
The role of private equity: from focus on the product to focus on value creation

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Abstract: As a consequence of the paradigm shift from an industrial society to an information society, the role of the entrepreneur ought to change from being an inventor of product/services to become a value creator. Hence, the focus of entrepreneurial ventures should be shifting towards creating viable business models rather than superior product/services. One major implication of the shift of entrepreneurial endeavour from product/services towards creating new business models is that hands on investors behind companies' have to be involved closer to the inception of new ventures in order to contribute to their portfolio companies.

Keywords: paradigm shift; the role of private equity; new strategy; business logic; value creation; business concept; resource-based theory; agency theory; venture capital; propositions for future research.

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1 Introduction

The emergence of entrepreneurial firms initiates a broad range of positive effects in economic development (Drucker, 1985; Schumpeter, 1934; Teece, 1986). Research indicates however, that the probability of survival is rather limited for new organisations (Freeman et al., 1983). Stinchcombe (1965) labelled this phenomenon the 'liability of newness', and argued that new organisations' general resource poverty, lack of legitimacy, and weak ties to external actors provide them with reduced capacity when competing with established players.

Though environmental influence on organisation survival is well documented (Aldrich, 1979; Cooper, 1993; Freeman et al., 1983; Gartner et al., 1998; Hannan and Freeman, 1977; Sandberg and Hofer, 1987), recent studies have shown that successful management of internal resources can significantly improve venture performance and the likelihood of survival (Boeker, 1989; Hambrick et al., 1996; Hambrick and Mason, 1984; Shephard et al., 2000; Smith et al., 1994). This is especially true for new organisations in emerging, fast-moving industries (Birley and Stockley, 2000; Jensen and Meckling, 1976; Virany and Tushman, 1986). Initial resource management decisions, in particular, appear to be of special significance, as these decisions stick with the organisation in the long run (Boeker, 1988, 1989; Gersick, 1991; McDougall et al., 1994).

Due to the general resource poverty of entrepreneurial ventures, the new venture teams face considerable challenges in gaining access to financial resources as well as other resources like business knowledge, experience, and networks. Because of the venture capital funds' hands on approach to their investments, attracting financing from such equity providers is generally perceived as a viable approach for these ventures in order to fill their resource gap. A unique characteristic of Venture Capitalists (VCs) is that they to a large extent they prefer to be hands-on investors, offering knowledge resources in addition to the financial capital offered (Brush et al., 2001). Therefore, VCs may represent a source for complementary skills that augment the resource base of a venture capital backed venture.

Venture capital research has basically followed two distinct paths to link the post investment behaviour of VCs to performance of their portfolio companies. The most dominant path is that of VCs' employment of governance mechanisms to control the new venture teams of their portfolio companies. This research has to a great extent been rooted in agency theory, contending that contracting and monitoring efforts can improve portfolio firm performance by reducing agency costs. The second path is rooted in resource based logic. In this part of venture capital research, scholars study the relationship between the venture capitalist as a provider of non-financial resources (e.g., obtaining alternative sources of equity financing, serving as a sounding board to the new venture team, and formulating business strategy) and portfolio firm performance. Focus within this research is on both human capital (the venture capitalist's experience and expertise) and social capital (the VCs access to resources from other firms/organisations due to their network).

In this paper, we address the question of linking post-investment behaviour of hands-on equity providers as VCs to portfolio firm performance by discussing a new challenge for both entrepreneurs and their equity providers. Hence, we argue that a general shift in business logic represents a need for both entrepreneurs and hands-on investors to rethink their current way of structuring their cooperation. First, we describe the shift in business logic in general and its consequences for the resource acquisition

process for new venture teams. Second, we discuss different definitions on entrepreneurship and the effects of the new way of thinking business. Third, we use the resource-based theory of the firm as a point of departure for describing the resource acquisition process of entrepreneurial venture and to highlight the importance of early decisions for such ventures. Finally, rooted in agency theory, we discuss the role of VCs regarding their monitoring and control effort to reduce agency risk. We conclude the paper with suggestions for both venture capitalists and entrepreneurs to adapt to the new way of thinking business.

2 Paradigm shift: from industry to information society

There has been a paradigm shift from an industrial society to an information society that emerged in the 1990s (Wananabe and Nagamatsu, 2003). This shift in paradigm has included a shift in the logic of business. The business logic governs the way entrepreneurs and investors think business. In the old paradigm, the industry society, there were firm and stable sequences between producers of raw materials and retailers further up in the value chain, and focus was on economic inputs and returns. The customer's role was passive receivers of goods and services. In the new paradigm, the information society, the logic of business has changed. The value chain has been replaced by a value creating star (Normann, 2001).

