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DACH Capital Market Study

ANALYSIS OF COST OF CAPITAL PARAMETERS AND SECTOR MULTIPLES FOR THE CAPITAL MARKETS IN GERMANY, AUSTRIA AND SWITZERLAND AS OF 30 JUNE 2024

Volume 15, September 2024

ValueTrust is a brand of PVT Financial Advisors SE

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Dear business partners and friends of ValueTrust,

We are pleased to release our fifteenth edition of the **ValueTrust DACH**[1] **Capital Market Study** for Q2 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 relevered 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[2], WBI[3] and SPI[4]. 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 30 June 2018 and 30 June 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.

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1) D (Germany), A (Austria), CH (Switzerland) 2) German Composite DAX Index 3) Vienna Stock Index 4) Swiss Performance Index

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- Chris is the founder and board member of ValueTrust
- Previously he was a Partner at KPMG and Managing Director for the DACH region at Duff & Phelps
- 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
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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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- He advises clients on initiatives that drive shareholder value: capital allocation, assessment of strategic alternatives, forecasting and scenario planning
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finexpert

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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.

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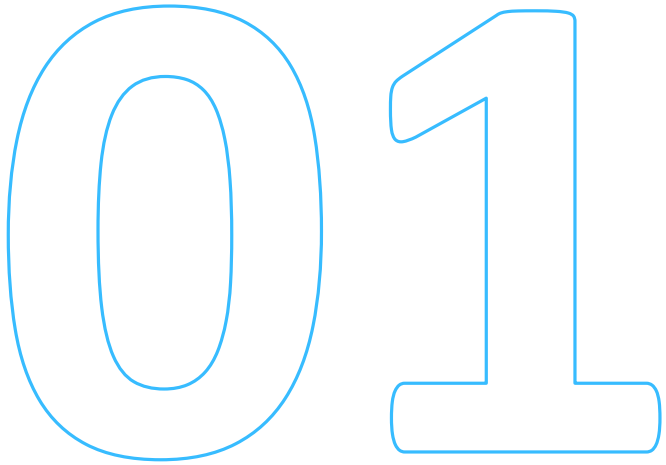
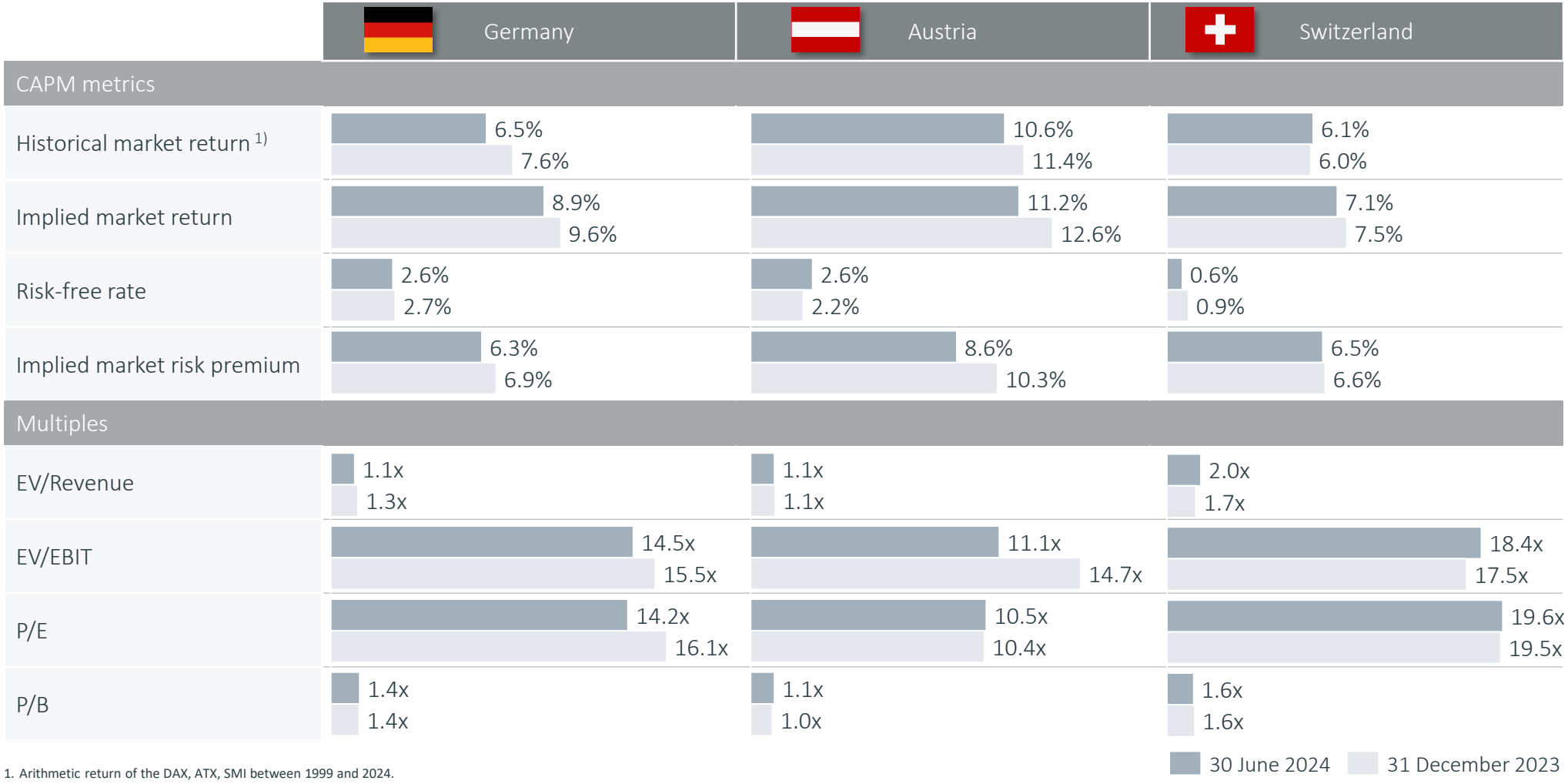


Executive summary

The implied market risk premium decreased for Germany and Austria over the past 6 months due to lower implied market return, and stayed relatively steady for Switzerland

Market risk premium and trading multiples by country, Q2 2024



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

Financial sectors continue to benefit from high interest rates; the Information Technology sector records one of the highest total shareholder return driven by Artificial Intelligence stocks

Cost of equity by sector and methodology for the DACH region, Q2 2024

Sectors	Implied levered cost of equity	Levered cost of equity (CAPM) [1)]	1 / PE-ratio (1yf)	Total shareholder return (Ø 6y) [2)]
Banking	9.3%	8.1%	10.9%	15.4%
Insurance	10.0%	7.3%	7.4%	17.5%
Financial Services	6.9%	10.1%	7.8%	16.5%
Consumer Service	7.9%	9.6%	5.4%	17.6%
Consumer Goods	10.1%	8.3%	6.7%	11.2%
Pharma & Healthcare	7.3%	10.0%	4.1%	11.6%
Information Technology	5.0%	9.1%	5.2%	16.8%
Telecommunication	8.6%	6.7%	6.5%	12.5%
Utilities	8.1%	6.9%	6.2%	12.9%
Basic Materials	8.4%	9.6%	7.7%	4.8%
Industrials	7.3%	9.8%	5.9%	17.6%
Real Estate	6.0%	8.0%	5.1%	5.3%

1. Based on 2-year sector beta, risk-free rate of 2.59% and implied market risk premium of 6.3% 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.

The Banking sector's valuation came out the lowest due to a stronger rise in earnings compared to prices, while the Information Technology sector trades at some of the highest multiples

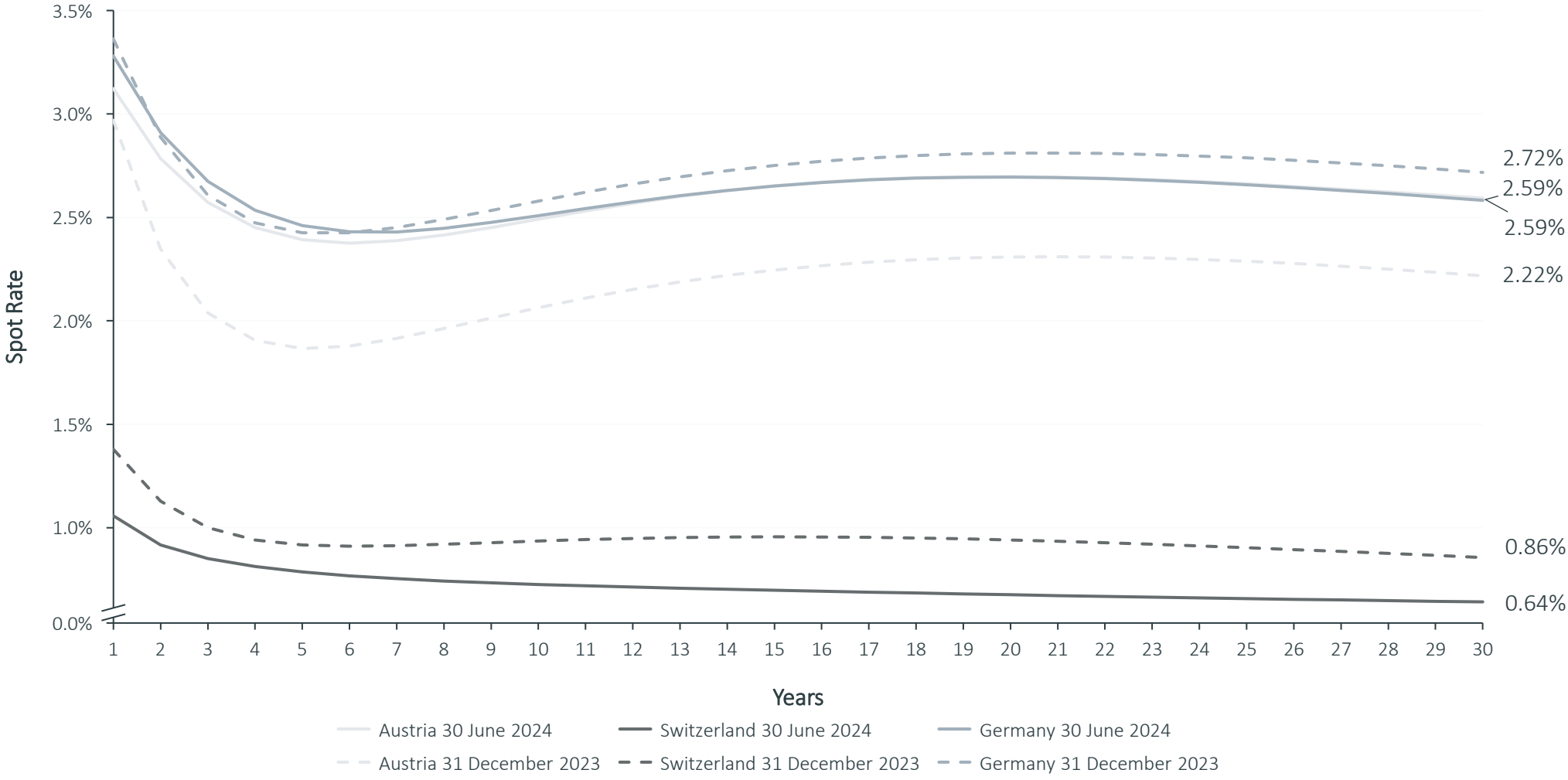
Trading multiples by sector for the DACH region, Q2 2024

Sectors	EV/Revenue 1yf	EV/EBIT 1yf	P/E 1yf	P/B LTM
Banking	n.a.	n.a.	9.2x	0.9x
Insurance	n.a.	n.a.	13.4x	1.6x
Financial Services	n.a.	n.a.	12.8x	0.9x
Consumer Service	1.0x	16.4x	18.5x	2.0x
Consumer Goods	1.0x	12.9x	14.9x	1.2x
Pharma & Healthcare	3.5x	22.1x	24.4x	2.4x
Information Technology	1.5x	16.3x	19.2x	2.6x
Telecommunication	1.6x	14.0x	15.4x	1.6x
Utilities	2.1x	14.4x	16.1x	1.7x
Basic Materials	1.1x	15.1x	13.0x	1.2x
Industrials	1.3x	14.8x	17.0x	1.5x
Real Estate	5.2x	27.8x	19.7x	0.9x

02 Risk-free rate

Germany's risk-free rate experienced a 13 bps decrease in the last 6 months to 2.59%, while Austria increased 37 bps to 2.59% and Switzerland decreased 22 bps to 0.64%

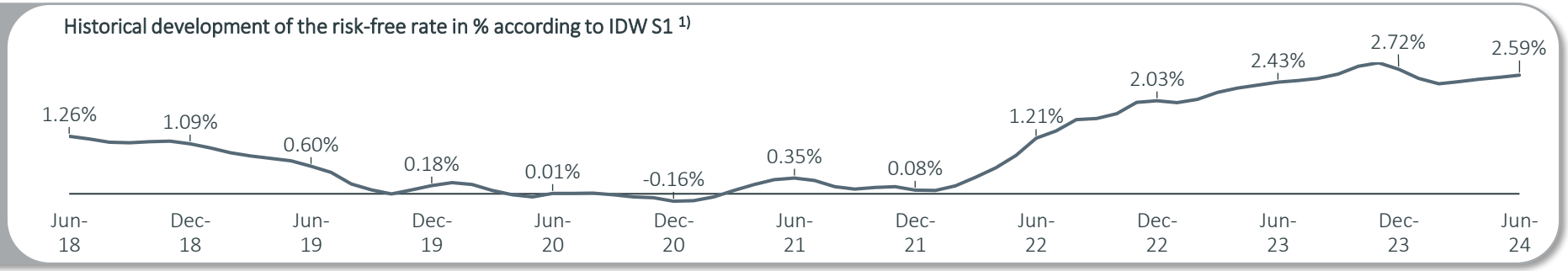
Risk-free rate for Germany, Austria and Switzerland based on long-term bonds (Svensson method), 30 June 2024



