

November 2022

# Georg Fischer

## Market profile

Country	Switzerland
Sector	Flow Control Equipment
Market cap (CHF million)	4'500
52-week high / low (CHF)	74.5/ 45.9
Price per share (CHF)	55

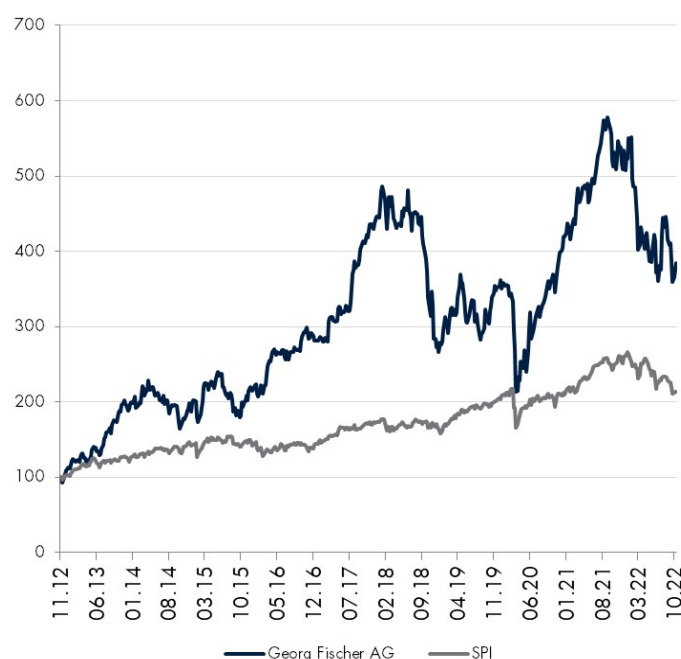
## Key metrics (CHF)

	2021	2022e	2023e
EPS	2.60	3.43	3.85
PE	19.3	16.9	15.9
P/Book	2.9	2.8	2.5
Dividend yield	1.1%	2.2%	2.4%

## Executive summary

Georg Fischer's history traces back to 1802, when Johann Conrad Fischer bought a water-driven mill in the Mühlfental valley near Schaffhausen. He used the mill as a copper smelting plant and works for developing new alloys. Today, with its three divisions -Piping Systems, Casting Solutions, Machining Solutions- the company offers products and solutions that enable the safe transport of liquids and gases, as well as lightweight casting components and high-precision manufacturing technologies. The corporation is headquartered in Schaffhausen and present in 34 countries with 139 companies, 61 of which are production facilities. In 2021, the group employed 15'111 people worldwide and generated sales of CHF 3'722 million.

Evolution of stock price with respect to benchmark (rebased)  
Source: IAM



## Investment case

Georg Fischer is a leader in sustainability and innovation, offering its customers high quality solutions in the areas of the safe transport of liquid and gases (Piping Systems); lightweight casting components (Casting Solutions) and high-precision manufacturing technologies (Machining Solutions). The Piping System division is sustainably profitable and has a defensive business model. It has been growing for years with high profitability and low capital employed. The Piping Systems benefits from healthy demand from end markets such as building technology, semiconductors, chemicals, and gas and water utilities. The latter is profiting from the infrastructure program in the USA. However, despite their excellent market position, the other divisions (Casting Solutions and Machining Solutions), are of secondary importance and could even be considered as distracting the management from the core business

# Georg Fischer

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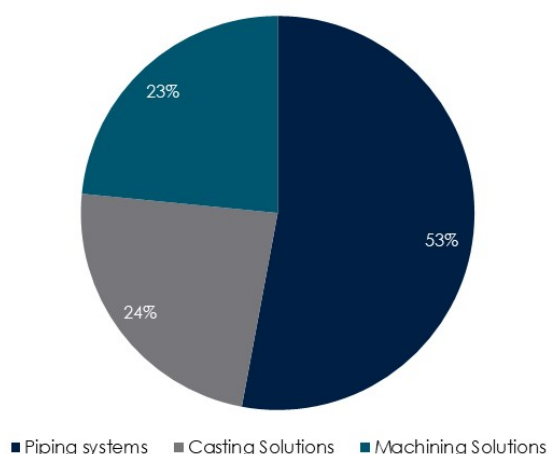
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## Company description and history

