




The Swiss Medtech Industry 2016

Sector Study

SWISS MEDTECH

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Introduction

This is the fifth edition of the Swiss medical technology industry (SMTI) Sector Study. It is the most comprehensive industry survey and report on the Swiss medtech industry. The report is based on the results of a wide survey and has been compiled every two years since 2008. Similar to 2014, 344 companies participated in the survey this year. The SMTI 2016 industry study was created thanks to the close collaboration between Medical Cluster and the Helbling Group, and was guided by an expert advisory committee.

Unlike many other industry reports, the SMTI study includes the whole Swiss medtech industry value chain. Manufacturers, suppliers, specialized service providers, and commercial enterprises from across the country participated in the survey. The aim of the report is to highlight the economic significance of the entire industry and to provide an overview of current challenges, areas of activity, and future development.

Since the first study in 2008, we have seen significant changes in the global medtech industry - which are also similarly affecting Swiss enterprises. Between 2000-2010, for example, the greatest challenges included finding sufficient qualified suppliers or dealing with increased market demand. In recent years, however, the issues have shifted to price, competition, and regulatory pressure. Swiss companies are also additionally faced with the strong Swiss franc.

Medical technology forms the core of the life sciences industry - together with pharmaceutical and biotech companies. The two sectors have been collaborating more closely in recent years: for example, in drug delivery systems, diagnostics, or active functional surfaces. Legislation is continuously being updated and expanded, forcing both medtech and pharmaceutical industries to keep up-to-date with ever-changing regulations and standards. It is not only the technical, but also regulatory complexity that is increasing for the life sciences - which Swiss companies, however, could also turn into an opportunity for themselves. In what other country are the necessary skills available to such an extent and in such a small area?

We were eager to receive this year's survey results. Are companies suffering

under the difficult market conditions and the strong Swiss franc? How do they assess their prospects? The survey results show that the vast majority of Swiss medtech companies have coped well over the last two years and are looking to the future with confidence. This report examines these issues and compares the attractiveness of the Swiss workplace with four other global medtech industry hotspots.

We are convinced that our sector will continue to grow and invest in the future in our country. However, this is only possible when the advantages of Switzerland as a business location can be further exploited through product innovation and process optimisation.

The SMTI 2016 Sector Study is the first publication to be released by the Swiss Medtech brand. Although the new association will only be formally established mid 2017, this report is the proof that the two designated founders - Medical Cluster and FASMED - are already working together hand in hand.

We would like to thank all participating companies, sponsors, and the members of the Advisory Board; without which we would not have been able to create this report.

[Laura Murer Mecattaf, Jonas Frey, Annebelle Smolders und Peter Biedermann, authors and publishers of the SMTI 2016 Sector Study](#)

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Management Summary

Management Summary (I/II)

Key data of the Swiss medtech industry

- In 2015 the Swiss medtech industry (SMTI) generated a turnover of CHF 14.1 billion, which represents 2.2% of the GDP. The 1,350 companies (manufacturers, suppliers, service providers, and trade & distribution companies) employ approximately 54,500 people
- Goods worth CHF 10.6 billion were exported in 2015 - with Germany and the United States as the main export destinations. This figure represents 4% of all Swiss exports. The trade surplus has scarcely changed over the last two years and remains at CHF 5.6 billion

Attained growth

- Industry turnover has increased by CHF 0.8 billion since 2014
- Over the last years the SMTI showed a constant sales growth of around 6% per year. This trend continued in 2014 and 2015. Compared to other industries, the SMTI showed much stronger growth and is well above the achieved increase in GDP in recent years (1.1% in 2014 and -0.5% in 2015)

Exports performance

- Despite the strong Swiss franc, medtech exports have remained constant in recent years and have even grown in the top destinations of the USA and Germany
- Exports to EU countries have decreased by 15% since 2010. The decline was particularly noticeable in crisis-stricken France, Spain, and Italy. Exports to the Netherlands have also fallen – a result of the reduced importance of a few central warehouses

Purchasing behaviour and production sites

- Imports have increased by 11% since 2010. The strong Swiss franc and competitive environment are forcing companies to purchase more intermediate inputs and capital goods from foreign suppliers
- According to the companies surveyed, this trend will continue in the coming years
- Manufacturers are still investing in new production facilities in Switzerland, but are also increasing expansion into foreign countries

Management Summary (II/II)

Challenges facing the SMTI

- Innovation and market access pose the biggest challenges for medtech companies (for example, preservation of innovation capability, quality and documentation requirements, obstacles to product certification). This is a response to rising cost pressure which forces companies to set themselves apart through innovation
- Further major challenges include finding suitable specialists and the unfavorable exchange rates in relation to the Swiss franc

R&D and Innovation

- Swiss medtech companies invest relatively heavily in R&D; up to 30% of turnover is spent on R&D, with larger companies investing proportionately less
- New products are sourced through internal development and collaboration with universities. Larger companies supplement in-house development through the acquisition of ideas, prototypes and companies
- From the companies' perspective, the framework conditions for publicly funded projects should be simplified and focus more on practical needs (ex. support for market entry)

Investment activities

- A large number of companies invest in Switzerland as well as in foreign countries; with most investments dedicated to marketing and sales
 - 86% of companies are planning investments in Switzerland. The main reasons are the highly qualified professionals and the Swiss labour productivity
 - 82% of companies will invest in foreign countries. The main reasons are the proximity to customers, the strength of the Swiss franc, and the high cost of labour in Switzerland

Future of the medtech industry in Switzerland

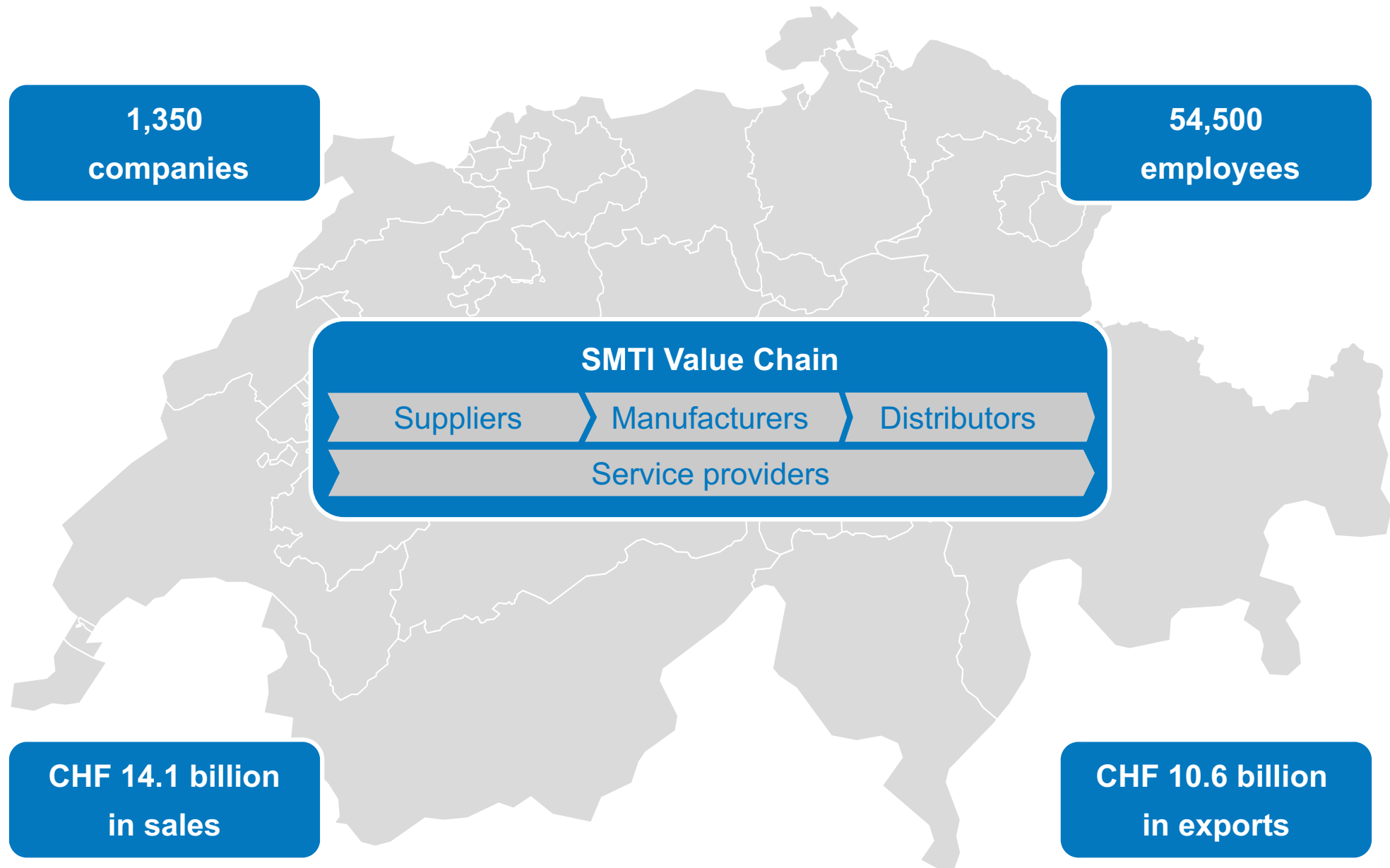
- The attractive Swiss workplace competes in the global market - especially with Germany, Ireland, the USA, and Singapore. Switzerland's significant competitive advantages include its access to highly qualified personnel and the exceptionally innovative environment
- The SMTI is optimistic about the future and expects a growth in sales of 8.6% in 2016. This also means certain risks for the Switzerland workplace: uncertainty regarding the bilateral agreements with the EU (trade, free movement of persons), increasing cost pressure, and rising tax burden



An overview of the Swiss Medtech Industry (SMTI)

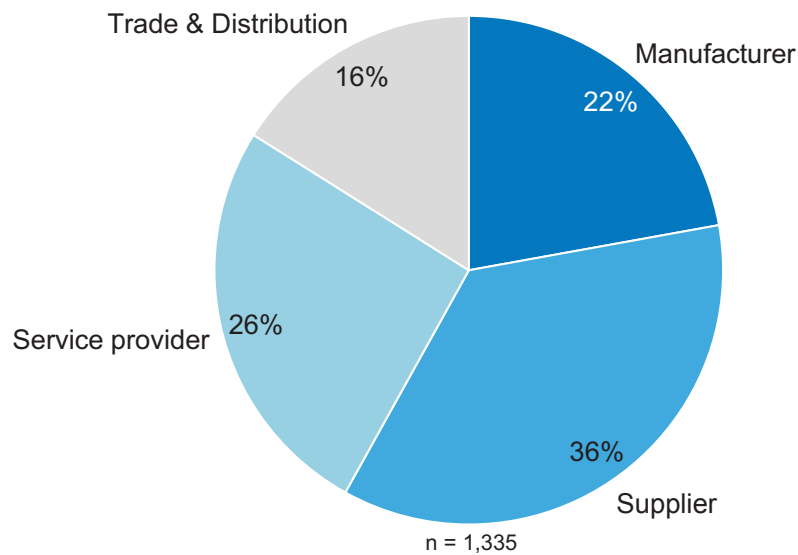
- Overview SMTI 2016
- Special topics: R&D expenditure, production sites, intermediate inputs, and capital goods
- Medtech industry imports and exports

Switzerland showcases a strong medtech industry in 2016



1,350 companies are active in the Swiss medtech industry

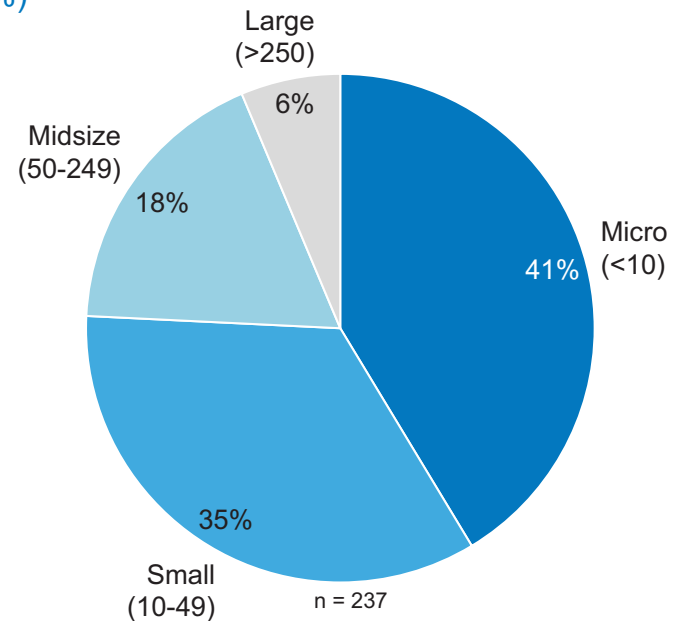
Companies by categorie¹⁾
(in %)



Comments

- The Swiss medtech industry is comprised of 1,350 companies:
 - Over 1/3 of the companies fall under the category of suppliers (480 companies) and over 25% are specialised service providers. These companies often work for other industries as well
 - Just under 300 companies (22%) are manufacturers

Company size by number of employees in Switzerland²⁾
(in %)



Comments

- The SMTI consists mainly of SMEs; 94% of companies have fewer than 250 employees, and 3 of 4 companies less than 50
- Micro enterprises (less than 10 employees) represent the largest group
- The 6% largest medtech companies are mainly manufacturers

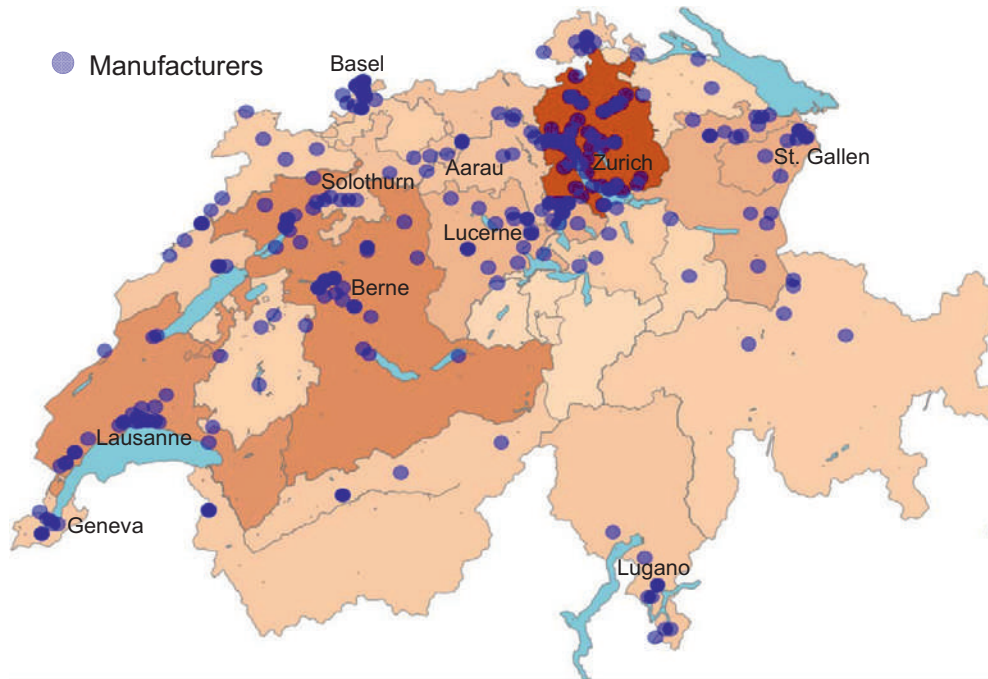
Note: The number of companies is different from previous years due to a stricter classification of medtech companies

Sources: 1) Medical Cluster database

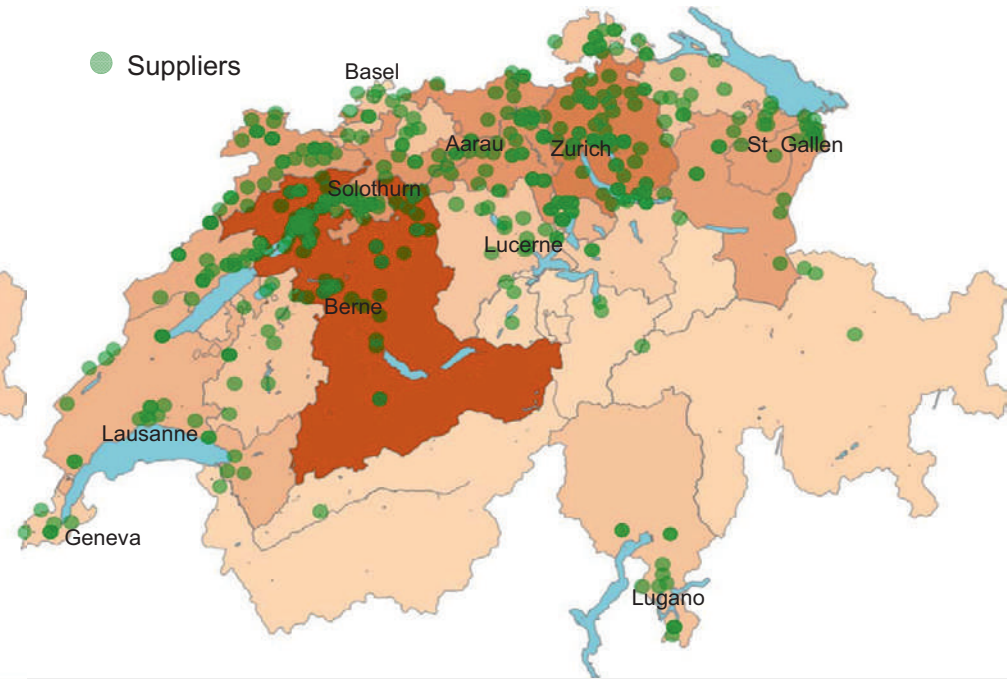
2) SMTI survey results 2016

Switzerland has a high density of medtech companies

Medtech manufacturers in Switzerland



Medtech suppliers in Switzerland



Comments

- The companies producing medtech products are located throughout Switzerland - even in the Alpine valleys
- The Jura Arc is home to a cluster of technology companies providing specialized supplier know-how
- The Geneva and Zurich regions benefit from two federal technical colleges - EPF Lausanne and ETH Zurich - which both focus strongly on medical technology and produce many start-ups
- Major manufacturers are located in all regions of the country

Note: The colour intensity is based on the number of companies per canton
Source: Medical Cluster databank

Many global players are active in Switzerland

Top 10 largest medtech employers in Switzerland by number of employees (2015 data)

No.	Company	Core activities in Switzerland	Headquarters	Employees in Switzerland	Growth in sales (in %)	R&D / sales (in %)
1	J&J Medical	Diabetes therapy, ENT diseases, cardiology, neurology, orthopaedics, trauma, wound treatment	USA	4,150	-8.7%	6.4%
2	Roche Diagnostics	In-vitro diagnostics	CH	2,370	0.4%	11.1%
3	Biotronik ¹⁾	Cardiology	GER	1,220	n.a.	n.a.
4	Sonova	Hearing aid systems	CH	1,200	5.8%	6.3%
5	Medtronic	Diabetes therapy, ENT diseases, cardiology, neurology, orthopaedics	IRL	1,150	7.0% ²⁾	7.2%
6	Zimmer Biomet	Dental care, orthopaedics, trauma	USA	1,100	28.3% ³⁾	4.5%
7	B. Braun	Wound treatment, consumables for hospitals	GER	993	11.4%	4.3%
8	Dentsply Sirona	Dental care	USA	840	-8.5%	2.8%
9	Ypsomed	Diabetes therapy, drug delivery systems	CH	807	9.9%	7.9%
10	Straumann	Dental care	CH	763	12.4%	5.0%
				Σ 14,593	Ø 6.5%	Ø 6.2%

1) Not a listed company; no further information available

2) Combined growth for both Medtronic and Covidien (takeover of Covidien)