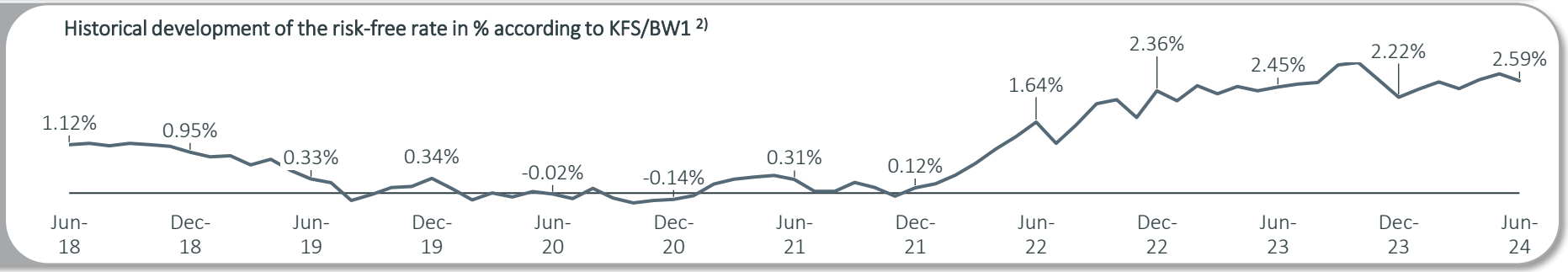
While German and Swiss risk-free rates decreased compared to December 2023, they remain elevated historically, with peaks likely behind and an initial downward trend emerging

Historical risk-free rate by country since 30 June 2018, in %

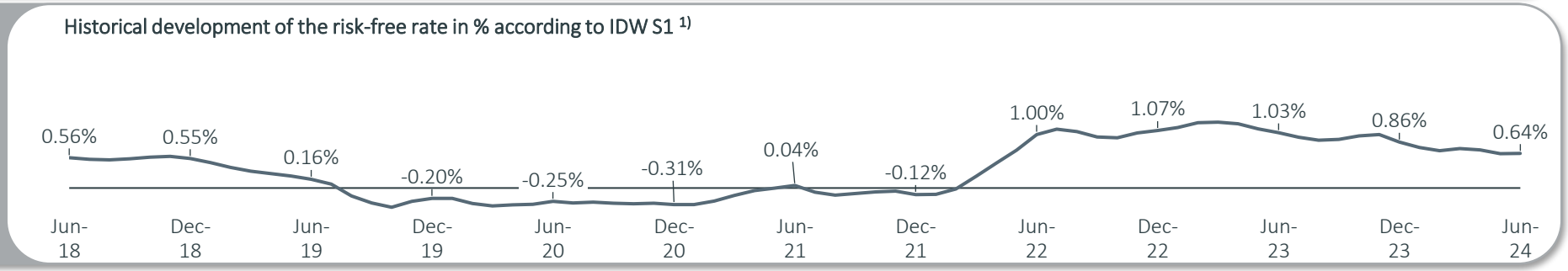
Germany



Austria



Switzerland



1. Interest rate as of reference date using 3-month average yield curves in accordance with IDW S 1;
2. Interest rate calculated using the daily yield curve in accordance with KFS/BW 1 (no 3-month average).00

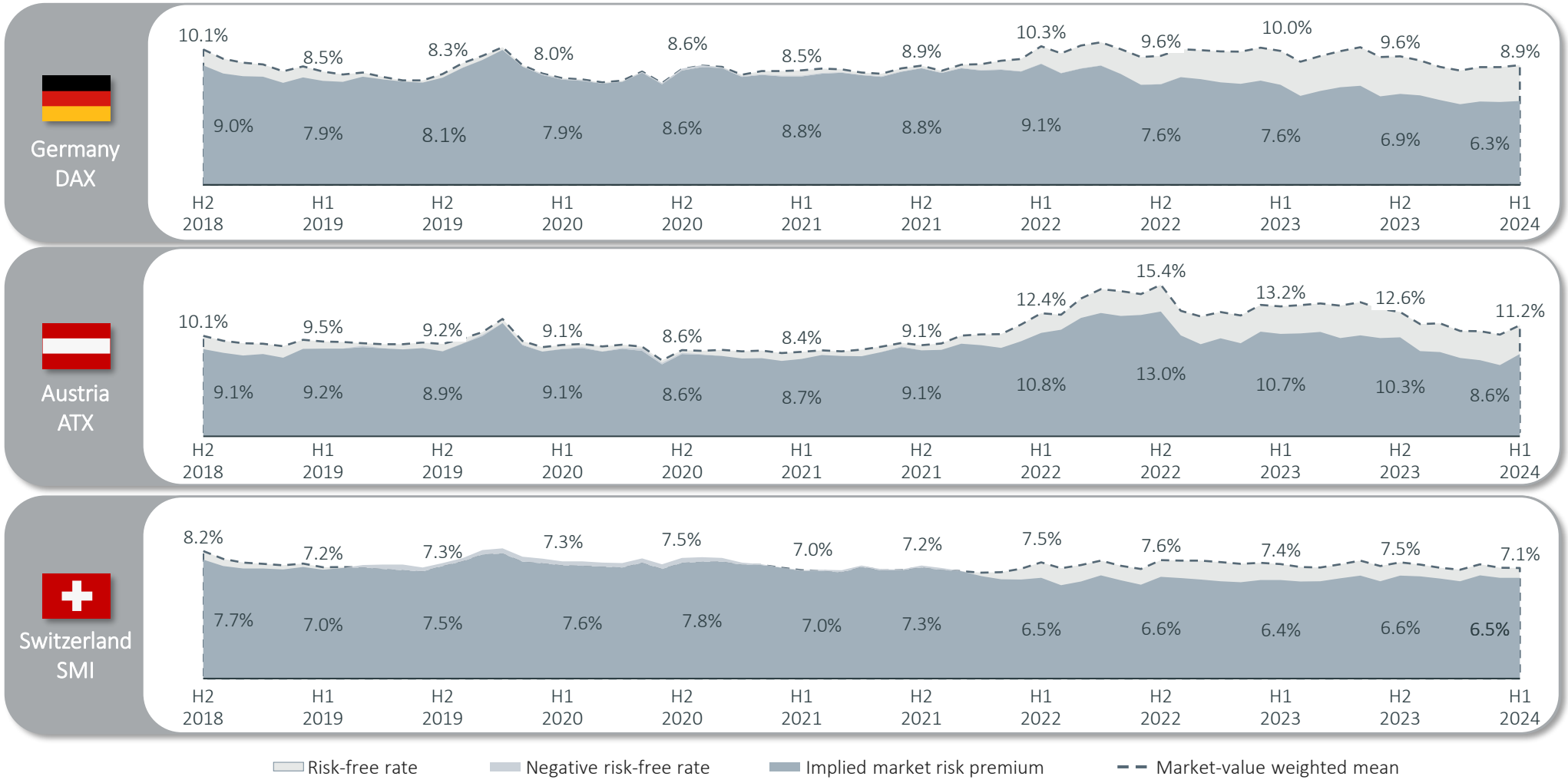
03

Market returns and risk premium

a. Implied returns (ex-ante analysis)

Due to lower implied returns, the market risk premium decreased 10 bps to 6.5% in Switzerland, 170 bps to 8.6% in Austria and 60 bps to 6.3% in Germany

Implied market risk premium by country since 2018, in %



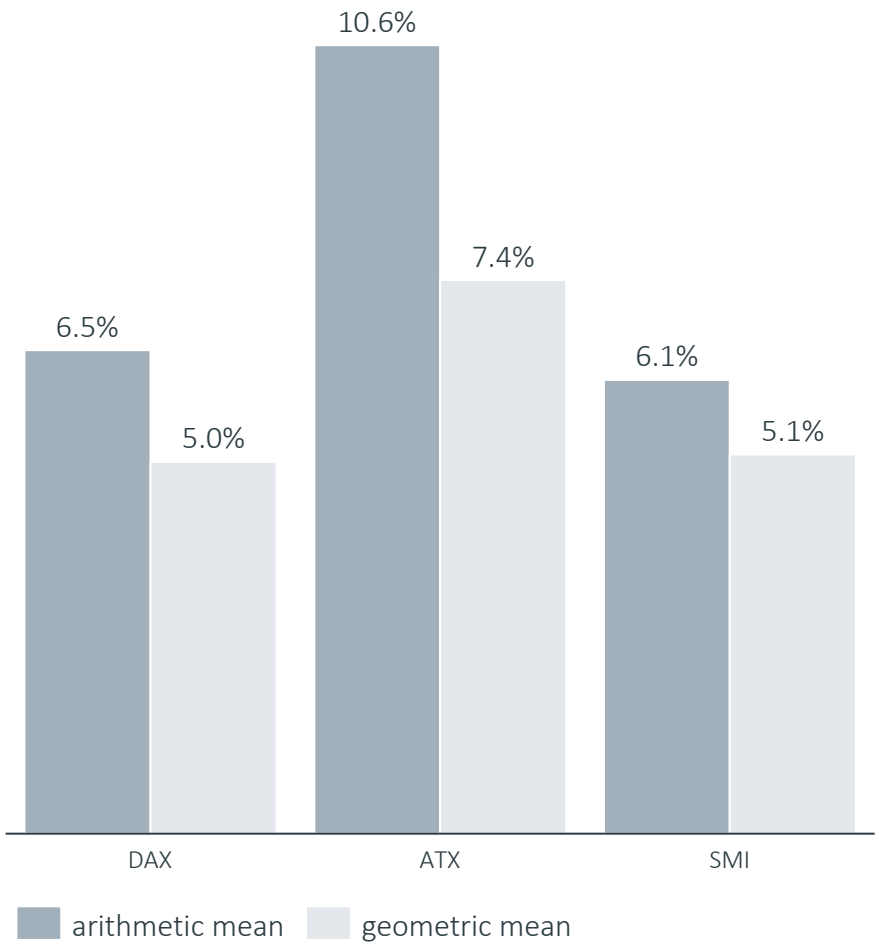
03

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 (10.6%), followed by Germany (6.5%) and Switzerland (6.1%)

Arithmetic and geometric mean of historical market returns as of 30 June 2024, 1999-2024

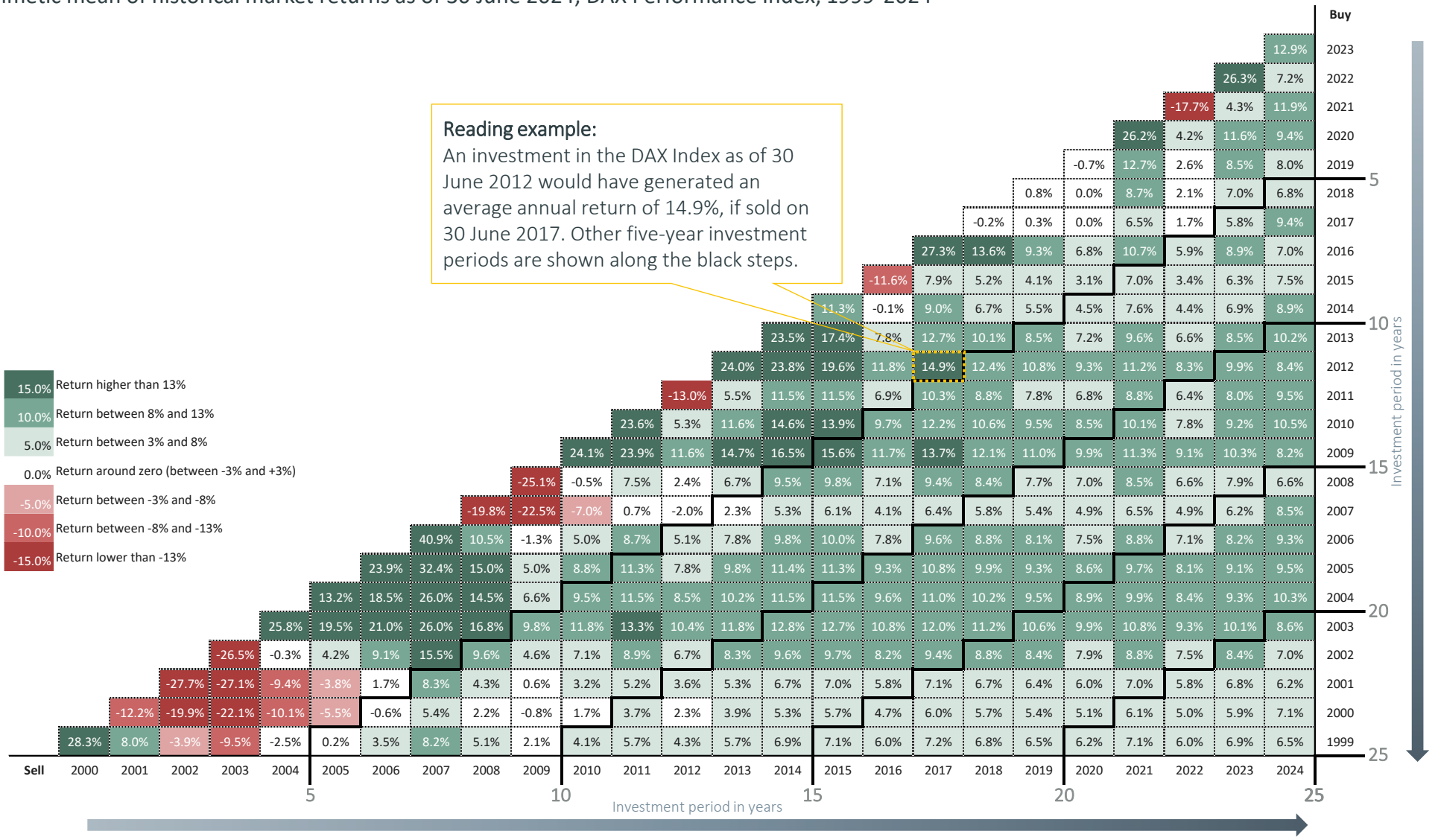


- In addition to the ex-ante analysis, we also analyze **historical (ex-post) returns over a long-term observation period of 25 years**, indicating a return potential for the German, Austrian and Swiss capital markets.
- The analysis of historical returns can be used for **plausibility checks of the 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**[1)], 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 12.9% in the last 12 months, the DAX was outperformed by the ATX (20.8%) but beat the SMI (9.8%)

