



INVEST IN FINLAND

Physiotherapy, Orthopedics and Fitness Technology in Finland

EXECUTIVE SUMMARY

January 2007

Invest in Finland is a national organisation promoting foreign direct investment in Finland. It is funded by the Ministry of Trade and Industry. Working closely with Finnish business community, it provides a link for foreign investors who are looking to set up ventures in Finland.

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Physiotherapy, Orthopedics and Fitness Technology in Finland

Basic information

Finland's total market for orthopedic and rehabilitation equipment and products is about €100 million. The market is largely based on public procurement through the Finnish subsidised healthcare system, and administered at public health centres and hospitals. The market consists of a wide range of products for people injured in accidents or sports, the elderly, disabled and those with chronic diseases of the musculoskeletal system. The products include artificial joints, crutches, prosthesis, hearing aids, bandages, wheelchairs and other aids.

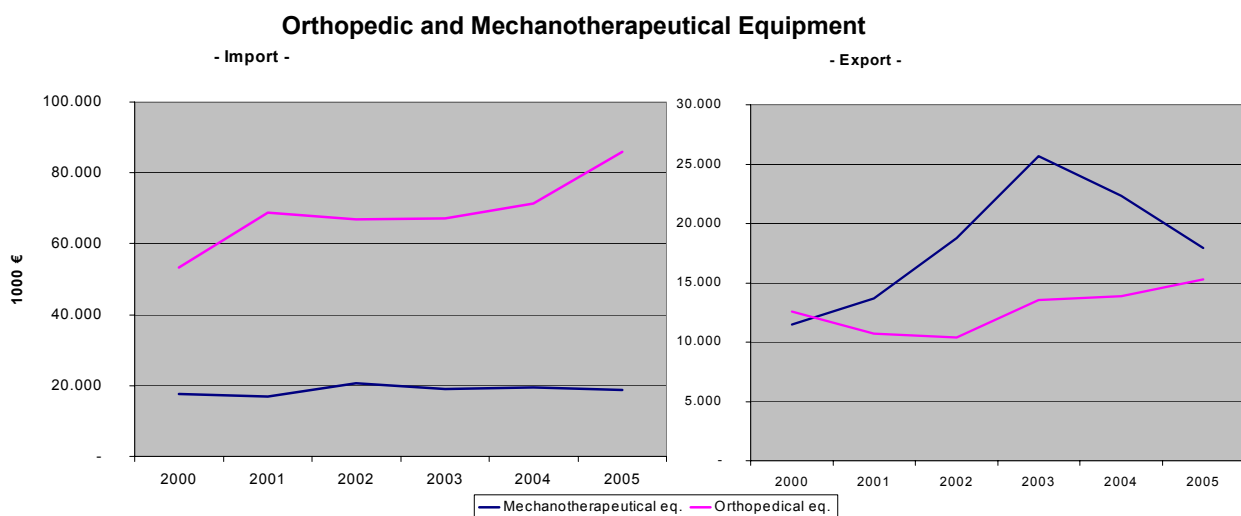


Figure 1, The import figures for orthopedic equipment have increased by 10% p.a. in the last 6 years, and export by 3,7% in the same period. The import and export values of mechano-therapeutical equipment are equal, and have grown by 13% and 11.6% respectively in the last 6 years.

Orthopedics

Treatment includes medical counselling, medication, casts, splints, exercise or surgery. Orthopedics is a growth area in Finland. Over a million people in the country report a long-term musculoskeletal disease, and about 600,000 have restricted functional capacity because of it. The number suffering from musculoskeletal diseases is expected to increase because of the ageing of the population, diminishing physical exercise and increasing obesity. Improved diagnostic and treatment methods also reveal an increasing range of musculoskeletal diseases. Medical aids and prostheses are generally free of charge by law, but only simple standard equipment is provided. Finnish patients are ready to invest private money in modern and more sophisticated products. The main responsibility for providing and financing medical aids and prostheses lies with the municipal health services. Other bodies such as the social services, the Social Insurance Institution and private insurance companies also finance medical aid.

