# Systematic Review of Research on Exit: A Bibliometric Analysis and Future Directions

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Abstract. Exit is an important element of the entrepreneurial process. However, until recently research on exit, especially at the individual level, had received relatively little attention. This article aims to map the development of research on exit and intersecting topics such as failure and survival. Applying a systematic literature review using a bibliometric and a qualitative analysis, this article reviews 243 articles that have been published between 2009 and 2015 in the Social Science Citation Index outlets. Using a bibliometric software package (BibExcel) and a large network analysis program (Pajek), this review provides a bibliometric map of research on exit. The generated clusters represent interconnected yet distinct subfields within the landscape, i.e. industry dynamics, firm exit and entrepreneurial exit. Our review shows that firm-level exit has received substantial attention within the field of exit. In contrast, our understanding of exit at the levels of individuals and teams is still limited. In particular, the present review calls for future research not only on the decision making process in relation to exit but also on how the process of exit is carried out and the impact of exit on entrepreneurs, teams and firms. Finally, theoretical perspectives on the phenomenon of exit are discussed in this paper which range from economics and organizational behaviour to psychological aspects of exit.

**Keywords:** firm exit, entrepreneurial exit, failure, survival, bibliometric analysis, review.

JEL Codes: L10, L22, L26.

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#### 1. Introduction

Exit is an important element of entrepreneurship. It is arguably as important as the entry into entrepreneurship because of the impact of exit on the economy,

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industry, firm and entrepreneur (DeTienne, 2010). However, compared to the research on entry into entrepreneurship, research on exit has received less attention. Fortunately, there has been a growing interest in recent years, encouraged by the significant impact of exit (DeTienne and Wennberg, 2016).

The state of research might be understood through studies which review past research (i.e. through review articles). However, reviews on exit research have been limited. The prominent reviews on the subject are a critical review on the importance of exit in the entrepreneurial process (DeTienne, 2010), an overview on phenomena of exit (Wennberg, 2011) and a critical review on exit intention, exit strategy and the process of exit (Wennberg and DeTienne, 2014). In terms of method, those reviews tend to reflect the peculiarities of the reviewers who are in depth in the topic. Although reviews carried out by experts are indispensable for evaluating the state of research and prompting discourse on future advancement, they are prone to be subjective and hence are immanently biased. Therefore a comprehensive and systematic review regarding exit research is necessary.

Such a comprehensive map of exit research is required because exit often appears in corresponding fields, such as failure (Ucbasaran et al., 2013; Cressy and Bonnet, 2018) and survival (Cefis and Marsili, 2011; Zhou and Van der Zwan, 2018). For this, bibliometric analysis offers an evolution map of a research field by focusing on and describing what appears in research discussions (Ramos-Rodríguez and Ruíz-Navarro, 2004). This article will address three issues utilizing Bibliometric Analysis and provide a thorough examination of existing research to draw future research suggestions.

The first issue to be addressed is the level of analysis. Exit happens on the individual (entrepreneur) level, team level and firm level. Entrepreneurs may exit from their founded firms, yet their firms persist to operate. Firms may exit by closing the business yet their founders (entrepreneurs) may continue their entrepreneurial activity by the founding of a new venture. Under the circumstances, exit is measured differently, indicated by various exit rates between empirical studies (see Delmar and Shane, 2004, Pe'er and Vertinsky, 2008). This problematic measurement contributes to the lack of research available (Wennberg, 2011). Realizing a key feature in entrepreneurship is the intersection between entrepreneurs (individuals) and firms (organizations), this review is devoted to examining and discussing the level of analysis in exit research.

Second, this article will examine the theoretical perspectives on exit research. Theoretical perspectives usually correspond with the level of analysis. For example, research on exit at the firm level at large and public companies may employ the lens of economics (e.g. Cainelli et al., 2014). Given that exit operates at all levels, understanding the theoretical perspectives for every level is required. Thus, this study aims to review theoretical perspectives of exit research and provide the most influential perspectives.

Lastly, this article will provide future research directions. This attempt is carried out by employing a qualitative review on the examined articles of exit research in addition to the bibliometric analysis.

The structure of this article is as follows. Section 2 will explain the methodology of performing a systematic literature review. Section 3 will draw some important insights from the 243 research articles on exit that were obtained from the bibliometric analysis. Section 4 will discuss future research directions in exit research while Section 5 concludes.

#### 2. Reviewing Literatures

To make sense of past research, scholars review literatures subjectively and systematically (Frank and Hatak, 2014). Solely employing a subjective approach (e.g. traditional narrative interview), a literature review is subjected to bias and less rigorous when it is solely employing a subjective approach (Tranfield et al., 2003). Furthermore, the subjective review method cannot adequately answer the question concerning the dynamism of knowledge through time and the intersecting subjects around a topic nor reveal the seminal works in the field by prominent scholars at different times (Coombes and Nicholson, 2013). On the other hand, this method may offer deep review of the most significant topic in the field (Grant and Booth, 2009).

The systematic approach of reviewing literatures can be carried out by employing a bibliometric analysis, a method rooted in communication science. A field of research is actually characterized by communication patterns among researchers. One of the manifestations of communication is indicated by citations from one work to another. The citations are depicted as frozen footprints of the scholarly achievement (Üsdiken and Pasadeos, 1995). These footprints show a relationship among researchers as well as the intersecting topics which is evidence of the knowledge structure of a field.

Bibliometric method has potential to produce a systematic, transparent and more importantly reproducible process of review (Åström et al., 2009). The method has been gaining popularity as the online databases are updated and developed (e.g. Web of Science, EBSCO). By mapping the bibliometric of a certain field of research, researchers could be guided to the most seminal works and the related themes without subjective bias. In the same vein as other scholars (e.g. Vogel and Güttel, 2013), the bibliometric method is not a substitute for other review methods but a complement. Therefore, in addition to bibliometric analysis, this study employs a subjective approach to enrich the understanding about literatures in the field of entrepreneurial exit.

#### 2.1. Methodology

Bibliometric analysis involves the aggregation of volumes of bibliographic data. The bibliometric method serves two roles; science mapping in an objective manner and performance analysis. Science mapping enables researchers to get the view of intellectual structure and dynamism in the field of research topics (Zupic and Čater, 2015). By performance analysis, the bibliometric method shows the performance of the scientific work of an individual and an institution.

Specifically, a bibliographic method will be used together with co-citation analysis. The co-citation analysis is carried out in the cited articles. By doing so, identification of *the knowledge base* and *the intellectual structure* of research on exit is possible. *The knowledge base* is the set of articles most cited by *the current research*. Meanwhile, the *intellectual structure* refers to the scientific domains of research traditions, influential research topics, composition of disciplines and pattern of the interrelationships (Shafique, 2013). A central assumption of cocitation analysis is that if two or more research articles are cited together, the more likely their contents are related (White and McCain, 1998). The cited articles of *current publications* (observed publications) are the foundations which reflect the fundamental theories, methodological practices and early findings.

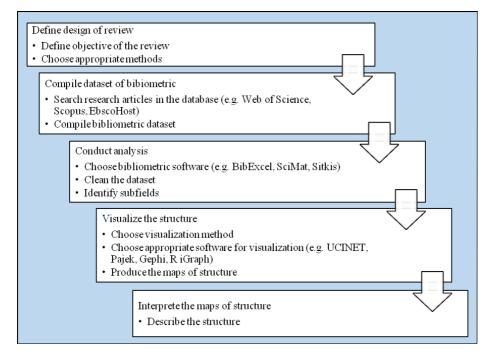
The science mapping with the bibliometric method is conducted as follows. The first step is searching research articles and compiling of bibliometric data. Having a set of articles to be considered for analysis, appropriate bibliometric software is chosen. Some reliable options are BibExcel, SciMat, and Sitkis (for detailed comparison, see Cobo et al., 2011). This study uses BibExcel (Persson et al., 2009) for several reasons: (1) it is the most used performing bibliometric analysis in management and organization studies, (2) easiness to learn, (3) quickness to operate, (4) ability to perform data cleaning, and (5) ability to perform advanced analysis in other programs (Zupic and Čater, 2015). The software is used for cleaning the bibliometric data and identifying subfields within the dataset

For subfields identification, this study employs network analysis (Wasserman and Faust, 1994) which generates a network of scientific fields. Nodes of network portray unit of analysis (e.g. journal articles, authors) meanwhile ties of network show similarity of connections among unit of analysis. This method has gained popularity recently because of its effectiveness and accuracy (Zupic and Čater, 2015).

A further step is visualizing the data which require a software package for the analysis. To name a few are UCINET, Pajek, Gephi and R iGraph. This study utilizes Pajek (Batagelj and Mrvar, 2004) since it offers a number of features and capabilities to visualize large networks (Zupic and Čater, 2015). More importantly, BibExcel and Pajek are compatible.

The final step in science mapping is describing and interpreting the maps of knowledge structure. The steps to conduct science mapping using the bibliometric method is represented in Figure 1.

Figure 1. Flowchart for conducting science mapping with Bibliometric Methods (Source: Zupic, and Čater, 2015).



# 2.2. Searching the Articles

The search for English academic articles was conducted at the beginning of June 2015 using the Web of Science database. The initial terms were "exit" and "entrepreneur" to search articles published in the last six years (2009-2014). The search was extended to the year of 2015 since there had been articles published in online press during 2014 but issues printed in 2015. The search resulted in 81 articles. This result confirms DeTienne et al. (2015) about the limited research on entrepreneurial exit, compared to more well-researched topics such as opportunity recognition (George et al., 2016). After thorough research, this method showed that an extension of search terms was required. The initial orientation to the topic of entrepreneurial exit revealed that the topic conjectures with "survival", "failure", "closure" and "succession". Therefore search terms were extended to the above terms combined with "entrepreneur", "founder" and "firm". The first search resulted in 449 academic articles published between 2009 and 2015. Further, only articles in the areas of business, management and

economics were included. The abstracts of those articles were all scrutinized and a reading of the full article attached to those abstracts was done in order to sort articles which were relevant to the topic of entrepreneurial exit. The set of analysis was narrowed down from 449 articles to 409 articles.

Exclusions were made to the articles which a) were distantly related to entrepreneurial exit, e.g. loan failure prediction, b) had the targeted keywords but did not discuss in detail or were not in the focus of the study, c) focused on survival but did not discuss the exit, d) did not research on entrepreneurial (individual and team) or firm exit, but instead on, e.g., project exit or Strategic Business Unit (SBU) exit, or e) discussed methods comparison on survival or failure prediction. The articles that passed the above screening have been included in the review and met at least one of the following criteria: they offered discussion on the definition of entrepreneurial exit or firm exit, offered insight on the phenomenon of entrepreneurial exit, offered insight on the firm level of exit or offered insight on the entrepreneurial (individual and team) level of exit. The final set of analysis comprised 243 research articles which were used to map the research structure in the area of entrepreneurial exit using the bibliometric analysis. The list of reviewed articles is provided in Appendix 1. Using BibExcel, the dataset was cleaned and analysed. Further, by using Pajek, the network of research on exit was visualized in graphs.

# 2.3. Mapping the Distribution of Articles

Although a limited number of articles have been published solely on the topic of entrepreneurial exit, using the conjunction terms to extend the search has assisted in broadening the map of exit research. Figure 2 illustrates the number of articles found through the extended search with the conjunction terms and the year they were published. What stands out in this figure is the immense number of articles in 2014, compared with those published in other years. This number is contributed by two points; (1) there are eleven outlets out of fifteen listed in Figure 3 which contribute more articles in 2014 than preceding year, and (2) interestingly, there are twenty one outlets which do not have any publications in the period between 2009 and 2013. The more publications in 2014 may be a result of the voices and calls for the need to study entrepreneurial exit in preceding years. For example, DeTienne (2010) voice the importance of exit in the entrepreneurial process. Furthermore, in 2011 the *Journal of Evolutionary Economics* dedicated a special issue on firm and entrepreneurial exit.

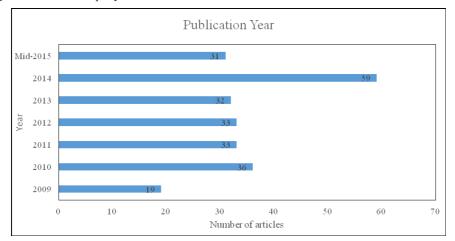


Figure 2. Publications per year

A glance of the most active institutions conducting research on exit, this study reports as follows. Most research on exit is carried out by institutions located in the USA, the United Kingdom, Germany, the Netherlands, Spain, and Sweden. By institution, Erasmus University Rotterdam, Syracuse University, University of Durham, University of Utrecht, Colorado State University and Linköping University are the most active institutions in the field.

It was found that the most active scholars in the field of exit are Dawn R. Detienne, Melissa S. Cardon, Dean A. Shepherd, Joachim Wagner, Karl Wennberg, Johan Wiklund, Mike Wright, Orietta Marsili, Deniz Ucbasaran and Nick Wilson.

In terms of publication outlets, the 243 articles are published in 116 journals scattered among the domains of economic, management, accounting, finance, and regional studies. This number indicates that exit is fragmentally attracted by academic journals. Figure 3 illustrates the list of scientific journals that publish more than three articles about either firm exit or entrepreneurial exit. Most contributions in the period 2009-2015 are in Small Business Economics, Journal of Business Venturing, International Small Business Journal, Industrial and Corporate Change and Entrepreneurship Theory Practice. This shows that research in the field is dominated by scholars in economics and entrepreneurship.

# 2.4. Mapping the Knowledge Base & Intellectual Structure: Bibliometric Analysis

In order to map the *knowledge base* and *intellectual structure* of exit research, the first step is identifying the influential articles, or those most cited, in the current research field. Co-citation analysis is conducted through co-cited publications which might result in numerous articles. Thus, it is necessary to filter publications

in order to analyse datasets to a manageable size and to assure that only cited articles which have enough citation data are used. The citation threshold is certainly more of a subjective than an objective judgement (Zupic and Čater, 2015). This review selected articles which were cited more than 20 times (by June 2015) which resulted in 20 articles, shown in Table 1.