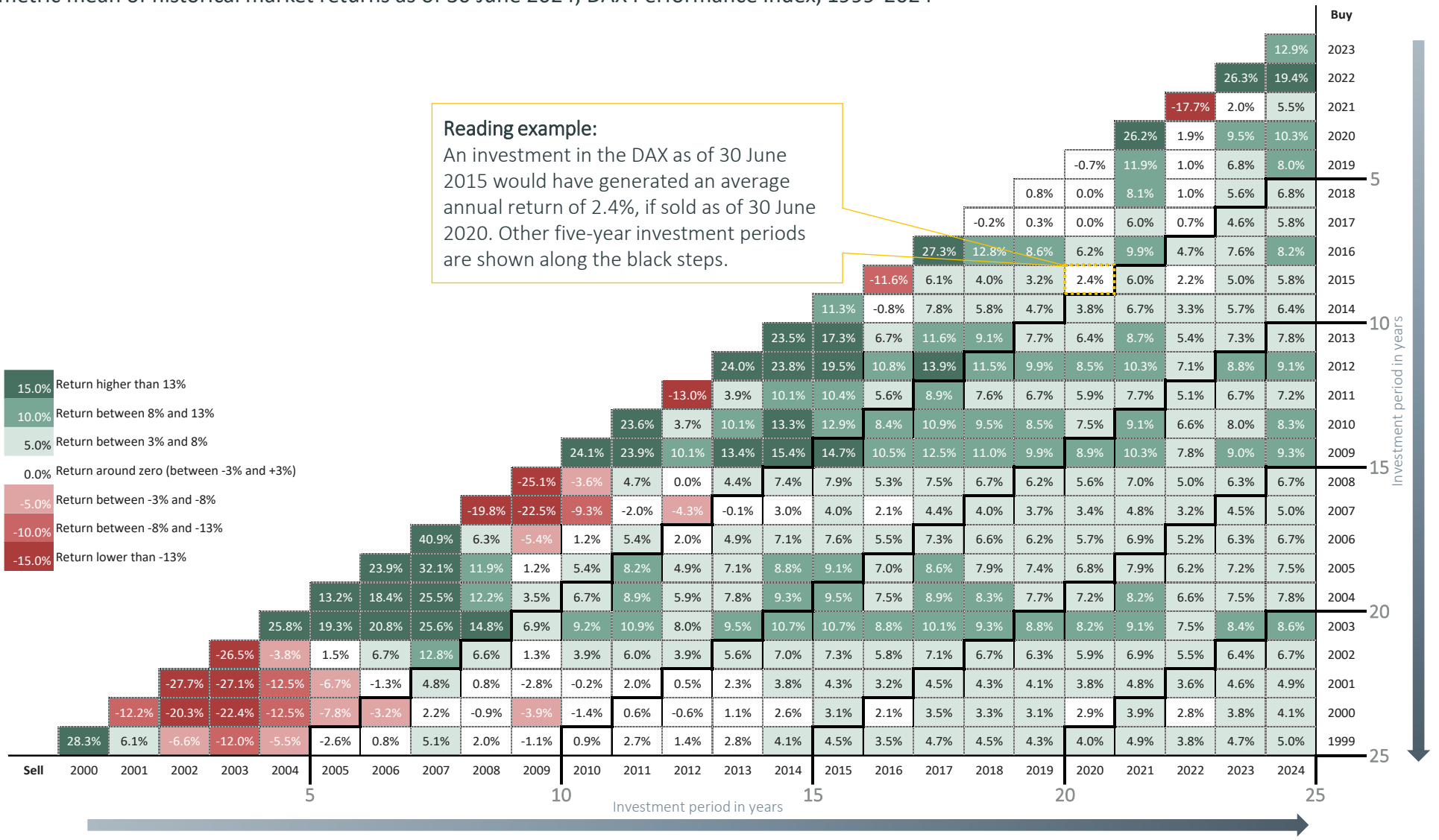
Arithmetic mean of historical market returns as of 30 June 2024, DAX Performance Index, 1999-2024



Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

The strong performance of the DAX in the last 12 months results in an improvement of the return of an investment in 2021 from 2.0% to 5.5%

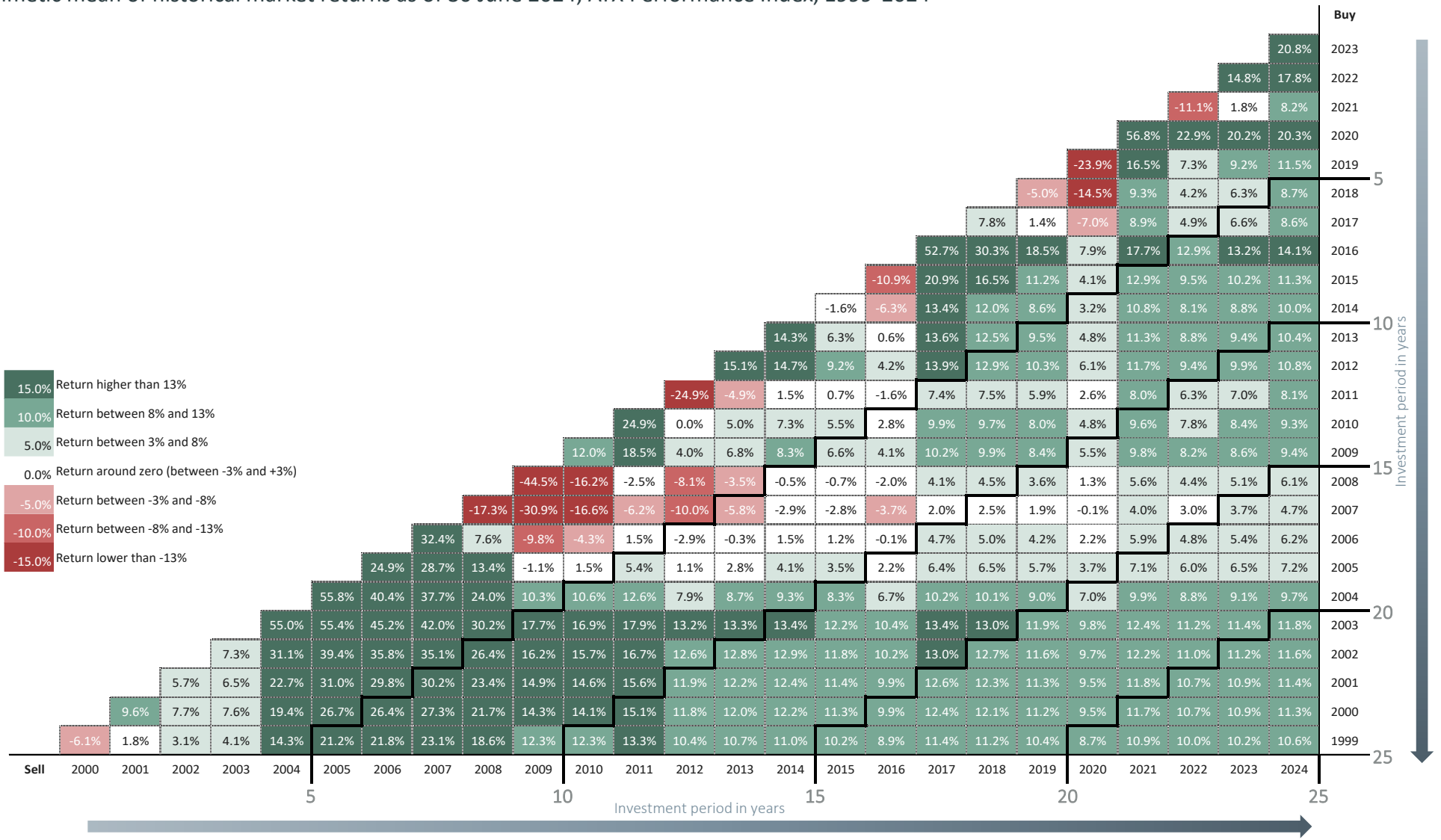
Geometric mean of historical market returns as of 30 June 2024, DAX Performance Index, 1999-2024



Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

With a return of 20.8% over the past 12 months, ATX performance is above the DAX (12.9%) and significantly higher than the historical long-term average of 10.6% p.a. over 25 years

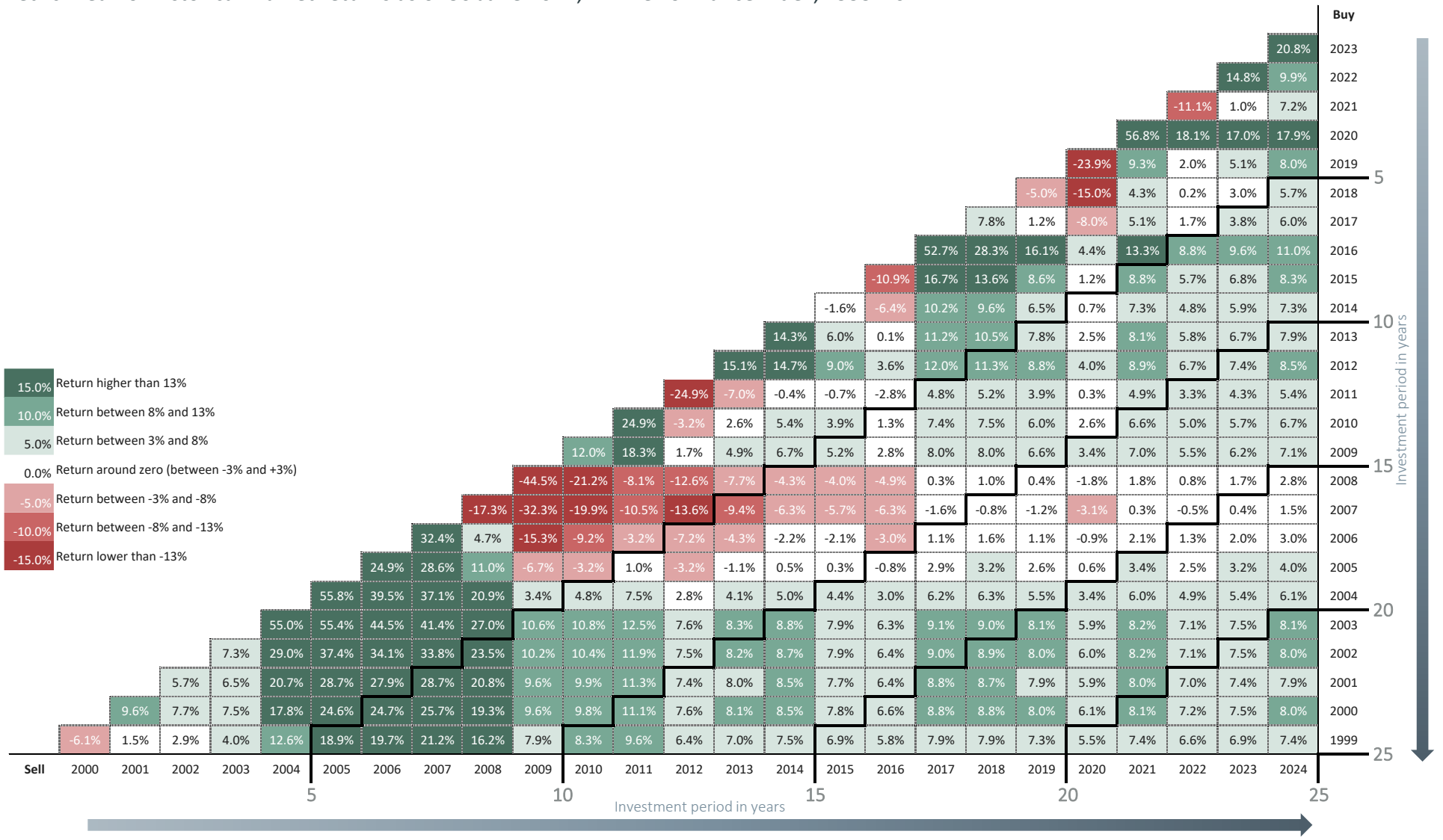
Arithmetic mean of historical market returns as of 30 June 2024, ATX Performance Index, 1999-2024



Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

Performance of the ATX in the last 12 months also improved the geometric mean return of an investment in 2021 (from 1.0% to 7.2%)

