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Hungarian Enterprises in the Global Market

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Hungarian enterprises in the global market

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Abstract

This paper reports on Hungarian companies and how they perform on the global market. The first part of the paper provides some background and historic information on government support for export. Four successful companies were selected, from computer technology, acoustics, pharmaceutical industry and lighting retailing. These four companies are very different, however they all became successful internationally. We set out to provide an insight into their success by describing their case from their origins to the present day.

Introduction

Since the political and economic changes of 1989, Hungary has steadily developed into one of Central Europe's most attractive business environments, states the country commercial guide recently prepared by the American Embassy in Budapest. The level of political, structural and economic stability it has achieved demonstrates the success of its transition to a modern market economy (Hungarian Economy, October, 2000).

Hungary no longer requires International Monetary Funding (IMF) financial assistance and has repaid all its debts to the Fund. Hungary's currency, the Forint (HUF), became fully convertible for current account purposes in 1996. The Hungarian Economy (October 2000) citing the latest economic figures states that GDP growth in 1999 was 4.5 percent and was predicted to reach 5-5.6 percent by the end of 2000. The volume of exports grew by 29.7 percent in 1999, while imports increased by 29.7 percent. The value of exports went up by 8.7 percent (USD 25 billion), while the increase of imports was 9 percent (USD 28 billion). Inflation rate fell rapidly from an annual average of 18.4 percent in 1997 to 14.3 percent in 1998 and then to 10.3 percent in 1999.

With about USD 23 billion of Foreign Direct Investment (FDI) since 1989, Hungary has been a leading destination for FDI in Central and Eastern Europe. Almost 75 percent of Hungarian exports are produced fully or partially by foreign owned companies. Fifty-five percent of FDI is invested in the industrial sector, particularly automotive and information technology.

The private sector produces over 80 percent of GDP. Foreign owners control 90 percent of telecommunications, 70 percent of financial institutions, 66 percent of industry, 60 percent of energy production, and 50 percent of the trading sector (Hungarian Economy, October 2000). Some 1700 of 2000 state-owned companies were privatised between 1989 and 1999, with another 44 still to go (Hungarian Economy, October 2000).

Hungary was and is a popular choice for investors with its reasonably stable political and economic system with its relatively good infrastructure and highly trained cheap labour (Illes, 1997).

The investment and transfer of know how from the West to the East have been well researched and published. However very little has been said about companies from the former Eastern-block countries who have become successful outside of their home markets. The authors of this paper set out to investigate whether Hungarian companies can succeed in the West and if so, how they achieve this.

Initially we checked the rules and regulations for overseas activities, collected some historic data and also investigated the available support that Hungarian companies could get if they wanted to enter foreign markets with their products or services.

During our research we interviewed ministry officials, members of support organisations and leaders of internationally successful Hungarian companies.

Background

We learnt from an interview that took place in the Ministry of Economic Affairs that there had always been some sort of foreign trade involving a selected group of Hungarian companies. However, in the command economy companies were not allowed to trade freely abroad. Typically companies traded through a foreign trade company. These companies were set up and tightly controlled by the Ministry of Foreign Affairs. The company whose products were sold abroad did not have any influence on price or any other terms and conditions of the sale. It was all very slow and bureaucratic, so little wonder that most companies were not inspired to pursue this route and they chose to sell their products within Hungary. From the late 1960s however, central control eased somewhat and companies such as Tungsram and Ikarus managed to get permission for setting up an independent trade agency in the West. Tungsram exported lightbulbs and Ikarus exported buses. Whilst these agencies were usually small affairs with only 1-2 employees, they could however act directly on behalf of the company.

Up till 1975 all foreign trade activities had to be given permission by the Ministry of Foreign Trade. After 1975 the process of export started to become easier, however companies still had to fill in many forms and comply with all kinds of regulations. Foreign trade only started to be relatively easy since 1996 when the Hungarian currency became convertible.

Why is it then that there are still not many Hungarian companies trading abroad? Why is it that only 25% of the export is produced by Hungarian companies and the rest is by foreign owned companies who operate in Hungary?

As we learnt from our interviews, some of the products are not competitive enough. Hungarian food and wine for example find it difficult to penetrate the saturated and protective Western markets. There are no real government incentives for companies to encourage export. The Ministry set up an organisation called ITD Hungary (International Trade Development) to promote Hungary abroad and to attract investors to the country in 1993. It has only been representing and promoting individual companies abroad since 1999. There are ITD Hungary offices in 36 countries and they are often linked to the trade section of Hungarian embassies. They produce brochures, organise and attend fairs and trade events. They are a

government-funded non-profit organisation who provide information free of charge. ITD Hungary also has regional offices in the country so in theory companies could use them as a source of information about business opportunities overseas. From the interview we found out, however, that it is only their officers close to the borders that are approached by companies who want to do business in the neighbouring countries.

The Ministry of Economic Affairs, the Hungarian Investment Bank together with other banks set up a state-owned organisation called Corvinus Plc in 1997 with the aim to provide capital investments in companies that propose investments outside Hungary. The starting capital of the company was 3.5 million US dollars. After an unsuccessful investment into China, they narrowed their activities to Central and Eastern European countries. At the time of the interview Corvinus was involved in six projects. Their biggest investment was in Romania to manufacture electric engines. When a company finds a good business opportunity in the neighbouring countries they can put a business plan together and approach Corvinus. The plan is discussed, the risk is analysed and when Corvinus is satisfied then they decide the size of the investment and also the proportion of ownership that Corvinus as an investor will have.

Apart from these two government initiatives Hungarian enterpreneurs can rely only on their own networks, contacts and innovative ideas to succeed at home or abroad.

