Author(s): Lamberg, Juha-Antti; Ojala, Jari; Peltoniemi, Mirva

Title: Thinking about industry decline : A qualitative meta-analysis and future research directions

Year: 2018

Version:

Please cite the original version:

Lamberg, J.-A., Ojala, J., & Peltoniemi, M. (2018). Thinking about industry decline : A qualitative meta-analysis and future research directions. Business History, 60(2), 127-156. https://doi.org/10.1080/00076791.2017.1340943

Thinking about Industry Decline: A Qualitative Meta-Analysis and Future Research Directions

We analyze historical and longitudinal research focusing on industry decline. Our analysis suggests that the literature's general reliance on a few meta-theoretical arguments has important consequences for how decline is framed and explained. We identify four meta-theoretical clusters in the literature: Politics and market dynamics are seen as exogenous factors with deterministic features, whereas technology and management capabilities are framed as firm-internal failures with causally questionable explanations of how firm-level characteristics explain industry-level decline. We propose that it is important to understand the limitations of distinct meta-theoretical arguments for an enhanced theoretical and methodological understanding of what industry decline is, how it takes place, and why. Accordingly, this study contributes to business history research by restructuring and clarifying latent theoretical issues, demonstrating the pros and cons of researchers' choices, and offering guidelines and propositions for researchers interested in industry decline.

Keywords: Industry decline, institutions, innovation environment, business model evolution, industry life cycles, strategy

Introduction

Business history is filled with examples of catastrophic decline processes of industries. Such decline processes have occurred, for example, in the British coal industry, the Detroit automobile industry, the Pittsburgh steel industry, and the Scottish knitwear industry.[1] In retrospect, we can identify similar causal patterns of decline, including the saturation of demand, foreign competition, problematic labor relations, and the inability to keep up with technological change. However, the historical research on the decline of specific industries is wildly heterogeneous in terms of content and results. Furthermore, the research corpus lacks a coherent structure and dialogical nature and consequently does not achieve a degree of clarity that would be helpful to either fruitful empirical research agendas or critical theoretical discussion.[2] This is the case despite the fact that industry decline and industrial competitiveness are major research topics in business history, strategy, and economic geography.

As Ray Stokes and Ralf Banken have proposed, the term "industry" is problematic as such: it is a ubiquitous conceptualization that tends to change over time.[3] We take a rather pragmatic stance with respect to how to proceed with this conceptual problem. We follow the conceptualizations of "industry" as constructed in the research that we analyzed. Thus, although the analyzed industries exist in "real life", they are also constructions made by the researchers. What makes our task easier is that in the analyzed decline literature, "industry" is most often regarded as a location-specific entity: industry decline means that most of the analyzed studies examine decline in some region, country or area, even though at the global level, the industry in question as a whole did not decline. Moreover, decline processes are often related both to the development of other industries and the evolution of firms. Therefore, the evolution of industries—and the very definition of the term "industry"—is bound to interplay not only

between firms and their industries but also between industries that are different in time and space.

Our mission is both to analyze the historical literature on industrial decline and to propose ways of moving forward from the theoretical and empirical understanding of this phenomenon. Our collection of literature reflects a heterogeneous tradition of research on industry decline, and it is not a coherent corpus that would enable a theoretically robust understanding of the different ways of defining and interpreting industrial decline. The vast majority of the literature consists of stand-alone studies that either explain a particular decline process or test the power of a specific theory in predicting decline processes. The two larger discursive clusters—the first group of studies focused on explaining industrial decline in the UK[4] and the second group of studies focused on the decline of the steel industry in the Western world[5]—are so idiographic and historically and geographically oriented that they have not generated either additional theoretical progress or large-scale empirical projects.

We do not argue for a one-size-fits-all approach to industrial decline. Nevertheless, we propose that we cannot expect theoretical development and an improved understanding of this phenomenon without the resolution of certain primary definitional and operational issues. Therefore, we aim to analyze the literature both to highlight what we already know about industrial decline and to synthesize a business historical analysis with neighboring fields, such as economic geography, strategic management, and more general (economic) history.

We contribute to the literature in two ways. First, our analysis clarifies the historical background and structure of the decline literature. The observed fragmentation of the literature is an important antecedent of the field's unpopularity: without a strong theoretical explanation for industrial decline, it is very difficult to either develop or challenge the current state of the

research. Second, our research clarifies the definition of industrial decline and its antecedents. We offer a theoretical framework that aids future studies in framing and legitimizing empirical analyses. Although case studies and comparisons from business history are highly valuable for analyzing and understanding the processes of industrial decline, the uses of concepts and theoretical assumptions must be transparent before cross-fertilization between economically oriented social sciences is possible in the study of industry decline and industry evolution more generally.

Method

Because there are no hegemonic studies on industry decline, we engaged in a comprehensive and iterative process of searching and screening the literature.[6] In addition, during the initial searches in Thomson Reuters Web of Science and Google Scholar, it became evident that the topic is being studied across the social sciences and humanities. This means that (a) articles are not the primary publication format (and therefore, the use of automated bibliometric methods[7] is precluded) and (b) from the beginning, we were unlikely to find citation patterns or keyword links that we could use in a more formal analysis. Accordingly, following the guidelines of qualitative meta-analysis,[8] we adopted an inductive strategy based on an interpretive reading of the material.[9]

Our analytical research process is described in Table 1. We started our research with a broad list of keywords and databases. Moreover, we searched the identified citation patterns,[10] i.e., books and articles from the references of the analyzed books and articles. We also extended our search to French, German, and Scandinavian sources, hoping to find non-English research streams in the study of industry decline. Accordingly, we started our research with a list of 327 publications, which we reduced to 103.[11] For instance, publications were excluded if they either

focused on national, firm or organizational decline or used the term “decline” in a symbolic or dramatized sense. Thus, we are concerned with the literature that defines decline as a phenomenon in a specific industry (including numerous business firms) in one or several regions and/or countries in terms of its relative market position. Therefore, we distinguish decline from national economic growth/decline. Moreover, decline is not the same as deindustrialization, which typically characterizes the decline of one or many industries in one region or nation and focuses on economic geography.[12] We also omitted business failures that concentrate on one firm that might operate in one or several industries.

We acknowledge that literature search choices are not self-evident and that, in many cases, a publication may belong to several discourses. For example, David Koistinen (2000, 2013) examines the economic history of deindustrialization and industry decline. Likewise, Nicholas Crafts (1998, 2012) mixes industry and national levels.[13] However, for the analytical process that we have adopted, it is necessary to limit ourselves to studies of a specific industry. Overall, it is unlikely that we have overlooked any important patterns of discourse from the most recent (our corpus does not incorporate much research from the pre-1945 period) literature: single books or articles may have been missed, but not to the extent that their inclusion would dramatically change our findings.

Insert Table 1 about here

In the final phase of our data collection and screening process, we understood that unlike many other review studies,[14] our literature review lacked a coherent and unifying theoretical and conceptual core. For that reason, we were unable either to pinpoint certain *a priori* themes or to

structure the literature according to only a few dimensions. For example, we identified more than thirty theoretical themes or distinct theories (*e.g.*, the "resource-based view" or "rent-seeking"); many historical studies made no explicit mention of theories or methods; and some studies were based on theories that operate on a different analytical level than the empirical context. For example, many studies of British postwar industrial decline explain decline either as a function of entrepreneurial failure[15] or as a symptom of macro-economic dynamics,[16] although commenters[17] have long proposed that simplifications of decline, on the one hand, and the causes identified (*e.g.*, Fordism versus flexible specialization), on the other hand, have little to do with the empirical evidence provided.

Following qualitative research of texts, we analyzed the identified publications in two phases. During the first round of reading, we marked each publication according to their theories, methods, research objects, geographical focus, time periods, and other attributes that would identify each text simultaneously as an entity and as part of a larger research cluster. After marking and creating a database, we used different filter combinations to find patterns and clusters among the publications. We identified only three clusters that could be characterized as evolving scientific discourses. First, the largest academic discussion of industry decline concerns the reasons for the UK's loss of its competitive advantage to Germany and the US.[18] Although the UK discourse primarily concerns traditional business lines from the first industrialization era[19] (i.e., steel, cotton, and coal), the general tone of the discourse is the overarching inertia in international competition in practically all industries.[20]

The second distinctive group of publications pertains to the evolution of the steel industry. As in the case of the UK discourse, the steel industry discourse is phenomenon-driven, albeit on an international scale. The core narrative concerns the loss of competitiveness in the

UK and then in the US, Germany, and all traditional steel-producing countries. The steel industry discourse emphasizes the failed interventions of governments, the poisonous influence of labor unions, and entrepreneurial failures.[21] Finally, the discourse of "others" includes a variety of studies from different theoretical and methodological angles. The studied industries ranged from fisheries to fertilizers and from machine tools to pulp and paper. The studies covered a wide geographical range that encompasses the US, Canada, France, Portugal, Japan, Turkey, Egypt, Tanzania, the Nordic countries, and Chile. Some studies presented data covering several European countries; others even presented global data.

This heterogeneous corpus helped us identify new approaches to studying and understanding industry decline. In the next section, we summarize and offer a theoretical interpretation of how industry decline is *de facto* defined and measured in the literature. We then turn our attention to four meta-theoretical explanations for industry decline that we identified from the literature.

How the Industry Decline Literature Defines Decline?

While coding our material, we found considerable variety in relation to the dependent variable, i.e., what is measured and explained when researchers study industry decline. The following list captures the most typical candidates for what industry decline is:

- Decreasing profits (price-cost margin) and decreasing output
- Declining sales
- Inability to renew/declining profits
- Decline relative to competitors
- Declining international market share

- Industrial organization structure (management's ability to create an architecture capable of renewal)
- Competitive decline, no innovations, organizational inefficiency
- Declining market share, declining profits
- Declining market share, inferior technology
- Decline as a cognitive measure
- Organizational decline, unwillingness to adapt modern practices, industrial inefficiency
- Declining exports
- Lower productivity of innovative activities (patenting) and weaker stock market performance
- Employment growth rate
- Decreasing growth of research and development (R&D) investment, decreasing share of basic research as opposed to applied research and development, decreasing share of domestic inventors compared with foreign inventors filing patents
- Decreasing capital investments (new plant and equipment), declining R&D expenditure, declining share of domestic patents

From all of these definitions, we identified five larger categories that by and large cover the definitions provided in the examined studies. The first category treats decline as a downward trend in output. This definitional category covers decreasing sales, smaller quantities of units produced and overcapacity (i.e., a discrepancy between production and sales). Paul A. Tiffany, for example, defines "industry decline" in the context of the US steel industry as the "continuing deterioration of *America's* steel performance in the international market."[22] Another example is

Liza Piper's study of Canadian fisheries in which industry decline is diagnosed according to decreasing output.[23]

The second type of decline definition centers on investment trends as synonyms and/or measures of decline: decreasing or ceasing investment in production capacity. Anthony DiFilippo, for example, uses a multitude of indicators, one of which is decreasing capital investment in plants and equipment.[24] The third category associates decline with the deterioration of investment rates in technology and innovation. Scholars regard decline in such investment as the absence of new products, low patenting rates and decreasing R&D investment rates. For example, Ashish Arora et al. diagnose the decline of the Japanese information technology (IT) industry based on Japan's lower patenting rates compared with those of their US competitors.[25] DiFilippo then uses both the declining R&D expenditure and the declining share of patents filed by US firms to signal the decline of the US machine tool industry.[26]

The fourth category covers financial indicators such as decreasing profitability, poor solvency status, poor stock market performance, decreasing contributions to the national economy, and domestic producers' decreasing market share. For example, Einar Lie uses decreasing profitability as an indicator of decline in the European fertilizer industry, and Fred Mannering et al. use the drop in market share of domestic producers in the US automotive manufacturing industry to signal industry decline.[27] Finally, a few studies measure industry through changes in industry structure, typically through decreasing firm numbers. For example, Joonas Järvinen et al. use decreasing firm numbers as indicators of global decline in the pulp and paper industry.[28]

The observed diversity in the indicators of industrial decline inevitably results in and reflects a situation in which empirical studies do not explain the same phenomenon. For

example, despite a lack of investment in capacity or innovation, sales may increase. A decrease in firm numbers may indicate the working of economies of scale in which average firm size increases along with production and sales. Stock market performance may depend more on a plethora of future risks than on any observed contraction in current operations. Finally, hypothetical decline processes do not correspond with any economic measures of decline,[29] serving more as a narrative resource[30] than as an empirical construct. D. N. McCloskey provides the following explanation:

> "Although mildly fashionable among historians, neither of these alternatives could be considered to have been successful in replacing the hypothesis of failure, because both were introduced in the same nonquantitative way as entrepreneurship itself. The form of argument adopted by both sides in the debate was qualitative isolation of one variable – entrepreneurship, interrelatedness, slowly growing demand – was sufficient to explain a good part of the apparent lag in technology."[31]

An implicit understanding of decline as the inability to change and renew an intentional decision to exit[32] is a common notion across the sampled literature. For example, Murat Cizakca argues that the Bursa silk industry declined in the 16th and 17th centuries because price volatility led to a change in production strategy.[33] The US cut nail industry declined, according to Amos J. Loveday, because firms and their managers were unable to adapt to changing technology: "Failure to recognize the need for, and the long-term profitability of, industrial research was the missing component in a management philosophy that was otherwise remarkably successful."[34]

This *de facto* definition of decline as the opposite of renewal has an intriguing association with the theoretical premises of industry life cycle theory: renewal would require the building of protective institutional barriers, the development of new technological innovations, or the creation of new industries. In all of the studies included, at least one of these renewal alternatives

failed and the entrepreneurs decided to exit. We now scrutinize the reasons for decline identified in our literature collection.