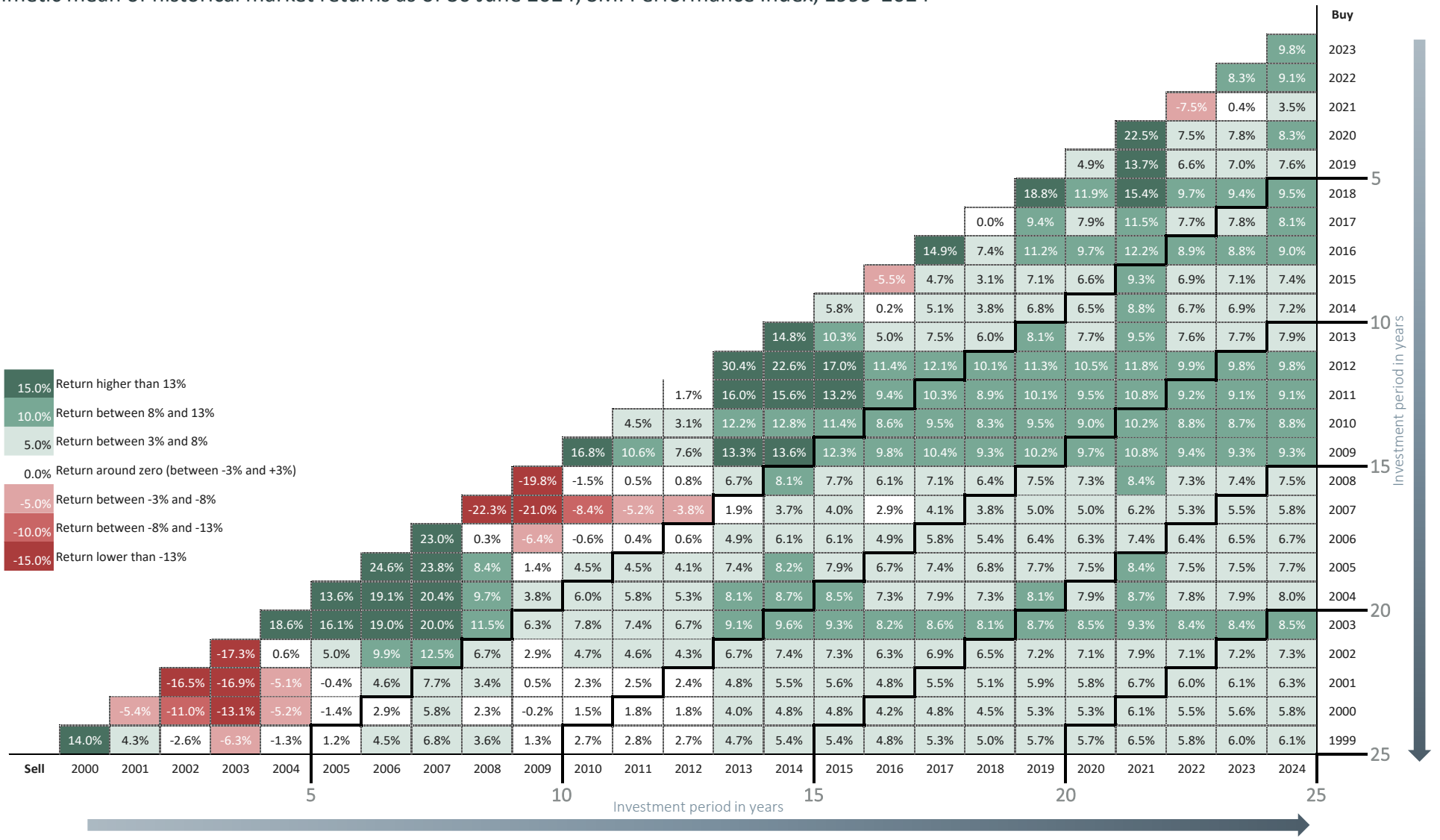
Geometric mean of historical market returns as of 30 June 2024, ATX Performance Index, 1999-2024



Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

With a return of 9.8% over the past 12 months, performance of the SMI is below the ATX (20.8%) and DAX (12.9%)

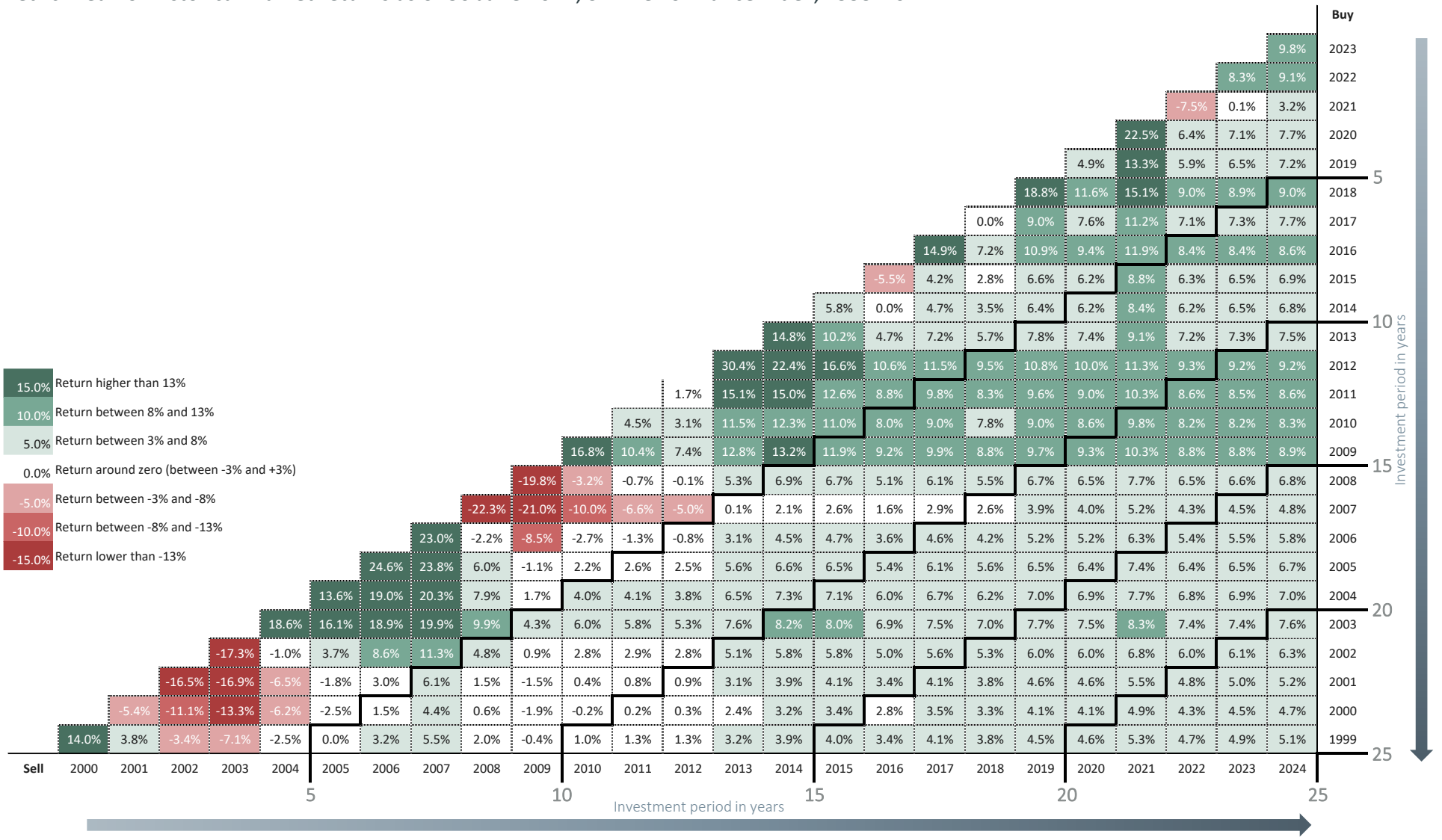
Arithmetic mean of historical market returns as of 30 June 2024, SMI Performance Index, 1999-2024



Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

Being less volatile than the DAX and ATX, the SMI's performance in the last 12 months has improved the geometric mean return of an investment made in 2021 (from 0.1% to 3.2%)

Geometric mean of historical market returns as of 30 June 2024, SMI Performance Index, 1999-2024

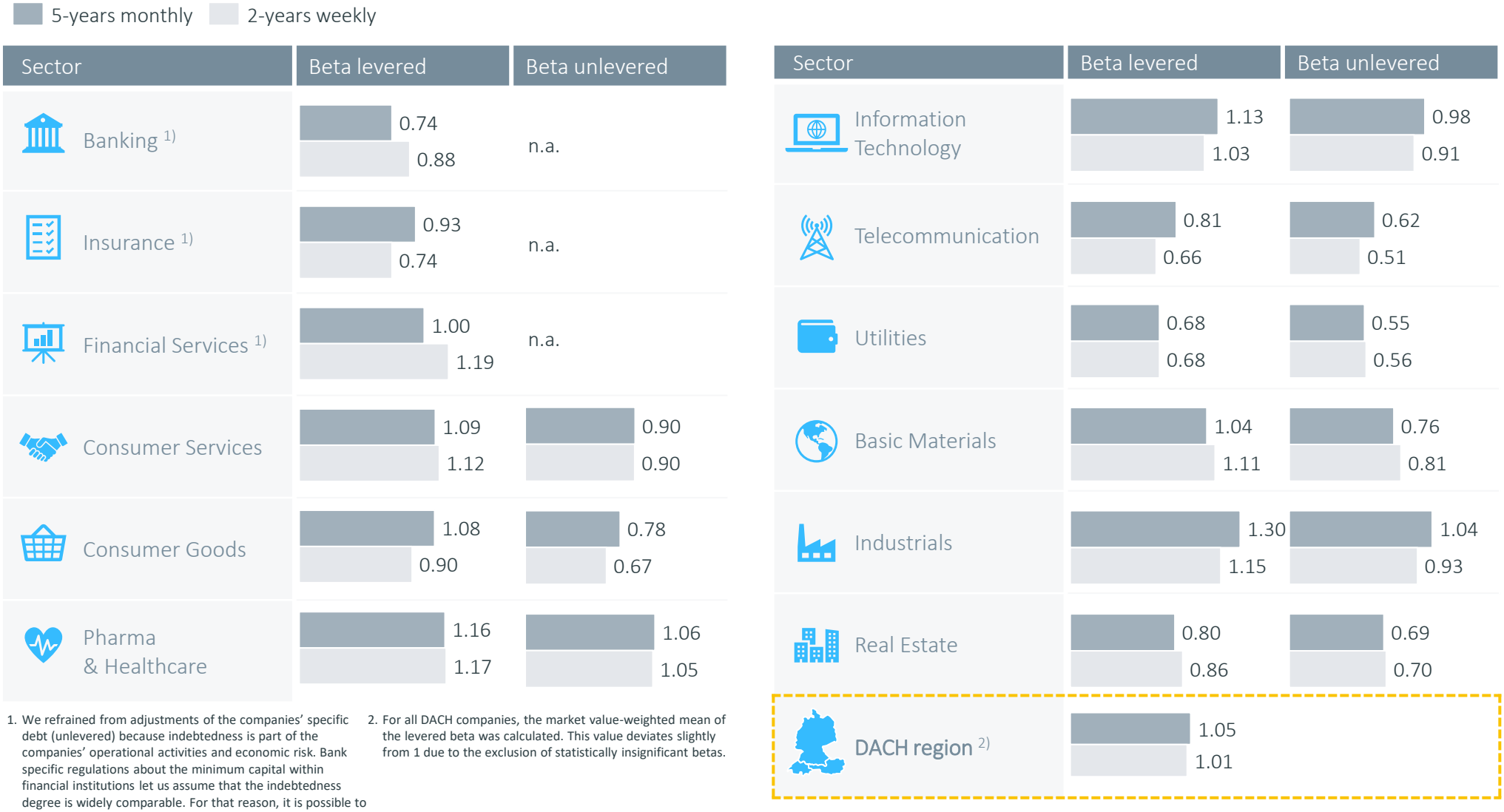


Source: https://www.dai.de/files/dai_usercontent/dokumente/renditedreieck/2015-12-31%20DAX-Rendite-Dreieck%2050%20Jahre%20Web.pdf

04 Beta

The highest (levered) betas are in the Industrial 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 30 June 2024



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.