Some of the Hungarian companies we discuss became successful worldwide with their own technological inventions, in spite of the almost hostile climate for innovation. Between 1940 and 1990 the proportion of original industrial products and technologies in Hungary fell from 30% to 3%, and the average age of the industrial products was almost 16 years at the end of the 1980s. 'Hungary has arrived at the drasctic political changes of 1989 without a clearly formulated and properly functioning innovation and technology policy. It is true that the importance of innovation and technical development has been stressed during the last decade in innumerable governmental declarations and decisions. But in reality innovation and technology policy has never been -with a few exceptions- and still is not, considered the pivot of the government’s economic policy' (Szántó, 1994).

The present government (elected in 1998) even downgraded the National Committe for Technological Development (OMFB), which had been working for decades as a quasi-ministry, and instead of developing it into a real western-type

Ministry of Technology and Innovation it was turned into a department within the Ministry of Education since January 1st, 2000.

Then how is it possible that innovation can thrive in some firms in this hostile environment? The secret is perhaps in the Hungarian character (Illes and Rees, 2000). Hungarians over the centuries have developed a strong sense of survival and adaptability. There is a Hungarian saying which goes: 'one has to learn to live on ice.' And this is exactly what they do. Hungarians truly mean that 'knowledge is power' and learning has always been an important weapon in their fight for survival. The country has a traditionally high quality education system. Government reports regularly mention that Hungary has the most Nobel Laureates per capita in the world (Hungarian Economy, October 2000). The country gave 12 Nobel-prize winners to the world. Hungarian scientists and engineers have invented a lot of substantial products and technologies such as the torsion pendulum by Lóránd Eötvös for measuring very small differences in gravity, used e.g. during the exploration of Californian oil fields, the carburator by János Csonka, the electric transformer by Ottó Titusz Bláthy, Miksa Déri, and Károly Zipernowsky, the DC-generator (utilizing the dynamo-principle) by Ányos Jedlik, the telephone-centre by Tivadar Puskás, the electric locomotive by Kálmán Kandó, the ball-point pen and the automatic gearbox by József Bíró, nuclear fission and reactor (and unfortunately the nuclear bomb as well) by Leó Szilárd, Ede Teller, and Jenö Wigner (in cooperation with the Italian Enrico Fermi), the computer by János Neumann, holography by Dénes Gábor, or the popular toy, Rubic-cube by Ernö Rubik Jr., etc. (Bödök, 1999; Németh, 1999; Rosta, 1999).

This tradition of high standard scientific and technological education and creative innovation has survived and still survives the decades of innovation-careless governance. There are still a lot of talented, highly educated and motivated innovators in Hungary, in spite of the lack of innovation and technology policy (and ministry) for decades and all the problems of the economic, social and political transition during the 1990s.

In our research we set out to find some of the successful Hungarian innovators who have managed to overcome not only the challenges of a transitional economy but also managed to find their market niche in the world economy.

When we designed our research we wanted to illustrate as widely as possible how Hungarian companies succeed in the global economy. Unfortunately we could

not find any statistics about the overall performance of Hungarian companies abroad. So all we could aim for at this stage was to select companies that could represent a cross section of internationally successful Hungarian enterprises. The four companies that we studied represent four different industries. They also differ in market share and value. However, they are all success stories that illustrate how disadvantage can be turned into an opportunity and how hard work and creativity can lead to success almost regardless of circumstances.

Once we identified the companies that we intended to study we aimed to collect all available published materials about them. We also used our personal contacts to set up meetings and interviews with various representatives of these organisations. All companies were very helpful in providing the data for our research. In order to try and compare the four companies we tried to follow the same structure in the case studies.

Graphisoft Plc.

The beginning

Graphisoft is a software company founded by Gábor Bojár in 1982, taking advantage of the opportunity created by the Hungarian reform-communist government pioneering the liberalization of private entrepreneurship in the Eastern Block. The new firm was based on the traditionally high quality mathematics education and culture of the country. Due to the very high number of mathematics and computer science graduates there was a surplus of excellent professionals in this field in Hungary, so a high number of them tried to find a job abroad, or at least to work for foreign software companies without moving abroad. The founders of Graphisoft chose a different strategy. He and his team decided to develop a novel product and sell it worldwide.

The economic liberalization mentioned above was only relative to the previous era, and didn't compare to West-European circumstances. There was a serious lack of private capital and bank loan for entrepreneurs. Economics policy of the government was inconsistent, sometimes contradictory, and unforeseeably everchanging because of the endless tug of war between the reform-communists and the hardliners. Technological and business infrastructure were both very poor, there

were serious COCOM restrictions of high-tech import, etc. But Gábor Bojár, the founder of Graphisoft emphasises the surprising fact that these unfavourable conditions finally helped Graphisoft in its development in two ways:

- COCOM restrictions created a market demand for their expertise which demand otherwise would have been satisfied by Western software products; and
- because of the restrictions they had to work on extremely low performance, small home computers, while Western software engineers worked on high performance working stations not available in Hungary, so when personal computers took over the key role in computing Hungarian software professionals already knew how to develop ’a great software for small computers' (Graphisoft, 2001).

The development of the firm up to the present

They decided to develop their software products on Appple Macintosh computers, and it was an important part of their ’garage image’. Grafisoft was sept up in 1982 by Gábor Bojár and Gábor Tari-István. The two innovators spent the first two years primarily on product development. During these two years they had a revenue of a few HUF millions, working on various government funded projects in a small attic. From 1985 they started to sell ArchiCAD first in Italy and in France and gradually in all European countries. Since 1987 Graphisoft is the largest Hungarian software exporter. In 1992, a decade since its foundation, the firm earned 6.2 million dollars sales with 87 employees. Considering this fast and large-scale development Graphisoft seems to be a typical ’gazelle’ firm i.e. a rapidly growing company with little experience in business but with high level of readiness for entrepreneurship and change in this early period (Vecsenyi & Kovach, 1996; Vecsenyi, 2001). Today Graphisoft has 12 subsidiaries with more than 300 employees all over the world, a brand new, large, modern, beautiful headquarters in Budapest which was nominated for an architectural award, and the firms annual sales reached 4.7. million Euro (Graphisoft Annual Report, 1999).