“Instead of seeing the business as a flow of materials to which value is continuously added and ending with the customer, we now see business starting from the customers and flowing to the company. The perspective changes from inside out to outside in.” (Normann, 2001, p.21)

The critical competence for the company has changed from knowledge about production to knowledge about the customer. The business company changes from being a producer to being an organiser of value creation (Normann, 2001).

The foundation for the shift in paradigm from old to new business logic is based on the new information technology with four main characteristics linked to the computer: Procedural (logic engines), participatory (encourage a sense of participation), spatial (create virtual space), encyclopaedic (store huge amounts of information easily) (Hanson, 2000, pp.39–45). We add reduced transaction costs (Williamson, 1975) as a consequence of the technology shift. This shift in the business paradigm creates new problems and new options for the entrepreneur. Especially, the development of the business concept (Bhave, 1994) becomes of vital importance.

3 Entrepreneurship and stage-of development models

Despite the multitude of entrepreneurship definitions existing in the literature, it does not seem controversial to include ‘new offer’ within the concept of entrepreneurship. According to Cooper (1993), a new offer could either be a new product/service, a new price/value relation, or a new bundle of product and service components. The first category, new product or service, corresponds to Schumpeter (1934) ‘new product’ and deals with the case when a product/service is so new that when it is introduced that a new market is created. The second category, new price/value relations is related to the

production possibility curve (Landström, 1999) and a more effective combination of resources. The third category, 'new bundle', is distinct from the first two in several ways. Davidsson describes this category as

“any combination of product and service components that – as a package deal – is unique relative to what has previously been offered on the market, although no individual component may be strictly new.” (Davidsson, 2004, p.9)

This kind of entrepreneurship does not necessarily take place at the product/production level. Rather, it may be addressed as developments regarding 'business concept' (Bhave, 1994) or 'business model' (Amit and Zott, 2001). This is very much in line with what (Normann, 2001) refers to as being an organiser of value creation rather than a producer. Amit and Zott highlights this kind of entrepreneurship as especially relevant to e-business:

“Value creation opportunities in virtual markets may result from new combinations of information, physical products and services, innovative configurations of transactions, and the reconfiguration and integration of resources, capabilities, roles and relationships among suppliers, partners and customers.” (Amit and Zott, 2001, p.496)

New product/service and new price/value relationship in many ways reflect a traditional view of entrepreneurship with regard to the introduction of a new product/service or production technology. Due to the product/production orientation represented by these categories, the act of entrepreneurship is often regarded as a sequential process (e.g., Bhave, 1994; Kazanjian, 1988; Kazanjian and Drazin, 1990; Webster, 1976, 1977). Hence, independent entrepreneurial start-ups are often analysed within the framework of stage-of development models or life cycle approaches (e.g., Kazanjian, 1988; Kazanjian and Drazin, 1990; Webster, 1976, 1977). Kazanjian and Drazin (1990) proposed and tested a stage of growth model consisting of four stages; conception and development, commercialisation, growth, and stability. This model is representative for the stage-of development models found in the literature on entrepreneurship and similar stage models are often found in different textbooks within entrepreneurship. Stage-of development models, or life cycle approaches, are also commonly employed within the literature on entrepreneurial finance. Here, different financial sources and finance providers are linked to different phases of the venture to be financed (e.g., Mason and Harrison, 1999; Osnabrugge and Robinson, 2000; Sahlman, 1990). In this setting, the detailing level is adjusted to the purpose of the analysis; i.e., finding the appropriate required rate of return for investments in different stages (e.g., Wetzel, 1981). The stage-of development logic is further utilised by venture capital setting regarding how VCs set up contracts and govern their firms post investment. According to Sahlman (1990, p.506): “The most important mechanism for controlling the venture is staging the infusion of capital”. This means that the investors provide the portfolio company only with capital expected to be sufficient to take the company to the next stage of development. This serves both as an incentive to the entrepreneurial not to misuse capital, as well as reducing risk for the investor.

Entrepreneurial endeavour falling within the category of 'new bundle', however, do not fit very well into the stage-of development models found in the entrepreneurship literature. As opposed to the traditional product/service driven entrepreneurial ventures, a distinction between a product development stage and a commercialisation stage may not mirror the actual process. This may complicate both the conceptualisation

of such firms, in addition to put demands for the governance effort by the investors investing in such firms.

