



LUND UNIVERSITY

The Potential of Bootstrapping Research for Advancing the Understanding of the Role of Resources in Corporate Entrepreneurship

Winborg, Joakim

2015

[Link to publication](#)

Citation for published version (APA):

Winborg, J. (2015). *The Potential of Bootstrapping Research for Advancing the Understanding of the Role of Resources in Corporate Entrepreneurship*.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

THE POTENTIAL OF BOOTSTRAPPING RESEARCH FOR ADVANCING THE UNDERSTANDING OF THE ROLE OF RESOURCES IN CORPORATE ENTREPRENEURSHIP

**Joakim Winborg (SKJCE)
School of Economics and Management
Lund University, Sweden**

ABSTRACT

Over the years we have seen an increased interest in businesses and in research for how to create conditions for entrepreneurship in established businesses (referring to corporate entrepreneurship). From research we know that access to and use of resources is critical for realizing corporate entrepreneurship activities. Even though the role of resources has been examined this conceptual paper identifies areas in need of development. The aim of the paper is to introduce and use insights from research in the area of bootstrapping to provide implications for how to advance the research related to the role of resources in corporate entrepreneurship. Bootstrapping is a concept that has been discussed in the independent entrepreneurship (new venture creation) context and refers to creative ways of acquiring the use of resources without using long-term external finance. The paper provides implications for development in two areas referring to two different levels of analysis. First, the paper discusses potential contributions from bootstrapping research for developing the understanding of how corporate entrepreneurs/intrapreneurs mobilize resources (referring to the individual level of analysis). Second, the paper presents implications from bootstrapping research for advancing our understanding of the role of resources for businesses seeking to renew their strategy and more specifically seeking to renew the business model. Business model as one area of corporate entrepreneurship has received much interest but the knowledge is still limited, and this in particular when it comes to how businesses actually are able to change and renew the business model.

CORPORATE ENTREPRENEURSHIP

The role of entrepreneurship in established businesses (so called corporate entrepreneurship) has received increased attention among businesses and in research (Corbett et al., 2013; Kuratko et al., 2015). In line with this, over the last years a number of so-called special issues on corporate entrepreneurship have been published (see for example, Kuratko & Audretsch, 2009; Phan et al., 2009; Corbett et al., 2013; Kuratko et al., 2015).

Although we can identify studies on corporate entrepreneurship already in the 70s and 80s (see for example Peterson & Berger, 1972; Burgelman, 1983) Corbett et al. (2013) argue that our understanding and definition of corporate entrepreneurship was clarified by the publication of the article by Guth and Ginsberg (1990). In their introduction to the special issue in SMJ Guth and Ginsberg advocate a broad definition of corporate entrepreneurship. According to them corporate entrepreneurship includes two components, namely: (i) the birth and creation of new businesses inside existing/established businesses, and (ii) the overall transformation and renewal of the business.

Our understanding and definition of the concept has since then been further developed by studies such as Sharma and Chrisman (1999) and Dess et al. (2003). More recent research (for example Phan et al., 2009; Kuratko & Audretsch, 2009) has further elaborated and developed the definition among others by nuancing the second component of transformation and renewal to include different entrepreneurial initiatives (referring to the concept strategic entrepreneurship) that do not result in creation of a new business such as the renewal of the business model.

THE ROLE OF RESOURCES IN CORPORATE ENTREPRENEURSHIP

Earlier research underlines the importance of resources for realizing corporate entrepreneurship activities (see for example, Borch et al., 1999; Hornsby et al., 2002; Zahra et al., 2009; Bloodgood et al., 2013; Nason et al., 2015). Burgelman (1983) argues that corporate entrepreneurship activities imply a need for new resource combinations. In the same way Teng (2007) states that undertaking corporate entrepreneurship activities often creates resource gaps in the business. The importance of resources and contacts is also indicated in the study by Urbano and Turró (2013). They find that the size of the personal network positively influences the likelihood of corporate entrepreneurship initiatives (which in turn indicates the role of the resources that can be secured via personal networks).

