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### Legal Mirrors of Entrepreneurship

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## **Legal Mirrors of Entrepreneurship**

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# LEGAL MIRRORS OF ENTREPRENEURSHIP

MIRIT EYAL-COHEN\*

**Abstract:** Small businesses are regarded as the engine of the economy. But just what is a “small business”? Depending on where one looks in the law, the definitions vary. Routinely, though, these various classifications fail to assess the policy considerations and legislative intent for granting regulatory preferences to small concerns to begin with. In the last century, the U.S. government has been cultivating one such policy of fiscal and economic growth. Consequently, Congress and private institutions have been acting to incentivize, support, and reward entrepreneurship through the law to stimulate the economy. Nevertheless, rather than targeting entrepreneurial businesses directly, the law grants preferences to entities according to their size, reflecting an obsolescent picture of past economies. Although most entrepreneurial firms may start small, not all small firms innovate and create new economic value. This Article applies “mirror theory” and proposes a novel legal model that strives to correlate the design of our legal rules, the goals they set to advance, and the societal trends they reflect. The Article suggests replacing the current size-based approach in our laws with a model that measures firms’ entrepreneurial orientation. Unlike the current binary small-or-not standard, this multi-tiered, simple, and flexible model reduces the intrinsic arbitrariness, complexity, and uncertainty in current legal definitions.

## INTRODUCTION

Over the past thirty years, there has been a growing awareness of the positive externalities that small businesses create in the economy.<sup>1</sup> What is a

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<sup>1</sup> Cf. *The Small Business Economy*, U.S. BUS. ADMIN., <http://www.sba.gov/advocacy/849/6282>, archived at <http://perma.cc/372J-X3VV> (last visited Apr. 16, 2014) (“For the past 30 years, the Office

“small business”? The answer is in the eyes of the beholder. Today, definitions of the term “small business” vary widely throughout different areas of the law, and even from one section of the law to another.<sup>2</sup> Small businesses are depicted as both an engine of the American economy and as a primary source of entrepreneurship and innovation.<sup>3</sup> Indeed, they have come to represent the essence of the American dream and the free enterprise economic system.<sup>4</sup>

These depictions of small business can be traced to the history of small firms and the way these entities have been defined by law.<sup>5</sup> According to the Small Business Administration (“SBA”), “small businesses” are businesses with fewer than five hundred employees.<sup>6</sup> And the SBA reports that over ninety-nine percent of firms in the United States meet this definition.<sup>7</sup> Throughout history, these firms have benefitted from special rules and regulatory exemp-

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of Advocacy has produced a series of annual reports on American small businesses [which provide] a rich collection of information about small business contributions to the economy and trends over time.”) *See generally* U.S. SMALL BUS. ADMIN., THE SMALL BUSINESS ECONOMY: A REPORT TO THE PRESIDENT (2010), available at [http://www.sba.gov/sites/default/files/sb\\_econ2010.pdf](http://www.sba.gov/sites/default/files/sb_econ2010.pdf), archived at <http://perma.cc/P7NN-92BF> (discussing the contributions small businesses make to the economy).

<sup>2</sup> Mirit Eyal-Cohen, *Down-Sizing the “Little Guy” Myth in Legal Definitions*, 98 IOWA L. REV. 1041, 1065–86 (2013) (surveying how small business is defined differently in securities law, health law, labor and employment law, patent law, government contracting law, and tax law).

<sup>3</sup> *See* Susan M. Gates & Kristin J. Leuschner, *Introduction* to IN THE NAME OF ENTREPRENEURSHIP? THE LOGIC AND EFFECTS OF SPECIAL REGULATORY TREATMENT FOR SMALL BUSINESS 1, 1 (Susan M. Gates & Kristin J. Leuschner eds., 2007) (discussing the role small businesses play in the economy).

<sup>4</sup> *See* 128 CONG. REC. 9177 (1982) (statement of Sen. Samuel A. Nunn, Jr.) (“Small business is the heart of the free enterprise system, that sector most likely to take the steps necessary to get this Nation back of [sic] the road to economic recovery.”); 124 CONG. REC. 35217 (1978) (statement of Sen. Gaylord A. Nelson) (“[S]mall businesses . . . are the heart and soul of the competitive free enterprise system.”); *cf.* MANSEL G. BLACKFORD, A HISTORY OF SMALL BUSINESS IN AMERICA 1 (2d ed. 2003) (discussing the integral role small businesses play in American culture); Richard J. Pierce, Jr., *Small Is Not Beautiful: The Case Against Special Regulatory Treatment of Small Firms*, 50 ADMIN. L. REV. 537, 538 (1998) (noting that the myth that small is good and big is bad is deeply rooted in our cultural beliefs). *See generally* Frank T. Carlton, *What Is Free Enterprise?*, 3 AM. J. ECON. & SOC. 655, 656 (1944) (discussing the importance of free enterprise to the American dream).

<sup>5</sup> *See infra* notes 177–238 and accompanying text (providing a history of small business in America).

<sup>6</sup> U.S. SMALL BUS. ADMIN., FREQUENTLY ASKED QUESTIONS 1 (2012) [hereinafter U.S. SMALL BUS. ADMIN., FAQ], available at [http://www.sba.gov/sites/default/files/FAQ\\_Sept\\_2012.pdf](http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf), archived at <http://perma.cc/F6Q3-49VT>. Different industries may define small business differently. *Id.* (citing U.S. SMALL BUS. ADMIN., TABLE OF SMALL BUSINESS SIZE STANDARDS MATCHED TO NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM CODES (2014), available at [http://www.sba.gov/sites/default/files/files/Size\\_Standards\\_Table.pdf](http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf), archived at <http://perma.cc/6ZEF-7AHP> (listing small business size standards in numerous industries, including those ranging from agriculture to public administration)).

<sup>7</sup> *Id.* (stating that 27.9 million U.S. firms qualify as small businesses, whereas only 18,500 firms have 500 or more employees).

tions solely by virtue of their size.<sup>8</sup> When the majority of a group receives preferential treatment, one can only wonder whether those rules could be designed more effectively.

Our legal system is full of benefits granted to small entities.<sup>9</sup> These benefits are overinclusive, contain inconsistent and contradictory notions of firm size, and create data distortions.<sup>10</sup> With over ninety-nine percent of firms meeting the various definitions of small business, it is no surprise that studies find a positive correlation between such entities and the growth of the American economy.<sup>11</sup> Given the broad nature of the small business category, legal favoritism of small entities results in the waste of revenues and the misallocation of government resources.<sup>12</sup> This occurs because the rules governing the allocation of benefits focus on firm size rather than more efficient ways of promoting economic growth.<sup>13</sup> This Article seeks to remedy this skewed picture of society by considering the role that legal rules play in reinforcing such an image.

Legal rules that favor small entities are one instance in which the law provides an archaic reflection of society. The favoring of small firms began in a time when people feared and disliked the mounting power of big businesses and simultaneously appreciated small businesses as essential to a free enterprise system.<sup>14</sup> This social image of small businesses, however, is very different today. In fact, scholars have found that small businesses create negative

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<sup>8</sup> See Eyal-Cohen, *supra* note 2, at 1065–85 (highlighting small business favoritism in securities law, health law, labor and employment law, patent law, government contracting law, and tax law).

<sup>9</sup> *Id.*

<sup>10</sup> See *id.* at 1095–97 (arguing that certain government programs that aim to promote entrepreneurship result in a waste of resources because they focus on business size).

<sup>11</sup> See *id.* at 1095–96 (discussing studies that show a correlation between firm size and economic growth); U.S. SMALL BUS. ADMIN., FAQ, *supra* note 6, at 1 (reporting that 99.7% of U.S. employer firms are small businesses). Similar to the SBA’s definition of small business, the definition found in the Securities Act captures over 99% of firms. Compare 15 U.S.C. § 77c(b)(1) (2012) (describing “small organizations” as entities engaged in small-business financing with total assets of \$5 million or less), with *SOI Tax Stats—Corporation Source Book Statistical Tables 2008 (All Sectors)*, INTERNAL REVENUE SERV., <http://www.irs.gov/uac/SOI-Tax-Stats-Corporation-Source-Book-Statistical-Tables-2008-All-Sectors>, archived at <http://perma.cc/4DS3-PVS2> (last updated Apr. 26, 2013) (follow the “1” hyperlink located directly to the right of “U.S. Total, 2008”) (illustrating that 99.96% of firms meet this definition). Moreover, §§ 1045 and 1202 of the Internal Revenue Code (“Code”) define small businesses as firms with \$50 million of assets or less. I.R.C. § 1045(b)(1) (2012); I.R.C. § 1202(c)–(d). Currently, the Internal Revenue Service provides that 99% of all firms report \$50 million of assets or less. See *SOI Tax Stats—Corporation Source Book Statistical Tables 2008 (All Sectors)*, *supra*.

<sup>12</sup> See Eyal-Cohen, *supra* note 2, at 1096–97.

<sup>13</sup> See *id.* at 1056.

<sup>14</sup> See Pierce, *supra* note 4, at 538–39, 549–50; cf. 128 CONG. REC. 9177 (1982) (statement of Sen. Samuel A. Nunn, Jr.) (“Small business is the heart of the free enterprise system . . .”).

externalities.<sup>15</sup> For example, employment in small firms is generally unstable and unskilled.<sup>16</sup> Further, most small businesses are “job destroyers” due to rapid job turnover and layoffs.<sup>17</sup> Likewise, employment in such livelihood businesses is usually low paying and lacking in job security, benefits, and opportunities for advancement.<sup>18</sup> These observations have recently begun to shift the focus from small businesses’ contributions to the economy to the growth potential of young entities, creating a need for further investigation of the sources of economic development.<sup>19</sup>

Entrepreneurship is an essential element of economic development. Although there is no one element that drives economic growth,<sup>20</sup> since the nineteenth century, scholars have recognized the essential role of entrepreneurship in the development of the economy.<sup>21</sup> Throughout the twentieth century to to-

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<sup>15</sup> See BLACKFORD, *supra* note 4, at 178 (discussing the shortcomings of small business); CHARLES BROWN ET AL., EMPLOYERS LARGE AND SMALL 2–4 (1990); Walter Y. Oi & Todd L. Idson, *Chapter 33: Firm Size and Wages*, in HANDBOOK OF LABOR ECONOMICS 2165, 2166–81 (Orley Ashenfelter & David Card eds., 1999) (discussing the wage gap between large and small firms); Martin A. Sullivan, *When Should Small Businesses Get a Tax Break?*, TAX NOTES, Jan. 16, 2012, at 267, 268 (contending that big firms pay higher wages, provide better health and pension benefits, and have lower turnover than small firms).

<sup>16</sup> Oi & Idson, *supra* note 15, at 2184, 2187–88.

<sup>17</sup> See Sullivan, *supra* note 15, at 268.

<sup>18</sup> See Oi & Idson, *supra* note 15, at 2204; Sullivan, *supra* note 15, at 268.

<sup>19</sup> See BLACKFORD, *supra* note 4, at 176–81.

<sup>20</sup> See generally ROBERT J. BARRO, DETERMINANTS OF ECONOMIC GROWTH: A CROSS-COUNTRY EMPIRICAL STUDY 52–87 (1997) (examining the effect of democracy on economic growth); E. Borensztein et al., *How Does Foreign Direct Investment Affect Economic Growth?*, 45 J. INT’L ECON. 115, 115 (1998) (reporting that foreign direct investment is a factor that affects economic growth); Ross Levine, *Law, Finance, and Economic Growth*, 8 J. FIN. INTERMEDIATION 8, 9 (1999) (arguing that the legal environment affects financial development and, eventually, long-run economic growth); Ross Levine & Sara Zervos, *Stock Markets, Banks, and Economic Growth*, 88 AM. ECON. REV. 537, 537 (1998) (demonstrating that stock market liquidity and banking development contribute to economic growth); Richard R. Nelson & Edmund S. Phelps, *Investment in Humans, Technological Diffusion, and Economic Growth*, 56 AM. ECON. REV. 69, 69–70 (1966) (positing that education and investment in human capital is important for economic growth).

<sup>21</sup> See PETER F. DRUCKER, INNOVATION AND ENTREPRENEURSHIP: PRACTICE AND PRINCIPLES 21 (1985) (noting that the nineteenth century French economist Jean-Baptiste Say described entrepreneurs as persons who “shift[] economic resources out of an area of lower and into an area of higher productivity and greater yield”); FRANK H. KNIGHT, RISK, UNCERTAINTY, AND PROFIT 41 (1921) (stating that taking risks is the entrepreneur’s essential function in the economy); JOSEPH A. SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT: AN INQUIRY INTO PROFITS, CAPITAL, CREDIT, INTEREST, AND THE BUSINESS CYCLE 74 (1934) (describing entrepreneurship as the “fundamental phenomenon of economic development”); William J. Baumol, *Entrepreneurship in Economic Theory*, 58 AM. ECON. REV. 64, 64–65 (1968) (contending that the entrepreneur has an important role in economic development); Harvey Leibenstein, *Entrepreneurship and Development*, 58 AM. ECON. REV. 72, 72 (1968) (arguing that entrepreneurship has a unique and critical role in the economic growth process). *But see* ISRAEL M. KIRZNER, COMPETITION AND ENTREPRENEURSHIP 81 (1973) (“[F]or me [entrepreneurship] is important primarily in enabling the market process to work itself out in all contexts—with the possibility of economic development seen merely as a special case.”).

day, there has been similar general agreement among economists and policy-makers that entrepreneurship is a vital component in economic development.<sup>22</sup> The key predictor of a firm's commercial success is entrepreneurial character—the ability to innovate and successfully deliver innovation to the market.<sup>23</sup>

Some scholars distinguish between small business owners and entrepreneurs.<sup>24</sup> Most small traditional businesses today exist primarily to provide means of support to the owners and their families, not to bolster the economy.<sup>25</sup> Successful entrepreneurial entities, by contrast, take high risks by pursuing novel ideas.<sup>26</sup> When these ideas are delivered to the market successfully, they result in rapid and substantial wealth and labor creation.<sup>27</sup> Despite this distinction, the government offers significant benefits to people who operate or own stock in all small firms in the name of entrepreneurship.<sup>28</sup>

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<sup>22</sup> See, e.g., DAVID A. HARPER, FOUNDATIONS OF ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT 2 (2003) (“[E]ntrepreneurship itself often generates more entrepreneurship, so that economic development is a process that can be kept in motion by endogenous economic forces rather than exogenous shocks . . . .”); Martin A. Carree & A. Roy Thurik, *The Impact of Entrepreneurship on Economic Growth*, in HANDBOOK OF ENTREPRENEURSHIP RESEARCH: AN INTERDISCIPLINARY SURVEY AND INTRODUCTION 437, 437 (Zoltán J. Ács & David B. Audretsch eds., 2003) (arguing that entrepreneurship is positively correlated with growth); Amir N. Licht, *The Entrepreneurial Spirit and What the Law Can Do About It*, 28 COMP. LAB. L. & POL’Y J. 817, 817 (2007) (noting that entrepreneurship is important to many desirable social outcomes, including lower unemployment, economic growth, and technological advancement); Sander Wennekers & Roy Thurik, *Linking Entrepreneurship and Economic Growth*, 13 SMALL BUS. ECON. 27 *passim* (1999) (surveying the literature associating entrepreneurship with economic development); Robert J. Shiller, *The Culture of Entrepreneurship*, PROJECT SYNDICATE (July 25, 2005), <http://www.project-syndicate.org/commentary/the-culture-of-entrepreneurship#zlpMACS0YOhVqwP4.99>, archived at <http://perma.cc/G83E-V5G8> (contending that entrepreneurship is an incubator and essential to long-term economic success).

<sup>23</sup> See Zoltán J. Ács et al., *Introduction: Why Entrepreneurship Matters to ENTREPRENEURSHIP, GROWTH, AND PUBLIC POLICY* 1, 8–9 (Zoltán J. Ács et al. eds., 2009) (discussing the importance of entrepreneurship to economic growth and the commercialization of innovative ideas).

<sup>24</sup> James W. Carland et al., *Differentiating Entrepreneurs from Small Business Owners: A Conceptualization*, 9 ACAD. MGMT. REV. 354, 354 (1984) (arguing that although there is an overlap between entrepreneurial firms and small business firms, they are different entities). *But see* William G. Gale & Peter R. Orszag, *An Economic Assessment of Tax Policy in the Bush Administration, 2001–2004*, 45 B.C. L. REV. 1157, 1192, 1204–06 (2004) (including small business in a discussion of pro-entrepreneur tax cuts).

<sup>25</sup> See Sullivan, *supra* note 15, at 267–68.

<sup>26</sup> JOSEPH A. SCHUMPETER, *The Entrepreneur in Today's Economy*, in THE ENTREPRENEUR, CLASSIC TEXTS BY JOSEPH A. SCHUMPETER 261, 261–83 (Markus C. Becker et al. eds., 2011) (observing this phenomenon in a discussion about the process of making entrepreneurial profits).

<sup>27</sup> See *id.*

<sup>28</sup> Compare I.R.C. § 1202(a)(1) (2012) (providing a tax break for noncorporate investors by excluding fifty percent of gains “from the sale or exchange of qualified small business stock”), with 157 CONG. REC. E10–E11 (daily ed. Jan. 5, 2011) (statement of Rep. David Dreier) (emphasizing the importance of innovation and entrepreneurship to the economy in support of tax benefits for small businesses).

The legal and academic discourse favoring small businesses harms entrepreneurship. The U.S. government, through congressional small business committees and the SBA, reinforces the path dependency of small business favoritism at the expense of entrepreneurship.<sup>29</sup> Moreover, the continuous conflation of small businesses and entrepreneurs in and of itself hampers entrepreneurship. This is because the regulatory relief that small business owners receive does not necessarily provide entrepreneurs with the support they need.<sup>30</sup>

We must ask, then, if we acknowledge that the focus on business size in legal definitions is inappropriate, what alternative remains? In other words, if entrepreneurship is a well-known element central to the development of an economy, how can the law mirror it? This Article aims to answer these important questions. Because law affects societies, markets, people, and firms, it has the power to directly and indirectly benefit or harm the development of entrepreneurship.<sup>31</sup> Accordingly, it becomes imperative to target entrepreneurial entities accurately.<sup>32</sup> To date, such efforts have proved unsuccessful.

This Article attempts to help the law accurately target entrepreneurs by creating a new legal model of entrepreneurial proclivity. It proposes to replace certain references to small business in the law with a flexible, graduated model of entrepreneurial orientation. This new model relies on the insights of the Austrian School of Economics, which perceives the market as a process rather

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<sup>29</sup> See Mirit Eyal-Cohen, *Why Is Small Business the Chief Business of Congress?*, 43 RUTGERS L.J. 1, 8–12, 28–38 (2011) (demonstrating how certain political institutions entrenched ineffective legal paths by sustaining small business preferences). Path dependency is the notion that history matters and that past actions influence present decisions. 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 17–18 (Peter Newman ed., 1998). For example, a person does not change his housing each day in response to price changes in the market. *Id.* at 18. A housing choice is the result of a rental or purchase decision made in the past, and that past decision influences the person's present decision not to move. *Id.*

<sup>30</sup> See Eyal-Cohen, *supra* note 29, at 34–51 (providing an example of the Small Business Investment Company program, a creation of the institutional path dependency of small business interests that failed to attend to the needs of entrepreneurs).

<sup>31</sup> See Markus C. Becker et al., *Introduction to THE ENTREPRENEUR*, CLASSIC TEXTS BY JOSEPH A. SCHUMPETER, *supra* note 26, at 1, 37 (expressing a belief that social and economic policies have a role in harming or supporting entrepreneurship); Licht, *supra* note 22, at 850–61 (discussing the effects law has on entrepreneurship).

<sup>32</sup> See Licht, *supra* note 22, at 34–51; D. Gordon Smith & Masako Ueda, *Law & Entrepreneurship: Do Courts Matter?*, 1 ENTREPRENEURIAL BUS. L.J. 353, 356–57 (2006) (arguing that scholars should focus on studying optimal legal structures to facilitate the commercialization of entrepreneurial opportunities and the regulation of entrepreneurial firms); see also CRAIG K. ELWELL, CONG. RESEARCH SERV., RL32987, LONG-TERM GROWTH OF THE U.S. ECONOMY: SIGNIFICANCE, DETERMINANTS, AND POLICY 15 (2006), available at [http://assets.opencrs.com/rpts/RL32987\\_20060525.pdf](http://assets.opencrs.com/rpts/RL32987_20060525.pdf), archived at <http://perma.cc/AG8K-5NE3> (“This infrastructure [of economic growth] is comprised of laws, government policies, socio-economic institutions, and cultural attitudes that are conducive to the entrepreneurial activity that generates sustained long-term economic growth.”).



than as a configuration of prices.<sup>33</sup> The proposed model focuses on innovation and economic value to set forth five factors that describe the entrepreneurial phenomenon: (1) the firm's age, (2) knowledge procurement, (3) innovation yield, (4) labor expansion, and (5) entrepreneurial success.<sup>34</sup> This Article demonstrates that the deployment of a multi-tiered legal model of entrepreneurship, as opposed to the current small-or-not standard, will more effectively promote the goals underlying small business benefits—namely, economic growth.<sup>35</sup>

Part I of this Article reviews the elements of economic development theory.<sup>36</sup> Part II then demonstrates that the current legal focus on size reflects an anachronistic picture of past economies and obsolete social views.<sup>37</sup> Part III offers a multi-dimensional legal model of entrepreneurship, which better accounts for the role of entrepreneurship in economic development.<sup>38</sup> Part IV surveys the policies of the proposed model as well as possible criticisms.<sup>39</sup> It also illustrates how the proposed model can be applied more efficiently by replacing some of the current legal size definitions.<sup>40</sup> Lastly, Part IV highlights the complex dynamic between entrepreneurship and the law.<sup>41</sup>

## I. THE ELEMENTS OF ECONOMIC DEVELOPMENT

Every practical model must be grounded in theory.<sup>42</sup> Joseph Schumpeter, the most influential figure of the Austrian School of Economics, defined eco-

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<sup>33</sup> See ISRAEL M. KIRZNER, *THE MEANING OF MARKET PROCESS: ESSAYS IN THE DEVELOPMENT OF MODERN AUSTRIAN ECONOMICS* 3–37 (1992) (explaining the differences between Austrian Economics and other schools of economics). Adam Smith, on the other hand, argued that an invisible hand directs the forces of the market toward equilibrium. See ADAM SMITH, *THE WEALTH OF NATIONS BOOKS: I–III* 157–66 (Andrew S. Skinner ed., Penguin Books 1986) (1776) (discussing how the market reaches the natural price of a commodity). See generally *infra* notes 43–49 and accompanying text (providing a more in-depth comparison between Austrian Economics as represented by Joseph Schumpeter).

