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以選擇進入模式觀點看分化型創業

ENTREPRENEURIAL SPIN-OFF ENTRY: THE PERSPECTIVE OF MODE CHOICE

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摘要

本研究以理論與文獻的邏輯探討為何創業者選擇以創新事業的方式作為組織的模式。本論文提出在何種狀況之下，原本受僱的員工將可能會選擇以分化出另一創新事業。本研究論述，分化型創業，其實就是一種在考量創新、不確定性，及機會之下一種有效率的組織模式的選擇。根據 K. H. Knight、J. A. Schumpeter 及 I. M. Kirzner 等創業理論經典著作之脈絡，本研究以創新、不確定性，及機會的角度來探討對員工選擇分化型創業的組織模式；另外，除了先前工作的經驗之外，社會資本也是支持個人在進行分化型創業時的考量因素。在以下三種狀況下，分化型創業最有可能發生：一、當創業者會選擇去極大化其所處團隊的專屬知識；二、當創業者願意去完全承擔其對於因其天賦可能創造的未來財富的樂觀期待（即使是以不確定性存在）；三、當創業者因瞭解資訊流動與知識創造而想要充分掌握現任公司職務之外的可能市場機會，而此三者可能存在交互影響的效果。另外，當創業者擁有社會資本作為支持而透過自有的社會網絡得以實現時，更能促使分化型創業付諸行動。本研究以組織模式的選擇解釋分化型創業為主要理論貢獻。

關鍵字：創業者、分化、創新事業、模式選擇

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ABSTRACT

This theoretical study inquires why entrepreneurs choose to create a new venture as a mode of organizing. This study consider entrepreneurial spin-off as a new venture creation by an employed individual. We argue that an entrepreneurial spin-off is an efficient mode choice, regarding innovation, uncertainty, and opportunity. Based on the major entrepreneurship theoretical foundations of K. H. Knight, J. A. Schumpeter, and I. M. Kirzner, we propose that innovation, uncertainty, and opportunity motivate an employed individual chooses an entrepreneurial spin-off. Beyond the prior company experience, we further propose that social capital facilitates the decision taking into action when the individual to proceed an entrepreneurial spin-off. An entrepreneurial spin-off tends to occur when an entrepreneur chooses to maximize team production output with one's specific know-how, to fully bear uncertainty for his or her optimistic judgment of future fortunes based on one's talent, to utilize opportunities beyond the current company's businesses based on information flow and knowledge creation, and these interactive effects might exist. Furthermore, the entrepreneurial spin-off is facilitated when social capital resources support. This study makes theoretical contributions of explaining entrepreneurial spin-off decision with a new venture organizing mode of choice.

Keywords: Entrepreneur, Spin-off, New Venture Creation, Mode Choice

1. Introduction

This paper inquires what determines an entrepreneur deciding to start up a new company based on know-how and ties from the previous company via a choice of spin-off entry. Past studies mainly explored when and why entrepreneurship occurs in the various empirical contexts from the perspectives of cognitive intentions (Carter, Gartner, & Reynolds, 1996；Kolvereid & Isaksen, 2006；Krueger Jr, Reilly, & Carsrud, 2000), personalities (Brandstätter, 1997；Gatewood, Shaver, & Gartner, 1995；Hansemark, 2003), and career choices (Carter, Gartner, Shaver, & Gatewood, 2003), but results have shown inconclusive findings with various supports for entrepreneurial start-up motivations. In fact, entrepreneurship demands a theory to explain and predict the process in response to opportunities (Shane, 2012). Although entrepreneurship is not equal to firm formation

(Shane & Venkataraman, 2000), this paper aims to theorize the motivation of a new venture creation via spin-off entry, when there is no formal transfer of ownership rights and when an entrepreneur leaves his previous employment to start a firm of his own (Parhankangas & Arenius, 2003).

Transaction cost economists argue how to determine a firm boundary with the consideration of efficient organizing mode (Coase, 1937；Williamson, 1979). We treat a decision of an entrepreneurial spin-off entry as a choice of mode: A new venture creation, a new organization separated from the parent company. More importantly, it is individual initiative without formal connection with the parent company. Such a mode choice is more efficient than alternatives, such as corporate entrepreneurship within the parent company or via alliances with other companies, and corporate strategic spin-offs.

An entrepreneurial spin-off is one among different kinds of spin-offs, which is “driven by one or more individuals to exploit an unused potential based on their key experience acquired within the parent company (Tűbke, Saavedra, & Gonzalez, 2004, p. 266)”. Schumpeterian entrepreneurship emphasizes innovations in terms of “new combinations”, “doing things differently” (Schumpeter, 1934, p. 65). An entrepreneur can be defined as a person who creates a new way of doing business, either within a firm or by starting a new company. This paper only focuses on entrepreneurial spin-off entry, an entrepreneur who leaves a prior company and starts up a new company of his or her own. And such a start is one which is in the same business as a competitor of the founder’s prior company, or as a supplier or customer of his prior company.

It’s a brave decision for an employee to leave a current company and start up his or her own venture. An entrepreneurial spin-off entry for an individual is a decision to totally change one’s career in some way. Going from an employee to an owner, he or she takes uncertainties and responsibilities on all operational details in every aspect of the business and environment in order to get profits or losses by running a new venture. Then compared with staying inside the parent company, why does he or she choose to establish a new company? There must be something which can compensate for all costs and uncertainties arising from a spin-off entry.

Entrepreneurship literatures emphasize availability of asymmetric information (Burt, 1992；Casson, 2000). Based on such information, innovative ideas or new business opportunities are exploited. However, this is not enough for a choice of spin-off entry. If there is no other motivational trigger, and if it is not efficient to establish a new venture, a spin-off would hardly happen. Instead, entrepreneurship inside corporations is common. Schumpeterian entrepreneurship on shifting production curves by innovations can happen anywhere so that creating a new venture is not always necessary. For example, why does an old employee who through the years has gained a sense of ownership through his or her service to the company boss not start up his own business? In many Taiwanese family-owned companies (no matter the size), such kind of old employees make full efforts on helping a family founder and their successors (in most cases, they are still family members). Deeply involved various businesses and operations, an old employee is supposedly a person knows best. Following Kirzner's (1973) argument, he or she has monopolist power in the process of competing for information on market opportunities. Thus, why does he or she still work under a family boss? Very likely, the most he or she could earn would be a salary without profit sharing. Why does he or she not start up a new company to earn a profit himself by exploiting opportunities? To an old employee, staying with the boss is more efficient than other alternatives. "The entrepreneur is overwhelmingly perceived to be different in important ways from the nonentrepreneur (Gartner, 1985, p. 699)". There must be something under-explored within entrepreneurial spin-off literature, which characterizes entrepreneurs compared with non-entrepreneurs (managers) as people who own information, bear uncertainties, and sell innovations. These can be necessary features for a potential entrepreneur, but not sufficient for becoming an entrepreneur running a new company. A decision of choosing an efficient mode by creating a new venture creation is the key inquiry here.