Current users of orthopedic technologies seek products that offer maximum comfort while requiring minimum physical supervision. The advantages of techniques such as minimally invasive surgeries include less pain and trauma, quicker return to daily activities, smaller scars, and reduced blood loss. Both economic and clinical benefits drive the orthopedic industry. Finnish industry provides some innovative niche products for surgical intervention such as special diagnostic tools for cartilage disorders and orthosis, prosthesis and mobility aids.

Physiotherapy

Physiotherapy has a strong focus on conventional rather than alternative medicine. It is mainly practised by physiotherapists, although some methods may be also practised by other health professionals. The scope of the physiotherapists' work varies considerably across the world. In some countries, physiotherapists normally work upon a

referral from other professionals, typically medical practitioners, whereas in Finland they work as primary care providers. They may work either privately or in public institutions such as hospitals. In many countries, physiotherapy has become the largest allied health profession and third behind medicine and nursing in the number of graduating healthcare students.

The major indication areas managed by physiotherapists can be grouped into musculoskeletal, cardiopulmonary, integumentary and neurological. Many aspects are common to all four areas.

Finland has a strong know-how in the fields of neurological physiotherapy and rehabilitation of the elderly. Gerontological research is a speciality of the University of Jyväskylä. Close research co-operation exists between the physiotherapy companies, the universities and polytechnics.

Finland has about 12,100 physiotherapists, and the average number of patients per physiotherapist is 427 (*ER-WCPT, European Region of the world confederation for physical therapy*). Physiotherapy is the most common private healthcare service. About 80% of its services are produced in the private sector. In 2004, there were 2,286 physiotherapy clinics employing 3,188 therapists. In the private sector, the turnover was EUR 73 million and an estimate for the public sector is about EUR 500 million. (Fysi ry, Aino Penttilä, executive director) In Finland, physiotherapeutic services are purchased by public and private sectors.

The presence of leading international players in Finland:

- **Enraf-Nonius B.V.**
 - Its product portfolio includes electrotherapy, ultrasound and thermotherapy equipment, treatment tables and exercise equipment. Enraf-Nonius products are represented in Finland through Physio Pirkko Metsola Oy. www.enraf-nonus.com
- **Stryker Corporation**
 - specialises in special surgical and medical products, and outpatient physical therapy services. 82% of annual sales come from the orthopedic implant and equipment market. The Finnish sales, service and marketing subsidiary was established in 1999. www.stryker.com
- **Tilia Europa GmbH**
 - concentrates on manufacturing and marketing electrotherapy equipment, training- and rehabilitation equipment, and heart rate measuring equipment. Tilia is represented in Austria, the Netherlands, Belgium, the Czech Republic, Spain and France. www.tilia.de
- **Kettler**
 - is a German company, specialising in sports- and fitness equipment, table tennis tables, leisure time furniture, bicycles and children's outdoor toys. Kettler Ergometers use heart rate measuring equipment. Oy Sultrade Ab represents the company in Finland. www.kettler.net
- **Johnson Health Tech**
 - specialises in fitness and rehabilitative medical equipment, with sales in 60 countries. Fysioline Oy represents the company in Finland. www.johnsonfitness.com
- **Vision Fitness**
 - designs and distributes treadmills, elliptical trainers, fitness bikes and strength equipment. The company has no subsidiary or distributor in Scandinavia. www.visionfitness.com
- **Zimmer Elektromedizin GmbH**
 - specialises in physical therapy and circulatory diagnosis. Its products are electro-, cryo-, laser- and ultrasound therapy equipment, and also diathermy equipment. Saga Yhtiöt sells Zimmer Elektromedizin products in Finland. www.zimmer.de