<sup>34</sup> See *infra* notes 265–355 and accompanying text.

<sup>35</sup> In a different project, I continue to explore the ways smaller provincial entities are actually beneficial to local and regional growth and the means by which the government should advance such entities. See generally Mirit Eyal-Cohen, *Urban Mavericks* (May 1, 2014) (unpublished manuscript) (on file with author).

<sup>36</sup> See *infra* notes 42–155 and accompanying text.

<sup>37</sup> See *infra* notes 156–264 and accompanying text.

<sup>38</sup> See *infra* notes 265–355 and accompanying text.

<sup>39</sup> See *infra* notes 356–388 and accompanying text.

<sup>40</sup> See *infra* notes 356–388 and accompanying text.

<sup>41</sup> See *infra* notes 356–388 and accompanying text.

<sup>42</sup> Cf. Susan Sturm, *Reaction: Law Schools, Leadership, and Change*, 127 HARV. L. REV. F. 49, 52 (2013), [http://cdn.harvardlawreview.org/wp-content/uploads/pdfs/forvol127\\_sturm.pdf](http://cdn.harvardlawreview.org/wp-content/uploads/pdfs/forvol127_sturm.pdf), archived at <http://perma.cc/GV7Z-5YJ4> (arguing that legal education should work to break down the dichotomy between theory and practice); cf. also Sylvia A. Law, *Rethinking Sex and the Constitution*, 132 U. PA.

conomic development as a dynamic process of change.<sup>43</sup> Schumpeter, unlike Adam Smith, argued that there is no invisible hand directing the forces of the economy toward stability and growth.<sup>44</sup> Instead, Schumpeter believed that the circular flow of economic life evolves through a process of “Creative Destruction” —cycles of punctuated equilibria disrupted by sudden leaps of endogenous innovation.<sup>45</sup>

According to Schumpeter, entrepreneurs are both the principal agents of Creative Destruction and the destabilizing force in the economy.<sup>46</sup> These “economic leaders,” as Schumpeter describes them, are avant-garde in that they create new combinations that confront and eventually defeat previously existing economic orders.<sup>47</sup> These innovative new combinations destroy the basis of the old economy.<sup>48</sup> And through destruction, they pave the way for a new economic order with higher levels of prosperity and welfare.<sup>49</sup>

This Article proposes a model of entrepreneurial proclivity. To place the proposed model in a proper context, this Part provides a brief overview of the main elements of economic development theory. First it discusses the economic concept of “novelty.”<sup>50</sup> It then explores the relationship between value and entrepreneurial profits.<sup>51</sup> This Part then explains the impact a business’s size has on economic development, if any.<sup>52</sup> Finally, this Part provides an overview of contemporary thoughts on economic development.<sup>53</sup>

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L. REV. 955, 955 (1984) (arguing that there is a need to develop a viable legal model of gender equality that accounts for sex differences as a key concept in modern political theory and practice).

<sup>43</sup> See JOSEPH A. SCHUMPETER, *The Theory of Economic Development: The Fundamental Phenomenon of Economic Development*, in THE ENTREPRENEUR, CLASSIC TEXTS BY JOSEPH A. SCHUMPETER, *supra* note 26, at 43, 48–49.

<sup>44</sup> Compare JOSEPH A. SCHUMPETER, *Economic Theory and Entrepreneurial History*, in ESSAYS ON ENTREPRENEURS, INNOVATIONS, BUSINESS CYCLES, AND THE EVOLUTION OF CAPITALISM 253, 254–55 (Richard V. Clemence ed., 1989) (calling Adam Smith’s picture of the industrial process entirely unrealistic), with SMITH, *supra* note 33, at 157–66.

<sup>45</sup> See JOSEPH A. SCHUMPETER, *Capitalism, Socialism and Democracy: The Process of Creative Destruction*, in THE ENTREPRENEUR, CLASSIC TEXTS BY JOSEPH A. SCHUMPETER, *supra* note 26, at 313, 316–18.

<sup>46</sup> Smith & Ueda, *supra* note 32, at 354; see SCHUMPETER, *supra* note 26, at 261–83 (describing the role of the entrepreneur in destabilizing the economy and noting that the effect of entrepreneurial activity upon the industrial structure is the consequent process of reoccurring destruction and reconstruction); see also Licht, *supra* note 22, at 822 (describing the circular flow of economic life as though the economy never reaches an equilibrium but instead shifts from disequilibrium to disequilibrium).

<sup>47</sup> See SCHUMPETER, *supra* note 21, at 74–94 (discussing entrepreneurial leadership).

<sup>48</sup> See *id.*

<sup>49</sup> See *id.*

<sup>50</sup> See *infra* notes 54–72 and accompanying text.

<sup>51</sup> See *infra* notes 73–84 and accompanying text.

<sup>52</sup> See *infra* notes 85–94 and accompanying text.

<sup>53</sup> See *infra* notes 95–155 and accompanying text.

### A. Novelty

Novelty, according to Schumpeter, distinguishes the entrepreneurial activity that changes the economic order from other business undertakings.<sup>54</sup> In his essay *The Explanation of the Business Cycle*, Schumpeter introduced the concept of “new combinations.”<sup>55</sup> These new combinations are the driving force that disturbs the market’s static state of equilibrium.<sup>56</sup> He argued that the innovative aspect of entrepreneurial activity is vital to the economy<sup>57</sup> because novelty and creativity challenge the current body of knowledge and eventually push society forward by destroying old premises.<sup>58</sup>

Not all new combinations constitute the kind of entrepreneurship that leads to economic development.<sup>59</sup> For example, Schumpeter distinguished innovation from invention or experimentation.<sup>60</sup> Unless inventions are successfully delivered to the market, they are economically insignificant and, hence, do not contribute to economic development.<sup>61</sup> It is therefore erroneous to equate entrepreneurship with technological invention.<sup>62</sup> The task of the entrepreneur is to successfully bring the invention to market, which is quite a different undertaking than that of the inventor.<sup>63</sup> Although, in reality, most entrepreneurs are also inventors or financiers, their key function is to effectively bring innovations to the marketplace.<sup>64</sup> The entrepreneur, Schumpeter emphasized, “is the man who gets new things done and not necessarily the man who in-

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<sup>54</sup> Smith & Ueda, *supra* note 32, at 354 (“In Schumpeter’s view, the *entrepreneur* is the agent of creative destruction, and the distinguishing attribute of entrepreneurial activity is *novelty*.”).

<sup>55</sup> JOSEPH A. SCHUMPETER, *The Explanation of the Business Cycle*, in *ESSAYS ON ENTREPRENEURS, INNOVATIONS, BUSINESS CYCLES, AND THE EVOLUTION OF CAPITALISM*, *supra* note 44, at 21, 38. Schumpeter defined “new combinations” as innovations. See Becker et al., *supra* note 31, at 5. Schumpeter listed five major types of new combinations, which include: (1) a new source of raw materials, (2) a new method of production, (3) a new product, (4) a new market, and (5) a new organization. *Id.* Schumpeter clarified, however, that the deployment of existing resources in an ordinary manner is not a new combination. See SCHUMPETER, *supra* note 43, at 49–51.

<sup>56</sup> SCHUMPETER, *supra* note 43, at 50.

<sup>57</sup> Tom Bottomore, *Introduction to JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM AND DEMOCRACY*, at ix, ix (Harper & Row 1976) (1942) (noting that Schumpeter regarded innovation as the essential feature of capitalism).

<sup>58</sup> *Id.* (noting how capitalism destroys its own institutional frameworks).

<sup>59</sup> JOSEPH A. SCHUMPETER, *Business Cycles: The Theory of Innovation*, in *THE ENTREPRENEUR, CLASSIC TEXTS BY JOSEPH A. SCHUMPETER*, *supra* note 26, at 286, 290–93.

<sup>60</sup> See SCHUMPETER, *supra* note 43, at 67.

<sup>61</sup> See *id.* at 50.

<sup>62</sup> See *id.*

<sup>63</sup> See *id.* at 66–67.

<sup>64</sup> See *id.* at 67.

vents.”<sup>65</sup> He also identified “enterprise” as the conduit for implementing novel ideas and discoveries that transform economic markets.<sup>66</sup>

Not all innovations delivered to the market, however, contribute to the development of the economy. Prime examples of innovations that do not develop the economy are those that are carried out in response to existing market demand.<sup>67</sup> To be a new combination, the innovation has to occur independently of the market and must create new demand.<sup>68</sup> It is not an easy task, however, to trace innovation to previously non-existent market demands.<sup>69</sup> This is especially the case because innovations are not isolated.<sup>70</sup> They tend to cluster as more and more firms follow in the wake of a successful innovation.<sup>71</sup> As the innovation takes hold, it then expands to other related industries.<sup>72</sup>

### B. Value

In the dynamic process of economic cycles, entrepreneurs innovate and create incremental value. Schumpeter called this incremental economic value “entrepreneurial profits.”<sup>73</sup> Entrepreneurial profits can be distinguished from other business profits by the scope and timing of their onset.<sup>74</sup> Entrepreneurial profits, according to Schumpeter, are the portion of profits over and above a normal profit.<sup>75</sup> These profits follow new combinations that create new market demand.<sup>76</sup> This demand in turn attracts other competitors to imitate the cutting-edge innovation.<sup>77</sup> As a result, Schumpeter concluded, entrepreneurial profit is only a temporary premium for successful innovation.<sup>78</sup> Once competitors follow, that special premium is transformed into common business profits.<sup>79</sup>

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<sup>65</sup> SCHUMPETER, *supra* note 44, at 266.

<sup>66</sup> SCHUMPETER, *supra* note 59, at 300.

<sup>67</sup> *See id.* at 292–93.

<sup>68</sup> *Id.* at 292 (“Of course the reverse would not be true: not every new plant embodies an innovation; some are mere additions to the existing apparatus of an industry bearing either no relation to innovation or no other relation than is implied in their being built in response to an increase in demand ultimately traceable to the effects of innovations that have occurred elsewhere.”).

<sup>69</sup> *See id.* at 292–300.

<sup>70</sup> *See id.* at 298.

<sup>71</sup> *See id.*

<sup>72</sup> *See id.* (“[W]henver a new production function has been set up successfully and the trade beholds the new thing done and its major problems solved, it becomes much easier for other people to do the same thing and even to improve upon it. In fact, they are driven to copying it . . .”).

<sup>73</sup> *See* SCHUMPETER, *supra* note 26, at 269–73 (discussing entrepreneurial profits).

<sup>74</sup> *See id.*

<sup>75</sup> *See id.*

<sup>76</sup> *See* Becker et al., *supra* note 31, at 5.

<sup>77</sup> *See id.*

<sup>78</sup> *See* SCHUMPETER, *supra* note 26, at 272. During the short period of time before competitors follow, these entrepreneurial gains also constitute monopoly gains. SCHUMPETER, *supra* note 44, at 260. *See generally* PAUL STONEMAN, THE ECONOMIC ANALYSIS OF TECHNOLOGICAL CHANGE 13–29

Schumpeter's economic theory of business cycles also aligns with his theory of entrepreneurship. He posited that entrepreneurs, as economic agents who successfully deliver innovations to the market, create new demand that attracts other businesspersons to imitate their innovative ideas.<sup>80</sup> At that juncture, the economy starts to build an upward cycle: the result of these entrepreneurial profits and of the common business profits that follow is the creation of wealth and economic growth.<sup>81</sup> When the innovation eventually trickles down to local businesses in related industries, it increases nationwide prosperity.<sup>82</sup> As more market players reproduce the initial entrepreneur's success, however, speculation and overinvestment begin to drive down the level of profits, bringing the economy into a downturn.<sup>83</sup> Once the downturn has begun, other entrepreneurs are required to successfully deliver new combinations to start a new upward business cycle, and the cycle repeats itself.<sup>84</sup>

### C. Size Doesn't Matter

As discussed, entrepreneurial businesses are those that stimulate the economy and incite market changes.<sup>85</sup> So how do small businesses fit into this picture? In the past, most entrepreneurs were either self-employed or formed independent small firms that struggled to get capital funding.<sup>86</sup> Yet, as Schumpeter's later work demonstrated, entrepreneurs are not necessarily small businessmen.<sup>87</sup> They may be employees of large companies where constantly changing sets of workers proceed from one innovation to another.<sup>88</sup> This phenomenon has come to be known as "intrapreneurship."<sup>89</sup> By pioneering inno-

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(1983) (stressing the importance of profit making in converting an invention into an innovation and then into an essential product).

<sup>79</sup> See SCHUMPETER, *supra* note 59, at 303. These premiums are temporary because no matter how much the entrepreneur struggles to preserve that stream of entrepreneurial profits—for example, by filing patent applications, imposing secrecy restrictions, or engaging in monopolistic strategies—in a competitive economy, innovations are destined to diffuse to other market players, related industries, and the entire economy, resulting in the forfeiture of the entrepreneur's monopolistic position. *See id.*

<sup>80</sup> *See id.*

<sup>81</sup> *See id.* at 300–307. That accumulation of profits also facilitates economic and social mobility for the entrepreneur. *See id.* at 304.

<sup>82</sup> See SCHUMPETER, *supra* note 44, at 258–63 (discussing the process of economic change).

<sup>83</sup> Becker et al., *supra* note 31, at 5.

<sup>84</sup> See SCHUMPETER, *supra* note 59, at 294.

<sup>85</sup> *Id.* at 298; *supra* notes 54–72 and accompanying text.

<sup>86</sup> See BLACKFORD, *supra* note 4, at 104–06, 166 (describing the conditions leading to the formation of small firms).

<sup>87</sup> SCHUMPETER, *supra* note 59, at 294; SCHUMPETER, *supra* note 43, at 57.

<sup>88</sup> SCHUMPETER, *supra* note 59, at 294; SCHUMPETER, *supra* note 43, at 57.

<sup>89</sup> See generally Karina S. Christensen, *Enabling Intrapreneurship: The Case of a Knowledge-Intensive Industrial Company*, 8 EUR. J. INNOVATION MGMT. 305 (2005) (examining the phenomenon of intrapreneurship in a large knowledge-intensive industrial firm). The term "intrapreneurship" was

variations within a firm's existing structure, entrepreneur-employees contribute to their firm's entrepreneurial viability.<sup>90</sup>

Decades before intrapreneurship became a buzzword, Schumpeter proposed a more nuanced understanding of entrepreneurship. In his later work, he argued that although entrepreneurial ventures may start small, not all small businesses are entrepreneurial.<sup>91</sup> Thus, if small businesses indeed contribute to economic development, it is not by virtue of their size, but rather by virtue of their entrepreneurial character.

In fact, Schumpeter observed, large established firms are often more entrepreneurial and innovative than small firms.<sup>92</sup> This is because large firms have more resources to invest in innovation and to attract and incentivize entrepreneur-employees.<sup>93</sup> Large firms are more devoted to innovation in their routine operation, he concluded, because they are more inclined to invest daily resources in research and development in search of the next breakthrough innovation.<sup>94</sup>

#### D. Contemporary Thoughts on Economic Development

Schumpeter's ideas continue to have a large impact on contemporary economic literature.<sup>95</sup> Although some of his ideas have been revised and refined

first coined by economists in the 1980s. *See generally* Norman Macrae, *Intrapreneurial Now*, *ECONOMIST*, Apr. 1982, at 67, 68 (describing intrapreneurs). Intrapreneurship refers to divisions or employees that are responsible for developing internal entrepreneurship within large or established firms. Smith & Ueda, *supra* note 32, at 356. Up until the last decade, units that were divisions of large firms were excluded from the definition of entrepreneurs because it was difficult to establish their autonomy. Arshad M. Khan & V. Manopichetwattana, *Innovative and Noninnovative Small Firms: Types and Characteristics*, 35 *MGMT. SCI.* 597, 599 (1989).

<sup>90</sup> *See* Smith & Ueda, *supra* note 32, at 356 (observing that intrapreneurship is used by established firms to increase novelty and avoid organizational inertia).

<sup>91</sup> *See* SCHUMPETER, *supra* note 59, at 294; SCHUMPETER, *supra* note 43, at 57.

<sup>92</sup> Becker et al., *supra* note 31, at 18–19. This Schumpeterian hypothesis that large firms are more innovative than small firms has been criticized. *See* William B. Gartner & Nancy M. Carter, *Entrepreneurial Behavior and Firm Organizing Processes*, in ZOLTÁN J. ÁCS & DAVID B. AUDRETSCH, *HANDBOOK OF ENTREPRENEURSHIP RESEARCH 195* (2003) (claiming that entrepreneurs are people who create new organizations, not people who innovate within the structure of already existing organizations).

<sup>93</sup> *See* Becker et al., *supra* note 31, at 18–19.

<sup>94</sup> *See* SCHUMPETER, *supra* note 44, at 260–61.

<sup>95</sup> *See* David E. Pozen, *We Are All Entrepreneurs Now*, 43 *WAKE FOREST L. REV.* 283, 290–91 (2008) (“[I]t was the great Austrian economist Joseph Schumpeter who made the most profound contribution to the theory of entrepreneurship and to the public’s appreciation of the concept.”); *see also* NATHAN ROSENBERG, *INSIDE THE BLACK BOX: TECHNOLOGY AND ECONOMICS* 106 (1982) (“[T]he study of technological innovation . . . consists of a series of footnotes upon Schumpeter.”). American economist and Nobel laureate Robert Solow, well-respected for his work on economic growth, placed Schumpeter’s work on economic theory among the most important of the twentieth century. Robert M. Solow, *Heavy Thinker*, *NEW REPUBLIC*, May 21, 2007, at 48, 51. Solow stated, “Today, some

over time, Schumpeter's commitment to a vision of economics based on technological innovation has endured.<sup>96</sup> Modern economists, most notably William Baumol<sup>97</sup> and Israel Kirzner,<sup>98</sup> among others,<sup>99</sup> continue to develop Schumpeter's theory by portraying entrepreneurship as a function of innovation and economic evolution.<sup>100</sup> And at least one scholar has also found no significant correlation between economic growth and the size of the firm.<sup>101</sup>

William Baumol emphasized the importance of entrepreneurship in stimulating economic growth.<sup>102</sup> Like Schumpeter, Baumol's contribution was to generate a formal theoretical analysis of the entrepreneur's role in economic life.<sup>103</sup> Baumol argued that there are certain features that are crucial to growth in the free market.<sup>104</sup> He singled out two features in particular: (1) innovation

sixty years after their deaths, Schumpeter's star probably outshines Keynes's." *Id.* According to Solow, whereas "the lessons that Keynes taught have been learned by central banks and finance ministries," Schumpeter's theory of economic growth has influenced intellectual and political leaders. *Id.*

<sup>96</sup> See generally Elias Dinopoulos & Fuat Sener, *New Directions in Schumpeterian Growth Theory*, in ELGAR COMPANION TO NEO-SCHUMPETERIAN ECONOMICS 688 (Horst Hanusch & Andreas Pyka eds., 2007) (applying and further developing Schumpeterian theories); NEW DEVELOPMENTS IN THE ANALYSIS OF MARKET STRUCTURE (Joseph E. Stiglitz & G. Frank Mathewson eds., 1986); RECENT ADVANCES IN NEO-SCHUMPETERIAN ECONOMICS: ESSAYS IN HONOUR OF HORST HANUSCH I (Andreas Pyka et al. eds., 2009) (same). In addition, *The Economist* publishes a column entitled "Schumpeter" to highlight the importance of his economic theory as it relates to today's business trends, finance, and management. See *Schumpeter: Business and Management*, *ECONOMIST*, <http://www.economist.com/blogs/schumpeter>, archived at <http://perma.cc/GY9D-PRDF> (last visited Mar. 31, 2014).

<sup>97</sup> See generally WILLIAM BAUMOL, *THE FREE-MARKET INNOVATION MACHINE: ANALYZING THE GROWTH MIRACLE OF CAPITALISM* 10 (2002) (discussing innovation through a Schumpeterian lens).

<sup>98</sup> See generally KIRZNER, *supra* note 21 (discussing entrepreneurship); Israel M. Kirzner, *Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach*, 35 *J. ECON. LITERATURE* 60 (1997) (developing a theory of entrepreneurship).

<sup>99</sup> See generally, e.g., RICHARD R. NELSON & SIDNEY G. WINTER, *AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE* (1982) (developing a theory of economic change in the intellectual tradition of Schumpeter); Richard R. Nelson & Sidney G. Winter, *The Schumpeterian Tradeoff Revisited*, 72 *AM. ECON. REV.* 114 (1982) (developing a theory of economic evolution that built on and expanded Schumpeter's most important ideas).

<sup>100</sup> See HOWARD H. STEVENSON ET AL., *NEW BUSINESS VENTURES AND THE ENTREPRENEUR* 16 (2d ed. 1985) (explaining the entrepreneurial process and describing entrepreneurship as "the process of creating value by pulling together a unique package of resources to exploit an opportunity"); see also J. Stanley Metcalfe, *Entrepreneurship: An Evolutionary Perspective*, in *THE OXFORD HANDBOOK OF ENTREPRENEURSHIP* 59, 87 (Marc Casson et al. eds., 2006) (describing entrepreneurs as agents that transform the economy by creating new knowledge that leads to economic evolution).

<sup>101</sup> See John Haltiwanger, *Entrepreneurship and Job Growth*, in *ENTREPRENEURSHIP, GROWTH, AND PUBLIC POLICY*, *supra* note 23, at 119, 119–45 (finding no correlation between firm size and employment growth and instead finding firm age as a determinant factor).

