Chapter 6 A Reform Strategy for Italy



127

Mark Sanders, Mikael Stenkula, Luca Grilli, Andrea M. Herrmann, Gresa Latifi, Balázs Páger, László Szerb and Elisa Terragno Bogliaccini

Abstract In this chapter, we outline a reform strategy to promote an entrepreneurial society in Italy. From a Varieties-of-Capitalism perspective, Italy has been classified as a Mixed or Mediterranean Market Economy. It boasts a vibrant entrepreneurial economy of locally embedded, often family-owned small- and medium-sized firms

All authors acknowledge financial support from the European Union's Horizon 2020 research and innovation program under grant agreement No 649378. László Szerb and Balázs Páger also acknowledge support from the National Scientific Research Fund of Hungary (OTKA/NKFI grant no. 120289, titled as Entrepreneurship and Competitiveness investigations in Hungary based on the Global Entrepreneurship Monitor surveys 2017-2019). Mikael Stenkula also gratefully acknowledges financial support from Jan Wallanders och Tom Hedelius stiftelse and from the Marianne and Marcus Wallenberg Foundation.

M. Sanders (⋈) · E. Terragno Bogliaccini

Utrecht School of Economics, Utrecht University, Utrecht, The Netherlands

e-mail: m.w.j.l.sanders@uu.nl

E. Terragno Bogliaccini

e-mail: e.m.terragnobogliaccini@uu.nl

M. Stenkula

Research Institute of Industrial Economics, Stockholm, Sweden

e-mail: mikael.stenkula@ifn.se

L. Grilli

Department of Management Economics and Industrial Engineering,

Politecnico di Milano, Milan, Italy e-mail: luca.grilli@polimi.it

A. M. Herrmann

Copernicus Institute of Sustainable Development, Utrecht University, Utrecht, The Netherlands

e-mail: A.M.Herrmann@uu.nl

G. Latifi

TUM School of Management, Technical University of Munich, Munich, Germany

e-mail: gresa.latifi@tum.de

B. Páger · L. Szerb

Department of Management Science, University of Pécs, Pécs, Hungary

e-mail: pagerb@rkk.hu

© The Author(s) 2020

M. Sanders et al. (eds.), The Entrepreneurial Society, International Studies in Entrepreneurship 44, https://doi.org/10.1007/978-3-662-61007-7_6

that make up a major share of its economy. The main bottlenecks in the Italian entrepreneurial ecosystem are low ambition levels, the lack of skills and education flowing into entrepreneurial ventures, and a bureaucratically encumbered, non-meritocratic, business environment that feeds back into a low familiarity with ambitious entrepreneurship. Italy could strengthen its entrepreneurial ecosystem in several areas, ranging from boosting human capital investments to reducing the clientelism in the business environment and recruitment culture. This would open up more opportunities for the young and talented, eager to engage in productive and innovative venturing in Italy.

Keywords Italy \cdot Entrepreneurship \cdot Varieties-of-capitalism \cdot Entrepreneurial ecosystem \cdot Entrepreneurship policy

6.1 Step 1: Historical Roots of Institutions and Recent Policies

6.1.1 North and South—A Short History of Italy

Italy has only been a unified state since 1861 and has been a bicameral parliamentary democracy under the current constitution since 1948. But Italy has a long and rich history that influenced and permeated areas well beyond its geographical boundaries. The Italian city-states of the Renaissance saw the rise of banking and the principles of Roman Civil Law persist in continental European legal traditions. In many ways, the deep-rooted institutions in Italy are the deep-rooted institutions in large parts of Europe. Foremost among these, the Catholic Church in Rome left a deep imprint.

During the Middle Ages, the Catholic Church (The Church) was promoting corporatism to pacify the conflicts of interests between aristocracy, farmers, and trade through the various sponsored function-based groups and institutions including universities, guilds of artisans and craftspeople, and other professional associations. The establishment of a system that relies on guilds involved the allocation of power to regulate trade and prices to guilds (Wiarda 1997).

This role of the Church was also evident during industrialization. While workers asserted their rights, the Church supported them on the one hand, but also fiercely opposed communism on the other. Nowadays, the Catholic Church in Italy is characterized by widespread worship throughout Italy and is still very much alive in Italy through institutions such as schools, hospitals, nursery schools, rest homes, shelters for the chronically ill and the handicapped, special institutions for education and retraining, and publishing, to give just some examples (Garelli 2007). Italy is the nation with the highest level of baptized Catholics, at 97% (55 million) of the population (Garelli 2007). The Church has provided Italy with a long-standing

L. Szerb

e-mail: szerb.laszlo@ktk.pte.hu

tradition of charity, still actively promotes an inclusive, family-based corporatist model of economic governance, and is an important factor in cementing social cohesion in Italy.

But although Italians throughout the country share this Catholic heritage, there is also the sharp divide between North and South, known as the "Italian Mezzogiorno" (Ichino and Maggi 2000). This division of Italy dates to the sixth century, with the fall of Rome in 568, and persists to this day. In the middle of the eighteenth century, the country was organized into seven separate states: The Kingdom of Sardinia (with Piedmont and Liguria), the Kingdom of the Two Sicilies, the Papal State (Lazio, Umbria, the Marches, and parts of Emilia and Romagna), Lombardy-Veneto which was under Austrian rule, controlled directly from Vienna, and the Grand Duchy of Tuscany and the duchies of Parma and Modena that were dependent on the Habsburg scions (Barbagallo 2001). The Mezzogiorno extends from Abruzzo and the southern parts of Lazio down, includes Sicily, and often Sardinia is also considered part of Italy's South. Only in 1860, with the Italian Risorgimento, was the territory brought together into a single politically organized community (Barbagallo 2001). But even today, some would claim that Italy was never truly one country and geography, and the lack of infrastructure continues to widen the economic and social divide (Barbagallo 2001). Policies to address this have met limited success.

The Cassa del Mezzogiorno, or the "Fund for the South," created in the early 1950 to encourage economic growth and industrialization in the Southern part of the country (Baum et al. 1990), largely failed because of administrative ineffectiveness (D'Attorre 1987). The public work projects and the jobs it funded were either short-term or highly inadequate, and the fund was criticized for promoting "large-scale capital-intensive projects" that required administrative capacities largely absent in the South (Bohlen 1996). Instead of convergence, institutional failure ended up promoting the Mafia in the South, while the North was growing (Spooner 1984).

According to Graubard and Cavazza (1974), the ineffectiveness of public administration in Italy was mainly related to the so-called *clientelismo*—a sort of political patronage allowing certain groups of citizens to connect to politicians through special laws and a system of kickbacks offered to public officers for influencing public decisions. The signs of a diminished tolerance toward corruption in Italian society appeared especially in the 1980s (Cazzola 1988). The fight against public bribery and corruption took shape in the *Mani Pulite* ("Clean hands") judicial investigation into political corruption held in the early 1990s and led to the disappearance of many political parties and to the end of the so-called "First Republic." But while these improvements at the national level have been hopeful, corruption and organized crime organizations have not been wiped out and at times heavily encumber economic activity (e.g., D'onza et al. 2017; Spanò et al. 2016, 2017; Allini et al. 2017).

Today, the regional divide is still obvious in the quality of institutions such as schools, public administrations, hospitals, and large private corporations (Ichino and Maggi 2000; Viesti 2016). Even the judicial system, which is the backbone of a modern state, works differently in the Northern and Southern part of Italy. In the South, to get a ruling in civil cases still takes much more time than in the North,

even though the legal system and the career paths for judges have essentially been the same in both parts of the country for 150 years now (Tabellini 2010).

This gap between the two regions, in fact, requires policy makers to bear in mind that any reform strategy proposed for the North should not blindly be suggested for Italy's South and vice versa. Historically, economically, and institutionally, Italy often constitutes two distinct regions rather than one country with some regional heterogeneity. Thus, Italy probably needs different policy interventions in its two regions, building on the deep-rooted institutional frameworks inherited from the past. In what follows, we, therefore, discuss how institutions for the creation and diffusion of knowledge, the allocation of finance and labor have evolved in Italy.

6.1.2 Institutions for Knowledge Creation and Diffusion

In modern economies, the institutions for knowledge creation and diffusion are largely concentrated in the academic system of education and research and the system of intellectual property rights. These institutions, notably universities and patent systems, both have their historical roots in Europe and in fact in renaissance Italy.

6.1.2.1 Universities

Italian universities rank among the oldest in the world. The University of Bologna is the oldest recognized university, established in 1088 (Università di Bologna n.d.). Other Italian universities that have obtained the official status of university institutions early in the Middle Ages include Padua, Naples, Rome, Perugia, Pisa, and Florence (Simonini 1954). Universities initially emerged as institutes where theology, law, and philosophy were taught, and their histories comprise a long struggle to keep external influences from clerical and secular authorities out and conquering and protecting scholarly and academic freedom. Today, Italian universities are typically very broad institutions of academic research, which are publicly funded, while both universities and professors enjoy high levels of autonomy and focus on academic knowledge creation and diffusion.

There are two important technical universities in Italy which first appeared at the end of the nineteenth century. The oldest technical university in Italy is based in Torino and was established in 1859 under the name *Scuola di Applicazione per gli Ingegneri* (Technical School for Engineers). In 1906, it transformed into what today is known as *Politecnico di Torino*. Its creation coincided with the new era of industrialization that put the focus on Electrotechnics and Building Science (Politecnico di Torino n.d.). Today, this university strives to enhance technological and scientific research capabilities and integrate them into a higher education framework (Statute of Politecnico di Torino 2011).

The other important technical university of the country, the *Politechnico di Milano*, was founded only 4 years later in 1863. Its original name was *Regio Instituto Tecnico Superiore* ("Royal Higher Technical Institute") and the only majors that were taught were Civil and Industrial Engineering. In 1987, the school expanded to regional campuses of Como (1987) and Lecco (1989), and regional facilities in Cremona (1991), Mantova (1994), and Piacenza (1997) (Politecnico di Milano n.d.). Importantly, both technical universities were founded in the North at the time when industrialization took off in Italy.¹

Complementing the formal academic teaching and research institutes, Italy recently also invested in the creation of science parks. In these parks, firms and academic research are physically located close to one another to facilitate knowledge spillovers and cement the links between research and commerce. According to The Bank of Italy survey of 2012 on Science and Technology Parks, there was a boom in the number of science parks in the 1990s. Some 25 were founded at a rate of up to three per year over a period of about 25 years (Liberati et al. 2016).

