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Ramon-Muñoz, Ramon, Marijn Molema, and Emil Evenhuis. 2024. "Business History and the Resilience of Regional Economies." *Business History* 66 (8): 1939–61. <https://doi.org/10.1080/00076791.2024.2432420>.

Business history and the resilience of regional economies

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Abstract

While resilience has become a key concern within a variety of disciplines in recent years, it requires further development in the field of business history. With the aim of providing new conceptual and empirical insights into the study of regional business history, in this introduction to this special issue we provide a general overview to the literature on regional economic resilience and to the concept of resilience. This is followed by a review of the recent research on business history that use the resilience concept. We then establish the analytical framework and present the aims and boundaries of our research. In the next section, we briefly describe the content of the articles included in this special issue. We finally discuss these articles in order to shed light on the uniqueness and universality applied to the resilience of regional economies.

Keywords: Resilience, business longevity, clusters, economic evolutionary geography, adaptability

1. Introduction

Research into regional economies has a lot to offer to our historical understanding of how businesses and the immediate contexts in which they operated have coped with the recurrent changes and fluctuations within the global economy. These changes and fluctuation are the existence of shocks which a wide range of scholars are paying increasing attention. Shocks might be induced by international market integration and the growth of trade. This was, for example, the case in the nineteenth century as well as in the last decades of the twentieth century, when a new globalisation wave

took place and a global process of economic re-localization emerged (Antràs, [2016](#); Bordo et al., [2003](#); Feenstra, [1998](#)). Infectious diseases and pandemics, such as the COVID-19 pandemic, as well as economic recessions, technological breakthroughs or political constraints, can also induce shocks (Bloom et al., [2022](#); Goldfarb & Tucker, [2019](#); Reinhart & Rogoff, [2009](#)). Such major developments affect regional economies and their foundational firms. Regional economies are composed of (among other elements) firms, workers, their accompanying associations, governance institutions and knowledge organisations. These may form networks of agents that coincide with industrial districts or clusters (Beccatini, [1979](#); Porter, [1998](#)). Such regional networks may (or may not) react in a way that sustains the long-term economic growth path and takes advantage of any new opportunities. Regions respond differently to challenges posed by changing circumstances in the economic environment, however (Molema & Svensson, [2020](#); Rosés & Wolf, [2020](#); van Leeuwen et al., [2020](#)). This similarly applies to clusters and industrial districts (Becattini et al., [2009](#); Amatori & Colli, [2001](#); Catalan et al., [2011](#); Dei Ottati, [2018](#)). Economic and business history, however, also show a lot of patterns and recurrent reactions towards economic crisis, as will be detailed in Section 2.

Historical analysis of interconnected firms can benefit from the concept of ‘resilience’ which highlights the capacity to adapt to changing circumstances. Following Martin and Sunley ([2015](#)), we define regional economic resilience as ‘the capacity of a regional or local economy to withstand or recover from market, competitive and environmental shocks to its developmental growth path, if necessary, by undergoing adaptive changes to its economic structures and its social and institutional arrangements’ (p. 13). The concept of resilience is thus inextricably tied to the idea of adaptation. But whereas adaptation refers to the *actual observable* process of dealing with disturbances in the wider context in which a firm, cluster, industry or regional economy operates; resilience is about the *underlying capacity* to adapt (Evenhuis, [2017](#)). Some firms, clusters, industries and economies are more capable of coping with change: why is that? Within this we can make a distinction between the long-run and short-run, as indeed many of the contributions to this special issue do. In the long-run, resilience will take the form of adaptability: the ‘dynamic capacity to effect and unfold multiple evolutionary trajectories, through loose and weak couplings between social agents in place, which enhance the overall responsiveness of the

system to unforeseen changes' (Pike et al., [2010](#), p. 4). Hence it is basically the capacity to 'reinvent' oneself time and time again.

In the short run, resilience can take various forms. Some firms, clusters, industries and economies, will undergo only quite minimal changes to reorganise or reorientate themselves in the face of a shock. Resilience then only takes the form of 'a movement towards a preconceived path in the short run, characterised by short and tight coupling between social agents in place' (Pike et.al. [2010](#), p. 4). Sometimes – and confusingly – this is also referred to as 'adaptation' (but in a very specific sense); and it is posited that such short-term and limited 'adaptation' may be at the expense of long-term 'adaptability' (Grabher & Stark, [1997](#); Pike et al., [2010](#)). But resilience in the short-term can also take the form of more wide-ranging processes of reorganisation and reorientation, in which more fundamental adjustments are made to deal with a disturbance.

Research on the resilience of regional economies (in both the long-run and short-run) has shown that 'related variety' within an economy is an important factor/mechanism (but by no means the only one, as discussed in the next section). This concept refers to the degree of similarity between technologies and capabilities between sectors and economic activities based on which recombination can then take place, giving rise to innovations and new economic activities that can promote regional resilience (Boschma, [2015](#); Content & Frenken, [2016](#)).

This special issue considers the concept of resilience extensively because it supports the integrative analysis between business dynamics and their regional environment. An historical account of regional resilience scrutinises some of the factors that helped firms to adapt and change. These hypotheses formed the starting point of our endeavour.¹ Our introduction investigates the tension between uniqueness and

¹ The 'endeavour' started with a workshop in Leeuwarden (the Netherlands) at the Fryske Akademy, sponsored by the Regional Studies Association as well as the N.W. Posthumus Institute, 14-16 January 2018, followed by a double session on the world Economic History Congress in Boston, 1 August 2018. We thank John Tomaney as well as Karel Davids for their comments on individual contributions as well as the collection of papers. We also thank the editors and reviewers of Business History for their valuable insights. Ramon Ramon-Muñoz also acknowledges funding support from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 872618. The content of this article does not reflect the official

universality. Faced with external shocks, firms within a region sometimes show their resilience in an unprecedented and singular way. Informed by the theoretical underpinnings of ‘resilience’ we also found similarities in processes of adaptation. Our central question is whether the responses to shocks are unique events in time and space, or do different reactions to shocks reveal a repertoire that calls for further historical comparisons? By ‘repertoire’ we mean a variety of recurrent factors and/or mechanisms that can stimulate (or hamper) the resilience of regional economies.

