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Spin-off start-ups in the Netherlands

At First Glance

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Summary

This is a study into the general characteristics of spin-off start-ups in the Netherlands. We provide insight into the occurrence and main features of spin-offs in the population of Dutch small business (<100 employees). We pay explicit attention to the parent firms, which gets us behind some of the dynamics of spin-off start-ups in the Dutch economy.

Based on a review of literature, we have gathered empirical data among 1,734 Dutch SMEs. The subsample of firms that are spin-offs and parent companies were contacted again to get into further detail about the spin-off process. Next to this survey, a number of spin-offs and parent firms were interviewed face-to-face.

In this study, we use the following definition of a spin-off:

A spin-off is an individual or a group of individuals leaving a ‘parent’ firm to start up a new, independent business. The start-up occurs on the basis of specific knowledge and competences built up within the parent firm. The parent firm supports the spin-off by allowing the transfer of knowledge, competences and/or direct means.

In our survey of SMEs, we find that 5-8% of all SMEs in the Netherlands is a spin-off. This means that there are about 6,000 - 7,000 new spin-offs per year. Most existing spin-offs are relatively young firms. Most spin-offs descend from other small firms. Large and medium-sized firms more frequently facilitate spin-offs explicitly.

34% of the spin-offs are supported by the transfer of knowledge. 34% are backed by some (initial) orders from the parent firm. 37% received other kinds of support, such as advice or an introduction to some of the members in the network of the parent. Financial support exists in 26% of cases. The knowledge transfer is seen as most critical by the spin-offs. Patents or licences hardly play a role in the SME spin-offs, but the transfer of product knowledge or knowledge of the market is very important in many cases. Most types of support from the parent firm occur only temporarily, although a number of spin-offs keep receiving advice or orders even after many years. Most support is clearly and only given in the start-up phase and a short period thereafter.

There appear to be relatively many spin-offs in manufacturing, construction and business services. From the survey it can be concluded that spin-offs are not only overrepresented in these sectors, the spin-offs are also more innovative than other SMEs, especially in manufacturing and business services.

Spin-off start-ups begin their venture with motives similar to other start-ups, but the pull factors are more dominant for spin-off entrepreneurs. Creating new and improved opportunities for products and people is a critical motive, next to the ‘regular’ independence motive. Dissatisfaction in the employment situation and the threat of unemployment are not as often mentioned by spin-offs as important motives. A motive quite specific to spin-offs is to utilize opportunities such as new products or technology that would otherwise have remained unused (within the parent firm). About a quarter of the spin-offs in the survey explicitly state this as a motive.
Personal factors, such as a good relationship between the former employer and the spin-off entrepreneur, seem to play an important role for the SME spin-offs. More strategic motives, such as concentration on core competences and/or keeping strategic grip on innovations, are more important for larger parent firms. Outplacement of employees is a less frequent motive, both for small and larger firms. The added value to the quality of the business environment of the parent firm may be an important explanation of the occurrence of spin-offs. The parent gains a valuable friend in its network, and flexibility, strategic focus and risk reduction ‘on the side’.

In a majority of the cases, the initiative to spin-off lies with the employee (i.e. the spin-off entrepreneur). In most other cases the initiative is joint or lies with an external party, such as an advisor.

The reputation of the parent firm seems to be one of the more important factors of success for spin-offs, especially at the start-up itself. The use of the network, the access to customers, suppliers and finance are important positive effects for the spin-off start-ups. The fact that firms benefit from the ‘support’ of a large firm with a settled reputation helps the entrepreneurs, while they still have advantages of being small: acting independently, flexibly and fast.

The empirical data in our survey provide only limited information to really compare the success factors of spin-offs with the success factors of start-ups in general. From the limited information about sales growth, employment growth and profit growth, we may conclude, however, that the spin-offs are quite successful.
1 **Introduction**

Spin-off start-ups are new entrepreneurs or new entrepreneurial teams that use and are explicitly allowed to take knowledge or other assets from an existing firm (the ‘parent’ firm)\(^1\). Spin-offs are a category of entrepreneurship on which knowledge is rather limited. The extent to which spin-offs occur, their characteristics and their success are quite unknown, especially in the Netherlands. Spin-offs currently receive substantial (policy) attention. They are typically assumed to be technology-intensive, highly innovative and of high growth potential. Spin-off start-ups are typically seen as positive to the economy as a whole.

We aim to increase the knowledge on spin-offs.

This study aims to increase the knowledge on spin-offs. The focus of the study are small and medium-sized enterprises (SMEs) with less than 100 employees. Obviously, there are also larger spin-offs, but we are interested in the entrepreneurial aspects of spin-off start-ups. Therefore, it can be considered appropriate not to include the large spin-offs.

The rest of this section presents the objective and the research questions of this study.

**Objective**

The objective is to learn more about the occurrence of spin-offs in the Dutch economy: How many spin-offs are there? What are the characteristics of spin-offs and parent firms, and, is it possible to say something about the success of spin-offs, compared to ‘normal’ small and medium-sized enterprises?

**Research questions**

The following questions follow from the objective:

1. What is a spin-off?
2. What is the extent to which spin-offs occur in the Dutch economy?
3. What are the characteristics of spin-offs and parent firms (size, industry, high or low tech, innovativeness)?
4. What are the motives to ‘spin-off’ for both the entrepreneurs and the parent firms?
5. What are the factors of success for spin-offs?

**Research method**

First, theoretical literature about the subject is studied and used to make a theoretical framework for answering the research questions. Second, empirical literature is studied to see whether part of the research questions have been answered elsewhere. Third, a telephone survey was held among SMEs in the Netherlands. The sample of 1,734 SMEs included 121 spin-offs and 256 parent companies. The spin-offs and parent firms were interviewed again (response rate 70%). With the outcomes of the survey, questions 2 (occurrence), 3 (characteristics) and 4 (motives of parents and spin-offs) can be answered. Finally, eight face-to-face interviews were carried out, using a semi-structured questionnaire. These interviews were held with 4 parents and 4 spin-offs. The interviews were predominantly used to go into more depth about motives and success factors for spin-offs and their parents.

\(^1\) This is only one definition of spin-offs, in section 2 the choice of definitions is elaborated upon.
Structure of this study

Chapter Two highlights the literature on spin-offs. Spin-offs are defined and a theoretical framework is presented. From the theoretical framework, hypotheses are formulated on the success factors of spin-offs. These hypotheses are confronted with the empirical results in the following chapters. Chapter Three deals with the occurrence and characteristics of spin-offs in the Dutch economy. We also look at the characteristics of parent firms and at the relationship between parents and spin-offs. Chapter Four presents the motives of parent companies and spin-offs. Chapter Five, then, discusses the success of spin-offs compared to SMEs in general. Chapter Six relates the expected factors of success to the empirical results and draws conclusions.
2 Spin-off literature

In this chapter we look at the definitions of spin-offs (of which there are many). We choose one and continue to discuss theoretical arguments on some of the relevant questions: why do spin-offs exist? what are the most important features? what are critical factors of success? ...

2.1 Theory and our key questions

Several managerial and economic theories relevant.

Figure 1 below presents an overview of several managerial and economic theories that are able to explain (1) why spin-offs exist (‘parental’ motives and ‘entrepreneurial’ motives), (2) how the relationship between parent firm and spin-off works, and (3) which factors of success are relevant. The five most relevant theories supplement and overlap, as is illustrated in figure 1.

Figure 1 Interdependence of relevant theories

Why spin-offs occur and under which circumstances they work well are the key questions, but ...

Motives for employees to start up a new firm may follow from arguments such as self-realization, autonomy and the challenge of being independent. Parent firms may have additional strategic motives to facilitate (or initiate) spin-offs for specific activities, such as the reduction of uncertainty about the future success of innovative products. Entrepreneurship theories, transaction costs theory and the resource-based view can help explain why spin-offs occur. They explain the motives for spin-offs and parents to enter a spin-off relationship. Agency theory and resource dependence theory both focus on the relationship between the spin-off and the parent. These theories are well equipped to explain why spin-offs work and whether they are likely to perform well. The set of these theories can explain many of the things we are interested in.
Before going into these theories, we first discuss definitions of spin-offs.

2.2 What is a spin-off?

Literally, “something that comes about unexpectedly, as a result of activities that were designed to achieve something else” (Parhankangas 1999, p. 21).

