Why do entrepreneurs join networks of independent business-partners? Early empirical findings from France

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Abstract: When establishing a new business, entrepreneurs face a variety of contractual forms. Among the choices, they can decide to join a network rather than choose the alternative of independent business ownership. In this study, we analyze what determines whether network membership is observed, using data on the membership status of 20,236 firms located throughout France within the context of the decision to start a new business. The sample is taken from the SINE survey, which provides detailed data about a group of new firms created in France in 2006. Entrepreneurs' decision to join a network is modeled to include three choices: 1) join a franchise, cooperative or voluntary chain, 2) join a concession network or become a trademark licensing agent or 3) initiate an independently owned business. Franchises, cooperatives, and voluntary chains imply complex and rigid contracts. In contrast, concessions and trademark licences are simpler and more flexible contracts, in which no assistance or specific transfer of know-how is provided. A multinomial logit model is used to model the relationship between the choice to join a network and, on the one hand, the entrepreneurs' profile and project and, on the other hand, market characteristics. The early results show, as expected, that hypotheses are more often verified when entrepreneurs join rigid partnerships rather than flexible ones in comparison with the choice to start an independent business. If we focus upon the determining of the part of the network's selection and the part of self-selection by the founder, we cannot derive any conclusion from our results regarding the role played by human capital. However, results suggest that the less financially constrained founders are more likely to join networks that use rigid contractual agreements, which confirms the role played by the network's selection process in the generation of the pool of entrepreneurs who join networks. We also find that the probability of joining a network that uses rigid contractual agreements increases with the entrepreneurs' specific industry experience, business contacts, goal to increase income, the project's amount of financial capital required, the number of customers, and the level of activity competitiveness. In contrast, the probability of joining a network is negatively related to the entrepreneurial circle, the perceived level of innovation and the geographic dispersion.

Keywords: Entrepreneur, Network, Human and social capital, Financial capital, Selection process.

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Résumé: Lorsqu'ils créent une entreprise, les entrepreneurs peuvent choisir différentes formes contractuelles. En particulier, ils peuvent décider d'être affiliés à un réseau d'enseigne plutôt que de rester indépendants. Dans cette étude, nous analysons les déterminants de l'affiliation à un réseau d'enseigne, dans un contexte de création d'entreprise, à partir de données concernant 20236 entreprises françaises. L'échantillon provient de l'étude SINE de l'INSEE, qui comporte des données détaillées concernant un ensemble d'entreprises nouvellement créées en France en 2006. La décision d'affiliation à un réseau d'enseigne est modélisée en incluant trois modalités : 1) être affilié à une franchise, coopérative ou chaîne volontaire, 2) être affilié à une concession ou comme agent de marque ou 3) ne pas être affilié à un réseau d'enseigne. Les franchises, coopératives et chaînes volontaires impliquent des contrats complexes et rigides. En revanche, les concessions et licences de marque sont des contrats plus simples et plus flexibles, dans lesquels aucune assistance ou transfert spécifique de savoir-faire n'est prévu. Un modèle logit multinomial est utilisé pour modéliser la relation entre le choix d'affiliation à un réseau et, d'une part, le profil de l'entrepreneur et son projet ainsi que, d'autre part, les caractéristiques du marché. Conformément à nos attentes, les premiers résultats montrent que les hypothèses sont plus souvent corroborées lorsque les entrepreneurs sont liés à des réseaux d'enseigne rigides plutôt qu'à des réseaux flexibles, en comparaison avec l'absence d'affiliation. Concernant le rôle joué par le capital humain de l'entrepreneur, nos résultats ne permettent pas de conclure quant à la part de la sélection par le réseau et la part du choix par le créateur d'entreprise dans l'explication de l'affiliation à un réseau. Cependant, nos résultats suggèrent que les créateurs les moins contraints financièrement sont plus susceptibles d'être affiliés à un réseau rigide, ce qui confirme le rôle joué par le processus de sélection du réseau dans la constitution du pool d'entrepreneurs qui sont affiliés à des réseaux d'enseigne. Nous montrons également que la probabilité d'affiliation à un réseau rigide augmente avec l'expérience du secteur d'activité de l'entrepreneur, ses relations d'affaires et son objectif d'augmentation de ses revenus. Les moyens financiers nécessaires pour démarrer, le nombre de clients et le niveau de compétitivité de l'activité ont également un impact positif sur la probabilité d'affiliation à un réseau d'enseigne. En revanche, la probabilité d'affiliation à un réseau est négativement liée à l'existence d'un entourage entrepreneurial, au niveau d'innovation perçu et à la dispersion géographique.

Mots-clés: Entrepreneur, Réseau d'enseigne, Capital humain et social, Capital financier, Processus de sélection.

INTRODUCTION

When establishing a new business, entrepreneurs face a variety of contractual forms. Among the choices, they can decide to join a network rather than choose the alternative of independent business ownership. Little is known about the determinants of entrepreneurs' decision to join a network. In this study, we analyze what determines whether network membership is observed, using data on the membership status of 20236 firms located throughout France. Williams (1998) examines empirically the decision to enter into a franchise contract rather than choose the alternative of independent business ownership. In our study, we take into account the decision to join a network more broadly as different organization options (franchise, cooperative, voluntary chain or concession, trademark licensing) are possible for French entrepreneurs. Moreover, we examine both the determinants of entrepreneurs' decision to join a network and the selection of prospective entrepreneurs by networks.

Understanding the determinants of network membership is an important topic for researchers and practitioners (networks and entrepreneurs). Indeed, this research is relevant because of the importance of networks in the world economy, and specifically in the French economy. Sales channels such as franchising, concessions and cooperatives have been hugely popular in Europe for many years and are on the increase in France. In particular, France occupies a strong position in the franchising field both at the European and the international level. The latest figures provided by the French Federation of Franchising (2007) show that there were no less than 1,141 franchising networks and 45,996 franchised units in the French territory in 2007. Franchising generated about 45 billion euros of revenues in that same year. This represents half of the revenues generated by cooperative networks. Indeed, franchisees are often smaller businesses than cooperatives' members. Networks are broadly used in the retail trade industry as they enable firms to group purchases, to advertise at the national level, to share fixed costs or development costs, in order to benefit from a trademark that is recognized by consumers and from all the advantages related to a larger size. In a network, members usually share a commercial trademark. The networks, which develop their own commercial strategies, represent the great majority of the sales of the retail trade industry and leave little room for the totally independent businesses.

Reijnders and Verhallen (1996) refer to horizontal "strategic alliances" to describe modern voluntary associations in the retail industry. In our paper, the term "network" will refer to "a group of firms which maintain between them formal relations not through financial links,

what differentiates them from groups, but through contracts (franchising, cooperative, etc.) between the units. Contracts specify the extent of the common actions but does not imply control" (INSEE, National Institute of Statistics and Economic Studies, 2010). Networks are thus characterized by contractual relations between an organization that initiates the network and the members: for example, between a franchisor and its franchisees, between a cooperative of independent outlets and its members. These relations are sometimes simple contracts as in concession or trademark licensing partnerships.

