

Chapter 4

On the Institutional Foundations of the Varieties of Entrepreneurship in Europe



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Abstract For decades, research into the link between national institutions and entrepreneurship has been characterized by three shortcomings: First, clear-cut concepts of institutions are rare. Second, a parsimonious understanding of how a few core institutions influence entrepreneurship is missing. Third, scholars often ignore that incrementally innovative ventures constitute a distinct (and under-researched) type of entrepreneurship next to the (over-researched) form of radically innovative, high-growth or high-tech entrepreneurship. This chapter seeks to illustrate how the application of the “Varieties-of-Capitalism” (VoC) reasoning does not only enable focused rather than eclectic analyses of institutional influences on entrepreneurship but also reveals the institutionally induced equifinality of the varieties of entrepreneurship across Europe. These insights invite future entrepreneurship research to move away from the ideology that displays radically innovative entrepreneurship as, by far, the most desirable form of entrepreneurship. This finding also invites policymakers to target entrepreneurial support measures more specifically to their economy’s institutional environment.

Keywords Entrepreneurship · Varieties-of-Capitalism · National institutions · Institutional complementarities

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4.1 Introduction

Over the past two decades, the Varieties-of-Capitalism (VoC) literature, going back to the work of Hall and Soskice (2001a), has become a widely applied framework in the political sciences, in political economy and economic sociology alike. In a nutshell, the VoC literature illustrates that different national institutions governing labor and financial markets as well as inter-organizational collaborations facilitate different types of corporate innovation. While the VoC framework has been developed mostly through studies of incumbent firms, its reasoning is also applicable to new ventures: National institutions are likely to lead also new ventures to develop business ideas of different innovativeness. To put it differently, given that incumbent firms were found to compete on different types of innovations and thus, in different market segments between countries, it is reasonable to assume that many firms have chosen these competitive strategies from their inception as new ventures.

However, until the beginning of the H2020 project *Financial and Institutional Reforms for an Entrepreneurial Society in Europe* (FIRES), the VoC framework has hardly been applied in entrepreneurship research (for exceptions, see Ebner 2010; van der Walt 2010).¹ To be clear, the entrepreneurship literature illustrates that entrepreneurs are driven by different motives and reasons have diverse aspirations and growth ambitions (for example, Cooper and Artz 1995; Wiklund et al. 2003). Accordingly, the literature acknowledges that different forms of entrepreneurship exist, ranging from solo self-employment over small family businesses to high-growth gazelle ventures (see also Delmar et al. 2003; Henrekson and Stenkula 2016; Vivarelli 2013). The Global Entrepreneurship Monitor, by far the most comprehensive dataset on entrepreneurship forms across the world, also shows that entrepreneurship takes different forms between countries. However, systematic research into institutional reasons, as laid out by the VoC literature, for how and why entrepreneurship between countries may differ in its innovation focus remained underdeveloped until the start of the FIRES project.

This research gap has arguably (see Herrmann 2019) persisted because of a strong focus on radically innovative—that is “technology-intensive” (OECD 1998), “R&D-intensive” (Schreyer 2000), or “knowledge-intensive” (Delmar et al. 2003)—ventures. This focus can be theoretically motivated by their high-growth potential and empirically because these ventures have been shown to generate a disproportionately high share of employment (see also Amat and Perramon 2010; Davidson and Segerstrom 1998; Hözl 2009; OECD 2002; Shane 2009). Radically innovative ventures typically develop goods and services based on new technologies, leading to strong corporate growth on the one hand and a higher risk of failure on the other. Examples of such radically innovative ventures have emerged particularly frequently in Silicon Valley which, in turn, has led to an idolization of this radically innovative,

¹The reason why the VoC framework has hardly been applied in business and management research today seems straightforward: The core proponents of the VoC arguments, as well as their followers, are political scientists (Peter Hall, Kathleen Thelen), political economists (David Soskice), and sociologists (Wolfgang Streeck) rather than business and management scholars.

57 “Silicon Valley” entrepreneurship. Newspapers have reported with high frequency
58 about the heroic efforts and outstanding success of Silicon Valley entrepreneurs, and
59 even mainstream movies have been made about the start-up stories of Apple and
60 Facebook. Because attention and impact have accrued to studies of extraordinary
61 rather than every-day phenomena, scientific research has paid inordinate attention
62 to the funding and other needs, along with the impact of radically innovative ven-
63 tures (see, for example, Henrekson and Johansson 2010; Shane 2009). And as a
64 consequence, policymakers across Europe explicitly or implicitly aim to facilitate
65 high-growth (“Silicon Valley”) entrepreneurship (Commission 2010; OECD 2002;
66 see also Hölzl 2009; Mason and Brown 2013).

67 This focus on radically innovative entrepreneurship is problematic for various
68 reasons. First, it conveys the impression that less innovative types of entrepreneurship
69 are second-best as they grow less rapidly (see, for example, Amat and Perramon
70 2010; Davidson and Segerstrom 1998; Hölzl 2009; OECD 1998, 2002; Schreyer
71 2000). This reasoning is flawed as recent studies show that high employment growth
72 is not only generated by highly innovative start-ups but also by more established
73 firms of at least five years (Anyadike-Danes et al. 2009) and with an average age
74 of 25 years (Acs et al. 2008a). Furthermore, a recent study of the German ministry
75 of economic affairs finds that “high-growth ventures can also shrink again as well.
76 A high-growth venture (...) is thus no guarantee for sustained employment growth
77 but constitutes a temporary phenomenon” (BMW 2012, p. 42; see also Daunfeldt
78 and Halvarsson 2015). Second, the focus on radically innovative entrepreneurship
79 is also problematic because it neglects the comparative institutional advantages that
80 continental European economies offer to incrementally innovative start-up firms.
81 As laid out in detail below, the institutional environment of regulated economies
82 makes it easier for entrepreneurs to establish incrementally rather than radically
83 innovative ventures. Third, incrementally innovative ventures grow at a lower but
84 more sustainable rate than their radically innovative counterparts (Herrmann 2008,
85 Chap. 5). If successful, radically innovative ventures typically yield higher returns
86 than incrementally innovative ventures. But the chances of becoming successful
87 are decisively lower for radically than for incrementally innovative ventures. Last
88 but not least, radically innovative ventures occur much less frequently than their
89 incrementally innovative counterparts, even in the USA. While most new ventures
90 are not innovative across economies, among those that are, incremental innovation is
91 the rule and radical innovation is the exception (see Baumol 2002, 2004; Henrekson
92 and Sanadaji 2014, p. 1760; Nightingale and Coad 2014).

