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Published in:
Business History

DOI:
[10.1080/00076791.2014.977869](https://doi.org/10.1080/00076791.2014.977869)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2015

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

de Jong, A., Higgins, D. M., & van Driel, H. (2015). Towards a new business history? *Business History*, 57(1), 5-29. <https://doi.org/10.1080/00076791.2014.977869>

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Towards a new business history?

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This article calls for a discussion about business history research. We advocate that the current typical approach in business history – dominantly case study analysis – maintains its prominent position, but the purpose and relevance of this type of research in the scientific method for business history is made more explicit. Moreover, the article proposes the application of additional approaches in business history, which specifically aim to develop theory and test hypotheses. These approaches are well established in the social sciences, but require adaptation to the particular needs of business history. The purpose of this article is to argue that opportunities for scientific explanations in business history are enhanced by engagement with the circle of knowledge creation where theory is confronted with empirical evidence and empirical observations feed back into theory formation.

Keywords: history; business

1. Introduction

Business history encompasses business systems, entrepreneurs, industries, firms in their historical context, and the complexities of their interactions with the political, economic and social environment.¹ In the *Oxford Handbook of Business History* an extensive overview of the business history literature has been presented, ranging from big business to family firms, from technology and innovation to corporate governance, and from entrepreneurship to the role of the state.

As a discipline, business history is differentiated from business studies and cognate disciplines by its engagement with history. Because business history is necessarily broad in scope and covers a large historical dimension – ranging from the birth of branding in ancient civilisations to organisational structure and performance in the 1990s² – an all-encompassing definition may be absent. Nonetheless, we can approach and delimit a definition of business history by referring to the aims of the three leading English-language journals.³ *Business History* is ‘... an international journal concerned with the long-run evolution and contemporary operation of business systems and enterprises. Its primary purpose is to make available the findings of advanced research, empirical and conceptual, into matters of global significance, such as corporate organisation and growth, multinational enterprise, business efficiency, entrepreneurship, technological change,

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finance, marketing, human resource management, professionalisation and business culture'. Likewise, *Business History Review* '... seeks to publish articles with rigorous primary research that address major topics of debate, offer comparative perspectives, and contribute to the broadening of the subject. The journal is primarily concerned with the history of entrepreneurs, firms, and business systems, and with the subjects of innovation, globalisation, and regulation. It also covers articles on the relation of businesses to the environment and to political regimes.' Finally, *Enterprise & Society* '... offers a forum for research on the historical relations between businesses and their larger political, cultural, institutional, social, and economic contexts'.

The current status of business history research has recently been evaluated by the editors of these leading journals. Thus, for example, although Wilson and Toms consider business history a discipline in its own right, with its distinguishing characteristic being the focus on primary source materials, they recognise the appeal of the discipline to other social sciences.⁴ Indeed, they explicitly refer to the eclectic use of methodology and literatures which reach out to other disciplines. Friedman and Jones take a slightly more critical stance and argue: 'business historians should strive to make use of these rich empirical data in order to build broad generalisations'.⁵ They consider business history to be '... a multidisciplinary field of its own'.⁶ We are completely in agreement with these sentiments. The discipline has made significant progress, but we advocate that for business history to continue to develop there needs to be much greater engagement with the use of methodologically rigorous empirics and the application of a wider range of theoretical concepts.

We are not the first to engage in the debate about how business history should evolve; nor are we the only ones to devote explicit attention to methodology in business history.⁷ However, unlike recent contributions which focus mainly on *areas* of research,⁸ our approach is concerned with *methodological* issues, particularly the role and opportunities for empirical analyses in business history.

In the remainder of this article we first assess the explicit use of theory and methodology, in business history, both in the past and currently (Sections 2 and 3), before discussing the role of feedback loops between empirical and theoretical research (Section 4). In Section 5 we present a set of empirical approaches for a 'new' business history, and present conclusions in Section 6.

2. The traditional approach in business history and its critics

Traditionally, the majority of contributions to business history were descriptive case studies of individual entrepreneurs, firms, and industries. This is not surprising given the formation of the discipline. The beginning of business history is usually dated to 1927, when Harvard Business School founded a professorship in business history.⁹ N.S.B. Gras (1884–1956) was the first to hold this chair. Because of the prevalence of the case-study method at Harvard, and the willingness of companies to commission their own histories, the discipline of business history originated in company histories. In a UK context, the study of individual firms was strongly advocated in Ashton's famous dictum 'Just as microscopic work on cells may throw new light on the human body, so detailed study of the growth of particular business units may add to knowledge of the industrial system.'¹⁰ Between the 1950s and 1970s, a plethora of firm-specific case studies emerged, for example on Courtaulds, Colvilles and Unilever.¹¹

These firm-level histories were complemented by a range of industry studies which evolved to address specific themes. Perhaps most famous is the debate on British entrepreneurial failure from the late nineteenth century which encompassed, for example,

detailed analyses of the cotton, wool, and iron and steel industries.¹² Nonetheless, even these studies were criticised: ‘the British approach of piling case upon case, despite the increasing sophistication of the analyses, was unsatisfactory to those ... who were convinced that the measures of performance ... were inadequate on theoretical grounds’.¹³

However, while each of these studies was a significant contribution to firm and industry-specific business history, the problem remained of how to use these studies to formulate generalisations applicable to the corporate economy. It was Alfred Chandler Jr. who pioneered the use of firm and industry-specific histories to develop theoretical frameworks which had relevance to the corporate economy and consequently he became the most influential business historian of the twentieth century.¹⁴ Chandler’s work both prompted the development of a comparative approach to business history and the need to study the evolution of business in its wider context. For example, Elbaum and Lazonick used case studies of particular industries which once dominated the British economy – textiles, iron and steel, shipbuilding – to develop an institutional explanation for national economic performance.¹⁵ Interactions between historians and management and strategy researchers stimulated business historians to challenge and adapt the earlier conclusions presented by Chandler.¹⁶ Even so, concerns are still being raised that business history underutilises relevant theory to formulate explicit and appealing hypotheses and often neglects to discuss methodological foundations.

These concerns were raised as early as 1970, when Hidy advocated the need for a more social scientific approach to business history:

Methodologically, we need to improve our tools and borrow much more extensively the applicable concepts and analytical techniques from the social sciences. Historians need to make their hypothesis much more explicit and in many instances narrow the range of the subject that they investigate. They can gain much by testing theories dealing with learning, with behavior in organizations, and with decision-making.¹⁷

To date, calls for a change in approach appear not to have had substantial impact on our discipline: over 40 year later Jones reiterated Hidy’s assessment:

... business historians have not made a habit of explicit hypothesis testing or the use of standardized social science methodology. ... The underinvestment in methodology has increasingly meant that other scholars accustomed to more formal approaches have been unable to identify business history research as being of high scholarly quality.¹⁸

In the next section we assess the extent to which business history has indeed consistently been a methodological backwater by performing a content analysis of articles published in the leading English language business history journals in 1970/1971 and 2012.

3. Contents analysis of leading business history journals in 1970/1971 and 2012

To appreciate the range of approaches previously and currently adopted in business history research, we have classified all empirical articles published in 1970/1971 and 2012 in the three leading English language journals – *Business History*, *Business History Review* and, for 2012 only, *Enterprise and Society* – based on their methodological choices.¹⁹ Editorials, dissertation summaries, book and literature reviews, comments on archive sources, so-called lagniappes (included in the 1970-volume of *Business History Review*), and theoretical, historiographical and methodological articles were omitted from the analysis. In total, we have included 127 articles in our analysis, 46 for 1970/1971 and 81 for 2012.²⁰ We recognise that our analysis does not take books into account.