2. On the concept of resilience: an overview

In recent years, resilience has become a key concern within a variety of disciplines (Grove, [2018](#); Rodin, [2015](#); Wink, [2016](#); Zolli and Healy, [2012](#)). Part of this popularity can probably be traced back to the financial crisis and subsequent Great Recession during the late 2000s and early 2010s. But more generally there is a perception that – as a result of various large-scale processes, such as globalisation, climate change, fast-paced technological change and diffusion, and now also the possibility of global pandemics (Wink, [2021](#)) – disruptive changes are more prevalent and more difficult to manage.

The notion of resilience originates from the ecological sciences, where it has obvious relevance in the context of climate change and environmental degradation (Gunderson & Holling, [2002](#); Holling, [1973](#); Walker & Salt, [2006](#)). As argued by Holling ([1973](#): 17, 21), resilience ‘determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist’. This approach emphasises ‘the need to keep options open, the need to view events in a regional rather than a local context, and the need to emphasise heterogeneity’.

Within the last decade or so, resilience has also become a key topic in economic geography, regional economics, and urban studies (see Bristow & Healy, [2020](#); Hassink & Gong, [2020](#); Mai & Chan, [2020](#); Ramos & Royuela, [2021](#); Sutton et al.,

opinion of the European Union. Responsibility for the information and views expressed lies entirely with the authors.

[2023](#)). Resilience is then concerned with differences between regional and urban economies in dealing with disruptions, and with the underlying mechanisms within these economies of coping with shocks. Indeed, several papers have explicitly focussed on the conceptualisation and operationalisation of ‘regional economic resilience’ (Boschma, [2015](#); Bristow & Healy, [2018a](#); Christopherson et al., [2010](#); Evenhuis, [2017](#); Lemke et al., [2023](#); Martin, [2012](#); Martin & Sunley, [2015](#); Simmie & Martin, [2010](#); Sutton & Arku, [2022](#); Tripp et al., [2024](#)). In this section we review the burgeoning literature on resilience as applied to regional economies focusing on several interrelated issues: the types of disturbances, the factors and mechanisms of resilience, and the conceptualisations of resilience. This then sets the scene for a discussion in the next section of how resilience has featured in the business history literature.

We can distinguish between three types of disturbances in connection to regional economic resilience (Evenhuis, [2017](#); Sutton & Arku, [2022](#)). Firstly, there are sudden events, such as natural disasters, system breakdowns, shortages of certain important resources, major plant closures, or epidemics (if transitory). A regional economy may be confronted by such emergencies, and then the question is whether such a shock will have a large impact, and whether there is a swift and full recovery. The second type of disturbance are macro-economic fluctuations. The wider economy has historically shown cycles of expansion and contraction (the ‘business cycle’). Regional economies vary with respect to the degree to which macro-economic downturns affect them, and the speed and extent of the subsequent upturn. The third type of disturbances are structural changes in the economy. This concerns more slow-burn processes, such as the emergence of new production technologies, changes in consumption patterns, and the erosion of the competitive position of certain key industries (related to the opening up of international trade and ongoing globalisation). Some regional economies can cope with these changes relatively well and may even take a leading position with regard to such changes. But for other regions, structural changes may undermine and seriously weaken their economic base (as has happened, for example, with the shift from craft- and batch-production to mass-production in the early twentieth century, or with deindustrialisation in the 1970s and 1980s).

[Table 1 about here]

Based on an extensive review of the literature, we identify key factors and mechanisms for the resilience of regional economies to various types of shocks (differentiating between the various domains of the regional economy to which they pertain), in Table 1.

An analytical perspective leads to three ways of conceptualising regional economic resilience. The first is the ‘engineering’ conception which conceives of resilience as the capacity to bounce back to some state of equilibrium after a disturbance. It is applied to regional economies dealing with macro-economic recessions or with emergencies (Rose, [2016](#); Hill et al., [2012](#); Fingleton et al., [2012](#); also see Gong et al., [2020](#)). This conception of resilience is normally operationalised by measuring the extent to which a disturbance causes a regional economy to diverge from its regular growth path (when it is assumed to be in equilibrium). The focus lies on how swiftly it then returns to that growth path (and is thus in equilibrium again). Building on this, a second conceptualisation moves a regional economy towards alternative growth paths: the ‘ecological’ conception of resilience (see Fingleton et al., [2012](#); Martin, [2012](#); Martin & Gardiner, [2019](#); Simmie & Martin, [2010](#)). The disturbance then prompts some changes in the composition and workings of the regional economy, which may then cause it to move to a different growth path. The third conception of resilience is the evolutionary conception. It theorises resilience as the capacity to renew and reconfigure in the face of disruptions (Boschma, [2015](#); Davoudi et al., [2013](#); Manca et al., [2017](#); Martin, [2012](#); Martin & Sunley, [2015](#); Simmie & Martin, [2010](#)).²

This third category draws heavily on evolutionary approaches to regional economic development, also referred to as ‘Evolutionary Economic Geography’. And this conception is especially applicable to cases in which regions have to cope with structural changes taking place in the economy (Cowell, [2013](#), [2015](#); Evans &

² Some scholars have even posited a fourth type of resilience: transformative resilience. That is the ability to create a new reconfiguration and set of structures and functions that meets a new set of demands, such environmental sustainability or inclusive development (Sutton et al., [2023](#); Sutton & Arku, [2022](#); Trippl et al., [2024](#)).

Karecha, [2014](#); Evenhuis, [2016](#); Hu, [2015](#); Shutter et al., [2021](#); Wink et al. [2015](#)). How do regional economies deal with profound changes taking place as a result of for example the development of new technologies, new ways of organising production, opening up of new markets, introduction of new competitive forces, or changes in lifestyle?