Analysis

The first round of our qualitative interpretative analysis resulted in 32 suggestions as reasons for industry decline. We aggregated these categories as four meta-theoretical clusters of explanations, which (a) enable us to group individual studies according to their explanatory logic (e.g. role of agency and evolution) and (b) suggest directions for future research. These meta-theoretical clusters are policy and institutional environment, market dynamics, technology, and capabilities.

Policy and the Institutional Environment at Large

Our collection of decline literature primarily treats policy decisions and the institutional environment as exogenous factors. Although many studies acknowledge that firms and industry associations attempt to affect and modify public policies[35] and that in many cases, government is an active player in the decline process, most authors seem to treat decline processes according to their regulatory and institutional environments.[36] This approach is an interesting choice: most pluralist theorists of political decision making would argue that firms and industry associations intentionally compete for public goods in the "political market place."[37] The studied collection of decline literature identifies other actors, such as labor unions[38] and industrial actors in other countries and other industries;[39] however, the focal industries are rarely viewed as operating in the same network of commitments.[40] In some cases, firm management and other industry leaders are accused of mismanaging their stakeholder networks[41] (typically, labor unions and government); however, studies viewing firms and other organizations as embedded in the same

institutional environment that affects their decline process are either rare or non-existent.

Today's political economists assume that two factors influence the evolution of industries (and hence, the downward spiral), thus providing the theoretical background for the question of the government's role. First, representatives of the field of new political economy (which is based on historical evidence and empirical data) assume that certain institutional elements (*e.g.*, democracy and a predictable governance system) are necessary conditions for economic growth and in turn, are logically necessary for industrial development.[42] These theoretical assumptions do not predict the success of any particular industry, but they do suggest that all industries compete according to a similar set of rules. Second, public choice scholars[43] and political sociologists[44] assume that industry-specific rules and regulations are a function of bargaining power and political maneuvering among interest groups. Competition thus prevents an industry from reaping a sustained political advantage.[45] However, if an industry gains a dominant position in a country's industrial policy, the predicted outcome is inferior success in market competition caused by the buffering role of governmental policies.[46]

Some of our sources follow this theoretical logic – especially publications that either attribute decline to an overly secure position in government protection and support[47] or acknowledge that industry-specific protective activities are either harmful[48] or useless[49] in the long run. However, most publications operate with less sophisticated meta-theoretical assumptions. On the one hand, some scholars openly argue for a free market economy in the sense that political involvement in industry destroys value and competitiveness[50] in the long run. On the other hand, another group of authors either view government non-involvement as a major cause of decline[51] or believe that government involvement was not strong enough to prevent decline.[52] We argue that these basic meta-theoretical stances make it difficult to identify the

causal structure between the decline process and dynamics in the regulatory environment; that causal structure is then reflected in the argumentation for and against political protection and support.

Our collection of decline literature includes a few studies in which authors accuse governments of failing to protect specific industries. A notable case is the US steel industry, especially as examined in Paul A. Tiffany's study. He argues that the US government could have protected the domestic steel industry but for strategic reasons, it opted not to do so; instead, it helped European and Japanese steel producers return to the market after the disastrous Second World War:

> "Our investigation of these events has revolved around the central concept of institutional divisiveness. We have endeavored to show how the absence of any ameliorating public programs for steel, combined with the steadfast intransigence of corporate and labor leaders, played an important role in the industry's eventual decline […] The federal government's continuing failure to appreciate the special circumstances surrounding the manufacture of tonnage carbon steel […] contributed significantly to the subsequent diminishment of industry performance."[53]

A similar but more complex argument is made by Bernard Elbaum and William Lazonick, who interpret certain managerial and organizational inefficiencies as consequences of Britain's institutional emphasis on free market competition:

> "Britain, however, was impeded from adopting these modern technological and organizational innovations by the institutional legacy associated with atomistic, nineteenth-century economic organization. Entrenched institutional structures – in industrial relations, enterprise and market organization, education, finance, international trade, and state-enterprise relations – constrained the transformation of Britain's productive system."[54]

Elbaum and Lazonick, along with several other studies of industry decline in the UK,[55] are rare examples in this collection of literature in that they touch on the country's "deep" institutional structure, including the power structure among firms, the government, and labor. For example, when discussing the British shipbuilding industry, Edward H. Lorenz argues that "the resultant power of trade unions delayed early mechanization" and made "structural adaptations impossible."[56] However, most studies limit themselves to industry-specific issues instead of addressing larger institutional arguments. Notably, the question of the UK's industrial decline is highly contested;[57] thus, it is difficult to draw definite conclusions about the role of the institutional environment.

The government's role in the US steel and UK manufacturing industries is unique because of the magnitude of the cases and the amount of research that they have inspired. Other more mundane examples of a lack of government support include taxation policies (for example, the argument that the high value-added tax (VAT) rate accelerated the fall of the British toy industry[58]) and the removal of entry barriers (resulting in the US automotive industry's loss to Japanese producers because of the US firms' outdated technologies and inferior quality[59]).

Interestingly, most of the studies in our collection treat government interventions as harmful to the evolution of industries. For example, long-lasting protectionism attributable to a large voting population employed in a particular industry may block renewal and lead to a collapse, as occurred in the French agriculture industry.[60] James H. Cassing and Arye L. Hillman argue in their study of declining senescent industries that government support is a shaky strategic foundation because such industries' decreasing economic and political importance will eventually erode government support.[61]

Government support may also be withdrawn abruptly. The end of the Cold War caused cutbacks in defense expenditures, resulting in decreasing sales, no investment, and the cessation of new product development.[62] In the same spirit, excessive and misdirected military spending increased the cost of machine tool development (lucrative government projects were available with no incentive to be competitive in the international civilian market), causing long-term competitiveness problems.[63]

Government intervention may only make a marginal contribution to decline. According to David Koistinen, when New England's textile manufacturing industry began to decline, the government implemented several policies and programs that proved ineffective in reversing the process.[64] Similarly, several studies on the shipbuilding industry demonstrate government failures to subsidize that business through repeated injections and government orders, as has been the case, for example, in the UK,[65] Norway,[66] Sweden,[67] and Denmark.[68]

In short, the literature does not present conclusive evidence that government policies can (or even should attempt to) prevent decline processes. Indeed, some failures result from the government's protection of industries, destroying their incentive to compete internationally. With the end of such protectionism, the industry dies. Without protectionism, an industry might not remain internationally competitive or might die sooner, freeing up resources for more promising industries. This was the case, for example, with the mid-19th century abolition of protective Navigation Acts in Finland and Sweden that led to the decline of the shipping industry, on the one hand, but the rise of timber industries, on the other hand.[69]

Market Dynamics

The literature on industry decline concentrates almost entirely on one or more countries (such as Europe or the British Empire) competing in international markets. Therefore, competitiveness in

the global market is either taken for granted or viewed as a trigger for decline, although the primary causes of decline might arguably be found elsewhere (such as in institutions, technology, or capabilities).[70] Moreover, among industrial economists, even the decline itself is typically defined as a loss of (international) market share.[71]

A classic case displaying market dynamics is the relative decline of several British manufacturing industries in global competition.[72] Twenty years ago, David Edgerton argued that decline is the dominant theme in British business history.[73] The declining British industries mentioned in the literature include, for example, cotton and textiles,[74] iron and steel,[75] shipbuilding,[76] automotive manufacturing,[77] toys,[78] jute,[79] computers,[80] and coal.[81] All of these industries were confronted by intense international competition in the form of either cheaper product[82] or more advanced and efficient production technology.[83] However, as McCloskey and Edgerton show, British industry did not decline in absolute terms; instead, it simply lost some market size in certain industries. Moreover, McCloskey argues that the decline of the British iron and steel industry was related to a decline in demand (i.e., the markets) more than it was a symptom of entrepreneurial failure, as is typically claimed.[84]

The examination of international markets as a cause of industry decline returns reasoning to basic economic logic: the ability to produce the same amount of similar products either at a lower cost or with more efficient production.[85] Economic historians place special emphasis on labor costs, for example, how countries with low labor costs outperformed countries with high labor costs[86] or whether industries improved (labor) productivity through technological advances to meet the competition.[87] The late 19th-century steel-cut nails industry, described by Amos J. Loveday, is an illustrative case. A few American nail companies modernized their production. However, these investments imposed too much of a burden on further investments in converting

production to steel wire nails, leading to a final shakeout and the decline of this industry.[88] More generally, if products of similar quality can be produced more inexpensively elsewhere, production is doomed to fail – at least if no attempts are made to improve productivity.

A decline in transportation costs has accelerated international competition and has led over time to a situation in which exports are profitable and cost differences are smaller. Whereas in the late 18th century, the freight cost in international trade could double a product's cost, in the mid-19th century (depending on the cargo and area), the freight share from the product price was approximately one-third. By the 1970s, freight costs declined to approximately ten percent, and today's transport costs are less than four percent of cargo value, as shown by Yrjö Kaukiainen.[89] In this sense, the argument that foreign competition catalyzes decline is instead a statement about the organization and costs of international trade.

A representative case of cost difference affecting industrial decline is the post-1945 British jute industry, which lost ground with the rise of low-cost Indian production even though according to Jim Tomlinson et al., British producers attempted to increase efficiency by implementing more modern production technology.[90] Similarly, Egypt's cotton industry declined because superior technologies were adopted elsewhere and made the industry's production unprofitable, as shown by Laura Panza.[91]

With respect to market size, the rhythm of market growth is important. For example, as Gerben Bakker explains, the European film industry lost its market share in US in the 1920s because it missed the formative moment during the First World War to adapt to the new quality requirements and rapidly growing US market.[92] Similarly, Robert A. Blecker emphasizes the role of pricing behavior in the decline of the US steel industry. In this case, foreign imports weakened the profitability of domestic production and because domestic demand grew more slowly than

before, customers searched for substitutes for steel due to the pricing policies of the domestic oligopoly. Ultimately, this pricing behavior encouraged both foreign entry and a search for substitutes.[93]

Therefore, market changes may result in industry decline. The decline of markets is an obvious cause of industry decline; this decline is typically related to technology changes in which new products are substituted for older ones, thus creating new markets. Some of these substitutes leading to industry decline date back to the Second Industrial Revolution of the late 19th century, when research-based technology development encouraged the production of artificial goods to replace natural goods: for example, chemical dyes replaced traditional dyes and changed the geographical orientation of the dye industry;[94] chemical fertilizer replaced Peruvian guano;[95] wire nails outstripped steel-cut nails;[96] and paints replaced tar.[97]

Growing markets might also lead to industry decline, which happened to the European film industry when growing US markets forced European filmmakers to invest so much in production and marketing that their businesses became unprofitable and declined.[98] Similarly, the British toy industry was a casualty of demographic changes when European families opted to have fewer children; however, simultaneous growth in the average wealth of families increased the demand for toys, which was met by inexpensive Asian goods.[99]

Industry life cycle theory[100] offers one explanation for why industries fail when markets grow. When an industry emerges, market entry leads to a shake-out period in which some companies exit and the industry becomes more concentrated. Thus, economies of scale concentrate industries in the hands of ever-larger corporations, potentially forcing the departure of smaller companies that cannot compete with the growing investments in, for example, R&D and marketing. If these smaller companies are geographically concentrated in particular regions

or countries, the industry might decline in that area. The literature confirms this relationship; Bakker shows that the decline of the European film industry was indeed a consequence of the maturation of markets and the concentration of production.[101] By the same token, paper manufacturing companies in the Nordic countries increased their economies of scale even as industry was declining in many other regions and small firms were forced to leave the market.[102] In the European fertilizer industry, small producers exited when the industry reached the maturation stage.[103]

