

# DACH Capital Market Study

ANALYSIS OF COST OF CAPITAL PARAMETERS AND SECTOR MULTIPLES  
FOR THE CAPITAL MARKETS IN GERMANY, AUSTRIA AND SWITZERLAND  
AS OF 31 DECEMBER 2024

Volume 16, March 2025

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Dear business partners and friends of ValueTrust,

We are pleased to release our sixteenth edition of the **ValueTrust DACH<sup>1)</sup> Capital Market Study** for Q4 2024 carried out in cooperation with **finexpert** and the Institute of Accounting and Auditing at the **WU** Vienna.

In this Study, we provide certain **cost of capital inputs required to perform an enterprise valuation** in Germany, Austria and Switzerland:

- the relevant parameters used to calculate the cost of capital under the CAPM, including risk-free rate, market risk premium and beta;
- implied and historical market/sector returns;
- capital structure-adjusted implied sector returns, which serve as an indicator for the unlevered cost of equity (the levered cost of equity can be calculated by adapting the company specific debt situation to the unlevered cost of equity, serving as an alternative to the CAPM);
- an analysis of empirical (ex-post) cost of equity in the form of total shareholder returns consisting of capital gains and dividends (total shareholder returns can be used as a plausibility check for the implied (ex-ante) returns);
- a trading multiples overview.

We examine the relevant cost of capital parameters for the German, Austrian and Swiss capital markets in form of the CDAX<sup>2)</sup>, WBI<sup>3)</sup> and SPI<sup>4)</sup>. The constituents of these indices were allocated to twelve **finexpert** sector indices (so-called "super sectors"): Banking, Insurance, Financial Services, Consumer Service, Consumer Goods, Pharma & Healthcare, Information Technology, Telecommunication, Utilities, Basic Materials, Industrials and Real Estate.

Historical data was compiled between the reference dates 31 December 2018 and 31 December 2024 and is updated semi-annually with the objective to track capital market performance over time.

Further knowledge and information for financial decision making is provided at [www.finexpert.info](http://www.finexpert.info).

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- He has more than 30 years of experience in corporate valuation and financial advisory
- He is Honorary Professor for "Practice of transaction-oriented company valuation and value-oriented management" at the LMU in Munich
- He is member of the DVFA Expert Group "Fairness Opinions" and "Best Practice Recommendations Corporate Valuation"
- He is also Co-Founder of the European Association of Certified Valuators and Analysts (EACVA e.V.)



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- Benedikt leads the Swiss operations, the Financial Advisory business as well as the VC and Digital Valuation practice
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## DISCLAIMER

This Study presents an empirical analysis which serves the purpose of illustrating the cost of capital of Germany's, Austria's, and Switzerland's capital markets. The available information and the corresponding exemplifications do not allow for a complete presentation of a proper derivation of cost of capital. Furthermore, the market participant must consider that the company specific cost of capital can vary widely due to individual corporate circumstances.

The listed information is not specific to anyone and consequently, it cannot be directed to an individual or juristic person. Although we are always striving for reliable, accurate and current information, we cannot guarantee that the data is applicable in current and future valuation analyses. The same applies to the underlying data from the data provider S&P Capital IQ.

We recommend a self-contained, technical, and detailed analysis of the specific situation and we dissuade from acting solely based on the information provided.

ValueTrust and its co-authors do not assume any responsibility or liability for the up-to-datedness, completeness or accuracy of this Study or its contents.

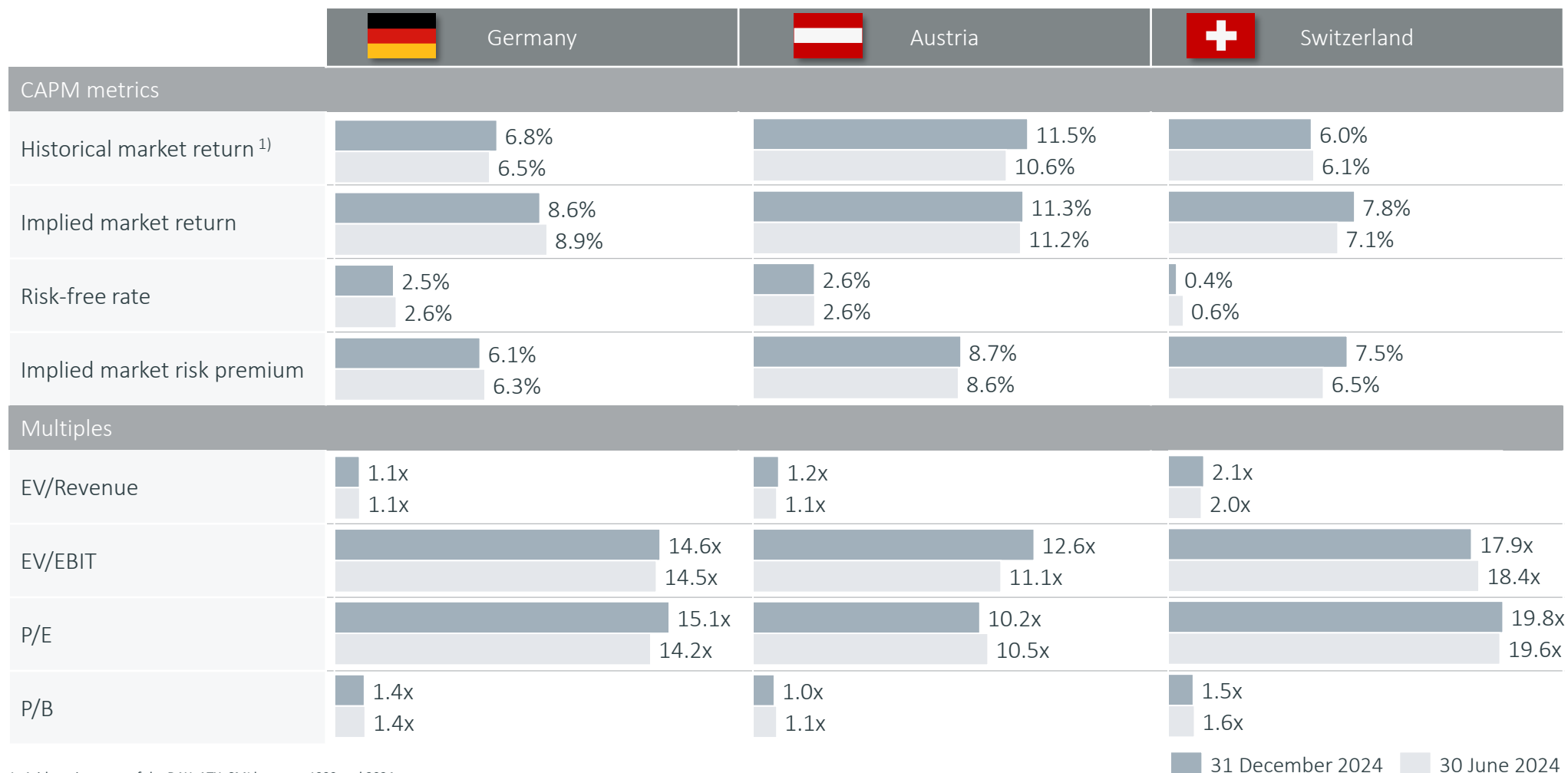
01

Executive summary



# The implied market risk premium slightly decreased for Germany, remained almost constant for Austria and increased for Switzerland driven by implied market returns

Market risk premium and trading multiples by country, Q4 2024















1. Arithmetic return of the DAX, ATX, SMI between 1999 and 2024.

 31 December 2024  30 June 2024

# Banking posted highest implied levered cost of equity benefitting from high interest rates, Information Technology showed best shareholder return in line with increase in earnings forecasts

Cost of equity by sector and methodology for the DACH region, Q4 2024

Sectors	Implied levered cost of equity	Levered cost of equity (CAPM) <sup>1)</sup>	1 / PE-ratio (1yf)	Total shareholder return (Ø 6y) <sup>2)</sup>
 Banking	10.3%	7.5%	7.8%	17.9%
 Insurance	9.9%	6.9%	7.0%	18.4%
 Financial Services	6.9%	8.3%	7.3%	23.1%
 Consumer Service	7.1%	8.8%	4.3%	23.0%
 Consumer Goods	10.0%	8.0%	6.2%	8.9%
 Pharma & Healthcare	8.1%	9.1%	4.9%	17.4%
 Information Technology	5.0%	8.9%	5.6%	23.3%
 Telecommunication	8.2%	6.4%	6.8%	13.9%
 Utilities	7.7%	5.9%	8.2%	11.8%
 Basic Materials	9.0%	9.8%	8.0%	6.3%
 Industrials	7.5%	8.8%	5.8%	22.4%
 Real Estate	6.1%	7.1%	4.4%	6.0%











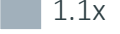











































1. Based on 2-year sector beta, risk-free rate of 2.48% and implied market risk premium of 6.1% for the German market;

2. Total shareholder returns can be viewed as historic, realized cost of equity. However, it has to be considered that total shareholder returns vary widely, depending on the relevant time period.



## Utilities sector's valuation came out the lowest due to a rise in earnings estimates compared to decreasing prices, while the Consumer Service sector trades at the highest P/E multiples

Trading multiples by sector for the DACH region, Q4 2024

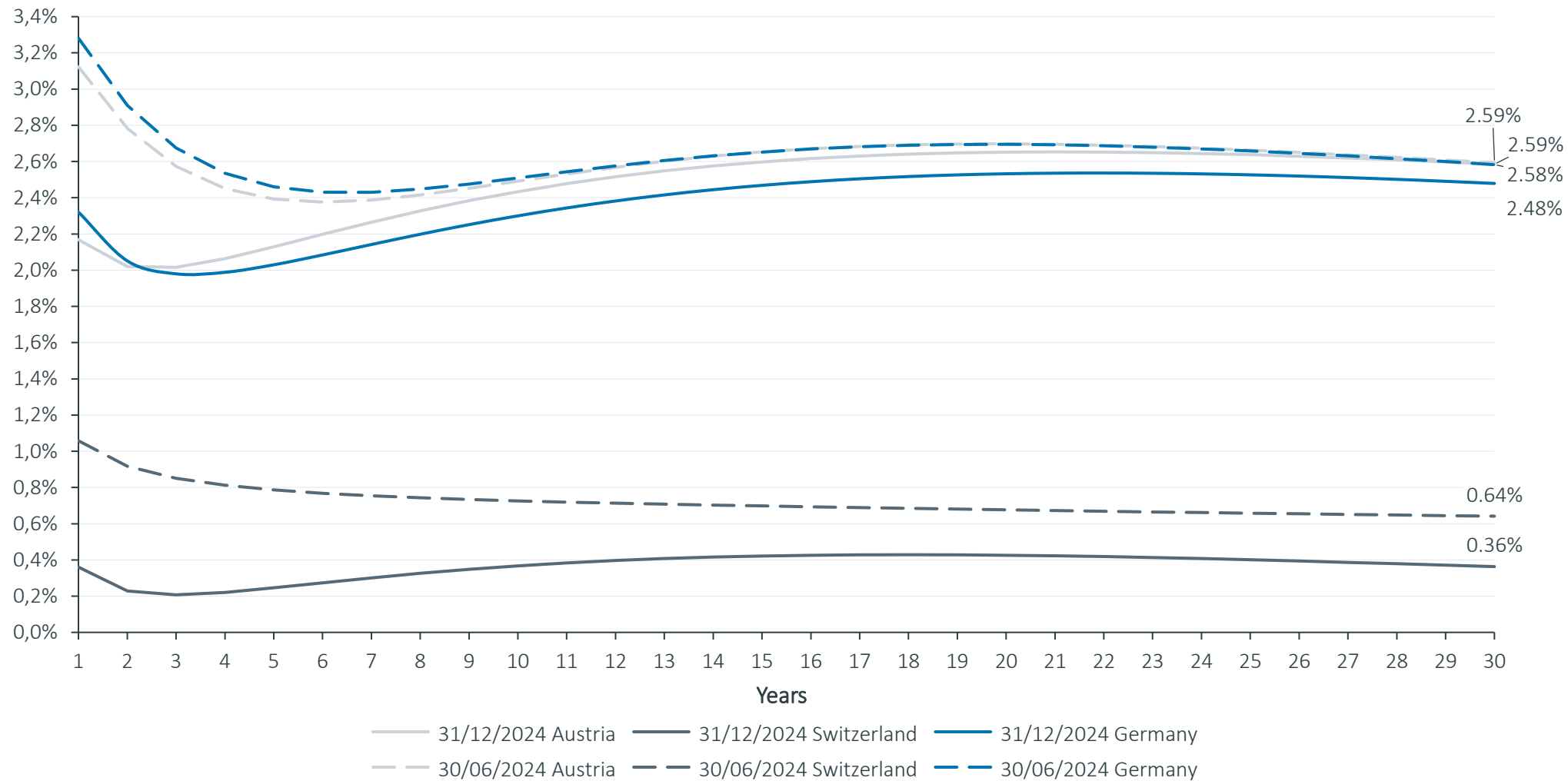
Sectors	EV/Revenue 1yf	EV/EBIT 1yf	P/E 1yf	P/B LTM
 Banking	n.a.	n.a.	 12.9x	 0.9x
 Insurance	n.a.	n.a.	 14.4x	 1.9x
 Financial Services	n.a.	n.a.	 13.7x	 0.9x
 Consumer Service	 1.1x	 18.0x	 23.0x	 2.0x
 Consumer Goods	 1.0x	 14.8x	 16.1x	 1.1x
 Pharma & Healthcare	 3.6x	 20.0x	 20.2x	 2.2x
 Information Technology	 1.7x	 14.9x	 17.9x	 2.1x
 Telecommunication	 1.6x	 14.0x	 14.6x	 1.9x
 Utilities	 2.0x	 13.5x	 12.1x	 1.4x
 Basic Materials	 1.2x	 12.3x	 12.5x	 1.1x
 Industrials	 1.2x	 15.0x	 17.3x	 1.4x
 Real Estate	 9.2x	 25.6x	 22.8x	 0.9x

02

Risk-free rate

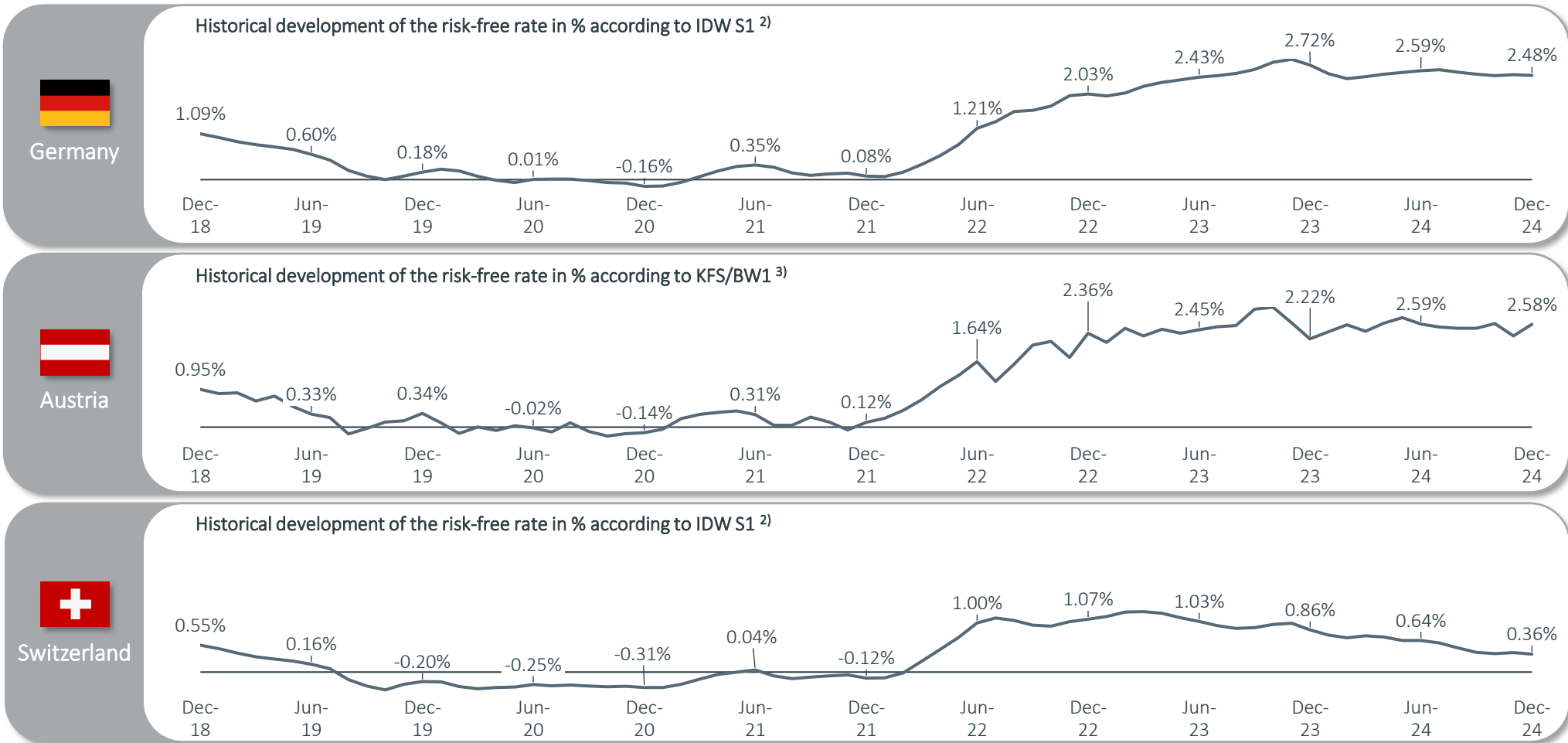
# Germany's risk-free rate experienced a 11 bps decrease in the last 6 months to 2.48%, while Austria decreased 1 bp to 2.58% and Switzerland decreased 28 bps to 0.36%

Risk-free rate for Germany, Austria and Switzerland based on long-term bonds (Svensson method), 31 December 2024



# While German and Austrian risk-free rates decreased compared to June 2024, they remain elevated historically, Swiss rates decreased steadily since December 2022

Historical risk-free rates by country from 31 December 2018 to 31 December 2024<sup>1)</sup>, in %



1. Historical development of the risk-free rate is measured based on interest yield curve from 1y to 30y for each date.  
 2. Interest rate as of reference date using 3-month average yield curves in accordance with IDW S 1;  
 3. Interest rate calculated using the daily yield curve in accordance with KFS/BW 1 (no 3-month average).

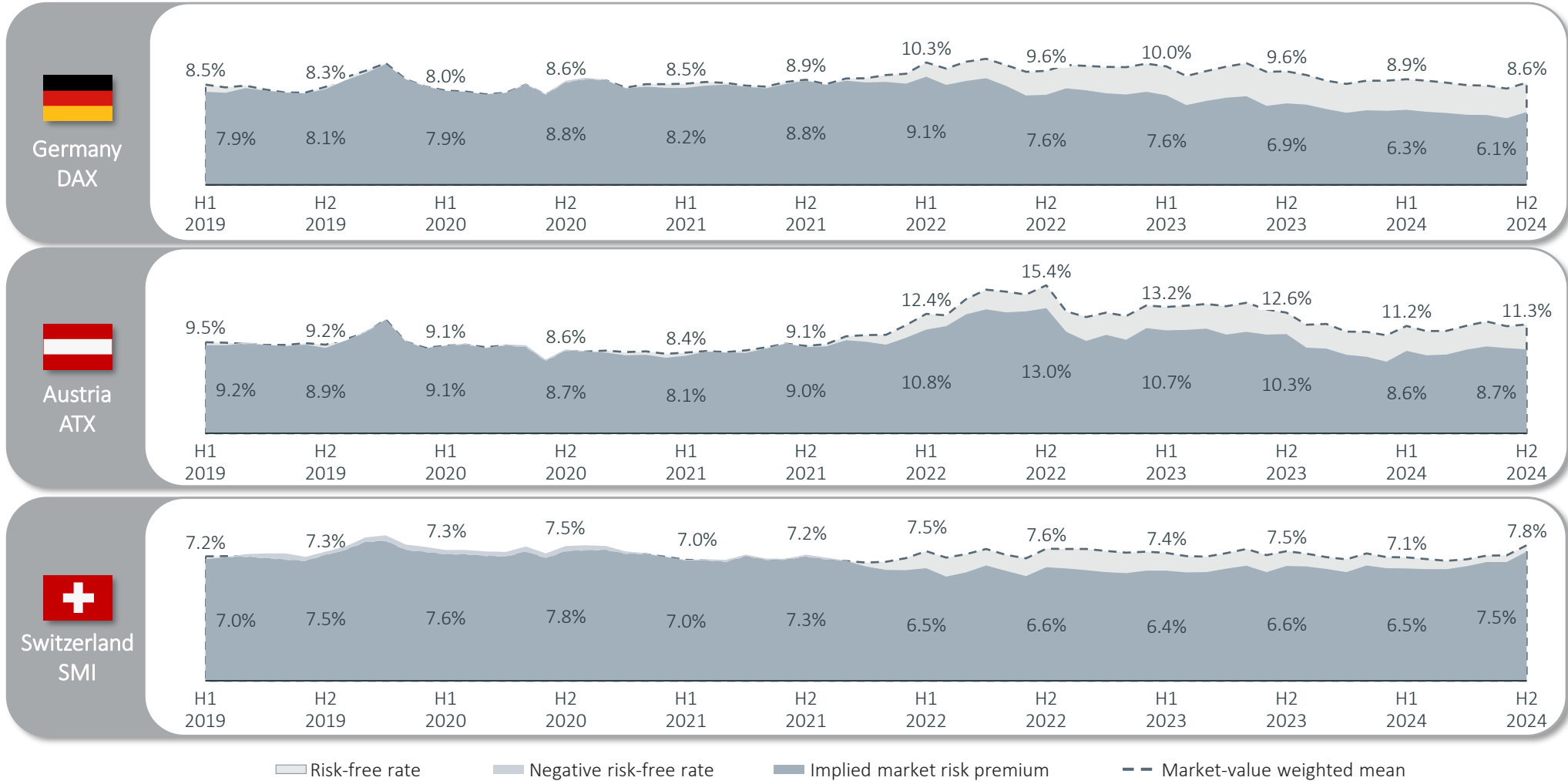
# 03

## Market returns and risk premium

### a. Implied returns (ex-ante analysis)

Due to higher implied returns and lower risk free rate, the implied market risk premium increased by 100 bps in Switzerland, while dropping by 20 bps in Germany due to lower implied returns

Implied market risk premium by country since 2019, in %



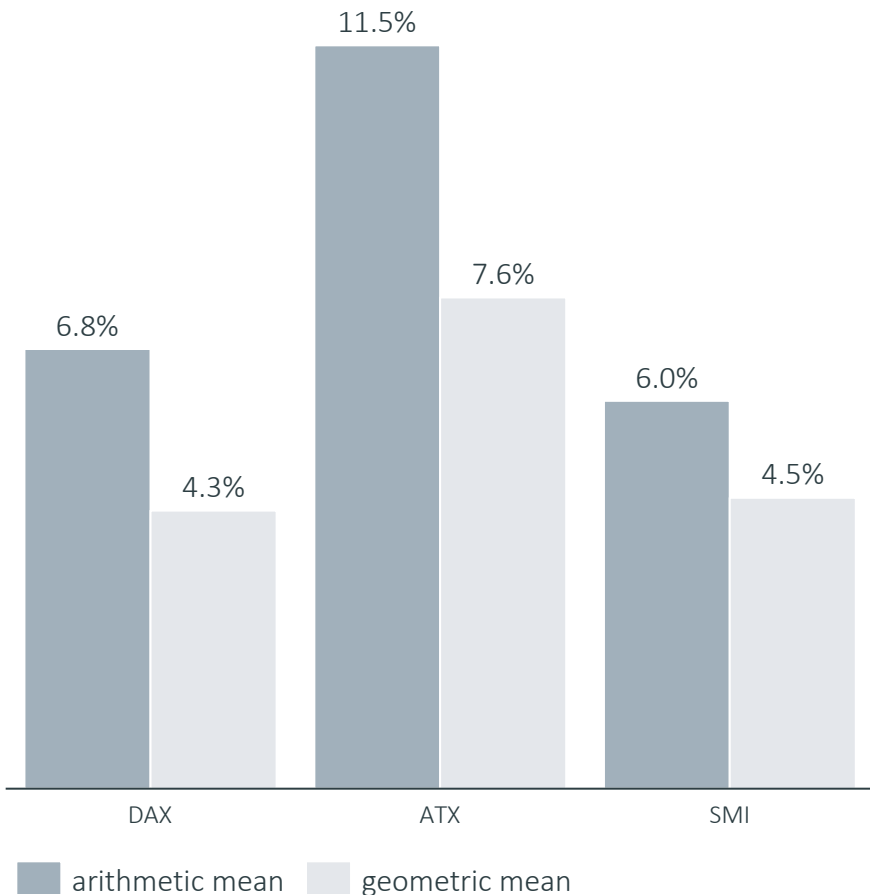
# 03

## Market returns and risk premium b. Historical returns (ex-post analysis)



# Over an investment period of 25 years, the Austrian capital market had the highest historical (arithmetic) returns (11.5%), followed by Germany (6.8%) and Switzerland (6.0%)

Arithmetic and geometric mean of historical market returns as of 31 December 2024, 1999-2024



- In addition to the ex-ante analysis, we also analyze **historical (ex-post) returns over a long-term observation period of 25 years**, indicating a return potential for the German, Austrian and Swiss capital markets.
- The analysis of historical returns can be used for **plausibility checks of the cost of capital**, more specifically of the **return requirements**, which were evaluated through the CAPM.
- For a detailed analysis of historical returns, we use a **return triangle<sup>1)</sup>**, providing **realized annual returns** from **different investment periods**.
- Specifically, the return triangle provides average annual returns for **different buying and selling points in time**, using the **geometric and arithmetic mean**.
- Average annual returns are calculated as **total shareholder returns**, which include the **return on investment** and **dividend yield**.
- Return on investment and dividend yield is captured by **total return indices** and therefore, our analysis is based on the **DAX** for Germany, **ATX Total Return** for Austria and the **SMI Total Return** for Switzerland.
- The following slides show the historical shareholder returns for different holding periods between 1999 and 2024, based on the arithmetic and geometric mean.