4 Venture Capitalists (VCs) as resource providers

In recent years, several scholars have made a case for the appropriateness of the Resource-Based View (RBV) in understanding entrepreneurial processes (Dollinger, 1999; Rotefoss, 2001) and new firm strategic behaviour (Busenitz et al., 2004). According to RBV scholars, the firm can be conceptualised as a bundle of resources and capabilities (Amit and Schoemaker, 1993; Barney, 1991, 1995, 2001; Conner, 1991; Mahoney and Pandian, 1992). Venkataraman and Ven de Ven (1998) argue that the most crucial activity in the business development process revolves around the identification, assembly, and allocation of resources. Initially, an emergent venture will neither possess nor control the resources necessary for survival and growth. Still, entrepreneurs are forced to react to the rapid change of their environment, which requires recourses and expertise far beyond what is controlled by the new venture at inception. Hence, the new venture team's most challenging task is the acquisition of adequate resources. According to this perspective, the entrepreneurial process is one in which the entrepreneurs acquire and develop resources, and where the new venture outcome is to a large extent determined by the nature of the resources the entrepreneurs are able to acquire (Dollinger, 1999).

An important aspect of the hands-on approach adopted by the venture capital providers is that they, themselves, represent a portfolio of complementary skills that can augment the resource base of the new venture. In general, VCs specialise in network activities and monitoring, whereas the entrepreneurial teams acquire particular knowledge regarding opportunity exploitation and the operation of the venture (Cable and Shane, 1997). In general, VCs have experience from prior investments in other ventures. Due to learning-curve effects (Brittain, 1989) and network-building effects, this experience may increase the probability of survival and growth for the portfolio companies of venture capital firms. Within the new business logic, the importance of networks is increasing. In particular, strategic networks is relevant for wealth creation in e-business because of the importance of networks of firms, suppliers, customers, and other partners in the virtual market space (Amit and Zott, 2001).

Venture-backed firms make use of the venture capitalist to a large extent in order to complement their own management resources (Landström, 1990). Indeed, according to Manigart and Struyf (1997), the main reason for why the ventures in their study applied for venture capital was the professional advice and the management support that the VCs provide post investment. According to Fried and Hisrich (1995, p.102) the main inputs VCs have to offer are: "money, operating services, networks, image, moral support, general business knowledge, and discipline".

Often, the investors are represented on the board of directors or in direct managerial positions within the firm. Both the effort and the usefulness of outside board members are regarded as greater in the early stages (seed, start-up, and first-stage financing) than the later stages (second-stage financing and later) (Rosenstein et al., 1993). As suggested by Boeker (1989), Brittain (1989) and Bamford et al. (1999), early decisions and founding conditions, in the formative stages of an organisation, have lasting effects which: imprint the firm, limit its strategic choice, and continue to impact its long-term performance.

One major reason for this deals with the general path dependence of resource development processes. The early stages of a firm's existence define the development of the organisation's deep structures. Deep structures are defined as

“the set of fundamental ‘choices’ a system has made of (1) the basic parts into which its units will be organised and (2) the basic activity pattern that will maintain its existence.” (Gersick, 1991, p.14)

These deep structures can be identified in organisations as routines and cultures that guide managerial decisions, but can also be traced back to the initial strategic choices made by the founders (Boeker, 1988). In these initial stages, the entrepreneurs must decide on an initial strategy on the basis of the resources at hand and those they can realistically acquire (Dollinger, 1999; Sarasvathy, 2001). This initial strategy, which determines which resources and capabilities are to be employed and which are to be developed and acquired, will in turn, result in a new set of available resources when a new strategy is made at the next crossroad. Gersick (1991) illustrates this by means of a decision tree. Once one decision is made, the resulting strategic options are reduced. Hence, even though a specific set of means can result in different strategic decisions (Sarasvathy, 2001), the resource development process is arguably path dependent.

