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The Strategic Management of Places: Applying a Framework to Analyze Local Economies

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Abstract The introduction to this book details the central problem at hand—how can localities work toward sustainable economic success, and what tools are available to help in that process? Starting by presenting the Strategic Management of Places Framework, this chapter puts forward a unique and more holistic way of addressing this issue. Following this, each individual component of this theoretical framework is then broken down and explained in detail, and practical cases demonstrating each component are also explicated so that the reader can easily conceive how these concepts can be practically implemented. After these in-depth examinations of the core tenets of the framework, the roadmap for the rest of the book is laid out and an overview of the countries and regions of the case studies in the book is provided.

1 Introduction

If we are to understand sustained economic growth on a trajectory of different sets of recourses and input factors based increasingly on the endowment of a place to harness them (Solow, 1956), we then must acknowledge that a broad “one strategy fits all places” approach to fostering regional economic development is misleading. As Audretsch (2015a) has stressed, economic progress largely depends on strategic choices made by key actors (e.g., governments, firms, institutions, organizations, and individuals) in places (e.g., municipalities, regions, and states) to effectively and efficiently manage or augment the input factors available in that place, be they natural or knowledge resources, specific labor capacities or infrastructure.

Solow (1956) once stated that all efforts to describe differences in economic growth using culture are too spurious. Consequently, they must “end up in a blaze of

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amateur sociology” (Krugman, 1991, p. 93). However, places are characterized by, to some extent, individuals, cultural, and institutional elements (Mokyr, 2016; Putnam, 2000). Therefore, we must regard regional economic development as context-based and grounded in the strategic management of place theory (Audretsch & Feldman, 1996; Audretsch et al., 2020).

If so, the ability to access, analyze, and utilize regional economic inputs is fundamental in setting and determining decision and strategy-making processes within places (Chatzoglou et al., 2018). Out of this resource-based view (RBV), the strategy goal is to evaluate and leverage specific tangible and intangible bundles to gain a competitive advantage (Barney, 1986). Thus, what applies to firms also applies to places; one key to subsequently build and sustain a place’s performance is to deploy resources that competing places cannot imitate, purchase, or substitute (Barney, 1986).

As rapid technological advancements have been reducing transportation and communication costs, it has had profound implications for the way that falling entry barriers have brought global competition into local places and left previously successful strategies in doubt (e.g., Loebbecke & Picot, 2015; Sussan & Acs, 2017). The arising questions are, on one hand, how can firms conform their strategy to a place and its input factors, and on the other hand, how can places identify, make available, and develop their resources and input factors to foster its economic development?

A large and growing body of literature on the strategic management of places provides a window into topics at the heart of economic development. Understanding the problems and proposed strategies may offer not only an explanation for why some places do better and some face struggles but may also address what economists are increasingly analyzing the impact of—culture and institutions, labor economics, entrepreneurship, growth economics, narratives, economic geography, and management studies, among so many others. The purpose of this essay is to detail various categories of regional economic inputs which can be managed for local economic development, provide case study examples of how each category has been successfully managed through strategic decision-making, and to explain how place managers and scholars can observe/measure/analyze these input categories in respective places. This purpose is methodologically achieved through the application of a rigorous theoretical framework for local economic development.

To understand the differing level of economic performance of various places, it is not sufficient to look at the strategic management of firms and places only from a singular perspective. The roots of this paper are based upon Audretsch’s (2015a) *Everything in its Place: Entrepreneurship and the Strategic Management of Cities, Regions, and States*, which links public policy with scholarly literature and valuable experiences from practitioners and professionals in the field of economic development. Inspired by the German concept of *Standortpolitik* (“place policy”), Audretsch (2015a) notes that in local economic development research, “there is no field providing an intellectual framework for decision-making in a manner analogous to the field of strategic management for firms and organizations.” In his argument, influencing the management of a place through the strategic management of different

dimensions is crucial for analyzing and ultimately improving the performance of that place.

Thus, what is still missing is how this framework can be applied in order to create and manage places in a strategic sense. As Audretsch and Lehmann (2017) point out, having a coherent and well-formulated strategy is fundamental to generating a strong performance for a place. Places in the past had not developed the discipline and practice of systematically and explicitly articulating their strategy—usually a strategy combining physical capital with unskilled labor—because, since there was only one strategy available, there was no point in analyzing and reflecting on it; to do so would be squandering precious time and resources. But where could policymakers and place advocates look for guidance and for a framework to help structure a strategy designed to improve their place, particularly in a globalized environment? Where could city and regional leadership find insights as to why some places prosper while others stagnate or deteriorate?

In fact, there were many contributions from a broad spectrum of scholarly fields and academic disciplines that filled the ensuing intellectual void, suggesting new approaches and strategies to deliver a strong economic performance. Contributions did not just come from urban economics; understanding the problem and proposed strategies originated from sociology, innovation and technological change, labor economics, entrepreneurship, growth economics, psychology, business, and management—to name a few. In addition, economic development professionals, ranging from experts on cities, states, and national-based agencies, to non-profit organizations, foundations, and consulting firms, have all contributed their thoughts and wisdom in this arena (Audretsch & Lehmann, 2017).

Out of all this research, thought and practical experience is a diverse set of insights, which taken together provide the basis for identifying and articulating the underlying forces shaping and influencing the performance of a place, along with what a place in turn can do to influence those underlying forces. This framework, based on the insights offered by scholarly research and insights from practitioners, is depicted in Fig. 1.

The framework is organized into four main elements, the three dimensions—(1) *factors of production*, (2) *spatial structure and organization*, and (3) *the human dimension*, and how they interact with one another—ultimately determine the economic performance of a place and are analyzed to effectively develop the fourth element, (4) *public policy* (Audretsch, 2015a, p. 24). The holistic nature of the approach emerges when the individual dimensions, as path-dependent components, form a multifaceted and coherent approach for the strategic management of places, through public policy, to foster a place's improved performance.

The past, present, and the future of economic growth lie with places and that generate both challenges and opportunities. The theoretical and empirical research discussion in each of the following sections represents the individual dimensions of Audretsch's "*Framework for the Strategic Management of Places*." Section 2 reviews the "*Factors of production*." Section 3 provides information on the "*Spatial Structure and Organization*" and Section 4 develops the "*Human Dimension*." Section 5 concludes the paper with "*Public Policy*" implications.

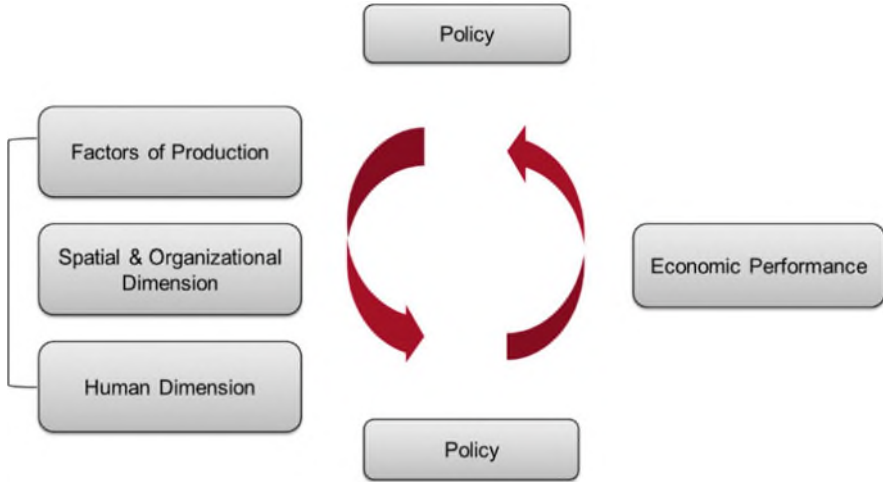


Fig. 1 Framework for the strategic management of places (Audretsch, 2015a, p. 24)

2 Factors of Production and Resources

The first element, factors of production and resources, encompasses a set of factors influencing the performance and strategic competitiveness of a place. This includes not just the traditional factors of natural resources, physical capital, and infrastructure, but also human capital, skilled labor, creative workers, financial capital, and knowledge capital. Just as the resource-based view of the firm has become a cornerstone for the field of strategic management of organizations, the role of factors and resources plays a central role for the strategic management of a place (Audretsch, 2015a).