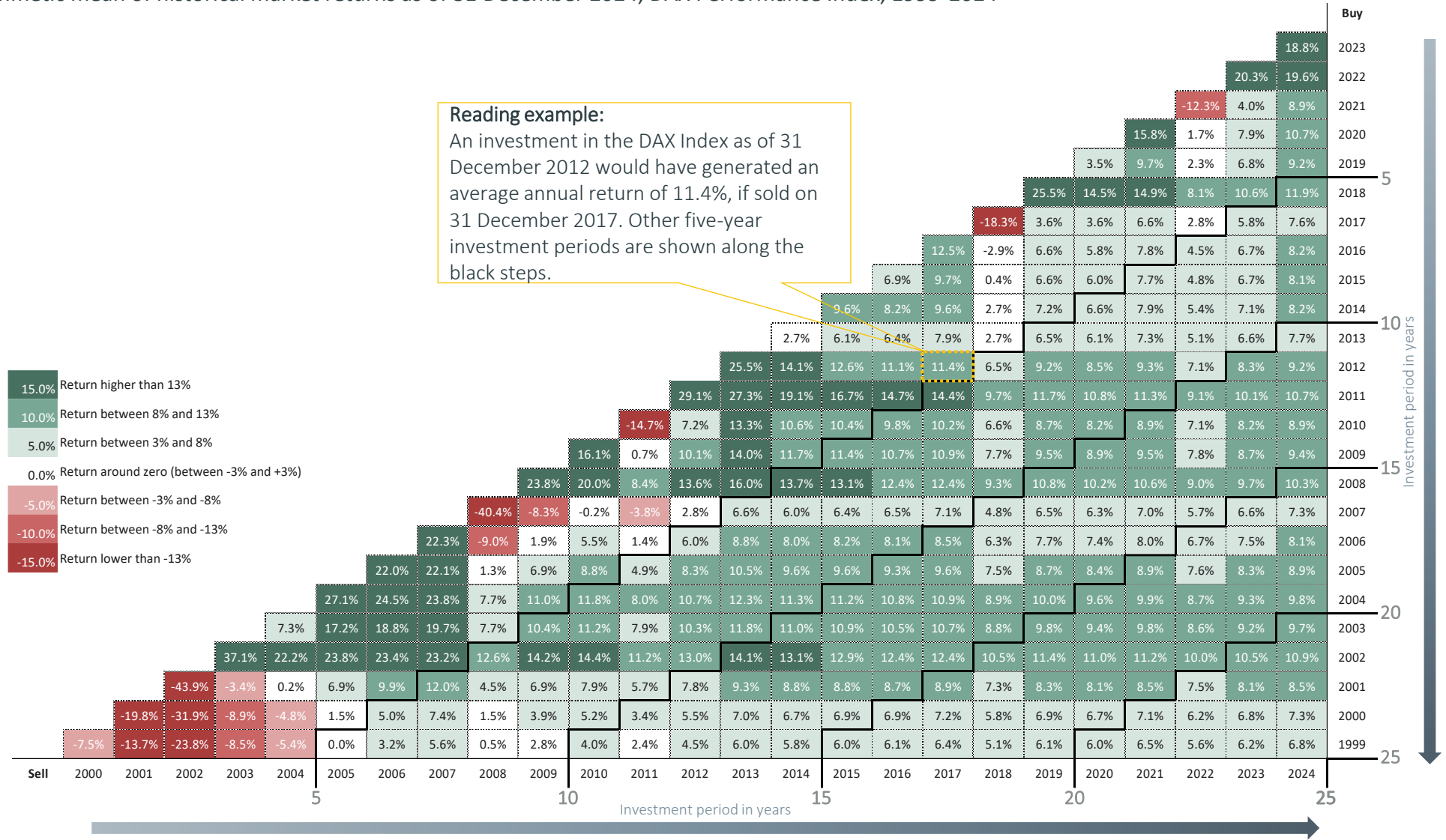
1. The German Stock Institute e.V. (DAI) developed the return triangle for DAX and EURO STOXX.



# With a return of 18.8% over the past 12 months, the DAX outperformed the ATX (12.1%) and significantly exceeded the SMI (7.5%)

Arithmetic mean of historical market returns as of 31 December 2024, DAX Performance Index, 1999-2024

**Reading example:**  
 An investment in the DAX Index as of 31 December 2012 would have generated an average annual return of 11.4%, if sold on 31 December 2017. Other five-year investment periods are shown along the black steps.



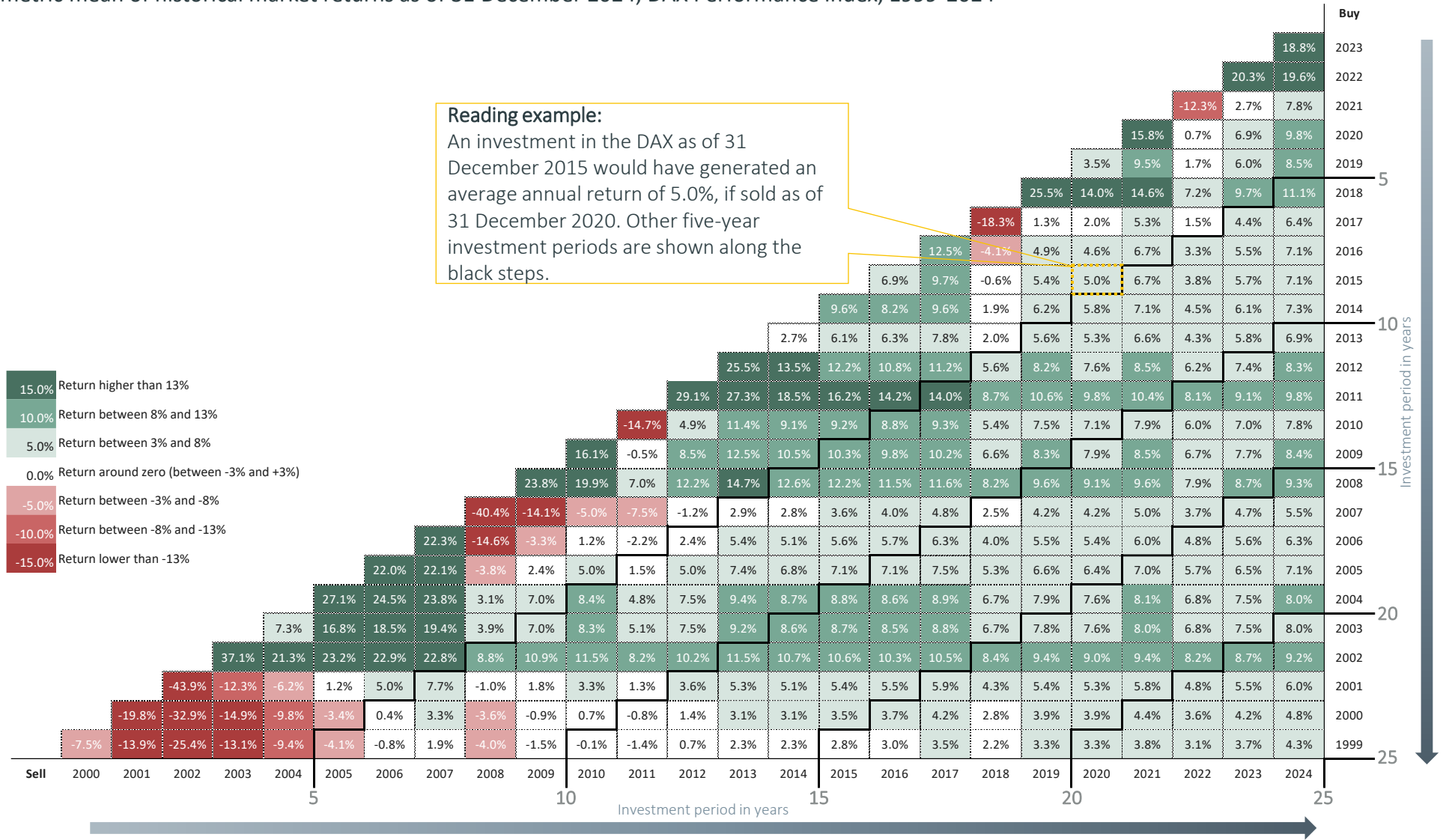
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# The strong performance of the DAX in the last 12 months results in an improvement of the return of an investment in 2021 from 2.7% to 7.8%

Geometric mean of historical market returns as of 31 December 2024, DAX Performance Index, 1999-2024

**Reading example:**  
 An investment in the DAX as of 31 December 2015 would have generated an average annual return of 5.0%, if sold as of 31 December 2020. Other five-year investment periods are shown along the black steps.

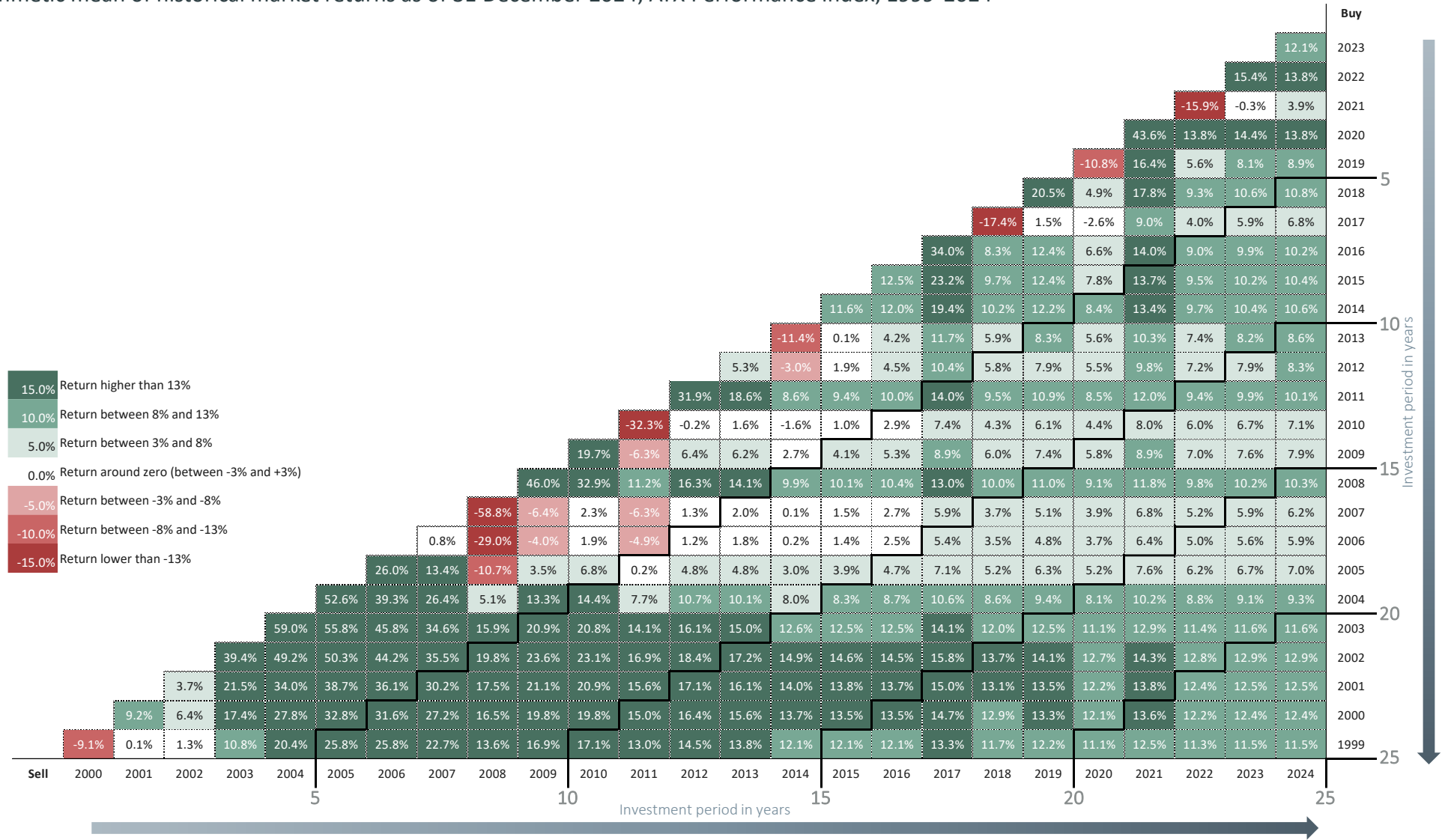


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# With a return of 12.1% over the past 12 months, ATX performance is below the DAX (18.8%) but higher than the historical long-term average of 11.5% p.a. over 25 years

Arithmetic mean of historical market returns as of 31 December 2024, ATX Performance Index, 1999-2024

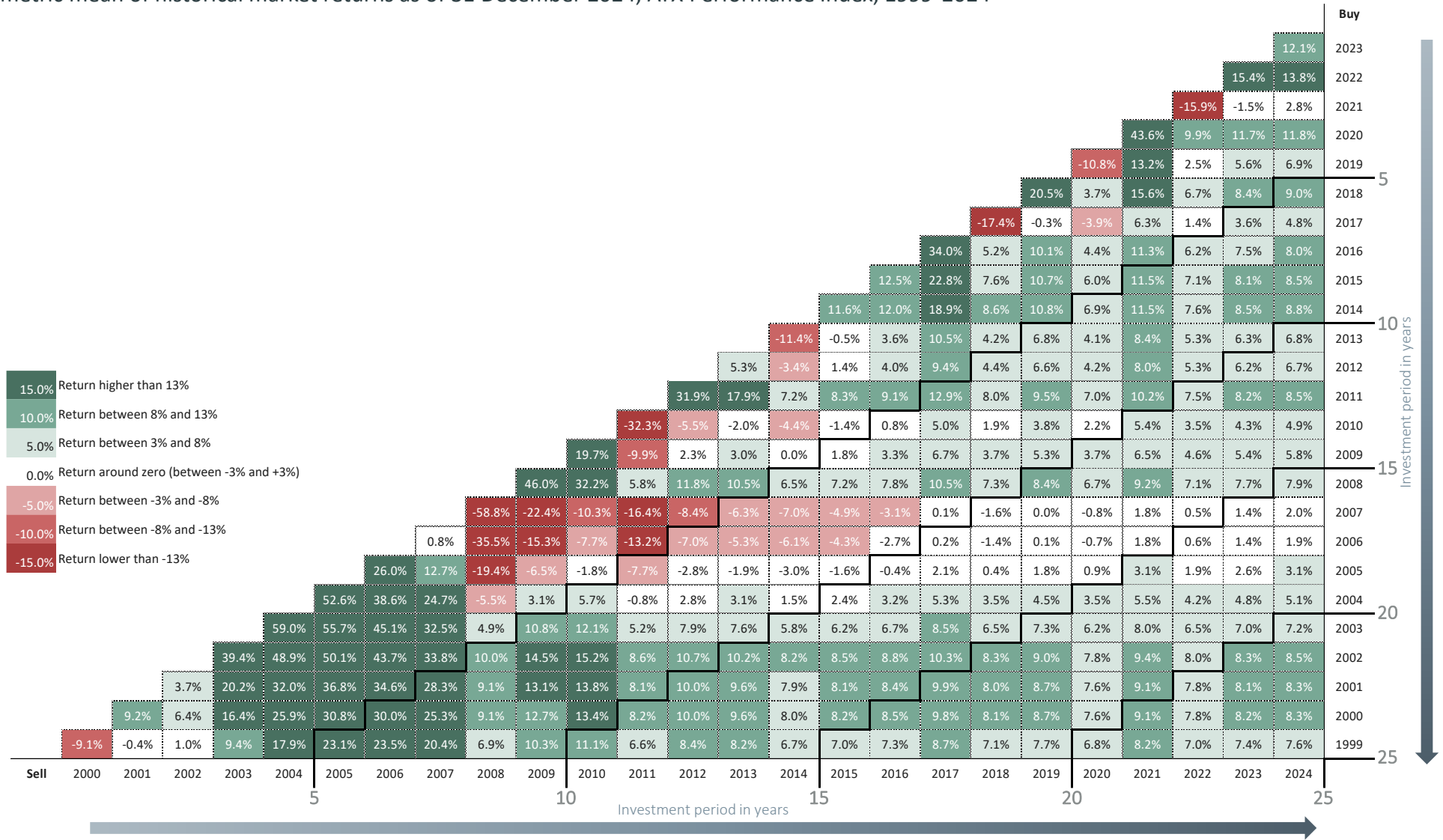


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# The ATX has shown a positive performance over the past 12 months, with the geometric mean return of an investment made in 2021 increasing from -1.5% to 2.8%

Geometric mean of historical market returns as of 31 December 2024, ATX Performance Index, 1999-2024

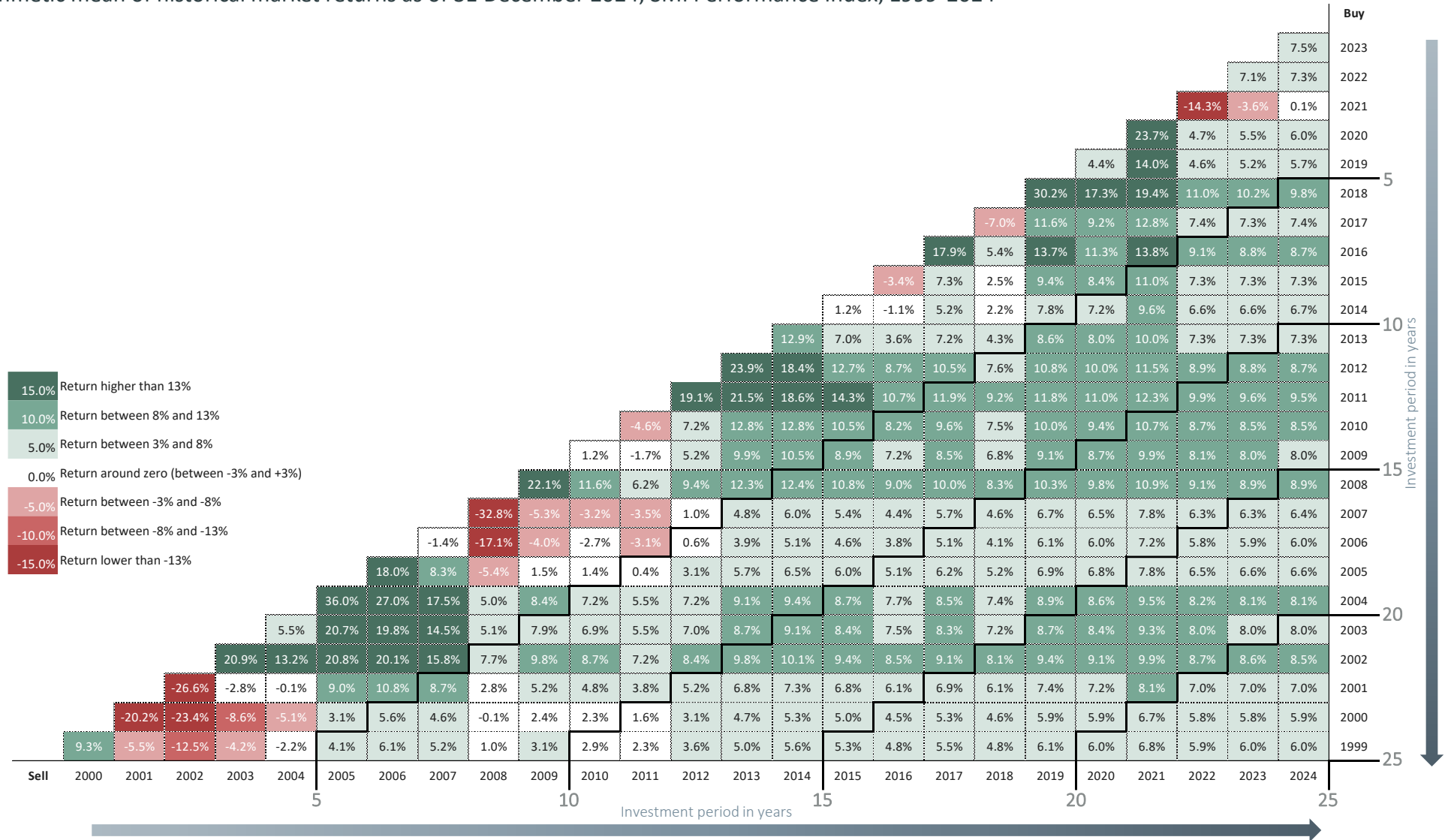


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# With a return of 7.5% over the past 12 months, performance of the SMI is below the ATX (12.1%) and DAX (18.8%)

Arithmetic mean of historical market returns as of 31 December 2024, SMI Performance Index, 1999-2024

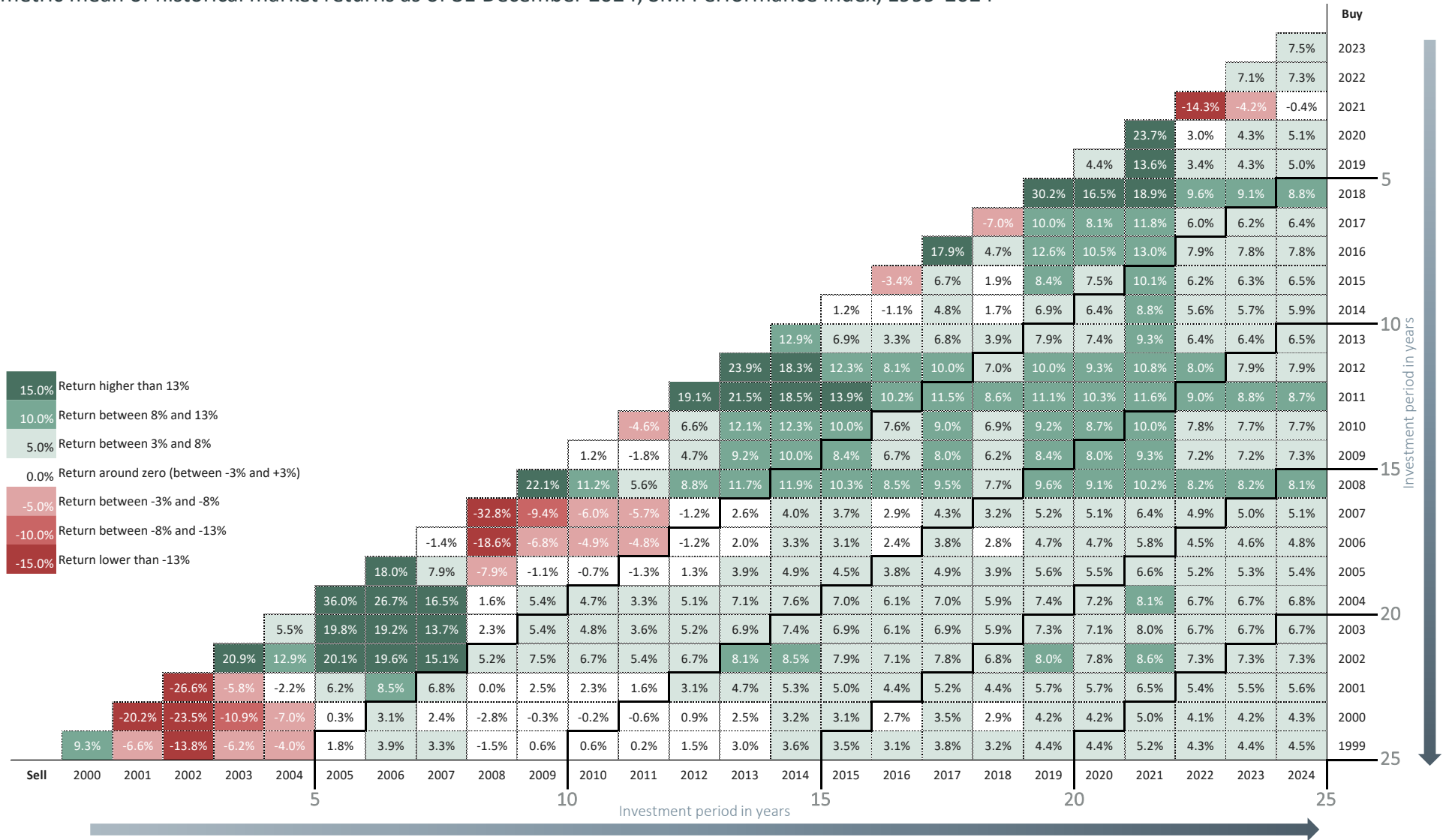


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Over the past 12 months, the SMI's performance has increased the geometric mean return of an investment made in 2021, rising from -4.2% to -0.4%

Geometric mean of historical market returns as of 31 December 2024, SMI Performance Index, 1999-2024



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04 Beta

# The highest (levered) betas are in the Industrials sector, which is the most cyclical, and the lowest in the Utilities and Telecommunication sectors, which have stable earnings streams

Levered and unlevered beta (mean) by sector as of 31 December 2024

■ 5-years monthly    ■ 2-years weekly

Sector	Beta levered	Beta unlevered
 Banking <sup>1)</sup>	0.73 0.83	n.a.
 Insurance <sup>1)</sup>	0.92 0.73	n.a.
 Financial Services <sup>1)</sup>	0.98 0.96	n.a.
 Consumer Services	1.08 1.04	0.85 0.75
 Consumer Goods	1.05 0.91	0.73 0.63
 Pharma & Healthcare	1.18 1.09	1.05 0.92

Sector	Beta levered	Beta unlevered
 Information Technology	1.07 1.06	0.90 0.79
 Telecommunication	0.72 0.64	0.61 0.51
 Utilities	0.71 0.57	0.52 0.45
 Basic Materials	1.05 1.20	0.74 0.82
 Industrials	1.24 1.03	0.96 0.81
 Real Estate	0.79 0.76	0.46 0.39
 DACH region <sup>2)</sup>	1.04 1.01	

1. We refrained from adjustments of the companies' specific debt (unlevered) because indebtedness is part of the companies' operational activities and economic risk. Bank specific regulations about the minimum capital within financial institutions let us assume that the indebtedness degree is widely comparable. For that reason, it is possible to renounce the adaptation of levered betas.