93 In several studies, whose most important results are reported in Sect. 4.3 of this
94 chapter, we show how a core set of distinct national institutions facilitates the devel-
95 opment of different types of entrepreneurial innovation across Europe. These studies
96 do not only explain why radically innovative ventures develop more frequently in
97 Anglo-Saxon economies. They also illustrate why incrementally innovative ventures
98 are more common in Northern Europe, while new ventures reproducing goods and
99 services at lower costs are particularly frequent in Southern and Eastern European
100 economies. Importantly, the insights gained from these studies may motivate future
101 research to move away from its focus on radically innovative entrepreneurship as

102 the most desirable entrepreneurship type. Overall, the studies below (see Sect. 4.3)
 103 thus illustrate how a better understanding of the varieties of entrepreneurship in
 104 Europe can lead to a more balanced understanding of the possibilities and needs—
 105 or rather the difficulties and needless efforts—to equally foster radically innovative
 106 entrepreneurship in Continental Europe.

107 To illustrate how the VoC reasoning offers a more balanced understanding of
 108 the link between distinct national institutions and different types of entrepreneurial
 109 innovativeness, I first review the core arguments of the VoC literature on a coun-
 110 try’s institutional foundations in Sect. 4.2. Section 4.3 then provides an overview
 111 of four FIRES studies that show how different institutional frameworks induce dif-
 112 ferent types of entrepreneurial venturing across Europe. Section 4.4 illustrates the
 113 implications that result for researchers and policymakers from these findings.

114 4.2 Theoretical Foundations

115 Importantly, the VoC arguments on how a distinct set of institutions support different
 116 types of corporate innovativeness have, until the start of the FIRES project, been
 117 empirically tested on the basis of *incumbent firms* (Hall and Soskice 2001a; Hancké
 118 et al. 2007; Casper 2007; Herrmann 2008). We therefore begin with the question
 119 of whether these arguments are equally applicable to *nascent ventures*. To answer
 120 this question, we first develop a theoretical framework that could explain which
 121 institutions are core to the development of (different types of) entrepreneurship, and
 122 why.

123 Starting with the work of Stinchcombe (1965), the entrepreneurship literature
 124 investigating how institutions influence entrepreneurship gained momentum in the
 125 early 1990s. Its contributors arrived at the conclusion that institutions “matter”
 126 because they structure economic payoffs which influence entrepreneurial efforts
 127 and activities (Calcagno and Sobel 2014; Baumol 1990; Murphy et al. 1990; Sobel
 128 2008). While the literature agrees that both formal and informal institutions incen-
 129 tivize individual behavior (North 1990), thereby influencing the extent and character
 130 of an economy’s entrepreneurial activity (Acs et al. 2008b; Stenholm et al. 2013;
 131 Urbano and Alvarez 2014), it also—often implicitly—focuses on the institutional
 132 drivers of *radically innovative entrepreneurship*. The formal institutions were found
 133 to be beneficial for “productive,” “high-growth” entrepreneurship and include law
 134 and order, contract enforcement, competition policy, trade policies, tax codes, social
 135 insurance systems, employment protection legislation, capital market regulation, as
 136 well as the protection of private property (Bjørnskov and Foss 2013; Hall and Jones
 137 1999; Henrekson and Johansson 2009). Informal institutions supporting growth-
 138 oriented entrepreneurship include individualism, social capital, trust, and power dis-
 139 tance (Hechavarría and Reynolds 2009; Taylor and Wilson 2012). In short, the liter-
 140 ature suggests that differences in entrepreneurship between countries or regions can,
 141 *inter alia*, be explained by a broad diversity of institutions (Case and Harris 2012;
 142 Stam 2014; World Economic Forum 2013).

143 This literature on institutions and entrepreneurship suffers from three problems.
 144 First, a clear-cut concept of institutions is missing. Second, a parsimonious under-
 145 standing of whether and how a few core institutions facilitate different types of
 146 entrepreneurship is not provided. Third, the literature focuses on explaining how
 147 different types of institutions foster “high-growth” or “high-impact” entrepreneur-
 148 ship (Davidsson and Henrekson 2002; Henrekson 2005; Henrekson and Johansson
 149 2009). While this leads to a focus on “technology-intensive” (OECD 1998), “R&D-
 150 intensive” (Schreyer 2000), or “knowledge-intensive” (Delmar et al. 2003) ventures,
 151 incrementally innovative ventures, their needs, and institutional drivers tend to be
 152 overlooked.

