

Home to some of the world's strongest pharmaceutical brands, Switzerland holds opportunities for Irish companies serving the industry in areas as diverse as drug discovery and delivery, engineering/electronics, building management and IT. Philip Kavanagh followed the white cross to Basel to meet with Dr Thomas Cueni, General Secretary of Interpharma, the Swiss Association for Research-based Pharmaceutical Companies.

Often overshadowed by its giant neighbour to the north, it is easy to forget that Switzerland has a highly developed and dynamic economy that has generated nearly as many global brands as the UK, Japan and France. According to *Business Week* (2007), Switzerland produced five of the Top 100 Brands for 2006 compared to six from the UK, including such well known names as Nestlé, Rolex and Novartis.

Underpinning this is a generally solid financial performance. According to the Economist Intelligence Unit, inflation ran at 1.1 per cent during 2006. Unemployment stood at 3.3 per cent and is forecasted to fall to 2.6 per cent in 2008. The country is experiencing GDP growth of over 3 per cent; while export growth is robust and expected to continue into 2009. Results of a recent business survey of 340 industrial firms by the Swiss bank UBS showed that 52 per cent of respondents reported higher production compared to one year ago.

However, it has not always been so. Indeed, Switzerland's story is one which has many parallels with Ireland. During the years of 1816 and 1817, Switzerland suffered a severe famine, which ultimately led to a continual stream of emigration as people left the primarily rural country for North America, Brazil and Australia. Such was the country's inability to sustain its population, Switzerland offered financial incentives to those willing to leave and never return.

And just as Ireland has become a global hub for the pharmaceutical industry, so too has Switzerland – although in the case of the Swiss, this sector is largely home-grown, as the country's unique mix of innovation and technological expertise has enabled it to develop a world class indigenous pharmaceutical and biotech industry. A recent study estimates that while 34,000 are directly employed by the Swiss pharmaceutical industry, a total of 118,000 are attached to it either directly or

indirectly. Moreover, employment in the sector has increased by 77 per cent in the last 15 years and exports shot up 600 per cent during the same period to reach a value of €28.5 billion in 2006.

So pharmaceuticals are big business in Switzerland. But just how important is Switzerland to the pharmaceutical industry? One person well positioned to answer that question is Dr Thomas Cueni. Following his studies in Economics and Political Science in Basel and at the London School of Economics, Dr Cueni worked as the UK correspondent for the Swiss newspapers *Basler Zeitung* and *Bund*, before pursuing a career in the Swiss Foreign Ministry, where he was based with the OECD in Paris and the UN in Vienna. Today, he is General Secretary of Interpharma, a position he has held since 1988. Interpharma is the Swiss association for research-based pharmaceutical companies, representing Actelion, Merck-Serono, Roche and Novartis. He currently also serves as a board member in EFPIA, IFPMA and the Swiss Medicines Committee.

According to Thomas Cueni, there were a number of factors that enabled the Swiss to turn the tide as the nineteenth century drew to a close. First among these was the Protestant work ethic that had been instilled by Zwingli and Calvin during the Reformation. This led to the development of specific industries in predominantly Protestant cantons such as Zurich and Basel, where the financial and chemical sectors flourished. Cueni notes that perhaps more importantly, as a small country, the Swiss recognised at an early stage the need to be outward looking and to seek markets outside of Switzerland. Pre World War I, Swiss pharma already had subsidiaries in Russia and Japan.

Cueni also credits the Swiss education system and the ability to take a theoretical concept and develop it into a marketable product. Indeed, Frenchman Jean-Paul Clozel, CEO and Founder of Actelion, has praised Switzerland's history of world

VITAL STATISTICS

Population	7,507,000
Capital	Bern
Notable Cities	Zürich, Geneva & Basel
Government	Federal Republic (divided into 26 cantons)
Languages	German (64%), French (19%), Italian (8%), Romansch (1%), other (8%)
GDP Growth	2.7%
Inflation	1.1%
Top Industries	Construction, Financial Services, Pharmaceuticals & Chemicals

SWISS FRANC ON UPWARD SLOPE

Traders anxious about currency risks in 2008 can take solace from the fact that due to Switzerland's close financial and commercial integration with the eurozone, the Swiss franc moves more closely in tandem with the euro than the US dollar. According to the Economist Intelligence Unit (2007), it traded at an average exchange rate of Swfr1.55:€1 in 2005, Swfr1.57:€1 in 2006 and Swfr1.656:1 in 2007, strengthening to around Swfr1.64:€1 at the time of going to press. The relatively weak Swiss franc reflects substantial low interest borrowing in Swiss francs for investments in higher-yielding currencies. However, the Economist Intelligence Unit (2008) notes the possibility of strong appreciation of the currency, particularly if the global economy enters a period of turbulence during 2008. The currency traded against the dollar at an average of Swfr1.25:US\$1 in 2005 and 2006 and at Swfr1.21:US\$1 in 2007.