We first assess the type of entity the articles focus upon. Categorisation of the focal entities used in [Tables 1](#) and [2](#) is the result of a preconceived taxonomy, except the

Table 1. Focal entities of business history articles published in 1970/1971 and 2012.

Focal entity	Number of articles (1970/71)	Number of articles (2012)	% (1970/71) (N = 46)	% (2012) (N = 81)
Person, family	4	5	9	6
Firm	11	18	24	22
Industry, chain, market	18	30	39	37
Trade association, private governing body	0	5	0	6
Public body	2	1	4	1
Geographical entity	8	17	17	21
Practice	3	5	7	6
Total	46	81	100	100

Sources: *Business History*, *Business History Review* and *Enterprise and Society* published in 1970/1971 and 2012 (*Enterprise and Society* only in 2012).

miscellaneous category of ‘practice’ which was added during the coding process. In Table 1 we present results where one type of focal entity was coded per article. We were primarily concerned to assess the frequency of case studies of individual companies compared to broader studies of industries, supply-chains, markets and geographical entities. Persons (not necessarily acting as entrepreneurs) or families were coded as such when they were involved in more than one firm and/or when organisations were a secondary focus of the article. In case of more than one entity covered within the article, we coded ‘firm’ as the type of focal entity rather than ‘industry/chain/market’ when firms were not (potentially) interacting with each other as competitors or in a supplier-customer

Table 2. Single and multiple entity studies per type of focal entity in business history articles published in 1970/1971 and 2012.

Focal entity	Number of articles (1970/1971)	Number of articles (2012)	% (1970/1971) (N = 46)	% (2012) (N = 81)
<i>Single entity studies</i>				
Person, family	4	3	9	4
Firm	9	17	20	21
Industry, chain, market	16	24	35	30
Trade association, private governing body	0	5	0	6
Public body	2	0	4	0
Geographical entity	6	13	13	16
Practice	2	3	4	4
Total single entity	39	65	85	80
<i>Multiple entity studies</i>				
Person, family	0	2	0	2
Firm	2	1	4	1
Industry, chain, market	2	6	4	7
Trade association, private governing body	0	0	0	0
Public body	0	1	0	1
Geographical entity	2	4	4	5
Practice	1	2	2	2
Total multiple entity	7	16	15	20
Overall total	46	81	100	100

Sources: *Business History*, *Business History Review* and *Enterprise and Society* published in 1970/1971 and 2012 (*Enterprise and Society* only in 2012).

relationship. Similarly, to arrive at a classification as precise as feasible, when functioning as the central actor, the regulating institutions of ‘trade association/private body’ or ‘public body’ took preference over ‘industry’ or ‘geographical entity’. On the other hand, in absence of a central role for these players, we coded as such clearly identifiable industries/chains/markets as the focus of the article, overruling possible coding according to geographical entity (cities, regions, or countries) in particular (geographical entity was coded when the article covered a wide array of activities, e.g. ‘London as a financial centre’ or the population of large companies in one or more countries). Finally, ‘practice’ refers to a focus on, for example, marketing (e.g. the use of trademarks and consumer behaviour), the use of coins and credit instruments, slavery, newspaper coverage, or litigation, where the acts of individual persons or specific firms receive little or no attention.

Table 1 indicates that in both reference years considerably more articles were devoted to industries (39% and 37%) than to any other category. The relatively high share (17% and 21%) of articles on geographical entities adds to the general picture that the majority of articles had a broader perspective, while articles on (one or more) individual firms represented a share of no more than 24% and 22% respectively. The analysis in Table 1 may be influenced by the presence of multiple focal entities per article, suggesting a too narrow perspective. In Table 2 we thus compare the articles exclusively centred on just one entity within the focal entity category (e.g. an article classified as firm-focused dealing with only one specific firm rather than with several firms) with those treating more than one entity within the focal entity category. Clearly, comparative studies, whether or not explicitly defined as such, remain relatively scarce: 85% and 80% respectively of the articles deal with a single entity within the focal entity category. Table 2 also shows that the traditional association of business history with case studies of single companies does not even apply to publications of more than forty years ago: we calculated a share of just 20% for this subset in 1970, compared to 21% in 2012.

The next stage in our analysis was to assess the prevalence of ‘descriptive’ case studies compared to articles which explicitly engaged with theory, methodology and tests of hypotheses (Table 3). It is important to note that we assess the *explicit* definition of central concepts; use of theory (including causal explanations of earlier works on the same empirical subject); inclusion of formal hypotheses or questions convertible into hypotheses, and explanation of methodology and information on the measurement of variables. We did not include conceptual elaborations and theoretical interpretations which were only offered in the concluding parts of the sampled articles. Consequently, some articles may be coded as ‘absent’ in these dimensions.

More than a third of the articles published in 2012 discuss and define their central concepts (38 % in 2012 compared to 17% in 1970) and refer to formal theory or relevant causal explanations provided by earlier studies (35% in 2012 against not more than 20% in 1970). A much smaller proportion included formal questions to be answered or hypotheses to be tested (7% and 11% respectively). Approximately 30% of the articles published in 2012 explained their methodology and, more specifically, the measurement of variables. Although substantially higher than the scores for 1970 (11% and 22% respectively), these results do not compare favourably with journal articles published in the social sciences, where it is standard practice to include a discussion of methodology, leading to testable hypotheses. Finally, in both reference years, few authors attempted to draw wider conclusions beyond the empirical domain of their article or to build new theory (11% and 10%). The general picture emerging from Table 3 is that business history as a discipline has made substantial methodological progress over the past four decades, but that explicit use of theory and clearly defined methodologies is still limited.

Table 3. Use of theory and methodology in business history articles published in 1970/1971 and 2012.

Aspect	Number of articles (1970/71)	Number of articles (2012)	% (1970/71) (N = 46)	% (2012) (N = 81)
Formal definition or discussion of central concepts	8	31	17	38
Formal use of theory (relating variables or concepts based upon a mechanism or causality explanation)	9	28	20	35
Hypotheses (or questions than can be reformulated as such)	3	9	7	11
Explicit explanation of methodology (including comparative set-up)	5	26	11	32
Explicit text on measurement of variables	10	24	22	30
Explicit generalization to other domain(s) and/or new theory building	5	8	11	10
Descriptive statistics in figures and tables	15	49	33	60
Time series statistics	13	40	28	49
Analytical use of statistics (e.g. correlations and regression)	0	9	0	11

Sources: *Business History*, *Business History Review* and *Enterprise and Society* published in 1970/1971 and 2012 (*Enterprise and Society* only in 2012).

