A Look At America's Corporate Finance Markets

"This article describes and analyzes the spectrum of finance markets available to U.S. corporations and… explains why some countries are now trying to emulate the U.S. structure."

How an economy channels finance from savers—typically individuals—to those with ideas about how to invest productively—the business sector—has always been recognized as important for economic growth. Some recent academic work has emphasized this point. Historians are now attributing a greater role to the development of corporate finance markets in spurring the emergence of the railroads and other heavy industries that were key engines of growth in the industrial revolution. And some recent empirical work suggests that the level of a country's financial development helps predict its future rate of economic growth.[1] Such work has reignited economists' interest in how firms get financed in both the United States and abroad.

This article describes and analyzes the spectrum of finance markets available to U.S. corporations and examines how firms as large as General Motors and as small as the tiniest start-up get financed, with particular attention to the recent dramatic expansion in finance markets for small and medium-sized firms. It explores some reasons for this dramatic expansion. It then examines why U.S. finance markets are structured as they are. Finally, it compares other countries with the United States in terms of how their firms obtain financing and explains why some countries are now trying to emulate the U.S. structure.

How Firms in the U.S. Get Financed Today

As shown in Chart 1, even after adjusting for inflation, corporate finance markets have grown extremely rapidly over the past 15 years. This expansion has largely been fueled by the rapid growth of nonbank financial institutions, such as pension funds, life insurance companies and mutual funds. In comparison, commercial banks have shown steady though less rapid growth, reflecting in part the regulatory constraints on their activities and the rise of competitors such as finance companies and money market mutual funds. Nonbank financial institutions are now the major suppliers of funds to corporations, and they have helped fashion for the United States the most diverse and rich set of corporate finance markets in the world.

Chart 1
The Growth of Corporate Finance Markets in the United States

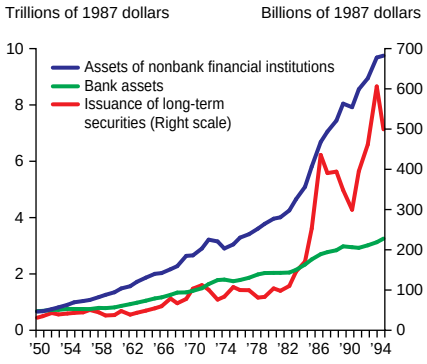
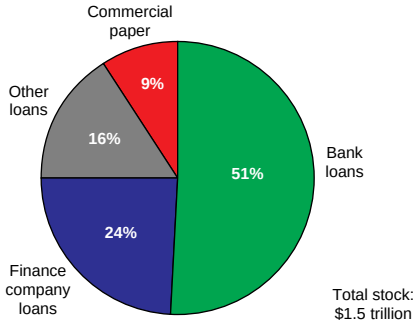


Chart 2
Short-Term Liabilities of Nonfinancial Business, 1994

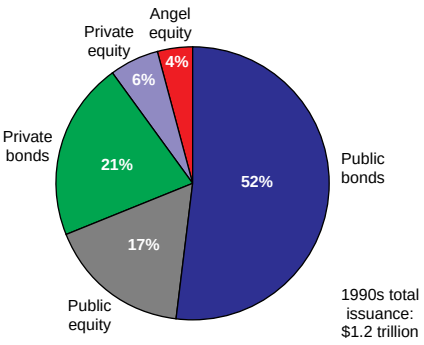


Firms use short-term finance markets for working capital purposes, such as financing inventories or receivables. As shown in Chart 2, in 1994 short-term business liabilities totaled $1.5 trillion, and they came from a number of sources, the most important being loans from banks. Banks are somewhat unique among financial institutions in that they are important lenders to firms of all sizes. Overall, banks supply over half of all short-term business finance. Finance companies are also important lenders to business, while other intermediaries also make business loans, such as savings institutions and mortgage companies. Issuing commercial paper is typically an option only for larger, more highly rated firms.

Long-term finance markets are used to finance capital expenditures that pay back returns over a long period of time. As shown in Chart 3, issuance of long-term securities so far in the 1990s totaled almost $1.2 trillion. Five markets have contributed to this financing. The most well-known are the public markets for bonds and equity. The public bond market is the largest source of long-term finance because it caters to the biggest firms that have the largest capital needs.

