LAW AND THE ECONOMICS OF ENTREPRENEURSHIP

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I. INTRODUCTION

This paper discusses recent research on law and the economics of entrepreneurship. The central premise of the article is that the law interacts with economic aspects of entrepreneurship in two main ways. First, legal structures shape organizational forms in entrepreneurship. Second, legal rules and institutions carry public policy implications for entrepreneurship in three areas: regulation; bankruptcy legislation; and the broad area of property rights, corruption, and the efficiency of courts. This article reviews literature on each of these issues.

This overview is not intended to be exhaustive. It is instead aimed at giving a flavor of recent developments in the literature. Several other features of the legal framework that affect entrepreneurs will consciously not be covered, including the role of trade unions, the size of the welfare state, and the effects of personal and corporate taxation. Nor do I tackle issues relating to intellectual property rights, patent protection, and academic entrepreneurship. These issues are left aside in the interests of space and focus.

The economics of entrepreneurship is concerned with the interdependence of entrepreneurs and the economy.[1] Law is relevant because at the very minimum it upholds the security of property rights that most economists regard as fundamental to the principles of free and voluntary exchange. Less minimally, the law in most developed economies places a range of restrictions on what entrepreneurs and the agents they interact with are allowed to do. Even when entrepreneurs break those rules, for example by evading tax or engaging in corrupt practices, they are usually aware of the

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1. SIMON PARKER, THE ECONOMICS OF SELF-EMPLOYMENT AND ENTREPRENEURSHIP 1 (2005) [hereinafter PARKER, SELF-EMPLOYMENT]. *See* Simon Parker, *The Economics of Entrepreneurship: What We Know and What We Don't*, 1 FOUND. & TRENDS ENTREP. 1 (2005) [hereinafter Parker, *Economics*].

implications of doing so, and the penalties they may face if they get caught. At an aggregate level, the legal structure generally affects the efficiency and certainty of investing and doing business, which can have important implications for the economy.

This paper has the following structure. I first consider several ways that the law shapes the organizational forms that entrepreneurship takes. The remaining sections then discuss the effects of the law on public policy as it relates to entrepreneurship. The final section concludes.

II. HOW THE LAW CAN SHAPE ORGANIZATIONAL FORMS IN ENTREPRENEURSHIP

Below I consider four ways that the law shapes the organizational forms used by entrepreneurs. First, legal costs of upholding contracts can explain why small enterprises can survive in competition with larger and ostensibly more efficient producers. In a similar vein, the second subsection discusses a particular legal instrument that explains how not-for-profit ("social") enterprises can co-exist with for-profit enterprises under conditions of competition, conditions that are usually taken to be incompatible with non-profit maximization objectives. The third subsection proposes imperfect legal protection of investors as a rationale for why family firm succession is so common in entrepreneurship. Finally, I consider how the legal definition of self-employment affects the classification of individuals as entrepreneurs (and hence practical measurement of entrepreneurship) in applied research.

A. Legal Costs as a Rationale for Small Enterprise Survival

One might ask why large firms, with all their advantages of scale, do not supplant small enterprises on efficiency grounds.[2] Wiggins proposed an answer to this question based on legal costs and incentive contracts.[3]

The basic intuition is this: In circumstances when employees know that their employer has an incentive to renege on compensation for their effort, it becomes costly for firms to commit to strong incentives. When these costs outweigh the benefits of scale, the small

2. OLIVER WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS (1975).

3. Steven Wiggins, *Entrepreneurial Enterprises, Endogenous Ownership, and the Limits to Firm Size*, 33 ECON. INQ. 54 (1995).

entrepreneurial firm can replace the large firm as the efficient form of organization.

To see how this works, suppose that workers only supply productive effort e with probability $p \in (0,1)$ in return for a promised wage w. The firm's expected output is $pe > 0$. If workers are not promised w they exert no effort and output is zero. Crucially, output is only observed, and w is only paid to the worker, $\tau \geq 1$ periods after the effort is supplied. Remunerated workers then receive $\gamma pe = w$, where γ is labor's share of output, and the firm owner receives $(1\text{-}\gamma)pe$. Suppose further that the firm faces a recurrent probability P that its capital will obsolesce and wholly lose its value next period, where P is exogenous and independent of time. Now the central question is: Will the firm follow through and pay w to the worker τ periods after their output is produced? After all, once the uncertainty is resolved and output is observed, the firm would gain $\tau\gamma$e from reneging on payment.

What are the costs of reneging? These costs might be low if the worker, who faces the burden of proof in a tort case, does not find it financially worthwhile to engage a lawyer to bring a legal case.[4] Workers who anticipate the probability of reneging and who are aware of the legal costs of tort, can only guarantee being compensated for their work by becoming entrepreneurs themselves and owning the rights to the fruits of their own effort. This insight might possibly explain why some sectors of the economy are dominated by small firms rather than by large ones, including independent and franchised restaurants and retail enterprises, in which development times (τ) are long.

B. Legal Constraints as a Rationale for Social Enterprise Survival

In standard textbook models of competitive markets, only profit-maximizing "for profit" (FP) firms should be able to survive competitive pressures. This begs the question of why not-for-profit (NFP) firms survive and even thrive alongside their FP competitors in

4. The costs of reneging may however include a loss of reputation, preventing the firm from trading in subsequent periods, causing a loss with present value of Σ t=1$^{\infty}$ $(1\text{-}\gamma)pe\, P^t$. Hence a necessary and sufficient condition for the firm not to renege is:

$$\Sigma\ t=1^{\infty}\ (1\text{-}\gamma)pe\ P^t = P(1\text{-}\gamma)pe/(1\text{-}P)] \geq \tau\gamma e.$$

It follows directly that reputation is more likely to fail (i) the smaller the probability of success of worker effort, p; (ii) the longer it takes to observe output, τ; (iii) the greater is labor's share, γ; and (iv) the lower the likelihood of continued trade, P.

many sectors of the economy, including childcare, medical care, education, and care for the elderly.[5]

Tax breaks on NFPs' income, donations, and sales cannot be the primary reason for the existence of NFPs, since many NFPs were founded before tax benefits were introduced; and these benefits are in any case limited or non-existent for non-charitable NFPs.[6] A more satisfactory answer is based on a legal clause called a Non-Distribution Constraint, abbreviated to NDC hereafter.[7] A NDC prevents any surpluses generated by NFPs from being distributed to their owners in the form of equity shares. According to Weisbrod, the NDC is one of the defining characteristics of a NFP.[8] It turns out that NDCs can help explain why NFPs exist at all, rather than being driven out of the market by FP enterprises.