3) Growth figure includes the acquisition of Biomet

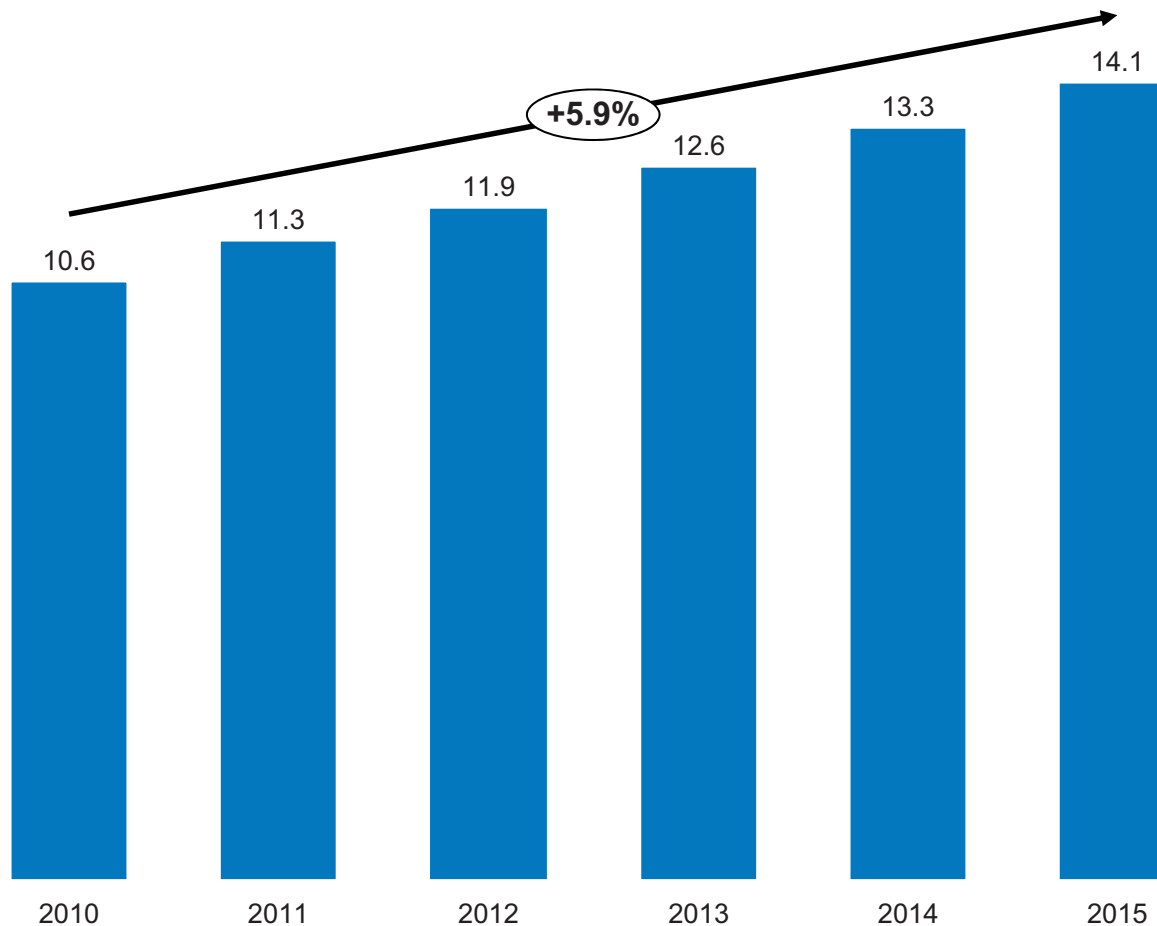
Note:

- Only the respective companies' medtech divisions were taken into consideration
- Exchange rates used: EUR / CHF 1.08261 (31/12/2015) USD / CHF 0.99081 (31/12/2015)
- Acquisitions and sales were not explicitly taken into account (except Medtronic)

Sources: Annual reports and information provided by the companies

SMTI has shown constant revenue growth over the years

Medtech sales performance (in billion CHF)



Comments

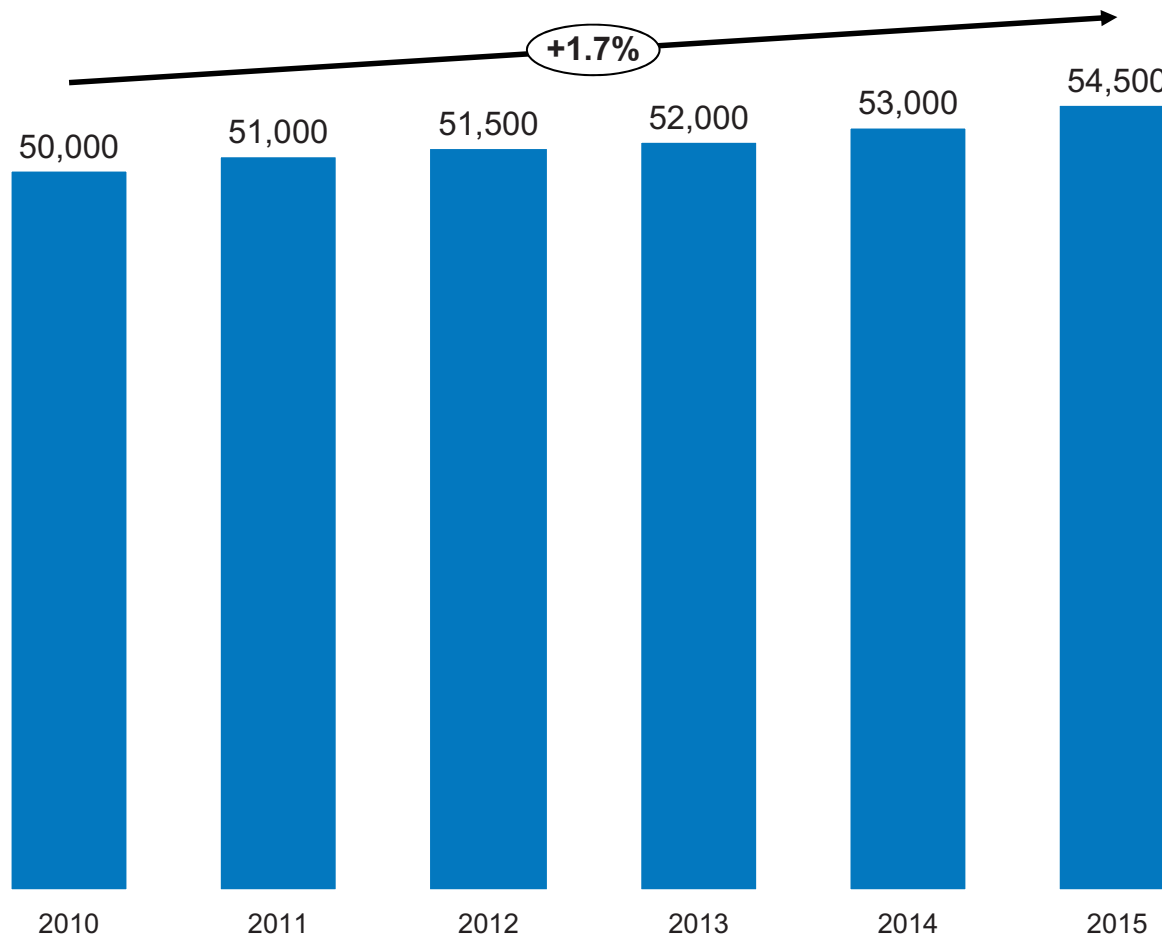
- In 2015 medtech industry stakeholders (manufacturers, suppliers, trade & distribution, and service) achieved an estimated turnover of CHF 14.1 billion
- This revenue represents approximately 2.2% of the entire Swiss GDP
- Sales increased by CHF 0.8 billion as compared to 2014
- Over the past six years the SMTI has shown a constant sales growth of around 6% per year
- The growth trend of recent years has continued
- Growth is well above the achieved GDP in recent years (1.1% in 2014 and -0.5% in 2015)

Note: The data was corrected retroactively due to a database cleaning and an adjustment in calculation method

Sources: Own analysis; SMTI survey results 2016; SMTI sector report; State Secretariat for Economic Affairs (SECO)

The SMTI is showing a stronger and renewed employee growth rate

Development of the number of medtech employees

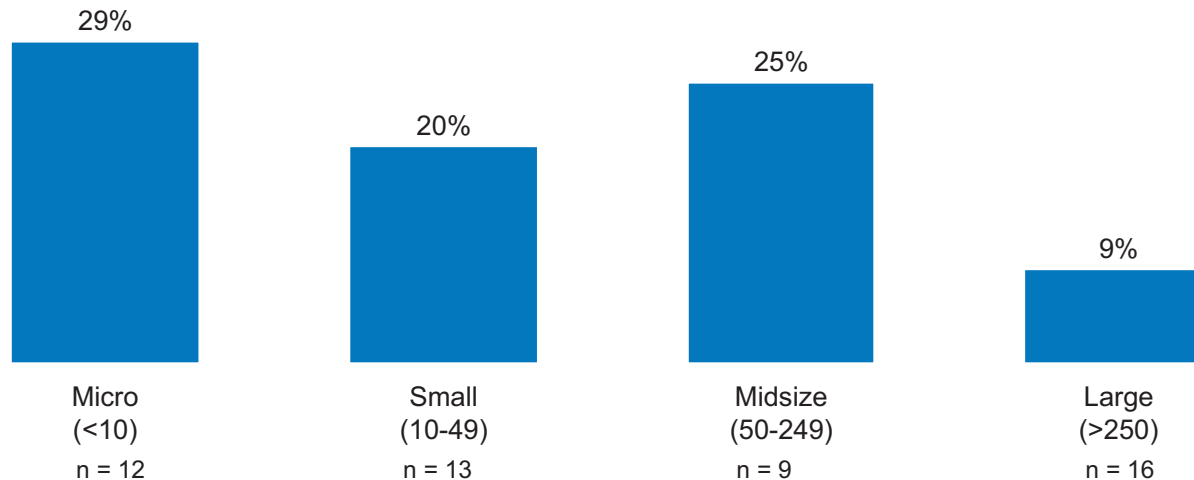


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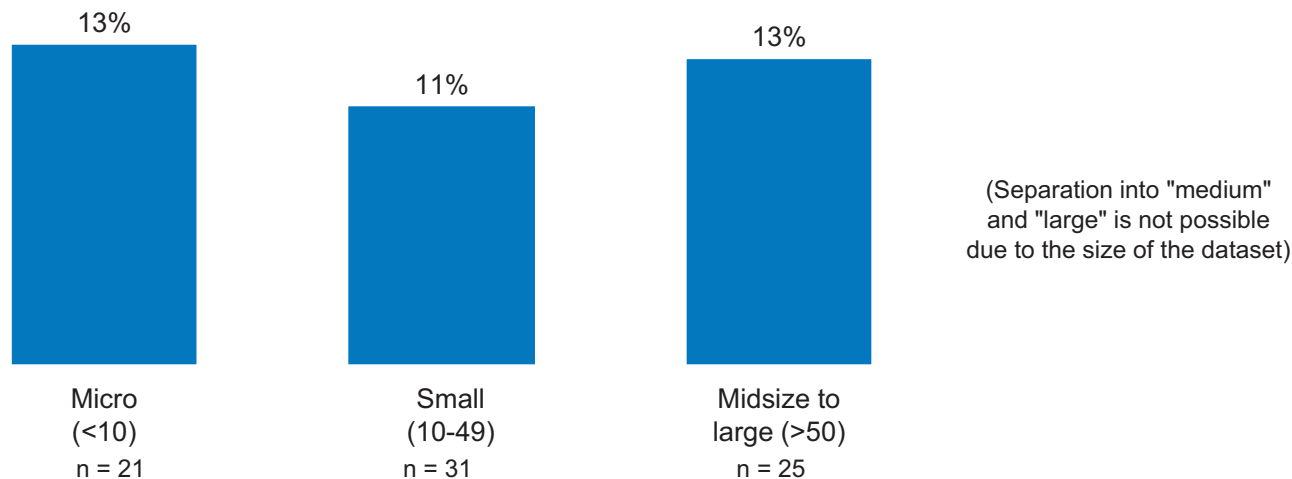
- 54,500 people worked in the medtech industry in 2015
- With an industry turnover of CHF 14.1 billion, that represents a labour productivity of CHF 260,000 per employee
- Since 2010, the number employed has risen on average by 1.7% per year, although growth over the years has fluctuated
- The number of people employed by the medtech industry has increased on average by 2.8% per year since 2014
 - This is an improvement compared to previous years
 - Furthermore, there are also signs that the crisis years have been overcome and we can now concentrate on expanding business again (ex. market development abroad)

Swiss medtech companies spend up to 30% of their revenues on R&D - with small producer companies investing proportionately the most

Expenditure on R&D from manufacturers' medtech revenue, according to corporate size (in %)



Expenditure on R&D from suppliers' medtech revenue, according to company size (in %)

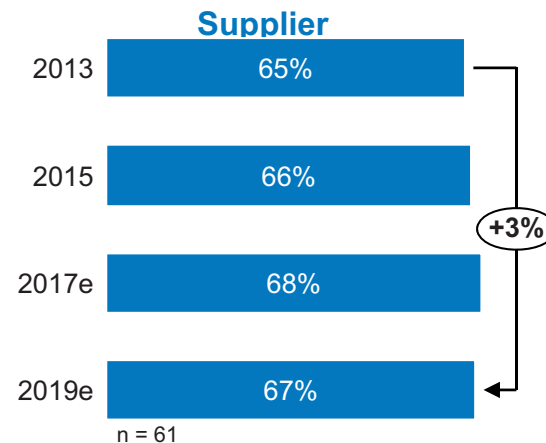
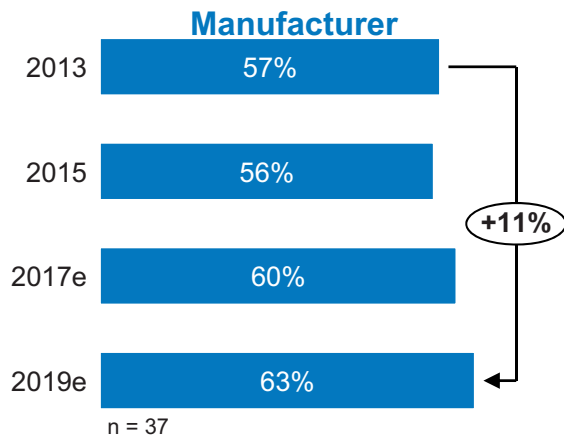


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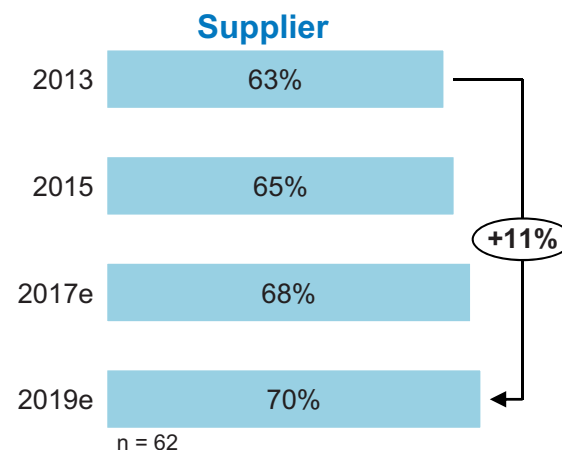
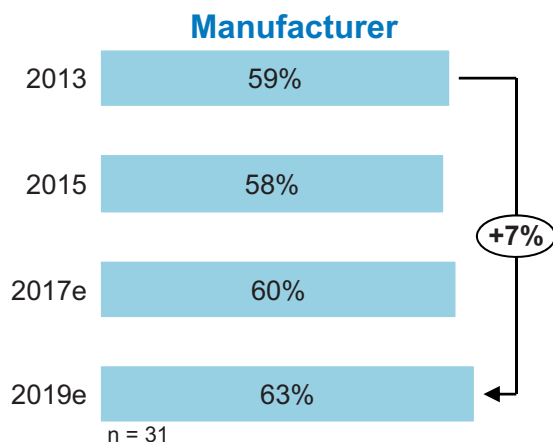
- As expected, medtech manufacturers spend a larger share of their income on research and development:
 - Manufacturers spend between 9% and 29% on R&D
 - Suppliers spend between 11% and 13% on R&D
- In both the manufacturers and suppliers groups, micro enterprises spend the largest share of their income on R&D
- R&D budgets are coming increasingly under pressure due to worsening general conditions or, in other words, are the victim of company cutbacks

Intermediate inputs and capital goods needed to manufacture products in Switzerland are purchased more and more often abroad

Total value of intermediate inputs purchased abroad (in %)



Total value of capital goods purchased abroad (in %)

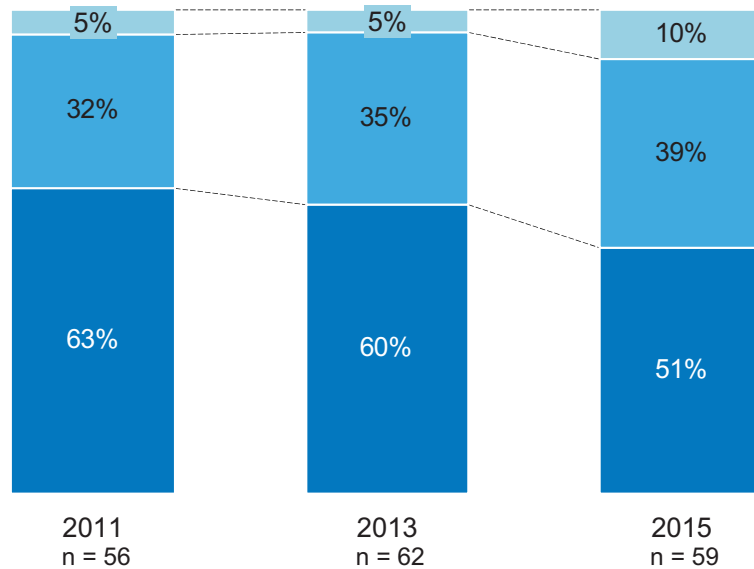


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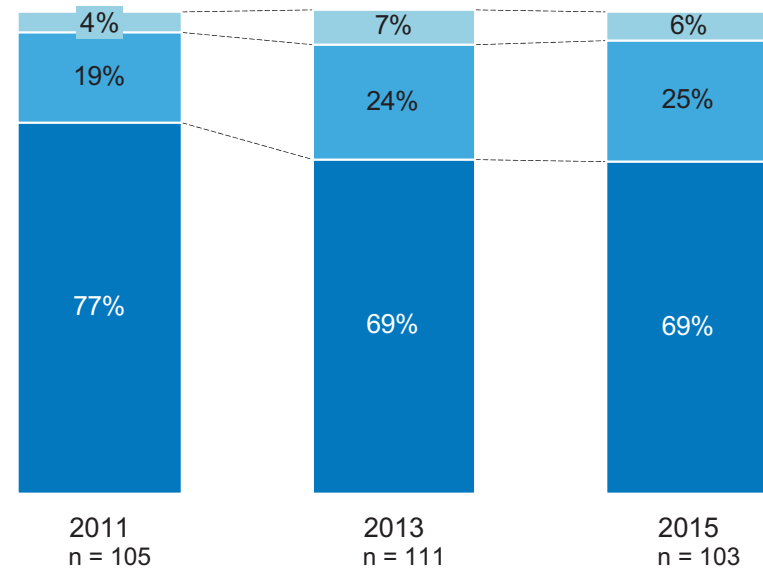
- Manufacturers purchase proportionately less intermediate inputs (components, raw materials, etc.) and capital goods (machinery, equipment, etc.) from abroad than suppliers
- Tougher competition is increasingly forcing Swiss medtech companies to purchase intermediate inputs and capital goods abroad
- It is expected that the proportion of the related foreign intermediate inputs and capital goods will continue to rise in the next few years

Medtech companies are producing more (also) abroad

Manufacturer production sites (in %)



Supplier production sites (in %)



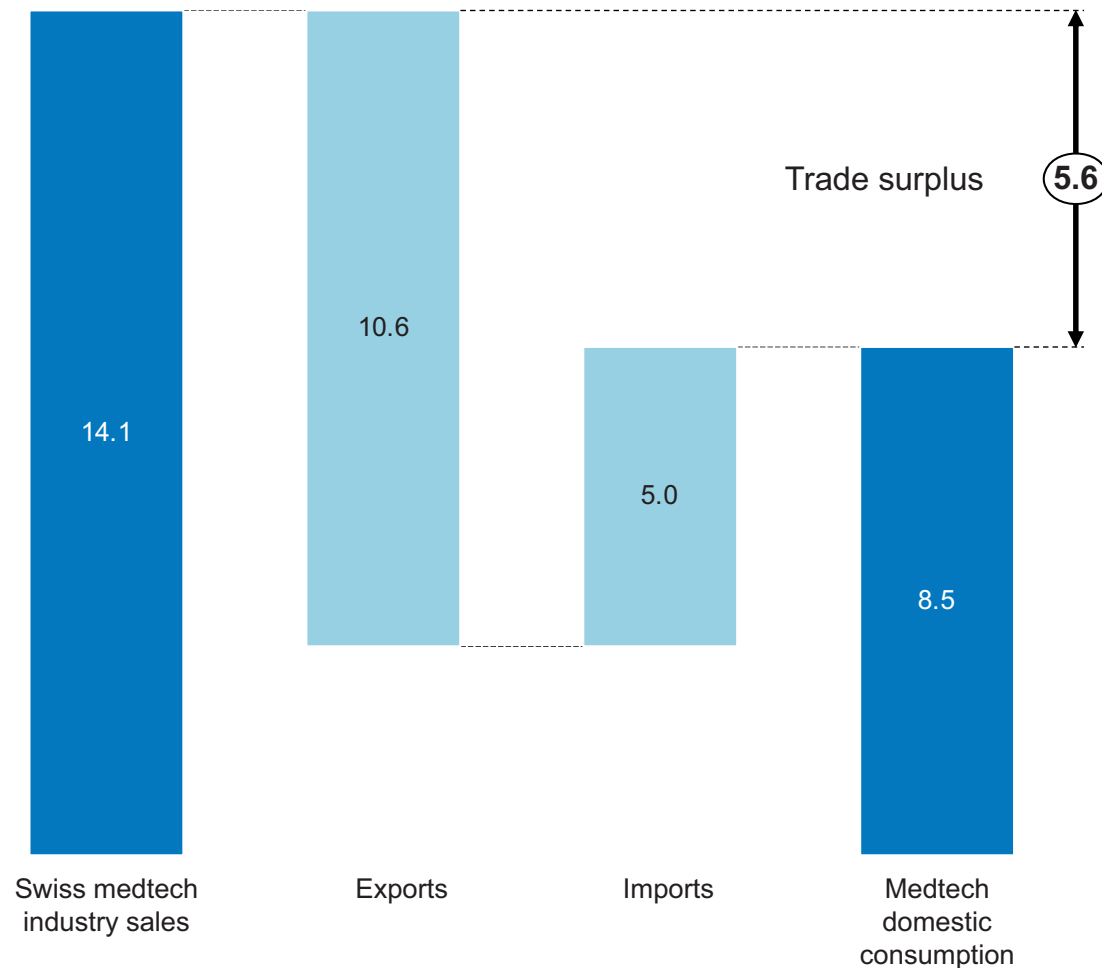
■ Production abroad only
 ■ Production in Switzerland and abroad
 ■ Production in Switzerland only

Comments

- In recent years, medtech manufacturers have increasingly added production capacity abroad; in 2015 nearly half of the manufacturers produced (also) abroad
- This trend can also be seen to a lesser extent with suppliers because their proximity to manufacturers in Switzerland is extremely important
- Despite tougher market conditions (ex. the strong Swiss franc), the majority of manufacturers and suppliers continued to produce exclusively in Switzerland.