<sup>102</sup> See BAUMOL, *supra* note 97, at 1–17 (observing how innovation and, therefore, entrepreneurship in the free market creates economic growth).

<sup>103</sup> See *id.* at viii–ix. (discussing the role entrepreneurs play in innovation and economic growth).

<sup>104</sup> See *id.* at 1–16.

itself as a prime competitive weapon and (2) the entrepreneurs who devote themselves to productive innovation.<sup>105</sup> Baumol relied on Schumpeter's depiction of innovation and distinguished between the innovative entrepreneur, who comes up with new ideas and puts them into practice, and the replicative entrepreneur, who simply launches a new business venture, regardless of whether similar ventures already exist.<sup>106</sup>

Baumol, like Schumpeter, attributed the success of the capitalist economy primarily to competitive pressures not present in other types of economies.<sup>107</sup> These competitive pressures, he argued, are the result of oligopolistic competition among large technological firms,<sup>108</sup> with innovation as a prime competitive weapon.<sup>109</sup> Baumol, however, distanced himself from not only Schumpeter<sup>110</sup> but also economists F.M. Scherer<sup>111</sup> and John Kenneth Galbraith.<sup>112</sup> Whereas Galbraith believed that the days of the individual small business entrepreneurs were waning,<sup>113</sup> Baumol argued that individual small business entrepreneurs were responsible for revolutionary breakthroughs.<sup>114</sup> More specifically, he pointed out that *younger* entrepreneurial firms are responsible for a disproportionate share of breakthrough inventions.<sup>115</sup>

<sup>105</sup> See *id.* at 4–5.

<sup>106</sup> WILLIAM J. BAUMOL, *THE MICROTHEORY OF INNOVATIVE ENTREPRENEURSHIP* 26 (2010).

<sup>107</sup> BAUMOL, *supra* note 97, at 3 (indicating that such market pressures compel firms to engage in “unrelenting investment in innovation”).

<sup>108</sup> *Id.* at 4. For example, Baumol pointed to dominant firms competing in the computer industry. *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.* at 31 (showing how in contrast to Schumpeter's earlier model of innovation as providing “extraordinary” profits to individual entrepreneurs, innovation in many industries is a product of rival firms who constantly innovate, thus making profits from innovation more akin to a typical investment in capital).

<sup>111</sup> See generally F.M. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* (1970) (providing empirical evidence that an industry is most efficient when in the hands of few large corporations).

<sup>112</sup> See generally JOHN KENNETH GALBRAITH, *AMERICAN CAPITALISM: THE CONCEPT OF COUNTERVAILING POWER* 86 (1956) (observing that the image of technological progress coming from individuals competing with each other is not an accurate account of the origins of innovation).

<sup>113</sup> Compare ZOLTÁN J. ÁCS & DAVID B. AUDRETSCH, *ENTREPRENEURSHIP, INNOVATION AND TECHNOLOGICAL CHANGE* 2 (2005) (observing Galbraith's belief in the decline of the small business entrepreneur), with BAUMOL, *supra* note 97, at 56 (discussing the revolutionary contributions of innovators outside the established firm).

<sup>114</sup> BAUMOL, *supra* note 106, at 30–32 (observing that “[t]he degree of asymmetry in the apportionment of R&D activity between large and small firms is . . . dramatic[]” and highlighting “the breakthrough innovations of the twentieth century—from the airplane to the zipper—for which small firms are responsible”).

<sup>115</sup> See *id.* at 25 (“[T]here is a rough-and-ready division of labor between major corporations and small, *new* enterprises in the high-tech sector.” (emphasis added)).



Baumol identified two main classes of private suppliers of innovation: (1) large firms and (2) inventor-entrepreneurs.<sup>116</sup> In this “David and Goliath” symbiosis, cutting-edge innovation, not pricing and economies of scale, is the key to success.<sup>117</sup> In other words, entrepreneurship in small and large firms originates from competitive forces that drive firms to invest in innovation and in the rapid diffusion of technology throughout the economy. Small and large businesses perpetuate their existence and growth through continued innovative activities.<sup>118</sup> What matters, in Baumol’s account, is not the size of the firm, but its innovative value.<sup>119</sup> This entrepreneurial activity ultimately results in economic growth.<sup>120</sup>

Israel Kirzner also followed Schumpeter in identifying economic value in terms of entrepreneurial profit.<sup>121</sup> Furthermore, Kirzner added important variations to the body of economic growth theory. He criticized price theories that assume perfect competition and market equilibrium.<sup>122</sup> According to Kirzner, these theories create an erroneous assumption of perfect knowledge.<sup>123</sup> When perfect knowledge exists in a state of equilibrium, Kirzner thought that it left no room for entrepreneurship.<sup>124</sup> Opportunities for entrepreneurial profit only exist in disequilibrium.<sup>125</sup>

For example, Kirzner viewed economic development as a process driven by entrepreneurs acting as agents responsible for equilibrating the market and correcting economic errors.<sup>126</sup> Kirzner indicated that the existence of yet-unexploited opportunities for entrepreneurial profits means that the existing

<sup>116</sup> *Id.* at 26.

<sup>117</sup> *Id.* at 26, 64–66.

<sup>118</sup> See BAUMOL, *supra* note 97, at 4. Baumol points once again to the computer industry as an example, where “new and improved models appear constantly, each manufacturer battling to stay ahead of its rivals.” *Id.*

<sup>119</sup> See BAUMOL, *supra* note 106, at 26.

<sup>120</sup> See BAUMOL, *supra* note 97, at 3–4.

<sup>121</sup> See KIRZNER, *supra* note 33, at 26–27 (exploring the relationship among entrepreneurship, profit, and economic development).

<sup>122</sup> See ISRAEL M. KIRZNER, *THE DRIVING FORCE OF THE MARKET: ESSAYS IN AUSTRIAN ECONOMICS* 44–45 (2000) (arguing that a theory is incomplete if it assumes perfect knowledge).

<sup>123</sup> See ISRAEL M. KIRZNER, *DISCOVERY AND THE CAPITALIST PROCESS* 40–67 (1985).

<sup>124</sup> ISRAEL M. KIRZNER, *PERCEPTION, OPPORTUNITY AND PROFIT* 110 (1979) (“Equilibrium simply means a state in which each decision correctly anticipates all other decisions. In such a situation . . . [n]o room exists for the entrepreneurial element.”).

<sup>125</sup> *Id.*

<sup>126</sup> *Id.* at 111 (“[The entrepreneur’s] role is created by the state of disequilibrium and his activities ensure a tendency toward equilibrium.”). Kirzner’s view differs from that of Schumpeter, who focused on the disequilibrating and destructive force of entrepreneurs. Compare *id.* at 109, with Smith & Ueda, *supra* note 32, at 354 (noting Schumpeter’s characterization of entrepreneurs). Kirzner instead argued that entrepreneurs move the economy toward equilibrium because they can identify and grasp opportunities ignored by others. KIRZNER, *supra* note 124, at 109 (“In fact, the essence of the entrepreneurial decision consists in *grasping* the knowledge that might otherwise remain unexploited.”).

state of affairs, no matter how evenly it seems to flow, in fact is a state of disequilibrium.<sup>127</sup> Entrepreneurship, therefore, is created by a state of disequilibrium and ensures a tendency toward equilibrium of the economy.<sup>128</sup>

Kirzner also refined Schumpeter's views on innovation, putting knowledge at the center of his theory.<sup>129</sup> Kirzner asserted that the market performs a crucial function in discovering knowledge that nobody realizes exists.<sup>130</sup> He coined the phrase "entrepreneurial alertness" to signify that when entrepreneurs are dissatisfied with both the quantity and the quality of current information, that dissatisfaction inspires them to search for more and better knowledge.<sup>131</sup> The market process then takes those systematically unnoticed opportunities and translates them into profitable exchanges.<sup>132</sup>

American economists Zoltán J. Ács and David B. Audretsch offer a unique assessment of the interplay among economic growth, entrepreneurship, and firm size.<sup>133</sup> Similar to Schumpeter and Kirzner, Ács and Audretsch argue that entrepreneurship capital exhibits a higher level of economic growth and is valuable to the development of the economy.<sup>134</sup> They propose a knowledge-spillover theory of entrepreneurship, which posits that as "knowledge context" increases, entrepreneurship becomes more important.<sup>135</sup> This occurs because

<sup>127</sup> See *id.* at 110.

<sup>128</sup> See *id.*

<sup>129</sup> See Israel M. Kirzner, *The Alert and Creative Entrepreneur: A Clarification*, 32 SMALL BUS. ECON. 145, 148 (2009) (arguing that entrepreneurial dissatisfaction with the prevailing quality and quantity of information motivates entrepreneurs to discover better information, resulting in a "dynamic competitive-entrepreneurial process").

<sup>130</sup> See *id.* at 145. Knowledge—consisting of beliefs, expectations and speculations (to the extent that people can base their actions upon them)—can, according to Kirzner, be new or previously ignored by others. Tony Fu-Lai Yu, *Entrepreneurial Alertness and Discovery*, 14 REV. AUST. ECON. 47, 51 (2001) (discussing Kirzner). Such knowledge is acquired in one of two ways, either through deliberate investment and cost-conscious search, or through spontaneous efforts. *Id.* at 50–51.

<sup>131</sup> Kirzner, *supra* note 129, at 148. Kirzner's work focused on how alertness drove the competitive entrepreneurial process. *Id.* He thought that observers could best see the nature of this process by looking to the presence of alertness in individual decisions. *Id.* According to Kirzner, social institutional arrangements, such as universities and research organizations, are highly desirable because they minimize ignorance and generate the greatest volume of spontaneous undeliberate learning. Deirdre Nansen McCloskey, *A Kirznerian Economic History of the Modern World*, in ENTREPRENEURSHIP AND THE MARKET PROCESS: IDEAS AND INFLUENCE OF ISRAEL KIRZNER 45, 56 (2010).

<sup>132</sup> Fu-Lai Yu, *supra* note 130, at 48. Steven Klepper recently reiterated these ideas in a study on knowledge spillover in Silicon Valley. See Steven Klepper, *Silicon Valley, a Chip off the Old Detroit Bloc*, in ENTREPRENEURSHIP, GROWTH, AND PUBLIC POLICY, *supra* note 23, at 79, 79–115 (discussing spinoffs in the semiconductor industry). Klepper showed that entrepreneurs function as a conduit for facilitating spillover of knowledge, as they take knowledge that might otherwise have remained uncommercialized and use it to launch start-ups. See *id.* at 80.

<sup>133</sup> See Ács et al., *supra* note 23, at 1–12 (reasserting the importance of small business).

<sup>134</sup> See DAVID B. AUDRETSCH ET AL., ENTREPRENEURSHIP AND ECONOMIC GROWTH 1 (2006).

<sup>135</sup> See *id.* at 41–43. The knowledge filter is also what creates the opportunity for entrepreneurship. *Id.* at 42. The greater the filter, the greater the value of new ideas. See *id.*

entrepreneurship provides a missing link for economic growth by commercializing investments in knowledge and ideas that might otherwise have remained uncommercialized.

Unlike Schumpeter, Ács and Audretsch downplay the role of large businesses in innovation. They argue that large corporations often suffer from a “knowledge filter,” which they define as knowledge barriers that impede entrepreneurship and economic growth.<sup>136</sup> They state that large corporations repeatedly decide not to pursue new ideas that eventually lead to valuable innovations and, ultimately, economic growth.<sup>137</sup> Like Kirzner, Ács and Audretsch claim that entrepreneurship in smaller firms contributes to economic growth by serving as a conduit for commercializing ideas and knowledge that otherwise might be abandoned or lie fallow in the organizations that originally created the ideas.<sup>138</sup>

Nevertheless, Ács and Audretsch argue that firm size may not necessarily matter for entrepreneurship. They provide empirical data showing a mixed correlation among a firm’s size, its entrepreneurial character, and its industrial environment.<sup>139</sup> Indeed, U.S. Census Bureau reports illustrate that although most young firms are small, when size is isolated as a variable, young and entrepreneurial firms are in fact the engines of employment growth in the United

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<sup>136</sup> Ács et al., *supra* note 23, at 7. Ács and Audretsch give various examples of the knowledge filter at work, including the copy machine, fax machine, personal computer, and flat screen. *Id.* at 7–8. According to Ács and Audretsch, “All of these ideas were caught in the knowledge filter of an incumbent large corporation,” so big firms failed to pursue them. *Id.* at 7–8. Audretsch notes that the knowledge filter is also what creates the opportunity for entrepreneurship. AUDRETSCH ET AL., *supra* note 134, at 42. The greater the filter, the greater the value of new ideas. *See id.*

<sup>137</sup> Ács et al., *supra* note 23, at 7; *accord* CLAYTON M. CHRISTENSEN, THE INNOVATOR’S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL 86 (1997) (remarking that the organizational and financial structure of established companies can prevent them from investing in the sort of innovative technology that has the potential to disrupt the market).

<sup>138</sup> Ács et al., *supra* note 23, at 8. Ács and Audretsch view entrepreneurship as the activity that leads to economic growth. *See* ÁCS & AUDRETSCH, *supra* note 113, at 1–4; *accord* Gartner & Carter, *supra* note 92, at 195 (noting that entrepreneurship involves the activities of individuals who create new organizations, not individuals who work within established firms). Ács and Audretsch argue that entrepreneurship is good for economic growth because entrepreneurs create new businesses. ÁCS & AUDRETSCH, *supra* note 113, at 1–4. New businesses, in turn, create jobs, intensify competition, and may even increase productivity through technological change. *See id.*

<sup>139</sup> *See, e.g.,* Zoltán J. Ács & David B. Audretsch, *Innovation, Market Structure, and Firm Size*, 69 REV. ECON. & STAT. 567, 567 (1987) (finding that although large firms tend to have an advantage in capital-intensive, concentrated, highly unionized industries that produce a differentiated good, small firms tend to have the advantage in highly innovative industries that utilize a large component of skilled labor and tend to be composed of a relatively high proportion of large firms). *See generally* George Syrneonidis, *Innovation, Firm Size and Market Structure: Schumpeterian Hypotheses and Some New Themes*, 27 OECD ECON. STUD. 35 (1996), available at [http://www.iseg.utl.pt/aula/cad172/3.%20Bibliografia/Parte%202%20\(2.2\)%20G.%20SYMEONIDIS%20\(1996\).pdf](http://www.iseg.utl.pt/aula/cad172/3.%20Bibliografia/Parte%202%20(2.2)%20G.%20SYMEONIDIS%20(1996).pdf), archived at <http://perma.cc/LE3P-72R5> (providing an overview of various studies on firm size and innovation).

States.<sup>140</sup> Thus, a firm's entrepreneurial proclivity is the critical factor for economic growth—not its size.

Ács, in a separate essay, called for a distinction between different types of new businesses.<sup>141</sup> Ács differentiated between “necessity entrepreneurship,” which is created because of a lack of other employment options, and “opportunity entrepreneurship,” which is an active choice to start a new enterprise based on the perception that an unexploited or underexploited business opportunity exists.<sup>142</sup> He found that necessity entrepreneurship causes negative GDP growth, whereas opportunity entrepreneurship has a significant positive effect on economic development.<sup>143</sup> A nation's economic development, Ács concluded, depends on successful opportunity entrepreneurship combined with the force of established corporations.<sup>144</sup> In sum, innovation is both a determinant executed by firms of all sizes and a variable that distinguishes livelihood businesses from entrepreneurial firms that can stimulate an economy.<sup>145</sup>

Schumpeter's vision of the key role of entrepreneurship in economic development continues to be applied and developed today.<sup>146</sup> The past three decades in particular have witnessed a “Schumpeterian renaissance” and a growing interest in Schumpeter's theories.<sup>147</sup> A neo-Schumpeterian school of eco-

<sup>140</sup> Haltiwanger, *supra* note 101, at 119–45.

<sup>141</sup> Zoltán J. Ács, *How Is Entrepreneurship Good for Economic Growth?*, 1 INNOVATIONS 97, 97–98 (2006).

<sup>142</sup> *Id.* at 97.

<sup>143</sup> *Id.* at 97–99.

<sup>144</sup> *Id.* at 104.

<sup>145</sup> See Ács, *supra* note 141, at 97–99, 104; *supra* notes 95–144 and accompanying text; see also Edwin Harwood, *The Sociology of Entrepreneurship*, in ENCYCLOPEDIA OF ENTREPRENEURSHIP 91, 95 (Calvin A. Kent et al. eds., 1982) (“[W]ithout innovativeness or novelty as part of the working definition of entrepreneurship, the distinction between run-of-the-mill small business and new venture organization is difficult to justify.”).

<sup>146</sup> See John Hagedoorn, *Innovation and Entrepreneurship: Schumpeter Revisited*, 5 INDUS. & CORP. CHANGE, 883, 883 (1996) (reasoning that entrepreneurial activities continue to play an active role in understanding innovation in Schumpeter's theory); Robert P. Merges, *Commercial Success and Patent Standards: Economic Perspectives on Innovation*, 76 CALIF. L. REV. 803, 844 (1988) (“[T]he Schumpeterian perspective seems well-suited for studying the legal rules . . . that influence innovation.”); Pozen, *supra* note 95, at 283, 290–91 (“[I]t was the great Austrian economist Joseph Schumpeter who made the most profound contribution to the theory of entrepreneurship and to the public's appreciation of the concept.”). See generally Renee Prendergast, *Schumpeter, Hegel and the Vision of Development*, 30 CAMBRIDGE J. ECON. 253, 253 (2006) (tracing Schumpeter's intellectual origins to Hegel).

<sup>147</sup> See Chris Freeman, *A Schumpeterian Renaissance?*, in ELGAR COMPANION TO NEO-SCHUMPETERIAN ECONOMICS, *supra* note 96, at 130 *passim* (discussing the Schumpeterian renaissance); see also KIRZNER, *supra* note 124, at ix (observing that there has been “a remarkable resurgence of the Austrian tradition”). See generally John Phillimore, *Schumpeter, Schumacher and the Greening of Technology*, 13 TECH. ANALYSIS & STRATEGIC MGMT. 23 (2001) (pointing to a relationship between new-Schumpeterian school of thought and Schumacher's theory of sustainable development).

nomic thought has emerged in the areas of technology and innovation studies.<sup>148</sup> Such scholars posit that technological change is a core variable of economic growth.<sup>149</sup> This growth is driven by the introduction of innovation and is shaped by government policy.<sup>150</sup>

Schumpeter's work has been given its due recognition in neoclassical studies of economics, but it has not received similar attention in legal studies.<sup>151</sup> Despite the fact that legal journals have often cited Schumpeter's views on democracy,<sup>152</sup> his economic schema has been overlooked by law and economics scholars, who have tended to focus on microeconomic perspectives of the law.<sup>153</sup> Nevertheless, some legal scholars have found Schumpeterian hypotheses useful in legal analysis.<sup>154</sup> They argue that Schumpeterian perspec-

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<sup>148</sup> See Stuart Minor Benjamin & Arti K. Rai, *Fixing Innovation Policy: A Structural Perspective*, 77 GEO. WASH. L. REV. 1, 12–14 (2008). See generally RECENT ADVANCES IN NEO-SCHUMPETERIAN ECONOMICS: ESSAYS IN HONOUR OF HORST HANUSCH, *supra* note 96, at 1 (discussing neo-Schumpeterian economics and technological innovation); Dinopoulos & Sener, *supra* note 96, at 688 (noting that Schumpeter's ideas are broad enough to allow current scholars to account for new developments in economic growth).

<sup>149</sup> See Horst Hanusch & Andreas Pyka, *Principles of Neo-Schumpeterian Economics*, 31 CAMBRIDGE J. ECON. 275, 275 (2006) (“[T]echnological innovation is the most exponent and most visible form of novelty.”); Paul M. Romer, *The Origins of Endogenous Growth*, 8 J. ECON. PERSP. 3, 17–21 (1994) (explaining the role of exogenous technological change on Schumpeterian growth models); Horst Hanusch et al., *A Neo-Schumpeterian Approach Towards Public Sector Economics 2–5* (Universitaet Augsburg, Inst. for Econ. Discussion Paper Series, Working Paper No. 306, 2009), available at <http://ideas.repec.org/p/aug/augsbe/0306.html>, archived at <http://perma.cc/5GF5-CEKT>.

<sup>150</sup> See Hanusch & Pyka, *supra* note 149, at 275; Romer, *supra* note 149, at 17–21; Hanusch et al., *supra* note 149, at 2–5.

<sup>151</sup> Merges, *supra* note 146, at 844. See generally Herbert Giersch, *The Age of Schumpeter*, 74 AM. ECON. REV. 103 (1984) (providing an overview of Schumpeter's influence on economics).

<sup>152</sup> See, e.g., Rachel E. Barkow, *Separation of Powers and the Criminal Law*, 58 STAN. L. REV. 989, 1031 n.234 (2006) (“Schumpeter also argued that the content of criminal laws should not be left purely to politics.”); James A. Gardner, *Can Party Politics Be Virtuous?*, 100 COLUM. L. REV. 667, 680 (2000) (noting that Schumpeter saw political life as a competitive struggle); *Leading Cases*, 119 HARV. L. REV. 169, 272–76 (2005) (discussing Justice Clarence Thomas's view of a Schumpeterian influence on how voters choose parties).

<sup>153</sup> See, e.g., RICHARD A. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 8–22 (1976) (applying a microeconomic analysis to examine monopoly power); Gregory S. Crespi, *Microeconomics Made (Too) Easy: A Casebook Approach to Teaching Law and Economics*, 91 MICH. L. REV. 1560, 1561–74 (1993) (discussing the widespread use of microeconomic theory by law and economics scholars).