Georg Fischer's history traces back to 1802, when Johann Conrad Fischer bought a water-driven mill in the Mühlfental valley near Schaffhausen. He used the mill as a copper smelting plant and works for developing new alloys. Today, with its three divisions -Piping Systems, Casting Solutions, Machining Solutions- the company offers products and solutions that enable the safe transport of liquids and gases, as well as lightweight casting components and high-precision manufacturing technologies. The corporation is headquartered in Schaffhausen and present in 34 countries with 139 companies, 61 of which are production facilities. In 2021, the group employed 15'111 people worldwide and generated sales of CHF 3'722 million.

Fig.1: Sales by division, 2021

Source: Georg Fischer



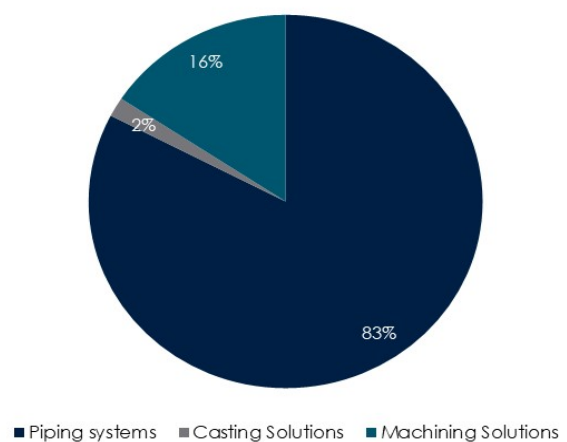
## Group Structure

Georg Fischer is organized around its three divisions, Piping systems, Casting Solutions and Machining Solutions. Each division has its own President and CFO. On top of the divisions, The Board of Directors is responsible

for managing the company, defining the strategic direction, and setting financial and accounting policies. The Executive Committee addresses all issues of relevance to the company, takes decisions within its remit and submits proposals to the Board of Directors. The CEO and the Heads of Corporate Development and Corporate Finance & Controlling make up the Corporate Center whose function is to assist the Board of Directors in the execution of its duties.

Fig.2: EBIT by division, 2021

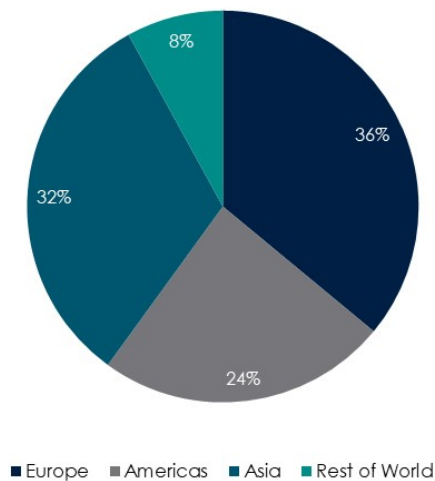
Source: Georg Fischer



## Piping Systems

When it comes to Piping Systems, one might think primarily of pipes. Georg Fischer is mainly involved in the production of fittings in most markets and applications. Pipes tend to be standard products with a high material content and a lot of air inside, where transport costs dictate local production. For high value industrial applications, transport costs are less important than the advantages of a centralized production. Production of fittings, valves, actuators, and jointing technologies sold by Georg Fischer can also take place outside the end markets, provided they are not standard products.