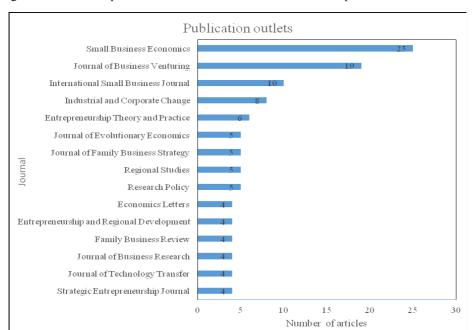


Figure 3. Journals that published more than three articles on exit within period 2009 - middle 2015

These most cited articles form the knowledge base in the field of current exit research. This knowledge base provides us with the opportunity to analyse the theoretical lens being used on exit research.

The top three articles are the knots of three groups of research, depicted by Figures 4, 5 and 6. In the first article, Jovanovic (1982) proposes a selection model about the evolution of industry. The Jovanovic model assumes that efficient firms grow and survive, while the inefficient ones decline, fail and exit from the industry. Meanwhile, Gimeno et al. (1997) propose firm survival by applying a threshold model of performance. The study offered an understanding of a threshold beyond performance, i.e. human capital characteristics of the entrepreneurs. Geroski (1995) focuses on firm entry, however the article also discusses the impact of firm entry on firm exit in the industry.

Table 1	. Most ci	ted a	rticles	in	Entrepreneurial	and	Firm	exit ar	rticles

Number of Citations	Articles
52	Jovanovic B, 1982, V50, P649, Econometrica
40	Gimeno J, 1997, V42, P750, Admin Sci Quart
32	Geroski P, 1995, V13, P421, Int J Ind Organ
29	Headd B, 2003, V21, P51, Small Bus Econ
28	Caves R, 1998, V36, P1947, J Econ Lit
28	Audretsch D, 1995, V77, P97, Rev Econ Stat
26	Bruderl J, 1992, V57, P227, Am Sociol Rev
26	Mata J, 1994, V42, P227, J Ind Econ
25	Audretsch D, 1991, V73, P441, Rev Econ Stat
24	Cox D, 1972, V34, P187, J R Stat Soc B
24	Wennberg K, 2010, V25, P361, J Bus Venturing
24	Dunne T, 1988, V19, P495, Rand J Econ
23	Stinchcombe A, 1965, P142, Hdb Org
22	Shepherd D, 2003, V28, P318, Acad Manage Rev
22	Ericson R, 1995, V62, P53, Rev Econ Stud
22	Hopenhayn H, 1992, V60, P1127, Econometrica
21	Freeman J, 1983, V48, P692, Am Sociol Rev
20	Detienne D, 2010, V25, P203, J Bus Venturing
20	Van Praag C, 2003, V21, P1, Small Bus Econ
20	McGrath R, 1999, V24, P13, Acad Manage Rev

The citation analysis also reveals the most cited journals, shown in Table 2. The Journal of Business Venturing is the most cited journal with 792 citations (by June 2015). Of the most cited journals, the top list is taken up by entrepreneurship and management journals, e.g. Journal of Business Venturing and Strategic Management Journal. Economics outlets (e.g. American Economic Review, Econometrica) also contribute to the development of exit research primarily concerning firm exit.

Further, the identification of subfields is carried out by deploying a Louvain algorithm (Blondel et al., 2008). This method uses network modularity to measure meaningfulness of a network group into communities. Nodes are assigned one by one to divide the community, while the algorithm checks whether adding a node from one community to another one causes a change in the modularity of the community.

A Louvain algorithm was performed using several parameters to define the granularity of the groups. Initially, there were six groups. However, three groups contained less than 3 elements. Therefore, the three groups were treated as outliers. The remaining three groups were then extracted. The intellectual structure was mapped using Pajek, shown by Figures 4, 5 and 6. The three groups

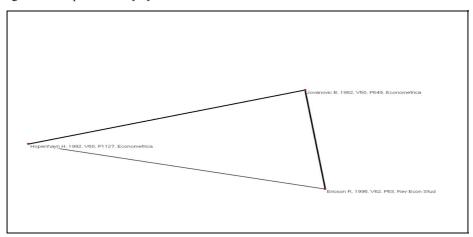
are labelled as industry dynamics (Figure 4), firm exit (Figure 5) and entrepreneurial (individual and team) exit (Figure 6).

Table 2. Most Cited Journals in Entrepreneurial and Firm Exit articles

Citations	Journals
792	Journal of Business Venturing
506	Small Business Economics
489	Strategic Management Journal
487	Family Business Review
447	Entrepreneurship Theory and Practice
310	Academy of Management Review
303	Academy of Management Journal
283	Administrative Science Quarterly
238	American Economic Review
223	Journal of Finance
209	Journal of Small Business Management
194	Management Science
181	Review of Economics & Statistics
179	Journal of Financial Economics
174	International Journal of Industrial Organization
165	Econometrica
152	Journal of Political Economy
152	Research Policy
140	Journal of Management
140	Quarterly Journal of Economics

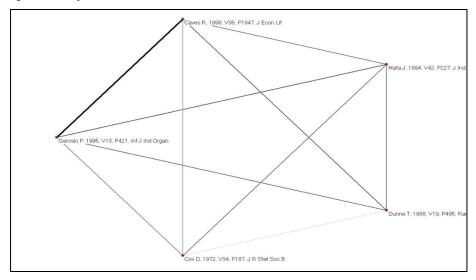
The first group (Figure 4) consists of articles that propose models of industry dynamics. Industry dynamics (firm entry, exit and growth) is modelled using a variety of perspectives and emphases, such as selection and evolution (Jovanovic, 1982), stationary equilibrium (Hopenhayn, 1992) and Markov-perfect Nash equilibrium (Ericson and Pakes, 1995).

Figure 4. Group 1 - Industry dynamics



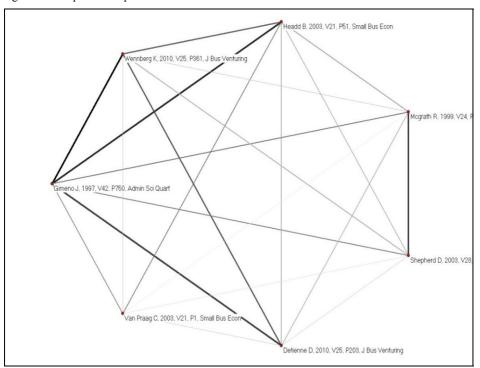
The second group are the seminal works on exit at firm level. Although the work of Cox (1972) is not specifically concerned with the firm, the Cox Proportional Hazard model is most frequently used to investigate the survival of the firm. The other articles deal with the pattern of firm entry and exit (Dunne et al., 1988, Caves, 1998), life duration of new firms across industries (Mata and Portugal, 1994) and the effects of firm entry in the industry by observing firm exit (Geroski, 1995).

Figure 5. Group 2 - Firm exit



Moving from the firm level of analysis, the third group consists of works on the individual exit. The work of Gimeno et al. (1997) can be regarded as a seminal one when investigating personal variables which determine firm exit. Taking a perspective of threshold model, Gimeno et al. (1997) propose that the survival of the firm is a function of the threshold which is determined by the human capital characteristics of the entrepreneurs. While they emphasize on the threshold, Van Praag (2003) focuses on person-specific determinants of firm survival. Van Praag (2003) derives the model from classical theories of business success and failure such as Marshall, Schumpeter and Knight. Given the facts that some businesses are closed while successful, Headd (2003) pioneered the work in the differentiation between the terms business closure and business failure. Yet, exit cannot be detached from "failure" (Coad, 2014). The works of McGrath (1999) and Shepherd (2003) cement the foundation on this stream of entrepreneurial failure.

Figure 6. Group 3 - Entrepreneurial exit



Turning now to the co-citation analysis, the intellectual structure of a research field can be depicted chronologically, shown by Figure 7. This map is produced by partitioning cited documents by publication year. The structure can also be called a reading list for those aiming to get an orientation to the field of exit. The details of the chronological reading list can be found in Appendix 2.

Figure 7 shows that the root of exit research can be traced back to the article of Stinchcombe (1965) which coins the term "liability of newness" explaining

why young firms face the highest death rate within early stages. Further, Freeman et al. (1983) empirically investigate the liability of newness. Regarding firm exit and industry dynamics, the work of Cox (1972) sets the foundation on procedures for regression analysis of failure rate or hazard function. The newest seminal works on the reading list are the articles dealing with entrepreneurial exit. Wennberg et al. (2010) and DeTienne (2010) set the foundation of entrepreneurial exit and define the term "entrepreneurial exit" differentiating with the term "firm exit".

Stinchcombe A, 1965, P142, Hdb Org Dox D, 1972, V34, P187, J R Stat Soc B Iovanovic B. 1982, V50, P649, Econometrica eeman J, 1983, V48, P692, Am Sociol Rev V19, P495, Rand J Econ udretsch D, 1991, V73, P441, Rev Econ Stat ruderl J, 1992, V57, P227, Am Sociol Rev lata J, 1994, V42, P227, J Ind Econ Audretsch D. 1995, V77, P97, Rev Ecor Ericson R. 1995, V62, P53, Rev Econ Stud Gimeno J. 1997, V42, P750, Admin Sci Quart . Caves R, 1998, V36, P1947, J Econ Lit ograth R, 1999, V24, P13, Acad Manage Rev eadd B 2003 V21 P51 Small Shepherd D. 2003, V28, P318, Acad M an Praag C, 2003, V21, P1, Small Bus Eco Wennberg K, 2010, V25, P361, J Bus Venturing Detienne D, 2010, V25, P203, J Bus Venturing

Figure 7. Chronological reading list of articles on exit

#### 3. Drawing Insights

To complement the knowledge structure on entrepreneurial and firm exit, this section is devoted to analyzing the 243 research articles and discuss the insights regarding two topics, namely the level of analysis and theoretical perspectives. From the bibliometric analysis, research on entrepreneurial exit has been scattered in Economics, Management and Entrepreneurship. Firm level analysis is carried out within the field of Economics (e.g. Bhattacharjee et al., 2009,

Marques and Brandao, 2010), while individual level analysis is examined within the field of Entrepreneurship and Management (Salvato et al., 2010, Rauch and Rijsdijk, 2013). In terms of the individual exiting his/her entrepreneurial team, research is conducted in the field of management which also overlaps with entrepreneurship. In the management field, team exit is discussed primarily in relation with CEO exit and venture capital, for example the work of Loane et al. (2014).

#### 3.1. Research Streams and Level of Analysis

Research on the exit from entrepreneurship has received less attention compared to the entry into entrepreneurship (DeTienne, 2010). Yet, in the last years more scientific endeavours have been published in the field of entrepreneurial exit (DeTienne and Wennberg, 2016). Research on entrepreneurial exit can be divided into three streams. The first one deals primarily with large and publicly-traded companies by utilizing statistical data from the stock market. Most studies examine the relationship between financial firm performance and how firms exit (e.g. Fortune and Mitchell, 2012, Huynh et al., 2012). The second stream is concerned with the exit of nascent entrepreneurs, utilizing data of the Panel Study of Entrepreneurial Dynamics (PSED) (e.g. Reynolds et al., 2004, Yusuf, 2012) and Global Entrepreneurship Monitor (GEM) (e.g. Hessels et al., 2011). This kind of research mostly analyses the discontinuance of nascent entrepreneurs who are stopping an entrepreneurial process during the pre- and start-up phase. Thirdly, attention is given to privately-owned firms (e.g. Gimeno et al., 1997, Wennberg et al., 2010). The studies in this stream cover small and large firms and focus on the relationship between the exit of firms, human capital (e.g. education) and firm characteristics (e.g. legal form). Not only do they study the actual exit, but this group of researchers also analyses the exit intention or exit strategy. However, little attention is given to young firms even though 50% of them exit by ceasing operations within the first five years. This section follows the third stream of exit research.

Entrepreneurship can be understood through different levels of analysis that study the individual, firm, region, industry and nation (Davidsson and Wiklund, 2001). The firm has often been the object of study when it comes to exit. Scholars define firm exit as the exit of the firm from the market (Anderson and Tushman, 2001, Carree et al., 2011) due to the closure or liquidation (Bates, 2005), the discontinuance of the firm's operation (Carter et al., 1997), the bankruptcy (Gimeno et al., 1997), or the merger and acquisition (Balcaen et al., 2012). Firm exit can also be observed based on the exit of the business or firm from a region, regardless of the status of a firm administered at the governmental office (Pe'er and Vertinsky, 2008). Firms that do not appear in the database in the following

year are cited as an exited firm, and are often included in the administrative data used by researchers.

At the individual level of analysis, there is a variety of definitions for entrepreneurial or individual exit. For example, some definitions for entrepreneurial exit include the exit of the individual from self-employment (Van Praag, 2003), entrepreneurial career (Stam et al., 2010), the firm that entrepreneurs have created (DeTienne, 2010), start-up phase (Delmar and Shane, 2003) and entrepreneurial team (Ucbasaran et al., 2003). Most studies use a broad definition of "entrepreneurs" encompassing those individuals who own firms, regardless of their participation and do not limit the term to those who have founded, acquired or inherited their firm. Wennberg (2011) suggests that a researcher should approach the complex phenomenon of entrepreneurship by utilizing a mixed level of analysis considering that a firm cannot be detached from its entrepreneur.

#### 3.2. Theoretical Perspectives

Looking at the intellectual structure (Figure 7), a seminal study on firm and entrepreneurial exit is the work of Stinchcombe (1965) that highlights the liability of newness. It is followed by the concept of liability of smallness, proposed by Hannan and Freeman (1984). The concepts of liability of newness and smallness premise that new firms face a set of problems with their status as newly founded entities, compared with older and more established firms. The age and size are two factors argued to moderate the firm entry and exit mechanism within the industry. Building on these assumptions, the Population Ecology is a "popular" approach to explain the pattern of firm entry and exit, oftentimes deploying survival analysis (e.g. Falk, 2013, Kelly et al., 2015) and hazard-rate models (e.g. Holmes et al., 2010, Facanha et al., 2013) for empirical studies. For the firm exit in a region, some researchers utilize the spatial agglomeration model (e.g. Cainelli et al., 2014, Buenstorf et al., 2015) and the equilibrium model (e.g. Atkeson and Burstein, 2010, Spulber, 2010).

