside talent.

Compared with executives in older firms, those in younger firms…

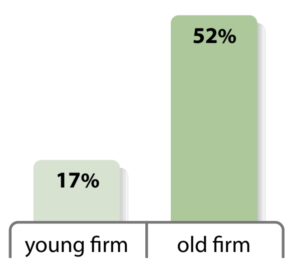
are younger,

Average age of executives in firms that have existed for 30 years and less and in older firms



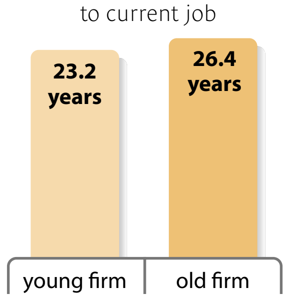
are less likely to be "lifers,"

Percentage of executives spending their entire careers in one company



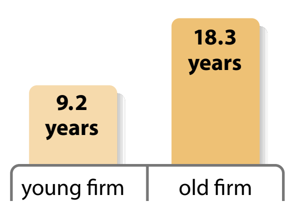
have reached the top faster,

Average time from first to current job



and have spent less time in their current firms.

Average time in current company



women executives in different industries suggest that systematic practices are at work, that some industries' cultures and practices advance women while other industries' do not. But before women reject certain industries as inhospitable, they should bear in mind that restructuring could rapidly change women's career prospects, just as restructuring in the steel industry opened opportunities for a new generation of executives with new skills. In considering job prospects, women would do better to evaluate an industry's overall stability rather than just its cultures and practices.

The Decline of the Elite

The top executives of powerful companies once shared the common bond of elite education. Increasingly, graduates of non-Ivy institutions have worked their way up the corporate ranks. Between 1980 and 2001, the percentage of *Fortune* 100 top executives with Ivy League undergraduate degrees fell by four points (nearly 30%), while the proportion from public schools increased by 16 points (50%). This change in educational background may reflect a difference in the characteristics of the entry-level hires in each period: Although the pool of four-year-college graduates from which these corporations typically hire did not shift toward public institutions over this period, a greater proportion of the companies' new hires may have come from public schools. The change in educational background may also reflect a change in the attributes of those who were promoted after being hired – Ivy League graduates may have had a much higher rate of promotion in the earlier period. It is impossible to tease out the answer from these data, but it is reasonable to conclude that the erosion in the importance of an elite alma mater and the shift toward public institutions were due to changes in corporate practices, not demographics.

The results for second degrees suggest an even greater change. There is something of an increase in the proportion of second degrees, principally MBAs and law degrees, among these executives by 2001, and the decline in the percentage that came from Ivy League institutions was much greater than for undergraduate degrees. It's unclear whether this means corporations were becoming less elitist and more open to students from all levels of society. A possible explanation is simply that the Ivy League produced a smaller fraction of graduates over time, especially in the exploding area of professional degrees.

Predictions for 2021

How will the top executives of 2021 compare with those of today? What factors will shape – indeed, are already shaping – their careers? Graduate training in business, especially the MBA degree, has in recent years become much more important for access to the best entry-level corporate jobs. It's a safe bet, therefore, that MBAs will be even more prominent in executive suites in the next generation. And the amount of job-hopping that young managers have already done suggests that by the time they enter the corporate suite, they will have worked in many more organizations than their predecessors. The organizational tenures of top corporate executives will certainly decline.

As corporations focus more intently on cutting costs and improving margins, expenditures associated with management development may be further trimmed. The most important development experiences (and the hardest to get) will increasingly be those that involve hands-on responsibility for profit and loss. Big corporations are likely to become even more cautious about who they give this responsibility to. A record of good P&L performance may become even more critical to getting hired and advancing in the largest companies. As a result, we may see a reversal of the usual flow of talent, which has been from the academy companies to smaller firms. In the future, it may be more and more common for aspiring executives to develop records of performance in small companies, or even as entrepreneurs, before seeking positions in large corporations. If that happens, corporate careers will have come full circle from the early days when firms like Du Pont and General Motors acquired new companies and placed the entrepreneurs who founded them, people like Alfred Sloan, into newly created executive roles.

Reprint R0501B

intentionally
blank for
full-page ad

page 9

To order, see page ~~xxx~~.