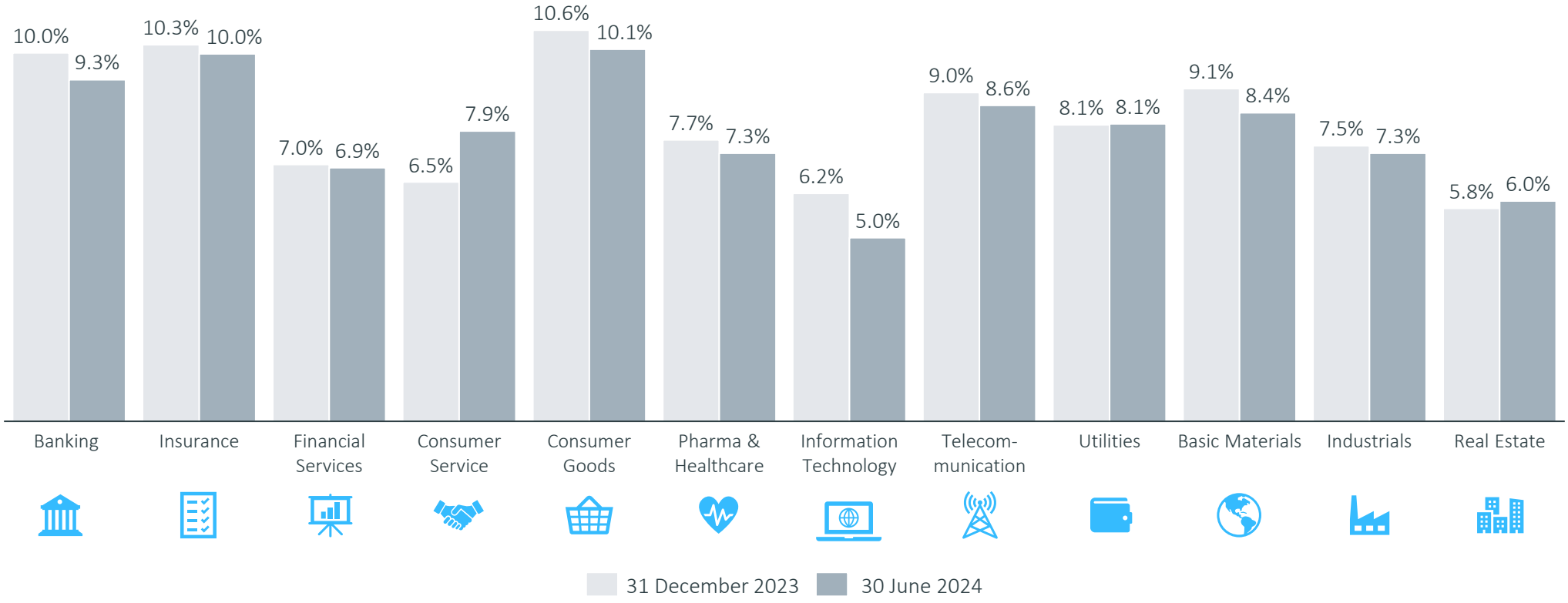
05

Sector returns

a. Implied returns (ex-ante analysis)

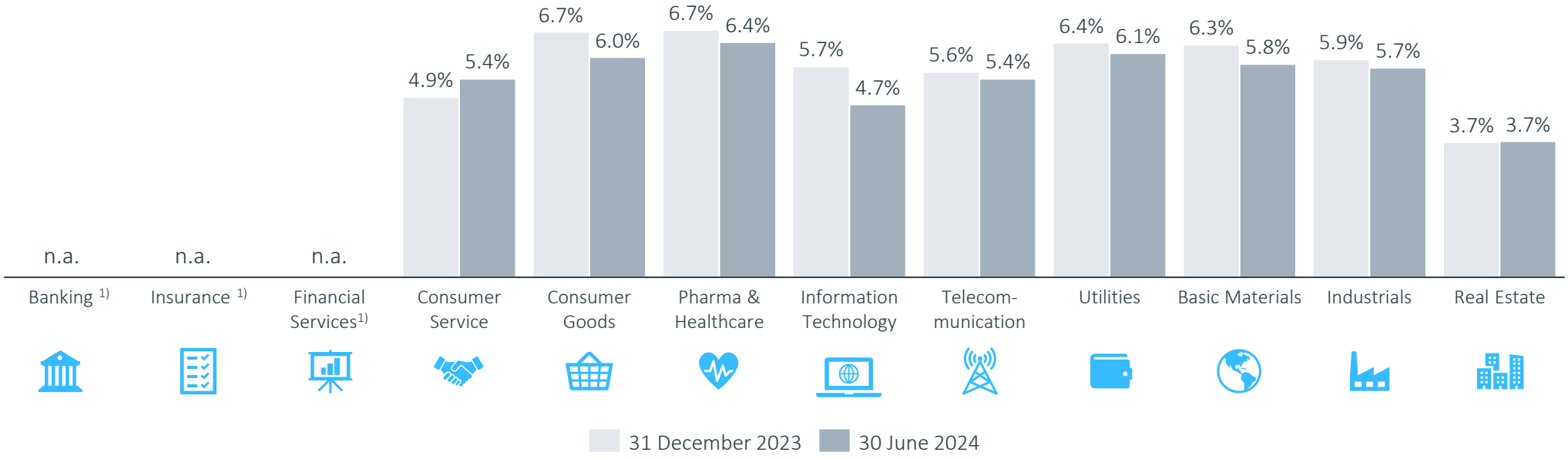
Except for Consumer Service and Real Estate, all sectors recorded a decline in implied levered returns

Implied levered returns by sector, 30 June 2024 vs. 31 December 2023



The implied unlevered returns[1)] remained relatively stable within a range of 50 bps, with only notable declines in the Consumer Goods and Information Technology sectors

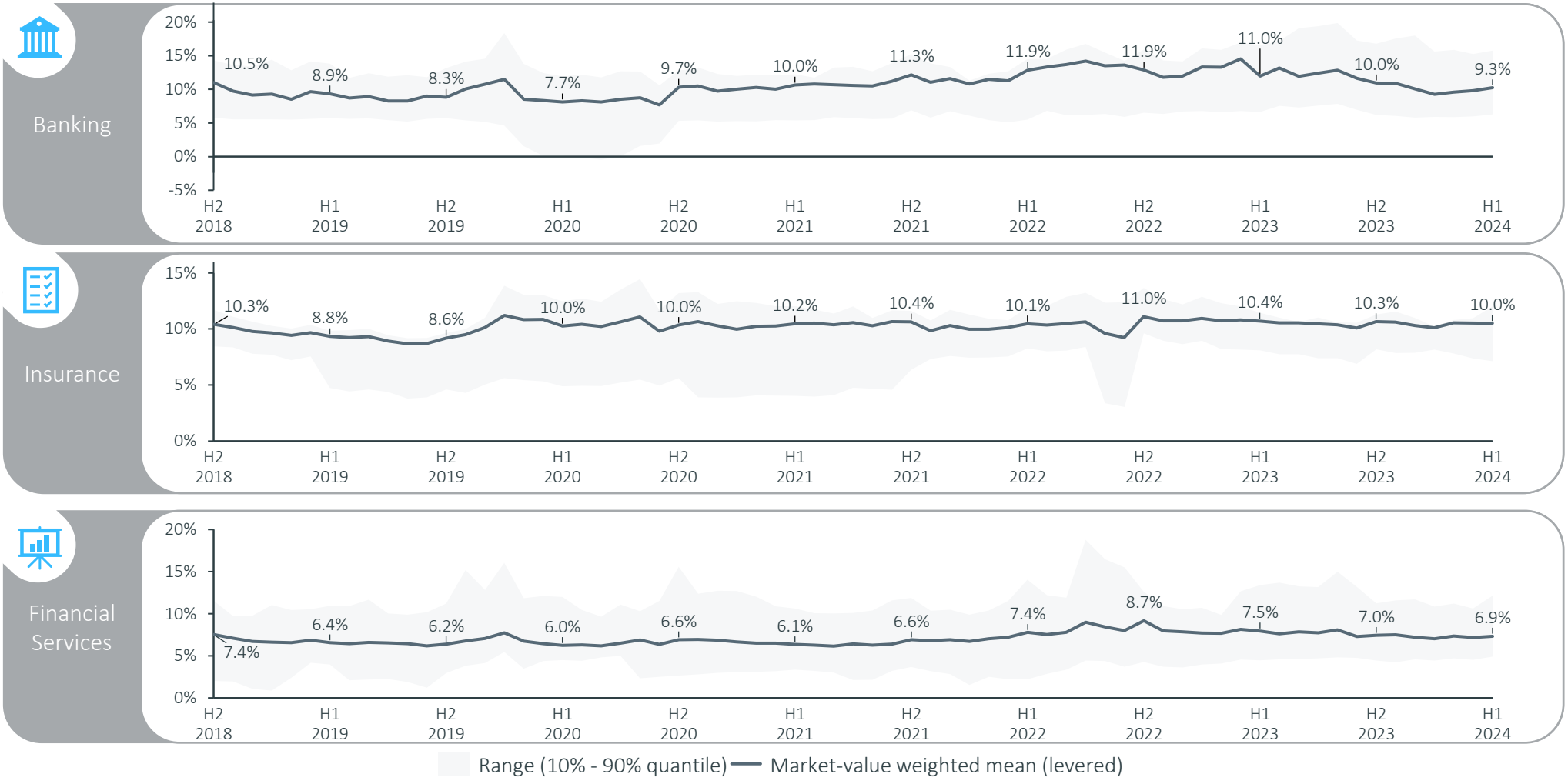
Implied unlevered returns by sector, 30 June 2024 vs. 31 December 2023



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

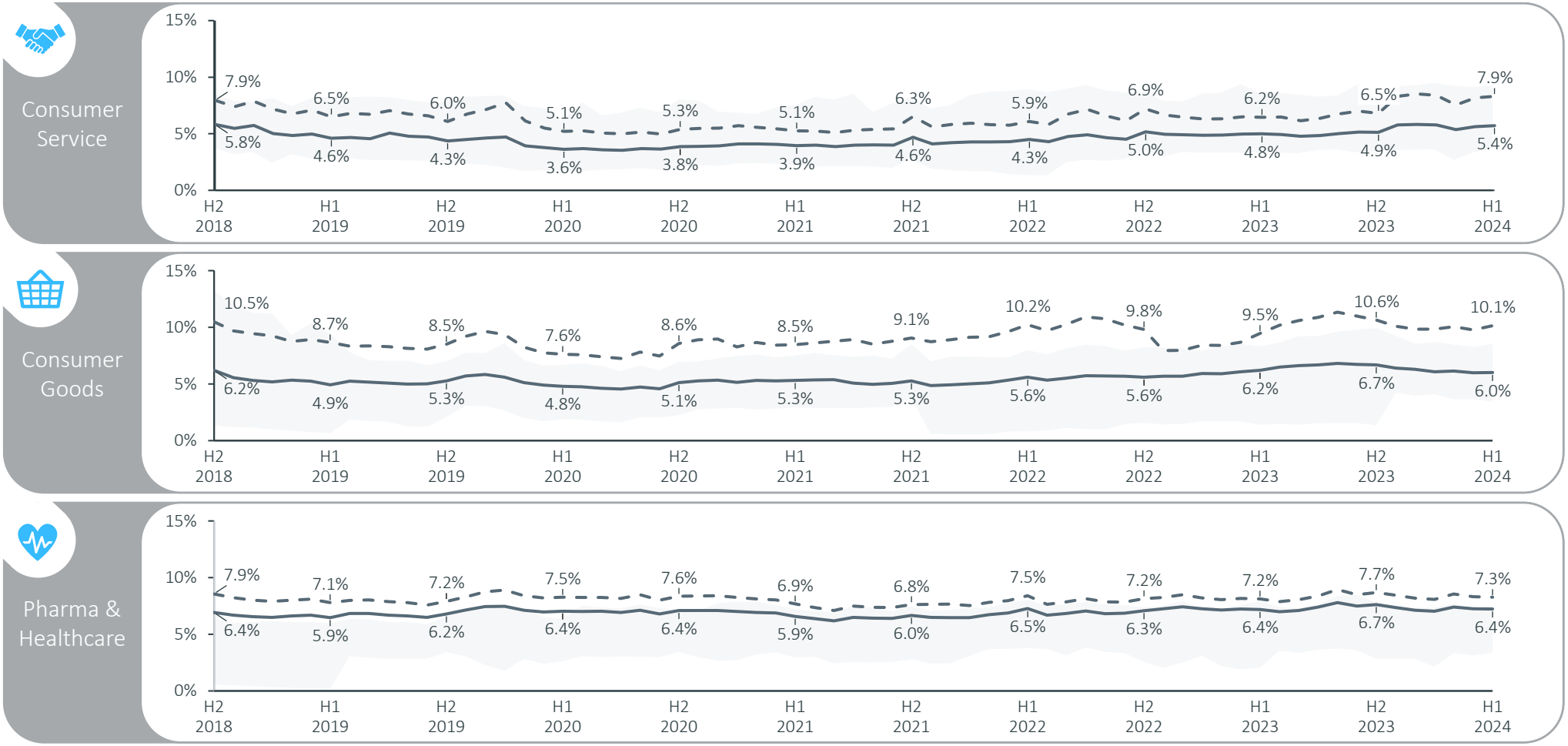
The implied return of the Banking sector decreased in the first half of 2024 due to stock price growth of heavier market-value weighted banks exceeding the increase of their earnings

Implied levered sector returns since 2018



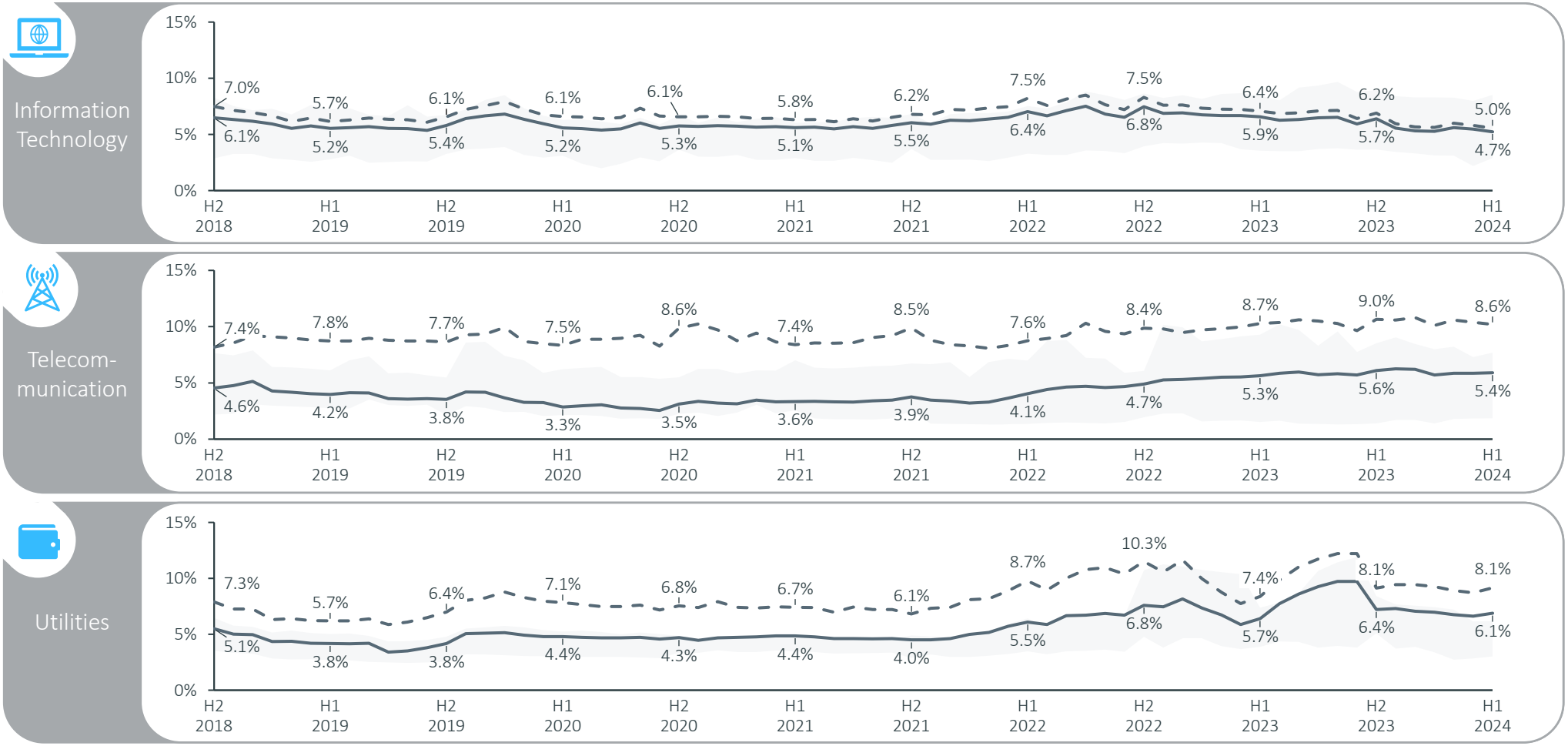
Implied sector returns for Pharma & Healthcare and Consumer Services have been relatively stable over time; Consumer Goods decreased due to rising interest rates and material costs