Our finding that only a minority of studies explained their general methodology and measurement of variables is an indication that methodological choices received – and continue to receive – scant attention in business history. The use of statistical analysis is particularly sensitive in this context: in 1970, only one third of the articles contained tables or figures providing descriptive statistical information; none included analytical statistics (Table 3). In 2012, 60% of the articles included tables and figures displaying descriptive statistics (including percentages), of which 11% – still a small minority – used analytical statistical methods (for instance correlations or regressions). This change represents a substantial improvement on 1970, but is less impressive when compared to the period 1990–2000. Indeed, a previous study which examined the quantitative content of articles published in *Business History Review* and *Business History* for this period reported that 43% and 34%, respectively, of articles contained no quantitative content; articles using ‘sophisticated quantitative techniques’ were, respectively, 5.6% and 7.3%.²¹ Management scholars using historical data follow a different approach in this respect. An analysis of 55 historical studies published in three leading management journals (*Academy of Management Journal*, *Administrative Science Quarterly*, and *Organization Science*) between 1981 and 2010 revealed that 62% of them employed ‘quantitative methods’.²²

Finally, the largest component of descriptive statistics in our study (partly) concerned time-series, defined as tables and figures containing data on the same variable for several years (28% of all articles in 1970 and 49% in 2012).²³ A fair share of the time-series analyses (partially) relied upon printed serial resources as a source of quantification.²⁴ Table 4 describes the sources in the articles published in 1970 and 2012. Unsurprisingly, the majority of authors refer to unpublished archival material as a source, but one third of the articles of 1970 only used published written sources (compared to 17% in 2012). Given the still prevailing dominance of qualitative studies, the use of oral history appears to be relatively low (2% in 1970, and just 10% in 2012).²⁵

Table 4. Sources used in business history articles published in 1970/71 and 2012.

Source	Number of articles (1970/71)	Number of articles (2012)	% (1970/71) (N = 46)	% (2012) (N = 81)
Unpublished documents from archives	31	67	67	83
Printed serial sources for quantification (business dictionaries, government statistics, annual reports, newspapers)	9	20	20	25
Interviews and personal communication	1	8	2	10

Sources: *Business History*, *Business History Review* and *Enterprise and Society* published in 1970/1971 and 2012 (*Enterprise and Society* only in 2012).

Overall, measured by contributions to leading journals, the discipline of business history made significant progress since 1970. Nonetheless, calls for the systematic use of formal concepts, theories and methodologies have remained largely unanswered. The reasons for this inertia seem easy to comprehend. By their education and perhaps through exercise of personal preference, many business historians tend to be interested in the particular rather than the general. They deplore the assumed simplicity and one-sidedness of existing social scientific theories and models; instead, they prefer to highlight the importance of the historical context for studying business behaviour. This leads them to approach their analysis in an inductive way, whereas a reduction in complexity is needed to study relations between a selective set of variables. In addition, explicating methodology and research design does not get much emphasis in the historians' training.²⁶ Hannah argued that in Britain the institutional isolation of both economic and business history from other disciplines may have 'reinforced the tendency to insularity and antiquarianism'.²⁷ Furthermore, it is possible that historians might be inclined to think that the formulation of explicit questions and hypotheses is inelegant from a stylistic point of view because it interrupts their narrative. Consequently, it can be anticipated that editors of business history journals receive a small number of articles which explicitly address the development of theory and hypothesis testing, underpinned by methodological choices, even though they may be particularly interested in their publication.

4. Empirical inputs, feedback and creation of knowledge

In previous sections we discussed the enduring problematic relation between business history and other, more theoretically oriented, social sciences. Typical is the phrasing of an observation by one business historian that the 'growing technicism of economic history' led business historians to find 'nearest refuge ... in the rapidly expanding schools of business and management. We exchanged one set of theoretical masters for another'.²⁸ The purpose of this article is not to disavow the mainstream approach to business history. On the contrary, we advocate that the case study approach maintains its prominence because the nature of business history research requires in-depth investigation and because the wide range of issues implicit in business history warrant a broad description of the activities of firms and entrepreneurs. In our view, business history research has already yielded rich insights on the interaction between business and its environment over time.

Nonetheless, our argument is that if business history is to develop, the traditional case study approach needs to be complemented by the application of empirical methods that scrutinise ideas and theories by subjecting them to rigorous hypotheses testing. These

empirical methods are embedded in other social sciences – sociology, economics and psychology – but require adaptation to the particular needs of any field of history, which has to deal with limited availability of data while remaining faithful to the specific historical context. Through engagement with the circle of knowledge creation we anticipate that these empirical methods will further develop the discipline of business history.

Our approach exploits the strengths of business history, which are: the tradition of in-depth and rich empirical descriptions based on primary (mainly archival) sources and/or secondary literature, and the eclectic use of theoretical concepts, all of which yield the advantage that the field is not limited by the dominance of a single paradigm. These strengths have associated weaknesses: the creation of knowledge in business history does not evolve from a continuous effort to perform exploratory analysis, or to develop theoretical approaches, or to undertake empirical testing of these theories. Consequently, there is limited scope for ‘feedback loops’ to emerge in which the results of empirical testing improve theory. In our view this lack of structure has limited the scope as well as the influence of business history on other disciplines. We believe that business history can and should develop theory and related empirical evidence, because business historians have a strong comparative advantage in understanding businesses and entrepreneurs in their time and context as well as understanding processes of change over time. Explicit engagement with empirical testing will help the discipline develop in its own right by adding the time dimension, while complementing other disciplines such as economics, finance, marketing, organisational behaviour, psychology, sociology, and strategic management.

It is a truism that all businesses are different because they have unique characteristics and that each will follow a different path of growth or decline. In our view a scientific approach to business history should aim to understand in a general sense how and why major stakeholders in business activity are involved in strategic decisions; why companies change over time; why some businesses perform better or worse, in terms of, for example, revenue, profit and survival. In this section we outline a schema of scientific analysis in which feedback loops between theory and empirical testing are emphasised. Our fundamental argument is that business history research should create knowledge by using empirical research to explore, define and test theory. The outcomes of this process are generalisations within a specific domain.

We propose that the ultimate goal of scientific research is to build generalisations and to understand and explain causal mechanisms: we can only enhance our understanding of reality by building theories that explain it. Every attempt to build theory and develop generalisations must delineate appropriate boundaries.²⁹ Obviously, there is tension between the desire to generalise and the necessity of defining the domain, that is, the limits of generalisation. Historians’ principal comparative advantage over (other) social scientists is their awareness of the importance of the ‘time’ domain, implying a ‘holistic approach’ which is particularly sensitive to context.

In our view the scientific method for business history consists of a continuous sequence of four steps ([Figure 1](#)). Imagine that we have no theoretical guidance about a particular subject area. In order to gain a preliminary understanding of this area a set of case studies will be an informative (step [1] in [Figure 1](#)). The choice of the case studies can be random, because we do not yet have a priori ideas about the direction of our exploration. Case study results can help define a set of common characteristics and whether they converge or diverge through time. Via inductive generalisations and inferences, exploratory case analysis (step [2] in [Figure 1](#)) leads to a theory (step [3] in [Figure 1](#)). It is crucial to note

Figure 1. Feedback between empirical research and theory-building.

that a theory always consists of two elements: content and domain. While the former is the main result, that is, the causal mechanism, the latter is equally important because it defines context and boundaries, for example, time period or firm type.

In research the construction of theory does not occur *in vacuo*, but builds on prevailing paradigms. Business historians can exploit their eclectic advantages by using fundamental models from, inter alia, economics (for example, transaction cost economics or industrial economics), and sociology and psychology (for example, business culture or social networks). They can also refer to more applied models from management theory (for example, the resource-based view) as well as financial economics, accounting, marketing science, information systems, and human resource management.

Once a theory and its domain or boundaries have been identified, hypotheses can be deduced (step [4] in Figure 1). Because the theory operates within defined boundaries, hypotheses are only applicable within this pre-defined context. Implementing these four steps, we repeat our collection of case materials (step [1] in Figure 1), which now serves a different purpose: hypotheses testing. In the repeat stage we no longer simply collect case materials but make choices to ensure that case analysis (step [2] in Figure 1) generates feedback into further theory building (The range of choices is explained more fully in section 5).