Fig.3: Piping Systems, sales by region, 2021  
Source: Georg Fischer



### Material used

The requirement for piping systems depends on the variety of chemical and physical parameter. Such are the chemical composition of the transported medium, the chemical composition of the environment, corrosion, fire risks, temperature and temperature fluctuations, pressure, transport speed as well as height differences. Therefore, there is need for a wide variety of materials. Hygienic requirements for drinking water and the purity of equipment for the semiconductor industry also require particularly pure starting materials, and manufacturing processes are very different. The main piping materials used are polyvinyl chloride (PVC), polyethylene (PE), polybutene (PB), polypropylene (PP) and polyvinylidene fluoride (PVDF).

### Joining techniques

Piping can be screwed, welded, pressed, plugged, and glued. Depending on the material, application and situation, different methods are suitable. Georg Fischer specializes in developing the best connections in terms of quality and cost for a wide range of applications, perfecting all these technologies. For welding plastic pipes, the company offers various welding techniques such as socket welding, butt welding, infrared welding, and bead – and groove-free welding.

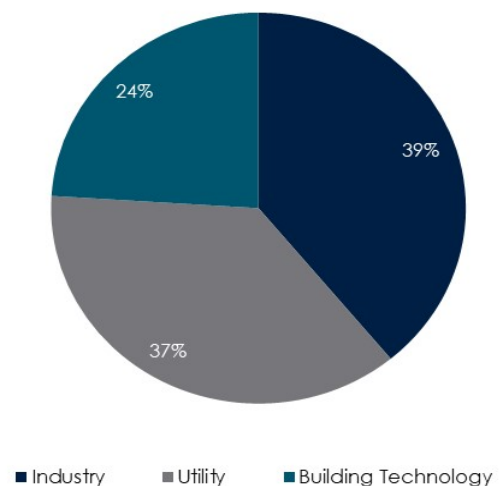
### End markets

Georg Fischer is strongly anchored in the water and gas distribution (Utility segment) with 38% of sales. Equally important is the industrial business, which is divided among submarkets such as the chemical process industry, data centers, power generation, food & beverage, marine, microelectronics and water treatment. Building technology is the smallest segment within the division, accounting for 24%.

### Casting Solutions

This division is the historical origin of Georg Fischer, which was incorporated in 1802 as an iron foundry. The strategic focus has for long been on the automotive sector. Due to the trend towards lighter vehicles, the division

Fig.4: Piping Systems, sales by segment, 2021  
Source: Georg Fischer

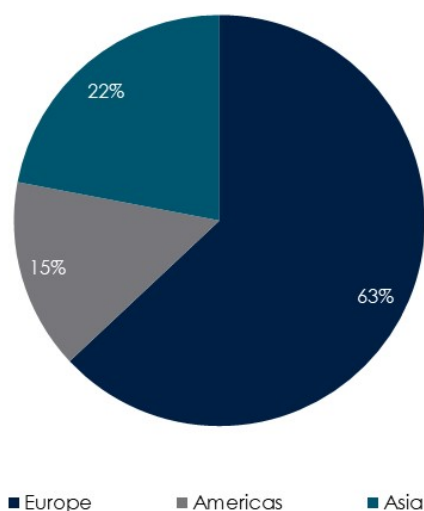


discontinued its iron ore casting business and developed its capabilities in aluminum and magnesium light-metal components. In electric vehicles in particular, weight reduction counts as an important contribution to increasing the range on a single battery charge. Hybrid and electric vehicles account now for about one third of orders. Georg Fischer has 13 production sites in Germany, Austria, Romania, Switzerland, China, and the USA. In the USA, this division works together with the Canadian precision machining company Linamar as part of a 50:50 joint venture.

Casting Solutions core competencies are:

- Die casting of aluminum and magnesium alloys for vehicles and industrial applications. Examples include structural parts for cars, transmission housings, electric motor housings, battery housings, escalator steps and light housings.
- Investment casting involves the industrial production of complex parts made from high-strength steel-nickel-cobalt superalloys using the lost-wax casting process, for turbine blades.
- Additive manufacturing includes the three-dimensional printing of sand cores for mold-making in iron casting as well as the time-critical production of complex metal parts.
- Toolmaking: die casting applications require molds that can withstand enormous pressure.