2. For all DACH companies, the market value-weighted mean of the levered beta was calculated. This value deviates slightly from 1 due to the exclusion of statistically insignificant betas.

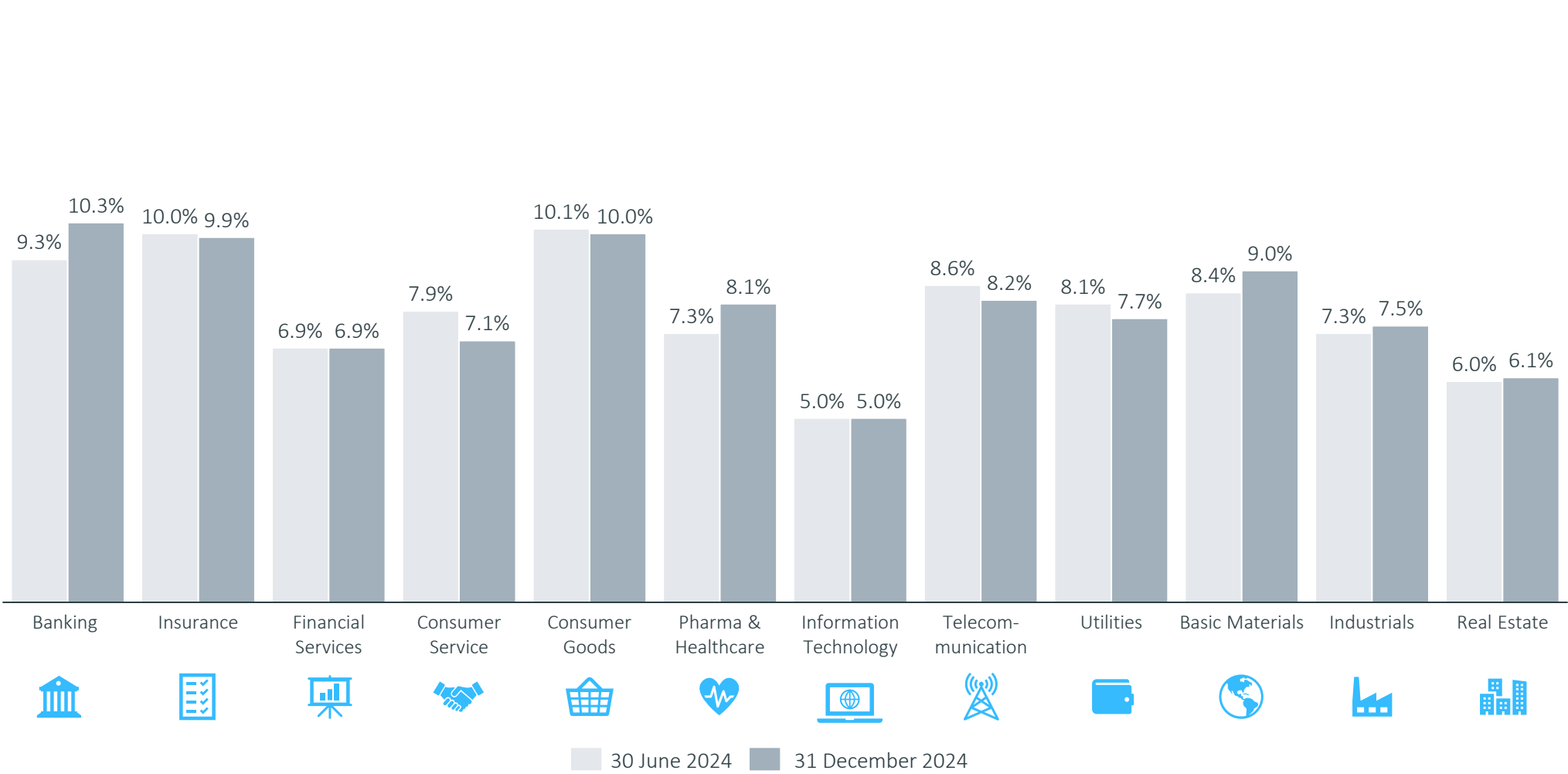
05

## Sector returns

a. Implied returns (ex-ante analysis)

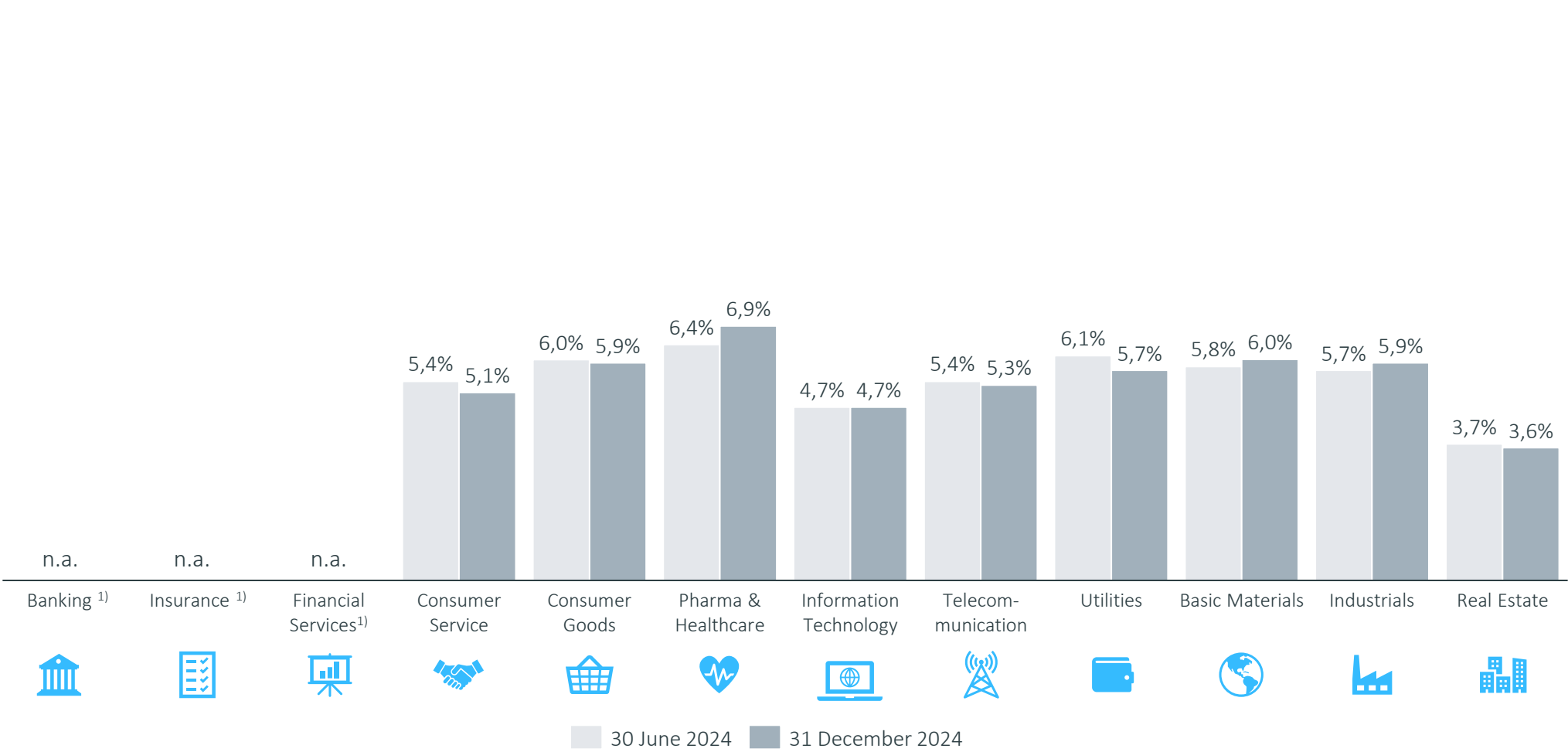
# Implied returns were stable for most sectors but rose in Banking, driven by strong earnings estimates from high interest rates, and in Pharma & Healthcare, following a stock price decrease

Implied levered returns by sector, 31 December 2024 vs. 30 June 2024



# Implied unlevered returns were mostly stable but rose slightly in Pharma & Healthcare and Basic Materials, driven by low stock prices, and in Industrials, driven by higher earnings estimates

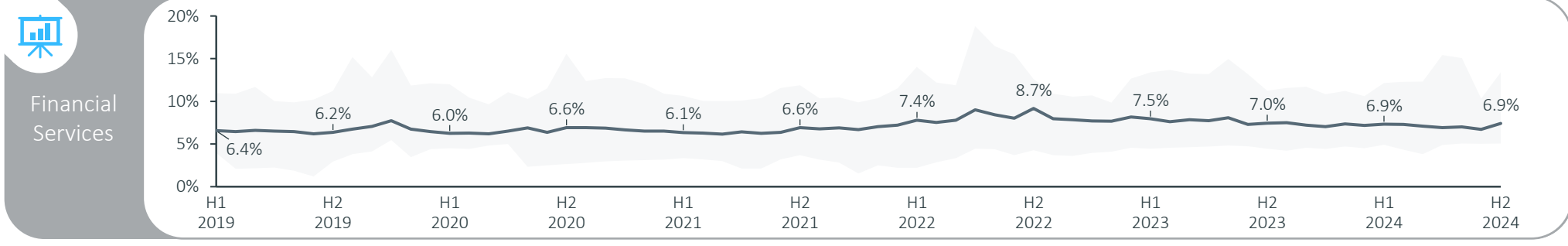
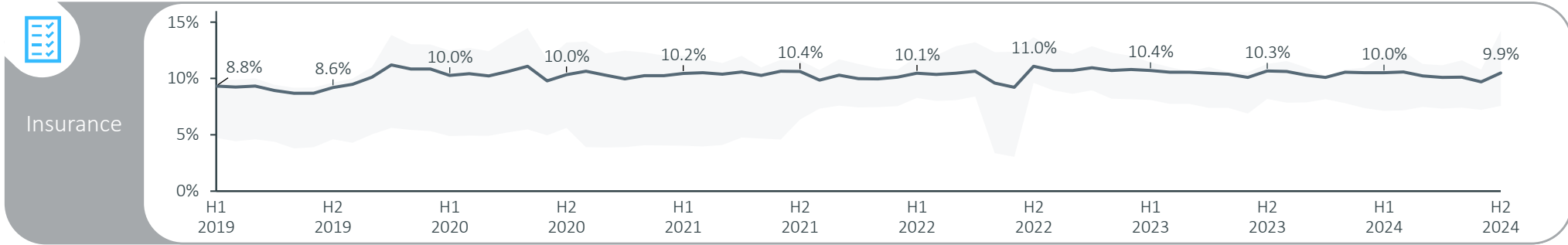
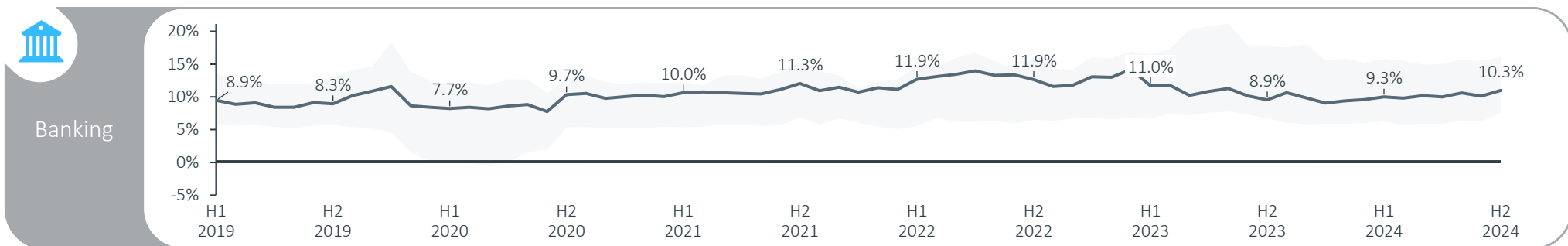
Implied unlevered returns by sector, 31 December 2024 vs. 30 June 2024



1. No unlevered returns are reported for the Banking, Insurance and Financial Services sector, as debt is part of operating activities.

# Implied sector returns for Banking increased as market-weighted earnings rose more strongly than stock prices due to positive momentum in earnings, with interest rates remaining elevated

Implied levered sector returns since 2019



Range (10% - 90% quantile) — Market-value weighted mean (levered)

# Pharma & Healthcare sector implied returns rose on higher earnings estimates driven by strong demand for medicines and diagnostics, while Consumer Service fell due to higher stock prices

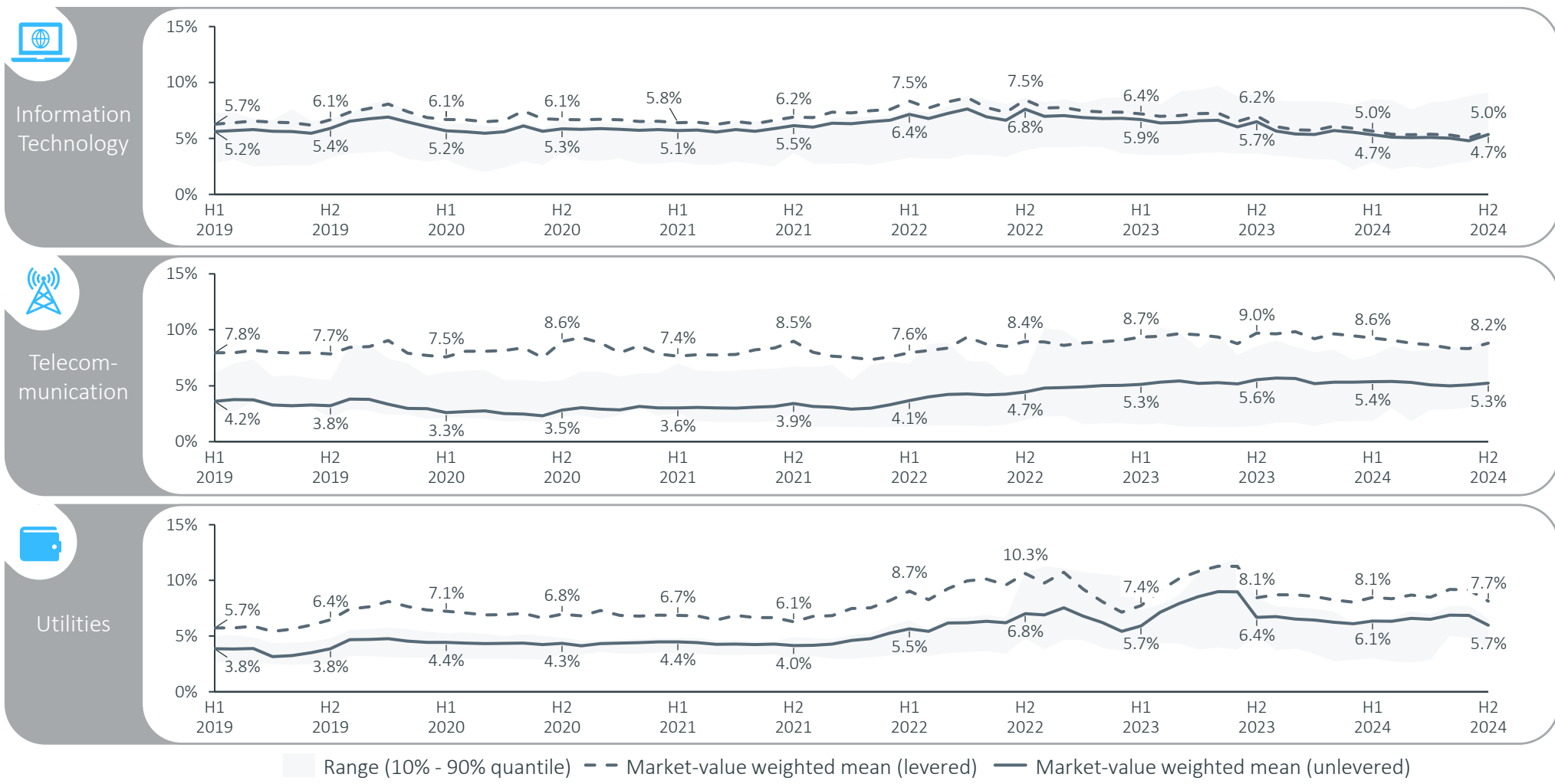
Levered and unlevered implied sector returns since 2019





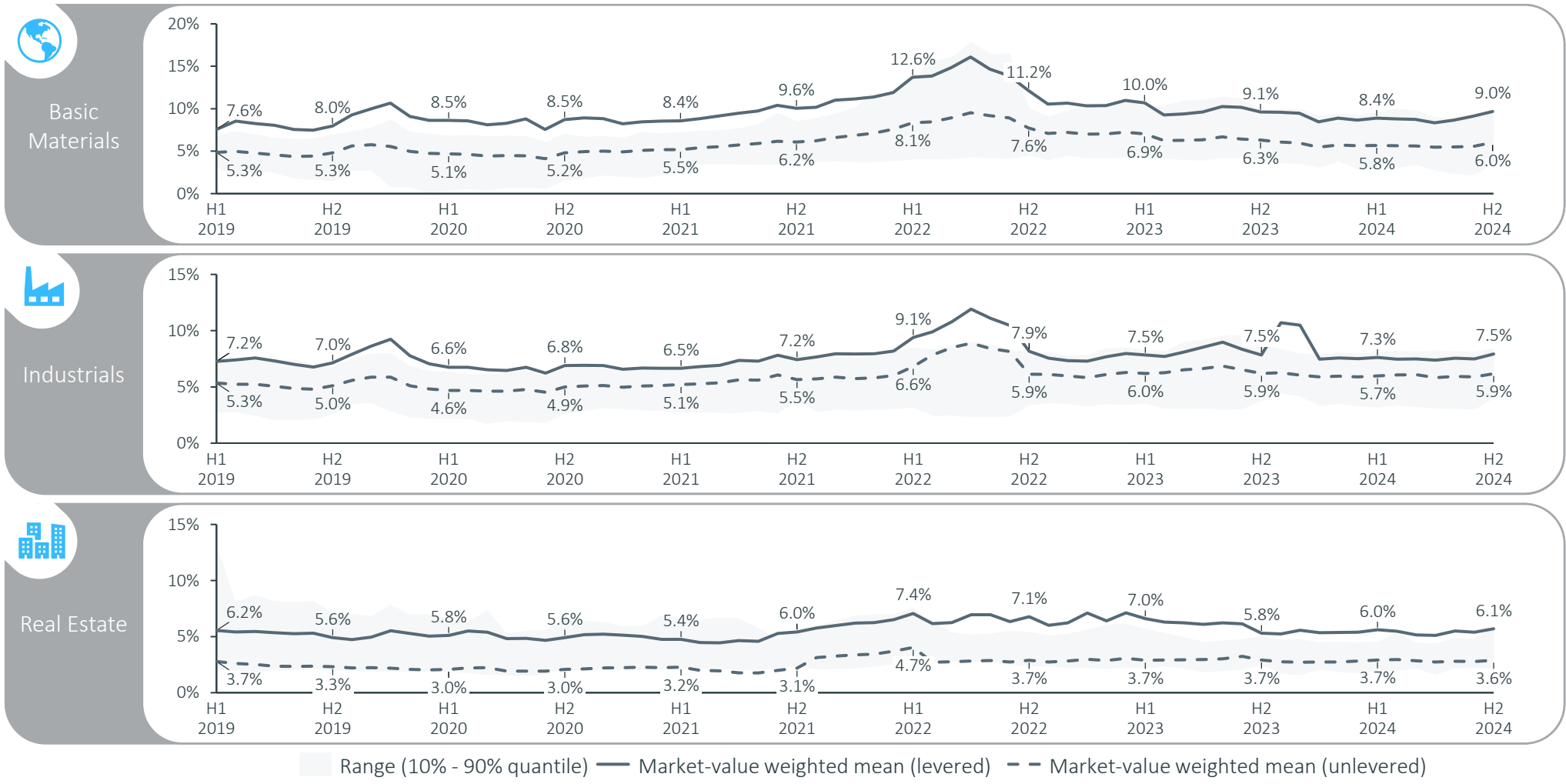
# Telecommunication sector implied returns fell as market-weighted earnings outpaced prices, while Utilities sector implied returns declined amid uncertainty over Germany's elections

Levered and unlevered implied sector returns since 2019



# Implied returns of Basic Materials and Industrials increased on a positive market outlook, while Real Estate remained constant due to increasing earnings estimates and stock prices