Feedback from case analysis into theory may lead both to a refinement of theory and a better delineation of the applicable domain. This domain is crucial because the relevance of theory to business depends on the environment – time and location – in which firms operated. For example, the hypothesis that family-run firms in the UK in the late nineteenth century were underperforming relative to non-family firms requires the specification of time (late nineteenth century) and location (UK). Theories that have applicability in multiple domains more quickly gain relevance than those restricted to a single domain.

The previous discussion suggested that the role of empirical research in science is twofold. The first is to inspire formation of theory and the second is empirical validation of theory, via falsification (finding evidence rejecting hypotheses) or verification (finding supporting evidence). This step is important because it permits generalisations to be made from individual observations and encourages scientific progress.

5. New business history

5.1. Overview

‘New’ business history is both empirical and theory-oriented; it aims to develop scientific knowledge by constructing theories which are subjected to empirical testing. In our view, a continuous programme of theory formation and testing will develop knowledge about

businesses and entrepreneurs in their historical context and their interactions with the environment. We anticipate a fruitful engagement between our approach and those currently prevailing in business history. The key difference between our approach and the way business history has traditionally been conducted is that we advocate a better balance between theory formation and testing. Much of the current research in business history is either a-theoretical descriptive, or leads to new theory and ideas. The label ‘new’ may severely overstate novelty but we hope it will provide food-for-thought and provoke comments on alternatives. In the remainder of this section we first discuss the formulation of hypotheses in relation to theory-building (section 5.2), then describe a set of empirical approaches that are particularly suitable for business historical research (section 5.3), before reviewing current sources of historical business data for empirical testing (section 5.4). Conclusions to this section appear in section 5.5.

5.2. *Theory and hypotheses*

In the previous section we defined the role of theory and hypotheses in our suggested feedback process. Theories can be based on those currently existing within business history, as well as theories from other fields of science, empirical observations, logic reasoning, and feedback from empirical tests. In our view, theory-building should aim for an understanding of historical business phenomena that can be generalised to the greatest extent. We are aware of the dangers of generalisability and reiterate that a crucial element of any theory is its domain, that is, the demarcation of its applicability. The only formal requirement for a theory, as well as its translation into hypotheses, is empirical testability. Irrespective of whether empirical feedback aims for verification or falsification, we do not find untestable hypotheses meaningful, precisely because they do not permit empirical feedback.

5.3. *Empirical approaches*

In this section we describe a set of potential empirical approaches to business history. For each approach we discuss the usefulness of theory-building versus theory-testing. We also describe requirements and opportunities in the use of data sources.

5.3.1 *Exploratory single case analyses*

Few, if any, would doubt the usefulness of single case studies which provide detailed descriptions of a firm, groups of firms, or an industry, over a specified time period. This approach is most applicable to theory-building. A key requirement is that the researcher approaches the case study with an open perspective. Evidence from case studies may reveal systematically reported and easily quantifiable characteristics – for example, financial metrics, sales performance – while other sources of information, for example, board minutes and correspondence, facilitate examination of motivations and exploration of causal relations. These cases are extremely valuable in the scientific process, particularly in the determination of causality.³⁰

5.3.2 *Hypotheses-testing with single case analyses*

A frequent misconception is that single cases cannot be used to test theory. Consider, for example, the two interrelated hypotheses which have figured prominently in British business history: in the late nineteenth century, Britain ‘failed’ and family firms ‘failed’.³¹ One interpretation of the first hypothesis is that *all* sectors of the British economy ‘failed’

according to some yardstick – for example – comparisons with other countries and/or by comparison with Britain’s historical record. The logical corollary of this is that *all* family firms ‘failed’. Case studies can falsify the first hypothesis by showing that some sectors of the economy performed well (e.g. retailing of consumer goods) and falsify the second hypothesis if it can be demonstrated that some family firms performed better when compared with non-family firms (for example, Boots in pharmacy and Pilkington’s in glass). Evidence of a ‘black swan’ is interesting per se, but not entirely satisfactory: given the difficulty of pure falsification any theory can probably be rejected by finding a counter example. This makes case selection crucial: a case chosen close to the boundaries of the domain of a theory can be informative about these boundaries. A case which is chosen not to yield falsification (a swan expected to be white), which provides falsification (by finding the swan to be black) can present an informative test.

Single cases can also help determine causality. Even if ‘black swans’ did *not* exist, by what means did failure in family firms *cause* the general failure of the British economy? Low rates of growth in the British economy, by restricting the growth of consumer demand, would have resulted in firm failure irrespective of ownership. It can be argued that the only way to reach a quantitative conclusion on the relative importance of family firms in the decline of the British economy is to use quantitative methods, the choice of which should be determined by economic models and their associated theoretical underpinnings. Another problem is that the existence of successful family firms does not permit rejection of the null hypothesis: for exogenous reasons, such as better resource endowments, foreign countries would have surpassed British growth rates independently of family firm performance.³² Box 1 presents a good example of a single case study with implications for theory formation.

Box 1: Freeland (2001) on the M-form in General Motors

Choice of an appropriate time frame when combined with careful empirical research can be particularly valuable when using a single case study to test hypotheses. Freeland’s study of the evolution of managerial structures in General Motors (GM) between the 1920s and 1970s, is an excellent example of such a qualitative study.³² Famous scholars made GM a classic case of early successful adoption of the multidivisional organisational form (M form),³³ but Freeland’s re-examination cast severe doubt on the alleged superiority of this organisational structure. In practice, GM’s top executive, Alfred P. Sloan Jr., persistently and in a variety of ways infringed the strict demarcation of responsibility for strategic and operational decision-making prescribed by the ideal M-form. For instance, letting division managers participate in strategic decision-making helped create consensual support between 1923 and 1933, after which a different product and pricing policy was accompanied by a marked increase in the involvement of headquarters in divisional operations. From 1941, GM returned to the ‘participative decentralisation’ approach to deal with the uncertainties and complexities of war production. Ironically, according to Freeland’s short exposé, GM’s decline set in after 1958, when its top management finally decided to implement a textbook version of the M-form, which – with Sloan gone – quickly degenerated into an overly centralised organisation.

Freeland carefully delineates the domain to which his ‘test’ applies. Because ‘... GM was primarily a single-industry producer than a diversified firm competing in highly dissimilar markets’, he argued that the market segments constructed by GM

were artificial, which ‘probably made it more difficult to articulate a fixed boundary between strategic and operating decisions’.³⁴ Possessing sufficient market knowledge, GM’s top executives were provided with considerable leeway to alternate between centralised and decentralised decision-making. In contrast, given their lack of detailed expertise on the diverse markets covered, the corporate headquarters of truly diversified firms may require the participation of divisional management in the formulation and implementation of strategy. Freeland draws a clear and bold general conclusion from this observation: ‘It is in this context that the image of the M-form as a vehicle for hierarchical control becomes most dangerous, for if executives in such firms adhere to this textbook image of an M-form that relies extensively on fiat and financial control mechanisms, they will substitute bureaucratic or perfunctory compliance for consummate performance, and short-term profits for long-term competitive advantage.’³⁵

Consequently, Freeland’s case-study has wider implications: for example, he takes issue with Williamson’s transaction cost economics (TCE). Williamson, heavily inspired by Chandler, argued that administrative overload on senior management required large, diversified companies, to adopt the M-form (which according to Williamson mainly serves as an internal ‘miniature capital market’).³⁶ This decentralisation of operational decision-making was to be accompanied by intensified internal auditing and control. Drawing upon his extensively researched case study, Freeland, however, concludes that this perspective was myopic: ‘Because TCE is incapable of conceptualising the social and non-rational dimensions of governance, it is incapable of recognising efficiency that goes beyond bureaucratic compliance’.³⁷