- **Woodway**
 - is the largest specialised treadmill manufacturer in the world and has design and manufacturing facilities in the United States, Germany and Japan. Products are used in the home and at sports and rehab centres. Woodway has no office in Finland. www.woodway.com
- **Chattanooga Group**
 - makes rehab equipment for treating skeletal, muscular, neurological and soft tissue disorders. It has production facilities in USA and service and distribution centres in Belgium and Australia. Fysioline Oy represents Chattanooga's products in Finland. www.chattgroup.com
- **Meyra Group**
 - is one of the leading manufacturers of wheelchairs and rehabilitation aids. Products consists of aids in the bathroom, walking aids, aids for sitting and lying such as anti-bed sore systems, seat furniture, lifts, etc. Meyra has a subsidiary in Denmark. www.meyra.de
- **Bauerfeind AG**
 - is a supplier of phlebology products, orthosis, foot orthopedic products and prosthetics. Bauerfeind is active in Scandinavia, Sweden, the Benelux countries, France, Croatia, Austria, Switzerland, France, Italy, Spain, the UK and USA. www.bauerfeind.com
- **Tempur World**
 - is a world-leading manufacturer of pressure relieving mattresses and pillows. It is active all over the world and also has a subsidiary in Finland. www.tempurworld.com

The following companies are some examples of Finnish companies active in these sub-sectors:

- **Hur Oy**
 - is recognised as a global leader in equipment for fitness, rehab and geriatric exercise. The company is derived from research conducted at the Helsinki University of Technology. Its customers include fitness clubs, rehabilitation centers, and hotels. www.hur.fi
- **Diter-Elektroniikka Oy**
 - manufactures physiotherapy equipment, exporting more than 70% of its sales. The company designs and manufactures electrotherapy, ultrasound and laser therapy equipment, selling them to rehab centres, physiotherapists and beauty/wellness centres. www.diter.com
- **FD Systems Oy**
 - supplies customer management systems and physical performance measuring equipment. Its spin-off, PhysioTools Oy develops export markets for PhysioTools products. PhysioTools Oy is the global market leader in software for physical therapy. www.fdsystems.fi
- **Fysioline Pharma Oy**
 - makes Ice Power cold therapy and Desi Power disinfection products. The Fysioline Group is a supplier of physiotherapy products such as treatment tables, measuring-, testing- and electrotherapy equipment, and fitness, sports and wellness products. www.fysioline.fi
- **Tunturi**
 - is the largest manufacturer of bicycles in Finland and an internationally significant manufacturer of fitness equipment such as treadmills, cycle ergometers, exercise cycles and crosstrainers. Tunturi is part of the Dutch Accell Group N.V. www.tunturi.com

- **Metitur**
 - manufactures equipment and computer programmes for testing isometric muscle strength, assessing and training postural balance, and measuring psychomotor speed. Research work has been carried out in Finland at the University of Jyväskylä. www.metitur.com
- **Mega Electronics**
 - specialises in biosignals monitoring for neurology, rehabilitation, occupational health, sports medicine and gynecology. It has developed a compact ambulatory technology to detect muscle activity on the skin surface. Its has dealers in over 20 countries. www.meltd.fi
- **EMG/Mediracer Ltd**
 - focuses on intelligent handheld point-of-care (POC) diagnostic testing devices for peripheral nerve system examination. Its largest shareholder, EMG Laboratories Ltd, specialises in neurophysiologic consultation and research services in Finland. www.emg.fi
- **DBC International**
 - develops evidence-based treatment and rehab methods for musculoskeletal disorders. DBC products are used in hospitals in 22 countries. www.dbc.fi

Fitness Technology and Sports

Finland has one of the highest proportions of sports and exercise facilities per capita in the world and, for most Finns, keeping fit is a natural part of everyday life. Two out of three Finns regularly use sports and exercise facilities. Trainings concepts as “Nordic Walking” were invented in Finland and companies like Polar, Suunto, Aino Active and Firstbeat provide world-class know-how in personalised training and health management tools. In many other countries too, sport is an essential part of the culture and life of the people. The value of the sports economy to the national economy cannot be underestimated. In the global arena, Amer of Finland owns six world-class brands such as Wilson, Atomic, and Salomon.