Besides age and size as determinants of exit, the characteristics of entrepreneurs and human resources of the firm have been proven to determine firm performance and survival (Van Praag, 2003, Colombo et al., 2004). The human capital theory is deployed to investigate some areas, for example the exit propensity (Van Teeffelen and Uhlaner, 2013), the survival of newly founded firms (Rauch and Rijsdijk, 2013) and the survival of new high-technology firms (Gimmon and Levie, 2010). Scholars have also attempted to couple other theoretical lenses with human capital theory to better understand the determinants of exit, e.g. psychological well-being (Patel and Thatcher, 2014) and signalling theory (Gimmon and Levie, 2010).

The perspective of social capital has also appeared to be a theoretical lens that helps to understand the determinants of exit. Social capital refers to the components of social structures in the society as well as the resources placed in social networks. The study of Hamböck (2014) reveals that a stronger social network is associated with a lower likelihood to exit. The concept of social capital is also found in the field of family business (Liu et al., 2015).

The decision to exit from entrepreneurial activity has been investigated in a number of areas (Shepherd et al., 2015). Wennberg et al. (2010) developed a conceptual model on the decision to exit by utilizing expected utility framework and prospect theory. Expected utility hypothesizes that entrepreneurs make decisions with regard to choices that have uncertain outcomes by taking the highest returns on their human capital (Becker, 1964). Yet, the assumption of utility maximization does not hold in every case. Prospect theory argues that economic actors are rationally bounded by the evaluation of gains and losses of their risky prospects, and that they rely on heuristic shortcuts with an individual reference point (Kahneman and Tversky, 1979). A perspective relating to the reference point is the threshold model. This perspective has been applied in investigating whether exit or survival is determined by the economic performance of the firm (Gimeno et al., 1997), whether different intended paths of exit are determined by founder experience (DeTienne and Cardon, 2012) or whether exit strategies are determined by socioemotional wealth in a family firm (DeTienne and Chirico, 2013).

With regard to the condition of exit, significant attention has been given to failed exit. At the individual level, scholars borrow theories of grief (Shepherd, 2009), appraisal theory (Jenkins et al., 2014), entrepreneurial learning (Cope, 2011), and mental model theory (Wood et al., 2014). Almost all these perspectives assist scholars in understanding personal implications of entrepreneurial failure, which is assumed to have either encouraging implications or devastating ones.

Failed exit is often associated with emotional distress and financial loss (Shepherd, 2003); Shepherd (2009) analogizes a loss of a firm to the loss of a loved one, which involves grief. Grief is defined as a negative emotional response and negative emotions felt by entrepreneurs as a response to the failure of their exit. The responses to this loss can be analysed using appraisal theory. The theory posits that the emotional reaction of an individual to an experience is determined by his or her individual and subjective evaluation of the experience (Smith and Lazarus, 1993).

While grief and appraisal theory deal with the emotion of failure, mental model theory and entrepreneurial learning put emphasis on the learning from failed exit. Mental model theory posits that individuals have mechanisms that process information and generate understanding of their current situation by constructing cognitive models or images of the acquired information and cast those models into possible future states (Wood et al., 2014). Entrepreneurial

learning serves an interface between the field of entrepreneurship and organizational learning. The perspective is helpful to understand the specific process of learning such as the learning process from failure (Cope, 2011), learning sequence (Bingham and Davis, 2012) and ability to cast failure experience into new activity (Yamakawa and Cardon, 2015).

Turning to the "classical" organizational theories (e.g. resource based theory, evolutionary theory), past research has benefited from those theories in understanding some aspects of exit. The resource based theory, which assumes that resources are critical for the performance of the firms (Barney, 1991), has shed light on the ways that firms exit. Although some studies show that the ways to exit and the outcome are predicted by resources (e.g. Li et al., 2010, Van Teeffelen and Uhlaner, 2013), the theory does not explain which specific resources correspond to a specific way to exit.

The resource dependency theory, which assumes that a firm's adaptation to environmental uncertainty is through managing resource flows and interdependencies, sheds light on another aspect of resources when exiting (Pfeffer and Salancik, 1978). The decision about the way to exit can be analysed through a firm's dependence on its resources, for example mergers and acquisitions are oftentimes chosen in order to reduce a firm's dependencies (Harkins and Forster-Holt, 2014).

Turning to the evolutionary theory or approach, this theory is concerned with how internal variations within firms are organized in order to adapt to the changing environment and the circumstances under which arrangements lead to survival and death, i.e. selected out from environment (Aldrich, 1999). For example, the work of Fortune and Mitchell (2012) demonstrated how managerial and functional capabilities affect the ways to exit (selected out from environment).

### 4. Outlining Directions for Future Research

Having conducted a literature review on entrepreneurial exit, some suggestions for future research are drawn. The findings have shown that the current state of exit research is not exhaustive. This section is set out to provide future research suggestions in the field of entrepreneurship.

To make suggestions for future research systematically, the framework instituted by Shane (2012) relating to the focus of entrepreneurship research is borrowed. Shane (2012) suggests that future entrepreneurship examinations may focus on (1) a lower level than the firm level of analysis, (2) entrepreneur's or entrepreneurial team's choices relative to other alternatives, (3) efforts to identify and develop opportunities and (4) outcomes beyond business performance.

First, regarding the level of analysis, firm exit is understood and has been well researched in the field. However, individual and entrepreneurial team exit call for

further exploration (Ucbasaran et al., 2003). Future contributions may come from research that explores beyond the human capital factors of the entrepreneurs as determining factors to exit. Also, researchers should investigate how entrepreneurs cast their past entrepreneurial experience, including an exit, to the new scene of entrepreneurial activity.

Another area in need of research is the imprinting effects of team composition on the performance of the firm after one or more team members exit from the firms they have founded. An initial entrepreneurial team has a shared vision, motivation, knowledge and resources to create a new venture (Wasserman, 2008). An exit of one member might disrupt the configurations of the knowledge and resources (Cunha, 2007) held by the team. Furthermore, the exit of a team member plays a critical role (Piva and Rossi-Lamastra, 2017) since firm performance of a new venture is related to the social capital of the entrepreneurial team (Bamford et al., 2006).

Future contribution is likely to come from the mixed level of analysis such as with regards to the constructs of entrepreneurial orientation. Entrepreneurial orientation has been one of the most established approaches to understand the phenomena in entrepreneurship (Wales, 2016). Yet, the constructs have not been exhaustively examined in the case of entrepreneurial exit. Past studies examine entrepreneurial orientation primarily in the case of failure (Wiklund and Shepherd, 2011) and survival (e.g. Box and Gratzer, 2017). Future research might seek to answer how firm's entrepreneurial orientation influences an entrepreneur's intention to exit and ways to exit.

Second, concerning decision making, the choice of one alternative route to exit over other ones should be explored more often (e.g. Wennberg et al., 2010, DeTienne et al., 2015). Entrepreneurs decide to exit due to calculative, alternative and normative reasons (DeTienne, 2010). Upcoming research may contribute to a better understanding of the choice by moving beyond those reasons such as how entrepreneurs' emotions influence the decision making to exit, and how those reasons relate to the subsequent activities after exit and the impact of social ties to the decision to exit (Fei et al., 2017).

Further, entrepreneurs are rationally bounded (Simon, 1955) and thereby exposed to biases, i.e. overconfidence, optimistic bias and distrust (Gudmundsson and Lechner, 2013). Future research is likely to make contributions by answering following questions such as what biases are involved in the decision making to exit, or how these biases affect the ways to exit.

Third, researchers have a good understanding on the entrepreneurial process in general, yet the process to exit is less understood. This process to exit is complex, and goes beyond the decision to exit and to persist. Entrepreneurs may exit via several ways, but future contributions may come to a better understanding on the process of evaluating the options to exit and how the process of exit is carried out. The perspective of change would also help to analyse the change and process before exit (Parastuty et al., 2015). Specifically, contributions may also

come from investigating the role of entrepreneurial orientation in the process to exit. Entrepreneurs and entrepreneurial firms would like to shape the distribution of their outcomes by limiting potential losses and increasing potential gains (McGrath, 1999). This process may lead to decisions which ways to exit. The research endeavour can investigate whether the relationship between EO and the process of exit (distributing outcomes) depend on other factors, such as attitudes towards failure.

Fourth, firm performance is arguably critical to the decision to exit (Gimeno et al., 1997), yet associating poor firm performance with exit should be exercised with caution. Exit can happen successfully and unsuccessfully (Headd, 2003) regardless whether the firms remain in the market or vanish (Coad, 2014). In the more successful case, entrepreneurs may exit voluntarily via closing because they have better options to pursue. In the other case, entrepreneurs are forced to exit (involuntarily) via closing by the bank or other creditors. Future research should move beyond the firm (financial) performance, and concentrate on the entrepreneurs' satisfaction regarding their entrepreneurial activity (especially exit) and how the satisfaction may influence their re-entry into entrepreneurship.

While the impacts of exit on the industry and region have been discussed extensively (e.g. Huiban, 2011, Cainelli et al., 2014, Buenstorf et al., 2015), the impact of exit experience at the individual level is an area of exploration. Future research should investigate how the experience of exit is made easier because of the subsequent entrepreneurial activity. Entrepreneurial learning, as a theoretical perspective, should be used to understand the phenomenon of exit, especially when the experience of exit is contextualized into different circumstances and can be useful for further study.

#### 5. Conclusions

This paper reviewed research on entrepreneurial exit utilizing bibliometric analysis and a qualitative approach of reviewing. The results show that the number of journal articles on exit has risen between 2009 and 2015. Approximately seventy percent of studied articles discuss firm exit which dominate the landscape in the early period of study. Yet, entrepreneurial exit has started to intensify in recent years.

Of the 243 academic articles on firm and entrepreneurial exit, the co-citation analysis reveals 20 articles which received more than 20 citations. The 20 articles can be regarded as the seminal articles in the field and have become the must-read articles for researchers entering the field though all of them offer insights into the topic of firm and entrepreneurial exit.

This qualitative review carried out an analysis of the theoretical perspectives that have been used in past research. These theoretical perspectives help to orient the researcher when it comes to the phenomena of firm and entrepreneurial exit.

Based on the findings of the bibliometric analysis and the qualitative analysis, some suggestions for future research were drawn, but the endeavour of this review does have some limitations.

The use of broader search terms i.e. exit and failure, rather than solely using the term "entrepreneurial exit" led to articles falling outside the focus of the study. This decision was made due to the intersection of the under-researched topic of entrepreneurial exit and the other terms chosen by the researcher. A profound overview of prominent literatures discussing exit of firms and entrepreneurs, which apparently intersect with other topics, is useful to understand the research landscape.

Furthermore, a drawback of bibliometric analysis is that its quantitative approach does not capture in what context and with what intentions authors refer to other works. The network structures provided by bibliometric analysis is based on the researchers defining the number of data reduction and threshold, which excludes potential research useful for study. Therefore, this method cannot be accounted solely to review past research, and should be combined with more subjective (qualitative) approaches.

Nevertheless, we believe the present paper makes an important contribution to current knowledge in the field of exit and can be used by researchers as a valuable overview of the present state of affairs in exit research.

#### References:

- Aldrich, H. E. (1999). Organizations Evolving. London: Sage Publications.
- Anderson, P. and Tushman, M. L. (2001). "Organizational Environments and Industry Exit: The Effects of Uncertainty, Munificence and Complexity", *Industrial and Corporate Change* 10(3): 675-711.
- Åström, F., Danell, R., Larsen, B. and Schneider, J. W. (Eds.) (2009). *Celebrating Scholarly Communication Studies: A Festschrift for Olle Persson at his 60th Birthday*, International Society for Scientometrics and Informetrics.
- Atkeson, A. and Burstein, A. T. (2010). "Innovation, Firm Dynamics, and International Trade", Journal of Political Economy 118(3): 433-484.
- Balcaen, S., Manigart, S., Buyze, J. and Ooghe, H. (2012). "Firm exit after distress: Differentiating between bankruptcy, voluntary liquidation and M&A", Small Business Economics 39(4): 949-975
- Bamford, C. E., Bruton, G. D. and Hinson, Y. L. (2006). "Founder/Chief Executive Officer Exit: A Social Capital Perspective of New Ventures", *Journal of Small Business Management* 44(2): 207-220.
- Barney, J. (1991). "Firm Resources and Sustained Competitive Advantage", *Journal of Management* 17(1): 99-120.
- Batagelj, V. and Mrvar, A. (2004). "Pajek— Analysis and Visualization of Large Networks". In: M. Jünger and P. Mutzel (Eds.), *Graph Drawing Software*. Berlin: Springer-Verlag, pp. 77-103.
- Bates, T. (2005). "Analysis of young, small firms that have closed: Delineating successful from unsuccessful closures", *Journal of Business Venturing* 20(3): 343-358.
- Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. Chicago, IL: Chicago University Press.
- Bhattacharjee, A., Higson, C., Holly, S. and Kattumanw, P. (2009). "Macroeconomic Instability and Business Exit: Determinants of Failures and Acquisitions of UK Firms", *Economica* 76(301): 108-131
- Bingham, C. B. and Davis, J. P. (2012). "Learning Sequences: Their Existence, Effect, and Evolution", *Academy of Management Journal* 55(3): 611-641.
- Blondel, V. D., Guillaume, J.-L., Lambiotte, R. and Lefebvre, E. (2008). "Fast unfolding of communities in large networks", *Journal of Statistical Mechanics: Theory and Experiment* 2008(10): P10008.
- Box, M. and Gratzer, K. (2017). "New-Firm Survival in Sweden: New Methods and Results", *International Review of Entrepreneurship* 15(4): 431-464.
- Buenstorf, G., Fritsch, M. and Medrano, L. F. (2015). "Spatial Concentration of Industries and New Firm Exits: Does this Relationship Differ between Exits by Closure and by M&A?", *Regional Studies* 49(1): 59-75.
- Cainelli, G., Montresor, S. and Vittucci Marzetti, G. (2014). "Spatial agglomeration and firm exit: A spatial dynamic analysis for Italian provinces", *Small Business Economics* 43(1): 213-228.
- Carree, M. A., Verheul, I. and Santarelli, E. (2011). "Sectoral patterns of firm exit in Italian provinces", *Journal of Evolutionary Economics* 21(3): 499-517.
- Carter, N. M., Williams, M. and Reynolds, P. D. (1997). "Discontinuance among new firms in retail: The influence of initial resources, strategy, and gender", *Journal of Business Venturing* 12(2): 125-145.
- Caves, R. E. (1998). "Industrial organization and new findings on the turnover and mobility of firms", *Journal of Economic Literature* 36(4): 1947-1982.
- Cefis, E. and Marsili, O. (2011). "Revolving doors: Entrepreneurial survival and exit", *Journal of Evolutionary Economics* 21(3): 367-372.
- Coad, A. (2014). "Death is not a success: Reflections on business exit", *International Small Business Journal* 32(7): 721-732.
- Cobo, M. J., Lopez-Herrera, A. G., Herrera-Viedma, E. and Herrera, F. (2011). "Science mapping software tools: Review, analysis, and cooperative study among tools", *Journal of the American Society for Information Science and Technology* 62: 1382-1402.
- Colombo, M. G., Delmastro, M. and Grilli, L. (2004). "Entrepreneurs' human capital and the startup size of new technology-based firms", *International Journal of Industrial Organization* 22(8–9): 1183-1211.