Levered and unlevered implied sector returns since 2019



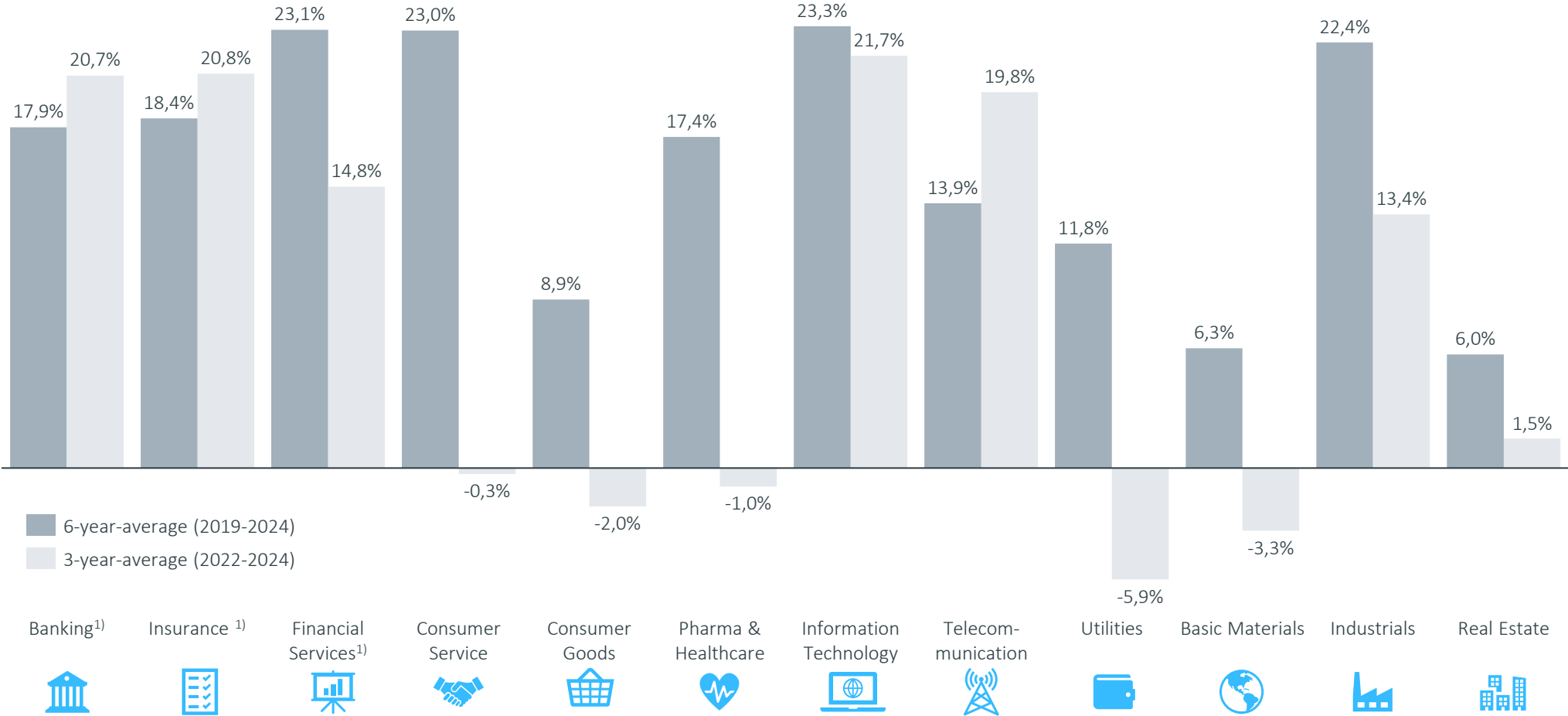
05

## Sector returns

b. Historical returns (ex-post analysis)

# The globally tense environment impacted most sectors, with Banks and Insurance benefiting from higher interest rates, while IT continued to gain from digitalization and AI trends

Three- and six-year-average historical sector returns as of 31 December 2024



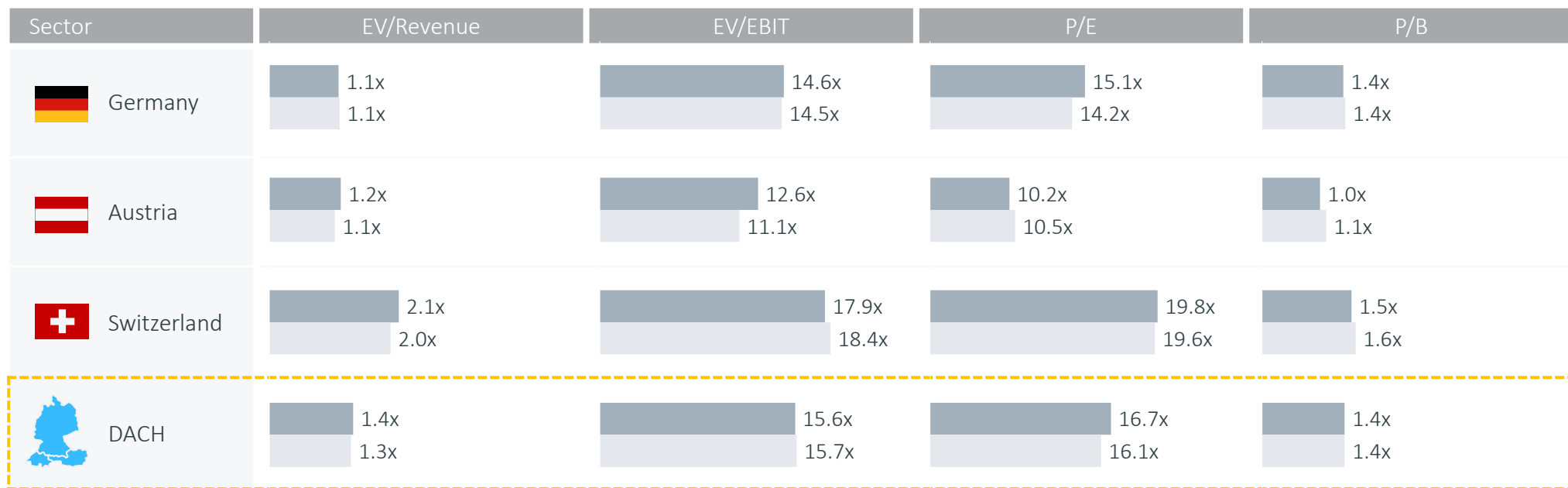
1. The returns for the sectors Banking, Insurance and Financial Services are levered sector returns. For all other sectors unlevered returns are displayed.

06

Trading multiples

# The DACH stock market demonstrated stability in its EV and P/B ratios. P/E multiples improved due to lower interest rates, innovation-driven growth, and moderate short-term earnings estimates

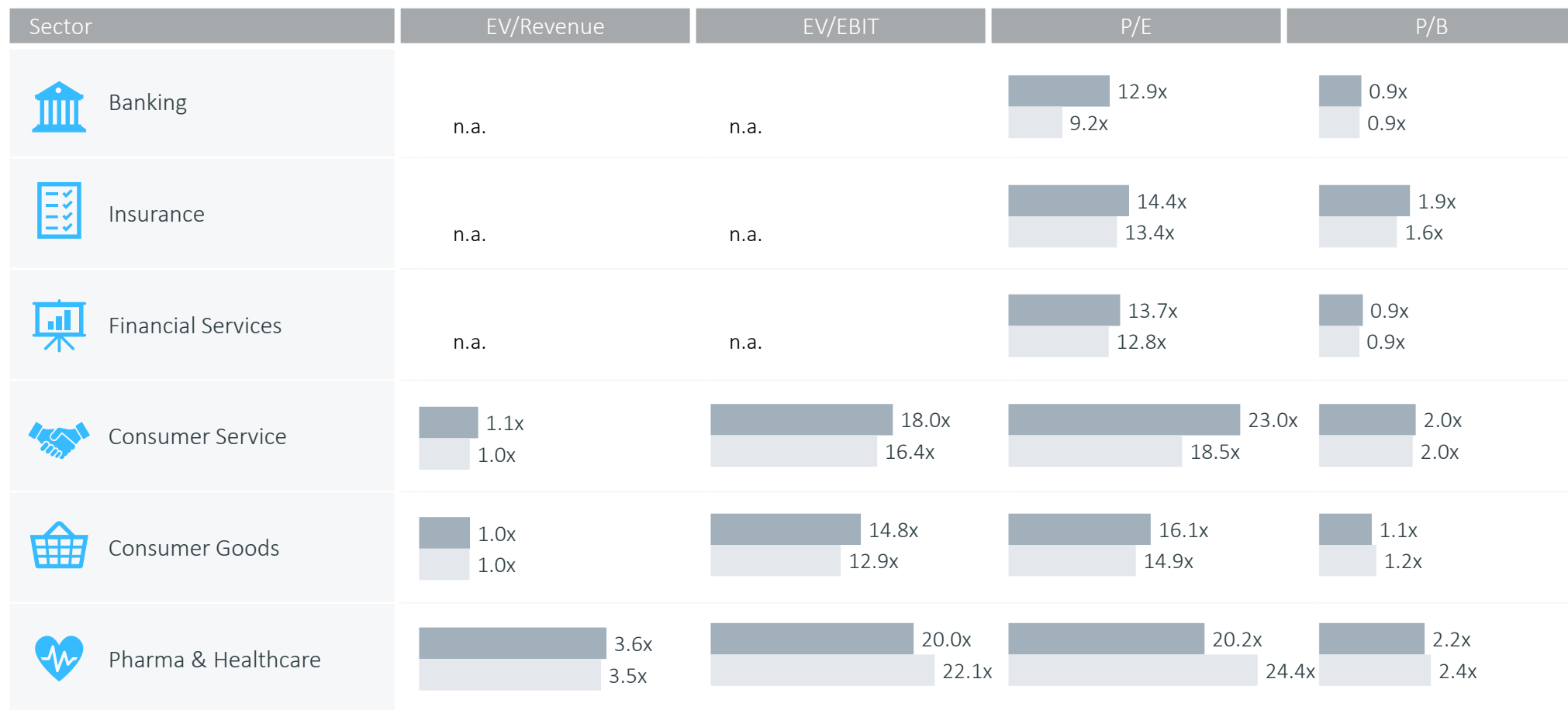
Median forward multiples by country, 30 June 2024 and 31 December 2024




31 December 2024
  30 June 2024

# EV/Revenue and P/B multiples remained stable across most sectors. However, the P/E multiple declined in the Pharma & Healthcare sector as earnings growth exceeded stock price increase

Median forward multiples by sector, 30 June 2024 and 31 December 2024

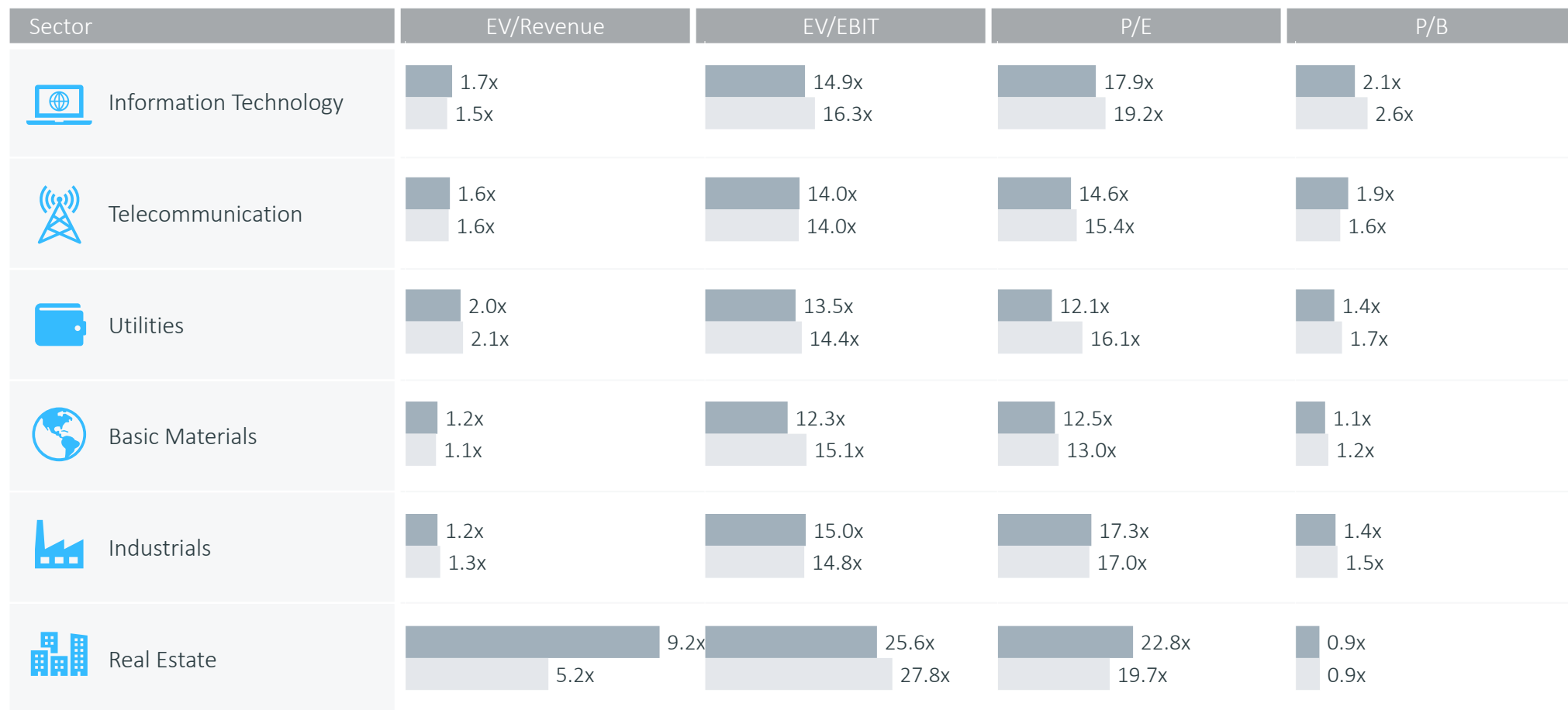


 31 December 2024  30 June 2024

Note: For companies in the Banking, Insurance and Financial Services sectors, Revenue- and EBIT-Multiples are not meaningful and thus are not reported.

# Real Estate sector's P/E multiples increased as earnings estimates relative to stock prices decreased more sharply driven by higher interest expenses, while EV/EBIT multiple declined

Median forward multiples by sector, 30 June 2024 and 31 December 2024















■ 31 December 2024   ■ 30 June 2024



# Pharma & Healthcare sector ranks highest due to its growth potential and defensive nature, while the Financials rank lowest due to regulatory constraints and risk exposures

Sector multiples ranking based on median, 1yf as of 31 December 2024

	EV / Revenue 1yf	EV / EBIT 1yf	P / E 1yf	P / B LTM	Ø Ranking
 Banking	n.a.	n.a.	10	11	10.5
 Insurance	n.a.	n.a.	8	4	6.0
 Financial Services	n.a.	n.a.	9	10	9.5
 Consumer Service	8	3	1	3	3.8
 Consumer Goods	9	6	6	8	7.3
 Pharma & Healthcare	2	2	3	1	2.0
 Information Technology	4	5	4	2	3.8
 Telecommunication	5	7	7	5	6.0
 Utilities	3	8	12	7	7.5
 Basic Materials	7	9	11	9	9.0
 Industrials	6	4	5	6	5.3
 Real Estate	1	1	2	12	4.0

Banking and Financial Services sectors showed the least expensive valuation level of all sectors.

Pharma & Healthcare sector showed the highest multiples, followed by Information Technology Consumer Service and Real Estate

Note: Multiples are ranked from highest to lowest values: 1 – highest (dark green), 9/12 – lowest (red).

# Appendix

## Background and approaches

# German government bonds are used to derive risk-free rates for Germany and Austria, while the risk-free rate for Switzerland is based on Swiss government bonds

## Risk-free rate

The **risk-free rate** is a return available on a security that the market generally regards as free of default risk. It serves as an input parameter for the **CAPM** and is used to determine the risk-adequate cost of capital.

The risk-free rate is a yield, which is obtained from **long-term government bonds** of countries with top notch ratings. By using interest rate data of different maturities, a **yield curve** can be estimated for fictitious zero-coupon bonds (spot rates) for a period of up to 30 years. The German Central Bank (Deutsche Bundesbank) and the Swiss National Bank (Schweizer Nationalbank) publish – on a daily basis – the parameters needed to determine the yield curve using the **Svensson method**. Based on the respective yield curve, a **uniform risk-free rate** is derived under the assumption of present value equivalence to an infinite time horizon.

The **German bonds** are internationally classified as **almost risk-free securities** due to their AAA rating according to S&P. As a result, the **Austrian** Chamber of Public Accountants and Tax Consultants also recommends deriving the risk-free rate from the yield curve using the parameters published by the German Central Bank.<sup>1)</sup> Likewise, bonds issued by **Switzerland** enjoy a AAA rating and are also considered risk-free according to the Swiss National Bank.<sup>2)</sup> Hence, a similar approach as for Germany and Austria is in our view appropriate for Switzerland with Swiss parameters.<sup>3)</sup>

To compute the risk-free rate for a specific reference date, the **Institute of Public Auditors** (Institut der Wirtschaftsprüfer, **IDW**) in Germany recommends using an **average value** deduced from the daily yield curves over the **past three months** (IDW S 1).

In contrast, the **Austrian Expert Opinion (KFS/BW 1)** on company valuation recommends deriving the risk-free rate in line with the evaluated company's cash flow profile from the yield curve that is valid for the **reference date (reference date principle)**. Consequently, in the following analyses, we depict the **yield curve** for Germany following IDW S 1, while for Austria we adhere to the recommendations of KFS/BW 1.

For **Switzerland**, there is no generally accepted recommendation as to the determination of the risk-free rate. The most widely used risk-free rates in valuation practice are the yield of a **10-year Swiss government bond** as of the reference date as well as the **yield derived from the 3-month average of the daily yield curves** (in accordance with IDW S 1).

1. [www.bundesbank.de](http://www.bundesbank.de)

2. Swiss National Bank – Zinssätze und Renditen, p.11

3. *ibid.*, p.12

# The concept of implied cost of capital recently gained momentum

## Market returns and market risk premium: Implied returns

The **future-oriented** computation of **implied market returns** and **market risk premiums** is based on profit estimates for public companies and return calculations. This approach is called ex-ante analysis and allows us to calculate the “**implied cost of capital**”.

The **ex-ante method** offers an **alternative** to the **ex-post approach** of calculating the cost of capital by means of a regression analysis through the **CAPM**. The ex-ante analysis method seeks cost of capital which represent the **return expectations of market participants**. The approach assumes that the estimates of financial analysts reflect the expectations of the capital market.

The concept of **implied cost of capital** recently gained momentum. For example, when it was recognized by the German *Fachausschuss für Unternehmensbewertung* “**FAUB**”.<sup>1)</sup> It is acknowledged that implied cost of capital capture the **current capital market situation** and are thus able to reflect the effects of the **current interest rate environment**.

Furthermore, recent **court rulings** with regards to appraisal proceedings appreciate the forward-looking nature of **implied cost of capital**. As of the **reference date**, it offers a more insightful perspective compared to the exclusive use of ex-post data.

In the analysis, we use – a simplified annual formula – the formula of the Residual Income Valuation Model by *Babbel*:<sup>2)</sup>

$$r_t = \frac{NI_{t+1}}{MC_t} + \left(1 - \frac{BV_t}{MC_t}\right) * g$$

With the following parameter definitions:

$r_t$  = Cost of equity at time t

$NI_{t+1}$  = Expected net income in the following time period t+1

$MC_t$  = Market capitalization at time t

$BV_t$  = Book value of equity at time t

$g$  = Projected growth rate

By solving the model for the cost of capital, we obtain the implied return on equity.<sup>3)</sup> Since *Babbel's* model does not need any explicit assumptions except for the growth rate it turns out to be **robust**. We source all data (i.e. expected annual net income, market capitalization, and book value of equity, etc.) of the analyzed companies from the data supplier S&P Capital IQ. As a typified growth rate, we apply the European Central Bank target inflation rate of **2.0% as a typified growth rate**.

We determine the **implied market returns** for the DAX, ATX and SMI. We consider these indices to be a valid approximation for the total markets.<sup>4)</sup> Subtracting the risk-free rate from the implied market returns results in the implied market risk premium.

To determine the appropriate market risk premium for valuation purposes, it is also important to take into account historical returns and volatility. Especially in times of crisis it may make sense to apply an average market risk premium over several periods instead of a reference date value.

1. cf. Castedello/Jonas/Schieszl/Lenckner, Die Marktrisikoprämie im Niedrigzinsumfeld – Hintergrund und Erläuterung der Empfehlung des FAUB (WPg, 13/2018, p. 806-825);

2. cf. Babbel, Challenging Stock Prices: Stock prices und implied growth expectations, in: Corporate Finance, N. 9, 2015, p. 316-323, in particular p. 319. In the observation period from H2 2020 until H2 2021, we applied t+2 earnings forecasts in our model due to distortions by the COVID-19 crisis;

3. cf. Reese, 2007, Estimation of the cost of capital for evaluation purposes; Aders/Aschauer/Dollinger, Die implizite Marktrisikoprämie am österreichischen Kapitalmarkt (RWZ, 6/2016, p. 195-202);

4. Approx. 75% of the total market capitalization (CDAX, WBI, SPI) is covered.

## Betas are calculated based on regressions and adjusted to take the capital structure into account

### Betas

**Beta** is used in the **CAPM** and also referred to as beta coefficient or beta factor. Beta is a measure of **systematic risk** of a security of a specific company (**company beta**) or a specific sector (**sector beta**) in comparison to the market. A beta of less than 1 means that the security is theoretically less **volatile** than the market. A beta of greater than 1 indicates that the security's price is more volatile than the market.

Beta factors are estimated based on **historical returns of securities** in comparison to an **approximate market portfolio**. Since a company valuation is **forward-looking**, it has to be examined which risk factors from the past also apply to the future, and to which extent. In valuing non-listed companies or companies without meaningful share price performance, it is common practice to use a beta factor from a group of comparable companies ("**peer group beta**"), a suitable sector ("**sector beta**") or one single listed company in the capital market with a similar business model and similar risk profile ("**pure play beta**"). Within this Capital Market Study, we have used **sector betas** which are computed as **arithmetic means of the statistically significant beta factors of all companies** of a particular sector.

The calculation of beta factors is usually accomplished through a **linear regression analysis**. We use the CDAX, WBI, and SPI as country specific reference indices.

It is important to set a time period over which the data is collected (**benchmark period**), and whether daily, weekly or monthly returns (**return interval**) are analyzed. In practice, it is common to use **observation periods of two years** with the regression of **weekly returns** or **five years** with the regression of **monthly returns**. Both alternatives are displayed in our Study.

In the CAPM, company specific **risk premiums** include **business risk**, and financial **risk**. The beta factor of levered companies ("**levered beta**") is usually higher compared to a company with an identical business model but without debt (due to financial risk). Hence, **changes in the capital structure** require an **adjustment of the betas** and therefore of the company specific risk premiums.

Various adjustment formulas are available to calculate the **unlevered beta**. We prefer to use the **adjustment formula by Harris/Pringle** which assumes a value-based financing policy, stock-flow adjustments without time delay, uncertain tax shields and a so-called **debt beta**. We calculate the debt beta based on the respective company's rating or the average sector rating (if a company's rating is not available) through the application of the **credit spread** derived from the expected cost of debt. We do not adjust the credit spread for unsystematic risks. Capital market data, in particular historical market prices, is provided by the data supplier S&P Capital IQ.

# Implied sector returns simplify the calculation of the levered cost of equity

## Sector returns: Implied returns

Besides the future-oriented calculation of **implied market returns**, we also calculate **implied returns for sectors**. That offers an **alternative** to and simplification of the **ex-post analysis** of the company's cost of capital via the **CAPM**. Using this approach, the calculation of sector betas via regression analyses is not necessary.

The **implied sector returns** can be used as an **indicator** for the **sector specific levered cost of equity**, which already consider **sector specific leverage**.

The following return calculations are again based on the Residual Income Valuation Model by *Babbel*.<sup>1)</sup> The required data (i.e. net income, market capitalization, and book value of equity) are sourced from the data provider S&P Capital IQ. With regards to profit growth, we assume a growth rate of 2.0%.

We unlever the implied returns with the following **equation** for the **cost of equity**<sup>2)</sup> to take into account the specific leverage:<sup>3)</sup>

$$r_E^L = r_E^U + (r_E^U - R_f) * \frac{D}{E}$$

with:

$$\begin{aligned} r_E^L &= \text{Levered cost of equity} \\ r_E^U &= \text{Unlevered cost of equity} \\ R_f &= \text{Risk-free rate} \\ \frac{D}{E} &= \text{Debt}^{4)}\text{-to-equity ratio} \end{aligned}$$

The **implied unlevered sector returns** serve as an indicator for the **aggregated and unlevered cost of equity** for **specific sectors**. The process of relevering a company's cost of capital to reflect a company specific debt situation (cf. calculation example on the next slide) can be accomplished without using the CAPM.