The key aspect of a NDC is that it can protect investments made by donors, volunteers, consumers, and employees from ex post appropriation by the entrepreneur. A NDC signals a credible commitment to outside stakeholders that an entrepreneur running a NFP will not exploit their donations by, for example, cutting back on other investments. Because FPs cannot credibly make this commitment, they are therefore at a competitive disadvantage compared with NFPs, at least for consumers for whom product quality matters and product quality is hard to verify.[9]

As an example, consider nursing care homes. FP care homes tend to use more sedatives—a cheap way of keeping patients calm—than NFPs, which usually provide more intensive patient care instead.[10] Sedatives are a cost-reducing strategy that adversely affects non-contractible quality; consumers anticipating such incentives in the FP sector demand NFP care homes instead. The NDC in a NFP eliminates the profit incentive to compromise on quality, unlike FPs. This might even enable NFPs to command a higher market price than FPs.

The NDC can also confer on NFPs a competitive advantage by helping them attract donations.[11] Donations do not change a FP's

5. Susan Rose-Ackerman, *Altruism, Nonprofits, and Economic Theory*, 34 J. ECON. LIT. 701 (1996).

6. BURTON WEISBROD, THE NONPROFIT ECONOMY, HARVARD (1988).

7. Henry Hansmann, *Economic Theories of Non-profit Organization*, *in* THE NON-PROFIT SECTOR: A RESEARCH HANDBOOK (Walter Powell ed., 1987).

8. WEISBROAD, *supra* note 7.

9. Edward Glaeser & Andrei Shleifer, Not-for-profit Entrepreneurs, 81 J. PUB. ECON. 99 (2001).

10. WEISBROAD, *supra* note 7, at ch. 8.

11. Glaser & Shleifer, *supra* note 9.

marginal conditions for the production of quality. But donations to NFPs reduce the marginal utility of revenues, and so soften incentives to compromise on quality. In a similar way, the NDC helps NFPs to elicit greater worker effort.[12] This is because the NDC ensures that donated labor effort will not be converted by the NFP into profit (or lead to cuts in wages or perquisites), something that cannot be guaranteed by FPs. The latter can be further out-competed because if workers care about the social mission, NFPs can attract their effort with a smaller wage premium than FPs do.

It is possible that some public goods would not be forthcoming at all without a NDC and NFPs—which provides a social welfare justification for the NDC legal instrument.

C. Imperfect Legal Protection of Investors and Family Firms

An important question is why family firms are such prominent vehicles for entrepreneurship, and why so many of them find successors from within the family. Within-family succession might be motivated by several considerations. It could yield a non-pecuniary benefit to the founder, who has dynastic preferences, or it might carry some reputational value. Alternatively, within-family succession could be privately valuable by promoting far-sighted investment behavior, by enabling valuable informal human capital to be transmitted to successors from an early age, by facilitating trust and capital pooling; and by strengthening kinship networks that consolidate and leverage advantageous political connections.[13]

While there is relatively little evidence on which of these factors are salient (if any), there is also an interesting alternative explanation based on weak legal protection of entrepreneurs who sell their firm to managers hired from outside the family. Burkart et al. argue that founders are more likely to pass on a business to their heirs when outside managers find it easier to expropriate value from the business, entailing costly monitoring by the founders.[14] So Burkart et al, predict that owners will be more likely to keep businesses under close family control in economies that lack strong legal protection of investors—even though outside managers may run the firm better, and generate a higher sale price to the founder.[15] Indeed, cross-country evidence

12. Patrick Francois, *Not-for-profit Provision of Public Services*, 113 ECON. J. C53(2003).
13. Marianne Bertrand & Antoinette Schoar, *The Role of Family in Family Firms*, 20 J. ECON. PERSP. 73 (2006).
14. Mark Burkart, Fausto Panunzi & Andrei Shleifer, *Family Firms*, 58 J. FIN. 2167 (2003).
15. *Id.* More generally, this argument might also explain why Anglo-Saxon patterns of corporate governance, with widely held firms and regular conflicts between professional

from La Porta et al. and Claessens et al. shows that family firms are especially widespread in countries with weak legal protection of shareholders.[16]

D. Legal Classification of Self-employment

Self-employment is a widely used measure of entrepreneurship, especially by economists.[17] In fact, who is "self-employed" rests firmly on a legal definition. In law, the issue comes down to whether there is a contract of service or a contract for services. The first indicates paid employment, the second self-employment. A wide range of criteria are used by courts and tribunals to determine which applies in any given case. Thus Harvey cites the U.K. legal case of Young & Woods versus West, whereby the criteria for workers being under a contract of service includes workers not determining their own hours, not supplying their own materials and equipment, not allocating or designating their own work, not being able to nominate a substitute to work in their place, and not setting their rate of pay.[18]

Entrepreneurship researchers commonly argue that some self-employed individuals are not entrepreneurs in the "classic" sense of the term, e.g., because they are not innovators, arbitrageurs, or the embodiment of some other special function commonly associated with entrepreneurship.[19] Some experts, recognizing that the self-employed are a very diverse group, advocate excluding from this category all professionals, artisans, plumbers, electricians, etc.—in order to obtain a "purer" measure of entrepreneurship.[20] Other researchers recommend excluding "dependent self-employed workers," who are defined as "workers who provide work or perform services to other persons within the legal framework of a civil or commercial contract, but who in fact are dependent on or integrated into the firm for which

managers and dispersed shareholders are likely to be a feature of countries with strong protection of minority shareholders.

16. Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, *Corporate Ownership Around the World*, 54 J. FIN. 471 (1999). *See also* Stijn Claessens, Simeon Djankov & Larry Lang, *The Separation of Ownership and Control in East Asian Corporations*, 58 J. FIN. ECON. 81 (2000).

17. PARKER, SELF-EMPLOYMENT, *supra* note 1.

18. MARK HARVEY, TOWARDS THE INSECURITY SOCIETY: THE TAX TRAP OF SELF-EMPLOYMENT, INST. EMP. RTS. (1996) (citing YOUNGS & WOODS LTD. V. WEST, 1980 I.R.L.R. 201). *See also* P. Leighton, *Employment and Self-employment: Some Problems of Law and Practice*, 91 EMP. GAZETTE 197 (1983).

19. JOSEPH SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT (1934). *See* ISRAEL KIRZNER, COMPETITION AND ENTREPRENEURSHIP (1973). *See also* C. Mirjam van Praag, *Some Classic Views on Entrepreneurship*, 147 DE ECON. 311 (1999).

20. Luigi Guiso, Paola Sapienza & Luigi Zingales, *Does Local Financial Development Matter?*, 119 Q.J. ECON.929 (2004).

they perform the work or provide the service in question."[21] Dependent workers may be "self-employed" by the letter of the law, but not the spirit of it.

In all cases, though, it remains the case that legal practice places bounds on the admissible superset of individuals who can be considered as self-employed entrepreneurs in the broadest sense of the term—even if researchers sometimes like to narrow the definition to obtain a subset of individuals that more closely approximates their ideal of entrepreneurship.

III. REGULATION

In this section, I consider four principal forms of regulation that affect entrepreneurship and the economy. The first relates to legal rules restricting the ways that businesses can operate. The second concerns administrative procedures involved in legally registering a new business. The third relates to employment protection legislation (EPL), while the fourth treats legislation that regulates competition among banks lending to small businesses.

On each of these topics, it has been vigorously argued that regulation dampens enterprise and growth. Counter-arguments to this position will also be presented below.

A. Restrictions on Running an Enterprise

In a lively polemic, Dennis catalogues several examples of U.S. regulations that impede company formations and early stage growth.[22] These include:

- local zoning ordinances that designate home-based businesses illegal in some cities, or that restrict the scope of their operations;
- laws placing onerous "minimum training" requirements on entrepreneurs seeking to obtain licenses (e.g., in cosmetology), and restrictions on the number of licenses (e.g., for taxi-cabs); and,
- high costs of complying with complex tax laws

21. Rene Boheim & Ulrike Muehlberger, *Dependent Forms of Self-employment in the UK: Identifying Workers on the Border Between Employment and Self-employment* (Indus. Stud. Of Lab., Discussion Paper No. 1963, 2006).

22. William Dennis, *Business Regulation as an Impediment to the Transition from Welfare to Self-employment*, 19 J. LAB. RES. 263 (1998).

Dennis went on to argue that the costs of complying with these regulations tend to fall heaviest on the poorest self-employed individuals, such as welfare recipients.[23] At the same time, the costs of complying with health and safety legislation and tax laws tend to fall heaviest on the smallest firms. Brock and Evans estimated legal compliance costs to be some ten times higher for small U.S. firms than for their larger domestic rivals.[24] This puts small enterprises at an unfair competitive disadvantage, unless "tiering" (the partial or complete exemption of smaller firms from regulation) is explicitly built into the legislation.

Others have argued that business regulation can backfire. In a nice example of the perverse effects of public policy, Leung describes how German regulations designed to maintain the authenticity of Chinese restaurants by legally restricting those who can work as chefs in these establishments simply encouraged some restaurateurs to move into fast food—with lower skill requirements (and presumably less authenticity!).[25] In a statistical analysis, Bertrand and Kramarz demonstrate empirically the negative effects on employment growth in France of new laws requiring business creation or expansion to gain approval by regional zoning boards.[26]

On the other hand, business regulation can arguably tangibly assist entrepreneurs operating in transition economies in which legal institutions and property rights are weak. While entrepreneurs might be able to find ways around missing institutions soon after deregulation, for example by exploiting reputation advantages, entrepreneurs eventually need legally enforceable contracts if they are to expand their companies into markets where they have fewer personal contacts. Furthermore, they need financial regulation to access bank loans and outside shareholding if they are to grow and exploit economies of scale.[27] The challenge for policy makers is evidently to design a regulatory framework that does not impose unreasonable costs on enterprise.

23. *Id.*

24. WILLIAM BROCK & DAVID EVANS, THE ECONOMICS OF SMALL BUSINESSES: THEIR ROLE AND REGULATION IN THE U.S. ECONOMY (1986).

25. Maggi H.W. Leung, *Beyond Chinese, Beyond Food: Unpacking the Regulated Chinese Restaurant Business in Germany*, 15 ENTRE. & REG'L DEV. 103 (2003).

26. Marianne Bertrand & Francis Kramarz, *Does Entry Regulation Hinder Job Creation? Evidence from the French Retail Industry*, 117 Q.J. ECON. 1369 (2002).

27. John McMillan & Christopher Woodruff, *The Central Role of Entrepreneurs in Transition Economies*, 16 J. ECON. PERSP. 153 (2002).