- Coombes, P. H. and Nicholson, J. D. (2013). "Business models and their relationship with marketing: A systematic literature review", *Industrial Marketing Management* 42(5): 656-664.
- Cope, J. (2011). "Entrepreneurial learning from failure: An interpretative phenomenological analysis", *Journal of Business Venturing* 26(6): 604-623.
- Cox, D. R. (1972). "Regression Models and Life-Tables", Journal of the Royal Statistical Society 34(2): 187-220.
- Cressy, R. and Bonnet, J. (2018). "The long-run impact of bank lending constraints and other economically important factors on SME failure", *International Review of Entrepreneurship*, 16(3): 289-328.
- Cunha, M. P. (2007). "Entrepreneurship as decision-making: Rational, intuitive and improvisational approaches", *Journal of Enterprising Culture* 15(1): 1-20.
- Davidsson, P. and Wiklund, J. (2001). "Levels of Analysis in Entrepreneurship Research: Current Research Practice and Suggestions for the Future", *Entrepreneurship: Theory & Practice* 25(4): 81-100.
- Delmar, F. and Shane, S. (2003). "Does business planning facilitate the development of new ventures?", *Strategic Management Journal* 24(12): 1165-1185.
- Delmar, F. and Shane, S. (2004). "Legitimating first: organizing activities and the survival of new ventures", *Journal of Business Venturing* 19(3): 385-410.
- DeTienne, D. R. (2010). "Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development", *Journal of Business Venturing* 25(2): 203-215.
- DeTienne, D. R. and Cardon, M. S. (2012). "Impact of founder experience on exit intentions", *Small Business Economics* 38(4): 351-374.
- DeTienne, D. R. and Chirico, F. (2013). "Exit Strategies in Family Firms: How Socioemotional Wealth Drives the Threshold of Performance", *Entrepreneurship: Theory & Practice* 37(6): 1297-1318.
- DeTienne, D. and Wennberg, K. (2016). "Studying exit from entrepreneurship: New directions and insights", *International Small Business Journal* 34(2): 151-156.
- DeTienne, D. R., McKelvie, A. and Chandler, G. N. (2015). "Making sense of entrepreneurial exit strategies: A typology and test", *Journal of Business Venturing* 30(2): 255-272.
- Dunne, T., Roberts, M. J. and Samuelson, L. (1988). "Patterns of firm entry and exit in U.S. manufacturing industries", *The RAND Journal of Economics* 19(4): 495-515.
- Ericson, R. and Pakes, A. (1995). "Markov-Perfect Industry Dynamics: A Framework for Empirical Work", *The Review of Economic Studies* 62(1): 53-82.
- Facanha, L. O., Resende, M., Cardoso, V. and Schroder, B. H. (2013). "Survival of new firms in the Brazilian franchising segment: an empirical study", *Service Industries Journal* 33(11): 1089-1102.
- Falk, M. (2013). "A survival analysis of ski lift companies", Tourism Management 36: 377-390.
- Fei, Z., Katrin, B.-L. and Dan Kai, H. (2017). "To leave or not? The impact of family support and cognitive appraisals on venture exit intention", *International Journal of Entrepreneurial Behavior & Research* 23(3): 566-590.
- Fortune, A. and Mitchell, W. (2012). "Unpacking Firm Exit at the Firm and Industry Levels: The Adaptation and Selection of Firm Capabilities", *Strategic Management Journal* 33(7): 794-819.
- Frank, H. and Hatak, I. (2014). "Doing a research literature review". In: A. Fayolle and M. Wright (Eds.), *How to Get Published in the Best Entrepreneurship Journals: A Guide to Steer Your Academic Career*, Cheltenham, UK: Edward Elgar, pp. 94-117.
- Freeman, J., Carroll, G. R. and Hannan, M. T. (1983). "The Liability of Newness: Age Dependence in Organizational Death Rates", *American Sociological Review* 48(5): 692-710.
- George, N. M., Parida, V., Lahti, T. and Wincent, J. (2016). "A systematic literature review of entrepreneurial opportunity recognition: Insights on influencing factors", *International Entrepreneurship and Management Journal* 12(2): 309-350.
- Geroski, P. A. (1995). "What do we know about entry?" *International Journal of Industrial Organization* 13(4): 421-440.
- Gimeno, J., Folta, T. B., Cooper, A. C. and Woo, C. Y. (1997). "Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms", *Administrative Science Quarterly* 42(4): 750-783.

- Gimmon, E. and Levie, J. (2010). "Founder's human capital, external investment, and the survival of new high-technology ventures", *Research Policy* 39(9): 1214-1226.
- Grant, M. J. and Booth, A. (2009). "A typology of reviews: An analysis of 14 review types and associated methodologies", *Health Information & Libraries Journal* 26(2): 91-108.
- Gudmundsson, S. V. and Lechner, C. (2013). "Cognitive biases, organization, and entrepreneurial firm survival", *European Management Journal* 31(3): 278-294.
- Hamböck, C. (2014). "Entrepreneurial exit in the context of process and social ties among cofounders". Paper presented at the 4th International Workshop on Entrepreneurship, Culture, Finance and Economic Development (ECFED), Klagenfurt, Austria.
- Hannan, M. T. and Freeman, J. (1984). "Structural Inertia and Organizational Change", *American Sociological Review* 49(2): 149-164.
- Harkins, J. and Forster-Holt, N. (2014). "Resource Dependence and the Exits of Young Firms", Entrepreneurship Research Journal 4(4): 323-349.
- Headd, B. (2003). "Redefining business success: Distinguishing between closure and failure", *Small Business Economics* 21(1): 51-61.
- Hessels, J., Grilo, I., Thurik, R. and Zwan, P. (2011). "Entrepreneurial exit and entrepreneurial engagement", *Journal of Evolutionary Economics* 21(3): 447-471.
- Holmes, P., Hunt, A. and Stone, I. (2010). "An analysis of new firm survival using a hazard function", *Applied Economics* 42(2): 185-195.
- Hopenhayn, H. A. (1992). "Entry, Exit, and Firm Dynamics in Long Run Equilibrium", *Econometrica* 60(5): 1127-1150.
- Huiban, J. P. (2011). "The spatial demography of new plants: urban creation and rural survival", Small Business Economics 37(1): 73-86.
- Huynh, K. P., Petrunia, R. J. and Voia, M. (2012). "Duration of new firms: The role of startup financial conditions, industry and aggregate factors", *Structural Change and Economic Dynamics* 23(4): 354-362.
- Jenkins, A. S., Wiklund, J. and Brundin, E. (2014). "Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience", *Journal of Business Venturing* 29(1): 17-33.
- Jovanovic, B. (1982). "Selection and the Evolution of Industry", Econometrica 50(3): 649-670.
- Kahneman, D. and Tversky, A. (1979). "Prospect Theory: An Analysis of Decision under Risk", *Econometrica* 47(2): 263-291.
- Kelly, R., Brien, E. O. and Stuart, R. (2015). "A long-run survival analysis of corporate liquidations in Ireland", *Small Business Economics* 44(3): 671-683.
- Li, S. L., Shang, J. and Slaughter, S. A. (2010). "Why Do Software Firms Fail? Capabilities, Competitive Actions, and Firm Survival in the Software Industry from 1995 to 2007", Information Systems Research 21(3): 631-654.
- Liu, C. W., Eubanks, D. L. and Chater, N. (2015). "The weakness of strong ties: Sampling bias, social ties, and nepotism in family business succession", *Leadership Quarterly* 26(3): 419-435.
- Loane, S., Bell, J. and Cunningham, I. (2014). "Entrepreneurial founding team exits in rapidly internationalising SMEs: A double edged sword", *International Business Review* 23(2): 468-477
- Marques, A. and Brandao, A. (2010). "Is exit a firm failure? Facts and theory." *Acta Oeconomica* 60(4): 405-426.
- Mata, J. and Portugal, P. (1994). "Life duration of new firms", *Journal of Industrial Economics* 42(3): 227-245.
- McGrath, R. G. (1999). "Falling forward: Real options reasoning and entrepreneurial failure", *Academy of Management Review* 24(1): 13-30.
- Parastuty, Z., Schwarz, E., Breitenecker, R. J. and Harms, R. (2015). "Organizational change: A review of theoretical conceptions that explain how and why young firms change", *Review of Managerial Science* 9(2): 241-259.
- Patel, P. C. and Thatcher, S. M. B. (2014). "Sticking It Out: Individual Attributes and Persistence in Self-Employment", *Journal of Management* 40(7): 1932-1979.
- Pe'er, A. and Vertinsky, I. (2008). "Firm exits as a determinant of new entry: Is there evidence of local creative destruction?", *Journal of Business Venturing* 23(3): 280-306.

- Persson, O., Danell, R. and Schneider, J. W. (2009). "How to use Bibexcel for various types of bibliometric analysis". In: F. Astrom, R. Danell, B. Larsen and J. W. Schneider (Eds.), *Celebrating Scholarly Communication Studies*, International Society for Scientometrics and Informetrics, pp. 9-24.
- Pfeffer, J. and Salancik, G. R. (1978). The External Control of Organizations. A Resource Dependence Perspective. London: Harper and Row.
- Piva, E. and Rossi-Lamastra, C. (2017). "Should I sell my shares to an external buyer? The role of the entrepreneurial team in entrepreneurial exit", *International Small Business Journal* 35(6): 767-784.
- Ramos-Rodríguez, A.-R. and Ruíz-Navarro, J. (2004). "Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal, 1980–2000", Strategic Management Journal 25(10): 981-1004.
- Rauch, A. and Rijsdijk, S. A. (2013). "The Effects of General and Specific Human Capital on Long-Term Growth and Failure of Newly Founded Businesses", *Entrepreneurship Theory and Practice* 37(4): 923-941.
- Reynolds, P. D., Carter, N. M., Gartner, W. B. and Greene, P. G. (2004). "The Prevalence of Nascent Entrepreneurs in the United States: Evidence from the Panel Study of Entrepreneurial Dynamics", *Small Business Economics* 23(4): 263-284.
- Salvato, C., Chirico, F. and Sharma, P. (2010). "A farewell to the business: Championing exit and continuity in entrepreneurial family firms", *Entrepreneurship & Regional Development* 22(3/4): 321-348.
- Shafique, M. (2013). "Thinking inside the box? Intellectual structure of the knowledge base of innovation research (1988–2008)", *Strategic Management Journal* 34(1): 62-93.
- Shane, S. (2012). "Reflections On The 2010 AMR Decade Award: Delivering On The Promise Of Entrepreneurship As A Field Of Research", *Academy of Management Review* 37(1): 10-20.
- Shepherd, D. A. (2003). "Learning from business failure: Propositions of grief recovery for the self-employed", *Academy of Management Review* 28(2): 318-328.
- Shepherd, D. A. (2009). "Grief recovery from the loss of a family business: A multi- and meso-level theory", *Journal of Business Venturing* 24(1): 81-97.
- Shepherd, D. A., Williams, T. A. and Patzelt, H. (2015). "Thinking About Entrepreneurial Decision Making: Review and Research Agenda", *Journal of Management* 41(1): 11-46.
- Simon, H. A. (1955). "A Behavioral Model of Rational Choice", *The Quarterly Journal of Economics* 69(1): 99-118.
- Smith, C. A. and Lazarus, R. S. (1993). "Appraisal components, core relational themes, and the emotions", *Cognition and Emotion* 7(3-4): 233-269.
- Spulber, D. F. (2010). "Competition among entrepreneurs", *Industrial and Corporate Change* 19(1): 25-50.
- Stam, E., Thurik, R. and Van der Zwan, P. (2010). "Entrepreneurial exit in real and imagined markets", *Industrial and Corporate Change* 19(4): 1109-1139.
- Stinchcombe, A. L. (1965). "Social Structure and Organizations". In: J. G. March (Ed.), *Handbook of Organizations*. Chicago, IL: Rand McNally, pp. 142-193.
- Tranfield, D., Denyer, D. and Smart, P. (2003). "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review", *British Journal of Management* 14(3): 207-222.
- Ucbasaran, D., Lockett, A., Wright, M. and Westhead, P. (2003). "Entrepreneurial Founder Teams: Factors Associated with Member Entry and Exit", *Entrepreneurship: Theory & Practice* 28(2): 107-127.
- Ucbasaran, D., Shepherd, D. A., Lockett, A. and Lyon, S. J. (2013). "Life After Business Failure: The Process and Consequences of Business Failure for Entrepreneurs", *Journal of Management* 39(1): 163-202.
- Üsdiken, B. and Pasadeos, Y. (1995). "Organizational Analysis in North America and Europe: A Comparison of Co-citation Networks", *Organization Studies* 16(3): 503-526.
- Van Praag, C. M. (2003). "Business Survival and Success of Young Small Business Owners", *Small Business Economics* 21(1): 1-17.