There were important first-mover advantages in this area. For example, the regional government of Turin, focused on policies promoting initiatives such as incubators and science parks early on and today we see two highly regarded Science and Technology Parks, the Environment Park, and the Bio-Industry Park (Salvador 2010) in Turin. The *Politecnico di Milano* was also an early mover in this domain, and today, its incubator "Polihub" is considered excellent, and ranked as the third best university incubator in the World Top University Business Incubator Ranking 2017/2018 by the Association UBI Global.

In recent years, Italian universities and Polytechnics have also increasingly started to teach entrepreneurship and engage in technology transfer in order to generate spin-offs. Yet, the literature considers entrepreneurship education in Italy still as "immature" (Iacobucci and Micozzi 2012).

In conclusion, Italian universities and Polytechnics have a proud history and tradition to build on, but they face challenges preparing for their emerging role in the modern knowledge-based economy. The curriculum and didactic approaches would probably benefit from modernization, but deeply entrenched interests and hard-won academic freedom imply that this is hard to engineer top-down. Instead, the Italian academic system would have to accept a more engaged role in society and be convinced that it is also in their interest to make the transition to a system of more modern, entrepreneurial universities that adopt evidence-based methods and focus more on engaging academic research with societal challenges.

¹Two more universities have been awarded the label *Politecnico. Politecnico di Bari* is in the capital city of the Apulia region, established in 1990 (Politecnico di Bari n.d.), and the University of Ancona changed its name to *Università Politecnica delle Marche* and was recognized as a technical university in 2003 (Politecnica delle Marche 2017). These institutions are based in the South and Middle of the country, respectively, and were founded to become important actors in the respective local industrial ecosystems. To date, however, they do still not play the role the older schools play in the Northern economic system.

6.1.2.2 The Patent System

The use of patents as an institution to encourage knowledge production and its diffusion is relatively old and, in fact, it was in Italy where the first real patents appeared. There is a lot of discussion among historians whether Florence or Venice was the first to grant patent rights on innovations, but Italy led the way. There was strong and systematic interest of the Venetian Republic in promoting inventions long before 1400, but it was the city of Florence which recorded Filippo Brunelleschi as the first patentee in 1421. He was granted an exclusive right of 3 years to use his invention—a barge with hoisting gear for marble—protected from potential imitators. The patent stated clearly that all those that would replicate the invented device should be burned at the stake (Frumkin 1945).

This first patent, however, was still very ad hoc. The first more general system of intellectual property rights protection was adopted by the Venetian Senate on March 19, 1474. The decree called upon every person who invented ingenious devices to first disclose their invention to Provveditori di Comun. Doing so would benefit inventors by protecting them for 10 years (Long 1991). The Statute is clear on several things that still characterize patents today. The decree mentions the originality of the work as a substantial ingredient in the way of getting a patent, industrial applicability, and the exclusive right to exploit the invention for 10 years. One of the early Venetian patent receivers was Galileo Galilei for his invention of a "Mechanism for Raising Irrigation Water to Fields" in 1594 (Maynard 1980). With the foundation of the Kingdom of Italy in 1861, the country implemented a national patent law, similar to that in most industrialized economies (Moradei 2009) and Italian legislation on intellectual property has since evolved considerably. Today's Italian patent law has been revised following the patent provisions of the 1995 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The patent does not substantially differ from its initial form, but the width, breadth, and extent of patent protection have changed substantially over time.

The debate on patent protection is not new to Italy. According to Sirilli (1986), the rise of technical and scientific development and the role of economists in the acknowledgement of patents as an incentive for innovation (e.g., Schmookler 1966; Scherer 1965), have both driven the debate. Textbook economics claims that without patent rights, inventors would have no incentives to produce valuable knowledge. But Sirilli (1986) shows that for Italian inventors who applied for a patent, three-quarters of the respondents admitted that the absence of patent protection would not have prevented them from pursuing the invention. Also in Italy, patents serve a useful purpose in keeping track of and building a public registry of useful inventions, but it is especially the commercially applicable ones that should be registered and protected from imitation. Thus, like in many industrialized countries, there is much debate about the usefulness of patents and the application of strict rules of protection of intellectual property as they are applied today (e.g., Panunzi 2012; Boldrin and Levine 2008).

6.1.3 Development of Financial Institutions

Italy is a well-known example of a bank-based economy, and it is of great relevance for understanding entrepreneurship in Italy to summarize its historical development and the culture that prevails in these financial institutions. Modern banking has its roots in Italy. In fact, the rise of banking system dates back to Medieval and Renaissance Italy and originated in the prosperous and rich cities of Florence, Venice, and Genoa (Hoggson 2007). The Bardi and Peruzzi families led banking in fourteenth century Florence, expanding with new branches in many other parts of Europe (Hoggson 2007).

In the fifteenth century, the de Medici bank, which was established in 1397 by Giovanni de Medici in Florence (Goldthwaite 1995), made a distinguished imprint in the development of banking and became the most important financial institution in Europe in the fifteenth century (The Economist 1999). The de Medici bank grew into the most international bank of Italy and for decades was a highly respected bank in Europe (De Roover 1999). It used its massive network to a degree that it attracted and maintained the Vatican as its largest client and until 1434, more than half of the bank's revenues flowed through the Rome "branch," which accompanied the pope on his travels. The strong ties with Rome and the Vatican brought the bank enormous influence on customers and the Church itself (The Economist 1999).

In the period between 1527 and 1572, important banking family groups such as the Grimaldi, Spinola, Pallavicino, Doria, Pinelli, and Lomellini rose as big players in banking during the sixteenth century (Duggan 2013; MacDonald and Gastmann 2000). Banking in the Renaissance, and thereafter, was very much a family business and it mainly catered to the needs of rich merchants who wanted to settle large transactions over increasing distances and needed sophisticated products, such as insurance for cargoes at sea, trade credit, and currency exchange services.

Throughout the centuries, Italy became home to many other banks. The *Banca Monte dei Paschi di Siena*, for example, has been operating continuously since 1472 (Boland 2009). The Economist (2017) noted that this bank is the oldest surviving bank in the world and saving it from bankruptcy in 2013 could thus almost be considered a matter of conservation of cultural heritage.

The first publicly held Italian bank that looked somewhat like a modern bank, taking deposits and giving loans, was established in Milan in 1894. Gradually then, small industrialists and a rising middle class created demand for and supply of what we now consider to be traditional banking services. Many of these banks are also still operating today and typically served society for centuries (Hertner 2016). The role of these banks in Italy was particularly relevant in the industrialization and modernization of agriculture in Europe after World War I. As shown by the seminal work of Gerschenkron (1962), banks were important in Europe, where financial markets were less developed than in the UK and USA but industrialization was more advanced than in others, such as Eastern Europe and Russia. This gave banks a vital role in the industrialization process as the financier of modern industry (Sylla 2002).

The banking system in Italy went through several reforms in the twentieth century. The Bank Law of 1936 is an example that reformed the whole banking sector by putting financial intermediaries into different categories depending on their credit activities. The law also limited the linkages between industry and financial institutions to alleviate possible conflicts of interest. Another reform, put in place in 1993, aimed at increasing privatization of the banking system and expanding the range of activities of banks. Until about 2004, there was some consolidation in the Italian banking sector but despite this M&A activity, concentration ran counter to the global trend. Even if there were fewer banks in 2004 (800) than in 1985 (1,100), the market share of the five largest banks dropped over this period (Goddard et al. 2007; Coccorese 2013), implying that consolidation took place among smaller banks whereas competition increased at the top.

European legislation, such as the 2004 New EU take-over Directive, implemented to integrate European financial markets have stimulated further consolidation in banking (ECB 2017). But Italy's banking system still has many small, diverse, relationship-based cooperative banks that support its SMEs also in times of crisis (Castellani 2018). If the banking sector continues to consolidate, however, as in the Netherlands or the UK, Italy risks losing its system of small, diverse and arms-length relationship banking, and credit will be allocated more to real estate (mortgages) and traded financial assets (Goddard et al. 2007; ECB 2017). This would harm the entrepreneurial ecosystem and reduce the access to finance for Italian entrepreneurs.

Despite the recent improvements, many Italian banks still struggle with significant bad debt overhang and a limited ability to finance new projects (Beccalli and Girardone 2016). Current mandatory reserve and equity ratios are insufficient. When banking made its biggest contributions to Italy's development, leverage was much lower, and banks could shoulder losses better. To justify financing experimental venturing with bank credit, banks, therefore, should be recapitalized.

6.1.4 Labor Institutions

Concerning its labor market institutions, Italy is commonly grouped with other Mediterranean countries such as Spain, Portugal, and Greece. Despite important differences, these countries are all characterized by labor markets with high employment protection and low social security. Union bargaining coverage is often extended and trade unions control large parts of the labor market without being representative of large parts of the workforce (Dilli et al. 2016; Hassel 2014). These institutions formed largely when Italy became a unified state and industrialization fueled the organization of labor in the early twentieth century. Italy's welfare state dates back to the aftermath of World War II, and both labor and social security regulations were frequently reformed even since the 2008 global financial crisis.

6.1.4.1 Employment Protection

Dismissals were first regulated in Italy in 1966. Any unfair dismissal obliges employers to either hire back workers or pay compensation based on individuals' experience and firm size (Boeri and Jimeno 2005). For workers with less than two and a half years of tenure, the compensation ranged between 5 and 8 months, and for those with between two and a half and 20 years of tenure, the compensation varied from 5 to 12 months. The above regulation applied to firms with more than 60 employees while those with less had to pay half the severance pay (Boeri and Jimeno 2005). In 1970, the *Statuto dei Lavoratori* obliged firms with more than 15 employees to hire back workers and pay their foregone earnings in case of unfair dismissals while firms with less than 15 employees were totally exempted (Leonardi and Pica 2006).

Historically, Italy was considered one of the strictest countries in terms of employment protection legislation (Lazear 1990; Bertola 1990; Nicoletti et al. 1999). As these arrangements proved to represent a barrier to entrepreneurship in general (Golpe et al. 2008) and to ambitious entrepreneurship in particular (Henrekson et al. 2010), important reforms were introduced in 2003 with the Biagi reform (Cirillo et al. 2017) and more recently with the Monti-Fornero reforms of 2012 and the "Jobs Act" of 2014 (Tiraboschi 2012; Carinci 2015). These reforms moved Italy's labor market firmly in the direction of the *flexicurity* camp.