Levered and unlevered implied sector returns since 2018



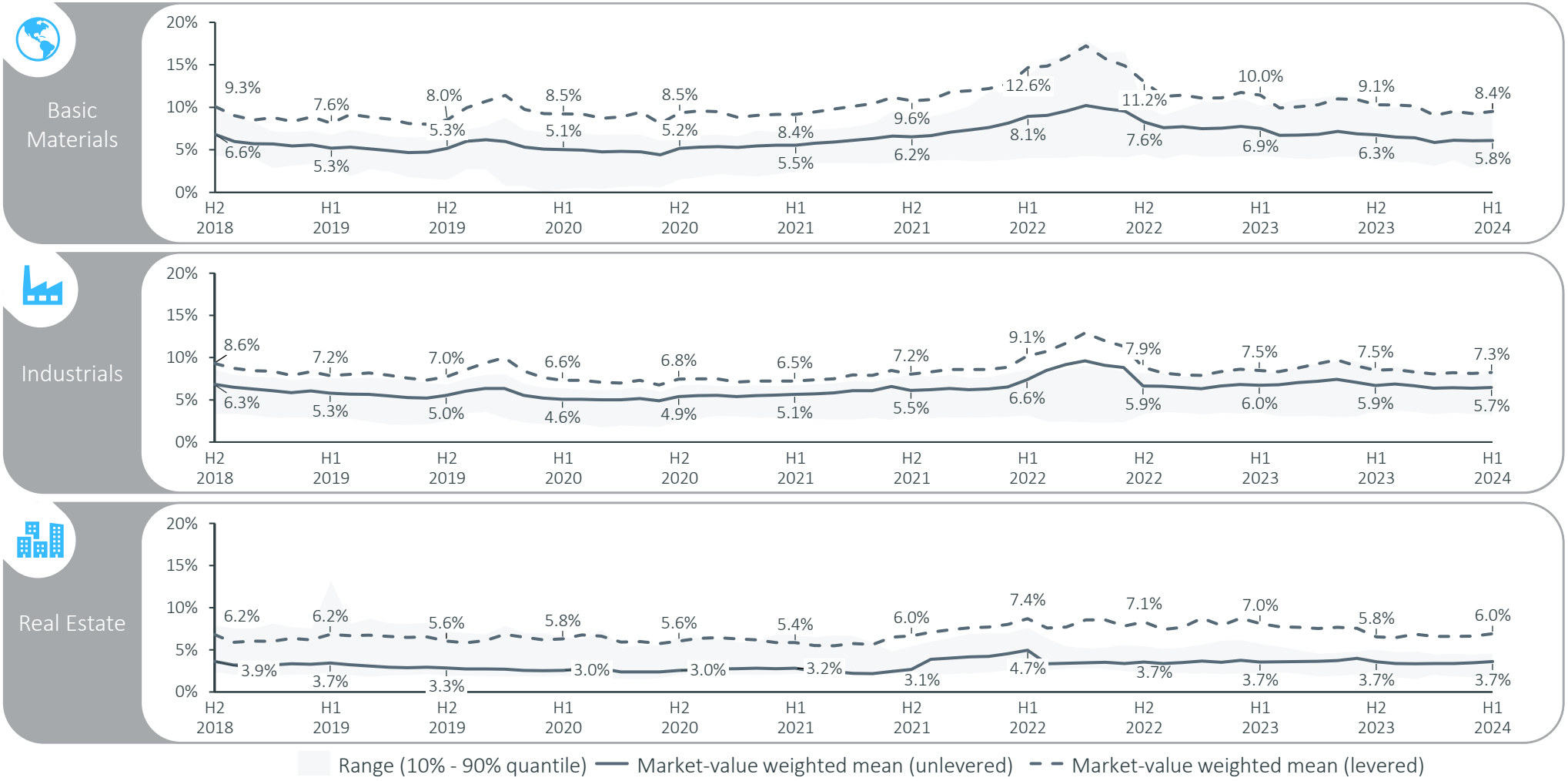
The weighted implied return of the Information Technology sector decreased from the previous year due to price increases exceeding the earnings growth of larger companies

Levered and unlevered implied sector returns since 2018



Implied returns of the Basic Materials and Industrials sectors declined; despite a strong drop in earnings estimates for the Real Estate sector, unlevered returns remained constant

Levered and unlevered implied sector returns since 2018



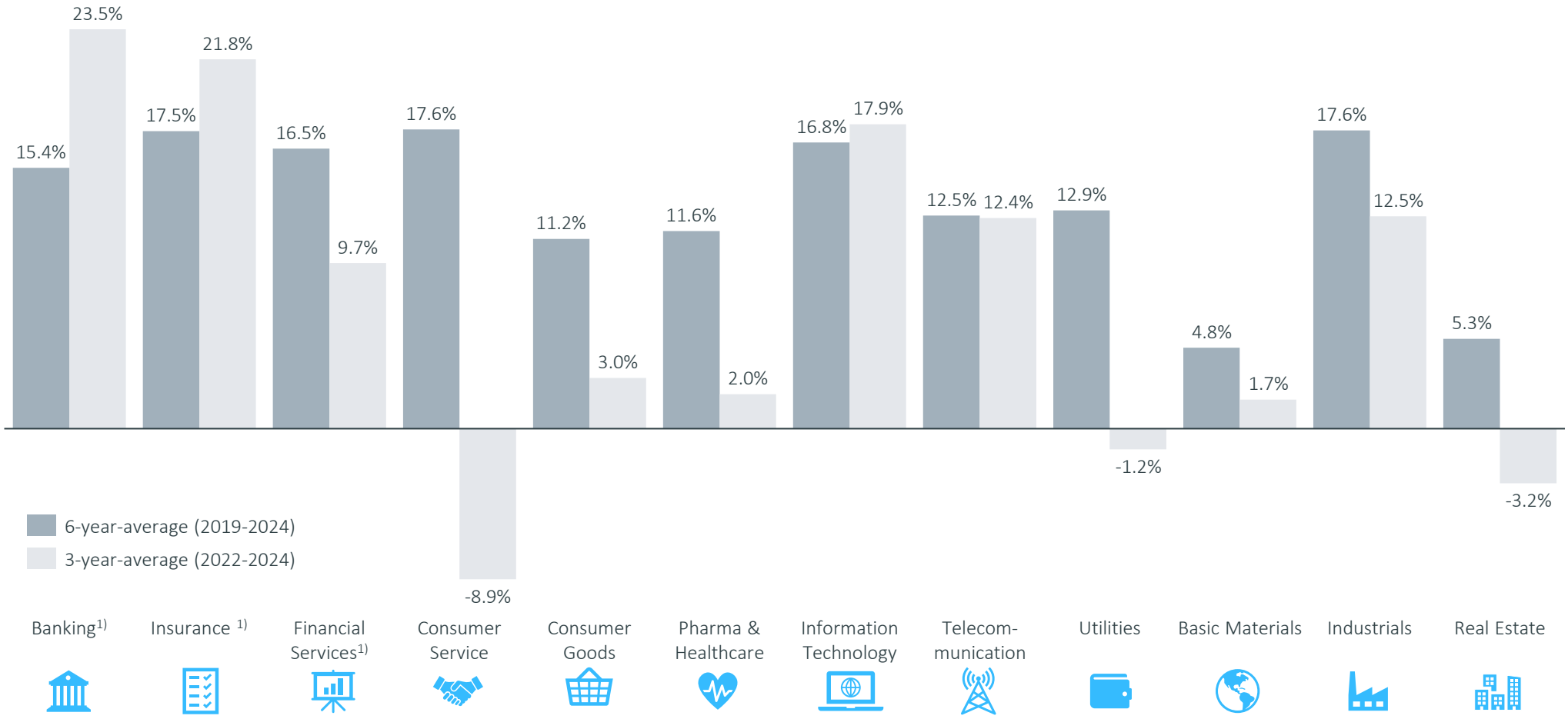
05

Sector returns

b. Historical returns (ex-post analysis)

Historical sector returns show varying impact of higher interest rates; Real Estate sector returns were negative while the Banking sector continuous to benefit from higher rates

Three- and six-year-average historical sector returns as of 30 June 2024

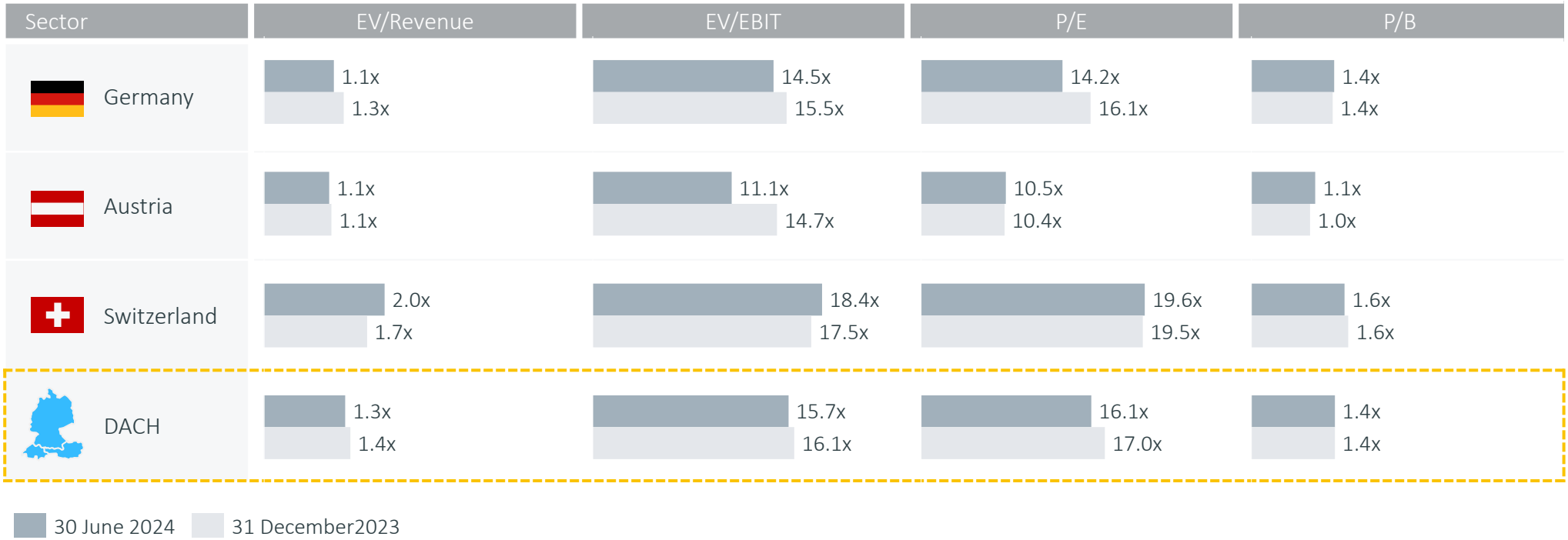


1. The returns for the sectors Banking, Insurance and Financial Services are levered sector returns. For all other sectors unlevered returns are displayed.

06 Trading multiples

EV and P/E multiples decreased as financials grew stronger than prices; P/B remained steady as book values rose in line with prices. Switzerland's multiples are the highest, driven by Pharma[1)]

Median forward multiples by country, 30 June 2024 and 31 December 2023



1. The Pharma & Healthcare makes up c. 30% of the Swiss index and has the highest (median) multiples compared to all other sectors.