There are some differences between these organizational forms. In a cooperative, the member is a network's customer but also a shareholder. But because of the economic evolution the cooperatives' functioning and the franchises' one are now very similar with the concept of store, trademark (and contract) policy, marketing tools, etc. However, franchising is in general a more rigid and more constraining system that recognizes the franchisor's authority on its network. The franchisee has only few means to influence the policy adopted by its partner. At best, the franchisor will enable him/her to give his/her advice in the framework of consultative committees. From the legal point of view, in the franchising framework like in the other organizational forms, the franchisee is considered as an independent entrepreneur, totally responsible for his/her business success.

The results of our study are important for several reasons. First, it contributes to the growing literature on the economics and management of networks (franchising, cooperatives, alliances, corporate governance relations, etc). In particular, it provides new evidence related to the demand for business partnerships opportunities and the selection process that generates the pool of independent entrepreneurs who joins networks. Second, it contributes to the empirical literature on entrepreneurship. Several studies analyze the individuals' decisions to make the transition from fixed wage employment to self-employment (see, for instance, Evans and Leighton, 1989; Evans and Javonovic, 1989; Williams, 1999; Le, 1999). However, none of these studies take into account the role of alternative contractual partnerships on the decision to start a new business. To the extent that organizational structure influences self-employment earnings, it may also influence self-employment decisions.

We begin in section 1 with a description of the organizational forms the empirical setting employs. A presentation of the theoretical arguments and hypotheses development follow in section 2. In section 3, we describe the method, sample and empirical study while in section 4 we present the results. We conclude in section 5.

1 ORGANIZATIONAL FORMS TO START A BUSINESS IN FRANCE

Bradach and Eccles (1989) argue that distribution processes are coordinated via integrated channels, networks of independent agents, and hybrid arrangements. The possible organization forms to start a business include: independent businesses, franchises, cooperatives, voluntary chains, concessions, and trademark licenses. Independent businesses are not members of a network. Entrepreneurs own and operate the company on an independent basis, and oversee all aspects of operations. If an entrepreneur chooses to start a business within a network then different types of contracts are possible. Franchises, cooperatives, and voluntary chains imply complex and rigid contracts. In contrast, concessions and trademark licences are simpler contracts, in which no assistance or specific transfer of know-how is provided.

1. 1. FRANCHISES, COOPERATIVES, AND VOLUNTARY CHAINS

To start a business, entrepreneurs can join commercial mutual assistance organizations, like franchise organizations, cooperative groups, and voluntary chains. There are significant contractual differences between these organizational forms but, in most cases, networks propose more or less the same thing to entrepreneurs: setting up a store or business, transferring their know-how to their partners and confiding them the distribution of their products and/or services. Cooperative and voluntary groups can thus be seen as a type of business format franchising (Coughlan et al., 2006). All three forms (cooperative groups, voluntary groups, and actual franchise organizations) involve contractual vertical integration, which is characterized by the use of formal contractual agreements.

In franchising, an entrepreneur purchases from a firm (the franchisor) the right to use its trademark name and operating system (Michael and Combs, 2008). The franchisee remains an independent company, but operates the business given strict regulations and surveillance from the franchisor. The franchisee usually maintains control over local capital investments and is the residual claimant to profits. The franchisor's operating and monitoring systems yield control over the trademarked operated system.

Cooperative networks are also broadly used in France, in particular in the retailing industry. A retailers' cooperative is a type of cooperative that employs economies of scale on behalf of its retailer members. Retailers' cooperatives use their purchasing power to acquire discounts from manufacturers and often share marketing expenses. Cooperative members are less numerous than franchisees but their outlets are in general larger and they represent a greater weight in the economy. In fact, some large successful networks have developed through

cooperative systems: Mr Bricolage, Intersport, Optic 2000, Super U, Gitem. Generally speaking, these networks are more structured and more stable than franchises. They are found in "traditional" commerce sectors such as food, optics, jewellery, appliance, etc. but they are absent from services. They are also absent from new markets: cooperatives are firmly set up but they are less innovative than franchises.

To enter a cooperative, the member has to buy a share of its capital. The value is different from one network to another but in general it remains significantly lower than the entry fee required by most franchisors. This interest sometimes depends, as for Intersport, on the outlet size. The member then pays each year a subscription fee that is used to finance the network's functioning. This fee can be proportionate to sales (like in most franchises), around 1 to 2% of sales.

Cooperative networks sometimes offer services to their members: legal or management assistance, market study, etc. These services are thus completely comparable, and sometimes even superior in some networks, to those offered in franchise systems. But when the cooperative network becomes larger, it creates a heavy structure of permanent staff with sometimes hundreds of employees. In spite of their way of functioning, the management of cooperatives thus tend to escape the control of their members. In fact, a new member that enters a cooperative network of hundreds of shopkeepers will have very little power in the network. In fact, he/she enters in an organization with its own established rules and his/her situation is, in practice, not very different from a franchisee's one. Some cooperative networks are now real multinational firms like, for instance, several do-it-yourself networks.

Moreover, many cooperative networks have strengthened their ties with the members by more restricting contracts that are sometimes very similar to franchise contracts. Their particular goal is to prevent members' poaching by competitors. In fact, the best performing outlets are very often disputed and the members sometimes easily switch from one network to another if nothing prevents them from doing it. The flexibility of cooperatives then becomes a weakness as it is a handicap to build stable networks.

The advantage of the cooperative remains however this flexibility: an entrepreneur can leave the network when he/she wants and he/she sells his/her shares, while it is not so easy to break a franchising contract. It avoids certain disputes and trials related to breaches of contract, such as those in the franchise networks. However, when a shopkeeper completely ordered his/her store according to the principles of a cooperative and when all his/her articles come from this cooperative, the break and the reconversion can also turn out difficult, even without the legal handicap of the contract. Voluntary chains are less used than franchise and cooperative systems but they play nevertheless a significant role in the French commerce. Several well known national networks have chosen this organizational form, in particular in the hotel industry and the do-it-yourself industry (Catena). Voluntary chains are organized around a wholesaler with whom various distributors sign membership contracts to obtain diverse advantages, such as lower prices.

1.2. CONCESSIONS AND TRADEMARK LICENSES

A licensor may grant permission to a licensee to distribute products under a trademark. With such a license, the licensee may use the trademark without fear of a claim of trademark infringement by the licensor. A trademark license is thus an agreement between a trademark owner (the "licensor") and another person or business entity (the "licensee") in which the licensor gives permission to the licensee to use its trademark or trademarks in commerce. The licensor confers to an independent company the right to use its trademark in return either of the payment of a fee or proportional royalties (turnover). The aim of the contract is thus mainly the exploitation of the trademark, which presents at once a strong notoriety. In certain cases, the contract can add complementary elements for the transfer of a know-how attached to the trademark. But, the entrepreneur who signs a trademark license agreement is left alone. In most cases, the trademark license contract doesn't include any training or assistance.