This article will focus on the three private markets—the private bond, private equity and angel equity

Chart 3
Issuance of Long-Term Securities
In the 1990s



markets—because they are the only realistic sources of long-term finance for small and middle-market companies and because they have grown extremely fast in recent years. Despite their importance, relatively little is known about how these markets operate.

The largest of these private markets is the private placement, or private bond, market. It offers long-term debt at fixed interest rates. Primary lenders are life insurance companies. Primary borrowers are middle-market companies with annual revenues between $100 million and $500 million that are generally not large enough to issue public bonds. Although this market receives little attention, it has grown rapidly over the past 15 years and is now quite large. Average annual issuance in recent years is almost five times greater than in the early 1980s, and in some recent years, issuance has actually exceeded that of public bonds, even though individual issue sizes are much smaller than those in the public market. In short, the private placement market is a major source of funds for middle-market firms.[2]

The private equity market consists of equity investments professionally managed by specialized intermediaries, mostly limited partnerships. These limited partnerships are funded by institutional investors such as pension funds, banks, endowments and insurance companies. Although this market is small compared with others, its growth since 1980 has been astronomic, almost 10 times faster than other long-term finance markets. I estimate that the private equity capital stock in 1994 was about $100 billion, almost 25 times larger than in 1980.[3]

One reason for this explosive growth since 1980 has been regulatory and tax changes that encouraged pension fund investment through limited partnerships (LPs). Partnerships have proved to be the most efficient vehicle for investing funds from institutional investors in firms seeking private equity. As shown on the left of Chart 4, most of the growth in the private equity market since 1980 has been through partnerships. Prior to 1980, private equity investments were undertaken mainly by wealthy families, industrial corporations or banks directly investing their own capital. This practice was inefficient because it required all individual investors to bear the costs of managing their own investments. The pooling of funds into one entity—the LP—that does all the management has proved to be a more efficient way of organizing private equity investments.

The right half of Chart 4 shows that in 1980 this market was focused almost exclusively on traditional venture capital targets—small firms, often in high-tech lines of business that have a chance of growing into highly successful large firms. Today, the market has a much wider range of activity, including nonventure investments such as expansion capital for middle-market firms, turnaround capital for firms in financial distress and buyout investments.

Finally, there is the market for angel capital. Angel capital refers to equity investments in small firms by wealthy individuals, often with entrepreneurial backgrounds. Unlike the private equity market, this is a very localized, informal market. Angel capital is targeted at start-up or infant stage firms that cannot attract venture capital because they don't have exciting enough growth prospects. Although it's hard to estimate the size of this market, it is very important for small firms, not least because it's often the only realistic source of capital available to such firms. The most conservative estimates suggest that angels invest about $10 billion in more than 30,000 small firms each year. This market has also likely grown very fast in recent years, in part because the number of wealthy individuals in the economy has grown so fast. For example, after adjusting for inflation, there are roughly six times as many people making $1 million or more a year in the U.S. today than there were in 1980.

Why have the finance markets for small and medium-sized firms expanded so rapidly? First, these firms have become increasingly important in the economy, as illustrated in Chart 5. Per capita new business incorporations have almost doubled since the late '60s, while