As a consequence of the shift in business logic, the initial resources needed for new venture teams to establish viable businesses, are changing. As the innovation may represent a new business model, rather than a new product/service or a new price/value relation, the early decisions are of significant importance for new venture teams. Within the new business logic, the importance of the resources associated with knowledge areas like strategy, marketing and finance, is increasing, while the hitherto focus on product-specific knowledge alone is diminishing. That is, the initial decisions are no longer limited to technical aspects to produce superior products/services, but rather embracing the important business model of the new venture. The contribution by VCs is rarely associated with the technical details of the specific innovation (Murray, 1996). More commonly VCs contribute with knowledge within strategy, finance as well as networks to finance suppliers, customers and strategic partners. The new business logic leads to increased relevance of the relationship capital (Sawhney and Zabin, 2002) as well as making demands on the strategic insight and market knowledge of the new venture team. This means that when the level of innovation shifts from product/service towards the business model, the need for VCs' value adding activity is moving closer to the inception of the new venture. Thus, we propose for future research:

Hypotheses 1: The VCs' contribution to their portfolio companies has greater impact closer to the inception of the new venture.

According to venture capital research, VCs whom have experience from the focal industry of the portfolio company, provide significantly more value than those with less focal industry experience (Sapienza et al., 1996). Knowledge of the e-business models is of special relevance for the entrepreneurs in the information age. “An e-business model is a descriptive representation of the fundamental components of a business that operates partially or completely on the internet” (Canzer, 2003). Brokerage e-business models cover online marketplaces where buyers and sellers are brought together. Examples are:

- Advertising e-business Model is based on earning revenue in exchange for the display of advertisements on a firm's web site.
- Subscription, Pay-per-View and Membership e-business Models earn revenues through the use of these methods.
- Distribution Channel member e-business model include activities of retailers, wholesalers, and manufacturers carrying on business through the Internet.
- Affiliation e-business Model involves payments to web site operators for customers who find their way to a company's site.
- Community e-business Model built around the idea that a group of online users can regularly use the web site for commercial purposes.
- Infomediary e-business Model is based on the collection and sale of online information. Portal e-business Model earns revenues by drawing users to its site and serving as gateway to information on the internet (Canzer, 2003, pp.120–126).

To be able to secure their own investment the role of private equity could be changed towards the realities of the information age. Competence to use the new business logic together with competence on network, change, human, and process capital in addition to financial capital is of importance for the entrepreneur in the information age. This leads to our second proposition:

Hypothesis 2: VCs with significant knowledge, experience and networks within e-business will add more value to their portfolio ventures than venture capitalists without these resources.

5 Agency theory and Venture Capitalists' (VCs) governance effort

Because of asset specificity and sunk costs associated with production capital in entrepreneurial ventures, venture capitalist need to be assured that they will receive a return on their investments. To provide this assurance, investors may utilise corporate governance mechanisms (Schleifer and Vishny, 1997). According to agency theory scholars (e.g., Jensen and Meckling, 1976; Jensen, 1983), such mechanisms includes incentive alignment (e.g., share ownership, stock options, or a threat of dismissal if income is low), contractual covenants (e.g., limits on capital expenditures, limits on managerial salaries, technology non-disclosure agreements, etc.) and monitoring effort (e.g., board representation, financial reports, etc.).

Research on the venture capitalist/new venture team relationship has to a large extent been rooted in agency theory (e.g., Barney et al., 1994, 1996). The agency theoretical considerations are especially related to governance mechanisms relevant to contracting and controlling issues of the relationship. In essence, agency theory concerns cooperative behaviour between parties with differing goals and differing attitudes toward risk (Eisenhardt, 1989). The underlying assumption for the employment of agency theory is that there are incentives present for the agent not always to act in the best interest of the principal (Jensen and Meckling, 1976). Thus, agency theory, as outlined by Jensen and Meckling, focuses on "the behavioural implications of the property rights specified in the contracts between owners and manager of the firm" (Jensen and Meckling, 1976, p.308).

Hence, agency theory is concerned with the structuring of control relationships and focus on the legal contract between the cooperating partners (Eisenhardt, 1989).

Venture capital research has proposed various mechanisms for VCs to control the behaviour of the new venture teams of their portfolio companies. Governance mechanisms employed in the relationship between VCs and new venture teams typically include contractual provisions, monitoring arrangements, and bonding (Barney et al., 1996; Busenitz et al., 2004). Such mechanisms include staging the infusion of capital, compensation schemes and active involvement in the management of their portfolio companies (Sahlman, 1990).