The Swiss medtech industry generated a trade surplus of CHF 5.6 billion in 2015

SMTI trade indicators 2015 (in billion CHF)



Comments

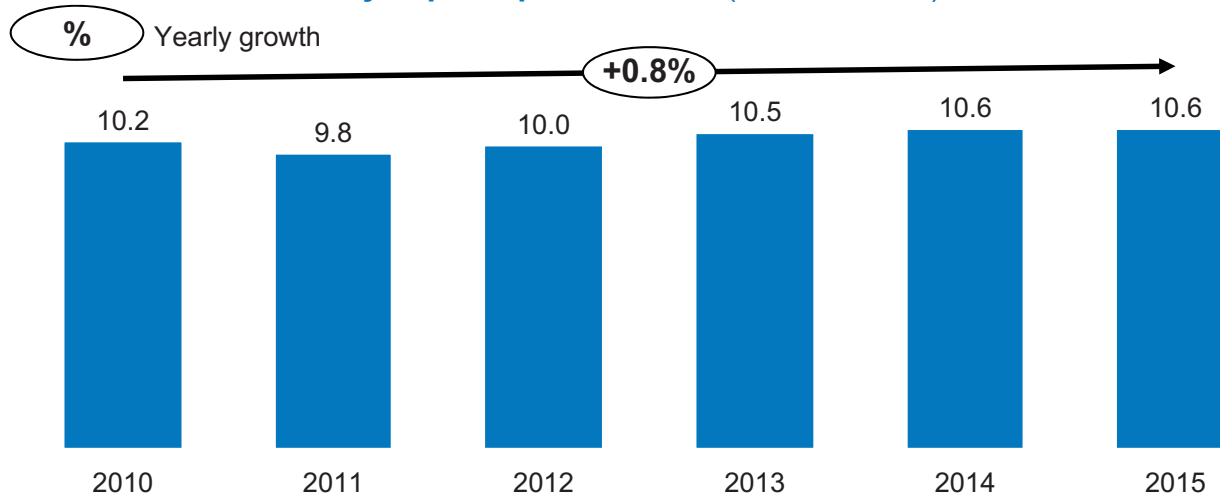
- Switzerland had a trade surplus of CHF 5.6 billion for the medtech industry in 2015
- The medtech trade surplus in finished products represents 16% of the total Swiss trade surplus (CHF 35.4 billion, 2015)
- Export and import figures changed little compared to previous years
- In contrast, both medtech industry revenues and domestic consumption rose
- The resulting domestic consumption of medtech products amounted to CHF 8.5 billion; which represents 12% of annual health care expenditure (CHF 71.2 billion in 2014)

Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

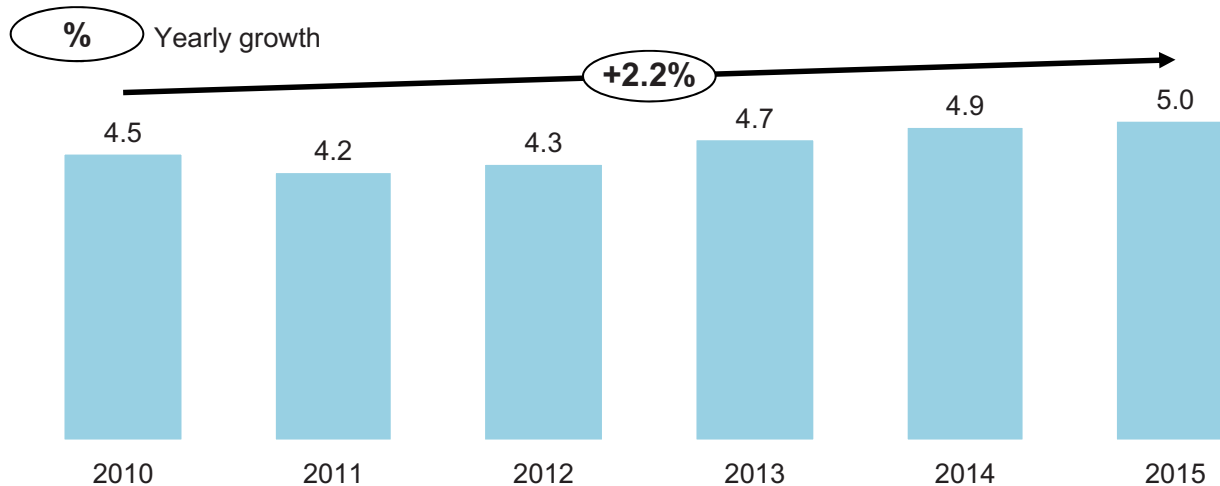
Sources: Swiss Federal Customs (FCA); Swiss Federal Statistical Office (FSO); own analysis

Medtech exports remained steady in recent years at around CHF 10 billion - imports have increased

Swiss medtech industry exports performance (in billion CHF)



Swiss medtech industry imports performance (in billion CHF)



Comments

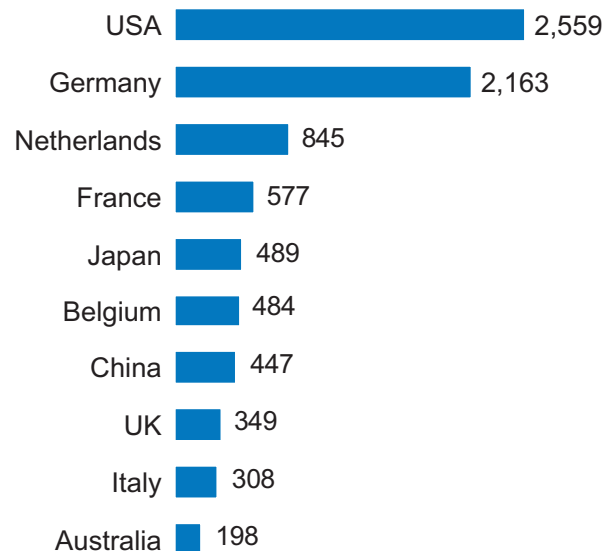
- Since 2010, medtech product exports have averaged around CHF 10 billion per year, and amounted to CHF 10.6 billion in 2015
- Imports have shown a growth rate of 2.2% per year since 2010
 - Imports have especially increased in the last three years due to the weak euro, among other things
 - This trend will most likely continue for the next few years
- It should be noted that the EUR / CHF rate has weakened (about -25% since 2010), thereby reducing the value of exports. Without this effect, the value of exported goods would have been higher

Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA)

The US and Germany remain the most important medtech trade partners for Switzerland

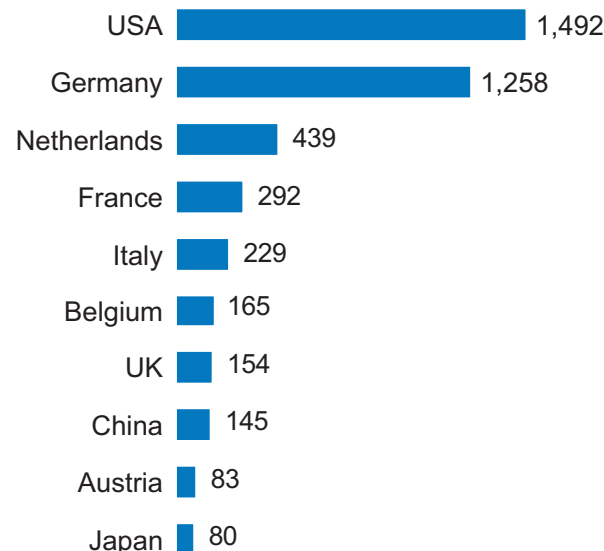
Top export destinations (in million CHF)



Comments

- 45% of all exports go to the top export destinations of USA and Germany
- Exports to Japan have increased significantly (+ 33% since 2013))
- 80% of all Swiss medtech exports go to the top ten destinations

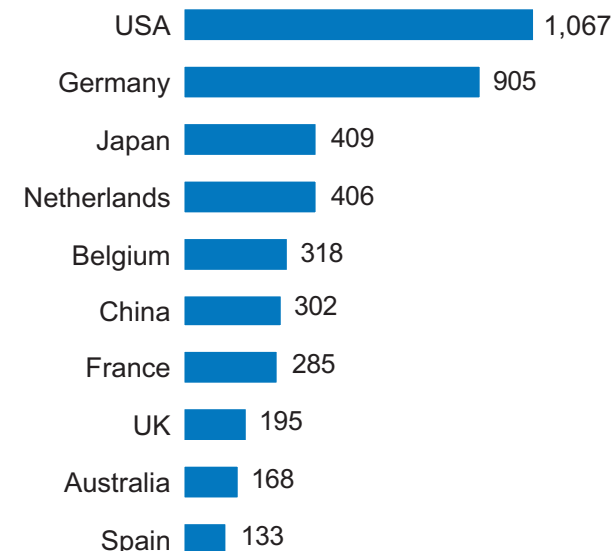
Top import source countries (in million CHF)



Comments

- The most important import source countries are the US and Germany
- 85% of all imports come from the top ten source countries

Swiss trade surplus (in million CHF)



Comments

- Switzerland produces a high trade surplus of CHF 4 billion with its top trading partners
- Japan comes in third place after the US and Germany, thanks to the rapidly rising exports and stable import figures

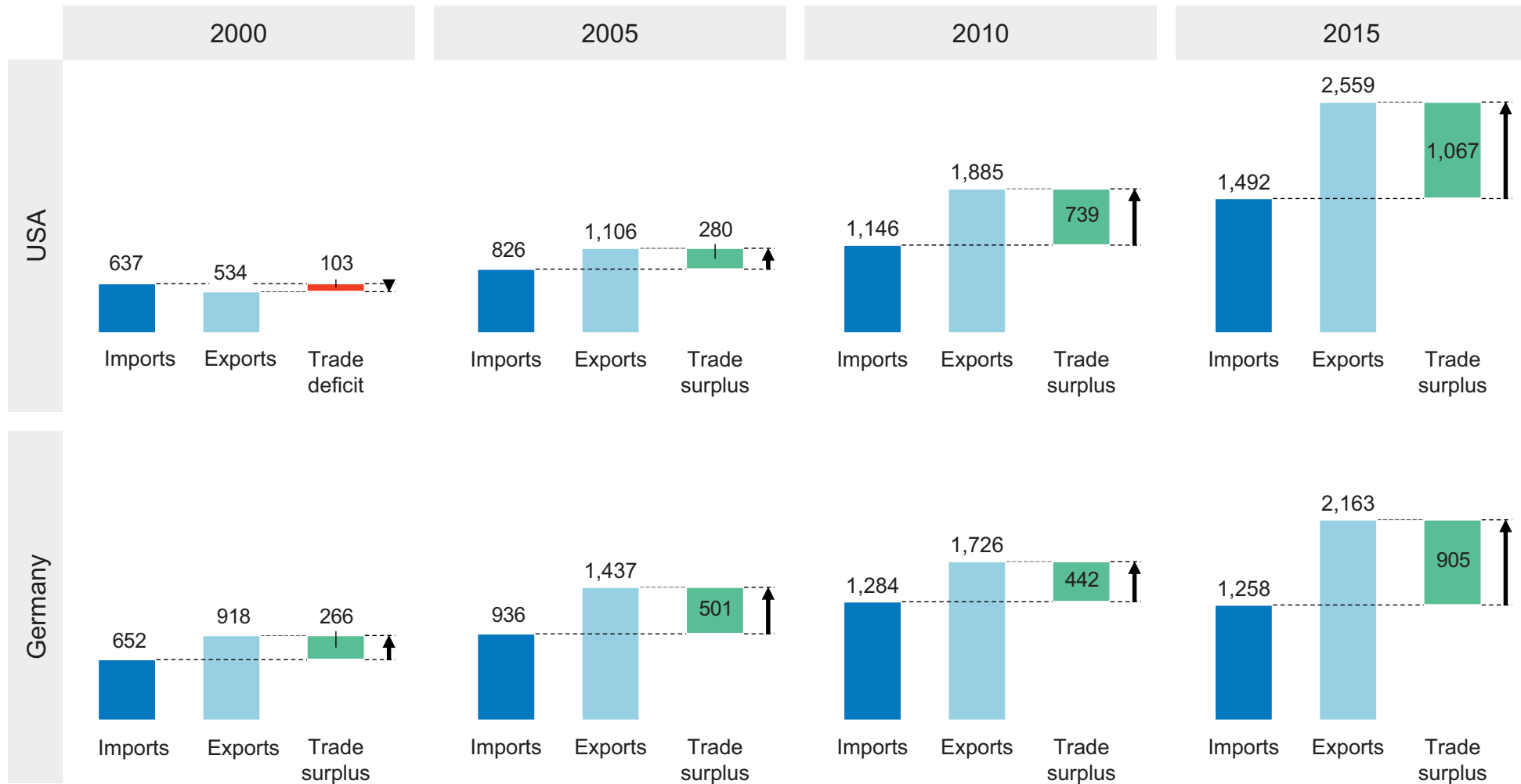
Notes:

- The European central warehouses of several global players are located in the Netherlands, Belgium and Germany
- The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA), 2015

The trade surplus with the USA and Germany also increased in 2015

Key data for the USA and Germany – from the Swiss perspective (in million CHF)



Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA)

Exports to France, Italy and Spain have been declining since 2010

Key data for France, Italy, and Spain – from the Swiss perspective (in million CHF)

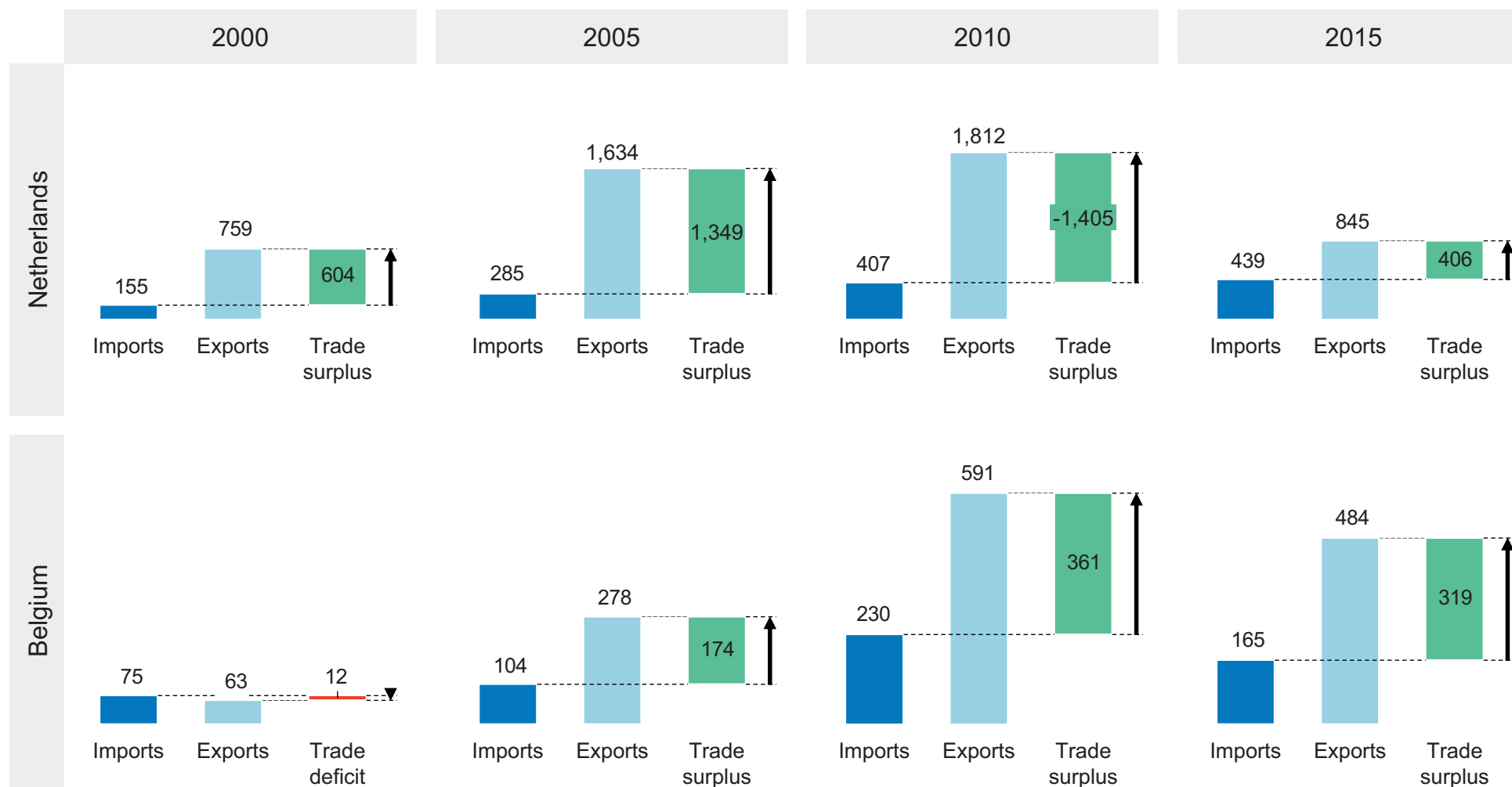


Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA)

Exports to the Netherlands and Belgium have declined significantly since 2010

Key data for the Netherlands and Belgium – from the Swiss perspective (in million CHF)



Notes:

- Central European warehouses in the Netherlands have become less important for some global players
- The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA)

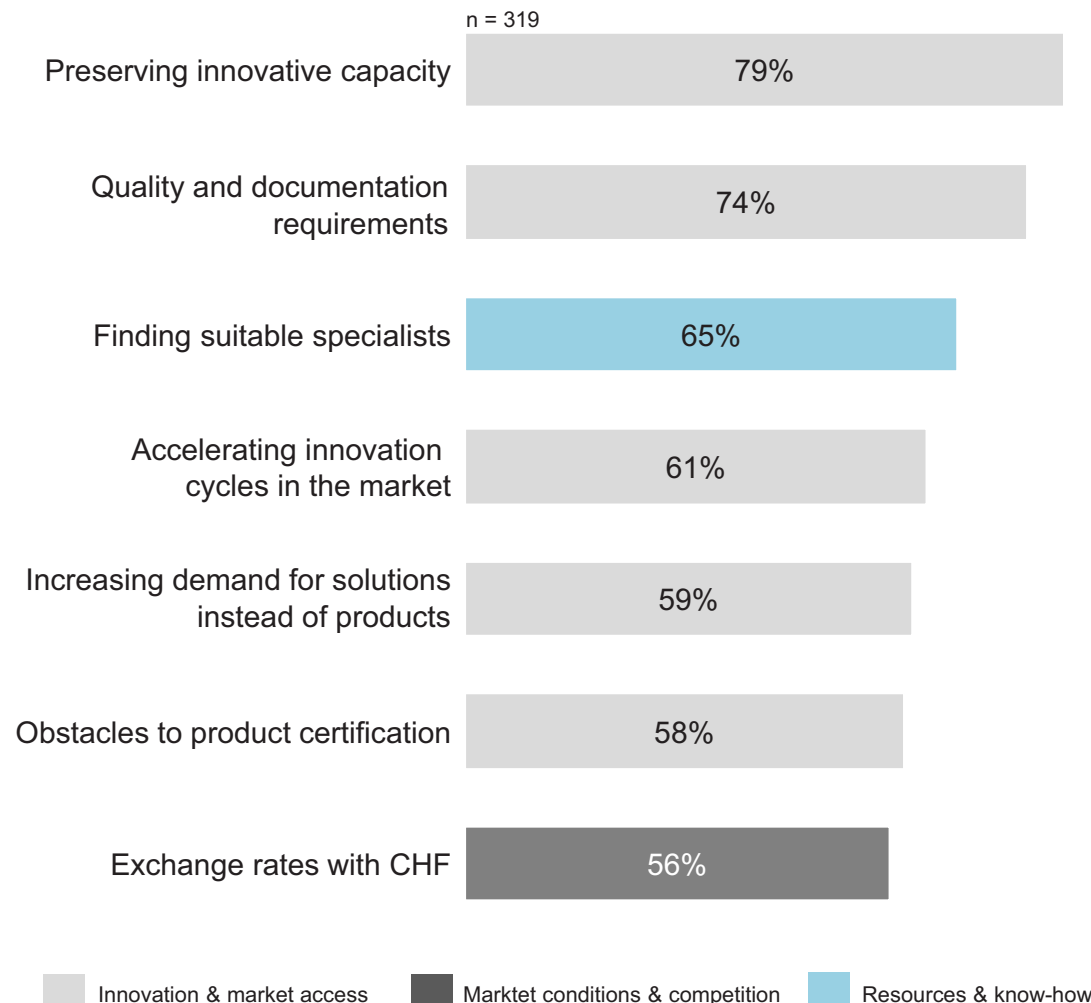


Challenges

- Top 7 challenges for medtech companies
- Selected focus topics: innovation, specialists, market entry, exchange rates and digitalisation