2.1 Physical Resources

What role can natural resources, such as land, vegetation, mineral, and energy resources play in the economic development of a place? The modern debate on what Chang and Jing (2011) termed as “the foundation of human survival and development” dates back, to the pioneering works of Marshall (1890), Hotelling (1931), and Romer (1986) and has been oscillating between whether natural resources are “a blessing” or a “curse” for a place (e.g., Sachs & Warner, 2001; Barbier, 2005; Dwumfour & Ntow-Gyamfi, 2018). While proponents of positive association emphasize its role as a contributor to economic development, promoting foreign direct investment (FDI), and thus domestic markets (Rosser, 2006), it can be a double-edged sword for places to rely solely on this strategy, leading to the

“resource curse.” In a short period, wealth is generated and supplied by demand, capital, and entrepreneurship in places with abundant natural resources. However, in the long run, large-scale exports based on simple products or resources lead to increased exchange rates and, as a consequence, increased imports, which is ultimately followed by a decline in productivity in a place and an end of its sustained development (Watkins, 1963; Gunton, 2003; Beine et al., 2012; Pegg, 2010).

As there continues to be a fractious debate in the literature leaving the answer unknown, it is more pertinent to focus on how natural resources can be harnessed to guarantee economic growth, as it has in the case of the Champagne region in northeast France. For 350 years, the effervescent wine, champagne, produced from the grapes of the Champagne region, has emerged as the key component of the regional economy as well as a symbol for the entire place itself, fostering both tourism and abundant exports. While the Champagne region’s charm takes the form of local wine houses and cellars and its intangible and cultural landscape attracts wine tourism (Agence Régionale du Tourisme Grand Est, 2022), more than 16,000 wine companies are involved in the production and export of more than 244 million champagne bottles every year, equivalent to EUR 4.2 billion in worth. With the second-largest foreign trade surplus in France and a 20% share of French wines and spirits’ total export value, Champagne became a marketplace icon for the whole of France. The region thus serves as an excellent example of how a place can leverage its natural resources, in this case the geographic and meteorological conditions necessary to grow perfect grapes, in order to generate local economic prosperity.

How can a place be evaluated to provide measurements of natural resources that are useful to firms, places, and decision-makers? In this context, several methods for identifying, assessing, and monitoring a region have been developed for different purposes (FAO, 1976). The most profound and advanced analysis provides geographic information systems (GIS) that envelope the process of gathering and studying geographic objects (Lü et al., 2019). Despite tremendous advances over the years, GIS is an effective, but expensive tool, with the consequence that often major public institutions, such as the German “Umweltbundesamt” (UBA, 2020), “Federal Ministry for Economic Affairs and Energy” (BMWK, 2016), or the “U.-S. Energy Information Administration” (EIA, 2016), publish openly the information gathered by GIS. Furthermore, an overview of the “total natural resources rents” in a country is supplied yearly by the World Bank (World Bank, 2021), while information on mineral and soil resources on the municipal level is to be found with agencies such as the Federal Statistical Office for Germany (Genesis, 2022) or the United States Department of Agriculture (USDA) for the U.S. To evaluate tourism resources such as scenery landscapes or functional-historical characteristics (Clawson & Knetsch, 1963), a combined overview can be found in resources such as the “Outdoor Recreation Satellite” by the U.S. Bureau of Economic Analysis (BEA, 2020). Another common method is the demand approach (Ferrario, 1979), where natural resource attractiveness is evaluated by conducting traveler surveys or analyzing tourism data.

2.2 *Physical Capital*

For the economists asking questions about the roots of economic growth at a place, however, consistent themes in the early growth theory model all point in the same direction: human capital, social capital, and physical capital (Becker, 1976; Putnam, 2000; Solow, 1956). Whereas social capital refers to the value of social networks and human capital to properties within individuals (Putnam, 2000), physical capital itself can be described as physical objects with which one can work or produce something.

For many places, the endowment of physical capital in the form of infrastructure (Shi et al., 2017; Pradhan et al., 2018), factories (Kim, 2007), or machines (Voigtländer & Voth, 2006) can be vital for economic growth. In his famous model, Solow (1956) asserts that places exhibiting a dearth of physical capital should grow much faster and “catch up” with high-income regions. Here, it is implicated that the strategic management of places and companies has to focus not only on the physical capital endowment in a place, but must be contextualized in a regional and global frame (Li et al., 2015).

Although the nickname “Detroit in Europe” may be misleading due to Detroit’s substantial decline, the region of Zilina, and Slovakia as a whole, has been profiting greatly for its *mélange* based on state investments in infrastructure, low labor costs, and a flat tax concept. Through its good geographic position at the intersection of Poland, Czech Republic, and Austria, Zilina has attracted many foreign direct investments to build industrial branches from scratch. For example, the paper mill industry, like Tendo or Neusiedler, and also major automakers, such as KIA or BMW, have built their plants in Slovakia. As the investments are coming, new jobs are appearing, and today Zilina is showing high retail density and low unemployment (EURES, 2020). This exemplifies a region where the development of physical capital has been paramount to economic success.

To observe the physical capital of a place, a first indication can be seen in the transportation infrastructure of a place. For example, if the place is part of a global infrastructure network, such as the Trans-European Transport Network (TEN-T, 2020), transportation costs for firms can decrease and profitability increase, making this a valuable metric. From the quality perspective, the World Economic Forum (2018) provides a full picture of the infrastructure quality in countries in its “Global Competitiveness Report,” whereas the “Global Infrastructure Hub” organized as a G20 initiative allocates more detailed information on a local scope (GIHub, 2020). Information about already resident industries that rely on physical capital is usually contributed by the country’s ministry of economic affairs (e.g., BMWK for Germany (BMWK, 2021); “Industry Finder” by the Bureau of Labor Statistics for the USA (BLS, 2021). To get a more comprehensive view, trade associations can also provide insights, such as the Association of German Chambers of Industry and Commerce (DHIK) or the National Association of Manufactures (USA), which supply information regarding industry types on a regional level.

2.3 *Research and Development*

A key to understanding the emergence of economic growth in a place can be gained by refocusing the attention to places that experience economic success despite a lack of physical resources. One way forward constitutes knowledge that is vague and hard to pass. Places like Heidelberg, Austin, or the Silicon Valley have grown significantly even in the absence of natural resources or big manufacturers.

How, then, does knowledge impose an explosive, self-reinforcing economic development that we can observe all over the world? The answer is technological advancements, or innovations (Romer, 1986). Whether technological or prescriptive knowledge, all places unite that were able to pass and teach knowledge among individuals within a place, enabling its vertical and horizontal transmission. As the focal point for this strategy, research and development (R&D) bring together what, according to Tirole (2017), are crucial ingredients for innovation—inventors and finance. As a result of R&D investments, financed both publicly and privately, technological improvements emerge and average productivity increases (Link et al., 2021). In the theoretical and empirical literature, R&D is seen as crucial for innovation, which leads to knowledge spillovers in a place, based on the interaction of inventors and investors (Romer, 1986; Aghion & Howitt, 1996; Yazgan & Yalçinkaya, 2018).

While in the 1950s, America's booming economy was largely dependent on the mighty factories of Detroit, North Carolina seemed to suffer and be left behind. In terms of education, knowledge accumulation, and human capital, the region took the last place in a country-wide comparison, and industry was anything but present. Shifting the focus away from traditional to high-technology clusters, the region started embracing innovations and science, as well as new, unconventional ideas. The region changed its image away from backward-looking industry to a progressive and future-oriented place. As a result, North Carolina was transformed into a desirable destination for new firms, well-educated workers, and direct investments in the local economy. As inventors and finance interacted successfully, knowledge spilled over and the region became what is recognized today as the famous Research Triangle Park (Audretsch & Lehmann, 2016a).

There are versatile indicators for the R&D endowment in a region. Taking the presented ingredients (inventors and finance) into account, a first insight is provided by the World Bank on a country level showing a wide range of R&D measures such as "Research and development expenditure (% of GDP)" or "Researchers in R&D (per million people)" (World Bank, 2022). Furthermore, the "Global Entrepreneurship Monitor (GEM)" provides data on "R&D transfers" within a country. Zooming in on a more regional level, the European Statistical Office (Eurostat) shows a comprehensive view of different regions in Europe within the "Regional Innovation Monitor Plus" (Research and Innovation, 2019).

2.4 Universities

If R&D endowments have indeed become one of the main explanations for economic growth, that is, why some places are successful—how else can knowledge be generated and transmitted within a region? There has been a long history in the entrepreneurship literature on the interplay of research and entrepreneurial activity and the mediating role of universities (Audretsch & Lehmann, 2005a; Åstebro & Bazzazian, 2011; Lehmann, 2015; Audretsch et al., 2013). Through research parks, joint research ventures, and technology transfer offices (TTO), among others, universities have various means of enhancing knowledge dissemination. Moreover, university research has proven to be an effective strategy for businesses looking for new ideas and insights that can be turned into innovative, novel products and for places that want to create a knowledge resource that promotes economic growth (Audretsch, 2015b).

