



Higher growth through the Blue Ocean Strategy: Implications for economic policy

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ABSTRACT

Higher growth is a key goal of companies, governments, and societies. Economic policies often attempt to attain this goal by targeting companies of certain sizes that operate in specific industries and focus on a specific business activity. This approach to policy making has considerable shortcomings and seems to be less than fully effective in increasing economic growth. We suggest a new approach to policy making that stems directly from the entrepreneurial perspective. This approach examines a successful business strategy framework – the Blue Ocean Strategy – to discover conditions for high growth. We test the propositions on empirical data for two cases of successful high-growth business, namely Slovenian gazelles and Amazon.com. The results reveal a gap between the macro level of economic policy making to achieve higher growth and the micro level of business growth. The findings call for a change in the focus of economic policies on specific size companies, industries, and business activities to intraindustry cooperation, collaboration between companies of different sizes, value innovation, and creation of uncontested markets.

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1. Introduction

Today, most governments recognize that entrepreneurial activity and innovation are important elements of economic policy. The idea of a positive relationship between innovation and entrepreneurship on the one hand and economic growth on the other hand has endured in economic thought ever since Schumpeter (1942) popularized “creative destruction” as a result of entrepreneurial activity that creates new products and business models and generates long-term economic growth. The idea of stimulating economic growth by supporting entrepreneurial activity has established deep governmental commitment to provide a high level of support to small and medium-sized enterprises (SMEs) and new start-ups.

However, governments are generally ill equipped to provide detailed economic direction (Porter, 1990). A reason for this could be a lack of feedback on the results of policy interventions, as only a few studies have investigated whether the policy measures introduced indeed have the desired effect on entrepreneurial activity (Patzelt and Sheperd, 2009). Another reason is the structure of today’s business context, which is changing quickly and pushes companies of all sizes and in different industries to be innovative

and to constantly review their processes and practices to survive in the market.

Over the past few years, the financial crisis has forced policy makers to rethink the path to economic recovery. Job creation has remained a primary policy concern. This means that economic policies mostly target companies of a specific size, in particular SMEs and new companies. This policy direction seems somewhat reasonable because it provides a quick solution to increase employment, re-establishes active participation in the labor market, and reduces negative social effects of job loss. However, the creation of low-added-value jobs works only in the short run, as it more or less postpones any problems to a later time. A strong focus on employment growth seems to imply that existing government policies may be less than fully effective in increasing economic growth. Evidence for this also comes from an analysis of sources of economic growth in the European Union since the mid-1990s and a comparison to the United States (Timmer et al., 2011). To explore this room for improvement, our study compares existing policy-making initiatives with the characteristics of high business growth, and it introduces a new approach to policy making. We investigate the value of an entrepreneurial perspective on opportunities in the business environment for the foundation of economic policy.

The article begins with a brief overview of the sources of economic growth that have been targeted by instruments of economic policies. It continues with shortcomings of current policy-making approaches and proposes a new approach based on a business strategy called the “Blue Ocean Strategy” (BOS). The BOS is a successful example of executing change as a crucial source of high business

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growth (Tushman and O'Reilly, 1997), in contrast to conventional strategy models that are explicitly or implicitly based on stability rather than change. The propositions derived from the BOS framework are then analyzed via two cases, Slovenian gazelles and Amazon.com. These successful cases of high business growth serve as benchmarks to determine how congruent their characteristics are with BOS characteristics. In the final section of the article, we discuss our findings to see how policy makers can learn from the BOS framework, we report the limitations of our study, and we present directions for future research. Our recommendations are primarily intended for policy makers. Companies can use the BOS directly, as it is a framework created for them, but they can also benefit from understanding the implications of its use for policy makers.

2. Theory of economic growth and shortcomings of current policy-making approaches

Economic growth is a priority of the most recent policy interventions. There have been numerous shifts in how economists perceive the main source of economic growth, evolving from manufacturing (Smith, 1937 [1776]) to entrepreneurship (Schumpeter, 1942) and productivity growth (Krugman, 1997). Although in principle economic growth can be achieved through growth of labor or labor productivity, most governments count on productivity increases. This is in line with Krugman's (1997, p. 11) famous statement: "Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker." Indeed, labor productivity is the most widespread measure of productivity (OECD, 2001). Growth in labor productivity comes from three sources of growth: labor quality, which reflects the composition of the workforce; capital deepening, which manifests the amount and composition of capital goods (e.g., equipment, structures) available to the workforce; and total factor or multifactor productivity (Steindel and Stiroh, 2001). Multifactor productivity captures the residual output growth that cannot be explained by measured input growth and is typically attributed to technical progress and resultant efficiency gains. It is mainly driven by innovation (Jorgenson, 2009), another important impetus for growth. Innovation has also been emphasized as an important contributor to enabling companies to improve economic performance (Crespi and Zuñiga, 2010). To foster innovation, governments have established intellectual property rights systems and have directed their policies toward specific industries and companies of specific size.

Intellectual property rights systems provide economic incentives for innovation activities and stimulate competition and market development by protecting entrepreneurial talent, so governments have incentivized companies to increase research and development (R&D) expenditures and the number of patents. However, these systems have generated various performance results and growth potentials across businesses, sectors, and countries, which casts doubt on their effectiveness (e.g. Andersen and Konzelmann, 2008; Furukawa, 2007), especially in light of new phenomena such as deliberate intellectual property sharing (Pisano, 2006). Still, patents are typically used as indicators of innovation intensity (e.g. Guellec and Pilat, 2008). For example, the World Economic Forum's methodology includes innovation as one of the pillars of the Global Competitiveness Index, but six out of seven indicators in this pillar are closely related to technology, and patents still hold a prominent position. Of course, this index has been strongly criticized on the ground of weak definitions, a biased approach, and methodological issues, and it is rarely used in the academic literature (Lall, 2001). However, the concept of national competitiveness has become a dangerous obsession (Krugman, 1996) and is often used in policy making because it allows for the

benchmarking of countries. In Slovenia, the index is frequently cited by the Institute of Macroeconomic Analysis and Development, an independent government office that prepares analytical bases for strategic decision making and economic and development policy measures (see Brložnik, 2010; Kmet Zupančič, 2011).