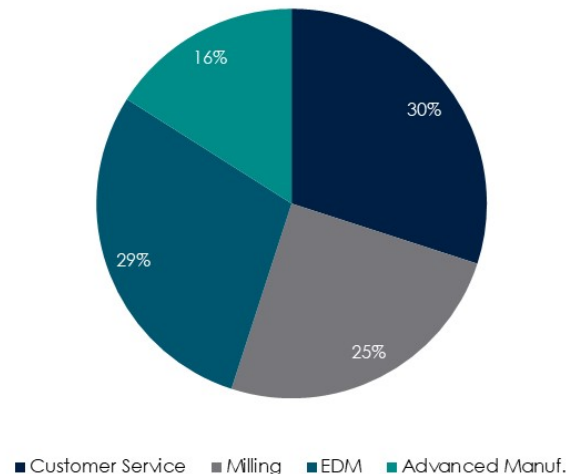
Fig.5: Casting Solutions, sales by region, 2021  
Source: Georg Fischer



With its technological leading manufacturing processes and upstream and downstream services, the division is well positioned. As it operates in a fragmented environment, the company should distinguish itself through quality and experience. Competitors include Ryobi (Japan),

Druckguss Systeme AG (Switzerland), Shiloh Industries (USA), and Wanfeng Lightweight Technologies (China).

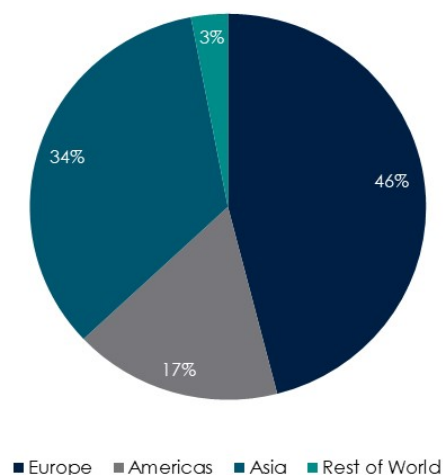
Fig 6.: Casting Solutions, Sales by segment, 2021  
Source: Georg Fischer



## Machining Solutions

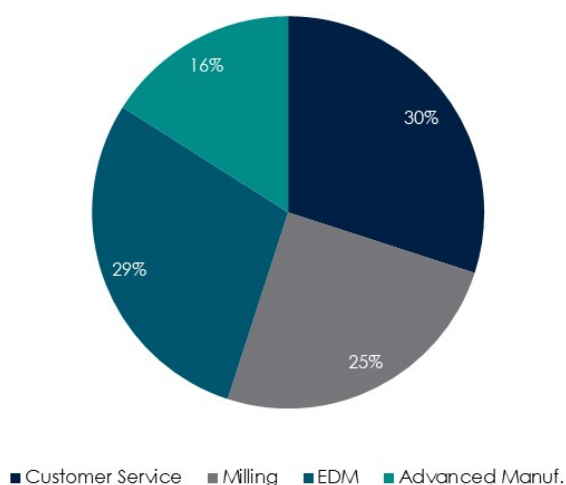
The origin of this division is the combination of machine manufacturer Charmilles, acquired in 1983, with Agie SA, acquired in 1996. In addition, Mikron's milling machine business was integrated in 2000. Georg Fischer is now one of the world's leading suppliers of complete solutions for tool and mold making and for producing

Fig 7.: Machining Solutions, Sales by segment, 2021  
Source: Georg Fischer



precision parts. Its milling portfolio includes milling machines and their spindles, wire and die-sinking machines, and laser technologies. The latter are used in particular for surface processing of injection molds (laser structuring, laser beams, laser engraving and laser etching) and for micromachining. In additive manufacturing, Georg Fischer offers 3D metal printing systems. Important markets for these devices are aerospace, automotive and motorsport. Other customer services include the development of tools, automation solutions and software. The division has its own sales companies in over 50 countries. Key customer segments include aerospace, information and communication technology, electronics, medical technology, and the automotive industry.