1. cf. Babbel, Challenging Stock Prices: Share prices and implied growth expectations (Corporate Finance, n. 9, 2015, p. 316-323, especially p. 319); cf. Aders/Aschauer/Dollinger, Die implizite Marktrisikoprämie am österreichischen Kapitalmarkt (RWZ, 6/2016, p. 195-202);  
2. In situations in which the debt betas in the market are distorted, we would have to adjust these betas to avoid unsystematic risks. For simplification reasons, we deviate from our typical analysis strategy to achieve the enterprise value (Debt beta > 0) and assume that the cost of debt are at the level of the risk-free rate. This process is designed by the so-called Practitioners formula (uncertain tax shields, debt beta = 0), cf. Pratt/Grabowski, Cost of Capital, 5th ed., 2014, p. 253;

3. We assume that the cash and cash equivalents are used entirely for operational purposes. Consequently, we do not deduct excess cash from the debt;  
4. "Debt" is defined as all interest-bearing liabilities. The debt illustration of the companies in the Banking, Insurance and Financial Services sector only serves an informational purpose. We will not implement an adjustment to these companies' specific debt (unlevered) because their indebtedness is part of their operational activities and economic risk.

# An exemplary calculation of relevered cost of equity to adjust for the company specific capital structure

Sector returns: Implied returns

## Calculation example:

As of the reference date 31 December 2024, we observe a sector specific, unlevered cost of equity of **6.0%** (market-value weighted mean) in the German Basic Materials sector. For the exemplary company X, which operates in the German Basic Materials sector, the following assumptions were made:

- Debt-to-equity ratio of X: **40%**
- Risk-free rate: **2.48%** (cf. slide 11)

Based on these inputs, we calculate the relevered cost of equity for company X with the adjustment formula:

$$r_E^L = 6.0\% + (6.0\% - 2.48\%) * 40\% = 7.4\%$$

**7.4%** is the company's relevered cost of equity. In comparison, the levered cost of equity of the Basic Materials sector is **9.0%**, reflecting the sectors' lower average leverage.

## Historical sector returns are calculated using market-weighted aggregated sector indices

### Sector returns: Historical returns

In **addition** to **historical market returns**, we calculate **historical sector returns**.

Our analysis contains **total shareholder returns** including **share price development** and **dividend yield**.

We calculate **total annual shareholder returns as of 31 December** for every listed company of CDAX, WBI, and SPI. We aggregate these returns market-value weighted **to sector returns**. Our calculations comprise the time period between 2019 and 2024.

Since total annual shareholder returns tend to fluctuate to a great extent, their explanatory power is limited. Therefore, we do not only calculate the 1-year market-value weighted means, but 3-year (2022-24) as well as the 6-year (2019-24) averages.



# The multiples approach can be used for company valuation

## Trading multiples

Besides income-based valuation models (earnings value, DCF), the **multiples approach** offers a practical approach for an enterprise value estimation. The multiples method estimates a subject company's value **relative** to another company's value. The enterprise value is derived by multiplying a reference value (revenue or earnings values are frequently used) of the subject company by the respective multiples of **comparable companies**.

Within this Study, we calculate the following **multiples for the "super-sectors"** as well as **for the DACH market** consisting of the German, Austrian and Swiss capital markets (CDAX, WBI and SPI):

- Revenue-Multiples ("EV<sup>1</sup>/Revenue")
- EBIT-Multiples ("EV<sup>1</sup>/EBIT")
- Price-to-Earnings-Multiples ("P/E")
- Price-to-Book Value-Multiples ("P/B")

Multiples are presented for the reference dates 31 December 2024 and 30 June 2024. The reference values are based on one-year forecasts of analysts (so called forward multiples, in the following "1y"). Solely the Price-to-Book-Value-Multiples are calculated with book values as of the reference dates. We present **median** values.

We present historical multiples starting as of 31 December 2018 in the appendix and update the applied multiples **semi-annually at the predefined reference date (as of 31 December and as of 30 June)**.

For the purpose of **simplification**, we exclude negative multiples and multiples in the highest quantile (95%). The multiples in the lowest quantile (5%) build the lower limit.

We source the data (i.e. market capitalization, revenue, EBIT, etc.) from the data provider S&P Capital IQ. Based on the availability of data, especially in terms of forecasts, the number of companies underlying each specific multiple varies.

Additionally, we present a **ranking table** of the sector multiples. Sector multiples are sorted from highest to lowest for each analyzed multiple. The resulting score in the ranking is displayed in the table and visualized by a color code that assigns a dark **green color** to the **highest rank** and a **red color** to the **lowest rank**. Thus, a green colored high rank indicates a high valuation level, whereas a red colored low rank suggests a low valuation level. We then aggregate the rankings and calculate an average of all single rankings for each sector multiple. This is shown in the right column of the ranking table. This **average ranking** indicates the overall **relative valuation levels** of the sectors when using multiples.

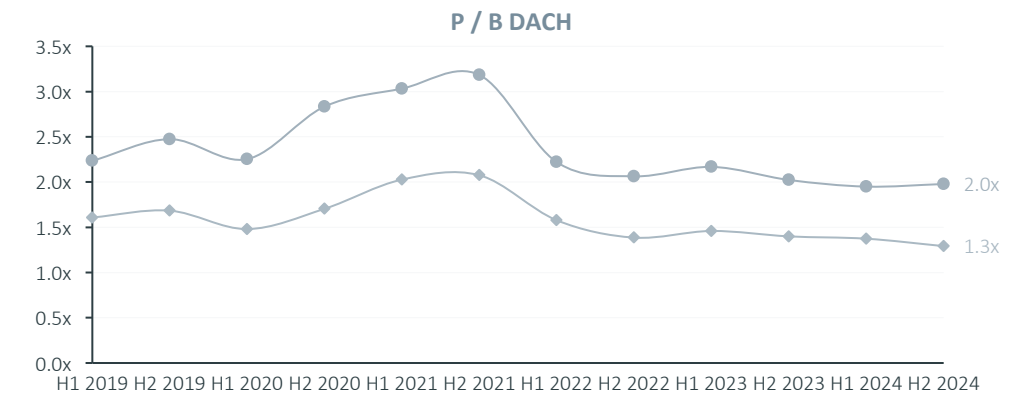
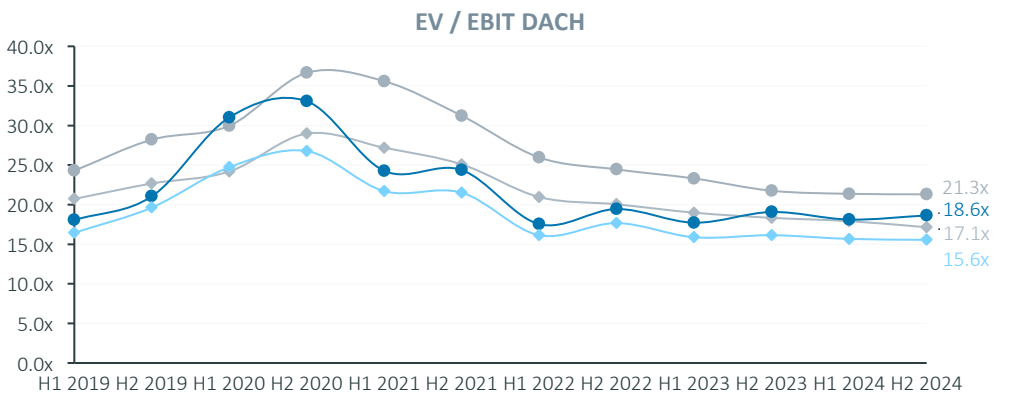
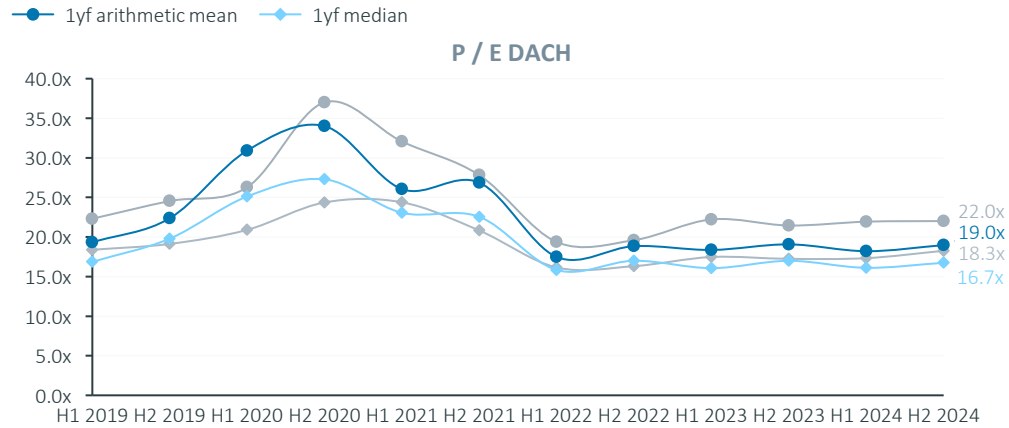
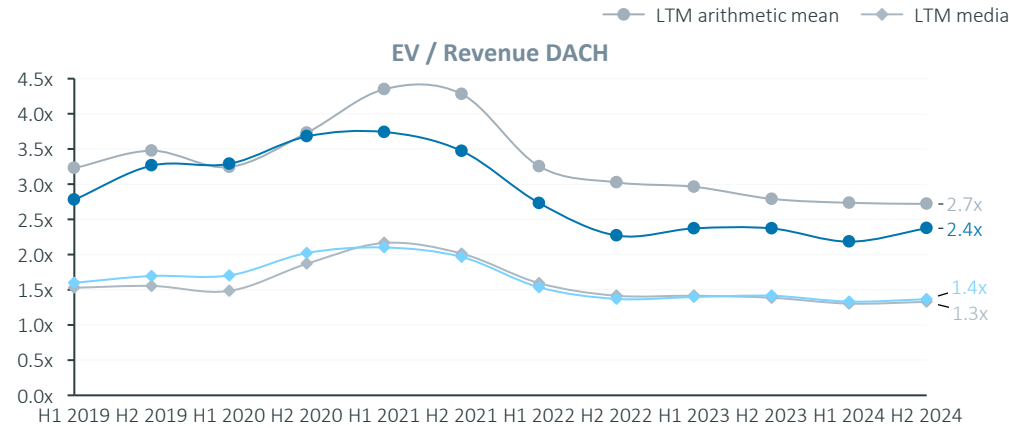
1. Enterprise value

# Appendix

Historical development of trading multiples  
since 2018

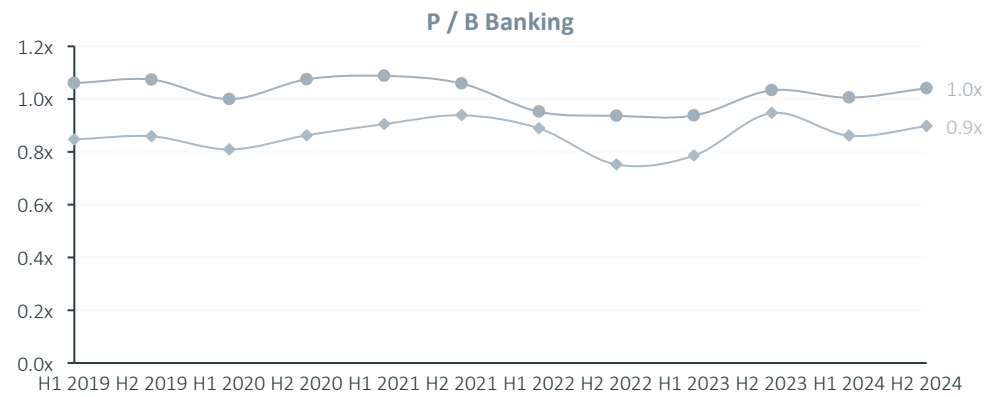
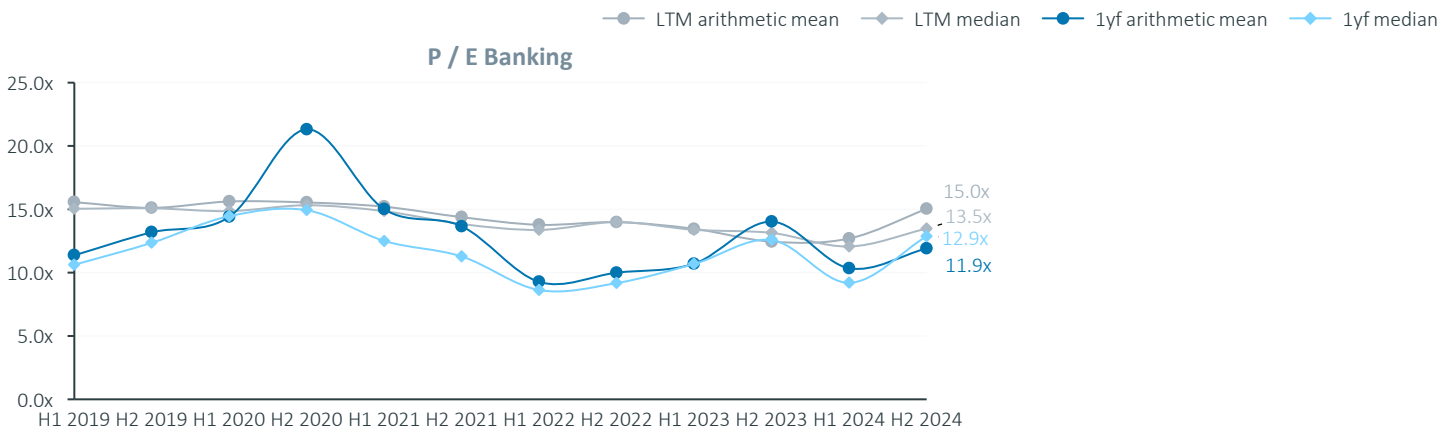
# DACH region

## Revenue-, EBIT-, P/E- and P/B-Multiples



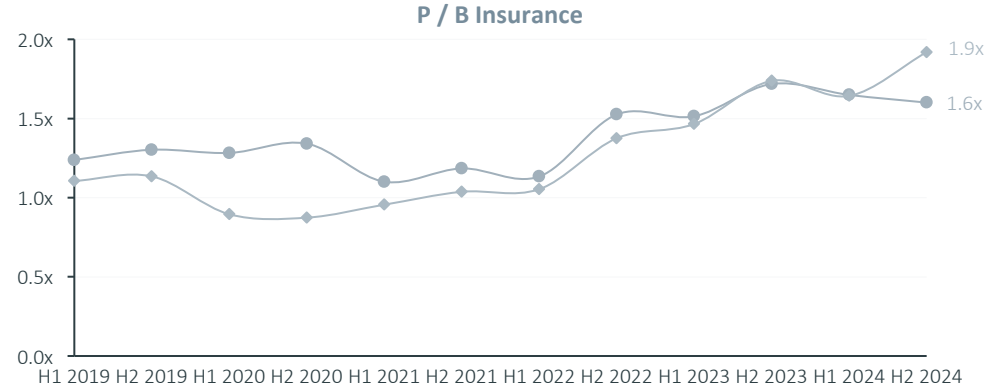
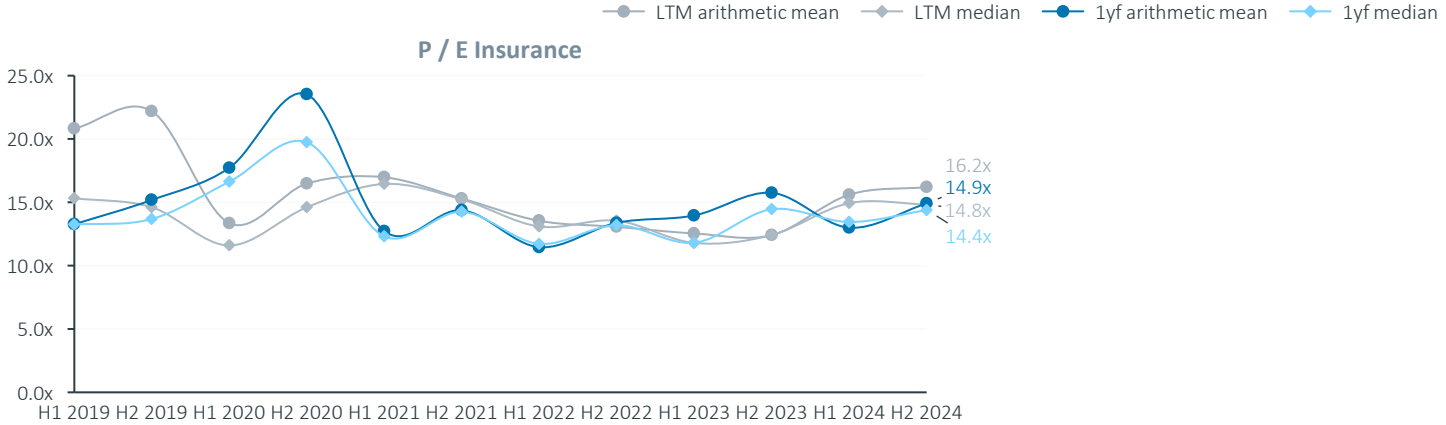
# Banking

## P/E- and P/B-Multiples



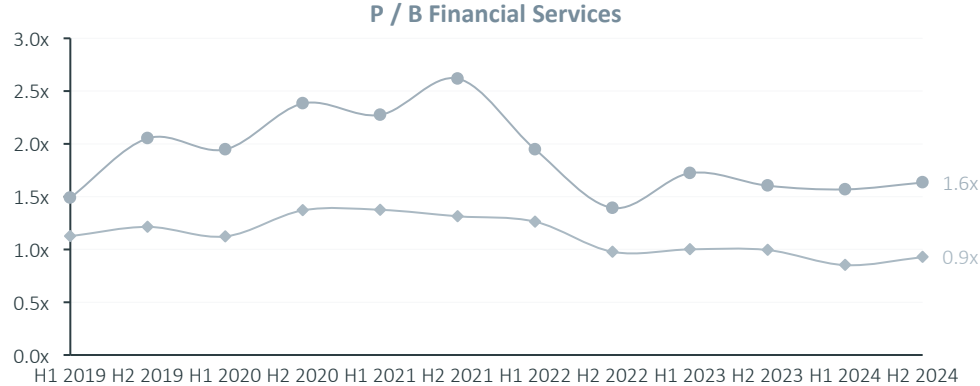
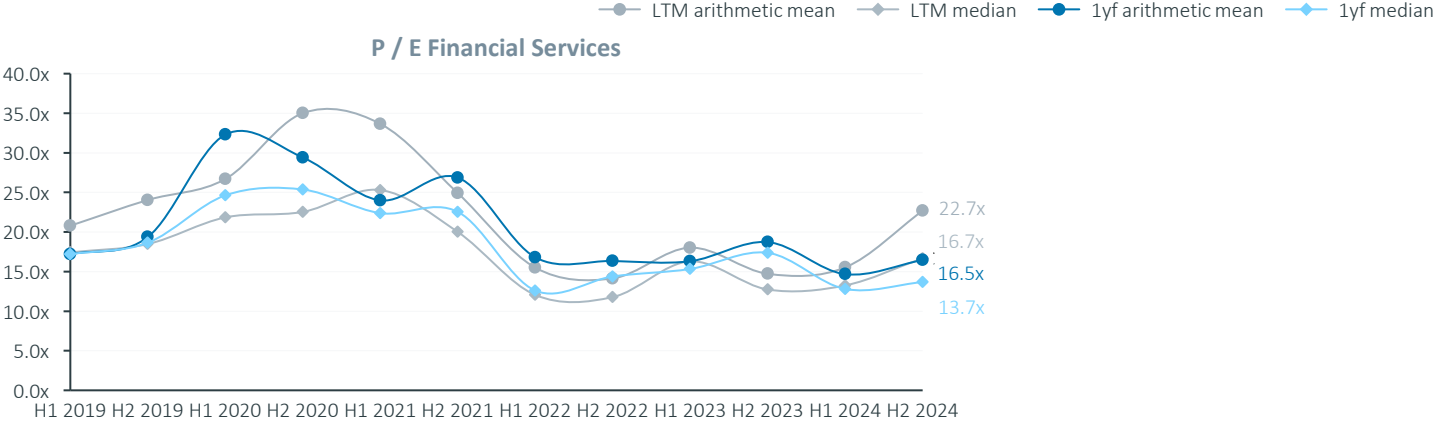
# Insurance

## P/E- and P/B-Multiples



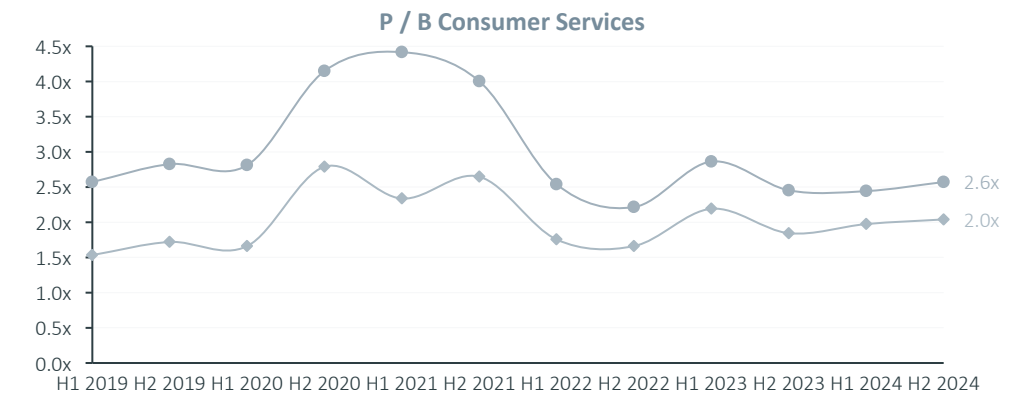
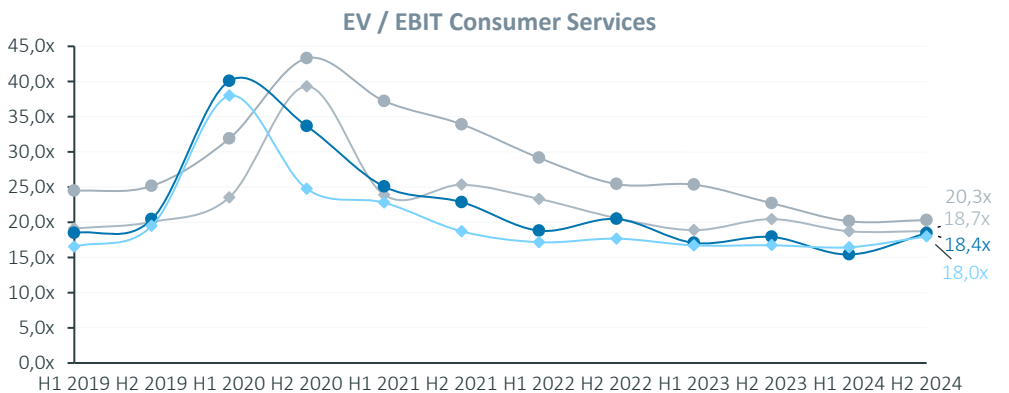
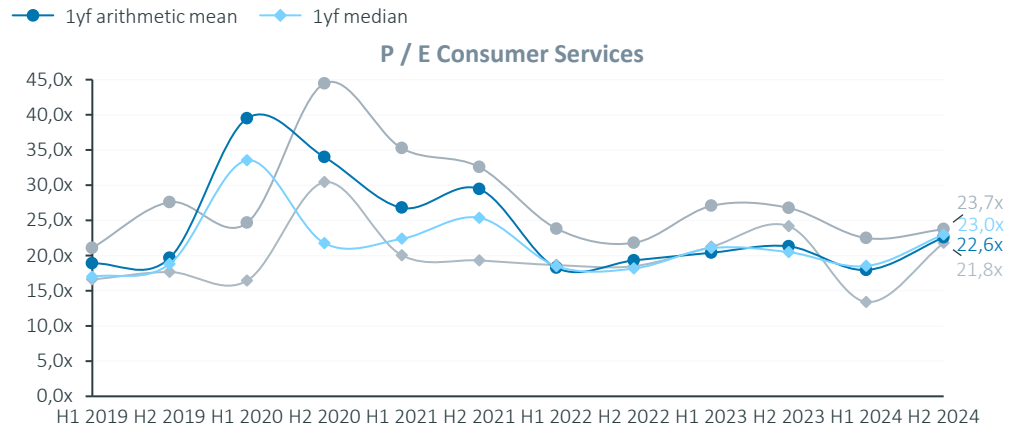
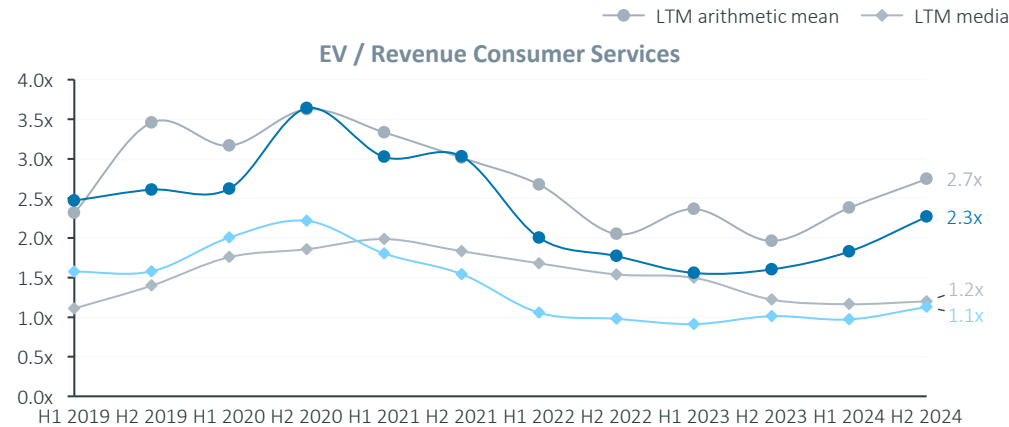
# Financial Services