Other data on innovation have only recently supplemented patent data and R&D expenditures (OECD, 2009), so as not to exclude service-sector companies and small companies. One type of innovation is a business-model innovation defined as the discovery of a fundamentally different business model in an existing business. The difference vis-à-vis other types of innovation (e.g. product or service innovations) is that business model innovators redefine an existing product or service and how it is provided to the customer. A business-model innovation can be patented at the U.S. Patent Office, but it cannot be protected in the European Union.

Another arena for policy action concerns specific industries like information technology (IT) that are believed to lie at the core of productivity growth. For the United States, Jorgenson et al. (2007) examined the role of IT in output and productivity growth. They concluded that the multifactor productivity upsurge of 1995–2000 was generated by IT-producing industries, whereas IT-using industries (many of them in the services sector) came to the fore in 2000–2005 after the dot-com crash of 2000. A positive impact of IT on productivity growth was also observed in other industrialized countries in the 1990s, even though their more restrictive regulatory environments compared to those of the United States seem to have attenuated it (Gust and Marquez, 2004). Lately, the focus has changed to incorporate, in addition to IT, other emerging high-tech fields, such as biotechnology and nanotechnology. Although governments typically emphasize the importance of high-tech industries, companies of various sizes and ages, and operating in various sectors, can achieve high growth (Smallbone et al., 1995). In addition, whenever policies address specific industries or technologies, thus departing from neutrality, it is necessary to exercise caution so as to not create market distortions and reduce competition (Aghion et al., 2009).

Policies are also sensitive to business size. The debate on the importance of small companies to the economy started in the United States after David Birch published a report in 1979 claiming that small companies accounted for the majority of job growth in the United States (Landström, 2005). Since the mid-1980s it is commonly held that small companies can compete against bigger ones because they are more flexible and thus better adapted for engendering and adopting innovations (Piore and Sabel, 1984; Rothwell, 1989; Sabel and Zeitlin, 1985). This idea has been even further developed by suggesting that the U.S. economy should be reoriented toward small, craft-based companies (Robertson and Langlois, 1995).

Only recently have politicians realized that sheer numbers do not make for a dynamic economy, as both job losses and gains are highly concentrated among small companies (Drnovšek, 2004). Many authors have shown the existence of a negative relationship between the growth of labor productivity and job growth in the United States (e.g. Freeman, 1988) and in the European Union, where flexibilization of labor markets may indeed create many jobs, albeit at the expense of labor productivity growth (Kleinknecht et al., 2006). Growth in the self-employment sector may also be problematic from a growth perspective, as increased self-employment rates are not necessarily positively related to the rate of economic growth (Blanchflower, 2000; Jiang et al., 2010). The emergence of fast-growing companies has largely added to public policy discussions on the importance of SMEs as the engine room of growth in the economy. Fast-growing companies demonstrate an ability to increase labor productivity while also increasing employment (Smallbone et al., 1995), thus effectively contributing to economic growth.

This review indicates that governments need to be aware of the potential flaws of introduced economic policies, which is also partially due to insufficient quality and quantity of relevant data; policy making remains under investigated because we do not have answers to the uncertainties related to input into the policy-making process and its outcome. For entrepreneurship policy, the problematic assessment is also the result of the recent introduction of initiatives, which are still too young to be fully evaluated (Cumming, 2007). There is even less literature on the role of empirical data in policy making. Some studies have examined the use of evidence in environmental policy (Holmes and Clark, 2008) and health policy (Niessen et al., 2000) to show that policy making in these areas is increasingly evidence based. Although data at the national, regional, and local levels are gathered periodically and used as complex econometric data in macroeconomic models and simulations, economic policies do not rely on macroeconomic data alone. In examining U.S. economic policy, Jones and Baumgartner (2005) showed that Congress did not take into account objective economic indicators, such as a change in gross domestic product (GDP), and more closely followed whether people in the Gallup survey agreed that macroeconomic issues were the most important problem facing the nation. Including public opinion in policy making simply to satisfy the changing demands of the electorate is an important pitfall of the existing policy-making process, as is overreliance on indicators that have weak methodological support (e.g. Bikfalvi, 2007). These problematic issues are inherent to the policy-making process because of information overload, complex problems, and data discrepancy. At the same time, it is difficult to predict how a large economic system will respond to policy inputs. Still, putting aside the complex nature of the analysis, policy measures can have adverse outcomes with a negative impact on economic growth.

3. A new approach to policy making for growth

This study proposes a new approach to the design of high-growth economic policies that stems directly from the entrepreneurial perspective and is using evidence to inform economic policy. This approach investigates the applicability of a business strategy, called the BOS, to policy making to create conditions for high growth.

The BOS was developed by W. Chan Kim and Renee Mauborgne, professors of strategy at the INSEAD (Institut Européen d'Administration des Affaires), in their study of 150 strategic moves spanning 30 industries; the authors used data stretching back more than 100 years. The authors analyzed new business launches in 108 companies and discovered that 86% of those new ventures were line extensions and a mere 14% were aimed to create new markets or industries. Although the line extensions accounted for 62% of total revenues, they delivered only 39% of total profits, compared to the 61% of total profits that the new markets or industries accounted for (Kim and Mauborgne, 2004). Their research resulted in the landmark book *Blue Ocean Strategy* (Kim and Mauborgne, 2005) and research articles that preceded it (see Kim and Mauborgne, 1999, 2004). Executive reviews point to the usefulness of this approach as a compelling case for pursuing a business strategy with a creative, not combative, approach and as a strategy that is not only original but also practical and leads to powerful results.

The BOS thus builds on the idea of a company's value creation in uncontested markets labeled "blue oceans", whereas conventional business strategy models focus on competing inside an existing "red ocean" by trying to beat the competition. The latter markets are characterized by well-defined, accepted industry boundaries and clearly understood rules of competition. Business strategies are built on cost leadership, differentiation, or focus (Porter, 1990) to

achieve a sustainable competitive advantage and long-term success in chosen areas or industries. Companies that follow a traditional business strategy seek to beat the competition while exploiting the existing demand and making value–cost trade-offs. They constantly try to cut production costs and increase marketing efforts. Because all competitors are doing the same, this approach usually results in a zero-sum game.