Strengths of the physiotherapy, orthopedics and fitness technology sector

Physiotherapy has a long tradition in Finland. The law regulates physiotherapy entrepreneurship and a physiotherapist must fulfill strict requirements. Physiotherapy staffs are highly educated and provide high-quality services. Therefore they expect better diagnostic and treatment tools than in many other parts of the world. In Finland in 2005, product development investments increased by over 60 % in companies providing physical treatments and this trend is expected to continue or even increase (*MTI, SME's operational environment and development 2005-research.*)

Finland has strong know-how in physiotherapy and rehabilitation for the elderly, the fastest growing target group in the industrialised countries. Finland has the fastest ageing population in the EU. Gerocenter is an R&D centre concentrating on improving the functional ability and wellbeing of the elderly. The goal is to produce operating models for rehabilitation and the prevention of weakening functional ability. It also develops and evaluates healthcare technological medical aids and co-operates with regional, national and international R&D organisations.

Finland is focusing on enabling handicapped people to live an independent life in a normal environment (*Finnish Association of People with Mobility disabilities, FMD*). (Pikosystems Oy provides environment management equipment. It produces electronic systems and related services to improve independent living, quality of life and security. These include remote control systems for such things as the front door, elevator, door phone, windows and lighting. Finland has foreseen the future increase in the number of people with special needs.

Jyväskylä is a centre of excellence in sport and health sciences, housing not only the faculty of Sports and Health Sciences at the University of Jyväskylä but also the Research Centre of Olympic Sports. The University of Jyväskylä is the only place in Finland, which offers university level studies for sports sciences. www.jyu.fi. KIHU, the Research Centre of Olympic Sports, is a nationally and internationally respected inter-disciplinary research, development and service organisation for sports. It does research in areas like biomechanics, physiology and psychology. www.kihu.fi

Weaknesses

The physiotherapy research field and industry needs to become better focused. Improved co-operation between the industrial players in the sector would also strengthen its international standing. More integrated solutions are required instead of many separate tools. A key issue is how to deal with international competition and manage innovation in a new business environment (*Pentti Era, Metitur Oy*). Finnish physiotherapy companies are relatively small, and lack business and management skills. A lack of development and investment funds is also causing problems. Some products and solutions are simply not known in other markets. In the orthopedic surgery sector, the Finnish offering does not meet the actual needs. This is evident in the long waiting lists for hip replacement, and the small number of players in the industry sector.

In an effort to rectify this, a change in the law was drafted in March 2005. The Care Guarantee Act ensures that a patient is assessed within 3 weeks, and treatment begun within 6 months. Three years ago, over 60,000 people were queuing for special care, but this number has now dropped significantly. By the end of May 2006, however, the number of patient waiting for over six months was still 13,000. The most difficult areas are hearing defects treatment, orthopedics, hand surgery and plastic surgery. This is mostly due to the lack of both specialised medical staff and operating room nursing staff. Communities have set aside over EUR 100 million for preparatory measures, and waiting times have been shortened by working longer hours, and purchasing more external services. There is still a need for 3-5% more funding to balance the situation. Turku and Oulu have begun additional training courses for doctors to relieve the lack of ear specialists (*Ministry of Social Affairs and Health*).

Global Changes

The ageing of the population and reducing physical activity in all age groups will lead to a higher demand for physiotherapy and orthopedic services. It is estimated that for instance osteoporosis will become a problem for 40% of women over 50 years old.