- Van Teeffelen, L. and Uhlaner, L. M. (2013). "Firm Resource Characteristics and Human Capital as Predictors of Exit Choice: An Exploratory Study of SMEs", Entrepreneurship Research Journal 3(1): 84-108.
- Vogel, R. and Güttel, W. H. (2013). "The Dynamic Capability View in Strategic Management: A Bibliometric Review", *International Journal of Management Reviews* 15(4): 426-446.
- Wales, W. J. (2016). "Entrepreneurial orientation: A review and synthesis of promising research directions", *International Small Business Journal* 34(1): 3-15.
- Wasserman, N. (2008). "The founders dilemma", Harvard Business Review 86(2): 102-109.
- Wasserman, S. and Faust, K. (1994). Social Network Analysis: Methods and Applications. Cambridge, UK: Cambridge University Press.
- Wennberg, K. (2011). "Exit". In: L. P. Dana (Ed.), World Encyclopedia of Entrepreneurship, Cheltenham, UK: Edward Elgar, pp. 170-177.
- Wennberg, K. and DeTienne, D. R. (2014). "What do we really mean when we talk about 'exit'? A critical review of research on entrepreneurial exit", *International Small Business Journal* 32(1): 4-16.
- Wennberg, K., Wiklund, J., DeTienne, D. R. and Cardon, M. S. (2010). "Reconceptualizing entrepreneurial exit: Divergent exit routes and their drivers", *Journal of Business Venturing* 25(4): 361-375.
- White, H. D. and McCain, K. W. (1998). "Visualizing a Discipline: An Author Co-Citation Analysis of Information Science, 1972-1995", Journal of the American Society for Information Science 49(4): 327-355.
- Wiklund, J. and Shepherd, D. A. (2011). "Where to From Here? EO-as-Experimentation, Failure, and Distribution of Outcomes", *Entrepreneurship: Theory & Practice* 35(5): 925-946.
- Wood, M. S., McKelvie, A. and Haynie, J. M. (2014). "Making it personal: Opportunity individuation and the shaping of opportunity beliefs", *Journal of Business Venturing* 29(2): 252-272.
- Yamakawa, Y. and Cardon, M. S. (2015). "Causal ascriptions and perceived learning from entrepreneurial failure", *Small Business Economics* 44(4): 797-820.
- Yusuf, J.-E. (2012). "A tale of two exits: Nascent entrepreneur learning activities and disengagement from start-up", *Small Business Economics* 39(3): 783-799.
- Zhou, H. and Van der Zwan, P. (2018), "Is there a risk of growing fast? The relationship between organic employment growth and firm exit", *Industrial and Corporate Change*, forthcoming.
- Zupic, I. and Čater, T. (2015). "Bibliometric Methods in Management and Organization", Organizational Research Methods 18(3): 429-472.

Appendix 1. List of 243 Articles

No.	Year	Authors	Title	Journal	Level of analysis	Type of articles	Topics
1	2009	A. Bhattacharjee, C. Higson, S. Holly and P. Kattumanw	Macroeconomic Instability and Business Exit: Determinants of Failures and Acquisitions of UK Firms	Economica	Firm	Empirical quantitative	Factors to exit
2	2009	A. Shiferaw	Survival of Private Sector Manufacturing Establishments in Africa: The Role of Productivity and Ownership	World Development	Firm	Empirical quantitative	Survival, Factors to exit
3	2009	D. Greenaway, J. Gullstrand and R. Kneller	Live or Let Die? Alternative Routes to Industry Exit	Open Economies Review	Firm	Empirical quantitative	Exit strategy
4	2009	D. Schafer and O. Talavera	Small business survival and inheritance: evidence from Germany	Small Business Economics	Firm	Empirical quantitative	Factors to exit
5	2009	D. Ucbasaran, P. Westhead and M. Wright	The extent and nature of opportunity identification by experienced entrepreneurs	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Re- engagement, Failure
6	2009	E. Santarelli, M. Carree and I. Verheul	Unemployment and Firm Entry and Exit: An Update on a Controversial Relationship	Regional Studies	Firm	Empirical quantitative	Impact of exit
7	2009	F. Lotti, E. Santarelli and M. Vivarelli	Defending Gibrat's Law as a long-run regularity	Small Business Economics	Firm	Empirical Quantitative	Survival
8	2009	H. Van Auken, J. Kaufmann and P. Herrmann	An Empirical Analysis of the Relationship Between Capital Acquisition and Bankruptcy Laws	Journal of Small Business Management	Firm	Empirical quantitative	Failure
9	2009	J. M. G. Lara, B. G. Osma and E. Neophytou	Earnings quality in ex-post failed firms	Accounting and Business Research	Firm	Empirical quantitative	Failure
10	2009	J. M. Plehn- Dujowich	Entry and exit by new versus existing firms	International Journal of Industrial Organization	Firm	Empirical quantitative	Ways to exit
11	2009	J. Sauer and T. Park	Organic farming in Scandinavia - Productivity and market exit	Ecological Economics	Firm	Empirical quantitative	Factors to exit
12	2009	J. Tong	Explaining the Shakeout Process: A "Successive Submarkets" model	Economic Journal	Firm	Empirical quantitative	Survival
13	2009	M. H. Chang	Industry dynamics with knowledge-based competition: a computational study of entry and exit patterns	Journal of Economic Interaction and Coordination	Firm	Empirical quantitative	Survival, Factors to exit
14	2009	M. Schwartz	Beyond incubation: an analysis of firm survival and exit dynamics in the post-graduation period	Journal of Technology Transfer	Firm	Empirical quantitative	Survival, Failure
15	2009	M. T. Junkunc and J. T. Eckhardt	Technical Specialized Knowledge and Secondary Shares in Initial Public Offerings	Management Science	Firm	Empirical quantitative	Ways to exit
16	2009	R. Chang, L. Kaltani and N. V. Loayza	Openness can be good for growth: The role of policy complementarities	Journal of Development Economics	Firm	Empirical quantitative	Survival
17	2009	R. Fontana and L. Nesta	Product Innovation and Survival in a High-Tech Industry	Review of Industrial Organization	Firm	Empirical quantitative	Factors to exit, Survival

18	2009	S. Janjuha-Jivraj and L. J. Spence	The Nature of Reciprocity in Family Firm Succession	International Small Business Journal	Firm	Conceptual	Succesion
19	2009	T. M. Safley	Business Failure and Civil Scandal in Early Modern Europe	Business History Review	Firm	Empirical qualitative	Process of exit
20	2010	A. Atkeson and A. T. Burstein	Innovation, Firm Dynamics, and International Trade	Journal of Political Economy	Firm	Empirical quantitative	Impact international trade cost to exit
21	2010	A. Gepp, K. Kumar and S. Bhattacharya	Business Failure Prediction using Decision Trees	Journal of Forecasting	Firm	Empirical quantitative	Failure
22	2010	A. Marques and A. Brandao	Is Exit a Firm Failure? Facts and Theory	Acta Oeconomica	Firm	Conceptual	Factors to exit
23	2010	C. Helmers and M. Rogers	Innovation and the Survival of New Firms in the UK	Review of Industrial Organization	Firm	Empirical quantitative	Survival
24	2010	C. Korunka, A. Kessler, H. Frank and M. Lueger	Personal characteristics, resources, and environment as predictors of business survival	Journal of Occupational and Organizational Psychology	Entrepreneur	Empirical quantitative	Survival
25	2010	C. Niedermeyer, P. Jaskiewicz and S. B. Klein	'Can't get no satisfaction?' Evaluating the sale of the family business from the family's perspective and deriving implications for new venture activities	Entrepreneurship and Regional Development	Entrepreneur	Empirical quantitative	Ways to exit
26	2010	C. Salvato, F. Chirico and P. Sharma	A farewell to the business: Championing exit and continuity in entrepreneurial family firms	Entrepreneurship and Regional Development	Founder	Empirical qualitative	Factors to exit
27	2010	D. F. Spulber	Competition among entrepreneurs	Industrial and Corporate Change	Entrepreneur	Conceptual	Factors to exit
28	2010	D. R. DeTienne	Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development	Journal of Business Venturing	Entrepreneur	Conceptual	Process of exit, Factors to exit,
29	2010	D. Ucbasaran, P. Westhead, M. Wright and M. Flores	The nature of entrepreneurial experience, business failure and comparative optimism	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Failure
30	2010	E. Bocatto, C. Gispert and J. Rialp	Family-Owned Business Succession: The Influence of Pre-performance in the Nomination of Family and Nonfamily Members: Evidence from Spanish Firms	Journal of Small Business Management	Entrepreneur	Empirical quantitative	Succesion
31	2010	E. Gimmon and J. Levie	Founder's human capital, external investment, and the survival of new high-technology ventures	Research Policy	Founder	Empirical quantitative	Survival
32	2010	E. Stam, R. Thurik and P. van der Zwan	Entrepreneurial exit in real and imagined markets	Industrial and Corporate Change	Entrepreneur	Empirical quantitative	Factors to exit
33	2010	F. Olawale and D. Garwe	Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach	African Journal of Business Management	Firm	Empirical quantitative	Survival
34	2010	G. Buenstorf and S. Klepper	Submarket dynamics and innovation: the case of the US tire industry	Industrial and Corporate Change	Firm	Empirical quantitative	Survival

35	2010	H. Buddelmeyer, P. H. Jensen and E. Webster	Innovation and the determinants of company survival	Oxford Economic Papers-New Series	Firm	Empirical quantitative	Survival
36	2010	H. Chen, J. J. Miao and N. Wang	Entrepreneurial Finance and Nondiversifiable Risk	Review of Financial Studies	Entrepreneur	Empirical quantitative	Factors to exit
37	2010	J. C. Carr, K. S. Haggard, K. M. Hmieleski and S. A. Zahra	A Study of the Moderating Effects of Firm Age at Internationalization on Firm Survival and Short-term Growth	Strategic Entrepreneurship Journal	Firm	Empirical quantitative	Survival
38	2010	J. Plehn-Dujowich	A theory of serial entrepreneurship	Small Business Economics	Entrepreneur	Conceptual	Factors to exit
39	2010	J. Wiklund, T. Baker and D. Shepherd	The age-effect of financial indicators as buffers against the liability of newness	Journal of Business Venturing	Firm	Empirical quantitative	Survival
40	2010	K. Sakai, I. Uesugi and T. Watanabe	Firm age and the evolution of borrowing costs: Evidence from Japanese small firms	Journal of Banking & Finance	Firm	Empirical quantitative	Survival, Factors to exit,
41	2010	K. Wennberg, J. Wiklund, D. R. DeTienne and M. S. Cardon	Reconceptualizing entrepreneurial exit: Divergent exit routes and their drivers	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Ways to exit, Factors to exit
42	2010	M. Kato	The role of investment efficiency in the industry life cycle	Industrial and Corporate Change	Firm	Empirical quantitative	Survival
43	2010	N. Bhattacharya, E. Demers and P. Joos	The Relevance of Accounting Information in a Stock Market Bubble: Evidence from Internet IPOs	Journal of Business Finance & Accounting	Firm	Empirical quantitative	Survival, Factors to exit
44	2010	P. Holmes, A. Hunt and I. Stone	An analysis of new firm survival using a hazard function	Applied Economics	Firm	Empirical quantitative	Survival
45	2010	R. I. D. Harris and Q. C. Li	Export-Market Dynamics and the Probability of Firm Closure: Evidence for the United Kingdom	Scottish Journal of Political Economy	Firm	Empirical quantitative	Survival
46	2010	R. M. Feinberg	Do international shocks affect small wholesalers and retailers?	Review of World Economics	Firm	Empirical quantitative	Factors to exit, Survival
47	2010	R. Rufin and C. Medina	Market delimitation, firm survival and growth in service industries	Service Industries Journal	Firm	Empirical quantitative	Survival
48	2010	S. Esteve-Perez, A. Sanchis-Llopis and J. A. Sanchis-Llopis	A competing risks analysis of firms' exit	Empirical Economics	Firm	Empirical quantitative	Factors to exit
49	2010	S. L. Li, J. Shang and S. A. Slaughter	Why Do Software Firms Fail? Capabilities, Competitive Actions, and Firm Survival in the Software Industry from 1995 to 2007	Information Systems Research	Firm	Empirical quantitative	Failure, Survival
50	2010	S. Wagner and I. Cockburn	Patents and the survival of Internet-related IPOs	Research Policy	Firm	Empirical quantitative	Survival
51	2010	V. Molly, E. Laveren and M. Deloof	Family Business Succession and Its Impact on Financial Structure and Performance	Family Business Review	Firm	Empirical quantitative	Succesion
52	2010	V. Naidoo	Firm survival through a crisis The influence of market orientation, marketing innovation and business strategy	Industrial Marketing Management	Firm	Empirical quantitative	Survival
53	2010	X. H. Chen, Y. Cao and F. Q. Wang	A life cycle analysis of Hunan's enterprises and their determinants	China Economic Review	Firm	Empirical quantitative	Survival