According to Bloodgood et al. (2013) in order to realize corporate entrepreneurship initiatives businesses need to focus on how to further utilize existing resources as well as how to be able to develop and acquire new resources needed. Earlier research has stressed the potential role of absorptive capacity for businesses to be able to identify and use external resources (see Zahra et al., 2009; Patel et al., 2014).

To be able to experiment with and realize opportunities in new areas established businesses need slack resources (Ahuja & Lampert, 2001). At the same time, based on earlier research Simsek et al. (2007) argue that we can expect different effects of slack resources on corporate entrepreneurship initiatives. On the one hand, they conclude that the existence of slack resources can be assumed to be favourable for experimentation and searching for new opportunities outside of the existing business. On the other hand, they argue that the existence of slack resources might reduce the perceived need for change and engagement in corporate entrepreneurship.

Research has also discussed differences between large and small businesses in terms of differences as for access to resources. For example, Nason et al. (2015) formulate the proposition that large businesses have more slack resources than small businesses which might be beneficial for corporate entrepreneurship. However, these authors state that on the other hand large businesses might be at a disadvantage as compared with small businesses in that large businesses can be assumed to face more challenges to quickly renew its resources and capabilities due to rigid organizational structure.

Focusing on the potential of forming alliances with other businesses to handle resource gaps Teng (2007) also discusses other forms of mobilizing resources for the existing business undertaking corporate entrepreneurship activities. Besides alliances Teng (2007) discusses: (i) internal development; that is the business develops the resource internally, (ii) market transaction; that is the business acquires the resource from the market to market price, and (iii) acquisition of another business; which resembles the market transaction but here the business completely acquires another business among others to get the resources looked for.

Brown et al. (2001) in their article seek to develop and test a measurement instrument to empirically capture the concept “entrepreneurial management” discussed by Stevenson (see Stevenson & Jarillo, 1990). One of the dimensions included is resource orientation. Based on Stevenson and Jarillo (1990) in the article by Brown et al. (2001) it is assumed that in businesses that are entrepreneurial the orientation and focus is less on owning resources rather on the ability to use (own and others’) resources. On the other hand, businesses that are less entrepreneurial (labelled administrative businesses) are more focused on owning resources and the starting point for these businesses in trying to find opportunities is the resources owned and legally controlled. Brown et al. (2001) test the validity of their measurement instrument among others in terms of overlap with EO (Entrepreneurial Orientation measure). They find that most of the dimensions they include in entrepreneurial management are separate from the dimensions included in EO and conclude that these two concepts should be used in combination in order to diagnose the level of entrepreneurship in companies.

Discussing the knowledge base in earlier research Greene et al. (1999) conclude that earlier research in corporate entrepreneurship, focusing corporate venturing, has not examined in detail how the individual/individuals involved in the venturing process (so-called champion or corporate entrepreneur) go about actually identifying and securing resources needed. The interest for how the individual champion or corporate entrepreneur proceed in the development of new projects and manage to mobilize resources is also seen in the literature referring to so-called bootlegging (or underground) behavior in established businesses (see for example Abetti, 1997b; Augsdörfer, 2005; Criscuolo et al., 2013; Globocnik & Salomo, 2014). Bootlegging is “the process by which individuals take the initiative to work on ideas that have no formal organizational support and are often hidden from the sight of senior management...” (Criscuolo et al., 2013, page 1288). The bootlegging concept has its roots and got its name based on the practice of hiding spirits in one’s boots (Criscuolo et al., 2013). Since bootlegging activities are not known and legitimized by the organization the corporate entrepreneur that engages in bootlegging per definition lack access to formal resources such as people/work time, materials and equipment (Globocnik & Salomo, 2014). This in turn implies that the corporate entrepreneur bootlegging must him-/herself find the resources needed, persuade others to share resources or even use the resources of others without asking (Abetti, 1997a). At the same time, in line with the stream of research discussing the corporate venture champion (see Greene et al., 1999) the research related to bootlegging and underground initiatives by corporate entrepreneurs do not in detail discuss specific methods for how to secure resources (see Abetti, 1997b; Augsdörfer, 2005; Mainemelis, 2010; Criscuolo et al., 2013; Globocnik & Salomo, 2014).