Chart 4
Stock of Private Equity

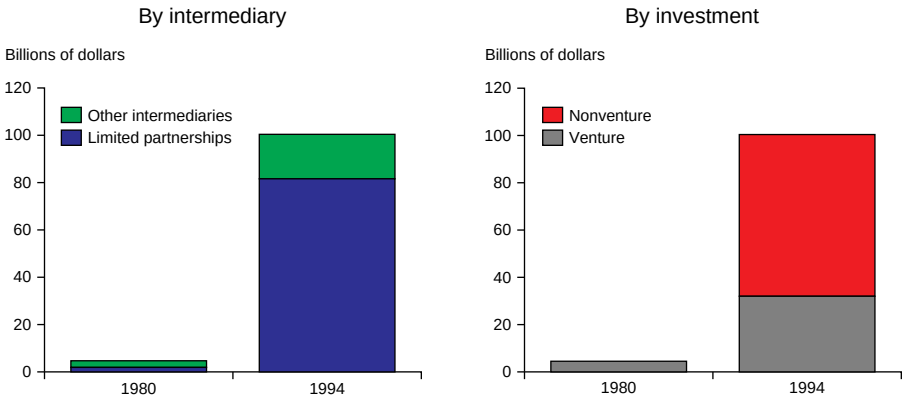
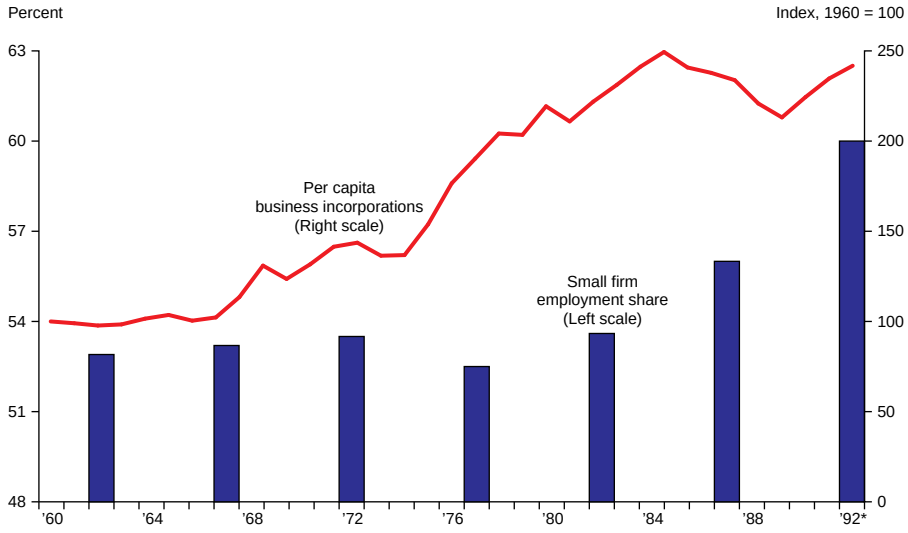


Chart 5
Small Business Has Been Increasing in Importance



* Estimate.

the share of total employment in small firms has increased sharply since the mid-'70s. The evolution to an information-based economy has probably contributed to small firm growth, since many service and technology-based firms tend to be small or medium-sized. The tendency for large firms to outsource many of their administrative functions to smaller firms (such as payroll, accounting and personnel) may also be a factor. As small and medium-sized firms have increased in importance, so has their demand for capital. Second, there has been an increased interest and ability of institutional investors to supply capital to smaller firms, as illustrated by the previously discussed pension fund involvement in the private equity market.

Why Corporate Finance Markets Are Structured as They Are

Why are corporate finance markets structured as they are in the United States? A partial answer lies in how the finance market has addressed two generic information problems faced by all firms trying to raise capital.

First is the selection problem, which investors face in choosing where to invest. Out of the hundreds of investment proposals investors receive from firms, how do they select the ones most likely to succeed or least likely to fail? A second problem is one of monitoring or governance: how do investors ensure that, after funding, the firm puts the funds to the proper uses? These are essentially information problems: they stem from the fact that potential outside investors typically know much less about the firm than the firm's managers. This limitation impairs investors' ability both to assess which firms are the best investments and to know exactly what the firm is doing with the money made available to it.

Information problems tend to be worse for small firms, which do not produce very detailed information about themselves and are often too young to have a track record about which they can boast. Medium-sized firms, being typically somewhat more mature than small firms, have a more solid track record and tend to produce more information about their activities. They consequently suffer somewhat less from the handicap of the unknown. Large public firms make available detailed information about their activities and usually have long track records. They suffer least from such problems.

However, just as firms differ in the extent of the information problems they pose to outside investors, corporate finance markets differ in the extent to which they can deal with these shortcomings. As shown in Table 1, small firms are forced to raise funds in markets that have developed the greatest safeguards to mitigate information problems, such as the markets for angel capital, private equity and bank loans. Medium-sized firms may be able to tap the private bond market, while some of the larger or more promising middle-market firms may also be able to issue public equity. Large firms that suffer least from information problems gravitate toward the markets that have the fewest such safeguards and where, in general, capital is the cheapest, such as the public bond and commercial paper markets.