Regional development and improvement based on university knowledge spillovers can be explored in the region of Munich (Audretsch & Lehmann, 2016a). Munich is a prime example of a location that successfully transitioned from an agriculture-based economy to a thriving, high-tech metropolis, making it the envy of the world. The way of success is not only found in the presence of high-ranked research universities (e.g., Technical University of Munich), but also a multitude of scientific institutions (e.g., Fraunhofer Society) and high-tech companies (e.g., Siemens). To foster knowledge dissemination, venture hubs such as UnternehmerTUM in Munich combine a center for entrepreneurship and innovation education, a high-tech incubator, a prototype workshop, and an innovation consultancy under one roof. By bridging the gap between research and industry, venture hubs help to transfer knowledge and finally build and finance a start-up. Consequently, Munich has seen a wave of start-ups in various high-tech sectors like biotechnology, engineering, electronics, and creative industries that have brought low unemployment, economic growth, and prosperity to the region.

How can both places and firms evaluate and participate in the knowledge transmission produced by universities? While places with universities can be easily identified by several databases (e.g., Shanghai Rankings and US News & World Report) and be ranked by generated funding or academic patents (Statista, 2021), it is more difficult to obtain a picture of the rootedness of place in the world economy. Here, the “Globalization and World Cities Research Network” ranks places on the involvement in world economic affairs. Another predictor of knowledge spillover depicts the entrepreneurship rate in regions that can be found in the dataset of the World Bank (2019). With the measures “Perceived Opportunities” and “Total Early-stage Entrepreneurial Activity,” the GEM supplies a plethora of data on a country level (GEM, 2020).

2.5 *Unskilled Labor*

Once a place has acquired a specific capital formation, albeit grounded on physical or human capital, the question arises what people are needed to mobilize the advantages of the assets and resources available at a place (Audretsch, 2015a). Naturally, it depends. A place loaded with physical capital in the form of high-scale manufacturing often needs a large supply of a specific type of labor, where people are employed in factories, at machines or in assembly lines rather than finding precise creative solutions, as is required for high-tech industries. It is the combination of reliable unskilled labor and capital-intensive production through physical capital that has been fruitful, especially for developing countries involved in industrialization (Mokyr, 2016; Storper & Scott, 2009; Roberts & Skoufias, 1997). This type of workforce usually has a lower amount of secondary and post-secondary education.

This particular combination has been working particularly well for the so-called “Four Guangdong Dragons”—the cities Dongguan, Zhongshan, Nanhai, and Shunde in the Pearl River Delta Economic Zone (PRD) in southern China. Hitting two birds with one stone, the “Open Door Policy” from 1979 aimed at picking up the manufacturing industry from the Western hemisphere giving the PRD more market freedom, while large-scale FDI also found an abundance of low-cost labor in the surrounding region. Fueled by myriad labor-intensive factories from DuPont to Philips, PRD has emerged as the fastest growing place in one of the world’s fastest growing economies. Although PDR has almost the size of Croatia, GDP has grown up to about the same size as Italy’s (~US\$2 trillion) (Ceicdata, 2020).

This type of input can be traced by using various indicators. As the combination of unskilled labor with physical capital can be particularly profitable, the same indicators can be useful as presented in the section on physical capital. However, to collect information on unskilled labor, different sources can be applied. In global terms, the OECD publishes a “Skills Studies series” (OECD, 2019) as well as the “World Indicators of Skills for Employment” (OECD, 2015) that focuses on work history and skills and educational background data from international organizations such as UNESCO and World Bank. Building on that report, the data platforms of World Bank (World Bank, 2019) and Eurostat (Eurostat, 2022) show a wide range of labor market practices. Information about a labor shortage, important for labor-intensive productions, can be found in sources such as the “Job Openings and Labor Turnover” report by the BLS (2021).

2.6 *Skilled Labor*

While some places have profited immensely by relying on the combination of physical capital and low-skilled labor, the strategy falls short in places that lack in physical capital (Audretsch, 2015a). As technology advances and new industries

emerge, many sectors demand a new, higher set of skills in the labor market that necessitate a certain amount of training or knowledge to properly apply. Examples of skilled occupations are nurses, tailors, electricians, laboratory technicians, computer operators, financial technicians, and administrative assistants. Some skilled labor jobs have become so specialized that there are labor shortages in these areas (Horbach & Rammer, 2020). Numerous studies have found evidence that this demand spawns multiple perks (Burststein & Vogel, 2017; Caselli & Coleman, 2006). When examining the so-called “skill premium” (i.e., the difference between the earnings of unskilled and skilled workers), Acemoglu and Autor (2011) find that skilled workers enjoy higher wages, which in turn attract industries with such needs that ultimately result in sustained economic growth (Caselli & Coleman, 2006).

Some regions, such as Lombardy in Italy, profit from regional, natural, and physical capital but rely particularly on different skilled labor types. Due to the digitalization of systems and innovative engineering in manufacturing, workforce requirements have been up-skilling over time. To sum, Lombardy mainly generates economic value in the service sector (67% of the workforce), in the industrial field (32%), and in agriculture (2%) today. By early anticipation of an approaching skilled labor shrinkage in Lombardy, the region passed the Employment Unified Endowment Act. Especially the industrial field, its large number of small- and mid-sized enterprises play a vital role in training and educating employees to encounter the most pressing issues like skill development and unemployment, as the unemployed people can be directly linked to firms to fill their skill gap. More than 73% of the participants are employed after having completed the program, while the program effectively acts as an employment accelerator for youth (Colombo et al., 2015). As the case of Lombardy has shown, it can be fruitful for a place and a firm to collaborate to develop and upskill laborers.

The more the skilled labor shrinkage is proliferating around the globe, the more pressing it is for firms, and for places, to find and attract, as well as educate their own, skilled laborers. While places with high demand in educated laborers can be often identified by skilled labor immigration acts (e.g., such as those passed in Canada, Germany, and Japan), for firms good indicators are depicted in regional statistics of vocational training that are provided on federal and regional level by the Federal Labor Office in Germany (by Federal Labor Office, 2020) or by the Germany Chamber of Industry and Commerce (DIHK, 2021). A comprehensive overview of the labor demographics of the USA can be found on the homepage of the U.S. Bureau of Labor Statistics on a yearly basis. A general impression of public skill development agendas is often provided by the economic/labor ministries in a country or region, such as the European Skills Agenda (European Commission, 2021a) in the European Union, or by the regional employment office in a place.

2.7 *Human Capital*

While physical capital is instrumental in creating economic growth, human skill has to be trained, educated, and practiced and thus depends on the absorption and diffusion of knowledge (Nelson & Phelps, 1966; Lucas, 1988). Human capital, often measured via informal and formal education, is thusly crucial to economic growth as both technological advances and regional development rely strongly upon it (Easterlin, 1981).

Although there is far from a consensus on most of the details, in literature, human capital is widely regarded as a focal point and key determinant of competitiveness and economic growth (Benhabib & Spiegel, 2005; Audretsch & Lehmann, 2005a). The linkage between human capital endowment and economic growth is based on two questions: (1) how much a place should invest in education and (2) what kind of education to provide and foster. Regarding the first question, Blackwell, Cobb and Weinberg's (2002) work on human capital impacts finds higher education as a key to human capital and in the resulting economic development. A more detailed focus on elementary and secondary education in Spain by de la Fuente (2011) shows that public investments can contribute to regional development, especially in the poorest regions. Addressing the second question, Murphy, Shleifer, and Vishny (1991) stated that countries focusing more on engineering students grow faster than countries with more law students. By shifting the attention to the role of institutions, Hsieh et al. (2019) demonstrated how institutional discrimination barriers to the acquisition of human capital, especially for white women, black men, and black women in the USA, emphasize the role of declining racial and gender discrimination as engines for future growth.

The case of Singapore displays how human capital works as a source of great importance for productivity and economic growth. Despite being bestowed with lower amounts of natural resources and physical capital, Singapore has become one of the most developed countries in the world. To do this, Singapore needed a resource that cannot be bought so easily: human capital. Besides its national strategy and its tremendous expenditure on education, the city-state shows two educational policy peculiarities that match the questions raised above: an educational policy that is built on a mutual agreement among employers, unions, and the government and also on the involvement of all relevant agencies. In these endeavors, priority was given to develop a vibrant education system to encourage future economic developments (Osman-Gani, 2004). For instance, the human capital accumulation has improved significantly and so the economic situation, in 2012, 25% of Singapore population have tertiary-level education, while in 1991, only 7% had tertiary-level education, and the GDP per capita increased from USD14,502 (1991) to US\$55,549 in 2012 (Department of Statistics Singapore, 2013).

To evaluate human capital accumulation in a place, several sources are available. The World Bank provides a plethora of information focusing on the country's educational setting, e.g., Government expenditure on education (World Bank, 2019), that helps to understand the educational setting in a country. A more precise

perspective with an abundance of data from a region is often contributed by federal agencies, such as the USA does in its “Institute of Education Science” (IES, 2021) or in Germany with the “Federal Ministry of Education and Research” (2021). Particularly comprehensive analyses of places are made possible by “European Regional Competitiveness Index” for the EU (European Commission, 2021b) at a glance and also through municipal-level regional databases, such as the “Destatis-Regionalstatistik” for Germany.