A concession is a business operated under a contract by which a network allows an independent company to distribute its products. The concession is always associated with a degree of exclusivity in business within a certain geographical area. In general, this type of contract is used by the car industry and some other assimilated business sectors. The contract includes the supply in products of the trademark, the logistics, the delivery, a common sign, and a common commercial policy. The owner of the concession (the concessionaire) pays either a fixed sum or a percentage of revenue to the entity with the ability to assign exclusive rights for an area or facility. The entry of a concessionaire in the network is based on a selection by the network. In a concession contract, the assistance from the network is often limited.

Concession contracts are mostly used for the marketing of consumer durable goods as trademarked goods. The particular nature of these goods requires a professional capacity for satisfying the customers' requirements. That's why the manufacturer chooses the retailers. The network can define the requirements for the sale of the products. For instance, in the car industry, the concessionaires have to maintain and repair vehicles. The network can also establish the maximum retail sale prices, which cannot be exceeded by the concessionaire.

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Although the concessionaire buys the goods from the network, his/her remuneration often takes the form of royalties. Otherwise, it depends on the sales margin.

Since the mid-1990s, there is a trend to use the term "concession" in networks in order to differentiate from franchising and appear as more flexible partnerships. This type of concession is thus very different from the one used by car trademarks.

We now consider several factors that favour alternatives among these organizational forms.

2 THEORY AND HYPOTHESES

The organizational forms represent contractual alternatives to start a business. Nascent entrepreneurs evaluate whether to establish a contractual alliance with a network or remain independent. If they decide to join a network, then they have to choose between simple contracts (concessions, trademark licenses) or more complex contracts (franchises, cooperatives, voluntary chains). Entrepreneurs' profile and project should influence organization decisions. Market characteristics are exogenous factors that also influence governance (Hart, 1983). We first consider the role of entrepreneurs' personal characteristics.

2.1. ENTREPRENEURS' PERSONAL CHARACTERISTICS

2.1.1. Human and social capital

Theoretical models of entrepreneurial attempts have to include the role and impact of human capital characteristics (Åstebro and Bernhardt, 2005). Education and work experience (managerial skills, entrepreneurial skills and activity experience) are the most common dimensions of human capital used in the entrepreneurship literature. Social capital is also considered as an important factor for the accumulation of human capital. Social capital focuses on networks: "friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital" (Burt 1992, p. 9).

We believe human and social capital characteristics are also of importance to understand why entrepreneurs choose to join a network. Entrepreneurs will choose to join a network rather than to initiate an independently owned business if the expected utility from joining a network exceeds the expected utility from initiating an independent business ownership (Williams, 1998). Given the importance of network-supplied inputs, profits are expected to vary across alternative organizational forms with entrepreneurs' human and social capital. We further differentiate these dimensions in order to clarify which types of human and social capital affect the decision to join a network. Table 1 presents a synthesis of expected relationships.

In general, entrepreneurs' valuation of network-supplied inputs diminishes with their ability

to contribute inputs of the same type and quality (Williams, 1998). Thus, the expected gains from joining a network will decrease with entrepreneur's human and social capital values. Moreover, according to Ucbasaran et al. (2008), the level of general human capital (i.e. education and work experience) of individuals will favour the emergence of new ideas or opportunities and, it is hypothesized, so will the probability of joining a network over independent business ownership. Therefore, we state the following hypothesis:

H1a: The greater an entrepreneur's human capital value, the more likely he/she will choose independent business ownership.

We also consider the impact of an entrepreneur's social capital on the choice to join a network. Some authors argue that the children of entrepreneurial parents are more likely to become entrepreneurs in their adult careers (Blau and Duncan, 1967; Western, 1994). These second-generation entrepreneurs bendit from exposure to an entrepreneurial environment, ranging from practical matters of running business operations to developing social networks to coping with the risks associated with entrepreneurship. However, Kim and al. (2006) found that levels of entrepreneurial involvement among family had no association with being a nascent entrepreneur.

Informal training and pre-market experiences are resources that might increase interest in a start-up project (Lentz and Laband, 1990). Entrepreneurial values, such as autonomy and perseverance, provide a valuable cultural resource for future entrepreneurs. These values may be transmitted to an individual through direct encouragement or indirect cues by someone in his/her circle. Individuals who are close to business owners benfat from apprenticing with mentors and as well from joining business-related social networks. For these reasons, an individual with someone in his/her circle as an entrepreneur (including family circle but not limited to) owns a social capital of greater value. We expect that he/she will be more likely to attempt entrepreneurship as an independent business than others.

H1b: An entrepreneur with someone in his/her circle as an entrepreneur will be more likely to choose independent business ownership.

Furthermore, individuals who have access to various social networks for market information, access to capital, hiring employees, establishing reputations, and developing supplier and customer relationships will be more likely to choose independent business than others.

H1c: An entrepreneur with business contacts will be more likely to choose independent business ownership.

The entrepreneurs' selection by networks also has an impact on the choice to join a network. For instance, an entrepreneur can choose to apply to become a franchisee but the franchisor can decide not to retain his/her candidature. In other words, networks and entrepreneurs choose one another. How networks and entrepreneurs select each other remains a largely unexplored topic. A study by Jambulingam and Nevin (1999) focused on the selection process of franchisees. The authors found that criteria related to individual background and personal characteristics were used in selection processes. Using a scoring method, Clarkin and Swavely (2006) found that franchisors assigned the highest level of importance to Personal Interview, followed by Financial Net Worth, General Business Experience, Psychological Profiling, Formal education and Specific industry experience. Given the level of importance franchisors assigned to General business experience, we state that:

H1d: The greater an entrepreneur's general business experience (managerial and entrepreneurial skills), the more likely the network will select him/her.

On the contrary, as franchisors rated Specific industry experience and Formal Education as overall least important in their selection process, we state that:

H1e: The entrepreneur's level of education will have no impact on the selection by networks.

H1f: The entrepreneur's specific industry experience will have no impact on the selection by networks.

An entrepreneur's social capital is a resource that might increase his/her probability of being a successful business owner. However, this type of individual capital might be unobservable or non measurable for networks which select their potential members. Given the ambiguity about social capital's possible value to networks, we offer no hypothesis concerning the impact of this type of capital on the likelihood of selection by a network.

Johning a network						
Type of capital	Dimensions	Entrepreneur's view	Network's view			
	Education	-	No impact			
Human capital	Managerial skills	-	+ (general business exp)			
	Entrepreneurial skills	-	+ (general business exp)			
	Industry experience	-	No impact			
Social capital	Business contacts	-	No hypothesis			
	Entrepreneurial circle	-	No hypothesis			

Table 1 - Expected impact of the type of capital on the entrepreneur's probability of joining a network

2.1.2. Risk considerations

Entrepreneurs' risk preferences may also influence their choice of organization (Knight, 1921;

Kihlstrom and Laffont, 1979). The returns of entrepreneur are more variable and uncertain that the wages of employees. The self-employer is seen as a risk bearer (De Wit, 1993). Cramer and al. (2002) found that an individual with lower risk aversion has a higher propensity to choose self-employment. Kan and Tsai (2006) found the same results with a different measure of risk aversion.