A historical perspective can add considerable value to an evolutionary understanding of regional economic resilience, as it is well-suited to take a long-run perspective (see also Henning, [2019](#)). The timespan to observe the ‘engineering’ or ‘ecological’ types of resilience is usually around a decade or perhaps two decades, as then it is clear whether a regional economy has bounced back (or not), respectively whether it has returned to a similar growth path or moved to a different growth path. But by taking a historical perspective one can explore how regional economies deal with changes and oscillations over many years and decades. This can then shed new light on how exactly resilience takes place within regional economies, and the factors and mechanisms that explain the success (or lack thereof) in the long-run (in other words, the ‘adaptability’ of regional economies). Moreover, adopting such a historical perspective can also elucidate how resilience in the long-run (‘adaptability’) relates to resilience in the short-run (immediate responses to a shock), and whether there is indeed a trade-off between a limited type of ‘adaptation’ in the short-term, and ‘adaptability’ in the long-term. Especially a historical-comparative approach can help to identify generalisations in the factors and mechanisms of resilience, and distinguish these from historical and contextual particularities, through both diachronic (through time) as well as synchronic (through several places) comparisons (Åberg & Denk, [2020](#)).

3. Resilience and business history: literature review

The concept of resilience has also found reception in historical studies with environmental or ecological history as one of the historical disciplines where this is more apparent. For example, by using the concept of resilience, recent research on historical ecology has examined the responses of past societies to sudden environmental shocks (Benson & Kundis, [2017](#); Diamond, [2011](#); Van Horsen, [2016](#)). Partially connected with this literature, historical disaster studies have

increasingly utilised the concept of resilience, typically defined in this field as the ability of settlements and communities to withstand external shocks and persist (see Soens, [2020](#), also for further references, see also the studies included in Curtis, [2014](#)).

[Figure 1 about here]

What about business history? Figure 1 displays the results of searching for the word ‘resilience’ in the three top-ranked journals that publish business history articles. According to the latest available editions of the Journal of s Reports by Clarivate and Scopus by Elsevier, these journals are, in alphabetical order, Business History, Business History Review, and Enterprise & Society. The search only includes articles, excluding book reviews. There are two sets of information. The first counts the number of articles that include the word ‘resilience’ and similar terms, mainly ‘resilient’ and ‘resiliency’, anywhere within the full text of the article. The second set of information does the same but only considers the title, abstract, and keywords.

In both cases, the results confirm the increasing use of the word ‘resilience’ and its derivatives, particularly after the 2007-08 economic crisis. Regarding the first set of information, the data from the journals in business history show that between the first and the second decades of this new millennium, the number of articles that used these words quadrupled, from 28 to 114. These are approximate figures, as they are not normalised by the number of issues and articles published per year in the journals we are considering, which has tended to increase in the last two decades. Despite this, the general trend remains the same.

[Table 2 about here]

Nevertheless, the growing number of articles using the word ‘resilience’ and its derivatives should not be necessarily taken as definitive proof that the concept of resilience has been fully integrated into business history. Firstly, the words ‘resilience’, ‘resilient’, and ‘resiliency’ are not always used to identify the same phenomenon, nor necessarily as the capacity of firms, groups of firms, industries, and regional systems to resist, renew, and reconfigure after a shock. Secondly, of the more than 220 manuscripts we have identified, only 17 of them include these words

somewhere in the title, abstract, or keywords (see Figure 1 and Table 2), and only 7 out of 223 use them in at least two of these items, i.e. in the title and the abstract, in the title and as a keyword, or in the abstract and as a keyword. This evidence suggests that the concept, determinants, and other related areas associated with resilience may not have been a main area of interest in business history so far.

Of course, avoiding the use of the word ‘resilience’ and its derivatives in bibliometric identifiers does not necessarily imply neglecting parts of the components of the concept. Indeed, business historians have also considered some of the central issues surrounding the concept of resilience, using various units of analysis. Whereas in the literature on regional economic resilience, the principal unit of analysis has been the regional economy and key components within this (clusters or dominant industries within a region), business historians have mainly looked at how individual firms, certain types of firms (family-owned firms), particular networks/groups of firms, and certain industries have coped with disturbances and changes. Business historians have at times linked this to determinants in the context in which these firms, networks and industries operate. Reactions to economic crises are also significant themes in business history, closely connected to the study of resilience. There is extensive literature on how firms and industries respond to external shocks and changing market conditions, addressing both challenges and opportunities in the long and short term. Business historians have explored responses to specific crises as well as structural changes in the economy. They have also considered the environmental characteristics of firms, as a factor for understanding the impact of shocks and companies’ response.

In this respect, the regional environment is certainly not absent in business history either. The concept of industrial districts and clusters have underpinned various contributions within the field (Zeitlin, [2008](#)). For example, Wilson and Popp ([2003](#)) worked on the integration of cluster theories into the field of business history, also scrutinising the regional networks of firms (see also Wilson et al., [2023](#)). Other studies on the Catalan automotive industry (Catalan & Fernández-de-Sevilla, [2020](#)) illustrated the same point, namely that individual firms are embedded in regional economic networks. In these networks, crucial drivers of business development emerge, such as: (human) capital, shared facilities, and social-cultural values.

Business decisions, strategies, and performance may indeed transcend the level of individual firms. For example, Amdam and Bjarnar (2015) studied a furniture cluster and a maritime cluster in Norway and explained the successful responses to globalisation according with reference to collective action of firms within the clusters. More recently, Wegenschimmel and Hodges (2023) have stressed the importance of embeddedness within local, regional, and state-level structures by analysing the cases of the Gdynia (Poland) and Uljanik (Croatia) shipyards. Similarly, other authors have advocated for considering the interaction between firms and local and regional actors when exploring firms' adaptative responses. Thus, Xia and Donzé (2024) have used the term co-creation to indicate entrepreneurial processes involving the intervention of multiple actors over time to foster economic change.

Despite these developments, and although business historians have considered some of the central issues surrounding the concept of resilience, using also the region as unit of analysis, an explicit reception of the literature on regional economic resilience has remained largely absent so far (with some exceptions, such as Valdaliso, 2020; Miranda & Roldán, 2022; Semeraro & Miranda, 2023). Moreover, – and as some scholars dealing with entrepreneurship and resilience have pointed out – in many business histories 'resilience is often poorly defined; it is used to connote a wide range of concepts such as success, survival, persistence, and optimism' (Korber & McNaughton, 2018). Finally, the regional and network dimensions of the phenomenon are, in general, missing in many analyses.