153 The VoC literature makes it possible to address these three problems. First, taking
 154 the perspective of historical institutionalism and in line with North (1990, p. 3),
 155 the VoC literature clearly defines institutions as “... formalized rules that may be
 156 enforced by calling upon a third party” (Streeck and Thelen 2005, p. 10). Institutions
 157 thus are the written or verbally agreed rules of the game which lead to a systematic
 158 behavior of actors—individuals and organizations, such as entrepreneurs and their
 159 ventures. Compared to rational-choice institutionalism, the VoC literature thus takes
 160 a broader perspective, including informal institutions that develop on the basis of
 161 less formal agreements than written rules (such as laws or contracts). At the same
 162 time, the VoC literature, in line with Ostrom (1990), focuses on those institutions that
 163 provide capacities for deliberation, the exchange of information, monitoring, and the
 164 enforcement of agreements (Hall and Soskice 2001a, pp. 9–12). In this regard, the
 165 VoC literature has a more focused understanding than sociological institutionalism:
 166 While shared understandings (such as norms, values, and culture) provide the basis
 167 for the development of (informal) institutions, the latter “... must be reaffirmed
 168 periodically by appropriate historical experience” (Hall and Soskice 2001a, p. 14),
 169 in order to remain viable as rules upon which third parties can be called.²

170 Second, the VoC literature offers a parsimonious theoretical framework to iden-
 171 tify a core of institutions which influence any business activity (Hall and Soskice
 172 2001b). To this end, the VoC literature draws on the insights of economic theory
 173 (Milgrom and Roberts 1992; Teece and Pisano 1998; Williamson 1985), as well
 174 as the resource-dependence view (Pfeffer and Salancik 1978), which illustrate that
 175 three types of resources are essential for any business to operate: labor, finance, and
 176 know-how. These resources are considered as most important because firms can only
 177 secure them after solving a collective action problem with external economic actors,
 178 namely their workforces, financiers, and R&D partners. Institutions channeling the
 179 resources between firms and their workforces, financiers, and R&D partners can
 180 therefore offer comparative advantages and are thus considered to be economically
 181 most influential. Accordingly, the VoC literature illustrates how education-related
 182 together with labor-market institutions, finance-related institutions, and institutions
 183 governing inter-organizational collaborations are shaped differently between coun-
 184 tries, and it explains how these institutional constellations together lead to different,

²For a more in-depth understanding of how different schools of thought differ from each other in their understanding of institutions, see (Koelble 1995; Hall and Taylor 1996).

185 complementary institutional environments on the one hand and to different types of
186 corporate behavior on the other.

187 Third, based on these theoretical considerations, the VoC literature convincingly
188 argues that incrementally innovative firms are institutionally supported by a reg-
189 ulated environment. To illustrate this point, the VoC literature (Hall and Soskice
190 2001a) compares the regulated institutional environment of the Northern European
191 countries, the so-called “Coordinated Market Economies” (CMEs), to the dereg-
192 ulated institutional environment of the Anglo-Saxon countries, or the “Liberal Market
193 Economies” (LMEs). In doing so, the VoC scholars often illustrate their reasoning at
194 the examples of Germany, which they consider the most typical CME, and the UK
195 or USA, which are considered particularly typical LMEs. Later contributors to the
196 VoC literature questioned the dichotomous distinction between CMEs and LMEs as
197 they identified additional, particularly typical institutional constellations of country
198 groups, most notably Mediterranean Market Economies (MMEs) and Eastern Mar-
199 ket Economies (EMEs) (for example Amable 2003; Hancké et al. 2007; Schneider
200 and Paunescu 2012).

201 Based on these distinctions, I here summarize our FIRES studies which illustrate
202 that radically innovative entrepreneurship is facilitated by a deregulated institutional
203 environment (that is typical for Anglo-Saxon economies), whereas regulated insti-
204 tutional constellations (typical of Northern European countries) facilitate incremen-
205 tally innovative forms of entrepreneurship. The over-regulated or rapidly liberalized
206 institutional environment of Southern and Eastern European economies, respectively,
207 facilitate reproductive entrepreneurship based on the imitation of existing business
208 ideas. Applying the VoC reasoning to new ventures explains why high-growth, radi-
209 cally innovative entrepreneurship develops particularly frequently in the deregulated
210 institutional environments of LMEs, including the Anglo-Saxon economics such as
211 the USA, UK, and Ireland.

212 Beginning with *labor*, the VoC literature highlights the free-riding problem related
213 to the training of specifically skilled workforces (Dencker et al. 2009; Hall and
214 Soskice 2001b). Given that the education and training system of LMEs tends not to
215 be coordinated via a country-wide dialog between the social partners, sophisticated
216 industry-wide job classifications that could serve as a basis for training workforces
217 do not exist. Workforces therefore acquire a versatile skill set which they can use in
218 different work environments. Upon completion of education trajectories, the flexible
219 labor-market institutions of LMEs further strengthen the general skills of workforces.
220 Short notice periods, dismissal without substantial reasons, and weak work councils
221 imply that workforces are faced with hire-and-fire at short notice and change jobs
222 frequently. Workers therefore acquire general skills that are useful for, and thus
223 adequately rewarded by, all firms needing a certain business function. Importantly,
224 such general skills imply that workers are particularly imaginative (thanks to the
225 different work environments they have seen in different firms) and flexible as they
226 are used to adapt to new corporate environments. Radically innovative firms, in
227 turn, do not only require the capacity to imagine completely new business ideas but
228 are also characterized by rapid changes. Flexible workforces with general skills are
229 thus particularly well equipped to develop radical innovations. In sum, the flexible

230 education and labor-market institutions of LMEs thus facilitate the development of
231 radically innovative ventures as they equip workforces with general skills (see also
232 Herrmann and Peine 2011).