Starting a new business with a network is less risky than setting up own-label store and offers the entrepreneur a low cost format and high profile presence, enhancing trademark awareness. There are two complementary forces whereby the network contract reduces risk relative to the level expected under the alternative of independent ownership. First, the entrepreneur bears all risk as the sole owner of an independent business whereas network membership facilitates, for a given level of risk, risk sharing between entrepreneurs and networks. Second, for a given sharing agreement, less risk is expected under network membership because of reductions in demand uncertainty. Thus, more risk-averse entrepreneurs will prefer to join a network, other things being equal.

H2a: The greater an entrepreneur's aversion to risk, the more likely he/she will join a network.

The entrepreneur's aversion to risk will also be considered by networks in their selection process. There are conflicting observations of the role of business risk-taking in franchising. O'Donnell (1984) stated that franchisees are people who value order and security above risk. His view implies that potential franchisees should have a sense of security as they become franchisees and should feel that this business endeavor is less risky. Olm et al. (1988) suggest that risk averse individuals are preferable in franchising compared to those who are less risk averse. Similarly, Withane (1991) found that risk-taking is an important attribute to be successful as a franchisee, but 60% of the franchisees thought being an independent businessman is more risky than being a franchisee. Thus, being a franchisee reduces the perceived risk compared to starting a self-owned business. In contrast, Gartner (1985) observed that franchising may require more risk-taking than starting a small business without the attachments of franchising.

From the franchisor's view, the franchisee's attitude toward business risk-taking has an impact on franchisee outcomes. Franchisees who opt to enter franchising and who are risk-takers are going to experiment with their philosophies of running a franchise business. As risk-takers they might challenge the way business is conducted by franchisors. They would like to take risk, and, therefore, they may not like to conduct the business in the specific way suggested by the franchisors. Because their opportunity to take risk is curtailed, they might be

less satisfied in a franchise system and be more opportunistic toward their franchisor (Jambulingam and Nevin, 1999).

As a consequence, our analysis leads to two conflicting hypotheses regarding the impact of the selection process of entrepreneurs by networks on the probability of joining a network:

H2b: The greater an entrepreneur's aversion to risk, the more likely the network will select him/her.

H2c: The greater an entrepreneur's aversion to risk, the less likely the network will select him/her.

2.1.3. Financial considerations

When establishing a new business, an entrepreneur will be concerned about the investment itself, and the amount of capital locked into the investment. The role of financial factors in the setting up of businesses has drawn a particular attention of researchers (Evans and Jovanovic, 1989; Bernhardt, 1994; Constant and Zimmermann, 2006). Authors have found a significant influence of liquidity constraints on the propensity to become self-employed. They all claim that financial capital is an important barrier to self-employment and that individuals will choose the occupation, which yields highest utility in terms of earnings for them.

Capital investments will also affect the entrepreneur's choice of governance form. For relatively larger projects, entrepreneurs will have incentives to join networks. Network membership offers broad name recognition, management systems and marketing competencies that enable the firms to recoup investments efficiently (Dahlstrom et al., 2009; Brickley et al., 1991). Moreover, franchisees are a source of financial capital to franchisors that face binding capital constraints (Caves and Murphy, 1976; Martin, 1988). Following this argument, if networks are capital constrained they will prefer a greater share of their compensation in the form of an upfront fee rather than through royalties (Lafontaine, 1992). This implies that start-up capital is greater for firms that join networks than for independent owners, all else constant (Williams, 1998).

H3a: The greater start-up capital, the less likely an entrepreneur will start as an independent business.

Capital market considerations may influence entrepreneurs' decision to join a network. In particular, if the entrepreneur faces financial constraints then he/she may need network membership to get access to financial resources from banks. Network membership can thus help an entrepreneur start his/her business by providing increased access to bank loans. As a consequence:

H3b: The more an entrepreneur faces financial constraints, the more likely he/she will

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choose to join a network.

On the contrary, from the network's view, as most franchisees incur start-up costs, prospective entrepreneurs often must meet certain financial criteria to qualify for a franchise purchase. The ability to meet financial requirements is thus an important and logical aspect of the selection process by networks (Clarkin and Swavely, 2006). Networks will select entrepreneurs with a sufficient financial net worth, or in other words, entrepreneurs that are less financially constrained.

H3c: The more an entrepreneur faces financial constraints, the less likely a network will select him/her.

2.1.4. Entrepreneurs' personal goals and motives

Agency theory ignores motives other than efficiency. The influence of social structure on economic action is neglected (Granovetter, 1985). But entrepreneurs' motives may affect the decision to join a network. Moreover, attitudes and personality are also important in the franchisee selection process (Clarkin and Swavely, 2006; Jambulingam and Nevin, 1999).

According to Kaufmann (1999), the desire to provide employment for family members could be related to the decision to become self-employed. As network membership allows an entry on the market at a larger size, opportunities to provide employment for family members will be greater if the entrepreneur decides to join a network.

H4a: The creation of jobs for the entrepreneur's family members is positively related to the probability that he/she joins a network.

In addition, for the entrepreneur, the network allows, thanks to the economies of scale and scope, an entry on the market at a larger size, thus with larger expected earnings. Besides, if we take into account the network's point of view, entrepreneurs who are interested in increasing earnings are more likely to be selected to become a member.

H4b: An entrepreneur's motivation for creating a new venture in order to increase income is positively related to the probability that he/she joins a network.

In contrast, if an entrepreneur chooses to start a business within a network then he/she will be contractually engaged. Cooperating within a network means a loss of independence (Reijnders and Verhallen, 1996). The entrepreneur will thus not oversee all aspects of operations.

H4c: An entrepreneur's motivation for creating a new venture in order to be independent is negatively related to the probability that he/she joins a network.

2.1.5. Entrepreneur's perceived level of innovation

If entrepreneurs believe they possess a new product or service, or a new distribution concept

that will be highly competitive, they will assign less value to the inputs supplied by the network (product, managerial assistance, marketing, etc) than will entrepreneurs who believe they possess an uncompetitive product or who possess no new product or concept at all (Williams, 1998). The innovation is thus a substitute for the network's inputs. Therefore, we state that:

H5: An entrepreneur's perceived level of innovation will have a negative impact on the probability that he/she joins a network.

2.2. MARKET CHARACTERISTICS

The choice to join a network may be influenced by the type and number of customers. The independent actor's costs are appreciably greater if it has a large number of customers, mainly geographically dispersed (international or national customers), but joining a network markedly lowers these costs.

H6: As the company's main market gets larger and more geographically dispersed, an entrepreneur is more likely to join a network than to initiate an independent business.