A historical and long-term perspective has much to contribute to the study of regional economic resilience, and in particular to the further substantiation of evolutionary approaches to resilience. But conversely, such a historical, long-term perspective would also benefit from engaging explicitly with some of the theoretical insights that have meanwhile emerged with regard to regional economic resilience, as this would lead to more analytical precision. Moreover, positioning historical research within theoretical frames, will help in making distinctions between what is particular for a case, and what may be seen as more general or common patterns with a wider validity beyond individual cases.

This is exemplified in MacKenzie and Perchard's (2023) recent research on industrial clustering in the Scottish Highlands since the early 1900s. The authors observe that after a long period of difficulties, the region experienced the development of new clusters in life sciences, fish farming, and forestry, complementing the more traditional industrial clusters in whisky and weaving. These developments were connected to the reinforcement of the region through the re-establishment of the Scottish Parliament and Scottish Executive in 1999. According to these authors, the case of Scottish Highlands illustrates 'the value of understanding agentic actors within economic systems as well as the role contingency must play in our understanding of clusters'. A similar conclusion was reached by Castell and Ramon-Muñoz (2022, 2023) in analysing the location, origins, and early development of industrial districts in the Catalan agribusiness sector during the second half of the nineteenth century through a leading pig-meat cluster.

Regarding the Scottish Highlands, MacKenzie and Perchard (2023) also outlined that the abovementioned developments helped move the region 'out of path dependency to path creation'. This observation is echoed by Antuña (2024), who explored the history of the Daniel Alonso Group, a small metalworking firm that became a world leader in the wind power sector, in the northern Spanish region of Asturias since the 1950s. As in MacKenzie and Perchard (2023), Antuña showed a process of path creation in a deindustrialising region through delocking, diversification, and international expansion.

4. Analytical framework and general aims

As mentioned, regional economic resilience, as a concept, potentially strengthens historical research on economic change and innovation processes. It makes the historian sensitive for the way how companies prepare themselves and react to external shocks in close cooperation with their partners in a specific region. And vice versa, business and economic historians can add to evolutionary accounts of this topic in particular, providing detailed and rich approaches covering long periods of time, of how firms, clusters and regions have responded to economic disturbances and changes over time. This way important new insights could be gained on the exact

mechanisms through which regional economic resilience takes place, and the determinants of success or failure in this respect.

Clearly the main unit of analysis for studying regional economic resilience is the regional economy. But it is important to note that the regional economy is composed of various actors and structures, such as firms, workers, banks, governments, labour unions, business associations, chambers of commerce, consultative bodies, clusters or industrial districts, etc. The resilience of regions will thus firstly be a function of the responses of the different actors. We scrutinise these responses and their aggregated effects. We conceive of the regional economy as an arrangement of companies and institutions within a more or less delineated sub-national territory. Every contribution to this special issue has its own unit of analysis: each paper draws the lines around the relevant system of actors and their relationships, somewhat differently. The systemic point of departure thus allows for analytical flexibility, which is necessary because resilience can take place on several interdependent levels. Resilience might occur on the level of the firm, as well as more encompassing levels of regional clusters or industrial districts, networks, and economic regions. Some of the actors involved may actually be based outside of a certain region, for example national governments, large corporations with headquarters outside of the region, financial institutions operating at the national and international level, etc. Even these extra-regional actors are taken into account from such a systemic point of view. As business historians have recently shown, they may influence agents' behaviour and industry and regional performance, sometimes activating unlocking dynamics (MacKenzie et al., [2024](#)).

We indeed believe that resilience is a process which is importantly conditioned by temporal and spatial particularities influencing how a regional system reacts depends on the system itself and its surrounding environment; both are full of history, in the sense that each system has its own rules of conduct, its own traditions and its own particularities with respect to how different actors within the network act and communicate with each other. The same goes for the societal context in which regional economies are embedded. External circumstances have a dynamic on their own, and its particular characteristics need to be included in the analysis. Still, despite a world full of contingency, historians can help to find general mechanisms in the

process of resilience and unravel some determinants that are, time after time, important in coping with shocks, as illustrated in Table 1. As such, they can help to improve the theories and conceptual schemes of their colleagues within evolutionary economic geography as well.

We are aware of the limits of a special issue and the necessity of applying focus. For example, in the economic geography literature, numerous determinants of the resilience process can be identified – as we have observed in our review of recent works in business history (see [Section 3](#)). It would be impossible to excavate all these determinants in the same historical depth within the space constraints of a review article or introduction. Nevertheless, the articles included in this special issue tackle with the determinants of resilience. Every contribution concentrates on particular actors. These actors can be firms (Amdam, Bjarnar, and Berge, [2020](#), this issue), administrative or governmental organisations (Bianchi et al., [2021](#), this issue), knowledge institutes (Davids, [2021](#), this issue) or intermediary organisations (Plantinga, [2020](#), this issue). Furthermore, they focus on the structural relationships between actors within a regional economy, and their connections outside the region (Davids, [2021](#)). These connections are studied on the concrete level of individual links from one actor to the other (Amdam, Bjarnar, and Berge, [2020](#), this issue). Or they can be broader in the sense that actors within the region in question are affected by economic, political and cultural processes in- and outside the region (Plantinga, [2020](#), this issue; Davids, [2021](#), this issue; Bianchi et al., [2021](#), this issue). As these topics have also received attention in business history (see [Section 3](#)), the articles included in this Special Issue contribute to the discipline through the lens of entrepreneurship and regional economic resilience.

In addition, all contributions include the analysis of responses to structural changes in the economy, i. e. the third type of resilience we mentioned above. In particular, the shock of globalisation and growing competition since the last decades of the twentieth century is always considered. Yet, examples of other types of resilience can be also found. This includes, for example, sudden events, like shortages of certain important resources (Amdam, Bjarnar, and Berge, [2020](#), this issue), as well as macroeconomic fluctuations, like the rapid increase of wages in the Netherlands throughout the 1960s (Plantinga, [2020](#)), the oil crises in the 1970s (Amdam, Bjarnar,

and Berge, [2020](#), this issue), and the financial crisis of 2007-08 (Bianchi et al., [2021](#), this issue).