5.3.3 *Hypotheses-testing with multi-case analyses*

In the social sciences use of multiple cases for hypothesis testing has been gaining importance in recent decades.³³ In these so-called case-based methods the void between single-case work and large sample analysis is filled using approaches that allow the testing of hypotheses with relatively few in-depth cases, which are particularly selected for the hypotheses at hand. Below, we describe several case-based methods. It should be noted that case-based analyses can also be used for theory-building.³⁴

One type of case-based research is necessary condition analysis, which tests for the empirical relevance of ‘necessary’ conditions.³⁵ A necessary condition is based on the assertion that x is necessary for y to happen, which means that if y is true, x must also be true. Clearly, situations may exist where a few observations can refute the assertion that x is a necessary condition for y . In many ideas and theories, necessary conditions are used, even though they are typically not explicated as such. However, where scholars employ the terms ‘required’, ‘critical success factor’, ‘threshold’ or ‘condition’, the suggested underlying mechanism is typically a necessary condition. For example, in the literature on successful merger and acquisitions, many authors report that requirements such as the speed of integration are determinants of success.³⁶ This hypothesis requires falsification of a necessary condition test.

We illustrate the use of necessary condition analysis in business history using a conceptual article by Kock and Guillén on the conditions necessary for the formation of business groups (BGs). Although the authors do not perform necessary condition analysis, their first proposition states ‘In countries at the beginning stage of late development, the ability to utilise ‘contacts’ is a valuable, rare, imperfectly tradable and difficult-to-imitate capability, leading to BG growth, but only insofar as significant regulatory asymmetries³⁷ and protectionism favouring locals exist.’³⁸ Based on this proposition, several necessary

conditions could have been defined for the growth of BGs in a country. Two of these characteristics are country-level variables, that is, regulatory asymmetry and protection of local firms. In addition there is one firm-level characteristic, which is contact capability.³⁹ An empirical test of these conditions using multiple cases can now be designed which would start with a limited number of countries and periods in which the number of BGs increased. For each of these countries in the same stage of development three hypotheses (one for each characteristic) can be defined about conditions that have to be fulfilled. To test these hypotheses, countries without a growing number of BGs are irrelevant. Thus, the choice of cases in necessary condition analysis is driven by the opportunity to refute a hypothesis.

A further approach, complementary to the methodology discussed above, is qualitative comparative analysis (QCA). This technique maximises the number of comparisons that can be made between cases by examining the presence or absence of certain characteristics. An advantage of QCA is that it can be applied to small samples.⁴⁰ An example of the use of QCA is provided by Kogut and Ragin.⁴¹

Box 2: Kogut and Ragin (2006) on varieties of capitalism

Many business historians use concepts and ideas from the varieties of capitalism literature and from recent work on the effects of legal systems. Kogut and Ragin relate to these literatures and test several hypotheses, one of which is that ‘legal systems determine financial market development’.⁴⁸ This hypothesis is tested using the QCA.

The authors used a sample of 49 countries. For each country a range of relevant variables are defined as dichotomous, that is, with yes or no values, typically coded as one and zero, respectively. As a result, each variable is a classification or categorisation, and continuous variables are transformed into categories. To test the hypothesis a number of variables were used, including: the legal system (either common or civil law), high or low financial market development, and four other variables. [Table 5](#) presents the results for four of the 49 observations.

The QCA algorithm is based on Boolean algebra, where values of variables can be true or false, normally coded as 1 and 0, respectively. The application of QCA on the data yields a set of conditions, which can be interpreted as causal relations. One outcome for developed financial markets is: ‘RULE OF LAW * COMMON LAW * transplanted law’. The interpretation of this result is that the upper-case variables are important when they are present; conversely, lower-case variables matter when they are absent, while the ‘*’ indicates that multiple criteria variables jointly determine the result. Using this Boolean analysis, the authors thus find that common law origin systems have more developed financial markets, only when the strong rule of law applies (such as low corruption) *and* when the law has not been transplanted. This result is a rejection of the simple ‘silver bullet’ hypothesis that legal origins are the sole explanation for financial development, and has refined current thinking about causes of financial development.

5.3.4 Variables-based analyses

In economic history, regression models are frequently used to test relations between variables using a reduced-form specification dictated by economic theory.⁴² These analyses are proper tests of economic theories, but they suffer from three weaknesses. The first is that causality is assumed, but cannot be tested, because the results presented are

Table 5. Sample of data from Kogut and Ragin.

	High GNP per capita	Developed financial market	Common law	Civil law	Transplanted law	Rule of law
Argentina	0	0	0	1	1	0
Australia	1	1	1	0	1	1
Austria	1	0	0	1	0	1
Belgium	1	0	0	1	1	1

Source: Kogut and Ragin, "Exploring Complexity."

typically correlations, which *do not* indicate causality. The second is that endogeneity issues plague model design and interpretation of results. Again, researchers assume a correct specification, but variables often defined as exogenous are actually endogenously determined. If the independent variables used in a regression model are not exogenous – that is, determined outside the model – then their relationship with the dependent variable will not be correctly estimated causing spurious results to emerge. For example, when firms with strong competitive positions grow and become large and highly profitable, a simple regression of size on performance may yield a positive value. However, the inference that size positively affects performance is not correct per se, because the actual effect may be determined by variation in firms' competitive positions. Finally, the variables may be based on economic theory, but the empirical approximations (proxies) are imperfect measures of this theory. Still, the toolbox of econometricians (including cliometricians) contains many useful techniques for business historians, including systems of equations and instrumental variables estimation. In situations where theories are strongly influenced by economic reasoning we advocate the use of these empirical techniques.⁴³

To mitigate these measurement problems, contemporary business researchers have developed empirical techniques which can deal with theoretical concepts that are difficult to measure. In structural equation modelling with unobservable latent variables, there are techniques which validate the measurement and estimation of causal models. In these analyses two sub-models are estimated. The first measures unobservable characteristics (latent variables) by combining observable data (indicators). Typically, confirmatory factor analysis is used to measure latent variables, which estimate relationships between observable indicators and latent variables. The resulting approximations for the unobservable characteristics are based upon a weighted average of the observable variables. In other words, by using a combination of measures for a variable, the measurement can be improved. Tests can be carried out to examine the quality of these approximations. In the second step, regression equations are estimated to test the hypothesised relations between the latent variables.⁴⁴ The user-friendly LISREL software has popularised this approach in the management literature. For estimations using small samples, partial least squares (PLS) is least demanding in terms of the minimum number of observations required: it has been applied with only 30 observations.⁴⁵

Of course, hypotheses do not need to be derived exclusively from economic literature. For instance, Fligstein's historically informed book *The Architecture of Markets* (2001), was positioned as a contribution to economic sociology and contains, for example, hypotheses about the relationship between 'concepts of control', the social structure of markets and innovation.⁴⁶

Yet other fruitful approaches which can be adopted in business history research are those of 'imprinting' and organisational ecology which might inspire business historians

to formalise the variables studied without too much loss in complexity or excessive environmental determinism. Good examples of these related approaches are set out in [Box 3](#).