Their most succesful product is ArchiCAD, a several times award-winning architectural CAD (Computer Aided Design) software, world market leader on Apple Macintosh platform, sold in 80 countries on 25 local languages, and used by more than 100,000 architects worldwide. Another succesful and profitable product of them was a nuclear power station planning and controlling software. In 1990 Graphisoft became the exclusive dealer of Apple hardware in Hungary. Though both the hardware dealer and the nuclear power station software business were profitable, they

decided to sell those and focus on the core business of architectural CAD software development. The strategy worked and ArchiCAD became a worldwide success. In 1993 Graphisoft launched the Windows version of ArchiCAD. This was the only architectural CAD software available both for Macintosh and Windows platform.

Graphisoft's key technology is the Virtual Building concept, using three dimensional object oriented modelling, building simulation and group design. We use the term 'key technology' in the sense Little (1981) use this term: it's unique, just a few companies (sometimes only one) possess it, and it's a source of competitive advantage. This type of technology is sometimes also called 'differentiation technology' (Morin, 1985) or 'sufficient technology' in the mathematical sense of the word (Price, 1996). We don't accept the term 'sufficient' because a great technological advancement can't guarantee business success in itself. As Katz and Allen point out (1988); 'Witness, for example, the problems of Xerox, where the R&D labs have generated and surfaced many major new advances and approaches only to discover that the company has failed to fully exploit and capture benefit from many of them.' A well known example of Xerox's failures to commercialize their inventions is the graphic user interface with windows, roll-down menues, and the mouse for computers. They developed this revolutionary technology in the late seventies, used it in-house, but weren't able to exploit it in the market. Steve Jobs, co-founder of Apple Computers saw it during a company visit at Xerox, and utilized it in the development of Liza and Macintosh models. Graphisoft, on the contrary, was able to take advantage of its technological advancements.

Virtual Building technology is not only a tool for better productivity of the design process but a tool of visual communication as well by which architects can show their plans with the help of photorealistic 3D pictures and virtual reality animations to their clients. Graphisoft's mission is playing a leading role in this task in the hope of a better and nicer built environment. Graphisoft are pioneers not only in technological innovation but also in the successful commercialization of their innovative product on the world market.

These technological advances of Graphisoft have become base technologies in CAD industry for today. We use the term 'base technology' in the sense Little (1981) use this word: it is common, required to enter the industry concerned, readily available, and every (or at least most) firm in this business use it. This type of

technology is sometimes also called ’necessary technology’ in the mathematical sense of the word (Price, 1996), and this time we accept this second term as well.

Gábor Bojár believes that the key of Graphisoft’s success is their well-educated, highly qualified, and outstandingly motivated workforce. He consideres motivation the most important factor. His philosophy is that exceptional economic success emerges from the desire to prove yourself as a nation. This is what the Germans and Japanese did after World War II. People who work for Graphisoft are people who want to prove that they are the best in their field even in the international market.

At the beginning many of their western software dealer partners advised them to hide the Hungarian origin of their software behind a West-European firm’s name because of the western customers’ bias and mistrust of high-tech products made in the ’Eastern Block’. It is still quite common to sell Hungarian software products under the flag of a western software firm so the customers have no idea of the Hungarian origin of the product. But Gábor Bojár disagreed with them because their products were not consumer products, they are bought by professionals, and Hungarian software engineers have always had high reputations. Graphisoft has never hidden the real origin of its products and nowadays nobody gives them such advice. The firm became world famous as a Hungarian firm, without any tricks to hide its real nationality.

The world’s most influental political, scientific and business leaders meet in Davos, Switzerland every year to discuss the development of world economy. In 2000 the Davos forum launched a new programme called ’Technology Pioneers’. They invite MDs of top high-tech firms and ask them to tell their company’s success stories and share their views about the future. These speakers are more the men and women of the future than of the present. In 2001 Gábor Bojár was invited to take part in the Technology Pioneers program at Davos. He said that information technology was the only chance for Hungary to catch up with the most developed part of the world (Fülöp, 2001).

Plans for the future

In January, 2001 Graphisoft founded GDL Technology, a subsidiary providing GDL (Geometric Description Language) software products for architectural designing offices, building companies and facility management firms to get access to the electronic catalogues of building material and accessory manufacturers and traders.

The new firm is continuously broadening the selection of their DGL tools, to make them available for a wider and wider customer base. Stefan Larsson, the marketing director of GDL Technolgy states that this new object-oriented technology is the most significant progress in this business since the invention of CAD, and offers great advantage for the clients as the Internet-based product catalogues are becoming generally used. The head of the new firm is András Haidekker, former head of the UK subsidiary of Graphisoft producing 80% increase in sales in 2000. Before that he used to be a software developing engineer and sales manager in Graphisoft's headquarters. The centre of the new subsidiary is in Budapest and they plan to open their offices first in the UK, Germany, and the USA (Graphisoft, 2001).

In February, 2001 Graphisoft USA merged with Drawbase, another successful American subsidiary of Graphisoft, the market leader of providing CAFM (Computer Aided Facility Management) software solutions. Drawbase CAFM products are used by more than 18,000 users, including such prestigious customers such as the US Department of Defence or the World Bank, covering various kinds of business organizations from Fortune 500 big companies to small enterprises. The main market segments are: healthcare, finance (banks, brokerage, insurance), commercial real estate, higher education, retail, interior design, federal government, and other 'large space' market sectors (Drawbase, 2001).