Rises in income- and education level will also alter the demand structure. People will be increasingly able and willing to pay for high-quality services. There is a clear trend towards equipment-based services and personalised fitness tools. The service portfolio of physiotherapeutic rehabilitation will develop fast. One reason is the growing number of elderly with special needs and the aim of keeping them independent. Governments are increasingly stressing the importance of a healthy population through preventive healthcare programmes and the promotion of healthy living. The sports industry has already realised the business potential of "health-oriented fitness"

Potential business opportunities

Finland as a market

Finland has a strong demand for surgical orthopedic products and offers business opportunities for physiotherapy products and medical aids. In the related service sector, increasing privatisation and specialisation bring opportunities for service providers. Technically sophisticated medical equipment has good market potential, especially equipment that increases efficiency and reduces occupancy rates in hospitals, such as minimal invasive surgery (MIS) and video endoscopes. In Finland, personal training is becoming increasingly popular and fitness clubs are also paying more attention to customers that have a physical problem and hiring a physiotherapist instead of using their own staff to advise these customers.

Finnish companies as business partners

In personal health monitoring systems, Finland provides key technologies, which are backed by scientific evidence. "Health-oriented fitness" is a growing industry. Many personalised fitness tools used in rehab and preventive healthcare have their roots in Finland (*see page 5*).

Opportunities in related industries

Physiotherapeutic and fitness devices and IT

The integration of IT into physiotherapeutic devices and sports equipment has helped to identify and prevent potential health hazards at an early stage. The outcome of treatment is becoming more measurable and this will lead to more standardised quality throughout the sector.

Physiotherapy and sports

The industry is moving into the age of “knowledge-based sports”. Sports medicine and science have become an integral part of maximising athletes’ potential. Athletes use sports science to push the limits of their strength, optimise the nutritional value of their food intake and to improve their techniques using biomechanical analyses. Some Finnish companies are active in these niche areas today.

Orthopedics and biotechnology

Autologous cell systems are used to substitute organs and tissues such as cartilage.

Physiotherapy, rehabilitation and the tourist industry

Rehabilitation clinics offer “health weeks” for tourists with a comprehensive package of diagnostic and attractive preventive measures.

Analyses of FDI inflows

Among 170 foreign healthcare companies in Finland, 10 are categorised as companies focused on the physiotherapy or orthopedic business. In all 10 cases, the investors opened sales or service offices in Finland. One company specialising in orthopedic and surgical products came to Finland in the early 80’s. It attributed that move to how well product R&D co-operation functions in Finland and how the company cooperated with the endoprosthesis register containing comprehensive information on hip and knee endoprosthesis.

A company spokesman went on to say, “This is of course valuable information for product development activities. The future of our company and the orthopedic field is very positive; the demand for high-quality surgical products and endoprosthesis is high and growing. The ageing population also increases the demand. Success comes with sophisticated and high-quality products and the right strategic decisions.”

Conclusions

Orthopedics and physiotherapy offer investment opportunities in different ways. In orthopedics, Finland seeks high-tech products for the surgical treatment process to increase the efficiency of services. In physiotherapy, Finnish suppliers deliver innovative technical solutions to diagnose and restore physical ability and control the success of treatment. In health-related fitness, Finnish companies have a lot to offer. The industry provides training concepts for different age groups and IT-supported health management tools. The use of excellent know-how in physiotherapy, sports medicine and communication technology combined with advanced equipment are an important competitive advantage in the treatment of musculoskeletal diseases and in the prevention of lifestyle-related illnesses such as heart diseases, strokes and osteoporosis.

A healthy population brings many economic benefits to a nation. Because non-communicable diseases will become a more serious health threat than communicable diseases as a result of changing lifestyles, most governments are stressing the importance of a healthy population through preventive healthcare programmes and the promotion of healthy living, especially in rapidly ageing societies. The objective is to stay fit and remain healthy to drastically reduce healthcare costs.

Invest in Finland

Invest in Finland offers consulting services and relevant information to international companies interested in establishing or expanding a presence in Finland. We provide assistance with questions relating to opening a sales office, mapping potential merger and acquisition targets, establishing research and development facilities and/or a manufacturing unit, or expanding existing operations.

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