<sup>154</sup> See, e.g., Douglas H. Ginsburg, *Antitrust, Uncertainty, and Technological Innovation*, 24 ANTITRUST BULL. 635, 644–46, 651–61 (1979) (calling for further study on the Schumpeterian hypothesis regarding the ideal industrial composition for innovation); Louis Kaplow, *The Patent-Antitrust Intersection: A Reappraisal*, 97 HARV. L. REV. 1813, 1823 (1984); Mark A. Lemley, *Patenting Nanotechnology*, 58 STAN. L. REV. 601, 629 n.121 (2005) (“I follow Schumpeter here in distinguishing between the act of inventing—coming up with a new idea—and innovating—turning that idea into a marketable product.”).

tives are well-suited to the study of legal rules and have called for their use in places where law affects innovation.<sup>155</sup>

## II. THE MODEL AS A MODERN LEGAL MIRROR

If firm size does not matter for purposes of entrepreneurship and economic growth, why does the law support small business? This Part provides a historical bridge to the reasons for the significance of small business in American culture today. First, Section A discusses legal “mirror theory,” the idea that law mirrors the society it controls.<sup>156</sup> Section B then provides an overview of the history of small businesses in America and how our current understanding is anachronistic.<sup>157</sup> After reviewing this history, Section C explores how small businesses operate in today’s economy.<sup>158</sup> Finally, this Part asserts that legal rules should mirror today’s economic climate.<sup>159</sup>

### A. Mirror Theory

Law mirrors the society it regulates.<sup>160</sup> Mirror theory views the law as a human institution and a product of culture.<sup>161</sup> Legal historian Lawrence Friedman further established mirror theory by describing law as a product of social forces.<sup>162</sup> In his view, social pressures from interest groups,<sup>163</sup> legal institu-

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<sup>155</sup> See Ginsburg, *supra* note 154, at 644–46, 651–61; Kaplow, *supra* note 154, at 1823; Lemley, *supra* note 154, at 629. See generally Merges, *supra* note 146, at 844–45 (“[T]his Article explicitly adopts a Schumpeterian framework for its analysis.”).

<sup>156</sup> See *infra* notes 160–176 and accompanying text.

<sup>157</sup> See *infra* notes 177–238 and accompanying text.

<sup>158</sup> See *infra* notes 239–257 and accompanying text.

<sup>159</sup> See *infra* notes 258–264 and accompanying text.

<sup>160</sup> LAWRENCE M. FRIEDMAN, AMERICAN LAW: AN INTRODUCTION 292 (2d ed. 1998).

<sup>161</sup> See, e.g., CHARLES LOUIS DE SECONDAT DE MONTESQUIEU, THE SPIRIT OF LAWS 104–05 (David Wallace Carrithers ed., Thomas Nugent trans., Univ. of Cal. Press 1977) (1748) (noting that it is unlikely that law that fits one nation can suit another); Lawrence M. Friedman, *The Law & Society Movement*, 38 STAN. L. REV. 763, 764 (1986) (noting that law is a product of human culture and a creation of society).

<sup>162</sup> FRIEDMAN, *supra* note 160, at 292–320; JOANNA L. GROSSMAN & LAWRENCE M. FRIEDMAN, INSIDE THE CASTLE: LAW AND THE FAMILY IN 20TH CENTURY AMERICA *passim* (2011) (reiterating mirror theory and describing the effects of contemporary social phenomena on the law); Book Note, *Mirror, Mirror, On the Wall*, 107 HARV. L. REV. 1813, 1813–15 (1994) (reviewing LAWRENCE M. FRIEDMAN, CRIME AND PUNISHMENT IN AMERICAN HISTORY (1993)) (using the narrative of American history in the nineteenth and twentieth centuries to reveal various forces that shaped the law, including the dominant influence of social forces). *But see* BRIAN Z. TAMANAHA, A GENERAL JURISPRUDENCE OF LAW AND SOCIETY 12–17 (2001) (noting the problems of mirroring in formerly colonized nations).

<sup>163</sup> LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 584 (3d ed. 2005) (“[The law] is whatever results from the scheming, plotting, striving, hoping, and dreaming, of people and groups, with and for and against and athwart each other.”). *But see* Mark V. Tushnet, Commentary, *Perspec-*

tions, and economic conditions change the law by forcing the legal system to respond to them.<sup>164</sup> Later on, Friedman added that the converse is true as well—society responds to the law.<sup>165</sup> In some regards, he argued, society mirrors law.<sup>166</sup> Accordingly, law not only mirrors society, but also circumscribes thoughts, reinforces ideology, and generates social change.<sup>167</sup>

Legal changes, Friedman argues, derive from concrete demands on the institutions that make up the legal system.<sup>168</sup> In the small business sphere, many of the legal preferences and regulatory exemptions were proposed and advocated by government-appropriated small business institutions, such as the SBA and the House and Senate Small Business Committees.<sup>169</sup> Created in the 1940s and 1950s, these institutions were instrumental in bringing about changes to the laws governing small business.<sup>170</sup> These institutions conducted nationwide

*tives on the Development of American Law: A Critical Review of Friedman's "A History of American Law,"* 1977 WIS. L. REV. 81, 82–83 (criticizing the “materialist perspective” present in mirror theory).

<sup>164</sup> Friedman, *supra* note 161, at 771 (“To put it another way, the main motor force of legal change derives from concrete demands on the institutions that make up the legal system.”); *see also* FRIEDMAN, *supra* note 160, at 307 (“Our concern is with law—more specifically, with the role legal institutions play either in helping to bring these changes about, in resisting them, in adapting to them, or in altering their form.”).

<sup>165</sup> *See* Friedman, *supra* note 161, at 771–72.

<sup>166</sup> FRIEDMAN, *supra* note 163, at ix (“Perhaps [law] is a distorted mirror. Perhaps in some regards society mirrors law. Surely law and society interact. The central point remains: Law is the product of social forces, working in society. If it has a life of its own, it is a narrow and restricted life.”).

<sup>167</sup> *See* FRIEDMAN, *supra* note 160, at 292–320; MARK KELMAN, A GUIDE TO CRITICAL LEGAL STUDIES 243 (1987).

<sup>168</sup> Friedman, *supra* note 161, at 771 (describing how legal institutions “translate [demands] into ‘legal’ concepts”).

<sup>169</sup> *See* Eyal-Cohen, *supra* note 29, at 12; *Greater Federal Aid to Small Businesses Urged by House Unit: It Backs More Defense Awards to Concerns, Legislation to Increase Investment in Them*, WALL ST. J., Jan. 10, 1963, at 13 [hereinafter *Greater Federal Aid*]. *See generally* Small Business Act of 1953, Pub. L. No. 83-163, §§ 202, 204, 67 Stat. 232, 232–33 (forming the SBA to “aid, counsel, assist and protect, insofar as is possible, the interests of small business concerns”), *amended by* Small Business Act, Pub. L. No. 85-536, sec. 2, § 4, 72 Stat. 384, 384–85 (1958) (codified as amended at 15 U.S.C. § 633 (2012)) (making permanent the establishment of the SBA).

<sup>170</sup> *See* Eyal-Cohen, *supra* note 29, at 12; *Greater Federal Aid*, *supra* note 169; *see also* About, U.S. SENATE COMMITTEE ON SMALL BUS. & ENTREPRENEURSHIP, <http://www.sbc.senate.gov/public/index.cfm?p=History>, archived at <http://perma.cc/H8Y5-C2GX> (last visited Apr. 18, 2014) (describing the 1940 creation of the Senate Committee); *Committee History*, HOUSE COMMITTEE ON SMALL BUS., <http://smallbusiness.house.gov/about/>, archived at <http://perma.cc/NDM8-UDG7> (last visited Apr. 18, 2014) (describing the 1941 creation of the House Committee). One change that has occurred since the adoption of the SBA and the House and Senate Small Business Committees includes the Regulatory Flexibility Act (“RFA”), which thereafter required any agency conducting a notice and comment rulemaking to consider fully the rules’ effect on “small entities.” *See* Pub. L. No. 96-354, sec. 3(a), §§ 602–603, 94 Stat. 1164, 1165–67 (1981). In 1996, Congress further expanded these responsibilities by passing the Small Business Regulatory Enforcement Fairness Act of 1996. *See* Pub. L. No. 104-121, 110 Stat. 857. This Act gives the RFA sharper teeth by providing for judicial review of federal agencies’ RFA analysis. *Id.* § 203(2); Joshua E. Husbands, Comment, *The Elusive Meaning of “Small Business,”* 2 J. SMALL & EMERGING BUS. L. 355, 358 (1998).

hearings, investigated the problems of small businesses, and translated their demands into laws.<sup>171</sup>

The response to the legal system's preferential treatment of small business in and of itself generated social change. This legal treatment drove business planning, generated economic opportunities, and encouraged small business owners to demand further regulatory preferences. These social changes reinforced the importance of small business culture in American society and increased pressure on political representatives and legal institutions to favor small business.<sup>172</sup>

Even though we live in an age of never-ending change, the laws governing small businesses have remained "preservationist"—entrenched in the path dependency of small business favoritism.<sup>173</sup> Laws sustaining entities that would otherwise go out of business due to their inherent inefficiency reinforce this path dependency.<sup>174</sup> At the same time, globalization and free trade opportunities have brought about significant economic and social change. Physical capital today is less important than knowledge capital.<sup>175</sup> Furthermore, competition is no longer confined to the borders of domestic trade.<sup>176</sup> The dichotomy of small versus big has also become irrelevant, and laws that remain fixed on this distinction are outdated. All told, such laws reflect neither current economic realities nor recent changes in society.

Accordingly, to ensure that America's laws and institutions are truly effective in promoting entrepreneurship and economic growth, our legal rules must target appropriate audiences and provide appropriate incentives. It is crucial for any modern economy focused on growth and development to understand the identity and role of key market participants. Moreover, determining the requirements for effective participation in the economy is key to effectively legislating benefits and appropriations that promote growth.

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<sup>171</sup> See *Greater Federal Aid*, *supra* note 169. Consequently, small business committees were frequent initiators of small business acts in Congress. See, e.g., Arlen J. Large, *R & D Funding for Small Firms Sets Off Big Fight in Congress*, WALL ST. J., Apr. 19, 1982, at 29; *Senate Unit Asks Change in Small Business Investment Program to Make It a Success*, WALL ST. J., Apr. 27, 1960, at 6. See generally Friedman, *supra* note 161, at 771 (describing how legal institutions "translate [demands] into 'legal' concepts").

<sup>172</sup> See Eyal-Cohen, *supra* note 29, at 16–24.

<sup>173</sup> Ács et al., *supra* note 23, at 5; see Eyal-Cohen, *supra* note 29, at 16–24.

<sup>174</sup> See Pierce, *supra* note 4, at 561–68.

<sup>175</sup> Ács et al., *supra* note 23, at 6.

<sup>176</sup> See *id.* at 5. For example, imported automobiles and steel are poured into the United States from more efficient competitors, such as Germany and Japan. *Id.*



### B. A Précis of Small Business History

The current legal focus on business size reflects an anachronistic picture of society. This outdated vision imagines an economy driven by mom-and-pop shops and local traders, with only a few dominant enterprises.<sup>177</sup> This is an image of a bygone society that glorified small businesses to counteract the fear of big business's influence on democracy in America.<sup>178</sup>

Until the end of the nineteenth century, success in business meant success as a small business owner.<sup>179</sup> Small firms were the norm, and typical business enterprises were minor, local, and personal.<sup>180</sup> During the nineteenth century, rapid economic growth created opportunities for small business owners, whereas technological, market, and financial limitations precluded the development of big businesses in most industries.<sup>181</sup> Until such limitations dissipated, small firms made up the bulk of America's business system.<sup>182</sup> Local and regional commerce were the main stimuli for economic growth.<sup>183</sup> Small businesspersons consisted of merchants, brokers, and skilled workers.<sup>184</sup> They facilitated the exchange of goods through single-unit, non-bureaucratic enterprises that lacked managerial hierarchies.<sup>185</sup> Furthermore, they sought economic gain less for themselves than for their families and their livelihood.<sup>186</sup> Small business ownership was a way of life, and because the majority of businesses were small, firm size had no special importance.<sup>187</sup>

The importance of firm size originated with the rise of big businesses during the Gilded Age.<sup>188</sup> During this period, although the number of small businesses continued to increase in absolute numbers, their significance to the economy began to decline.<sup>189</sup> For example, large capital investments were required to finance new developments in transportation, communications, and

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<sup>177</sup> See Carlton, *supra* note 4, at 656.

<sup>178</sup> See *id.* at 655.

<sup>179</sup> See BLACKFORD, *supra* note 4, at 11 (“Getting ahead in America meant succeeding in the world of business, and at a time when few large firms existed, business success meant success as a small business person.”).

<sup>180</sup> Eyal-Cohen, *supra* note 29, at 14–15.

<sup>181</sup> See BLACKFORD, *supra* note 4, at 13–14.

<sup>182</sup> See *id.* at 14.

<sup>183</sup> See *id.* at 13–14.

<sup>184</sup> See *id.* at 15–20.

<sup>185</sup> *Id.* at 16.

<sup>186</sup> See Margaret B. Hay, *Law and Social Work in a Rural Community*, 145 LAW & SOC. WELFARE 137, 138 (1929) (“Until recently the American population has been interested in the county solely as a means of livelihood and [was] concerned simply [with] having its own business succeed.”).

<sup>187</sup> See BLACKFORD, *supra* note 4, at 37–38.

<sup>188</sup> See *id.* at 43–76.

<sup>189</sup> *Id.* at 43.

manufacturing.<sup>190</sup> This need created fertile conditions for the rise of big business.<sup>191</sup> Thus, management systems, bureaucratic committees, and functional departments began to replace informal business arrangements and employment based on family and personal ties.<sup>192</sup> These new organizational entities were charged with the task of handling a company's operations.<sup>193</sup>

By the turn of the twentieth century, large companies had come to dominate markets.<sup>194</sup> They did this by taking advantage of economies of scale in production and by setting up their own nationwide marketing networks.<sup>195</sup> For example, they used economies of scale to combine mass production with mass distribution.<sup>196</sup> Mergers and vertical integration became widely used competitive business practices.<sup>197</sup> Large firms became vertically integrated enterprises that controlled all or most of the production and sales of their products.<sup>198</sup> Developments such as mail-order houses, department stores, and chain stores threatened the existence of small retail stores.<sup>199</sup>

Some small firms adapted to these new conditions. Small businesses remained significant by carving out market niches or by operating in interior towns that were removed from the big cities.<sup>200</sup> They also served as producers during times of peak demand in industries where economies of scale did not exist.<sup>201</sup> Additionally, small businesses served as suppliers of parts in secondary sectors, acted in seasonal markets, and operated in industries with unstable demand.<sup>202</sup>

Over time, however, many small firms were unable to compete and ultimately failed because they had difficulty adapting to the new economic envi-

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<sup>190</sup> *Id.* at 44–47.

<sup>191</sup> *See id.*

<sup>192</sup> BROWN ET AL., *supra* note 15, at 8–17. *See generally id.* (discussing organizational difference between large and small firms).

<sup>193</sup> *See id.*

<sup>194</sup> *See* BLACKFORD, *supra* note 4, at 103–04.

<sup>195</sup> *Id.* at 53.

<sup>196</sup> *See id.* at 103–4.

<sup>197</sup> *See* Herbert Hovenkamp, *The Law of Vertical Integration and the Business Firm: 1880–1960*, 95 IOWA L. REV. 863, 865–77 (2010).

<sup>198</sup> Eyal-Cohen, *supra* note 29, at 14–15.

<sup>199</sup> *See* Richard C. Schragger, *The Anti-Chain Store Movement, Localist Ideology, and the Remnants of the Progressive Constitution, 1920–1940*, 90 IOWA L. REV. 1011, 1019–22 (2005) (describing the rise of threats to small retail stores).

<sup>200</sup> *See* BLACKFORD, *supra* note 4, at 53.

<sup>201</sup> *See id.*

<sup>202</sup> *See* Gideon Rosenbluth, *The Trend in Concentration and Its Implications for Small Business*, 24 LAW & CONTEMP. PROBS. 192, 197–206 (1959) (describing how small businesses have survived in the face of concentration in various industries).

ronment.<sup>203</sup> Accordingly, public attitudes and government policies toward small and big businesses began to change.<sup>204</sup> The failure of small businesses to match up to their larger counterparts raised substantial national concerns about the future of free enterprise.<sup>205</sup> Although some associated big businesses with positive externalities, such as increasing wealth, efficiency in production, and a rise in standard of living, others feared them.<sup>206</sup> The public began to develop a sentimental attachment to small businesses and the proverbial “little guy.” There was a desire to preserve these entities, even though many people saw them as anachronistic, obsolete, and inefficient.<sup>207</sup> These critics of small businesses predicted their failure as a natural evolutionary step.<sup>208</sup>

Social, political, and legal environments responded to the public’s changing attitudes toward small business in two ways. First, congressional policies began to control and regulate the operations of big businesses.<sup>209</sup> Second, con-

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<sup>203</sup> BLACKFORD, *supra* note 4, at 66 (pointing to country stores that by 1920 and 1930 disappeared from the scene except in isolated rural areas). For example, small companies often secured fewer government procurement contracts than their larger competitors, who were able to increase output rapidly to meet changing government demands. *See Senate Small Business Committee Urges More Bids in Pentagon Buying*, WALL ST. J., Jan. 13, 1961, at 7; *see also* ADDISON W. PARRIS, THE SMALL BUSINESS ADMINISTRATION 4–18 (1968) (describing the struggles of small businesses to procure government contracts during the Second World War).

<sup>204</sup> *See* BLACKFORD, *supra* note 4, at 100.

<sup>205</sup> *See id.* at 115.

<sup>206</sup> James Surowiecki, *Big Is Beautiful*, NEW YORKER, Oct. 31, 2013, at 38, 38 (observing that consumers enjoy the greater selection of products and lower prices that big businesses offer); Barak Orbach, *The Antitrust Curse of Bigness*, 85 S. CAL. L. REV. 605, 605, 609–13 (2012) (“The American public has feared big business since businesses began utilizing economies of scope and scale.”); *see* FRIEDMAN, *supra* note 163, at 585 (“First, economic growth (in a society which, after all, had had a great deal of this otherwise scarce commodity) no longer satisfied everyone, particularly those with money to spare, and still no inner peace. Second, big business was poisoning the rivers and darkening the air, cities poured tons of muck into lakes and oceans, highway engineers were driving concrete paths through America’s heritage and heart.”). *See generally* MATTHEW JOSEPHSON, THE ROBBER BARONS (1934) (describing monopolistic practices used by large industrialists to control the American economy during the nineteenth and twentieth century).

<sup>207</sup> BLACKFORD, *supra* note 4, at 48.

<sup>208</sup> *Id.*

<sup>209</sup> *See, e.g.*, Act of July 7, 1955, ch. 281, 69 Stat. 282 (codified as amended at 15 U.S.C. § 1 (2012)) (increasing penalties under the Sherman Antitrust Act); Clayton Act, ch. 323, 38 Stat. 730 (1914) (current version in scattered sections of 15 and 29 U.S.C. (2012)) (limiting anticompetitive practices among firms); Robinson-Patman Act, ch. 592, § 2(a), 49 Stat. 1526, 1526 (1936) (codified at 15 U.S.C. § 13a (2012)) (limiting price discrimination); Hart-Scott-Rodino Antitrust Improvements Act of 1976, Pub. L. No. 94-435, 90 Stat. 1383 (codified as amended in scattered sections of 15 U.S.C.) (regulating mergers); Consumer Goods Pricing Act of 1975, Pub. L. No. 94-145, 89 Stat. 801 (1975) (amending the Sherman Antitrust Act “to provide lower prices for consumers”). Note that the Consumer Goods Pricing Act of 1975 was specifically designed to repeal the Miller-Tydings Fair Trade Act, which was an amendment to the Sherman Antitrust Act that allowed for vertical pricing restraints. *See* Carole A. Casey, *The Rule of Reason Analysis of Dual Distribution Systems: Does It Further the Purposes of the Sherman Act?*, 29 B.C. L. REV. 431, 448 & n.155 (1988); Leegin’s Unex-

gressional policies began to favor small firms.<sup>210</sup> A small business culture appeared, which glorified the significance of small firms to the American economy.<sup>211</sup> This culture was reinforced by the institutional path dependency of certain small business agencies and organizations.<sup>212</sup> These organizations, including the House and Senate Small Business Congressional Committees and the SBA, proposed, advocated, and paved the path for legal rules that contributed significantly to the persistence of small business programs.<sup>213</sup> They were instrumental in shaping current small business benefit patterns.<sup>214</sup> Specifically, the House and Senate Small Business Congressional Committees and the SBA were charged with advancing the well-being and welfare of small business entities.<sup>215</sup> These institutions worked in Congress to determine which laws should be pursued to benefit their small business constituents.<sup>216</sup>

These institutions also played a major role in leading Congress down a path of unrelenting favoritism to small business.<sup>217</sup> During the second half of the twentieth century, small business benefits proliferated throughout the tax code.<sup>218</sup> Small firms were also granted regulatory exemptions from health, labor, and safety guidelines.<sup>219</sup> At the same time Congress used the law to re-

explored “*Change in Circumstance*”: *The Internet and Resale Price Maintenance*, 121 HARV. L. REV. 1600, 1602–03 (2008).

<sup>210</sup> See BLACKFORD, *supra* note 4, at 50, 98. For example, Congress set up the Senate Committee on Small Business in 1940 and the House Committee on Small Business a year later to look after the needs of small businesses. *Id.* at 98. In addition, a Small Business Division was established within the Department of Commerce, charged with resisting the trend of concentration. *Id.*

<sup>211</sup> Schragger, *supra* note 199, at 1022–28 (describing the cultural backlash against chain stores and the support many felt for small retailers).

<sup>212</sup> See Eyal-Cohen, *supra* note 29, at 7–12.

<sup>213</sup> *Id.* at 12.

<sup>214</sup> See *id.* at 28–29.

<sup>215</sup> Small Business Act, Pub. L. No. 85-536, sec. 2, §§ 2, 4, 72 Stat. 384, 384–85 (1958) (codified as amended at 15 U.S.C. §§ 631, 633 (2012)); see *About*, *supra* note 170 (describing the purpose of the Senate Committee on Small Business and Entrepreneurship); *Committee History*, *supra* note 170 (describing the purpose of the House Committee on Small Business).