The most significant modifications include the easing of dismissal regulation, more emphasis on active labor market policies and a new supervising national authority to enhance coordination among public and private actors (Raulli 2017). More generally, Italy has followed the Danish flexicurity recipe and decided to move from security of employees and jobs to security of income and work. In general, such reforms could support a more entrepreneurial society in Italy, but a careful evaluation of these reforms will have to show how they perform in the Italian context.

6.1.4.2 Wage Bargaining

Regarding the wage setting institutions, this is based on the tripartite agreement of July 23, 1993. Italy has an industry-wide bargaining model, applied at the national level (Eurofound 2009). As Calmfors and Driffill (1988) have shown, such a system of wage bargaining tends to increase wage pressure, which in turn may result in high long-run unemployment. Specifically, for entrepreneurs, such national coverage implies that vested interest parties can directly influence a major cost component for any (new) employer in their sector.

More importantly, these vested interest parties will also negotiate additional jobrelated rights and entitlements that have limited portability across industries, are easy for incumbents to administer, but put a large burden on new ventures. Trade unions, for example, negotiate the terms of pensions, sickness and maternity leave, working hours per week, month and year, leave, and education on the job. In the Italian corporatist tradition employers, state and workers will negotiate in relative harmony (Regini 1997), but Italy also has a strong history of class struggle and communism (Kertzer 1980), making unions more militant and willing to strike for their rights than in other Continental European countries. They share this labor militancy with the Mediterranean countries, although in recent decades, strikes are declining and labor relations seem to become more harmonious (Gall 1999).

Alternatively, one can interpret this as trade unions becoming less powerful and representative as organization rates decline in new industries. As unions typically protect the position of their (long-term employed) members, their decline would level the playing field for more entrepreneurial employers, but reforms in this area should respect the tradition of paying "decent wages for decent jobs" not to clash with other important aspects of the Italian institutional framework.

6.1.4.3 Social Security

Social security is typically less developed in Italy compared to other European countries, but compared to the rest of the Mediterranean countries, it is probably one of the most developed. Social insurance was first introduced between 1898 (work injuries) and 1919 (old age, invalidity and unemployment). In the period 1945–1975, the Italian welfare state was expanded significantly (Ferrera 2005). A generous statefunded pension, universal health care, constitutionally guaranteed unemployment benefits, and social security benefits were put in place and typically funded on a pay-as-you-go basis.

These systems have all been built up after World War II and thus have a relatively short history. Still, some rights are considered inalienable and the pay-as-you-go financing implies that current generations have paid for social security and entitlements they were (implicitly) promised would also be available for them in the future. Reforming such systems can, therefore, be politically complicated. In the 1980s and 1990s and more recently after the financial crisis, we have seen significant reforms in this domain. This suggests that social security is probably not a deeply rooted institution and reforms can be proposed to promote more entrepreneurship. But such reforms should not simply lower protection and security and rather make entitlements and rights more portable across jobs and industries.

6.1.5 Recent Entrepreneurship Policies in Italy

6.1.5.1 Innovative SMEs

In the 1990s, Italy was still highly dominated by small businesses. More than 99% of active firms employed less than 50 employees and less than 3,000 firms employed more than 250 employees (Unioncamere 2005). Increasingly, more attention was paid to SMEs by industrial policy, especially that concerning innovation, which was usually thought to be of sole concern to larger firms. In addition, improvements

in the bureaucratic structure of state-aid-provision entities created a more "SME-friendly" environment. It is relevant to note that, at the national level, systems of support have favored process innovation rather than product innovation (Rolfo and Calabrese 2003).

At the end of the 1990s, the Ministry for University and Scientific Research introduced the research program "Road Map for Italy." The program covered 300 SMEs and found that typically Italian entrepreneurs play a very proactive role in the management of their firms. Consequently, it is the background and competence of the entrepreneur that largely determines the ultimate success of the firm. The lack of specialization, networking, and teambuilding also has big consequences for the technological culture of SMEs in Italy (Rolfo and Calabrese 2003).

The Environmental Concessions law around 2000 established a tax relief system for SMEs that make environmental investments. As a lot of energy and resource-saving equipment and investments would fall under this legislation, the program gives Italian SMEs an incentive to develop sustainable business practices and develop new competitive advantages in doing so.

6.1.5.2 Entrepreneurship and Entrepreneurship Policy after the Recent Financial Crisis

The Italian response to the financial crisis of 2009 was focused on strengthening its innovative SME sector and initially even on increasing spending to maintain investment in innovation and R&D. In 2009, Italy was one of the first EU countries to approve the European Commission's 2008 Small Business Act (SBA) proposal and adopted it domestically. The approval of this program allowed for the immediate mandatory and continuous monitoring of SME policies and for the arrangement of "one law a year" regarding small firms (Ministero dello Sviluppo Economico n.d.). Some of the interventions under the SBA included:

- Law 185/2008, proposed to guarantee the integrity of credit and avoid any charges to businesses:
- Law 29/2009-2, adopted to facilitate access to credit by introducing, the "Tremonti Bond," through which the banks can grant loans to businesses;
- Law 78/2009 ('Manovra anti-crisi'), passed to promote the reinvestment of profits in capital goods;
- Law 99/2009 ('Legge Sviluppo'), providing a broad mandate to the government to reorganize regulatory obligations for companies;
- "Unique Communication" launched in 2009 giving the possibility for starting a business by sending a single communication to the Chamber of Commerce;
- Law 82/2009 establishing an 80 million euro facility for product and/or process innovations replacing or eliminating chemical substances.

Other initiatives regarding the sustained growth of SMEs included: a fund for competition and innovation; a fund for rescue and restructuring of businesses in difficulty; a fund for districts and business networks; measures for the automobile

sector, domestic appliances, furniture, and apparel; the National Innovation Fund (for patents); the Made in Italy Fund (for internationalization); and various fiscal initiatives (Ministero dello Sviluppo Economico 2009).

More specific attention to entrepreneurship followed shortly after. The Program *Restart Italia!* was launched in 2012 to reshape the Italian entrepreneurial environment in order to promote economic growth and employment. Overall the project envisioned outcomes such as the development of innovation and entrepreneurship culture, social mobility, transparency, and meritocracy as well as the attraction of foreign factors of production.

Arguably, the most significant result of the implementation of the *Restart Italia!* program was the newly recognized status of start-ups—as innovative enterprises of high technological value—when it was introduced into the Italian legal system. The resulting "Law 221/2012" (the so-called Italian Start-up Act) is an organic and coherent policy for which public support for innovative entrepreneurship represents a new way of thinking about industrial policymaking (Ministero dello Sviluppo Economico 2012).

In 2014, Italy introduced the Start-up Visa (ISV) program facilitating self-employment visas to non-EU citizens who were interested in launching an innovative start-up in Italy. The initiative was composed of a novel procedure which was characterized by being "fast-track"—never taking more than 30 days to be issued—and being centralized, digitized, bilingual, and free of charge. The committee evaluating the applications has been formed by the presidents of five key associations of the Italian innovation ecosystem, including business angel firms, university incubators, and others.

Several policy initiatives followed. Among the most important was the national Plan *Industria 4.0* which became effective in 2017. The plan was designed for firms operating in the manufacturing sector and intended as "a great deed of trust from the government to enterprise." The program is to be applied without—or as few as possible—constraints by bureaucratic processes or subjected to territorial or sectorial selection and invests in all stages of the life cycle of firms, particularly focusing on investment support in the digitalization of production, the development of employee productivity, the training of applicable skills and the development of new products and procedures (Ministero dello Sviluppo Economico 2017).

These programs have of course been evaluated, but it is difficult to ascertain their true impact. It would also take us beyond the scope of this chapter to attempt an assessment here. In short, in recent years, policy attention for SMEs and later entrepreneurial venturing has risen considerably in Italy and the financial and Euro crisis have strengthened the call to reform. However, in Italy there is also a political backlash, and reformists should take care to emphasize and ensure the inclusive character of reforms toward an entrepreneurial society, creating more and better opportunities for challengers, not lining the pockets of incumbents in business and politics.

6.1.6 Conclusions

In conclusion, we can take away a few important lessons from the above. First, Italy has a long history of supporting a vibrant entrepreneurial economy of locally embedded, often family-owned small- and medium-sized firms that make up the overwhelming majority of its economy. The Italian ecosystem was supported by banks, patents, and universities early on and industrialization, especially in the North, brought deep rooted but modern financial, labor, and knowledge institutions to Italy.

From more recent policy initiatives, we may tentatively conclude that national policy makers in Italy have recognized the importance of supporting Italy's Entrepreneurial Society. Moreover, we note that recent policy initiatives seem well-informed and well-targeted. Policy makers try to reduce the regulatory burden and remove undue barriers to new initiatives. Policies are more general and targeted at entrepreneurial venturing in general, and are not specifically directed toward sectoral, geographic or size-related barriers. Building on its unique history, Italy is well-positioned to promote more entrepreneurship in its economy in both North and South. In our next steps, we will use quantitative and qualitative information to identify what factors are holding Italian entrepreneurs back.

6.2 Step 2: Data Analysis with REDI for Italy

6.2.1 Italy's International Position

To get a first impression of Italy's relative performance as an entrepreneurial ecosystem, we turn to the Regional Entrepreneurship and Development Index (REDI). For calculating the country scores of the REDI index, we used the population-weighted REDI scores. Out of the 24 countries, Italy ranks 18th with 30.0 points (Table 3.3, in Varga et al. 2020). This score is significantly lower than other developed countries, and also the EU average, lagging well behind the United Kingdom, Germany, and even some newly assessed countries like Estonia, Slovenia, and the Czech Republic.

The REDI is composed of 14 underlying pillars that together make up 3 sub-indices: Entrepreneurial Attitudes, Abilities, and Aspirations (Acs et al. 2014; Szerb et al. 2017, 2019). Figure 6.1 gives us a first glance at how Italy is performing relative to the UK, Germany, and the EU average on these 14 pillars. From Fig. 6.1, we can see that Italy is performing below the European Union average on almost all aspects of the entrepreneurial ecosystem that the REDI methodology covers.