233 In addition to labor-market institutions, also those institutions governing the access
234 to venture *finance* facilitate the development of radically innovative ventures in
235 LMEs. The VoC literature shows that institutions differ in how they address the
236 principal-agent problem related to the provision of shareholder capital (Hall and
237 Soskice 2001b; Kenyon and Vitols 2004; Vitols 2001). To be willing to invest, share-
238 holders need to be assured that their funds are used in the most efficient way by
239 the firm's management. In LMEs, supervisory boards overlooking the activities and
240 decisions of the management board of directors do not exist. While shareholders
241 directly elect corporate managers, they have little or no systematic insight into, or
242 control over, managerial investment decisions via a supervisory board. Consequently,
243 managers have unilateral power to take major strategic and financial decisions, while
244 shareholders can monitor the soundness of managerial decisions only through the
245 development of equity prices at the stock market. This, in turn, drives managers to
246 maximize returns on investment by engaging in high-risk, radical innovation projects.
247 Radically innovative start-ups are therefore a particularly attractive investment option
248 for venture capitalists. Venture capital investments into start-up firms are furthermore
249 facilitated by the private pension systems of LMEs, which imply that comparatively
250 high sums destined to build up future pensions are invested *inter alia* in venture
251 capital firms. Accordingly, the pension and corporate governance systems of LMEs
252 facilitate the development of radically innovative ventures.

253 The VoC literature furthermore highlights how solutions to hold-up problems,
254 related to inter-organizational development of *know-how*, facilitates the emergence
255 of radically innovative ventures (Hall and Soskice 2001b; Tate 2001; Teubner 2001).
256 Start-up firms often engage in R&D collaborations with other organizations, such
257 as research labs, universities, or suppliers, in order to jointly develop new products
258 or services (Lundvall 1992; Tate 2001, pp. 444–446). But such joint developments
259 also bear the risk of hold-up. The latter occurs whenever two or more actors try to
260 appropriate the intellectual property (IP) developed by their cooperation partner(s)
261 without having contributed proportionally to the knowledge development (see Klein
262 1996; Rogerson 1992, p. 777). Institutions governing inter-firm collaborations influ-
263 ence the ways in which companies can protect themselves against such IP drift or
264 theft, depending on how institutions facilitate the enforcement of R&D contracts
265 between collaboration partners (Tate 2001; Teubner 2001). In LMEs, the case-by-
266 case decisions of lay juries or judges make the outcome of lawsuits unpredictable.
267 Consequently, start-up firms often shy away from approaching courts to have the
268 contractual obligations of their R&D collaboration partners enforced. This, in turn,
269 does not only discourage firms to engage in large-scale R&D cooperation where the
270 risk of hold-up is simply higher, but it also stimulates fierce competition between
271 potential collaboration partners, which is at the basis of radical innovation.

272 While these VoC arguments explain why radically innovative ventures occur with
273 particular frequency in the Anglo-Saxon LMEs (most notably in the USA and the
274 UK), the VoC literature also explains why the regulated institutional environment

275 of the Northern European CMEs (in particular, that of Germany) facilitates the
 276 development of incrementally innovative ventures.

277 With regard to *labor skills*, the VoC literature highlights how workforces in CMEs
 278 tend to acquire company-specific rather than general skills (Hall and Soskice 2001b).
 279 The acquisition of company-specific skills is essentially induced by regulated labor-
 280 market institutions which prohibit the hiring-and-firing of employees at will. Unless
 281 they fall under exempt regulations, such as start-up companies of less than 10 employ-
 282 ees, ventures can only dismiss employees for limited reasons, after respecting specific
 283 notice periods and involving the ventures' work councils. Often, temporary forms of
 284 employment can also be strongly protected with the intention to gear them toward per-
 285 manent employment (Dencker et al. 2009). Given that these institutions tie employees
 286 to the same firm for a long time period, employees in CMEs tend to have in-depth
 287 firm-specific knowledge and long-standing relationships with their firms' suppli-
 288 ers. Such firm-specific skills enable workforces in CMEs to autonomously propose
 289 and develop improvements which translate into incremental innovations and high-
 290 quality products. At the same time, given their focus on just one (or a few) corporate
 291 environments, workforces with firm-specific skills lack the imaginative capacity and
 292 adaptiveness arising from frequent job changes. While workforces with firm-specific
 293 skills are thus less likely to come up with radically innovative ideas, they are particu-
 294 larly well equipped for developing incremental innovations (Herrmann and Peine
 295 2011).

296 In addition, the pension and corporate governance systems of CMEs, institu-
 297 tionalizing the access of ventures to *finance*, tend to facilitate the development of
 298 incrementally innovative ventures (Hall and Soskice 2001b; Kenyon and Vitols 2004;
 299 Vitols 2001). Venture capital tends to be scarce in CMEs especially when the public
 300 pension system is a pay-as-you-go scheme. In these systems, such as in Germany,
 301 the pension provisions paid in by the current working population are directly redis-
 302 tributed by the state to the retirees and not invested into profit-yielding projects,
 303 let alone venture capital funds.

304 Once limited liability ventures reach a certain size, a supervisory board typically
 305 needs to be established including employees as well as shareholder representatives.
 306 Given that the supervisory board needs to agree to major strategic investment deci-
 307 sions of the board of directors, managers have no unilateral decision-making power.
 308 On the one hand, this makes it difficult to rapidly invest into, or divest from, new
 309 business units, which is often necessary for radical innovations. On the other hand,
 310 shareholders with insights into, and a say about, how their funds are to be used are
 311 typically less interested in maximizing returns on investment in the short run. This is
 312 particularly true whenever members of supervisory boards represent large corporate
 313 stakeholders, such as the firm's "house banks" or suppliers. In these cases, the board
 314 members are often reluctant to agree that "their" venture engages in high-risk projects
 315 (even if these promise high returns) because radically innovative businesses are also
 316 more likely to fail. Supervisory board members thus tend to have a preference for
 317 the firm to engage in incrementally innovative projects because the latter typically
 318 have more stable and predictable (albeit lower) returns in the long run.