This section reviews several definitions of spin-offs that are found in the literature. Since there are many definitions in use, we motivate the definition that we use in the remainder of this study. That definition is as follows:

A spin-off is an individual or a group of individuals leaving a ‘parent’ firm to start up a new, independent business. The start-up occurs on the basis of specific knowledge and competences built up within the parent firm. The parent firm supports the spin-off by allowing the transfer of knowledge, competences and/or direct means.

The definition is adapted from Elfring and Foss (2000). The relevant characteristics of spin-offs that we want to emphasize are that the new enterprise is independent from the parent firm and that the parent firm supports the spin-off (in some explicit way). The support may be the transfer of specific knowledge or competences, but, it can also be more ‘tangible’, e.g. financial support, first orders, a guarantee for turnover or the use of specific assets.

2.2.1 Spin-offs: many definitions

A good starting point for a quest for a definition of spin-offs can be Elfring and Foss (2000). These authors define spin-offs as “an individual or an organizational unit leaving an existing firm to start as a new firm on the basis of his/her specific knowledge and competences.”

Elfring and Foss (2000) further classify spin-offs according to the character of separation (‘virtuous’ or ‘vicious’) and the unit of analysis (individuals or organizational units). A virtuous spin-off benefits the parent company, while a vicious spin-off harms the parent company. With vicious spin-offs, the motive to start the new firm is negative: The organizational unit or (more often) the individual that leaves the company, leaves because they are frustrated in the relation with the employer, or because they expect to be able to gain higher rewards as an entrepreneur. The new firm in case of vicious spin-offs is often competing with the old firm.

Although a spin-off may mean that people with innovative ideas and high competences are leaving the firm, spin-offs may well have a positive impact on the parent company. In the latter case, Elfring and Foss (2000) call it a virtuous spin-off. The individual or the unit of the virtuous spin-off does not compete with the parent company. The activities of the spin-off are complementary or the activities are part of the value chain of the company. Alternatively, if the parent company wants to concentrate on its core business, or if it does not have the right structure to support the new firm, a business opportunity may have higher value as a separate firm.
Restructuring and entrepreneurial spin-offs

In an explorative study of the European Commission, Moncada et al. (1999) look at the impact of corporate spin-offs on the competitiveness and employment growth in the European Union. Here, a (corporate) spin-off is broadly defined as “the division of an existing company into two, usually a bigger one (the parent company) and a smaller one (the spin-off)”.

Moncada et al. (1999) make a further division into two types of spin-off processes:

- Restructuring-driven spin-offs: “when the parent company decides to sell off a business because it no longer fits the parent’s strategy, because functions of the business are externalized and/or because the parent company tries to avoid costly layoffs and social plans”.
- Entrepreneurial spin-offs: “when the spin-off entrepreneur forms a new company based on critical know-how acquired during his previous professional experience in order to exploit an unused potential”.

The latter type of entrepreneurial or ‘pro-active’ spin-offs can again be divided into two types as well: spin-offs that collaborate with their parent company and spin-offs that compete with their parent company (which has an obvious analogy with the explained virtuous or vicious spin-offs).

Corporate venturing/intrapreneurship

Shrader and Simon (1997) look at independent ventures and corporate ventures, both of which are often also called spin-offs. The difference between independent and corporate ventures is that the former are new independent companies, established by individual entrepreneurs, and the latter are initiatives controlled and sponsored by larger companies. Both of these are new firms, started by individuals, using specific knowledge from their former jobs. The latter, however, has a quite different ownership structure: it is still controlled by the parent firm. Green et al. (1999) also define corporate venturing as the creation of new business by members of a firm that already exists, but leave the ownership issue a bit more open.

Some authors make a difference between internal corporate ventures (also called ‘intrapreneurship’) and external corporate ventures. This difference widens the possible field to include initiatives that remain fully within the parent company (substantially broader than Shrader and Simon (1997)). For our study, the literature on venturing is an important source of information. The definition of independent or external corporate ventures is the most relevant. Both types of ventures are by definition of Shrader and Simon (1997) receiving financial support from the (parent) company.

Transfer of assets from the parent company

Lindholm Dahlstrand (1997) describes ‘entrepreneurial’ spin-offs as “… entrepreneurs that leave a company to start a firm of their own. This transfer to a new company must include the transfer of some rights, e.g. assets or knowledge, from the existing legal body to the new firm or body”. The author makes a further division between corporate and university spin-offs, which may be important since there appear to be different motives and backgrounds for these two types of spin-offs.
In the literature about corporate venturing, the new ventures are often associated with innovation, high-tech and high-risk, even when these aspects are not included in the definition. Some authors do, however, include the innovativeness or relation to technology in their definition of a corporate venture. Tidd, Bessant and Pavitt (1997), for example, define a corporate venture as: “a separate organization or system, designed to be consistent with the needs of new, high-risk, but potentially high-growth businesses”. The link with technology is also made by Jagersma (2000), who defines corporate ventures as a means for large firms to increase their competitiveness by strategically participating in promising new technologies.

Spin-offs from non-profit organizations

In the definitions of spin-offs and related notions given above, the spin-off (or venture) springs from a commercial enterprise. Many spin-offs also originate from non-profit institutes, such as universities or ‘knowledge institutes’. Such institutes sometimes act as incubators stimulating start-ups of innovative firms. The spin-off firms from this type of parents are mostly established in the same area. The difference with corporate spin-offs is primarily in the strategic objectives. The corporate parent aims to outsource non-core activities, to keep in touch with new innovations, and so on. The non-profit parent organizations typically act from a public aim, to promote innovation, entrepreneurship and the diffusion of knowledge.

Choosing a definition

When is a start-up a spin-off?

Following from the different aspects listed in the preceding section, we distill several key attributes that spin-offs have. To us, the most important aspects are:

− Making use of specific knowledge or competences built up within the parent company;
− Support from the parent company (financial, time, making use of facilities, guaranteed turnover, etc.);
− Independence (largely) from the parent company.

One or more of these aspects are often left out when spin-offs are described. It follows that there is not one common definition of spin-offs. There seems to be a broad spectrum of relevant forms, from innovative employees, via intrapreneurs to independent entrepreneurs. We choose not to study employees that leave their parent firm without consent and support. Latter start-ups are more likely to be vicious to the parent, but also less interesting at the moment.

Although it is often not incorporated in the definition, innovativeness and high tech sectors are important in most articles about spin-offs. In general, spin-offs are related to modern ways of managing innovativeness by using venture capital and creating more flexible organizations. Thus, in the literature about spin-offs, the (superfluous) employee of a large firm, who receives help to start his own firm, with the motive of cutting (wage) costs, is usually not meant as a typical example of a spin-off. The same holds for the outsourcing of business units that do not contribute to the core business, as we saw happening on a large scale during the eighties. These outsourced firms do use knowledge that they built up within the parent company, but they are not innovative, or their innovation is not related to the work they did with the parent company (described above as restructuring spin-offs).
The motives of parent companies behind the ‘innovative’ spin-offs on the one hand, and the restructuring or ‘economizing’ spin-offs on the other hand, are opposites. With the former type, the motive is positive, to grow and be competitive, while with the latter type of spin-offs, the motive is negative, just to economize on overhead and labour costs.

A spin-off is an individual or a group of individuals leaving a ‘parent’ firm to start up a new, independent business. The start-up occurs on the basis of specific knowledge and competences built up within the parent firm. The parent firm supports the spin-off by allowing the transfer of knowledge, competences and/or direct means.

2.2.3 Spin-offs in relation to other kinds of start-ups

The section above shows how broad the spectrum is of definitions of spin-offs. When we think of examples in practice, people may be calling the specific type of spin-off differently, for example a management buy-out, outsourcing, outplacement, corporate venturing and licensing.

Management buy-outs may be a spin-off, as long as a relationship with and support from the parent firm to the new firm remain. Outsourcing and outplacement may be spin-offs as long as the new entities are independent. Corporate ventures may be comparable to spin-offs, but often the corporate ventures are not independent, since they remain under the control of the parent firm (intrapreneurship). Licences may play a role for spin-offs, but licences may also be sold to entrepreneurs that are not former employees of the parent firm. The latter is explicitly taken no spin-off.