Box 3: Marquis (2003) and Hannan and Baron (2002) on imprinting and organisational ecology

Several articles published in management journals are guided by sociological perspectives, which explicitly use a time frame, but which are not identified as business history research. A prominent example is a study by Marquis on the early imprinting of intercompany networks in parts of the US.⁵⁴ Marquis notes that in 2000, in St. Louis (Minnesota, 2.6 million citizens) 31% of director connections were local, while in Phoenix (Arizona, 3.2 million habitants) this applied to only 13% of connections. In both cities, the majority of companies were founded after the 1970s, which appeared to rule out long-term historical explanations of differences in the local density of company networks. Nonetheless, early imprinting was relevant: 'As a result of the difficulty of intercity travel, the intercorporate social networks of cities established in the early part of the century were locally oriented.'⁵⁵ By 1910, St. Louis was already a well-established community with 687,000 people, while the more recently established Phoenix counted only 11,000 inhabitants. This led Marquis to formulate the formal hypothesis: 'The local intercorporate networks of communities that were established before the era of auto and air travel will have a greater percentage of local network connections than cities established more recently.'⁵⁶ This is not the whole story, because it is important to know which mechanisms maintained the imprint: 'There are two primary mechanisms that may lead component organisations within community network systems to continue to replicate the imprinted pattern: (1) the existence of local social institutions that provide a venue for social connection; and (2) firms' emulation of locally legitimate templates of action.'⁵⁷

Regarding the first mechanism, Marquis hypothesised that the presence of exclusive upper class-clubs, the number of commercial banks headquartered in a community and institutions representing the arts (e.g. museums), were important for maintaining local connectedness. For the second mechanism, Marquis hypothesised that: 'Newly founded firms in communities in which prominent firms have more locally focused networks are more likely to establish local ties.'⁵⁸

Marquis tested these hypotheses by assessing the interlocks between all firms quoted on the NYSE and Nasdaq stock-exchanges in 1986 and 2000. His independent variables included: the number of incorporated firms in every city in 1905; the presence of upper class-clubs; the number of headquartered banks, and art and culture organisations in 51 selected cities in 1986 and 2000, as well as the local connections of prominent firms in these cities in 1986. Finally, he defined a range of control variables. Marquis found strong support for his hypothesis that 'earlier-established communities will have a greater percentage of local network connections'⁵⁹ and mixed support for the ones on replicating mechanisms.

Imprinting is frequently employed in the organisational ecology literature, which is of special relevance to business history because it is predominantly concerned with the development of 'populations' of firms over time.⁶⁰ Characteristically, the method adopted is construction of time-series on 'vital events' such as the founding and exit of firms (birth and mortality) and the resulting density and age structures of firms in these

populations. This data has generated insights, for example, into: 'age dependence' and 'density dependence' of firm survival. Moreover, organisational ecology practitioners have formalised a much wider range of variables, including environmental characteristics (e.g. technological knowledge, labour availability, state of the macro-economy, and legislation), and also intra-organisational characteristics (e.g. management structure, average length of service of employee, gender distribution) and other features influencing firm performance. Taken together, this information helps to assess the occurrence of phenomena conceptualised as imprinting, inertia, legitimacy, and learning, as well as niche formation and resource partitioning within a certain population, factors which ultimately determine firm survival or failure.

A common and major criticism of the above approach is the environmental determinism implied in the emphasis on selection rather than adaptation, that is, neglect of agency.⁶¹ Acting as iconoclasts, the pioneers of organisational ecology posed that environmental selection favours the survival of organisations showing inertia in their core features, because this signals reliability and accountability.⁶² The methodology of analysing populations through time is crucial here: 'The common, but distorted, view of organisational change as easy and beneficial likely arises from the unsound way many observers collect data on corporations'.⁶³ These authors refer to the bias resulting from the common research practice of selecting successful firms and then retrospectively identifying the several organisational transformations they experienced. In turn, population ecology faces an important methodological constraint given its '... use of large-scale, historical databases in which, by necessity, measures are frequently removed from concepts.'⁶⁴ For instance, legitimation – a vital concept, which is very hard to assess directly – is normally measured by using as a proxy the evolution of 'density' (number) of firms in a population. Organisation ecology practitioners, however, are able to differentiate the temporal domains to which their measures and predictions regarding organisational forms apply: 'During a population's early history, changes in density have powerful consequences for legitimation. With aging, simple persistence and myriad kinds of institutionalisation come to substitute for density in preserving a form's taken for grantedness.'⁶⁵

Organisation ecology has its limitations in its applicability to business history because 'Historically, organisational ecologists appear to have favoured a trade-off of precision and realism for generality in their theories.'⁶⁶ Despite this, the rich collection of aspects dealt with in a formalised way makes organisation ecology a potentially attractive research engine for business historians.

One example of a rather broad-oriented and accessible study by organisation ecologists is by Hannan and Baron on high-technology firms founded in Silicon Valley between 1980 and 1996.⁶⁷ Unusually for organisational ecology research, their major sources included interviews with founders, CEOs and HR directors and documents obtained from the firms sampled. Focusing on intraorganisational characteristics, the authors identified five so-called 'employment blueprints' which were common to many of the start-ups and which involved the selection, retention, control, and coordination of their employees (e.g. a 'Bureaucracy' or a 'Commitment' blueprint, the latter focusing on family-like relations to keep the employees attached to the firm, and their selection and coordination based on 'fit' and peer control, respectively). Hannan and Baron defined these multidimensional blueprints with respect to ten distinct measures (e.g. compensation). The high-tech companies studied adopted one of the five blueprints in a rather pure form. Once again the importance of the domain becomes

apparent: 'In contrast, larger, older, and more diversified companies commonly display multiple, distinctive subcultures and HR subsystems.'⁶⁸ They found that relatively few organisations changed from one (pure) blueprint to another during their life-span. Still, the authors leave room for agency: changes were much more likely when the founder left the firm and they conclude that one factor which directly influenced the 'initial employment blueprint', was the 'founder's intended business strategy' (not his or her background characteristics, for example, previous employment). Furthermore, the range of other variables taken into consideration is broad and includes administrative overhead, employee turnover, and organisational performance (the latter variable disaggregated into likelihood of survival, likelihood and speed of going public, and growth or decline in market capitalisation after going public). A few results from their study illustrate the relevance of the chosen variables. On average, the share of managers and administrators in the total workforce was about 2.3 times higher in 'Bureaucratic' compared to 'Commitment' organisations, while the likelihood of survival was several times higher for the latter category compared to 'Autocratic' firms. In line with Hannan and Freeman's emphasis on the virtues of structural inertia,⁶⁹ they found that change in the founder's blueprint was associated with higher employee turnover, lower growth of market capitalisation and – in particular – a higher risk of failure. The interviews not only provided the researchers with systematic data on variables per firm, but also helped them to interpret their findings.

5.3.5 Interaction between case studies and variables-based research

Care must be exercised to ensure that variables-based research does not drive context-rich case-study work into the background. Kobrak and Schneider perceived an unwelcome tendency, apparent even in the *Oxford Handbook of Business History*, that 'nearly every section carved business history up into component dimensions' and lament the lack of authors treating businesses as 'integrated whole institutions'.⁴⁷ In this way, 'The firm as historical actor – in all its social, political, and economic dimensions – gets lost'.⁴⁸ One way to prevent this happening is to move back and forth between various empirical approaches.