319 Furthermore, the hold-up problem related to joint *know-how* development with
320 R&D partners is overcome by the code-based legal system of CMEs in general and
321 Germany in particular (Hall and Soskice 2001b; Tate 2001; Teubner 2001). Because
322 of the clearly defined conditions for IP infringements, the outcome of lawsuits is
323 better predictable. Contractual obligations of R&D collaborations can therefore be
324 enforced in a straightforward manner, which limits the risks of uncompensated IP
325 appropriation by a collaboration partner. Additionally, if supported by the fairly
326 reliable and efficient legal system, start-up firms in CMEs have a higher propensity
327 to engage in R&D collaborations on a large scale (Herrmann 2008, Chap. 4). This, in
328 turn, facilitates incremental product improvements rather than radical innovations.

329 Given that they are either all deregulated (LMEs) or regulated (CMEs), the institu-
330 tions governing labor, financial, and supplier–producer relations in LMEs and CMEs
331 are complementary, which implies that “... the presence (or efficiency) of one [insti-
332 tution] increases the returns from (or efficiency) of the other” (Hall and Soskice 2001b,
333 p. 17). For example, the complementary availability of generally skilled workforces
334 and easily accessible venture capital makes it disproportionately easier for nascent
335 ventures to be radically innovative than this would be the case if the skill sets of
336 national workforces had been geared toward firm-specific skills—even if venture
337 capital was available—and the other way around.

338 Importantly, the institutional environment in Mediterranean and Eastern European
339 economies are often not complementary. Consequently, nascent ventures typically
340 lack the types or combinations of labor skills and financial resources that facilitate
341 radical or incremental innovation. This, in turn, can explain why a particularly high
342 share of new ventures in these economies is focused on reproducing goods or services
343 at lower costs rather than developing radical or incremental innovations.

344 Due to their recent histories of extensive state intervention, firms in Mediterranean
345 Market Economies (MMEs) have built specific capabilities of non-market coordi-
346 nation in the sphere of corporate finance. Given that venture capital from national
347 investors is hardly available and that external shareholders are not well protected,
348 venture funding is often provided by family members, friends, and acquaintances of
349 the entrepreneur (Herrmann 2008, Chap. 3). While new ventures thus have access to
350 small funding amounts, they have difficulties in acquiring larger funds from institu-
351 tional investors which, in turn, are needed for developing incrementally or radically
352 innovative products.

353 While MMEs are characterized by moderate levels of social protection and high
354 public expenditure for poverty alleviation and pensions, national expenditures for
355 education are limited. Together with a fragmented social dialog and stifling labor-
356 market regulation, which makes dismissals of employees close to impossible, new
357 ventures are reluctant to hire employees (Hall and Soskice 2001b). The human
358 resources of new ventures are thus often very limited which, in turn, makes any
359 kind of innovation difficult and rather leads firms to focus on the reproduction of
360 products and services, which does not require a broader skill basis.

361 Together with a fragmented and unreliable judicial system that makes recourse to
362 legal action in case of IP conflicts difficult, this gives firms in MMEs a comparative
363 advantage in low-cost reproduction—with the exception of some niche markets, such

364 as furniture or fashion, where, for example, Italian firms compete on incremental
 365 innovations and design (Molina and Rhodes 2007).

366 Contrary to CMEs, employers in Eastern Market Economies (EMEs) are not will-
 367 ing to bear the additional costs of on-the-job training for inexperienced young work-
 368 ers. This, in turn, leads to a shortage of specifically skilled labor in EME ventures.
 369 But given that labor markets were rapidly deregulated in EMEs (with the exception
 370 of Slovenia) after the fall of the wall, workforces are comparatively mobile which,
 371 like in the LMEs, facilitates the acquisition of general skills.

372 Regarding financial markets, foreign direct investment is among the most impor-
 373 tant sources of capital. Domestic bank lending, the second most important source
 374 of finance, is dominated by transnational companies (Hancké et al. 2007; Nölke and
 375 Vliegenthart 2009).

376 Together with a less reliable judicial system, this gives EMEs a comparative insti-
 377 tutional advantage in the assembly and production of relatively complex and durable
 378 consumer goods. These comparative advantages are based on national institutions
 379 which combine low labor costs and a skilled population with substantial knowledge
 380 of medium-level technologies and the availability of foreign direct investment.

381 To conclude, the institutional environment of LMEs can be expected to facil-
 382 itate the development of radically innovative ventures, CME institutions lead
 383 entrepreneurs to rather set up incrementally innovative ventures, whereas the insti-
 384 tutional framework of MMEs and EMEs facilitates, slightly different types of,
 385 reproductive entrepreneurship.

386 4.3 Empirical Evidence

387 To test the empirical applicability of these theoretical arguments, we proceeded in
 388 three steps. In the first step (Dilli et al. 2018, pp. 293–309), we assessed whether the
 389 entrepreneurship-related institutions of the EU member states indeed form distinct
 390 institutional families. To this end, we operationalized the environment of overall 21
 391 Western economies with regard to those labor-, finance-, and R&D-related institu-
 392 tions that, according to the VoC literature, are most influential on entrepreneurial
 393 innovativeness (Dilli et al. 2018, pp. 301–304). For each country, we determined the
 394 availability of workforces with general entrepreneurial skills on the basis of over-
 395 all six OECD and GEM indicators.³ We furthermore measured the availability of
 396 venture finance by institutional investors with the help of four Eurostat and World

³To measure the extent of highly and generally skilled workforces, these indicators report (for each country): (i) the share of population with tertiary education, (ii) the percentage of researchers, and (iii) the amount of R&D transfers to entrepreneurial ventures, as well as (iv) the stringency of regular employment protection legislation, (v) the stringency of temporary employment protection, and (vi) the social spending on start-up incentives.