The scores on the 14 pillars are markedly low for "Human Capital," "Opportunity Start-up," and "High Growth," but overall, the Italian entrepreneurial ecosystem needs strengthening on almost all fronts. Italy scores above the European average (and even above Germany and the United Kingdom) on "Product Innovation" and "Process Innovation". These high scores indicate that Italy's long tradition of industrial policies to support innovative SMEs (see above) have paid off. But the Italian ecosystem

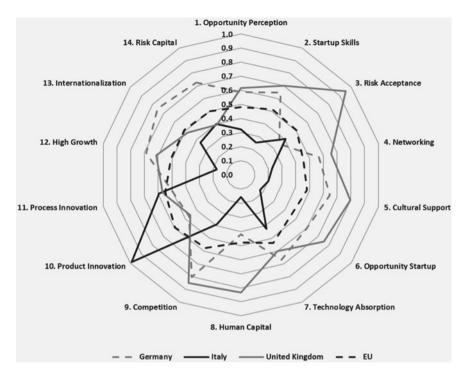


Fig. 6.1 Radar-plot REDI comparison Germany–Italy–UK and EU-average. Source Authors' own compilation

remains weak in the sub-index Entrepreneurial Attitudes (upper right pillars 1–5) and in Entrepreneurial Abilities (lower pillars 6–9). Even on Entrepreneurial Aspirations, it scores low because of the large imbalances between the pillars in the upper left side of the radar-plot (pillars 10–14).

The underlying algorithm in the REDI puts a penalty on bottlenecks in the ecosystem (Acs et al. 2014; Szerb et al. 2017), such that a rounder radar-plot scores higher than a more erratic one, and policy interventions should be aimed at alleviating bottlenecks with priority. As we have indicated, however, the national average potentially hides a lot of regional heterogeneity. We, therefore, focus in on Italy's main regions next.

6.2.2 A More Detailed Regional Quick Scan

If we zoom in on the regional level, in Fig. 6.2 and Table 6.1, we see that all Italian regions score between 25.7 and 33.5, with the Southern regions significantly lagging the Center and North, as expected.²

 $^{^2}$ The numbers are index numbers ranging from 0 (worst) to 100 (best) across all 125 European NUTS2/3 regions for 2012–2014.

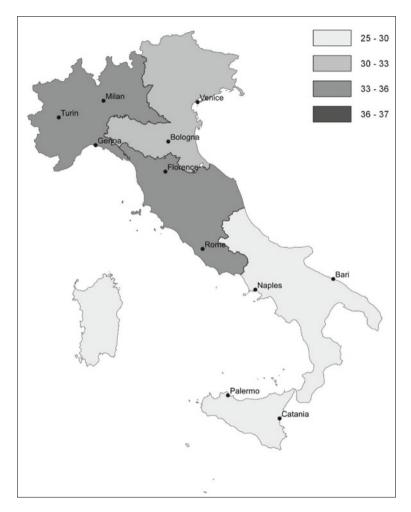


Fig. 6.2 REDI map of Italian regions. Source Authors' own compilation

Table 6.1 REDI-scores Italy

Region	REDI-scores 2012–2014	
Nord-Ovest	33.5	
Nord-Est	32.6	
Centro	33.5	
Sud	25.7	
Isole	26.7	

Source Authors' own compilation

Table 6.2 Weakest points per region

Region	Weakest pillars	Weakest variables
Nord-Ovest	5, 6, 8, 12	Open Society, Business Environment, Educational Level, Gazelle
Nord-Est	2, 4, 8, 14	Skill Perception, Know Entrepreneurs, Educational Level, Informal Investment
Centro	5, 6, 8, 12	Open Society, Business Environment, Educational Level, Gazelle
Sud	5, 6, 8, 12	Open Society, Business Environment, Educational Level, Clustering
Isole	5, 6, 8, 12	Open Society, Business Environment, Educational Level, Clustering

Source Authors' own compilation

Without going into too much detail in this chapter,³ the intuition behind each of the pillars is that data on individual entrepreneurial agency, obtained from the Global Entrepreneurship Monitor adult population survey data, is combined with relevant institutional quality indicators from a wide variety of reputed international institutions, such as World Bank, Freedom House and OECD. The index then builds on the assumption that institutions and individual agency are complements (Acs et al. 2014; Acs and Szerb 2009). That is, high levels of, for example, Opportunity Perception in a low-quality institutional environment, will contribute little. Likewise, low Opportunity Perception in a high-quality institutional environment is also a sign of weakness in the entrepreneurial ecosystem.

To improve the score on a given pillar, policies and reforms should seek to improve the weakest link and then aim to increase both institutional quality and individual agency together. Especially because of the latter, the menu of effective interventions is not limited to improving the scores on the institutional quality indices alone. The same logic is then also imposed on the individual pillars that make up the three sub-indices: Entrepreneurial Attitudes, Abilities, and Aspirations.

The good news for Italy and its regions, based on these analyses, is that with small improvements in its weakest pillars, large improvements in the ecosystem can be expected. Moreover, from Table 6.2, we can see that, although the overall scores are lower in the Southern regions, the weaknesses in the Southern and Northern ecosystems seem largely concentrated in the same pillars and variables. This implies that national policy and reform programs addressing these weaknesses, will strengthen entrepreneurial society throughout the country and Table 6.2 gives us a clear sense of the priorities. National level policies to promote pillars 5 "Cultural Support," 6 "Opportunity Start-up," 8 "Human Capital," and 12 "High Growth" are likely to benefit Entrepreneurial Aspirations, Abilities, and Attitudes throughout the territory.

³We refer interested readers to Acs et al. (2014) and Szerb et al. (2017, 2019) for further details.

Improvements in these aspects would address some of the most prominent bottlenecks in the system in all regions of Italy. The recent labor market reforms as proposed under the recent Jobs Act, can, for example, prove to be beneficial in removing the penalty on growth that is present in many firm size-related social security and labor market protection provisions. It will probably take some time for such reforms and interventions to show up in the index, as the numbers will only change when people respond to the new situation by starting more ambitious and successful firms. But such fundamental reforms are what we suggest should be preferred over more direct but less fundamental policies that would boost the indicator directly, but superficially.

For Human Capital, both Educational Level and Training warrant attention, whereas for Opportunity Start-up, it is especially the poor quality of the Business Environment that keeps the pillar down. Italian entrepreneurs seem to see opportunities but are held back by deficient human capital supply and a daunting bureaucracy in starting up new ventures. To address these weaknesses, targeted interventions to improve the business environment will be needed, whereas reforms in the educational system are also advised. Not because the Italian education system does not deliver high-quality graduates, but because that quality currently does not seem to flow to the entrepreneurial ventures that need them.

In the Entrepreneurial Attitudes, the pillar on Networking is weak due to low scores on both Social Capital and Know Entrepreneur, whereas the Cultural Support pillar is weakened by the low system wide score on Open Society that negates the relatively high score for Career Status. The Start-up Skills are low in North-East mainly due to low quality of education. It is not straightforward to come up with reforms that improve these aspects, but we make some suggestions below.

6.2.3 Overall Conclusions of the REDI Analysis

Our reading of the data above reveals that, in all Italian regions and the country as a whole, the main bottlenecks in the entrepreneurial ecosystem are low ambition levels (High Growth), the lack of skills and education (Human Capital), and an entangled business environment (Opportunity Start-up) that feeds back into a low familiarity with ambitious entrepreneurship and a rather closed culture (Networking and Cultural Support).

Generally, it is dangerous, to rely exclusively on data and aggregate indices, even if they are composed of a broad set of sub-indicators and disaggregated as much as the data might allow. It is always important to complement a data-based quick scan with historical analysis, common sense, and more qualitative information to contextualize and complete the diagnosis. Only after triangulating the results above with the historical analysis, literature review, expert judgment, and more qualitative survey results below, we can map the diagnosis onto our menu of interventions to propose tailored reforms for Italy.

6.3 Step 3: Triangulating History, Data, and Survey Results

6.3.1 Venture Creation Processes in Italy

We assessed the ways in which the Italian institutional ecosystem influences entrepreneurial activities from two different perspectives, namely a static one, based on multiannual averages, and a process-oriented perspective (Herrmann 2020, this volume). The results obtained from both types of analyses are highly complementary. Our static analyses indicate that entrepreneurs in Italy are less likely than entrepreneurs in coordinated or liberal market economies to create radically or incrementally innovative ventures. Instead, Italy's entrepreneurs have a tendency to set up ventures based on the replication of existing technologies (Dilli et al. 2018; Herrmann 2019).

The dynamic analyses, in turn, provide insights into how the institutional environment influences different aspects of the venture creation process. With regard to human capital, we find that national labor market institutions affect the employment choices of entrepreneurs in Italy (Held 2019). In view of the benefits and security that employees enjoy in dependent employment, Italy's founders are more likely than their counterparts in the UK or the USA to start a venture in part-time rather than in full-time. Italian part-time founders, however, are more likely to transition to full-time entrepreneurship than their German equivalents (Held 2019).

Similarly, the institutional ecosystem also influences the process of finance acquisition (Held et al. 2018a). Given that stock market capitalization in Italy is low while debt finance to start-up firms is limited, venture founders in Italy very often need to finance the initial stages of venture creation with their personal funds as well as the funding provided by their family or friends. Finally, the propensity of nascent ventures to engage in R&D collaborations with external partners (universities and labs) also seems to be institutionally influenced. Given that it takes years to obtain a ruling, legal action is typically not perceived as a means of recourse in case of IP conflicts with collaboration partners. This may be the reason why nascent ventures in Italy are more reluctant to engage in R&D projects with external partners than their counterparts in Germany (Held et al. 2018b).

Taken together, these studies lend support to the argument that Italy's distinct finance-, labor-, and R&D-related institutions influence the decisions of entrepreneurs with regard to the business ideas they develop as well as the process they follow to set up their ventures. This leads to the question how entrepreneurs in Italy experience their institutional environment when setting-up a venture: Which aspects are constraining them? And what could policy makers do to facilitate venture creation in Italy?

6.3.2 Regulatory Barriers to Entrepreneurship in Italy

To examine regulatory barriers to entrepreneurship, we conducted a survey with 133 Italian founders between 2017 and 2018 (Herrmann et al. 2018). Table 6.3 provides an overview of the answers to the question: "Which regulatory requirements did you perceive as major obstacles during venture creation?".

Contrary to their German and British counterparts, venture founders in Italy frequently mentioned that they had encountered regulatory obstacles. The, by far, most frequent obstacle, encountered in almost 14.5% of cases, were bureaucratic procedures that made venture creation unnecessarily long and time consuming. Some respondents (3%) specifically mentioned the obligation to go through a notary when registering a new company and the complexity of the existing laws and specific procedures for setting-up a *Società a Responsabilità Limitata* (s.r.l.), a limited liability company. All these administrative procedures mean quite substantial implicit and explicit costs for a start-up.