2.8 *Creative Class*

The classic canon of economic growth has been widely based on capital endowment at a place. What has not received enough attention yet in this work is the matter of occupational skills with a background in creativity as a specific subject of strategic management of a place (Audretsch, 2015a, b; Noonan, 2021). Florida (2002) first introduced the concept of the “creative class,” which sparked intense controversy (Glaeser, 2005; Hoyman & Faricy, 2009; Markusen, 2006), as it proposes that creative workers are pivotal for the socio-economic development of a place. Opposed to widely accepted education measures for human capital, Florida (2002) uses occupational skills to show that rather than the availability and efficient use of production factors, intellectual and creative capital bestow growth (for empirical studies see Audretsch & Belitski, 2021; Fritsch, 2007). From the creative capital perspective, to increase its prosperity, a city should try to attract the right residents. Namely, those knowledge workers who utilize their creativity to develop innovations, that are essential for sustainable growth (Florida, 2003).

For centuries, life in Denmark was about producing economic output through the industrial economy. In the wake of the work of Florida (2002), the Municipality of Copenhagen was clearly influenced, with a local leader stating that: “If the region has the three T’s, Talent, Technology and Tolerance, then according to Florida it will experience the highest growth in the modern economy” (HUR, 2003, p. 5). Increasing the pulling factor for creative laborers is a crucial locational factor for knowledge-based firms, and the main policy proposed to do so was to focus on being an attractive cultural and leisure city. Indeed, Copenhagen has been transforming into a metropolitan city of international appeal. From its public benefits, diverse services and opportunities, cultural offers, and tolerance to non-mainstream lifestyles, Copenhagen has attracted the creative class and thus high R&D investments. Consequently, Copenhagen has been bestowed the name “Medicon Valley” for its world-leading cluster of life science firms. Today, Copenhagen flourishes through the interplay of culture, creativity, and city policies.

Literature shows a wide range of data types used to explore the creative potential in a place (Lorenzen & Andersen, 2007; Audretsch & Belitski, 2013; Audretsch et al., 2021a, b; Falck et al., 2009). A large body of literature points to three main indicators of creative capital. (1) Knowledge workers can be measured as share of employees working in creative occupations, as defined by Florida (2002), and

specific data, including changes over years, are often provided by the federal Employment Agency in a country (e.g., Federal Labour Office Germany, 2020). (2) Entrepreneurship serves as a predictor for knowledge accumulation and several sources dispense entrepreneurship data, e.g., the Global Entrepreneurship Monitor (2020), the Regional Entrepreneurship and Development Index (REDI, 2020) by Eurostat, or the local statistical office for a place (e.g., Bayerisches Landesamt für Statistik, 2021). (3) Cultural opportunities and, in particular, tolerance to diversity display intangible city qualities, as Lehmann and Seitz (2017) show. For the latter, data are contributed by Eurostat, while for the former, the Intercultural City Index (2020) is suitable as a predictor for tolerance in a place for cities in Europe.

3 Spatial Structure and Organizational Dimension

While the first dimension of the strategic management of place framework, as depicted in Fig. 1, focuses on the amount, quantity, and quality of a particular factor or resource and how they matter in shaping local economic performance, the structure and organization of that activity matter as well. The second dimension thus focuses on how they, along with the accompanying activity, are structured and organized. There are compelling theoretical arguments and systematic empirical evidence supporting each of the following structural and organizational aspects identified—market power, competition, entrepreneurship, specialization, diversity, clusters, and ecosystems (Audretsch, 2015b). These aspects are not mutually exclusive, and in some cases, one aspect is the antithesis of a different one. The spatial structural and organizational dimension in no way advocates any singular locational strategy in terms of “one structure fits it all” rather, each place, whether it is a community, city, region, state, or even an entire country should formulate its own locational strategy based on the spatial and organizational configuration of resources and factors.

3.1 Clusters

At least since Alfred Marshall’s (1890) principles, the tendency for industries to cluster in local areas, places, and the economic and social benefits that come with this type of spatial and organizational structure has fascinated scientists, managers, and policymakers alike. However, it is only quite recently that policymakers and managers joined the wave and began to include clusters or the geographical structure of economic activities in their set of instruments that they can use for their strategic policy agenda, in particular since Michael Porter (1998) made the concept of “clusters” popular. According to Porter, a cluster consists of businesses in related industries operating at the same place, a local and geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related

industries, and associated institutions in particular fields that compete but also cooperate (Porter, 1998). Public cluster policies have since been highly prioritized and constitute a crucial policy instrument for economists and policymakers across the globe for more than 20 years. They aim at stimulating national or regional performance in developing and adapting to new technologies and bringing new services and business innovations to the markets.

Cluster-based policies can be found at the national, transnational, regional, and local levels across almost all knowledge-based economies (Audretsch et al., 2019a). Cluster initiatives have been perceived as an effective means to facilitate the exploitation of entrepreneurial opportunities as well as shape and augment regional competitiveness to achieve superior economic performance (Audretsch et al., 2015; Autant-Bernard et al., 2013; Delgado et al., 2015). Cluster policies seek to stimulate entrepreneurial innovation by bundling resources and exploiting the benefits of local agglomerations and spatial proximity, thus inducing knowledge spillovers and place-based entrepreneurship, and ultimately to spur regional prosperity (Lehmann & Menter, 2018a). The rationale for public cluster policy is justified by increasing overall welfare across regions through subsidizing economic activities in either disadvantaged regions or fostering and supporting promising regions (Lehmann & Menter, 2018b). Clusters can enhance the economic performance and competitiveness of a place by generating gains accruing from agglomeration economies, like spillovers and complementarities. Firms located within such a cluster enjoy greater employment growth, wage growth, and innovative activity (Delgado et al., 2015). Examples of clusters include software and semiconductors in Silicon Valley, banking in London, filmmaking in Hollywood, car making in Stuttgart and Munich, or medical life sciences in Tuttlingen.

3.2 *Market Power*

A second aspect of spatial structure and organization involves the degree of market power. Three disparate strands in the literature have identified how and why market power can influence economic performance at a place (Audretsch 2015b). The first strand comes from the field of industrial organization, which identified how firms with a high share of the market had a positive impact on the economic performance of industries. The second strand of the literature is from the field of strategic management, which analyzes the impact of firm size and power to increase the competitiveness of places. The third strand in the academic literature argues that monopoly power generates a superior economic performance for a place than does competition. In sum, the superior economic performance of the place is attributable to the high, sustained performance and rate of the return accruing to market power. Economic performance of places is shaped by agglomeration effects, and large, powerful corporations account for a large share of the market and thus attain sufficient economies of scale and scope, resulting in nearby suppliers, customers, employers, and service industries.

However, the higher and more superior rate of return for firms with market power must be transformed or redistributed to the place for the place to share in this greater return. Such redistributive and transformative mechanisms include organized labor and civic engagement, but also taxes to be spent and invested in infrastructure, higher education, and local amenities (Audretsch et al., 2021a, b), in addition to philanthropic contributions, as Acs (2012) explains. Acs makes a direct link between the philanthropic generosity of larger and more powerful companies and the performance of places and makes clear that philanthropic giving is a key mechanism for transforming wealth created by market dominance and monopoly power to a sustained economic performance for the place where that company is located.

3.3 Competition

A very different view, in fact the polar opposite, about what spurs locational performance is also put forth, arguing that having an organizational structure of monopoly will actually hinder locational performance and that the exact opposite—namely competition—is important for a sustained high level of economic performance. Monopolies tend to underinvest in research and development and may overinvest in protecting market entry. Through the continual rejection of new and innovative ideas, whether it involves a new product, process, or organizational and managerial function, places are losing their overall attractiveness rendering them from “sunset” to “sunburn” places (Audretsch & Lehmann, 2016a). However, it may not necessarily be the competition in the product markets that is driving the performance of places, rather it is competition in the factor input markets, like the market for ideas, which has generated such great locational performance of places like the Silicon Valley in the last decades. While a huge amount of large companies located there are powerful, they exert their monopoly power on the product markets, but otherwise favor and support the free market for new ideas. Thus, competition in the factor of input markets and monopoly power on the product markets is walking hand-in-hand fostering the economic performance of places. Not only do an increased number of firms provide greater competition for new ideas, but greater competition across firms also facilitates the entry of new firms specializing in some particular new product niches, becoming world market leaders in their narrow product and market areas. This is because the necessary complementary inputs and services are likely to be available from small specialist niche firms, but not necessarily from large ones (Audretsch et al., 2021a, b).