Exogenous shocks in the markets might precipitate industry decline. For example, the First World War was among the causes of the decline of the European film industry in US markets caused by American protectionist activities and changes in consumer behavior.[104] The "price revolution" – worldwide inflation – was a key factor in the decline of the Ottoman silk industry at the turn of the 16th and 17th centuries.[105]

A market-based explanation of these developments holds that international markets are viewed through a generic evolutionary logic of the "survival of the fittest". Such discussions assume that the industry as a whole does not decline; it simply transforms. The great shipping crisis of the 1970s and 1980s is a good example of such a transformation: shipping from high-cost countries drove the industry to low-cost countries. However, even some high-cost countries survived in this competitive industry by specializing in niche areas and adopting best-practice technology.[106]

Technology

The technological explanation for industry decline relates to the catch-up processes whereby less developed economies first obtain and then surpass the technological prowess of leading countries or regions. For example, the fall of the British cotton manufacturing industry is explained by UK

firms in the 1960s continuing to use vintage technologies, such as the mule and Lancashire loom, which had long been abandoned in other cotton-producing countries and regions.[107] Similarly, the demise of Turkish and Egyptian textile production resulted from superior technologies being adopted elsewhere, leading to locally harvested raw material being shipped abroad for manufacturing.[108]

Studies have presented various causal mechanisms for such catch-up and surpassing processes. The fall of the US automobile manufacturing industry is explained by entry barriers that gave firms incentives to rely on outdated technologies, resulting in automobiles that were more expensive but of poorer quality than automobiles manufactured in other countries. Once the entry barriers were removed, US manufacturers lost a substantial amount of their domestic market share to international competitors that had adopted more modern technologies.[109]

The failure to adopt new technology is also offered as the explanation for the decline of the European semiconductor manufacturing industry. US firms that entered the business later developed new technological capabilities that were off the radar of European firms, which concentrated on their existing profitable businesses.[110] Similarly, the demise of the British shipbuilding industry is explained by British firms' success with previous generation technologies: the need to invest in technological progress did not occur to managers as long as their operations were highly profitable.[111] By the time these operations ceased to be profitable, it was too late. A complementary explanation is offered by Edward H. Lorenz, who argues that UK shipbuilding failed because of a strong craft tradition and a tradition of one-off construction. Thus, firms never benefitted from the economies of scale achieved from an assembly line type of production, which was important in global competition.[112]

Empirical studies have found that the root causes of technology-led decline can be divided into two industry life cycle mechanisms. First, countries that became active in the industry at an early stage moved into an era of stability in which manufacturing occurred on a large scale and was both efficient and standardized. In this stage of industry evolution, firms direct their resources towards exploiting their acquired capabilities. This strategy opens the door for more technologically advanced competitors that have not tied their capital to production capacity based on the older technological paradigm and therefore can potentially explore alternative solutions. Second, in some cases, traditional manufacturing regions had not moved from a craft-style entrepreneurial regime into the routinized regime of mass production.[113] This sluggishness gave the foreign entrants the opportunity to enter with larger production units, enabling economies of scale and thus both lower cost and more uniform quality.

The actor in the technological explanation for industry decline is the entire network of firms operating in the industry in a limited geographical area. The technological paradigm of an industry is not decided by any single firm. Certainly, some firms may spearhead an industrial cluster and incentivize other firms to offer compatible solutions; some of these firms have more decision-making power than others. However, an industry's technological ethos is a population-level phenomenon, and one firm moving from the innovative and inefficient stage to the routinized and efficient stage forces others to follow suit. Similarly, as long as all local competitors adopt a craft-based customized approach, they may find it difficult to compete with mass production. However, as mass-production practices are adopted and found to be superior in other regions, the artisan fails because cheaper goods of standard quality are imported.

How could technology-based industry decline have been prevented? Organization theory suggests one solution: ambidexterity.[114] Ambidextrous organizations channel their resources into

both exploring and exploiting. Exploring new technological solutions and new customer needs keeps the firm abreast of the latest developments in its field; simultaneously, the efficient exploitation of current capabilities both reduces cost and increases volume. Such a balance might have helped European semiconductor firms observe new technological developments, hindering American firms from overtaking to the extent that they did. Moreover, had UK shipbuilders been quicker to exploit their capabilities, they might not have been overtaken by more efficient international competitors. Nevertheless, firms' ambidexterity depends on the strategic choices of their owners, i.e., it is not a managerial choice *per se*. This may not be simply a question of short-termism; instead, it may be a question of cognitive limitations in the ability to foresee shifts in competitive advantage as a result of technological breakthroughs.

Capabilities

The fourth category of explanations for decline relates to capabilities. According to management theorists, business firms – and thus industries – should and do continuously develop new processes and routines to meet competition and technological challenges.[115] Therefore, capabilities are by definition a necessary condition for renewal: the continuous exploration and exploitation of resources embedded in market dynamics.[116] According to David J. Teece, a normative expectation based on capabilities is as follows:

> "To identify and shape opportunities, enterprises must constantly scan, search, and explore across technologies and markets, both "local" and "distant". This activity not only involves investment in research activity and the probing and reprobing of customer needs and technological possibilities; it also involves understanding latent demand, the structural evolution of industries and markets, and likely supplier and competitor responses. To the extent that business enterprises can open up technological opportunities (through engaging in R&D and through tapping into the research output of others) while simultaneously learning

> about customer needs, they have a broad menu of commercialization opportunities. Overcoming a narrow search horizon is extremely difficult and costly for management teams tied to established problem-solving competences."[117]

Teece's normative proposition is not unproblematic from the point of view of understanding industry decline. Certainly, most studies criticizing management failures as causes of industry decline[118] frame managers and firms as lacking all of the qualifications listed above. This framing creates immediate conceptual problems because an industry is an aggregate of firms and firms are an aggregate of their shareholders, employees and contracts.[119] Thus, the first logical question is whose capabilities are discussed when explaining decline? In the decline studies emphasizing capabilities, this fundamental definitional issue related to firm theory has not been an issue. Most studies treat industry decline as a result of managerial failure that can relate to both skills and ethics. British industrial decline has traditionally been explained by managerial or entrepreneurial failure,[120] although critics such as McCloskey and Edgerton question the very existence of this decline in the UK.[121] Lazonick considers managerial failure as a key determinant of the decline of British industries. According to him, British businessmen failed (to even try) "individually or collectively to transform their industrial environment"; they instead "took the conditions facing them as given".[122] However, as Roger Lloyd-Jones and Myrddin J. Lewis suggest, British industrial decline cannot be explained by a similar failure to renew and take advantage of new technologies in all industries. They suggest, for example, that the Sheffield metal industry was based on "quality production and flexible technology" and thus resembled its American analog.[123]

Derek F. Channon argues that British industrial corporations suffered from managerial deficiencies, such as a lack of expertise in relevant pricing, inefficient production, poor industrial relations, low capital investment, and preferences for colonial markets.[124] In a similar vein,

Joonas Järvinen et al. find that firms in the global pulp and paper industry were locked into their previously successful paths and were unable to adapt to a changing environment.[125] Barry E. C. Boothman's study offers a more detailed explanation for the lack of adaptation: in the Canadian pulp and paper industry, corporate reporting practices masked firms' financial status and resulted in overinvestment and excess capacity[126]. Such reporting practices hint at unethical behavior. Furthermore, both Thomas P. Carney and Amos J. Loveday offer ethical failure as the reason for industry decline: idealistic leaders of the past have been replaced by profit-motivated opportunists.[127]

In addition to a lack of skill and ethics, managerial failure is tied to national culture. In the case of the British cotton industry, the decline is explained by the rise of corporate economies in Japan and the US, where the new corporate culture was better equipped to "create conditions for new profitable opportunities."[128] Numerous studies analyzing British industrial decline, whether during the late 19th century, the turn of the 20th century, or after the Second World War, tend to emphasize a certain, almost culturally embedded tradition of managers adhering to old methods and practices.[129] However, culturally bound managerial failure is not solely a British phenomenon. The fall of the Japanese IT industry has also been explained in cultural terms: as software innovations have become more important, Japanese firms have suffered because the Japanese are not prone to software innovation.[130]

The capabilities-based explanation of industrial decline ultimately lays the blame on managers. Managers lack required skills because of poor education or culturally bound norms and values. Could a different set of managers have saved an industry in decline? According to empirical research on management's impact on survival, we simply do not know the answer to this question. Thus, and unsurprisingly, the wide capability literature on industry decline has

found it difficult to define and assess the causal relationship between managerial activities and decline. Robert A. Ankli and Eva Sommer, for example, claim that the decline of the American steel industry was indeed caused by management failure but that exactly where managers were active is a more problematic question, because managers were responsible for daily decisions about subject matter with far-reaching consequences. Ankli and Sommer conclude that American steel industry managers were incapable of renewing the business to return to its former success: "Management thought that they had the best industry in the world – what worked yesterday was thought to work just as well tomorrow."[131] A similar conclusion is obtained in several studies analyzing various lines of declining industries in Britain. However, again, a clear causal relationship might be hard to pinpoint. For example, according to Lorenz, the decline of the British shipbuilding industry was not necessarily caused by a management failure; it was instead caused by the failure to build trust between management and trade unions.[132] However, this trust might be understood as an entrepreneurial function; thus, if it were neglected, the situation could be understood as a managerial failure in building trust with unions.

Managerial failure boils down to the human tendency to prefer the familiar over the unfamiliar, which in managerial speak translates into a local search. Cognitive limitations result in changes that surface as surprises: the Scottish knitwear industry (i.e., knitwear firms and their managers) did not understand that it had lost its previous advantage,[133] and British paper industry managers optimized production with information that in retrospect, motivated them to make inferior technology choices.[134] However, the same managers would be labeled successful heroes without the decline, which underlines not only the tendency to attribute failure to individuals but also the fact that an individual-level explanation is categorically wrong when aiming to explain industry-level decline processes.[135] Accordingly, Teece's proposal to have a rich modular base of

capabilities would be helpful in renewing industries and does not regress to individual firms and their decisions.[136]

Discussion

The analysis of our collection of industry decline literature revealed a fragmented body of research. The more than 100 publications focus on numerous industries, countries, and regions and use different theories and methods. The collection does not have a dialogical structure outside some classic themes in economic and industrial history (*e.g*., UK manufacturing in the 20th century and the US steel industry). From this starting point, our study's contributions are as follows. First, we redefine industry decline to clarify the research topic in future studies. Second, we generate theoretical propositions based on historical evidence. Third, we make some suggestions about how to study industry decline and what might arise as limitations in such inquiries.

A (Re)Definition of Industry Decline

Our collection of literature reflects an interesting paradox: only a few industries have completely disappeared from industrial history. Conversely, a large US steel industry still exists; cars are manufactured in the UK; and Nordic paper industry firms are larger than before their industry started to decline. Our results suggest that the manner in which decline is conceptualized may be a key factor in determining the types of explanations that researchers find and the policy options that decision-makers derive from these findings. Therefore, one key contribution of our research is that researchers studying industry decline should be more careful and explicit in how they conceptualize decline and should consider whether their conceptualizations match their implicit and explicit cause-effect modeling.

Accordingly, to clarify empirical research and theory development, we propose a reformulated definition of industry decline – and in some sense a redefinition of *industry*.[137] We propose viewing an industry from a configurational and identity-based perspective. In other words, firms in the declining industry are members of a population characterized by similar business models[138] and industry recipes. By business model, we mean the product offerings, management system, network, and value-creation practices[139] that (a) have a modular structure[140] and (b) are historically contingent.[141] By industry recipe,[142] we mean the collective method of cognitively "making sense"[143] of the link between the business model and the market environment. That said, in a given historical moment, some firms may be members[144] of a population of firms sharing business model characteristics and thoughts about industry boundaries, product ontology, and reputational ranking (i.e., who's who in the industry).[145] This membership, however, does not mean that a firm could not have/obtain membership in other industries or that its operational and cognitive characteristics will remain the same forever. This also means that we treat decline as a collective inability or unwillingness to change a dominant industry recipe and business model, which is then reflected in measurable deterioration of economic performance.

Why Do Industries Not Transform?

An obvious takeaway from our research sample is that decline is largely the opposite of renewal. Building on the analysis of our collection of literature, we propose ways in which politics, market competition, technology, and capabilities may catalyze industry decline by preventing renewal. These factors target three alternative ways of renewing the industry: (1) creating barriers to entry; (2) rejuvenating the mature industry through innovation; and (3) reframing the industry and its boundaries. The industry life cycle literature[146] recognizes all three mechanisms

as potential strategies against declining performance. Our contribution is to identify the causal links between the antecedents of decline as specific to these three mechanisms of renewal. Table 2 below lists the potential causalities.