To sum up, given the existing knowledge related to the role of resources in corporate entrepreneurship there seems to be potential for development in two areas referring to two levels of analysis. First of all, on the individual level of analysis earlier research has stressed the important role of the corporate entrepreneur, venture champion (Greene et al., 1999) or the employees engaging in bootlegging. However, as stressed out this earlier research is undeveloped in terms of specific methods that potentially are and could be used for securing the use of resources. This is in particular important for the corporate entrepreneur engaging in bootlegging activities (which per definition is not known of by the management team).

Secondly, there seems to be potential for development of knowledge related to the level of analysis referring to the business. One area within corporate entrepreneurship is focusing business model renewal (Kuratko & Audretsch, 2009; Kuratko et al., 2011). Despite strong interest in research and among companies the knowledge in the business model literature is still limited (Zott et al., 2011). This in particular when it comes to how companies actually are able to change and renew their business model (Cavalcante, Kesting & Ulh i, 2011; Achtenhagen et al., 2013; Mezger, 2014). Recent research has indicated that the ability to change and renew the business model is dependent on the development of resources and capabilities (see for ex Mezger, 2014). However, our knowledge as for how this is made possible is limited. In this paper a potential is identified to further our understanding in this respect using insights from bootstrapping research.

The purpose of this paper is to discuss potential developments related to these two levels of analysis using insights from earlier research related to independent entrepreneurship on so-called bootstrapping practices in new and small businesses.

RESEARCH ON BOOTSTRAPPING

Thorne (1989) together with Bhidé (1992) can be considered being the first authors to direct our attention to the potential of alternative methods for handling finance (and need for resources) in new and small businesses. Thorne (1989) did not explicitly refer to bootstrapping as a concept but discussed methods being used in practice that we later know as bootstrapping which he thought should be taken up and examined in research. In his text he states that a surprising amount of new businesses are financed using other than traditional sources such as equity and debt from new owners and banks. He presents examples of what he refers to as alternative methods for financing such as negotiating favorable terms with customers and suppliers, and methods for handling need for competence (employees) at favorable terms. Thorne (1989) states that: “It is the entrepreneur’s ability to find and exploit other sources of funding that often identifies the “entrepreneurial” character of the individual.”.

Bhid  (1992) was one of the first researchers to explicitly discuss the concept of bootstrapping referring to “bootstrap financing”. He wrote his paper as a reaction to the, at that time, focus on so-called big money model. This big money model referred to the

assumption that new businesses will need and seek large amounts of money from external financiers such as venture capitalists and banks. Based on interviews with founders of companies on the so-called Inc 500 list Bhide (1992) concluded that the major part of these businesses had not been started with large amounts of external capital instead they had used different methods for keeping costs low and relying on the founders savings and resources. Bhide (1992) refers to these methods of securing resources at low cost and using the founder's savings and resources as bootstrapping.

Another pioneering study of bootstrapping practices in new businesses is the study by Freear et al. (1995). In their study they examined bootstrapping practices among new software businesses in US. Freear et al. (1995) define bootstrapping as "highly creative ways of acquiring the use of resources without borrowing money or raising equity financing from traditional sources.". In line with Thorne (1989) traditional sources refer to equity and debt from external financiers such as new owners and banks. The study by Freear et al. (1995) was replicated by Harrison and Mason (1997) who examined use of bootstrapping in the software industry in Northern Ireland. Winborg and Landström (2001) extended the study by Freear et al. (1995) to include different sectors examining bootstrapping practices in Swedish small businesses. Winborg and Landström (2001) identified different groups (or clusters) of bootstrappers differing in their use of bootstrapping. One of these groups was called relationship-oriented bootstrapper. This group use different methods of joint utilization with other companies to a relatively large extent. This includes methods such as borrowing and/or sharing resources with other companies often at favorable terms.

The early literature on bootstrapping was focused on examining relative use of bootstrapping methods. Over the last ten years a number of studies have been undertaken to develop our understanding of the use of bootstrapping (many of these studies being based on the framework in Winborg & Landström, 2001). One question raised in these more recent studies is whether use of bootstrapping changes over the life cycle of the business (see for example Ebben & Johnson, 2006). Examining this issue Ebben and Johnson (2006) find that the use of owner-related bootstrapping (such as withholding salary) decreases over time whereas various bootstrapping methods related to negotiating favorable terms with customers increase.