B. *Entry Regulations*

Two theoretical contributions have emphasized the potentially destructive effects of entry regulations on employment, enterprise, and economic growth. First, Fonseca et al. construct a simple search model in which higher administrative costs of starting a new business decrease employment in two ways.[28] First, they reduce incentives to be an entrepreneur under free occupational choice, so reducing the demand for labor and the number of vacancies. Second, fewer vacancies result in smaller inflows into employment from unemployment in the presence of employment search costs.

In a second contribution, Dulleck et al. argue that lower start-up costs not only enable "mismatched" workers (i.e., those unable to find a job) to start their own firm, but also increase incentives for individuals to acquire the education needed to operate high growth enterprises.[29] Higher levels of education and greater numbers of high growth firms are the first component of a "double dividend" occasioned by a reduction in entry costs. The other benefit is a thicker market for high skilled workers that encourage incumbent firms operating amidst labor market search frictions to offer more high skilled jobs.

On the other hand, entrepreneurship can benefit from certain forms of entry regulation as well. For example, certification can protect consumers from crooks and "cowboys" who could otherwise set up firms easily and dupe their victims with scams or poor quality workmanship. By weeding out these low quality or illegal entrepreneurs, entry regulations can make consumers more willing to demand goods and services from legitimate entrepreneurs, so increasing aggregate demand.

What of the evidence on this issue? I know of only one study, by Fonseca et al., who measure administrative costs in terms of the number of administrative procedures required to start a new business, and the number of weeks it takes to set one up.[30] Simple correlations from a cross-section of Organisation for Economic Co-operation and Development (OECD) countries suggest that countries with higher administrative costs enjoy smaller inflows from employment to self-employment, lower employment growth, and lower employment rates.

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28. Raquel Fonseca, Paloma Lopez-Garcia & Christopher Pissarides, *Entrepreneurship, Start-up Costs and Employment*, 45 EUR. ECON. REV. 692 (2001).

29. Uwe Dulleck, Paul Fritjers & Rudolf Winter-Ebmer, *Reducing Start-up Costs for New Firms: The Double Dividend on the Labour Market*, 108 SCAND. J. ECON. 317 (2006).

30. Fonseca et al., *supra* note 29.

However, this is only one study; clearly much more evidence is needed before any firm conclusions about the effects of entry regulations on entrepreneurship can be reached.

C. *Employment Protection Legislation (EPL)*

EPL comprises measures designed to protect the rights of employees at work. As defined by the OECD, employment protection refers to regulations about hiring (e.g., rules favoring disadvantaged groups, conditions for using temporary or fixed-term contracts, and training requirements) and firing (e.g., redundancy procedures, mandated pre-notification periods and severance payments, special requirements for collective dismissals, and short-time work schemes).[31] EPL in turn refers to all types of employment protection measures, whether grounded primarily in legislation, court rulings, collectively bargained conditions of employment, or customary practice.

It is commonly argued that EPL retards entrepreneurship by disproportionately imposing burdens on the smallest firms. Entrepreneurs running the smallest firms can often least afford the hiring and firing costs imposed by EPL. Furthermore, the damage caused by retaining poor performers in small firms where "every job counts" is likely to be proportionately greater than in large firms where such individuals can be carried more easily. One might therefore expect EPL to discourage individuals from becoming entrepreneurs in the first place, and to decrease the survival prospects of those entrepreneurs who employ outside workers.

Some EPL protects workers with the longest tenure, as in Sweden for example.[32] This creates a further disincentive for workers to try entrepreneurship since those workers "lose their place in the queue" if they ever want to close their venture and return to paid employment. EPL can also reduce worker mobility between firms. Yet worker mobility appears to play a crucial role in the success of places like Silicon Valley where it facilitates the rapid spread of technological information, knowledge spillovers, and entrepreneurship.[33]

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31. OECD, EMPLOYMENT OUTLOOK 51 (1999).

32. Magnus Henrekson, *Entrepreneurship: A Weak Link in the Welfare State?*, 14 INDUS. & CORP. CHANGE 437 (2005).

33. ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128 (1994). *See* Per Davidsson & Magnus M. Henrekson, *Determinants of the Prevalence of Start-ups and High-growth Firms*, 19 SM. BUS. ECON. 81 (2002).

These arguments suggest that there will be a negative relationship between EPL and entrepreneurship. However, this relationship could be weakened if employers can circumvent EPL, for example by outsourcing work to self-employed contractors.[34]

The available evidence lends only modest support to the notion that EPL retards entrepreneurship. Kanniainen and Vesala ran regressions using pooled quinquennial data from several OECD countries over the period 1978–98, and reported a significant negative relationship between self-employment rates and four different measures of Employment Protection Legislation (EPL).[35] However, subsequent research has been unable to replicate these findings. For example, Robson regressed self-employment rates from thirteen OECD countries over the mid-1960s to the mid-1990s on various measures of EPL and other control variables, and found that measures of EPL were generally insignificant in cross-country self-employment rate regressions.[36] Torrini reported similar results, also using OECD data.[37] It is unclear why Robson's and Torrini's results differ so much from those of Kanniainen and Vesala; perhaps less aggregated data are needed to dig deeper into the underlying causal factors.

D. Deregulation of the Small Business Banking Sector

Bank lending is the most important source of external finance for the majority of entrepreneurial ventures.[38] Regulations that impede free competition among small business lenders may therefore impede access to finance for entrepreneurial ventures—and hence the number of entrepreneurs.

In a recent study, Black and Strahan showed that deregulation of American bank branching and interstate banking significantly boosted the growth of small business lending, and that this translated into a substantial increase in new business incorporations.[39] In follow-up work based on a panel of data relating to manufacturing

34. Simon Parker, *Contracting Out, Public Policy and Entrepreneurship* (mimeo, 2006).

35. Vesa Kanniainen & Timo Vesala, *Entrepreneurship and Labour Market Institutions*, 22 ECON. MODEL. 828 (2005).

36. Martin Robson, *Does Stricter Employment Protection Legislation Promote Self-employment?*, 21 SM. BUS. ECON. 309 (2003).