397 Bank indicators.⁴ Finally, we identified the reliability of supplier–producer collabora-
 398 tions on the basis of five World Bank indicators.⁵ This data was available for 20
 399 EU countries as well as the USA.⁶

400 Having operationalized the institutional environment of these 21 countries, we
 401 wondered whether countries cluster into distinct groups on the basis of these insti-
 402 tutions. In other words, which countries resemble—and respectively differ from—
 403 each other with regard to their entrepreneurship-relevant institutions? To answer this
 404 question, we run cluster analyses on the basis of all 15 aforementioned institutional
 405 indicators, which were measured at the country level and, depending on data avail-
 406 ability, as the average of the 2004–2014 time span.⁷ The results of these cluster
 407 analyses are depicted in Fig. 4.1.

408 We find that the clustering corresponds remarkably well to the institutional fami-
 409 lies identified in the VoC literature. Accordingly, we find that countries form distinct
 410 families with regard to their finance-, labor-, and R&D-related institutions governing
 411 entrepreneurship. Importantly, the institutions we studied go far beyond the classical
 412 VoC institutions, as they influence the ease or difficulty with which entrepreneurial
 413 ventures, rather than incumbent firms, can acquire different types of finance, labor,
 414 and know-how. This makes it surprising that the country groups we identify are
 415 basically identical to the ones discussed in the VoC literature.

416 In line with the VoC literature, we called the different varieties of entrepreneurial
 417 capitalism which we identified LMEs, CMEs, MMEs, and EMEs. LMEs include the
 418 Anglo-Saxon economies (Ireland, the UK, and the USA) with permissive financial-
 419 market institutions and deregulated labor markets comprising scientific education
 420 systems teaching workforces general skills, as well as reliable legal systems gov-
 421 erning inter-firm collaborations. In contrast, CMEs (including Austria, Germany,
 422 the Netherlands, Switzerland, Belgium, Norway, Denmark, Sweden, and Finland)
 423 are characterized by less permissive financial-market institutions, well-regulated
 424 labor markets based on vocational education systems that teach specific skills to
 425 workforces, and reliable legal systems supporting inter-firm collaborations. MMEs

⁴These indicators capture the influence of institutional investors on nascent ventures by reporting the extent (i) of protection of minority interests, (ii) of minimum capital requirements, (iii) of venture capital investments, and (iv) of recovery rates in case of venture failure.

⁵These indicators measure the reliability of legal procedures in case of lawsuits related to supplier–producer collaborations by capturing the extent (i) of enforcing contracts, (ii) of judicial independence, (iii) of impartial courts, (iv) of the protection of property rights, and (v) of the integrity of the legal system.

⁶More precisely, the countries covered include Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, the UK, and the USA.

⁷In order to identify possible changes that may have taken place in the countries' institutional environments over time, we also split our data into two groups: the periods of 2004–2009 and of 2009–2014, respectively. Importantly, though our separate analyses for these two time periods revealed that no major institutional changes have taken place, the results are very similar between the two periods. We therefore used the average of the 2004–2014 time span in the analyses and results presented below.

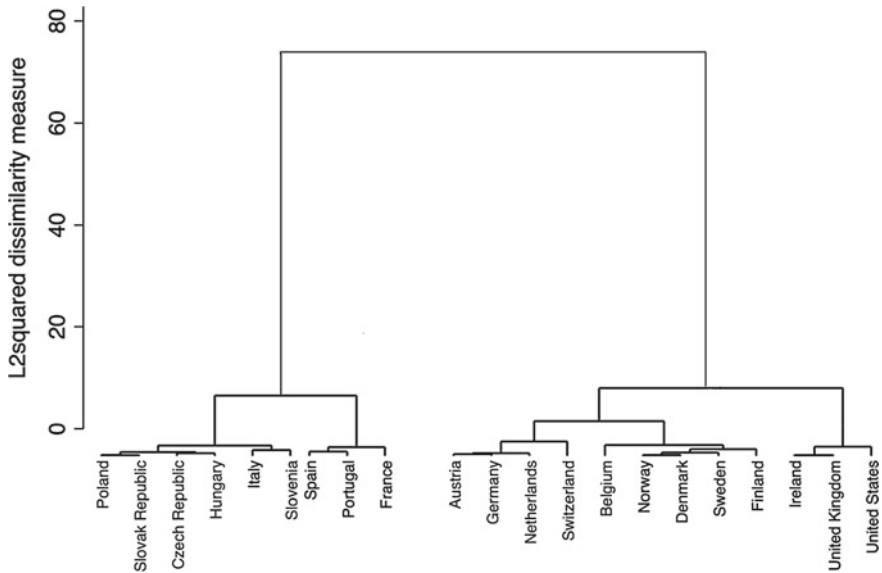


Fig. 4.1 Country families with similar entrepreneurship-relevant institutions. *Source* Dilli et al. (2018)

426 (including Italy, Spain, Portugal, and France), in turn, are characterized by con-
 427 straining financial and labor-market institutions including education systems that
 428 mostly teach basic skills to workforces, and, with the exception of France, less
 429 reliable legal systems that make inter-firm collaborations difficult. Finally, EMEs
 430 (including Poland, the Slovak Republic, the Czech Republic, Hungary, and Slovenia)
 431 are characterized by constraining financial-market institutions, well-regulated labor
 432 markets based on education systems that mostly teach basic skills, and unreliable
 433 legal systems that hamper inter-firm collaborations. In short, varieties-of-capitalism
 434 similar to the ones described in the VoC literature for established firms can be
 435 identified for nascent ventures with regard to those national institutions governing
 436 entrepreneurship.