2.3 Why do spin-offs exist?

In this section, we look at theory regarding the motives to start a spin-off, from the viewpoint of the spin-off entrepreneur (section 2.3.1) and from the viewpoint of the parent firm (section 2.3.2).

2.3.1 The spin-off entrepreneur

The personality of the (potential) entrepreneur is a key factor in explaining why people become entrepreneurs. However, not all individuals with an ‘entrepreneurial’ personality will start a business. External factors are important to explain why employees, graduates or dropouts take the step to actually start a business. These external factors may be: the presence of an infrastructure (institutions), the social status of entrepreneurship, a great idea, the financial outlook and – specifically for spin-offs - the relationship with the employer and the opportunity the latter may give to actually start a spin-off company.

There is a lot of research that compares the personality of entrepreneurs with that of employees. Many studies find that for entrepreneurs the quality of ‘daring to take risks’ is relatively important. Also the need for self-realization and ‘locus of control’ (the need to control one’s own environment) are important characteristics of entrepreneurs (see Nandram and Samsom, 2001). Brandstätter (1997) found that entrepreneurs who set up their own firm, compared to entrepreneurs who take over existing firms have a relatively high emotional stability and a higher desire for independence. Because of these characteristics, they have a higher self-confidence and they dare to work in innovative ways. Amit e.a. (2000) found in a study among high-tech entrepreneurs, that character-
istics such as the urge to innovate, vision, the urge to be challenged were the most im-
portant motives for these entrepreneurs to start their firms.

While the mentioned characteristics are important for entrepreneurs, there will be many
managers and employees who also have these characteristics. Personality is not the only
factor that explains entrepreneurship.

A second important factor to explain why people start their own firm can be the expec-
tation of a higher financial reward, compared to working as an employee. From several
studies it follows that the potential high financial rewards are a motive for starting a
firm, but the studies also show that most entrepreneurs do not see this as the critical
motive to start (see e.g. Amit e.a., 2000, Hisrich, 1990, Brockhaus e.a., 2001).

**Push factors**

Sometimes push factors play an important role for people to become entrepreneurs.
Several push factors can be distinguished. When the economy is in a downturn, entrepre-
neurship is often an important (if not the only) alternative to unemployment. Sometimes the social/cultural environment is important:
entrepreneurship may be a means to establish a position in society (see Nandram and
Samsom, 2001). Other push factors may be a bad relationship between employer and
employee. This may occur if a person is just not successful in working for a boss, but
also if workers are frustrated when their work is not appreciated by their employer or
when potentially successful projects are turned down by the firm. Sometimes workers
are stimulated to leave with (the rights to) their idea.

**Pull factors**

Important pull factors for people to start a firm are, for instance, the social status of
entrepreneurship and the practical opportunities. The social status depends largely on
cultural factors. E.g. in the US, entrepreneurship is consistently associated with success,
independence, high income, et cetera. Over the last decade the general attitude to-
wards entrepreneurship in the Netherlands is shifting into the same direction. The pa-
rental attitude towards entrepreneurship is also important, as may be the initiatives by
schools and universities to stimulate entrepreneurship. The practical opportunities to
become an entrepreneur depend on institutions such as government legislation and
educational requirements (which recently have been lowered in the Netherlands), the
financial system and infrastructure in a country or region, but also on the access to fi-
nancial capital and advice, expertise, etc. All the latter are generally considered to be
part of the ‘innovation system’.

From the aspects that are relevant for entrepreneurship, we can expect that spin-offs
are started by ‘entrepreneurial’ personalities. Because of push and pull factors, though,
spin-offs may on average be less ‘entrepreneurial’ than ‘regular’ start-ups. The availability
of a stimulating environment and infrastructure (‘system’) for spin-offs can be ex-
pected to facilitate start-ups that would otherwise not have existed.

**2.3.2 The parent firm**

At first sight, it may not seem logical for firms to promote employees to spin-off. Why
would a firm support employees to leave and bring (innovative) products to the market,
while it could also try to incorporate the activity in its own firm? Resource-based theory
and transaction costs economics provide answers to this question. Below, we discuss
arguments.
**Resource-based view**

In the resource-based view, strategies for exploitation of firm-specific means and qualities ('resources') are the central focus. Firms can outperform other firms on the basis of low costs, high productivity, or specific assets and capabilities (Teece, 1998). Resources may be the foundation of lasting competitive advantages. These advantages are not in the products, but in those resources that are hard to copy. The resource-based view takes the following assumptions:

- Firms fundamentally differ in their use, management and control of resources.
- These fundamental differences between firms are relatively stable.
- Differences in firm resources cause differences in performance between firms.
- Firms aim to increase and/or optimalize their economic performance.

It is difficult to explain success of firms, because it is difficult to uncouple activities and resources that actually cause uniqueness. Tacitness of knowledge and appropriability of returns are relevant here. Knowledge is very often tacit, that is, not written down but only present inside people's heads. Imitation is difficult. Appropriability means the possibilities that are available for a firm to protect or appropriate the returns to a specific resource (Teece, 1998). There is a range of legal procedures to protect returns, such as licensing and patenting. Time to market may be another way to safeguard the returns.

**Focus and outsourcing**

How does the resource-based view explain that parent firms spin off certain activities? First, the ability to excel in a market or activity is important to firm survival. This focus may make it attractive to let less interesting ideas and people spin off. Honda and Intel are examples of firms that spun off dozens of firms. They both invested strongly in the development of their one specific product (small engines and complex chips, respectively), and they combined those investments in technology with skills in short cycles of development (Teece, 1998).

Second, strategic outsourcing of specific activities can provide higher flexibility and a better focus on core competences (Quinn, 1992). The activities in which the firm has no competitive advantages are outsourced. They can be purchased from external parties at a better price/quality ratio than if produced internally, especially in the long run.

**Transaction costs economics**

Transaction costs economics looks at why and when activities are carried out within firms and when firms buy those activities in the market. The relevant aspects are the frequency of transaction, the uncertainty and the specificity of firm investments. If the frequency of transaction, the uncertainty and the specific investments are low, outsourcing an activity, purchasing it in the market, is the most rational action. When these relevant aspects are all high, internalizing is probably the most rational choice. A spin-off is a solution to relieve some of the uncertainties in the market and lower some of the transaction costs, compared to other market alternatives. It does (on the other hand) provide additional flexibility and the opportunity to lower specific investments compared to internalization. Figure 2 shows the continuum between the hierarchy (activities within a firm) and market transaction (contracts between firms). Most coordination mechanisms are hybrid forms of these two mechanisms. Vertical integration is the most hierarchical type, and joint ventures, cooperation, networks, clustering and spin-offs are all examples that lie somewhere in between.
One factor that seems to be especially relevant in the decision to spin-off activities, is the strategic importance of the activities. When the activity is highly important for the parent firm, but all other factors are pointing towards outsourcing, the spin-off can be an option, since the firm can still have some grip on the technology or product of the spin-off firm (see Parhankangas, 1999). Figure 3 below illustrates this. The figure shows a model based on Williamson (1985). The co-ordination mechanisms of firms are determined by the frequency of transaction (occasional or recurrent) and the characteristics of the know-how involved (non-proprietary or proprietary). The third dimension in the model is the use of knowledge and/or technology, which can be specialized or non-specialized. The figure shows that hybrid co-ordination mechanisms (this includes spin-offs) are chosen when the know-how is proprietary (so licences or patents can be used), the knowledge can be both non-specialized or specialized and the frequency of the transaction is recurrent.

Firms can be expected to spin off activities when there is a degree of uncertainty about the activity, but where the activity is still important enough to not be completely outsourced.

2.4 Will it work?

In this section we look at the agency theory and the recourse dependence theory. The first looks at vertical relationships between firms or individuals, and how these relationships (contracts) affect the (combined) output. The second, the resource dependency theory, looks at how firms obtain resources, and what role stakeholders play (especially the parent firm in case of spin-offs).

**Agency theory**

Agency theory describes the relation between ‘principal’ and ‘agent’. This can be a relation within a firm, such as between employer and his employee, or between firms, such as between a contractor and a supplier, or, between a parent firm and a spin-off.