Another issue examined in more recent studies is whether bootstrapping is favorable for growth or not (see for example Patel et al., 2011; Vanacker et al., 2011). The findings in Vanacker et al. (2011) indicate a positive relation between some of the bootstrapping methods examined and new venture growth whereas for many of the bootstrapping methods no relation (positive or negative) was found. Hence no negative relations were found. On the other hand, the findings presented in the study by Patel et al. (2011) indicate a non-linear (inverted u-shaped) relation between bootstrapping and growth which according to the authors implies that "excessive bootstrapping has decreasing returns to venture growth.".

Finally, a number of recent studies have examined the potential relation between social capital and use of bootstrapping (see for example Jones & Jayawarna, 2010; Jonsson & Lindbergh, 2013; Grichnik et al., 2014; Jayawarna et al., 2015). The findings in Jones and Jayawarna

(2010) show that the influence from social networks on firm performance is mediated by entrepreneurs bootstrapping activities. Focusing on the relation between bootstrapping and performance the findings in this study show a positive relation as for some bootstrapping methods but not for all. When it comes to methods related to joint utilization a positive relation is found whereas for owner-related bootstrapping no relation was found. Grichnik et al. (2014) find that the size of the network of the entrepreneur positively influences the use of bootstrapping. Furthermore, the authors find interesting results as for the influence of strong (family and friends) and weak ties. The size of the weak tie network has a positive association with relative use of bootstrapping whereas they find no influence from the size of the strong tie network. According to the authors these findings indicate that bootstrappers find more resources of general use outside the family/friends (strong) network. Jayawarna et al. (2015) in their study find that woman entrepreneurs are relatively more dependent on strong ties for bootstrapping resources whereas for men so-called weak ties are relatively important. Related to the study by Grichnik et al. (2014) Jayawarna et al. (2015) conclude that the differences between men and women entrepreneurs in turn imply that they face different opportunities to secure appropriate resources via bootstrapping.

Related to the interest in social networks for bootstrapping in the studies above Winborg (2000) and Winborg and Johansson (2001) argue that entrepreneurs that manage to bootstrap using others' resources for free or at low cost engage in so-called social contracting. In social contracting use of resources is secured for social obligations (see also Starr & MacMillan, 1990). Either social obligations others have to the entrepreneur (due to favours he/she has done before) are used or use of resources is being made today for unspecified compensation in the future. On the other hand, in financial contracting (or discrete contracting) the norm is the exchange of money in return for goods with an explicit value (see Winborg, 2000, page 179).

Winborg (2009) examined the different motives for engaging in bootstrapping and as opposed to the assumption in many earlier studies the findings in his study actually showed that entrepreneurs use bootstrapping not only due to lack of capital (hence not only as a last resort). The findings indicate that some entrepreneurs use bootstrapping as a planned decision in order to maintain freedom of action (by not owning all resources) and as a way of reducing the risk in the business (by keeping the balance sheet as small as possible using others' resources).

Related to the motives for engaging in bootstrapping there are studies discussing overall strategic implications and advantages related to the use of bootstrapping. For example, Winborg (2003) argues that entrepreneurs engaging in bootstrapping can secure resources needed for the activities being part of their business value chain at low or no cost. As examples, he describes that some entrepreneurs manage to promote/market the business and its products/services at no cost (getting the opportunity to use other companies marketing channels for free), and that other entrepreneurs have succeeded in "transferring" consulting for an initial paying customer into a volume product (hence having the initial customer paying the main part of the development of the product). Furthermore, Grichnik et al. (2014) claim that by using bootstrapping solutions entrepreneurs can realize business opportunities with

means (resources) that would not be achievable based on conventional market transactions. This is in line with the argument by Winborg (2003) saying that the use of some bootstrapping methods will lead to the entrepreneur being able to develop unique resources that cannot be purchased on the market using conventional financial transaction (money for goods/resources). An example of this is using bootstrapping methods for developing competence using customers and potentially university researchers at favorable terms to develop unique competence in the business. In the same way we can imagine that securing access to other companies marketing channels at low or no cost in turn is an example of a resource that will be hard to buy in the market and hence hard to copy. In line with the reasoning above, Patel et al. (2011) argue that bootstrapping often will imply that the resources secured are seldom general purpose resources. On the one hand this may put restrictions as for the relative use of the resource for the entrepreneur (Patel et al., 2011). On the other hand, this means that these resources are specific and hence may be unique. In line with this, Grichnik et al. (2014) indicate that the use of bootstrapping has implications for the competitive advantage of the business.