Insert Table 2 about here

Many of these observations restate theoretical predictions from the literature on industrial organization,[147] capabilities,[148] and new political economy.[149]. Complementing existing assumptions, we may identify three central processes that help explain and predict the inability to renew. The following list and Figure 1 present these three processes.

1. **Hindrance**: The process starts from a combination of changing technology and subsequent market dynamics. Technological change inflates existing technological capabilities and together with insufficient organizational capabilities, hinders renewal.
2. **Demotivation**: Industry architecture (i.e., the combination of structure and incentives[150]) demotivates renewal because actors are embedded in organizational and social networks, making it difficult to experiment with alternative strategies.
3. **Constraint**: Political interventions and the "web of commitments"[151] constrain renewal attempts by both maintaining barriers of exit and demotivating renewal attempts in cases in which public authorities support the declining industry via protectionist policies and subsidies.

Insert Figure 1 about here

For business history research, our theorizing means a shift from studying the causes and effects of decline towards studying the processes of uneasy renewals and overall dynamics driving these processes. Additionally, with respect to our causal matrix (Table 2) the 12 theoretical notions offer fine-grained starting points to focus on specific theoretical questions instead of aiming for comprehensive explanations. For example, we call for more nuanced research on the role of politics in catalyzing industry decline. Although current research has mostly focused on the role of governments in the creation or non-creation of entry barriers, our proposition is that governments' role goes much deeper into innovation processes (including research and education) and how governments reframe the industry and its boundaries. Likewise, the role of technology development would require extensive focused research to reveal the deeper mechanisms driving technological inertia and thus problems in coping with competition. Finally, although we find it difficult to locate evidence on inferior management and leadership at the *firm level* as causes of *industry-level* decline, we propose studying the role of political decision-makers and influential figures in national innovation systems as inhibitors of renewal.[152] For example, earlier studies of industry evolution and innovation management in Germany reveal that specific outcomes (our case industry decline or renewal) are the results of configurations of institutions, capabilities, and firm-level adaptation[153]. The management of challenging situations equally requires orchestration of institutional frameworks, engineering research and education, and firm-level adaptability. The examples by Murmann and more recent studies on nanoeconomics suggest that industry-level dynamics should be studied from below. Such research requires data for all firms in a certain population and methodological tools to cope with the emerging complexity.[154] While such a level of detailed analysis is not possible for some

cases, it opens opportunities for business historians to study industry decline with a level of accuracy that has not been typically seen in the neighboring disciplines in social sciences.

Conclusions

The analysis of industry decline literature revealed four dominant meta-theoretical explanations causing industry decline. The first is institutional environment, emphasizing the role of the government, labor unions, and influence of special interest groups as the causes for decline. The second emphasizes market dynamics and international competition explaining the decline of industries in certain geographical areas. This literature indicates that decline is caused by cost differences in production, transport, marketing, etc. The third explanation is technological: falling behind in technological development causes industry decline. Technological change can even destroy global industries as new products and services create new industries that displace existing ones. The fourth widely noted cause for decline is related to capabilities, which historical studies usually identify as entrepreneurial failure and managerial deficiencies.

Based on the wide body of decline literature, we redefined industry decline and made theoretical propositions and suggestions for further studies in industry decline. Stokes and Banken state that business historians and social scientists tend to be more interested in firms than in industries.[155] Therefore, although the interplay between firms and their industries will be highly valuable when analyzing industry decline, the interplay between industries and governments and innovation systems more broadly is equally important. Finally, the primary underlying message of our analysis and theoretical work is that instead of forcing a narrative structure for the study of industry decline, researchers would benefit from (a) focusing on the processes of renewal problems instead of explaining backwards from outcomes and (b) using narrower and theoretically more robust study settings.

References

Abe, E. and T.R. Gourvish. *Japanese Success? British Failure? Comparisons in Business Performance Since 1945*. Oxford: Oxford University Press, 1997.

Acemoglu, D., S. Johnson, and J. A. Robinson. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *The Quarterly Journal of Economics* 117, no. 4 (2002): 1231-1292. doi:10.1162/003355302320935025.

Acemoglu, D., S. Johnson, and J. A. Robinson. "Institutions as a Fundamental Cause of Long-Run Growth." In *Handbook of Economic Growth*, edited by P. Aghion & S. Durlauf, 385-472. Amsterdam: Elsevier, 2005

Alford, B. W. E. "Flagging or Failing? British Economic Performance, 1880–1914." In *The British Industrial Decline*, edited by J. P. Dormois and M. Dintenfass, 23-56. London: Routledge, 1999.

Anand, J. and H. Singh. "Asset Redeployment, Acquisitions and Corporate Strategy in Declining Industries." *Strategic Management Journal* 18, no. S1 (1997): 99-118. doi:10.1002/(SICI)1097-0266(199707)18:1+<99::AID-SMJ928>3.0.CO;2-B

Ankli, R. E. and E. Sommer. "The Role of Management in the Decline of the American Steel Industry." *Business and Economic History* 25, no. 1 (1996): 217-231.

Argyres, N. S. and J. P. Liebeskind. "Contractual Commitments, Bargaining Power, and Governance Inseparability: Incorporating History into Transaction Cost Theory." *Academy of Management Review* 24, no. 1 (1999): 49-63. doi:10.5465/AMR.1999.1580440

Arora, A., L. G. Branstetter, and M. Drev. "Going Soft: How the Rise of Software-Based Innovation Led to the Decline of Japan's IT Industry and the Resurgence of Silicon Valley." *Review of Economics and Statistics* 95, no. 3 (2013): 757-775. doi:10.1162/REST_a_00286

Aspara, J., J.-A. Lamberg, A. Laukia, and H. Tikkanen. "Strategic Management of Business Model Transformation: Lessons from Nokia." *Management Decision* 49, no. 4 (2011): 622-647. doi:10.1108/00251741111126521.

Audretsch, D. B. "New-Firm Survival and the Technological Regime." *The Review of Economics and Statistics* 73, no. 4 (1991): 441-450.

Bakker, G. “The Decline and Fall of the European Film Industry: Sunk Costs, Market Size, and Market Structure, 1890-1927.” *The Economic History Review* 58, no. 2 (2005): 310-351. doi:10.1111/j.1468-0289.2005.00306.x.

Barley, S. R. “Building an Institutional Field to Corral a Government: A Case to Set an Agenda for Organization Studies.” *Organization Studies* 31, no. 6 (2010): 777-805. doi:10.1177/0170840610372572

Blecker, R. A. “Markup Pricing, Import Competition, and the Decline of the American Steel Industry.” *Journal of Post Keynesian Economics* 12, no. 1 (1989): 70-87. doi:10.1080/01603477.1989.11489781.

Booth, A. “The Manufacturing Failure Hypothesis and the Performance of British Industry During the Long Boom.” *Economic History Review* 56, no. 1 (2003): 1-33. doi:10.1111/1468-0289.00240.

Boothman, B. E. C. “High Finance/Low Strategy: Corporate Collapse in the Canadian Pulp and Paper Industry, 1919-1932.” *Business History Review* 74, no. 4 (2000): 611-656. doi:10.2307/3116469.

Bozeman, B. “Technology Transfer and Public Policy: A Review of Research and Theory.” *Research Policy* 29, no. 4 (2000): 627-655. doi:10.1016/S0048-7333(99)00093-1.

Braguinsky, S., & Hounshell, D. A. History and nanoeconomics in strategy and industry evolution research: Lessons from the Meiji-Era Japanese cotton spinning industry. *Strategic Management Journal, 37*, (2016): 45–65.

Brown, K. D. “The Collapse of the British Toy Industry, 1979-1984.” *The Economic History Review* 46, no 3 (1993): 592-606. doi:10.1111/j.1468-0289.1993.tb01351.x.

Burton, A. *The Rise and Fall of British Shipbuilding.* London: Constable and Company Limited, 2013.

Butler, T. “Towards a Hermeneutic Method for Interpretive Research in Information Systems.” *Journal of Information Technology* 13, no. 4 (1998): 285-300. doi:10.1057/jit.1998.7.

Carney, T. P. *False Profits: The Decline of Industrial Creativity*. Notre Dame, IN: University of Notre Dame Press, 1981.

Cassing, J. H. and A. L. Hillman. “Shifting Comparative Advantage and Senescent Industry Collapse.” *The American Economic Review* 76, no. 3 (1986): 516-523.

Catalan Vidal, J. “The stagflation crisis and the European automotive industry, 1973-85.” *Business History* 59, no. 1 (2017): 4-34. doi:10.1080/00076791.2016.1237505

Cattani, G., Porac, J. F., & Thomas, H. ”Categories and competition.” *Strategic Management Journal*, *38*(1) (2017): 64-92.

Chandler Jr., A. D. *The Visible Hand. The Managerial Revolution in American Business.* Cambridge, MA: Harvard University Press, 1977.

Chandler Jr., A. D. *Scale and Scope. The Dynamics of Industrial Capitalism.* Cambridge, MA: The Belknap Press of Harvard University Press, 1990.

Channon, D. F. *The Strategy and Structure of British Enterprise*. Basingstoke, UK: Palgrave Macmillan, 1973.

Chesbrough, H. and R. S. Rosenbloom. “The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation’s Technology Spin-Off Companies.” *Industrial and Corporate Change* 11, no. 3 (2002): 529-555. doi:10.1093/icc/11.3.529

Church, R. *The Rise and Decline of the British Motor Industry*. Cambridge, UK: Cambridge University Press, 1996.

Cizakca, M. “Price History and the Bursa Silk Industry: A Study in Ottoman Industrial Decline, 1550–1650.” *The Journal of Economic History* 40, no. 3 (1980): 533-550. doi:10.1017/S0022050700085223.

Clutterbuck, D. and S. Crainer. *The Decline and Rise of British Industry*. London: W.H. Allen, 1988.

Coker, R. E. *The Fisheries and the Guano Industry of Peru*. Washington, DC: US Government Printing Office, 1910.

Collins, B. and K. Robbins. *British Culture and Economic Decline.* New York: St. Martin’s Press, 1990.

Crafts, N. “Forging Ahead and Falling Behind: The Rise and Relative Decline of the First Industrial Nation.” *Journal of Economic Perspectives* 12, no. 2 (1998): 193 - 210.

Crafts, N. “British Relative Economic Decline Revisited: The Role of Competition.” *Explorations in Economic History* 49, no. 1 (2012): 17-29. doi:10.1016/j.eeh.2011.06.004.

Cushman, G. T. *Guano and the Opening of the Pacific World: A Global Ecological History.* Cambridge, UK: Cambridge University Press, 2013.

DiFilippo, A. *Military Spending and Industrial Decline: A Study of the American Machine Tool Industry*. Westport, CT: Greenwood Press, 1986.

Dintenfass, M. *Managing Industrial Decline: The British Coal Industry Between the Wars.* Columbus: Ohio State University Press, 1992.

Dintenfass, M. "Converging Accounts, Misleading Metaphors and Persistent Doubts: Reflections on the Historiography of Britain's 'Decline.'" In *The British Industrial Decline*, edited by J. P. Dormois and M. Dintenfass, 23-24. London: Routledge, 1999.

Donnelly, T., J. Begley, and C. Collis. "The West Midlands automotive industry: the road downhill." *Business History* 59, no. 1 (2017): 56-74. doi:10.1080/00076791.2016.1235559

Dormois, J.-P. "France's Experience of Industrial Retardation During the Belle Epoque." In *The British Industrial Decline*, edited by J. P. Dormois & M. Dintenfass, 176-191. London: Routledge, 1999.

Dosi, G., K. Pavitt, and L. Soete. *The Economics of Technical Change and International Trade.* New York: New York University Press, 1990.

Dunleavy, P. *Democracy, Bureaucracy and Public Choice: Economic Approaches in Political Science*. London: Routledge, 2014.

Dunnett, P. J. S. *The Decline of the British Motor Industry: The Effects of Government Policy, 1945-1979.* London: Croom Helm, 1980.

Edgerton, D. *Science, Technology, and the British Industrial "Decline", 1870-1970.* Cambridge, UK: Cambridge University Press, 1996.

Edgerton, D. "The Decline of Declinism." *Business History Review* 71 no. 2 (1997): 201-206. doi:10.2307/3116157.

Eisenhammer, J. and M. Rhodes. "The Politics of Public Sector Steel in Italy: From the "Economic Miracle" to the Crisis of the Eighties." In *The Politics of Steel: Western Europe and the Steel Industry in the Crisis Years (1974-1984)*, edited by Y. Mény and V. Wright, 416-475. New York: W. de Gruyter, 1986.

Elbaum, B. "The Steel Industry Before World War I." In *The Decline of the British Economy*, edited by B. Elbaum and W. Lazonick, 51-81. Oxford: Oxford University Press, 1986.

Elbaum, B. and W. Lazonick, eds. *The Decline of the British Economy*. Oxford: Oxford University Press, 1986.