## P/E- and P/B-Multiples



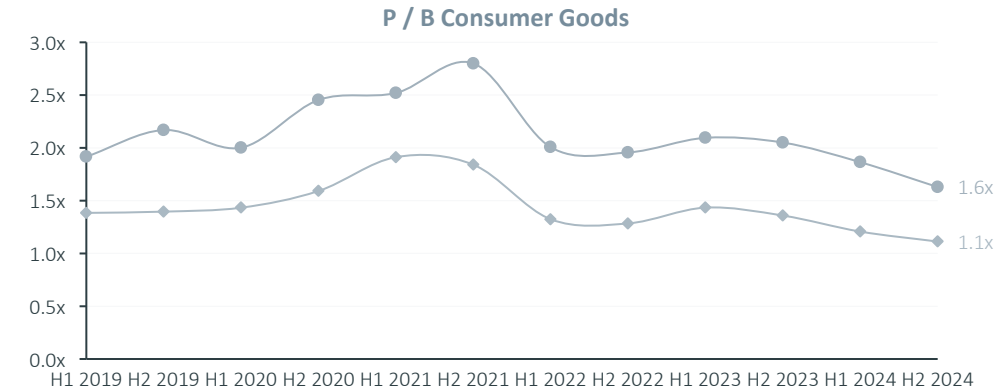
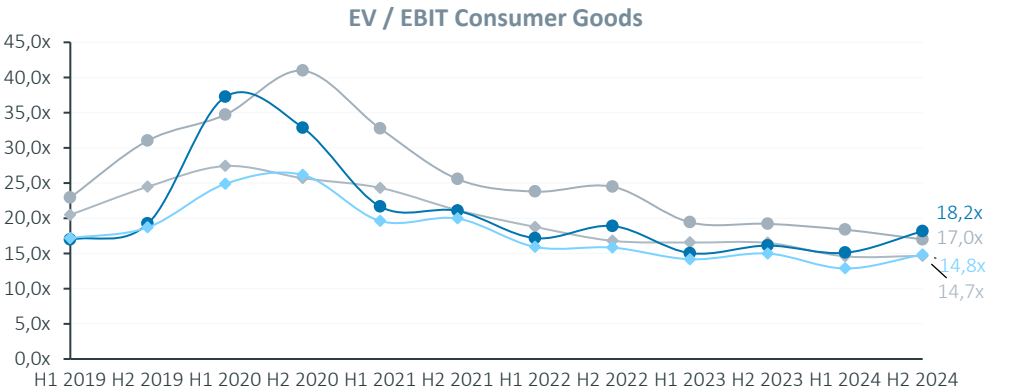
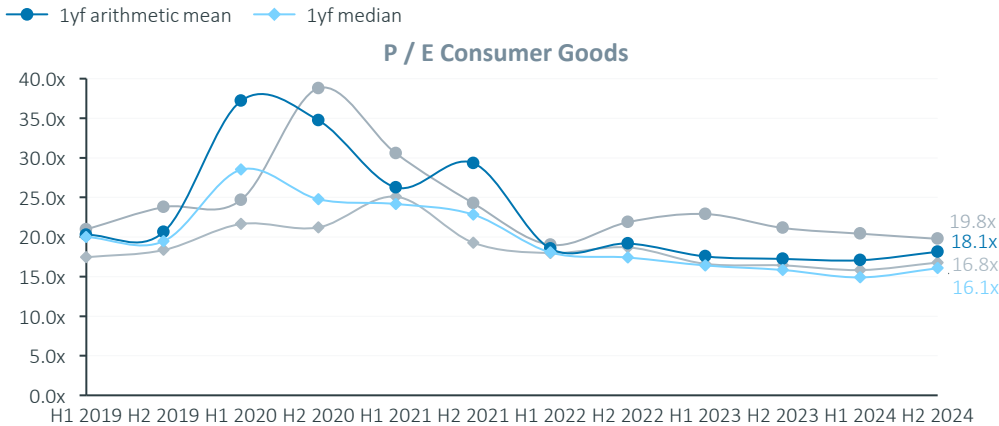
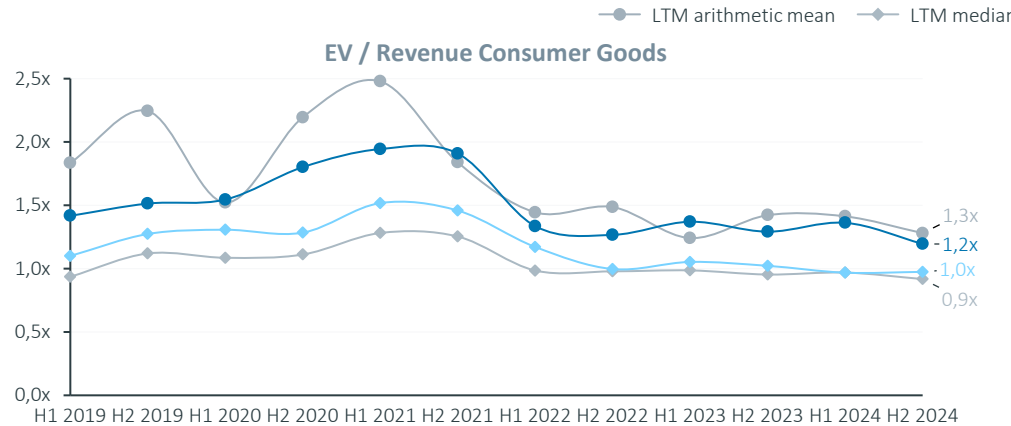
# Consumer Services

Revenue-, EBIT-, P/E- and P/B-Multiples



# Consumer Goods

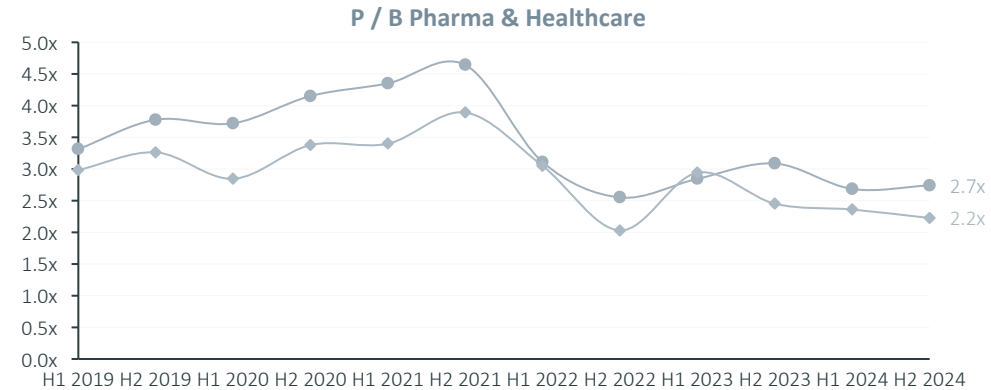
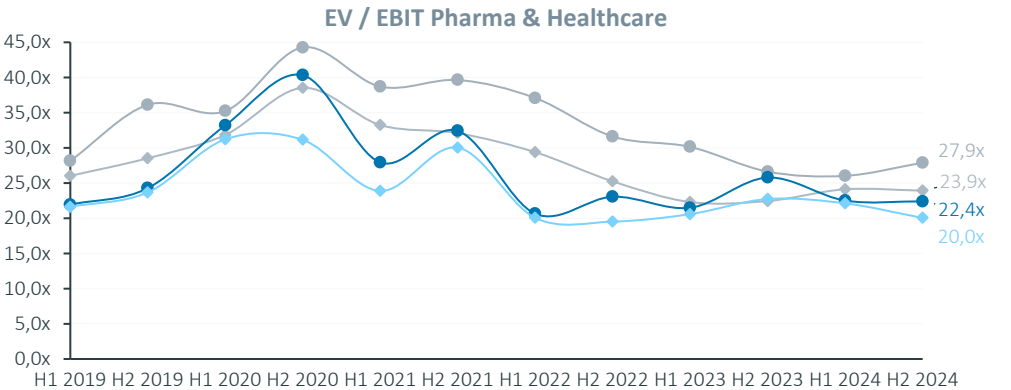
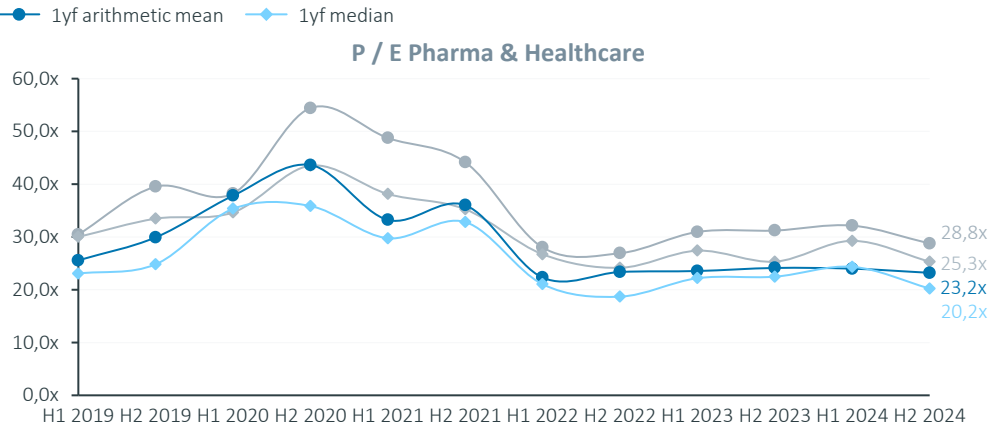
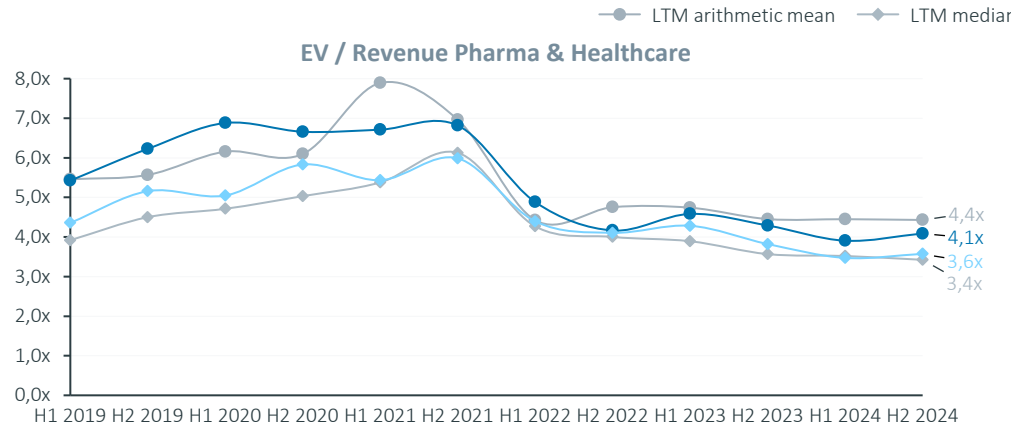
Revenue-, EBIT-, P/E- and P/B-Multiples





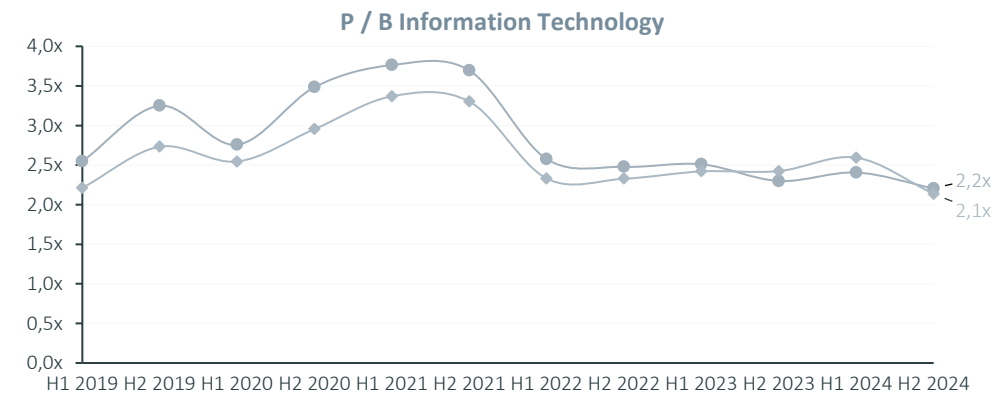
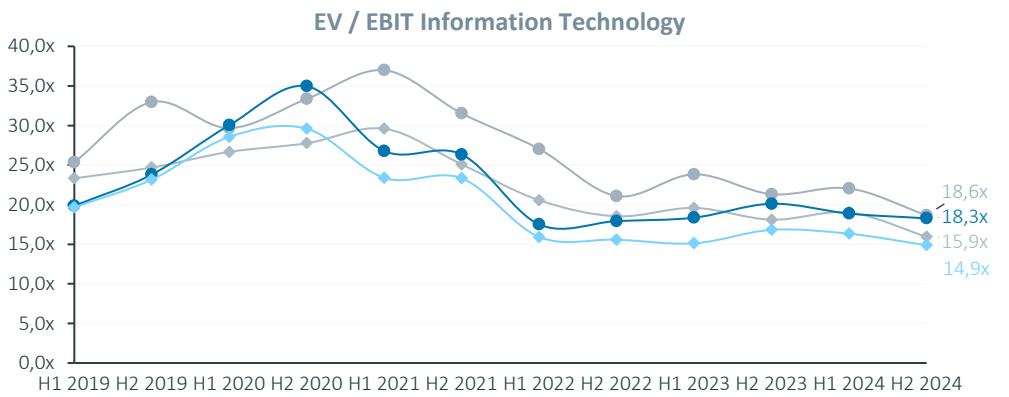
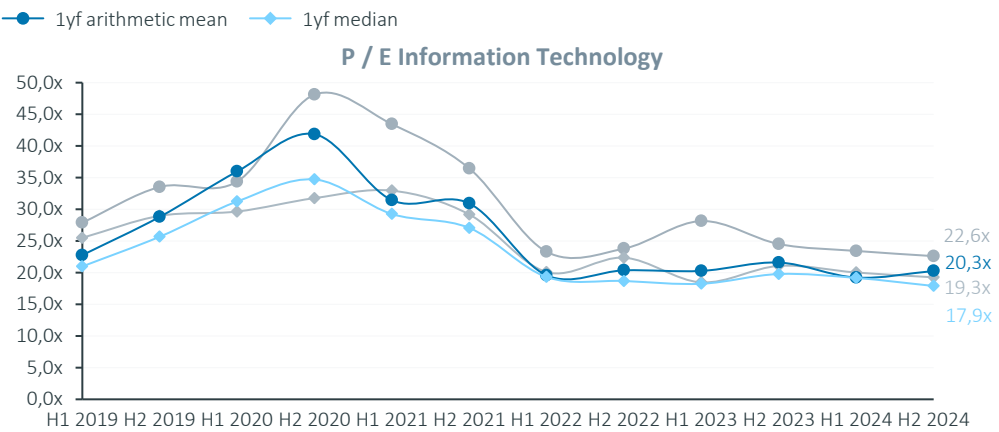
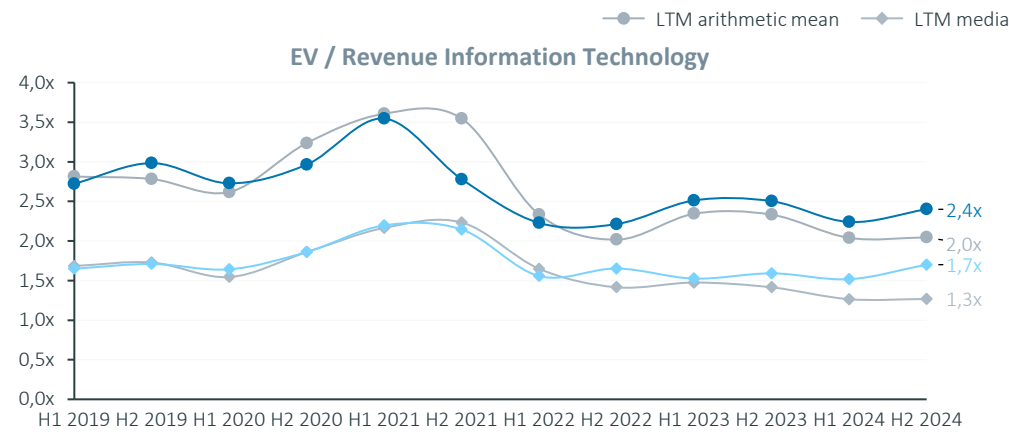
# Pharma & Healthcare

Revenue-, EBIT-, P/E- and P/B-Multiples



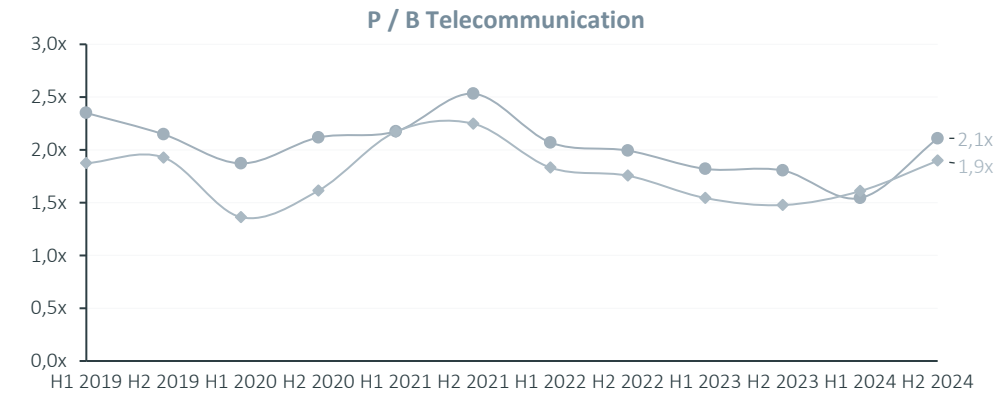
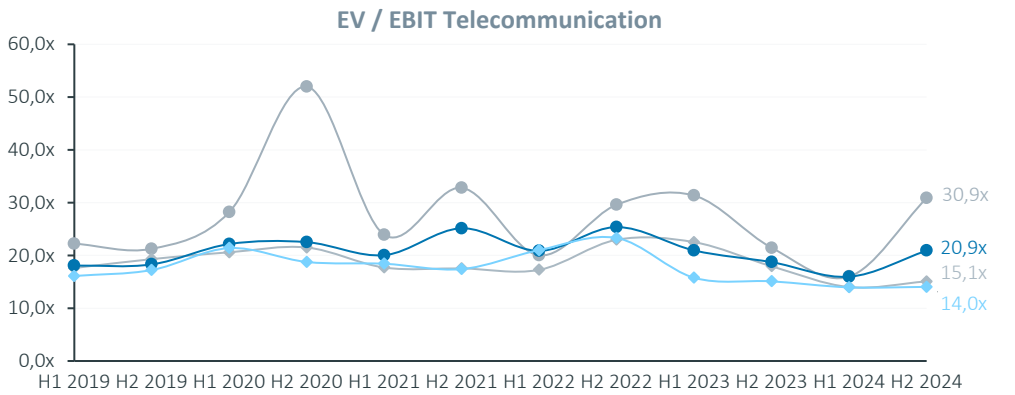
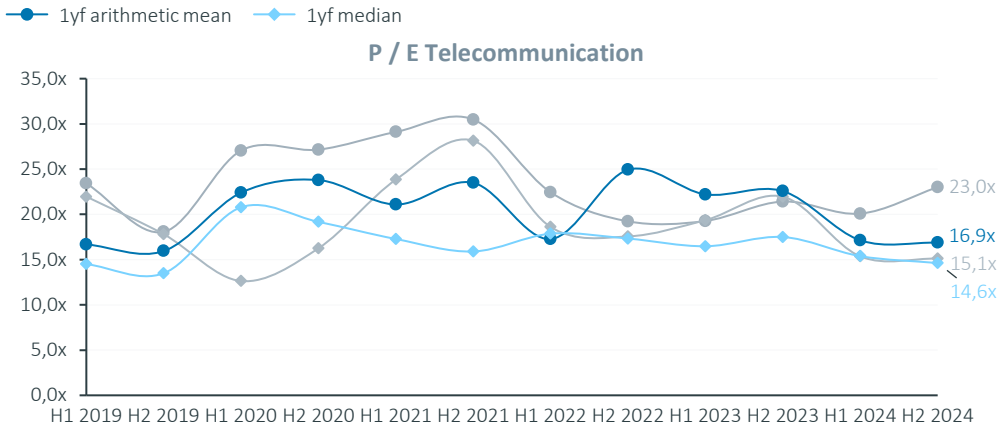
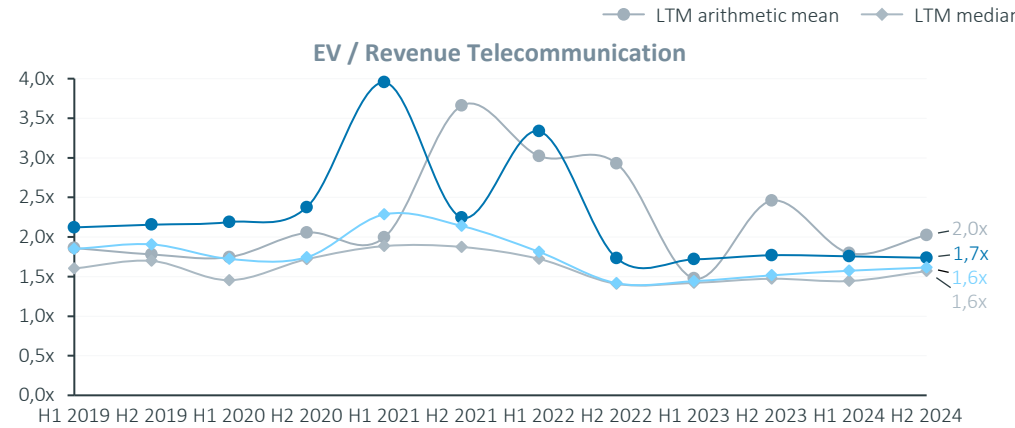
# Information Technology