Finally, all articles also pay attention to governance relationships defined as the implicit and explicit regulatory frameworks that impact on the communication and cooperation between actors. The resilience of regional economic systems, as we see it, is highly dependent on structures of governance that favour collective action and cooperation between individual agents. Collective action, cooperation and networks are well-established themes in the business history literature. However, as Fernández Pérez and San Román ([2023](#), p. XVIII) have argued in a recent book on collective entrepreneurship in service industries, it is generally accepted that we do not know enough about how ‘networks develop and change because few studies have approached business networks as an evolutionary and historical process’, a perspective that the articles in this special issue do provide.

The distinction between ‘adaptation’ and ‘adaptability’ is used throughout the contributions, as well as the concept of ‘related variety’, which is highly relevant in relation to regional economic resilience and central to the article by Amdam et al. ([2020](#)). The variety of our case studies, in terms of types of shock, time-periods, regions, and sectors of interest, provides the chance to compare different characteristics and processes of resilience. Nevertheless, we do not attempt to compare all the dimensions of the resilience processes. For pragmatic and logical purposes, our basic analytic framework comprises a focal point that is, more or less, present in all the articles. We compare the various contributions with reference to either the uniqueness of responses to specific shocks; or with reference to recurrent factors and mechanisms which we call ‘repertoires’ of resilience in regional economies.

To sum up, the collection of essays stresses the role of history and networks in the analysis of how firms, clusters and regional economies as a whole, respond to external shocks. It shows the potential of multidisciplinary approaches and long-term perspectives in the analysis of resilience. As such, we will also contribute to the debate on resilience among evolutionary economic geographers as we aim at embedding some key concepts from evolutionary economic geography into historical case-

studies. Moreover, the issue will extend our conceptual and theoretical insights by stressing the similarities and differences between original case-studies. As a whole, it will improve our understanding of regional-specific factors in the performance of regional economies - and the businesses, networks and industries within these regional economies - in fluctuating environments, with special attention to the role of regional governments and intermediary organisations.

5. Contributions

The special issue comprises four articles with case-studies from Norway, Italy, the Netherlands, and Taiwan. Rolv Petter Amdam, Ove Bjarnar, and Dag Magne Berge scrutinise how six major regional business families within ocean industries, i. e. Brødr. Aarsæther, Koppernæs, Holm, Voldnes, Sævik and Remøy, reacted to external shocks in the 1920s, 1950s, 1970s, and the first decade of the 21th century. They show that the resilience of the Norwegian Sunnmøre region was driven by family firms, who distributed resources from one sector to another related sector as a response to shocks. Amdam, Bjarnar and Berge situate their empirical findings in recent research in economic geography on the related variety of different sectors and industrial branches (Boschma, [2015](#)). Related variety refers to the existence of related industrial sectors in a region, and relatedness promotes economic development due to spill-overs between sectors (Content & Frenken, [2016](#)). From an evolutionary perspective, external shocks may result in new development paths in a region with related varieties, and the Norwegian case shows how family firms induce the micro-coordination mechanisms behind related variety and resilient regions.

The second contribution is written by Patrizio Bianchi, Raffaele Giardino, Sandrine Labory, Alberto Rinaldi and Giovanni Solinas. This team of interdisciplinary Italian scholars look for the determinants of the long-term adaptive capacity of regions. Their empirical case-study is situated in the Emilia-Romagna region in Italy, which drew wide attention as a successful case of flexible specialisation based on industrial districts in the face of the shocks of globalisation and the Great Recession. The article concludes that the characteristics of the industrial structure, agency and institutions,

particularly regional government and the industrial policy this government applied from the 1980s onwards, fostered the reconfiguration of the region's industrial districts, encouraging a shift towards a more knowledge-intensive mix of sectors.

The third contribution draws a comparison between a Dutch and a Taiwanese region. Mila Davids analyses the resilience of the high-tech region Eindhoven in the Netherlands and the Taiwanese high-tech region Hsinchu, home for firms such as Philips in Eindhoven and Taiwan Semiconductor Manufacturing Corporation (TSMC) and United Microelectronics Corporation (UMC) in Hsinchu. The developments in both regions show that resilience started with a concern for the challenges ahead, although threats and challenges were differently perceived in both regions. These concerns in both Eindhoven and Hsinchu led to government plans to, amongst others, build and strengthen the knowledge structure, stimulate regional cooperation, and boost new activities. Davids' article illustrates that government actions were important for the regions' adaptability, but the actions carried out by other actors, at home and abroad, were also essential. Interestingly, the regions' responses were determined by the phase of economic development they were. On the one hand both high-tech clusters faced economic and technical challenges that were intertwined with global developments. On the other hand, global connections played a crucial role in the adaptive capability of these high-tech regions.

In the fourth article, Ronald Plantinga explores the resilience of a regional cluster; the dairy industry in the Dutch province of Friesland. Under the impact of external shocks such as rising wages and increasing competition from European and global markets, the cluster had to adapt in order to remain competitive. Between 1960 and the early 1990s, it did so by means of rationalising the production process. This rationalisation process was driven by a mix of technological and organisational innovations. Earlier research has pointed to the structure of knowledge networks as a key factor affecting cluster resilience. In addition, this contribution argues that intermediary organisations – in this article the Dairy Association – were crucial for integrating different actors, contributing to the adaptation process.