In the present study, we use the BOS characteristics to formulate four propositions relevant to economic policies that focus on high growth. The first proposition builds on the main distinguishing feature of the BOS, its search for blue oceans of compelling opportunities and uncontested market space. The key idea behind the BOS perspective is encompassed by value innovation, or the pursuit of superior customer value at a lower cost. This perspective leads to a new definition of a target customer and focuses on what that customer needs and wants. Companies try to redefine the industry by searching for new customers and creating a new value proposition for customers instead of relying on imitation or incremental improvement over competitors. Thus, a company can create an uncontested market space, in which the company is the first in the market, which gives it temporary monopoly power; it can quickly create economies of scale and exploit positive feedback effects, which offers the company an opportunity to grow more quickly. We can therefore expect that a company that is first to market enjoys a larger market share and has a higher net value added per employee. Companies following this strategy should change their target customers and/or redefine the strategy to serve them by offering the best mix of attributes, a mix that is most relevant for the target customer's needs. All the company's activities are undertaken in the pursuit of differentiation and low cost. To do this, companies must change their established business models. This might mean destroying models that have been successful over time and discarding assets that were once very valuable. The capacity to embrace business models that create new value for customers and new wealth for investors is a concept that Christensen (1997) and Hamel (2000) explain, who perceive competition in the contemporary world as no longer being between products or services but between competing innovation regimes. In addition, Tushman and O'Reilly (1997) see the clear identification of opportunity gaps as a starting point for winning through innovation. All these authors focus less on competition between companies and products and instead propose market disruption as a source of entrepreneurial profits. Accordingly, the first proposition relates to the creation of new market spaces in which a company is a pioneer and the competition is small or nonexistent.

Proposition 1. *Creating a new market space leads to higher growth.*

Several studies have reported that the successful creation of a new market space is present in industries as different as the plush toy market (Sheehan and Vaidyanathan, 2009), movie theaters (Kim and Mauborgne, 2004), and the wine industry (Kim and Mauborgne, 2005). Differences between industries are visible if we look at the economies of scale that have proved strong in certain industries, such as iron and steel, automobile manufacturing, and certain branches of chemicals, whereas in many other cases small companies have been able to retain strong positions (Robertson and Langlois, 1995). This leads us to the second proposition, which builds on the evidence that blue oceans can be found at the boundaries of any industry and are not limited to a specific industry (e.g. high-tech industries like nanotechnology, biotechnology, and energy).

Proposition 2. *Fast growing companies can be found in a variety of industries.*

Creating a new market space means being innovative. For decades we have known that innovations are not limited to just products and technology. Kim and Mauborgne (2004) showed that 10 of 13 blue oceans identified in three distinct industries (automobiles, computers, and movie theaters) were created mostly through existing technologies – only 3 used some new technologies. Just 1 of the 13 was focused on technology pioneering, and the others were focused on value pioneering. In Japan, a technology powerhouse, only 33% of all patents are actually being used (Hisamitsu, 1999). Research has shown that more than 95% of patents are unlicensed and 97% generate no royalties (Landes and Posner, 2003). Another study has shown that only between 1% and 3% of patents generate a profit for their holders (Myhrvold, 2010). This brings us to the third proposition on gaining growth through value innovation.

Proposition 3. *Companies achieve high growth through value pioneering, not only through technology pioneering.*

The BOS idea suggests that large companies are not at a disadvantage compared to SMEs in terms of flexibility regarding the creation of a new market space. Kim and Mauborgne (2004) showed that incumbents (i.e., among the largest in their industry) created 9 of the 13 blue oceans identified in three distinct industries, start-ups created 3, and an established player coming from another industry in which it was among the largest players created 1. This finding is in line with many authors who believe that economies of scale remain overwhelmingly important (Lazonick, 1990) and that a high degree of vertical integration is desirable (Florida and Kenney, 1990). Therefore, we establish the fourth proposition, which suggests that both large and small companies can achieve high growth by creating new market space.

Proposition 4. *Fast growth is independent of company size.*

4. Methodology

To empirically assess the potential of the BOS propositions for high-growth policy making, we selected two cases that have enjoyed extreme growth: Slovenian gazelles and Amazon.com. Although a multiple-case study is generally preferred, analysis of extreme cases can lead to particularly useful findings (Patton, 1987), as they allow for a more detailed and precise analysis with the same amount of resources (Dyer and Wilkins, 1991). Because the present study is based on only two cases, it is especially important that these cases represent an extreme test of a particular theory (Scapens, 1990; Yin, 2003). In such an approach, random selection is not necessary and is even undesirable (Eisenhardt, 1989). We did not select the two cases for their comparability; on the contrary, the Slovenian gazelles are mainly rooted in the Slovenian institutional environment, despite their prevalently international orientation, and they often operate in one industry. In contrast, Amazon.com is a global company operating in many different institutional environments, spanning different industries, and offering an opportunity to discover a broad spectrum of innovations. Nevertheless, fast growth characterizes all these companies, and they all share the label “gazelles” for at least a certain period of time.

Growth is the hallmark of a gazelle company. Gazelles are fast-growing companies that are qualitatively different from other types of companies, namely mice (small companies committed to remaining small) and elephants (big companies; Landström, 2005). Birch defined a gazelle as “a business establishment which has achieved a minimum of 20% sales growth each year over the interval, starting from a base-year revenue of at least \$100,000,” thus doubling its sales over the most recent four-year period (Henrekson and Johansson, 2009). In business terms, this means that gazelles are agile enough to avoid hostile takeovers by companies bigger than them and fast enough to grow revenue more quickly than

they increase their costs, thus becoming profitable as quickly as they become sizable. A meta-analysis of the empirical evidence on gazelles showed that gazelles create all or a large share of new net jobs and exist in all industries, although they seem to be overrepresented in services (not high-tech); on average, they are younger and smaller than other companies, and it is their young age more than their small size that is associated with rapid growth (Henrekson and Johansson, 2009). Previous research has also shown correlation between high growth and innovativeness of a company (e.g. Acs and Audretsch, 1990).

A recent European panel also agreed that gazelles are rare, but they are important because 3–10% of any new cohort of companies will end up delivering 50–80% of the aggregate economic impact of the cohort over its lifetime (Autio and Hözl, 2008). Research on Slovenian gazelles corroborates these findings: the top 500 Slovenian gazelles expanded their sales 5.6-fold in the 2002–2007 period, and the top 5000 fastest-growing companies representing 4.5% of all incorporated businesses in Slovenia created 60% of all new jobs in the 2003–2007 period and contributed 28% of GDP, namely four percentage points higher than the net contribution of bigger companies (Pšeničny, 2008). However, Acs and Mueller (2008) report that gazelles unfold their major employment effects after they have been in business for at least five years; and Acs et al. (2008), conclude that high-impact companies are relatively old (an average of 25 years) and rare (2–3% of all companies) and contribute to the majority of overall economic growth in the private sector.