The newly merged firm is based in Boston, San Francisco and San Antonio. The head of the new company is Al Moulton, previously the president of Drawbase for 15 years, who led his company into a market leader position in the CAFM business. Tamás Hajas, former president of Graphisoft USA for the last 3 years came back to the Budapest headquarters of Graphisoft and was appointed to the vice-president of Graphisoft group responsible for strategy formulation. Before becoming the president of Graphisoft USA he used to be the vice-president for R&D of the group.With this merger all the American subsidiaries of Graphisoft became one large company, hoping to create significant synergies between providing computer support solutions for both architectural design and facility management (Graphisoft, 2001).

Pharmavit Plc.

The beginning

Pharmavit is a pharmaceutical company founded by Dr. Imre Somody in 1988. The firm has a formal mission and vision statement, as follows.

'Pharmavit Plc. considers its mission to provide their customers products which contribute to the preservation or restoration of their health in an economical way, and which are necessary and useful for the society. Pharmavit Plc.'s activity contributes to giving health a higher priority among people's values, to the development of health-consciousness, and to the dissemination of healthy life style models. As a result of all this our vision is a more healthy Central and East-European society, both physically and mentally.'

Imre Somody graduated as an economist in the former East-Germany, and started to work at Chinoin Plc., one of the most prestigious Hungarian pharmaceutical company in 1981. He found that the Soviet-type concepts he had studied were mostly useless in the real world of Hungarian economy, so he took up the management programme of the Karl Marx University of Economics in Budapest to study useful modern business concepts. After graduating he continued his studies at postgraduate level and obtained a doctoral degree in business economics. He spent five months at Frankfurt University as a visiting scholar in 1985.

Dr. Somody and some other young members of Chinoin's management team proposed to produce vitamin effervescent tablets, which where almost unknown in Hungary in that time. The board of the company rejected their idea, but Imre Somody and his team finally found a compromise with the CEO, István Bihari. Chinoin didn't want to set up an effervescent production line, but was ready to help Dr. Somody's team to found a spin-off company for manufacturing such products. Chinoin invested a building site with infrastructure into the project in a village called Veresegyház. However, the Somody team had to raise the rest of the capital that the business required. So the popular belief that Dr. Imre Somody broke up with Chinoin when he started his enterprise, is not true (Binder, 1996).

The Somody team chose a rather unusual way to find investors. They looked through the telephone directories, identified and contacted those who, in their view had the interest and the money to invest into their business idea. In spite of the

unusual method of research, they succeeded, and Pharmavit Ltd. was founded by 5 Hungarian and foreign firms as investors, including Chinoin, with HUF 66,5 million capital in 1988. The new production facility was built up in 5 months, and started to produce two kinds of vitamin effervescent tablets, named 'Plusssz'. The company had 18 employees, in 1989.

These origins have developed into a present-day legend for today: the six founding members of the company's management team used to work in an attic. They had to keep the window open even during the winter because they wanted to hear the ring of the public telephone in the street. Why? Because they used the public phone as their official telephone line of the company. (In the 1980s there was still a serious shortage of business and private telephone lines in Hungary. One of the co-authors of this paper for example had to wait 12 and a half years for his private telephone line. And he felt lucky when he finally got his telephone line because other people had to wait even longer.) The number of the telephone box was Pharmavit's number, and they answered the phone in that street box as it would have been a normal company line (Plusssz, 2001).

The development of the firm up to the present

Plusssz vitamin effervescent tablets were a great success from the very beginning, and it became a fashion to drink vitamin drinks made from these tablets. A very important contributing factor in Plusssz products' market success was the fact that Pharmavit contracted with Krisztina Egerszegi, multiple olympic, world, and European champion, world record holder swimmer, to be the front person of the Plusssz advertisement campaign. It was a very good choice because Egerszegi was one of the most popular, if not the most popular sportswoman in Hungary at that time, not only because of her sport success but also because of her pleasant personality. There was a perfect match between the healthy life style image of the product and the young, healthy and cheerful image of the succesful and popular sportswoman. This cooperation was so successful that she is an employee of Pharmavit even today, working in the promotion of their products.

In 1990 Pharmavit and an Austrian pharmaceutical company, Genericon Pharma founded Pharmagen Ltd. to produce generic pharmaceuticals (the first of their product was Diclofenac, a cream for painful muscles). In 1991 Pharmagen was merged with Pharmavit.

In 1992 Pharmavit began to export its products, at first in the neighbouring countries. In 1994 Pharmavit founded subsidiaries in Prague, Bratislava, Warsaw and Bukarest. In the same year Pharmavit transformed from an Ltd. into a Plc., and its shares were sold mainly to foreign investors, primarily to institutions. Imre Somody took out a bank loan to buy Pharmavit shares and became one of the key shareholders of the firm. After that Pharmavit went to the international stock market from London to New York. Its shares were sold for 5960% of their nominal value. After the international introduction they also introduced their shares at an equally high price to the Budapest stock market. This way Pharmavit's capital increased to HUF 176,5 million. The rise of capital allowed the company to invest into a new production facility in a new building. This started to operate in 1995. Dr. Somody was able to pay back his bank loans from his profit coming from the great increase of his shares price, and suddenly became one of the richest Hungarian multimillionaires.

The culmination point of Pharmavit's success story was when more and more multinational companies made offers to acquire Pharmavit. Imre Somody felt that they had reached the limits of their possibilities as a relatively small company and the further development of the firm needed a partner with much more capital. After long negotiations and careful consideration he and the other owners of the company decided to accept the offer of Bristol-Myers Squibb, a leading diversified worldwide health and personal care company. In 1996 Bristol-Myers Squibb became a 99% owner of Pharmavit for 110 million US dollars. Bristol-Myers Squibb's principal businesses are medicines, beauty care, nutritionals and medical devices, and Pharmavit widened its operation to these fields as well, by enlargening their production facilities again in 1997.

