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Investor protection and equity markets ☆

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Abstract

We present a simple model of an entrepreneur going public in an environment with poor legal protection of outside shareholders. The model incorporates elements of Becker's (J. Political Econ. 106 (1968) 172) "crime and punishment" framework into a corporate finance environment of Jensen and Meckling (J. Financial Econ. 3 (1976) 305). We examine the entrepreneur's decision and the market equilibrium. The model is consistent with a number of empirical regularities concerning the relation between investor protection and corporate finance. It also sheds light on the patterns of capital flows between rich and poor countries and on the politics of reform of investor protection.

JEL classification: G31; G32

Keywords: Investor protection; Ownership structure; Financial systems

1. Introduction

Recent research reveals that a number of important differences in financial systems among countries are shaped by the extent of legal protection afforded outside investors from expropriation by the controlling shareholders or managers. The findings show that better legal protection of outside shareholders is associated with: (1) more valuable stock markets (La Porta et al., 1997); (2) a higher number of

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listed firms (La Porta et al., 1997); (3) larger listed firms in terms of their sales or assets (Kumar et al., 1999); (4) higher valuation of listed firms relative to their assets (Claessens et al., 2002; La Porta et al., 2002); (5) greater dividend payouts (La Porta et al., 2000a); (6) lower concentration of ownership and control (European Corporate Governance Network, 1997; La Porta et al., 1999; Claessens et al., 2000); (7) lower private benefits of control (Zingales, 1994; Nenova, 1999); and (8) higher correlation between investment opportunities and actual investments (Wurgler, 2000).

While the understanding of the empirical differences in the patterns of corporate finance has advanced considerably, the theoretical work in this area is only beginning. A number of studies explicitly model the expropriation of minority shareholders by the controlling shareholders (see, among others, Grossman and Hart, 1988; Harris and Raviv, 1988; Hart, 1995; Burkart et al., 1997, 1998; Friedman and Johnson, 2000) and the legal framework underlining such expropriation (La Porta et al., 1998; Johnson et al., 2000). Other studies attempt to explain theoretically why control is so concentrated in countries with poor shareholder protection (Zingales, 1995; La Porta et al., 1999; Bebchuk, 1999), and why such organizational form as pyramids may be common (Wolfenzon, 1999). Still other studies, such as Bennedsen and Wolfenzon (2000), argue that control structures with multiple large shareholders may be efficient in environments with poor shareholder protection. La Porta et al. (2002) make the case for higher concentration of cash flow ownership (and not just control) in countries with poor shareholder protection. Each of these studies has focused on specific aspects of legal environments with weak shareholder protection. But a market equilibrium model of corporate finance in such environments remains to be developed.[1]

In this paper we present one such model. The model incorporates elements of Becker's (1968) classic "crime and punishment" framework into a corporate finance environment as in Jensen and Meckling (1976). We consider an entrepreneur trying to raise equity finance for a project, and deciding how much equity to sell and how big a project to undertake. We follow the literature (Zingales, 1995; Bebchuk, 1999) in maintaining that the entrepreneur keeps control of the project after the initial share offering. This entrepreneur operates in an environment with limited legal protection of outside shareholders, and so has an opportunity to divert some of the profits of the firm once they materialize (Shleifer and Vishny, 1997; Burkart et al., 1998). By doing so, he risks being sued and fined for breaking the law or the shareholder agreement. The quality of investor protection in our model is given by the likelihood that the entrepreneur is caught and fined for expropriating from shareholders.

In this simple model, we show how the entrepreneur's decisions on the size of the project and the amount of cash flow to sell are shaped by the legal environment. We then embed this going-public decision into a market equilibrium with savers and

[1] One strand of the empirical literature not discussed in this paper deals with the implications of investor protection for economic growth. On this, see Carlin and Mayer (1999), Demirguc-Kunt and Maksimovic (1998), Levine and Zervos (1998), and Rajan and Zingales (1998).