Elbaum, B and W. Lazonick. “An Institutional Perspective on British Decline.” In *The Decline of the British Economy*, edited by B. Elbaum & W. Lazonick, 1-17. Oxford: Oxford University Press, 1986.

Fetzer, T. “Reversing gear: trade union responses to economic crises at Opel (1974-1985).” *Business History* 59, no. 1 (2017): 141-157. doi:10.1080/00076791.2016.1223627.

Fiss, P. C. “A Set-Theoretic Approach to Organizational Configurations.” *Academy of Management Review* 32, no. 4 (2007): 1180-1198. doi:10.5465/AMR.2007.26586092.

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

Gray, V. and D. Lowery. “Interest Group Politics and Economic Growth in the US States.” *American Political Science Review* 82, no. 3 (1988): 109-131. doi:10.2307/1958061.

Hadani, M. and D. A. Schuler. “In Search of El Dorado: The Elusive Financial Returns on Corporate Political Investments.” *Strategic Management Journal* 34, no. 2 (2013): 165-181. doi:10.1002/smj.2006.

Harlaftis, G., S. Tenold, and J. Valdaliso (eds.). *The World’s Key Industry: History and Economics of International Shipping*. Basingstoke, UK: Palgrave Macmillan, 2012.

Harrigan, K. R. *Strategies for Declining Businesses*. Lexington, MA: Lexington Books, 1980.

Hautala, K. *Suomen Tervakauppa 1856-1913* [Finnish tar trade 1856-1913]. Helsinki: SHS, 1956.

Helper, S. “Strategy and Irreversibility in Supplier Relations: The Case of the US Automobile Industry.” *Business History Review* 65, no. 4 (1991): 781-824. doi:10.2307/3117265.

Hendry, J. *Innovating for Failure: Government Policy and the Early British Computer Industry*. Cambridge, MA: MIT Press, 1989.

Hoerr, J. P. *And the Wolf Finally Came: The Decline of the American Steel Industry*. Pittsburgh: University of Pittsburgh Press, 1988.

Howe, W. S. *The Dundee Textiles Industry 1960-1977: Decline and Diversification.* Aberdeen: Aberdeen University Press, 1982.

Jacobides, M. G. “The Architecture and Design of Organizational Capabilities.” *Industrial and Corporate Change* 15, no. 1 (2006): 151-171. doi:10.1093/icc/dtj009.

Järvinen, J., J-A. Lamberg, and L. Pietinalho. “The Fall and the Fragmentation of National Clusters: Cluster Evolution in the Paper and Pulp Industry.” *Journal of Forest Economics* 18, no. 3 (2012): 218-241. doi:10.1016/j.jfe.2012.04.002.

Kaukiainen, Y. *Ulos maailmaan*. *Suomalaisen merenkulun historia* [History of Finnish shipping]. Helsinki: SKS, 2008.

Keim, G. D. “Business and Public Policy: Competing in the Political Marketplace.” In *Handbook of Strategic Management*, edited by M. A. Hitt, R. A. Freeman, and J. S. Harrisone, 283-601. Malden, MA: Blackwell, 2001.

Kelly, T. *The British Computer Industry: Crisis and Development*. New York: Croom Helm, 1987.

Klepper, S. “Industry Life Cycles.” *Industrial and Corporate Change* 6, no. 1 (1997): 145-181. doi:10.1093/icc/6.1.145.

Koerner, S. *The Strange Death of the British Motor Cycle Industry*. Lancaster, UK: Carnegie Publishing, 2012.

Kogut, B., & Zander, U. (2000). “Did socialism fail to innovate? A natural experiment of the two Zeiss companies.” *American Sociological Review*, 169-190.

Koistinen, D. “Dealing with Deindustrialization: Economics, Politics, and Policy during the Decline of the New England Textile Industry, 1920-1960.” *The Journal of Economic History* 60, no. 2 (2000): 501-504. doi:10.1017/S0022050700025201.

Koistinen, D. *Confronting Decline: The Political Economy of Deindustrialization in Twentieth-Century New England*. Gainesville: University Press of Florida, 2013.

Laamanen, T., J.-A. Lamberg, and E. Vaara. “Explanations of Success and Failure in Management Learning: What Can We Learn from Nokia’s Rise and Fall?” *Academy of Management Learning & Education* 15, no. 1 (2016): 2-25. doi:10.5465/amle.2013.0177

Layton, I. G. *The Evolution of Upper Norrland’s Ports and Loading Places 1750 – 1975*. Umeå: Umeå University, 1981.

Lazonick, W. “Competition, Specialization and Industrial Decline.” *Journal of Economic History* 41, no. 1 (1981): 31-38. doi:10.1017/S0022050700042716.

Lazonick, W. “Industrial Organization and Technological-Change: The Decline of the British Cotton Industry.” *Business History Review* 57, no. 2 (1983): 195-236. doi:10.2307/3114355.

Lie, E. “Market Power and Market Failure: The Decline of the European Fertilizer Industry and the Expansion of Norsk Hydro.” *Enterprise & Society* 9, no. 1 (2008): 70-95. doi:10.1017/S1467222700006716.

Lloyd-Jones, R. and M. J. Lewis. “Personal Capitalism and British Industrial Decline: The Personally Managed Firm and Business.” *Business History Review* 68, no. 3 (1994): 364-411. doi:10.2307/3117172.

Lorenz, E. H. “An Evolutionary Explanation for Competitive Decline: The British Shipbuilding Industry, 1890–1970.” *The Journal of Economic History* 51, no. 4 (1991): 911-935. doi:10.1017/S002205070004016X.

Lorenz, E. H. *Economic Decline in Britain: The Shipbuilding Industry, 1890-1970.* Oxford: Clarendon, 1991.

Lorenz, E. and F. Wilkinson. “The Shipbuilding Industry, 1880-1965.” In *The Decline of the British Economy*, in B. Elbaum and W. Lazonick, 109-134. Oxford: Oxford University Press, 1986.

Loveday, A. J. *The Rise and Decline of the American Cut Nail Industry: A Study of the Interrelationships of Technology, Business Organization, and Management Techniques.* London: Greenwood, 1983.

Magee, G. B. “Competence or Omniscience? Assessing Entrepreneurship in the Victorian and Edwardian British Paper Industry.” *Business History Review* 71, no. 2 (1997): 230-259. doi:10.2307/3116159.

Malerba, F. *The Semiconductor Business: The Economics of Rapid Growth and Decline.* London: Pinter, 1985.

Mannering, F., C. Winston, Z. Griliches and R. Schmalensee. “Brand Loyalty and the Decline of American Automobile Firms.” In *Brookings Papers on Economic Activity: Microeconomics*, edited by M. Baily & C. Winston, 67-114. Washington, DC: Brookings Institution, 1991.

Mantere, S., P. Aula, H. Schildt, and E Vaara. “Narrative Attributions of Entrepreneurial Failure.” *Journal of Business Venturing* 28, no. 4 (2013): 459-473. doi:10.1016/j.jbusvent.2012.12.001.

March, J. G. “Exploration and Exploitation in Organizational Learning.” *Organization Science* 2, no. 1 (1991): 71–87. doi:10.1287/orsc.2.1.71.

Mass, W. and W. Lazonick. “The British Cotton Industry and International Competitive Advantage: The State of Debates.” *Business History* 32, no. 4 (1990): 9-65. doi:10.1080/00076799000000143

McCloskey, D. N. *Economic Maturity and Entrepreneurial Decline: British Iron and Steel, 1870-1913*. Cambridge, MA: Harvard University Press, 1973.

McGahan, A. M. “How Industries Change.” *Harvard Business Review* 82, no. 10 (2004): 86-94.

Mény, Y. and V. Wright. *The Politics of Steel: Western Europe and the Steel Industry in the Crisis Years (1974-1984).* Berlin: Walter de Gruyter, 1986.

Menzel, M. P. and D. Fornahl. “Cluster Life Cycles—Dimensions and Rationales of Cluster Evolution.” *Industrial and Corporate Change* 19, no. 1 (2010): 205-238. doi:10.1093/icc/dtp036.

Mizruchi, M. S. *The Structure of Corporate Political Action: Interfirm Relations and their Consequences.* Cambridge, MA: Harvard University Press, 1992.

Moen, E. *The Decline of the Pulp and Paper Industry in Norway, 1950-1980: A Study of a Closed System in an Open Economy*. Oslo: Scandinavian University Press, 1998.

Murmann, J. P. *Knowledge and Competitive Advantage: The Coevolution of Firms, Technology, and National Institutions*. Cambridge, MA: Cambridge University Press, 2003.

Napolitano, M. R., V. Marino, and J. Ojala. “In Search of an Integrated Framework of Business Longevity.” *Business History* 57, no. 7 (2015): 955–969. doi:10.1080/00076791.2014.993613.

North, D. C. *Institutions, Institutional Change and Economic Performance*. Cambridge, UK: Cambridge University Press, 1990.

Ojala, J., M. Voutilainen, and J. A. Lamberg. “The Evolution of the Global Paper Industry: Concluding Remarks.” In *The Evolution of Global Paper Industry 1800-2050: A Comparative Analysis*, edited by J.-A. Lamberg, J. Ojala, M. Peltoniemi, and T. Särkkä, 345-356. Dordrecht: Springer, 2012.

Ojala, J. and A. Räihä. ”Navigation Acts and the Integration of North Baltic Shipping in the Early Nineteenth Century.” *The International Journal of Maritime History* 29, no. 1 (2017): 1-18. doi:10.1177/0843871416678166.

O'Reilly, C. A. and M. L. Tushman. "Ambidexterity as a Dynamic Capability: Resolving the Innovator's Dilemma." *Research in Organizational Behavior* 28 (2008): 185-206. doi:10.1016/j.riob.2008.06.002.

Owen, G. *From Empire to Europe: The Decline and Revival of British Industry Since the Second World War*. London: HarperCollins Publishers, 1999.

Panza, L. "De-Industrialization and Re-Industrialization in the Middle East: Reflections on the Cotton Industry in Egypt and in the Izmir Region." *Economic History Review* 67, no. 1 (2014): 146-169. doi:10.1111/1468-0289.12019.

Pardi, T. "Industrial policy and the British automotive industry under Margaret Thatcher." *Business History* 59, no. 1 (2017): 75-100. doi: 10.1080/00076791.2016.1223049.

Patel, P. and K. Pavitt. "The Technological Competencies of the World's Largest Firms: Complex and Path-Dependent, but not much Variety." *Research Policy* 26, no. 2 (1997): 141-156. doi:10.1016/S0048-7333(97)00005-X.

Piper, L. "Parasites from 'Alien Shores': The Decline of Canada's Freshwater Fishing Industry." *Canadian Historical Review*, 91, no. 1 (2010): 87-114. doi:10.3138/chr.91.1.87.

Porac, J. F., H. Thomas, and C. Baden-Fuller. "Competitive Groups as Cognitive Communities: The Case of Scottish Knitwear Manufacturers." *Journal of Management Studies* 26, no. 4 (1989): 397-416. doi:10.1111/j.1467-6486.1989.tb00736.x.

Porac, J. F., H. Thomas, and C. Baden-Fuller. "Competitive Groups as Cognitive Communities: The Case of Scottish Knitwear Manufacturers Revisited." *Journal of Management Studies* 48, no. 3 (2011): 646-664. doi:10.1111/j.1467-6486.2010.00988.x.

Porter, M. *The Competitive Advantage of Nations*. New York: Free Press, 1990.

Poulsen, R. T. and H. Sornn-Friese. "Downfall Delayed: Danish Shipbuilding and Industrial Dislocation." *Business History* 53, no. 4 (2011): 557-582. doi:10.1080/00076791.2011.574692.

Ramos-Rodríguez, A. R. and J. Ruíz-Navarro. "Changes in the Intellectual Structure of Strategic Management Research: A Bibliometric Study of the Strategic Management Journal, 1980–2000." *Strategic Management Journal* 25, no. 10 (2004): 981-1004. doi:10.1002/smj.397.

Richardson, J. J. and G. F. Dudley. “Steel Policy in the U.K.: The Politics of Industrial Decline.” In *The Politics of Steel: Western Europe and the Steel Industry in the Crisis Years (1974-1984)*, edited by Y. Mény & V. Wright, 308-367. Berlin: Walter de Gruyter, 1986.

Romanelli, E. “The Evolution of New Organizational Forms.” *Annual Review of Sociology* 17 (1991): 79-103.

Rowthorn, B. and J. R. Wells. *De-Industrialization and Foreign Trade*. Cambridge, UK: Cambridge University Press, 1987.

Rubenstein, J. M. *The Changing U.S. Auto Industry: A Geographical Analysis*. London: Routledge, 2002.