After becoming a Bristol-Myers Squibb company Imre Somody remained the CEO of the firm, the new owners asked him to continue his work at the top of the organization. In 2000 Dr. Somody announced the revamping of their traditional success products, the Plusssz vitamin effervescent tablets. It became necessary because a domestic (Béres) and a foreign (Pez-Haas) competitor entered the market, reducing Plusssz tablets' turnover by 70%. Market research revealed that 76% of the consumers wanted the renewal of Plusssz tablets. (Élelmiszer Online, 2001) The new Plusssz tablets have a new composition. They taste better and dissolve 50% faster in water They appear in a more fashionable package and the old disc shape of the tablettes was changes into a trefoil shape.

Pharmavit products are sold in more and more countries including countries of Asia. The company has more than 450 employees now, in contrast with the 18 at the beginning 12 years ago.

Imre Somody's personal career is also impressive. He won the Manager of the Year prize and the Aschner Lipót prize in 1996, the Hungarian Business prize and the Man of the Year prize in 1998, and the George Washington prize in New York in 1999 (previously given e.g. to János Neumann, Ede Teller, Yehudi Menuhin, and the Nobel Peace Prize winner Elie Wiesel). He is a member of the government's economic policy and science policy advisory board since 1999.

Plans for the future

Pharmavit has a statement of its goal and vision as follows. 'Our aim is to become the leading health provider company of Hungary in the new millenium, giving one of the most significant contribution to people's beauty, health and recovery.' Pharmavit's future is an integral part of Bristol-Myers Squibb's future, and can't be considered on its own. Focusing on Pharmavit's classic product line, Plusssz vitamin effervescent tablets only, the company achieved the sales of HUF 1500 million in 2000 and forecasts HUF 2200-2500 million sales in 2001 (Élelmiszer Online, 2001).

We think that Imre Somody's personal endeavours and plans are at least as interesting as Pharmavit's. Over the years he became the role model of a successful entrepreneur who unlike many, cares not only for his interests but also for the interests of others. Dr. Somody, became famous not only because of his financial success but because of his high moral standards and social responsibility. Imre Somody is known for using his personal wealth rather than the company's for charity and other public purposes. Somody and two other businessmen set up a private fund called the 'Bolyai János Prize' to reward the best Hungarian scientists in 1998. The founders wanted this prize to be codified by the Hungarian parliament, and the legal difficulties took 2 years to resolve. In 2000 Árpád Göncz, the president of the Hungarian Republic handed over the first Bolyai János prize to Tamás Freund, the internationally recognized brain researcher, member of the Hungarian Academy of Sciences.

In 2000 Imre Somody and the local authority of Veresegyháza founded Mission Health Centre, an experimental model of the modern and human health care institute based on social insurance. The aim of the experiment is to reveal the sources

of unefficiency in social insurance based health service and to use money more cost-effectively than the conventional system. Dr. Somody spent his own money for this purpose as well. Hopefully his philanthropic activities will be followed by other in the Hungarian society.

Etalon Acoustics Ltd.

The beginning

Etalon Acoustics is a high-end audiofile stereo equipment manufacturer founded by László Sallai and his wife in 1993. They develop and produce stereo amplifiers and loudspeakers. It's a small enterprise with about 7 employees. Sallai is not only the head of the firm but the developer of their products as well. He considers himself much more an engineer than a businessman. It is interesting that despite being a stereo component designer he is not an electronic engineer by training: he graduated as a mechanical engineer in Germany. He used to work as a consultant and representative for the world famous Danish companies Brüel & Kjaer (over 14 years) and for Ortofon (over 12 years), and became an expert of acoustics not only in the field of music reproduction but in a wide variety of applications, such as safety measurements of vibrations in nuclear power stations or medical diagnostics. After more than 25 years of research he established two small enterprises, Sonophil Ltd. – dealing with music recordings and CD productions –, and Etalon Acoustics Ltd. – manufacturing high-end audio products. This combination of his two firms is the only one in the world having own-developed products from the microphones in the recording room up to the loudspeakers used in the listening room.

Sonophil recorded more than 60 CDs in the past years for worldwide famous companies, such as Hungaroton, CBS, Naxos and Harmonia Mundi, France. Famous conductors and composers such asClaudio Abbado, Leonard Bernstein, John Cage, Sergiu Celibidache, Péter Eötvös, Iván Fisher, Kobayashi Ken Ichiro, György Kurtág, György Ligeti and Sándor Szokolay were impressed by their work. Leonard Bernstein recommended the small Hungarian company to Deutsche Grammophon. After several recordings with Maestro Sergiu Celibidache and the Munich Philharmonic Orchestra, the Maestro – impressed by the 'authentic sound' of Sonophil recordings, recommended the company to Philips Classics. Sonophil also received the highest acknowledgement from the top management of Denon.

In the seventies László Sallay and one of his colleauges founded the predecessor of Etalon Acoustics, the firm we focus on now. The name of the firm was different, but the brandname of their products was Etalon. They made sound recordings and developed and manufactured sound reproduction equipment. At the beginning of the 1990s the two owners decided to split and folow their own ways separately because of personal frictions, so László Sallay and his wife founded Etalon Acoustics in 1993. The firm is still theirs, without any other owners, and has never received any bank loans.

László Sallay cherished a dream from his childhood: it was always a disappointment for him to hear the difference between live concert music and the sound of his father's radio, so his desire was to reproduce high quality live music. His main motivation was *an inner cultural need for making the listening to realistic reproduced music at home possible.* Although they haven't got a western-fashioned formal mission statement, obviously the satisfaction of this need can be considered the mission of Etalon Acoustics Ltd.