There is considerable and compelling systematic evidence from scholars linking the local structural dimension of competition to the performance of places, finding that those cities with a higher level of competition among firms also tend to exhibit higher levels of economic growth and register more innovative activity (Audretsch, 2015a).

While empirical research highlights the positive effects of large corporations to foster the economic performance and competitiveness of places, other studies argue

for the opposite, in that competition among firms increases the economic performance and competitiveness of places. What should policymakers do? The answer, however, lies in the middle: neither the domination of one or just a few large and powerful corporations will guarantee sustainable economic performance and competitiveness of a place, as the decline of the automobile and steel industry drastically showed in Detroit, Gary, and other places. Nor will a place gather economic performance and competitiveness when small- and medium-sized firms compete without reaching a minimum efficient scale.

Localized competition will also facilitate knowledge spillovers because if a particular idea is not used by a firm, it is likely to be contested and used by a different enterprise. Valuable ideas are less likely to go unused and, following the knowledge spillover theory (Audretsch & Lehmann, 2005a; Acs et al., 2013), are mostly used and commercialized at the place, the source, where the idea was generated. To complement, an important spatial and organizational structure in absorbing knowledge spillovers is played by entrepreneurial activity and the establishment of a functional entrepreneurial ecosystem.

3.4 Entrepreneurship and Entrepreneurial Ecosystems

The extent to which a place generates entrepreneurial activity is another important aspect of spatial organization and structure. The knowledge spillover theory of entrepreneurship (Feldman & Audretsch, 1999; Acs et al., 2013) suggests that the economic performance and competitiveness of a place will be stronger because entrepreneurship facilitates spillovers from organizations producing knowledge to new firm organizations where those ideas are introduced into the market and transformed into innovations. Audretsch and Lehmann (2005a) provide econometric evidence showing that knowledge spillovers and new firm creation in the high-tech and knowledge-intensive industries positively shape the economic performance of those places where new firms are located.

Entrepreneurship can benefit not just those individuals starting the new company, or their employees, but also the place where the entrepreneurship occurs (Audretsch, 2015a). By serving as the conduit for the spillover of knowledge, entrepreneurial start-ups take the knowledge created in one organizational context and facilitate the innovation in a very different organizational context, which can ultimately spur growth, jobs, and competitiveness of not just the new firm, but ultimately the entire place. While this link between entrepreneurship and growth is certainly not new—in his 1911 treatise “*Theorie der Wirtschaftlichen Entwicklungen*” (Theory of Economic Development), Joseph A. Schumpeter proposed that new firms with the entrepreneurial spirit displace less innovative incumbents, ultimately leading to higher growth—what is new today is the emergence of vibrant entrepreneurial activities for places to grow and sustain competitive advantages (Audretsch et al., 2006). There is a large body of empirical studies validating the importance of entrepreneurial activities in absorbing knowledge spillovers to increase economic

performance of places (Ghio et al., 2015; Audretsch et al., 2006). These studies provide compelling evidence that a greater degree of entrepreneurial activity, typically measured in terms of start-up rates, also tends to exhibit higher levels of economic performance, typically measured in terms of economic growth and sustainability. These studies also provide compelling systematic empirical support of the knowledge spillover theory of entrepreneurship across multiple levels of analysis, the firm, the city, state, region, and every country (Braunerhjelm et al., 2010).

In the past decade, a new literature has been developed linking entrepreneurial activities directly to places, thus generating a new type of spatial organization and structure: entrepreneurial ecosystems. Entrepreneurial ecosystems as organized attempt to establish environments that are conducive to increasing the success for newly established ventures. The underlying idea is that neither firms nor places just compete with each other through well-developed stand-alone strategies to achieve advantages over their rivals, uniquely relying on their own resources, knowledge, and capabilities. In a turbulent and hyperactive business world (D'Aveni et al., 2010), strategic and competitive advantages of places and firms are increasingly based on shared resources, network externalities, knowledge spillovers, local endowments, and governmental support, creating a need for concepts beyond the firm-specific competitive advantage approach (Audretsch et al., 2019b). Concepts, which consider not only those actors involved directly in the own firm-specific value chain, like close suppliers, financiers, or clients, but rather all factors which shape a firm's value chain, also in an indirect way, are therefore necessary. Such a view has to enrich the close competitive environment, rethinking existing causal relationships but also encompassing physical and intangible assets, like infrastructures, institutions, sources of knowledge, human capital spillovers, and network effects (Audretsch et al., 2016; Lehmann & Menter 2016, 2018a, b). The entrepreneurial ecosystem approach is used in corporate, national, and local contexts and has grown in prominence given the vital need to transform economies around the creation of innovative ideas, products, services, and technologies. Entrepreneurial ecosystems involve a network, or system, of interactions of individuals and organizations, like financial intermediaries, universities and research institutions, suppliers and customers, multinational companies, and the government. The entrepreneurial ecosystem literature has thus mainly focused on identifying the relevant stakeholders like entrepreneurial firms and entrepreneurs and how they interact with other stakeholders within a more or less defined system (Colombo et al., 2017).

3.5 Specialization and Diversity

A different aspect of spatial organization and structure is the extent to which economic activity is specialized. Specialization might enhance the economic performance associated with a place reducing the transaction costs of engaging in business since firms and individuals would be engaged in the same type of activity. Specialization of places often will produce higher economic performance than having a

large set of firms producing a broad set of products and services—there are potential economies of scale in concentrating on a smaller number of products and services. Crailsheim, a small city nearby Stuttgart in Germany, is called the “Packaging Valley,” named after a cluster of mid-size companies, albeit market leaders in their niches, producing highly specialized machines in the packaging sector, with a particular focus on the chemical and pharmaceutical industries (Audretsch & Lehmann, 2016a).

By contrast is the view that exactly the opposite holds, that diversity is more conducive to a strong economic performance of places than specialization on the grounds that inter-industry knowledge spillovers are more important than intra-industry spillovers. The competitive advantage of diversity thus stems from the exchange of complementary knowledge across diverse firms and economic agents that yields a greater return on new economic knowledge. Also, as Richard Florida points out, the degree of diversity in places contributes to the tolerance and acceptance of new ideas. Thus, diversity of population and workforce translates into a diversity of ideas and ultimately innovation activity, leading to a more diverse industry mix in places. Also, the degree of diversity at a place plays a key role in shaping economic performance according to models of evolutionary economics on two central principles, namely diversity and selection. The process of evolution takes place by a process of selection among diverse entities, which propels an economy into new direction. A place with no diversity and no selection will not evolve and still remain permanently locked in a long-run, steady-state equilibrium, as Audretsch and Lehmann (2016b) described when analyzing sunset and sundown regions in Italy. Finally, the degree of diversity shapes economic performance of places in times of turbulence and disturbance (Audretsch & Lehmann, 2016a). The higher the degree of diversity, the lower the costs of exogenous shocks. This directly follows from portfolio theoretical considerations.

Whether a place pursues a strategy of specialization or diversity may have a significant impact on its performance. It is important to emphasize that compelling examples exist where either specialization or diversity is associated with a positive and sustained economic performance, just as there are examples of places where neither specialization nor diversity is associated with poor performance. While the organizational dimension of specialization and diversity certainly matters, it does not matter in such a way that can be reduced to a formula that every place can blindly implement and follow.

4 Human Dimension

As discussed, the factors of production are tangible, understandable, and measurable in a relatively straightforward way. Likewise, the spatial and organizational dimension of this analysis provides a perspective that is primarily observable—the manner and density in which the aforementioned factors of production are organized and implemented. However, as Audretsch (2015a) discusses in his research, there is yet

another determinant in dictating the economic performance of a place—the people themselves. As the key variable in any economy, the populace of a place is inextricably linked to the performance of their place. By its inclusion in the strategic management of places framework, the human dimension asserts that it is not enough for a place to simply have the proper resources (factors of production) and to have them arranged properly (spatial and organizational dimension); a place must also have the right societal forces and key individuals that meld everything together in order to truly realize the economic potential of a place (Audretsch, 2015a).

The human dimension seeks to analyze how nuanced human behavior and interaction influence the performance of a region. Prior case study analyses of high-performing cities, states, and regions throughout the world have honed in on the importance of the perception of a place and its people (and a place's people perceive themselves and their place), the informational exchange and knowledge spillovers occurring within and between communities, the likelihood of people to trust and engage with one another and the propensity of individuals from all three economic sectors (public, private, and non-profit) to assume leadership roles to become catalysts in pushing economic development policies and initiatives forward (Audretsch & Lehmann, 2016a). In these case studies, these societal conditions were delineated as foundational to the economic triumphs of the places analyzed. Researchers found that places such as Berlin, Silicon Valley, Austin, Bilbao, Denver, and many others all shared a commonality of dynamic local populations, cultures, and individuals that were at the heart of their success stories (Audretsch, 2015a).