Revenue-, EBIT-, P/E- and P/B-Multiples



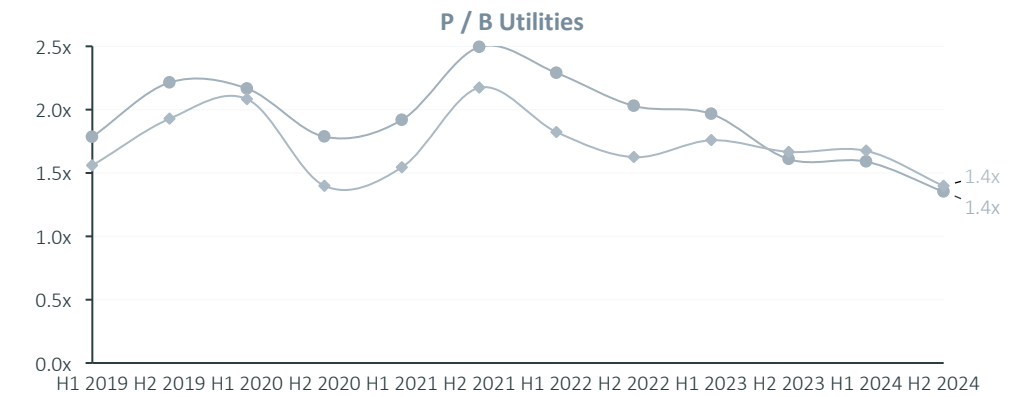
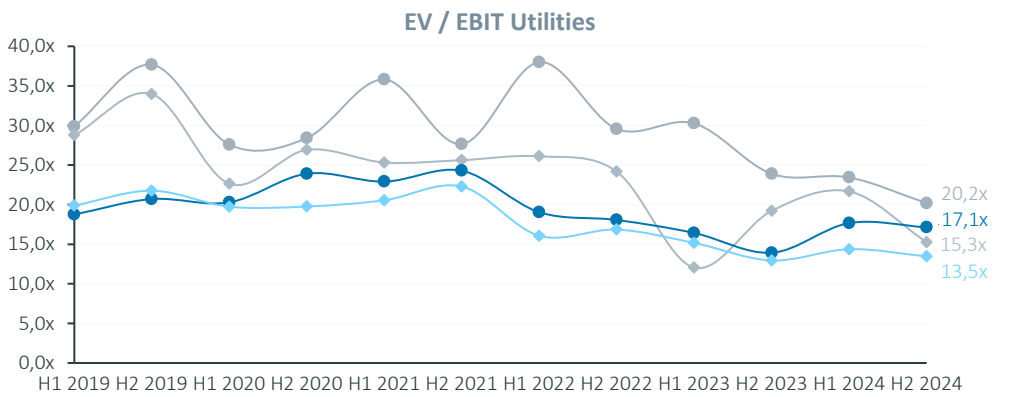
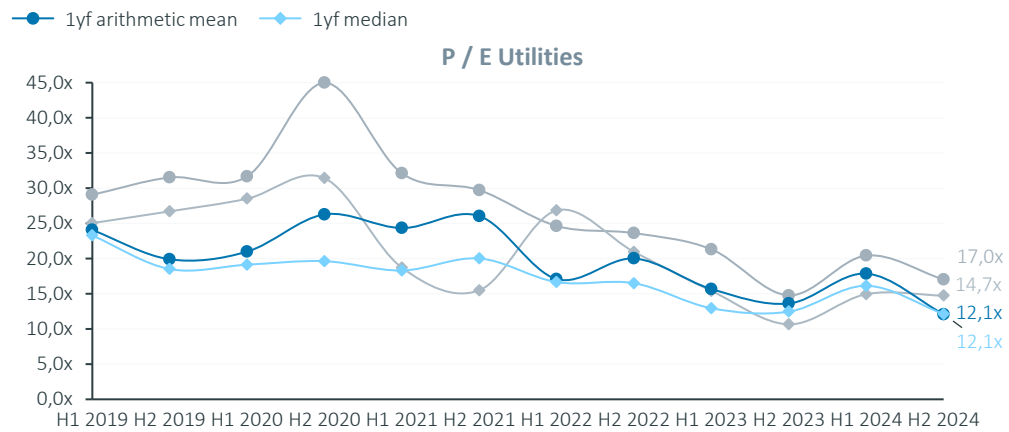
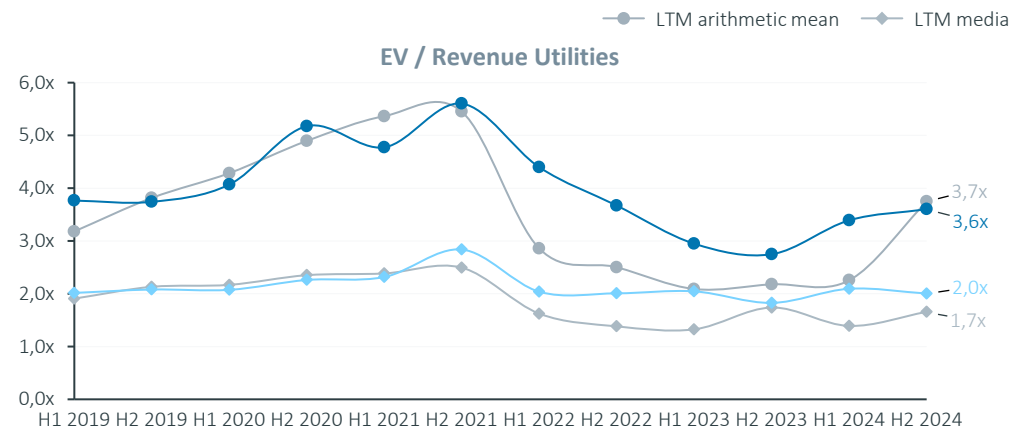
# Telecommunication

Revenue-, EBIT-, P/E- and P/B-Multiples



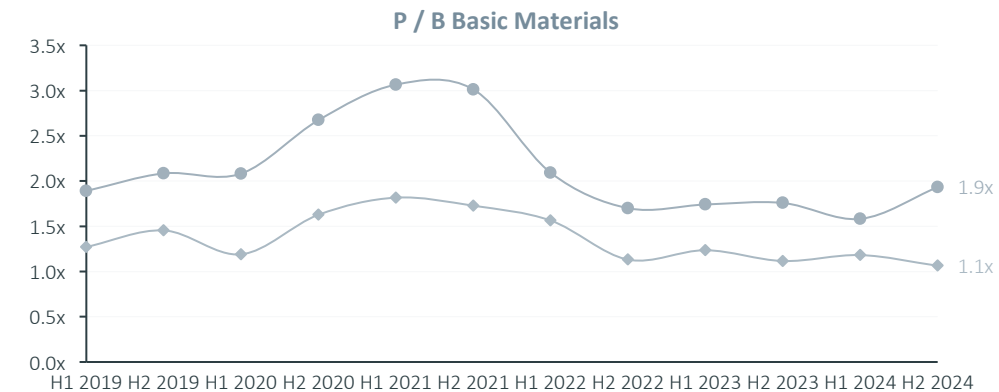
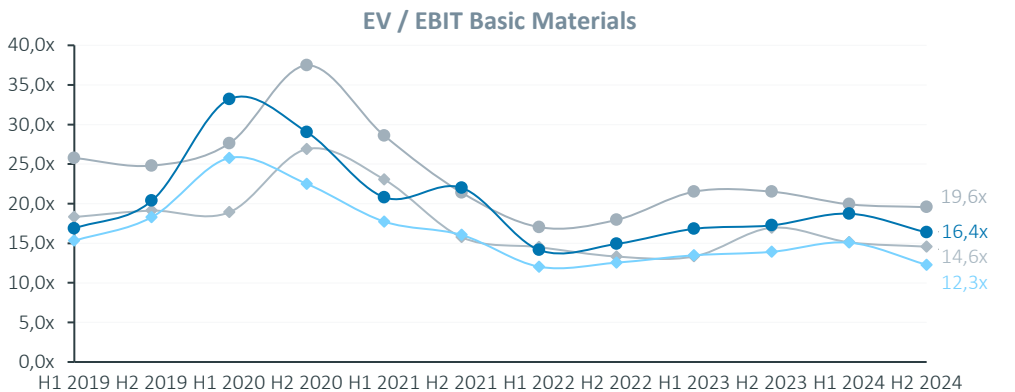
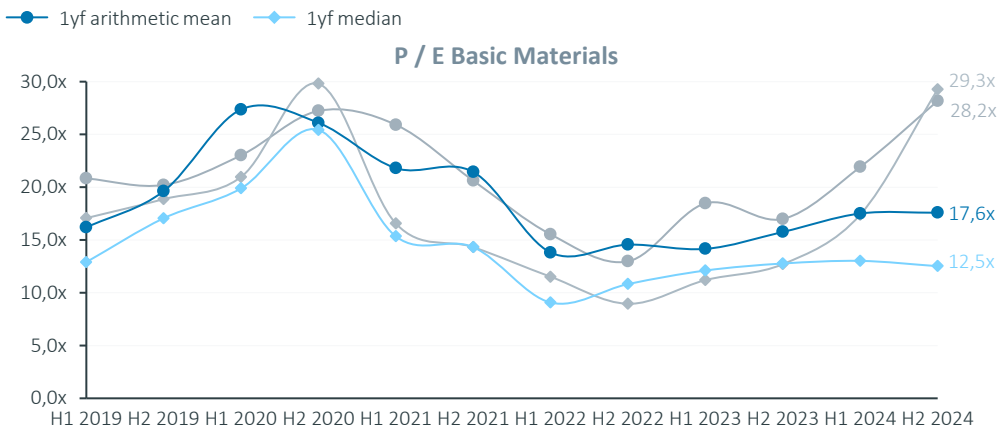
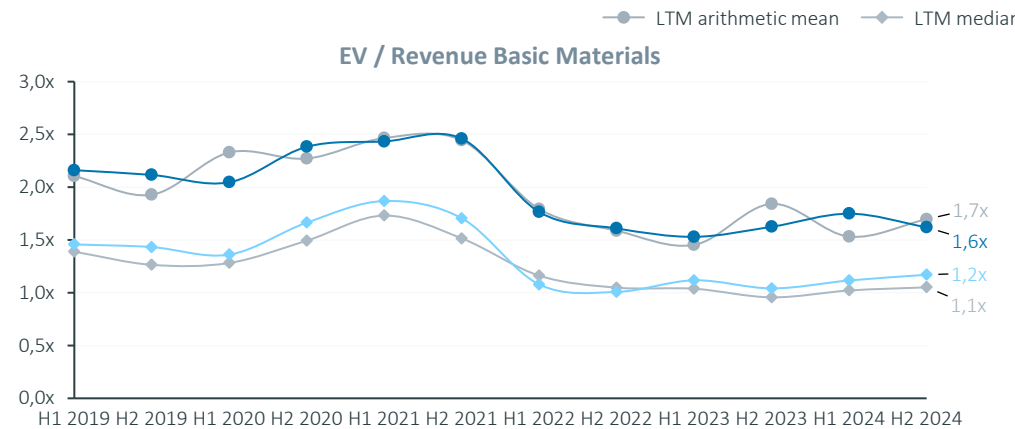
# Utilities

## Revenue-, EBIT-, P/E- and P/B-Multiples



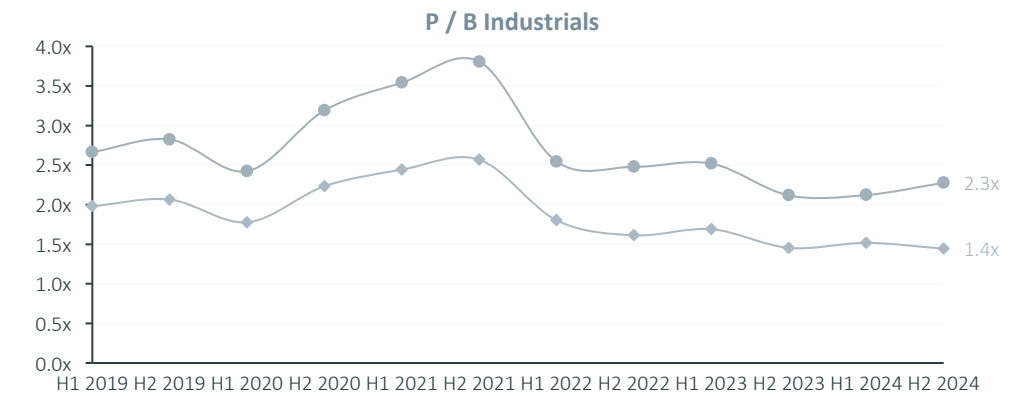
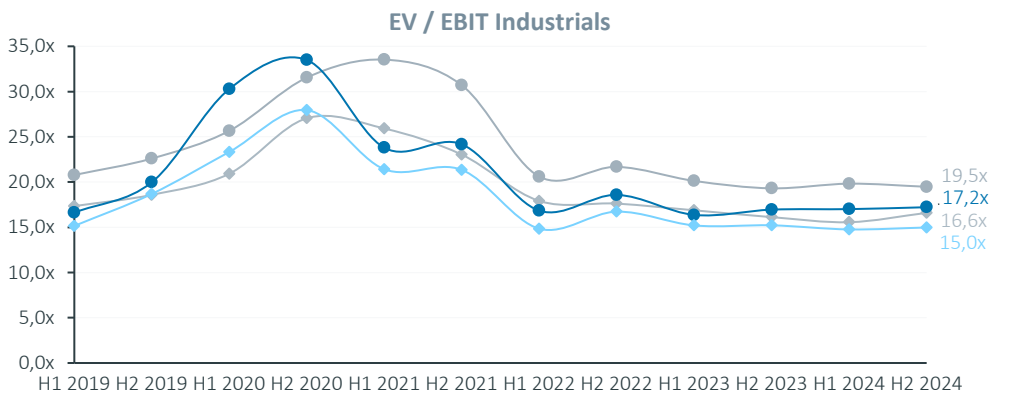
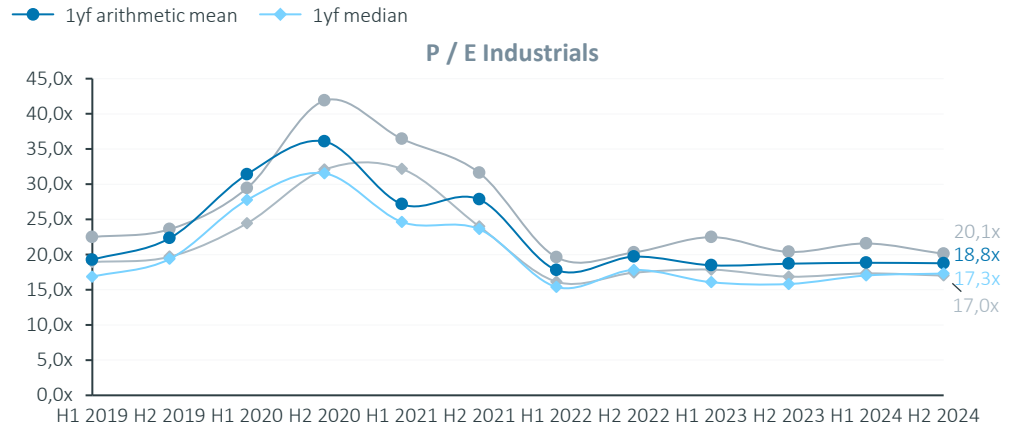
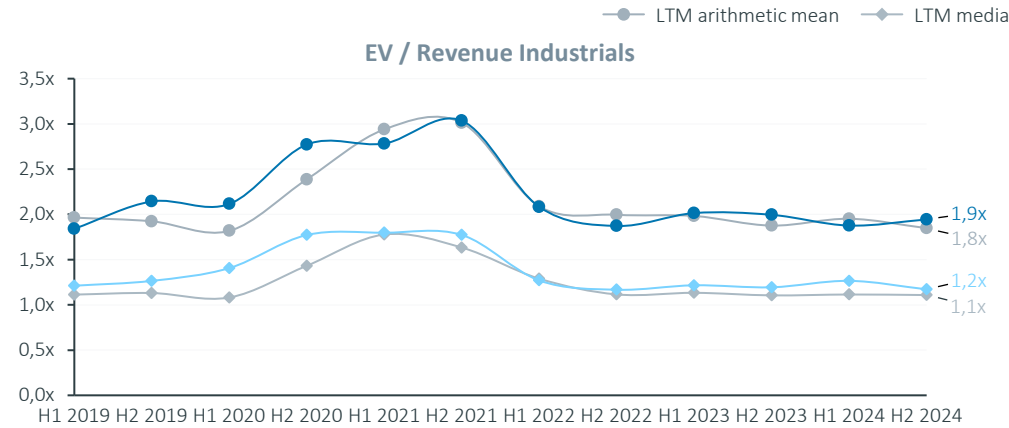
# Basic Materials

Revenue-, EBIT-, P/E- and P/B-Multiples



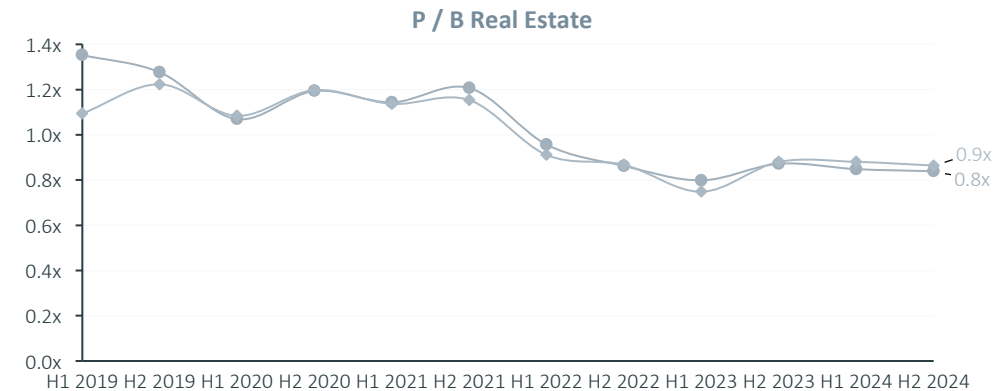
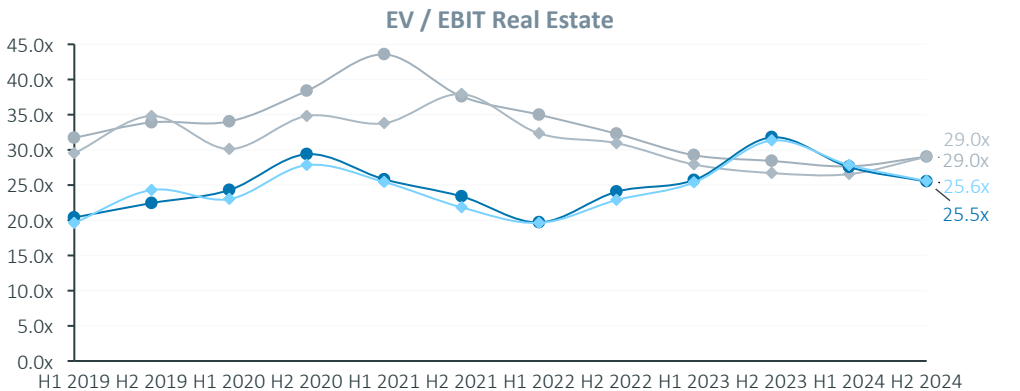
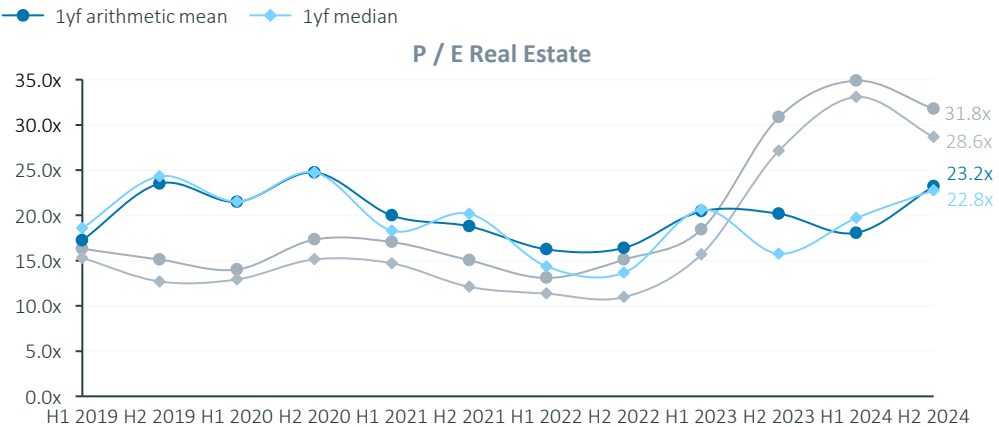
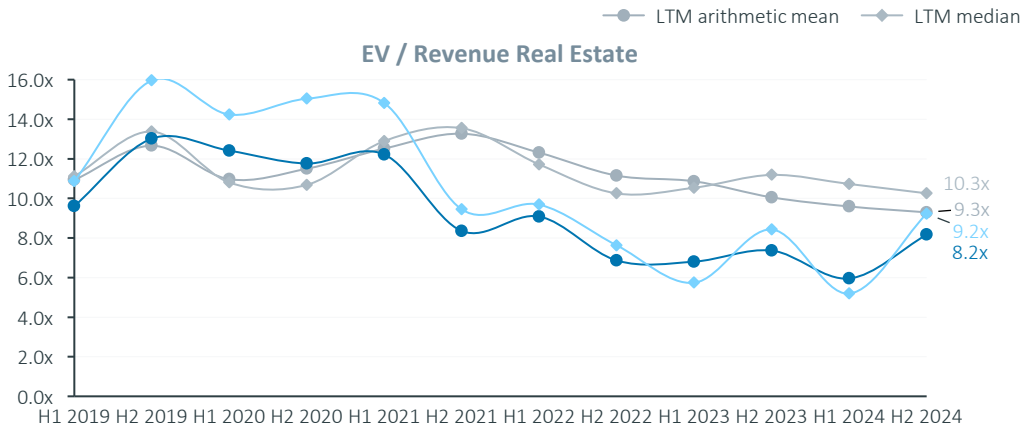
# Industrials

## Revenue-, EBIT-, P/E- and P/B-Multiples



# Real Estate

## Revenue-, EBIT-, P/E- and P/B-Multiples



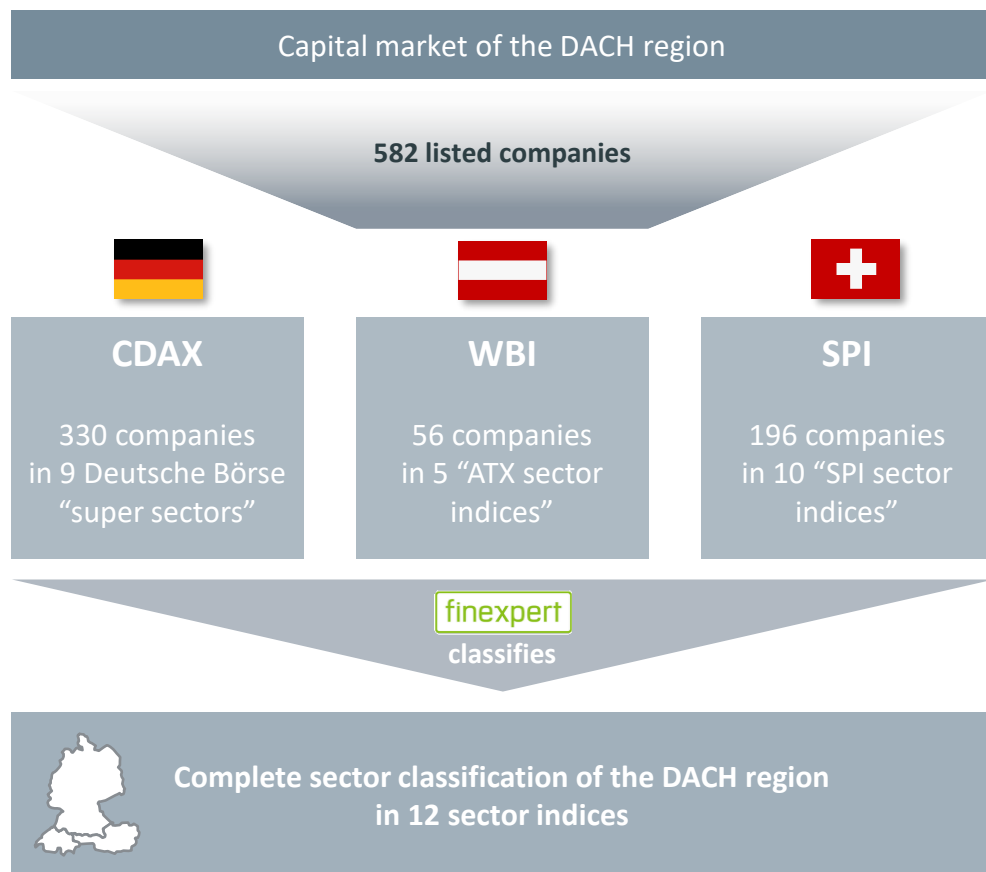
# Appendix

Composition of the sectors of CDAX, WBI  
and SPI as of 31 December 2024



# The capital market of the DACH region comprises 582 listed companies that are allocated to twelve sector indices

**finexpert** sector indices of the DACH region



The **finexpert** sector indices aim to cover the **entire capital market of the DACH region**. This Study contains all equities of the **German Composite DAX Index (CDAX)**, **Vienna Stock Exchange Index (WBI)** and **Swiss Performance Index (SPI)**. These three indices contain all shares listed on the **Official and Semi-Official Market**.