Due to moral hazard and adverse selection, it may be difficult for the venture capitalist to observe the behaviour of the portfolio companies. In general, the venture capitalist has two options. One is to discover the portfolio firm behaviour by investing in monitoring effort (e.g., board representation, reporting procedures, and budgeting systems). The other option is to contract on the outcomes of the portfolio venture's behaviour (Eisenhardt, 1989). One issue seen as a determinant of which strategy to pursue relates to the task performed by the agent. The argument is that the programmability of the task is likely to influence the ease of monitoring behaviour (Eisenhardt, 1989). Hence, it is assumed that the more the behaviour by the agent can be specified in advance, the easier it is to verify whether the agent has lived up to its obligations. This means that the more programmed the task, the more attractive are behaviour-based contracts because information about the agent's behaviour is more readily determined (Eisenhardt, 1989). Vice versa, when the level of task programmability is low, contracts based on outcomes, which seek to align the preferences of the agent to those of the principal, are regarded to be most effective. According to our arguments, the new business logic implies that an increasingly part of entrepreneurship endeavour is taking place at the business model level rather than on the product/service level. As may be the case also when it comes to the development and market introduction of new product/services, especially high-tech innovations, the programmability of a business model innovation will in general be low. This means that outcome-based contracts may be more appropriate for VCs to control their portfolio companies within the new business logic. Hence we propose:

Hypothesis 3: When the innovation concerns the business model, outcome-based contracts will be more effective than behaviour-based contracts.

Because entrepreneurs may have incentives to continue running projects they know have negative net present value (Gompers, 1995), the staging of venture capital investments may allow the VCs to intervene and price subsequent rounds so that they earn a fair rate of return. Hence, staging of capital payouts may be an efficient strategy for the VCs due to the resolution of uncertainty as the portfolio firms develop (Gompers, 1995). However, for entrepreneurial ventures in which the innovation lies on the business model level, it may be difficult to link such payouts to stages of the development process as is frequently done in the financing of early stage ventures. Further, stage-based financing based on milestones regarding product/service development is rooted in causation logic of new firm development. As argued by Sarasvathy (2001), the creators of new firms may as well follow effectuation strategies. Hence, the staging of venture capital investments should be based on milestones that are not product/service specific. This means that indicators of growth, market success or economic performance, strategic alliances etc. may be more effective within the new business logic. Hence, we propose:

Hypothesis 4: The staging of capital payouts based on milestones regarding product/service development are less effective than staging based on economic indicators when the innovation take place at the business concept level.

6 The changing role of private equity

The role of private equity is confronted with these new challenges in the information age. The business concepts ought to be developed in the light of the new business logic. In this logic, the concept could more easily be based on cooperation between suppliers in a value creating star (Normann, 2001). The value creation system could more easily satisfy broad customer needs and could operate with low transaction costs.

The new paradigm could imply new roles both for private equity and the entrepreneur. This is illustrated in Table 1.

Table 1 The roles of private equity and the entrepreneur classified according to focus

		Focus of the Entrepreneur	
		Specific on the product/ Service	on the Business (Value creation)
Focus of Private Equity	Product Investment	4	2
	Business Investment (Value creation)	2	1

The optimal solution would be if both the entrepreneur and the investor were focusing on business opportunities and value creation (Aldrich, 1979) and not over focusing on the product/service properties (Bamford et al., 1999).

This would imply a more active role for private equity and give the entrepreneur intellectual support when he needs it the most- in the phase of developing the business idea. Entrepreneurs seem to lack motivation for active information search in unfamiliar domains and when they have a high level of confidence. The link between capital and competence could motivate the entrepreneur for business development (Cooper, 1993). A more active role for the venture capital would influence the role of public sector providers of venture capital (Write et al., 1999).

This leads to our fifth hypothesis:

Hypothesis 5: There will be a greater success rate for entrepreneurs when both the entrepreneur and the representative for the private equity are focusing on value creation than if they both are focusing on product/services.

7 Conclusion

In this paper we have discussed new challenges for entrepreneurs and their venture capital backers. Due to the paradigm shift from an industrial society to an information

society, the role of the entrepreneur ought to change from being an inventor of product/services to become a value creator. Hence, the focus of entrepreneurial ventures should be shifting towards creating viable business models rather than superior product/services. This has implications for both entrepreneurs and venture capitalist. First, venture capital providers should be more closely involved with a firm's inception of the new ventures in order to be effective as resource providers. Second, knowledge regarding e-business models is increasingly important for VCs to enhance value creation in their portfolio ventures. To govern their portfolio ventures introducing new business models to the market, venture capitalist have to find alternatives to stage-based models rooted in product development sequences. Such mechanisms are less effective when it comes to governance of new ventures which innovation lies on the business model level. Hence, staging of capital payouts should be based on indicators decoupled from the product/service development process. Further, outcome based contracts may be more effective than behaviour-based contracts when it comes to innovation on the business model level. For entrepreneurs, the resource acquisition processes should be more focused on attracting relational capital and human capital resources in addition to physical capital resources.