Vanacker et al (2011) argue that by the use of bootstrapping the entrepreneur will create/foster a mindset in the business characterized by a belief in making the most out of the own and others resources. This mindset in turn can create a competitive advantage over businesses that is focused on securing resources using a traditional financial contracting approach (hence buying resources at market price in exchange for money). Furthermore, the businesses in which entrepreneurs by the use of bootstrapping methods manage to borrow and share resources instead of buying them will be more flexible to change strategic direction if needed (Vanacker et al., 2011). Finally, Malmström (2014) identifies different typologies of bootstrapping behavior and she argues that these typologies in turn have implications as for the development of the business model of the business.

IMPLICATIONS FOR CORPORATE ENTREPRENEURSHIP RESEARCH

Earlier in the paper it was concluded that there seems to be potential for advancing our understanding of the role of resources in corporate entrepreneurship. The potential refers to the individual level of analysis (referring to the action of the corporate entrepreneur) as well as the level of analysis focusing the business (referring to the potential role of resources for business model renewal). In this concluding section implications from using insights from bootstrapping research will be discussed related to these two levels of analysis. First will be discussed implications for the individual level of analysis and then implications for the level of analysis focusing the business.

Corporate entrepreneurs mobilization of resources

There seems to be potential to further develop our understanding of how corporate entrepreneurs mobilize resources using insights from bootstrapping research. In this way to complement earlier work on the corporate venture champion (Greene et al., 1999), the use of

network contacts by intrapreneurs (see for example Urbano & Turró (2013), and research on bootlegging (for recent studies see for example Criscuolo et al., 2013; Globocnik & Salomo, 2014).

The bootstrapping research can further advance our understanding of how corporate entrepreneurs mobilize resources in two ways. Firstly, the bootstrapping research has up to now among others focused on examining the use of specific bootstrapping methods. At the same time, as indicated the research related to corporate entrepreneurs' mobilization of resources only touches upon specific methods that can be used. Therefore, future research should be based on the frameworks of methods developed in the bootstrapping research examine the specific methods that corporate entrepreneurs use. Since bootstrapping research has been focused on methods to be used for the business as such this of course means that all methods included will not be relevant when focusing the individual corporate entrepreneur. Methods that seem highly relevant are methods included in relationship-oriented bootstrapping (one group of methods identified in Winborg & Landström, 2001) such as borrowing and/or sharing resources with others at low cost or for free. Related to corporate entrepreneurship for example in bootlegging situations we can imagine the corporate entrepreneur succeeding in using other departments' resources for free. Research in bootstrapping has also highlighted methods for negotiating favorable conditions with suppliers and customers including testing/using resources from suppliers for free and for having prepayments from customers. Engaging with and using resources from customers and suppliers is related to examples given in research discussing bootlegging in which the corporate entrepreneur take contact with external stakeholders without the management being aware. For so-called relationship-oriented bootstrapping, network contacts are central for being able to find and negotiate favorable solutions as for need for resources. The focus on the role of network contacts for corporate entrepreneurs is indicated in the study by Urbano and Turró (2013).

Secondly, in bootstrapping research some studies give inputs to develop a conceptual understanding of what characterizes the mindset of the bootstrapper in comparison with the entrepreneur going for traditional financial solutions (that is using internal generated funds and/or finance from external financiers to buy resources at market price). Winborg (2015) refers to the reasoning in Starr and MacMillan (1990) arguing that the bootstrapper is skilled in perceiving opportunities for making more use of resources underutilized by others. Starr and MacMillan (1990) provide examples of entrepreneurs borrowing equipment and location space not fully used by the owner. The corporate entrepreneur seeking to mobilize resources will gain from using an orientation focused on finding underutilized resources inside the organization as well as at external stakeholders such as suppliers or university research organizations. The discussion related to resource orientation is clearly linked to the article by Brown et al. (2001) seeking to develop an instrument measuring Stevenson's concept "entrepreneurial management". One of the dimensions in this instrument is the resource orientation. Brown et al. (2001) refer to Starr and MacMillan (1990) stating that as for commitment of resources the entrepreneur (or promoter) is focused rather on being able to make use of resources needed rather than legally controlling/owning these.