437 We assessed the impact of these distinct varieties of entrepreneurship-related insti-
 438 tutions on entrepreneurship in the second step (Dilli et al. 2018, pp. 309–320). Based
 439 on the VoC reasoning about the impact of institutions on entrepreneurial innovativeness,
 440 we would expect to find an above-average share of radically innovative ventures
 441 in LMEs, an elevated proportion of incrementally innovative ventures in CMEs, and
 442 a plurality of imitative ventures in MMEs and EMEs. We assessed these hypotheses
 443 on the basis of several regression analyses. Taking the technology intensity of indus-
 444 tries as indicator of entrepreneurial innovativeness, these analyses tested whether
 445 specific types of entrepreneurship (e.g., venture creation in technology-intense or,
 446 respectively, in less technology-intense industries) are particularly frequent in LMEs,
 447 CMEs, MMEs, and EMEs, respectively.

Overall, our regression analyses lend support to the idea that the institutional constellations of LMEs, CMEs, MMEs, and EMEs support different types of entrepreneurship (Dilli et al. 2018, pp. 309–314). While these analyses can only establish correlations, not causalities, it is noteworthy that entrepreneurs in LMEs outperform their counterparts in other economies in the extent to which they found radically innovative, high-tech ventures which also grow fast. Entrepreneurs in CMEs often develop incrementally innovative ventures. That is, they create more high- and medium-tech ventures than entrepreneurs in EMEs and MMEs but also more low-tech ventures than their counterparts in LMEs, whereby these ventures are overall characterized by lower but sustainable growth. In contrast, entrepreneurs in EMEs specialize in less innovative product imitations. Accordingly, they are outperformed by entrepreneurs in both LMEs and CMEs in setting up high-tech ventures. However, EME entrepreneurs are decisively better in setting up medium- and low-tech ventures than their counterparts in CMEs and MMEs alike. Importantly, though, these ventures show little growth. Finally, innovative entrepreneurship is least developed in MMEs. Accordingly, MME entrepreneurs hardly set up any high-tech or medium-tech ventures compared to their counterparts in all other economies. At the same time, entrepreneurs in MMEs do outperform entrepreneurs in all other economies in the extent to which they set up low-tech ventures, whereby these ventures hardly show any growth.

Having established that distinct institutional constellations correlate with different types of entrepreneurship across Europe, we asked in a third step whether, and if so how, venture creation processes differ between countries. To this end, we collected a unique dataset of venture creation activities. More concretely, this dataset traces—on a monthly basis—the activities that nascent ventures undertake during their start-up period in order (1) to build up the necessary human resources, (2) to acquire funding, and (3) to develop product-related know-how. Based on optimal matching techniques, we analyzed—with a specific focus on country-specific differences—how ventures approach any of these three components of the start-up process. In short, our findings are presented below.

(1) Beginning with human resources, two separate studies (Held 2019; Held et al. 2018) investigate how labor-market institutions influence the composition of start-up teams in nascent ventures. The influence of the institutional setting comes particularly to the fore in the first study, which analyzes the circumstances in which part-time entrepreneurs, who worked for the nascent venture less than 30 h per week, transition to full-time entrepreneurship (Held 2019). Interestingly, and in line with the expectations of the VoC literature, Held finds that part-time entrepreneurs in CMEs, such as Germany, are significantly less likely to transition to full-time entrepreneurship than those in LMEs, such as the UK and the USA, presumably because, in case of venture failure, it is particularly difficult in CMEs to regain a responsible position as a well-paid and well-insured employee. The study highlights that national labor-market institutions do not only elicit the emergence of a dominant type of entrepreneurship (Dilli et al. 2018) but also specific entry choices by the entrepreneur herself.

492 Having analyzed the entry processes of individual entrepreneurs, we investigate
 493 team formation processes at the venture level in an additional study (Held et al. 2018).
 494 To this end, we employ a definition of the venture team that goes beyond the founders
 495 involved in the creation of the venture and encompasses employees and external
 496 service providers. As a result of this broader conceptualization of team formation
 497 (in line with Cardon and Stevens 2004; Koch et al. 2013), our study discerns overall
 498 seven distinct approaches toward team formation. More concretely, the study does
 499 not only describe these seven-team formation processes with regard to the founder
 500 team but also uncovers the existence of distinct approaches to the hiring of employees
 501 and service providers. It furthermore shows that significant interaction takes place
 502 between the approaches to these three components of the venture team. While an
 503 additionality effect exists between founder team size and the hiring of employees, we
 504 observe substitution effects between the hiring of employees and service providers.
 505 Interestingly, the reliance on service providers is especially prevalent among nascent
 506 ventures in coordinated market economies. This finding is in line with the expectation
 507 of the VoC literature that entrepreneurs in CMEs are more reluctant to hire employees
 508 because dismissal at short notice is difficult which, in turn, elicits only low venture
 509 growth (Dilli et al. 2018). As such, our findings confirm that the VoC reasoning,
 510 originally developed in the context of established firms (Estevez-Abe et al. 2001;
 511 Hall and Soskice 2001b), also applies to nascent ventures—at least with regards to
 512 aspects of the team formation.