Increasingly difficult conditions demand that Swiss medtech companies preserve their high capacity for innovation

Top 7 challenges for medtech companies (in % of all responses; all categories)

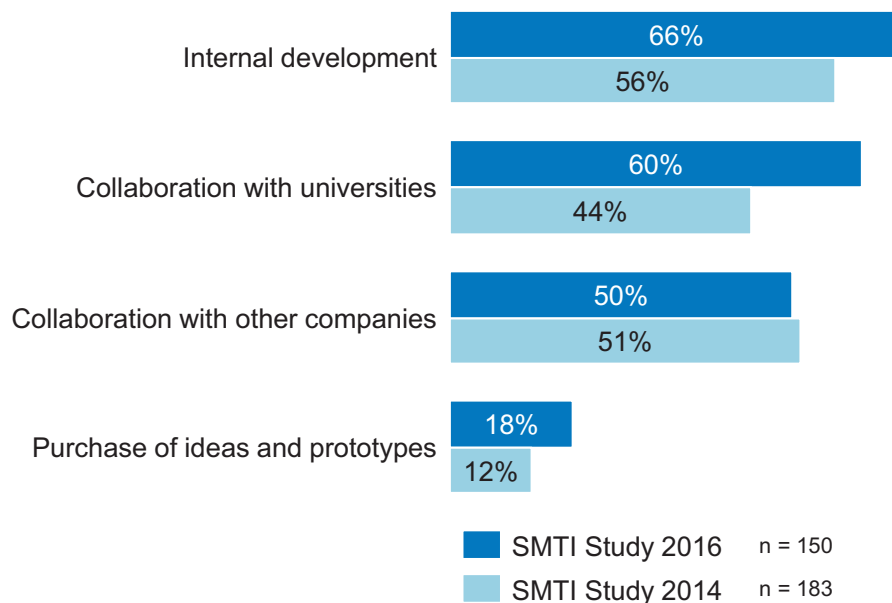


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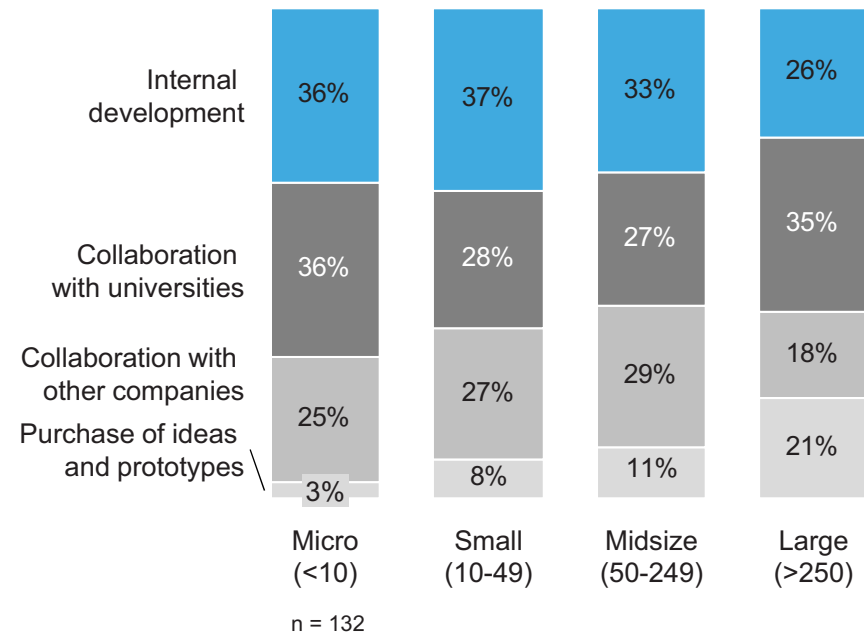
- The biggest challenges are mainly related to innovation and market access:
 - These challenges can be, amongst other things, caused by the pressure of rising costs
 - This forces medtech companies to increasingly set themselves apart through innovation
 - In addition, medtech companies are struggling with ever-increasing quality and documentation requirements
- Finding qualified medtech specialists is becoming more difficult for the companies
- The unfavorable exchange rate continues to be a source of concern
- Selected challenges will be considered in detail in the following pages

Focus innovation: companies are applying various sources of innovation in order to preserve innovative capacity

Source of innovation for new products / product lines¹⁾
(in % of all companies; manufacturers and suppliers)



Source of innovation by company size²⁾
(in % all responses; manufacturers and suppliers)



Comments

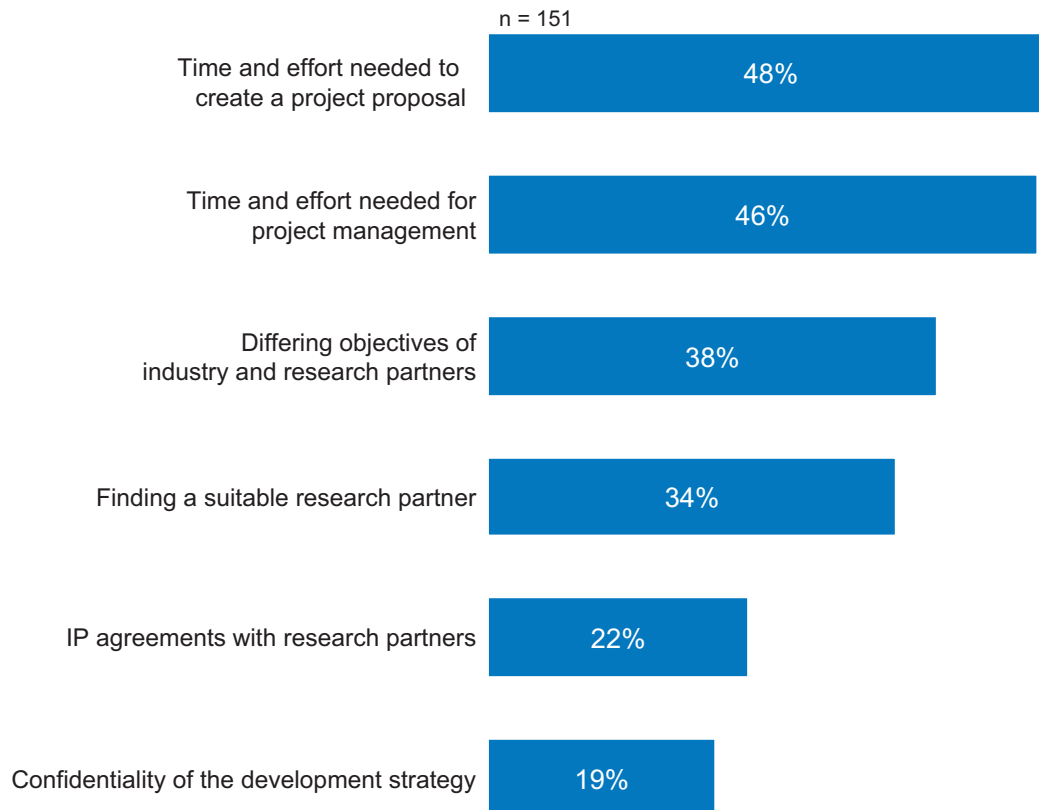
- Companies now cite internal development and cooperation with universities as the most important sources of innovation
- Large companies occasionally supplement internal development through the purchase of ideas, prototypes, and finished products
- Many innovations are now created in partnerships - increasingly with universities, and to a lesser extent with other companies as compared to 2014
- Some companies listed users or customers as other sources of innovation

Sources: 1) SMTI survey results 2016; SMTI sector report

2) SMTI survey results 2016

Focus innovation: Various difficulties arise in publicly funded projects with research partners

Obstacles to publicly funded projects with research partners (in % of all responses; manufacturers and suppliers)

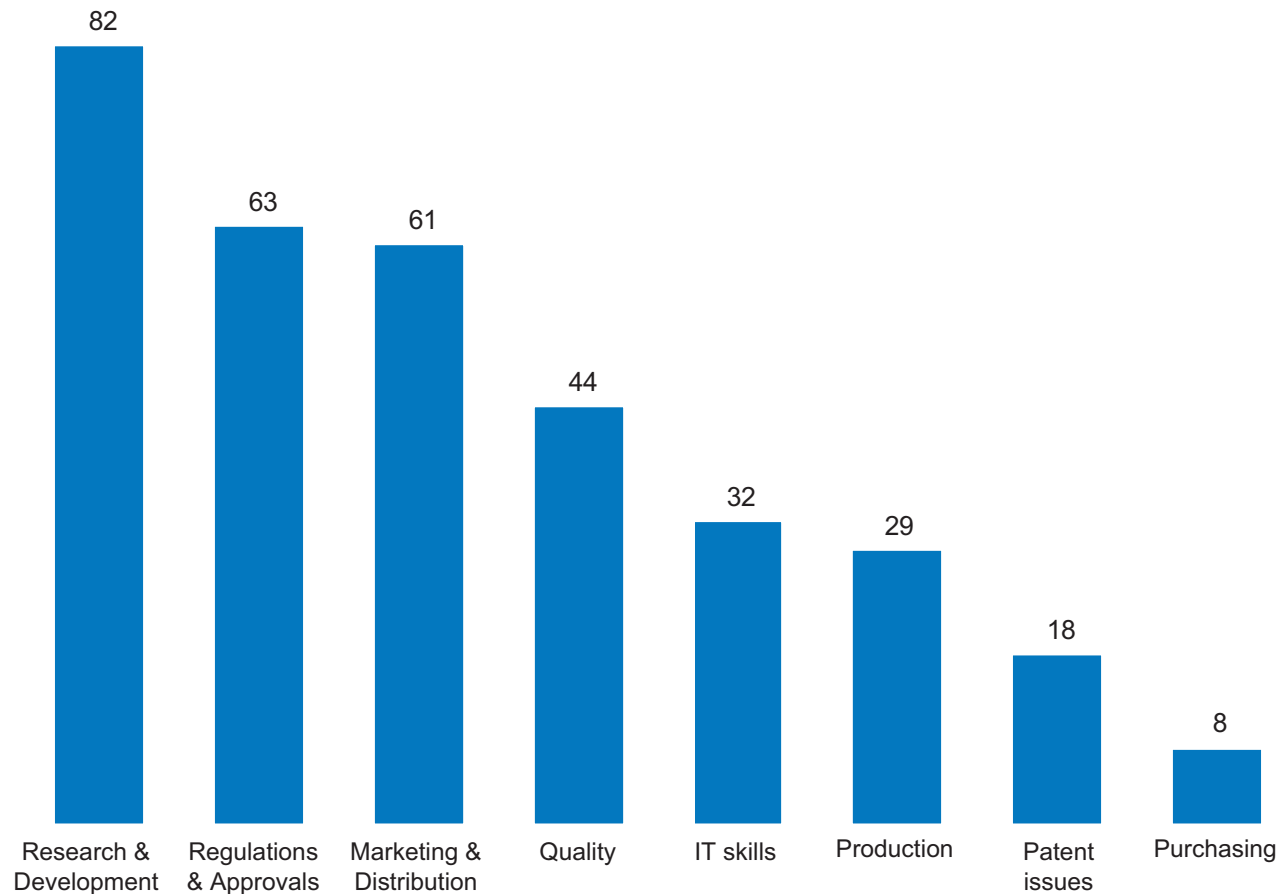


Comments

- For medtech companies, the effort associated with an application is the main obstacle for the implementation of a publicly funded project with a research partner. The requirements difficult to fulfill, especially for SMEs and start-ups
- Finding a suitable research partner as well as differing objectives was perceived as a problem by a third of the companies
- Some companies criticized that the CTI (Commission for Technology and Innovation) focuses more on supporting research partners than on industry interests
- Some companies find it unfortunate that the CTI does not provide more support for innovation outside the R&D process (ex. for market entry)

Focus professionals: Difficulties in recruiting exist primarily for medtech-specific functions

Great to very great difficulties with recruiting
(# of responses; manufacturers and suppliers)



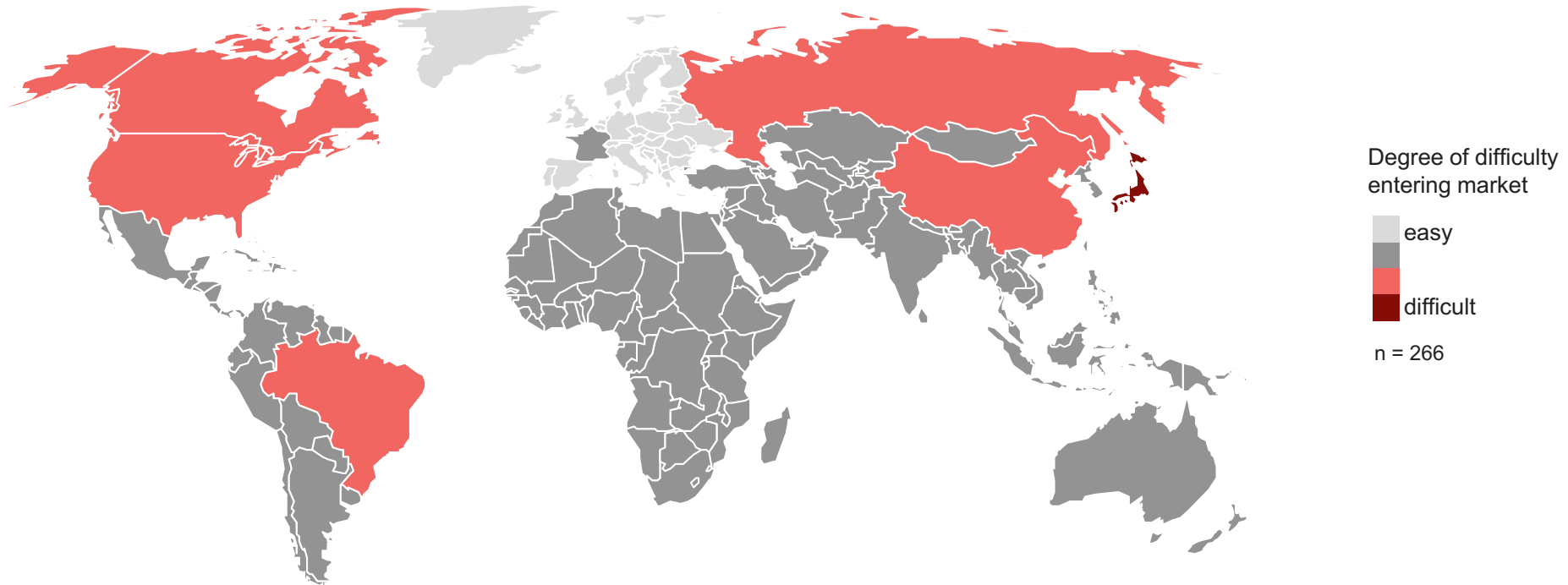
n = 155

Comments

- The medtech industry has hired 1,500 new employees since 2014. The companies surveyed have added personnel intensively in the areas of Regulation & Approvals, and Quality. Finding suitable personnel was rated more (or less) problematic depending on the department:
 - Most companies find it difficult recruiting medtech specialists for Research and Development and Regulatory Approvals
 - Recruitment of qualified professionals in the fields of Marketing and Sales, and Quality is also seen as challenging
 - In the other non- medtech specific areas, finding suitable personnel is considered less problematic

Focus obstacles to product certification: Companies have observed specific market access challenges for Japan, USA / Canada, Brazil, China and Russia

Difficulties with market entry (from the perspective of companies experienced in entering the relevant markets)



Comments

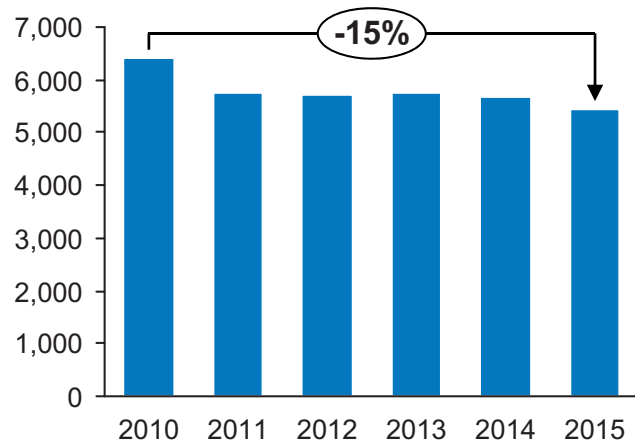
- The growing obstacles related to product certification present a major challenge for Swiss medtech companies. Country-specific requirements for the heavily export-oriented industry play a significant role
- Market entry for new products is considered difficult in the USA, Canada, Brazil, Russia and China; and very difficult in the rapidly growing Japanese market. This is, among other things, due to high import duties and approval obstacles
- In contrast, launching a new product in the European markets is reported to be relatively easy

Note: New analysis method compared to SMTI study 2014

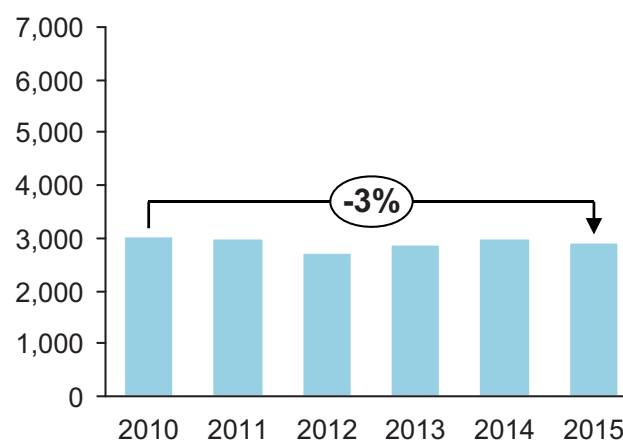
Source: SMTI survey results 2016

Exploratory exchange rate: The negative exchange rate developments in the euro zone negatively affects exports

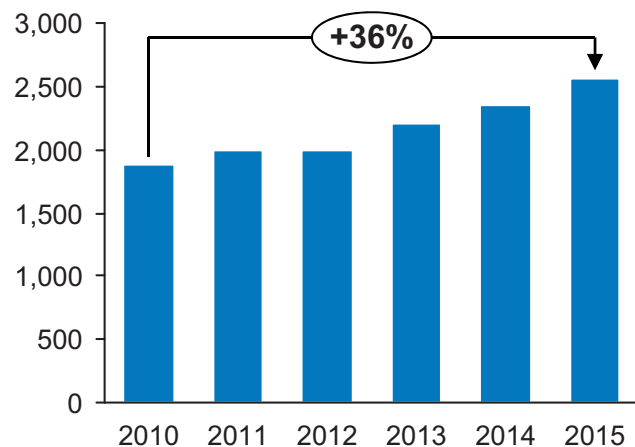
Exports to the EU (in million CHF)



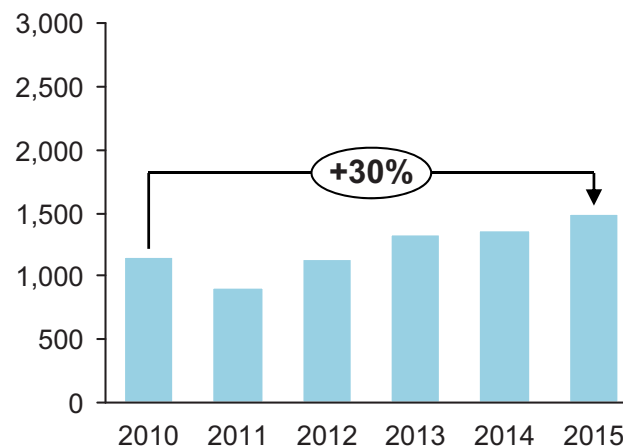
Imports from the EU (in million CHF)



Exports to the USA (in million CHF)



Imports from the USA (in million CHF)



Comments

EU

- Exports to the EU have declined in value by approx. 15% since 2010
 - The negative exchange rate EUR / CHF development (approx. -25% since 2010) has decreased the value of exports to EU countries
 - The decrease was particularly noticeable in the crisis-stricken countries of France, Italy, and Spain
 - A decline also occurred in the Netherlands and Belgium; this is, among other things, due to the reduced importance of central warehouses

- In terms of imports, companies benefitted from lower prices due to the weak euro