Next to these bureaucratic constraints, the respondents also mentioned several financial hurdles as obstacles to venture creation, namely the taxes to be paid (5.3% of all responses), difficulties to obtain finance (5.3%), and legal initial capital requirements (2.3%). Accordingly, our survey highlights that, together with the costs arising from heavy bureaucratic requirements, nascent ventures in Italy face financing constraints. This finding did not stand out that much in the above REDI analysis. But earlier research also indicated that the absence of a vibrant angel

 Table 6.3
 Results survey on regulatory obstacles in Italy

Which regulatory requirements did you perceive as major obstacles during venture creation?	Times mentioned	In %
None	28	21.1
Does not answer question	15	11.3
Difficulties with bureaucratic procedures	19	14.3
Taxes	7	5.3
Difficulties with obtaining finance	7	5.3
Lacking clarity regarding regulations	5	3.8
Constantly changing regulatory environment	5	3.8
Safety regulations	5	3.8
Legal requirements to involve a notary	4	3.0
Legal initial capital requirements	3	2.3
Specific requirements related to energy sector	3	2.3

Note

^{1.} Based on interviews with 133 founders mentioning 133 obstacles (more than one obstacle could be mentioned)

^{2.} Only obstacles mentioned three times or more are reported in the table *Source* Authors' own compilation

and VC investment community might be linked to unfavorable fiscal circumstances (Henrekson and Sanandadji 2017), tight regulation on institutional investors, and difficulties in making smooth and profitable exits in secondary markets (e.g., Bottazzi and Da Rin 2002).

A third major block of obstacles refers to unclear regulation and frequent regulatory changes. Taken together, a lack of clarity regarding regulation, as well as a constantly changing regulatory environment and specific safety regulations were mentioned in almost 12% of responses, while specific requirements related to the energy sector were mentioned as regulatory obstacles in an additional 2.3% of responses. Together, these answers indicate the detrimental effect of unclear and frequently changing rules and regulation, echoing the REDI conclusion that bureaucracy is a complicating factor in Italy.

Overall, the answers show a relevant lack of institutional support, most importantly in the form of heavy bureaucratic procedures, financial constraints, and unsteady regulation. This indicates that the aforementioned policies have thus far not (fully) succeeded in facilitating entrepreneurship in Italy.

6.3.3 Founders' Suggestions for Reforms in Italy

In the same survey, we also asked founders the following: "In your view, what can policy makers do to facilitate venture creation?". An overview of the answers to these questions is given in Table 6.4. Almost every founder had at least one suggestion of how venture creation could be facilitated by the government. The suggestions often mirror the obstacles encountered during venture creation. Accordingly, measures to alleviate bureaucracy and facilitate access to finance are listed amongst the top priorities by the founders. The respondents suggested to facilitate venture creation by reducing bureaucracy in almost 18% of all cases, to simplify bureaucratic procedures through online tools in more than 4% of responses, and to eliminate the need for a notary or to provide a notary in, together, almost 4% of cases.

Next to that, some broader suggestions were made about how to facilitate the formalities related to venture creation, namely an easier availability or accessibility of information about how to start a business (almost 5%) and better guidance of how to proceed when setting-up a new venture (slightly more than 3%). Taken together, suggestions related to facilitating administrative formalities amount to one third of all suggestions made, which illustrates the potential of this area for policy improvements.

In order to alleviate the financial constraints on nascent ventures, the respondents suggested to reduce taxes for small businesses (in more than 8% of all answers), to facilitate access to financial capital (almost 14% of responses), and to establish procedures to better detect which ventures are seeking investment (1.6% of all responses). Finance-related policy improvements make up a quarter of all policy suggestions, thus constituting another area of substantial concern.

While founders also followed-up on the third group of obstacles encountered by suggesting that constant policy changes should be avoided, this suggestion was made

Table 6.4 Results survey on suggested policies in Italy

In your view, what could policy makers do to facilitate venture creation?	Times mentioned	In %
Nothing	3	1.6
Does not answer question	13	6.8
Reduce bureaucracy	34	17.7
Facilitate financing for small businesses	26	13.5
Reduce tax rates for small businesses	16	8.3
Provide incentives for hiring people	13	6.8
Provide better training to people for starting businesses	9	4.7
Provide better information about how to start a business	9	4.7
Reduce time and difficulty of bureaucracy through online procedure	8	4.2
Provide guidance	6	3.1
Eliminate the need to have a notary for registration	4	2.1
Provide notary	3	1.6
Help market start-ups	3	1.6
Provide better networking opportunities	3	1.6
Avoid constant policy changes	3	1.6
Establish procedures to better detect whom to fund	3	1.6
Provide accountant	3	1.6

Note

in 1.6% of cases. The third major block of policy recommendations, therefore, does not relate to more stable policies. Instead, it refers to facilitating access to human capital. Accordingly, founders suggested in almost 7% of their answers that policy makers should provide incentives for hiring people, in almost 5% of cases that people should be better trained in entrepreneurial skills, and in almost 2% of cases that an accountant should be provided to nascent ventures.

Finally, and unrelated to the hurdles they reported above, some founders also see a role for the government in helping to market the products/services of start-ups (1.6%) and to provide networking opportunities (1.6%).

Overall, we, thus, find general support for the weaknesses identified in the above historical and quantitative analyses. Most importantly, Italy's founders point to the tedious bureaucratic processes as a major obstacle and, accordingly, for policy improvements. At a more general level, these suggestions can be interpreted as an invitation to move away from a non-transparent and heavy toward a leaner way of establishing new ventures. In addition, the call for easier access to human and financial capital reflects the insights gained from our analyses of the previous

^{1.} Based on interviews with 133 founders mentioning 192 suggestions (more than one suggestion could be mentioned)

^{2.} Only suggestions mentioned three times or more are reported in the table Source Authors' own compilation

sections. Founders are signaling a lack of information and training and call for a more stable policy environment. We interpret this as general support for a more fundamental reform approach that creates the institutional support for those providing such services and knowledge.

6.3.4 Conclusions

In sum, the survey has confirmed most of the weaknesses identified in Sect. 6.2, but also provided some interesting additional insights. For example, the need to create a stable institutional framework that is above all transparent and clear is information that is hard to gather from quantitative data alone. The survey was, therefore, useful in nuancing some of the previous results.

Yet, when asked for the most important barriers encountered and possible policy remedies, founders—rather obviously—mention those points which they met in their personal experiences. While there certainly is valuable information in this experience, it is important to base policy recommendations on a broader basis by combining personal experiences with information of encompassing datasets. Taken together, the triangulation of our historical, quantitative and qualitative information for Italy reveals sufficient information to draw up a tentative diagnosis and turn to treatments.

6.4 Step 4: Mapping onto the FIRES-Reform Proposals

In the previous sections, we have considered the history of Italy, used an advanced diagnostic tool to scan for her most urgent problems, and asked founders how they felt and what they believed would be good treatments. Based on all this information, we can come to a diagnosis and map that diagnosis onto the menu of treatments developed in Elert et al. (2019) to propose a course of action that best fits the patient.

Italy has a long and proud history. Many of the institutions that shape an entrepreneurial society today have their roots in Italy. Italy has seen the birth of modern banking, invented intellectual property rights protection, and boasts the oldest surviving universities in the world. Consequently, Italy features a highly innovative small- and medium-sized entrepreneurial sector that competes at the global level. Innovative entrepreneurship has deep historical roots in Italy.

But time has progressed while the quality of the Italian entrepreneurial ecosystem seems to have eroded. The Italian data show quite serious weaknesses and importantly significant imbalances across the pillars that make up the REDI. Italy still performs quite well on innovation and technology absorption, but this is not complemented by a supportive culture, networks, and human capital. To face the challenges of the future, Italy will have to build on its historical strengths but should urgently address these bottlenecks. Fortunately, our regional analysis has shown that the same weaknesses hold back entrepreneurship across the country, despite significant and lasting overall

level effects between regions in the North and Center, and the South. This implies that Italy can strengthen its entrepreneurial ecosystem in all regions by boosting human capital investments and, more importantly, opening up opportunities for the young and talented to engage in productive and innovative venturing across Italy. In the recent crisis, but also before, Italy has experienced an exodus of talent. It seems there are more opportunities abroad than at home and young Italians are entrepreneurial enough to go after them.

Of those that stayed and started up ventures in Italy, we heard complaints about cumbersome bureaucracy resulting in lacking growth ambitions and stunted economic dynamics. Our survey among Italian founders also revealed that complexity of the tax system, an inefficient judicial system, and cumbersome bureaucratic requirements add to the uncertainties that entrepreneurs already face and put a break on venture creation.

Taking this diagnosis to our menu of policy interventions and reform proposals in the companion volume of this book (Elert et al. 2019), we have selected what we believe to be fifteen suitable interventions for Italy. They are listed in Table 6.5. In Column 1, we find the number under which they were presented in Elert et al. (2019). Column 2 lists the policy area and 3 the proposal, where Column 4 gives our motivation for the case of Italy tying it in with the analysis presented above.

The first proposal (1) resulted from the discussions we have had with Italian founders in our surveys and was confirmed in a literature search. The need for simplicity, transparency, and predictability is high in any business venture, but certainly important in entrepreneurial ones where technical and market uncertainty is already high. Adding legal, bureaucratic, and fiscal uncertainties and complexities to this mix is not productive.

The set of fiscal and financial reform proposals (6, 8, 13 and 19) aim to eliminate that uncertainty in the tax sphere, and at the same time leave more financial resources in the hands of the people who can invest it in small amounts and in more experimental ventures at arm's length. When combined with investment in a reliable ICT infrastructure that can support the emergence of platform-based finance, this may prove a powerful push toward the decentralization of entrepreneurial finance. Still, we chose to focus first on setting the framework conditions for such a strategy to work. Proposal 19, instead, aims to strengthen Italy's traditionally diverse, decentralized, and deeply rooted system of local banking, that would also benefit from intermediating more privately held and managed wealth.

The proposals referring to Italian labor market institutions (23, 25, 27 and 31) all aim to mobilize labor across regions, sectors, and jobs, while at the same time maintaining a social security level that people are by now accustomed to in Italy. This balancing act involves making social security entitlements less conditional and more portable, while reducing job protection and barriers to job mobility.