The development of the firm up to the present

László Sallay's view of the stereo equipment industry is not typical of the mainstream of the hifi business, but similar to some other 'esoteric' high-end component manufacturers. In his opinion the reproduction of live music at the very beginning was not a business but a trial to transfer music for a much broader audience than ever before. The original aim was to share the joy of music with a very large number of people, most of whom never would go to a concert or to the opera. But later it became clear that sound reproduction is a very good business, and hifi industry split into two parts: one ismore technical, trying to approache the realistic reproduction of live music within the limits of technology, and the other is commercial, focusing on sales figures. The Hifi industry is largely determined by the commercial way, but Etalon Acoustics is among those few who chose thetechnical aspect. They don't want to tell the customers what they should need and buy like the commercialists, who always generate newer and newer hifi fashion-wawes to stimulate market demand. Etalon people try to find better and better technological solutions to approach closer and closer lifelike sound reproduction, which they think fulfills people's need, and offer them these solutions, i.e. audiophile equipment.

Etalon products have been sold in West-Europe since 1988, and their sales figures increased near to the present level in 1990-1992. At the time they entered the

market the main stream of hifi industry was ’over-engineering’, i.e. all equipment were full of expensive military standard parts and components, and the design of their electronic circuits were all extremely overcomplicated. If somebody opened the house of an Etalon product, it seemed almost ’empty’ in comparison with the over-engineered mainstream ones. Everybody was surprised, and the typical reaction of German, French, and Dutch hifi merchants and journalists was that Etalon equipments are ’empty, expensive, but good-sounding’.

Being expensive meant that they seemed to be expensive partly relative to the amount of components they were built from, and partly because of their Hungarian origin. But they were not and are not expensive compared to their western competitors’ products: in fact they are 30…50% cheaper than their rivals. László Sallay was often toldthat Etalon products should be cheaper partly becuse they contain far fewer parts and components, and partly because they are produced in Hungary when saleries and wages are much lower than in West-Europe. Sallay’s reply to the first point was that his products are cheaper than their western rivals and still have a better sound quality, as hifi experts admitted, so the price must be proportional with the result, not with the number of components. His answer to the second remark was that Audi TT and some other fashionable West-European cars are also manufactured in Hungary but nobody thinks they should be cheaper because of the lower Hungarian salaries and wages. He thinks that Etalon products are already cheaper enough compared to their western rivals on the international market.

Etalon Acoustics had to overcome some of the common barriers to entry faced by a new business, described by Porter (1979, 1980) in his famous ’five forces’ model:

- *Capital requirements* – costs of entering the industry act as a deterrent,
- *Brand preferences and customer loyalty* – it’s difficult for a new entrant to prise customer away from their existing suppliers,
- *Access of distribution channels* – the new entrant can’t reach the customer as effectively as the incumbent firms, so it will not be its products or services that are sold.

Capital requirements were so high that Etalon Acoustics wasn’t able to start up its own high-tech loudspeaker unit manufacturing company at the beginning. Loudspeaker units’ manufacturing technology is very sophisticated and needs a huge investment, and some parts of it are key technologies. Etalon had to make a

compromise and to buy the units from prestigous manufacturers abroad and build their loudspeaker systems from these units. László Sallay explains their loudspeaker systems' more modest succes with this compromise. The big loudspeaker unit manufacturers refused to produce special types in those very small quantities which Etalon Acoustics ordered for reasons of economies of scale. They were willing only to do some slight modifications in their normal types on the series produced to fulfill Etalon's orders. Mr. Sallay had to further modify these units before building into his systems but even in this way he wasn't able to build exactly the systems they wanted. Capital requirements were not so high in amplifier manufacturing because the necessary components are available and manufacturing technology is relatively simple and cheap, it's mainly a base technology. Consequently there was no need to make a compromise in the design of Etalon amplifiers, and they became very succesful.

Brand preferences and customer loyalty was also a barrier at the beginning. Like Gábor Bojár of Graphisoft, László Sallay was also advised to hide the Hungarian origin of Etalon equipment. In response Sallay put a distinctly visible sign onto the front panel of every Etalon equipment saying that "carefully handmade in Hungary". Today it is quite different: Etalon has made a name for itself and has its own loyal customers.

Access of distribution channels was perhaps the most serious problem at the start. László Sallay phoned the well-known high-end audiphile equipment merchants all over Europe, but about 85% of them refused even to try his products. They just ridiculed him on the phone and rang off when he told them that he offered high-end audio products from Hungary. Approximately 15% of them also laughed at him but didn't rang off at once so Sallay was able to convince them that he might have something serious for them, especially as he was ready to drive thousands of kilometers at his own cost to demonstrate the abilities of his products. He said they would regret not test-listening them. He called them up again and again until some merchants were willing to receive him and try out his products free of charge, maybe in the hope of a good laugh. The listening tests convinced them all, and they began to sell Etalon products.

More and more customers test-listened to and bought Etalon products, so hifi journalists became curious of these newcomer but promising equipments. The measurement and listening test results were excellent, and the high recommendations

of the hifi journals (Home Studio in Holland; Revue du Son, Haute Fidelite, and Diapason in France; Stereo, High Fidelity, Hör Erlebnis Forum, and HiFi Vision in Germany, Alta Fidelidad in Spain, HiFi World in UK, Fedelta del Suono, Stereo, Suono, and Audio Review in Italy, and Ihos in Greece) generated even more demand. Etalon amplifiers have been compared to Audio Research, Jadis, Lectron, Cello, Conrad Johnson, Primare, Accuphase, Burmester, Gryphon, YBA, Goldmund, Naim, Linn, Mark Levinson, Krell, Threshold, Jeff Rowland, Spectral, Classé Audio, FM Acoustics, etc. with excellent results: they were found to be at least on the same or even on higher level than the most famous products, for a lower price. The prestigous French audiofile magazin, Diapason chose Etalon equipment for 'The Best HiFi Product of the Year' five times during the nineties, and uses them as references, i.e. compares every tested stereo equipment to their Etalon counterparts as benchmarks, so the brandname 'Etalon' became reality. László Sallay was awarded the HiFi Oscar Prize for his Etalon products in Italy in 1998. Apart from the UK and the Scandinavian countries Etalon products are sold almost all over Europe, some hundreds per year. Etalon Acoustics's annual sales increased to 1 million dollars, but three years ago it decreased with almost 50% because of the recession of the high-end audio market. A lot of audiofile manufacturers and merchants went bankrupt since then, but Etalon Acoustics managed to survive and is still profitable.