4.1. Slovenian gazelles

In Slovenia, businesses that satisfy the criterion of extreme growth are known as Slovenian gazelles. This study draws on two data sources on Slovenian gazelles: a survey of the top Slovenian gazelles and the GVIN.com database. The survey sample consisted of 512 Slovenian gazelles selected as candidates in the annual contest for the Slovenian Gazelle 2007. The contest used the following standard criteria: total revenue growth rate, revenue profit growth rate, capital profitability growth rate, assets profitability growth rate, and profit-per-employee growth rate. Additional quantitative indicators included the index of a company's survival probability and the DaBeg index (Birch, 1987). Qualitative data such as the extent of corporate social responsibility activities performed by a company, the future development vision of a company, and so on, supplemented the financial criteria. The survey questionnaire was pretested in three cognitive interviews using a combination of think-aloud and retrospective probing. The overall response rate was 27.9% (calculated according to the measure RR6 set up by the American Association for Public Opinion Research). To determine for the presence of nonresponse bias, an additional telephone data collection was conducted among nonrespondents for three key survey variables, and supplemental variables on sampled gazelles were gathered from the GVIN.com database. The GVIN.com database is a leading provider of electronic business information in Slovenia. We matched the survey data with the GVIN.com data on the basis of a unique business identification number. The GVIN.com data are in effect based on publicly available administrative records from the Slovenian Business Register that contain basic information on businesses (e.g. legal form, location, main activity) and annual reports (i.e. balance sheets and income statements that must be published in accordance with the Companies Act) (Lešnjek, 2008). According to these analyses, the sampled gazelles represented a fairly homogeneous group with respect to the variables of interest, although nonrespondents tended to be slightly (but generally not statistically significantly) less inclined to internal entrepreneurship (Bavdaž et al., 2009). We therefore concluded that the data are highly representative of the sampled gazelles.

Table 1
Amazon's financial data.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Sales (mio \$)	0.5	15.7	148	610	1640	2762	3122	3933	5264	6921	8490	10710
Annual sales growth rate (%)		2981	839	313	169	68	13	26	34	31	23	26
Gross profit (mio \$)	0.1	3.5	29	134	291	656	799	992	1258	1602	2039	2456
No. of employees (in 000)		0.16	0.61	2.1	7.6	9.0	7.8	7.5	7.8	9.0	12.0	13.9
Employee growth (%)			289	242	262	18	-13	-4	4	15	33	16

4.2. Amazon.com

Amazon.com has managed to transform itself from an online bookstore to one of the key destinations for online shopping in the world, it has entered the market of application solution providers, and it offers business solutions (e.g. warehousing, distribution) and Web services. Furthermore, the company is a typical representative of the so-called new economy, but it also has many characteristics of traditional companies. Traditional functions account for 70% of its core resources (Niekerk, 2000). Therefore, the case enables the identification of innovations that are typical of both traditional and new economy companies. Patton (1987) and Stake (1995) suggest picking a case from which the most can be learned. The selected case must also enable a comparison with the existing literature (Yin, 2003). Here, Amazon.com has managed to develop from a start-up to among the largest companies in the world in slightly more than a decade (Table 1). This enables us to analyze innovations in different phases of the company's life cycle. In the past decade, Amazon.com has been one of the most frequently used examples in business and academic literature and has thus already been analyzed from different viewpoints, which can help improve the validity of the findings. Amazon.com is also an extreme and contradictory case in terms of predictions regarding the company's future, ranging from being on the cover of every major business publication to an ugly duckling. In fact, before the dot-com crash the company was typically featured as a role model, and its chief executive officer, Jeffrey Bezos, was even selected as *Time's* Person of the Year in 1999. After the dot-com crash even the most prominent economists (see Porter, 2001) portrayed the company as having negative characteristics and predicted that its future was bleak.

This study covers the period from the company's establishment in 1994 to the end of 2008. It also includes Amazon.com's subsidiaries (e.g. IMDB.com, A9.com) as long as they relate to the operations of the company as a whole, although we make no detailed analysis of those companies. Furthermore, we consider partner companies (e.g. Drugstore.com, Toys "R" Us) only in the context of their cooperation with Amazon.com. We used several data sources concerning the company: news releases, annual reports, the CEO's letters to shareholders, blogs, audio and video recordings of key employees, patents, and academic and business literature examining the company. We included all news releases on the company's Web site from 1995 to 2006. All together, 703 news releases in English and French were analyzed. We included annual reports, letters to shareholders, blogs, and audio and video recordings to gain insight into the information the company considered important for its stakeholders. In addition, we used academic and business literature that offers an alternative and more critical view of the company.

4.3. Indicators of growth included in the analysis

We used data from the gazelles' annual reports to derive the main performance indicator for Slovenia's fast-growing companies. We used a relative measure of net value added per employee to facilitate comparisons across various business sizes. After conducting a sensitivity analysis, we selected value added over other

possible indicators, particularly sales and profit. Profit as an indicator of financial profitability does not capture relevant size and growth aspects (Meuleman et al., 2009). Sales is the most widely used indicator of business growth in empirical analyses (Delmar et al., 2003), even though sales figures are sensitive to the degree of integration, presence of sales on a commission basis, and so on. Gross output is also suggested as a measure of business output (Majumdar, 2007), yet it is also sensitive to the degree of integration and is therefore not suited for comparisons between businesses and across industries.

The value-added indicator expresses the value that a business newly creates, which conceptually fits our purpose of capturing the contributions of businesses to value generation. It also enables a comparison of heterogeneous businesses and different industries. It has a direct link to the principal indicator of economic growth, namely the GDP growth rate. GDP is intended to be a comprehensive measure of the total gross value added produced by all resident institutional units (European Commission et al., 2009), despite that it has attracted criticism (Hillinger, 2003). For the business sector, GDP can be calculated from the gross value added of businesses after some adjustments, such as an upward adjustment by the capitalized costs of developing software and a downward adjustment by the service charges paid for financial intermediation (UN, 2000). Although value added is not a typical performance indicator for companies, the business world is familiar with the concept through taxation systems involving value-added tax. Value added can be measured as a gross amount or net of depreciation. Conceptually, it should be measured net, as a reduction in the value of fixed assets is a cost of production and thus not part of newly created value (European Commission et al., 2009). Nevertheless, value added is often measured gross because of practical difficulties in measuring depreciation to reflect the cost of the fixed capital used up in production instead of reflecting a depreciation schedule allowed by tax authorities (UN, 2000). By analyzing news releases, an attempt was made to identify the changes and innovations Amazon.com found to be important enough to communicate to a broad audience. As patents are one of the more traditional forms of protecting intellectual property rights from innovations, an analysis of patents granted and pending was also conducted. Altogether 92 patents and patent applications were analyzed; in all, Amazon.com was the assignee or CEO Jeffrey P. Bezos was the inventor.