References

- Aldrich, H.E. (1979) *Organizations and Environment*, Prentice-Hall, Englewood Cliffs, NJ.
- Amit, R. and Schoemaker, P.J.H. (1993) 'Strategic assets and organizational rent', *Strategic Management Journal*, Vol. 14, pp.33–46.
- Amit, R. and Zott, C. (2001) 'Value creation in e-business', *Strategic Management Journal*, Vol. 22, pp.493–520.
- Bamford, C.E., Dean, T.J. and McDougall, P.P. (1999) 'An examination of founding conditions and decisions upon the performance of new bank start-ups', *Journal of Business Venturing*, Vol. 15, pp.253–277.
- Barney, J. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, Vol. 17, No. 1, pp.99–120.
- Barney, J.B. (1995) 'Looking inside for competitive advantages', *Academy of Management Executive*, Vol. 9, No. 4, pp.49–62.
- Barney, J.B. (2001) 'Is the resource-based 'view' a useful perspective for strategic management research? Yes', *Academy of Management Review*, Vol. 26, No. 1, pp.41–56.
- Barney, J.B., Busenitz, L.W., Fiet, J. and Moesel, D.D. (1994) 'The relationship between venture capitalist and managers in new firms: determinants of contractual covenants', *Managerial Finance*, Vol. 20, No. 1, pp.19–30.
- Barney, J.B., Fiet, J.O., Busenitz, L.W. and Moesel, D.D. (1996) 'The substitution of bonding for monitoring in venture capitalist relations with high technology enterprises', *The Journal of High Technology Management Research*, Vol. 7, No. 1, pp.91–105.
- Bhave, M.P. (1994) 'A process model of entrepreneurial venture creation', *Journal of Business Venturing*, Vol. 9, pp.223–242.
- Birley, S. and Stockley, S. (2000) 'Entrepreneurial teams and venture growth', *Handbook of Entrepreneurship*, Blackwell, Oxford, UK, pp.287–307.
- Boeker, W.P. (1988) 'Organizational origins: entrepreneurial and environmental imprinting at the time of founding', in Carrol, G.A. (Ed.): *Ecological Models of Organizations*, Ballinger Publishing Company, Cambridge, MA.
- Boeker, W.P. (1989) 'Strategic change: the effects of founding and history', *Academy of Management Journal*, Vol. 32, No. 3, pp.489–515.