Agency theory looks especially at the role that (financial) rewards plays in these vertical relations, and the way in which this influences the production of a joint output. With joint production, or co-operation, it is important that the input of every contributor can be measured, so that free-riding can be prevented. In positive terms, financial rewards can stimulate parents and spin-offs to work hard and well. The possibility to spin off from the parent firm can already be a motivation for employees/managers to work hard and to be innovative and creative while they are still in the company. In this respect, a spin-off policy in a parent firm can be part of human resource management. It provides career opportunities that the firm itself may not be able to offer, and thus it may attract highly qualified employees. The other way around, once the spin-off relationship is a fact, the link between parent and spin-off may determine the early success of the spin-off. The assurance that the employee is allowed to come back and other incentives may make the relationship even stronger.

**Resource dependence theory**

Every organization depends on its resources to be successful. The way in which these resources can be obtained, depends on the stakeholders around the firm. For spin-off start-ups, the parent firm plays an important role in obtaining the necessary resources. Five principal types of resources are:
- human capital
- social capital
- organization capital
- physical capital
- financial capital.

Compared to regular start ups, spin-offs have a lead in most of these resources. Human capital is taken from the parent firm, and thus the employees are already experienced in the relevant market, or have knowledge of the specific technology or product. Social capital, such as a network of clients, trust and social skills may be one of the most relevant resources for spin-offs. A network can be seen as a resource that is hard to imitate and for which there are no substitutes. Networks can give access to potential providers of finance, potential clients and suppliers. The name and reputation of the parent firm can be the reason that external relationships have more faith in the new firm and see the new firm as a serious partner/client. Organization capital (procedures, routines, organisation structure, etc.) is normally not available in new organizations, and support
from the parent firm can help the spin-off to focus more on the product or service and less on these issues. Not without a risk, since the procedures of the parent firm are likely to be too rigid to be transferred to the smaller spin-off. Physical capital may also be made available by the parent firm at the start-up phase of a spin-off. This can be the use of a building, machines or materials. Like organisation capital, this reduces the costs in the start-up phase and makes it easier to focus on the new product or service. Financial capital is finally the last but not least resource. Parent firms may support spin-offs financially. The reputation effect of the parent firm can be very important for spin-offs to get access to external finance as well.

2.5 Synthesis

The theoretical explanations for motives of both entrepreneurs and parent firms to start a spin-off can be translated into assumptions about these motives. Also, the explanations for the relationship between parent and spin-off, and the performance of the spin-off can be translated in assumptions about how these relations and performance will be in practice. Below, we list the most relevant conclusions that follow from the theoretical arguments. These conclusions are to be tested in the empirical chapters that follow. The final chapter evaluates to which degree we succeed in this.

Why do spin-offs exist?

We look at the question why spin-offs exist, and what motives spin-off entrepreneurs and parent firms have to start such initiatives.

- In general, spin-offs can be expected to have an 'entrepreneurial personality'. They may not have started without certain additional push or pull factors that facilitate the spin-off (the threshold to start is lowered). As a result, it can be expected that spin-off entrepreneurs are less 'entrepreneurial' than other entrepreneurs.

- Because of the specific pull factors (e.g. facilities to start a spin-off in a firm or university), it can be expected that spin-offs are more often innovative and high-tech than normal start-ups or normal firms.

- Given the definition of spin-offs, it can be expected that we find many restructuring driven spin-offs in the survey among SMEs. It can be expected that these will have relatively little to do with innovation and exploitation of unused potential, but more with outplacement of superfluous employees.

- The motives of parent firms can vary from using spin-off as a means to restructure (as described above; part of a social plan, e.g.), to using spin-off as a means to be able to excel in core competences, while still being able to keep strategic grip on potential important innovations. A motive in between these two motives is to attract excellent and ambitious personnel with a spin-off policy (as part of the human resource management).

Will it work?

We also look at success factors for spin-offs. There are many factors that are expected to cause spin-offs to perform better compared to ‘regular’ start-ups.

- Especially for virtuous, entrepreneurial spin-offs, starting with an innovative product or service, combined with support from a parent firm can be expected to lead to positive outcomes; higher survival rates, higher and faster growth in sales and personnel, et cetera.

- The most important factors of success can be expected in the start-up phase. Spin-offs have an important lead compared to regular start-ups. Spin-offs profit from the advantages of a large firm with a good reputation. The relationship with the parent and the use of its network mean that access to financial capital is better, access to customers is easier, etc. Spin-offs typically still do have the advantages of being small and independent, acting flexibly and fast.
The advantages of having a parent firm are less when the 'strategic fit' between the parent and the spin-off is poor. The advantages of using the network of the parent are then relatively low, especially compared to the spin-offs with a good 'strategic fit'.
3 Spin-offs in the Netherlands

In this chapter and the following two chapters the characteristics of spin-offs in the Netherlands are presented.

Data are collected from EIM’s ‘SME-panel’, 1,734 observations.

Our empirical data are the results of two rounds of telephone interviews with the owners of Dutch companies with 0-9, 10-49 and 50-99 employees. First, we interviewed 1,734 firm owners in EIM’s so-called ‘SME-panel’. The panel consists of Dutch companies with less than 100 employees, equally distributed across three size classes and nine sectors of economic activity. The firms are interviewed 3 times a year on varying topics.

First round: selection.

In the first round, we asked if the owner was supported by his/her former employer while starting the business, and, if so, which kind of support had been received. To detect parent firms, we asked if a former employee had been supported to start a business, and if so, how much support was given, and why.

Second round: in depth.

In a second round of interviews, only the owners who answered positively (receiving/providing support) were interviewed again, focusing more in depth on the spin-off process. 121 firms that received support and 256 firms that provided support were interviewed in this second round. This time we asked for more details on the kind of support that was received and provided. The age of the firm, the control by the parent firm, the motivation to start, the type of knowledge and competences taken from the parent firm, the relationship with the parent firm and the kind of support received were additional items asked. The parent firms were asked similar questions.

Overview.

Section 3.1 looks at the extent to which spin-offs occur in the Netherlands, section 3.2 looks at sector, age and size of spin-offs. Section 3.3 discusses the relation between parent firms and spin-offs. Section 3.4 presents the innovativeness of spin-offs.

3.1 Number of spin-offs

According to the survey of SME firms in the Netherlands, between 5 and 8% of all SMEs can be qualified as a spin-off (i.e. starting their firm with some kind of support from their former employer, taking specific knowledge built up in the previous job, and being independent from the parent company). In our sample, most spin-off entrepreneurs (86%) started a new company. 14% took over part of the business of their former employer.

Table 1 Estimated number and share spin-offs in the population of SMEs

<table>
<thead>
<tr>
<th></th>
<th>% of all SMEs</th>
<th>Total number of spin-offs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spin-offs</td>
<td>5%-8%</td>
<td>35,000-55,000</td>
</tr>
<tr>
<td>- Newly established</td>
<td>4%-6%</td>
<td>30,000-45,000</td>
</tr>
<tr>
<td>- Take-over of part</td>
<td>1%-2%</td>
<td>5,000-10,000</td>
</tr>
<tr>
<td>of existing firm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; 95% confidence interval.

10-14% of all SMEs are parents.

From the same survey, it follows that 10-14% of all SME firms (70,000-100,000) can be qualified as a parent firm of one or more spin-offs. Most parent firms have supported
6,000-7,000 new spin-off start-ups per year.

Based on our data, we estimate that there are between 6,000 and 7,000 new spin-offs per year in the Netherlands. This number may be a little lower if the survival rate of spin-off start-ups is larger than that of regular start-ups.

Some information on large firms: apparently increasing inclination to facilitate spin-offs in larger firms.

Although information about the number of spin-offs from other sources is limited, we do have some information on larger firms. In the ‘Entrepreneurship monitor’ (EIM, 2000; Ministry of Economic Affairs, 2000), large companies were interviewed to find out how often employees are starting with support from their employer (100 or more persons employed). From this inquiry it followed that 8% of all large companies examined were at that moment ‘facilitating’ one or more spin-offs. From 40% of the large companies one or more employees left to start their own enterprise in the past. In about 50% of these cases, the parent company formally supported the former employee. This means that around 20% of large firms facilitate spin-offs. Very large companies (more than 1,000 employees) produce more spin-offs than the companies between 100 and 1,000 employees. It may be expected that large firms facilitate spin-offs more often than small firms (see also section 3.2). More than 40% of the large companies expect the number of spin-offs to increase in the coming years. Only 7% expect a decrease (EIM, 2000). Apparently, something is changing in the business climate for spin-offs.