5. Data analysis and results

We present the results of our analysis according to the four propositions arising from the BOS formulated in Section 3. We first comment on the results of a sensitivity analysis on the main performance indicator. We tested the correlations between companies' average net value added per employee, sales per employee, and earnings before interest and taxes (EBIT) per employee by industry, both for the gazelles and as an average for all Slovenian companies. We performed these calculations only for companies with employees. The gazelles' average net value added per employee varied by industry the gazelles' average EBIT per employee ($r=0.936$) and on average in the same direction, though somewhat less in harmony with the gazelles' average sales per employee ($r=0.530$). Similarly,

Table 2
Comparison of performance indicators (2007; thousand €).

Average values per company	Net value added per employee	Sales per employee	EBIT per employee
Gazelles	50.6 €	531.8 €	28.1 €
All companies	25.8 €	152.5 €	10.6 €

all companies' average net value added per employee varied by industry practically the same as all companies' EBIT per employee ($r = 0.998$) and on average in the same direction, but not so consistently as all companies' sales per employee ($r = 0.317$).

We also compared the net value added per employee between gazelles and all Slovenian companies (Table 2). There is a sharp difference: in Slovenia, on average, a fast-growing company achieved €50.6 thousand of net value added per employee in 2007, whereas the average Slovenian company achieved only €25.8 thousand net value added per employee. Sales and EBIT per employee exhibit even sharper differences (€531.8 thousand of sales per gazelle and €152.5 thousand per company; €28.1 thousand of EBIT per gazelle and €10.6 thousand per company).

5.1. Proposition 1: Creating a new market space leads to higher growth

Creating new market spaces means avoiding competitors and creating and capturing new demand by breaking the value–cost trade-off, which provides the company with possibilities for high growth. We used a one-way analysis of variance (ANOVA) on the survey data for the gazelles to test for differences in their net value added per employee among three groups of gazelles: gazelles with many competitors ($M = €54.7$ thousand), gazelles with some competitors ($M = €62.9$ thousand), and gazelles with one major competitor ($M = €109.2$ thousand). The average value per gazelle showed the expected direction, but it did not differ significantly across the three groups, $F(2, 141) = 2.43$, $p = 0.09$.

The Amazon.com case study also provides support for Proposition 1. Even though some authors perceive Amazon.com as the first company to have entered the market (Mellahi and Johnson, 2000), the company was in fact hardly the first to enter the market, nor was it a pioneer with its initial online bookstore model. Computer Literacy Bookshops, a specialized technical bookstore company from the Silicon Valley, began selling books online back in 1991, three years before Amazon.com was established. In 1992, Book Stacks Unlimited was established. In 1994, it opened a bookstore with 500,000 book titles at reduced prices. The bookstore offered information about authors, user reviews, extensive electronic book selection, and even its own bookstore news-radio show. What distinguishes Amazon.com from these companies is its introduction of new innovative ways to serve the customer online. For example, Amazon.com was the first company to use collaborative-filtering technology, the first to develop a one-click program, and the first to provide customers with reminders and order tracking through alerts (Hof et al., 1998). Although the company did patent its one-click program, almost every e-commerce company now uses the invention (Mellahi and Johnson, 2000). This shows that the company managed to differentiate its business model not so much in value proposition but in how it created its value. The initial business model, which included direct sourcing, enabled it to work at lower operational costs: rather than building physical stores and maintaining a multiplied inventory in all of them, it developed a centralized distribution model. The other key difference was in its system of high-quality recommendations of titles from its long tail. The long tail refers to the statistical property that a large share of the products sold is found on the tail of a probability distribution. Products in the tail have higher margins and low competition, as offline

competitors do not offer them because of limited storage space. In contrast, online competitors were unable to push the products from the long tail in front of potential buyers. This suggests that being the first to create the value proposition for the blue ocean is insufficient for a company to grow faster; what is important is being able to really exploit the newly created market space.

These results partially confirm the first proposition: companies that exploit a new market space grow faster.

5.2. Proposition 2: Fast-growing companies can be found in a variety of industries

Industries were defined at the level of NACE divisions (i.e. two-digit codes). Special attention was given to high-tech industries that are often targeted by economic policies. In Slovenia, high-tech was initially closely associated with the software industry. In 2007, though, only 2 of the 500 fastest-growing Slovenian companies were in software-related industries. We also compared the number of fast-growing companies in a given industry to the number of all companies in that industry. As Fig. 1 shows, three industries exhibit a greater percentage of fast-growing companies than other industries: recycling, air transport, and manufacture of basic metals. None of these industries is typically considered a high-tech industry. All other industries include less than 2% of companies that qualify as gazelles. At the same time, more than a third of all gazelles (172 of 512) are in wholesale and retail industries, industries that are never considered high-tech industries.

Moreover, we analyzed the long tail of the net value added per employee by industry and compared the average gazelles' net value added per employee for a given industry with the average of the rest of the companies. The comparison showed that not all gazelles produce above-average net value added per employee. As Fig. 2 shows, in 8 of 37 industries gazelles created workplaces with a lower net value added per employee than did remaining companies. Also notable is that gazelles in industries classified as "activities auxiliary to financial intermediation" have an index of 227 compared to those classified as "financial intermediation" with an index of 50.

Among industries with the highest index are those related to real estate. This result can be attributed to the real estate boom that was peaking around 2007. This industry is followed by "other business activities," with more than three times greater net value added per employee for gazelles than the average. The results also show that gazelle wholesale companies generated net value added per employee 2.4 times greater than the average for the others.

The results also reveal the high variability of net value added per employee in industries. For example, the coefficient of variance for the industry computer and related activities was 6.1, which places it among the 15% of industries with the greatest variability.