6. Conclusions and further research

This special issue includes evidence on factors and mechanisms that drive the resilience of regional economic systems, especially mechanisms related to policies and institutional arrangements. All contributions explore, to various degrees, governmental actions and/or institutions that facilitate (or hamper) the process of resilience. We are aware of the qualitative approach of most of the research that we brought together here. Quantitative methodologies can enrich research on the resilience of firms and regional economies over time as well (Eloranta et al., [2023](#)). We underscore the metaphorical way in which the concept of ‘resilience’ is applied in both the contributions and this introduction. We cannot give clear dividing lines for when a regional economy is resilient or not. Nevertheless, we are convinced that the concept has great heuristic value and enlarges the analytical toolbox of business historians. The application of this concept helps to integrate the dynamics of a firm’s regional environment into business histories. Theoretical notions from other disciplines, such as Evolutionary Economic Geography, can sharpen the historical and holistic view. The theoretical endeavour of the special issue’s introduction were concerned with the responses to shocks – and the question if they were unique in time and space or whether we can discern a repertoire of possible reactions to shocks that calls for further historical comparison.

It should come as no surprise that the answer is twofold. Yes, responses were to some extent unique events connected to the period as well as the place in which they happened. A case in point is the North-Taiwanese high-tech science park of Hsinchu Park. Taiwan in the 1970s and 1980s had an urgent desire to catch up. That made the Taiwanese government and business leaders more sensitive to international technological competition, thus driving its ambition towards fostering a semiconductor industry capable of producing very large-scale integration chips in the 1980s. Davids’ contribution on Hsinchu Park is telling, also because she compares the Taiwanese high-tech park with the Dutch Eindhoven region. As an established high-tech centre, the Eindhoven region responded less adequate to the same international competition that drove the Taiwanese responses. Only after sudden shocks, like the closing and departure of key companies, the region of Eindhoven

developed a new growth strategy in the 2000s. Case studies like this make it appear as if each process of resilience has a uniqueness of its own, grasped by the narratives of the development of these regional economic systems. This is also a conclusion that works into the direction of (evolutionary) economic geographers. Historical senses unveil the regional contingencies that are at work *next to* universal mechanisms and patterns.

On the other hand, we can discern similarities within all fourth case studies as well, thus pointing to a repertoire of policy and/or institutional induced reactions to shocks. We can distinguish between at least four repertoires. The first points at the industrial policies of governments and business organisations. Again, Hsinchu-Park (Taiwan) and the Eindhoven region (the Netherlands) are a case in point: targeted actions in the 1980s respectively in the 2000s illustrate how policies help regional economic systems to adapt. The same goes for the Emilia-Romagna region (Italy). Industrial policy of the regional government, as the article showed, have stimulated the clustering of Small and Medium sized Enterprises (SMEs) in the 1980s and 1990s, which contributed to the success of Industrial Districts. In a later stage, industrial policies helped the region to enlarge its capacity to innovate.

A second repertoire, and connected to the first, reveals the systematic change generated by intermediary organisations. The contribution on the Dutch-Frisian dairy industry is illustrative for this point. A process of cooperation that was rooted in its nineteenth century cooperative origins met slow burn technological and structural shocks in the 1960s and 1970s. A cooperative and intermediary organisation helped single companies to merge with each other, enabling the dairy sector to cope with the new post-war challenges. Similar roles of intermediary organisations have come to the fore in the paper by Mila Davids, and – to a lesser extent – in the contribution on the Emilia-Romagna region.

A third repertoire is comprised of the implicit and often intangible assets of social and cultural values. The contribution on the Norwegian Sunnmøre region shows how shocks led to changing business strategies. Cultural values like autonomy and perseverance, as well as sustaining the family firm, helped the Norwegian entrepreneurs to change their business strategy, and invest in new activities. The

regionally celebrated tradition of high-quality dairy production in Friesland (the Netherlands), and the culture of craftsmanship in Emilia-Romagna, all point in the same direction of the importance of a ‘mind-set’ rooted in place.

Fourth, external resources impact on resilience and these resources can be supported by policies and institutions as well. Again, Emilia Romagna is an example, because of the key role of foreign multinational enterprises. Their settlement in the region, facilitated by strategically targeted policies, helped the region to cope with the slow burn shocks of globalisation. A similar attraction of foreign investment can be discerned in the Sunnmøre region of Norway. The leadership of a foreign US captain of industry within the Hsinchu-Park case in Taiwan illustrates that these resources can take the form of human capital as well.

Of course, the combination we find between temporal and spatial particularities, but also the clear emergence of a repertoire of general patterns in the reaction to shocks is only one of the themes that emerge from the four case studies presented in this special issue. It calls for further historical inquiry to enrich our insight about the repertoires and how they stimulate (or hamper) the resilience of regional economies and the firms and other agents that operates within regional systems. We are fully convinced that many questions and other topics are also connected to this special issue, and which have not extensively dealt with. We point at two other directions for further research. First, the kind of shock (induced by sudden events, macro-economic fluctuations, or structural changes) might be related to different kinds of consequences within regional economies. Responses to shocks within regional economies can lead to decline, to adaptation to preconceived growth paths, or to a state of adaptability leading to new trajectories. Is there any recurrent relationship between the kind of shocks and the responses that occur in regional economies? On the basis of this special issue, one might hypothesise that there is some relationship, but further research should test this in a more substantive way.

A second point connects to the repertoires again. In this Special Issue, we saw some continuities over time irrespective of the type of shock they face. We saw how social and cultural values affected the cooperation between individual actors within regional economies. On several occasions, the contributions stressed the deep roots

of these cooperative patterns, which are connected to the history of the region itself. Such regional qualities affect the regional agents, organisations and institutions that interfere in the region's economy and impact on its resilience. We do need more case-studies which investigate the impact of both formal and informal institutions, as well as the social-cultural values of a region, in order to grasp the historicity of resilience in a regional economy.

In the realm of regional studies, as in other fields, there is a growing awareness of the relevance of history in understanding patterns of regional change. Recent contributions have suggested strategies to take 'history seriously in the study of regional development' (Martin, Sunley, & Evenhuis, [2020](#)), and some scholars have proposed analysing institutions 'as a binding agent between regional and historical studies' (Molema & Tomaney, [2020](#)).

This Special Issue does not pretend to provide a complete response to the question of how business history can engage with other fields of study, but it is clear that it can contribute. The concept and analysis of resilience entails processes of continuity and change in a particular geographical area and involve a variety of actors responding to external shocks – business history has explored these issues for a long time. The general framework of analysis in this special issue may thus help connect business history with regional studies, as well as neighbouring disciplines.