- Brittain, J. (1989) 'Strategy and time-dependent failure probabilities: experience, obsolescence, and strategic change', *Academy of Management Proceedings*, pp.173–177.
- Brush, C.G., Green, P.G. and Hart, M.M. (2001) 'From initial idea to unique advantage: the entrepreneurial challenge of constructing a resource base', *Academy of Management Executive*, Vol. 15, No. 1, pp.64–78.
- Busenitz, L.W., Fiet, J.O. and Moesel, D.D. (2004) 'Reconsidering the venture capitalists' 'value added' proposition: an interorganizational learning perspective', *Journal of Business Venturing*, Vol. 19, pp.787–807.
- Cable, D.M. and Shane, S. (1997) 'A prisoner's dilemma approach to entrepreneur-venture capitalist relationships', *Academy of Management Review*, Vol. 22, No. 1, pp.142–176.
- Canzer, B. (2003) *E-Business. Strategic Thinking and Practice*, Houghton Mifflin Company, Boston, New York.
- Conner, K. (1991) 'A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm', *Journal of Management*, Vol. 17, No. 1, pp.121–154.
- Cooper, A.C. (1993) 'Challenges in predicting new firm performance', *Journal of Business Venturing*, Vol. 8, pp.241–253.
- Davidsson, P. (2004) *Researching Entrepreneurship*, Springer, Jönköping.
- Dollinger, M.J. (1999) *Entrepreneurship: Strategies and Resources*, Richard D. Irwin, Homewood, IL.
- Drucker, P.F. (1985) *Innovation and Entrepreneurship*, Butterworth Heinemann, Oxford.
- Eisenhardt, K.M. (1989) 'Agency theory: an assessment and review', *Academy of Management Review*, Vol. 14, No. 1, pp.57–74.
- Freeman, J., Carroll, G.R. and Hannan, M.T. (1983) 'The liability of newness: age dependence in organizational death rates', *American Sociological Review*, Vol. 48, October, pp.692–710.
- Fried, V.H. and Hisrich, R.D. (1995) 'The venture capitalist: a relationship investor', *California Management Review*, Vol. 37, No. 2, pp.101–113.
- Gartner, W.B., Starr, J.A. and Bhat, S. (1998) 'Predicting new venture survival: an analysis of 'anatomy of a start-up', Cases from inc. magazine', *Journal of Business Venturing*, Vol. 14, pp.215–232.
- Gersick, C.J.G. (1991) 'Revolutionary change theories: a multilevel exploration of the punctuated change paradigm', *Academy of Management Review*, Vol. 16, No. 1, pp.10–36.
- Gompers (1995) 'Optimal investment, monitoring, and the staging of venture capital', *Journal of Finance*, Vol. 50, No. 5, pp.1461–1489.
- Hambrick, D.C. and Mason, P.A. (1984) 'Upper echelon: the organization as a reflection of its top managers', *Academy of Management Review*, Vol. 9, No. 2, pp.193–206.
- Hambrick, D.C., Cho, T.S. and Chen, M-G. (1996) 'The influence of top management team heterogeneity on firms' competitive moves', *Administrative Science Quarterly*, Vol. 41, pp.659–684.
- Hannan, M.T. and Freeman, J. (1977) 'The population ecology of organizations', *American Journal of Sociology*, Vol. 82, pp.929–964.
- Hanson, W. (2000) *Principles of Internet Marketing*, South-Western College Publishing, Cincinnati, Ohio.
- Jensen, M.C. (1983) 'Organization theory and methodology', *The Accounting Review*, Vol. 58, No. 2, pp.319–339.
- Jensen, M.C. and Meckling, W.H. (1976) 'Theory of the firm: managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, Vol. 3, pp.305–360.
- Kamm, J.B., Shuman, J.C., Seeger, J.A. and Nurick, A.J. (1990) 'Entrepreneurial teams in new venture creation: a research agenda', *Entrepreneurship Theory and Practice*, Summer, pp.7–17.

- Kazanjian, R.K. (1988) 'Relation of dominant problems to stages of growth in technology-based new ventures', *Academy of Management Journal*, Vol. 31, pp.257–279.
- Kazanjian, R.K. and Drazin, R. (1990) 'A stage-contingent model of design and growth for technology based new ventures', *Journal of Business Venturing*, Vol. 5, No. 3, pp.137–150.
- Knight, G.A. (1997) *Emerging Paradigm for International Marketing: The Born Global Firm*, Unpublished Doctor of Philosophy, Michigan State University, Michigan, USA.
- Landström, H. (1990) 'Co-operation between venture capital companies and small firms', *Entrepreneurship and Regional Development*, Vol. 2, No. 4, pp.345–362.
- Landström, H. (1999) 'The roots of entrepreneurship research', *New England Journal of Entrepreneurship*, Vol. 2, No. 2, pp.9–20.
- Lichtenstein, B.M.B. and Brush, C.G. (2001) 'How do 'resource bundles' develop and change in new ventures? A dynamic model and longitudinal exploration', *Entrepreneurship Theory and Practice*, Spring, pp.37–58.
- Mahoney, J.T. and Pandian, J.R. (1992) 'The resource-based view within the conversation of strategic management', *Strategic Management Journal*, Vol. 13, pp.363–380.
- Manigart, S. and Struyf, C. (1997) 'Financing high technology startups in Belgium: an explorative study', *Small Business Economics*, Vol. 9, No. 2, pp.125–135.
- Mason, C. and Harrison, R. (1999) 'Editorial: venture capital: rationale, aims and scope', *Venture Capital*, Vol. 1, No. 1, pp.1–46.
- McDougall, P.P., Shane, S. and Oviatt, B.M. (1994) 'Explaining the formation of international new ventures: the limits of theories from international business research', *Journal of Business Venturing*, Vol. 9, pp.469–487.
- Murray, G. (1996) 'A synthesis of six exploratory, European case studies of successfully exited, venture capital-financed, new technology-based firms', *Entrepreneurship Theory and Practice*, Vol. 20, No. 4, pp.41–60.
- Normann, R. (2001) *Reframing Business*, West Sussex, John Wiley & Sons, LTD.
- Osnabrugge, M.v. and Robinson, R.J. (2000) *Angel Investing*, Jossey-Bass Inc., San Francisco.
- Reid, G.C. (1996) 'Fast growing small entrepreneurial firms and their venture capital backers: an applied principal-agent analysis', *Small Business Economics*, Vol. 8, No. 3, pp.235–249.
- Reid, G.C. (1999) 'The application of principal-agent methods to investor-investee relations in the UK venture capital industry', *Venture Capital*, Vol. 1, No. 4, pp.285–302.
- Rosenstein, J., Bruno, A.V., Bygrave, W.D. and Taylor, N.T. (1993) 'The CEO, venture capitalists, and the board', *Journal of Business Venturing*, Vol. 8, No. 2, pp.99–113.
- Rotefoss, B. (2001) *A Resource-Based Approach to the Business Start-Up Process – A Longitudinal Investigation*, Unpublished Unpublished Dissertation, Brunel University, Henley-on-Thames, Henley, UK.
- Sahlman, W.A. (1990) 'The structure and governance of venture-capital organizations', *Journal of Financial Economics*, Vol. 27, pp.471–521.
- Sandberg, W.R. and Hofer, C.W. (1987) 'Improving new venture performance: the role of strategy, industry structure, and the entrepreneur', *Journal of Business Venturing*, Vol. 2, pp.5–28.
- Sapienza, H.J., Manigart, S. and Vermeir, W. (1996) 'Venture capitalist governance and value added in four countries', *Journal of Business Venturing*, Vol. 11, pp.439–469.
- Sarasvathy, S.D. (2001) 'Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency', *Academy of Management Review*, Vol. 26, No. 2, pp.243–263.
- Sawhney, M. and Zabin, J. (2002) 'Managing and measuring relation equity in the network economy', *Journal of the Academy of Marketing Science*, Vol. 30, No. 4, pp.313–332.
- Schleifer, A. and Vishny, R. (1997) 'A survey of corporate governance', *Journal of Finance*, Vol. 52, No. 2, pp.737–783.