Fast-growing companies can be found in any industry, as the development of Amazon.com shows. The company started as a pure-play online shop, actually stocking fewer than 2000 of the 2.5 million titles it offered on its Web site in 1997. Following its "get big fast" strategy, it then moved into new markets and product groups. As a result, 35% of its orders involved products from product groups other than books. This required a change in the company's business model: a move away from direct sourcing and the development of its own warehousing and logistics capabilities. The company also created blue oceans by constantly developing and optimizing its own processes and offering them as a service, such as e-commerce technology services, customer care services, technology for in-store and telephone ordering, Web site management, and warehousing. Today, its customers include Marks & Spencer, Target, Bebe, Sears Canada, Netflix, and others, many of which are Amazon.com's direct competitors in other industries. The company has constantly changed and supplemented its original business model to enable further growth. Fast-growing companies thus exploit their core

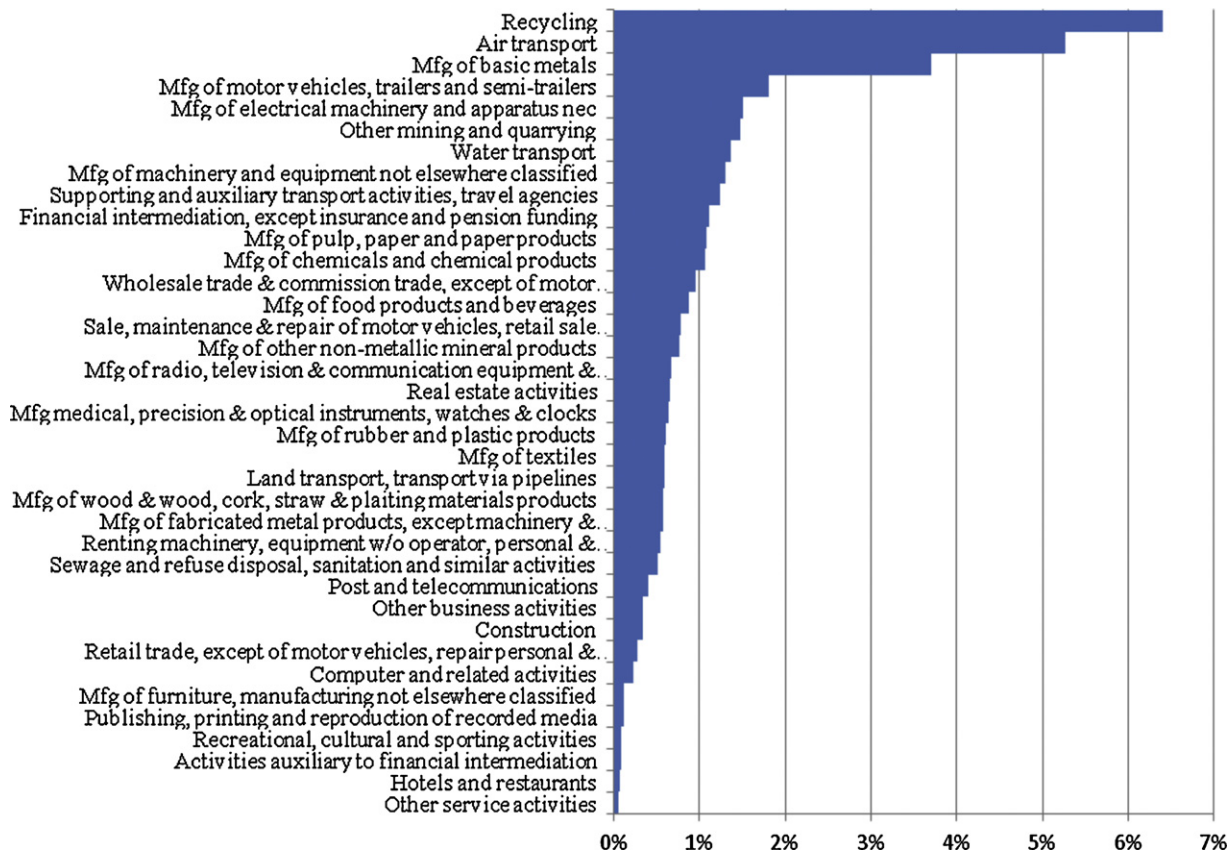


Fig. 1. Share of fast-growing companies by industry in Slovenia in 2007. Note: The figure includes only those industries that include gazelles.

competencies to develop new blue oceans regardless of the industry in which they initially started their business. These results show that fast growth is not generated or guaranteed by specific industries.

5.3. Proposition 3: Companies achieve high growth through value pioneering, not only through technology pioneering

Patents are believed to be a superior way to promote intellectual discovery and protect inventions from imitators. In the case of Slovenian gazelles, we analyzed the number of patents issued for each company and discovered that only 5.5% of these companies held patents. This means that companies can achieve high growth without focusing on protecting products or technology.

In September 2010, Amazon.com held 115 patents in its name, whereas in 2009 alone IBM garnered 4914 and Microsoft 2906 U.S. patents. The success of Amazon.com indicates that the number of patents issued is not a proper measure of likely success. Further, patents often have little to do with the success of innovation (Hutter, 2010). For example, Amazon.com did not discover bookselling; it redefined what the service is all about, what the customer gets out of it, and how the service is provided to the customer (Markides, 2006). It also operates in the book retail business in a fundamentally different way from others in the industry or its so-called rivals, like Barnes & Noble. Its clients include companies like Eli Lilly, Pfizer, NASA, Adobe Systems, and Netflix. In February 2010 Microsoft and Amazon.com entered into a cross-license agreement that gives each company a license to access the other's patent portfolio. Amazon.com is also expanding beyond its roots as an online retailer by developing innovative ways to serve the customer online. The emphasis on value places the customer, not the competition, at the center of strategic thinking and pushes

managers to go beyond incremental improvements to totally new ways of doing things. The company has managed to position itself as the leader in the Web services business because of the continuous development of the value and preference of customers for Amazon.com over later entrants.

These findings therefore confirm the proposition that the key to fast growth lies in value innovation not just in technology innovation.

5.4. Proposition 4: Fast growth is independent of company size

First, we examined the definition of SMEs in comparison to that of large companies. It emerged that this definition is not only arbitrary but also differs between countries and even within individual countries when used for different purposes. The EU member states have their own definitions of SME size, although the European Union has started to standardize the concept. Its current statistical definition categorizes companies with fewer than 10 employees as "micro", those with fewer than 50 employees as "small," and those with fewer than 250 employees as "medium-sized". In the United States small businesses are generally considered those with fewer than 100 employees, whereas a medium-sized business is often regarded as one with fewer than 500 employees.