Entrepreneurship is recognized as an important interdisciplinary field of research (Shane & Venkataraman, 2000). Unfortunately, entrepreneurship studies have not progressed as a coherent, explanatory, predictive or normative theory (Amit, Glosten, & Muller, 1993；Zahra & Dess, 2001). Busenitz, West, Shepherd, Nelson, Chandler, and Zacharakis (2003) surveyed 97 entrepreneurial articles published in top management journals and found them to focus on opportunities, individuals and teams, mode of organizing, and environmental contexts. Scheutz (1986) categorized spin-offs into supplementary, divergent, and competitive types, which were influenced by external factors, qualities of entrepreneurs, and their parent firms. Other studies also find linkages between entrepreneurs and their prior companies (Chen, 2005；Christensen, 1997；Jones & Butler, 1992；Klepper & Sleeper, 2002). There can be hundreds of underlying factors for spin-off entries, but a predictive theory is still in short. When and why would an employee decide to leave a company for a new start up? Why would he or she not choose another organizing mode for a new venture?

Is there any existing theory which can predict an entrepreneurial spin-off entry? Can we link successful rates, durations, and financial outcomes of spin-offs based on a predictive model? It is our attempt to provide a theoretical model to predict an entrepreneurial spin-off entry as a choice of mode. And normatively, it may provide managerial implications for entrepreneurial initiatives, which fit in our predictive model to link with spin-off outcomes. Our study also responds to the call of Busenitz et al. (2003) by focusing research efforts on entrepreneurs' modes of organizing, i.e., new venture creation in this research. We intend to make contributions in theorizing the entrepreneurial venture creation from a firm boundary decision when spin-off might occur in addition to past empirical investigations from various theoretical perspectives.

We study only entrepreneurial spin-offs, which is not a part of corporate strategy of the prior company. Hence, corporate spin-offs are excluded. The plan of this paper follows. We begin by reviewing two major lines of literature: Entrepreneurship and choice of mode. Theories and propositions come after that. Then the conclusion will be given.

2. Entrepreneurship

An entrepreneur is an innovator, an uncertainty-taker, an opportunity-finder and an exploitator, who creates value and earns entrepreneurial profit instead of managerial salary. Most entrepreneurial studies and theories come from economics. Classic entrepreneurship literature includes Risk, Uncertainty, and Profit (1921) by Knight, The Theory of Economic Development (1934); Business Cycles (1939); Capitalism, Socialism and Democracy (1942) by Schumpeter, and Competition and Entrepreneurship (1973) and Discovery and the Capitalist Process (1985) by Kirzner. We review them as the foundations for our argument of entrepreneurial spin-offs. In addition, contemporary entrepreneurship articles are also included.

The three major literature of Knight (1921), Schumpeter (1934, 1939, 1942), and Kirzner (1973, 1985) used in this study have been the classic entrepreneurship foundations in the past century. To examine their theories, we find that they argued entrepreneurship from distinct angles, particularly Knight from the angle of uncertainty, Schumpeter from the angle of innovation, and Kirzner from angle opportunity. All of these three foundations have strong and complete arguments from the specific perspectives they engaged. However, rare research tried to take an integrative and comprehensive view on them at one time to explore why entrepreneurship occurs. This study makes an effort on taking the three major entrepreneurship foundations as integrative and comprehensive motivations for the entry of entrepreneurial spin-off as a new organizing mode of choices.

2.1 Knight: Uncertainty and Residual

Knight (1921) viewed an entrepreneur as an organizer of uncertainties. Uncertainty exists because of our incomplete knowledge and finite intelligence towards an unknown future. “It is a world of change in which we live, and a world of uncertainty. We live only by knowing something about the future; while the problems of life, or of conduct at least, arise from the fact that we know so little (p. 199)”. Risk and uncertainty are two distinctive concepts, where the former is measurable by probability of possible states but the latter is immeasurable. Nevertheless, uncertainty is the source of entrepreneurial profit, but the compensation for risk is determined. Bearing risk brings a competitive return in proportion. “The presence of true profit, therefore, depends on an absolute uncertainty in the estimation of the value of judgment, or on the absence of the requisite organization for combining a sufficient number of instances to secure certainty through consolidation (p. 285)”.

Entrepreneurial profit cannot be “determined”. It is a residual after other costs being determined. Because uncertainty exists, there is room for a residual based upon the confidence of a foresighted entrepreneur who trusts his or her own judgment. Optimism and self-confidence make up entrepreneurship, and it is dependent on the rashness or timidity under uncertainty (Casson, 2005). The entrepreneur receives income, or more accurately, profit via “the uncertainty of all life and conduct which call for the exercise of judgment in business, the economy of division of labor which compels men to work in groups and to delegate the function of control as other functions are specialized, the facts of human nature which make it necessary for one who directs the activities of others to assume responsibility for the results of the operations, and finally the competitive situation which pits the judgment of each entrepreneur against that of the extant business world in adjusting the contractual incomes which he must pay before he gets anything for himself. (Ibid., p. 277)” An entrepreneur bears high uncertainty and thus takes the chance of investing in expectation of whatever is left after he or she pays “contractual incomes” to other productive factors. The brave choices an entrepreneur makes in a world of uncertainty lead to future profitability or loss.

2.2 Schumpeter: Innovation and Profit

Schumpeterian entrepreneurship is highly associated with innovations, by doing things in new ways, or by arranging things in new combinations. “The carrying out of new combinations we call ‘enterprise’; the individuals whose function it is to carry them out we call ‘entrepreneurs’ (Schumpeter, 1934, p. 74)”. Schumpeter (1942) defined entrepreneurs by functions:

“… the function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of material or a new outlet for products, by revolutionizing an industry and so on.” (p. 132)

The entrepreneur is the one who carries out innovation. Entrepreneurship is associated with the process of “creative destruction” for innovative competitions on new products, services, or under new organizing ways. The entrepreneur functions as a creator of innovation. It is not necessary to build up a new venture. Moreover, entrepreneur leadership is viewed as one of the important production factors, in which entrepreneurs contribute their values to productive activities. But, entrepreneurship can hardly be replaced by other input factors. It is similar to a “scarce resource” according to the resource-based view (Barney, 1991), or “specific asset” via the transaction cost theoretical lens (Williamson, 1975). However, it is not the same, because Schumpeterian entrepreneurship disappears whenever innovation is not ongoing but business becomes regular and routine activity. As entrepreneur is defined by function, an entrepreneur per se can hardly last forever under the condition of carrying out “new combinations” in an ongoing process. “Being an entrepreneur is not a profession and as a rule not a lasting condition (Schumpeter, 1934, p. 78)”. The super normal profit vanishes when entrepreneurship does not exist via process of creative destruction. Even a founder of a firm, when his or her firm is well-established on a normal routine process of doing business, is no more an entrepreneur, and his or her company cannot get super normal profit any more. An entrepreneur functions on carrying out innovations. Via a creative destruction process, an entrepreneur earns a super normal profit. This state disappears at the end of competition and adaptation via market mechanisms, and at that time, entrepreneurship and innovation does not exist.