Reducing barriers to new business formation (32) is a direct and obvious proposal in light of our aim to promote a more entrepreneurial society in Italy. New ventures typically come in the form of new businesses and organizations that need to be established also formally before they can reach their full potential. At the same time, we propose (40) to also carefully monitor these new firms and collect and disseminate the knowledge that is gained, even, or perhaps especially, when new businesses fail.

 Table 6.5
 FIRES-reform proposals for Italy^a

No.	Policy area	Proposal	Italy
1	The rule of law	Strengthen monitoring and enforcement mechanisms to improve and safeguard the performance of all member states on rule of law, protection of property rights, and government effectiveness.	It takes too long to settle commercial disputes in civil cases. This creates uncertainty and works in the advantage of large, established, and incumbent firms. An entrepreneurial society needs fast, predictable, and clear legal proceedings to thrive. A lot has been done, but more is needed still.
6	Corporate income taxation	Eliminate discrepancies between statutory and effective corporate income tax rates.	This is a general advice we would give to the European Commission that also applies to Italy. Founders in Italy complain about taxes but more than their level, their complexity and unpredictability make growing a firm unattractive. Simplification and transparency are more important than lowering the levels and granting tax complex exemptions and deductions.
8	Dividend and capital taxation	Countries should aim for low dividend and capital gains tax rates with few exceptions and few (opaque) concessionary schemes.	A tax system benefits from an occasional cleaning-up. Simplicity and transparency should be the goal, not necessarily reducing rates for targeted groups. But at an overall tax pressure of 64% against 40.8% in Europe, Italy should also reduce taxes, especially on the sources of income that matter most to new ventures and their financiers.
13	Private wealth	Allow for more wealth to accumulate and remain in private hands and make it possible, easy and attractive to invest such wealth in entrepreneurial ventures.	Italy has a strong family-based tradition. This creates opportunities also for financing ventures, especially in their early stages. Italy could consider banking on extended family ties to increase the flow of financial resources into entrepreneurship. The Anglo-Saxon Angel and VC model may be less appropriate in the Italian context, given the lack of skills and incompatibility with its deep-rooted informal institutions.

(continued)

Table 6.5 (continued)

No.	Policy area	Proposal	Italy
19	Banks	Increase the mandatory equity ratio in banking gradually to 10–15% to allow them to take on more risk responsibly in their lending portfolios.	Italy still has a rather diverse and locally embedded banking system. This can be an asset in the entrepreneurial society, but these small, local banks are increasingly brought under European rules and supervision made for large, system banks. By requiring higher equity in banks, they can justifiably engage in riskier but also in the long run more productive lending, while diversity ensures stability in the system.
23	Employment protection	Relax the stringency of employment protection legislation for permanent contracts.	Italy has already implemented some fundamental reforms in the labor market in recent years. In part, this was done under pressure of the financial and Euro crisis and external creditors. The general direction of these reforms was the right one, but more can be done. Specifically, the "reinstatement" provision in employment protection is often mentioned as a burden on small and young firms. In reforming its labor markets, Italy should not forget that of the Mixed Market Economies it is actually closest to the Coordinated Market Economies and should seek to combine individual flexibility with reliable social security.
25	Employment protection	Lift the legal enforceability of confidentiality agreements between employers and their employees.	Specifically, for Italy, this proposal should be understood in light of the overall argument for investment in mobility and reducing barriers for switching jobs, industries and occupations. This will create opportunities for the young and talented to remain actively engaged in Italy and reduce the brain drain to the rest of Europe and the world.

(continued)

Table 6.5 (continued)

No.	Policy area	Proposal	Italy
27	Social security	Carefully consider the impact of flexicurity reforms on young firms and do not force them to take on excessive risks and burdens.	It is tempting for governments with tight budgets to have employers pick up the bill for their employees' training, mobility and social security. This, however, tends to reduce mobility and strengthens the insider–outsider effect. On the labor demand side, such schemes work in (relative) favor of large firms and block young firms' expansion. This keeps youth unemployment up and pushes also educated Italian youngsters to leave the country.
31	Active labor market policy	Establish or strengthen training programs to prepare workers for new occupations.	In a more flexible labor market, more flexible and mobile employees are key. Italy will not be isolated from technological and economic trends and flexibility is needed to engage opportunities and exit declining jobs, industries and trades. We propose Italy invests in the flexibility of its workforce. To the extent that people underinvest in their own flexibility due to behavioral biases and information asymmetries, public interventions and finance can be justified.
32	Entry barriers	Excessive barriers to new business formation and new entry should be lifted where possible.	Key in this proposal is the word "excessive." Founders in Italy report quite a wide variety of bureaucratic and administrative barriers to starting up a venture in Italy. Some of these barriers may serve a valid purpose, but simplicity, transparency and predictability are essential. Data shows Italian SMEs spend 52% more time dealing with bureaucracy than their European competitors and WEF ranks Italy 44th on doing business index. There is a lot of room for improvement.

(continued)

 Table 6.5 (continued)

No.	Policy area	Proposal	Italy
40	Insolvency	Setup publicly funded "entrepreneurial knowledge observatories" where knowledge accumulated in the entrepreneurial process is collected, curated and freely diffused.	Creating a real hub, rich in events, infrastructure, and networking between teams could be useful for the Italian entrepreneurial ecosystems. This involves concentration. Today Milan (14.7%), Rome (8.5%) and Turin (4.7%) have less than 30% of the total number of start-ups. Our research has shown how geographical proximity is important for success. It is a tough choice, but it would be useful to invest in a start-up capital (Milan) that can perform a national function.
41	Education system	Reforms in primary and secondary education should provide pupils with a solid and coherent knowledge base and promote initiative, creativity and a willingness to experiment.	Italy's educational system can be characterised as traditional. The state sets the curriculum, provides uniform tests, and most children attend public schools. The curriculum is demanding, geared toward cognitive skills and textbook based, leaving little room for creativity and diversity. Italy considers its educational system of high quality, but making pupils work hard is not the same as teaching them useful skills. Countries ranking high on, e.g., the WEF, OECD and EU rankings, such as Finland and Norway have less homework and formal testing and more autonomy for highly trained and well-paid professional teachers. Italy should consider reforms in that direction.
42	Education system	Promote STEM education and English as a (mandatory) second language early on and then throughout educational career.	Italy ranks 20 out of 27 EU countries plus Turkey when it comes to knowledge of English as a second language. This is a handicap when Italy seeks to compete at the EU or global level. Italy scores around rank 30 out of 80 in the OECD PISA-scores on Math and Science behind countries like the Czech Republic and Luxemburg while on STEM topics Italy has EU average levels of enrollment but high levels of dropout. The situation can be improved by reforming curricula in primary and secondary education and ensure that sufficient vocational tertiary educational options exist in Italy.

Table 6.5 (continued)

No.	Policy area	Proposal	Italy
44	Universities/Entrepreneurial clusters	The link between universities and external stakeholders should be strengthened by encouraging universities to stimulate entrepreneurial initiatives and university spin-offs.	Many Italian universities started offering courses focused on entrepreneurship. Courses usually taught by a researcher with no work experience outside academia, and no experience in start-ups. The average curriculum therefore deals with writing business plans and how to get financing. Italy lacks a start-up culture and those trying to provide it have no hands-on experience. This is not easy to address, but a good start would be to promote the involvement of entrepreneurs in (academic) curricula and opening up universities to external stakeholders.
45	Universities/Entrepreneurial clusters	Both the EU and its member states should create healthy, well-funded, academic institutions that allow Europe's most talented academics to pursue their research interests.	For the Italian context, it is important to open up its academic institutions. Many reforms have already been undertaken, but most in a time of aging, financial constraints, and budget cuts. With vested interests and gilded contracts hard to reform, the rate at which Italian academic institutions open up for competition and meritocracy is slow. It makes little sense to spend a lot of money on institutions before such structural issues have been addressed. Unfortunately, the (poor) students, not the aging staff is driven out.

Source Authors' own compilation

Finally, we propose Italy should consider urgent reforms to its educational system (41, 42, 44 and 45) to ensure its young and talented are better prepared for a future in a more entrepreneurial Italy. This starts in primary schools and even earlier, with a reorientation on creativity and experimentation, whereas English proficiency and STEM topics will prepare Italian youths for a future in a globalized and technologically rapidly changing economy. Meanwhile, Italy's established academic institutions should open up to the world outside of academia, preferably from a genuine position of scholarly curiosity and interest, rather than driven by financial and policy incentives.

^aNumbered as in Elert et al. (2019)

The proposals, individually and in combination, aim to strengthen the knowledge base and talent pool from which Italian entrepreneurs can draw and aim to open opportunities for not only starting but also growing firms in all regions in Italy. All Italian regions stand to benefit from these interventions. However, the fact that density and clustering tend to promote the quality and impact of entrepreneurial venturing will imply that the same policy improvements benefit the already prosperous regions most. Still, that should not stop policymakers from pursuing these interventions as it is the Italian citizens, not its regions per se that governments should care about. Creating opportunities for Italian entrepreneurs in a few entrepreneurial hotspots is better than not creating such opportunities at all, also for people living in regions that do not have such hotspots.

Of course, these proposals will need a much more detailed discussion and form the starting point, not the final word on the policy agenda. Moreover, even if adopted, our proposals all require careful implementation and evaluation to complete the 7-step policy cycle presented in Chap. 1 of this volume. But based on our analysis of the situation, we proposed Italy consider this set of interventions to build up its strengths and restore health to its ailing entrepreneurial ecosystem. To conclude this chapter, we now turn to the discussion of these proposals in their proper policy context.

6.5 Step 5: the FIRES-Reform Proposals in Light of the Countries' Historical, Geographical and Institutional Context

To put our proposed reform program in its proper context, it is important to discuss the diagnosis and proposed treatments with experts in the field. In this case that is Italian policy makers that are active in the field every day. Moreover, given the wide diversity of policy areas involved, it is important to not only discuss this with policy makers that are active in "entrepreneurship policy" in the narrow sense. Our approach emphasizes the importance of reforming institutions that determine the allocation of financial, labor, and knowledge resources to entrepreneurial activity in the broadest and most inclusive sense of the word. Broadening the scope was motivated by the fact that entrepreneurship policy in the narrow sense has been around for some three decades or more, also in Italy, and to date has achieved only limited success.