As alluded to, this human element is not as readily recognized and captured, but that does not prevent it from being felt and measured. Audretsch's (2015a) work in this field uncovered identifiable characteristics within the human dimension which can be investigated and analyzed in order to create an overall mosaic picture of how the people in a place generate economic activity and performance, thus enabling future researchers and policymakers to use this section of the framework to adequately capture and inventory the human dimension for any place. This information can then be used to determine areas of strength or opportunities for growth within these societal components, which can be compared and contrasted with those of high-performing peers. Armed with this knowledge, researchers and policymakers can then flush out the details of various policy initiatives which can be implemented in order to influence the human element to positively spur economic sustainability, while also acknowledging the historical and cultural context of each particular place. Consequently, this section of the paper proceeds by describing and exemplifying the subcomponents of the human dimension: networks and linkages, social capital, identity and image, and finally, leadership.

4.1 *Networks and Linkages*

Networks and linkages inform a researcher as to the nature and platforms of interpersonal communication and knowledge sharing within a city, region, or state (Audretsch, 2015a). Constituting the means by which people interact and exchange ideas, networks and linkages serve to define the formal and informal ways members of a community or society are connected with one another. Formal networks and linkages can be identified as local organizations and institutions such as trade unions, guilds, chambers of commerce, interest groups, professional associations, and industry cluster networks. Informal networks and linkages often take shape through local cultural and social traditions, such as familial and cultural ties, working relationships and practices as well as events and meeting places. Taken in combination, these formal and informal networks and linkages serve to create an overall environment of fluid interaction and exchange between and among the people of a place, which expands professional creativity and opportunities through institutional and industry knowledge spillovers, idea generation, and new or expanded business partnerships (Audretsch, 2015a).

Indianapolis, Indiana, can be looked to as an example of a place which leverages formal networks and linkages in order to promote interaction and exchange throughout the city to enhance economic growth. By fostering and hosting various associations and institutions such as the International Center, the Indianapolis Chamber of Commerce, and Junior Chamber International—Indianapolis, the city supports a variety of formal platforms and groups that are utilized to bring together economic actors from the metropolitan area which would otherwise be disparate and unconnected (Indy Chamber, 2021). For informal networks and linkages, Silicon Valley becomes an exemplar. By leveraging the presence and attraction of so many individuals and organizational actors around the high-tech industry cluster, the region has profited from an environment that is highly fluid with individuals moving in and out of different institutions and firms within the industry (Saxenian, 1996). This movement encourages a high amount of interpersonal interaction and knowledge exchange as these individuals and groups pick up new knowledge and disseminate existing knowledge with each move, thereby creating a knowledge community that speaks the same professional language and understands all of the different perspectives and players within the local environment. This widespread insight about the inner workings and nuances within the function and makeup of the dominant local industry then reduces overall uncertainty and transaction costs while simultaneously creating close personal relationships and networks across the industry, promoting innovation and new business ventures (Saxenian, 1996).

When investigating the formal and informal networks and linkages of a place, researchers can start by going to the local economic development corporation associated with that place, which generally provides an overview of the formal groups and associations within the local business community, as well as a profile of the industries, sectors, and clusters which are prevalent in the area. This then serves as a launching pad to dive deeper into those formal and informal associations,

institutions, and groups which provide that vital platform for communication and exchange. It should then be analyzed how active and vibrant these groups and their activities are, making sure to note areas of diversity and inclusion within them as well to track how well they are engaging and involving the community as a whole.

4.2 *Social Capital*

Researchers have long searched for a way to define and assess the feeling of a place, or the community spirit that coincides within the population of a particular area. Scholars and economic development practitioners realized that the proverbial “glue” that brought a local society together was crucial in mobilizing economic and social policy at the municipal level, and thus, producing prosperity (Woolcock, 1998). Further, this manner of interacting, socializing, and living with one another within the location then becomes intricately associated with the locality’s perception, reputation, and performance. This phenomenon has come to be known as “social capital,” defined by the World Bank as referring to,

the norms and networks that enable collective action. It encompasses institutions, relationships and customs that shape the quality and quantity of a society's interactions. [...] Social capital is critical for societies to prosper economically and for development to be sustainable. Social capital [...] can improve project effectiveness and sustainability by building the community's capacity to work together to address their common needs, fostering greater inclusion and cohesion, and increasing transparency and accountability. (World Bank, n.d.)

When seen through this lens, social capital can be thought of as producing the level of mutual trust needed in a society to come together to inspire and work toward positive change, not just in terms of economic performance, but in all aspects of civil life (Woolcock, 1998).

Places that succeed economically through a positive accumulation of social capital typically do so through a combination of a thriving community of civil society organizations as well as open public spaces and intentionally organized cultural/entertainment festivals and events, which work in concert with one another to inspire a sense of unity and togetherness within the local populace (Audretsch, 2015a; Woolcock, 1998). Within the western tradition of civil society and volunteer organizations, many communities boast robust local portfolios of groups such as Rotary Club International, Lions Club, Kiwanis, American Legion, Veterans of Foreign Wars, Shriner Clubs, United Way, Red Cross, local community foundations, and many, many more, all of which serve to bring neighborhoods and communities together in order to work toward common public benefits and causes (Salamon et al., 1999). While the examples of cities in the USA excelling in this area are many, including Denver, Boston, and Austin, cities from around the world have begun founding chapters of these organizations or starting similar organizations in order to build their stock of social capital as well (Salamon et al., 1999). The other side of the social capital equation, open spaces and events, is displayed through the example of Chicago’s Department of Cultural Affairs and Special Events (DCASE), which

sponsors and runs many of the cities exhibitions, performances, holiday events, and festivals throughout the numerous neighborhoods and communities in the metropolitan area (City of Chicago, 2021). By dedicating millions of dollars annually in staff, materials, and resources, DCASE serves as proof of the value that mayors and municipal leaders place on investing in the growth and maintenance of social capital (City of Chicago, 2021).

In order to measure and evaluate the social capital of a particular place, it is then important to observe the quantifiable aspects of local efforts to build and maintain the intangible asset of social capital. Researchers and interested persons can look to local non-profit registries or IRS filing records to observe the number of civil society/volunteer/charity organizations within a defined geographic place, and many of those organizations will often maintain local websites with facts and figures which can be used to identify membership and engagement, i.e., how active they are in the local community. Likewise, most municipalities maintain records regarding the number, frequency, and attendance of public events and festivals, and many local planning departments keep data and information on the amount of open/park/green space in local communities.

4.3 Identity and Image

Those that are familiar with common beliefs and sayings in marketing, public relations, and advertising will recognize the phrase, “perception is reality.” While the statement itself might not be literally true, the implication holds true that how people think or feel about something, someone or, in this case, someplace, impacts the relationship between people and that particular thing, person, or place. Researchers have found that the internal and external perception of a place has concrete implications for that place’s performance. Audretsch (2015a) delineates the internal perception as “identity,” or the way that the local population of a place feel about themselves and their surroundings. Audretsch (2015a) also provides a label for the external perception, noting that “image” refers to how a place is viewed by the world outside of the place’s borders.

A place that has been able to cultivate a positive identity and image in order to boost local economic performance is Tallinn, Estonia. In making local place-based policy decisions after gaining autonomy following the fall of the Soviet Union, the governments of Tallinn and Estonia invested substantially in the infrastructure necessary to foster technological innovation and entrepreneurship (Venesaar et al., 2006). These investments included educational and community initiatives that helped a positive self-perception of an adaptable, agile, and creative city to develop (Venesaar et al., 2006). It can then be argued that this had, and continues to have, a reinforcing effect—that since the people living in Tallinn perceive it to be a modern and forward thinking hub of economic and technological innovation, it becomes one. Tallinn is a place where ideas can thrive because the local population believes that it is. This has had a knock-on effect as Tallinn has subsequently become renowned the

world over for its vibrant tech start-up scene. Because the city has a positive image as a place where ideas and new companies can thrive, Tallinn has become a magnet for new people, foreign investment, and international cooperations, further boosting the economic performance of the place (Venesaar et al., 2006).

Those researching the identity of a place would be well-served to investigate the demographics and spatial breakdown of the place, which helps to understand the different neighborhoods and groups of a place and to obtain a better idea of how they interact together, or rather, the amount of social capital therein (Audretsch, 2015a). This can be viewed alongside how the area projects and advertises themselves, which is revealed through the activities of local chambers of commerce and tourism bureaus. While these advertisements and communications might display an idealized version of a place, they also give an impression of how the local population perceives the best of what their place has to offer. The image of a place can often be found within the national news media of the country or supranational region where the place is located. Often written in an op-ed fashion, these articles deliver outside opinions about the current state of affairs within the place. These typically rely on statistical data and anecdotal reports in order to formulate an outside perception of a place, and when numerous articles arrive at similar opinions, a person can gain a solid understanding of a place's perceived image. Sources would include the *Economist*, *New York Times*, *Handelsblatt*, *International Affairs*, *Bloomberg*, etc.