Fig.8.: Machining Solutions, sales by segment, 2021  
Source: Georg Fischer



## Strategy 2025

2021 marked the launch of the company's new strategy cycle which emphasizes the central roles of innovation and sustainability. The five-year plan addresses three strategic focus areas: profitable growth, portfolio resilience and developing a performance and learning culture.

The Strategy 2025 will be an evolution of the promising path of the last five years. The goal is to drive profitable growth through intelligent and sustainable solutions, increase robustness through resilient portfolio and opera-

tional excellence, and evolve the culture towards more performance and learning. In terms of financial targets, the strategic ambition is to achieve sales of CHF 4.4 (organic) to 5 billion (including acquisitions) with an EBIT margin of 9-11% and a return on invested capital of 20-22% by 2025.

Sustainability is an integral part of the strategy and in the next five years, Georg Fischer wants to become a sustainability leader through offering high-value sustainable products and solutions, driving circular economy, fostering a diverse, engaging, and safe working environment, and collaborating with stakeholders along the value chain. To achieve this, the company has set itself ambitious sustainability targets such as realizing 70% of sales in 2025 from products and solutions with social or environmental benefits for customers, achieving 21% reduction of absolute CO2 emission by 2025, ensure that 25% of newly appointed managers are female.

## Georg Fischer's markets

As Piping Systems is Georg Fischer's core business and accounted for nearly 53% of sales and 89% of EBIT in 2021, we will concentrate on this division. The Piping Systems division is benefitting from healthy demand from end markets such as building technology, semiconductors, chemicals, gas and water utilities. The latter is profiting from an infrastructure program in the USA. The USD 1 trillion infrastructure package adopted under the Biden administration also includes USD 55 billion for water supply, in particular the replacement of lead pipes with more suitable materials. This toxic material was used until 1986 for the transition from public to private lines because of its flexibility. Georg Fischer has a good chance of generating additional sales from this infrastructure program thanks to its very good solutions for house connections.

## Competitive landscape

Piping tends to be a local business that benefits from high transport costs, regulations, and habits in plant construction. In addition, as a manufacturer of specialties, Georg Fischer benefits from a better negotiating position when it comes to large projects than pure pipe manufacturers. At first glance, the piping industry appears very fragmented,

but a closer look at individual products, applications and markets reduces the number of relevant competitors. Among competitors we can cite Geberit, which generates about one third of its sales with piping systems; the finish company Uponor; Rotork, a British company specialized in industrial flux controls; and to some extent Belimo, a company specialized in actuators for ventilation and pipeline valves.

## ESG considerations

Georg Fischer defines sustainability as responsible corporate actions geared to the long term. The company published its first environmental report in 1997. Since 2019, a detailed sustainability report has been published annually.

### Environment

The company's most important products are made of plastic. This material has major advantages over heavier materials, such as steel and concrete, in manufacturing, transport, and processing. In addition, piping systems serve their purpose in unchanged quality for up to 100 years, during which time they make an energy-efficient contribution to the transport of liquids and gases. At the end of their service life, these products are virtually fully recyclable.

### Social

Georg Fischer wants to offer its employees a diverse, motivating, and safe workplace. To implement this plan, the company sets three goals for 2025: gender balance and, employee engagement, and a safe, healthy working environment.