Schreiber, R., D. Crooks, and P. N. Stern. “Qualitative Meta-Analysis”. In *Completing a Qualitative Project: Details and Dialogue*, edited by J. M. Morse, 311-326. Thousand Oaks, CA: Sage, 1997.

Shepsle, K. A. “Congress is a ‘They,’ Not an ‘It’: Legislative Intent as Oxymoron.” *International Review of Law and Economics* 12, no. 2 (1992): 239-256.

Simsek, Z., B. C Fox, and C. Heavey. “‘What’s Past is Prologue’: A Framework, Review, and Future Directions for Organizational Research on Imprinting.” *Journal of Management* 41, no. 1 (2015): 288-317. doi:10.1177/0149206314553276.

Sjögren, H. “Shipping as Gambling: Governance Mechanisms and the 1984 Bankruptcy of Saléninvest.” *Scandinavian Economic History Review* 47, no. 1 (1999): 24-47. doi:10.1080/03585522.1999.10419804.

Spender, J.-C. *Industry Recipes.* Oxford: Basil Blackwell, 1989.

Stokes, R. and R. Banken. “Constructing an ‘Industry’: The Case of Industrial Gases, 1886–2006.” *Business History* 57 no. 5 (2015): 688-704. doi:10.1080/00076791.2014.975123

Supple, B. *The History of the British Coal Industry, IV 1913-1946: The Political Economy of Decline*. Oxford: Clarendon, 1987.

Teece, D. J. “Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance.” *Strategic Management Journal* 28, no 13 (2007): 1319-1350. doi:10.1002/smj.640.

Temin, P. “The Relative Decline of the British Steel Industry, 1880-1913.” In *Industrialization in Two Systems: Essays in Honor of Alexander Gerschenkron*, edited by H. Rosovsky, 67-83. New York: Wiley, 1966.

Tenold, S. and H. W. Nordvik. “Coping with the International Shipping Crisis of the 1970s: A Study of Management Responses in Norwegian Oil Tanker Companies.” *International Journal of Maritime History* 8, no. 2 (1996): 33-69. doi:10.1177/084387149600800203.

Tenold, S., M. J. Iversen, and E. Lange (eds.). *Global Shipping in Small Nations: Nordic Experiences after 1960*. Basingstoke, UK: Palgrave Macmillan, 2012.

Tiffany, P. A. *The Decline of American Steel: How Management, Labor, and Government went Wrong*. Oxford: Oxford University Press, 1988.

Tomlinson, J., C. Morelli, and V. Wright. *The Decline of Jute: Managing Industrial Change.* London: Pickering & Chatto, 2011.

Whisler, T. R. *The British Motor Industry, 1945-1994: A Case Study in Industrial Decline*. Oxford: Oxford University Press, 1999.

Wiener, M. J. *English Culture and the Decline of the Industrial Spirit, 1850-1980.* Cambridge, UK: Cambridge University Press, 1981.

Womack, J. P. *The Decline of the American Auto Industry and the Search for Industrial Policy.* Cambridge, MA: Future of the Automobile Program, 1981.

Zott, C. and R. Amit. “The Fit between Product Market Strategy and Business Model: Implications for Firm Performance.” *Strategic Management Journal* 29, no. 1 (2008): 1-26. doi: 10.1002/smj.642.

Decline Literature used in the Analysis

Abe, E. & Gourvish, T.R. eds. *Japanese success? British failure? Comparisons in business performance since 1945*. Oxford: Oxford University Press, 1997.

Alford, B. W. E. “Flagging or failing? British economic performance, 1880– 1914”. In Dormois, Jean-Pierre and Dintenfass, Michael (eds.). *British Industrial Decline*. London: Routledge, 1999.

Alladin, MI. "Economic development in a plantation economy: the decline of the sugar industry in Mauritius." *Studies in Comparative International Development* (SCID) 21, no. 4 (1986):88-106.

Anand, J. & Singh, H. “Asset Redeployment, Acquisitions and Corporate Strategy in Declining Industries”. *Strategic Management Journal* 18, no. S1 (1997): 99-118.

Ankli, Robert E, and Eva Sommer. "The Role of Management in the Decline of the American Steel Industry." *Business and Economic History* 25, no. 1 (1996): 217-31.

Arora, A., Branstetter, L.G. & Drev, M. ”Going Soft: how the Rise of Software-Based Innovation Led to the Decline of Japan's it Industry and the Resurgence of Silicon Valley”. *Review of Economics and Statistics* 95, no. 3 (2013): 757-75.

Bakker, Gerben. "The decline and fall of the European film industry: sunk costs, market size, and market structure, 1890–19271." *The Economic History Review* 58, no. 2 (2005): 310-51.

Baptista, R. & Karaoez, M. “Turbulence in growing and declining industries”. *Small Business Economics* 36, no. 3 (2011): 249-70.

Bhattacharjee, A., Higson, C., Holly, S. & Kattuman, P. “Macroeconomic Instability and Business Exit: Determinants of Failures and Acquisitions of UK Firms”. *Economica* 76, no. 301 (2009): 108-131.

Blecker, R.A. “Markup Pricing, Import Competition, and the Decline of the American Steel Industry”. *Journal of Post Keynesian Economics* 12, no.1 (1989): 70-87.

Booth, A. “The manufacturing failure hypothesis and the performance of British industry during the long boom”. *Economic History Review* 56, no. 1 (2003): 1-33.

Boothman, B.E.C. “High Finance/Low Strategy: Corporate Collapse in the Canadian Pulp and Paper Industry, 1919-1932”. *Business History Review 74*, no. 4 (2000):_611-56.

Brown, K.D. “The Collapse of the British Toy Industry, 1979-1984”. *The Economic History Review* 46, no. 3 (1993): 592-606.

Burton, A. *The Rise and Fall of British Shipbuilding*. London: Constable and Company Limited, 2013.

Carney, T.P. *False profits: the decline of industrial creativity*. University of Notre Dame Press: Notre Dame, Ind., 1981.

Cassing, J.H. & Hillman, A.L. “Shifting Comparative Advantage and Senescent Industry Collapse”. *The American Economic Review* 76, no. 3 (1986): 516-23.

Church, Roy. *The Rise and Decline of the British Motor Industry*. Cambridge: Cambridge University Press, 1996.

Cizakca, Murat. "Price History and the Bursa Silk Industry: A Study in Ottoman Industrial Decline, 1550–1650." *The Journal of Economic History* 40, no. 3 (1980): 533-50.

Clutterbuck, D. & Crainer S. *The decline and rise of British industry*. London: W.H. Allen, 1988.

Coker, R. E. *The fisheries and the guano industry of Peru*. US Government Printing Office, 1910.

Collins, B. & Robbins, K., eds. *British culture and economic decline*. New York: St. Martin's Press, 1990.

Crafts, N. “Forging ahead and falling behind: The rise and relative decline of the first industrial nation”. *Journal of Economic Perspectives* 12, no. 2 (1998): 193-210.

Crafts, N. “British relative economic decline revisited: The role of competition”. *Explorations in Economic History* 49, no. 1 (2012): 17-29.

Cushman, Gregory T. *Guano and the opening of the Pacific world: a global ecological history*. Cambridge: Cambridge University Press, 2013.

Cybinski, P.J. *Doomed firms: an econometric analysis of the path to failure*. Aldershot: Ashgate, 2003.

DiFilippo, A. *Military spending and industrial decline: a study of the American machine tool industry*. Westport, Conn.: Greenwood Press, 1986.

Dintenfass, M. *Managing industrial decline: the British coal industry between the wars*. Columbus: Ohio State University Press, 1992.

Dintenfass, Michael. “Converging accounts, misleading metaphors and persistent doubts: reflections on the historiography of Britain’s ‘decline’.” In *British Industrial Decline*, edited by Jean-Pierre Dormois and Michael Dintenfass. London: Routledge, 1999.

Dintenfass, Michael. “The voice of industry and the ethos of decline: business citizenship, public service and the making of a British industrial élite”. In *British Industrial Decline*, edited by Jean-Pierre Dormois and Michael Dintenfass. London: Routledge, 1999.

Dormois, Jean-Pierre. “France’s experience of industrial retardation during the Belle Epoque”. In *British Industrial Decline*, edited by Jean-Pierre Dormois and Michael Dintenfass. London: Routledge. 1999.

Dunnett, P.J.S. *The decline of the British motor industry: the effects of government policy, 1945-1979*. London: Croom Helm, 1980.

Edgerton, D. *Science, technology, and the British industrial "decline", 1870-1970*. Cambridge: Cambridge University Press, 1996.

Edwards, Franklin R, and Frederic S Mishkin. "The Decline of Traditional Banking: Implications for Financial Stabilityand Regulatory Policy." *FRBNY Economic Policy Review*, July 1995.

Edwards, J.K. "The decline of the Norwich textiles industry." *Bulletin of Economic Research* 16, no. 1 (1964): 31-41.

Eisenhammer, J. & Rhodes, M. “The Politics of Public Sector Steel in Italy: From the “Economic Miracle” to the Crisis of the Eightees”. In *The Politics of steel: Western Europe and the steel industry in the crisis years (1974-1984)* by Y. Mény & V. Wright, 416-475. New York: W. de Gruyter, 1986.

Elbaum, Bernard, and Lazonick, W. eds. *The Decline of the British Economy*. Oxford: Oxford University Press, 1986a.

Elbaum, Bernard & Lazonick, William. ”A institutional Perspective on British Decline”. In *The Decline of the British Economy*, edited by B. Elbaum and W. Lazonick, 1-17. Oxford: Oxford University Press, 1986b.

Elbaum, Bernard. “The Steel Industry before World War I”. In *The Decline of the British Economy*, edited by Bernard Elbaum and W. Lazonick, 51-81. Oxford: Oxford University Press, 1986.

Ellis, Joyce. "The Decline and Fall of the Tyneside Salt Industry, 1660–1790: A Re-examination." *The Economic History Review* 33, no. 1 (1980): 45-58.

Esser, J. & Väth, W. “Overcoming the Steel Crisis in the Federal Republic of Germany 1975-1983”. In *The Politics of steel: Western Europe and the steel industry in the crisis years (1974-1984)*, by Y. Mény & V. Wright, 623-691. New York: W. de Gruyter, 1986.

Fox Przeworki, J. *The decline of the copper industry in Chile and the entrance of North American capital, 1870-1914*. New York: Arno Press, 1980.

Frankland, Edward. "The rise and decline of the British dyestuffs industry: An Object Lesson for American Industry", 7-14. Bull. Hist. Chem 9, 1991.

Freedman, Craig, and Alexander Blair. "Seeds of destruction: the decline and fall of the US car industry." *The Economic and Labour Relations Review* 21, no. 1 (2010): 105-26.

Garside W. R. “Regional vs national perspectives on economic ‘decline’ in late Victorian and Edwardian Britain”. In *British Industrial Decline*, edited by Jean-Pierre Dormois and Michael Dintenfass. London: Routledge, 1999.

Garside, WR. "A very British phenomenon? Industrial politics and the decline of the Japanese coal mining industry since the 1950s." *Australian Economic History Review* 45, no. 2 (2005): 186-203.

Haber, Stephen, Noel Maurer, and Armando Razo. "When the law does not matter: The rise and decline of the Mexican oil industry." *The Journal of Economic History* 63, no. 1 (2003): 1-32.

Hammersley, George. "Technique or economy? The rise and decline of the early English copper industry, ca. 1550–1660." *Business History* 15, no. 1 (1973): 1-31.

Hautala, K. *Suomen tervakauppa 1856-1913* [Finnish Tar Trade 1856-1913]. Helsinki: SHS, 1956.

Hayward, J. "The Nemesis of Industrial Patriotism: The French Response to the Steel Crisis". In *The Politics of steel : Western Europe and the steel industry in the crisis years (1974-1984)*, by Y. Mény & V. Wright, 502-533. New York: W. de Gruyter, 1986.

Healey, M.J. "Plant Closures in Multi-Plant Enterprises - the Case of a Declining Industrial Sector". *Regional Studies* 16, no. 1 (1986): 37-51.

Hendry, J. *Innovating for failure: Government policy and the early British Computer industry*. Cambridge Mass: MIT Press, 1989.

Higgins, David, and Steve Toms. "Financial distress, corporate borrowing, and industrial decline: the Lancashire cotton spinning industry, 1918–38." *Accounting, Business & Financial History* 13, no. 2 (2003): 207-32.

Hoerr, J.P. *And the wolf finally came: the decline of the American steel industry*. Pittsburgh, PA: University of Pittsburgh Press, 1988.

Howe, W.S. *The Dundee textiles industry 1960-1977. Decline and diversification.* Aberdeen: Aberdeen University Press, 1982.