2.3 Kirzner: Process and Opportunity

Entrepreneurship is about competing for opportunities along the market process towards equilibrium. Opportunities exist everywhere. The key to capitalism is an ongoing competitive "creative discovery" process. "Entrepreneurial discoveries are the steps through which any possible tendency toward market equilibrium must proceed. So…entrepreneurial activities make up, in my view, the process of mutual discovery by which alone we can imagine equilibrium ever to be approached (Kirzner, 1985, p. 11-12)". At market disequilibrium, Kirzner (1973) saw an entrepreneur who caught an opportunity to resolve market disequilibrium by arbitrage.

"In equilibrium there is no room for the entrepreneur. When the decisions of all market participants dovetail completely, so that each plan correctly assumes the corresponding plans of the other participants and no possibility exists for any altered plans that would be simultaneously preferred by the relevant participants, there is nothing left for the entrepreneur to do." (Kirzner, 1973, p. 26-27)

An entrepreneur is aware of market opportunities, and he or she takes action on recognized opportunities. The entrepreneur actually brings into mutual adjustment those opportunities ignored by the prior market. This competitive process depends "entirely on the freedom of those with better ideas or with greater willingness to serve the market to offer better opportunities (1973, p. 98)". Different from Schumpeterian innovation, "the entrepreneur consists not of shifting the curves of cost or of revenues which face him, but of noticing that they have in fact shifted (1973, p. 81)". Entrepreneurship is viewed as a responding process rather than a creative innovator.

Entrepreneurship exists when the market is away from equilibrium. Via monopolist competitions on opportunity discovery, the entrepreneur creates profit. Entrepreneurial profit thus depends on an entrepreneur's capability and luck. It is generated precisely from deliberate exploitation of perceived opportunities in the market. Regardless of Knightian uncertainty, "profits are not seen as compensation for shouldering this uncertainty; they are seen as uncertainty-bred differences between the anticipated value of resource services and their actual value. The profits won by any particular entrepreneur depend on his own ability and good luck as well as upon the general level of initiative and ability in the market (1973, p. 82)".

Kirzner's argument based on the process towards market equilibrium is in fact aligned with what Schumpeter (1934) argues. He argues that entrepreneurship is a temporary function and entrepreneurial profit is challenged by its sustainability. "The profit is usually temporary when an entrepreneur creates new combinations, or innovations. After more and more competitors enter of course the market supply and demand law says thus to reach an equilibrium), the profit (super normal profit) will decrease to zero (p. 132)". "It will vanish in the subsequent process of competition and adaptation (Schumpeter, 1939, p. 104)". When there is no more creative discovery of new opportunities, based on Schumpeter's argument, or no appearance of new combinations, the function of the entrepreneur no longer exists. Thus entrepreneurial profit does not exist at market equilibrium according to Kirzner's point of view. Kirzner's view of opportunity discovery is actually quite similar with later economists, such as Casson (2000, 2005), who argues entrepreneurship is a judgmental decision-making about information, and sociologist such as Burt (1992) who argues entrepreneur is a structural agent in accessing and controlling two or more social networks.

Entrepreneurship can happen in different forms. Spin-off entry is only one of them (Table 1). Spin-off is defined as "a new firm formed by individuals leaving an existing firm in the same industry (Garvin, 1983, p. 3)", which includes the following three categories: "New companies that compete directly (in same market segment) with the firms their founders have left, new companies that compete indirectly (in same general industry, but different market segments) with the firms their founders have left, and new companies that supply products to the firms their founders have left (Ibid., p. 16)". Thus, the spin-off entrepreneur does not necessarily get resources or supports from the prior firm he or she worked with, and might even face pressure or resistance against his or her intended action (Tűbke et al., 2004). We argue that an entrepreneur "chooses" to spin off from a prior company and create a new venture of his or her own because such choice is the efficient mode of among entrepreneurship forms.

2.4 Intra-preneurship and Spin-off

Intra-preneurship, or corporate entrepreneurship, is viewed as a multidimensional concept (Jennings & Lumpkin, 1989) that incorporates a firm's activities directed at product and technological innovation, risk taking, and proactive initiatives (Miller, 1983). Nielsen, Peters, and Hisrich (1985) defined intra-preneurship as "the development within a large organization of internal markets and relatively small and independent units designed

Table 1　Entrepreneurship Forms of Entry

Acquisition of Established firm	Horizontal merger	The acquired and acquiring firms are based in the same industry.
	Vertical merger	The acquired firm is in an industry that either supplies or purchases from the industry of the acquiring firm.
	Conglomerate merger	The acquired and the acquiring firms are based in unrelated industries.
New Division or Subsidiary	Pure (unrelated) diversification	The established firm is based in a completely unrelated industry.
	Related diversification	The established firm is based in a different but related industry.
Creation of New Firm	Voluntary divestiture	An established firm creates a new division or subsidiary and then divests itself of that organization, allowing it to operate autonomously.
	Inexperienced entry	A new firm is established and none of the founding principals have previously worked in the industry being entered.
	Talent buy-in	A new firm is established by a third party and some of the new firms principals have previously worked in the industry being entered, but the impetus for starting the new firm did not originate with these principals.
	Spin-off	A new firm is created by one or more individuals who have previously worked in the industry being entered, and the impetus for starting the new firm originates with these individuals.

Source: Garvin (1983, p. 5)

to create, internally test-market, and expand improved and/or innovative staff services, technologies or methods within the organization (p. 181)”. Ito and Rose (1994) found that the spin-off from corporate entrepreneurship may benefit the parent firm by decreasing the administrative burden, releasing funds for the development of core businesses, and serving as a means for exploring new, revolutionary ideas at arm’s length from main stream businesses. Parhankangas and Arenius (2003) argued that in an entrepreneurial spin-off, there is usually no formal transfer of ownership rights. An entrepreneurial spin-off occurs when an entrepreneur leaves his previous employment to start a firm of his own. However, the linkage between intra-preneurship and spin-off becomes a choice of mode, whether to keep within the parent firm or involving a new venture formation based on the business ideas developed within the parent firm being taken into a self-standing firm.