3. METHOD

3.1. DATA AND SAMPLE

We used a survey entitled SINE 2006 (Système d'Information sur les Nouvelles Firmes, New Firms Information System), which was conducted by the French National Institute of Statistical and Economic Studies (INSEE, Institut National des Statistiques et des Etudes Economiques) in September 2006. In this survey, new firms are identified on the basis of their registration in the SIRENE repertory (Système d'Informations et de Répertoire des Entreprises et des Etablissements). This survey identifies qualitative data surrounding entrepreneurship and, more precisely, it contains variables related to the entrepreneur, to the context and to the environment of entrepreneurship. Data are generated by a compulsory survey, which has been conducted on a representative population of new firms every five years since 1994. In this article, we use the cohort of firms which set up in 2006 and which survived at least for one month. This compulsory survey is carried out among the population of 126439 new firms. The sample is representative¹ of the total population of new firms, which had been set up in 2006. We exclude "reactivations" from the sample. Economic "reactivations" correspond to SIRENE listed units which had stopped their activity and which start up again. The French units established abroad are set aside.

¹ A weight variable is used for the sample to fit the entire population.

The determinants of the entrepreneur's choice between start-up (ex nihilo) and takeover and those between network membership and independent business may be similar (for instance, human capital or financial capital). To avoid misinterpretation, firms taken over or set up by existing companies (subsidiaries) have been removed from the sample.

Within our theoretical framework, the founder makes a tradeoff between the constraints imposed by the networks and their advantages. A part of this constraint is due to the financial investments required to join the network. This constraint is effective if the network is renowned and if the cost to become a member is sufficiently high. This information is not available in the SINE survey. To approximate it, we exclude smaller projects that is to say the units for which the level of financial needs at start-up is inferior to 8 000 \in

Finally, our analysis is based upon the possibility of a founder's choice. A real choice is possible only if networks are active in the sector in which the founder decides to start his/her business. That's why, we focus upon the sectors (classification NES16 of INSEE) where the networks are the more active (INSEE reference): transport, real estate, private persons services, firms services (except: post office, advice and assistance, operational services and R&D), education, social action and health. But the NES16 classification is not very precise. In each category, there is a large diversity of activity and in some categories there are no networks at all or networks ensure all the activity. In these sectors, the entrepreneur has no choice. So, industries (NAF 700 classification) in which there are no networks and those in which there are only networks have been removed from the sample. Finally, we retained in our sample 20236 units.

3.2. VARIABLE DEFINITIONS

A description of variables is given in Table 2.

3.2.1 Dependent variable

The dependent variable is the network membership. To test our hypotheses, we have created a polytomous variable, which takes into account the three possible answers of respondents to the following question: "Are you a member of a network?". Respondents can answer that: 1) they belong to a franchise, cooperative or voluntary chain (7.27 % of sample); 2) they belong to a concession or they are trademark-licensing agents (4.28 % of sample); 3) they do not belong to any network (88.45 % of sample). The preceding discussion (section 1) suggests that concessions and trademark licenses imply less binding contracts for the member than franchising, cooperative and voluntary chain contracts. In this article, the term "rigid networks" will thus refer to franchises, cooperatives and voluntary chains whereas the term

"flexible networks" will refer to concession and trademark licensing contractual agreements. We expect fewer differences between flexible networks and independent businesses than between rigid networks and independent businesses. In other words, we expect that the hypotheses will be more often verified when the entrepreneur chooses to join a rigid network than when he/she chooses to join a flexible one.

3.2.2 hdependent variables

All variables are dichotomous variables except the entrepreneur's age. They all take the value one (and zero otherwise) for the modality that is presented in the text and in Table 2.

Human and social capital

We introduce six variables to take into account the entrepreneurs' diploma. Each variable is equal to 1 when the entrepreneur has a degree and 0 otherwise. These variables correspond respectively to no diploma, vocational diploma, primary school level, secondary school level, undergraduate and postgraduate diploma. In our sample, 10.24 % of founders do not hold any diploma (4.68 % of individuals who choose rigid network and 5.98 % of those who choose flexible network) whereas 8.24 % of them have a postgraduate degree (7.78 % of individuals who choose rigid network and 6.22 % of those who choose flexible network).

We assume that the founder has acquired industry experience if he has a professional experience in the main activity of his/her firm. We consider the intensity of this experience by taking into account its duration. We distinguish between three possible durations: long (professional experience in the same activity during more than ten years), medium (from three to ten years) and short (less than three years).

Managerial skills are an important part of human capital. In the SINE survey, entrepreneurs have to answer questions about their career. We consider that they have acquired managerial skills during their career if they held jobs as a company's manager or a senior executive. The activity of a manager and his/her experience varies with the firm's size. To introduce these differences, we take into account the size of the firm where the founder acquired managerial skills. Four sizes are considered: very small firms (less than 10 employees), small firms (more than 10 and less than 50), medium firms (more than 50 and less than 250), large firms (more than 250). In our sample, 59.76 % of entrepreneurs do not have any managerial skills (48.61 % of individuals who choose rigid network and 50.17 % of those who choose flexible network).

An experience in setting up a firm increases the entrepreneur's human capital value. We introduce a variable equal to one when entrepreneurs answer that they already set up a firm

and 0 otherwise. However, we will have to be careful when interpreting the results, as some individuals can be "serial" entrepreneurs who always prefer to start new firms rather than network membership.

Social and cultural capital is measured by four dummy proxy variables. We consider that the founder has an entrepreneurial network when a member of his/her family is an entrepreneur. The presence of entrepreneurs in the individual's family circle facilitates the access to information and the identification of good opportunities of new ventures. In our sample, 73.22 % of independent entrepreneurs answer that they belong to an entrepreneurial network (versus 71.31 % of founders who join a rigid network and 76.82 % of those who join a flexible network). We also consider the social capital generated by the relationships inside professional networks. It is measured by strong relationships with suppliers, customers or the former employer's firm, which facilitate the start-up of the business.

Risk considerations

Measuring risk aversion is difficult. Studies in experimental economics rely on risk aversion and gender. Some of them conclude that women are more risk averse than men (Eckel and Grosmann, 2008). In this study, we use gender as a proxy of risk aversion (the reference is man). We also assume that the family constraints and environment impact the entrepreneur's attitude towards risk. A founder will take less risk if he must rear children.

Financial considerations

To analyze the impact of finance on the choice of entry's mode (network membership or independent business), we introduce three variables. First, we take into account the level of the initial investment required. Five levels of financial needs are considered (see Table 2). Second, we take into account the part of bank loans in the total financing. To control the correlation between the level of financial needs and the part of bank loans we cross these variables. We consider that at a given level of initial investment required, the founder who is constrained by his/her personal wealth has always a greater part of bank loans than the founder who is not financially constrained. We also take into account financial difficulties encountered by the entrepreneurs at start up: difficulties to open a bank account or/and to obtain financing or/and to obtain a bank overdraft. We consider this variable as a proxy of the initial entrepreneur's personal wealth and of the level of his/her financial constraints.