4.4 Leadership

Having thoroughly dissected many of the underlying forces and elements that contribute to and determine the performance of a place, one can see how crucial strategy is to maximize the factors of production, the spatial and organizational dimension, and the human dimension. However, strategy still requires a person or a group of people to visual it and enact it to realize a place's full potential (Audretsch, 2015a). There is a distinctly human element to the strategic management of places, in that it does not simply manifest itself and that it is not always straightforward—if it were easy, everyone would be successful in conducting it. This gets at the heart of a key question—why do places that have similar underlying forces in the three dimensions have different results in economic performance? What separates the winners and losers in these cases? Perhaps the answer to this is partially captured in the last subcomponent of the human dimension, leadership.

As noted by Audretsch (2015a), individual decision-makers are often central to cases where local economic development initiatives have proven successful in maximizing performance through the augmentation or efficient use of the three dimensions. Therefore, places with strong leadership within their communities are better positioned to realize a higher economic performance, and it is imperative that systems of equality are in place to empower more leaders to emerge within a place's local population. Cases of municipalities that have relied upon strong leadership to

boost performance are numerous, as are cases where poor leadership has resulted in local economic downturn. Nottingham, England, serves as a positive example where the leadership of the local economic development agency, local university presidents, and the CEO of a major, locally operated firm chose collaboration over competition in order to pool together resources that fostered the emergence of a thriving bioscience cluster in what was once a post-industrial economic underperformer (Rossiter & Smith, 2017). Many recent examples of leaders failing to take measures to mitigate the negative effects of the COVID-19 pandemic and safeguard both public health and the economy serve as negative cases (Peters, 2021).

For researchers interested in investigating the leadership elements within a particular place, they must simply dig deeper into the recent history of that place. By taking a closer look at economic development successes and failures, one can usually identify individuals and institutions that were instrumental in the outcome. After the initial determination of key figures, researchers should take the next step to assess which conditions enabled those leaders to breakthrough and succeed, or fail, and to analyze which systems may be improved or bolstered to encourage leadership triumphs in the future (Audretsch, 2015a).

5 Public Policy

Having detailed the overall concept for the strategic management of places and taken a closer look at all of the subcomponents within each of the three underlying forces of local/regional economies, it is now appropriate to shift focus toward the action-oriented portion of the theoretical framework—public policy. Understanding and investigating the three underlying forces for a place gives one great insight into the economic health of that place and even clarifies the areas that need to be maximized or improved, hinting at what must be included in strategic planning for the place moving forward. Without actionable public policy, however, an analysis of the three underlying forces serves only as an informative inventory of economic factors that doesn't do anything to actually change or improve the place's economic performance. Effective public policy then takes the insights garnered from the analysis of the underlying forces and acts upon it to enact real and positive economic change for the place and its people (Audretsch, 2015a; Audretsch & Lehmann, 2016a).

It is correctly assumed that local elected officials and public servants are heavily involved in crafting public policy to improve place-based economic performance, as was detailed in the “leadership” subcomponent of the “human element.” As the executive and legislative functions of local governance, they are instrumental in creating and implementing the economic policy of a place (Peters, 2021). However, local economic development and the strategic management of places are interdisciplinary by nature, and their successful implementation therefore requires buy-in and participation from a range of stakeholders from all three sectors (public, private and non-profit) in the local population (Rossiter and Smith, 2017). As noted in the several case studies and examples throughout this chapter (and in further detail in

subsequent chapters), key actors in informing and implementing successful public policy are found not only in local government, but also in local private sector firms, non-profit and civil society organizations like community foundations, charity groups and chambers of commerce, and even quasi-non-governmental organizations such as economic development corporations. Further, every individual within a place also plays a crucial role. As we have seen throughout this paper, and noted by sociologists and economists, the economic health of a place hinge largely on a sense of community, identity, and solidarity, which everyone contributes to (Woolcock, 1998).

Public policy must not only be multifaceted in terms of who is involved, but the most effective and transformative polices are also nuanced in their design. In this regard, a well thought-out public policy brings together subcomponents from more than one underlying force, or even all underlying forces, and exploits their interconnected nature in order to maximize public benefit for the whole of a place (Audretsch, 2015a). For reference, readers can return to many of the examples explored throughout this chapter (and in those of subsequent chapters) and note how many of the strongest and most impactful results for local communities involved not only the subcomponent being directly discussed in that sub-heading, but also several other subcomponents from the same underlying force as well as the other underlying forces. These spillovers and connections between the different dimensions in the framework create ample opportunities for all stakeholders involved in public policy creation and implementation, as they evidence the prime areas for performance enhancement for the place in question (Audretsch & Lehmann, 2016a, b).

Researchers that are attempting to suggest public policy recommendations for a place should start by focusing on policy areas that are revealed through the examination of the underlying forces and trying to identify points of overlap which produce spillover benefits for public policy targeting—meaning where one policy or a package of policies can solve problems and create benefit for more than one subcomponent or even more than one of the underlying forces. After these policy areas are determined, researchers should then seek out success stories and positive examples from other places that have similar local economic inventories based upon an analysis their underlying forces as well. Being careful to accurately and thoroughly account for history, culture, equity, and sustainability within the local context, the policies from the successful example should be tweaked and modified so that they can be effectively implemented in the specific context of the place in question. Further, researchers will also want to account for potential areas of pushback to their policy recommendations; identifying where local politics and coalition building will be instrumental to creating adequate buy-in for successful policy implementation. Lastly, researchers should also work to identify local, national, and international granting opportunities to cover the financial costs of implementing a policy, especially in situations where tax increases or other revenue generation may prove infeasible or overtly difficult.

6 Conclusion: Applying the Framework

It is one thing to have a framework depicting the conceptualization of the basic forces shaping the economic performance of place. It is quite another thing to be able to use or implement that framework with the goal of enhancing place performance. The gap between theory and application is formidable and requires translation to successfully implement the strategic management of place framework.

The translation and application of the framework revolve around five key W's—Who, Where, What, Which, and When. The first involves who is mandated with, involved with, or has a vital interest in the performance of their place. The most obvious actors mandated with the ensuring a strong performance is the public sector. It has been well established that the proclivity of voters to support and continue with incumbents in office, or instead prefer a change, is closely linked to the economic performance of the place, or at least whether the performance trend is positive or negative. In the context of the United States, this would include mayors, governors, city councils, and state legislators.

What is less visible is the involvement, and incentive to be involved, in the strategic management of place by both the private and non-profit sectors. Location is a key choice variable in the strategic management of private firms. The performance of a place can have both direct and indirect impacts on the performance of firms located at that place or deliberating moving to that place. A prolonged negative performance can adversely affect the quality or competencies of the local population comprising the workforce. Dissatisfied and disgruntled workers tend to move away to locations offering better opportunities. Most recently, places suffering such an exodus from their talented workforce have been characterized as suffering a brain drain. Such a brain drain poses a challenge to firms remaining at the place, since the supply of talent dries up as the workforce, and in particular the most talented segment, in response to fewer opportunities associated with a low performance.

To the degree that a private firm has sunk costs invested at a particular location, it therefore has a vested interest in participating in or at least ensuring a robust strategic management of their place. Sunk costs essentially bind the firm to a specific place. While switching locations always remains a possibility, the existence of costs which are sunk suggests that such a move will incur costs beyond those of simply transacting the change in location. In some cases, sunk costs emanate from specific relationships with complementary firms, albeit suppliers or even competitors, located at the place. Such relationships can extend into the broader ecosystem comprising a place and include people at every important node in the ecosystem, such as at a university or local government. While many of the firm's assets may be portable and can be moved at low costs across geographic space, such relationships tend to be place-specific and require frequent face-to-face interactions for the relationship to thrive. Distance can lead some relationships to wither, suggesting that the tacit knowledge embedded in place-specific relationships renders replicating or replacing such relationships required in a locational change expensive and costly.

To the extent that the firm's competitive advantage emanates from a particular firm cluster or entrepreneurial ecosystem, it will confront a loss of competitiveness by moving away. Thus, while locational investments in clusters and entrepreneurial ecosystems can enhance firm competitiveness, they also render the firm more dependent on a specific location. To avoid losing the sunk costs incurred at that particular place, legacy firms also have a strong incentive to contribute to the strategic management of that place to ensure a strong performance. For example, Eli Lilly and Company in Indianapolis were confronted with a potential loss in competitive advantage when it could not access the pipeline of new pharmaceutical products emanating from biotechnology start-ups, which its counterparts could in the Research Triangle in North Carolina and San Diego life science entrepreneurial ecosystems. The company considered moving its headquarters but realized that the sunk costs incurred were prohibitively expensive. Instead, the company actively set upon championing the strategic management of the region to create the life science entrepreneurial ecosystem requisite to its own competitive advantage. Thus, investing in the strategy of the place proved to be more economical than simply moving to an existing cluster or entrepreneurial ecosystem at a different location.