### Governance

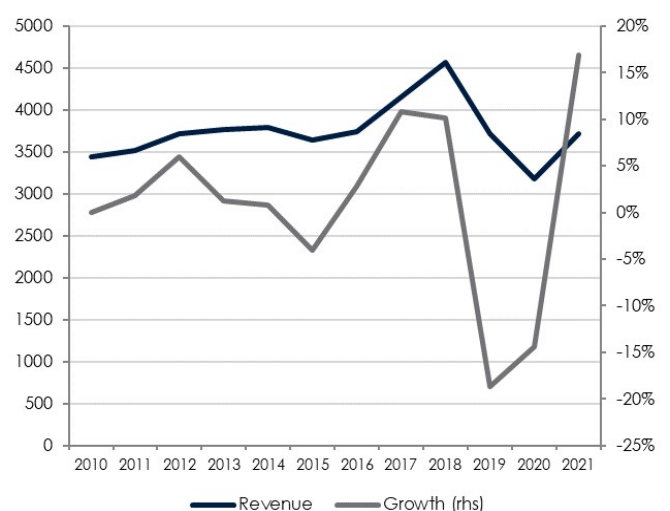
Shareholders: the most important shareholders are currently Impax Asset Management (5.86%), BNP Paribas (4.84%), Blackrock (3.74%), Vanguard (3.16%) and the Norges Bank (3.04%). Georg Fisher has no shareholder with a dominant influence, and shareholder decisions are made by professional investors.

## Financial analysis

### Revenues

Sales have increased by 16.9% in 2021, a nice rebound after two consecutive years of negative growth. The company's turnover is now at par with the 2019 pre-covid level, but still much lower than in 2018. Sales growth illustrates the high cyclical nature of the company. Since 2010 there has been three waves of growth and two periods of contractions. In 2021, sales were boosted by the successful development of multiple segments, including data centres, e-mobility, and MedTech. All three divisions recorded a solid development in China, adding to remarkable growth in the Americas and Europe. The sales rebound reflects the resilient portfolio of all three divisions and the rebound of various markets (mould and die, water treatment, chemical process industry, ship building) and offsetting the subdued performance in the aerospace and automotive sectors. Price increase also contributed positively to sales growth and underlined the strong market position of the company.

Fig.9: Evolution of sales  
Source: Georg Fischer



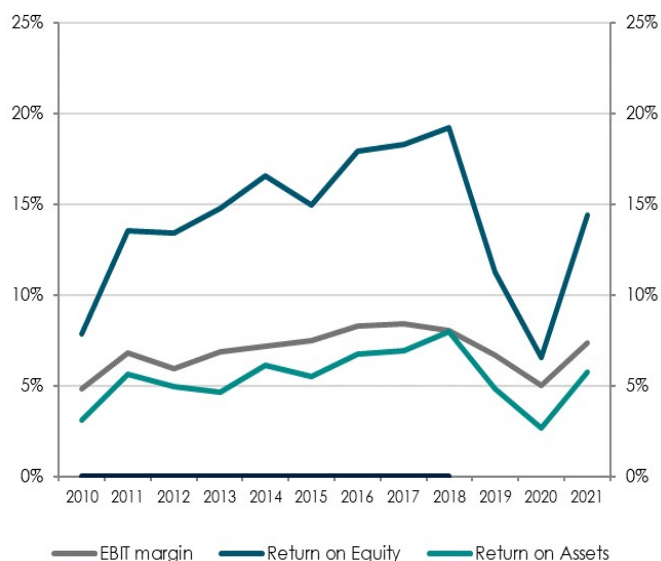


## Profitability

The group's EBIT reached CHF 274 million in 2021 and the EBIT margin rose to 7.5%. Net profit attributable to shareholders amounted to CHF 214 million. The groups' ability to increase prices and to digest raw material increase through cost cutting and productivity enhancement initiative explains these good results. However, margins have not fully recovered and are still below their pre-covid level. 2022 will also be a challenging year for the group as inflationary pressures have not decreased and growth is decelerating worldwide.