Just like Graphisoft, Etalon Acoustics also has a key technology. It is László Sallay's sophisticated mathematical modelling method which enables him to find connection between the characteristics of electronic signals and subjective sound quality. It's not an electronic circuit design, it's a mathematical procedure, suitable for optimizing the design of any kind of audio equipment. Sallay regards his mathematical modelling invention as the secret of Etalon products' outstanding sound quality. Unlike Graphisoft's case this key technology haven't become the industry's base technology during the years because it is still Etalon Acoustics' secret. This mathematical modelling procedure is a typical *core competence* in the sense Hamel and Prahalad (1990, 1994) use this term:

- it provides competitive advantage,
- it's translated into customer-perceived value,
- it's difficult to imitate (impossible in this case),
- it's extendable to new products or markets.

The only thing competitors were able to imitate was the minimalist concept inner design. A decade ago Etalon's 'empty boxes' surprised audio experts who had become used to the typical over-engineered products of that time. But nowadays this simplistic approach is more and more common, and there are more and more rivals of Etalon looking very similar inside. But this similarity is limited: the essence of Etalon product design is the mathematical optimizing procedure, the firm's core competence, which is still unique.

Plans for the future

This year three turning points are coming in the firm's history. One turning point is that after a decade of compromises in loudspeaker system design they already have the necessary investment capital to build up their own loudspeaker unit manufacturing factory, moving the firm from Székesfehérvár to Budapest. This way they can design and manufacture exactly the special kind of loudspeaker units with the required quality that they really need for their loudspeaker systems, without any compromise. They hope this significant technological change will greatly enhance the competitive advantage of their loudspeaker systems on the high-end audio market. This huge investment was made possible by retaining most of Etalon's profit from the beginning up to now for the development of the company.

Another turning point is that they launched a brand new product line, called Musicante. László Sallay was always unhappy to hear the complaints of Hungarian music fans that they couldn't afford Etalon products. Their prices vary between a few thousands and tens of thousands of German marks which is cheap compared to their rivals, however, it is still very expensive for somebody with an average Hungarian salary. So Sallay designed some cheaper models for the domestic market. He made some technical compromises in the design and in the manufacturing process as well: musicante models are not hand-made, but produced on a production line. This way they can be sold for the equivalent of about a thousand German mark. The first domestic measurement and listening test of the debuting Musicante amplifier, called Origo, was very positive in Audio, the Hungarian high-end audiofile journal (Nagy, 2000; Munka, 2000). There is a demand for Musicante products abroad as well, e.g. this March Sallay introduced his new models in Germany.

And the third turning point is that Etalon Acoustics is going to launch its first CD player soon. The newcomer equipment comes as a member of the Musicante product line. With the new CD player customers can buy a complete stereo set from

Etalon Acoustics: CD player, (integrated or separated pre- and power) amplifier, and a pair of loudspeakers, all of them representing exactly the same music reproduction philosophy.

László Sallay has hopes in a fourth turning point as well: after the European success he wants to enter the American market. He is looking for dealers selling Etalon products, and he also would like to find investors to establish a joint venture to manufacture and distribute Etalon products in the USA for the American market.

Danubilux Ltd.

The beginning

This company was set up in 1997 by Sándor Valkai and Péter Vámosi. Valkai was a university lecturer with sound theoretical knwledge who also benefited from a British Government academic aid project. This project helped Hungarian academics to gain experience in Western style management education. As part of his university programme, Valkai spent a year at a UK university and completed a full time MBA programme. A short time after his returning to Hungary, Sándor Valkai left the university because of a personal conflict and started to work in the business sector, first at a local telephone company, and after that at a satellite telecommunication company in marketing managerial jobs. He was very unsatisfied in both cases because he realised that he could do very little with his newly acquired knowledge in management if the CEO of the company did not have a similar level knowledge in this field. As a result he started to look for entrepreneurial opportunities.

This opportunity came when he went to his high school reunion and met Vámosi again. Vámosi had been working for one of the major retailors in lighting and electronics and he was equally unhappy with his position. He found his company slow and reactive that did not have a true entrepreneurial spirit that was necessary to success in the rapidly changing market of Hungary's transitional economy in the mid 1990s. After a long conversation Valkai and Vámosi decided to team up and set up their own enterprise. Vámosi was well connected in lighting retailing and knew the market well while Valkai had some previous business experience and the knowledge he acquired from his MBA.

The two enterpreneurs had very little money (they started the business with HUF 500 000 which is about £1250) when they started the business in a rented house

with a second hand mini van. They worked as a team and did everything on their own. They negotiated with suppliers, and shop owners and they were also the van drivers delivering the products to the shops. They did all the marketing, PR and of course dealt with all the complaints and daily challenges of the business. It was a very demanding phase of the enterprise and the two owners worked 12-14 hours a day, needing a lot of stamina. Their motivation lay partly for the money partly for the inner drive for success. They wanted to prove that they could become a great business in the competitive world of lighting retailing.

The lighting retailing trade has many manufacturers. These sell their products in bulk to two or three main retailers who also supply smaller retailers. In the first year Danubilux partly built on Vámosi's contacts and also started to look for new suppliers in the world market who were not yet in Hungary. They did an in depth industry analysis and also studied customers' taste and buying patterns. In the first year their turnover was HUF120 million (£30,000). In a year they built up a small group of regular customers and also started to look for new ways of increasing their sales.