Because of its breadth, our reform agenda inevitably cuts across many policy areas, traditionally less associated with entrepreneurship policy, including, for example, wealth taxation, financial and labor market regulation, social security, and science policy. As the institutions in these areas have evolved historically and policy makers in these areas pursue different, equally relevant, public policy priorities, the challenge is to discuss the proposed agenda in sufficient depth, but with a sufficiently diverse group of policy makers and practitioners. Policies and institutions in these different areas overlap and interact in ways that affect the quality and performance of the entrepreneurial ecosystem (Stam 2015, 2018). The challenge is to not only propose

policies and reforms that will strengthen the ecosystem, but to do it in such a way that other important policy priorities are also achieved.

In order to receive a first round of feedback on the proposals for Italy presented in Table 6.5, a policy round table was held at the CDP Group (*Cassa Depositi e Prestiti*) in Rome on March 5, 2018. This step can be seen as an attempt to allow our patient, or perhaps more accurately, her team of medical specialists, intimately familiar with our patient, to give feedback about our diagnosis and proposed treatments. What proposals would this team endorse, question or maybe want to drop?

In this policy round table, the diagnosis presented above was broadly shared among the participants. The group included representatives from the Bank of Italy, the OECD, UNCTAD and the Italian Ministry of Economic Development (Sanders and Grilli 2018). Participants recognized the encumbered bureaucracy and inflexible educational system as well as the long-standing North–South divide and issues of effective and high-quality governance. There was general consensus that universities could function as catalysts by playing a more important role in supporting financial education and putting entrepreneurship at the center of the stage. Another important deficiency in the Italian entrepreneurial ecosystem is the shortage of dedicated networking events. Italy has many, small, high-quality centers of excellence, but they lack mass and local governments could act to improve this situation. Participants added that it is also important to improve attitudes toward risk taking and reduce the cultural stigma arising from failure.

Given the background and natural inclinations of the host institution, there was perhaps a slight bias in the selection of participants and emphasis on financial policies and institutions in Italy, even when these issues did not stand out as the main bottleneck in Italy in our diagnosis. This fact was recognized in the group, but as many were interested in and actively involved in financial policy making, the issue was still on the table. Concerning financing issues and venture capital, it was mentioned that the small VC industry may not only be a result of insufficient demand for this type of capital. It may also stem from the VC lack of competencies and a shortage of professional skills in this area. Crowdfunding platforms providing an alternative route to financing scale ups and exits, may fit well with the Italian tradition of family-based share holdings and finance and preserve an orientation on long-run value creation.

There were also weaknesses that were not mentioned in our analysis so far but were deemed important. Public procurement and the governance of the public administration were considered to be the most prominent problems by many participants. Too many ministries and public bodies are responsible for too many parts of a too complex puzzle. In addition, there is a problem with the quality of governance in general and of innovation and entrepreneurship policy specifically due to an aged workforce with outdated skills in the public sector—only 40% of Italian civil servants hold a university degree and the share of central government employees below the age of 35 is just 2.2%. High levels of job protection in civil service make it difficult to change these numbers, but it is evidently a problem when young and dynamic entrepreneurs have to deal with an ossified and outdated civil service.

Finally, all participants stressed the need to implement policies to promote the formation and strengthening of industrial districts. The benefits of knowledge spillovers, agglomeration, and scale can only be realized in specialized districts. The resulting geographical heterogeneity should not be politically opposed but rather be managed and accomodated. Consequently, there was a great attention from all stakeholders for the geographical dimension that is considered crucial for triggering virtuous dynamics in the Italian entrepreneurial ecosystems.

6.6 Conclusions

This chapter on Italy illustrates the FIRES-approach to formulating a tailored institutional reform strategy to promote a more entrepreneurial society in Europe. It shows how the tools, discussed and introduced in the first part of this volume, have been used to systematically analyze the situation in Italy. After carefully analyzing Italy's historically rooted institutional foundations, this chapter triangulated historical, qualitative, and quantitative information to identify Italy's strengths and weaknesses. Based on this diagnosis the most relevant proposals were then selected from the menu of policy interventions and reform proposals in the companion volume of this book (Elert et al. 2019).

We conclude that many of the institutions that shape an entrepreneurial society have their roots in Italy. Italy has seen the birth of modern banking, invented intellectual property rights protection, and has the oldest universities in the world. Even today, Italy boasts a highly innovative small- and medium-sized entrepreneurial sector that competes on quality at the global level.

Italy could strengthen its entrepreneurial ecosystem in the area of boosting human capital investments and more importantly, opening up opportunities for the young and talented to engage in productive and innovative venturing in Italy. In the recent crisis Italy has seen an exodus of talent. This diaspora perhaps had benefits in the past. It created demand for Italian products abroad and served as an alternative for high domestic unemployment. But with an aging and shrinking population, such an exodus is a bad sign that suggests there are more opportunities abroad than at home. When those that do stay and start-up ventures then complain about cumbersome bureaucracy resulting in lacking growth ambitions and stunted economic dynamics, there is a clear reason to act.

The chapter discussed proposals concerning the legal system, the mobility of talent, and the regulatory burden for new firms. It also discussed reforms of the tax and educational system and presented suggestions about how to improve the flow of financial resources into experimenting firms. The proposals, individually and in combination, aim to strengthen the knowledge base and talent pool from which Italian entrepreneurs can draw and aim to open opportunities for not only starting but also growing firms in all regions in Italy. Both North and South stand to benefit from these interventions. Of course, these proposals will need a much more detailed discussion

and only form the starting point, not the final word in the policy debate. Moreover, even if eventually adopted, our proposals all require careful implementation and evaluation to complete the FIRES Seven Step cycle.

References

Acs ZJ, Autio E, Szerb L (2014) National systems of entrepreneurship: measurement issues and policy implications. Res Policy 43(3):476–494. https://doi.org/10.1016/j.respol.2013.08.016

Acs ZJ, Szerb L (2009) The global entrepreneurship index (GEINDEX). Found Trends Entrep 5(5):341–435. https://doi.org/10.1561/0300000027

Allini A, Ferri L, Maffei M, Zampella A (2017) The effect of perceived corruption on entrepreneurial intention: evidence from Italy. Int Bus Res 10(6):75–86

Barbagallo F (2001) Italy: the idea and the reality of the nation. J Mod Ital Stud 6(3):388-401

Baum CF, Munro JM, Schachter G (1990) Structural change and economic development in Southern Italy. J Dev Stud 27(1):54–71

Beccalli E, Girardone C (2016) Banking in Italy. In: Beck T, Casu B (eds) The Palgrave handbook of European banking. Palgrave Macmillan, London, pp 521–540

Bertola G (1990) Job security, employment and wages. Eur Econ Rev 34(4):851-879

Boeri T, Jimeno JF (2005) The effects of employment protection: learning from variable enforcement. Eur Econ Rev 49(8):2057–2077

Bohlen C (1996) North-South divide in Italy: a problem for Europe, too. New York Times. Retrieved from: http://www.nytimes.com/1996/11/15/world/north-south-divide-in-italy-a-problem-for-europe-too.html

Boland V (2009) Modern dilemma for world's oldest bank. Financial Times, June 12. Retrieved from: https://www.ft.com/content/a034542e-5771-11de-8c47-00144feabdc0

Boldrin M, Levine DK (2008) Against intellectual monopoly. Cambridge University Press, Cambridge

Bottazzi L, Da Rin M (2002) Venture capital in Europe and the financing of innovative companies. Economic policy 17(34):229–270

Calmfors L, Driffill J (1988) Bargaining structure, corporatism and macroeconomic performance. Economic policy 3(6):13–61

Carinci F (2015) Labour law and industrial relations in Italy: update to the jobs act (no. 183-2014). IPSOA/Wolters Kluwers, Milano

Castellani D (2018) Mortgage-backed securitization and SME lending during the financial and economic crisis: evidence from the Italian cooperative banking system. Econ Notes 47(1):187–222

Cazzola F (1988) Della corruzione. Il Mulino, Bologna

Cirillo V, Fana M, Guarascio D (2017) Labour market reforms in Italy: evaluating the effects of the jobs act. Econ Polit 34(2):211–232

Coccorese P (2013) Assessing the competitive conditions in the Italian banking system: some empirical evidence. PSL Q Rev 51(205):171–191

D'Attore PP (1987) Italian reconstruction and "depressed areas": the Marshall plan in the Mezzogiorno. Center for European studies working paper series no. 11. Harvard University

De Roover R (1999) The rise and decline of the Medici bank: 1397–1494. Beard Books, New York Dilli S, Elert N, Herrmann AM (2018) Varieties of entrepreneurship. Exploring the institutional foundations of different entrepreneurship types through 'varieties-of-capitalism' arguments. Special issue on "financial and institutional reforms for an entrepreneurial society." Small Bus Econ, 51(2):293–320

Dilli S, Henrekson M, Westerhuis G (2016) The institutional evolution of labour market institutions in Europe and entrepreneurship. Retrieved from https://projectfires.eu/wp-content/uploads/2017/09/D2.5-The-Institutional-Evolution-of-Labour-Market.pdf

D'Onza G, Brotini F, Zarone V (2017) Disclosure on measures to prevent corruption risks: a study of Italian local governments. Int J Public Adm 40(7):612–624

Duggan C (2013) A concise history of Italy. Cambridge University Press, Cambridge

ECB (2017) Report on financial structures 2017. ECB, Frankfurt

Economist (1999) Those Medici. Retrieved from http://www.economist.com/node/347333

Economist (2017) Italy's fourth-biggest bank returns to the stock market. Retrieved from https://www.economist.com/news/finance-and-economics/21730672-shares-bailed-out-bank-start-trading-again-italys-fourth-biggest-bank

Elert N, Henrekson M, Sanders M (2019) The entrepreneurial society: a reform strategy for the European Union. Springer, Berlin

Eurofound (2009) Italy: 'wage formation'. Retrieved from https://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/italy/italy-wage-formation

Ferrera M (2005) Welfare states and social safety nets in Southern Europe: an introduction. In: Ferrera M (ed) Welfare state reform in southern Europe: fighting poverty and social exclusion in Greece, Italy, Spain and Portugal. Routledge, London, pp 1–24

Frumkin M (1945) The origin of patents. J Pat Off Soc 27(3):143-149

Gall G (1999) A review of strike activity in Western Europe at the end of the second millennium. Empl Relat 21(4):357–377

Garelli F (2007) The public relevance of the church and Catholicism in Italy. J Mod Ital Stud 12(1):8–36

Gerschenkron A (1962) Economic backwardness in historical perspective: a book of essays. Belknap Press of Harvard University Press, Cambridge, MA