We then analyzed gazelles and how the threshold between an SME and large business affects the average gazelle's net value added per employee. As reported in Fig. 3 we found that the average gazelle's net value added per employee drops quickly with a small number of employees. It is halved when the threshold moves from "sole proprietorship" to 20 employees per gazelle. We further discovered that it remains practically unchanged when we increased the number of employees per gazelle to more than 20 people. If the threshold between an SME and a large company is

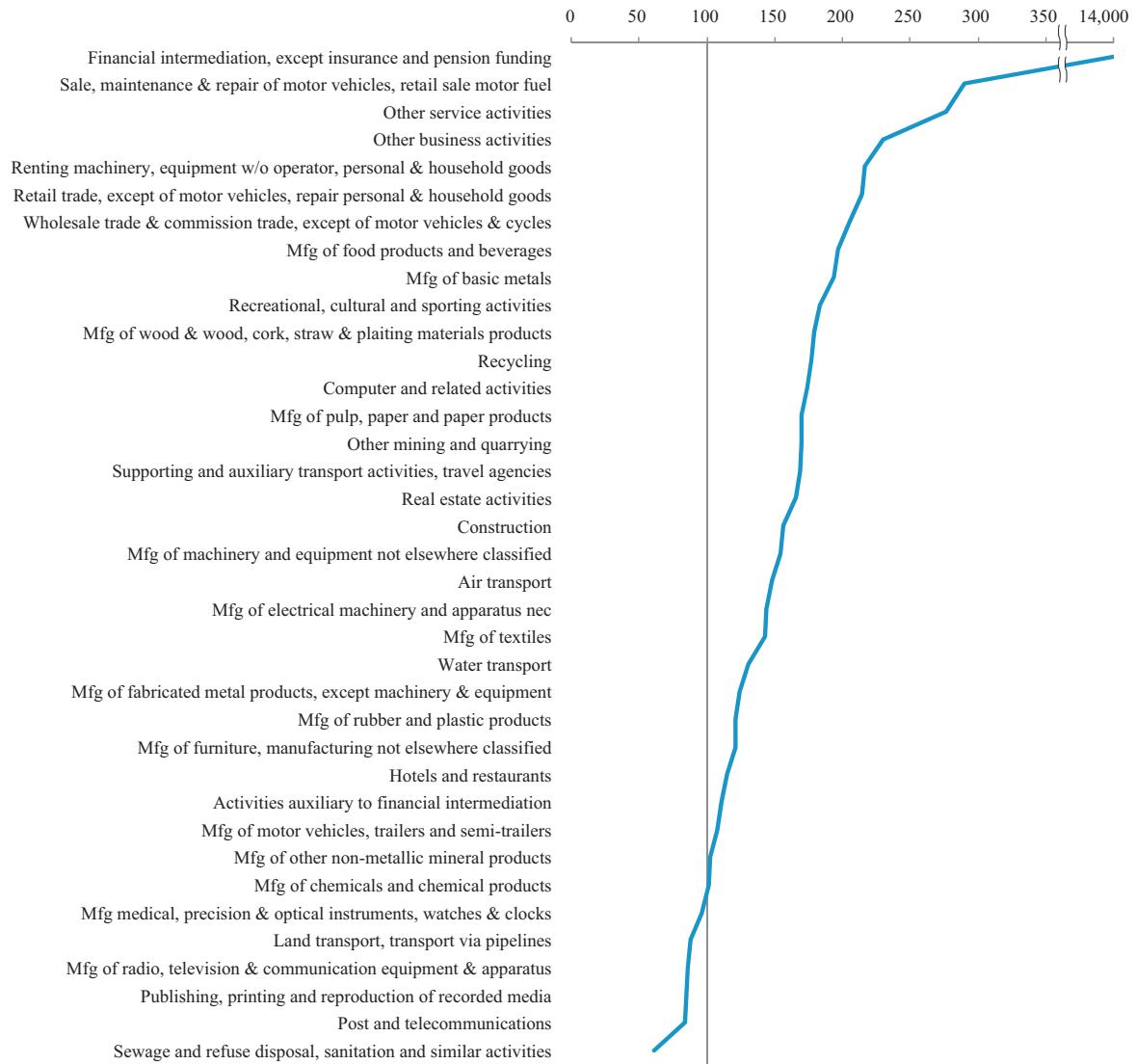


Fig. 2. Index of net value added per employee by industry in Slovenia in 2007.

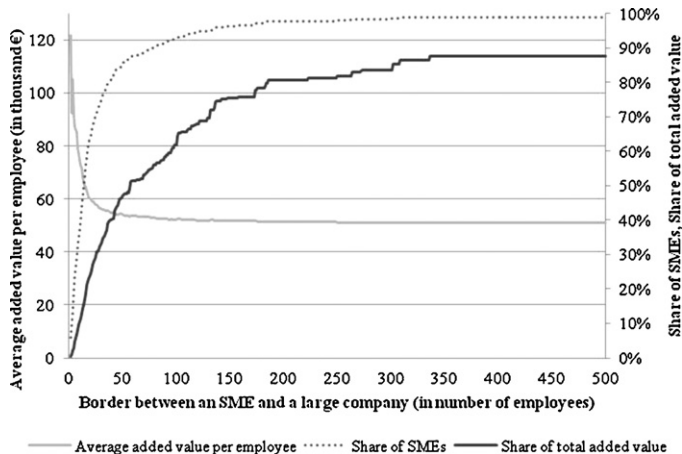


Fig. 3. Impact of the threshold between an SME and a large company.

set at 20 people, there are 64.3% of SMEs among gazelles, but they generate only 24.6% of the total value added that gazelles generate.

Moreover, we compared the structure of all companies to the structure of gazelles (Table 3). Micro companies are underrepresented among gazelles, whereas small, medium-sized, and large companies are overrepresented.

Jeff Bezos founded Amazon.com in 1994, and with only a few, albeit carefully selected, employees the company generated US\$15.7 million in sales in 1996, in its first full fiscal year in business. As it had entered the bookstore business, it was competing against much larger competitors such as Barnes & Noble and Borders. Although Borders was perceived as a technology innovator at the time, it was unsuccessful online and was later formed a partnership with Amazon.com. Amazon.com took over all of Borders's Internet activities, and Borders received a percentage of the sales but lost the opportunity to collect data and maintain direct contact with its customers.

