

Stimulation of innovations by R&D spin-offs

The spin-off of R&D activities from established companies into new companies with an independent management has increased significantly during recent years. This article will describe how academic and corporate R&D spin-offs can support the innovation strategy of established companies by creating flexible R&D structures. It is based on an actual market study performed by Festel Capital and on several discussions with industry experts.

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There are often innovation hurdles in companies with established structures (bureaucratic thinking, fear of cannibalism, not invented here syndrome). R&D spin-offs can overcome these hurdles by accelerating R&D projects. All the energy of the new spin-off's management team can be used for the commercialization of the R&D activities. R&D spin-offs can more easily pick up impulses from outside. For example, competencies from other companies or top-class scientists from universities or public research agencies can be brought together to form the best team. One important aspect is that the R&D spin-off is not only a separate legal entity but also has its own identity including its own name and legal units. An adequate and transparent profit-sharing model between parent company, management and employees of the new com-

pany as well as external investors is fundamental. As a rule, the management should hold a significant equity stake in the company. Also, the parent company has significant advan-

The Role of External Investors

External investors were involved in most of the corporate R&D spin-offs (Fig. 1). Normally the parent company provides the necessary assets and

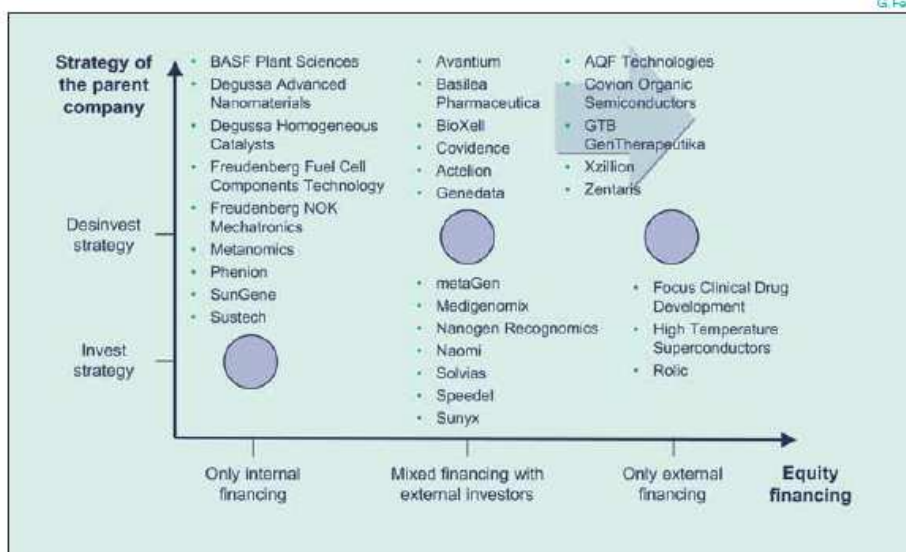


Fig. 1: External investors were involved in most of the corporate R&D spin-offs which were analysed within the market study.

tages. The fixed cost base and management complexity can be reduced. However, it should be mentioned as well that R&D spin-offs have disadvantages. For example, the momentum of a spin-off can lead to conflicts with the parent company, which may lose control.

intellectual property (e.g. patents) and an investor finances the liquidity requirements of the new start-up. The financial structure depends on the cash flow characteristics of the company. Professional financial engineering secures a sustainable financial structure through the involvement of investors with the right

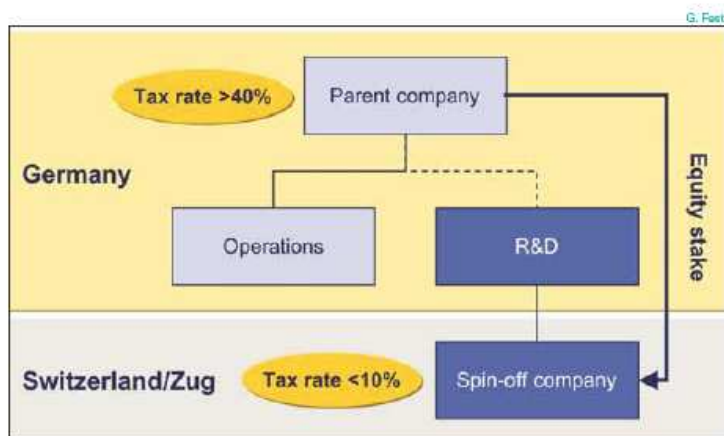


Fig. 2: The spin-off company in Switzerland would be responsible for the worldwide licensing business and pay for R&D work in Germany.

risk/return expectations. Most investors expect annual returns above 20 percent, which can be only realized after an exit. Therefore, it is this which determines the success or failure of an R&D spin-off from the investor's viewpoint. The best way to achieve an exit is an initial public offering (IPO) because the exit price is relatively high and higher returns are thus possible. However, an exit by this means was not always possible in recent years. For example, the IPOs of Rolic (technology-oriented spin-off of Roche in Basel) and Zentaris (biotech spin-off of Asta Medica in Frankfurt) were canceled. The management and the investors would be well advised to come up with alternatives like a trade sale to a strategic buyer, as was the case with Xzillion (proteomics spin-off of Aventis in Frankfurt).

The Pros and Cons of External Investors

The involvement of external investors brings both advantages and disadvantages. From the beginning, there is a strong business orientation because the external investor pushes to realize profitable growth. Additional funding can be invested to meet specific targets and the investor's network can help develop the business. The main advantage is that funding the spin-off by external investors is an "acid test" for the qual-

ity of a spin-off. This means that the spin-off must be able to attract external capital. However, there are also disadvantages. A part of the value creation potential is abandoned to the capital provider and there is a potential conflict of interest concerning the exit options (reintegration versus trade sale or IPO). Frequently there is the problem that industrial companies are not willing to provide the required returns to external investors.

Sometimes the involvement of external investors is the first step in selling R&D spin-offs in a second step to a new owner. This has happened in the case of Covion Organic Semiconductors. The company develops, produces and commercializes organic light-emitting diodes for the optoelectronic industry. The specialty chemical company Avecia bought 15 percent of the equity when Covion was spun off from Celanese in 1999. It acquired the remaining 85 percent in 2001. Recently Covion has been sold to Merck in Darmstadt.

Advantages of Tax Optimization Structures

Because of the high corporate tax rates in Germany, start-ups have to consider tax optimization structures before they establish business. A comparison of tax rates shows that, for example, the Swiss canton of Zug has very low tax rates for both com-

panies and individuals. Under certain conditions, taxes on net profit are less than 10 percent – compared with around 40 percent in Germany. It is important to note that the tax optimization structures must be implemented before profits are realized. One suitable structure could be the formation of an additional company in the canton of Zug. The R&D facilities (including all employees) could be located in Germany. The spin-off company in Switzerland would be responsible for the worldwide licensing business and pay for R&D work in Germany (Fig. 2). A concrete example from the pharmaceutical industry shows annual tax savings of about EUR 6 million based on a turnover of EUR 30 million. □

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