Corporate Finance

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The *Journal of Political Economy* and Chicago economists have played a major role in the development of the modern field of corporate finance,
pioneering the agency cost and property rights approach. This brief essay is a tribute to those contributions rather than a comprehensive review of the field. We apologize to those authors excluded by our singular focus.

Over 50 years ago, papers by Modigliani and Miller (1958) and Coase (1960) provided the foundations by establishing a remarkable set of “irrelevance” propositions. Coase established that, under the assumption of zero transaction costs, the allocation of property rights does not affect the ability of participants to achieve an efficient outcome. Modigliani and Miller showed that, with investment policy held constant and with zero taxes and transaction costs, the mix of securities issued by the firm does not affect the total value of the firm. These propositions provided a serious challenge to those who thought institutional arrangements could be easily explained.

**Early Work**

One of the fundamental assumptions behind the Modigliani-Miller irrelevance proposition is tax neutrality. Modigliani and Miller (1958, 1963) immediately recognized that in the United States (and most of the world) debt is tax favored at the corporate level. Thus, firm value increases when debt replaces equity. Modigliani and Miller’s irrelevance proposition and its tax implications have been incredibly influential in the practice of finance. The fundamental valuation techniques (from the weighted average cost of capital to the adjusted present value approach) are based on the Modigliani-Miller proposition: they start from the cash flow available for investors (regardless of whether they are debt or equity holders), and then they adjust for the effect of taxes and possibly the cost of financial distress.

Even in a world in which debt is tax advantaged at the corporate level, capital structure can still be irrelevant for firm value if debt is tax disadvantaged from the perspective of personal taxes, as is the case in the United States (and particularly so before the 1986 tax reform). As Miller (1977) points out, if there is an interior equilibrium, it will have the characteristic that one dollar of pretax profits paid as interest should deliver investors the same value as a dollar of pretax profits paid as dividends or capital gains. Thus, the structure of taxes affects the average leverage in the economy, but any single company is still indifferent between issuing debt and equity.

**The Agency Cost Approach to Corporate Finance**

Starting in the 1950s, the influential managerialist literature (Baumol 1959; Simon 1959; Marris 1964; Williamson 1964) challenged the assump-
tion of value maximization and often abandoned optimizing models altogether in favor of ad hoc descriptive models. The Chicago response was to focus on managerial agency problems to explain deviations from value maximization as well as to understand real-world capital structures.

Alchian and Demsetz (1972) are early adopters of the agency cost perspective. They argue that the distribution of cash flow rights is determined to minimize the expected cost of shirking associated with team production. The firm’s owner is a centralized monitor who can measure the productivity of team members and reward them accordingly. Ownership of the residual cash flows provides this centralized monitor with the incentive to be vigilant.

Jensen and Meckling (1976) also adopt an agency cost approach but try to match the reality of the modern corporation. The corporation is described as a “nexus of contracts” among various parties including owner-managers, employees, suppliers, outside equity holders, and bondholders instead of a monolith endowed with a single objective such as value maximization. Jensen and Meckling emphasize the conflicts between the various parties, especially management versus outside shareholders and bondholders versus shareholders.

For Jensen and Meckling, the essence of the manager-shareholder conflict is the dichotomy between cash flows and firm value on the one hand and perquisites or nonpecuniary benefits on the other. Their notion of perquisites has proved flexible enough to encompass various phenomena including diversion of cash flows, costs of effort, and empire building. Managers consume too many perquisites because they bear only a fraction of their cost. Outside equity is costly because it drives a wedge between the benefits of perquisites to the manager and the cash flow cost of those perquisites, although it allows the firm to pursue valuable investment opportunities. Borrowing may allow the manager to pursue some of these investments while still bearing the residual cash flow consequences, but leverage has its own associated agency costs. Jensen and Meckling outline how the optimal scale of the firm is determined by the trade-off between costly external finance and pursuit of positive net present value investments along with the optimal mix of manager-owned equity, outside equity, and debt. Their seminal paper illustrates the sheer explanatory power of a simple agency cost framework in corporate finance.

The main weakness of Jensen and Meckling’s model is the omission of control rights of debt or outside equity as a means of limiting agency costs. Fama and Jensen (1983) argue that separation of residual risk bearing from decision management necessitates systems that also separate decision management from decision control. In large corporations, we typically have an explicit mechanism such as the board of directors for monitoring and decision ratification. Their paper has stimulated a thriving empirical literature on the role of boards of directors.
Jensen (1986) argues that corporate cash flow in excess of investment needs (free cash flow) runs the risk of being wasted by managers through self-aggrandizing negative net present value projects. The presence of debt in the capital structure has the benefit of reducing this kind of waste. This “free cash flow theory” provided a compelling rationale for the 1980s leveraged buyout wave.

Up to this point, the literature still lacks a good theory of ownership as distinct from claims to profit shares. Grossman and Hart (1986) fill this void. Their notion of ownership as the right to make decisions when contracts are incomplete has proved very powerful. It has influenced research on many topics including corporate governance and ownership patterns around the world, state-contingent financial contracting, venture capital contracting, and the role of public enterprises.

There is a large empirical literature on these topics. Early papers include Demsetz and Lehn (1985), Morck, Shleifer, and Vishny (1988), and Kaplan (1989).