The **582 public companies**, which are listed in the mentioned indices as of 31 December 2024, build the base for the **sector classification** and the **subsequent analyses**:

- The German DAX Sector All Index<sup>1)</sup> includes 330 companies listed in the Prime Standard and General Standard and is grouped to nine “Deutsche Börse super sectors”.
- The Austrian ATX has five sector indices, and ValueTrust allocates the remaining companies of the WBI to the twelve sector indices listed below.
- The Swiss SPI contains ten sector indices that comprise 196 companies.

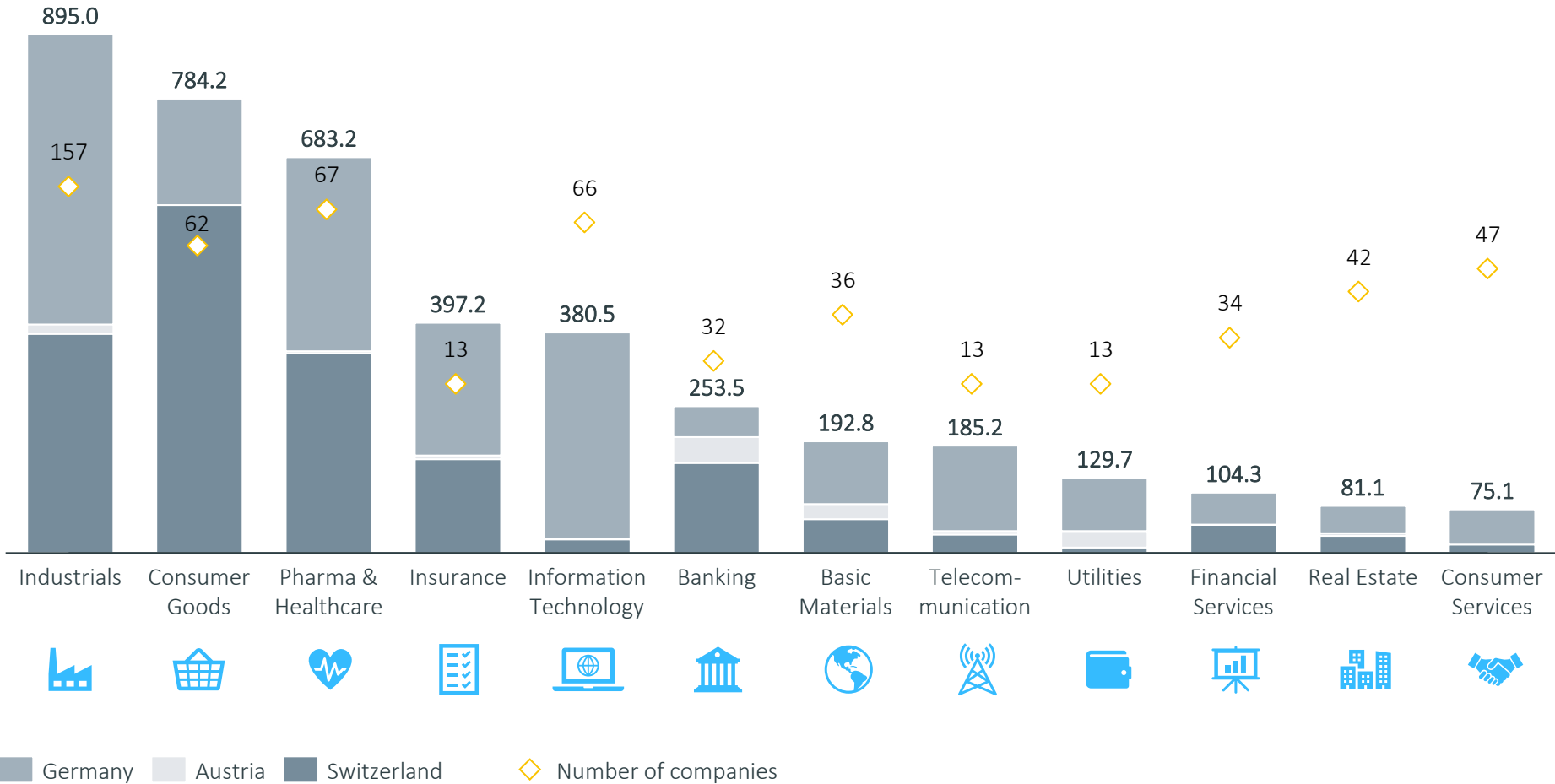
**finexpert** allocated all constituents of three market indices and the respective sector index classifications to twelve **finexpert** sector indices, called “super sectors”:

- |                       |                          |
|-----------------------|--------------------------|
| ▪ Banking             | ▪ Information Technology |
| ▪ Insurance           | ▪ Telecommunication      |
| ▪ Financial Services  | ▪ Utilities              |
| ▪ Consumer Service    | ▪ Basic Materials        |
| ▪ Consumer Goods      | ▪ Industrials            |
| ▪ Pharma & Healthcare | ▪ Real Estate            |

1. The DAX Sector All Index contains all equities listed in the Prime and General Standard as well as in the Scale segment of the Frankfurt stock exchange.

# Industrials, Consumer Goods and Pharma & Healthcare sectors represent over 55% of the market capitalization in the DACH region

finexpert sector market capitalization in the DACH region as of 31 December 2024 (in EUR bn)



# Banking, Financial Services, Insurance, and Real Estate (1/2)

## DACH Capital Market Study

### Banking

#### Germany

Commerzbank AG  
Deutsche Bank AG  
Deutsche Pfandbriefbank AG  
ProCredit Holding AG  
Wüstenrot & Württembergische AG

#### Austria

Bank für Tirol und Vorarlberg AG  
BAWAG Group AG  
BKS Bank AG  
Erste Group Bank AG  
Oberbank AG  
Raiffeisen Bank International AG

#### Switzerland

Banque Cantonale de Genève SA  
Banque Cantonale du Jura SA  
Banque Cantonale Vaudoise  
Basellandschaftliche Kantonalbank  
Basler Kantonalbank  
Berner Kantonalbank AG  
Cembra Money Bank AG  
EFG International AG  
Glarner Kantonalbank  
Graubündner Kantonalbank  
Hypothekbank Lenzburg AG  
Julius Bär Gruppe AG  
Luzerner Kantonalbank AG  
Schweizerische Nationalbank  
St. Galler Kantonalbank AG  
Thurgauer Kantonalbank  
UBS Group AG  
Valiant Holding AG  
Vontobel Holding AG  
Walliser Kantonalbank  
Zuger Kantonalbank

### Financial Services

#### Germany

ALBIS Leasing AG  
Allane SE  
Brockhaus Technologies AG  
CAMERIT AG  
capsensixx AG  
Deutsche Beteiligungs AG  
Deutsche Börse AG  
DF Deutsche Forfait AG  
DWS Group GmbH & Co. KGaA  
flatexDEGIRO AG  
FORIS AG  
Grenke AG  
Heidelberger Beteiligungsholding AG  
Hypoport SE  
KAP AG  
MLP SE  
Mutares SE & Co. KGaA  
OVB Holding AG  
Pearl Gold AG  
SPOBAG AG  
WCM Beteiligungs- und Grundbesitz-AG  
Webac Holding AG

#### Austria

Addiko Bank AG  
Burgenland Holding AG  
SunMirror AG  
Wiener Privatbank SE

#### Switzerland

Bellevue Group AG  
Compagnie Financière Tradition SA  
GAM Holding AG  
Leonteq AG  
Partners Group Holding AG  
Private Equity Holding AG  
R&S Group Holding AG  
Swissquote Group Holding Ltd  
VZ Holding AG

### Insurance

#### Germany

Allianz SE  
DFV Deutsche Familienversicherung AG  
Hannover Rück SE  
Münchener Rückvers. AG  
Talanx AG

#### Austria

UNIQA Insurance Group AG  
Vienna Insurance Group AG

#### Switzerland

Baloise Holding AG  
Helvetia Holding AG  
Swiss Life Holding AG  
Swiss Re AG  
Vaudoise Assurances Holding SA  
Zurich Insurance Group AG

### Real Estate

#### Germany

ACCENTRO Real Estate AG  
alstria office REIT-AG  
Branicks Group AG  
DEMIRE Deutsche Mittelstand Real Estate AG  
Deutsche EuroShop AG  
Deutsche Konsum REIT-AG  
Deutsche Real Estate AG  
Deutsche Wohnen SE  
Fair Value REIT-AG  
FCR Immobilien AG  
Gateway Real Estate AG  
Hamborner REIT AG  
Instone Real Estate Group SE  
LEG Immobilien SE  
PATRIZIA SE  
TAG Immobilien AG  
TTL Beteiligungs- und Grundbesitz-AG  
Vonovia SE

#### Austria

CA Immobilien Anlagen AG  
IMMOFINANZ AG  
UBM Development AG  
Warimpex Finanz- und Beteiligungs AG

#### Switzerland

Allreal Holding AG  
CI COM SA  
EPIC Suisse AG  
Fundamenta Real Estate AG  
HIAG Immobilien Holding AG  
Ina Invest AG  
Intershop Holding AG  
Investis Holding SA  
Mobimo Holding AG  
Novavest Real Estate AG  
Orascom Development Holding AG  
Peach Property Group AG  
Plazza AG  
PSP Swiss Property AG

# Real Estate (2/2), Basic Materials, and Consumer Goods

## DACH Capital Market Study

### Real Estate

#### Switzerland

SF Urban Properties AG  
 Swiss Prime Site AG  
 Varia US Properties AG  
 Warteck Invest AG  
 Züblin Immobilien Holding AG  
 Zug Estates Holding AG

### Basic Materials

#### Germany

Altech Advanced Materials AG  
 AlzChem Group AG  
 Aurubis AG  
 BASF SE  
 Bayer AG  
 BRAIN Biotech AG  
 Covestro AG  
 Decheng Technology AG  
 Eisen- und Hüttenwerke AG  
 Evonik Industries AG  
 Fuchs SE  
 H&R GmbH & Co. KGaA  
 K+S AG  
 LANXESS AG  
 Salzgitter AG  
 SGL Carbon SE  
 SIMONA AG  
 Surteco Group SE  
 Symrise AG  
 Wacker Chemie AG

#### Austria

AMAG Austria Metall AG  
 Lenzing AG  
 OMV AG  
 PORR AG  
 Schoeller-Bleckmann Oilfield Equipment AG  
 Strabag SE  
 Voestalpine AG  
 Wienerberger AG

#### Switzerland

Clariant AG  
 CPH Group AG  
 EMS-CHEMIE HOLDING AG  
 Givaudan SA  
 Gurit Holding AG  
 Swiss Steel Holding AG  
 Zwahlen & Mayr SA

### Consumer Goods

#### Germany

A.S. Création Tapeten AG  
 adidas AG  
 Bayerische Motoren Werke AG  
 Beiersdorf AG  
 Berentzen-Gruppe AG  
 Bertrandt AG  
 Bike24 Holding AG  
 Borussia Dortmund GmbH & Co. KGaA  
 CEWE Stiftung & Co. KGaA  
 Continental AG  
 Daimler Truck Holding AG  
 Dierig Holding AG  
 Douglas AG  
 Einhell Germany AG  
 ElringKlinger AG  
 Grammer AG  
 HELLA GmbH & Co. KGaA  
 Henkel AG & Co. KGaA  
 Hugo Boss AG  
 Knaus Tabbert AG  
 Leifheit AG  
 Mercedes-Benz Group AG  
 Meta Wolf AG  
 Ming Le Sports AG  
 Mister Spex SE  
 pferdewetten.de AG  
 Porsche Automobil Holding SE  
 PUMA SE  
 PWO AG  
 ROY Asset Holding SE  
 SAF-Holland SE  
 Schaeffler AG  
 Schloss Wachenheim AG  
 Sto SE & Co. KGaA  
 STS Group AG  
 Südzucker AG  
 TC Unterhaltungselektronik AG  
 Villeroy & Boch AG

Volkswagen AG  
 WASGAU Produktions & Handels AG  
 Westag AG

#### Austria

AGRANA Beteiligungs-AG  
 DO & CO AG  
 Gurktaler AG  
 Josef Manner & Comp. AG  
 Linz Textil Holding AG  
 PIERER Mobility AG  
 Polytec Holding AG  
 Stadlauer Malzfabrik AG

#### Switzerland

Airesis SA  
 ARYZTA AG  
 Autoneum Holding AG  
 Barry Callebaut AG  
 Bell Food Group AG  
 CALIDA Holding AG  
 Chocoladefabriken Lindt & Sprüngli AG  
 Compagnie Financière Richemont SA  
 Emmi AG  
 Groupe Minoteries SA  
 Hocrn AG  
 Metall Zug AG  
 Nestlé SA  
 ORIOR AG  
 Stadler Rail AG  
 The Swatch Group AG  
 V-ZUG Holding AG

# Consumer Service and Pharma & Healthcare

## DACH Capital Market Study

### Consumer Service

#### Germany

Artnet AG  
 AUTO1 Group SE  
 Bastei Lübbe AG  
 bet-at-home.com AG  
 Bijou Brigitte modische Accessoires AG  
 Ceconomy AG  
 CTS Eventim AG & Co. KGaA  
 Delivery Hero SE  
 Delticom AG  
 elumeo SE  
 Fielmann Group AG  
 Hawesko Holding SE  
 HelloFresh SE  
 HORNBAACH Holding AG & Co. KGaA  
 Intertainment AG  
 LUDWIG BECK am Rathauseck - Textilhaus Feldmeier AG  
 Metro AG  
 Nakiki SE  
 NeXR Technologies SE  
 Philomaxcap AG  
 ProSiebenSat.1 Media SE  
 Readcrest Capital AG  
 Scout24 SE  
 Sporttotal AG  
 Springer Nature AG & Co. KGaA  
 Ströer SE & Co. KGaA  
 TAKKT AG  
 TUI AG  
 UNITEDLABELS AG  
 Westwing Group SE  
 Wild Bunch AG  
 Your Family Entertainment AG  
 Zalando SE  
 ZEAL Network SE

#### Switzerland

APG SGA SA  
 Asmallworld AG  
 Avolta AG

Bergbahnen Engelberg-Trübsee-Titlis AG  
 DocMorris AG  
 Galenica AG  
 Highlight Event and Entertainment AG  
 Jungfrauabahn Holding AG  
 mobilezone holding ag  
 Orell Füssli AG  
 TX Group AG  
 Villars Holding SA

### Pharma & Healthcare

#### Germany

2invest AG  
 4SC AG  
 aap Implantate AG  
 Biofrontera AG  
 Biotest AG  
 Carl Zeiss Meditec AG  
 co.don AG  
 Dermapharm Holding SE  
 Drägerwerk AG & Co. KGaA  
 Eckert & Ziegler SE  
 Evotec SE  
 Formycon AG  
 Fresenius Medical Care AG  
 Fresenius SE & Co. KGaA  
 Gerresheimer AG  
 Heidelberg Pharma AG  
 Maternus-Kliniken AG  
 MEDICLIN AG  
 Medigene AG  
 Medios AG  
 Merck KGaA  
 Paion AG  
 Pentixapharm Holding AG  
 PharmaSGP Holding SE  
 RHÖN-KLINIKUM AG  
 Sartorius AG  
 SCHOTT Pharma AG & Co. KGaA  
 Siemens Healthineers AG  
 Stratec SE  
 VITA 34 AG

#### Austria

Marinomed Biotech AG

#### Switzerland

Addex Therapeutics Ltd  
 Aegis Victoria SA  
 Alcon Inc.  
 Bachem Holding AG  
 Basilea Pharmaceutica AG

BB Biotech AG  
 COLTENE Holding AG  
 Curatis Holding AG  
 Dottikon ES Holding AG  
 Evolva Holding SA  
 Galderma Group AG  
 Idorsia Ltd  
 IVF Hartmann Holding AG  
 Kuros Biosciences AG  
 Lonza Group AG  
 Medartis Holding AG  
 Molecular Partners AG  
 Novartis AG  
 PolyPeptide Group AG  
 Relief Therapeutics Holding SA  
 Roche Holding AG  
 Sandoz Group AG  
 Santhera Pharmaceuticals Holding AG  
 Siegfried Holding AG  
 SKAN Group AG  
 Sonova Holding AG  
 Spexis AG  
 Straumann Holding AG  
 Tecan Group AG  
 Xlife Sciences AG  
 Ypsomed Holding AG

# Information Technology, Telecommunications, and Utilities

## DACH Capital Market Study

### Information Technology

#### Germany

adesso SE  
 Adtran Networks SE  
 AIXTRON SE  
 All for One Group SE  
 Allgeier SE  
 Arzneiwerk AG VIDA  
 ATOSS Software SE  
 B+S Bankssysteme AG  
 Bechtle AG  
 Cancom SE  
 CENIT AG  
 Cherry SE  
 CompuGroup Medical SE & Co. KGaA  
 DATA MODUL AG  
 Elmos Semiconductor SE  
 First Sensor AG  
 FORTEC Elektronik AG  
 GFT Technologies SE  
 Gigaset AG  
 Infineon Technologies AG  
 init innovation in traffic systems SE  
 INTERSHOP Communications AG  
 InTiCa Systems SE  
 IONOS Group SE  
 IVU Traffic Technologies AG  
 KPS AG  
 MeVis Medical Solutions AG  
 Nagarro SE  
 Nemetschek SE  
 Nexus AG  
 NorCom Information Technology GmbH & Co. KGaA  
 OHB SE  
 Panamax AG  
 paragon GmbH & Co. KGaA  
 PSI Software SE  
 q.beyond AG  
 RealTech AG  
 SAP SE

Schweizer Electronic AG  
 secunet Security Networks AG  
 Serviceware SE  
 Siltronic AG  
 SNP Schneider-Neureither & Partner SE  
 SÜSS MicroTec SE  
 SYZYGY AG  
 TeamViewer SE  
 The Social Chain AG  
 tison AG  
 United Internet AG  
 Vivanco Gruppe AG

#### Austria

AT&S Austria Technologie & System. AG  
 Austriacard Holdings AG  
 Frequentis AG  
 Kapsch TrafficCom AG  
 Maschinenfabrik Heid AG  
 RATH AG

#### Switzerland

ALSO Holding AG  
 ams-OSRAM AG  
 Ascom Holding AG  
 Huber+Suhner AG  
 Kudelski SA  
 Logitech International SA  
 SoftwareONE Holding AG  
 Temenos AG  
 u-blox Holding AG  
 WISEKey International Holding AG

### Telecommunication

#### Germany

1&1 AG  
 11 88 0 Solutions AG  
 3U Holding AG  
 Deutsche Telekom AG  
 ecotel communication AG  
 freenet AG  
 LS telcom AG  
 NFOON AG  
 YOC AG

#### Austria

EuroTeleSites AG  
 Telekom Austria AG

#### Switzerland

Sunrise Communications AG  
 Swisscom AG

### Utilities

#### Germany

E.ON SE  
 EnBW Energie Baden-Württemberg AG  
 Encavis AG  
 Gelsenwasser AG  
 Mainova AG  
 MVV Energie AG  
 RWE AG  
 Uniper SE

#### Austria

EVN AG  
 VERBUND AG

#### Switzerland

BKW AG  
 Edisun Power Europe AG  
 Romande Energie Holding SA

# Industrials (1/2)

## DACH Capital Market Study

### Industrials (1/2)

#### Germany

7C Solarparken AG  
 Amadeus FiRe AG  
 Aumann AG  
 Basler AG  
 BayWa AG  
 Bilfinger SE  
 Brenntag SE  
 Deutsche Lufthansa AG  
 Deutsche Post AG  
 DEUTZ AG  
 DMG MORI AG  
 Dr. Höhle AG  
 Dr. Ing. h.c. F. Porsche AG  
 Dürr AG  
 Enapter AG  
 Energiekontor AG  
 Francotyp-Postalia Holding AG  
 Fraport AG  
 Friedrich Vorwerk Group SE  
 FRIWO AG  
 GEA Group AG  
 Gesco SE  
 Hamburger Hafen und Logistik AG  
 Hapag-Lloyd AG  
 Heidelberg Materials AG  
 Heidelberger Druckmaschinen AG  
 Hensoldt AG  
 hGears AG  
 HOCHTIEF AG  
 INDUS Holding AG  
 Infas Holding AG  
 Jenoptik AG  
 JOST Werke SE  
 Jungheinrich AG  
 KHD Humboldt Wedag International AG  
 KION GROUP AG  
 Klöckner & Co SE  
 Knorr-Bremse AG

Koenig & Bauer AG  
 Kronos AG  
 KSB SE & Co. KGaA  
 KWS SAAT SE & Co. KGaA  
 LIBERO Football Finance AG  
 LPKF Laser & Electronics SE  
 Manz AG  
 Maschinenfabrik Berthold Hermle AG  
 Masterflex SE  
 MAX Automation SE  
 MBB SE  
 MTU Aero Engines AG  
 Müller - Die lila Logistik SE  
 Nordex SE  
 Nordwest Handel AG  
 NORMA Group SE  
 ORBIS AG  
 Pfeiffer Vacuum Technology AG  
 Pittler Maschinenfabrik AG  
 PNE AG  
 PVA TePla AG  
 R. STAHL AG  
 RATIONAL AG  
 RENK Group AG  
 Rheinmetall AG  
 Ringmetall SE  
 SFC Energy AG  
 Siemens AG  
 Siemens Energy AG  
 Singulus Technologies AG  
 Sino-German United AG  
 Sixt SE  
 SMA Solar Technology AG  
 SMT Scharf AG  
 Softing AG  
 Stabilus SE  
 technotrans SE  
 thyssenkrupp AG  
 thyssenkrupp nucera AG & Co. KGaA

Traton SE  
 Uzin Utz SE  
 Varta AG  
 Verbio SE  
 Viscom SE  
 Voltabox AG  
 Vossloh AG  
 Wacker Neuson SE  
 WashTec AG  
 ZhongDe Waste Technology AG  
**Austria**  
 Andritz AG  
 Cleen Energy AG  
 FACC AG  
 Flughafen Wien AG  
 Frauenthal Holding AG  
 Mayr-Melnhof Karton AG  
 Österreichische Post AG  
 Palfinger AG  
 RHI Magnesita N.V.  
 Rosenbauer International AG  
 Semperit AG Holding  
 SW Umwelttechnik Stoiser & Wolschner AG  
 Zumtobel Group AG  
**Switzerland**  
 ABB Ltd  
 Accelleron Industries AG  
 Adecco Group AG  
 Adval Tech Holding AG  
 Arbonia AG  
 BELIMO Holding AG  
 Bossard Holding AG  
 Bucher Industries AG  
 Burckhardt Compression Holding AG  
 Burkhalter Holding AG  
 BVZ Holding AG  
 Bystronic AG  
 Carlo Gavazzi Holding AG  
 Cicor Technologies Ltd.

Comet Holding AG  
 Dätwyler Holding AG  
 DKSH Holding AG  
 dormakaba Holding AG  
 Feintool International Holding AG  
 Flughafen Zürich AG  
 Forbo Holding AG  
 Geberit AG  
 Georg Fischer AG  
 Holcim AG  
 Implen AG  
 INFICON Holding AG  
 Interroll Holding AG  
 Kardex Holding AG  
 Klingelberg AG  
 Komax Holding AG  
 Kuehne + Nagel International AG  
 Landis+Gyr Group AG  
 LEM Holding SA  
 MCH Group AG  
 Medacta Group SA  
 medmix AG  
 Meier Tobler Group AG  
 Meyer Burger Technology AG  
 Mikron Holding AG  
 Montana Aerospace AG  
 OC Oerlikon Corporation AG  
 Perrot Duval Holding SA  
 Phoenix Mecano AG  
 Rieter Holding AG  
 Schindler Holding AG  
 Schlatter Industries AG  
 Schweiter Technologies AG  
 Sensirion Holding AG  
 SFS Group AG  
 SGS SA  
 SIG Group AG  
 Sika AG  
 StarragTornos Group AG

# Industrials (2/2)

## DACH Capital Market Study

### Industrials (2/2)

**Switzerland**

- Sulzer Ltd
- VAT Group AG
- Vetropack Holding AG
- Zehnder Group AG



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