Fig.10: Profitability ratios

Source: Georg Fischer

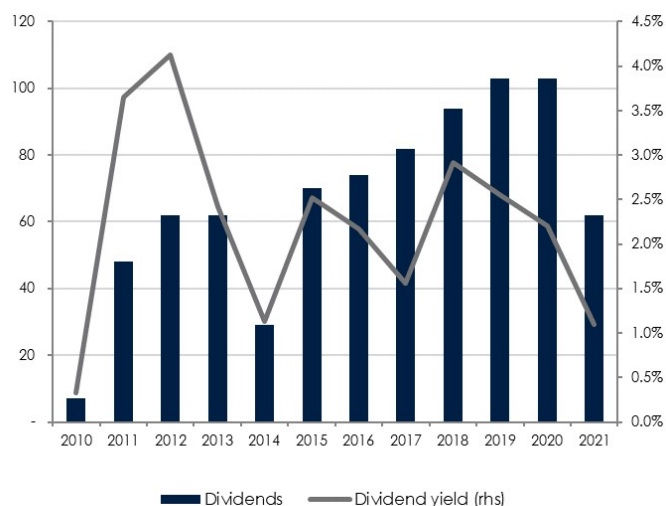


## Capital distribution

In 2021, the dividend yield was about 1.0%. Following the good results, the general assembly has approved the board's proposition to increase the dividend from CHF 0.75 to 1.0 per share. At current share price, the dividend yield is approximately 2.2%.

Fig.11: Dividends and dividend yield

Source: Georg Fischer

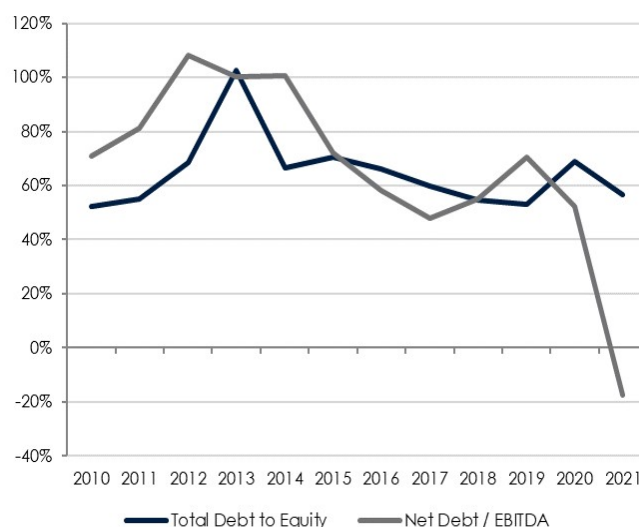


## Strong balance sheet

The company further reinforced its balance sheet in 2021. This resulted in a high level of liquidity and a negative net debt position. The debt-to-equity ratio improved from 69% to 58%. The rebound in activity during the fourth quarter 2021 led to an increase in net working

Fig.12: Debt ratios

Source: Georg Fischer



capital that affected the free cash flow before acquisitions. The very strong liquidity position and balance sheet may enable Georg Fischer to consider some acquisitions in its very fragmented markets.

## Investment case

Georg Fischer is a leader in sustainability and innovation, offering its customers high quality solutions in the areas of the safe transport of liquid and gases (Piping Systems); lightweight casting components (Casting Solutions) and high-precision manufacturing technologies (Machining Solutions). The Piping System division is sustainably profitable and has a defensive business model. It has been growing for years with high profitability and low capital employed. The Piping Systems benefits from healthy demand from end markets such as building technology, semiconductors, chemicals, and gas and water utilities. The latter is profiting from the infrastructure program in the USA. The division is developing additional momentum thanks to related services such as prefabrication, quality control and planning work. However, despite their excellent market position, the other divisions (Casting Solutions and Machining Solutions), are of secondary importance and could even be considered as distracting the management from the core business

## Opportunities

- Further focus on less cyclical business could strengthen the company
- Potential acquisitions to strengthen market shares
- Intensification of market development in Piping Systems in existing and new markets also with new applications

## Threats

- Procurement and logistics problems in all divisions with corresponding price effects
- Cyclical downturn in auto production and machine tools
- Recession would slow down investments in piping infrastructure

## SWOT analysis

### Strengths

- Growing, sustainably profitable and non-capital-intensive Piping System business
- Good geographical diversification and strong position in China
- Strong management team and corporate governance
- Solid balance sheet and strong liquidity position

### Weaknesses

- Hardly any synergies among the divisions
- High proportion of costs in Switzerland burdened by the strong Swiss franc