THE SWISS PHARMACEUTICAL AND BIOTECH INDUSTRIES IN FIGURES

PHARMA

- 2nd - Global ranking of Switzerland in terms of per capita pharmaceutical expenditure (second only to the United States)
- €28.5 billion - Value of Swiss exports attributed to the industry in 2006
- 5% - Share of Swiss nominal GDP accounted for by the industry Espicom, 2007
- 118,000 - Total number of jobs directly or indirectly attached to the sector in 2006
- 77% - Increase in the number of people employed by the sector in the past 15 years
- €2.66 billion - The joint domestic R&D expenditure of Switzerland's largest companies (Novartis, Roche, Serono, Actelion, Vifor and Cilag) in 2006
- 19% - Percentage of turnover that Interpharma member companies spend on R&D activities

SOURCE: INTERPHARMA, 2007

- €3.6 billion - Value of Swiss pharmaceutical market in 2006
- 6.3% - Percentage accounted for by generics
- 40.4% - Growth in the generics market in 2005
- 40% - Share of the generics market held by domestic producer Mepha Pharma. This is followed by Ecosol with around 20%. Other leading generic companies include Spirig, Strueli and Sandoz.

SOURCE: ESPICOM, 2006

BIOTECH

- 218 - Number of biotech companies active in Switzerland at the end of 2006. Switzerland has the highest density of biotech companies per capita globally.
- 9th - Global ranking of Swiss Biotech industry
- 14,300 - Number of people employed in the industry in 2006
- 6.4% - Increase in employee count on 2004
- €3.89 billion - Industry sales in 2006
- 17.3% - Percentage increase on 2004
- €968 million - Expenditure on R&D in 2006
- 15.4% - Increase in R&D expenditure on 2004

SOURCE: ERNST & YOUNG, 2007

class chemists and the collaboration between academia and industry, which has enabled the conception and worldwide growth of companies such as Actelion.

It could be considered unusual to hear of a French man extolling the benefits of Switzerland. However, Cueni considers Jean-Paul Clozel more the rule than the exception: "As a landlocked country, Switzerland has experienced a lot of inward migration such as from France and Germany. There are a lot of foreigners who have made it here – just look at the top management of many Swiss companies."

Aside from the availability of skilled labour and a flexible employment market, he believes Swiss personal ethics are an important feature of the industry, and in particular, the international outlook, almost a must, given the size of the country. Indeed, Irish companies targeting the global pharmaceutical market will be well aware that while they may be tendering for a project in the Americas or Asia, the final decision is often made by a head office in Basel.

During his time at Interpharma, Cueni has seen many changes within the industry. He regards the 1990s as somewhat of a Renaissance period, with the explosive growth of well-established pharmaceutical companies and the Big Bang of the biotech industry witnessed primarily in the US. He credits much of Switzerland's biotechnology industry success to the presence of large pharma players, which dominate the market. Many of the biotech companies active in Switzerland today were once "small projects in big companies. These companies were essentially born from the graveyard of big pharma – albeit commercially viable graveyards."

He believes that while the continuous flow of new and innovative therapeutics will continue to be the mainstay of all companies involved in R&D, dramatic change is afoot. Factors such as price competition from generics manufacturers and pressure from health insurers and governments are influencing pharma to significantly develop niche offerings.

For traditional indications such as rheumatoid arthritis and cancer, companies are looking away from conventional chemical compounds to large biological molecules. But medical progress can also be expected in a range of other areas such as diabetes. "This is an issue which is particularly important for developed OECD countries," Cueni notes. The World

Health Organisation (2007) estimates that there are 180 million sufferers worldwide, a figure which is likely to double by 2030, as Type II diabetes becomes more common and is being diagnosed at a far earlier age, particularly in the west.

Other areas in which he envisages significant developments include Alzheimer's and other neurodegenerative diseases, albeit not quite as fast as we may hope for. And, after many years out of vogue – and seen as ineffective – vaccines are back on the agenda, with companies once again investing in their vaccines portfolio. Wyeth has already struck gold with a blockbuster for invasive pneumococcal disease in infants, while hepatitis is one of a range of other targets in the industry's sights.

The attitude of big pharma towards other stakeholders in the industry is also changing, Cueni believes. "There has always been partnering in the industry, [however] now more than half of the potentially viable solutions are coming from start-ups and licensing."

Having observed at close hand the many changes undergone by the Swiss pharma and biotech sectors, he has this advice for companies in this country. "Firstly, Irish companies must benchmark themselves against the best. Like Swiss companies, they must be outward looking." This means not just looking outside their own territory but outside their own comfort zone and engaging global markets, adapting and customising as the need arises. Ireland now finds itself in a parallel position to Switzerland – a high cost location for business, competing against countries with much lower pay structures, but with a well educated workforce. "Ireland must also move up the value added chain and find its own specialisation, in a similar way to Switzerland, which started out as a centre for the dye industry but evolved into a centre of excellence for chemicals, then agro-chemicals, pharma-ceuticals and now biotechnology." So too can Irish pharma embark on its own 'sonderfeld'. **M**

Enterprise Ireland, Düsseldorf, has recently dedicated additional resources to the life sciences sector in Germany, Switzerland and Austria. For further information, contact Philip Kavanagh, Market Advisor, Pharmaceuticals & Biotechnology

Düsseldorf, Tel +49 211 4705924, email: philip.kavanagh@enterprise-ireland.com

