A Sketch of the European Biotechnology Industry

With much delay vis-a-vis the United States, the number of young biotechnology companies has exploded in many European countries over the last 4-7 Years. This article will take a rough look at the European biotechnology landscape and, with the example of Germany, will ask how this success was possible.

[Numbers taken from Ernst&Young, if not indicated otherwise]

According to Ernst&Young's yearly report on the Europaen biotechnology industry, the number of life science companies in Europe has doubled between 1997 and 2001, surpassing the US in 2000. Nevertheless, the combined market capitalization of all biotech companies (~75 mrd. Euro in 2000) is just slightly more than the market capitalization of Amgen, the largest American biotech firm (~68 mrd. Euro). In fact, many of the European companies are pure research organization. These companies depend solely on venture capital to cover their expenses. They are rapidly evolving, eager to establish their first products on the market.

Lookin at Europe country by country, one sees a similar pattern of rapidly growing vs. mature countries. In England, a large number of companies arose in te 1980s, partly due to Margared Thatcher's economic reforms which made many talented people lose their former jobs. Today, the British biotechnology industry, like the US, is no more growing in the number of companies (271 in 2000). The creation of new ventures is counterbalanced by consolidation, mergers and acquisition. Nasty voices already call England the grandfather of European biotech.

Germany, on the contrary, has been called "the most densely populated sandbox" of the biotech world: 333 companies in the year 2000 had a mere 4 drugs in clinical trials! Even less mature are the 240 French biotech companies without a single IPO in 2000 (versus 10 IPOs each for German and British companies). While South and the East of Europe are lacking behind due to a less well-funded research base, smaller countries such as Sweden, Denmark, Finland, Switzerland, Israel, Ireland and Iceland are on their way to become the jewels of European biotechnology.

What are the reasons for the sudden explosion of biotechnology company startups across Europe? Let us examine the example of Germany.

Strong resentments in the public against new technologies - from nuclear and IT to anything "genetic" - lead to an unfavorable climate in Germany in the 1980s. A resulting structural crisis in the economy was confounded by the cost of the German reunification and lead to 15% unemployment.

The insight of the public that new jobs lie in new technologies and the abundance of skilled researchers and university graduates on the labor market fell together with the federal government's initiative to foster clusters of excellence in life science, stressing the networking of federal research, pharma industry and startup companies. The BioRegio competition in 1995/1996 chose and funded 4 model regions among 17 applicants: Munich, Heidelberg and Duesseldorf/Koeln. Coordination and strategic planning of each region's netwokking effort was often carried out by non-profit organizations with affiliation to the State governments.

State and local governments kept supporting their bioregions even if they lost in the BioRegio competition. Legal and managerial advice, venture capital and incubator space was proficed and enticed many researchers to become entrepreneurs. Often, it was a post-doc who founded a company based on his lab's technology, with the professor becoming an advisor but keeping his university post.

The fresh breeze of entrepreneurship lead to a surge in business plan competitions. Scientists with an idea would team up with their friends in finance and business. During seminars in the course of a business plan competition, the creative mix of peole and ideas quickly rearranged, recombined and bore new plans. For example, two participating teams might decide to combine their technologies, take on as a CEO an experienced manager who was involved in the business plan competition as an advisor, and start up a real company from what started as a game.

In the biotech clusters, tightly networked with uinversity, large pharma and capitalists, backed by the local government and banks, these new companies could thrive. (An often practiced scheme is that government funds double the funds a company can gather from private venture capitalist.) From 70 biotechnology in Germany in 1995,

the number has benn growing by 50 companies a year ever since.

On the background of a strong research base, smart government initiatives and a growing enthusiasm in the public have brought about a remarkable biotech boom not only in Germany but in many European countries. Japan, in spite of good research, has been slower to bring its technology the market. In its effort to catch up with the US, Japan should study the experinece of various European countries. In reverse, European companies need to be better informed about the Japanese market and industry so that they can reach global markets before their US competitors. A French group of companies of the Essonne biotech cluster near Paris made a first step and visited Japan last November to study the market and make contacts. Itochu and Institut Pasteur's recent announcement of the launch of a joined biotech venture capial fund is a result of this visit.

In order to promote contacts and mutual information promote contacts and utual information beween Japanese and European life science companies, the author mainatins a biotechnology news database at http://www.biojapan.de. Contributions regarding your company's activities in the field are highly welcome and will be posted to European biotech executives in an email magazine.

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