Ideally, single and multiple case studies, together with variables-based research, should feed upon each other. Single or multiple case studies may generate hypotheses which can be tested by case-based and variables-based research. In *Strategy and Structure* (1962), Chandler made an intensive investigation of four firms to show that it wasn't size per se which necessitated the adoption of the M-form structure, but 'the increasing diversity and complexity of decisions that senior managers had to make'.⁴⁹ In his next land-mark study *The Visible Hand* (1977), Chandler examined US manufacturing in its entirety and argued that industry characteristics such as rate of growth, capital intensity, technological complexity, and degree of energy consumption, determined the necessity for administrative coordination.⁵⁰ Chandler supported his argument using data on the concentration of the top-500 industrial firms in high-growth, capital intensive, technologically complex and/or energy intensive industries in 1917, subsequently pursued with data on the top-200 firms in the US, UK and Germany during the first part of the twentieth century in the final part of his trilogy *Scale and Scope* (1990).⁵¹

Hypotheses generated by extended case-research in this way can stimulate further hypotheses testing. For instance, Roy, reported zero or weak correlations between capital intensity, growth rate and the number of establishments owned by US industrial firms on

the one hand, and their inclination to incorporate on the other, during the boom period 1901–1904.⁵² Similarly, a statistical analysis based upon industry-level census data showed only mixed support for the thesis that ‘Chandlerian’ industries were more likely to develop extensive managerial and administrative hierarchies compared to other industries, both in the US and the Netherlands, during the first half of the twentieth century.⁵³

Conversely, variables-based research can guide the selection of appropriate new cases permitting further investigation of the issue at stake, in this case the relationship between an industry’s structure, growth rate, and the scale and complexity of administrative coordination. By taking account of industry and firm contexts, comparative analyses can identify the precise mechanisms driving the formation of managerial hierarchies. The domain to which (amended) hypotheses should be applied can then be specified according to the type of industry, its geographical location and periodicity.

5.4. Sources

The discovery and utilisation of data sources are dependent upon the hypotheses and empirical approaches chosen by the researcher. Empirical testing of the validity of a theory may require multiple cases and observations. The difficulty of obtaining access to a sufficient volume of these may constrain the range of empirical approaches available to business historians. To overcome this problem we suggest a number of solutions.

First, business historians can simply study multiple archives. This is time-consuming and the number of archives available for a specific test may be limited. This problem is mitigated to some extent because we have described case-based methods that require only a few observations. It should also be noted that for hypothesis-testing very specific information may be required from archives, which limits the time invested per case. We see opportunities for collaboration between several researchers gathering archival data to test multiple hypotheses.

Business historians can use the knowledge of colleagues with extensive information on particular companies and industries. Using the case survey approach⁵⁴ information can be obtained from existing case histories. The wealth of corporate biographies in business history can thus become a source of data. The case survey method helps control for variation in the quality of sources. Thus, for example, the researcher can tap into the richness of existing case studies on family firms. Moreover, historians can request information from other business historians. Of course, combinations are possible, for example, where historians verify case-survey data.

Additionally, data sources in a particular archive may contain multiple observations on certain variables. Examples are personnel files, customer dossiers and financial transactions. Using these sources may allow researchers to construct a sample of observations for one specific firm and to assess the variation in this sample. The use of these sources permits the use of techniques that require multiple observations.

Furthermore, the potential value of primary evidence from oral sources was indicated in our discussion of Hannan and Baron’s study. In the sample of articles we analysed, the use of interviews was relatively scarce, being just 10% in 2012 and 0% in 1970 (Table 4). Obviously, this source may also contribute to an in-depth investigation of singular and multiple cases. But the use of oral history may not be appropriate for variable-based research covering the distant past. Nonetheless, two scholars who reconstructed the social position of shopkeepers in England between 1880 and 1914, used interviews with 27 of their descendants, supplemented by interviews with 71 unrelated people living in Lancashire in 1911, could have used their rich material to assess quantitative estimates of

the range of variables dealt with in their publication.⁵⁵ Apart from social status, they mention: the gender of shopkeepers; the presence and number of employees and other indications of size; the presence and frequency of side jobs; the type of goods sold; shop location; the homogeneity of the neighbourhood and selling on credit. All of these observations could be presented as categorical variables, ratio variables or coded as scores on a 7-point (Likert) scale. Subsequently, the data could be employed to test the occurrence and strength of a priori correlations between these variables, for instance between social status on the one hand, and the extent of selling on credit on the other.

Finally, sources in the public domain can be accessed.⁵⁶ Examples are the data contained in annual reports, business directories, business censuses, newspaper coverage, overviews in trade journals, scholarly and popular historical monographs on firms, industries, and countries, as well as publicly available evidence from oral history. All of these are potentially major sources of information for the business historian. Obviously, sources which provide systematic data on certain firm variables on a periodical base, such as annual reports and business directories, are of particular value (20% and 25% respectively of the studies in our sample employed these printed serial sources for collecting systematic data, see Table 4). Quantitative data, often financial, are not the only type of information which can be processed. Frequently, published monographs such as company histories may be rich in qualitative data covering a wide range of subjects. Nonetheless, it is possible – though challenging – to code the information contained in these monographs and transform it into information which can be used for formal hypotheses testing. A publication such as the multi-volume series *International Directory of Company Histories* (published since 1988 and now counting more than 100 volumes) may be useful in this respect.

5.5. Penultimate remarks

In this section we answer two relevant questions about ‘theory-orientated’ business history in order to avoid potential misunderstanding. First, our approach does not provide new methods, new results, or new theory. The novelty of our perspective lies in the application of sequences of empirical investigations, theory and hypotheses formulation, and empirical testing. The methods we propose include the case method, which is common in business history, but also other methods that are common to other areas of business studies. Most of the approaches we propose have already been used in historical business studies. Jones and Khanna explicitly propose three examples – history as a source of time series variation, historical evidence on ‘born global’ firms, and path dependence – in which business history can illuminate debates in international business studies.⁵⁷ Consider, for example, the popular concept of path dependence: here business historians can fulfil an important role in carefully and systematically assessing critical (sequences of) events and (other) self-reinforcing mechanisms as central elements of supposed path dependent processes or, if these elements cannot be identified, discard the relevance of path dependence in the case involved.⁵⁸ Counterfactual history⁵⁹ or – perhaps less arbitrary – comparative history⁶⁰ may be an effective method to determine the relevance of path dependence in distinct cases.

Second, the approach we advocate is not applied economic history.⁶¹ This would unnecessarily constrain the scope and reach of business history. It should however be noted that the first usage of the phrase ‘new business history’ – to the best of our knowledge – stems from a comparison with new economic history, following the award of the Nobel Prize in Economics for this field in 1993.⁶² A key characteristic of economic

history is reliance on economic theory and econometric testing. The eclectic nature of business history is much richer and very valuable. Of course, there are parallels between ‘new’ economic history and the approach we propose, as both aim to build theories and conduct explicit tests of hypotheses. In a way, economic history can serve as a role model for its rigorous analytical approach, and also as a warning against narrowly focused research. The same holds true for the more sociologically orientated field of organisation ecology. We would like to emphasise that our plea for a ‘new’ business history concerns both quantitative and qualitative research.

6. Conclusion

The typical approach in business history research is the ‘descriptive’ case study. The use of case study analysis in the development of theory is crucial for the advancement of business history and has important spill-overs to other fields, such as management and organisation studies and economics. This article calls for a discussion about the future of the discipline and particularly the role of theory and empirical research in business history. Case study analysis should be continued, but complemented with other types of research. We advocate the application of additional empirical approaches – in terms of data collection and hypothesis testing – in business history, including a more structured use of case studies. These empirical approaches are well established in business studies, sociology, and economics, but require adaptation to the particular needs of the field of business history. The purpose of our ideas is that the opportunities for scientific explanations in business history are enhanced by considering the circle of knowledge creation where theory is confronted with empirical results and empirical observations feed theory formation.