Amazon.com was also successful in maintaining its leading position in the pure-play online business. Overstock.com tried to compete with Amazon.com using Amazon's initial business model,

Table 3
Gazelles compared to all companies by size.

Number of employees	All companies	Gazelles	Share of gazelles among all companies
1–9	85.5%	34.7%	0.4%
10–49	11.3%	50.1%	4.6%
50–249	2.6%	13.2%	5.2%
250+	0.6%	2.0%	3.6%
Total	100.0%	100.0%	1.0%

which had some important advantages over Amazon's modified one, such as lower inventory levels. In 2001 the CEO of Overstock.com, Patrick Byrne, stated that Overstock.com not only would move ahead of Amazon.com but also would be able to take the company over in a few years' time (Owen, 2002). In 2009 Overstock.com had reached only 3% of Amazon's annual sales and 0.7% of its operating income.

On the other hand, the company supplemented its business model when it was already one of the world's largest companies and entered new businesses. As it entered the Web services business, it was competing against the world's largest companies like Microsoft and IBM. If two or more companies recognize the opportunity to create a new advantage, the company that can create the advantage more quickly will win (Mellahi and Johnson, 2000). So the company was successfully competing as a small company against large companies and as a large company against large companies and smaller challengers.

The results of our analysis support the proposition that all companies, not just SMEs, generate fast growth.

6. Discussion and conclusions

This article has sought to challenge some well-established premises of economic policies, namely what companies are the targets of such policies and what is being supported and stimulated to achieve high growth. To be more specific, is it appropriate for current economic policies to focus on SMEs and start-ups, high-tech industry, and patents? Our research based on companies that excelled in growth suggests that such policies might not lead to desired outcomes. A different perspective on how to achieve high growth comes from the business world itself; it is based on the valuable contribution of a specific business strategy, the BOS, to today's business. Our research thus tested four propositions arising from the BOS framework.

The first proposition, that companies creating blue oceans grow faster, received only partial support. Rather, our research suggests that the key to high growth is not to create a new market but to be the first to develop and exploit that market. This is most evident in the case of Amazon.com, which was not the first in the market but was the first to truly develop and exploit it; Computer Literacy Bookshops and Book Stacks Unlimited had a significant advantage in the marketplace but could not fight off Amazon.com. The search for unexploited blue oceans therefore appears to open up the same opportunities for a company as creating blue oceans from scratch.

Second, our results greatly challenge the premise that industry strongly influences growth. Fast-growing companies are found in a variety of industries. Slovenian fast-growing companies are players in several industries that are not related to high technology; they create an important part of total value added and achieve this with a high net value added per employee. Congruent with the BOS, companies working at the borders of industries seem to achieve higher added value per employee. The results also showed that companies can successfully focus on their competencies to enter completely new markets and not limit themselves to the industry they are in. This implies that policy makers should reconsider technology clusters in favor of intraindustry cooperating companies. A more

diversified environment increases the probability of successfully combining core competencies in different configurations by offering a greater number and variety of unsolved challenges, as well as a much wider pool of expert knowledge and other resources to create new markets.

Third, our findings suggest that value innovation is as important as technology innovation. By this, we do not suggest that policy makers should move away from a technology focus and substitute it with a value focus. Amazon.com built its value innovations on continuous improvements to technological solutions, but we found that Amazon.com has managed to position itself as the leader in the Web services business by developing new innovative ways to serve the customer. We also found that technology was not the main factor that influenced the growth rate of gazelles when compared to the remaining companies. This finding suggests that value creation deserves a higher position on the priority list of policy initiatives and that companies can achieve high growth regardless of whether they patent their products and technology.

Fourth, the focus of economic policies should move from SMEs to cooperation between different-sized companies. "Small is cute" is an attractive strategy, but it is not necessarily an effective one. Although our results showed that there are differences in the net value added per employee between small companies and other fast-growing companies, the threshold greatly influences those differences. In terms of impact on the total value added, one should locate the threshold somewhere between the size that is typically used for micro and small companies, not between middle and large companies as we might expect. But when we consider putting the threshold for a small company between 10 and 20 employees, the impact of so defined small companies on the overall growth rate is much less than is typically believed. The share of generated value added drops rapidly as the number of employees is reduced. These companies are also underrepresented in comparison with all companies, which implies that, although there is a special emphasis on them, they are still less effective in terms of becoming fast-growing companies. In terms of value added per employee, it seems worthwhile to focus on micro and small companies, but it does not seem sufficient, as they do not generate enough added value. Typical arguments in favor of SME-supporting policies are that SMEs generate the highest growth and the most new jobs, they are a prerequisite for developing larger companies, they are more flexible and therefore can reposition faster, and they have lower sunk costs and thus can achieve higher growth. Nevertheless, large companies also have important advantages, such as a pool of resources, capital, and market position. We therefore suggest focusing on efforts that combine the characteristics of small companies with the competencies and resources of large companies. Open innovation theory (Chesbrough et al., 2006) offers approaches that could be harnessed to create a new generation of policies that enable cooperation between companies of different sizes.

As with any research, these findings must be interpreted taking into account the study's scope and limitations. One limitation is the use of quantitative data only for Slovenian companies, as the Slovenian economy is small and young, with relatively smaller companies. Moreover, focusing the analysis on one year might introduce some bias. For example, the data are from the time of the

peak of the real estate boom. Although the conclusions are not context dependent, we cannot fully exclude the impact of context on the results. Another limitation of the research reported in this paper is that it does not measure the effects of the proposed approaches, but this was beyond the scope of the study.

These limitations suggest several possibilities for future research. Further research is needed on the operationalization of the ideas and concepts presented in this article. This could then serve as a basis for creating new, more relevant indicators that are currently missing. This data support would provide better grounds for testing the appropriateness of different governmental policies in different contexts, including different phases of business cycles, different levels of country development, different industrial structures, and other country-related specifics.

The BOS is primarily relevant to companies that can use it to grow more quickly by creating unique offerings for new markets rather than by competing with rivals in existing ones. However, as our research showed, policy makers can also learn from the BOS framework to create policies that can contribute to higher business growth. Implications of our research are primarily intended for policy makers, but companies can also find the results interesting in terms of how to approach their strategy to achieve higher growth. In the end, we did not aspire to develop operationalized policies but to give insights into the foundations on which successful policies can be developed.

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