EV/Revenue and P/B multiples remain stable across most sectors, whilst Pharma & Healthcare experienced an increase in the P/E multiple due to a stronger price increase relative to earnings

Median forward multiples by sector, 30 June 2024 and 31 December 2023

Sector	EV/Revenue	EV/EBIT	P/E	P/B
Banking	n.a.	n.a.	9.2x 12.6x	0.9x 0.9x
Insurance	n.a.	n.a.	13.4x 14.5x	1.6x 1.7x
Financial Services	n.a.	n.a.	12.8x 17.4x	0.9x 1.0x
Consumer Service	1.0x 1.0x	16.4x 16.7x	18.5x 20.5x	2.0x 1.8x
Consumer Goods	1.0x 1.0x	12.9x 15.0x	14.9x 15.8x	1.2x 1.4x
Pharma & Healthcare	3.5x 3.8x	22.1x 22.7x	24.4x 22.5x	2.4x 2.5x

30 June 2024 31 December 2023

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

The Real Estate sector's P/E increased significantly, as earnings estimates relative to market capitalization decreased more sharply in the last 6 months

Median forward multiples by sector, 30 June 2024 and 31 December 2023

Sector	EV/Revenue	EV/EBIT	P/E	P/B
Information Technology	1.5x 1.6x	16.3x 16.8x	19.2x 19.8x	2.6x 2.4x
Telecommunication	1.6x 1.5x	14.0x 15.1x	15.4x 17.5x	1.6x 1.5x
Utilities	2.1x 1.8x	14.4x 13.0x	16.1x 12.5x	1.7x 1.7x
Basic Materials	1.1x 1.0x	15.1x 13.9x	13.0x 12.8x	1.2x 1.1x
Industrials	1.3x 1.2x	14.8x 15.2x	17.0x 15.8x	1.5x 1.5x
Real Estate	5.2x 8.4x	27.8x 31.3x	19.7x 15.8x	0.9x 0.9x

30 June 2024 31 December 2023

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

Sector multiples ranking based on median, 1yf as of 30 June 2024

	EV/Revenue 1yf	EV/EBIT 1yf	P/E 1yf	P/B LTM	Ø Ranking
Banking	n.a.	n.a.	12	11	11.5
Insurance	n.a.	n.a.	9	5	7.0
Financial Services	n.a.	n.a.	11	12	11.5
Consumer Service	8	3	4	3	4.5
Consumer Goods	9	9	8	8	8.5
Pharma & Healthcare	8	2	1	2	1.8
Information Technology	5	4	3	1	3.3
Telecommunication	4.4	8	7	6	6.3
Utilities	3	7	6	4	5.0
Basic Materials	7	5	10	9	7.8
Industrials	6	6	5	7	6.0
Real Estate	1	1	2	10	3.5

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

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

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.[1)] Likewise, bonds issued by **Switzerland** enjoy a AAA rating and are also considered risk-free according to the Swiss National Bank.[2)] Hence, a similar approach as for Germany and Austria is in our view appropriate for Switzerland with Swiss parameters.[3)]

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
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**".[1)] 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 **low 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*:[2)]

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

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.[3)] 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.[4)] 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.*[1)] 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**[2)] to take into account the specific leverage:[3)]

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

with:

- r_E^L = Levered cost of equity
- r_E^U = Unlevered cost of equity
- R_f = Risk-free rate
- $\frac{D}{E}$ = Debt[4)]-to-equity ratio

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 30 June 2024, we observe a sector specific, unlevered cost of equity of **5.8%** (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: **2.59%** (cf. slide 11)

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

$$r_E^L = 5.8\% + (5.8\% - 2.59\%) * 40\% = 7.1\%$$

7.1% is the company's relevered cost of equity. In comparison, the levered cost of equity of the Basic Materials sector is **8.4%**, 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 30 June** 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**[1)]**/Revenue**")
- EBIT-Multiples ("**EV**[1)]**/EBIT**")
- Price-to-Earnings-Multiples ("**P/E**")
- Price-to-Book Value-Multiples ("**P/B**")

Multiples are presented for the reference dates 30 June 2024 and 31 December 2023. The reference values are based on one-year forecasts of analysts (so called forward multiples, in the following **"1yf"**). 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 30 June 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.

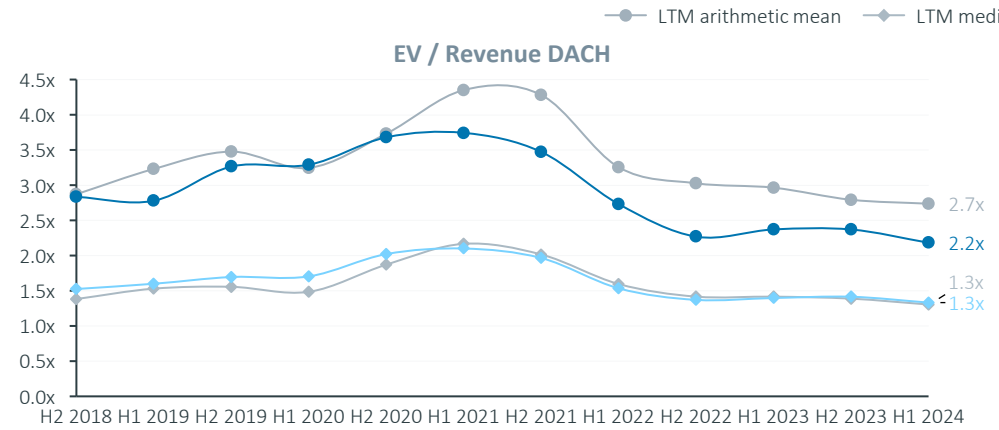
1. Enterprise value

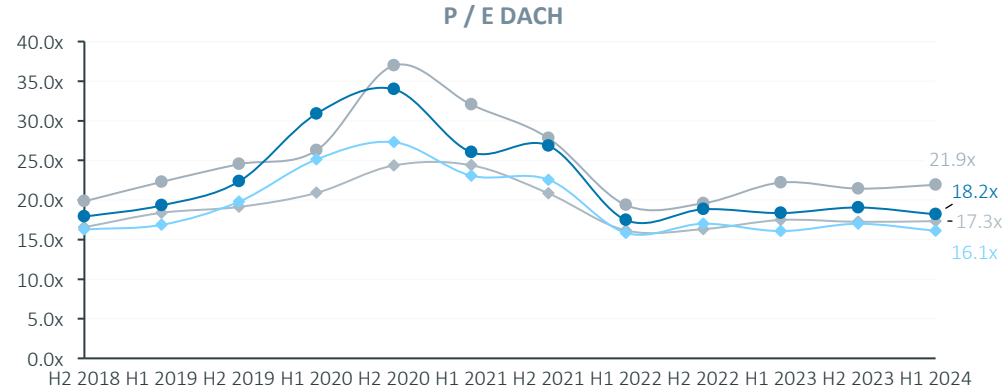
Appendix

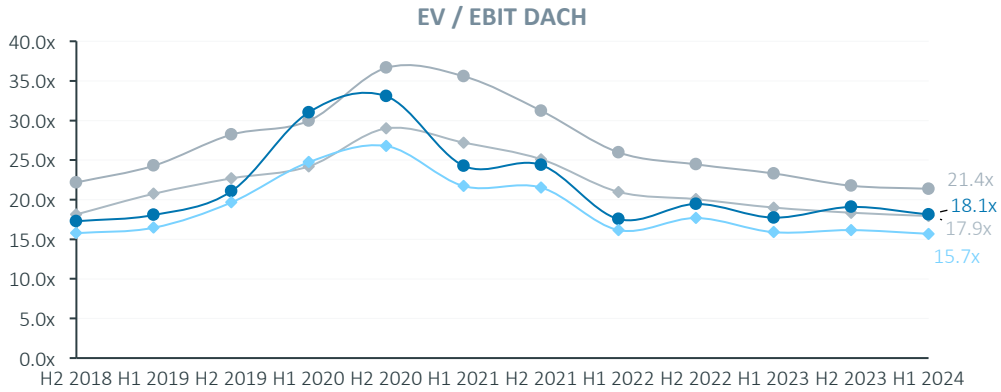
Historical development of trading multiples since 2018