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TABLES

Table 1

Possible factors and mechanisms through which resilience takes place in different domains of the regional economy

Domain:	Possible factors and mechanisms:
Economic base: industrial structure, and types of sectors	Diversity in the economic structure will diminish the impact of shocks (Brown & Greenbaum, 2017; Davies & Tonts, 2010). Little dependence on procyclical industries (such as especially manufacturing), will make a regional economy more resistant; and a relatively large share of dynamic, strong and high-value sectors will accelerate recovery (Annoni et al., 2019; Davies, 2011; Di Caro, 2018; Giannakis & Bruggeman, 2017a; 2020; Groot et al., 2011; Martin et al., 2016; Martin & Gardiner, 2019; Ray et al., 2017; Tan et al., 2020; 2020; Webber et al., 2018). A large presence of the public sector can facilitate resilience, as public services are normally rather stable and unaffected by economic shocks (Webber et al., 2018). Conversely however, if the funding and operation of these public services importantly relies on the central government, these services may be affected by imposed austerity in times of economic recession (Bristow et al., 2014; Štátná et al., 2024; Tsampra, 2018). Large agglomerations may be more resilient, as in addition to a diverse economic structure, 'sharing, matching and learning' may provide them with additional capacity to withstand and recover from shocks (Capello et al., 2015; Rizzi et al., 2018; Sutton & Sutton, 2024).
Technology and knowledge base	Related variety' and technological coherence may foster innovation and the emergence of new activities, enabling regional economies to cope with shocks (Boschma, 2015; Cainelli et al., 2019; Lazzeretti et al., 2019; Rocchetta & Mina, 2019). Renewal may be supported by the comparatively large presence of certain types of activities in the local economy (academic research, creative industries, high technology sectors, knowledge intensive services, etc.) which support R&D and innovation (Bristow & Healy, 2018b; Rizzi et al., 2018; Rocchetta & Mina, 2019; Sedita et al., 2017). More open and flexible relations in the exchange of knowledge, the development of technologies, supply chains and networks with relevant stakeholders, will facilitate innovation, continuous investment, and reorientation among firms (Balland et al., 2015; Billington et al., 2017; Crespo et al., 2014; Grabher, 1993; Kitsos et al., 2019; Wang & Wei, 2021).
Capital and finance	When firms, households and other actors can dispose over accumulated capital reserves (and forms of 'redundancy'), they will have resources and time to reorientate and innovate (Foster, 2012; Martin & Sunley, 2015, p. 32; Pendall et al., 2012). Likewise, if they can access additional finance and investment, and / or alternatively have a steady flow of income coming in from outside the region.
Labour market and skills	A large stock of human capital as a result of a relatively large subset of the population that is skilled, highly educated and entrepreneurial, will enable and drive renewal and adaptation (Cellini & Cuccia, 2019; Giannakis & Bruggeman, 2017b; Glaeser, 2005; Huggins & Thompson, 2015; Kitsos & Bishop, 2018). Regions which offer 'skill-related' employment opportunities facilitating intersectoral labour mobility, will retain and continue to develop their stock of human capital; while regions that do not have these features may lose part of their skill-base, which may consequently hinder their further economic development (Diodato & Weterings, 2015; Eriksson & Hane-Weijman, 2017; Hane-Weijman et al., 2018; Martin, 2012; Otto et al., 2014).
Built environment	Buildings and equipment that are adaptable and may be deployed for alternative uses (rather than being customised for a single type of use), may facilitate renewal: 'new ideas must use old buildings'. (Jacobs, 1961/1993, p. 245). Urban renewal, and the development of better infrastructure connections, propel and accommodate new economic activities, new investment, and gentrification (Power et al., 2010; Zimmerman, 2013).
Policies	Government policy can assist (or indeed also hinder) in coping with disruptions and promoting renewal in the regional economy. For example, through support measures for affected industries and workers, technology and innovation policies, attraction of inward investment, enterprise support, urban regeneration, skills policies, and public procurement policies. (Cowell, 2013,2015; Davies, 2011; Di Caro & Fratesi, 2018; Eraydin, 2016; Evans & Karecha, 2014; Evenhuis, 2016; Hill et al., 2012; Hu & Yang, 2019; Kakderi & Tasopoulou, 2017; Wink, 2014; Wink et al. 2016).
Institutional arrangements	High quality of government and effective coordination between various key actors (different government bodies, important firms, labour unions, community organisations, etc.), will lead to a reduction of uncertainty about each other's actions, and will enable collaboration to bring about new initiatives (Bristow & Healy, 2014a, 2014b, 2015; David, 2018; Evenhuis, 2016; Ezcurra & Rios, 2019; Hundt & Holtermann, 2020; Lang, 2012; Safford, 2009). Institutional arrangements to gather intelligence, analyse trends, produce narratives, anticipate changes, feed debates, and make sense of the world (and the place of the region in it); will enable actors to engage with change proactively (Bristow & Healy, 2014a, 2014b, 2015; Murua & Ferrero, 2019; Pike et al., 2010, pp. 66-67).

Notes and sources: Adapted from Evenhuis (2020), Table 5.2, pp. 77–78.