54	2010	Y. Kim and A. Heshmati	Analysis of Korean IT startups' initial public offering and their post-IPO performance	Journal of Productivity Analysis	Firm	Empirical quantitative	Ways to exit
55	2010	Y. Park, J. Shin and T. Kim	Firm size, age, industrial networking, and growth: a case of the Korean manufacturing industry	Small Business Economics	Firm	Empirical quantitative	Survival
56	2011	A. Madrid- Guijarro, D. Garcia- Perez-de-Lema and H. van Auken	An analysis of non-financial factors associated with financial distress	Entrepreneurship and Regional Development	Firm	Empirical quantitative	Performance & Exit, Survival, Failure
57	2011	A. Susarla and A. Barua	Contracting Efficiency and New Firm Survival in Markets Enabled by Information Technology	Information Systems Research	Firm	Empirical quantitative	Survival
58	2011	B. Heebels and R. Boschma	Performing in Dutch book publishing 1880-2008: the importance of entrepreneurial experience and the Amsterdam cluster	Journal of Economic Geography	Firm	Empirical quantitative	Survival, Factors to exit
59	2011	C. Carreira and P. Teixeira	The shadow of death: analysing the pre-exit productivity of Portuguese manufacturing firms	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
60	2011	D. A. Shepherd and J. M. Haynie	Venture Failure, Stigma, and Impression Management: A Self-Verificarion, Self- Determination View	Strategic Entrepreneurship Journal	Entrepreneur	Conceptual	Failure
61	2011	D. J. Storey	Optimism and chance: The elephants in the entrepreneurship room	International Small Business Journal	Firm	Conceptual	Survival
62	2011	E. Bell and S. Taylor	Beyond letting go and moving on: New perspectives on organizational death, loss and grief	Scandinavian Journal of Management	Firm	Conceptual	Failure
63	2011	E. Cefis and O. Marsili	Born to flip. Exit decisions of entrepreneurial firms in high- tech and low-tech industries	Journal of Evolutionary Economics	Firm	Empirical quantitative	Survival, Factors to exit, Ways to exit
64	2011	E. Cefis and O. Marsili	Revolving doors: entrepreneurial survival and exit	Journal of Evolutionary Economics	Firm	Conceptual	Ways to exit, Performance & Exit
65	2011	E. D. Rosenzweig, T. M. Laseter and A. V. Roth	Through the service operations strategy looking glass: Influence of industrial sector, ownership, and service offerings on B2B e- marketplace failures	Journal of Operations Management	Firm	Empirical quantitative	Failure
66	2011	E. van Tonder and L. Ehlers	Factors Threatening the Survival of Independent Financial Advisers in Their Organizational Life Cycle: An Exploratory Study	South African Journal of Economic and Management Sciences	Entrepreneur	Empirical qualitative	Survival
67	2011	G. D. Bruton, S. Khavul and H. Chavez	Microlending in emerging economies: Building a new line of inquiry from the ground up	Journal of International Business Studies	Entrepreneur	Empirical qualitative	Failure
68	2011	G. W. Haynes, S. M. Danes and K. Stafford	Influence of Federal Disaster Assistance on Family Business Survival and Success	Journal of Contingencies and Crisis Management	Firm	Empirical quantitative	Survival, Failure
69	2011	H. A. Cader and J. C. Leatherman	Small business survival and sample selection bias	Small Business Economics	Firm	Empirical quantitative	Survival

70	2011	H. Renski	External economies of localization, urbanization and industrial diversity and new firm survival	Papers in Regional Science	Firm	Empirical quantitative	Survival
71	2011	J. Cope	Entrepreneurial learning from failure: An interpretative phenomenological analysis	Journal of Business Venturing	Entrepreneur	Empirical qualitative	Failure
72	2011	J. Hessels, I. Grilo, R. Thurik and P. van der Zwan	Entrepreneurial exit and entrepreneurial engagement	Journal of Evolutionary Economics	Firm	Empirical quantitative	After exit, Reengagement
73	2011	L. Grilli	When the going gets tough, do the tough get going? The pre- entry work experience of founders and high-tech start-up survival during an industry crisis	International Small Business Journal	Firm	Empirical quantitative	Factors to exit, Survival, Exit strategy
74	2011	L. Klapper and C. Richmond	Patterns of business creation, survival and growth: Evidence from Africa	Labour Economics	Firm	Empirical quantitative	Factors to exit, Survival
75	2011	L. Yu, P. F. Orazem and R. W. Jolly	Why Do Rural Firms Live Longer?	American Journal of Agricultural Economics	Firm	Empirical quantitative	Survival
76	2011	M. A. Carree, I. Verheul and E. Santarelli	Sectoral patterns of firm exit in Italian provinces	Journal of Evolutionary Economics	Firm	Empirical quantitative	Factors to exit, Survival,
77	2011	M. Gagne, C. Wrosch and S. B. de Pontet	Retiring From the Family Business: The Role of Goal Adjustment Capacities	Family Business Review	Entrepreneur	Empirical quantitative	Process of exit, Ways to exit
78	2011	M. S. Cardon, C. E. Stevens and D. R. Potter	Misfortunes or mistakes? Cultural sensemaking of entrepreneurial failure	Journal of Business Venturing	Firm	Empirical quantitative	Failure
79	2011	N. Bosma, E. Stam and V. Schutjens	Creative destruction and regional productivity growth: evidence from the Dutch manufacturing and services industries	Small Business Economics	Firm	Empirical quantitative	Survival
80	2011	P. Braunerhjelm and B. Carlsson	Steven Klepper: Recipient of the 2011 Global Award for Entrepreneurship Research	Small Business Economics	Firm	Conceptual	Survival, Failure
81	2011	S. Balcaen, S. Manigart and H. Ooghe	From distress to exit: determinants of the time to exit	Journal of Evolutionary Economics	Firm	Empirical quantitative	Survival, Failure
82	2011	S. Jones	Does the Capitalization of Intangible Assets Increase the Predictability of Corporate Failure?	Accounting Horizons	Firm	Empirical quantitative	Failure
83	2011	S. Tsoukas	Firm survival and financial development: Evidence from a panel of emerging Asian economies	Journal of Banking & Finance	Firm	Empirical quantitative	Survival
84	2011	T. Luo and A. Mann	Survival and growth of Silicon Valley high-tech businesses born in 2000	Monthly Labor Review	Firm	Empirical quantitative	Survival
85	2011	U. Cantner, J. J. Kruger and K. von Rhein	Knowledge compensation in the German automobile industry	Applied Economics	Firm	Empirical quantitative	Survival
86	2011	V. Bordonaba- Juste, L. Lucia- Palacios and Y. Polo-Redondo	An analysis of franchisor failure risk: evidence from Spain	Journal of Business & Industrial Marketing	Firm	Empirical quantitative	Survival, Failure, Factors to exit

87	2011	W. Lam	Dancing to two tunes: Multi- entity roles in the family business succession process	International Small Business Journal	Founder	Empirical qualitative	Process of exit
88	2011	Z. Arasti	An empirical study on the causes of business failure in Iranian context	African Journal of Business Management	Firm	Empirical quantitative	Factors to exit, Survival, Failure
89	2012	A. Fortune and W. Mitchell	Unpacking Firm Exit at the Firm and Industry Levels: The Adaptation and Selection of Firm Capabilities	Strategic Management Journal	Firm	Empirical quantitative	Factors to exit, Ways to exit
90	2012	A. M. Robb and J. Watson	Gender differences in firm performance: Evidence from new ventures in the United States	Journal of Business Venturing	Firm	Empirical quantitative	Performance & Exit
91	2012	C. A. Varum and V. C. Rocha	The effect of crises on firm exit and the moderating effect of firm size	Economics Letters	Firm	Empirical quantitative	Factors to exit
92	2012	C. Decker and T. Mellewigt	Business Exit and Strategic Change: Sticking to the Knitting or Striking a New Path?	British Journal of Management	Firm	Empirical quantitative	Factors to exit, Ways to exit, Exit strategy
93	2012	C. McDonald	Western Union's Failed Reinvention: The Role of Momentum in Resisting Strategic Change, 1965-1993	Business History Review	Firm	Empirical qualitative	Survival, Failure,
94	2012	D. G. De Silva and R. P. McComb	Geographic concentration and high tech firm survival	Regional Science and Urban Economics	Firm	Empirical quantitative	Survival
95	2012	D. G. De Silva, G. Kosmopoulou and C. Lamarche	Survival of contractors with previous subcontracting experience	Economics Letters	Firm	Empirical quantitative	Survival
96	2012	D. R. DeTienne and M. S. Cardon	Impact of founder experience on exit intentions	Small Business Economics	Founder	Empirical quantitative	Factors to exit, Exit intention, Ways to exit
97	2012	E. Cefis and O. Marsili	Going, going, gone. Exit forms and the innovative capabilities of firms	Research Policy	Firm	Empirical quantitative	Factors to exit, Ways to exit
98	2012	F. G. van Oort, M. J. Burger, J. Knoben and O. Raspe	Multilevel Approach and the Firm-Agglomeration Ambiguity in Economic Growth Studies	Journal of Economic Surveys	Firm	Empirical quantitative	Survival
99	2012	F. T. Mousa and W. Wales	Founder effectiveness in leveraging entrepreneurial orientation	Management Decision	Entrepreneur	Empirical quantitative	Factors to exit
100	2012	G. R. G. Clarke, R. Cull and G. Kisunko	External finance and firm survival in the aftermath of the crisis: Evidence from Eastern Europe and Central Asia	Journal of Comparative Economics	Firm	Empirical quantitative	Survival
101	2012	J. Byrd, D. R. Fraser, D. S. Lee and S. Tartaroglu	Are two heads better than one? Evidence from the thrift crisis	Journal of Banking & Finance	Firm	Empirical quantitative	Factors to exit
102	2012	J. E. Yusuf	A tale of two exits: nascent entrepreneur learning activities and disengagement from start-up	Small Business Economics	Entrepreneur	Empirical quantitative	Learning, Reengagement
103	2012	J. M. de Figueiredo and B. S. Silverman	Firm Survival and Industry Evolution in Vertically Related Populations	Management Science	Firm	Empirical quantitative	Survival
104	2012	J. M. Millan, E. Congregado and C. Roman	Determinants of self- employment survival in Europe	Small Business Economics	Entrepreneur	Empirical quantitative	Survival

105	2012	J. Mata and E. Freitas	Foreignness and exit over the life cycle of firms	Journal of International Business Studies	Firm	Empirical quantitative	Factors to exit
106	2012	J. Watson	Networking: Gender differences and the association with firm performance	International Small Business Journal	Entrepreneur	Empirical quantitative	Survival, Performance & Exit
107	2012	M. Garcia-Vega, A. Guariglia and M. E. Spaliara	Volatility, financial constraints, and trade	International Review of Economics & Finance	Firm	Empirical quantitative	Survival
108	2012	M. K. Cabrera- Suarez and J. D. Martin-Santana	Successor's commitment and succession success: dimensions and antecedents in the small Spanish family firm	International Journal of Human Resource Management	Entrepreneur	Empirical quantitative	Succesion
109	2012	N. Chancharat, C. Krishnamurti and G. Tian	Board Structure and Survival of New Economy IPO Firms	Corporate Governance-an International Review	Firm	Empirical quantitative	Survival, Failure
110	2012	N. Sharif and C. Huang	Innovation strategy, firm survival and relocation: The case of Hong Kong-owned manufacturing in Guangdong Province, China	Research Policy	Firm	Empirical quantitative	Survival
111	2012	O. Bruyaka and R. Durand	Sell-off or shut-down? Alliance portfolio diversity and two types of high tech firms' exit	Strategic Organization	Firm	Empirical quantitative	Ways to exit, Exit strategy
112	2012	P. J. H. Schroder and A. Sorensen	Firm exit, technological progress and trade	European Economic Review	Firm	Empirical quantitative	Factors to exit, Failure, Survival
113	2012	R. Coeurderoy, M. Cowling, G. Licht and G. Murray	Young firm internationalization and survival: Empirical tests on a panel of 'adolescent' new technology-based firms in Germany and the UK	International Small Business Journal	Firm	Empirical quantitative	Survival
114	2012	R. Fernandez- Guerrero, L. Revuelto-Taboada and V. Simon- Moya	The business plan as a project: an evaluation of its predictive capability for business success	Service Industries Journal	Firm	Empirical quantitative	Survival
115	2012	R. Powell and A. Yawson	Internal Restructuring and Firm Survival	International Review of Finance	Firm	Empirical quantitative	Factors to exit, Ways to exit
116	2012	S. Balcaen, S. Manigart, J. Buyze and H. Ooghe	Firm exit after distress: differentiating between bankruptcy, voluntary liquidation and M&A	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Ways to exit
117	2012	S. Buehler, C. Kaiser and F. Jaeger	The geographic determinants of bankruptcy: evidence from Switzerland	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Failure
118	2012	S. Jones and D. Johnstone	Analyst Recommendations, Earnings Forecasts and Corporate Bankruptcy: Recent Evidence	Journal of Behavioral Finance	Firm	Empirical quantitative	Performance & Exit
119	2012	T. T. Yang and H. E. Aldrich	Out of sight but not out of mind: Why failure to account for left truncation biases research on failure rates	Journal of Business Venturing	Firm	Empirical quantitative	Survival, Failure
120	2012	V. Havila and C. J. Medlin	Ending-competence in business closure	Industrial Marketing Management	Firm	Empirical qualitative	Ways to exit