USA

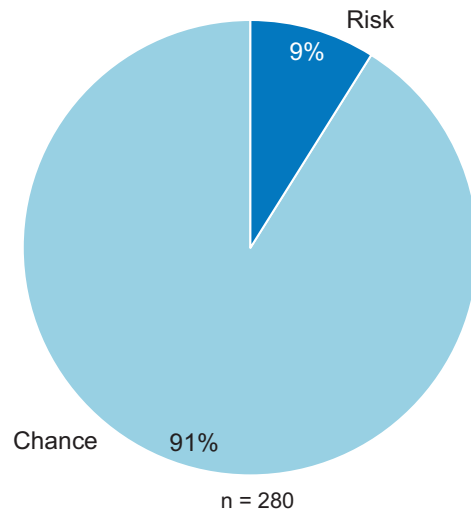
- The USD / CHF exchange rate has remained constant over the years; the trade relationship with the US has continued to grow

Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

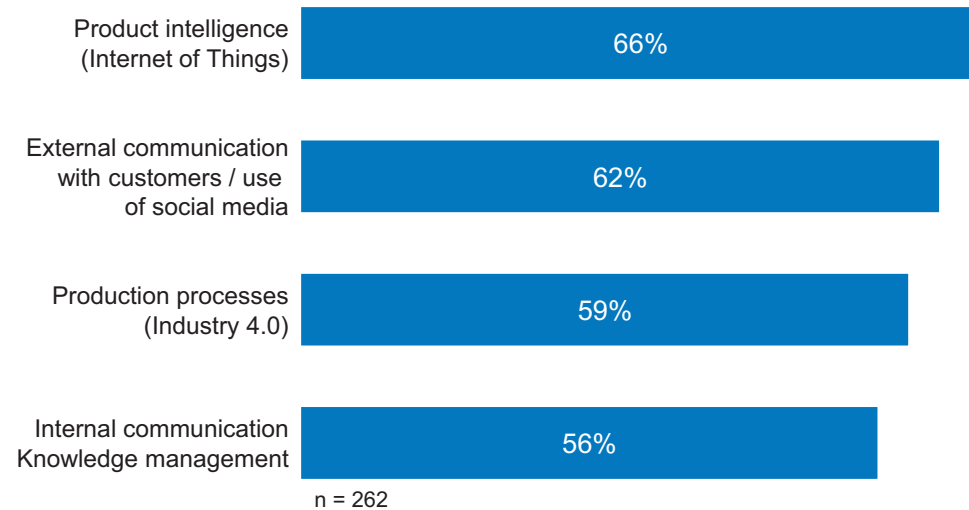
Source: Swiss Federal Customs (FCA), www.oanda.com

Digitalisation as an opportunity for the Swiss medtech industry

Digitalisation as chance or risk? (in % of all responses; all categories)



Areas affected by digitalisation (in % of all responses; all categories)



Comments

- 9 out of 10 medtech companies view digitalisation as an opportunity. In particular, companies see the benefits for product innovation (ex. Product Intelligence), for external communication with customers, and social media
- The companies surveyed also expect that production processes, internal communication processes and knowledge management can become more efficient through digitalisation
- Almost half of all companies surveyed assume that digitalisation will influence today's business models strongly, or even very strongly
- Presently, only a minority are intensively involved with e-health and / or m-health

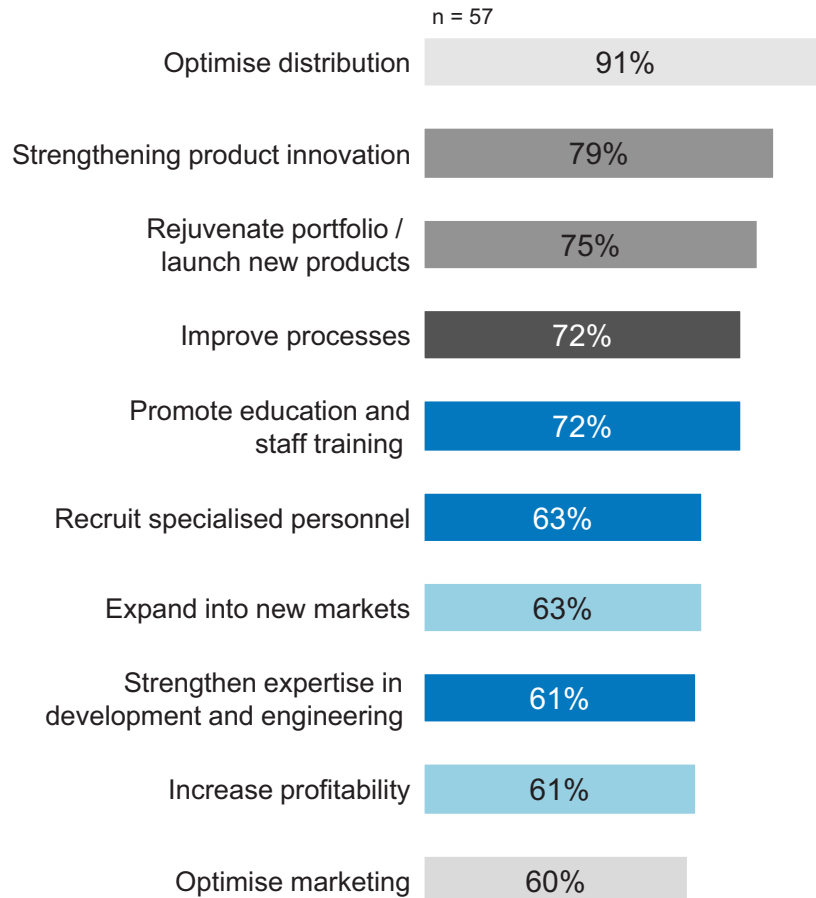


Future orientation of SMTI

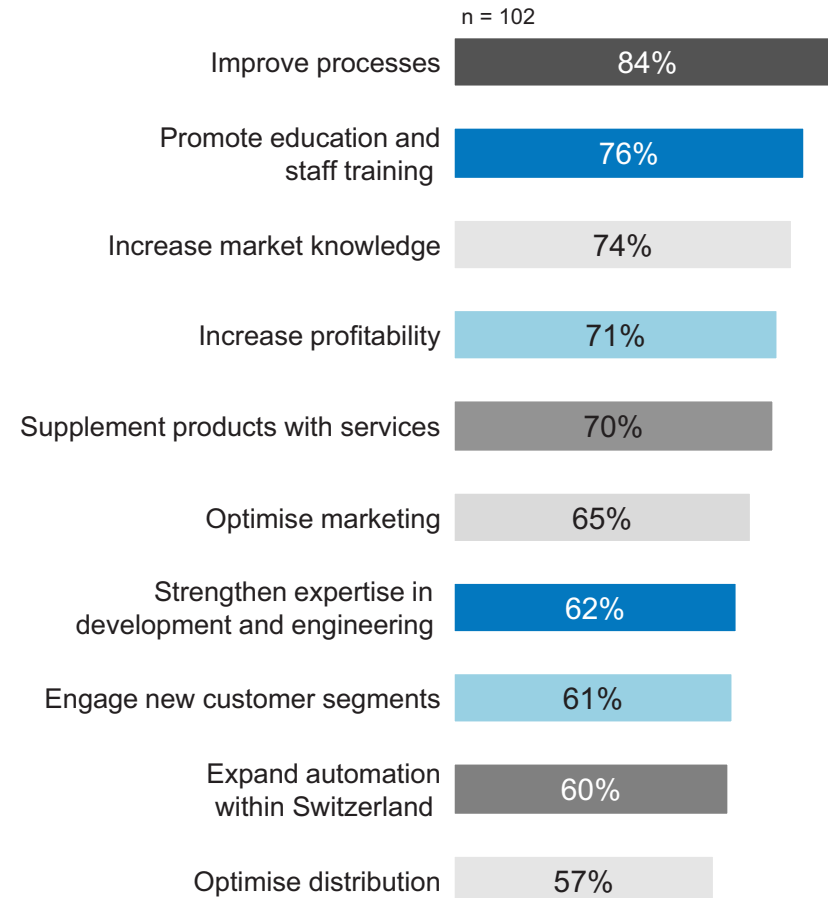
- Top 10 action points for manufacturers and suppliers
- Investments and investment focus
- Expectations for growth

Over 90% of manufacturers set their priority for action on the optimisation of sales, while suppliers focus on process improvement

Top 10 key action points for manufacturers (in% of all responses)



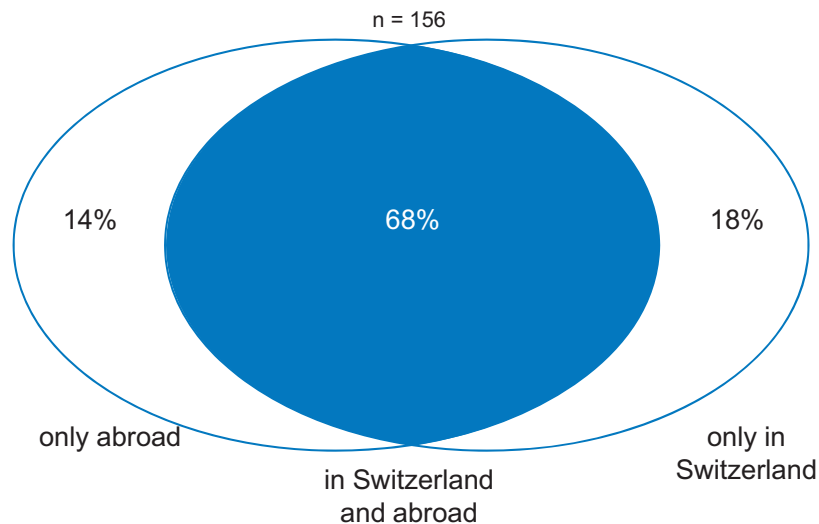
Top 10 key action points for suppliers (in% of all responses)



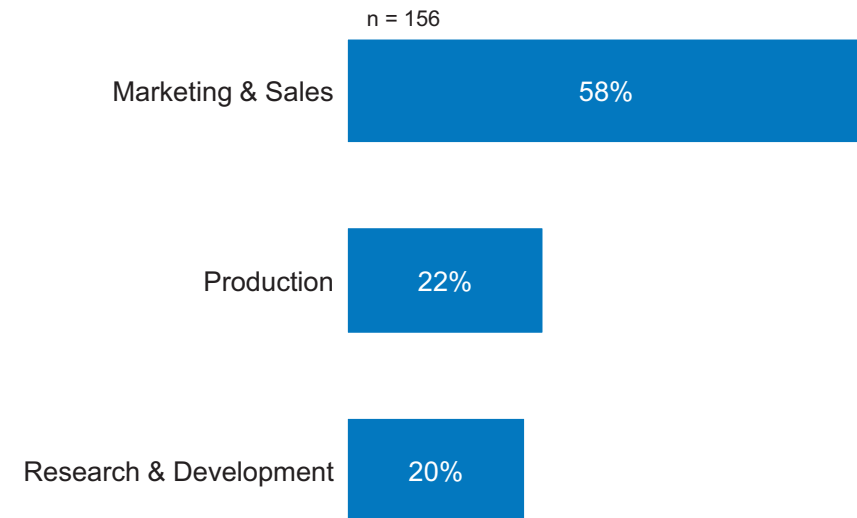
Marketing & Distribution Development & Product management Production & Purchasing Personnel Strategy

A multitude of companies invest in Switzerland, as well as abroad - with most investments planned for marketing and sales

Planned investments in Switzerland and abroad (in %; manufacturers and suppliers)



Planned investments according to area (in % of all responses; manufacturers and suppliers)



Comments

- Almost all companies are planning investments in the near future
- The majority of companies are planning investments both in Switzerland, and abroad
- 18% of surveyed companies only invest in Switzerland, while 14% of firms only invest abroad

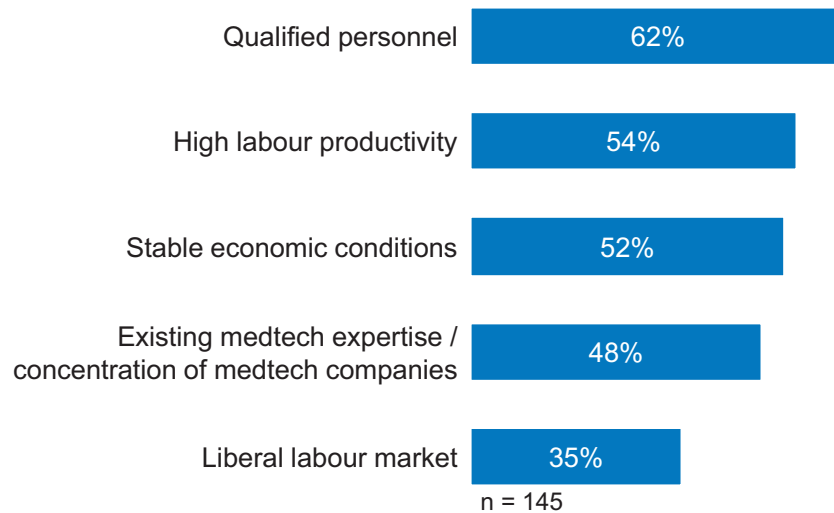
Comments

- 58% of investments are reserved for marketing and sales. Compared to other areas, these investments will be increasingly made abroad
- Production and Research & Development receive 1/5 each of total investments made

Swiss medtech companies plan investments for Switzerland and abroad for many diverse reasons

Top 5 reasons to invest within Switzerland

(in % of all responses; manufacturers and suppliers)

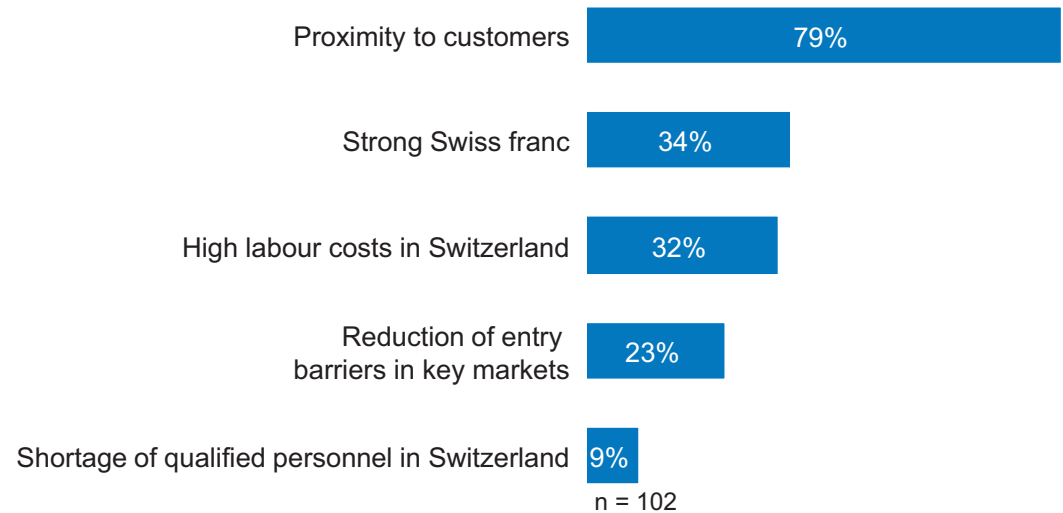


Comments

- 86% of the surveyed manufacturers and suppliers are planning to invest within Switzerland
- The advantages of Switzerland as a location are, among others, listed as the qualified personnel and labour productivity, the stable economic environment, and the available medtech expertise
- Investment in Switzerland are being undertaken, among other reasons, because of the existing sites and facilities

Top 5 reasons for investing abroad

(in % of all responses; manufacturers and suppliers)



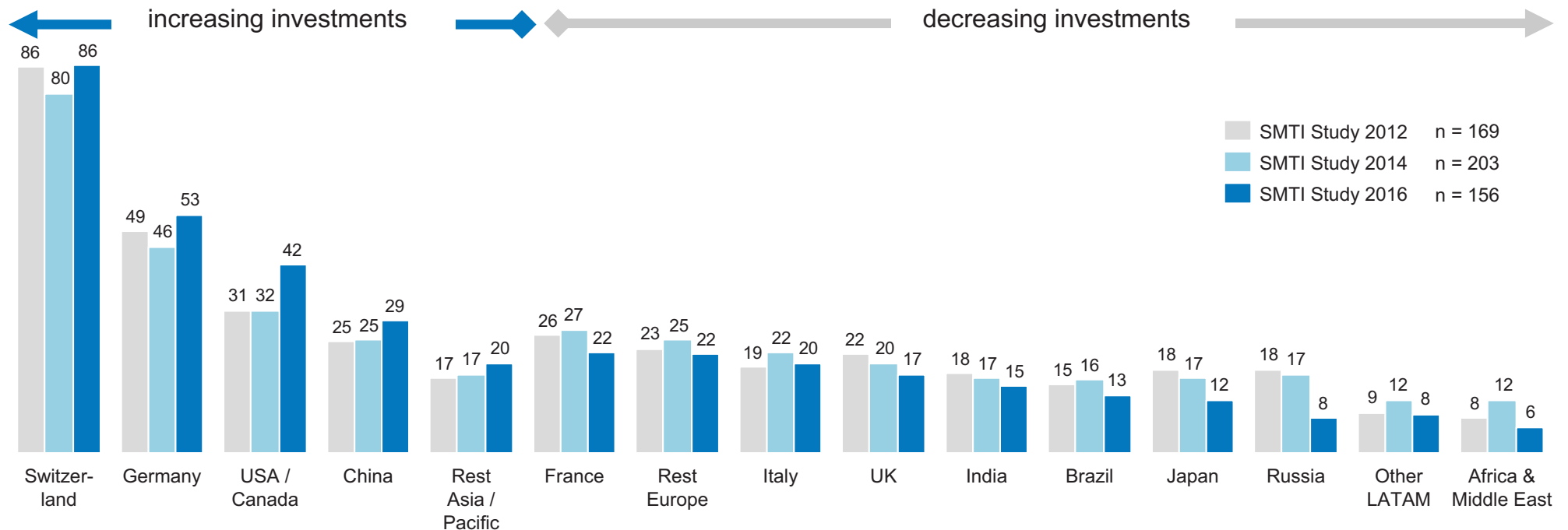
Comments

- 82% of the surveyed manufacturers and suppliers are planning to invest abroad
- A key reason for investing abroad is the proximity to customers
- More drivers for investment are cost factors such as the strength of the Swiss franc or the high cost of labour in Switzerland

The neighbouring medtech location of Germany ranks first for investments abroad

Percentage of manufacturers and suppliers who are planning to invest - or have already invested - abroad

(in %; manufacturers and suppliers)



Comments

- As already the case in 2014 and 2012, Germany and USA / Canada remain the main target markets for investment by Swiss medtech manufacturers and suppliers - and the trend is increasing
- With the exception of India and Japan, investments in Asian markets such as China and Asia / Pacific continue to increase - among other reasons - to ensure proximity to the market abroad, reduction of entry barriers, and the relocation of production
- Investments in Russia are declining especially sharply - among other reasons - due to Russian import restrictions

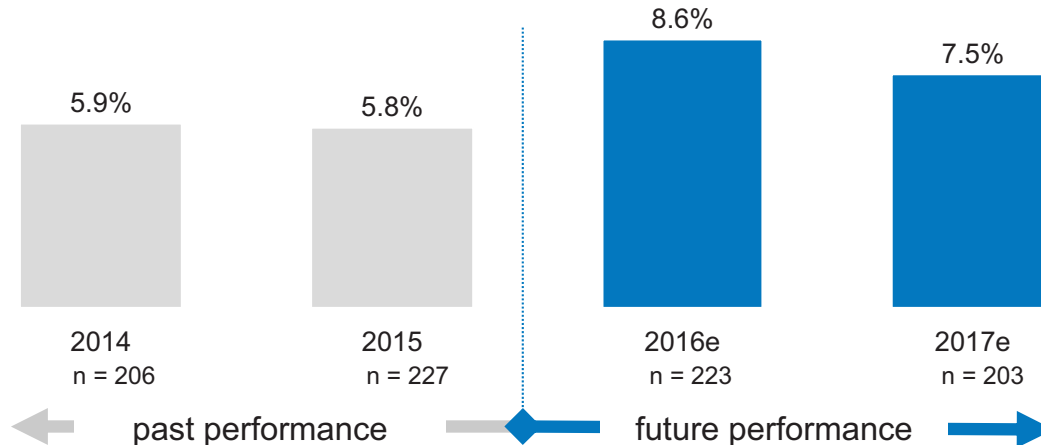
Note: New calculation method compared to SMTI Study 2014