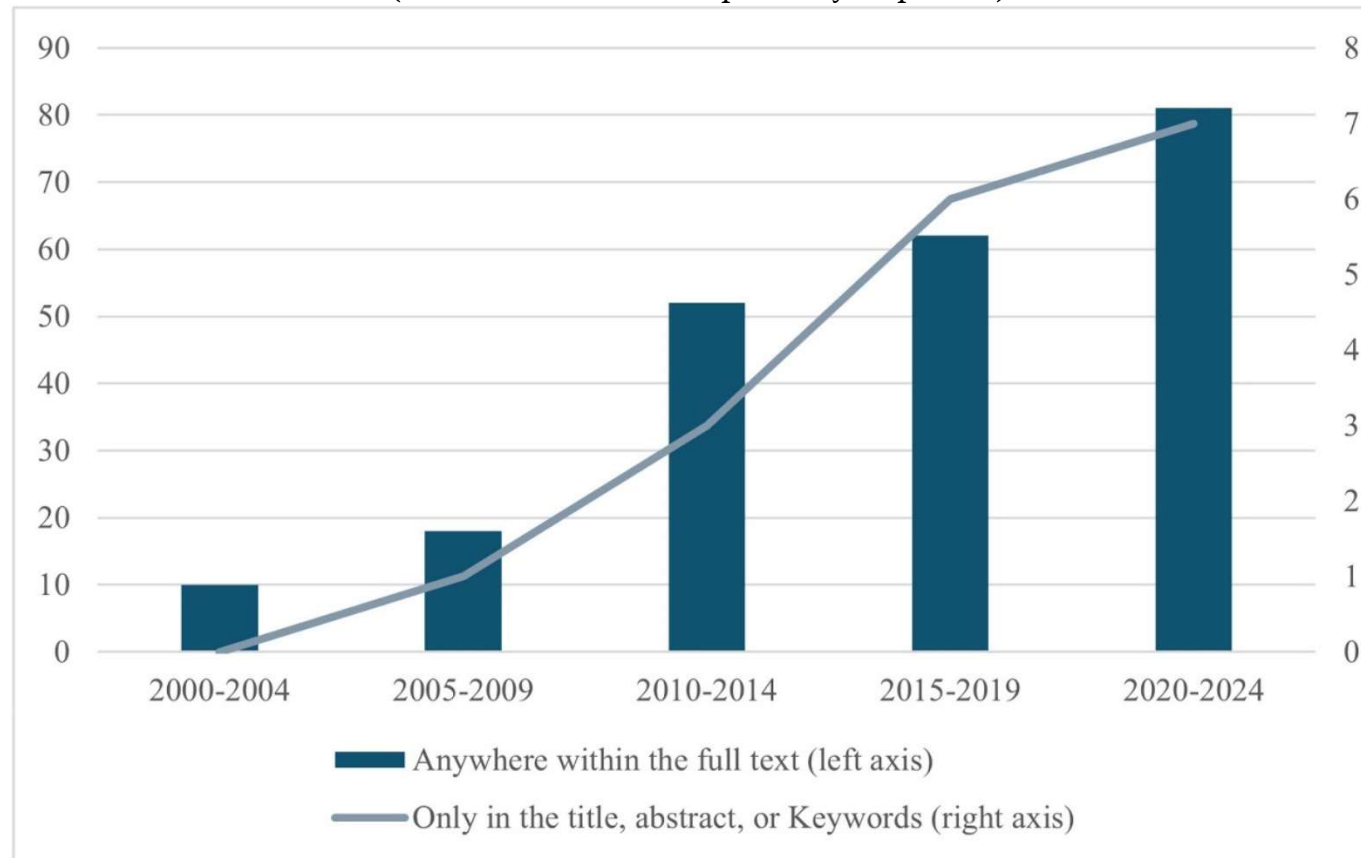
Table 2
List of articles published in the top 3 business history journals that include the word ‘resilience’ and similar words in their title, abstract, or key words, 2000-2024

Author/s (Year)	Article's title	Journal
Puig and Castro (2009)	Patterns of International Investment in Spain, 1850–2005	BHR 83 (3): 505–537
Herbane (2010)	The evolution of business continuity management: A historical review of practices and drivers	BH 52 (6): 978–1002
Carbonell-Esteller (2012)	Montes de Piedad and savings banks as microfinance institutions on the periphery of the financial system of mid-nineteenth-century Barcelona	BH 54 (3): 363–380
Sifneos (2013)	Greek Family Firms in the Azov Sea Region, 1850–1917	BHR 87 (2): 279–308
Colli et al. (2016)	The only way to grow? Italian Business groups in historical perspective	BH 58 (1): 30–48
Da Silva et al. (2016)	Business groups in Portugal in the Estado Novo period (1930–1974): family, power and structural change	BH 58 (1): 49–68
Link (2018)	The Charismatic Corporation: Finance, Administration, and Shop Floor Management under Henry Ford	BHR 92 (1): 85–115
Batiz-Lazo and Del Angel (2018)	The Ascent of Plastic Money: International Adoption of the Bank Credit Card, 1950–1975	BHR 92(3): 509–533
Colvin (2018)	Organisational Determinants of Bank Resilience: Explaining the Performance of SME Banks in the Dutch Financial Crisis of the 1920s	BHR 92(4): 661–690
Yacob (2018)	Rising of the Phoenix: Mitigating Political Risk through Knowledge Management—Behn, Meyer & Co., 1840–1959	E&S 19 (4): 946–978
Fauri and Troilo (2020)	The 'Duce hometown effect' on local industrial development: The case of Forlì	BH 62 (4): 613–636
Valdaliso (2020)	Accounting for the resilience of the machine-tool industry in Spain (c. 1960–2015)	BH 62 (4): 637–662
Spadavecchia (2020)	Building Industrial Districts: Do Subsidies Help? Evidence from Post-war Italy	BHR 94 (2): 399–423
Keneley (2020)	British Fire Insurers in Australia, 1860–1920: A Story of Enterprise, Luck, and Resilience	BHR 94 (3): 535–568
Bagnaresi et al. (2021)	Organisational change in the hospitality industry: The change drivers in a longitudinal analysis	BH 63 (7): 1175–1196
Miranda and Roldán (2022)	A Resilient Industry? Business Strategies in the Footwear Industry of Southern Europe, 1970–2007	E&S 23 (1): 206–238
Semeraro and Miranda (2023)	Surviving peace: Resilience and production decentralisation in the Italian gun-making district, 1945–1970	BH 65 (8): 1438–1462

Notes and sources: BH: Business History, BHR: Business History Review, E&S: Enterprise & Society. The four articles that are part of this Special Issue are not included in this list. See also Figure 1.

FIGURES

Figure 1
The use of the word ‘resilience’ and similar in the articles published in the top 3 business history journals, 2000-2024
(total number of articles per five-year periods)



Notes and sources: The article included in this Special Issue are not included. Authors' own elaboration from the sources mentioned in the text, with the assistance of Montse Escudé-Sala.