3. Mode Choice

Transaction cost scholars argue that the firm boundary decision is a choice towards the comparative institutional efficiency (Coase, 1937；Williamson, 1979). International business studies of mode choices are mostly investigated in foreign market entry (Agarwal & Ramaswami, 1992；Brouthers & Nakos, 2004；Gatignon & Anderson, 1988；Hennart & Park, 1993；Kim & Hwang, 1992). Mode choice of an organizing form is predicted by an efficient entry of comparatively low transaction costs among alternative forms.

An entrepreneur choosing a spin-off entry by creating a new venture is thus an efficient form of organizing one's entrepreneurial actions. Moreover, the efficient choice of mode might align with the entrepreneur's own interests in innovation, uncertainty, and opportunity. From the perspective of agency theory, diverse interests and asymmetric information exist between agent and principal. Shane (1996a) argued that the choice of hybrid form reduces monitoring costs on agency problems. Shane provided evidence that entrepreneurs expand their businesses quickly via franchising because residual claimancy provides incentives on minimizing shirking. Firms with better monitoring capabilities tend to choose a contractual mode of international entry (Shane, 1996b). Based on agency theory, Rhoades and Rechner (1997) argued that managers tend to make less risky decisions on behalf of owners. They found that managers prefer to choose a less high-risk control mode of international entry. In these cases, managers would not like to take risks of uncertainty, and would like to maximize potential expansion opportunities simply because there might not be enough incentives to motivate them to make a fair choice of mode.

In addition to economic rationales of transaction costs and agency concerns, however, social capital is viewed as a complementary mechanism to reduce transaction cost (Poppo & Zenger, 2002). Social network with enhanced trust can effectively mitigate the moral hazards of contracting and thus reduce coordination costs (Gulati, Nohria, & Zaheer, 2000). Trust often exists among social network members who possess prior interactive experiences and maintain relationships. Gulati and Singh (1998) argued that trust-based organizations could reduce both coordination costs and appropriation concerns and thus minimize hierarchical controls. They compared choices of joint ventures, minority investment, and contractual alliances and found that trust reduces the tendency to choose an equity-based high control mode, while reconfirming that specific assets push partners to choose more equity controls. Therefore, social network could perform as a negative facilitator for an entrepreneurial spin-off entry upon those determinants on an efficient organizing form if social network resources are fully bound by the existing firm and affiliated actors. This might explain why an old employee never pursues an entrepreneurial spin-off even with abundant information of potential business opportunities and regardless of whether a new venture creation is an efficient form of entrepreneurial organizing.

3.1 Entrepreneurship and Organizing Mode

An inquiry of efficient organization form of entrepreneurship is an interesting yet under-researched topic of study (Busenitz et al., 2003). “The choice between firm, market, and network may be analyzed using the principle that the most efficient arrangement will survive and less efficient arrangements will not (Casson, 1997, p. 812).” A new venture creation by entrepreneurial spin-off is one form of organizing, which can be seen as a process of externalization from the prior company towards a process of internalization of the entrepreneur’s own new venture.

Entrepreneurs internalize their various advantages. Casson (2000) viewed an entrepreneur as a coordinator of information, arguing that an entrepreneur internalizes the market for ideas of business opportunities based on “secrets” because of asset specificity and high transaction cost. Mosakowski (1998) examined the link between individual or team entrepreneurial resources and their efficient organization form, arguing that an efficient organization is one in which the managerial, entrepreneurial, and risk-bearing roles are all played by the entrepreneur based on “high intensive intensity” in transaction cost term (Williamson, 1985), or “high incentive intensity” in agency theory term (Jensen & Meckling, 1976). Alvarez and Barney (2004) argued that entrepreneurs make decisions on how to simultaneously and efficiently exploit those opportunities for both rent-generation and rent-appropriation processes under market imperfections. Organizing choices depend primarily on the relative importance of explicit and tacit knowledge in generating the economic rents associated with a market opportunity. And hierarchical governance is a protector of explicit knowledge from market inefficiency and potential competitions.

3.2 Entrepreneurial Spin-off Entry

The mode-choosing problem in this paper is the decision of whether an entrepreneur chooses to stay at the company as a hired employee or to choose to leave the company to start his or her own in the same industry or even in the same business. Existing theories applied to explain entrepreneurship include decision and prospect theories, start-up factors of production, information processing, network theory, and temporal dynamics. We propose a model of entrepreneurial spin-off entry as a choice of mode based on economic efficiencies. Entrepreneurship is an outcome of function of an entrepreneur. An entrepreneur, as defined by functions, takes advantage of opportunities, bears uncertainties, and carries out innovations. An entrepreneur chooses a mode of organizing these activities, and a new venture creation is one of various modes. We assume that an entrepreneur chooses an efficient mode for organizing entrepreneurial activities. It is a choice of "externalization" from the prior company by spinning off, then of "internalization" in the new company by creating a new venture.

3.2.1 Innovation and Know-how

Alchian and Demsetz (1972) argued that the emergence of the firm is a result of the efficiency of team productions in taking advantage of cooperative specialization through different kinds of resources. To avoid shirking incentives in a team production, a manager acts as a residual claimant who monitors the team members. In other words, this is an individual with ownership. And the cost of managing resources is justified in comparison with allocating resources via market transactions. Following Alchian and Demsetz's argument, then who initiates the team production, or who creates the firm? Or in their terms, where does a "central agent (firm's employer)" come from?

An entrepreneur may have brilliant ideas on exploiting information and opportunities that he or she uniquely possesses. The question is with which team he or she shall choose to work. By the definitions of Knight, Schumpeter, or Kirzner, an entrepreneur and a firm founder are not equal. An individual has to choose which team one needs to work with in order to produce an optimal team output by utilizing one's own resources and know-how. When an employed individual who is, by definition, an entrepreneur (an uncertainty-bearer, an innovator, or an opportunity finder), owns specific resources and know-how, the individual stays in the same company if he or she believes that the combination of his or her resources with those of the existing team can produce superior outputs. On the contrary, if the entrepreneur evaluates that working with the current team is not a good condition to fully utilize his or her resources and know-how, he or she will choose to leave the current company. After leaving the current company, he or she could choose to join another team production in another company. If there is no ideal team in the market, the entrepreneur thus might consider to create a new team, or in another words, a new firm.