Non-profit organizations also participate, or at least have a strong incentive to participate, in the strategic management of place. Some non-profit organizations actually have a legal mandate to foster the performance of their place. For example, the Ewing Marion Foundation is mandated by its charter from its founder, Ewing Marion, to enhance the performance of Kansas City. Similarly, the Lilly Foundation has a mandate to enhance the performance of a particular place, Indiana, just as the Ameritech Foundation has a charter mandating it with a mission to enhance the performance of the Midwest in the United States. Similarly, the Georgia Research Alliance has a clear mandate to promote the performance of that state, as do the system of Fraunhofer Institutes in Germany. As Audretsch and Lehmann (2016a) point out,

the Center for European Economic Research (ZEW) in Mannheim, is financed in part by the *Land* of Baden-Wuerttemberg, which provides cities and the entire region with key economic and business insights and trends. In fact, the German landscape is littered with similar institutions, ranging from basic research and applied research, such as the Leibniz Institutes and the Fraunhofer Institutes, to institutions providing a linkage and networking function, and institutions, such as the Social Science Center Berlin (Wissenschaftszentrum Berlin fuer Sozialforschung, WZB) or the Kiel Institute of Global Economics, which provide some of both. Membership in the prestigious Leibniz *Gesellschaft*, or Society, ensures that such research institutes maintain a careful but delicate balance between local as well as national interests. These are just a few poignant examples of the rich mosaic of institutions, organizations, and agencies which are at least partially sponsored at the local level, but typically with considerably federal financial support, in order to enhance the economic performance of the particular *Standort*.

Colleges, universities, and technical institutes often have a vested interest in the strategic management of their place. For example, the University of Akron, in Ohio, was sufficiently concerned about the impact that the deteriorating conditions of its city would have on the performance of the university that it was drawn into engaging in the strategy to enhance the performance of Ohio. Many state universities,

especially the land grant universities, have an explicit mandate to contribute to and ensure the prosperity of their state. Similarly, the mandate of *Fachhochschule*, or technical colleges, in Germany, as well as their counterparts elsewhere, such as community colleges in the United States, is to generally provide training and education to prepare the local workforce to enhance the competitiveness of the place.

The “where” involves the specific geographic location defining the boundaries and context for the strategic management to enhance spatial economic performance. The geographic context typically reflects political boundaries, such as a city, province, state, county, or district, where there is a clear policy mandate. However, the interest and confluence of actors spanning the public, private, and non-profit sectors may also span political boundaries, so that their own performance is shaped by the performance of overlapping political regimes. Examples would include the border region between Windsor, Canada, and Detroit, USA, or between El Paso, Texas, and Juarez, Mexico. Participants engaged in the strategic management of a place may draw on multiple spatial levels, both within but also beyond the boundaries of the place. It is more the rule than the exception that the concerns for place performance involve participants and actors spanning multiple spatial dimensions and locations.

The “what” involves using the framework to identify which specific strategies would be most conducive to enhancing performance. The ancient Greek aphorism “know thyself” is a good starting point. An inventory of the attributes of the place in terms of the essential elements of the framework—factors and resources, spatial structure and organization, the human dimension and policy—and how they map onto generating the competitiveness of either existing industries or aspirational industries, provides a window into areas of strength and deficiency. The strategic management of the place can then prioritize those strategies which the framework identifies as being most conducive to the type of performance to which the place aspires and for which it has strengths. At the same time, it can address glaring deficiencies to the extent of requisite complementarities for an enhanced performance.

Still, the insight of Robert F. Kennedy, “Some men see things as they are and ask, ‘Why?’ ‘I dream things that never were and ask’, ‘Why not?’” also applies to the strategic management of place. While application of the framework starts with taking inventory of the elements and components comprising the framework, it should not be the end. Perhaps the greatest attribute of places able to implement a successful strategy is the ability to envision a future for the place that may go beyond simply replicating the present or returning to the past. Such a vision needs to articulate both a (type of) performance and a clear path prioritizing those elements of the framework that will ignite a trajectory to transform the place from its current and past reality to actualizing the envisioned future performance.

Such a vision was articulated when the leadership of the Basque region envisioned transforming Bilbao from a city devastated by a loss of competitiveness in the shipbuilding industry, along with the accompanying unemployment and social decay, to a thriving region based on design and culture. This vision was essential to prioritize a strategy to transform the image and identity of the city and region away from the grittiness of docks and blue-collar work to art, creativity, and ideas.

The “which” involves the instruments used to actually implement the strategies. In the case of the transformation of Bilbao and the Basque region, a main instrument involved convincing the Guggenheim Museum to locate its first location outside of North America in Bilbao. Opening the Guggenheim Museum in Bilbao triggered a cultural transformation of the region, which accelerated the success of the food and culinary industries, such as the famous Rioja wine. As the design and software industries have replaced the now idle docks and shipbuilding factories of yesteryear, the performance of Bilbao and the entire Basque region has soared. It all started, however, with the vision of leaders for a strategy that would dramatically change both the economic and social landscapes of Bilbao, and ultimately the performance as well.

Similarly, in transforming Berlin from a performance characterized by stagnant economic growth and growing unemployment, key instruments involved both human capital and knowledge, but also identity and image. The strategy prioritized investments in universities and research but also amenities to attract high human capital to the city. At the same time, the strategy prioritized changing the identity and image of the city from being overly bureaucratic and anti-business to being creative, open, and entrepreneurial. Berlin is now widely recognized as being the most entrepreneurial city in Europe and one of the entrepreneurial hot spots in the world.

The “when” involves the timing and lags between the implementation of the strategies through specific instruments and their actual impact on performance. Some strategies are longer term, while other have a more immediate impact. For example, it took decades for the investments which created the Research Triangle Park to actually pay off in terms of enhanced performance. By contrast, the Connect policy in San Diego, which was the catalyst for the emergence of the life sciences entrepreneurial ecosystem, resulted in an enhanced economic performance within just a few short years.

Thus, it is one thing to have a framework to enhance performance. It is quite another to be able to implement it successfully. Focusing on the five W’s—Who, Where, What, Which, and When—will go a long way in making the theory inherent in the framework remarkably tractable, enabling those places willing to do the work not just to enhance their economic performance but to ultimately thrive. The insight of George Eliot, the great British novelist observed, “it will never rain roses: when we want to have more roses, we must plant more roses.”

Perhaps a remaining question is, “how?” In order to show the manner in which the framework can be applied universally across geographic, historical, and cultural contexts, this book proceeds with a multitude of chapters exploring different cases of the framework’s practical application. This case study approach, while not exhaustive of all potential places, does serve as adequate evidence of how any place can benefit from the opportunity for self-reflection and creative problem-solving that the framework provides. The following chapters provide case studies from across the globe—specifically, four continents, 12 countries, and many localities (see Table 1 and Fig. 2). These cases span a variety of economic and social issues and clearly display the dynamic and interdisciplinary nature of economic and community development that are present within the strategic management of places framework.

Table 1 Overview of book chapters

Continent	Country	Chapter
<i>Europe</i>	Italy	Taranto—Revitalizing the Energy of a Mediterranean Port City
		Analyzing Youth Unemployment and Brain Drain in Southern Italy
		An Analysis for Strategic Locational Management: The Case of Lombardy
	Austria	The Past, the Present, and the Future in Vorarlberg and Tyrol
	Spain	Economic Development in an Autonomous Region within a State
	Germany	Skilled Labor Shortages—the Bavarian Case
		Regional Differences in Unemployment—the German Case
Norway	The Norwegian Paradox—Analyzing Overdependence on Oil Exports	
France	The Gender Pay Gap in France	
<i>North America</i>	USA	The Economic Performance of Las Vegas—Shaping Culture and Identity through Economic Policy
		Fracking in Texas—Effects on Economic Development and Future Outlook
		Overdependence of Silicon Valley on the Technology Industry
		Population Decline—Detroit’s Exodus
		New York City—The Challenges of the American Dream
<i>Asia</i>	United Arab Emirates	Dubai—A City of Contradictions
	Singapore	Strategic Management of Places: The Case of Singapore
	China	The Economic Impact of Air Pollution in Beijing
		The Intersection of Environmental Policy, Public Health & Economic Performance in Shanghai
	Qatar	The Impact of Hosting the World Cup on the Economic Performance and Labor Conditions of Qatar
<i>Africa</i>	South Africa	Cape Town—Making Progress Possible. Together?

**Fig. 2** Geographic locations of the case studies created with [WorldMapCreator.com](https://www.worldmapcreator.com/)

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