3.2 Sector, age and size of spin-offs

According to our survey, spin-offs are over-represented in manufacturing, construction and business services. This is shown in Table 2 below.

Table 2 Sector distribution spin-offs and SMEs

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of spin-offs</th>
<th>% of all SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>11*</td>
<td>7</td>
</tr>
<tr>
<td>Construction</td>
<td>14*</td>
<td>10</td>
</tr>
<tr>
<td>Retail and wholesale trade</td>
<td>19</td>
<td>24*</td>
</tr>
<tr>
<td>Hotel and catering</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Transport</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Business services</td>
<td>24*</td>
<td>18</td>
</tr>
<tr>
<td>Financial services</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other services</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Non-private sector</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; * larger share, at 5% significance.

More spin-offs in several sectors.

From the literature, spin-offs are expected to occur most in high tech sectors. Manufacturing and business services may be more high tech than the other sectors, but based on our data we do not know whether the spin-offs are actually in the high tech segments. We can investigate whether the spin-offs in this survey are more innovative than the other SMEs (see below).

High-tech might be more prevalent.
Spin-off companies are relatively young: 46% of the spin-offs are less than five years old. The fact that there are relatively few older spin-offs may be seen as a sign that spin-offs may not be very successful enterprises. On the other hand, perhaps the entrepreneur tends to ‘forget’ that he received support around his/her start-up. Based on this - unless we have grounded reason to believe the number of spin-offs has been increasing over the last five years - spin-offs could actually be less successful in the long run than regular start-ups. There are indications, however, that the number of spin-offs has actually been increasing, so we should not jump to conclusions too easily.

Table 3  Age distribution of spin-offs and SMEs

<table>
<thead>
<tr>
<th></th>
<th>% of spin-offs</th>
<th>% of all SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years or younger</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>6-10 years</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>11 years and older</td>
<td>32</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off firms +/- 5%.

Based on our data, spin-offs enterprises seem to be relatively small. However, we do not find significant differences in their size distribution compared to regular SMEs.

Table 4  Size-class distribution of spin-offs and SMEs

<table>
<thead>
<tr>
<th>Size class, in number of people employed</th>
<th>% of spin-offs</th>
<th>% of all SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 employees</td>
<td>97</td>
<td>92</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off firms +/- 5%.

The great majority of spin-off parents are small firms. Once again, the size distribution is not significantly different from the regular SMEs. Parent firms are more often older enterprises, but their size is not significantly different from ‘regular’ SMEs.

Table 5  Size-class distribution of parent firms and SMEs

<table>
<thead>
<tr>
<th>Size class, in number of people employed</th>
<th>% of parent firms</th>
<th>% of all SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 employees</td>
<td>88</td>
<td>92</td>
</tr>
<tr>
<td>10-49 employees</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>50-99 employees</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; parent firms +/- 4%.
3.3 Relationship between spin-off and parent firm

3.3.1 Support from the parent firm

The spin-offs in the survey received different kinds of support from their former employers. Knowledge support and orders were received by one third of the spin-offs as support. Financial support from the former employer was received by one quarter of the spin-offs.

Table 6 Type of support received at the start-up phase

<table>
<thead>
<tr>
<th>Type of support from parent firm</th>
<th>% of spin-offs that received this type of support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders</td>
<td>34</td>
</tr>
<tr>
<td>Knowledge</td>
<td>34</td>
</tr>
<tr>
<td>Financial means</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups subsample.

The category ‘other support’ contains a range of different support types. ‘Advice’ was mentioned. Many firms also offered their former employee the possibility to work part-time or with flexible hours in the transition period. A third category of ‘other support’ mentioned is the use of - or introduction to - parties in the network of the parent firm. This includes customers, potential customers, partners and potential partners.

Direct financial support less frequent.

From our face-to-face interviews, we learned that knowledge is often a key support mechanism, frequently in the form of a product or service developed in the parent firm. Physical resources, such as the (temporary) use of machines, computers, and other equipment are also sometimes transferred. The interviewed spin-offs also received financial support from the parent firms. However, this financial support was in most cases not given directly. The support was given by subsidized research, or remittance of debts. Sometimes the spin-off receives orders from the parent firm.

Knowledge transfer is critical asset.

The support with physical resources was seen as important (especially when scale economies are relevant, e.g. in manufacturing), as well as the financial support. This facilitated the birth and the exploitation of the spin-offs. However, the knowledge-transfer played the most important role, according to the spin-offs, because the knowledge taken from the parent firm is seen as the basic competence of their newly established firms.

25% still receive support.

A quarter of the spin-offs in the survey still receive support of their parent firms at the moment of the survey. 60% of these are older than 5 years. From Table 7 it is clear that the most prevalent type of ongoing support after five years is advice (78%). Orders come second (by 43%). Financial support has fallen to 6%. 
Table 7  Type of ongoing support from the parent firm

<table>
<thead>
<tr>
<th>Type of support</th>
<th>% of spin-offs that receives this type of support (more than one answer was possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice</td>
<td>78</td>
</tr>
<tr>
<td>Orders</td>
<td>43</td>
</tr>
<tr>
<td>Financial means</td>
<td>6</td>
</tr>
<tr>
<td>Knowledge</td>
<td>1</td>
</tr>
<tr>
<td>Support in finding financial means</td>
<td>1</td>
</tr>
<tr>
<td>Staff/personnel</td>
<td>1</td>
</tr>
<tr>
<td>Other support</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; pampered spin-offs (15%).

In about one third of the spin-off start-ups (see Table 6), knowledge is transferred from the former employer to the spin-off. Figure 4 shows that knowledge of products, knowledge of the market and technological knowledge are most commonly transferred. Various other kinds of knowledge were also mentioned.

![Figure 4 Knowledge transmitted from former employer to spin-off](image)

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups subsample.

Patents and licences play a minor part for (SME) spin-offs. For only a few of the spin-offs a patent or a licence was part of the knowledge transfer. It can be expected that for spin-offs from large firms, or spin-offs from universities or knowledge institutes, patents and licences play a more important role.

\[ ^1 \text{According to the answers of parent firms, in 3\% of the cases a patent of licence was transferred to the spin-off.} \]
3.3.2 Competitive relationship between spin-off and parent firm

Spin-offs seldom carry out activities that were part of the parent firm before the spin-off started. More often they carry out new activities, that the parent firm could/would not carry out. One third of the spin-offs carry out activities that have nothing to do with the parent firm. Half of the spin-offs perform activities that are actually comparable to those of their parents (and half of the spin-offs that receives support is therefore in fact potentially vicious).

Table 8 Activities of the spin-off compared to activities of the parent firm

<table>
<thead>
<tr>
<th>Activities of the spin-off, in comparison to the parent firm</th>
<th>% of spin-offs that gave these answers (more than 1 answer was possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities that were part of the parent firm before the spin-off started</td>
<td>5</td>
</tr>
<tr>
<td>New activities, which the parent firm could/would not carry out</td>
<td>17</td>
</tr>
<tr>
<td>Activities that have nothing to do with the parent firm</td>
<td>36</td>
</tr>
<tr>
<td>Comparable activities</td>
<td>51</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups subsample.

Despite the large number of spin-offs carrying out activities that are comparable to the activities of the parent firm, not many are direct competitors of their former employer. According to the spin-off, only 15% are direct competitor of their parents (see Table 9). One third of the spin-offs is a supplier of the parent firm and 5% of the spin-offs are a client of the parent firm. When a spin-off is the supplier of the parent, in about half of the cases this concerns less than 10 percent of the turnover, in the other half of the cases it concerns 10 to 50 percent of the turnover. Quite a number of the spin-offs mention some sort of ‘other’ relationship with their parent firm. Most frequently this amounts to a ‘partnership’ of some sort. We have not followed through on the actual form of these partnerships.

Table 9 Current relationship of the spin-off with the parent firm

<table>
<thead>
<tr>
<th>Relationship with parent firm (according to the spin-off)</th>
<th>% of spin-offs</th>
<th>% of turnover coming from parent firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct competitors</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>No relationship</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Supplier of parent firm</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>– less than 10% of turnover from parent</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>– 10-50% of turnover from parent</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>– more than 50% of turnover from parent</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Client of parent firm</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Other relationship</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups subsample.