Source: SMTI survey results 2016; SMTI industry reports

Swiss medtech companies expect a 8.6% growth in sales for 2016

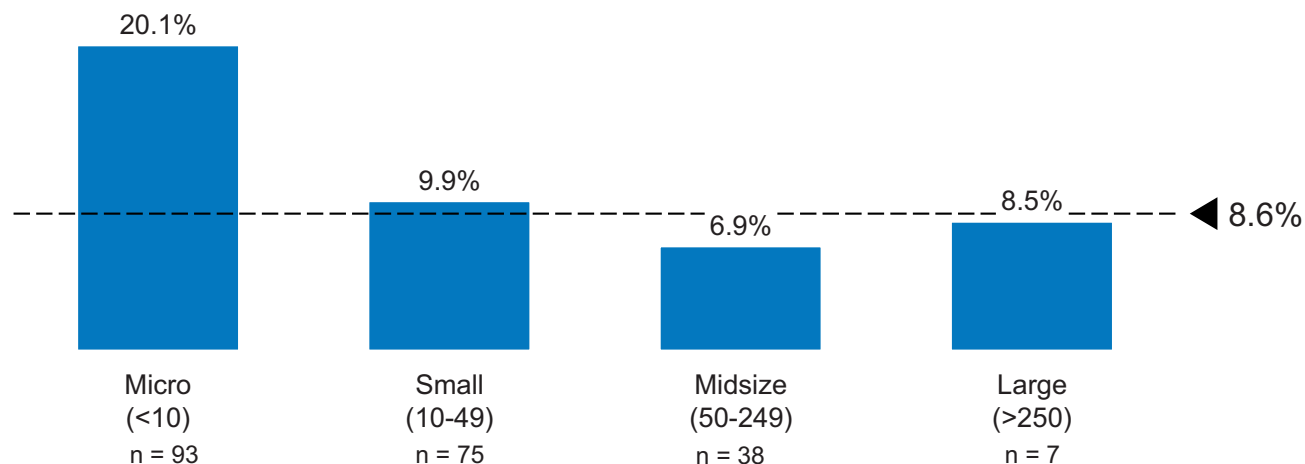
Ø Growth in sales

(in %, weighted by number of employees in Switzerland; all categories)



Ø Expected sales growth in 2016 according to company size

(in %, weighted by number of employees in Switzerland; all categories)

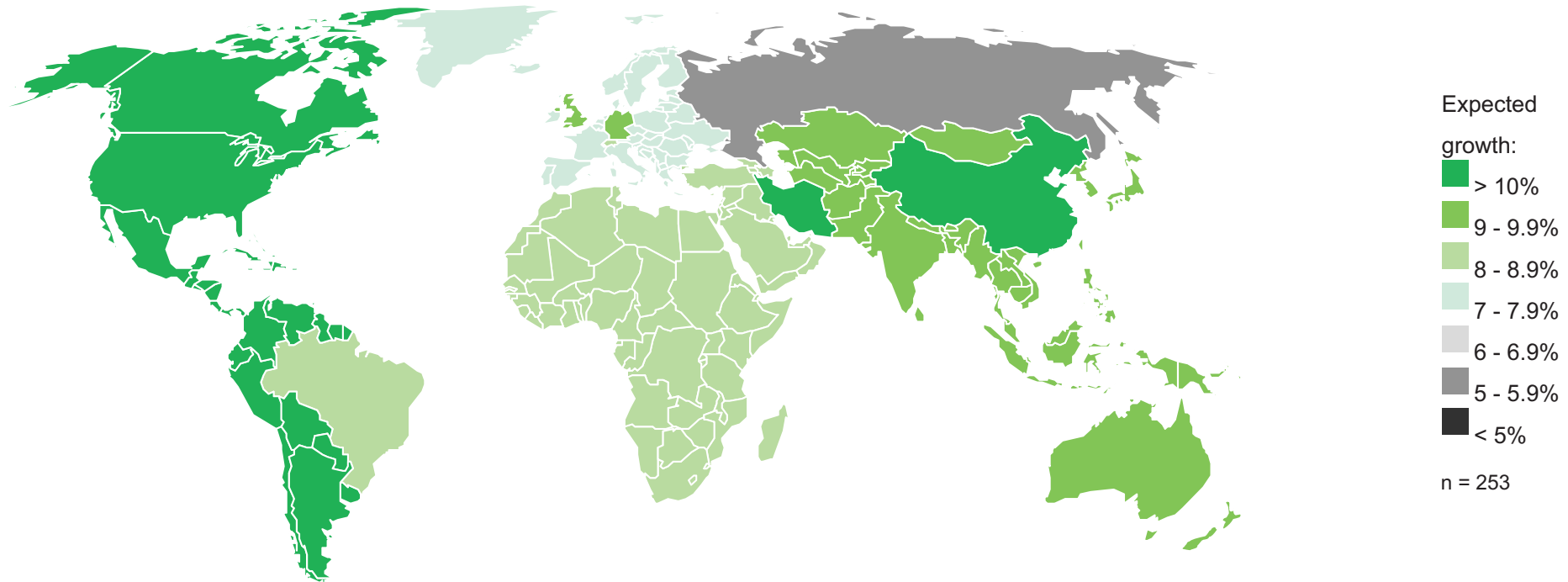


Comments

- Medtech companies are looking positively to the future; a slightly greater sales growth than in recent years is expected
- An average sales growth of 8.6% is expected for 2016, and 7.5% is expected for 2017 (weighted by the number of employees in Switzerland)
- The expected 2016 sales growth is estimated as follows:
 - 65% expect growth
 - 5% expect a decline
 - 30% expect unchanged levels of turnover
- In cross-comparison, the micro and small enterprises expect higher growth than the midsize and large companies

Sales growth is expected - especially in China, Iran, USA / Canada and South America

Annual sales growth expectations 2017-2019 (from the perspective of companies planning - or having already made - investments)



Comments

- Worldwide sales growth is expected. Swiss medtech companies classify the North and South American countries, and China and Iran as particularly attractive growth markets (> 10%)
- Within Europe, the highest sales growth is expected for Germany and Britain¹⁾. Switzerland comes in slightly above the European average - with an expected sales growth of 8.6%
- By global standards, a slower sales growth is expected in Russia

1) This survey result came before the Brexit referendum results
Note: New evaluation method compared to the SMTI Study 2014
Source: SMTI survey results 2016



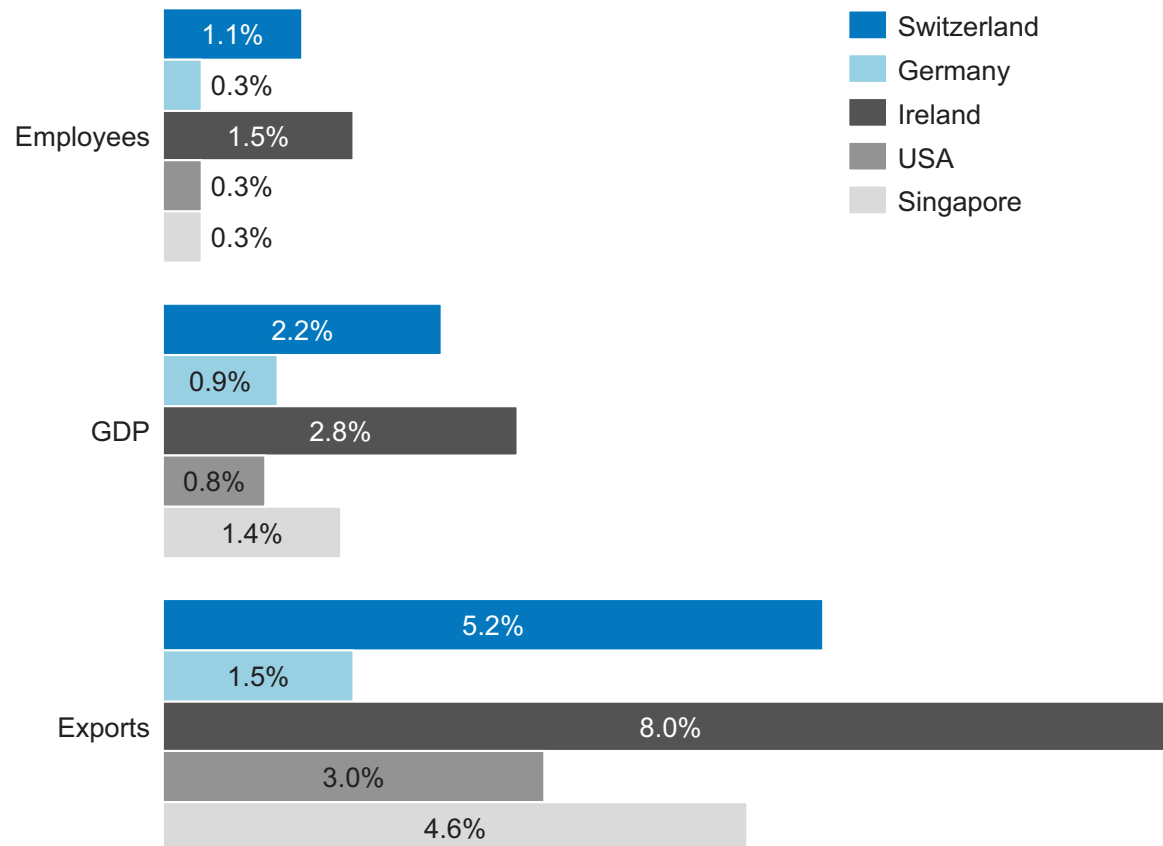
Attractiveness of the Swiss workplace

- Site analysis of selected medtech countries: Switzerland, Germany, Ireland, USA, and Singapore
- Outlook for the attractiveness of the Swiss workplace

Apart from Switzerland, other major production sites include Germany, Ireland, the USA, and Singapore - as the «Gateway to Asia»

Medtech share in strong medtech countries

(in % of the respective total amount)



Comments






- Switzerland, Germany, Ireland, the USA, and Singapore are seen as attractive locations and strong medtech countries
- The medtech industry - particularly in Switzerland and Ireland - enjoys a relatively large share of the GDP
- Singapore is characterised by the high percentage of medtech exports and GDP in relation to the number of employees. This may be explained, among other things, by its role as the «Gateway to Asia»
- It must be noted that varying survey methods and definitions may be used in different countries

Note: Figures subject to availability from the years 2011 to 2015

Sources: Advamed; Swiss Federal Statistical Office (FSO); Central Statistics Office Ireland; Department of Statistics Singapore; Destatis; Federal Customs Administration (FCA); Irish Medical Devices Association; singaporemedtech.com; Spectaris; State Secretariat for Economic Affairs (SECO); Statistics Singapore; U.S. Census Bureau; U.S. Department of Commerce; World Bank; World's Top Exports

Key competitive advantages of producing in Switzerland: access to highly qualified personnel and the extremely innovative environment

Classification by factors affecting location attractiveness

	Conditions for the Medtech industry	Qualified personnel	Innovation-friendly conditions	Corporate taxation rates	Ease of doing business
	4	1	2	3	3
	2	2	5	5	5
	5	5	4	2	4
	1	4	1	4	2
	3	3	3	1	1

 Switzerland
  Germany
  Ireland
  USA
  Singapore

Comments

- The five countries all offer different benefits
- Key competitive advantages of producing in Switzerland are the access to highly qualified personnel and the extremely innovative environment
- Germany is an attractive production location due, among other things, to the large domestic market and the qualified personnel
- The USA is attractive because of their culture of innovation and the attractive economic conditions for the medtech industry
- Singapore and Ireland profit from, among others things, their bold investment-promoting policies

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results))

Location analysis of Switzerland



Overall assessment	Switzerland impresses especially with its highly qualified personnel, a liberal labour market, and by an innovation-friendly environment with many opportunities for knowledge transfer. Also, taxes will be comparatively low in the future - that is assuming they will remain so after the planned Corporate Tax Reform III. Due to the pending bilateral negotiations with the EU, however, there are deferred risks related to market access, qualified personnel, and research programs.	
Conditions for the medtech industry	Many international medtech companies are active in Switzerland. The liberal labour market can be seen as an additional important advantage. Switzerland performs very well in the Global Competitiveness Index. However, the upcoming bilateral negotiations with the EU are creating uncertainty regarding, among other things, today's free trade and research agreements - strongly inhibiting the attractiveness of the Swiss workplace.	4
Qualified personnel	Switzerland has a very good dual education system which also includes leading technical universities (ex. the ETH Domain). Many qualified personnel can be found as it is also an attractive country for highly skilled foreign workers. Multilingualism is a given standard for the specialist professionals. Switzerland also achieved the highest position in the IMD World Talent Report ranking.	1
Innovation-friendly environment	Switzerland scores very well in the Global Innovation Index. Both the collaboration with universities and other specialist partners, as well as the public funding of R&D projects contribute to an innovation-friendly environment. However, reluctance in the face of potential risks and sluggish reimbursement policies inhibit innovation activity. This explains why Switzerland is not considered the most innovation-friendly country.	2
Corporate taxation	Companies in Switzerland benefit from tax advantages in many ways. The average tax rate is 28.8% (relatively low in comparison). Thanks to the planned Corporate Tax Reform III, the appeal of taxation levels in Switzerland should increase further. Start-ups, however, often feel exposed to unreasonable tax burdens. In the ranking, Switzerland is given a relatively good rating for "Ease of paying taxes".	3
«Ease of doing business»	Switzerland has a well developed health care system and a high willingness to pay for medtech products. Direct contact with authorities is ensured. Although the protection of intellectual property is achieved though a simple registration process, demands regarding clinical research have increased. In the ranking, Switzerland is given a mediocre mark for "Ease of doing business".	3

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results)

- An explanation of the ranking can be found in the appendix

Location analysis of Germany



Overall assessment

The German economy benefits from EU membership and the country is known for its highly qualified personnel. The German medtech market is innovation-friendly and attractive due to its high standards - but at the same time, battles with significant bureaucratic red tape. In addition, the high level of corporate taxation negatively affects the workplace attractiveness.

Conditions for the medtech industry

Germany has an attractive and well-developed sales market. Due to its EU membership, Germany also benefits from simplified trading conditions (European single market and various free trade agreements), as well as the weakening of the euro. Germany scores very well in the Global Competitiveness Index.

2

Qualified personnel

Germany is characterised by a solid education system and the available doctors, researchers and engineers are very well qualified. Currently however, they are facing a shortage of skilled workers; particularly in the field of research. Germany scores in the midfield in the "IMD World Talent Report" ranking.

2

Innovation-friendly environment

Germany has a environment conducive to innovation, thanks - among other things - to many government initiatives such as the promotion of university hospitals and competence centres which make considerable know-how centrally available. At the same time, Germany is awarded a good evaluation in the Global Innovation Index. The innovation conditions are however threatened by anti-innovative health insurance providers, bureaucratic processes, and low reimbursement rates.

5

Corporate taxation

The average tax rate for companies is - at 48.8% - are relatively high. Germany also gets mediocre marks in the «Ease of paying taxes» ranking. At the same time, Germany enjoys an active business relocation policy whereby investors in some regions benefit from substantial tax breaks. Nevertheless, in cross-country comparisons, the taxation rates are usually too unattractive.

5

«Ease of doing business»

Low cost clinical research is possible in Germany but is subject to increasing demands. The country has good infrastructure and quality standards, thanks to technical specifications and high delivery reliability. Germany does quite well in the «Ease of doing business» ranking. The high level of bureaucracy for approvals and reimbursements, however, poses a greater and more serious disadvantage.

5

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results)

- An explanation of the ranking can be found in the appendix

Location analysis of Ireland



Overall assessment	Ireland is characterised by an innovative spirit, cooperation within the medtech industry, as well as between industry and the government. It also has a low corporate tax rate. Although Ireland still shows much room for improvement compared to other medtech countries, it can expect its attractiveness to rise due to the strong state support. Brexit could bring Ireland more unexpected location advantages.	
Conditions for the medtech industry	The medtech industry has grown rapidly in Ireland thanks to the economic promotional measures. The English language, membership in the EU, and the euro make Ireland an internationally well-connected country. The domestic sales market is rather small. Compared to the four other medtech countries, Ireland is still not able to provide very attractive conditions and rates rather badly in the Global Competitiveness Index.	5
Qualified personnel	Ireland impresses with a capable, well-educated workforce; although foreign languages skills are quite weak. The English language, however, is an advantage for the international trade. Ireland scores mid-range in the «IMD World Talent Report» ranking. In addition, Ireland is currently facing a slightly shrinking labour market and therefore is not able to compete with the other four medtech countries..	5
Innovation-friendly environment	Ireland receives a good evaluation in the Global Innovation Index. The country strives for an environment conducive to innovation through investments in R&D (ex. by establishing development associations). A <i>BioInnovate Fellowship Programme</i> was even created to encourage exchange between industry, medicine, and science. In comparison with the other medtech countries, Ireland should be able to constantly improve its position in the field of innovation.	4
Corporate taxation	At 25.9%, the average tax rate for companies is in Ireland comparatively low. As a result, it ranks very well in the "Ease of paying taxes" category.	2
«Ease of doing business»	Ireland seeks to establish attractive regulatory conditions and promotes close collaboration between industry and the authorities. There is also active exchange between individual medtech companies. Ireland scores rather well in the «Ease of doing business» ranking. Although conditions are further developed in some other medtech countries, Ireland shows potential in this respect for the future.	4

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results)

- An explanation of the ranking can be found in the appendix

Location analysis of the USA



Overall assessment

The USA impresses with its favourable innovation environment - thanks to the close collaboration of all players in the industry. Furthermore, the attractive conditions provided by the established medtech market are a big advantage. However, strict regulatory requirements, difficulty in funding innovation, and relatively high taxes detract from the attractiveness of the US medtech market.

Conditions for the medtech industry

The United States enjoys a strong international market presence and established position with global players in the medtech industry. They have a highly developed culture of innovation as well as various medtech clusters. In addition, the large domestic market with its high reimbursement rates benefit from the liberal labour market and the English language. The USA rates very well in the Global Competitiveness Index.

1

Qualified personnel

Thanks to its attractive labour market, the USA attracts highly qualified professionals, which means that companies can find sufficient, appropriately trained staff. There are, however, fewer competent manual tradesmen available. Foreign languages skills are also less common. As a result, the USA is placed in the midfield of the «IMD World Talent Report».

4

Innovation-friendly environment

The innovation-friendly environment is promoted through R&D collaboration with a multitude of university hospitals and prestigious colleges in the field of medicine. Additionally, *the MedTechInnovator* helps bring various actors of the medtech industry together to facilitate the exchange of ideas. The culture of innovation in the USA is very strong, and the country obtained a good evaluation in the Global Innovation Index.

1

Corporate taxation

At 43.9%, the average tax rate for companies in the United States is relatively high. Moreover, a *Medical Device Tax* which is levied on the sale of medical products has been introduced in the US. The USA has a mediocre ranking in «Ease of paying taxes».

4

«Ease of doing business»

The USA ranks quite well in the «Ease of doing business» category. Medtech companies have numerous associations to represent their interests (*State Medical Technology Alliance*). Start-ups are currently facing difficulties raising funding, as capital investors are withdrawing from the sector. In addition, regulatory requirements are necessitating an increasing amount of time and effort.