37. Roberto Torrini, *Cross-country Differences in Self-employment Rates: The Role of Institutions*, 12 LAB. ECON. 661 (2005).

38. PARKER, SELF-EMPLOYMENT, *supra* note 1, at ch. 5.

39. Sandra Black & Philip Strahan, *Business Formation and the Deregulation of the Banking Industry*, *in* PUBLIC POLICY AND THE ECONOMICS OF ENTREPRENEURSHIP 59 (Douglas Holtz-Eakin & Harvey Rosen eds., 2004).

establishments across U.S. states over the period 1977–94, Cetorelli and Strahan documented how U.S. localities with lower bank concentration and looser regulations on bank expansion were associated with greater numbers of firms and smaller average firm sizes.[40] In particular, the size share of firms with less than five employees was found to be significantly higher the greater is the degree of banking competition.

Other supporting evidence comes from Beck et al.[41] Their cross-country evidence pointed to a positive association between bank concentration and greater perceived obstacles to finance by owners of small and large firms—especially the former. In addition, more government restrictions, government interference in the credit markets, and government ownership of banks were found to strengthen the association between bank concentration and obstacles to finance in all the (relatively less developed) countries in their sample.

The only caveat to these findings of which I am aware comes from Wall, who re-examined Black and Strahan's data.[42] Wall's contribution was to allow the effects of deregulation to vary across U.S. regions. He found that deregulation was associated with increases in new firm incorporations in some regions, but with decreases in others. This suggests a more subtle and ambiguous relationship between bank competition and entrepreneurship.

E. Summary and Implications

Overall, despite ongoing disagreement among researchers, both the theory and evidence point to somewhat stronger negative impacts on entrepreneurship and growth from regulation than positive or neutral effects. Yet governments the world over continue to tighten their regulatory grip on businesses while simultaneously espousing the benefits of entrepreneurship. It is unclear why this is so, though I will venture two conjectures. First, we still lack clear assessments of the impact of regulation on the formation and early growth of businesses.[43] This absence of evidence allows policymakers enough "wriggle room" to deny that their legislation is actually retarding

40. Nicola Cetorelli & Philip Strahan, *Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local US Markets*, 61 J. FIN. 437 (2006).

41. Thorsten Beck, Asli Demirguc-Kunt & Vojislav Maksimovic, *Bank Competition and Access to Finance: International Evidence*, 36 J. MONEY CREDIT & BANKING 627 (2004).

42. Howard Wall, *Entrepreneurship and the Deregulation of Banking*, 82 ECON. LETTERS, 333 (2004). *See also* Black & Strahan, *supra* note 39.

43. Dennis, *supra* note 22.

entrepreneurship. Second, there can sometimes be powerful entrenched interests at work, including incumbent entrepreneurs, who have nothing to gain and much to lose from deregulation that opens them up to fierce competition from new entrants. The tacit support of these entrepreneurs for further regulation gives the argument that regulation is "entrepreneur-neutral" (or even "entrepreneur-friendly") a spurious legitimacy. We will return to this issue below.

What is undoubtedly true is that countries differ markedly in their approaches to regulation. For example, in relation to legal procedures regulating entrepreneurial entry, a survey conducted in the late 1990s by UNICE (the Union of Industrial and Employer's Confederations of Europe) showed that new businesses can be established in countries like the United States, United Kingdom, and Australia with generally one procedure that takes less than one week; whereas in countries like Germany, France, the Netherlands, Italy, and Japan, an average of 8.4 procedures are needed to start a new business, taking an average of 9.4 weeks. Hence there may be considerable scope for governments to change their policies on entry cost regulation, as has already occurred recently in some of the Scandinavian countries.

It is important to remember that sometimes entrepreneurs themselves can also be agents of institutional change. Entrepreneurs can help to deregulate centralized economies by becoming public advocates of change; by persuading policymakers to de-regulate "behind the scenes"; and by evading restrictive laws to demonstrate to policymakers the value of changing them.[44] Li et al. call such individuals "institutional entrepreneurs."[45] Despite the benefits to the economy as a whole that institutional entrepreneurship can bring, it is risky, as the institutional entrepreneur not only has to cope with customary business risk, but also bears the additional risk that his or her reform efforts are unsuccessful. Li et al, provide several examples of institutional entrepreneurs stimulating economically valuable reforms in China.[46]

So, in conclusion, if governments can overcome entrenched interests and institute policies of deregulation that do not harm their other social objectives, they may be able to seize a precious opportunity to stimulate entrepreneurship and greater

44. David Li, Junxin Feng & Honping Jiang, *Institutional Entrepreneurs*, 96 AM. ECON. REV. PAPERS & PROC. 358 (2006).
45. *Id.*
46. *Id.*

competitiveness by easing the burden of regulation on small businesses.