Three quarters of the spin-offs in our subsample still have some sort of a relationship with the parent firm. Apparently many older spin-offs also keep in touch with their par-
ents. The majority of the spin-offs qualify the relationship and understanding with the parent firm as good. Only five percent consider it to be ‘bad’.

Table 10 Qualification of the current relationship with parent firm

<table>
<thead>
<tr>
<th>Understanding with the parent firm (according to the spin-off)</th>
<th>% of spin-offs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>72</td>
</tr>
<tr>
<td>neither good nor bad</td>
<td>0</td>
</tr>
<tr>
<td>Bad</td>
<td>5</td>
</tr>
<tr>
<td>no relationship (anymore)</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel, spin-off start-ups.

Looking at the relationship between spin-off and parent for the spin-offs with whom we had in-depth interviews, three of the five spin-offs have good relationships with their parents, one has no relation at all with its parent (since this company no longer exists), and one spin-off has a rather weak relationship with the parent firm. The firms with a good relationship state they have an understanding based on mutual confidence, (informal contacts, services in return). Even after the starting period, these spin-offs can call for the parent’s help, but they actually do so sporadically. The described weak relationship has to do with the fact that at the start, no clear agreements were made (only verbal), and the two firms now are sometimes competitors.

The latter aspect, whether firms are competing, supplementary or stand alone, can be described by the ‘strategic fit’ of the two firms. When there is no strategic fit, there will be few conflicting interests, but there will neither be a motive to support the spin-off (except perhaps the motive of ‘outplacement’). When the strategic fit is strong, and activities overlap, the firms may easily become competitors, which is also negative for the relationship. The strategic fit between parent firm and spin-off may be important for the birth of spin-offs and for the competitive position later on. The existence of a strategic fit between spin-offs and parent firms may influence the perception of third parties towards the spin-off as well. Third parties may be more forthcoming, especially because the parent firms approved the spin-off. In the interviews, it is mentioned that spin-offs because of their background got easier entry to third parties, but it is not fully clear if this took part because of approval of the parent firm.

The majority of the interviewed spin-off entrepreneurs mention that the reputation of the parent firm is very positive for the spin-off. The reputation of the parent firm actually seems to have certain reputation spill-over effects towards the spin-off. The strong trademark of the parent firms made the start-up of the spin-offs easier, because acquiring resources from third parties was easier due to the spin-off background at the parent firm.

When we go back to the survey data, and look at the effects of ‘spinning off’ on parent firms, we see in table 11 that most parent firms in the survey (60%) mention positive effects on their firm. The spin-offs are new good clients or suppliers, and have a positive effect on technology and/or knowledge development as well. The parent firms also mention positive effects on public relations and the spin-offs as new cooperation and networking partners.
Table 11  Effects on parent firm, as a consequence of supporting a spin-off (according to parent firm)

<table>
<thead>
<tr>
<th>Effects on the parent firm</th>
<th>% of parent firms</th>
<th>Which positive and negative effects?</th>
<th>% of effects (more than one answer possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>60</td>
<td>A new, good client</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A new, good supplier</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A new, good partner</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive for technology development</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive for knowledge development</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive for public relations</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>Negative</td>
<td>13</td>
<td>An extra competitor</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Too high investment costs</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>30</td>
</tr>
<tr>
<td>Both positive and negative effects</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No effects</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off parents.

If parent firms mention negative effects as a consequence of supporting a spin-off, it is mostly because of the extra competition that is caused by the spin-off. The loss of employees and knowledge is often mentioned as another negative effect.

This corresponds with earlier EIM results that 70% of large companies that facilitate a spin-off are positive about the spin-offs (see EIM, 2000), because they create a new market for the parent company and/or because there is collaboration with the spin-off.

Given the above results, it is not surprising that most SME parent firms have a positive attitude towards supporting spin-offs in the future. 17 percent of the parent firms even explicitly try to stimulate spin-offs. This suggests that the entry of spin-offs can be expected to persist in the coming years.

Table 12  Attitude of parent firm towards supporting spin-offs in the future

<table>
<thead>
<tr>
<th>Attitude of parent firm towards support of employees</th>
<th>% of parent firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit stimulation</td>
<td>17</td>
</tr>
<tr>
<td>Positive, if employee asks for support</td>
<td>58</td>
</tr>
<tr>
<td>Neutral</td>
<td>22</td>
</tr>
<tr>
<td>Negative</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off parents.
3.4 Innovativeness of spin-offs

Spin-offs seem to be more innovative than SMEs in general. This conclusion can be drawn from the information on innovativeness that we have from our survey data. The conclusion holds for launching new products and for introducing improvements in processes within the firm. Spin-offs make more use of external networks to exchange knowledge than other SMEs. Finally, they also tend to cooperate more often and more intensively in order to innovate.

Table 13 Indicators for innovativeness of spin-offs and SMEs

<table>
<thead>
<tr>
<th></th>
<th>% of spin-offs</th>
<th>% of all SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launched new products on the market in the last 3 years</td>
<td>53*</td>
<td>48</td>
</tr>
<tr>
<td>Introduced improvements in processes within the firm over the last 3 years</td>
<td>74*</td>
<td>67</td>
</tr>
<tr>
<td>Making use of external network to exchange knowledge</td>
<td>67*</td>
<td>46</td>
</tr>
<tr>
<td>Cooperating to innovate</td>
<td>57*</td>
<td>38</td>
</tr>
<tr>
<td>One or more employees officially engaged in innovation</td>
<td>58</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-offs start-ups;* larger share, at 5% significance.

The interviews show that the birth of spin-offs is among others due to the existence of an innovative product idea. The innovative character seems to continue after the establishment of the spin-off. Many spin-off entrepreneurs mention that they try to assign a central role in their organization to innovation.

3.5 Summary

In this chapter, we present the prevalence and features of spin-offs and parent firms in the Netherlands. About 5-8% of all SME firms in the Netherlands can be qualified as a spin-off. Most of these descend from small firms, but large and medium-sized firms actually facilitate spin-offs more often than small firms do. Most spin-offs are quite young. Many are found in manufacturing, construction and business services.

Spin-offs receive different types of support from their parent firms. One third of all spin-offs are supported by the transfer of knowledge, one third by orders from the parent firm, and others receive various kinds of support, such as advice or introduction into the network of the parent. Financial support is given in relatively few cases. From the survey it followed that a quarter received financial support. The knowledge transfer is seen as most important by the spin-offs. Patents or licences hardly play a role in the SME spin-offs, but transfer of product knowledge or knowledge of the market are considered critical in many cases.

The support from the parent firm is for three quarters of the spin-offs only temporary; it is given in the start-up phase and a short period thereafter. If the support relationship continues, the support most frequently consists of advice and/or orders (the latter could of course be seen as a normal business relationship). Although there is no support relationship, most spin-offs still have a good understanding with their parent firm. Although half of all spin-offs carry out comparable activities to the parent firm, only 15% of spin-offs see the relationship as direct competition. One should remember that we did not analyze employees that leave ‘without consent’.

5-8% of SMEs are spin-offs.

Knowledge support is most frequent and most important mechanism.

Support typically temporary, relatively few vicious spin-offs.
The reputation of the parent firm seems to be one of the important factors of success for spin-offs, especially at the start-up phase. The use of the network, access to customers, access to suppliers and access to finance are relevant positive effects for spin-off starters.

Parent firms are positive about facilitating spin-offs. About 60% see a positive effect of the spin-off for the firm. This effect can be a good relationship with the spin-off as supplier or client, or a positive effect on knowledge development. Only 13% are negative, most of which claim the extra competition to be the negative effect.

Spin-offs appear to be more innovative than SMEs on average. This can be caused by the sectors that spin-offs are in or their age, but also by the characteristics of spin-offs in general. From the interviews it follows that the spin-off entrepreneurs see innovation as an important asset and an important factor of success for their firms.

Given the outcomes of the survey, it is not unlikely that the number of spin-offs will increase over the next few years, in part because of the positive attitude that most parent firms have towards spin-offs.
4 Motives of spin-offs and parent firms

This short chapter throws some light on the motives of spin-offs and parent firms that lead to the birth of the spin-offs.