Business model renewal

Recent research has indicated that the ability to change and renew the business model is dependent on the development of resources and capabilities (see for ex Mezger, 2014). However, our knowledge as for how this is made possible is limited. This in particular as for how small and medium-sized businesses (SMEs) manage to renew their business models (Lindgren, 2012). SMEs are at a disadvantage over large businesses because in general they possess less resources (Vlaar et al., 2005). Hence, it can be assumed that small and medium-sized businesses face challenges in seeking to change and renew the business model. The implications in this section are therefore targeted at corporate entrepreneurship via business model renewal in SMEs.

In line with Malmström (2014) it is assumed that the kind of bootstrapping activities that the business is engaged in will have implications for its business model. In the context of the business model the resources represent the means for the outcome in terms of value offerings such as products, services or ways of distributing services (see also Johnson et al., 2008; Richardson, 2008). In order to be able to renew the business model the business will need to secure access to new resources and/or need to rethink how it uses the existing resources. From this perspective, bootstrapping seems to offer important opportunities.

As discussed earlier the bootstrapper applies a different perspective to handling need for resources as compared with the behavior following a traditional financial contracting logic in which all resources needed are purchased at market price using money as means (see Starr & MacMillan, 1990; Winborg, 2000). As said this reasoning is closely related to the instrument developed in Brown et al. (2001) in particular as for the promoters view of resource orientation.

Referring to the value chain of a business bootstrapping implies that some of the activities in the chain can be handled at low or no cost and that for some we even ride on other companies activities (such as using other companies marketing channels/activities). Moreover, in bootstrapping the case is often that the resource secured is not a general purpose resource (Patel et al., 2011). In line with this, Winborg (2003) claims that the use of some bootstrapping methods will imply that the business is able to develop unique resources which are not possible to purchase in the market and hence not possible for other companies (competitors) to copy. Another strategic implication from engaging in bootstrapping is the fact that the business that manages to borrow or share others resources instead of buying these will be more flexible to change and renew the strategic direction and business model as compared had the business legally been the owner of all resources in use. Finally, bootstrapping will foster a mindset in the company focused on making the most out of own and others resources (see Vanacker et al., 2011). This mindset in turn will be beneficial as for being alert for opportunities for renewing the business model of the business.

LIST OF REFERENCES

- Abetti, P. A. (1997a). Underground innovation in Japan: The development of Toshiba's word processor and laptop computer. *Creativity and innovation management*, 6(3), 127-139.
- Abetti, P. A. (1997b). The birth and growth of Toshiba's laptop and notebook computers: A case study in Japanese corporate venturing. *Journal of Business Venturing*, 12(6), 507-529.
- Achtenhagen, L., Melin, L. & Naldi, L. (2013). Dynamics of business models—strategizing, critical capabilities and activities for sustained value creation. *Long range planning*, 46(6), 427-442.
- Ahuja, G. & Lampert, C. M. (2001). Entrepreneurship in the large corporation: A longitudinal study of how established firms create breakthrough inventions. *Strategic Management Journal*, 22(6-7), 521-543.
- Augsdorfer, P. (2005). Bootlegging and path dependency. *Research Policy*, 34(1), 1-11.
- Bhide, A. (1991). Bootstrap finance: the art of start-ups. *Harvard business review*, 70(6), 109-117.
- Bloodgood, J.M., Hornsby, J.S. & Hayton, J.C. (2013). Organizational resourcefulness: The role of purposeful resource focus vacillation in implementing corporate entrepreneurship. In A.C. Corbett & J.A. Katz (Eds.), *Entrepreneurial Resourcefulness: Competing with Constraints*. Emerald Group Publishing, UK.
- Borch, O.J., Huse, M. & Senneseth, K. (1999). Resource configuration, competitive strategies, and corporate entrepreneurship: An empirical examination of small firms. *Entrepreneurship Theory and Practice*, 24(1), 51-72
- Brown, T. E., Davidsson, P. & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior. *Strategic management journal*, 22(10), 953-968.
- Burgelman, R. A. (1983). Corporate entrepreneurship and strategic management: Insights from a process study. *Management science*, 29(12), 1349-1364.
- Cavalcante, S., Kesting, P. & Ulhøi, J. (2011). Business model dynamics and innovation:(re) establishing the missing linkages. *Management Decision*, 49(8), 1327-1342.
- Corbett, A., Covin, J. G., O'Connor, G. C. & Tucci, C. L. (2013). Corporate Entrepreneurship: State-of-the-Art Research and a Future Research Agenda. *Journal of Product Innovation Management*, 30(5), 812-820.