Entrepreneurs' personal goals and motives and perceived level of innovation

The SINE survey contains information about the main motives of the founder. To test hypotheses H4b and H4c, we retain respectively the two following motivations: to increase income and to be independent. These two motivations are no exclusive. In the sample, the

proportion of independent entrepreneurs who start a business to increase income accounts for 22.87 % (29.91 % for rigid networks and 31.83 % for flexible networks). The proportion of independent entrepreneurs who start a business to be independent accounts for 58.12 % (57.65 % for rigid networks and 56.63 % for flexible networks). As the motivation of jobs' creation for entrepreneur's family members is not proposed in the survey, we do not have directly the information to test the hypothesis H4a. We assume that this motivation is important for the founder if he/she manages his/her business with a member of his/her family. To test the hypothesis H5, we retain the following motivation to start a business: the founder's belief regarding the project's innovativeness (new product, market or service). In our sample, 19.09 % of independent founders started a business because they had a new idea (9.72 % of founders who joined rigid networks and 14.99 % of founders who joined flexible networks).

Market characteristics

Two information concerning market characteristics are retained. The first one is the number of customers. This variable is used as a proxy of the competitiveness of the activity. In our sample, 77.37 % of independent founders have a large number of customers (91.64 % of founders who join rigid networks and 89.27 % of founders who join flexible networks). The second one is the geographical dispersion of customers. Three geographical areas are retained: local, regional and outside the region (national or international).

Control variables

In an effort to strengthen the empirical tests, we considered ten control variables. Two of them concern individual characteristics: entrepreneur's age and nationality (European or not). Four supplementary entrepreneur's goals are considered: unemployed person who has created under pressure, unemployed person who has chosen to start a business, person who starts a business because it is the only way to exercise his/her profession and person who seizes an opportunity. We also consider the two following goals for the future: to develop the firm and to stay a business owner. Finally, we add the use of Internet in the firm's activity. To control the multiplicative effect between dichotomous variables, we introduce interaction variables (Table 2).

Table 2 - Univariate analysis

INDEPENDENT VARIABLES	Franchises, cooperatives and voluntary networks (rigid network)	Trademark licenses and concessions (flexible network)	Independent ex nihilo start up	Pearson chi2 and probability
HUMAN AND SOCIAL CAPITAL				
Industry experience in the activity				
- Without industry experience	65.13	54.90	55.91	Pearson $chi2 = 82.6529$
 Long industry experience 	13.73	21.34	20.44	
 Medium industry experience 	17.40	14.99	18.21	Pr = 0.000
- Short industry experience	3.74	8.77	5.45	
Education	1 69	5.09	10.80	P_{22}
- No diploma Vocational diploma	4.08	5.98	10.89	Pearson $cn_1 = 124.7149$
- Vocational diploma	7 56	54.15 6.22	40.02	Pr = 0.000
- Elementary school level (baccalaureate)	10.45	0.22	8.83	FI = 0.000
- Undergraduate diploma	15.56	12.32	15.05	
- Post graduate diploma	7.78	6.22	8.37	
Managerial skills				
- Without managerial skills	48.61	50.17	61.15	Pearson chi2 = 252.5571
 Managerial skills acquired in very small firm 	14.68	16.96	15.38	
 Managerial skills acquired in small firm 	8.57	12.80	8.98	Pr = 0.000
 Managerial skills acquired in medium firm 	9.18	4.73	4.63	
 Managerial skills acquired in large firm 	18.97	15.34	9.67	
Experience in setting up other firm	28.69	26.99	24.24	Pearson = 17.0371 Pr = 0.000
Entrepreneurial circle	71.31	76.82	73.22	Pearson = 8.4511 Pr = 0.015
Strong relationship with suppliers	9.52	28.49	20.01	Pearson = 140.2109 Pr = 0.000
Strong relationship with customers	30.05	41.64	26.27	Pearson = 105.1882 Pr = 0.000
Strong relationship with the former employer's firm	13.19	14.30	6.37	Pearson = 162.7744 Pr = 0.000
RISK AVERSION				
Gender (man)	68.39	67.47	64.07	Pearson = 144781 Pr = 0.001
Children at the place of residence	58.33	62.86	57.01	Pearson $= 12,2022$ Pr $= 0.002$
	56.55	02.00	57.01	1 carson- 12.2022 11 - 0.002
FINANCIAL CONSIDERATIONS				
Level of financial needs to start the business:	12.02	25.50	26.02	
- More than 16 000 € and less than 10 000 € - More than 16 000 € and less than $40,000 €$	23.18	21.91	35.12	Pearson -1200
 More than 10 000€ and less than 40 000€ More than 40 000€ and less than 80 000€ 	19.37	15.46	14.31	Pr = 0.000
- More than 80 000€ and less than 160 000€	24.95	16.84	7.91	11 - 0.000
- More than 160 000€	20.46	10.27	6.64	
Part of the bank loans in the total financing	54.09	41.28	36.87	
Financial difficulties	29.91	31.83	31.66	Pearson = 1.9659 Pr = 0.374
ENTREPRENEUR'S PERSONAL GOALS				
AND MOTIVES				
Entrepreneur's motivation: increasing income	32.15	27.34	22.87	Pearson = 71.1413 Pr = 0.000
Entrepreneur's motivation: heing independent	57.65	56.63	58.12	Pearson = 0.8483 Pr = 0.654
Management of firm with family's member	19.51	13.15	16.02	Pearson = 18.2394 Pr = 0.000
ENTDEDDENEUD'S DEDCEIVED I EVEL	15101	10110	10102	
OF INNOVATION				
	0.72	14.00	10.00	Decrear 96 2206 Dr. 0.000
	9.72	14.99	19.09	Pearson = 80.3296 Pr = 0.000
MARKET CHARACTERISTICS				
Large number of customers	91.64	89.27	77.37	Pearson = 224.8148 Pr = 0.000
Customers' area	=1.10	17.07	50.00	D 0000105 D 0000
- Local (reference)	71.18	47.87	58.32	Pearson = 228.8135 Pr = 0.000
- Regional Outside the region	10.59	33.30	18.88	
- Outside the region	12.24	18.37	22.80	
CONTROL VARIABLES				
Demographic and individual variables:	05.50	07.46	00.74	D 12 2 607 D 0 000
- European Tounder	95.58	97.46	92.76	Pearson= 43.2697 Pr = 0.000
- Age of founder (mean in years)	38.00	40.11	57.95	

Other entrepreneur's goals and motives	2.50		1.00	D 11 501 1	D
- Unemployed who has started a business under	2.79	5.65	4.08	Pearson = 11.7914	Pr = 0.003
pressure					
 Unemployed who has chosen to start a business 	23.93	21.11	23.37	Pearson = 2.7058	Pr = 0.258
 Start-up is the only way to execute the profession 	2.11	8.77	6.03	Pearson= 51.7355	Pr = 0.000
 An opportunity led to start a business 	27.94	23.41	18.27	Pearson = 92.3555	Pr = 0.000
The future goals					
- To develop the firm	58.60	45.21	40.02	Pearson = 198.1442	Pr = 0.000
- To stay entrepreneurs	91.71	87.20	89.94	Pearson = 12.2886	Pr = 0.002
Technology					
 Use of Information and Communication 	84.98	93.19	72.44	Pearson = 281.9188	Pr = 0.000
Technologies					
INTERACTION VARIABLES					
- Part of bank loans X level of financial needs at start up (4 interaction variables)					
- Future goal: to develop firm X personal goal: to increase income					
- ruture goal to develop min A personal goal to increase income					

Managerial experience X unemployed who has chosen to start a business

3.3. DATA ANALYSIS

Given the nature of the dependent variable, we use both multinomial logit model and multinomial probit model to test our hypotheses. The probit model has the advantage of relaxing the assumption of the independence from irrelevant alternatives, which is a property of the multinomial logit model. The results of the two models regarding the variables of interest are qualitatively similar. Consequently, we present only the results from the multinomial logit model. The choice of starting an independent business is used as the base outcome (Table 3).