<sup>216</sup> See *Federal Lending Plan to Very Small Firms Disclosed; 514 Loans Already Made as Test*, WALL ST. J., May 27, 1964, at 6 (detailing the SBA’s efforts to implement pro-small business programs); *Greater Federal Aid*, *supra* note 169 (discussing how the House Committee pursued laws that favored small businesses); *Senate Unit Asks Change in Small Business Investment Program to Make It a Success*, *supra* note 171 (discussing how the Senate Committee pursued laws that favored small businesses).

<sup>217</sup> See Eyal-Cohen, *supra* note 29, at 12; *Federal Lending Plan to Very Small Firms Disclosed; 514 Loans Already Made as Test*, WALL ST. J., May 27, 1964, at 6 (detailing the SBA’s efforts to implement pro-small business programs); *Greater Federal Aid*, *supra* note 169 (discussing how the House Committee pursued laws that favored small businesses); *Senate Unit Asks Change in Small Business Investment Program to Make It a Success*, *supra* note 171 (discussing how the Senate Committee pursued laws that favored small businesses).

<sup>218</sup> See Eyal-Cohen, *supra* note 2, at 1065–86 (surveying the main small business benefits).

<sup>219</sup> See *id.* at 1072–75.

ward small businesses,<sup>220</sup> legislators began to use the law to restrict big businesses, which they viewed as engaging in unfair business methods.<sup>221</sup> This included limiting competition, price discrimination, and other monopolistic practices.<sup>222</sup> Accordingly, during this period, small businesses saw an increase in their development to some extent.<sup>223</sup>

In the early and mid-1980s, large firms suffered and small firms continued to gain prominence. In this decade, large multinational foreign companies began competing with American firms in both mass production industries and exports to overseas markets.<sup>224</sup> This competition led some larger firms to stagnate and fail.<sup>225</sup> In contrast, small innovative firms were able to step in and revitalize the economy by using computers and other technological developments to their advantage.<sup>226</sup> These firms were able to occupy market niches and to provide big businesses with reliable subcontracting alternatives to mass production.<sup>227</sup> Furthermore, they remained an important source of innovation by focusing on projects requiring specialized knowledge.<sup>228</sup>

Nevertheless, small businesses suffered from problems of their own. Although they created more jobs, small businesses also discharged employees and failed at a higher rate than large firms.<sup>229</sup> Small firms therefore were no more successful than larger firms in terms of net job creation.<sup>230</sup> Nonetheless, small business institutions continued to advocate for small business development.<sup>231</sup>

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<sup>220</sup> Indeed, Congressional members were vociferous in their support of small businesses. See 128 CONG. REC. 9177 (1982) (statement of Sen. Samuel A. Nunn, Jr.) (“Small business is the heart of the free enterprise system, that sector most likely to take the steps necessary to get this Nation back of [sic] the road to economic recovery.”); 124 CONG. REC. 35217 (1978) (statement of Sen. Gaylord A. Nelson) (“[S]mall businesses . . . are the heart and soul of the competitive free enterprise system.”); BLACKFORD, *supra* note 4, at 111 (quoting one congressman who observed that “[t]here are a great many people who feel that if we are to preserve democracy in government, in America, we have got to preserve a democracy in business operation”).

<sup>221</sup> See BLACKFORD, *supra* note 4, at 111 (explaining regulatory measures restricting big business).

<sup>222</sup> See *id.*

<sup>223</sup> See *id.*

<sup>224</sup> See *id.* at 166; Ács et al., *supra* note 23, at 5–6.

<sup>225</sup> BLACKFORD, *supra* note 4, at 115, 119–29, 166.

<sup>226</sup> See *id.*

<sup>227</sup> *Id.*; see also Sanford L. Jacobs, *Small Business; Small Concerns Find a Niche Solving Problems of Big Firms*, WALL ST. J., Apr. 21, 1986, at 25 (reporting that small firms find segments of the market big companies are not serving).

<sup>228</sup> BLACKFORD, *supra* note 4, at 115, 119–29, 166; Jacobs, *supra* note 227, at 25. Examples of these niche products include the aerosol can, biosynthetic insulin, double-knit fabrics, quick-frozen food, zippers, and computer software. BLACKFORD, *supra* note 4, at 176.

<sup>229</sup> See BLACKFORD, *supra* note 4, at 178; BROWN ET AL., *supra* note 15, at 2–4.

<sup>230</sup> Steven J. Davis et al., *Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts*, 8 SMALL BUS. ECON. 297, 301–07 (1996). See generally *id.* (investigating how job creation and destruction vary by employer size).

<sup>231</sup> See Eyal-Cohen, *supra* note 29, at 19–24.

Their demands included increasing loan programs for small businesses and increasing the share of government procurement contracts awarded to small businesses.<sup>232</sup>

The small business's return to economic prominence was brief.<sup>233</sup> Companies slowly grew in size, and the rate of self-employed workers declined.<sup>234</sup> By the end of the 1990s, large firms had reclaimed their place in the economy.<sup>235</sup> Often, large firms drove small firms out of business by acting more efficiently.<sup>236</sup> To increase efficiency, they allowed lower-rank management more independence, focused on internal groups, and invested in knowledge procurement and entrepreneurship.<sup>237</sup> Large firms once again became America's primary engine of economic growth.<sup>238</sup>

### C. The Economy Today

The historical preference for small firms is a social, not economic, phenomenon. This societal emphasis on firm size did not derive directly from the role small business played in the economy, but instead originated in response to the rise of big business in the early twentieth century. During the turn of the twentieth century, size became a significant social distinction. It differentiated between personal service and standardized packages, between free enterprise and a society of trust, and generally between what was perceived to be good and what was perceived to be bad.<sup>239</sup> Today, however, the differences between small and large firms are less significant. Gradually, society has come to accept

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<sup>232</sup> *See id.*

<sup>233</sup> BLACKFORD, *supra* note 4, at 166–68 (discussing the short-lived resurgence of small business in the 1990s).

<sup>234</sup> *See id.* at 165–70.

<sup>235</sup> *Id.* at 167–70. Large firms accomplished this return to prominence by using smaller management structures and new production methods. *Id.* at 170.

<sup>236</sup> *Id.* at 170–71.

<sup>237</sup> *The Puzzling Infirmary of America's Small Firms*, *ECONOMIST*, Feb. 18, 1995, at 63, 63; *see* BLACKFORD, *supra* note 4, at 170.

<sup>238</sup> *The Puzzling Infirmary of America's Small Firms*, *supra* note 237, at 63; *see* BLACKFORD, *supra* note 4, at 170.

<sup>239</sup> *See* 128 CONG. REC. at 9172, 9177 (1982) (statement of Sen. Samuel A. Nunn, Jr.) (“Small business is the heart of the free enterprise system, that sector most likely to take the steps necessary to get this Nation back of [sic] the road to economic recovery.”); 97 CONG. REC. 6750, 6773 (1951) (statement of Rep. Abraham J. Multer) (“Competition is healthy. But unfair, cutthroat competition has the effect of destroying competition by forcing independents out of business and leaving the field clear for monopoly.”); Eyal-Cohen, *supra* note 29, at 18–19; *see also* STAFF OF SUBCOMM. ON MONOPOLY OF THE S. SELECT COMM. ON SMALL BUS., 82ND CONG., REP. TO THE FEDERAL TRADE COMMISSION: MONOPOLISTIC PRACTICES AND SMALL BUSINESS 1–9 (Comm. Print 1952) (discussing the public's perception of small business entities); Pierce, *supra* note 4, at 538–42 (noting that the myth that small is good and big is bad that is deeply rooted in our cultural beliefs is responsible for this phenomenon).

the benefits of big business and appreciate the ways large firms contribute to society and demonstrate corporate responsibility.<sup>240</sup>

Moreover, the industrial and technological revolutions changed the face of American society. Developments in high-tech firms emphasized the importance of innovation and flexibility to the success of businesses of all sizes.<sup>241</sup> With the widespread availability and affordability of fast means of transportation, businesses were able to locate their stores on the outskirts of town, where land is cheap and there is space for large parking lots.<sup>242</sup> Furthermore, with the improvement of postal services, airmail, and internet access, online shopping became widespread.<sup>243</sup> Geography's impact on business accordingly became less significant over the last century. These developments transformed the United States from a land of isolated farms, shops, and towns into part of a worldwide market.<sup>244</sup> In this global marketplace, increasingly more products can be ordered from foreign countries at lower prices, and be received within a few days.<sup>245</sup>

Today, livelihood businesses mostly operate in rural and small-town America.<sup>246</sup> They rely mainly on local, geographically driven demand.<sup>247</sup> Their current economic role is to provide market diversity and fill market niches ignored by larger businesses.<sup>248</sup> Furthermore, they contribute to local and regional revitalization as well as the diversity of local goods.<sup>249</sup>

The past several decades have illustrated that by carving out market niches, continuing to be responsive to changing consumer preferences, and developing new production methods, small businesses can remain independent enterprises and successfully coexist with larger firms.<sup>250</sup> Small businesses succeed by focusing on specialty products with only limited demand, securing nonstandardized orders overlooked by large mass-production firms, providing personal service, and building on their reputation.<sup>251</sup> Some small-scale firms

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<sup>240</sup> See Cynthia A. Williams, *Corporate Social Responsibility in an Era of Economic Globalization*, 35 U.C. DAVIS L. REV. 705, 711–17 (2002) (summarizing the way corporations demonstrate corporate responsibility); see also BLACKFORD, *supra* note 4, at 93 (noting that after World War II, Americans looked more favorably upon big business). When asked to assess the social effects of big business, most Americans said that the good effects outweighed the bad. *Id.*

<sup>241</sup> BLACKFORD, *supra* note 4, at 165.

<sup>242</sup> See *id.* at 66.

<sup>243</sup> See *id.* at 184–89 (describing the rise of online book retailers).

<sup>244</sup> See *id.* at 66, 165, 184–89.

<sup>245</sup> See *id.* at 165–67.

<sup>246</sup> *Id.* at 66.

<sup>247</sup> See *id.* at 66, 119–29, 166.

<sup>248</sup> See *id.*

<sup>249</sup> See *id.*

<sup>250</sup> See *id.* at 115, 119–29, 176–81.

<sup>251</sup> See *id.* at 66, 119–29, 166.

are formed to act as franchised agents or subcontractors of larger firms.<sup>252</sup> Many such businesses fulfill a market demand created by other firms without much desire to change the market in which they operate.<sup>253</sup> In contrast, other smaller businesses succeed and change their market by thinking “outside the box.”<sup>254</sup> These firms develop new products or more efficient ways of producing existing products.<sup>255</sup> They are usually young firms that start with a few employees and, when successful, become prominent in the market.<sup>256</sup> Those new businesses that are able to survive the first few years after their establishment do so by being entrepreneurial.<sup>257</sup>

In the new global environment, size has become irrelevant to buyers. The dawn of the twenty-first century has seen internet-driven globalization redefine the nature of foreign trade.<sup>258</sup> With a single click, one can communicate with even the most remote places in the world. The focus has shifted from size to technology and from a firm’s dimensions to its products’ level of sophistication.<sup>259</sup> The fastest growing firms, whether large or small, are high-tech firms that develop innovative products and deliver them to the market successfully.<sup>260</sup>

Because of this global market, the significance of small businesses to the economy has shrunk even further.<sup>261</sup> In the set of factors that spur economic growth, entrepreneurship has taken the place of size.<sup>262</sup> Despite the widespread rhetoric today depicting small businesses as the source of economic growth, these types of entities are not responsible for the development of the economy.<sup>263</sup> Instead, economic growth is generated by the entities that, irrespective of their size, innovate and create value.<sup>264</sup>

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<sup>252</sup> *Id.* at 173–74 (describing how Americans secure two goals by franchising: first, they “fulfill their dreams of becoming independent business people,” and second, they enjoy “the benefits of belonging to large supportive organizations”); Max V. Kidalov, *Small Business Contracting in the United States and Europe: A Comparative Assessment*, 40 PUB. CONT. L.J. 443, 497–500 (2011) (observing that some small-scale firms are formed to act as subcontractors).

<sup>253</sup> See BLACKFORD, *supra* note 4, at 173–74; Buck Brown, *New Owners of Franchises Believe Mom-and-Pop Image*, WALL ST. J., Aug. 29, 1988, at 11.

<sup>254</sup> See BLACKFORD, *supra* note 4, at 115, 119–29.

<sup>255</sup> See SCHUMPETER, *supra* note 43, at 49–51.

<sup>256</sup> See BAUMOL, *supra* note 106, at 25; BLACKFORD, *supra* note 4, at 176–81.

<sup>257</sup> See Ács et al., *supra* note 23, at 1–12.

<sup>258</sup> See BLACKFORD, *supra* note 4, at 184–89.

<sup>259</sup> See ROBERT RONSTADT, *ENTREPRENEURSHIP: TEXT, CASES AND NOTES* 28–31 (1984) (noting that some scholars believe that technological innovation is the only true entrepreneurship).

<sup>260</sup> Timothy Bresnahan & Alfonso Gambardella, *Introduction to BUILDING HIGH-TECH CLUSTERS: SILICON VALLEY AND BEYOND* 1, 1 (Timothy Bresnahan & Alfonso Gambardella eds., 2004).

<sup>261</sup> See BLACKFORD, *supra* note 4, at 167.

<sup>262</sup> See Ács et al., *supra* note 23, at 9.

<sup>263</sup> See *id.*

<sup>264</sup> See *id.*



### III. A FIVE-DIMENSIONAL LEGAL MODEL OF ECONOMIC ENTREPRENEURSHIP

Thus far, this Article has illustrated that, both historically and economically, the importance of small business to economic development has been exaggerated.<sup>265</sup> This Article now seeks to provide an alternative model of economic development. Part III applies the main elements of economic development theory—namely, innovation and economic value—to the legal landscape. It seeks to shift the focus from firm size to entrepreneurship. Furthermore, it prescribes a multidimensional legal model that reflects an economy no longer driven by small or large businesses, but by innovative businesses. This new model replaces firm size with a more flexible and graduated distinction.

Many policymakers today are focused on finding the actual determinants, effects, and spillovers of entrepreneurship in the hope of fostering economic growth.<sup>266</sup> With this legislative intent in mind, Part III offers a conceptual model for measuring entrepreneurial viability. The model builds on Schumpeter, Baumol, and Kirzner's entrepreneurship theories as well as on other modern economic notions of entrepreneurship. Given the many dimensions of entrepreneurship, identifying a single indicator that measures entrepreneurship may result in an arbitrary and skewed picture.<sup>267</sup> As a result, this model presents a menu of the main and widely accepted common features and measures of for-profit firms that are most likely to display entrepreneurial qualities: (1) firm's age, (2) knowledge procurement, (3) innovation yield, (4) labor expansion, and (5) entrepreneurial success.

This selection of variables is based on principles of methodological soundness, simplicity, administrability, and measurability. Furthermore, this selection takes into account the overall relationship of these factors to the concept of entrepreneurship. It is possible that, if examined separately, the chosen factors would not exclusively indicate entrepreneurial proclivity. Rather, it is the combination of these factors that provides a composite portrait of a firm's entrepreneurial inclination.<sup>268</sup> Moreover, the factors chosen here make this

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<sup>265</sup> See *supra* notes 85–264 and accompanying text.

<sup>266</sup> See HARPER, *supra* note 22, at 2; Carree & Thurik, *supra* note 22, at 437; Licht, *supra* note 22, at 817; see also Wennekers & Thurik, *supra* note 22, *passim* (surveying the literature associating entrepreneurship with economic development).

<sup>267</sup> See Diego B. Avanzini, *Designing Composite Entrepreneurship Indicators*, in ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT 37, 38–52 (Wim Naudé ed., 2011) (observing this problem and measuring entrepreneurship with a similar methodology to what is proposed here).

<sup>268</sup> See generally MICHAELA SAISANA & STEFANO TARANTOLA, STATE-OF-THE-ART REPORT ON CURRENT METHODOLOGIES AND PRACTICES FOR COMPOSITE INDICATOR DEVELOPMENT 1 (2002) (reviewing twenty-four studies involving composite indicators). A composite indicator is a mathematical combination of indicators. *Id.* at 5. Relying on a composite indicator, as opposed to a single indi-

model more accurate and more efficient than the current small-or-not model by better circumscribing the entrepreneurial phenomenon, which is truly at the heart of economic growth and development. In the current economic reality, innovation is a greater indicator of entrepreneurship than firm size.

The proposed model also derives strength from its focus on the most common entrepreneurial behaviors of *firms*, as opposed to individual entrepreneurs. Over the past several decades, a vast amount has been written on the individual characteristics of entrepreneurs, particularly from a psychological perspective.<sup>269</sup> This scholarship has generally portrayed entrepreneurs as special individuals who tend to exhibit a particular combination of attributes, including risk-taking, which enables them to assume the role of innovators in the economy.<sup>270</sup> Nevertheless, a firm-behavior model of entrepreneurship has a number of advantages over other models that focus on the traits of individual entrepreneurs. First, studies have not established a causal relationship between individual traits and entrepreneurial success.<sup>271</sup> Actions, rather than psychological attributes, give meaning to the entrepreneurial process.<sup>272</sup> Second, entrepreneurial effectiveness manifests itself at the firm level, not the individual level, and is easier to measure in terms of firm, rather than individual performance. Third, although an individual entrepreneur's qualities may affect an organization's actions, it is the collection of individuals' acts manifested in the

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cator, better represents different dimensions of a concept because it allows the model to take into account multiple facets of a phenomenon. *See id.*

<sup>269</sup> *See, e.g.,* Becker et al., *supra* note 31, at 16 (describing the entrepreneurial spirit); Licht, *supra* note 22, at 827–32 (offering an overview of the psychological theories of entrepreneurial attributes).

<sup>270</sup> *See* Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 286 (1979) (arguing that entrepreneurs take risks more often); Licht, *supra* note 22, at 823 (noting that the entrepreneur's independent, confident, and venturesome nature is necessary for entrepreneurship); Viktor Mayer-Schoenberger, *The Law as Stimulus: The Role of Law in Fostering Innovative Entrepreneurship*, 6 *INFORM. I/SL J.L. & POL'Y FOR INFO. SOC'Y* 153, 170–73 (2010) (exploring the ability of entrepreneurs to understand and evaluate risks and returns). *But see* Robert H. Brockhaus, Sr., *Risk Taking Propensity of Entrepreneurs*, 23 *ACAD. MGMT. J.* 509, 517–19 (1980) (arguing that risk-taking behavior cannot be used as a distinguishing characteristic of entrepreneurship). *See generally* Daniel Ellsberg, *Risk, Ambiguity, and the Savage Axioms*, 75 *Q. J. ECON.* 643 (1961) (discussing the nature of risk, uncertainty, and decision).

<sup>271</sup> *See* Jeffrey G. Covin & Dennis P. Slevin, *A Conceptual Model of Entrepreneurship as Firm Behavior*, 16 *ENTREPRENEURSHIP: THEORY & PRAC.* 7, 16–17 (1991) (examining the relationship between entrepreneurial personalities and firm behavior); Carl P. Kaiser, *Entrepreneurship and Resource Allocation*, 16 *E. ECON. J.* 9, 10 (1990) (looking at differences among entrepreneurial personalities and how they affect firm success); Danny Miller & Jean-Marie Toulouse, *Chief Executive Personality and Corporate Strategy and Structure in Small Firms*, 32 *MGMT. SCI.* 1389, 1390 (1986) (discussing the relationship between an entrepreneur's character traits and firm success).

<sup>272</sup> Covin & Slevin, *supra* note 271, at 8 (favoring a behavioral model of entrepreneurship because behavior, not attributes, are meaningful to success as an entrepreneur).

firm's market performance that ultimately produces organizational achievements.<sup>273</sup>

#### A. Firm's Age

Although hardly a perfect predictor, many economists consider firm age as a general factor in gauging entrepreneurship.<sup>274</sup> Ács and Audretsch argued that entrepreneurship entails the creation of *new* enterprises.<sup>275</sup> In Schumpeter's eyes, a new organization is yet another form of a new combination.<sup>276</sup> And Baumol acknowledged the fact that novel ideas are often, though not always, embodied in new firms.<sup>277</sup>

Whether new firms are entrepreneurial depends upon their ability to convert original ideas into success.<sup>278</sup> Accordingly, the connection between a firm's age and its entrepreneurial character is a functional return. In other words, innovation is frequently manifested by the creation of a new formal organization. This is because of the firm's role as an instrument for accruing entrepreneurial profit.<sup>279</sup> The enterprise is simply a modern conduit through which entrepreneurial ideas enter the market.<sup>280</sup> It is advantageous for the entrepreneur to establish a separate legal entity to facilitate the accounting of entrepreneurial activity, receive credit and finance the development of innovations, and achieve legal autonomy.<sup>281</sup>

Of course, not all new firms innovate and succeed, but entrepreneurial failure is just as important as entrepreneurial success.<sup>282</sup> Both are economically and culturally valuable and productive.<sup>283</sup> Entrepreneurial failure diffuses knowledge among competitive entrepreneurs and emphasizes the skill sets that

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<sup>273</sup> See Licht, *supra* note 22, at 832.

<sup>274</sup> See *infra* notes 275–296 and accompanying text. And importantly, new firms are not necessarily small ones. See Adam Bryant, *So Who Says a New Business Has to Be Small?*, N.Y. TIMES, Jul. 12, 2013, at B2.

<sup>275</sup> ÁCS & AUDRETSCH, *supra* note 113, at 1–4.

<sup>276</sup> See SCHUMPETER, *supra* note 59, at 295 (“Innovations still emerge primarily with the ‘young’ ones, and the ‘old’ ones display as a rule symptoms of what is euphemistically called conservatism.”).

<sup>277</sup> See BAUMOL, *supra* note 106, at 25.

<sup>278</sup> See SCHUMPETER, *supra* note 59, at 293–96.

<sup>279</sup> *Id.* at 304–6.

<sup>280</sup> *Id.* at 300 (“For actions which consist in carrying out innovations we reserve the term Enterprise; the individuals who carry them out we call Entrepreneurs.”).