IV. BANKRUPTCY LEGISLATION

In the United States, Chapter 7 bankruptcy discharges both business and personal debts.[47] Under the provisions of Chapter 7, the entrepreneur relinquishes to creditors all of their assets in excess of an exemption level, and renders all of their future earnings exempt from any further obligation to repay debts.[48] However, the entrepreneur's credit record is marked by recourse to Chapter 7.[49] From the perspective of the entrepreneur, corporate Chapter 11 is often a preferred route, as this can buy the entrepreneur time and possibly also liquidity, enabling them to renegotiate with banks and other creditors and to avoid tax and other commitments while undergoing corporate restructuring.[50] The problem with this measure from an economic standpoint is that it can amount to a "subsidy for failure," and may be especially inefficient if the subsidy encourages entrepreneurs to stick too long with a business that is a poor match with their human capital.[51]

There is considerable variation across countries in legal provisions regulating times to discharge of bankruptcy. They vary from no discharge at all in Austria, Sweden, Spain, and Italy, to immediate discharge in the United States. Other countries have recently reduced their times to discharge, e.g., from 3 years in the United Kingdom to 1 year in 2004. An argument used against relaxing bankruptcy provisions is that consumers might also exploit them to avoid repaying personal debts. According to Armour and Cumming, however, there is little evidence so far this has happened on a major scale.[52]

In fact, in the last few years the economic literature has propounded several arguments claiming that laxer bankruptcy laws encourage entrepreneurship. On a conceptual level, it is straightforward to construct a simple lending model with the property

47. 11 U.S.C. §§ 701–785 (2006).
48. *Id.*
49. *Id.*
50. 11 U.S.C. §§ 1101–1146 (2006).
51. *Cf.* Douglas Baird & Edward Morrison, *Serial Entrepreneurs and Small Business Bankruptcies*, 105 COLUM. L. REV. 2310 (2005) (explaining that only 10–15% of businesses that close file for bankruptcy; and only 62.5% of those that file for bankruptcy are shut down and liquidated. So this is not a common exit route).
52. John Armour & Douglas Cumming, *The Legal Road to Replicating Silicon Valley*, (Centre Bus. Res., Working Paper No. 281, 2004), *at* http://www.cbr.cam.ac.uk/pdf/wp281.pdf.

that more generous bankruptcy exemptions provide partial wealth insurance to risk-averse entrepreneurs and so increases the probability that they will start a business.[53] A more challenging theoretical question is whether relaxing bankruptcy provisions, for example by extending exemptions for failed entrepreneurs from bankruptcy procedures, enhances efficiency and social welfare.

There are several reasons to think that they will. First, when there is asymmetric information in the credit market, with entrepreneurs knowing their own unobserved ability while lenders do not, the ablest entrepreneurs have incentives to signal their type by forgoing asset protection. The logic is simple: if I know I am unlikely to fail, I will be more willing than others to expose myself to unattractive payoffs in the downside state, because my superior ability makes me confident I will not end up in the downside state. This is a credible commitment from the entrepreneur to the lender. The problem is that all other types, including the least able types, have incentives to emulate the good types, in order to avoid being labeled as undesirable borrowers by banks, and possibly cut off from sources of borrowing altogether. The outcome of this particular "signaling game" is inefficient. All entrepreneurs can be made better off (while banks can still break even) by implementing bankruptcy exemptions that cap losses and limit entrepreneurs' downside exposure.[54]

Landier makes a second case for softer bankruptcy rules on the grounds that it encourages experimentation by entrepreneurs.[55] It becomes cheaper for the entrepreneur to close an existing business and try their luck again if they face less drastic sanctions in the downside state. This increases their incentives to become serial entrepreneurs, as well as overall economic efficiency. Because experimentation by entrepreneurs seems to pay off most in high-tech industries, it follows that softer treatment of bankrupts might be more appropriate in these industries (or in economies dominated by these industries) than in others where risk-return profiles are flatter.

Third, more generous bankruptcy exemptions can improve efficiency and entrepreneurs' welfare in cases where entrepreneurs are over-optimistic. Over-optimism appears to be a pronounced and

53. Wei Fan & Michelle White, *Personal Bankruptcy and the Level of Entrepreneurial Activity*, 46 J. L. & ECON. 543 (2003).

54. Philippe Aghion & Benjamin Hermalin, *Legal Restrictions on Private Contracts Can Enhance Efficiency*, 6 J. L. ECON. & ORG. 381 (1990).

55. Augustin Landier, *Entrepreneurship and the Stigma of Failure* (mimeo, 2004).

persistent entrepreneurial trait.[56] Entrepreneurs who are risk-averse but unrealistically optimistic will prefer lending contracts that concentrate returns in the success state. But from an objective (realistic) point of view these entrepreneurs end up under-insured. Asset protection provides insurance which increases their welfare ex post, even though the over-optimistic entrepreneurs do not think they need it ex ante.

Fourth, non-draconian bankruptcy laws allow failed entrepreneurs a "fresh start." This is acknowledged in U.S. law following the well-known *Local Loan v. Hunt* case, where the Supreme Court ruled that the bankruptcy law "gives to the honest but unfortunate debtor . . . a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt."[57] Ayotte analyzed a simple model with bankruptcy legislation that does not encumber failed entrepreneurs with high liabilities.[58] This increases failed entrepreneurs' effort, when they try again and so increases social welfare. The free market cannot achieve the welfare optimum on its own, necessitating mandatory legal implementation.

Fifth, Manove and Padilla show that strengthening bank defenses against over-optimistic entrepreneurs (for example, by requiring all entrepreneurs to post collateral) leads competitive banks to pitch interest rates so low that over-optimistic but inefficient individuals are encouraged to enter the market and become entrepreneurs.[59] This reduces economic efficiency, so it would be desirable to somehow weaken bank defenses. A policy that achieves this is laxer bankruptcy laws, since this limits the amount that banks can recover if entrepreneurs default. By bearing more of the costs of default, banks are obliged to charge higher interest rates. This discourages the most over-optimistic entrepreneurs, which thereby increases efficiency.[60]

Some independent evidence is consistent with Manove and Padilla's prediction that more generous bankruptcy exemptions

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56. Simon Parker, Professor, Durham U., Presentation to AEA Meetings: New Agendas in the Economics of Entrepreneurship: Optimism, Education, Wealth, and Entrepreneurship (Jan. 2006).