Criscuolo, P., Salter, A. & Ter Wal, A. L. (2013). Going underground: Bootlegging and individual innovative performance. *Organization Science*, 25(5), 1287-1305.

Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J. & Lane, P. J. (2003). Emerging issues in corporate entrepreneurship. *Journal of management*, 29(3), 351-378.

Ebben, J. & Johnson, A. (2006). Bootstrapping in small firms: An empirical analysis of change over time. *Journal of Business Venturing*, 21(6), 851-865.

Freear, J., Sohl, J.E. & Wetzel Jr, W.E. (1995). *Who Bankrolls Software Entrepreneurs?* Paper presented at the 15th Annual Babson College Entrepreneurship Research Conference, London.

Globocnik, D. & Salomo, S. (2014). Do formal management practices impact the emergence of bootlegging behavior?. *Journal of Product Innovation Management*.

Greene, P. G., Brush, C. G. & Hart, M. M. (1999). The corporate venture champion: A resource-based approach to role and process. *Entrepreneurship Theory and Practice*, 23, 103-122.

Grichnik, D., Brinckmann, J., Singh, L. & Manigart, S. (2014). Beyond environmental scarcity: Human and social capital as driving forces of bootstrapping activities. *Journal of Business Venturing*, 29(2), 310-326.

Guth, W. D. & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic management journal*, 11(4), 5-15.

Harrison, R.T. & Mason, C.M. (1997). *Entrepreneurial Growth Strategies and Venture Performance in the Software Industry*. Paper presented at the 17th Annual Babson College Entrepreneurship Research Conference, Boston.

Hornsby, J. S., Kuratko, D. F. & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of business Venturing*, 17(3), 253-273.

Jayawarna, D., Jones, O. & Marlow, S. (2015). The influence of gender upon social networks and bootstrapping behaviours. *Scandinavian Journal of Management*, 31(3), 316-329.

Johnson, M. W., Christensen, C. M. & Kagermann, H. (2008). Reinventing your business model. *Harvard business review*, 86(12), 57-68.

Jones, O. & Jayawarna, D. (2010). Resourcing new businesses: social networks, bootstrapping and firm performance. *Venture Capital*, 12(2), 127-152.

Jonsson, S. & Lindbergh, J. (2013). The development of social capital and financing of entrepreneurial firms: From financial bootstrapping to bank funding. *Entrepreneurship Theory and Practice*, 37(4), 661-686.

Kuratko, D. F. & Audretsch, D. B. (2009). Strategic entrepreneurship: exploring different perspectives of an emerging concept. *Entrepreneurship Theory and Practice*, 33(1), 1-17.

Kuratko, D.F., Morris, M.H. & Covin, J.G. (2011). *Corporate Innovation & Entrepreneurship*. International 3rd edition. South Western Cengage Learning.

Kuratko, D. F., Hornsby, J. S. & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality. *Small Business Economics*, 1-9.

Lindgren, P. (2012). Business Model Innovation Leadership: How Do SME's Strategically Lead Business Model Innovation?. *International Journal of Business and Management*, 7(14), p53.

Mainemelis, C. (2010). Stealing fire: Creative deviance in the evolution of new ideas. *Academy of Management Review*, 35(4), 558-578.

Malmström, M. (2014). Typologies of bootstrap financing behavior in small ventures. *Venture Capital*, 16(1), 27-50.