<sup>281</sup> See *id.* at 234.

<sup>282</sup> See ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128, at 111–15 (1994) (arguing that learning from failure increases the competitiveness of a region).

<sup>283</sup> See *id.*

entrepreneurs need to be resilient and eventually successful.<sup>284</sup> Failure educates investors and allows them to choose their future investments more wisely.<sup>285</sup> Furthermore, failure introduces “churn” into labor markets, which eventually leads to greater economic growth.<sup>286</sup>

Today, in fact, scholars view the mere act of creating new organizations as the essence of entrepreneurship.<sup>287</sup> The creation of new ventures or new departments in existing firms is seen as an indication of emergent entrepreneurship and novelty.<sup>288</sup> Scholars perceive new organizations as the way that entrepreneurs produce new combinations by successfully transforming resources into final goods.<sup>289</sup> With the development of limited liability doctrines that protect entrepreneurs from the risk of personal liability for their entities’ defaults, forming new entities has become an ordinary first step in the establishment of an entrepreneurial venture.<sup>290</sup>

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<sup>284</sup> See *id.* See generally Edward L. Glaeser & William R. Kerr, *Local Industrial Conditions and Entrepreneurship: How Much of the Spatial Distribution Can We Explain?*, 18 J. ECON. & MGMT. STRATEGY 623, 644 (2009) (noting that in entrepreneurial culture, failure is respectable, as it is better to fail than to not have tried at all).

<sup>285</sup> See SAXENIAN, *supra* note 282, at 111–15; Glaeser & Kerr, *supra* note 284, at 644.

<sup>286</sup> See SAXENIAN, *supra* note 282, at 111–15. “Churn” in labor markets is the movement of workers from one job to another. *Go for the Churn*, ECONOMIST, Feb. 11, 2012, at 77, 77. The entry of more new firms into the market has thus become a well-accepted measure of economic wealth. *Id.*; see Rajshree Agarwal et al., *The Process of Creative Construction: Knowledge Spillovers, Entrepreneurship, and Economic Growth*, 1 STRAT. ENTREPRENEURSHIP J. 263, 265 (2008) (highlighting the economic growth caused when more entrepreneurs enter a market); see also NIELS BOSMA ET AL., GEM MANUAL: A REPORT ON THE DESIGN, DATA AND QUALITY CONTROL OF THE GLOBAL ENTREPRENEURSHIP MONITOR 59 (2012), available at <http://www.gemconsortium.org/docs/download/2375>, archived at <http://perma.cc/YTN7-G98U> (using the prevalence rates of owner-managers in new firms as a measure of entrepreneurial activity).

<sup>287</sup> See Howard E. Aldrich, *Entrepreneurship*, in THE HANDBOOK OF ECONOMIC SOCIOLOGY 451, 451 (Neil Smelser & Richard Swedberg eds., 2d ed. 2005) (“Entrepreneurship ensures the reproduction of existing organizational populations and lays a foundation for the creation of new populations.”); Gartner & Carter, *supra* note 92, at 195 (“Entrepreneurial behavior involves the activities of individuals who are associated with creating new organizations rather than the activities of individuals who are involved with maintaining or changing the operations of on-going established organizations.”).

<sup>288</sup> See Avanzini, *supra* note 267, at 37–38.

<sup>289</sup> See Smith & Ueda, *supra* note 32, at 357 (citing BARBARA J. BIRD, ENTREPRENEURIAL BEHAVIOR 3 (1989)).

<sup>290</sup> Cf. J. William Callison, *Federalism, Regulatory Competition, and the Limited Liability Movement: The Coyote Howled and the Herd Stampeded*, 26 J. CORP. L. 951, 952–54, 979 (2001) (discussing how limited liability entities allow entrepreneurs to shield themselves from personal liability). See generally Mitchell F. Crusto, *Extending the Veil to Solo Entrepreneurs: A Limited Liability Sole Proprietorship Act (LLSP)*, 2001 COLUM. BUS. L. REV. 381, 399 (arguing that to encourage would-be entrepreneurs to create businesses, the law should enact a limited liability statute designed for the sole proprietor); David W. Leebron, *Limited Liability, Tort Victims, and Creditors*, 91 COLUM. L. REV. 1565, 1630 (1991) (arguing that unlimited liability would probably result in excessive risk aversion by entrepreneurs, particularly given the inability of such investors to diversify); Lynn M.

Leading entrepreneurship studies on organizational demography focus on business age and support the assertion that the creation of new firms is linked with entrepreneurship.<sup>291</sup> For example, the Global Entrepreneurship Monitor (“GEM”) project<sup>292</sup> reports entrepreneurial activity by computing nascent entrepreneurship, which includes only firms that are less than 3.5 years old.<sup>293</sup> Similarly, the Kauffman Foundation<sup>294</sup> releases the Kauffman Index of Entrepreneurial Activity, “a leading indicator of new business creation in the United States.”<sup>295</sup>

Nevertheless, focusing solely on firm age as an indicator of entrepreneurship provides an incomplete picture. For example, studies that focus on a firm’s age ignore, to some extent, the phenomenon of intrapreneurship. Recall that intrapreneurship occurs when established firms have employees or departments that continuously seek innovation and are entrepreneurial in their character.<sup>296</sup> The model proposed here provides a more complete analysis by considering other indicators and denoting different grades of entrepreneurial behavior. It recognizes that firm age, in and of itself, is insufficient in predicting innovation.

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LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 84–92 (1996) (suggesting that as an alternative to insurance, entrepreneurs could demonstrate financial responsibility).

<sup>291</sup> See JOHN HALTIWANGER ET AL., BUSINESS DYNAMICS STATISTICS BRIEFING: WHERE HAVE ALL THE YOUNG FIRMS GONE? 2–4 (2012), available at [https://www.census.gov/ces/pdf/BDS\\_StatBrief6\\_Young\\_Firms.pdf](https://www.census.gov/ces/pdf/BDS_StatBrief6_Young_Firms.pdf), archived at <http://perma.cc/6MKR-ZPE9> (linking job creation to young firms); ORG. FOR ECON. CO-OPERATION & DEV., MEASURING INNOVATION: A NEW PERSPECTIVE 70–71 (2010), available at <http://www.oecd.org/site/innovationstrategy/45188073.pdf>, archived at <http://perma.cc/8Q2Y-YYFU> (linking an economy’s share of young firms to its dynamism); Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257, 276 n.69 (2007) (pointing to recent empirical evidence that suggests that newer firms are more innovative than older firms); Elena Huergo & Jordi Jaumandreu, *How Does Probability of Innovation Change with Firm Age?*, 22 SM. BUS. ECON. 193, 193–95 (2004) (finding that entrant firms tend to present the highest probability to be innovative). *But see* Jesper B. Sørensen & Toby E. Stuart, *Aging, Obsolescence, and Organizational Innovation*, 45 ADMIN. SCI. Q. 81, 81 (2000) (finding that although a firm’s age is associated with increases in firms’ rates of innovation, the difficulties of keeping pace with external developments makes that innovation output obsolete).

<sup>292</sup> The GEM Project is an initiative that surveys entrepreneurship indicators in more than eighty nations to explore the widely accepted link between entrepreneurship and economic development. BOSMA ET AL., *supra* note 286, at 7–12 (explaining the GEM project). One of the key indicators GEM assesses is the business dynamics of firms and jobs. *Id.* at 37.

<sup>293</sup> *Id.* at 20–22, 59.

<sup>294</sup> The Ewing Marion Kauffman Foundation is one of the world’s largest foundations devoted to entrepreneurship. *See Who We Are*, EWING MARION KAUFFMAN FOUND., <http://www.kauffman.org/who-we-are>, archived at <http://perma.cc/EXJ9-3TMF> (last visited Apr. 23, 2014). The Foundation was formed by philanthropist and entrepreneur Ewing Marion Kauffman in the mid-1960s. *Id.*

<sup>295</sup> See ROBERT W. FAIRLIE, KAUFFMAN INDEX OF ENTREPRENEURIAL ACTIVITY: 1996–2012, at 2 (2013), available at [http://www.kauffman.org/~media/kauffman\\_org/research%20reports%20and%20covers/2013/04/kiea\\_2013\\_report.pdf](http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2013/04/kiea_2013_report.pdf), archived at <http://perma.cc/P93Y-PNNX> (reporting on business creation statistics).

<sup>296</sup> *See supra* notes 85–94 and accompanying text (discussing the concept of intrapreneurship).

### B. Knowledge Procurement

Innovation generally refers to the creation of superior products,<sup>297</sup> technologies,<sup>298</sup> or processes.<sup>299</sup> Schumpeter viewed innovation as the way of delivering new goods, new methods of production, new markets, new sources of raw materials, and the carrying out of new organizations of industries.<sup>300</sup> Although innovation is usually associated with technological changes, it may occur in nontechnological fields.<sup>301</sup> In these industries, firms can innovate by improving access to existing products and customer needs and by making products more attractive.<sup>302</sup>

Scholars have expressed skepticism over the existence of a method that is capable of fully measuring all dimensions of firms' innovation.<sup>303</sup> Nevertheless, measurements of innovation often begin by assessing a firm's knowledge procurement.<sup>304</sup> One method of measuring a firm's investment in knowledge is by

<sup>297</sup> See David M. Gann & Ammon J. Salter, *Innovation in Project-Based, Service-Enhanced Firms: The Construction of Complex Products and Systems*, 29 RES. POL'Y 955, 955–57 (2000) (linking innovation to the creation of more technologically complex products and systems).

<sup>298</sup> See Michael L. Tushman et al., *Technology Cycles, Innovation Streams, and Ambidextrous Organizations: Organization Renewal Through Innovation Streams and Strategic Change*, in MANAGING STRATEGIC INNOVATION AND CHANGE: A COLLECTION OF READINGS 3, 5–7 (Michael L. Tushman & Phillip C. Anderson eds., 1997) (discussing the relationship between innovation and technology).

<sup>299</sup> See CHRISTENSEN, *supra* note 137, at ix–xiii (giving an example of Sears innovating through new processes by developing supply chain management, catalogue retailing, credit card sales, and store brands). See generally THOMAS H. DAVENPORT, PROCESS INNOVATION: REENGINEERING WORK THROUGH INFORMATION TECHNOLOGY 1–20 (1993) (defining process innovation as improvements in business processes and giving examples of such innovations).

<sup>300</sup> Becker et al., *supra* note 31, at 25.

<sup>301</sup> See Keith Smith, *Measuring Innovation*, in THE OXFORD HANDBOOK OF INNOVATION 148, 168–70 (Jan Fagerberg et al. eds., 2005); see also Dominique Guellec & Bill Pattinson, *Innovation Surveys: Lessons from OECD Countries' Experiences*, 27 SCI. TECH. INDUS. REV. 77, 89 (2001) (discussing how innovation arises from sources other than technological development).

<sup>302</sup> See Steven H. Hobbs, *Toward a Theory of Law and Entrepreneurship*, 26 CAP. U. L. REV. 241, 276–81 (1997) (describing innovation as enhancing the value of a product or a service even through nontechnological means). See generally Khan & Manopichetwattana, *supra* note 89, at 597–98 (describing how as firms grow, their focus shifts from innovative products to innovative processes).

<sup>303</sup> See Jan Fagerberg, *Innovation: A Guide to the Literature*, in THE OXFORD HANDBOOK OF INNOVATION, *supra* note 301, at 1, 1–8 (noting difficulties in measuring and quantifying innovation).

<sup>304</sup> One method of measuring knowledge procurement proposed by economists is the “linear innovation” model, which begins with research and development of scientific knowledge and later develops into technological models and practical engineering. See Rinaldo Evangelista et al., *Measuring Innovation in European Industry*, 5 INT'L J. ECON. BUS. 311, 312, 317–32 (1998) (explaining the linear model and then statistically measuring innovation); cf. Matthew R. Marvel & G.T. Lumpkin, *Technology Entrepreneurs' Human Capital and Its Effects on Innovation Radicalness*, 31 ENTREPRENEURSHIP THEORY & PRAC. 807, 807–08 (2007) (examining a scientific body of work and then the practical developments following from that scientific body).

focusing on the cost of its innovation input.<sup>305</sup> This cost includes, but is not limited to, research and development (“R&D”) expenditures, external acquisitions of knowledge, the acquisition of equipment that incorporates new technology when producing a new product, as well as other tools and staff training.<sup>306</sup>

This Article’s proposed model determines knowledge procurement as follows:

$$(P) \text{ Knowledge Procurement}_{(\text{year } i)} = \frac{\text{Innovation Input}_i}{\text{Sales}_i}$$

Investment in knowledge and innovation incorporates a wide array of inputs, such as cost of information, human capital, designs, tools, and labs. Here, the indicator proposed by this Article consists of funds invested in knowledge procurement as a percentage of the company’s sales.<sup>307</sup> This indicator provides information on the firm’s level of commitment to innovation as shown by its willingness to devote a portion of its sales to innovation.

The model proposed here suggests incorporating a wide array of outlays to indicate investment in knowledge as an objective criterion.<sup>308</sup> Today, in both popular and academic literature, innovation efforts are viewed as a proxy for

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<sup>305</sup> The Internal Revenue Code provides a research and development (“R&D”) tax credit for certain qualified expenditures on R&D, namely amounts paid for the performance of research in the pursuit of new scientific knowledge. 26 U.S.C. § 41(a)–(b), (e) (2012). These expenditures usually include the wages of employees engaged in performing, supervising, or supporting R&D; supplies, prototypes, testing materials, and any tangible property directly linked to R&D activities; payments for R&D services performed under contracts; and basic research payments to nonprofit organizations and institutions for performing fundamental research that focuses on evaluating theories and hypotheses. *Id.* § 41(b)(2)(C)–(D), (e).

<sup>306</sup> NAT’L RESEARCH COUNCIL, MEASURING RESEARCH AND DEVELOPMENT EXPENDITURES IN THE U.S. ECONOMY 91 (Lawrence D. Brown et al. eds., 2004), available at [http://www.nap.edu/catalog.php?record\\_id=11111](http://www.nap.edu/catalog.php?record_id=11111), archived at <http://perma.cc/H36N-ZC6C>. External acquisition of knowledge can come in the form of patents, licenses, and technical services. *Id.*

<sup>307</sup> Investment in innovation has also been measured as a firm’s “R&D intensity,” calculated by identifying average R&D expenditures as a percentage of total sales. See Wesley M. Cohen & Steven Klepper, *The Anatomy of Industry R&D Intensity Distributions*, 82 AM. ECON. REV. 773, 773–80 (1992) (analyzing the nature of the distribution of firm R&D intensities within industries); Otto Toivanen et al., *Innovation and Market Value of UK Firms, 1989–1995*, 64 OXFORD BULL. ECON. & STAT. 39, 41 (2002); see also Richard Blundell et al., *Market Share, Market Value, and Innovation in a Panel of British Manufacturing Firms*, 66 REV. ECON. STUD. 529, 530–31, 547 (1999) (using R&D expenditure as a factor in measuring knowledge). See generally Toivanen et al., *supra*, at 41 (describing R&D expenditures as intangible assets and the stock of innovative knowledge).

<sup>308</sup> For a discussion on how firms vary with regard to R&D as an outlay, see Cohen & Klepper, *supra* note 307, at 773–80 (analyzing the nature of the distribution of firm R&D intensities within industries).

the long-term growth of firms, industries, and nations.<sup>309</sup> Such efforts signify the firm's commitment to producing knowledge and new ideas, which, if successful, result in innovation output.<sup>310</sup> These innovation efforts also indicate the amount of financial resources that a firm devotes to the development of innovation, thereby demonstrating the firm's commitment to entrepreneurship.<sup>311</sup>

Still, investment in knowledge alone is not sufficient for attaining economic growth.<sup>312</sup> Entrepreneurship involves the act of successfully transforming innovation into business value.<sup>313</sup> For example, a firm may be able to achieve a breakthrough invention, but then fail in commercializing that innovation and converting it into economic value. As noted by Kirzner, entrepreneurial firms are those that achieve innovation by pursuing opportunities and knowledge ignored by others.<sup>314</sup>

### C. Innovation Yield

Investment in innovation involves the combination of inputs in the hope of attaining positive outputs.<sup>315</sup> Innovation outcomes are a key part of economic development theory; they illustrate the importance successful innovative processes have in creating economic value.<sup>316</sup>

There are many different ways to measure innovation output. The most common signals of innovation outcomes are a firm's intellectual products.

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<sup>309</sup> See Samuel B. Graves & Nan S. Langowitz, *R&D Productivity: A Global Multi-Industry Comparison*, 53 *TECH. FORECASTING SOC. CHANGE* 125, 125 (1996) ("R&D spending seems to be critical to corporate success."); see also FED. TRADE COMM'N, *STATISTICAL REPORT: ANNUAL LINE OF BUSINESS REPORT 1977*, at 19–22 (1985) (showing firm-financed R&D as a percentage of sales for the ten highest-valued industry categories and showing its importance to firm prosperity).

<sup>310</sup> See *supra* notes 54–72 and accompanying text (discussing how entrepreneurial firms create novelty).

<sup>311</sup> See Cohen & Klepper, *supra* note 307, at 775–80 (looking at data on R&D expenditures and sales and transfers to see where firms focused their efforts to procure knowledge); cf. CONG. BUDGET OFFICE, PUB. NO. 2589, *RESEARCH AND DEVELOPMENT IN THE PHARMACEUTICAL INDUSTRY 9–12* (2006), available at <http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/76xx/doc7615/10-02-drugr-d.pdf>, archived at <http://perma.cc/H8T7-5GXX> (using R&D expenditures to measure a firm's commitment to innovation).

<sup>312</sup> See SCHUMPETER, *supra* note 59, at 290–93 (noting that not all new combinations constitute the kind of entrepreneurship that leads to economic development).

<sup>313</sup> See SCHUMPETER, *supra* note 43, at 67 (distinguishing economic leadership from invention, and noting that "inventions are economically irrelevant" if "they are not carried into practice").

<sup>314</sup> KIRZNER, *supra* note 124, at 109 ("In fact, the essence of the entrepreneurial decision consists in grasping the knowledge that might otherwise remain unexploited.").

<sup>315</sup> ALEXANDRA STONE ET AL., *SCI. & TECH. POLICY INST., MEASURING INNOVATION AND INTANGIBLES: A BUSINESS PERSPECTIVE*, at II-1 to -2 (2008).

<sup>316</sup> STONE ET AL., *supra* note 315, at II-2; see Lewis M. Branscomb, *Improving R&D Productivity: The Federal Role*, 222 *SCI.* 133, 133 (1983) (arguing that federal investment in bringing innovation to the private sector would boost the economy).



These include patents, copyrights, licenses, trademarks, service marks, product designs, trade productions, and publications.<sup>317</sup> Many studies measure the productivity of innovation and a firm's ability to generate new knowledge by the number of patents, copyrights, and trademarks it introduces.<sup>318</sup> Other studies use bibliometric information, such as the number of scientific publications, books, research and grant proposals, presentations, and cite counts.<sup>319</sup>

These studies, however, fail to account for the *quality* of innovation.<sup>320</sup> A firm's R&D department may be extremely productive when measured by the quantity of patents obtained, but may still fail to yield successful innovations or to further the company's business goals.<sup>321</sup> Similarly, an invention can be considered scientifically groundbreaking by outside evaluators and journal editorial boards, but in reality have little or no commercial value.<sup>322</sup> Moreover, some firms today are "patent trolls" that purchase patents as a strategic way to

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<sup>317</sup> See Wesley M. Cohen & Steven Klepper, *A Reprise of Size and R&D*, 106 *ECON. J.* 925, 929 (1996) (measuring the number of patents and innovations as products of R&D investment); see also David E. Adelman & Kathryn L. DeAngelis, *Patent Metrics: The Mismeasure of Innovation in the Biotech Patent Debate*, 85 *TEX. L. REV.* 1677, 1684–86, 1695–98 (2007) (examining the general trends in biotechnology intellectual property, including patent counts, patent-ownership patterns, and the distribution of biotechnology patents across distinct areas of research and development).

<sup>318</sup> See, e.g., Mark G. Brown & Raynold A. Svenson, *Measuring R&D Productivity*, 41 *RES. TECH. MGMT.* 30, 31–33 (1998) (using the number of patents received to measure productivity); Ariel Pakes & Zvi Griliches, *Patents and R&D at the Firm Level: A First Look*, in *R&D, PATENTS AND PRODUCTIVITY* 55, 63–65 (Zvi Griliches ed., 1984), available at <http://www.nber.org/chapters/c10044>, archived at <http://perma.cc/LY6W-L3NV> (considering the number of patent applications as an accurate proxy for innovation).

<sup>319</sup> See Zoltán J. Ács & David B. Audretsch, *Innovation in Large and Small Firms: An Empirical Analysis*, 78 *AM. ECON. REV.* 678, 678–81 (1988) (measuring innovative output as the number of new product innovations reported in trade journals in 1982).

<sup>320</sup> See, e.g., Zvi Griliches, *Patents: Recent Trends & Puzzles*, *BROOKINGS PAPERS ECON. ACTIVITY*, 1989, at 291, 314 (arguing that patent counts do not inform us about the quality of patents); Keith Smith, *Science, Technology and Innovation Indicators—An Overview of the Issues*, in *SCIENCE, TECHNOLOGY AND INNOVATION INDICATORS—A GUIDE FOR POLICY-MAKERS* 1, 6 (Keith Smith ed., 1998) available at <http://survey.nifu.no/step/old/Projectarea/IDEA/Idea5.pdf>, archived at <http://perma.cc/3RAZ-PEJ4> (observing that patent studies do not provide much information about the economic value of innovations and that bibliometric data is a flawed method of measuring scientific innovation because it provides no information about the innovation process, but instead focuses on publication statistics). See generally Jay P. Kesan & Andres A. Gallo, *Why "Bad" Patents Survive in the Market and How Should We Change?—The Private and Social Costs of Patents*, 55 *EMORY L.J.* 61, 67–68, 122 & n.29 (2006) (arguing that the loose practices of the U.S. Patent and Trademark Office lead to the issuance of low quality patents).