Goddard J, Molyneux P, Wilson JO, Tavakoli M (2007) European banking: an overview. J Bank Finance 31(7):1911–1935

Goldthwaite RA (1995) Banks, palaces and entrepreneurs in renaissance Florence. Variorum, Aldershot

Golpe AA, Millán JM, Román C (2008) Labor market institutions and entrepreneurship. In: Congregado E (ed) Measuring entrepreneurship: building a statistical system. Springer, New York, NY, pp 279–296

Graubard SR, Cavazza FL (1974) Il caso italiano. Garzanti, Milano

Hassel A (2014) Adjustments in the Eurozone: varieties of capitalism and the crisis in Southern Europe. LSE Europe in question discussion paper series no. 76/2014

Held L (2019) Part-time entrepreneurship: the role of institutions, venture and individual characteristics in entry and transition choices. In: Held L (ed) Unravelling the patterns in venture creation processes, Ph.D. thesis. Utrecht University, Utrecht, pp 25–55

Held L, Herrmann AM, Polzin F (2018a) Follow the money: the funding acquisition process of nascent ventures. Horizon 2020 Project on "Financial and Institutional Reforms for an Entrepreneurial Society" (FIRES), Workpackage 5, Deliverable 5.1; currently under review. Also available in Held L (2019) Unravelling the patterns in venture creation processes. Ph.D. thesis. Utrecht University, Utrecht, pp 91–122

Held L, Herrmann AM, Storz C (2018b) Whom do nascent ventures search for? Variance of linkage formation activities during new product development processes. Horizon 2020 Project on "Financial and Institutional Reforms for an Entrepreneurial Society" (FIRES), Workpackage 5, Deliverable 5.1; currently under review. Also available in Held L (2019) Unravelling the patterns in venture creation processes. Ph.D. thesis. Utrecht University, Utrecht, pp 123–150

Herrmann AM (2019) A plea for varieties of entrepreneurship. Special issue on "entrepreneurship in context." Small Bus Econ 52(2):331–343

Herrman AM (2020) On the institutional foundations of the varieties of entrepreneurship in Europe. In: Sanders M, Marx A, Stenkula M (eds) The entrepreneurial society. Reform strategies for Italy, Germany and the UK. Springer, Berlin

- Herrmann AM, Fischer B, Held L (2018) Internationally comparative dataset on start-up processes and their institutional foundations in Germany, Italy, the UK and the US, 1–17. Retrieved from https://projectfires.eu/wp-content/uploads/2018/10/d5.1-combined-complete.pdf
- Henrekson M, Johansson D, Stenkula M (2010) Taxation, labor market policy and high-impact entrepreneurship. J Ind Compet Trade 10(3–4):275–296
- Henrekson M, Sanandaji T (2017) Stock option taxation: a missing piece of European innovation policy? Retrieved from http://www.projectfires.eu/wp-content/uploads/2017/09/Complete-D5.9-submission.pdf
- Hertner P (2016) Starting from scratch? The beginnings of Banca Commerciale Italiana: 1893–1894. In: Hofmann C, Müller M (eds) History of financial institutions: essays on the history of European finance, 1800–1950. Routledge, New York, NY, pp 13–38
- Hoggson NF (2007) Banking through the ages: from the Romans to the Medicis, from the Dutch to the Rothschilds. Cosimo Inc., New York, NY
- Iacobucci D, Micozzi A (2012) Entrepreneurship education in Italian universities: trend, situation and opportunities. Education+Training 54(8/9):673–696
- Ichino A, Maggi G (2000) Work environment and individual background: explaining regional shirking differentials in a large Italian firm. Q J Econ 115(3):1057–1090
- Kertzer DI (1980) Comrades and Christians: religion and political struggle in communist Italy. Cambridge University Press, Cambridge
- Lazear EP (1990) Job security provisions and employment. Q J Econ 105(3):699-726
- Leonardi M, Pica G (2006) Effects of employment protection legislation on wages: a regression discontinuity approach. University of Milan, Mimeo
- Liberati D, Marinucci M, Tanzi GM (2016) Science and technology parks in Italy: main features and analysis of their effects on the firms hosted. J Technol Transfer 41(4):694–729
- Long PO (1991) Invention, authorship, "intellectual property," and the origin of patents: notes toward a conceptual history. Technol Cult 32(4):846–884
- MacDonald SB, Gastmann AL (2000) A history of credit and power in the Western world. Transaction Publishers, London
- Maynard JT (1980) Understanding chemical patents. A guide for the inventor. Anal Chem 52(6):660A-660A
- Ministero dello Sviluppo Economico (n.d.) Small business act. Retrieved from http://www.sviluppoeconomico.gov.it/index.php/it/impresa/piccole-e-medie-imprese/small-business-act
- Ministero dello Sviluppo Economico (2009) Small business act: le iniziative in materia di sostegno alle pmi nell'europa A 27. Retrieved from http://www.sviluppoeconomico.gov.it/images/stories/recuperi/Notizie/SBA27_2009.pdf
- Ministero dello Sviluppo Economico (2012) Restart Italia! Report of the task force on startups set up by the ministry of economic development
- Ministero dello Sviluppo Economico (2017) Italia start-up visa hub, 4th quarter report. Summary of the main findings, 31 Dec 2017
- Moradei G (2009) Patent information in Italy. World Pat Inf 31(1):19-31
- Nicoletti G, Scarpetta S, Boylaud O (1999) Summary indicators of product market regulation with and extension to employment protection legislation. OECD working paper no. 226
- Panunzi F (2012) Contro il monopolio sulla proprietà intelletuale. Lavoce. Retrieved from http://www.lavoce.info/archives/27450/contro-il-monopolio-sulla-proprieta-intellettuale/
- Politecnico di Bari (n.d.) History. Retrieved from http://www.en.poliba.it/university/history
- Politecnica delle Marche (2017) Historical highlights: the origins. Retrieved from http://www.univpm.it/Entra/Informations_about_University/Historical_Highlights
- Politecnico di Milano (n.d.) Towards the present. Retrieved from https://www.polimi.it/en/university/history/towards-the-present/
- Politecnico di Torino (n.d.) History. Retrieved from https://www.polito.it/ateneo/storia/index.php? lang=en
- Raulli L (2017) Transformation of the Italian labor market under the Renzi government: explaining the shift to flexicurity. Master Thesis, Ludwig-Maximilians-Universität, München

- Regini M (1997) Still engaging in corporatism? Recent Italian experience in comparative perspective. Eur J Ind Relat 3(3):259–278
- Rolfo S, Calabrese G (2003) Traditional SMEs and innovation: the role of the industrial policy in Italy. Entrep Reg Dev 15(3):253–271
- Salvador E (2010) Are science parks and incubators good "brand names" for spin-offs? The case study of Turin. J Technol Transf 36(2):203–232
- Sanders M, Grilli L (2018) Policy Roundtable Report. Retrieved from https://projectfires.eu/wp-content/uploads/2018/05/d5.12-roundtable-report-italy.pdf
- Scherer FM (1965) Firm size, market structure, opportunity, and the output of patented inventions. Am Econ Rev 55(5):1097–1125
- Schmookler J (1966) Invention und economic growth. Harvard University Press, Cambridge, MA Simonini R (1954) The universities of Italy. Bull Am Assoc Univ Profr (1915–1955) 40(4):563–592 Sirilli G (1986) The researcher in Italy: a profession in search of recognition. Res Policy 15(6):329–
- Spanò R, Ferri L, Fiondella C, Maffei M (2017) Accountability and reporting in the fight against corruption: preliminary evidences from the Italian setting. Int J Bus Manag 12(4):1–9
- Spanò R, Paola ND, Caldarelli A, Vona R (2016) Accountants' hybridization and juridification: a critical reflection on the fight against organized crime. Public Money Manag 36(6):441–446
- Spooner DJ (1984) The southern problem, the Neapolitan problem and Italian regional policy. Geogr J 150(1):11-26
- Stam E (2015) Entrepreneurial ecosystems and regional policy: a sympathetic critique. Eur Plan Stud 23(9):1759–1769
- Stam E (2018) Measuring entrepreneurial ecosystems. In: O'Connor A, Stam E, Sussan F, Audretsch DB (eds) Entrepreneurial ecosystems. Springer, Cham, pp 173–197
- Statute of Politecnico di Torino (2011) Retrieved from https://www.swas.polito.it/services/docuff/default.asp?id_documento_padre = 10358
- Sylla R (2002) The role of the banks. In: Sylla R, Toniolo G (eds) Patterns of European industrialisation: the nineteenth century. Routledge, New York, NY, pp 45–63
- Szerb L, Lafuente E, Horváth K, Páger B (2019) The relevance of quantity and quality entrepreneurship for regional performance: the moderating role of the entrepreneurial ecosystem. Reg Stud 53(9):1308–1320. https://doi.org/10.1080/00343404.2018.1510481
- Szerb L, Vörös Z, Komlósi É, Acs ZJ, Páger B, Rappai G (2017) The regional entrepreneurship and development index: structure, data, methodology and policy applications. Retrieved from http://www.projectfires.eu/wp-content/uploads/2018/07/d4.4-the-regional-entrepreneurship-and-development-index_-structure-data-methodology-and-policy-applications.pdf
- Tabellini G (2010) Culture and institutions: economic development in the regions of Europe. J Eur Econ Assoc 8(4):677–716
- Tiraboschi M (2012) Italian labour law after the so-called Monti-Fornero reform (law no. 92/2012). E-J Int Comp Labour Stud 1(3–4):47–86
- Unioncamere (2005) Le nuove imprese in Italia 1998–2002—Osservatorio Unioncamere sulla demografia delle imprese. FrancoAngeli, Milan
- Universita di Bologna (n.d.) The numbers of history. Retrieved from http://www.unibo.it/en/university/who-we-are/our-history/the-numbers-of-history
- Varga A, Szerb L, Sebestyén T, Szabó N (2020) Economic impact assessment of entrepreneurship policies with the GMR-Europe model. In: Sanders M, Marx A, Stenkula M (eds) The entrepreneurial society. Reform strategies for Italy, Germany and the UK. Springer, Berlin
- Viesti G (2016) Fondazione Res. Università in declino. Un'indagine sugli atenei da Nord a Sud. Donzelli, Rome
- Wiarda HJ (1997) Corporatism and comparative politics: the other great "ism". M.E., Sharpe, Armonk, NY

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