What type of safeguards have markets developed? Two phenomena are common in the bank loan, private placement, private equity and angel capital markets. First, as

Table 1
Capital Sources for Firms

	Firm size		
	Small	**Medium**	**Large**
Information availability:	Low	More	High
Selection/monitoring problems:	High	Less	Low
Capital sources:	Angel capital		
	Private equity	Private equity	
	Bank loans	Bank loans	Bank loans
		Private bonds	
		Public equity	Public equity
			Public bonds
			Commercial paper

a general practice, investors in these markets have the expertise and resources to obtain information about the firms who solicit them for money. These investors report selecting about 1 percent of the hundreds of investment proposals they receive per year. Proposals are usually from firms about which there is little or no publicly available information. Thus, banks, life insurance companies and limited partnerships have staff capable of producing information about the firm from scratch and analyzing that information intelligently. These resources help mitigate the selection problem.

Second, investors use their direct influence or other control mechanisms to ensure that the firm makes proper use of invested funds. Such influence helps mitigate the monitoring problem. Tight covenants in bank loans and private placements, for example, give the firm little leeway to stray from the straight and narrow path.

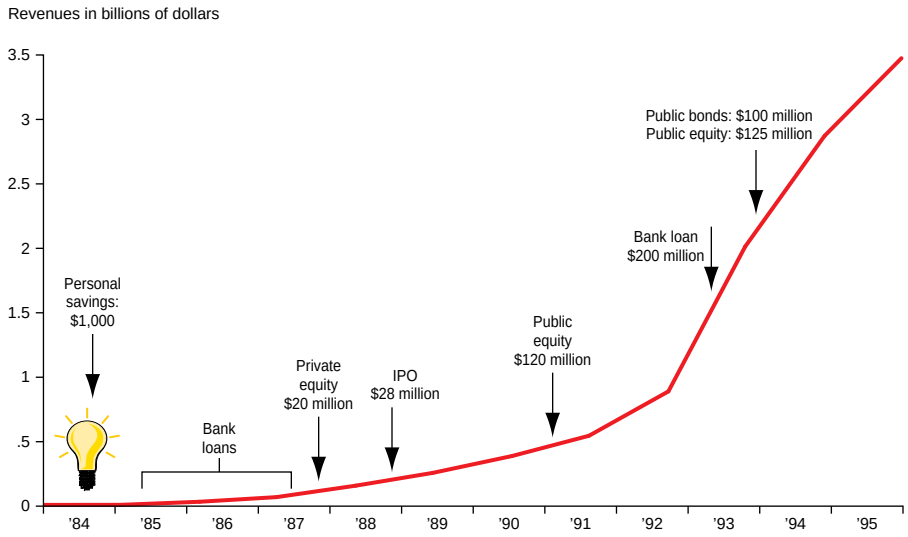
Private equity investors and angels also use a number of mechanisms to gain management influence. Representation on the firm's board and a majority voting right position are common examples. In addition, investors typically hold the purse strings for subsequent capital. Fast-growing firms depend crucially on the initial investors to either provide subsequent capital themselves or find other investors to do so. Initial investors will be unwilling to do either task if they believe the management team has not performed up to par. And management almost always has a significant level of stock ownership in the firm, so that management's incentives are more aligned with those of the outside investors.

Chart 6 shows how this structure of financial markets works in reality, using the financing history of Dell Computer as an illustration. Dell, based in Austin, is currently the world's fifth largest personal computer maker, with annual revenues of almost $3.5 billion. Twelve years ago, Dell was merely an idea in its founder's head. In 1984, Michael Dell started making and selling IBM PC clones through the mail from his college dorm. As with almost every start-up, his first source of financing was his own personal savings. Since the company had some inventory and sales to which it could point, for the next three years Dell tapped bank lines of credit secured by inventories and receivables.