2

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results)

- An explanation of the ranking can be found in the appendix

Location analysis of Singapur



Overall assessment	Singapore is considered to be the gateway to Asia, and is also attractive thanks to the very low corporate tax rate for manufacturing companies. Singapore has sufficient well-trained professionals and enjoys an innovation-friendly environment. The medtech industry can particularly benefit from the strongly supportive development programs and centres of excellence	
Conditions for the medtech industry	Singapore places importance on the promotion of the medtech industry. Singapore is also a well-developed Asian country and - as the gateway to Asia - benefits from attractive market conditions and standards, as well as a global network. Singapore rates very highly in the Global Competitiveness Index.	3
Qualified personnel	Singapore has a respectable education system and many well-trained professionals at its disposal. In addition, young people are often encouraged to join the medtech sector, for example through the <i>Singapore-Stanford BiodesignProgram</i> which works in collaboration with the University of Stanford. Singapore achieved a rather good position in the IMD World Talent Report ranking.	3
Innovation-friendly environment	Singapore received a good evaluation in the Global Innovation Index. The innovation-friendly conditions have been achieved mainly thanks to state support: the country invests large amounts in R&D - with a special focus on health sciences and biomedicine. Also, there are various government assistance programs for medtech start-ups, as well as centres of excellence with good infrastructure and highly centralised know-how.	3
Corporate taxation	The average tax rate for companies in Singapore is 18.4%, which is extremely low in comparison with the other locations. In the «Ease of paying taxes» ranking, Singapore occupied the highest standing of any of the five medtech countries.	1
«Ease of doing business»	Collaboration between privately run companies and hospitals is strongly encouraged in Singapore. Through clinical research medtech companies find it easy to transfer results into practice. In general, no great effort is required to enter the Singaporean market, thanks to short approval times and low entry barriers. Singapore rates top in «Ease of doing business».	1

Notes: - The classification corresponds to a 1-5 ranking of the countries assessed (1 represents the best results)

- An explanation of the ranking can be found in the appendix

The Swiss medtech workplace is successful in global competition. There are however relevant risks which could jeopardise its attractiveness

Risks for the Swiss medtech workplace

Increasing cost pressure

Swiss medtech companies are facing increasing cost pressure, which is in turn amplified by the strong Swiss franc:

- Swiss medtech companies feel increasingly compelled to purchase intermediate inputs and capital goods abroad; or to even move entire production sites out of Switzerland
- In addition, cost pressure often results in a reduction in R&D investments, among other things

Growing tax burden

In principle, Switzerland can distinguish itself from other medtech countries through low corporate tax rates:

- Tax laws must keep pace with international competition in order to maintain this workplace advantage. The planned Corporate Tax Reform III is therefore essential to maintain the level of competitiveness
- Furthermore, the current cantonal tax on assets practices make it difficult (especially for start-up companies) to shoulder the high tax burden

Bilateral agreements with the EU

The current uncertainty about the bilateral agreements with the EU is weakening the Swiss workplace:

- There are potential risks relating to obtaining free trade with the EU (access to the EU market) and facilitated access to research programs and capital
- In particular, the restricted movement of persons could harm Switzerland's workplace advantage with respect to qualified personnel

Conclusion and outlook

- Switzerland presents itself as an attractive location for medtech companies. Its strengths lay mainly in the availability of highly skilled professionals, its low corporate taxation rates, and the innovation-conducive environment which Switzerland may use to set itself apart from other medtech countries
- The current risks (cost pressure, taxation and bilateral treaties), however, put the attractiveness of the Swiss workplace at risk
- Effective measures must be implemented in order to maintain and augment the workplace advantage
- Pragmatic innovation funding, the Corporate Tax Reform III, and access to qualified foreign professionals are important for the continued positive development of the Swiss medtech industry



Appendix

Imports from the BRIC countries have risen slightly in recent years; and exports to these countries have also continued to increase

Key data for China, Brazil, and India - from Switzerland's perspective (in million CHF)

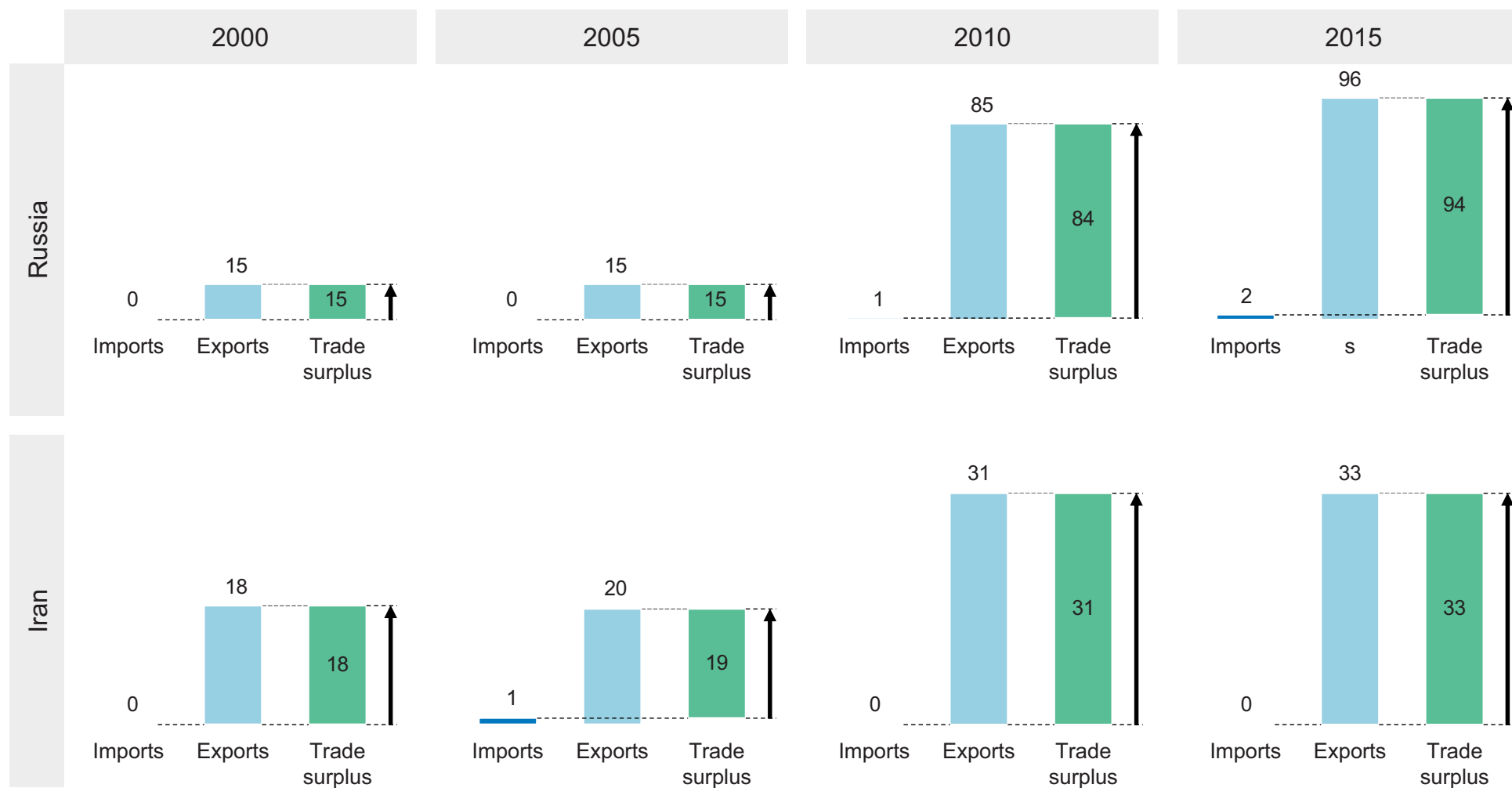


Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

Source: Swiss Federal Customs (FCA)

Iran could develop into an attractive export destination after the trade embargo expires

Key data for Russia and Iran – from Switzerland's perspective (in million CHF)

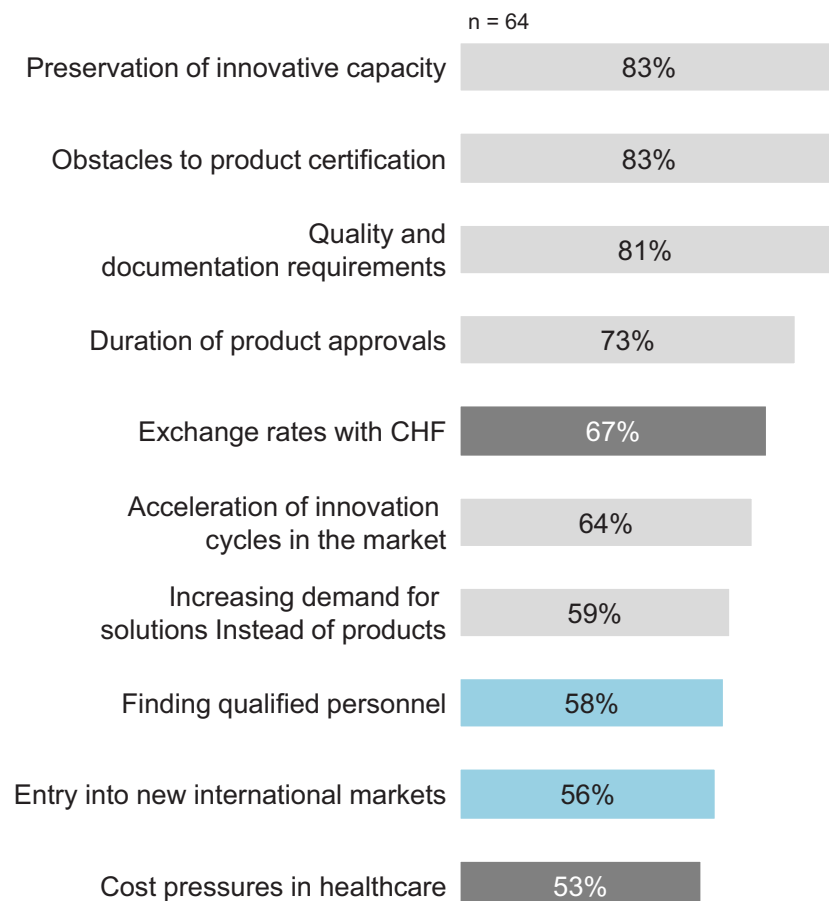


Note: The trade figures (exports and imports) reflect only finished products; trade / sales of semi-finished products are not included in these figures

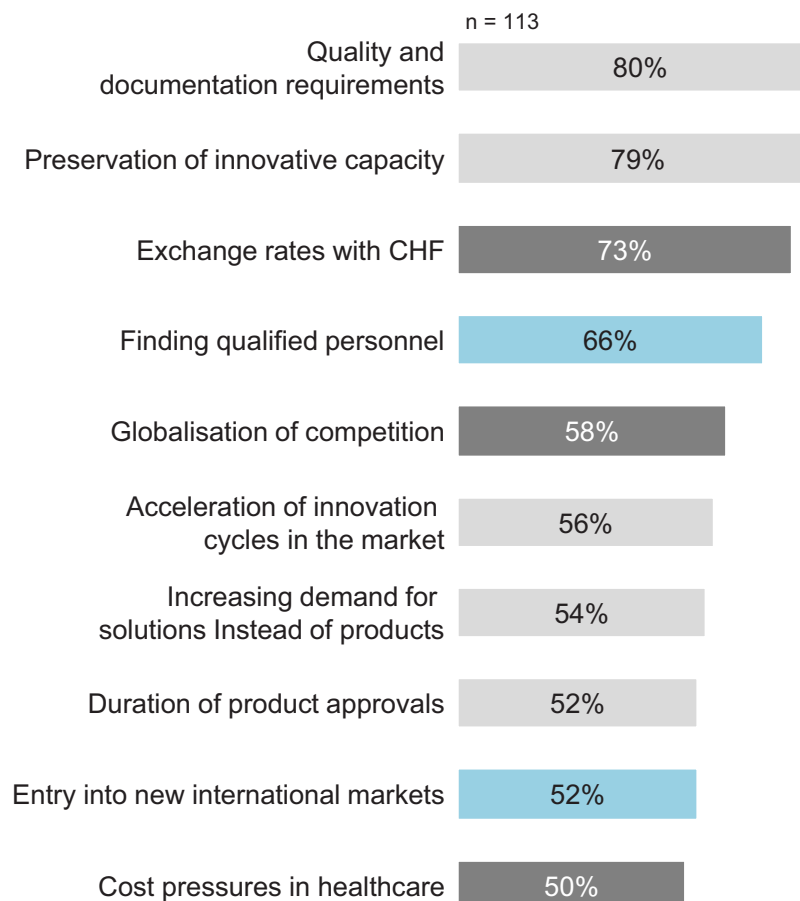
Source: Swiss Federal Customs (FCA)

Top 10 challenges for manufacturers and suppliers

Top 10 challenges for manufacturers (in % of all responses)



Top 10 challenges for suppliers (in % of all responses)



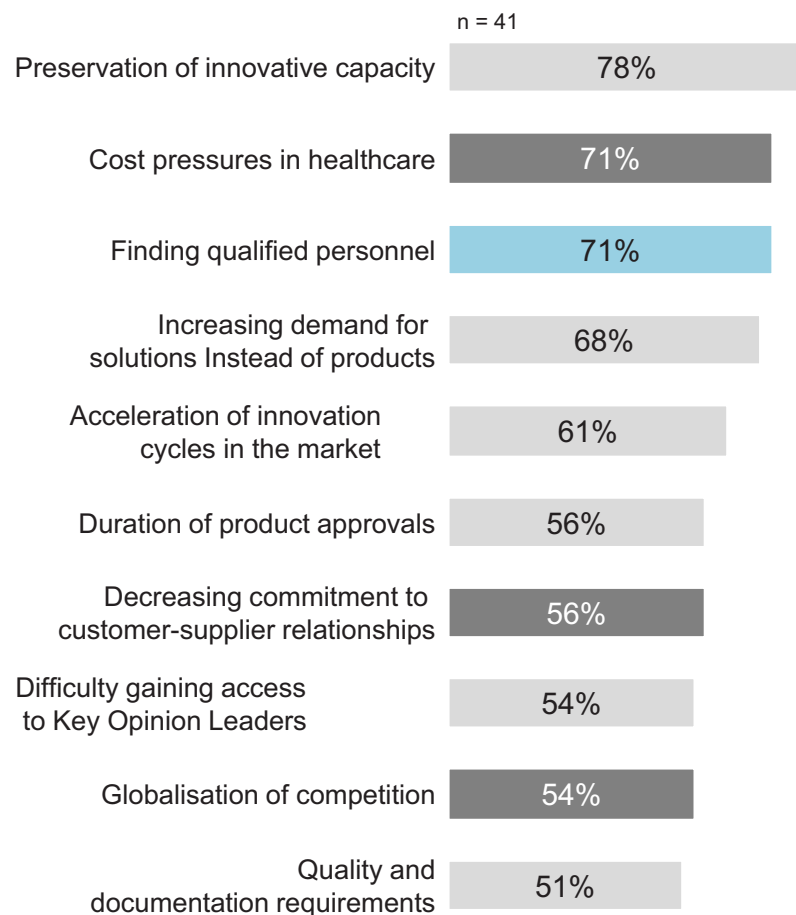
■ Innovation & Market access

■ Market conditions & Competition

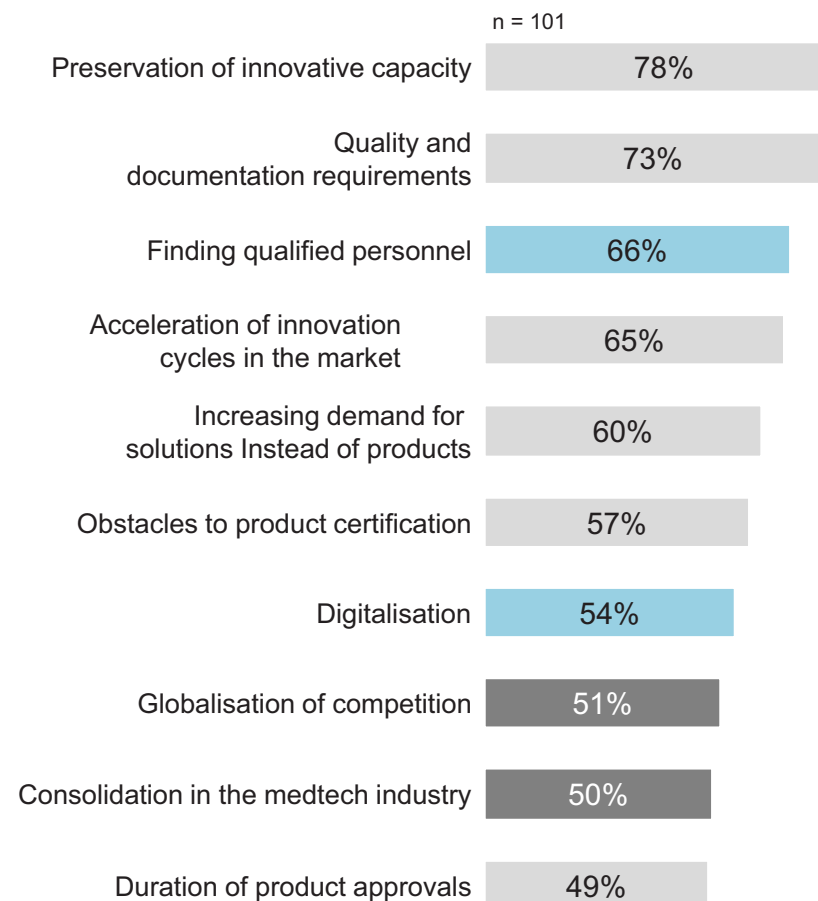
■ Resources & Know-how

Top 10 challenges for trade & distribution and service providers

Top 10 challenges for trade & distribution (in % of all responses)



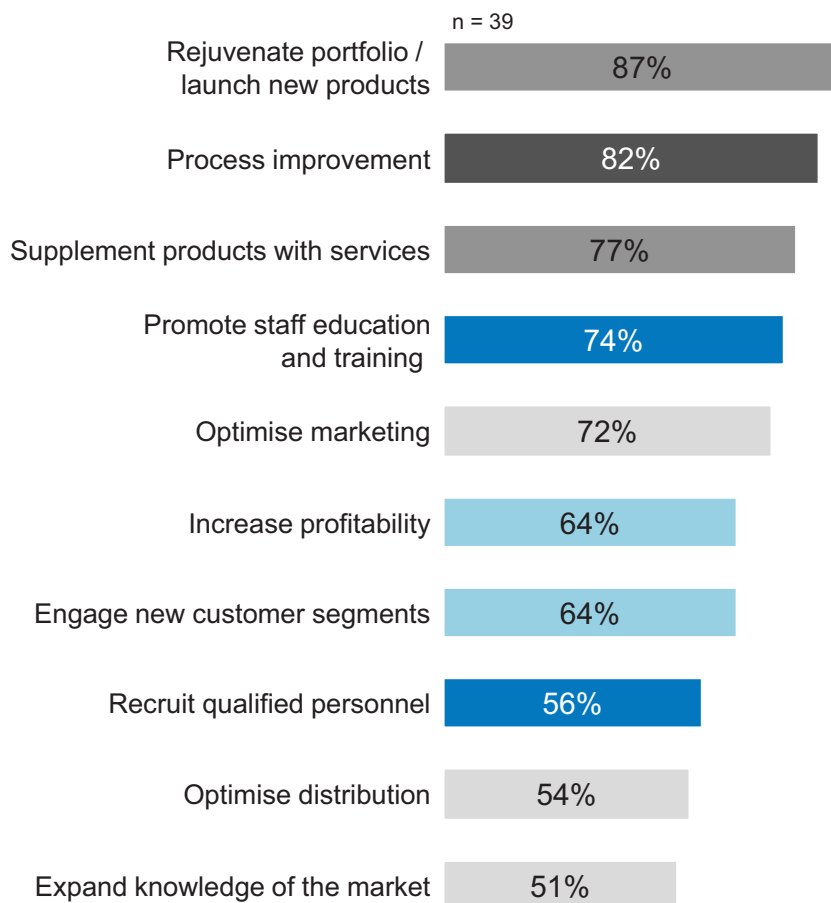
Top 10 challenges for service providers (in % of all responses)



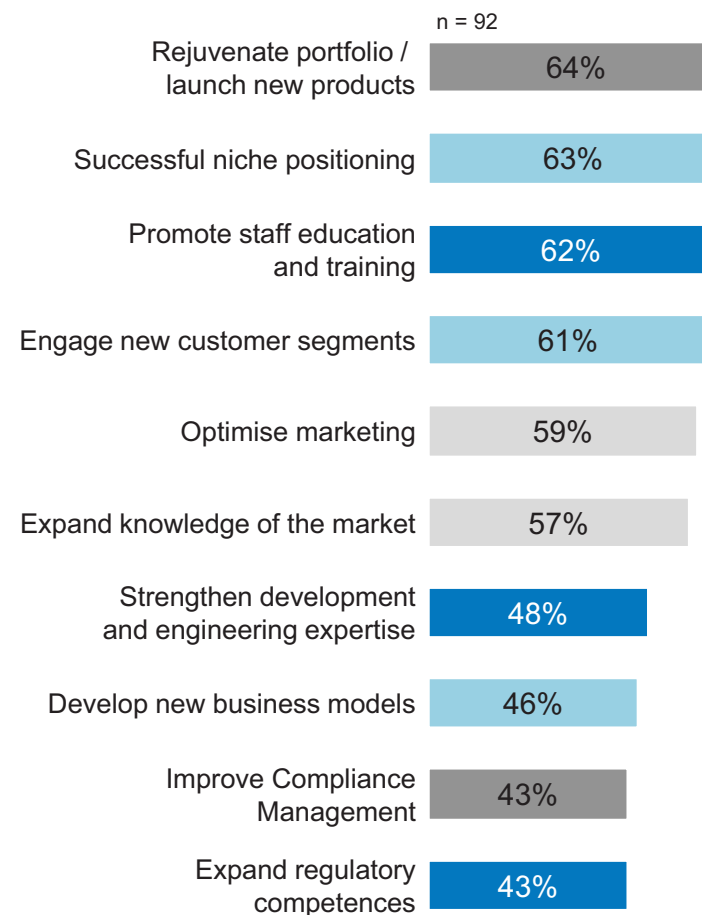
Innovation & Market access
 Market conditions & Competition
 Resources & Know-how

Top 10 action points for trade & distribution and service provider

Top 10 action points for trade & distribution (in % of all responses)



Top 10 action points for service providers (in % of all responses)