121	2012	V. Miranda, M. M. Badia and I. Van Beveren	Globalization drives strategic product switching	Review of World Economics	Firm	Empirical quantitative	Ways to exit, Factors to exit
122	2013	A. Coad, J. Frankish, R. G. Roberts and D. J. Storey	Growth paths and survival chances: An application of Gambler's Ruin theory	Journal of Business Venturing	Firm	Empirical quantitative	Factors to exit, Survival
123	2013	A. Colombelli, J. Krafft and F. Quatraro	Properties of knowledge base and firm survival: Evidence from a sample of French manufacturing firms	Technological Forecasting and Social Change	Firm	Empirical quantitative	Factors to exit, Survival
124	2013	A. Rauch and S. A. Rijsdijk	The Effects of General and Specific Human Capital on Long-Term Growth and Failure of Newly Founded Businesses	Entrepreneurship Theory and Practice	Entrepreneur	Empirical quantitative	Survival
125	2013	C. Bontemps, Z. Bouamra- Mechemache and M. Simioni	Quality labels and firm survival: some first empirical evidence	European Review of Agricultural Economics	Firm	Empirical quantitative	Survival
126	2013	C. Koropp, D. Grichnik and A. F. Gygax	Succession financing in family firms	Small Business Economics	Firm	Empirical quantitative	Succesion, Process of exit
127	2013	C. Y. Ho, P. McCarthy, Y. Yang and X. Ye	Bankruptcy in the pulp and paper industry: market's reaction and prediction	Empirical Economics	Firm	Empirical quantitative	Factors to exit, Failure
128	2013	D. Fackler, C. Schnabel and J. Wagner	Establishment exits in Germany: the role of size and age	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
129	2013	D. R. DeTienne and F. Chirico	Exit Strategies in Family Firms: How Socioemotional Wealth Drives the Threshold of Performance	Entrepreneurship Theory and Practice	Firm	Empirical quantitative	Exit strategy
130	2013	D. Ucbasaran, D. A. Shepherd, A. Lockett and S. J. Lyon	Life After Business Failure: The Process and Consequences of Business Failure for Entrepreneurs	Journal of Management	Entrepreneur	Review	Failure
131	2013	G. Mion and L. K. Zhu	Import competition from and offshoring to China: A curse or blessing for firms?	Journal of International Economics	Firm	Empirical quantitative	Factors to exit, Survival
132	2013	G. Saridakis, K. Mole and G. Hay	Liquidity constraints in the first year of trading and firm performance	International Small Business Journal	Firm	Empirical quantitative	Survival
133	2013	G. T. Solomon, A. Bryant, K. May and V. Perry	Survival of the fittest: Technical assistance, survival and growth of small businesses and implications for public policy	Technovation	Firm	Empirical quantitative	Survival
134	2013	J. J. Chrisman, P. Sharma, L. P. Steier and J. H. Chua	The Influence of Family Goals, Governance, and Resources on Firm Outcomes	Entrepreneurship Theory and Practice	Firm	Conceptual	Survival
135	2013	J. S. Dou and S. X. Li	The succession process in Chinese family firms: A guanxi perspective	Asia Pacific Journal of Management	Firm	Empirical qualitative	Succesion, Process of exit
136	2013	J. W. Hatfield and S. D. Kominers	Vacancies in supply chain networks	Economics Letters	Firm	Empirical quantitative	Impact of exit
137	2013	J. Wagner	Exports, imports and firm survival: first evidence for manufacturing enterprises in Germany	Review of World Economics	Firm	Empirical quantitative	Survival

138	2013	K. Stafford, S. M. Danes and G. W. Haynes	Long-term family firm survival and growth considering owning family adaptive capacity and federal disaster assistance receipt	Journal of Family Business Strategy	Firm	Empirical quantitative	Survival
139	2013	L. O. Facanha, M. Resende, V. Cardoso and B. H. Schroder	Survival of new firms in the Brazilian franchising segment: an empirical study	Service Industries Journal	Firm	Empirical quantitative	Factors to exit, Survival
140	2013	L. van Teeffelen and L. M. Uhlaner	Firm Resource Characteristics and Human Capital as Predictors of Exit Choice: An Exploratory Study of SMEs	Entrepreneurship Research Journal	Entrepreneur	Empirical quantitative	Ways to exit, Exit strategy
141	2013	M. E. Spaliara and S. Tsoukas	What matters for corporate failures in Asia? Exploring the role of firm-specific characteristics during the Asian crisis	Structural Change and Economic Dynamics	Firm	Empirical quantitative	Survival
142	2013	M. Ejrnaes and S. Hochguertel	Is Business Failure Due To Lack of Effort? Empirical Evidence From A Large Administrative Sample	Economic Journal	Entrepreneur	Empirical quantitative	Factors to exit, Failure
143	2013	M. Falk	A survival analysis of ski lift companies	Tourism Management	Firm	Empirical quantitative	Survival
144	2013	M. Nordqvist, K. Wennberg, M. Bau and K. Hellerstedt	An entrepreneurial process perspective on succession in family firms	Small Business Economics	Entrepreneur	Review	Succesion
145	2013	M. Schwartz	A control group study of incubators' impact to promote firm survival	Journal of Technology Transfer	Firm	Empirical quantitative	Survival
146	2013	N. Wilson, M. Wright and L. Scholes	Family Business Survival and the Role of Boards	Entrepreneurship Theory and Practice	Firm	Empirical quantitative	Survival, Failure
147	2013	R. Fuentes and J. Dresdner	Survival of micro-enterprises: Does public seed financing work?	Applied Economics Letters	Firm	Empirical quantitative	Survival
148	2013	S. Mantere, P. Aula, H. Schildt and E. Vaara	Narrative attributions of entrepreneurial failure	Journal of Business Venturing	Entrepreneur	Empirical qualitative	Failure
149	2013	S. V. Gudmundsson and C. Lechner	Cognitive biases, organization, and entrepreneurial firm survival	European Management Journal	Entrepreneur	Empirical quantitative	Survival, Failure
150	2013	T. Blumentritt, T. Mathews and G. Marchisio	Game Theory and Family Business Succession: An Introduction	Family Business Review	Entrepreneur	Conceptual	Succesion
151	2013	V. Gaba and A. Terlaak	Decomposing Uncertainty and Its Effects on Imitation in Firm Exit Decisions	Organization Science	Firm	Empirical quantitative	Factors to exit, Survival
152	2013	Y. L. S. Zhao and C. A. Di Benedetto	Designing service quality to survive: Empirical evidence from Chinese new ventures	Journal of Business Research	Firm	Empirical quantitative	Survival
153	2013	Y. P. Chung, H. S. Na and R. Smith	How important is capital structure policy to firm survival?	Journal of Corporate Finance	Firm	Empirical quantitative	Survival
154	2014	A. Avloniti, A. Iatridou, I. Kaloupsis and G. S. Vozikis	Sibling rivalry: implications for the family business succession process	International Entrepreneurship and Management Journal	Entrepreneur	Conceptual	Succesion, Process of exit
155	2014	A. Bhaskarabhatla and S. Klepper	Latent submarket dynamics and industry evolution: lessons from the US laser industry	Industrial and Corporate Change	Firm	Empirical quantitative	Factors to exit, Survival,

156	2014	A. Coad	Death is not a success: Reflections on business exit	International Small Business Journal	Firm	Conceptual	Performance & Exit, Process of exit
157	2014	A. Hyytinen, J. Lahtonen and M. Pajarinen	Forecasting Errors of New Venture Survival	Strategic Entrepreneurship Journal	Entrepreneur	Empirical quantitative	Factors to exit, Survival
158	2014	A. Kalnins and M. Williams	When do female-owned businesses out-survive male- owned businesses? A disaggregated approach by industry and geography	Journal of Business Venturing	Firm	Empirical quantitative	Factors to exit, Survival
159	2014	A. M. Ferragina and F. Mazzotta	FDI spillovers on firm survival in Italy: absorptive capacity matters!	Journal of Technology Transfer	Firm	Empirical quantitative	Factors to exit, Survival
160	2014	A. M. Priego, M. M. Lizano and E. M. Madrid	Business failure: incidence of stakeholders' behavior	Academia- Revista Latinoamericana De Administracion	Firm	Empirical quantitative	Failure, Survival
161	2014	A. S. Jenkins, J. Wiklund and E. Brundin	Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Failure, After exit
162	2014	A. Tsvetkova, J. C. Thill and D. Strumsky	Metropolitan innovation, firm size, and business survival in a high-tech industry	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
163	2014	A. Weber and C. Zulehner	Competition and Gender Prejudice : Are Discriminatory Employers Doomed to Fail?	Journal of the European Economic Association	Firm	Empirical quantitative	Survival
164	2014	A. Wyatt	Is there useful information in the 'use of proceeds' disclosures in IPO prospectuses?	Accounting and Finance	Firm	Empirical quantitative	Survival
165	2014	C. Burhop, D. Chambers and B. Cheffins	Regulating IPOs: Evidence from going public in London, 1900-1913	Explorations in Economic History	Firm	Empirical quantitative	Factors to exit, Failure, Process of exit
166	2014	C. Homburg, A. Hahn, T. Bornemann and P. Sandner	The Role of Chief Marketing Officers for Venture Capital Funding: Endowing New Ventures with Marketing Legitimacy	Journal of Marketing Research	Firm	Empirical quantitative	Factors to exit, Survival, Failure
167	2014	C. Varum, V. C. Rocha and H. V. da Silva	Economic slowdowns, hazard rates and foreign ownership	International Business Review	Firm	Empirical quantitative	Factors to exit, Failure
168	2014	D. Fackler, C. Schnabel and J. Wagner	Lingering illness or sudden death? Pre-exit employment developments in German establishments	Industrial and Corporate Change	Firm	Empirical quantitative	Process of exit
169	2014	D. Gras and K. I. Mendoza-Abarca	Risky business? The survival implications of exploiting commercial opportunities by nonprofits	Journal of Business Venturing	Firm	Empirical quantitative	Factors to exit
170	2014	E. Dalpiaz, P. Tracey and N. Phillips	Succession Narratives in Family Business: The Case of Alessi	Entrepreneurship Theory and Practice	Entrepreneur	Empirical qualitative	Succesion, Process of exit, After exit
171	2014	E. K. Laitinen and O. Lukason	Do Firm failure Processes Differ Across Countries: Evidence From Finland and Estonia	Journal of Business Economics and Management	Firm	Empirical quantitative	Survival, Factors to exit, Process of exit
172	2014	F. Puig, M. Gonzalez-Loureiro and P. N. Ghauri	Internationalisation for Survival: The Case of New Ventures	Management International Review	Firm	Empirical quantitative	Survival, Failure

173	2014	F. T. Mousa, P. E. Bierly and W. J. Wales	Different strokes: IPO risk factors, investor valuation, and firm survival	Journal of Management & Organization	Firm	Empirical quantitative	Factors to exit, Survival
174	2014	G. Arbia, G. Espa, D. Giuliani and M. M. Dickson	Spatio-temporal clustering in the pharmaceutical and medical device manufacturing industry: A geographical micro-level analysis	Regional Science and Urban Economics	Firm	Empirical quantitative	Factors to exit, Survival
175	2014	G. Burdin	Are Worker-Managed Firms More Likely To Fail Than Conventional Enterprises? Evidence From Uruguay	Ilr Review	Firm	Empirical quantitative	Factors to exit, Survival
176	2014	G. Cainelli, S. Montresor and G. Vittucci Marzetti	Spatial agglomeration and firm exit: a spatial dynamic analysis for Italian provinces	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
177	2014	G. Criaco, T. Minola, P. Migliorini and C. Serarols-Tarres	To have and have not: founders' human capital and university start-up survival	Journal of Technology Transfer	Firm	Empirical quantitative	Factors to exit
178	2014	H. Gorg and A. E. Spaliara	Financial Health, Exports and Firm Survival: Evidence from UK and French Firms	Economica	Firm	Empirical quantitative	Factors to exit, Survival
179	2014	H. Ma, X. H. Lu and X. L. Xie	Business exit as a deliberate strategy for incumbent firms	Organizational Dynamics	Firm	Conceptual	Exit strategy, Process of exit
180	2014	I. C. Jakel	Import-push or export-pull? An industry-level analysis of the impact of trade on firm exit	Empirica	Firm	Empirical quantitative	Factors to exit
181	2014	I. Iwasaki	Global financial crisis, corporate governance, and firm survival: The Russian experience	Journal of Comparative Economics	Firm	Empirical quantitative	Factors to exit, Survival
182	2014	J. Baggs, E. Beaulieu and L. Fung	Persistent Effects of Transitory Exchange Rate Shocks on Firm Dynamics	Contemporary Economic Policy	Firm	Empirical quantitative	Factors to exit, Survival
183	2014	J. Harkins and N. Forster-Holt	Resource Dependence and the Exits of Young Firms	Entrepreneurship Research Journal	Firm	Empirical quantitative	Factors to exit, Ways to exit
184	2014	J. J. Cater and R. E. Kidwell	Function, governance, and trust in successor leadership groups in family firms	Journal of Family Business Strategy	Entrepreneur	Empirical qualitative	Succesion
185	2014	J. Kwon and M. E. Johnson	Proactive Versus Reactive Security Investments in the Healthcare Sector	Mis Quarterly	Firm	Empirical quantitative	Failure
186	2014	J. Raffiee and J. Feng	Should I Quit My Day Job?: A Hybrid Path To Entrepreneurship	Academy of Management Journal	Entrepreneur	Empirical quantitative	Survival, Factors to exit
187	2014	J. Wagner and J. P. W. Gelubcke	Risk or Resilience? The Role of Trade Integration and Foreign Ownership for the Survival of German Enterprises During the Crisis 2008-2010	Jahrbucher Fur Nationalokonom ie Und Statistik	Firm	Empirical quantitative	Survival
188	2014	K. Van Peursem and Y. C. Chan	Forecasting New Zealand Corporate Failures 2001-10: Opportunity Lost?	Australian Accounting Review	Firm	Empirical quantitative	Failure, Survival
189	2014	K. Wennberg and D. R. DeTienne	What do we really mean when we talk about 'exit'? A critical review of research on entrepreneurial exit	International Small Business Journal	Entrepreneur	Review	Exit intention, Exit strategy, Process of exit
190	2014	K. Z. Kejzar and N. Ponikvar	The effect of industry maturity, turnover and competition on firm survival: evidence from Slovenian firms	Post-Communist Economies	Firm	Empirical quantitative	Factors to exit, Survival