<sup>321</sup> See Stuart J.H. Graham et al., *High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey*, 24 *BERKELEY TECH. L.J.* 1255, 1296–1302, 1312–14 (2009) (showing that a key motive of patenting by startups is to find investors, not to innovate).

<sup>322</sup> For example, academic articles or cultural inventions can include innovations that advance our understanding of processes and certain behaviors and yet have no commercial value. See Allan Hanson, *The Making of the Maori: Culture Invention & Its Logic*, 91 *AM. ANTHROPOLOGIST* 890, 897–99 (1989) (discussing how academics create new ideas that, although culturally significant, have no commercial value).

block potential competitors.<sup>323</sup> Accordingly, simply counting output is not enough. Outcomes must be measured by considering the real value an innovation adds to the firm.

A useful alternative indicator is innovation yield. Innovation yield considers the quality of an investment in knowledge and the value of that investment to the firm. This measure indicates the effectiveness of a firm's innovation efforts by determining the relationship between the commercial value of knowledge and the investment required to generate that knowledge.<sup>324</sup> By capturing the successful implementation of that knowledge, innovation yield directly measures the success of the knowledge's commercialization—in other words, the essence of the entrepreneurial process.<sup>325</sup>

Innovation yield can be illustrated as follows:

$$(Y) \text{ Innovation Yield}_{(\text{year } i)} = \frac{\text{Innovation output }_i}{\text{Innovation input }_i}$$

There are various ways to measure return on investment in innovation.<sup>326</sup> A simple way to measure the return is by looking at the ratio of innovation

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<sup>323</sup> See, e.g., Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2008–10, 2044 (2007) (arguing that “patent trolls,” i.e., entities that do not innovate but instead buy and assert patents in court, impede innovation); James Bessen, *Patent Thickets: Strategic Patenting of Complex Technologies* 6 n.6 (Research on Innovation, Working Paper No. 0401, 2003), available at <http://ideas.repec.org/p/roi/wpaper/0401.html>, archived at <http://perma.cc/68GQ-SKLT> (“[Firms] may choose to patent alternative techniques in order to strategically block competitors.”). Other firms patent the same product multiple times, creating “patent thickets that harm innovation.” Ian Ayres & Gideon Parchomovsky, *Tradable Patent Rights*, 60 STAN. L. REV. 863, 864 (2007) (claiming that patent thickets are especially harmful in innovation settings).

<sup>324</sup> Cf. Samuel B. Graves & Nan S. Langowitz, *Innovative Productivity and Returns to Scale in the Pharmaceutical Industry*, 14 STRATEGIC MGMT. J. 593, 593–96, 599–604 (1993) (examining six years of R&D expenditures as a primary independent variable for innovation). See generally Steven M. Paul et al., *How to Improve R&D Productivity: The Pharmaceutical Industry's Grand Challenge*, 9 NAT. REV. DRUG DISCOVERY 203, 203–13 (2010) (analyzing the R&D productivity of new medicines).

<sup>325</sup> See SCHUMPETER, *supra* note 59, at 290–93. This is why companies demand that their employees not only produce innovations, but also establish the value of these innovations to the organization. Cf. Brown & Svenson, *supra* note 318, at 30 (“Upper management is becoming less content with subjective measures of R&D's contribution to the bottom line.”).

<sup>326</sup> See Ville Ojanen & Olli Vuola, *Categorizing the Measures and Evaluation Methods of R&D Performance—A State-of-the-art Review on R&D Performance Analysis* 1–20 (Telecom Bus. Research Ctr. Lappeenranta, Working Paper No. 16, 2003) (providing a review of the literature on measuring innovation effectiveness). A number of scholars, for example, have compared the growth of research stock within different firms. See, e.g., Michael E. McGrath & Michael N. Romeri, *From Experience: The R&D Effectiveness Index: A Metric for Product Development Performance*, 11 J. PROD. INNOVATION MGMT. 213, 213–20 (1994); M. Ishaq Nadiri, *Innovations and Technological Spillovers* 10 (Nat'l Bureau of Econ. Research, Working Paper No. 4423, 1993), available at <http://www.nber.org/papers/w4423.pdf>, archived at <http://perma.cc/6GM3-XRJG>.

output to innovation input—that is, the revenues directly derived from investment in innovation as a portion of the cost of that innovation.<sup>327</sup> Whereas investment in knowledge includes patents, information, and salaries, innovation output includes any commercial value generated by new patents, products, processes, or publications.<sup>328</sup> Accordingly, innovation yield captures the effectiveness of investment in knowledge by measuring the profits firms directly derive from it.

When novelty is created, a firm may realize a low innovation yield ratio. This signifies a higher investment in innovation in the early stages of development. Once the investment is successfully developed into the innovation product, a firm may begin to reap more innovation output in the form of entrepreneurial gains, and, consequently, its innovation yield ratio increases.<sup>329</sup> As more competitors enter the market, however, the innovation output is expected to decrease, which in turn would cause the innovation yield ratio to decline as well.<sup>330</sup>

#### D. Labor Expansion

Entrepreneurial firms are considered the biggest contributors to the nation's economic growth.<sup>331</sup> Entrepreneurs establish new firms, which create more competition and new jobs.<sup>332</sup> This rapid labor expansion drives high levels of economic growth.<sup>333</sup> Innovation, in particular, contributes to this labor expansion and economic growth. Once a firm successfully implements an innovation, the firm initiates mass production by expanding its workforce.<sup>334</sup> This process generates long-term employment and economic growth.<sup>335</sup>

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<sup>327</sup> See Evangelista et al., *supra* note 304, at 316.

<sup>328</sup> See Brown & Svenson, *supra* note 318, at 31.

<sup>329</sup> See SCHUMPETER, *supra* note 26, at 269–73.

<sup>330</sup> See SCHUMPETER, *supra* note 59, at 303.

<sup>331</sup> Ács, *supra* note 141, at 103 n.15 (“The major generators of employment growth are both new plants and new firms . . .”).

<sup>332</sup> See *id.* at 101. New firms may also make the economy more productive by bringing about new technologies. *Id.* at 104.

<sup>333</sup> *Id.* at 97.

<sup>334</sup> See ZOLTÁN J. ÁCS & CATHERINE ARMINGTON, ENTREPRENEURSHIP, GEOGRAPHY, AND AMERICAN ECONOMIC GROWTH 16 (2006) (linking employment growth to the creation of new firms); Per Davidsson et al., *Entrepreneurship as Growth; Growth as Entrepreneurship*, in ENTREPRENEURSHIP AND THE GROWTH OF FIRMS 21, 33–35 (Per Davidsson et al. eds., 2006) (discussing the relationship between entrepreneurial success and workforce growth); Zoltán J. Ács et al., *The Missing Link: The Knowledge Filter and Entrepreneurship in Endogenous Growth* 17–21 (Centre for Econ. Policy Research Discussion Papers, Working Paper No. 4783, 2004), available at <http://www.indiana.edu/~idsspe/papers/ISSN%2005-12.pdf>, archived at <http://perma.cc/TVD3-BAJA>.

<sup>335</sup> Cf. Erik Brouwer et al., *Employment Growth and Innovation at the Firm Level—An Empirical Study*, 3 J. EVOLUTIONARY ECON. 153, 153–59 (1993) (finding that firms with a high share of product-related R&D experienced an above average growth of employment).

Labor expansion is only one of many indicators of entrepreneurship and innovation. Although labor expansion is one of the most recognized positive effects of entrepreneurship, it measures only the quantity, not the quality or productivity of employment in a firm. Labor expansion does not tell us anything about the turnover rate of employment, or more specifically, how many employees who joined a firm subsequently left during the course of the period in question.<sup>336</sup> Thus, as with the other indicators, employment growth alone cannot describe the entrepreneurial character of a firm. It must be combined with other factors to determine a firm's entrepreneurial orientation.

This Article's proposed model describes labor expansion with the following formula:

$$(E) \text{ Labor Expansion}_{(\text{year } i)} = \frac{\Delta E/E}{t} = \frac{(E_i - E_{i-t}) / E_{i-t}}{t}$$

E = Number of employees

There are many approaches for calculating labor expansion.<sup>337</sup> To mitigate the growth biases of very small, closely held corporations—which add only a few employees over a short period time—the model should be limited to include only those enterprises with greater than a certain number of employees.<sup>338</sup> Finally, for the sake of simplicity, the model proposes to measure labor expansion by focusing on the firm's periodic net increase in the number of full-time employees.<sup>339</sup>

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<sup>336</sup> See Paul M. Muchinsky & Paula C. Morrow, *A Multidisciplinary Model of Voluntary Employee Turnover*, 17 J. VOCATIONAL BEHAV. 263, 263 (1980) (positing that voluntary turnover depends on characteristics of the individual employee, work-related factors, and the states of certain economic variables).

<sup>337</sup> See, e.g., STEVEN J. DAVIS ET AL., *JOB CREATION AND DESTRUCTION* 188–91 (1996) (providing a series of formulas for measuring net job creation); ORG. FOR ECON. CO-OPERATION & DEV., *EUROSTAT-OECD MANUAL ON BUSINESS DEMOGRAPHY STATISTICS* 47–48 (2007), available at <http://www.oecd.org/std/39974460.pdf>, archived at <http://perma.cc/GA5L-KZWX> (measuring economic development by the growth in the number of jobs per enterprise over time); Zoltán J. Ács & Catherine Armington, *Employment Growth and Entrepreneurial Activity in Cities*, 38 REGIONAL STUD. 911, 921 (2004) (measuring average annual employment growth rate in year  $s_{rt+1}$  as  $(\text{empl}_{s_{rt+1}}/\text{empl}_{s_{rt}})^{1/3} - 1$ ); Brouwer et al., *supra* note 335, at 154 (measuring annual growth rate of employment by using fifth root of the increase in employment:  $\text{EMP}_{(t)}/\text{EMP}_{(t-5)}^{1/5} - 1$ ); Steven J. Davis & John Haltiwanger, *Gross Job Creation, Gross Job Destruction and Employment Reallocation*, 107 Q. J. ECON. 819, 825–29 (1992) (providing a method for calculating job creation and destruction by measuring establishment size, sector size, and growth rate).

<sup>338</sup> See ORG. FOR ECON. CO-OPERATION & DEV., *supra* note 337, at 61 (setting a size threshold to prevent the growth of small enterprises from causing distortions). Nevertheless, this threshold should be set low enough to avoid excluding too many enterprises, especially newly formed corporations in their nascent stages.

<sup>339</sup> Cf. ORG. FOR ECON. CO-OPERATION & DEV., *supra* note 337, at 41, 61 (discussing how full-time employee data can be used to measure labor expansion); ORG. FOR ECON. CO-OPERATION &

### E. Entrepreneurial Success

When a firm invests its resources in knowledge procurement and successfully implements that innovation in the market, the market creates a demand for the firm's products.<sup>340</sup> At that moment, the firm experiences a rapid growth in economic activity.<sup>341</sup> There are many indicators of an increase in economic activity. These indicators include a rise in the firm's income levels, growth in the number of employees, an increase in sales, an increase in international trade, a surge in the return-on-assets ratio, and growth in the number and capitalization of enterprises in the stock market.<sup>342</sup>

To remain simple, the model proposed here seeks to use measures that are both accessible and manageable to firms and policymakers. Growth in sales is a well-recognized indicator of a firm's success, and is fairly easy for the firm and its investors to observe.<sup>343</sup> Sales are also the immediate indicator of changes in market demand for a firm's products.<sup>344</sup> When a firm makes an important discovery and invests in product development, the successful delivery of a product to the market is primarily demonstrated through a sharp increase in a sales growth.<sup>345</sup> Accordingly, growth in sales can convey entrepreneurial suc-

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DEV., MEASURING ENTREPRENEURSHIP: A COLLECTION OF INDICATORS 28 (2009) (focusing on periodic growth in employees in firms with ten or more employees).

<sup>340</sup> See *supra* notes 59–72 and accompanying text (describing how entrepreneurship spurs innovation and grows the economy).

<sup>341</sup> See *supra* notes 59–72 and accompanying text.

<sup>342</sup> See Avanzini, *supra* note 267, at 39–40 (providing such examples as ways to measure growth in economic activity).

<sup>343</sup> See, e.g., David Schwarzman, *The Growth of Sales Per Man-Hour in Retail Trade 1929–1963*, in PRODUCTION AND PRODUCTIVITY IN THE SERVICE INDUSTRIES 201, 201–18 (Victor R. Fuchs ed., 1963), available at <http://www.nber.org/chapters/c1203.pdf>, archived at <http://perma.cc/8EFS-3DXK> (measuring the growth of constant-dollar sales per man-hour in retail trade between 1929 and 1963); John Williamson, *Profit, Growth and Sales Maximization*, 33 *ECONOMICA* 1, 1–3 (1966) (building on Baumol's growth model and constructing a model that measures the differences in firm behavior driven by sales maximization). But see Gregory G. Dess & Richard B. Robinson, Jr., *Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-Held Firm and Conglomerate Business Unit*, 5 *STRATEGIC MGMT. J.* 265, 265–66 (1984) (arguing that there are often problems obtaining objective measures of selected aspects of organizational performance that are reliable and valid, such as return on assets and growth in sales).

<sup>344</sup> See, e.g., Rajshree Agarwal & Barry L. Bayus, *The Market Evolution and Sales Takeoff of Product Innovations*, 48 *MGMT. SCI.* 1024, 1025 (2002) (discussing the relationship between sales and increased market demand); Richard Schmalensee, *Another Look at Market Power*, 95 *HARV. L. REV.* 1789, 1793–96 (1982) (analyzing the connection between increased market power, market demand, and sales).

<sup>345</sup> See David J. Bryce & Jeffrey H. Dyer, *Strategies to Crack Well-Guarded Markets*, 85 *HARV. BUS. REV.*, May 2007, at 84, 90 (providing empirical data on the connection between firm entry into new markets and change in average annual sales).

cess because it signals a firm's ability to convert valuable knowledge into increased economic performance.<sup>346</sup>

The proposed model describes entrepreneurial success through the following formula:

$$(S) \text{ Entrepreneurial Success}_{(\text{year } i)} = \frac{\Delta S/S}{t} = \frac{(S_i - S_{i-t}) / E_{i-t}}{t}$$

S=Sales

Entrepreneurial success is a multidimensional phenomenon that may be comprised of many indicators that provide information on business expansion.<sup>347</sup> These indicators include, among others, growth in sales, equity, income, and assets. Out of these indicators, the proposed model uses average annual growth rate based on sales because studies have concluded that sales growth is a reliable indicator of innovation.<sup>348</sup> This measure estimates the success of the firm's products through increases in the firm's sales volume over a period of time, under the assumption that the more successful the firm is in implementing innovation and creating new market demand, the higher the sales of its innovative products in the market.<sup>349</sup>

Although entrepreneurial success yields economic wealth derived from sales, this wealth is typically a temporary monopoly position.<sup>350</sup> It only exists until competitors that imitate the entrepreneur's innovation enter the market.<sup>351</sup> Once imitators enter the market and begin to sell similar products, the original firm will witness a decrease in sales.<sup>352</sup> This decrease reflects the market's reaction to the rise in the variety of products.<sup>353</sup>

Finally, despite being a useful proxy, identifiable sales increases cannot alone evidence entrepreneurial gains. Sales can also expand when firms fulfill preexisting market demand or utilize new marketing techniques. This problem therefore emphasizes the benefits of a model that uses a combination of fac-

<sup>346</sup> See ALEX COAD, THE GROWTH OF FIRMS: A SURVEY OF THEORIES AND EMPIRICAL EVIDENCE 77–81 (2009) (describing the relationship between innovation and sales growth).

<sup>347</sup> *Id.* at 69.

<sup>348</sup> See, e.g., *id.* at 73 (finding that firms appear to increase their total R&D expenditure following growth in sales and growth of employment); Alexander Coad & Rekha Rao, Firm Growth and R&D Expenditure, 19 ECON. INNOVATION & NEW TECH. 127, 127–28 (2010); Alexander Coad & Rekha Rao, *Innovation and Firm Growth in High-Tech Sectors: A Quintile Regression Approach*, 37 RES. POL'Y 633, 633 (2008) (relating innovation to sales growth for incumbent firms in high-tech sectors).

<sup>349</sup> Cf. Bryce & Dyer, *supra* note 345, at 86–90 (discussing a study on profitable firms between 1990 and 2000 and calculating growth rate as the change in average annual sales).

<sup>350</sup> See SCHUMPETER, *supra* note 44, at 260.

<sup>351</sup> *See id.*

<sup>352</sup> *See id.*

<sup>353</sup> *See id.*

tors. The use of many factors creates a more comprehensive picture of a firm's entrepreneurial orientation.

#### F. The Model

The five-dimensional conceptual model of entrepreneurship outlined above should be designed in accord with the following strategies. First, to achieve a better fit between the firm's actions and its entrepreneurial character, the model should be graduated.<sup>354</sup> Each dimension of entrepreneurship must contain several levels of entrepreneurial activity. Second, for the sake of simplicity, the model should focus on the most generally recognized and easily measured dimensions of entrepreneurship. To this end, though, the model may be expanded to include other entrepreneurial dimensions to attain an even more refined picture of entrepreneurial activity. Third, the use of multiple dimensions, and multiple layers within those dimensions, should introduce greater elasticity. This elasticity allows firms to move from one tier to another within each indicator. Finally, the proposed model should integrate the five individual dimensions into a single composite index.<sup>355</sup> Every tier in the model should provide firms with a number of points per entrepreneurial dimension, and each dimension should be weighted differently to account for its relative importance to economic development and social policies.

Figure 1, below, is an illustration of this model:

Figure 1: Entrepreneurial Orientation Scale

<i>Points per indicator</i>	<i>A Firm's Age</i>	<i>P Knowledge Procurement</i>	<i>Y Innovation Yield</i>	<i>E Labor Expansion</i>	<i>S Entrepreneurial Success</i>
100	$A \leq \alpha_1$	$P \geq \beta_1$	$Y \geq \gamma_1$	$E \geq \delta_1$	$S \geq \epsilon_1$
80	$\alpha_1 > A \leq \alpha_2$	$\beta_1 > P \geq \beta_2$	$\gamma_1 > Y \geq \gamma_2$	$\delta_1 > E \geq \delta_2$	$\epsilon_1 > S \geq \epsilon_2$
60	$\alpha_2 > A \leq \alpha_3$	$\beta_2 > P \geq \beta_3$	$\gamma_2 > Y \geq \gamma_3$	$\delta_2 > E \geq \delta_3$	$\epsilon_2 > S \geq \epsilon_3$
40	$\alpha_3 > A \leq \alpha_4$	$\beta_3 > P \geq \beta_4$	$\gamma_3 > Y \geq \gamma_4$	$\delta_3 > E \geq \delta_4$	$\epsilon_3 > S \geq \epsilon_4$
20	$\alpha_4 > A \leq \alpha_5$	$\beta_4 > P \geq \beta_5$	$\gamma_4 > Y \geq \gamma_5$	$\delta_4 > E \geq \delta_5$	$\epsilon_4 > S \geq \epsilon_5$

<sup>354</sup> On the connection between a progressive schedule and accurate representation of economic activity, see, for example, Robert P. Inman, *Comments to Gilbert E. Metcalf, The Lifetime Incidence of State and Local Taxes: Measuring Changes During the 1980s*, in *TAX PROGRESSIVITY AND INCOME INEQUALITY* 89, 89 (Joel Slemrod, ed., 1994) (explaining how graduated tax schedules help societies efficiently allocate resources); Michael L. Roberts & Peggy A. Hite, *Progressive Taxation, Fairness, and Compliance*, 16 L. & POL'Y 27, 27-30, 34 (1994) (discussing fairness and graduated measures in tax systems). *But see* James M. Snyder & Gerald H. Kramer, *Fairness, Self-Interest, and the Politics of the Progressive Income Tax*, 36 J. PUB. ECON. 197, 197 (1988) (contending that marginal-rate progression is not the result of society's desire to achieve a fairer distribution of income but is instead the result of middle-income taxpayers wanting to reduce their own burden).

<sup>355</sup> Cf. SAISANA & TARANTOLA, *supra* note 268, at 6 (explaining the benefits of composite indicators); Avanzini, *supra* note 267, at 43 (explaining how composite indicators are able to efficiently use multiple factors to acquire knowledge).

Figure 1: Entrepreneurial Orientation Scale					
<i>Weight per indicator</i>	0.1	0.25	0.3	0.20	0.15
* $\alpha, \beta, \gamma, \delta, \epsilon$ represent constant numbers in each range.					
** Points and weight per indicator are a random suggestion and can be adjusted to correlate to policy, industry, and other preferences.					

In every tier in the model, the firm receives a distinct number of points per entrepreneurial dimension. In Figure 1, for the purpose of simplicity, the scale increases in equal twenty-point increments. Every entrepreneurial dimension is also allotted a different weight. For example, Figure 1 provides an illustration of random weight suggestions, which emphasize investment in knowledge over other entrepreneurial dimensions. The composite indicator works by multiplying the sum of points of each indicator by the weight of each entrepreneurial dimension to add up to the firm's entrepreneurial orientation index.

Firms located at the top end of the scale receive a higher index, denoting their stronger entrepreneurial orientation and greater proclivity to contribute to economic growth. On the other hand, firms that receive no score at all are considered trivial, non-entrepreneurial enterprises. As firms move up the scale, they attain a higher entrepreneurial index.

The following examples of three hypothetical firms illustrate the model in action. First, consider Orange, Inc., a successful telecommunication company established in 1977. Orange enjoys steady employment expansion and invests some efforts in innovation, but mainly reaps profits from previously developed products. Under the new model, Orange will be deemed a relatively entrepreneurial-oriented firm, but the firm's age and its rather low innovation efforts prevent it from receiving a higher index. Alternatively, consider Newco, Inc., a software company founded just three years ago. It invests most of its resources into R&D, has doubled its number of employees, has successfully sold its products to several clients, and has significantly increased its sales over the last few years. Under the proposed model, Newco undoubtedly will be considered predominantly entrepreneurial. As a third example, consider Pizza, Inc., a local family pizzeria. It has been in business for twenty years, yields a stable average annual sales rate, does not significantly change its number of employees, and always uses the same baking method. Under the proposed model, Pizza will not be considered entrepreneurial.