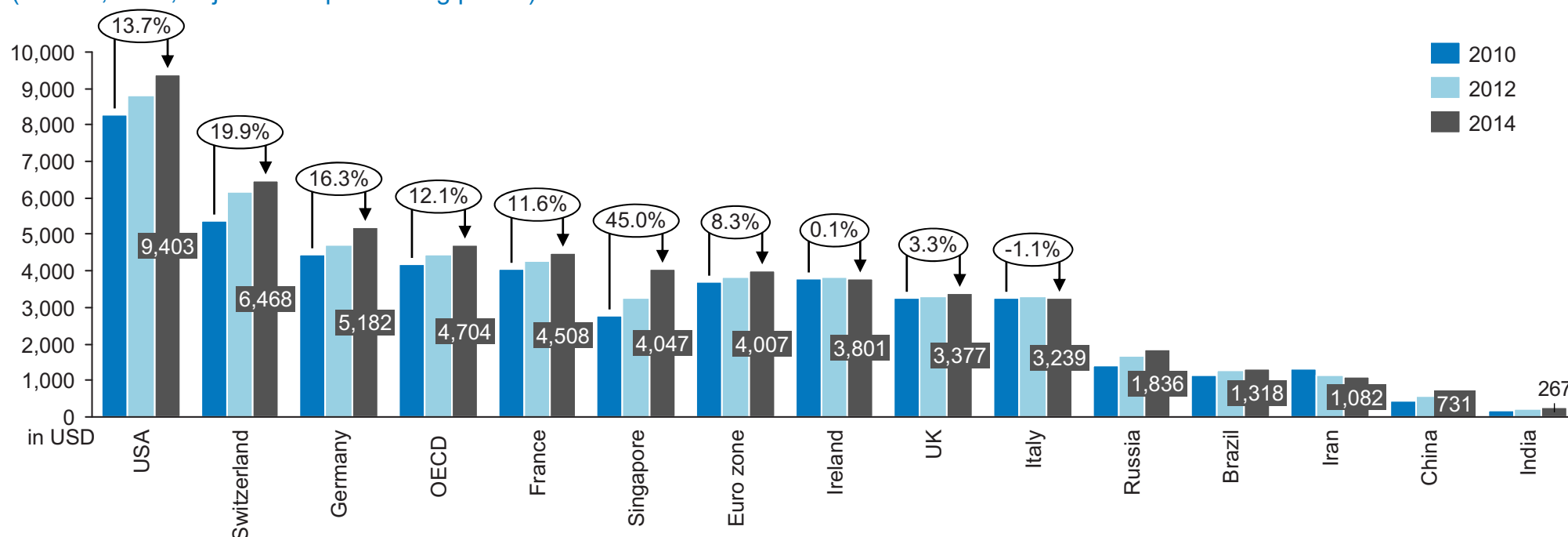


Marketing & Distribution Development & Product management Production & Purchasing Personnel Strategy

Per capita health expenditure

Per capita health expenditure

(in USD, 2011, adjusted for purchasing power)

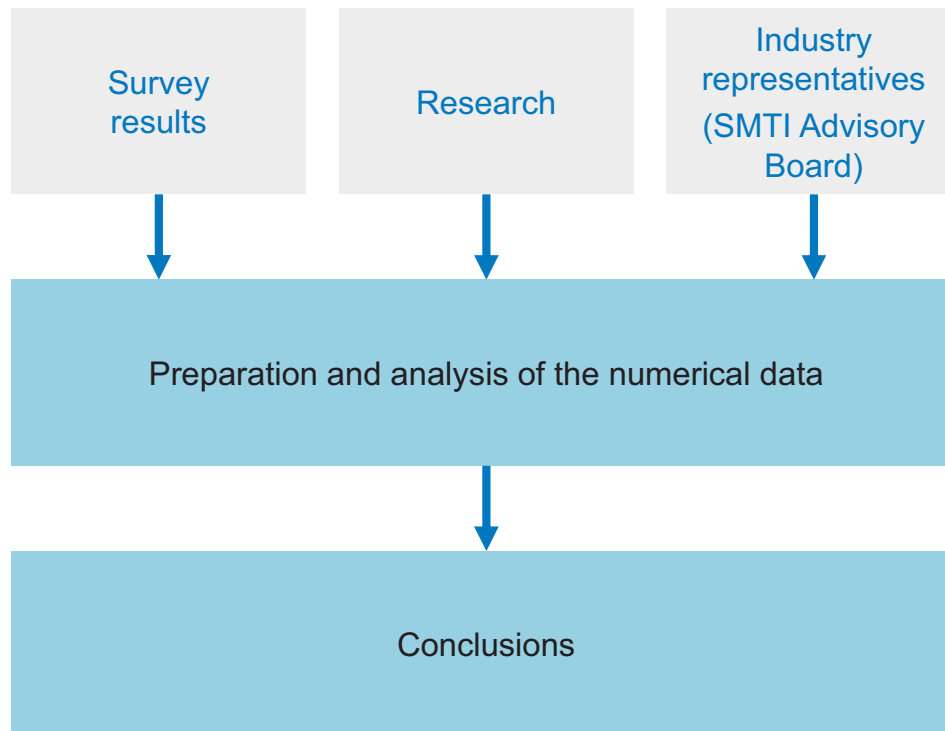


Comments

- Switzerland belongs to the countries with the highest per capita health expenditure - along with Germany and the United States,
- Due to their high expenditure on health care, industrialised countries are particularly attractive markets for the medtech industry, although significant differences in the per capita health expenditure are also found between countries (ex. Italy vs. Germany)
- Singapore's spending on health care is rising rapidly

Three main sources were used for this study

Basic methodology of the SMTI 2016 Sector Study

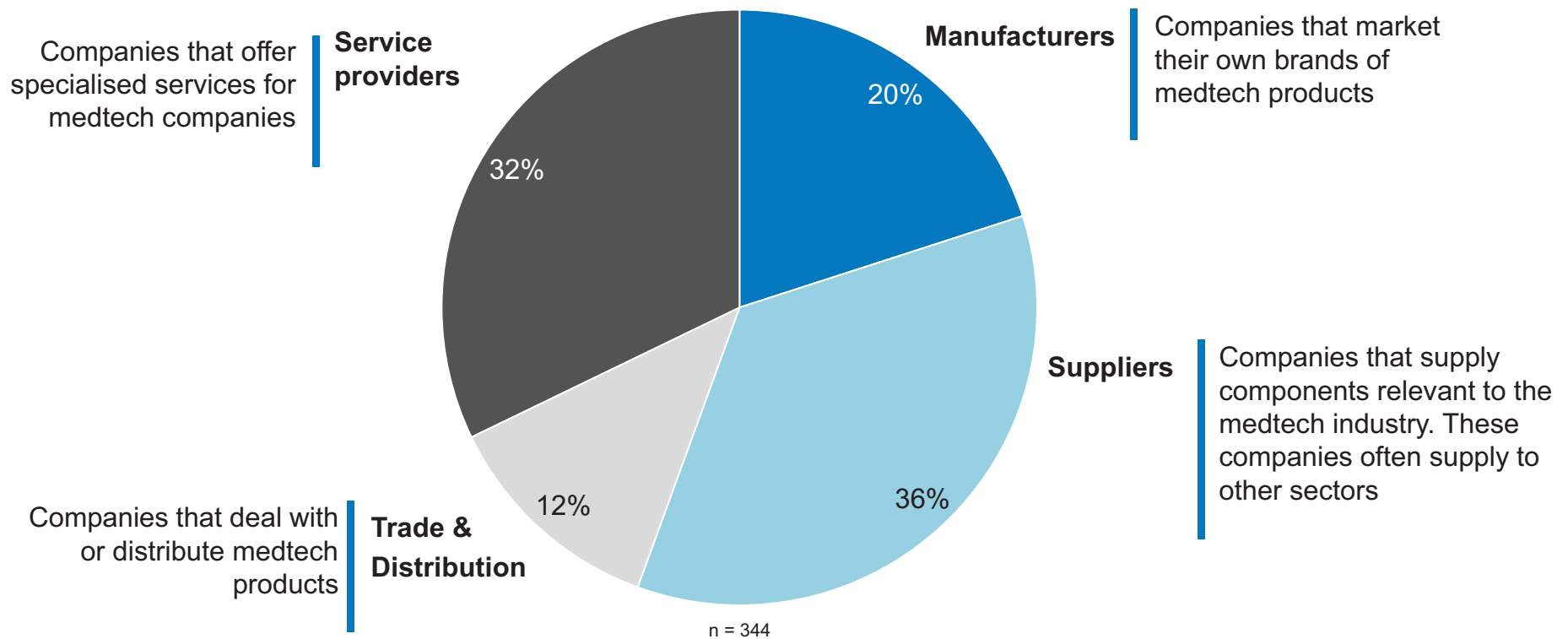


Methodology

- The SMTI study is based on three main sources:
 - Evaluation of an electronic survey, which was completed by 344 medtech companies operating in Switzerland. The survey was conducted in the spring of 2016
 - Research based on information from the Medical Cluster database, earlier SMTI studies, public databases, and other sources
 - Information and opinions from industry representatives
- The information from the three sources was combined, compared, discussed, analyzed, and commented. The key figures were extrapolated for the SMTI
- The resulting conclusions were discussed and validated, together with the Advisory Board and other external experts

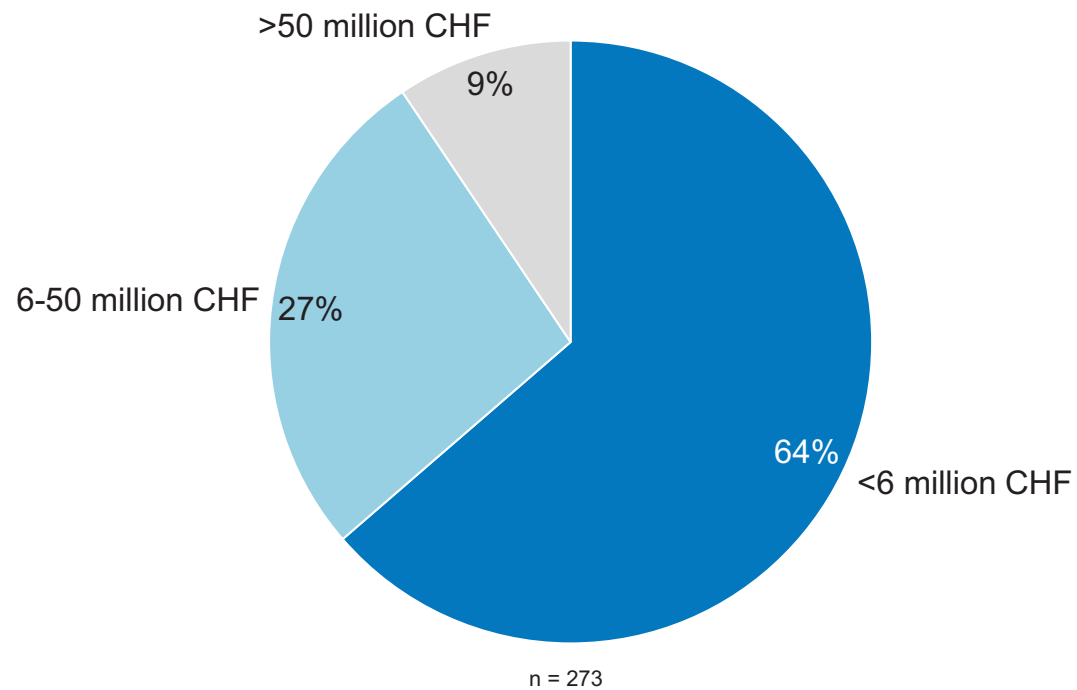
344 medtech companies took part in the SMTI survey

Participating companies by category (in %)



The majority of the participating companies generated under CHF 6 million revenues in 2015

Participating companies by medtech sales (in %)



Explanation of the rankings (I / II)

Global Competitiveness Index (2015-2016)

- Includes 140 countries
- Indicates how competitively viable the country is
- The ranking is based on 3 factors:
 - «Basic requirements» refer to institutions, infrastructure, national economic conditions, and education
 - «Efficiency enhancers» include higher education, labour market efficiency, goods market efficiency, financial market development, level of technological development and market size
 - «Innovation and sophistication factors» indicate the maturity of the business environment and level of innovation
- Sourced at http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf

IMD World Talent Report (2015)

- Includes 61 countries
- Rates the attractiveness each country's labour market
- Three factors (each with 8-12 sub-criteria) are assessed:
 - «Investment and development factor» measures investments in the education system as well as the promotion and development of talent, etc.
 - «Appeal factor» evaluates how attractive a country is to foreign workers (cost of living, quality of life, income levels, etc.)
 - «Readiness factor» indicates current job market conditions and considers employment growth and education levels, etc.
- Sourced at http://www.imd.org/uupload/IMD.WebSite/Wcc/NewTalentReport/Talent_2015_web.pdf

Explanation of the rankings (II / II)

Global Innovation Index (2015)

- Includes 141 countries
- Presents the conditions for innovation in each country
- The classification is divided into two sub-categories:
 - «Innovation Input» includes evaluations regarding the authorities and the wider community, education and R&D, infrastructure, the nature of the marketplace, and the degree of economic development
 - «Innovation Output»: measures the economic, technological, and creative influence of the country
- Sourced at <https://www.globalinnovationindex.org/userfiles/file/reportpdf/gii-full-report-2015-v6.pdf>

Ease of paying taxes (2016)

- Includes 189 countries
- Rates the taxation system in each country
- Three indicators are evaluated for the classification:
 - Taxation rate
 - Time needed
 - Number of payments required
- Sourced at <http://www.pwc.com/gx/en/paying-taxes-2016/paying-taxes-2016.pdf>

Ease of doing business (2015)

- Includes 189 countries
- Indicates how easy it is to conduct business in the country
- 10 categories are evaluated: founding a business, attaining building permits, availability of electrical power, ease in registering property, obtaining credit, protection of minority shareholders, taxes, international trade, contract enforcement, and bankruptcy proceedings
- Sourced at <http://www.doingbusiness.org/rankings>

This is the fifth report on the Swiss medtech industry



2008



2010



2012



2014



2016

Title	The Swiss Medical Technology Industry 2008	The Swiss Medical Technology Industry 2010 Survey "Medtech at the Crossroads"	The Swiss Medical Technology Industry 2012 "In The Wake Of The Storm"	The Swiss Medical Technology Industry 2014 "The Dawn of a New Era"	The Swiss Medical Technology Industry 2016 – Sector Study
	<ul style="list-style-type: none"> Dr. Patrick Dümmler Beatus Hofrichter René Willhalm Peter Biedermann 	<ul style="list-style-type: none"> Dr. Patrick Dümmler Beatus Hofrichter 	<ul style="list-style-type: none"> Dr. Patrick Dümmler Beatus Hofrichter 	<ul style="list-style-type: none"> Dr. Patrick Dümmler Beatus Hofrichter 	<ul style="list-style-type: none"> Laura Murer Mecattaf Jonas Frey Annebelle Smolders Peter Biedermann
Publi- sher	Medical Cluster	Medical Cluster	Medical Cluster	Medical Cluster	Swiss Medtech (Medical Cluster & FASMED)
	<ul style="list-style-type: none"> Helbling Roland Berger 	<ul style="list-style-type: none"> Roland Berger Deloitte KTI 	<ul style="list-style-type: none"> Medtech Switzerland FASMED IMS Consulting Group KTI 	<ul style="list-style-type: none"> Medtech Switzerland FASMED Switzerland Global Enterprise Helbling KTI 	<ul style="list-style-type: none"> Helbling KTI Switzerland Global Enterprise

Partner Profiles I/II

Swiss Medtech

Medical Cluster and FASMED have decided to join forces and form a new association called Swiss Medtech. The official foundation is scheduled for June 2017 - creating a significant trade association, with approximately 600 members.

Swiss Medtech will advocate the following objectives:

- Preservation and promotion of Switzerland as a workplace with attractive conditions, strong research institutions, continuing education programmes, symposia, export promotion services, and supportive measures for entrepreneurship
- Preservation and reinforcement of the domestic market through quality-oriented health care with fair reimbursement rates and progressive financing for innovation

With its active participation in technical committees at home and abroad, Swiss Medtech will help prevent harmful over-regulation and ensure international exchange in research and trade for the Swiss medtech industry.

Swiss Medtech will continue to provide information and analysis of the Swiss medtech industry through reports such as the SMTI Sector Study.



Helbling Group

Founded in 1963, the international Helbling Group is owned by 29 partners and employs over 480 professionals in four divisions at sites in Switzerland, Germany, the USA, and China. .

We distinguish ourselves in the market through our unique interdisciplinary range of skills in engineering and business consulting. We offer expert services in connection with innovation, technology and product development strategy, restructuring and mergers & acquisitions, IT, real estate, as well as energy and infrastructure.

The unique combination of expertise in technological innovation as well as business consulting makes us as one of the few service providers able to deal with tasks from a subject-specific and project-oriented approach, as well as from an overall corporate perspective - both for strategic as well as operational projects.

We always have one main objective regardless of the specific tasks our customers entrust us to do: strengthen their capacity for innovation and their competitive advantage.

Our specialists only consider their work complete when their client has become what our guiding principle claims: "Valuable through Innovation".

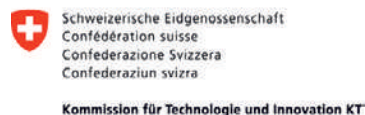


Partner Profiles II/II

Commission for Technology and Innovation (CTI)

The CTI is the federal innovation promotion agency responsible for encouraging science-based innovation in Switzerland by providing financing, professional advice and networks.

The CTI operates on the principle of subsidiarity - supporting innovation projects which, due to lack of funding, would not otherwise be possible or whose market potential could not be realised. It is active in cases where initiatives in the private sector can be supported by state measures. By helping to transfer research results into concrete marketable products, the CTI helps to improve the competitiveness of Swiss businesses, particularly SMEs, thereby contributing to a strong, innovative economy in Switzerland.



Switzerland Global Enterprise (S-GE)

With its international network of experienced consultants and experts, Switzerland Global Enterprise (S-GE) provides a confident and strong partner for clients, the cantons, as well as the Swiss government. We work to foster global entrepreneurship and the Swiss workplace.

Our role as a Centre of Excellence for internationalisation is to foster exports, imports and investment, to help clients develop new potential for their international business, and to strengthen the attractiveness of Switzerland as a business location.

The S-GE agencies abroad are referred to as Swiss Business Hubs. The teams are established in a Swiss Embassy or Consulate General. Following an initial consultation in Switzerland, the Swiss Business Hubs are often the next point of contact for S-GE in the respective export country. Due to their official status, all Swiss Business Hubs benefit from a valuable network of contacts in the respective target market. They are also responsible for the promoting investment in Switzerland abroad.



The SMTI Advisory Board provided valuable information and assessments for the SMTI Sector Study

SMTI 2016 Sector Study Advisory Board



Dr. Daniel Bühler
CEO Biotronik



Dr. Gery Colombo
CEO Hocoma



Richard Fritschi
Medtech expert and
board member for
several medtech
companies



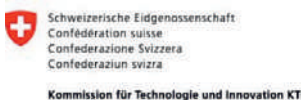
Simon Michel
CEO Ypsomed



Eduardo Stadelmann
General Manager,
Zimmer Biomet
Switzerland



Prof. em. Dr.
Gabor Székely
Head CTI Medtech



Extended expert network

- Dr. Christian Péclat, CEO, Helbling Gruppe
- Fabian Stadler, Secretary General, FASMED

Authors of SMTI 2016 Sector Study

Laura Murer Mecattaf, lic. oec. HSG

**Helbling Business Advisors AG**

Hohlstrasse 614
CH-8048 Zurich

Tel.: +41 (0)79 852 66 74

Email: laura.murer-mecattaf@helbling.ch

- Laura Murer Mecattaf works as a senior manager in the area of strategy and organisation at Helbling Business Advisors
- She has over 10 years experience advising industrial, service, commercial, and public sectors
- Her specialty areas are strategy, organisation, performance management, marketing and sales, as well as market and industry studies
- Over the course of her consulting career she has conducted a wide range of projects and market studies for Swiss medtch companies
- Laura Murer Mecattaf holds a degree from the University of St. Gallen

Jonas Frey, MSc ETH

**Medical Cluster**

Schwarztorstrasse 31
CH-3007 Bern

Tel.: +41 (0)31 330 97 71

Email: jonas.frey@medical-cluster.ch

- Jonas Frey has been working for Medical Cluster as a project manager for exports since 2013
- He has over 6 years experience with medtech associations
- His specialty areas are industry reports, industry research, organisation of trade fairs and seminars, as well as providing the point of contact for expert queries
- He has belonged to the core team of SMTI Sector Study since 2014
- Jonas Frey studied Movement Sciences at ETH Zurich and specialised in biomechanics

- We thank Annebelle Smolders for her valuable support in this study
- Publisher of the Swiss Medtech Industry 2016 Sector Report is the Swiss Medtech industry association
Contact person: Peter Biedermann; email: peter.biedermann@swiss-medtech.ch; Tel.: +41 (0)31 330 97 79

List of abbreviations

BRIC	Brazil, Russia, India, and China	IMD	Institute for Management Development
ca.	circa	IRL	Ireland
CH	Switzerland	LATAM	Latin America
CHF	Swiss francs	MCHF	Million Swiss francs
CTI	Commission for Technology and Innovation	n	Sample size
Dr.	Doctor	n.a.	not available
em.	Emeritus	No.	Number
EPF	École Polytechnique Fédérale	OECD	Organisation for Economic Co-operation and Development
etc.	et cetera	Prof.	Professor
ENT	Ears, nose & throat	R&D	Research & Development
ETH	Federal Technical University of Zurich	S-GE	Switzerland Global Enterprise
EU	European Union	SECO	State Secretariat for Economic Affairs
EUR	Euro	SME	Small and medium-sized enterprises
ex.	for example	SMTI	Swiss Meditech Industry
FASMED	Federation of Swiss Medical Technology	UK	United Kingdom
FCA	Federal Customs Administration	U.S.	United States
FSO	Federal Statistical Office	USA	United States of America
GDP	Gross Domestic Product	USD	United States Dollar
GER	Germany	vs.	versus
HSG	University of St. Gallen		

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- This report was created in the summer of 2016 based on a survey of 344 medtech companies in Switzerland. The Medical Cluster database, contributions from the Advisory Board and original research was also used. The statistical data represent the opinions of the participating companies at the time of the survey (March to May 2016) and therefore may not necessarily indicate the current market situation at the time of reading.
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Partners