4. RESULTS

Table 3 contains the results of the estimated multinomial logit model. The log-likelihood value for the model is -7216.979.

4.1 HUMAN CAPITAL AND SOCIAL CAPITAL

It was predicted that the probability of joining a network would decrease with accumulated human capital. The human capital proxies appear to influence the decision to join a network but the effect depends on the considered variables. Entrepreneurs who choose to join a network are more educated than the others as there is a positive impact of the different types of diploma on the probability of joining a network. In contrast, we find a negative impact of postgraduate diploma on the probability of joining a rigid network. Concerning education, H1a is thus confirmed only for entrepreneurs who hold postgraduate diploma whereas results are not in line with the hypothesis H1e.

Table 3 - Multinomial logit results

The choice of starting an independent business is used as the base outcome.

INDEPENDENT VARIABLES	Franchise and voluntary networks (rigid network)	Trademark licenses and concession (flexible network)
HUMAN AND SOCIAL CAPITAL	Coeff (Pr)	Coeff (Pr)
Industry experience (reference: without experience)		
- Long industry experience in the activity of creation	-0.749 (0.000)	-0.286 (0.004)
- Medium industry experience in the activity of creation	-0.400 (0.000)	-0.254 (0.019)
- Short industry experience	-0.771 (0.000)	0.687 (0.000)
Education (reference: no diploma)		
- Vocational diploma	0.479 (0.000)	0.408 (0.001)
- Primary school level	0.362 (0.013)	-0.009 (0.962)
 Secondary school level (baccalaureate) 	0.541 (0.000)	0.723 (0.000)
- Undergraduate diploma	0.116 (0.343)	-0.077 (0.614)
- Post graduate diploma	-0.257 (0.078)	-0.293 (0.115)
Managerial skills (reference: without managerial skills)	0.054 (0.602)	0.051 (0.674)
- Managerial skills acquired in cred firm	-0.034 (0.605)	0.031 (0.074)
- Managerial skills acquired in medium firm	0.048 (0.093)	0.150 (0.421)
- Managerial skills acquired in large firm	0.750 (0.000)	-0.150 (0.421)
Experience in setting up a firm	0.010 (0.899)	-0.139 (0.149)
Entreneneurial circle	-0.217 (0.001)	-0.002 (0.980)
Strong relationships with suppliers	-0.832 (0.000)	0.203 (0.021)
Strong relationships with supplets	0.357 (0.000)	0.605 (0.000)
Strong relationships with the former amployer's firm	0.913 (0.000)	0.857 (0.000)
	0.915 (0.000)	0.057 (0.000)
	0.000 (0.008)	0.057 (0.490)
Gender (man)	-0.000 (0.998)	-0.057 (0.480)
Children in the place of residence	-0.096 (0.124)	0.237 (0.002)
FINANCIAL CONSIDERATIONS		
Level of financial needs (reference: More than 8 000€ and less than 16 000€)	0.510 (0.000)	0 (00 (0 000)
- More than 16 000 \in and less than 40 000 \in	0.518 (0.000)	-0.690 (0.000)
- More than 40 000€ and less than 80 000€ More than 80 000€ and less than 160 000€	0.854(0.000) 2.428(0.000)	-0.249(0.172) 0.545(0.012)
- More than 160 000€	1 912 (0.000)	0.047 (0.859)
Part of bank loans in the total financing		-0.003 (0.207)
Financial difficulties	-0.317 (0.000)	-0.117 (0.145)
Interaction variables:		
- Part of bank*financial needs \in [16000, 40000]	-0.001 (0.650)	0.008 (0.005)
- Part of bank*financial needs ∈ [40000, 80000]	0.005 (0.093)	0.010 (0.005)
- Part of bank*financial needs E [80000, 160000]	-0.009 (0.002)	0.006 (0.093)
- Part of bank*financial needs \geq 160000	-0.001 (0.668)	0.009 (0.020)
ENTREFRENEUR SPERSONAL GUALS AND MOTIVES	0.705 (0.000)	0 121 (0 215)
Entrepreneur's motivation, heing independent	0.060 (0.358)	0.121 (0.313)
An epicacian simulation; demig independent	0.000 (0.336)	0.047 (0.537)
	0.010 (0.837)	-0.555 (0.002)
ENTREPRENEUR'S PERCEIVED LEVEL OF INNOVATION		
Perceived level of innovation	-0.885 (0.000)	-0.300 (0.004)
MARKET CHARACTERISTICS		
Large number of customers	1.198 (0.000)	0.981 (0.000)
Customer's area (reference: local)		
- Regional	-0.191 (0.019)	0.596 (0.000)
- Outside the region	-0./16 (0.000)	-0.182 (0.076)
CONTROL VARIABLES		
Demographic and individual variables:	0.000 (0.570)	1.010 (0.000)
- European founder	0.080 (0.570)	1.012 (0.000)
- Age of founder	-0.012 (0.001)	0.0175 (0.000)
<u>Uner entrepreneur s goals and motives</u>	0 320 (0 075)	0 240 (0 162)
 Unemployed who has cleated under pressure Unemployed who has chosen to start a business 	0.483 (0.000)	-0.107 (0.396)
Chemployed who has chosen to start a business	5.105 (0.000)	0.107 (0.570)

 Start-up is the only way to execute the profession 	-0.456 (0.019)	0.462 (0.001)
- An opportunity led to start a business	0.563 (0.000)	0.227 (0.011)
The future goals		
- To develop the firm	0.701 (0.000)	0.131 (0.152)
- To stay entrepreneurs	-0.245 (0.023)	-0.565 (0.000)
Technology		
 Use of information communication technologies 	0.920 (0.000)	1.650 (0.000)
OTHER INTERACTION VARIABLES		
 Future goal: develop firm* personal goal : to increase income 	-0.192 (0.139)	0.190 (0.249)
- Managerial experience *unemployed person who chooses to start a business	0.502 (0.001)	0.555 (0.002)

Log likelihood = -7216.979Number of observations = 20236 LR chi2(94) = 3135.79 Prob > chi2 = 0.0000 Pseudo R2 = 0.1785

The impact of industry experience is different according to the type of network. The longer the industry experience, the lower the probability of franchise, cooperative or voluntary chains (in comparison with independent business). This result confirms that the ability of an entrepreneur to contribute of the same type of product decreases his/her gain from network membership. On the contrary, the impact of industry experience upon the probability of joining a flexible network is different. Short industry experience increases the probability of joining a flexible network whereas medium- and long-term industry experiences have a negative impact. Concerning industry experience, the hypothesis H1a is thus confirmed only for franchise, cooperative and voluntary chain systems whereas the hypothesis H1f is not verified.