Jarvinen, J., Lamberg, J. & Pietinalho, L. "The fall and the fragmentation of national clusters: Cluster evolution in the paper and pulp industry". *Journal of Forest Economics* 18, no. 3 (2012): 218-41.

Kaltenberg, Michael C. and Joseph Buongiorno. "Growth and decline of the paper industry: an econometric analysis of US regions." *Applied Economics* 18, no. 4 (1986): 379-97.

Kelly, T. *The British Computer Industry: Crisis and Development*. New York: Croom Helm, 1987.

Khanna, D.M. *The rise, decline, and renewal of Silicon Valley's high technology industry*. New York/London: Garland, 1997.

Kitson, M. & Michie, J. "Britain's Industrial Performance since 1960: Underinvestment and Relative Decline". *The Economic Journal* 106, no. 434 (1996): 196-212.

Koistinen, David. "Dealing with deindustrialization: Economics, politics, and policy during the decline of the New England textile industry, 1920–1960." *The Journal of Economic History* 60, no. 2 (2000): 501-04.

Kothari, V.B. *Executive greed: examining business failures that contributed to the economic crisis.* New York: Palgrave Macmillan, 2010.

Lazonick, W. "Competition, specialization and industrial decline". *Journal of economic history* 41, no. 1 (1981): 31-38.

Lazonick, W. "Industrial-Organization and Technological-Change - the Decline of the British Cotton Industry". *Business History Review* 57, no. 2 (1983): 195-236.

Lazonick, William. "The Cotton Industry". In *The Decline of the British Economy*, edited by Bernard Elbaum and W. Lazonick, 18-50. Oxford: Oxford University Press, 1986.

Lewchuk, Wayne. "The Motor Vehicle Industry". In *The Decline of the British Economy*, edited by Bernard Elbaum and W. Lazonick, 135-161. Oxford: Oxford University Press, 1986.

Li, J.J. *Blockbuster drugs : the rise and decline of the pharmaceutical industry*. Oxford: Oxford University Press, 2014.

Lie, E. "Market Power and Market Failure The Decline of the European Fertilizer Industry and the Expansion of Norsk Hydro". *Enterprise & society* 9, no. 1 (2008): 70-95.

Linz, Gerd, Müller, Bernhard & Finka, Maroš. "Introduction: The Challenge of Structural Change for Industrial Cities and Regions in the CEE Countries". In *Rise and decline of industry in Central and Eastern Europe: a comparative study of cities and regions in eleven countries*, edited by B. Müller, M. Finka & G. Lintz, 1-24. Berlin: Springer, 2005.

Lloyd-Jones, R. & Lewis, M.J. "Personal capitalism and British industrial decline: The personally managed firm and business". *Business History Review* 68, no. 3 (1994): 364-411.

Lorenz, E. H. "An evolutionary explanation for competitive decline: the British shipbuilding industry, 1890–1970." *The Journal of Economic History* 51, no. 4 (1991): 911-35.

Lorenz, E.H. *Economic decline in Britain. The shipbuilding industry, 1890-1970*. Oxford: Clarendon, 1991.

Lorenz, Edward & Wilkinson, Frank. "The Shipbuilding Industry, 1880-1965". In *The Decline of the British Economy*, edited by Bernard Elbaum and W. Lazonick, 109-134. Oxford: Oxford University Press, 1986.

Loveday, A.J. *The rise and decline of the American cut nail industry : a study of the interrelationships of technology, business organization, and management techniques*. London: Greenwood, 1983.

Magee, G. B. "Competence or omniscience? Assessing entrepreneurship in the victorian and edwardian british paper industry". *Business History Review* 71, no. 2 (1997), 230-259.

Malerba, F. *The semiconductor business. The economics of rapid growth and decline*. London: Pinter, 1985.

Mannering, F., Winston, C., Griliches, Z. & Schmalensee, R. "Brand Loyalty and the Decline of American Automobile Firms". *Brookings Papers on Economic Activity. Microeconomics* 1991 (1991), 67-114.

McCloskey, D.N. *Economic maturity and entrepreneurial decline. British iron and steel, 1870-1913*. Cambridge, Mass.: Harvard University Press, 1973.

Mény, Y. and V. Wright. *The politics of steel: Western Europe and the steel industry in the crisis years (1974-1984*) Vol. 7. Berlin: Walter de Gruyter, 1986.

Meredith, David. "Government and the decline of the Nigerian oil-palm export industry, 1919–1939." *The Journal of African History* 25, no. 3 (1984): 311-29.

Messerlin, P. A. "The European Iron and Steel Industry and the World Crisis". In *The Politics of steel : Western Europe and the steel industry in the crisis years (1974-1984)*, by Y. Mény & V. Wright, 111-136. New York: W. de Gruyter, 1986.

Moen, Eli. *The Decline of the pulp and paper industry in Norway, 1950-1980. A study of a closed system in an open economy*. Oslo: Scandinavian University Press, 1998.

Ojala, Jari, Voutilainen, Miikka, and Lamberg, Juha-Antti. "The evolution of the global paper industry: concluding remarks." In *The Evolution of Global Paper Industry 1800 - 2050. A Comparative Analysis*, by J.-A. Lamberg, J. Ojala, M. Peltoniemi and T. Särkkä, 345-356. Dordrecht: Springer, 2012.

Owen, G. *From Empire to Europe: The Decline and Revival of British Industry Since the Second World War*. London: HarperCollins Publishers, 1999.

Owen, Geoffrey. "From Mass-Market Manufacturer to Niche Player: Product and Marketing Strategy at British Leyland/Rover from 1968-1995". In *Japanese success? British failure?: comparisons in business performance since 1945*, edited by E.Abe & T.R. Gourvish, 214-236. Oxford: Oxford University Press, 1997.

Panza, L. "De-industrialization and re-industrialization in the Middle East: reflections on the cotton industry in Egypt and in the Izmir region". *Economic History Review* 67, no. 1 (2014): 146-69.

Payne, Peter. "Entrepreneurship and British Economic Decline". In *British culture and economic decline*, edited by B. Collins & K. Robbins, 25-58. St. Martin's Press: New York, 1990.

Piper, L. "Parasites from 'Alien Shores': The Decline of Canada's Freshwater Fishing Industry". *Canadian Historical Review* 91, no. 1 (2010): 87-114.

Richardson, J. J. & Dudley G. F. "Steel Policy in the U.K.: The Politics of Industrial Decline". In *The Politics of steel : Western Europe and the steel industry in the crisis years (1974-1984)*, by Y. Mény & V. Wright, 308-367. New York: W. de Gruyter, 1986.

Robertson, A.J. "The Decline of the Scottish Cotton Industry 1860–1914." *Business History* 12, no. 2 (1970): 116-28.

Rubinstein, W. D. Cultural explanations for Britain's Economic Decline. In *British culture and economic decline*, edited by B. Collins & K. Robbins, 59-90. New York: St. Martin's Press, 1990.

Servier, J. *Le médicament francais: une industrie de pointe en voie de liquidation*. Paris: L'institut Economique de Paris, 1986.

Smitka, Michael J. *The decline of the Japanese automotive industry: causes and implications*. Cambridge MasCenter for International Studies, MIT Japan Program, Massachusetts Institute of Technology, 1996.

Supple, B. *The History of the British coal industry, IV 1913-1946: The political economy of decline*. Oxford: Clarendon, 1987.

Temin, Peter. *The relative decline of the British steel industry, 1880-1913*. na. 1966.

Tiffany, P.A. *The decline of American steel. How management, labor, and government went wrong*. Oxford: Oxford University Press, 1988.

Tiratsoo, Nick. "British Management 1945-1964: Reformers and the Struggle to Improve Standards". In *Japanese success? British failure?: comparisons in business performance since 1945*, edited by E. Abe & T.R Gourvish, 77-98. Oxford: Oxford University Press, 1997.

Tomlinson, J., Morelli, C. & Wright, V. *The decline of jute: managing industrial change*. London: Pickering & Chatto, 2011.

Ullmann, J.E. *The anatomy of industrial decline: productivity, investment, and location in U.S. manufacturing*. New York: Quorum Books, 1988.

Valk, P. *African industry in decline : the case of textiles in Tanzania in the 1980s*. Basingstoke: Macmillan in association with the Institute of Social Studies, 1996.

Whisler, T.R. *The British motor industry, 1945-1994. A case study in industrial decline*. Oxford: Oxford University Press, 1999.

Wiener, M.J. *English culture and the decline of the industrial spirit, 1850-1980*. Cambridge: Cambridge University Press. 1981.

Witteloostuijn, A.V. "Bridging Behavioral and Economic Theories of Decline: Organizational Inertia, Strategic Competition, and Chronic Failure". *Management Science* 44, no. 4 (1998): 501-19.

Womack, James P. *The decline of the American auto industry and the search for industrial policy*. Cambridge, Mass.: Future of the Automobile Program, 1981.

Notes

1. See, for example: Edgerton, *Science*; Supple, *British Coal Industry*; Rubenstein, *Changing U.S. Auto Industry*; Hoerr, *Wolf Finally Came*; Porac, Thomas, and Baden-Fuller, "Competitive Groups."
2. Edgerton, "Decline of Declinism"; McCloskey, *Economic Maturity*.
3. Stokes and Banken, "Constructing an 'Industry.'"
4. For example: Elbaum and Lazonick, *Decline of British Economy*; Mass and Lazonick, "British Cotton Industry."
5. For example: Mény and Wright, *Politics of Steel*.
6. Cf. Simsek, Fox, and Heavey, "What's Past is Prologue," that starts from Stinchcombe's research on imprinting conditions.
7. Ramos-Rodríguez and Ruíz-Navarro, "Changes."
8. Schreiber, Crooks, and Stern, "Qualitative Meta-Analysis."
9. Butler, "Towards Hermeneutic Method."
10. C.f. Simsek, Fox, and Heavey, "What's Past is Prologue."
11. The decline literature used in this article is included as a separate list after the literature list.
12. Rowthorn and Wells, *De-industrialization*.
13. Koistinen, "Dealing with Deindustrialization"; Koistinen, *Confronting Decline*; Crafts, "Forging Ahead"; Crafts, "British Relative Economic Decline."
14. Bozeman, "Technology Transfer"; Ramos-Rodríguez and Ruíz-Navarro, "Changes."
15. Wiener, *English Culture*.
16. Crafts, "Forging Ahead."
17. Booth, "Manufacturing Failure"; Edgerton, "Decline of Declinism"; McCloskey, *Economic Maturity*.

18. Edgerton, “Decline of Declinism.”
19. Crafts, “Forging Ahead.”
20. For example, Koerner, *Strange Death*.
21. For example: Mény and Wright, “Politics of Steel; Temin, Relative Decline; Tiffany, Decline of American Steel”.
22. Tiffany, *Decline of American Steel*, 158
23. Piper, ”Parasites.”
24. DiFilippo, “Military Spending”.
25. Arora, Branstetter, and Drev, “Going Soft.”
26. DiFilippo, *Military Spending*.
27. Lie, “Market Power”; Mannering et al., “Brand Loyalty.” See also Catalan Vidal, “Stagflation crisis” and Donelly, Begley, and Collis, “West Midlands automotive industry”.
28. Järvinen et al., “Fall and Fragmentation.”
29. For example: Collins and Robbins, *British Culture.*
30. Mantere et al., “Narrative Attributions.”
31. McCloskey, *Economic Maturity*, 32.
32. Harrigan, *Strategies for Declining Businesses*.
33. Cizakca, “Price History.”
34. Loveday, *Rise and Decline*, 150.
35. For example: Cassing and Hillman, “Shifting Comparative Advantage”; Dintenfass, *Managing Industrial Decline*.
36. DiFilippo, *Military Spending*; Dunnett, *Decline of British*. See also Pardi, “Industrial policy” and Fetzer, “Reversing gear”.
37. For example: Shepsle, “Congress”; Keim, “Business and Public Policy.”

38. Eisenhammer and Rhodes, “Politics of Public Sector”; Tiffany, *Decline of American Steel.* See also: Fetzer, “Reversing gear”.
39. Bakker, “Decline and Fall”; Moen, *Decline*.
40. Argyres and Liebeskind, “Contractual Commitments”; Barley, “Building.”
41. Tiffany, *Decline of American Steel*.
42. North, *Institutions*; Acemoglu, Johnson, and Robinson, “Institutions”; Acemoglu, Johnson, and Robinson, “Reversal of Fortune.”
43. Dunleavy, *Democracy*; Shepsle, “Congress.”
44. Mizruchi, *Structure*.
45. Acemoglu, Johnson, and Robinson, “Institutions.”
46. Gray and Lowery, “Interest Group Politics”; Hadani and Schuler, “In Search of El Dorado.”
47. DiFilippo, *Military Spending*.
48. Richardson and Dudley, “Steel Policy”; Womack, *Decline of American.*
49. McCloskey, *Economic Maturity*.
50. DiFilippo, *Military Spending*.
51. Tiffany, *Decline of American Steel*.
52. Koistinen, “Dealing with Deindustrialization.”
53. Tiffany, *Decline of American Steel*, 168
54. Elbaum and Lazonick, “Institutional Perspective,” 2.
55. Wiener, English Culture.
56. Lorenz, “Evolutionary Explanation,” 931.
57. See Edgerton, “Decline of Declinism.”
58. Brown, “Collapse,” 596.
59. Mannering et al., “Brand loyalty.”