4.1 Motives of spin-off start-ups

In this survey of spin-off start-ups based on EIM’s representative SME-panel, the spin-off entrepreneurs were asked why they became entrepreneur. Half of the spin-off entrepreneurs (53%, see Table 14) considered the advantages of being independent important. Another large group (48%) saw more opportunities as an entrepreneur than as an employee within the firm of the former employer. Almost a quarter of the spin-off entrepreneurs started out of dissatisfaction in their former employment situation, and another quarter mention the opportunity to use un-utilized possibilities such as new products and/or technologies.

Table 14 Motives of spin-off entrepreneurs to start a firm

<table>
<thead>
<tr>
<th>Motives</th>
<th>% of spin-offs that mention this motive (more than one answer possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages of being independent</td>
<td>53</td>
</tr>
<tr>
<td>More opportunities as an entrepreneur</td>
<td>48</td>
</tr>
<tr>
<td>Dissatisfaction with employment situation</td>
<td>24</td>
</tr>
<tr>
<td>Using un-utilized possibilities such as new products/technology</td>
<td>24</td>
</tr>
<tr>
<td>Threat of unemployment</td>
<td>9</td>
</tr>
<tr>
<td>Closure of part of the firm of the former employer</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups subsample, +/- 5%.

Spin-off start-ups compared to regular start-ups are more frequently opportunity driven (i.e. triggered by ‘pull factors’). About half of the spin-offs state that the additional opportunities as an entrepreneur are an important incentive to start. This is substantially lower for regular start-ups (based on EIM’s start-up panel). The ‘push factors’ (dissatisfaction, threat of unemployment) are less frequent motives for spin-off start-ups than they are for regular start-ups (again compared to EIM’s start-up panel).

4.2 Motives of parent firms

The interviews show that there are about as many motives that stimulate the birth of spin-offs as there are spin-offs. In all cases there is no single motive, it is always a combination of motives on both sides (i.e. also for the parents the motives vary). In a number of cases external aspects are of influence as well. Motives may be that the product or service does not fit the parent firm’s strategy or that the entrepreneurs expect better commercial results if the product or service is offered on the market independently from the parent.
The motives for parent firms to support former employees are diverse. Surprising result is that in many cases the employer ‘just wanted to help the employee’. Outplacement-like motives were also relevant, but not as important as expected. The importance of the personal motives may confirm that spin-offs are rewarded for taking risks (by being independent). Parents also benefit from the spin-off as a reliable, new party in the business environment. Whether strong or weak, the tie between the spin-off and parent will become and remain to be a valuable one. Monitoring costs of mutual efforts and quality will typically be low. Compared to keeping the spin-off within the firm flexibility, strategic focus and risk reduction are critical triggers to allow the employee to spin off. The empirical result that personal motives are important obviously does not contradict this. Personal motives are relevant in all open principal-agent relationships.

In comparison, according to Alferink and Van Wijk (2001), who looked at rather innovative and relatively large spin-offs, the most important motives of parent firms are the positive influence of spin-offs on the image and the strategic interest the spin-off has for the parent firm. We do not find this result for SME parent firms. Other motives like the fact that the competitive basis of the spin-off did not fit within the strategy of the parent firm and the desire by the parent to stimulate entrepreneurship are found in similar proportions. For only a few parent firms expected financial profit is a motive. A quarter of the parent firms say that they considered other possibilities before deciding to facilitate the spin-off.

The results of our face-to-face interviews confirm the idea that the parent firms stimulate spin-offs because of the strategic (mis)fit with the parent firm. If a certain activity does not fit in the core-business of the parent, the parent encourages one or more employees to spin-off. This motive seems especially important for non-profit knowledge institutions, at which several interviews were held. The goal of these institutions is to develop knowledge in certain areas, not to commercialize that knowledge. This is typically left to the spin-off. The stimulation of spin-offs plays an important role in the business strategy of these knowledge institutions.

### 4.3 Initiative to ‘spin-off’

From our representative survey, it follows that the initiative to spin-off comes in most cases from the spin-off entrepreneur (71% of all spin-offs). In 16% of the cases the initiative was a joint process (by the parent and the entrepreneur). For 10% of the spin-offs, the initiative lies with someone else (not the employer and not the employee, but e.g. a manager, an external adviser or the bank), and only in 4% of the cases it was the pure initiative of the parent firm.

The survey among large companies (Ministry of Economic Affairs, 2000) had about the same outcome, namely that in almost 75% of the spin-offs from large firms, the initiative to start came from the (new) entrepreneur, while in about 20% the employer and employee decided together.

The interviews show that the birth of a spin-off is the result of a complex process, in which the candidate spin-off entrepreneur and the parent firm both play an important role. External factors were also mentioned to be important. There is one parent firm for which facilitating spin-offs is part of its strategy. The entrepreneurs from that parent company are normally ‘selected’ by the parent, but only after the entrepreneurs make clear that they are motivated. One spin-off from this parent was initiated by three colleagues, who won a contest for business plans. For them, this external acknowledge-
ment, plus the availability of the facilities to spin-off from the parent firm, led to the start of their firm. For another spin-off, the initiative was with the entrepreneur, who was a manager, and the motive was that his business unit would be closed, after a take-over of part of the parent firm. The parent firm supported him to start his own firm, which had the advantages that less employees needed outplacement and that the image of the parent firm would not be harmed (so this can be seen as a restructuring driven spin-off).

4.4 Summary

On the surface, the motives for spin-off start-ups are comparable to the motives of other starters. The advantages of being independent, more opportunities as an entrepreneur, dissatisfaction in the employment situation are important motives. Spin-off entrepreneurs are more ‘opportunity driven’, though. A motive that is rather specific for spin-offs is the motive to use un-utilized possibilities such as new products or technology, which about a quarter of the spin-offs in the survey name as a motive. The spin-offs that see this as a motive may reasonably be expected to be innovative.

Spin-offs are more opportunity driven than regular start-ups.

Parent firms have very diverse and often personal motives.

Parent firms have very diverse motives to support employees to start independent firms. Personal factors, such as a good relationship between the employer and the specific employee, seem to play an important role for the SME spin-offs. The more business-like motives, such as concentration on core-competences and keeping strategic grip on innovations, are particularly important for larger parent firms. The motive of outplacement of employees for whom there is no longer suitable employment within the parent firm is a relevant motive, both for SME-firms and large firms. The added value to the business environment could be a critical motive that underlies most of the observed parental motives.

The initiative lies with the entrepreneurs.

The initiative to spin-off lies in the majority of the cases with the employee (i.e. the spin-off entrepreneur). If this is not the case, the initiative lies either jointly between employer and employee, with an external party, such as an adviser, or (in very few cases) solely with the employer.
5 Performance and factors of success

Most spin-offs in our sample are young enterprises, so we have only limited information about their performance. For this reason, we could not perform reliable analyses on factors of success. We limit ourselves to some first indications. Section 5.1 focuses on the performance of the spin-offs. Section 5.2 deals with the factors of success.

5.1 Performance of spin-offs

The survey gives three indicators for the performance of spin-offs: employment growth, sales growth and profit growth. All indicators are short term: growth is expressed as the change of last year and as expectation for the forthcoming year.

The majority of spin-offs realized employment growth, of which the greater share realized a strong employment growth. None of the spin-offs was confronted with decreasing employment. Spin-offs perform significantly better than all SMEs on this indicator.

Table 15  Employment growth 2000 and expected employment growth 2001, spin-offs and SMEs

<table>
<thead>
<tr>
<th>Employment growth 2000*</th>
<th>Expected employment growth 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spin-offs</strong></td>
<td><strong>All SMEs</strong></td>
</tr>
<tr>
<td>Strong growth</td>
<td>41</td>
</tr>
<tr>
<td>Slight growth</td>
<td>30</td>
</tr>
<tr>
<td>No change</td>
<td>30</td>
</tr>
<tr>
<td>Slight decrease</td>
<td>0</td>
</tr>
<tr>
<td>Strong decrease</td>
<td>0</td>
</tr>
<tr>
<td>Do not know</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups;* significantly better (95% confidence).

Expectations of spin-offs with regard to employment growth also seem to be somewhat better, but insignificantly.

Sales growth results show that spin-offs realized similar sales growth results to regular SMEs. The expectations 2001 are substantially higher (see table 16). Apparently, the spin-offs are more positive for the near future.