- 513 (2) In another study (Held et al. under review-a), we find that nascent ventures follow
 514 one of seven distinct processes of funding acquisition. The majority of ventures
 515 follows one of the two processes that fit the expectations formulated in the
 516 financial bootstrapping literature: these nascent ventures rely almost exclusively
 517 on the funding of their founders (Winborg and Landström 2001), but small
 518 yet significant number of ventures deviates from this process. These ventures
 519 acquire funding from other sources than their founders. The type of funding
 520 a venture acquires correlates with various venture characteristics such as the
 521 type of good that it develops, the product's novelty, venture size, industry, as
 522 well as its institutional context. With regard to the latter, we find that ventures
 523 in countries with a higher stock market capitalization, such as the UK and the
 524 USA, are less likely to seek debt finance. This, in turn, lends empirical support
 525 to the VoC idea that the availability of institutional (venture) capital influences
 526 the financial sources into which ventures tap to finance their endeavors.
- 527 (3) Finally, we find in a third study that nascent ventures in LMEs are less likely to
 528 engage in R&D collaborations with external partners, such as universities and
 529 laboratories, than nascent ventures in CMEs (Held et al. under review-b). This,
 530 in turn, supports the VoC idea presented above that nascent ventures are more
 531 careful to engage in external R&D collaborations whenever the institutions
 532 governing inter-firm collaborations make the outcome of lawsuits in case of
 533 disagreement of the collaborating partners less predictable.

534 Taken together, these studies lend support to the theoretical arguments that a dis-
 535 tinct set of national finance-, labor-, and R&D-related institutions correlates with the

536 development of different types of entrepreneurial innovativeness across the European
537 Union. While the deregulated institutional environment of Anglo-Saxon economies
538 implies that an above-average share of radically innovative ventures is founded in
539 LMEs, an elevated proportion of incrementally innovative ventures is set up in CMEs,
540 while a plurality of imitative ventures is founded in MMEs and EMEs.

541 **4.4 Implications for Entrepreneurship Research** 542 **and Policymaking**

543 In light of this empirical evidence supporting the VoC argument that distinct institu-
544 tional constellations facilitate different types of entrepreneurship, which implications
545 arise for entrepreneurship research and policymaking?

546 As we have argued elsewhere (Herrmann 2019; Dilli et al. 2018), entrepreneur-
547 ship research would first of all benefit from assuming a more parsimonious approach
548 toward investigating the link between institutions and entrepreneurship. The work of
549 Dilli (forthcoming) offers a useful example in this regard. One of the major insights
550 resulting from the VoC framework is that economic actors in different institutional
551 environments need to behave differently in order to achieve the same outcome. And
552 as a corollary, if economic actors across national institutions behave alike, this behav-
553 ior tends to result in different outcomes. To give an example, ventures that go public
554 in order to raise funds for increasing their R&D activities are likely to become rad-
555 ically innovative in the USA and incrementally innovative in Germany. Germany's
556 corporate governance and education systems as well as the regulated labor market
557 imply that the resources for radical innovations are less available and, hence, more
558 expensive. This makes radically innovative entrepreneurship in Germany consid-
559 erably more difficult while facilitating incrementally innovative entrepreneurship.
560 Germany's entrepreneurs thus need to behave differently from their USA and UK
561 counterparts if they want to achieve the same outcomes. Meanwhile, start-ups in the
562 UK have difficulties recruiting and retaining specifically skilled workers to grow their
563 businesses into export champions, as this arguably requires a disciplined and loyal
564 workforce that is harder to attain in LMEs. If British and German founders behave
565 alike, they will achieve different outcomes, while different behaviors are required to
566 achieve the same outcome. Research into such questions of institutionally induced
567 equifinality can offer a novel approach to investigating the link between institutions,
568 entrepreneurial behavior, and outcomes.

569 The entrepreneurship literature can furthermore benefit from the finding that
570 entrepreneurship types diffused in one institutional environment do not serve as a
571 role model for entrepreneurship in other institutional environments. To put it bluntly,
572 Silicon Valley cannot be a role model for the Continental European economies
573 because of their institutional differences. But neither is Baden-Württemberg, known
574 for its incrementally innovative firms, a suitable role model for the Midlands.

Such insights force the entrepreneurship literature to acknowledge that different institutional constellations allow for different types of entrepreneurship to flourish.

This also has important implications for policymaking. The VoC framework highlights that institutional constellations which are at the same time conducive to radically innovative, high-tech entrepreneurship and incrementally innovative, medium-tech entrepreneurship do not exist and may in fact be impossible to create. Policymakers are therefore faced with a trade-off and the question about which entrepreneurship type to facilitate. Of course, as laid out in the final chapters of this volume (Sanders et al. 2020a, b, c this volume), policymakers can design individual policy measures to stimulate those types of entrepreneurship that are currently less supported by their national institutional environment. But historically grown institutional complementarities imply that one has to make a choice whether to support radical, incremental, or imitative innovation.

Policymakers should be aware of these trade-offs and carefully consider the interplay of institutions. While labor protection has a negative impact on the development of radically innovative, high-tech entrepreneurship, it stimulates the development of incrementally innovative, medium-tech entrepreneurship. Germany, for example, is characterized by a lively start-up scene in this area (see Dilli et al. 2018; Herrmann 2019; Pahnke and Welter 2019). Finally, one should keep in mind that the regulation or deregulation of labor and financial markets has broader societal implications that may be undesirable. To give just some examples: strong wage inequalities and increasing disparities between the rich and the poor, as well as systematic underinsurance against the risks of disability, old-age poverty, and illness that seem to come with LMEs' deregulated labor markets. Similarly, high capital market volatility and risky investments go hand in hand with deregulated financial markets. From the above research, one can conclude that a one-size-fits-all institutional constellation that stimulates radically and incrementally innovative and imitative entrepreneurship while facilitating social cohesion does not exist and cannot be created. There is no blueprint. The best policymakers can hope to do is experiment with small improvements, carefully assessing their policies' impacts as they go along.

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