Demsetz and Lehn (1985) study the variation of ownership concentration across large US firms and also find that there is no significant relationship between ownership concentration and profitability. Morck et al. (1988) find a nonmonotonic relationship between management ownership and market valuation, possibly indicating the interplay of an incentive effect as well as an entrenchment effect that sets in when management holds a large block of shares. Kaplan (1989) finds that ownership and leverage realignments via management buyouts have a positive impact on profitability, consistent with improved incentives.

The Market for Corporate Control

Manne (1965) is the first to point out the role of the market for corporate control in promoting efficiency and protecting atomistic shareholders from self-interested managerial behavior. Writing at a time when the antitrust consensus against horizontal mergers is very strong, he advocates taking into account the efficiency benefits of corporate takeovers. He explains how a low stock price resulting from inefficient management provides an opportunity for profit that acts as a stronger force for change than internal governance mechanisms.

Grossman and Hart (1980) take a similar view on the benefits of the market for corporate control but point out the limitations of the mechanism due to a free-rider problem. Atomistic shareholders have no incentive to tender their shares for anything less than the full value of those shares after managerial improvements. This makes it impossible for a more efficient buyer to profit on buying their shares. Shleifer and Vishny (1986) document the prevalence of large block holdings in US corpora-
tions and analyze the role of large shareholders as activist investors who can help overcome this free-rider problem.

**The Labor Market**

The pressure from the corporate control market is not the only remedy against agency problems. As Fama (1980) points out, an important form of discipline comes from the labor market, because the current marginal product of managerial labor contains information about future expected marginal products. Thus, the wage revision process imposed by the managerial labor market will reward well-performing managers and penalize poorly performing ones. In some special cases, this ex post settling up eliminates completely the costs of separation of ownership and control.

For this mechanism to work, however, managerial salaries should vary significantly on the basis of past performance and so should the probability of dismissal. Jensen and Murphy (1990) do not observe much evidence for these two predictions, a finding they attribute to unspecified "political forces" that constrain "the type of contracts that can be written between management and shareholders" (227).

**International Dimension**

Corporate finance theory was developed in the United States, inspired by US stylized facts, and for the first 30 years mostly tested on US data. Chicago economists have played a significant role in internationalizing the field. Rajan and Zingales (1995) confronted US-based capital structure theories with international evidence. They document that corporate leverage is fairly similar across developed countries. The differences in leverage reflect the way bankruptcy is designed rather than the divide between bank-centered and market-based economies. Where bankruptcy favors liquidation, firms appear more hesitant to lever up.

In corporate finance, it is often difficult to determine the direction of causality: does the law drive the behavior or does the behavior drive the law? La Porta et al. (1998) show that long-standing differences between legal systems can explain much of the variation in key investor protection laws across countries. These differences between legal systems can be traced to their families of origin, which in turn resulted from “a combination of conquest, imperialism, outright borrowing, and more subtle imitation” (1115). The authors document that the laws of common law countries (originating in English law) are more protective of outside investors than those of civil law countries (originating in Roman law) and that this difference can explain a significant fraction of the variation in financial development around the world. Their methods of coding inves-
tor protection laws have influenced much research by academics and policy makers and sparked a lively debate. Subsequent research has shown that the family of legal origin is highly correlated with a wide range of laws governing economic activity. At Chicago, ideas are subjected to intense scrutiny, even among colleagues. While recognizing the importance of the legal origins argument, Rajan and Zingales (2003) thought that a more variable factor is needed to explain both the time-series variation and the cross-sectional differences in financial development. Their explanation is the opposition by incumbents, who feel threatened by financial markets, because they breed competition. They claim that incumbents’ ability and willingness to resist financial development are reduced by free trade and capital flows. Indeed, financial market development accelerates with open borders and retrenches in periods of protectionism and restrictions to capital flows.

Given the two Chicago irrelevance propositions mentioned above, it is important to establish that these observed differences in financing patterns and financial market development are not just a neutral mutation, but matter for real economic variables. To this end, Rajan and Zingales (1998) show that differences in financial development can explain a country’s ability to reallocate resources from sectors in excess to sectors in need, accelerating the growth of these sectors in need. The difference-in-difference strategy adopted in their paper has since become a standard in the literature.

New Directions

Chicago economists have also helped to broaden finance research beyond its traditional focus on large corporations. Entrepreneurial finance and household finance are two important new research areas. The field of entrepreneurial finance has grown along with the growth of private equity as an asset class and its increased role in driving innovation. In an early paper, Kaplan and Strömberg (2003) use the agency cost perspective to understand the allocation of cash flows and control rights in a large cross section of venture capital contracts. They find a strong correspondence between the predictions of agency theory and the structure of real-world venture capital contracts.

Household finance is increasingly recognized as perhaps the key link between finance and macroeconomics. Amit Seru and his coauthors have shown how securitization has led to lax lending standards as well as difficulty renegotiating bad loans (Keys et al. 2010; Piskorski, Seru, and Vig 2010). Atif Mian and Amir Sufi have established the close association between household debt and economic fluctuations using an array of data sets including detailed zip code-level data in the United States and a...
1960–2012 panel data set covering 30 countries (see Mian and Sufi 2014; Mian, Sufi, and Verner 2017).

References


Banking and the Evolving Objectives of Bank Regulation

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Views on the role played by banks in the economy have evolved greatly over the last 125 years, as have arguments on the need, as well as the best way, to regulate them. Some of the key insights in the debate have been published in the *Journal of Political Economy*. In what follows, we will outline the main contributions to the debate in recent years, with an emphasis on work done at the University of Chicago or published in the *JPE*. We

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