57. Local Loan Co. v. Hunt, 292 U.S. 234 (1934).

58. Kenneth Ayotte, *Bankruptcy and Entrepreneurship: The Value of a Fresh Start*, 23 J.L. & ECON. ORG. 161 (2007).

59. Michael Manove & Atilano Padilla, *Banking (Conservatively) with Optimists*, 30 RAND J. ECON. 324 (1999).

60. This is a neat policy response because problems caused by over-optimism are especially difficult to solve contractually since, by definition, unrealistic optimists tend to be unconscious of their own cognitive biases.

increase the cost of credit.[61] Several U.S. studies have found that lenders in states with more generous asset exemptions charge higher interest rates. However, they also tend to offer small loans, and are likelier to deny credit to entrepreneurs.[62] More recent work though has found that entrepreneurship increases on net once bankruptcy exemptions are extended. Thus Fan and White used U.S. Survey of Incomes and Program Participation data from 1993–98 to exploit state variations in bankruptcy exemption levels.[63] They found evidence of a positive relationship between entrepreneurship and exemptions, estimating the probability that a household owns a business to be 35% higher if the family is located in states with unlimited rather than limited exemptions.

V. PROPERTY RIGHTS, CORRUPTION, AND THE EFFICIENCY OF THE LEGAL SYSTEM

Well-protected property rights help promote entrepreneurship and innovation. Secure property rights prevent ad hoc expropriation of the fruits of entrepreneurship, which is usually necessary to make costly investments worthwhile. A stable legal framework promotes planning, resource acquisition, and coordination that take time to put in place.

In applied research, the security of property rights has been measured in several ways. For example, Johnson et al. measured them in terms of individuals' perceptions of the integrity of property rights and the effectiveness of courts.[64] A central question is whether weak property rights affect entrepreneurial behavior. Johnson et al. explored this issue using survey data from private manufacturing firms in Russia, Ukraine, Poland, Slovakia, and Romania in 1997. Using multivariate statistical analysis, these authors reported significant negative effects from insecure property rights on entrepreneurs' rates of re-investment in their firms. Entrepreneurs who perceived their property rights to be the least secure reinvested only 32% of their

61. Manove & Padilla, *supra* note 59.

62. Jonathan Scott & Terrence Smith, *The Effect of the Bankruptcy Reform Act of 1978 on Small Business Loan Pricing*, 16 J. FIN. ECON. 119 (1986). *See* Reint Gropp, John Scholz & Michelle White, *Personal Bankruptcy and Credit Supply and Demand*, 112 Q.J. ECON. 217 (1997). *See* Jeremy Berkowitz & Michelle White, *Bankruptcy and Small Firms' Access to Credit*, 35 RAND J. ECON. 69 (2004).

63. Fan & White, *supra* note 53.

64. Simon Johnson, John McMillan & Christopher Woodruff, *Entrepreneurs and the Ordering of Institutional Reform*, 8 ECON. TRANS. 1 (2000) [hereinafter Johnson, McMillan & Woodruff, *Entrepreneurs*]. *See* Simon Johnson, John McMillan & Christopher Woodruff, *Property Rights and Finance*, 92 AM. ECON. REV. 1335 (2002).

profits, while entrepreneurs perceiving the most secure rights reinvested 56%. Insecurity of property rights, all else equal, therefore reduced entrepreneurs' investment by over a third. Re-investment behavior is crucial because it drives employment and sales growth in these countries—and hence aggregate economic growth.

In general, efforts to stimulate entrepreneurship must take account of the legal and institutional setting. In many developing and transition economies, courts are used infrequently, and government takes up more of entrepreneurs' time and money in bribes, taxes, and other costs of doing business. The clear policy implication emerging from Johnson et al.'s work is that secure property rights (including the control of corruption) are necessary for entrepreneurship to develop.[65]

Additional evidence supports this position. For example, Frye and Shleifer found that small enterprises in Warsaw are more productive than their counterparts in Moscow partly because their tax and regulatory burden is lower.[66] Furthermore, Djankov et al. reported that perceptions of low corruption and a favorable attitude toward entrepreneurship among government officials and the general populace increase both the probability that Russians become entrepreneurs, and the length of time they spend in entrepreneurship.[67]

Arguably, governments should not only tackle impediments to investment such as corruption and the mafia, but should also implement responsible macroeconomic policies. McMillan and Woodruff argue that governments in transition economies differ a lot in their choices of enterprise-friendly microeconomic and macroeconomic policies, which in turn has a substantial impact on the spread of entrepreneurship in these economies.[68] This issue is all the more important because it seems that the success or failure of a transition economy can largely be explained in terms of the performance of its entrepreneurs. In many of these countries, new firms create the bulk of all new employment, much more so than incumbent state firms or their newly privatized counterparts, which often tend to shed jobs.[69]

65. *Id.*
66. Timothy Frye & Andrei Shleifer, *The Invisible Hand and the Grabbing Hand*, 87 AM. ECON. REV. 354 (1997).
67. Simeon Djankov et al., *Who are Russia's Entrepreneurs?*, 3 J. EUR. ECON. ASS'N 587 (2005).
68. McMillan & Woodruff, *supra* note 27.
69. Valentijn Bilsen & Jozef Konings, *Job Creation, Job Destruction, and Growth of Newly Established, Privatised and State-owned Enterprises in Transition Economies: Survey Evidence from Bulgaria, Hungary and Romania*, 26 J. COMP. ECON. 429 (1998).