1 Especially the small group of vicious spin-offs seem to perform well. The spin-offs that still receive support (‘pampered spin-offs’) seem to perform relatively poorly (‘no change’).
Table 16  Sales growth 2000 and expected sales growth 2001, spin-offs and SMEs

<table>
<thead>
<tr>
<th>Sales growth 2000</th>
<th>Expected sales growth 2001*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spin-offs</td>
</tr>
<tr>
<td>Strong growth</td>
<td>42</td>
</tr>
<tr>
<td>Slight growth</td>
<td>33</td>
</tr>
<tr>
<td>No change</td>
<td>18</td>
</tr>
<tr>
<td>Slight decrease</td>
<td>5</td>
</tr>
<tr>
<td>Strong decrease</td>
<td>0</td>
</tr>
<tr>
<td>Do not know</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: EIM, 2002; based on EIM’s SME-panel; spin-off start-ups; * significantly better (95% confidence).

Spin-offs realize profit growth very similar to regular SMEs. In terms of profit growth, the expectations of spin-off entrepreneurs are also similar. One reason for this may be that the spin-offs (like many regular SMEs) invest their profits right back into the firm).

5.2 Factors of success of spin-offs

What explains success?

Starting from the observation that spin-offs may perform better than regular SMEs: which factors can explain that spin-offs show a more positive performance than other firms, in other words what are the factors of success of spin-offs?

3/4 of spin-offs state: parental support contributes to success.

In the survey, three quarters of the spin-offs answer that the support of their parent firm contributes to their success, either strongly (29%) or slightly (48%). The rest of the spin-offs answer that there was no relation between their success and the support of their parent firm. The relationship with a parent firm, therefore, does seem to be an important success factor.

Other evidence circumstantial.

More insight in the factors of success can be derived from the interviews. Below, we look at the factors of success that follow. We have not performed a formal analysis, so this evidence is rather circumstantial.

Knowledge and experience.

The knowledge and experience that the spin-offs gained within the parent firm enable them to expand their activities rather quickly and to make progress in the development of their activities. The spin-off entrepreneurs that do not have such knowledge and experience within the specific industry lose considerable time commercializing their ideas. Knowledge and experience of the spin-off entrepreneur and of the firm’s staff are a likely factor of success to spin-off start-ups.

Reputation effects.

Most spin-off entrepreneurs mention explicitly that in the start-up phase, but even later on, their background at the parent firm brought them success. Financiers, potential clients and partners with whom they cooperate seem to take the spin-offs more serious once they mentioned their background. The interviewed spin-off entrepreneurs do not know to what extent this was an advantage, but they are sure it was an advantage. So we can tentatively conclude that in practice the reputation of the parent firm has a positive effect on the spin-off’s possibilities to acquire resources.
Most spin-offs received, in one way or another, support from physical resources from their parent firm. The use of this type of support occurs especially during the start-up phase of the spin-off. Seldom spin-offs structurally use physical resources of the parent firm later on. Physical resource support seems to be more important in the manufacturing sector (where economies of scale are important) than in the knowledge intensive sectors such as the ICT sector. Spin-offs in the manufacturing sector are able to save on investments because they can buy physical resources from the parent firm at moderate prices. This kind of support facilitates the birth of these spin-offs. Physical resources do not seem to bring lasting competitive advantages for the spin-off.

Other types of support that the spin-offs receive, besides the knowledge transfer and physical resources, are for instance the supplier relation with the parent (orders) or other kinds of indirect financial support. This is important in the start-up phase, since it contributes to the first successes of the spin-offs. The spin-offs may get through the difficult start-up phase because the parent firm is a reliable client. Orders from the parent firm seem to aid building a lasting competitive advantage. Once the spin-offs have reached a certain phase of maturity, they depend less and less on their parent firm.

Next to the factors of success described above in this section, the interviewed spin-off entrepreneurs mention some other factors. The first of these factors are the 'entrepreneurial skills'. Spin-offs have a less 'difficult' start-up phase than normal start-ups. They can profit from the support and the network of the parent firm. However, the entrepreneur may not become as 'entrepreneurial'. Spin-off entrepreneurs in particular should realize that they have to work on these skills, or perhaps even hire these skills. Another factor is the small size of the firm that facilitates a flexible way of operation. Most spin-offs descend from firms that are larger than they are themselves, and they argue that their smallness is important for their success. Finally, the spin-off entrepreneurs point at their emphasis on innovation as a factor of success.

The first section of this chapter shows, although based on rather limited data, that spin-offs seem to perform better than regular SMEs. Employment growth and sales growth expectations are significantly larger for spin-off start-ups than for regular SMEs.

Evidence on success factors is rather circumstantial, but it seems clear that most of the time (75%) the parental support helps the eventual success of the spin-off firm in one way or another.
6 Conclusions

We have tried to answer the following questions:
1. What is a spin-off?
2. What is the extent to which spin-offs occur in the Dutch economy?
3. What are the characteristics of spin-offs and parent firms (size, industry, high or low tech, innovativeness)?
4. What are the motives to ‘spin-off’ for both the entrepreneurs and the parent firms?
5. What are the factors of success for spin-offs?

**What is a spin-off?**
Spin-offs are: “individuals or groups of individuals leaving ‘parent’ firms to start-up new, independent businesses. The start-ups occur on the basis of specific knowledge and competences built up within the parent firms. The parent firms supports the spin-offs by allowing the transfer of knowledge, competences and/or direct means”.

**Number of spin-offs: 6-8% of the population**
Based on a representative sample of SMEs (in EIM’s SME-panel), we find that 5-8% of all SME firms in the Netherlands are spin-off start-ups. We estimate that there are between 6,000 and 7,000 spin-off start-ups per year in the Netherlands.

**Characteristics of the spin-offs: young and innovative**
The spin-offs are relatively young firms. Most spin-offs descend from other small firms. Large and medium sized firms more often facilitate spin-offs than small firms. There are relatively many spin-offs in manufacturing, construction and business services. These may be high-tech, but we are not sure. Spin-offs are more innovative than SMEs on average.

**Characteristics of the relationship: knowledge transfer crucial**
Most spin-offs receive several types of support from their parent firms. One third of all spin-offs are supported by the transfer of knowledge, one third by orders from the parent firm, more than a third by other support types, such as advice or introduction to the network of the parent. Financial support is given in one quarter of the cases. Knowledge transfer is seen as most important by the spin-offs. Patents or licences do not seem to play a role in SME spin-offs. The transfer of product knowledge and knowledge of the market are critical.

**Spin-offs more opportunity driven than regular start-ups**
Spin-off start-ups compared to regular start-ups are more often opportunity driven (i.e. triggered by ‘pull factors’). The ‘push factors’ (dissatisfaction, threat of unemployment) are less frequent motives for spin-off start-ups than they are for regular start-ups.

**Motives for parent firms to facilitate spin-offs diverse**
Parent firms have diverse motives to support an employee to start an independent firm. Seemingly accidental factors, such as a good relationship between the employer and the specific employee seem to play an important role. More business-like motives, such as concentration on core competences and keeping strategic grip on innovations are critical in fewer cases. 60% of parent firms see a positive effect of the spin-off for their
own firm. The added value to the quality of the business environment of the parent firm may be an important explanation of the occurrence of spin-offs. The parent gains a valuable friend in its network, and flexibility, strategic focus and risk reduction ‘on the side’.

**Initiative lies with the spin-off entrepreneur**

The initiative to spin-off comes in more than 75% of the cases from the employee (or the spin-off entrepreneur). Less than 5% are initiated solely by the employer.

**Spin-offs seem to be relatively successful**

Although based on rather limited data, spin-offs seem to perform better than regular SMEs. Employment growth and sales growth expectations are significantly larger for spin-off start-ups than for regular SMEs.

**Further research needed: evidence on success factors limited**

Evidence on success factors is rather circumstantial, but it seems clear that most of the time (75%) the parental support helps the eventual success of the spin-off firm in one way or another. The reputation of the parent firm seems to be an important factor of success for spin-offs, especially at the start-up phase. The use of the network, access to customers, suppliers and finance are the most important positive effects for spin-off starters. Orders and direct knowledge transfer are critical.

Further research is needed to understand which factors are most critical to the success of spin-off start-ups. The present study presents an insightful first glance at an important phenomenon. A comparison with innovative start-ups and/or start-ups of a more ‘vicious’ nature to the parent can be a valuable addition to the results presented in this report.
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