Although this multi-dimensional model is far from flawless, it is certainly an improvement over the current small-or-not standard. A single indicator cannot alone capture complex outcomes. Accordingly, the model should be viewed as a starting point for further studies of entrepreneurial traits and their correlation to economic growth. In the future, as studies on economic growth



establish correlations to other firm behavior indicators, the model should incorporate these gauges to attain a better reflection of our society.

#### IV. POLICY AND CRITICISM

By now, it is clear that rewarding firms merely according to their size will not necessarily achieve economic development. The size-focused approach is inconsistent with the current economic and social landscape. It reflects an anachronistic picture of previous economic structures.<sup>356</sup> An entrepreneurship-focused approach, on the other hand, directly correlates to economic development. Such an approach harmonizes modern-day economic policy and goals with the law. Accordingly, continuing to focus on firm size in legal definitions does not fit current economic realities and, more problematically, misses the point of entrepreneurship.

This Part first demonstrates how this Article's proposed model is more efficient in identifying firms with entrepreneurial orientation than the size-focused standards currently dominant in our legal system.<sup>357</sup> It then illustrates the model's benefits through an examination of tax laws.<sup>358</sup> Finally, it describes and addresses some possible criticisms of the proposed model.<sup>359</sup>

##### A. A Flexible, Fair, and Administrable Model

Legal tax models are more likely to be implemented successfully when they are designed with three main objectives in mind: flexibility, fairness, and administrability.<sup>360</sup> The proposed five-dimensional conceptual model of entrepreneurship in the law aspires to achieve these three goals. First, the proposed model is flexible. It includes several levels for each indicator.<sup>361</sup> Firms are likely to move from one tier to another each year.<sup>362</sup> Next, the model is fair. This fairness flows from the combination of five factors and five tiers, allowing for a more graduated and unbiased representation of firms' various degrees of entrepreneurship.<sup>363</sup> Lastly, the five-dimensional conceptual model is simple and administrable. It focuses on only five widely accepted gauges of entrepreneur-

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<sup>356</sup> See *supra* notes 85–94, 177–238 and accompanying text.

<sup>357</sup> See *infra* notes 360–368 and accompanying text.

<sup>358</sup> See *infra* notes 369–382 and accompanying text.

<sup>359</sup> See *infra* notes 383–388 and accompanying text.

<sup>360</sup> See Martin J. McMahon, Jr., *Individual Tax Reform for Fairness and Simplicity: Let Economic Growth Fend for Itself*, 50 WASH. & LEE L. REV. 459, 463–67, 482, 489 (1993) (discussing the tax system's concerns with fairness, simplicity, and administrability).

<sup>361</sup> See generally *supra* notes 265–356 and accompanying text (describing the proposed model at length).

<sup>362</sup> See generally *supra* notes 265–356 and accompanying text.

<sup>363</sup> See generally *supra* notes 265–356 and accompanying text.

ship. These measures are simple to attain, easy to measure, and broadly accessible to firms and policymakers. This simplicity and accessibility makes the determination of firms' entrepreneurial orientation relatively straightforward.

Importantly, the model also accounts for the temporary nature of entrepreneurship.<sup>364</sup> No firm or person is ever entrepreneurial all the time.<sup>365</sup> Behavior and growth trends will vary from firm to firm and from one year to another. This model accommodates these variances by allowing both for different stages of entrepreneurial activity and for several levels within each entrepreneurial dimension.

This model also attains flexibility while maintaining fairness and administrability by using a composite indicator.<sup>366</sup> The proposed model integrates the mathematical combination of each individual indicator into a single index. This method allows for the incorporation of a multi-dimensional concept of entrepreneurship.<sup>367</sup> It also provides policymakers and individual managers with a method of comparing different companies' entrepreneurial orientations as well as greater predictability to firms that are changing their position in the market. Finally, the composite indicator can assist policymakers in anticipating future entrepreneurial conditions and trends.<sup>368</sup>

Another feature of the proposed model that contributes to its flexibility is the allowance for a distinct weight to be given to each indicator. This provides an additional way to account for the significance of each entrepreneurial feature. Each indicator should be weighted differently according to its contribution to entrepreneurship, industrial variance, public and social policy, and other economic factors. For example, some indicators may demonstrate a stronger correlation to entrepreneurship and economic growth than others.

Specifically, there are a number of considerations that policymakers may take into account when adjusting each indicator's corresponding weight. They should consider existing empirical studies and ensure that the factors reflect national entrepreneurial trends and policies. Furthermore, the weight of each entrepreneurial dimension may be adjusted to account for the structure of various industries; the model should adapt to different national contexts and differ-

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<sup>364</sup> See SCHUMPETER, *supra* note 43, at 60 (stating that being an entrepreneur is not a lasting condition).

<sup>365</sup> See *id.*

<sup>366</sup> Cf. SAISANA & TARANTOLA, *supra* note 268, at 5 (explaining the benefits of composite indicators).

<sup>367</sup> See COAD, *supra* note 346, at 69 (noting that the multi-dimensional nature of entrepreneurship cannot be captured by any single indicator).

<sup>368</sup> Avanzini, *supra* note 267, at 42 (suggesting that composite indicator models can provide policymakers with information about the direction of developments, comparisons between different situations, assessment of current trends, early warnings, identification of areas for action, and anticipation of future conditions).

ent structures of the business population. Finally, policymakers may also use this model to reflect nationwide priorities. For example, in years that the government is more interested in increasing employment, it may give a greater weight to the entrepreneurial dimensions that have a higher correlation to job creation—such as employment expansion or longevity—and correspondingly reduce the weight of other indicators. Alternatively, if our policy objective is productivity growth, allotting greater weight to indicators of growth and expansion may be appropriate.

The proposed legal model's elasticity adds greater fairness to the application of the law to businesses. It allows firms to move along the entrepreneurship scale as they become more or less entrepreneurial oriented. When lawmakers incorporate this model into each area of the law, they will be free to adjust it fairly. Although there is not necessarily a correlation between entrepreneurship and each individual characteristic, they provide a valuable signal as a composite group. When a firm's state of affairs changes, it alters its position on the scale accordingly. This elasticity is beneficial in preventing the proposed model from either understating or overstating a particular firm's entrepreneurial orientation.

### *B. Several Illustrations of the Model*

One of the major advantages of the proposed model is its graduated nature. This means the model has the ability to take into account more economic variations than the classic small-or-not dichotomy. Indeed, size has proven to be an inadequate indicator of the kind of entrepreneurial activity that creates value and advances the economy.<sup>369</sup> In contrast to the current discrete and arbitrary size-based taxonomy, this multi-factor, multi-tiered, composite model aims to identify firms that possess entrepreneurial characteristics or firms that are becoming entrepreneurial. Once the truly entrepreneurial firms have been identified, the proposed model allows them to receive certain benefits.

Examining the tax incentives granted to small-business investors provides one example of how the model may improve fairness, promote simplicity, and increase administrability. The tax code offers significant tax benefits to individuals who operate or own stock in small firms.<sup>370</sup> For example, enacted in 1993, I.R.C. § 1202 allows noncorporate taxpayers to exclude gains from the

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<sup>369</sup> See Eyal-Cohen, *supra* note 2, at 1086–96; Pierce, *supra* note 4, at 551–55.

<sup>370</sup> See David O. Kahn, *Tax Tips: A Qualified Small Business Stock Tax Primer*, L.A. LAW., Dec. 2000, at 17, 18 (noting that the legislative intent behind these benefits was to encourage investment in small high-tech startup companies); Husbands, *supra* note 170, at 368–69.

sale or exchange of qualified small business stock from taxable income.<sup>371</sup> The legislative purpose of laws such as I.R.C. § 1202 is to promote entrepreneurship by encouraging financiers to invest in innovative firms.<sup>372</sup> But small firms are not necessarily entrepreneurial.<sup>373</sup>

In contrast, this Article's proposed model could better identify and promote entrepreneurial firms. For example, § 1202 could be redesigned to allow a full exclusion for gains resulting from the sale or exchange of stocks in firms with a high entrepreneurial orientation index. These are the highly innovative, job-creating, high-growth firms that currently or potentially promote economic growth. In addition, an exclusion of a reduced percentage could be accordingly granted to firms with a lower entrepreneurial orientation index. Finally, this tax benefit would be denied altogether to firms with an entrepreneurial orientation below a certain level, regardless of their size.

Comparable tax benefits, such as those provided by I.R.C. §§ 1045 and 1244, could also be improved through the application of the proposed model. Section 1045 permits taxpayers to rollover capital gains on the sale of small business stock if the proceeds are reinvested in another qualifying small business stock.<sup>374</sup> The legislative purpose of this provision is to encourage entrepreneurship by pushing the effective tax rates of certain investments down to zero if all proceeds are reinvested in similar qualified investments.<sup>375</sup> Section 1244 treats losses incurred by the sale of a small business corporation's stock

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<sup>371</sup> I.R.C. § 1202 (2012). Individuals who own qualified small business stock for at least five years can exclude up to 50% of the capital gain on disposition, limited to the greater of (1) \$10 million, reduced by any previously excluded gain attributable to such issuer, or (2) ten times the aggregate adjusted basis of the qualified small business stock disposed of in the taxable year at issue. *Id.* § 1202(a)(1), (b)(1). The tax code defines a qualified small business stock as that of a C corporation with less than \$50 million in aggregate gross assets. *Id.* § 1202(d). The C corporation has to be actively engaged in trade or business with less than \$50 million in aggregate total assets before and immediately following the issuance of the stock. *Id.* § 1202(c)(1), (d)(1)(B).

<sup>372</sup> See Kahn, *supra* note 370, at 18; Husbands, *supra* note 170, at 368–69. It is a well-known fact that securing credit is important in facilitating entrepreneurship. See SCHUMPETER, *supra* note 60, at 234. Entrepreneurs without capital require financing to gain commercial value from their innovations. *See id.*

<sup>373</sup> See Eyal-Cohen, *supra* note 2, at 1086–99 (providing a general discussion on the overinclusiveness of small business preferences). In 2008, the Internal Revenue Service data demonstrated that 99% of all firms report \$50 million or less in assets and that their investors may therefore be eligible for this exclusion. *See* I.R.C. § 1202(c), (d) (defining small business and providing an exclusion for investments in small business stock); *SOI Tax Stats—Corporation Source Book Statistical Tables 2008 (All Sectors)*, *supra* note 11.

<sup>374</sup> I.R.C. § 1045 (2012).

<sup>375</sup> *Cf.* Victor Fleischer, *The Rational Exuberance of Structuring Venture Capital Start-ups*, 57 TAX L. REV. 137, 165–67 (2003) (remarking that § 1405 “is an extension of § 1202[.]” which was “designed to encourage long-term investment in small businesses[.]” and observing that under certain circumstances, § 1405 incentivizes such investments by causing effective tax rates to approach zero).

as ordinary losses instead of capital losses.<sup>376</sup> This treatment results in bigger write-offs for investors in small business stock.<sup>377</sup> There is a greater chance, however, that these tax provisions will accomplish their goals and spur economic growth if they incentivize investments in entrepreneurial firms rather than small firms. If Congress instead modifies this benefit to allow a scaled tax benefit according to a firm's entrepreneurial orientation, it could achieve a better fit between these legal rules and their policies.

Finally, the proposed model could improve the R&D tax credit. The current R&D credit provides a general tax credit equal to 20% of qualifying research expenses in excess of a base amount; however, the tax credit covers 100% of qualified research expenses for eligible small firms.<sup>378</sup> The tax code defines an eligible small business as a business in which the taxpayer does not own a 50% or greater interest and in which there are five hundred or fewer employees.<sup>379</sup> Once again, this preference is currently available to an overly broad segment of the market.<sup>380</sup>

The same graduated scheme discussed above could be implemented more effectively under the proposed model as well. The R&D credit could be designed to allow 100% credit for qualified research expenses in firms with a high entrepreneurial orientation index. It could then provide lower credit percentages to firms with lower entrepreneurial orientation indices. Providing these benefits gradually in accordance with the firm's entrepreneurial orientation will promote innovation while reducing complexity and compliance costs associated with inconsistency in current definitions in the law.<sup>381</sup> Applying the proposed model will also result in a more effective allocation of government resources.<sup>382</sup>

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<sup>376</sup> I.R.C. § 1244 (2012). A "small business corporation" is a corporation whose aggregate receipts of money and property—in exchange for and at the time of issuance of corporate stock—does not exceed one million dollars. *Id.* § 1244(c)(3).

<sup>377</sup> *Id.* § 1244(a).

<sup>378</sup> *Id.* § 41(a) (2012) (providing for a general tax credit); *id.* § 41(b)(3)(D)(i) (providing a tax credit peculiar to eligible small firms).

<sup>379</sup> *Id.* § 41(b)(3)(D)(ii).

<sup>380</sup> U.S. SMALL BUS. ADMIN., FAQ, *supra* note 6, at 1 (noting that small businesses make up 99.7% of U.S. employer firms and that in 2010, only 18,500 firms were not small businesses).

<sup>381</sup> See generally STAFF OF J. COMM. ON TAX'N, 95TH CONG., GENERAL EXPLANATION OF THE REVENUE ACT OF 1978, at 195 (Comm. Print 1979) (explaining that many small business firms do not reap the full benefits they are entitled to because they are not familiar with the myriad aspects of the code and because they do not get adequate advice on how to meet the various definitions of a small business).

<sup>382</sup> See Eyal-Cohen, *supra* note 2, at 1095–96 (illustrating that size-based models contribute to the misallocation of government resources).

### C. Defusing Potential Criticism

There are three main types of potential objections to the proposed model: (1) disapproval of the choice of indicators, (2) the lack of prospective gauges, and (3) potential manipulation of the new model. First, finance scholars may object to the group of indicators chosen for this project. Specifically, they may question the lack of measurements of financial performance or risk-taking, such as investment capital, profits, return on assets, and debt-to-equity ratio. These measurements, however, were not ignored in the design of the model. Rather, they were carefully considered and rejected. These measurements were all found to possess one common problem: an inability to characterize universally recognized entrepreneurial behavior.<sup>383</sup> Entrepreneurial risk is hard to measure, and encouraging risk-taking can produce speculation. Also, economic development theory provides no support for their inclusion.

Today, there are many potential indicators of entrepreneurship. Many of these indicators are expressed through the use of innovation in daily life. But not every positive spillover of innovation is an indicator of entrepreneurship. These spillovers are not exclusive to economic growth. They may appear as improvements in quality of life, social progress, and the standard of living. Similarly, entrepreneurship is valuable for the benefits it generates to individuals and other entities in the same industry or in related markets.<sup>384</sup> Nevertheless, observations of spillovers, quality of life, and social development are speculative, subjective, and difficult to capture.

Second, one might point to the fact that some of the entrepreneurial dimensions reward entrepreneurial entities *ex post* and not *ex ante*. In other words, it may seem unjust to reward successful entrepreneurial entities that already demonstrate a high entrepreneurial character rather than incentivize the struggling firms that are in greatest need of government support to pursue such activity.

The model, however, achieves both ends. It allows legislators to target those firms that have already proven to have a high innovation yield. It also recognizes new firms that are in the initial stage of knowledge procurement and have not yet reaped the fruits of innovation. The model not only allows firms that have already expanded their labor force to receive a higher entrepreneurial index, but it also assists young firms on their way up and managers in predicting and calculating the increase in their labor force required to reach

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<sup>383</sup> See Avanzini, *supra* note 267, at 39 (arguing that entrepreneurship variables should be selected on the basis of their analytical soundness, measurability, relevance to the phenomenon being measured, and relationship to each other).

<sup>384</sup> See Klepper, *supra* note 132, at 79–117 (discussing how the interplay between entrepreneurial firms in a small region creates innovation and increases economic growth).

that mark. Additionally, as mentioned above, the weight granted to each entrepreneurial dimension can be adjusted to account for the importance policymakers may wish to give to ex post or ex ante incentives.

A final potential critique of the proposed model may target its potential for manipulation and evasion. Simplicity comes with a price.<sup>385</sup> It is not practicable to integrate multiple variables that will meaningfully capture the phenomenon of entrepreneurship while at the same time eliminate manipulation of the system altogether. Overinflating data, however, also comes with a price, which will help to deter firms from engaging in such a practice. The interrelation of this model with other legal reporting obligations should affect a firm's liability.<sup>386</sup> For example, the deployment of mergers and acquisitions or the creation of new entities for the sole purpose of receiving a higher entrepreneurial orientation score will likely affect the firm's financial and securities filing.<sup>387</sup> Overinflating sales or employee numbers will surely have an effect on increasing the firm's tax liability.<sup>388</sup> Policymakers can deal with these concerns about manipulation when designing their approach to applying the proposed model.

#### CONCLUSION

The law should not favor small businesses in the name of entrepreneurship. There may be other valid reasons for assisting brick-and-mortar entities. In a different article I discuss how supporting trivial businesses promotes various moral and social goals, including benefitting disadvantaged populations of minorities, whose main access to livelihood and financial autonomy is small business ownership.<sup>389</sup> Furthermore, acknowledging the importance of liveli-

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<sup>385</sup> Cf. James Alm, *What Is an "Optimal" Tax System?*, 49 NAT'L TAX J. 117, 117–18 (1996) (arguing that there is no framework that is able to capture all of the incredible complexity that characterizes the real world); Deborah L. Paul, *The Sources of Tax Complexity: How Much Simplicity Can Fundamental Tax Reform Achieve?*, 76 N.C. L. REV. 151, 156 (1998) (arguing that the desire for fairness and certainty causes tax complexity). See generally, e.g., Sheldon D. Pollack, *Tax Complexity, Reform, and the Illusions of Tax Simplification*, 2 GEO. MASON INDEP. L. REV. 319, 334–52 (1994) (providing a historical account of attempts to balance tax complexity and tax simplicity); Peter H. Schuck, *Legal Complexity: Some Causes, Consequences, and Cures*, 42 DUKE L.J. 1, 2 (1992) (discussing the need to balance simplicity and complexity in our legal system).

<sup>386</sup> See generally I.R.C. §§ 1(h), 45R, 1401 (2012) (detailing reporting requirements in the tax code).

<sup>387</sup> See generally Gil B. Manzon, Jr. & George A. Plesko, *The Relation Between Financial and Tax Reporting Measures of Income*, 55 TAX L. REV. 175, 176, 212 (2002) (discussing filing requirements).

<sup>388</sup> Cf. Manzon & Plesko, *supra* note 387, at 190 (showing how overestimation of firm income can increase a firm's tax liability).

<sup>389</sup> Eyal-Cohen, *supra* note 35; see also *Government Minority Small Business Programs: Hearing Before Subcomm. on Minority Small Bus. Enter. of the H. Select Comm. on Small Bus.*, 92d Cong. 351

hood businesses, and attending to their high compliance costs and tight credit problems, helps preserve cultural objectives such as maintaining business diversity.<sup>390</sup> Third, because these businesses operate neighborhood shops in urban areas or small stores in the countryside, they are often vital to local culture and diversity.<sup>391</sup> Nevertheless, law should not favor small businesses simply due to their size. Anachronistic societal sentiments as well as a fear of big business's influence on democracy originally inspired these laws. Over time, however, these sentiments have changed. Size-centered laws are now outdated. And because law is a product of society, it should reflect how society and the economy have changed over time.

We live in a century characterized by rapid social change. Every aspect of life—society, technology, politics, and the economy—is very different from where it stood a mere decade ago. The dichotomy of small versus big is irrelevant today. Instead, the entrepreneurial nature of a business is more important. This reflects the ability of a business to innovate and successfully deliver innovation to the market. Laws that remain fixed on the small versus big distinction are therefore obsolete.

This Article's proposed model for capturing entrepreneurial activity could improve the law in a variety of ways. First, it defines the legal frontiers of entrepreneurship by injecting the economic theory of entrepreneurship into the law itself. Second, it uses economic history to harmonize the law with the society it mirrors by identifying the practical elements of firms that promote novelty. Third, the model provides policymakers with more accurate tools to recognize and encourage innovative firms that have the potential to improve the economy. Lastly, it presents a more efficient way to meet budgetary goals while promoting economic growth. It does this by focusing on those entrepreneurial entities that have a higher likelihood of adding value to the economy.

More broadly, however, this Article scrutinizes the design of certain legal rules by considering their intent and the role of law in a changing society. Whether Congress should even use the law to direct behavior is hotly debated

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(1972) (statement of Calvin L. Walton, National Director, Independent Truckers League, Inc.) (arguing that opening one's own business is the best way for minorities to avoid systemic discrimination in hiring); SMALL BUS. ADMIN., MINORITIES IN BUSINESS: A DEMOGRAPHIC REVIEW OF MINORITY BUSINESS OWNERSHIP, 8–9 (2007), available at <http://www.sba.gov/advo/research/rs298tot.pdf>, archived at <http://perma.cc/PB8N-HR7U> (illustrating that minority-owned firms are more likely to be small businesses than white-owned firms). *But cf.* Pierce, *supra* note 4, at 537, 558 (arguing that small businesses are responsible for more cases of discrimination). *See generally* CHARLES V. DALE, CONG. RESEARCH SERV., RL33284, MINORITY CONTRACTING AND AFFIRMATIVE ACTION FOR DISADVANTAGED SMALL BUSINESSES: LEGAL ISSUES (2006) (advancing small business as a mechanism to advance minorities).

<sup>390</sup> *See* Eyal-Cohen, *supra* note 29, at 13 (discussing the positive cultural views of small business).

<sup>391</sup> *See* BLACKFORD, *supra* note 4, at 66.



and certainly beyond the scope of this Article. Regardless, lawyers and legal scholars have a central role in alerting the legislature and compelling the legal system to adjust and to accord for far-reaching changes in social and economic condition. Such efforts will ensure that legal rules actually mirror society and continue, at least in this Article's context, to promote innovation, encourage economic development, and ultimately lead to greater prosperity for all.