So far, the discussion has centered on the transition economies of Eastern Europe, in which corruption and uncertainty make the existence of strong institutions of paramount importance. However, it should be stressed that even developed economies face similar challenges. In particular, powerful established entrepreneurs have opportunities and incentives to lobby for restrictions on competitors, both domestic and foreign. This activity often goes by the name of "rent seeking behavior." Holmes and Schmitz present several specific examples from a wide range of U.S. industries showing how entrepreneurs have used the regulatory process to block rivals in order to limit competition.[70] Examples of such behavior include small and inefficient banks lobbying for restrictions on bank branching in U.S. states in attempts to restrict competition; efforts by small European and Japanese retailers to lobby for legal restrictions on maximum store floor space; incumbent trucking companies exercising undue influence by persuading the U.S. Interstate Commerce Commission to deny licenses to new competitors; and pressure by trade unions and small firms to change city building codes to restrict the spread of labor-saving innovations in the U.S. construction industry. Evidence cited by Holmes and Schmitz suggests that these efforts have all reduced output and productivity.[71]

Successful entrepreneurs who run large firms can even lobby governments to introduce regulations that impose high fixed costs on all firms, including their own, such as administrative compliance costs relating to banking and pensions. Because larger firms can spread these costs over greater output, they can thereby put their smaller rivals at a competitive disadvantage.

Morck and Yeung argue that in many countries, including developed ones, oligarchic entrepreneurs running family businesses find it easier than other economic agents to engage in successful rent seeking practices.[72] They suggest a range of reasons, based on game theory, why this is so.[73] Oligarchic entrepreneurs can build trust with officials to gain favors because of their longevity, small number, ability to pre-commit to outcomes, discretion, and power to punish. They sometimes also have blood ties to senior political figures. This

70. Thomas Holmes & James Schmitz, *A Gain from Trade: From Unproductive to Productive Entrepreneurship*, 47 J. MONETARY ECON. 417 (2001).
71. *Id.*
72. Randall Morck & Bernard Yeung, *Family Control and the Rent-seeking Society*, 28 ENTRE. THEORY & PRAC. 391 (2004).
73. *Id.*

can culminate in "a positive feedback trap where oligarchic family control, political rent seeking and poverty all perpetuate each other."[74]

The efficiency of courts matters in developed countries, too. Policy recommendations for addressing credit misallocation can be subtle, however. On the one hand, Jappelli et al. argue that improvements in judicial efficiency in enforcing debt contracts when borrowers can default opportunistically are likely to reduce credit constraints and increase lending.[75] The reason is that, by increasing borrowers' incentives to repay, creditors are more likely to extend credit. On the other hand, Zazzaro points out that stricter enforcement of debt contracts under conditions of asymmetric information might actually worsen credit allocation to entrepreneurs as it weakens banks' incentives to screen borrowers.[76] In contrast, improvements in accounting standards (e.g., tightening accounting and reporting rules) reduce the costs of screening and hence improve credit allocation and social welfare.

Mirroring the different theoretical positions on this issue, the available evidence is mixed. Using panel data from ninety-five Italian provinces, Jappelli et al. found that significantly fewer loans were extended in provinces with longer trials or large backlogs of pending trials.[77] Judicial efficiency correlates positively with the volume of lending and negatively with proxies for credit constraints. Using a different sample of Italian data, however, Guiso et al. found that a measure of judicial inefficiency, namely the number of years it takes to reach a first-degree judgment in the province, had a negative but insignificant effect on Italian firm creation rates.[78] It would seem that the way judicial efficiency is measured affects empirical estimates of its impact on entrepreneurship.

VI. CONCLUSION

Rather than repeat the arguments and findings outlined in this article, I will close with some implications for future research. First, there appears to be abundant scope for future researchers to develop and enrich the theoretical apparatus used to study the interface between law and entrepreneurship. Most of the theoretical models

74. *Id.* at 404.

75. Tullio Jappelli, Marco Pagano & Magda Bianco, *Courts and Banks: Effects of Judicial Enforcement on Credit Markets*, 37 J. MONEY CREDIT & BANKING 223 (2005).

76. *Cf.* Alberto Zazzaro, *Should Courts Enforce Credit Contracts Strictly?*, 115 ECON. J. 166 (2005).

77. Jappelli, Pagano & Bianco, *supra* note 77.

78. Guiso, Sapienza & Zingales, *supra* note 20.

that have been discussed above have been developed relatively recently, and should best be regarded as preliminary building blocks than as the last word on the issues they speak to. One particular challenge is to find connections between these issues, so that more than one legal institution or instrument can be analyzed simultaneously. Another challenge is to consider whether other aspects of the legal system affect entrepreneurs or have been implicitly shaped by latent concerns about their impact on entrepreneurship, in ways that have not yet been subjected to analytical scrutiny.

Second, the evidence base is strikingly thin in places, especially regarding aspects of business regulation. Further research is needed before we can reach definitive judgments about which legal provisions help and which hinder entrepreneurial endeavors. In particular, we badly need detailed micro evidence about the costs and benefits of particular kinds of regulation, and how exactly they impinge on entrepreneurs. It should be borne in mind that regulation might not only encourage entrepreneurs to take particular (observable) actions in response, but can also lead them to avoid taking other (unobservable) actions that are socially valuable, for example employing more workers. By definition, detecting events that did not happen is not straightforward. Another complicating factor for empirical research is that regulations can sometimes open up opportunities for some entrepreneurs to provide goods and services that make compliance with them easier, for example consultancy and legal services. This can happen at the same time that the regulations close off opportunities for other entrepreneurs on the grounds of cost or feasibility. A balanced assessment of regulations should therefore identify the winners as well as the losers. Overall though, most economists tend to argue that actions that increase business costs for some companies cause net welfare losses even after factoring in the transfers from losers to winners. This recommends a general principle of minimizing regulation wherever possible.

What seems unambiguous is that the health of entrepreneurship and the business climate in general depends on having a transparent and fair legal justice system. Business also needs simple and clear regulations. Unfortunately, regulations appear to be becoming ever more complex. An important challenge for policy makers in the coming years is to regulate more sparingly, transparently, simply, and appropriately, generating desired social benefits while minimizing the burden on the businesses that generate the income and tax revenue on which governments depend.