The managerial skills influence positively the probability of joining a rigid network when they have been acquired in a medium or large firm. This is in line with Williams (1998) who found that a management position increases the probability of becoming a franchisee. Managerial skills that have been acquired in a large firm also have a positive impact on the probability of joining a flexible network compared to independent business. As a consequence, concerning managerial skills, H1a is not confirmed. As entrepreneurs with greater managerial skills have a greater probability of joining a rigid network, H1d is verified. Concerning entrepreneurial skills measured by an experience in setting up other firms, we can conclude neither on the selection by the network neither on self-selection by the founder. The experience in setting up other firms doesn't affect the probability of joining a network. As a consequence, H1a applied to entrepreneurial skills and H1d are not confirmed. This result is not in line with Williams (1998) who found that prior business ownership decreases the probability of becoming a franchisee.

Social capital measured by the entrepreneurial circle appears to affect the decision of joining a network. As expected and in line with Williams (1998), an entrepreneur with an entrepreneurial circle has a lower probability of joining a rigid network. Hypothesis H1b is

thus confirmed for rigid networks. The existence of strong relationships inside the professional network increases the probability of joining a network, except for relationships with suppliers in the case of rigid networks. This result is inconsistent with H1c. Two reasons can explain this unexpected result. First, the variables used may be poor proxies for measuring social capital. Second, business contacts facilitate the search for information. Entrepreneurs with a high social capital value have a better knowledge of opportunities to start a new business (argument for hypothesis H1c) but they may also benefit from a better knowledge of the most efficient networks. In other words, business contacts may help entrepreneurs identify good networks.

4.2. RISK CONSIDERATIONS

The gender doesn't influence the decision to join a network. If the gender is a good proxy for risk aversion, it impacts neither the choice by the founder nor the selection by the network. This result is confirmed by the impact of children. The variable "children at the place of residence" influences only the decision to join a flexible network. As a consequence, hypotheses H2a, H2b and H2c are not verified. This is not consistent with Williams (1998) who finds that the franchise contract is preferred by more risk-averse entrepreneurs.

4.3. FINANCIAL CONSIDERATIONS

A high amount of initial capital needed increases the probability of joining a rigid network but not for flexible networks in comparison with independent businesses. As a consequence, hypothesis H3a is confirmed for rigid networks. This is consistent with results reported by Williams (1998), suggesting that the probability of becoming a franchisee increases with the amount of capital available to the firm at start-up.

Concerning the link between the level of initial capital needed and the part of bank loans, results show that, for the lowest level of initial capital, a founder who joins a rigid network finances a greater part of his/her project by bank loans than an independent founder. Nevertheless, we find no significant difference with the lowest level of initial capital, except for projects with initial capital between 80 000 and 160 000€ for which the probability of being financed by bank loans is lower than for smallest projects.

The part of bank loans for the lowest level of initial capital needed doesn't impact the probability of joining a flexible network. For this kind of network, the impact of the part of bank loans increases for greater level of initial capital. These results don't enable us to draw conclusions regarding the founder's financial constraints.

Concerning the financial difficulties encountered at start-up, we find no difference for the choice between flexible network and independent business. In contrast, the founder who joins a rigid network less often suffers from difficulties to open a bank account or/and to obtain financing or/and bank overdraft at the beginning of the venture than independent entrepreneurs. It was predicted that a founder who joins a rigid network is less financially constrained. The hypothesis H3c is thus confirmed whereas the hypothesis H3b is rejected. Hence, regarding financial aspects, the selection by the network seems to take precedence over the choice by the founder.

4.4. Entrepreneur's personal goals and motives and entrepreneur's perceived level of innovation

An entrepreneur who starts a new business to increase his/her income has a greater probability of joining a rigid network. The other entrepreneur's personal goals (to be independent and to create jobs for family members) don't influence the probability of joining a network. As a consequence, the hypothesis H4b is confirmed for rigid networks but H4a and H4c are not verified.

The founder whose main motivation to start a business is related to a new idea (product, service or market) less often joins a network than others. As a consequence, the hypothesis H5 is confirmed for all forms of networks.

4.5. MARKET CHARACTERISTICS

The probability of joining a network is greater in activities where the number of customers is large. Concerning the number of customers, the hypothesis H6 is thus confirmed. The results concerning the geographical dispersion are unexpected. For rigid networks, we find a negative impact of regional and national or international customers (in regard to local customers) on the probability of joining a network. Hypothesis H6 is thus not verified. For flexible networks, the impact of geographical dispersion is not linear and more ambiguous: national or international customers) have a negative impact (although weakly significant) on the probability of joining a network (inconsistent with H6) whereas regional customers have a positive impact (consistent with H6).

5. CONCLUSION

Using a nationwide sample of business enterprises, this study analyzes entrepreneurs' choice between three alternative organizational forms: franchise, cooperative, voluntary network; concession, trademark license; independent business ownership. The estimates of contractual choice indicate that entrepreneurs are more likely to join a network when the number of customers is large, the financial needs at start-up are high, when entrepreneurs have a specific industry experience, some business contacts, and when their goal is to increase income. In contrast, the probability of joining a network is negatively related to the existence of an entrepreneurial circle, the perceived level of innovation and the geographic dispersion of the market.

In this study, we considered several market characteristics as explanatory variables but other market characteristics, that are not available in the SINE survey, may also play an important role in the decision to join a network. Independent entrepreneurs have financial incentives associated with the desire to increase consumer awareness. The independent actor's costs to generate awareness and patronage are appreciably greater in remote locations, but a network membership markedly lowers these costs (Dahlstrom et al, 2009). Moreover, an independent entrepreneur may need a set of infrastructures (railway station, airport, etc) to facilitate and lower the costs of the suppliers' delivery. Network membership allows the delivery in remote locations. As a consequence, as the distance from major metropolitan areas and infrastructure increases, entrepreneurs should more often join networks. Moreover, competition in the market and the level of business risk may also influence the choice of organization. Independent entrepreneurs starting a business in markets where competitive intensity is high, may establish agreements with networks to secure an edge over competition. They also try to differentiate themselves and to diminish costs through network membership in competitive environments. Hence, to go further and add value to our early empirical findings, it would be interesting to include geographic variables and market variables such as business risk and competition intensity in our analysis.

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