- Schumpeter, J.A. (1934) *The Theory of Economic Development*, Transaction Books, New Brunswick, NJ.
- Shephard, D.A., Douglas, E.J. and Shanley, M. (2000) 'New venture survival: ignorance, external shocks, and risk reduction strategies', *Journal of Business Venturing*, Vol. 15, pp.393–410.
- Smith, K.G., Smith, K.A., Olian, J.D., Sims, H.P., O'Bannon, D.P. and Scully, J.A. (1994) 'Top management team demography and process: the role of social integration and communication', *Administrative Science Quarterly*, Vol. 39, pp.412–438.
- Stinchcombe, A.L. (1965) 'Social structure and organizations', in March, J.G. (Ed.): *Handbook of Organizations*, Rand McNally, Chicago, pp.153–193.
- Teece, D.J. (1986) 'Profiting from technological innovation: implications for integration, collaboration, licensing and public policy', *Research Policy*, Vol. 15, pp.285–305.
- Venkataraman, S. and Ven de Ven, A.H. (1998) 'Hostile environmental jolts, transaction set, and new business', *Journal of Business Venturing*, Vol. 3, pp.231–255.
- Virany, B. and Tushman, M.L. (1986) 'Top management teams and corporate success in an emerging industry', *Journal of Business Venturing*, Vol. 1, pp.261–274.
- Wananabe, C. and Nagamatsu, A. (2003) 'Sources of structural stagnation in R&D intensity in Japans electrical machinery industry – an analysis of mismatching with IT functionality development', *Technovation*, Vol. 23, No. 7, pp.571–591.
- Webster, F.A. (1976) 'A model for new venture initiation: a discourse on rapacity and the independent entrepreneur', *Academy of Management Review*, Vol. 1, No. 1, pp.26–37.
- Webster, F.A. (1977) 'Entrepreneurs and ventures: an attempt at classification and clarification', *Academy of Management Review*, Vol. 2, No. 1, pp.54–61.
- Wetzel, W.E. (1981) 'Technovation and the informal investor', *Technovation*, Vol. 1, pp.15–30.
- Williamson, O.E. (1975) *Markets and Hierarchies, Analysis and Anti. Trust Implications*, Free Press, New York.
- Write, M., Karsai, J., Dudzinski, Z. and Morovic, J. (1999) 'Transition and active investors: venture capital in Hungary, Poland and Slovakia', *Post- Communist Economic*, Vol. 11, No. 1, pp.27–46.