By 1987, the company had grown so fast that it had exhausted its debt capacity. Given the company's size and youth, the only realistic source of funds was private equity venture capital. That year Dell convinced a group of venture capitalists to invest $20 million in the company. As is typical in venture financings, the investors wanted some control over the company in return for their money—in this case the lead venture capitalist took the positions of president and chief operating officer. The infusion of equity proved crucial to subsequent expansion, and by 1988 Dell had become large enough to raise $28 million from the public equity markets through an initial public offering (IPO).

Dell continued to grow fast, and in 1991 returned to the public equity market for $120 million. Although Dell was a successful, fast-growing company, its relatively small size, youth and potentially volatile line of business meant that it still could not tap the public bond market. After obtaining a $200 million bank line of credit in early 1993, Dell had enough of a track record to be acceptable to public bond investors and issued $100 million of public bonds in August 1993. Thus, in 12 years, and with the aid of a variety of corporate finance markets, Dell Computer went from a one-man operation housed in a college dormitory to a multinational company that employs over 7,500 people.

Chart 6
From an Idea to a $3.5 Billion Company in 12 Years…
Dell Computer's Financing History



International Comparisons

In Japan and Germany, the corporate finance system is very different from that of the United States. Firms in these countries, large and small, typically have relied much more on bank financing than have U.S. firms. The primary reason for this reliance lies in the heavily regulated nature of German and Japanese securities markets, which has severely stunted their growth. Their public securities markets are extremely small compared with those of the United States, and their small firm finance markets are even more undeveloped. For example,

many medium-sized European firms are now finding it easier to do IPOs on the U.S. NASDAQ exchange rather than raise capital domestically.

Although the bank-centered systems may have had some advantages in the past, there is an increasing feeling that such systems may not provide adequately for the credit needs of small and medium-sized firms that are the engine of future economic growth and innovation. This may be one reason many of the success stories in the past 15 years have come predominately from the United States, while there have been few Dell's or Microsoft's in Japan or Germany. Recognizing this, policy-makers in these countries recently have deregulated their securities markets in an effort to emulate the U.S. system of corporate finance.

Conclusion

A recent *Business Week* cover article celebrated corporate America's access to the public equity markets and the positive effect the recent boom in IPOs had for innovation and growth. The magazine called this phenomenon "IPO capitalism."[4] This article argues that the story is really a much bigger and broader one. Dell is a success story about the capacity of U.S. capital markets to provide funds to firms at *all* stages in their life, not just the IPO stage.

This is not to say that all deserving firms get the type of access that Dell enjoyed, nor that our capital markets could not be improved. Nor is it meant to imply that it is now easy for small firms to raise capital. Raising capital for small firms is not easy and probably never will be because of the severe information problems that small firms pose to outside investors. But the rapid expansion of markets devoted to solving these problems has made raising capital easier than it was in the past. And today there are thousands of firms of all sizes in America that are benefiting from the unique scope and breadth of U.S. corporate finance markets. Such access to capital deserves a somewhat more encompassing term than just "IPO capitalism."

As Joseph Schumpeter once put it, "Credit creation is the monetary complement to innovation." For every underlying type of "real" economy—agricultural, industrial and so forth—there are a unique set of financing problems for firms and an optimal way of addressing those problems. As American innovation moves us beyond the agrarian and manufacturing eras and into the service and information age, our capital markets must evolve also, else economic growth will surely slow. The rapid expansion of the corporate finance markets for small and medium-sized firms documented in this article is one sign that this evolution is already taking place. Indeed, U.S. corporate finance markets today appear to have become the best in the world at funding "entrepreneurial capitalism," whatever the source of that entrepreneurial spirit.

—Stephen D. Prowse

Notes

[1] See R. G. King and R. Levine, "Finance and Growth: Schumpeter Might Be Right," *Quarterly Journal of Economics* 108 (August 1993): 717–37.

[2] See M. Carey, S. Prowse, J. Rea and G. Udell, "The Economics of the Private Placement Market," Federal Reserve Board Staff Study, no. 166, 1993.

[3] See G. Fenn, N. Liang and S. Prowse, "The Economics of the Private Equity Market," Federal Reserve Board Staff Study, no. 168, 1995.

[4] See *Business Week*, December 18, 1995.

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