Mezger, F. (2014). Toward a capability-based conceptualization of business model innovation: insights from an explorative study. *R&D Management*, 44(5), 429-449.

Nason, R. S., McKelvie, A. & Lumpkin, G. T. (2015). The role of organizational size in the heterogeneous nature of corporate entrepreneurship. *Small Business Economics*, 1-26.

Patel, P., Fiet, J. & Sohl, J. (2011). Mitigating the limited scalability of bootstrapping through strategic alliances to enhance new venture growth. *International Small Business Journal*, 29(5), 421-447.

Patel, P., Kohtamäki, M., Parida, V. & Wincent, J. (2014). Entrepreneurial orientation-as-experimentation and firm performance: the enabling role of absorptive capacity. *Strategic Management Journal*. Doi: 10.1002/smj.2310.

Peterson, R. A. & Berger, D. G. (1972). Entrepreneurship in organizations: Evidence from the popular music industry. *Administrative Science Quarterly*, 97-106.

Phan, P. H., Wright, M., Ucbasaran, D. & Tan, W-L. (2009). Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing*, 24(3), 197-205.

Richardson, J. (2008). The business model: an integrative framework for strategy execution. *Strategic Change*, 17(5-6), 133-144.

Sharma, P. & Chrisman, J.J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, 23(3), 11-27.

Simsek, Z., Veiga, J.F. & Lubatkin, M.H. (2007). The impact of managerial environmental perceptions on corporate entrepreneurship: Towards understanding discretionary slack's pivotal role. *Journal of Management Studies*, 44(8), 1398-1424.

Starr, J.A. & MacMillan I. (1990). Resource Cooptation via Social Contracting: Resource Acquisition Strategies for New Ventures. *Strategic Management Journal*, 11, 79-92.

Stevenson, H.H. & Jarillo, J.C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11(4), 17-27.

Teng, B-S. (2007). Corporate entrepreneurship activities through strategic alliances: A resource-based approach toward competitive advantage. *Journal of Management Studies*, 44(1), 119-142.

Thorne, J.R. (1989). Alternative financing for entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 13(3), 7-9.

Urbano, D. & Turró, A. (2013). Conditioning factors for corporate entrepreneurship: an in(ex)ternal approach. *International Entrepreneurship and Management Journal*, 9(3), 379-396.

Vanacker, T., Manigart, S., Meuleman, M. & Sels, L. (2011). A longitudinal study on the relationship between financial bootstrapping and new venture growth. *Entrepreneurship & Regional Development*, 23(9-10), 681-705.

Vlaar, P., De Vries, P. & Willenborg, M. (2005). Why incumbents struggle to extract value from new strategic options: Case of the European airline industry. *European Management Journal*, 23(2), 154-169.

Winborg, J. (2000). *Financing small businesses. Developing our understanding of financial bootstrapping behavior*. PhD thesis, School of Economics and Management, Lund University, Lund.

Winborg, J. (2003). Pengar är inte alltid lösningen – Användningen av finansiell bootstrapping i små företag (*Money is not always the solution – The use of financial bootstrapping in small businesses*). In Landström, H. (red.) *Småföretaget och kapitalet – en antologi om svensk forskning kring små företags finansiering*. SNS Förlag, Stockholm.

Winborg, J. (2009). Use of financial bootstrapping in new businesses: a question of last resort? *Venture Capital: An International Journal of Entrepreneurial Finance*, 11(1), 71-83.

Winborg, J. (2015). The role of financial bootstrapping in handling the liability of newness in incubator businesses. *International Journal of Entrepreneurship and Innovation*, 16(3), 197-206.

Winborg, J. & Johannisson, B. (2001). *Developing a Conceptual Framework for Financial Bootstrapping Behavior in Small Businesses*. Paper presented at RENT Conference, Åbo.

Winborg, J. & Landström, H. (2001). Financial bootstrapping in small businesses: examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, 16(3), 235–254.

Zahra, S.A., Filatotchev, I. & Wright, M. (2009). How do threshold firms sustain corporate entrepreneurship? The role of boards and absorptive capacity. *Journal of Business Venturing*, 24(3), 248-260.

Zott, C., Amit, R. & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019-1042.