A new firm is tailor-made to best suit an entrepreneur's unique resources and know-how. However, there are a lot of organizing costs in creating a new team. If productions with a tailor-made team can justify those costs, the entrepreneur will choose to found a new firm. Campell (1992) provided a decision model based on utility maximization for an employed person who is considered to act as an entrepreneur, meaning that the expected net gain from entrepreneurship depends both on average income from successful entrepreneurship weighted by the probability of success and the average income from wage labor weighted by the probability of employment.

In fact, an individual chooses to work with the current company based on his or her specific resources and know-how when there is something "new" of his or her resources or know-how, or in entrepreneurship terms, there is an innovation or a new discovery, so the individual then has an option whether to stay or to leave the current company. Practically, contextual factors in a company provide possibilities for entrepreneurship. Entrepreneurship is viewed as reconciling opportunities and actions co-evolving with the surrounding context (Bratnicki, 2005). Dobrev and Barnett (2005) found that current organizations play an important role for potential entrepreneurs in establishing new firms. They thought that entrepreneurs were highly influenced by their socio-demographic make-up and human and social capital, which were dependent on their previous organizational roles, job properties, and labor market experiences.

Practically, it is observed that some industries have high probabilities of new venture creation than others. Schumpeter (1939) made two observations on innovations: "Innovations do not remain isolated events, and are not evenly distributed in time, but that on the contrary they tend to cluster, to come about in bunches, simply because first some, and then most, firms follow in the wake of successful innovation", and "innovations are not at any time distributed over the whole economic system at random, but tend to concentrate in certain sectors and their surroundings (p. 100)". He thought that entrepreneurship usually comes from an internal factor of change inside a company. Thus, working at a knowledge-intensive firm may expose many chances for innovations or opportunity discoveries. Hence,

Proposition 1: A greater know-how of tacit knowledge gained from the prior company, there is more a greater tendency for an individual to create an entrepreneurial spin-off.

3.2.2 Uncertainty and Reward

Ownership and management are mostly separated in modern corporations. Owner-managed firms still exist. They are either small-scale or the owner-manager holds partial ownership. Fama (1980) argued that management and risk bear (the same concept as Knightian uncertainty bear) were two separate production factors in the modern corporation. Risk bearers take the team residual and are protected by the capital market. If they are unsatisfied with the performance of the firm, they can sell a stake. On the other hand, managers coordinate team production and are protected internally and by the labor market. He argued that top managers, who were main decision makers and directly controlled the firm, were responsible for firm performance. And performance is judged and monitored by the labor and mergers and acquisitions market.

The human capital of managers is thus marketable. A company hires an individual to buy his or her talent with a contracting wage. To minimize agency costs raised by conflicting interests between the principal and agent (Jensen & Meckling, 1976), a performance-link package may be applied in the modern corporation. An employed individual will choose to leave the current company if his or her talent is under-priced. In an efficient labor market, he or she could find a satisfied paid job in another company without difficulties. What if there is no other company a leaving individual can find to justify his or her human capital?

Agency problems arise when it is difficult or expensive for one party to evaluate the performance of the other, and when the motives of the parties to an exchange may be different, such that each has an incentive to act in a different or incompatible way. Then agent-entrepreneurs can be frustrated when their contributions cannot be well recognized or rewarded (Jones & Butler, 1992). Agency costs are combined costs of the monitoring costs incurred by the principal, bonding costs incurred by the agent, and residual loss incurred because the cost of fully enforcing contracts exceeds the benefits (Jensen & Meckling, 1976). These costs can be reduced via a mix-type contracting payment for managers by transferring some ownership to managers with performance-linked rewards. This can minimize agency costs. Through this mix-type payment, interests of managers and owners can be aligned as managers themselves are partial owners. From Fama's point of view, managers are also risk bearers.

But before they become risk bearers, who decide their employment contracts? What percentage of capital gains can they gain if they do perform as the contract specifies? What if they out-perform those expectations? Or in other words, what if their performance-linked package is far under-evaluated, ex ante, based on the ex post outcome? If an individual foresees that his or her talent can make a fortune, will he or she still work for an existing company by someone who decides his or her contracting price with very limited capital gain in the company's future success? The factors that make it difficult or expensive to evaluate the performance of the other party are due to the existence of uncertainty in environmental, organizational, or task conditions (Jones & Butler, 1992). Thus, it is uncertain whether he or she will succeed or not at the moment of contracting. As Casson (2005) argued, "when an entrepreneur takes a decision based on information that is not available to other people, the other people may perceive the decision to be risky. The entrepreneur perceives the risk as much lower, however, because of the information in his possession (p. 330)". As his or her judgment about future outcomes based on the talent is more optimistic than the one based on others deciding his or her contracting package, very likely he or she will create a new venture.

The reward for a risk bearer, or an entrepreneur, is profit for undertaking uncertainty (Knight, 1921), when he or she foresees that his or her contributions for the firm may very well exceed the reward from his or her hired contract with an existing company. Mosakowski (1998) argued that entrepreneurs who exit the labor market for a product market suggests that Knightian confidence in the entrepreneur's judgment plays as the above mechanism. When self-confidence is higher than others', an entrepreneur may exit the labor market. If management and risk bearing are two ends of a spectrum upon the percentage of profit taking, companies with different reward policies can influence the possibility of entrepreneurial spin-off. At one end, there is an owner-manager, who is responsible for every performance result of the company. In this case, there is no spin-off. At the other end, there is the employed-manager who has owns a fixed salary; he or she is very likely to leave the company if his or her talent is under-priced by the contract with the company. Furthermore, he or she might be forced to create a new venture if there is no other company willing to offer him or her a reasonable deal, a reasonable deal that is based on his or her own judgment of potential “profitability” in the future. Hence,

Proposition 2: If there is lower profit-sharing in the prior company, there is a greater tendency for an individual to create an entrepreneurial spin-off.

3.2.3 Opportunity and Connection

The value of an entrepreneur is to, as Kirzner argues, a creative discovery process upon meeting an opportunity. Social capital offers entrepreneurs opportunities to take advantage of information if the timing is right (Carolis, Litzky, & Eddleston, 2009；Greve & Salaff, 2003；Webb, Kistruck, Ireland, & Ketchen, 2010). Entrepreneurs are found to use the help available within their local networks during the period prior to start-up and approach formal sources when elements in the firm are set (Birley, 1985). Shane and Stuart (2002) argued that founders’ social capital was a major determinant of new venture success. They found that relationship with investors was vital in order to get funding and the possibility of IPO. Moreover, the problem of information asymmetry between entrepreneurs and investors can be resolved through social connection, which influences a new venture’s success (Shane & Cable, 2002).