191	2014	L. Beaudin and J. C. Huang	Weather conditions and outdoor recreation: A study of New England ski areas	Ecological Economics	Firm	Empirical quantitative	Factors to exit, Survival
192	2014	L. Wang, A. Madhok and S. X. Li	Agglomeration And Clustering Over The Industry Life Cycle: Toward A Dynamic Model of Geographic Concentration	Strategic Management Journal	Firm	Empirical quantitative	Survival
193	2014	M. Bhattacharya	Business Growth, Size And Age: Evidence From The Business Longitudinal Survey (BLS) Data in Australia	Australian Economic Papers	Firm	Empirical quantitative	Factors to exit, Survival
194	2014	M. Caliendo and S. Kunn	Regional Effect Heterogeneity of Start-up Subsidies for the Unemployed	Regional Studies	Firm	Empirical quantitative	Factors to exit, Survival
195	2014	M. de Vaan	Interfirm networks in periods of technological turbulence and stability	Research Policy	Firm	Empirical quantitative	Factors to exit, Survival
196	2014	M. Hollow	Strategic inertia, financial fragility and organisational failure: The case of the Birkbeck Bank, 1870-1911	Business History	Firm	Empirical qualitative	Failure
197	2014	M. Peltoniemi	How do the determinants of firm survival change in the course of the industry life cycle? A fuzzy- set analysis	Technology Analysis & Strategic Management	Firm	Empirical qualitative	Factors to exit, Survival
198	2014	M. S. Wood, A. McKelvie and J. M. Haynie	Making it personal: Opportunity individuation and the shaping of opportunity beliefs	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Failure
199	2014	N. Collett, N. R. Pandit and J. Saarikko	Success and failure in turnaround attempts. An analysis of SMEs within the Finnish Restructuring of Enterprises Act	Entrepreneurship and Regional Development	Firm	Empirical quantitative	Factors to exit, Failure, Survival
200	2014	N. Wilson, M. Wright and A. Altanlar	The survival of newly- incorporated companies and founding director characteristics	International Small Business Journal	Founder	Empirical quantitative	Factors to exit, Failure
201	2014	O. Bohren and S. Staubo	Does mandatory gender balance work? Changing organizational form to avoid board upheaval	Journal of Corporate Finance	Firm	Empirical quantitative	Factors to exit, Exit strategy
202	2014	O. Meier and G. Schier	Family firm succession: Lessons from failures in external party takeovers	Journal of Family Business Strategy	Others	Empirical qualitative	Succesion, Factors to exit, Failure
203	2014	P. C. Patel and S. M. B. Thatcher	Sticking It Out: Individual Attributes and Persistence in Self-Employment	Journal of Management	Entrepreneur	Empirical quantitative	Factors to exit, Survival
204	2014	R. Baptista, M. Karaoz and J. Mendonca	The impact of human capital on the early success of necessity versus opportunity-based entrepreneurs	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
205	2014	S. A. Simmons, J. Wiklund and J. Levie	Stigma and business failure: implications for entrepreneurs' career choices	Small Business Economics	Entrepreneur	Empirical quantitative	After exit, Failure
206	2014	S. R. Hiatt and W. D. Sine	Clear and present danger: Planning and new venture survival amid political and civil violence	Strategic Management Journal	Firm	Empirical quantitative	Survival, Factors to exit
207	2014	S. Schlepphorst and P. Moog	Left in the dark: Family successors' requirement profiles in the family business succession process	Journal of Family Business Strategy	Entrepreneur	Empirical qualitative	Succesion

208	2014	T. Dehlen, T. Zellweger, N. Kammerlander and F. Halter	The role of information asymmetry in the choice of entrepreneurial exit routes	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Ways to exit, Succesion
209	2014	T. Stucki	Success of start-up firms: the role of financial constraints	Industrial and Corporate Change	Firm	Empirical quantitative	Factors to exit, Survival
210	2014	U. Brixy	The Significance of Entry and Exit for Regional Productivity Growth	Regional Studies	Firm	Empirical quantitative	Factors to exit, Survival
211	2014	Y. Paik	Serial Entrepreneurs and Venture Survival: Evidence from US Venture-Capital-Financed Semiconductor Firms	Strategic Entrepreneurship Journal	Firm	Empirical quantitative	Factors to exit, Survival
212	2014	Z. L. Deng, H. L. Guo, W. F. Zhang and C. Q. Wang	Innovation and survival of exporters: A contingency perspective	International Business Review	Firm	Empirical quantitative	Factors to exit, Survival
213	2015	A. Blanco-Oliver, A. Irimia-Dieguez, M. Oliver-Alfonso and N. Wilson	Improving Bankruptcy Prediction in Micro-Entities by Using Nonlinear Effects and Non-Financial Variables	Finance a Uver- Czech Journal of Economics and Finance	Firm	Empirical quantitative	Factors to exit, Survival
214	2015	A. Hyytinen, M. Pajarinen and P. Rouvinen	Does innovativeness reduce startup survival rates?	Journal of Business Venturing	Firm	Empirical quantitative	Factors to exit, Survival
215	2015	A. Michel and N. Kammerlander	Trusted advisors in a family business's succession-planning process-An agency perspective	Journal of Family Business Strategy	Entrepreneur	Conceptual	Succesion, Process of exit
216	2015	A. Rey-Marti, A. T. Porcar and A. Mas- Tur	Linking female entrepreneurs' motivation to business survival	Journal of Business Research	Firm	Empirical qualitative	Survival, Factors to exit
217	2015	C. Casacuberta and N. Gandelman	Productivity, Exit, and Crisis in the Manufacturing and Service Sectors	Developing Economies	Firm	Empirical quantitative	Factors to exit, Survival
218	2015	C. Gonzalez- Aguado and J. Suarez	Interest Rates and Credit Risk	Journal of Money Credit and Banking	Firm	Empirical quantitative	Factors to exit, Survival
219	2015	C. W. Liu, D. L. Eubanks and N. Chater	The weakness of strong ties: Sampling bias, social ties, and nepotism in family business succession	Leadership Quarterly	Entrepreneur	Empirical quantitative	Succesion, Process of exit
220	2015	D. A. Shepherd and H. Patzelt	Harsh Evaluations of Entrepreneurs Who Fail: The Role of Sexual Orientation, Use of Environmentally Friendly Technologies, and Observers' Perspective Taking	Journal of Management Studies	Entrepreneur	Empirical quantitative	Failure
221	2015	D. A. Shepherd, T. A. Williams and H. Patzelt	Thinking About Entrepreneurial Decision Making: Review and Research Agenda	Journal of Management	Entrepreneur	Review	Exit strategy
222	2015	D. R. DeTienne, A. McKelvie and G. N. Chandler	Making sense of entrepreneurial exit strategies: A typology and test	Journal of Business Venturing	Entrepreneur	Empirical quantitative	Exit strategy
223	2015	F. Ciampi	Corporate governance characteristics and default prediction modeling for small enterprises. An empirical analysis of Italian firms	Journal of Business Research	Firm	Empirical quantitative	Factors to exit, Survival
224	2015	F. Mas-Verdu, D. Ribeirb-Soriano and N. Roig-Tierno	Firm survival: The role of incubators and business characteristics	Journal of Business Research	Firm	Empirical quantitative	Factors to exit, Survival

225	2015	G. Buenstorf, M. Fritsch and L. F. Medrano	Spatial Concentration of Industries and New Firm Exits: Does this Relationship Differ between Exits by Closure and by M&A?	Regional Studies	Firm	Empirical quantitative	Ways to exit, Performance & Exit
226	2015	G. Kim and M. G. Huh	Innovation and survival in Korean SMEs: the moderating effect of competitive strategy	Asian Journal of Technology Innovation	Firm	Empirical quantitative	Factors to exit, Survival
227	2015	H. G. Parsa, J. P. I. van der Rest, S. R. Smith, R. A. Parsa and M. Bujisic	Why Restaurants Fail? Part IV: The Relationship between Restaurant Failures and Demographic Factors	Cornell Hospitality Quarterly	Firm	Empirical quantitative	Factors to exit
228	2015	H. Oberhofer, T. Philippovich and H. Winner	Firm Survival in Professional Sports: Evidence From the German Football League	Journal of Sports Economics	Firm	Empirical quantitative	Factors to exit, Survival
229	2015	I. Colantone, K. Coucke and L. Sleuwaegen	Low-cost import competition and firm exit: evidence from the EU	Industrial and Corporate Change	Firm	Empirical quantitative	Factors to exit, Survival
230	2015	J. P. Qi, N. K. Sutton and Q. C. Zheng	The Value of Strategic Alliances in Acquisitions and IPOs	Financial Management	Firm	Empirical quantitative	Factors to exit, Performance & Exit
231	2015	K. Frenkena, E. Cefis and E. stam	Industrial Dynamics and Clusters: A Survey	Regional Studies	Firm	Review	Survival
232	2015	M. D. Camacho- Minano, M. J. Segovia-Vargas and D. Pascual- Ezama	Which Characteristics Predict the Survival of Insolvent Firms? An SME Reorganization Prediction Model	Journal of Small Business Management	Firm	Empirical quantitative	Factors to exit, Ways to exit
233	2015	M. Gilding, S. Gregory and B. Cosson	Motives and Outcomes in Family Business Succession Planning	Entrepreneurship Theory and Practice	Entrepreneur	Empirical quantitative	Succesion
234	2015	M. R. W. Hiebl	Family involvement and organizational ambidexterity in later-generation family businesses A framework for further investigation	Management Decision	Firm	Conceptual	Succesion
235	2015	N. Elert, F. W. Andersson and K. Wennberg	The impact of entrepreneurship education in high school on long- term entrepreneurial performance	Journal of Economic Behavior & Organization	Firm	Empirical quantitative	Survival
236	2015	N. Michael-Tsabari and D. Weiss	Communication Traps: Applying Game Theory to Succession in Family Firms	Family Business Review	Entrepreneur	Conceptual	Succesion, Process of exit
237	2015	R. Kelly, E. O. Brien and R. Stuart	A long-run survival analysis of corporate liquidations in Ireland	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Survival
238	2015	S. Mueller and J. Stegmaier	Economic failure and the role of plant age and size	Small Business Economics	Firm	Empirical quantitative	Factors to exit, Ways to exit
239	2015	S. Singh, P. D. Corner and K. Pavlovich	Failed, not finished: A narrative approach to understanding venture failure stigmatization	Journal of Business Venturing	Firm	Empirical qualitative	Failure, Learning
240	2015	T. Mathews and T. Blumentritt	A sequential choice model of family business succession	Small Business Economics	Entrepreneur	Conceptual	Succesion, Process of exit
241	2015	V. Rocha, A. Carneiro and C. A. Varum	Entry and exit dynamics of nascent business owners	Small Business Economics	Entrepreneur	Empirical quantitative	Factors to exit, Survival
242	2015	V. Rocha, A. Carneiro and C. Varum	What explains the survival gap of pushed and pulled corporate spin-offs?	Economics Letters	Firm	Empirical quantitative	Factors to exit, Survival
243	2015	Y. Yamakawa and M. S. Cardon	Causal ascriptions and perceived learning from entrepreneurial failure	Small Business Economics	Entrepreneur	Empirical quantitative	Failure, Learning

# Appendix 2. Chronological reading list of seminal articles cited by exit research

Stinchcombe, A. L. (1965). "Social Structure and Organizations," in <i>Handbook of Organizations</i> . Ed. J. G. March. Chicago, IL: Rand McNally, 142-193.
Cox, D.R. (1972). "Regression Models and Life-Tables," Journal of the Royal Statistical Society 34(2), 187-220.
Jovanovic, Boyan (1982). "Selection and the Evolution of Industry," <i>Econometrica</i> 50(3), 649-670.
Freeman, John , Carroll, Glenn R. and Hannan, Michael T. (1983). "The Liability of Newness: Age Dependence in Organizational Death Rates," <i>American Sociological Review</i> 48(5), 692-710.
Dunne, Timothy, Roberts, Mark J. and Samuelson, Larry (1988). "Patterns of Firm Entry and Exit in U.S. Manufacturing Industries," <i>The RAND Journal of Economics</i> 19(4), 495-515.
Audretsch, David B. (1991). "New-Firm Survival and the Technological Regime," <i>The Review of Economics and Statistics</i> 73(3), 441-450.
Hopenhayn, Hugo A. (1992). "Entry, Exit, and Firm Dynamics in Long Run Equilibrium," <i>Econometrica</i> 60(5), 1127-1150.
Brüderl, Josef, Preisendörfer, Peter and Ziegler, Rolf (1992). "Survival Chances of Newly Founded Business Organizations," American Sociological Review 57(2), 227-242.
Mata, José and Portugal, Pedro (1994). "Life Duration of New Firms," Journal of Industrial Economics 42(3), 227.
Geroski, P. A. (1995). "What Do We Know About Entry?," International Journal of Industrial Organization 13(4), 421-440.
Ericson, Richard and Pakes, Ariel (1995). "Markov-Perfect Industry Dynamics: A Framework for Empirical Work," <i>The Review of Economic Studies</i> 62(1), 53-82.
Audretsch, David B. and Mahmood, Talat (1995). "New Firm Survival: New Results Using a Hazard Function," <i>The Review of Economics and Statistics</i> 77(1), 97-103.
Gimeno, Javier, Folta, Timothy B., Cooper, Arnold C. and Woo, Carolyn Y. (1997). "Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms," <i>Administrative Science Quarterly</i> 42(4), 750-783.
Caves, Richard E. (1998). "Industrial Organization and New Findings on the Turnover and Mobility of Firms," <i>Journal of Economic Literature</i> 36(4), 1947.
McGrath, Rita Gunther (1999). "Falling Forward: Real Options Reasoning and Entrepreneurial Failure," <i>Academy of Management Review</i> 24(1), 13-30.
Headd, Brian (2003). "Redefining Business Success: Distinguishing between Closure and Failure," <i>Small Business Economics</i> 21(1), 51-61.
Shepherd, Dean A. (2003). "Learning from Business Failure: Propositions of Grief Recovery for the Self-Employed," <i>Academy of Management Review</i> 28(2), 318-328.
Van Praag, C. Mirjam (2003). "Business Survival and Success of Young Small Business Owners," <i>Small Business Economics</i> 21(1), 1-17.
Wennberg, Karl, Wiklund, Johan, DeTienne, Dawn R. and Cardon, Melissa S. (2010). "Reconceptualizing Entrepreneurial Exit: Divergent Exit Routes and Their Drivers," <i>Journal of Business Venturing</i> 25(4), 361-375.
DeTienne, Dawn R. (2010). "Entrepreneurial Exit as a Critical Component of the Entrepreneurial Process: Theoretical Development," <i>Journal of Business Venturing</i> 25(2), 203-215.