Acknowledgements

We gratefully acknowledge comments by Andrea Colli, Joost Jonker, Jeroen Kuilman, Keetie Sluyterman, an anonymous referee, and participants of the workshop on alternative business historical research (York, May 2012) and of the session on new business history of the EBHA meeting (Paris, August 2012). We claim full responsibility for the contents of the article.

Notes

1. Jones and Zeitlin, “Introduction,” 1.
2. See Moore and Reid, “The Birth”; and the special issue of *Business History* 53 no. 1, 2011, on European Business Models.
3. See <http://www.tandfonline.com/action/journalInformation?show=aimsScope&journalCode=fbs20>; <http://www.hbs.edu/businesshistory/publications-business-history-review.html>, and <http://es.oxfordjournals.org/>, visited on October 23, 2013.
4. Wilson and Toms, “Business History.”
5. Friedman and Jones, “Business History,” 2.
6. Ibid.
7. See Hidy, “Business History”; Jones, van Leeuwen, and Broadberry, “The Future”; Rowlinson and Hassard, “Historical Neo-institutionalism”; Rowlinson, Hassard and Decker, “Research Strategies”; and several contributions to Bucheli and Wadhvani (eds.), *Organizations in Time*. Furthermore, Raff, “How to do Things” discusses issues concerning sample selection in business history and proposes a forward-looking perspective. His suggestion is a very specific methodological contribution to the debate on business history methods.
8. See Jones and Khanna, “Bringing History”; O’Sullivan and Graham, “Moving Forward”; Wilson and Toms, “Business History”; Toms and Wilson, “Economic History”; Friedman and Jones, “Business History”; Rowlinson and Hassard, “Historical Neo-institutionalism.”
9. See e.g. de Goey, “Ondernemersgeschiedenis.”

10. Ashton, *An Eighteenth Century Industrialist*, ix.
11. Coleman, *Courtaulds* Vol. 1 and 2; Payne, *Colvilles*; Wilson, *A History of Unilever*.
12. Aldcroft, *The Development*; McCloskey and Sandberg, "From Damnation."
13. Payne, *British Entrepreneurship*, 48.
14. Chandler, *Strategy and Structure and The Visible Hand*.
15. Elbaum and Lazonick, *The Decline*.
16. Toms and Wilson, "Scale, Scope, and Accountability."
17. Hidy, "Business History," 494.
18. Jones et al., "The Future," 230.
19. The reason for including two years for the period around 1970 was the limited number of articles published annually by the two journals combined at the time. For the sake of convenience we will speak of two reference years in the text, 1970 and 2012, with '1970' referring to 1970/1971.
20. The complete data set with the coding of the 127 articles is available upon request from the corresponding author.
21. Eloranta, Jari, and Valtonen, "Are Business Historians Quantitatively Illiterate?," 88.
22. Rowlinson and Hassard, "Historical Neo-institutionalism," 118–119.
23. In other words, these statistics did no involve *econometric* analyses of time series.
24. This excludes unpublished serials such as annual reports and balance sheets.
25. Of course, as a rule, only authors studying the recent past will be able to draw upon oral sources.
26. See e.g. Bedeian, "Exploring the Past."
27. Hannah, "New Issues," 167.
28. Popp, "History," 834.
29. Byrne and Ragin, *The Sage Handbook*
30. Morck and Yeung, "History in Perspective" and "Economics, History and Causation."
31. Landes, *The Unbound Prometheus*; Payne, *Colvilles*. We are using 'failed' in a strictly economic sense – i.e., for example, that the British economy 'failed' to grow as fast as its resources permitted.
32. Habakkuk, *American and British Technology*.
33. Freeland, *The Struggle for Control*.
34. Drucker, *Concept of the Corporation*; Chandler, *Strategy and Structure*.
35. Freeland, *The Struggle for Control*, 322.
36. Ibid., 323.
37. Williamson, *Markets and Hierarchies* (quotation on 145) and *The Economic Institutions*.
38. Freeland, *The Struggle for Control*, 321.
39. Ibid.
40. Byrne and Ragin, *The Sage Handbook*.
41. Fiss, "A Set-theoretic Approach."
42. Mahoney, Kimball, and Koivu, "The Logic"; Dul and Hak, *Case Study Methodology*, Chapter 5.
43. Homburg and Bucerius, "Is Speed."
44. Regulatory asymmetry refers to regulation which applies differently to new or foreign firms, versus established or local enterprises. Kock and Guillén, "Strategy and Structure," 94.
45. Kock and Guillén, "Strategy and Structure," 97.
46. Ibid., 96.
47. See Byrne and Ragin, *The Sage Handbook*; Ragin, *The Comparative Method*; Rihoux and Ragin (eds.), *Configurational Comparative Methods*.
48. Kogut and Ragin, "Exploring Complexity."
49. Ibid., 49.
50. A reduced form equation expresses an endogenous variable solely in terms of predetermined variables and stochastic disturbances. Generally, endogenous variables are the equivalent of the dependent variable in single equation regression models, and exogenous variables are the regressors in such models (Gujarati, *Basic Econometrics*, 737–738).
51. See, for example, Gujarati, *Basic Econometrics* for a general discussion of econometric modeling. Morck and Yeung, "Economics, History and Causation" explicitly discuss the shortcomings in econometric analysis in history.
52. See Hulland, "Use of Partial Least Squares" for examples.
53. Wold, "Partial Least Squares"; Vinzi, Chin, Henseler, and Wang, *Handbook of Partial Least Squares*.

54. Jonsson and Lindbergh investigate the effects of institutional impediments – a concept building on Fligstein’s work – on investments using LISREL. Two questions in a survey measure these impediments and two other questions measure investments. A LISREL model is estimated on a sample of 233 small Swedish firms in order to describe the validity of the two questions for each variable as well as the relation between the variables. See Jonsson and Lindbergh, “The Impact.”
55. Marquis, “The Pressure of the Past.”
56. Ibid., 660.
57. Ibid.
58. Ibid., 661.
59. Ibid., 665.
60. Ibid., 674.
61. Carroll and Hannan, *The Demography*; Baum and Shipilov, “Ecological Approaches.”
62. Baum and Shipilov, “Ecological Approaches,” 55–56.
63. Hannan and Freeman, “Structural Inertia.”
64. Carroll and Hannan, *The Demography*, 6.
65. Baum and Shipilov, “Ecological Approaches,” 100.
66. Carroll and Hannan, *The Demography*, 245.
67. Baum and Shipilov, “Ecological Approaches,” 100.
68. Hannan and Baron, “Organizational Blueprints.”
69. Ibid., 32.
70. Hannan and Freeman, “Structural Inertia.”
71. Kobrak and Schneider, “Varieties of Business History,” 403.
72. Ibid.
73. Introduction of reprint of Chandler, *Strategy and Structure*, 2.
74. Chandler, *The Visible Hand*.
75. Chandler, *Scale and Scope*.
76. Roy, *Socializing Capital*, Chapter 2.
77. Van Driel, de Goey, and van Gerwen, “Testing the Chandler Thesis.”
78. Larsson, “Case Survey Methodology”; Larsson and Finkelstein, “Integrating.”
79. Vigne and Howkins, “The Small Shopkeeper.”
80. Carroll and Hannan, *The Demography*, Chapter 8.
81. Jones and Khanna, “Bringing History,” 465.
82. See Sydow, Schreyögg, and Koch, “Organizational Path Dependence.”
83. Mackay, “What if?”
84. Miller, “Comparative and Cross-National History.”
85. The background of two of the authors of this article may have biased our selection of examples illustrating variable based research.
86. Parker, “A ‘New’ Business History?”.

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