More than important, for the entrepreneurial discovery process, the connection with the network in the company offers great opportunities for arbitrage and gap-filling. In addition, it could bridge the structural holes in resources and in information gaps, which could even create opportunities (Jack & Anderson, 2002). Contextual resources existing in current organizations and the surrounding environment thus mostly determine the possibility of entrepreneurial discovery of profitable opportunities. Dobrev and Barnett (2005) found that current organizations play an important role for potential entrepreneurs who found new firms. They thought that entrepreneurs were highly influenced by their sociodemographic make-up and human and social capital, which were dependent on their previous organizational roles, job properties, and labor market experiences. Through in-depth case studies, Shane (2000) found that entrepreneurs discover opportunities related to the information that they already possess. So how individuals discover a specific opportunity and how they organize entrepreneurial activities depends on their different experiences.

When entrepreneurs inside existing firms feel unsatisfied upon the firm failing to act on available opportunities, an entrepreneurial spin-off may become their best choice. “There is a strong incentive for an entrepreneur to internalize the exploitation of the commercial information upon which his superior judgment is based. It is the internalization of commercial information that leads the entrepreneur to acquire control of assets, and hence links the entrepreneur to the management of a firm (Casson, 1982, p. 201).” Hence,

Proposition 3: If there is more access to information and opportunities in the prior company, there is a greater tendency for an individual to create an entrepreneurial spin-off.

3.2.4 Interactive Effect

Theoretical foundations argued that entrepreneurship occurs upon innovation (Schumpeter, 1934, 1939, 1942), uncertainty (Knight, 1921), and opportunity (Kirzner, 1973, 1985). Based on the main effects independently on entrepreneurship spin-off as we suggest above, the interactive effects between each pairs demand a further look because there is the possibility when any two of the three conditions might happen simultaneously. Firstly, innovation might provide incentives for further exploitation beyond the prior company scope. Particularly when the reward system is not fully satisfied or align with uncertainty, the one carried know-how of tacit knowledge would consider a new organization mode of choice via entrepreneurial spin-off with even more motivations. Hence,

Proposition 4a: When there is a greater know-how of tacit knowledge gained from the prior company and lower profit-sharing in the prior company, the probability to create an entrepreneurial spin-off will increase.

Secondly, as the discovery process of opportunity and connection provides motivations to internalize the commercial information via entrepreneurial spin-off mode of choice, if the one possesses a good know-how of tacit knowledge, it is more possible that the external opportunity further facilitates the entrepreneurial spin-off with the previously internal resource of tacit knowledge to be exploited by using an new venture organizing of entrepreneurial spin-off. Hence,

Proposition 4b: When there is a greater know-how of tacit knowledge gained from the prior company and more access to information and opportunities in the prior company, the probability to create an entrepreneurial spin-off will increase.

Thirdly, as the opportunity and connection facilitates the entrepreneurial spin-off, when there is uncertainty upon the prior company regarding the reward compensation, the external opportunity might drive a stronger motivations for the one who would like to explore both opportunity of business ventures and opportunity of newly defined reward scheme. Particularly when utilizing the opportunity via an organizing mode of entrepreneurial spin-off, the new venture might consider alternatives for reward and incentive scheme in accordance with the level of uncertainty whoever may undertake. Hence,

Proposition 4c: When there is lower profit-sharing in the prior company and more access to information and opportunities in the prior company, the probability to create an entrepreneurial spin-off will increase.

3.2.5 Social Capital

Witt (2004) demonstrated that socially embedded ties allowed entrepreneurs to get cheaper than market resources or even free resources or those not available at market such as reputation and special customer relationships. Social capital, a long-lived asset, is both appropriable and convertible, is either a substitute or a complement to other resources, needs maintenance, is a public goods, exists in relations with other actors (Adler & Kwon, 2002). Coleman (1988) identified that social capital, acting as resources for organizations and individuals, exists in the structure of relations between and among actors. Burt (1992) argues that an entrepreneur is a structural agent with connections across two or more social networks. He emphasized that the value of an agent is in spanning the structural hole, to access and control of information flows and business opportunities within and across various network groups. He argues that the most important person is one who occupies the position between non-redundant sources of information. This key individual is capable of creating a competitive advantage by utilizing the information and power benefits from the different access to circulations of information flows. This is true regardless of flows through strong or weak ties.

Social networks provide channels and conduits for the transmission of information and knowledge among regionally agglomerated organizations. Firms as well as individuals embedded in an environment full of resources have better opportunities to benefit from externality. Geographical as well as relational proximity offer major opportunities based on social capital. For example, the success of high-tech industries in Silicon Valley could be attributed to the atmosphere of community in which information can be shared via informal communication channels. In contrast to the fall of Route 128, the leading technologies, industrial dynamics and booming entrepreneurship in Silicon Valley have been relying on those complicated social connections based on local universities, research institutes and firms (Saxenian, 1994). It is common in a social network that people share experiences, discuss technological development, and exchange new business ideas with friends, old colleagues, suppliers and customers – even with their competitors.

Social capital can be viewed as pipes and prisms (Podolny, 2001) that allow people to access information and opportunities through network ties. Industrial economists believe that knowledge spillovers occur in a geographically bounded region where there is a concentration of firm productions within an industry (Glaeser, Kallal, Scheinkamn, & Shleifer, 1992) or between industries (Jacobs, 1969). Firms and individuals benefit from knowledge and information spillovers because of social capital and network embeddedness. Spatial-relational theorists contend that innovative creativity and collective learning take place in limited geographical areas via collective learning –"a dynamic and cumulative process of knowledge production, transfer and appropriation, taking place thanks to the interactive mechanisms which are typical of an area where a strong sense of belonging and strong relational synergies take place (Capello, 2002, p. 181)". The territorial relationships of communities provide opportunities for sharing of knowledge and values as a result of trust and a sense of belonging (Capello, 2002). In addition, learning from suppliers and clients is also an important way to gain further knowledge collectively in a network sense. Such information and knowledge spillovers occur in association with social relationships within a geographic boundary where similar economic conditions, socio-cultural backgrounds, and cooperation projects facilitate inter-personal and inter-firm interactions.

Casson (2005) argued, "Entrepreneurial organizations are located at nodes on social information networks. Information from diverse sources converges on these nodes, and it is there, in the headquarters of entrepreneurial firms, that the information is synthesized prior to investment decisions being made (p. 335)". Han, Chao, and Chuang (2012) also found social capital as major external resources for entrepreneurial firms to survive well. Thus, social capital triggers the timing for entrepreneurial spin-off taking into actions as preconditions of innovation and know-how, uncertainty and reward, and opportunity and connection are sufficiently support the boundary condition of new venture as organizing forms. Hence,

Proposition 5: If there are more sources of social capital, there is a greater tendency to trigger an individual who owns know-how of tacit knowledge gained from the prior company, whose prior company has lower profit-sharing , and/or who access more information and opportunities in the prior company, to create an entrepreneurial spin-off.