The development of the firm up to the present

The two entrepreneurs learnt very quickly that selling lamps was a capital intense business. So they started to look for a partner who would invest into the business. Valkai and Vámosi attended all major international fairs of the lighting industry and tried to collect as much information about the products, the competitors and the suppliers as possible.

The industry leaders in Europe are a Belgian company called Massive and the Italian Eglo Lux. These two companies have 50% of the Hungarian market. The second layer of the market consists of smaller companies such as Reflect and Rábalux. This is the category where Danubilux started to find its niche and market share.

Valkai found out that Massive, the market leader of the industry, manufactures many of its products in China. So he decided to attend the biggest fair in China and spoke with all the manufacturers there. He collected as much information as possible and after careful data analysis he decided to return to China and start individual negotiations with the selected factories.

He knew that in this competitive business it is absolutely essential for survival to find the cheapest suppliers who could provide them with high quality products. By

1998 Hungary had a growing Chinese community. Through a personal contact Valkai was introduced to a Chinese businessman who had interests in various businesses around the world and who has also invested into Hungarian companies. After a long negotiation first in Budapest then in China Valkai and Vámosi agreed to sell 50% of their business to the Chinese investor. As they only needed the money and they did not want their investor to take an active part in the daily running of the business they very carefully drew up a contract. It meant that the investor will have his initial $ 1 million repaid by the end of the year 2000. Until then he will own 52% of the company and Valkai and Vámosi will have 48%.

Once the capital investment is repaid the balance of shares will go back to 50% for each side. The Chinese investor agreed not to interfere with the daily running of the business, however, in order to guarantee that his interest is properly represented and there is transparency in the company he appointed a Chinese woman called Guo to oversee the business.

The atmosphere was tense initially both as a result of cultural communications and the nature of the contract. Guo had been installed to oversee the project, and protect the investor's money, so her brief was simply to watch every move. Communication was very difficult because the Hungarian employees of the company did not speak Chinese, and Guo did not speak Hungarian so the only common language was English. However, it was only Valkai who spoke English at Danubilux. Because of the language difficulties, little communication could take place, so her role was perceived more as that of an inspector. This created a mistrustful atmosphere. Valkai felt rather offended by the lack of trust and Guo felt that she could not represent the interests of the Chinese investor because she could not make sense of Hungarian accounts and business dealings.

Gradually, however the two sides started to realise that without trust and mutual support and helpfulness they would not survive.

Valkai spent almost one hundred days in China in 1998 and negotiated with various suppliers. In the end he selected nine lamp manufacturers with whom who they work Guo of course proved to be a real asset for the company in Hungary. She places all the orders with the manufacturers and deals with all the Chinese paperwork that is involved.

Apart from the nine Chinese suppliers Danubilux works with a Finnish manufacturer called Rival. There is a niche in the Hungarian market for Finnish design in lamps and Danubilux wants to satisfy that demand.

The companies turnover was HUF 220 million (£550,000) in 1999 and around HUF 370 million (£925,000) in 2000.

In 1999 the company moved to a spacious office and opened an elegant showroom that displays all its key products. They had their own catalogue produced containing all the designs that they keep in stock.

Relationships and communication have improved considerably. There are more young people with good command of English in the company. Guo has learnt some basic Hungarian and is doing a distance learning MBA at The Open University Business School's Hungarian subsidiary, Euro-Contact Business School.

Now the company is well established in the Hungarian market with about 5% market share in the industry. The name is well known among competitors and customers so Valkai and Vámosi managed to prove to themselves and to the world that it is possible to turn disadvantage into an opportunity and with creativity and hard work it is possible to overcome difficulties to succeed in international competition.

Plans for the future

Danubilux would like to pay back its borrowing to the investor by 2002. They had to defer payments from 2000 to 2002 because the business needed a large stock investment. In order to satisfy customer needs the company keeps a large stock of the products. Unfortunately because of the geographical distance they cannot have a just-in-time system with the factory. To reduce transport costs they can only order by a container. It means that a large amont of the company's asset is kept in stocks all the time.

They have a benchmarking strategy and observe very closely the prices and the marketing strategies of the competitors. As they found the cheapest suppliers and as they are still a lean organisation they can offer their products lower than the main retailers. They regularly offer sales and special prices to small retailers increasing their sales and expanding their regular customer base.

Based on their success in Hungary the company now looks into opportunities for selling their products in neighbouring countries and perhaps will also try to penetrate the Western European market.

Conclusion

In this paper we made an attempt to examine the export activities of Hungarian companies. We initially collected the available data on central support and government initiatives that helped Hungarian companies to succeed in the global market. We found that though by 2001 there were no legal obstacles for Hungarian companies to export, they were not actively encouraged either. The government set up a company called ITD Hungary to promote Hungarian business abroad, and also Corvinus Plc. to invest into businesses that Hungarian companies intend to set up in the neighbouring countries.

It means that most Hungarian companies who succeed abroad manage to turn the lack of support into an opportunity.

The four companies that we interviewed came from different industries, however they all shared some common features.

1. Each business was set up by a charismatic leader or leaders who had a vision and who believed in their product, in their creativity and who were prepared to work hard for their international success.
2. All of the four companies used innovation as a competitive advantage. In the case of Graphisoft it was the development of a unique product, in the case of Pharmavit it was product development linked to the consumers' need for a healthier life style. Etalon persued a dream of bringing concert quality music into people's home at an offordable price. Danubilux worked creatively with the supply chain by finding the cheapest global suppliers of quality lamps.

Further study would be necessary to investigate why there are only a few Hungarian companies who can succeed in the global market, and why there are a growing number of people who live at a very low level of income.

Why is it that some of the Hungarians fight for success and others choose depression and burn out? Surely it has something to do with the national character, the individual's psyche and the socio-economic environment.

Studying individual, corporate and national success is beyond the scope of this paper. However, we realised that only complex multi-disciplinary research could find answers to many of the questions that could rise even from simple observations such as ours.

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