60. Dormois, “France’s Experience.”
61. Cassing and Hillman, “Shifting Comparative Advantage.”
62. Anand and Singh, “Asset Redeployment.”
63. DiFilippo, *Military Spending*.
64. Koistinen, “Dealing with Deindustrialization.”
65. Lorenz, *Economic Decline in Britain*.
66. Tenold and Nordvik, “Coping.”
67. Sjögren, “Shipping as Gambling.”
68. Poulsen and Sornn-Friese, “Downfall Delayed.”
69. Ojala and Räihä, “Navigation Acts”; Layton, *Evolution*.
70. For example: Abe and Gourvish, *Japanese Success?*
71. Bakker, “Decline and Fall,” 310; Malerba, *Semiconductor Business*.
72. Chandler, *Scale and Scope*; Clutterbuck and Crainer, *Decline and Rise*; Crafts, “Forging Ahead”; Crafts, “British Relative Economic Decline”; Elbaum and Lazonick, *Decline of British Economy*; Owen, *From Empire to Europe*. Literature review in Dintenfass, “Converging Accounts” and in Edgerton, *Science*.
73. Edgerton, “Decline of Declinism.”
74. Howe, *Dundee Textiles*; Lazonick, “Competition,” Lazonick, “Industrial Organization.”
75. Elbaum, “Steel Industry”; McCloskey, *Economic Maturity*; Owen, *From Empire to Europe*.
76. Burton, *Rise and Fall*; Lorenz, “Evolutionary Explanation”; Lorenz and Wilkinson, “Shipbuilding Industry.”
77. Church, *Rise and Decline*; Dunnett, *Decline of British*; Whisler, *British Motor Industry*.
78. Brown, “Collapse.”
79. Tomlinson, Morelli, and Wright, *Decline of Jute*.

80. Hendry, *Innovating for Failure*; Kelly, *British Computer Industry*.
81. Dintenfass, *Managing Industrial Decline*; Supple, *British Coal Industry*.
82. e.g. Asian toy production in the 1970s and 1980s, Brown, "Collapse."
83. e.g., The American vs. British cotton industry, Lazonick, "Industrial Organization."
84. McCloskey, *Economic Maturity*, See also: Edgerton, *Science;* Edgerton, "Decline of Declinism."
85. Dosi, Pavitt, and Soete, *Economics of Technical Change*; Porter, *Competitive Advantage of Nations*.
86. Tomlinson, Morelli, and Wright, *Decline of Jute.*
87. Ullman, *Anatomy of Industrial Decline*.
88. Loveday, *Rise and Decline*.
89. Kaukiainen, *Ulos Maailmaan*, 11–12.
90. Tomlinson, Morelli, and Wright, *Decline of Jute.*
91. Panza, "De-industrialization."
92. Bakker, "Decline and Fall," 318.
93. Blecker, "Markup Pricing."
94. Murmann, *Knowledge*.
95. Coker, *Fisheries*; Cushman, *Guano.*
96. Loveday, *Rise and Decline*.
97. Hautala, *Suomen Tervakauppa*.
98. Bakker, "Decline and Fall."
99. Brown, "Collapse."
100. Klepper, "Industry Life Cycles."
101. Bakker, "Decline and Fall."
102. Ojala, Voutilainen, and Lamberg, "Evolution."

103. Lie, “Market Power.”
104. Bakker, “Decline and Fall.”
105. Cizakca, “Price History.”
106. Tenold, Iversen, and Lange, *Global Shipping*; Harlaftis et al., *World’s Key Industry*.
107. Lazonick, “Competition.”
108. Panza, “De-industrialization.”
109. Mannering et al., “Brand Loyalty.” See also: Helper, “Strategy and Irreversibility.”
110. Malerba, *Semiconductor Business.*
111. Burton, *Rise and Fall*.
112. Lorenz, *Economic Decline in Britain*.
113. Audretsch, “New-Firm Survival.”
114. March, “Exploration and Exploitation”; O’Reilly and Tushman, “Ambidexterity.”
115. For example, Teece, “Explicating Dynamic Capabilities”; Patel and Pavitt, “Technological Competencies.”
116. See also Napolitano et al., “In Search.”
117. Teece, “Explicating Dynamic Capabilities,” 1322.
118. For example: Ankli and Sommer, “Role of Management.”
119. Argyres and Liebeskind, “Contractual Commitments.”
120. For example, Alfrod, “Flagging or Failing?”; Chandler, *Visible Hand;* Chandler, *Scale and Scope*.
121. McCloskey, *Economic Maturity;* Edgerton, “Decline of Declinism.”
122. Lazonick, “Competition,” 37.
123. Lloyd-Jones and Lewis, “Personal Capitalism.”
124. Channon, *Strategy and Structure*.
125. Järvinen et al., “Fall and the Fragmentation.”

126. Boothman, “High Finance/Low Strategy.”
127. Carney, *False Profits*; Loveday, *Rise and Decline*.
128. Lazonick, “Industrial Organization”; Lazonick, “Competition.”
129. For example: Alford, “Flagging or Failing?”; Burton, *Rise and Fall*; Collins and Robbins, *British Culture*; Wiener, *English Culture*.
130. Arora, Branstetter, and Drev, “Going Soft.”
131. Ankli and Sommer, “Role of Management,” 230.
132. Lorenz, “Evolutionary Explanation.”
133. Porac et al., “Competitive Groups.”
134. Magee, “Competence or Omniscience?”
135. Laamanen et al., “Explanations of Success.”
136. Teece, “Explicating Dynamic Capabilities.”
137. See Cattani, Porac and Thomas “Categories and Competition” and Stokes and Banken, ”Constructing an ‘Industry.’”
138. Cf. Romanelli, “Evolution.”
139. Zott and Amit, “Fit Between.”
140. Aspara et al., “Strategic Management.”
141. Chesbrough and Rosenbloom, “Role of the Business Model.”
142. Spender, *Industry Recipes*.
143. Porac et al., “Competitive Groups.”
144. Fiss, “Set-Theoretic Approach.”
145. Porac et al., “Competitive Groups Revisited.”
146. Klepper, *Industry Life Cycles*; Harrigan, *Strategies for Declining Businesses*; McGahan, “How Industries Change”; Menzel and Fornahl, *Cluster Life Cycles*.

147. For example: Porter, *Competitive Advantage*.

148. For example: Jacobides, “Architecture and Design”; Teece, “Explicating Dynamic Capabilities.”

149. For example: Acemoglu, Johnson, and Robinson, “Institutions.”

150. Jacobides, “Architecture and Design.”

151. Argyres and Liebeskind, “Contractual Commitments.”

152. Gerschenkron, *Economic backwardness*.

153. Murmann, *Knowledge*, and Kogut and Zander, “Did Socialism.”

154. Murmann, *Knowledge*”, and Braguinsky and Hounshell, “History”.

155. Stokes and Banken, “Constructing an ‘Industry.’”

TABLES

Table 1

Description of the Analytical Process

Step	Action description	Arena	Search and limit parameters	Outcome
Step 1: Keyword search	Initial search of research that potentially focuses on industry decline. Bibliographical information stored in RefWorks. Iterative reading of titles and keywords for the broadening of the keyword list.	We used a host of electronic databases and search engines, including JSTOR, Libris, the Library of Congress, the British Library, the LSE Library, Google Scholar, Web of Science, and Scopus.	declin , failure , collaps , OR deindustriali , niedergang , fall AND industr , OR organizat , AND economics, sociology, management OR history .	327 publications: 194 books and 133 articles.
Step 2: Initial screening	Reading abstracts and publication titles.	RefWorks.	Omission of publications that did not focus directly on decline.	244 publications: 118 books and 126 articles.
Step 3: Screening publications	More intensive reading of abstracts and entire publications by two members of the research group. Consensus decision about the publications that were omitted at this stage and those that were core articles and books to retain in the corpus.	RefWorks and Web of Science for the analysis of citation patterns.	We omitted publications that focused on firms and organizations and those that did not focus on decline. Industry and industrial cluster stabilized as the main unit of analysis. Additionally, some publications were omitted because of their questionable scientific value (i.e., problematic content and/or publication outlet).	46 publications: 32 books and 12 articles.
Step 4: Collecting full texts	Collection of books and articles. Digitalization if necessary (by taking digital photos).	Electronic databases (especially Ebrary, JSTOR, EBSCO, and ProQuest) and London-area libraries (especially LSE and the British Library).	Omission of a few more articles and books that were either not found or not relevant.	41 publications: 30 books and 11 articles.
Step 5: Focused search	Re-search of publications based on the reading of the full texts already found and their lists of references.	See Step 1.	We used the original keywords and conducted searches on certain industries and authors.	103 publications: 46 books, 25 journal articles, and 31 chapters from edited volumes.
Step 6: Interpretive reading and categorization	We read and analyzed the corpus by using the full-text articles and books in addition to an Excel spreadsheet in which the publications were listed and attributed with keywords.	The entire corpus stored in a Dropbox folder.	Generation of keywords that identified the found literature: research period, geographical focus, industry, discipline, name(s) of the used theories, method (if articulated), *etc.*	See Step 5.

Table 2

How Decline Categories Affect Renewal Strategies

	Creating entry barriers	**Rejuvenating the mature industry through innovation**	**Reframing the industry and its boundaries**
Politics	In the short run, the allowance of market buffers (cartels; monopolies) may slow decline processes. In the long run, an increasingly weak market position will eventually result in collapse.	Political interventions are not a necessary or sufficient condition for the emergence of new innovations. However, the lack of political support may decrease industrial research and thus accelerate decline processes.	Political interventions are not a necessary or sufficient condition for reframing industry. However, political interventions may have a legitimizing effect[153] on reframed identity, thus accelerating decline processes.
Market dynamics	Market competition may importantly motivate the creation of entry barriers.	After the beginning of perceived industry decline, market competition may motivate firms to make new product innovations.	After the beginning of perceived industry decline, market competition may motivate firms and associations to engage in rhetorical reframing and business model innovations.
Technology	A lack of industrial research and a cumulative knowledge gap may motivate firms to seek political protection in the form of entry barriers.	Large-scale industrial research enables the emergence of new innovations. Likewise, a lack of or insufficient industrial research is a sufficient condition for industry decline.	Technological capabilities enable business model innovations and industry reframing. Likewise, insufficient technological capabilities prevent or problematize business model innovations and industry reframing.
Capabilities	Meta-level capabilities by industry leaders and political decision-makers enable changes in the industry architecture. Likewise, a lack of such capabilities contributes to industry decline.	A large set of pre-existing capabilities enables the emergence of new innovations. Likewise, a lack of organizational capabilities contributes to industry decline.	A large set of organizational capabilities enables industry reframing and the creation of new business models. Likewise, a lack of organizational capabilities contributes to industry decline.

Figures

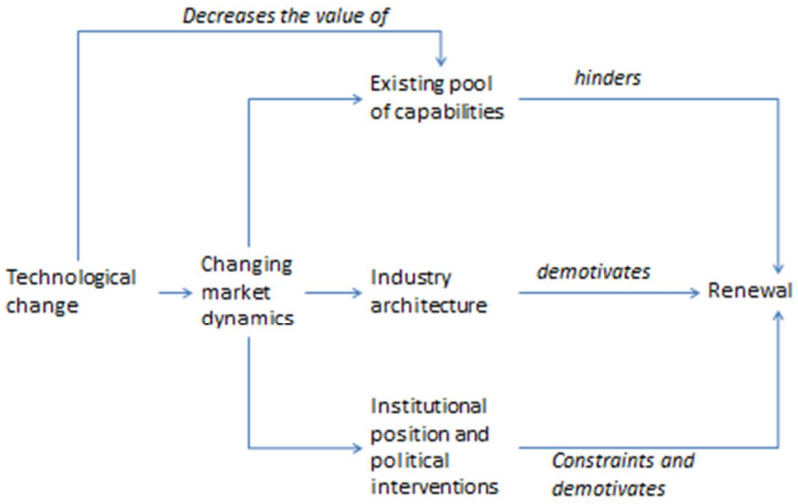

FIGURE 1

The Process of Industry Decline