4. Conclusion

This paper argues that entrepreneurs choose to create a new venture as a mode of organizing. We build up a predictive model of when an employed individual is likely to choose a new venture creation as the mode of organizing his or her entrepreneurship. We argue that an entrepreneurial spin-off by creating a new venture is an efficiency consideration by an entrepreneur, who owns innovation, bears uncertainty, and captures opportunity. We develop three central arguments. First, we argue that an entrepreneur chooses to establish a new firm for maximizing team production output with his or her specific know-how. Furthermore, instead of accepting a hiring contract, an entrepreneur chooses to fully bear uncertainty for his or her optimistic judgment of future fortunes based on his or her talent. Finally, an entrepreneur chooses to utilize opportunities beyond the current company's businesses based on information flows and knowledge connections in the environment of prior company settings. Above all, the three main effects might interact with each other to provide stronger motivations on increasing the probability of the entrepreneurial spin-off. In addition, the access to social capital can further facilitate the above three motivations taking into actions.

However, this study has limitations by only considering entrepreneurial spin-off as an organizing mode of choice. In addition to the main effects on entrepreneurial spin-offs, the interactive effects are also proposed. However, future research is suggested to explore how pairs of the interactive effects between innovation and know-how, uncertainty and reward, and opportunity and connection might provide the strongest effects on entrepreneurial spin-offs. By more empirical investigations in the future, comparisons between main effects and interactive effects shall be interesting and provide further implications on the phenomena of entrepreneurial spin-offs when considering such organizing form as a mode of choice. Furthermore, entrepreneurship orientation, personal characteristics of individual entrepreneurs, and personal motivations for entrepreneurial spin-offs can also be simultaneously considered towards comprehensive theoretical contributions for entrepreneurial spin-off decision. In addition, empirical studies by using questionnaire survey to compare intra-preneurship with entrepreneurial spin-off will further provide evidences for our propositions. This study makes theoretical contributions to entrepreneur initiatives by extending an entrepreneurial spin-off as a mode of choice within members in an existing company. Our theoretical propositions also provide managerial implications for practitioners in the following two perspectives. Firstly, entrepreneurship within the current company should be carefully managed in order to keep its potential value under the current organizational leadership. Secondly, new venture creation through the entrepreneurial spin-off should be viewed as an organizational mode of choice while organizing problems are normally less considered by many entrepreneurs.

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REFERENCES

1. Adler, P., & Kwon, S. (2002). Social capital: Prospects for a new concept. <u>Academy of Management Review, 27</u>(1), 17-40.

2. Agarwal, S., & Ramaswami, N. (1992). Choice of foreign market entry mode: Impact of ownership, location and internalization factors. <u>Journal of International Business Studies, 23</u>(1), 1-27.

3. Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. <u>American Economic Review, 62</u>(5), 777-795.

4. Alvarez, S. A., & Barney, J. B. (2004). Organizing rent generation and appropriation: Toward a theory of the entrepreneurial firm. <u>Journal of Business Venturing, 19</u>, 621-635.

5. Amit, R., Glosten, L., & Muller, E. (1993). Challenges to theory development in entrepreneurship research. <u>Journal of Management Studies, 30</u>(5), 815-834.

6. Barney, J. (1991). Firm resources and sustained competitive advantages. Journal of Management, 17(1), 99-120.

7. Birley, S. (1985). The role of networks in the entrepreneurial process. Journal of Business Venturing, 1(1), 107-117.

8. Brandstätter, H. (1997). Becoming an entrepreneur - A question of personality structure? Journal of Economic Psychology, 18, 157-177.

9. Bratnicki, M. (2005). Organizational entrepreneurship: Theoretical background, some empirical tests, and directions for future research. Human Factors and Ergonomics in Manufacturing, 15(1), 15-33.

10. Brouthers, K. D., & Nakos, G. (2004). SME entry mode choice and performance: A transaction cost perspective. Entrepreneurship Theory and Practice, 28(3), 229-247.

11. Burt, R. S. (1992). Structural Holes: The Social Structure of Competition. Cambridge, MA: Harvard Business Press.

12. Busenitz, L. W., West III, G. P., Shepherd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. (2003). Entrepreneurship research in emergence: Past trends and future directions. Journal of Management, 29(3), 285-308.

13. Campell, C. A. (1992). A decision theory model for entrepreneurial acts. Entrepreneurship Theory and Practice, 17(1), 21-27.

14. Capello, R. (2002). Spatial and sectoral characteristics of relational capital in innovation activity. European Planning Studies, 10(2), 177-200.

15. Carolis, D. M. D., Litzky, B. E., & Eddleston, K. A. (2009). Why networks enhance the progress of new venture creation: The influence of social capital and cognition. Entrepreneurship Theory and Practice, 33(2), 527-545.

16. Carter, N. M., Gartner, W. B., & Reynolds, P. D. (1996). Exploring start-up event sequences. Journal of Business Venturing, 11, 151-166.

17. Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. Journal of Business Venturing, 18, 13-39.

18. Casson, M. (1982). The market for information. In The Entrepreneur, 201-218. New Jersey: Totowa, Barnes & Noble Books.

19. Casson, M. (1997). Entrepreneurial networks in international business. Business and Economic History, 26(2), 811-823.

20. Casson, M. (2000). In competence, governance, and entrepreneurship: Advances in economic strategy research. Foss, N., & Mahnke, V. (Eds.), An Entrepreneurial Theory of The Firm, 116-145. NY: Oxford University Press.

21. Casson, M. (2005). Entrepreneurship and the theory of the firm. Journal of Economic Behavior and Organization, 58, 327-348.

22. Chen, J. (2005). A Prior Affiliation and Venture Creation: An Exploratory Assessment Using a Dyad Approach. The second JIBS workshop.

23. Christensen, J. J. (1997). The influence of outsider-generated knowledge resources on venture creation. Journal of Small Business Management, 37(4), 42-58.

24. Coase, R. H. (1937). The nature of the firm. Economica, 4(16), 386-405.

25. Coleman, J. S. (1988). Social capital in creation of human capital. American Journal of Sociology, 94(3), 95-120.

26. Dobrev, S. D., & Barnett, W. P. (2005). Organizational roles and transition to entrepreneurship. Academy of Management Journal, 48(3), 433-449.

27. Fama, E. F. (1980). Agency problem and the theory of the firm. The Journal of Political Economy, 88(2), 288-307.

28. Gatewood, E. J., Shaver, K. G., & Gartner, W. B. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. Journal of Business Venturing, 10, 371-391.

29. Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. Academy of Management Review, 10(4), 696-706.

30. Garvin, D. A. (1983). Spin-offs and the new firm formation process. California Management Review, 15(2), 3-20.

31. Gatignon, H., & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. Journal of Law, Economics, and Organization, 4(2), 305-336.

32. Glaeser, E. L., Kallal, H. D., Scheinkamn, J. A., & Shleifer, A. (1992). Growth of cities. Journal of Political Economy, 100, 1126-1152.

33. Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. Entrepreneurship Theory and Practice, 28(1), 1-22.

34. Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. Strategic Management Journal, 21, 203-215.

35. Gulati, R., & Singh, H. (1998). The architecture of cooperation: Managing coordination costs and appropriation concerns in strategic alliances. Administrative Science Quarterly, 43, 781-814.

36. Han, I., Chao, M. C. H., & Chuang, C. (2012). Internal resources, external resources and environment, and firm performance: A study on Taiwanese small and medium sized firms. Chiao Da Management Review, 32(2), 135-169.

37. Hansemark, O. C. (2003). Need for achievement, locus of control and the prediction of business start-ups: A longitudinal study. Journal of Economic Psychology, 24, 301-319.

38. Hennart, J., & Park, Y. (1993). Greenfield vs. acquisition: The strategy of Japanese investors in the United States. Management Science, 39(9), 1054-1070.

39. Ito, K., & Rose, E. (1994). The genealogical structure of Japanese firms: Parent-subsidiary relationships. Strategic Management Journal, 15, 35-51.

40. Jacobs J. (1969). The Economy of Cities. New York, NY: Random House.

41. Jack, S. L., & Anderson, A. R. (2002). The effects of embeddedness on the entrepreneurial process. Journal Business Venturing, 17(5), 467-487.

42. Jennings, D. F., & Lumpkin, J. R. (1989). Functioning modeling corporate entrepreneurship: An empirical integrative analysis. Journal of Management, 15(3), 485-502.

43. Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. Journal of Financial Economics, 3, 305-360.

44. Jones, G. R., & Butler, J. E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. Journal of Management, 18(4), 733-749.

45. Kim, W. C., & Hwang, P. (1992). Global strategy and multinationals' entry mode choice. Journal of International Business Studies, 23, 29-53.

46. Kirzner, I. M. (1973). Competition and Entrepreneurship. Chicago, IL: The University of Chicago Press.

47. Kirzner, I. M. (1985). Discovery and The Capitalist Process. Chicago, IL: The University of Chicago Press.

48. Klepper, S., & Sleeper, S. (2002). Entry by spinoffs. Papers on Economics and Evolution 2002-07, Max planck institute of economics.

49. Knight, F. H. (1921). Risk, Uncertainty, and Profit. New York, NY: Harper Torchbooks.

50. Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. Journal of Business Venturing, 21, 866-885.

51. Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. Journal of Business Venturing, 15, 411-432.

52. Miller, D. (1983). The correlates of entrepreneurship in three types of firms. Management Science, 29, 770-791.

53. Mosakowski, E. (1998). Entrepreneurial resources, organizational choices, and competitive outcomes. Organization Science, 9(6), 625-643.

54. Nielsen, R. P., Peters, M. P., & Hisrich, R. D. (1985). Intrapreneuship strategy for internal markets - Corporate, nonprofit, and government institution cases. Strategic Management Journal, 6, 181-189.

55. Parhankangas, A., & Arenius, P. (2003). From a corporate venture to an independent company: A base for a taxonomy for corporate spin-off firms. Research Policy, 32, 463-481.

56. Podolny, J. M. (2001). Networks as the pipes and prisms of the market. American Journal of Sociology, 107, 33-60.

57. Poppo, L., & Zenger, T. (2002). Do formal contracts and relational governance function as substitutes or complements? Strategic Management Journal, 23, 707-725.

58. Rhoades, D. K., & Rechner, P. L. (1997). The Role of Ownership and Corporate Governance Factors in International Entry Mode Selection. The Academy of Management Best Papers Proceedings.

59. Saxenian, A. (1994). Regional Advantage: Culture and Competition in Silicon Valley and Route 128. Cambridge, MA: Harvard University Press.

60. Scheutz, C. (1986). Critical events for Swedish entrepreneurs in entrepreneurial spin-offs. Technovation, 5(1-3), 169-182.

61. Schumpeter, J. A. (1934). The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and The Business Cycle. (Trans: R. Opie.) Cambridge, MA: Harvard University Press.

62. Schumpeter, J. A. (1939). Business Cycles: A Theoretical, Historical, and Statistical Analysis of The Capitalist Process. New York, NY: McGraw-Hill Book Company.

63. Schumpeter, J. A. (1942). Capitalism, Socialism and Democracy. New York, NY: Harper & Brothers.

64. Shane, S. (1996a). Hybrid organizational arrangements and their implications for firm growth and survival: A study of new franchisors. Academy of Management Journal, 39(1), 216-234.

65. Shane, S. (1996b). Why franchise companies expand overseas. Journal of Business Venturing, 11, 73-88.

66. Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. Organization Science, 11(4), 448-469.

67. Shane, S. (2012). Reflections on the 2010 AMN Decade Award: Delivering on the promise of entrepreneurship as a field of research. Academy of Management Review, 37(1), 10-20.

68. Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. Management Science, 38(3), 364-381.

69. Shane, S., & Stuart, T. (2002). Organizational endowments and the performance of university start-ups. Management Science, 48(1), 154-170.

70. Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217-226.

71. Tűbke, A., Toledo Saavedra, P. A., & Gonzalez, J. G. (2004). Towards a first spin-off typology and a new concept for corporate spin-off research. International Journal of Technology Transfer and Commercialisation, 3(3), 263-290.

72. Webb, J. W., Kistruck, G. M., Ireland, R. D., & Ketchen, D. J. (2010). The entrepreneurship process in base of the pyramid markets: The case of multinational enterprise / nongovernment organization alliances. Entrepreneurship Theory and Practice, 34(3), 555-581.

73. Williamson, O. E. (1975). Markets and Hierarchies: Analysis and Antitrust Implications. New York, NY: Free Press.

74. Williamson, O. E. (1979). Transaction cost economics: The governance of contractual relations. Journal of Law and Economics, 22, 233-261.

75. Williamson, O. E. (1985). The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting. New York, NY: The Free Press.

76. Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. Entrepreneurship and Regional Development, 16(5), 391-412.

77. Zahra, S., & Dess, G. G. (2001). Entrepreneurship as a field of research: Encouraging dialogue and debate. Academy of Management Review, 26(1), 8-10

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