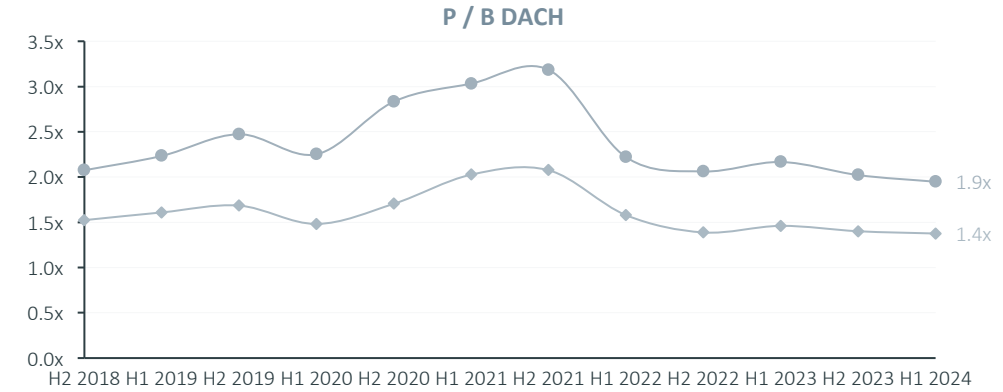
DACH region

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



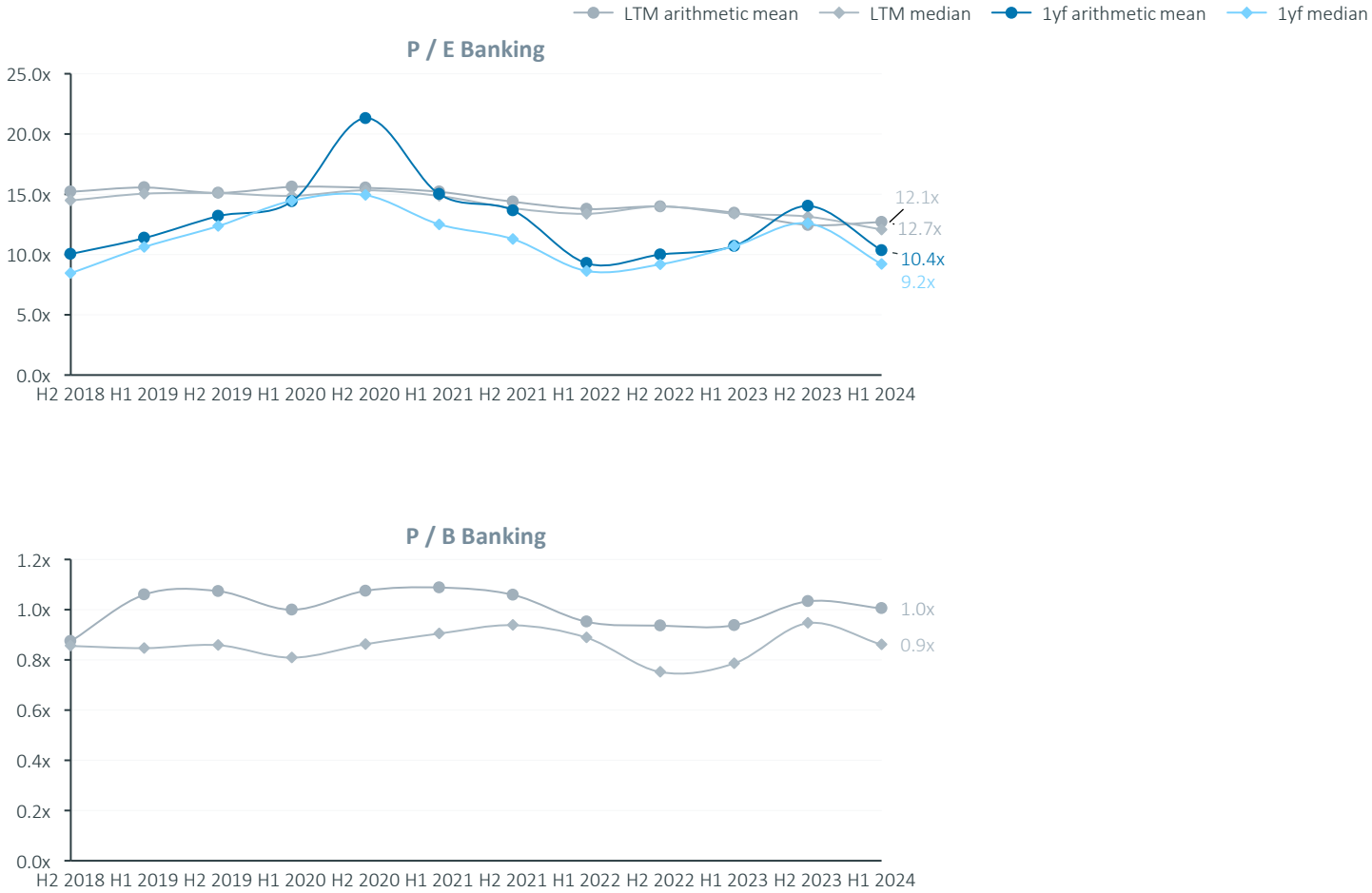






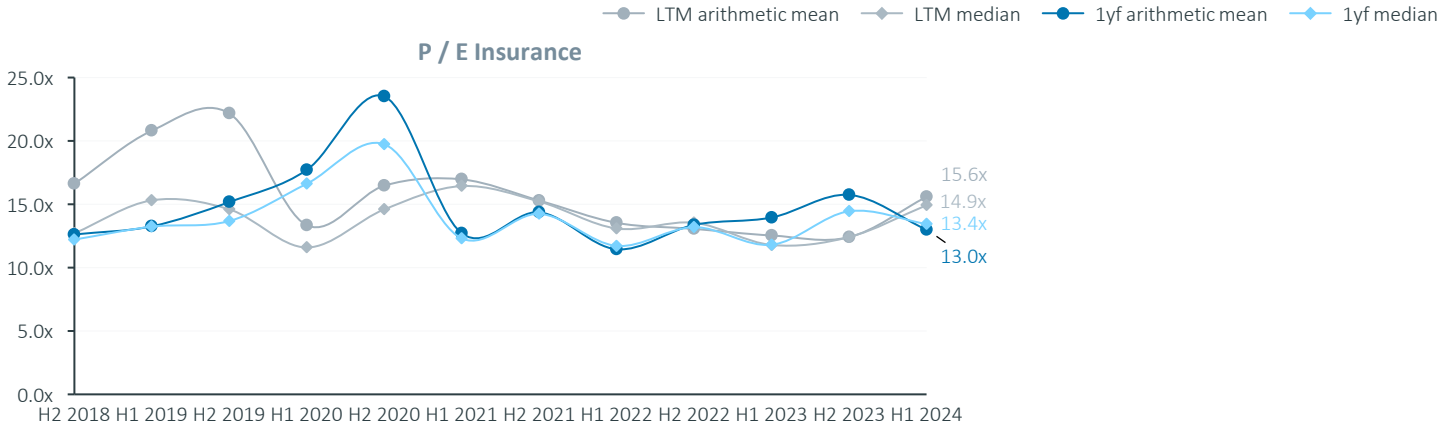
Banking

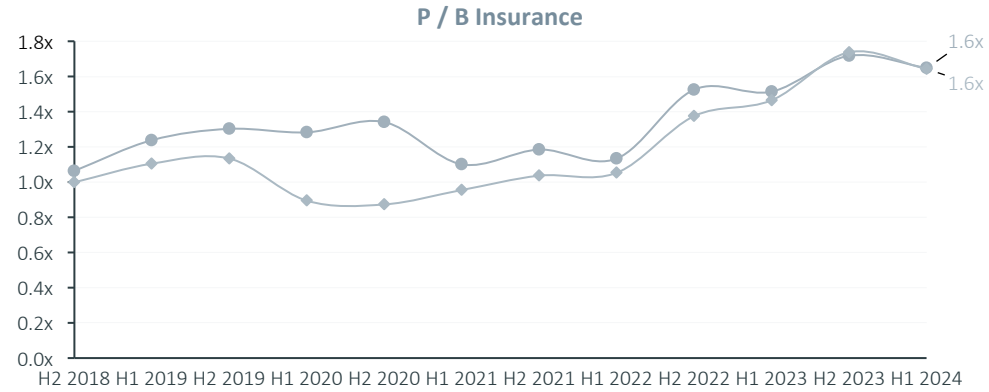
P/E- and P/B-Multiples



Insurance

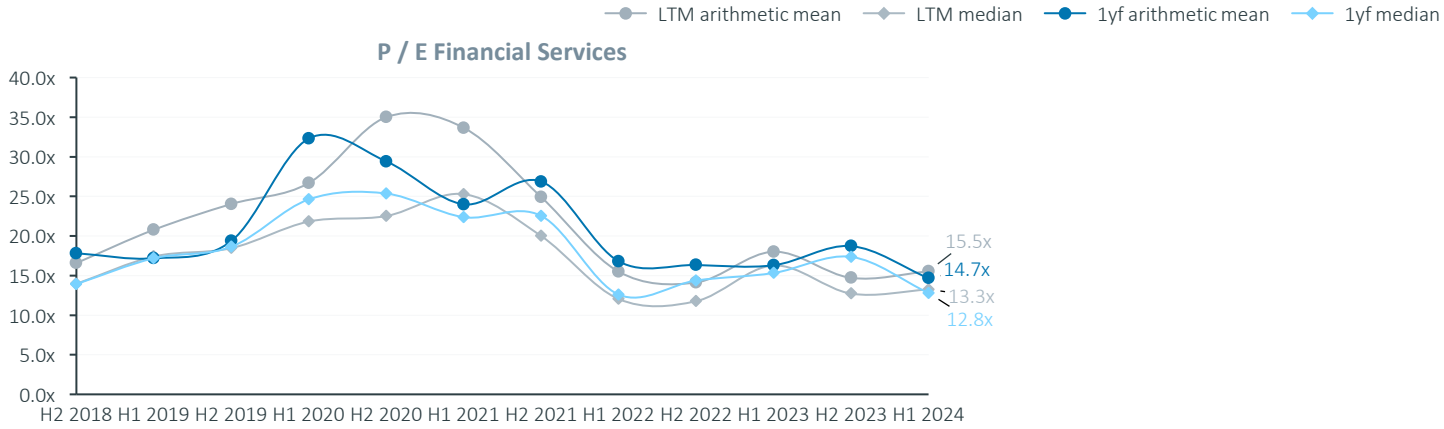
P/E- and P/B-Multiples

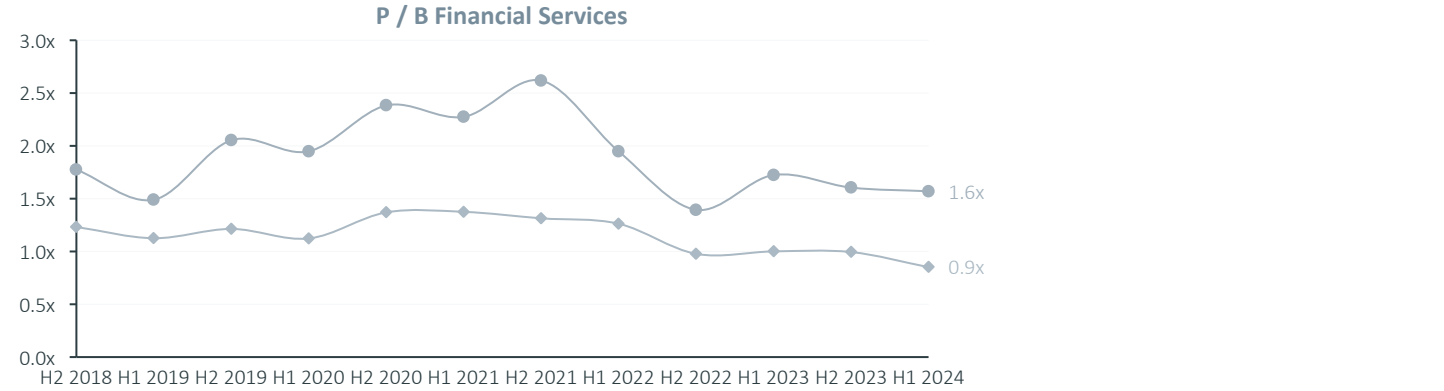




Financial Services

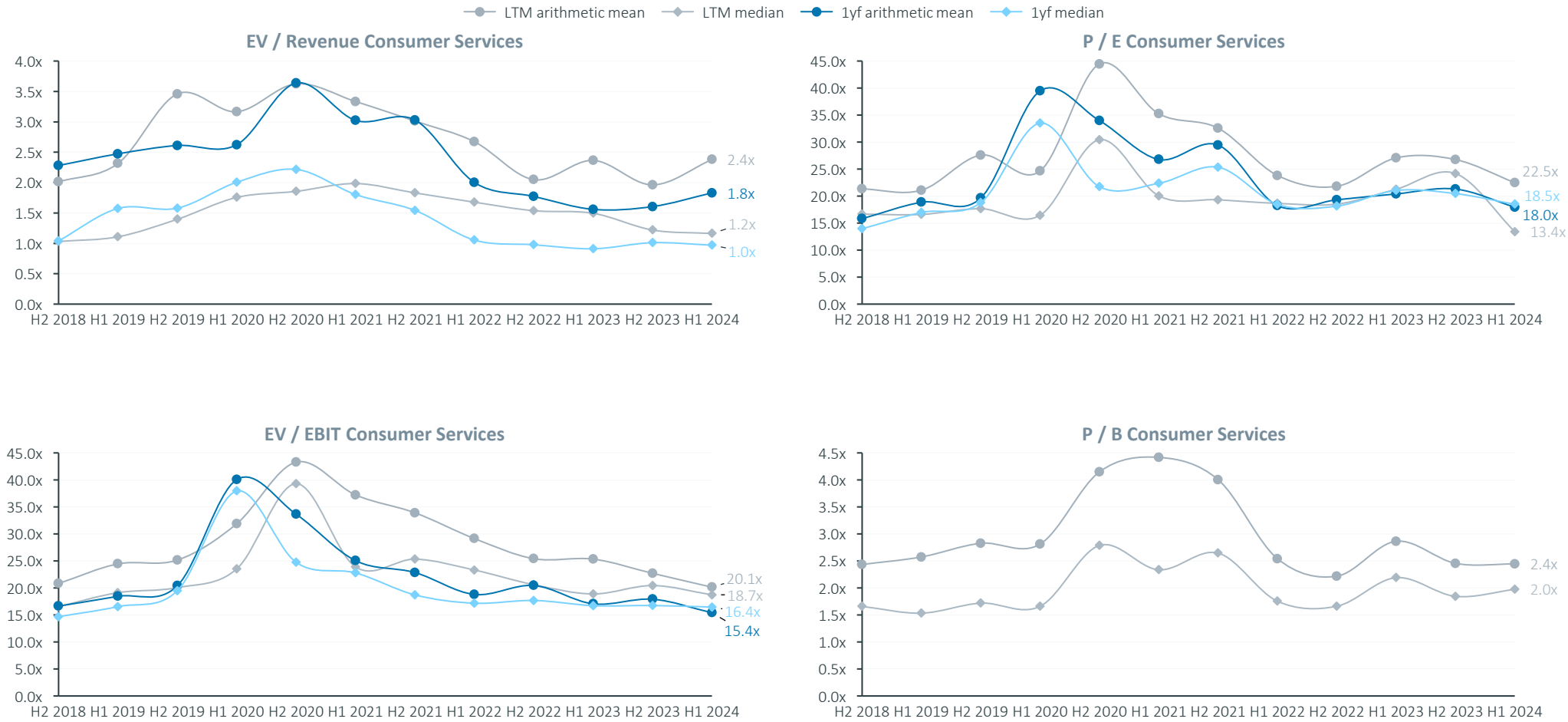
P/E- and P/B-Multiples





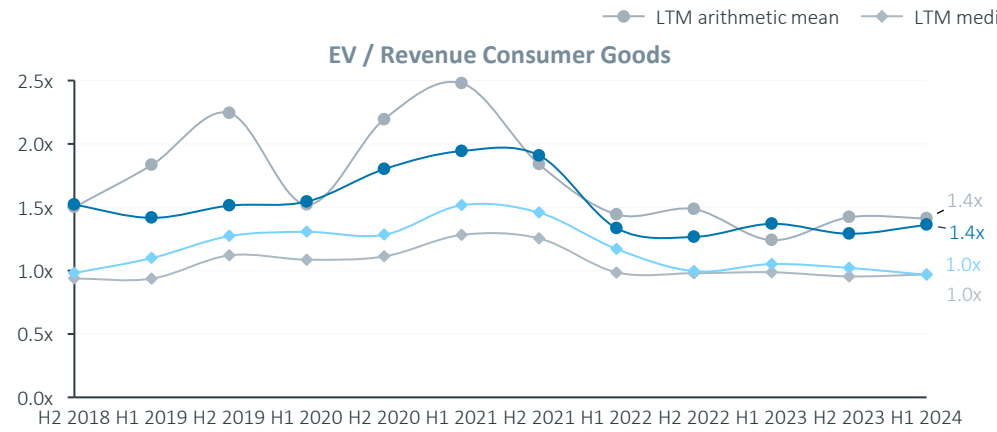
Consumer Services

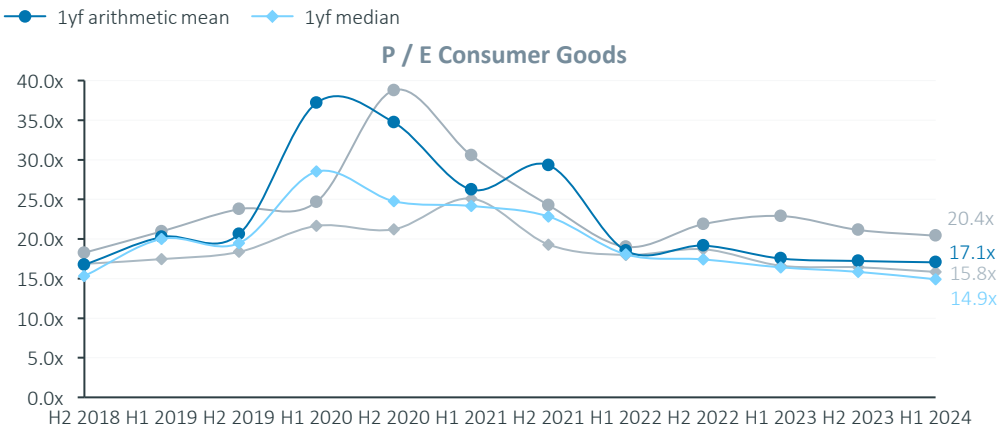
Revenue-, EBIT-, P/E- and P/B-Multiples

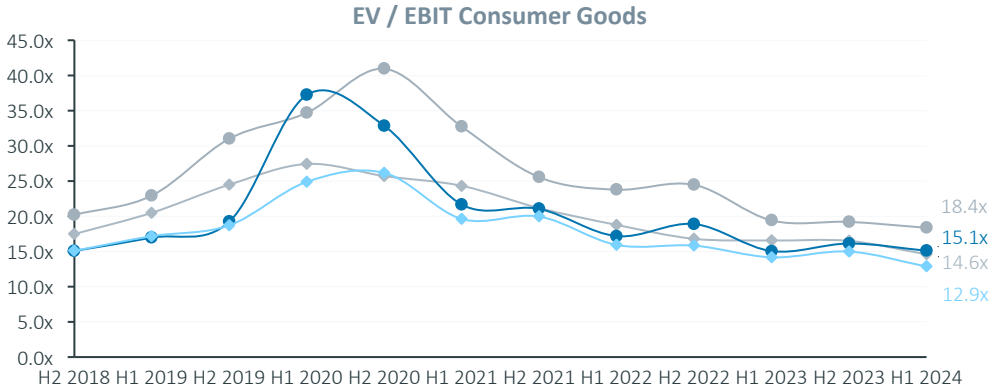


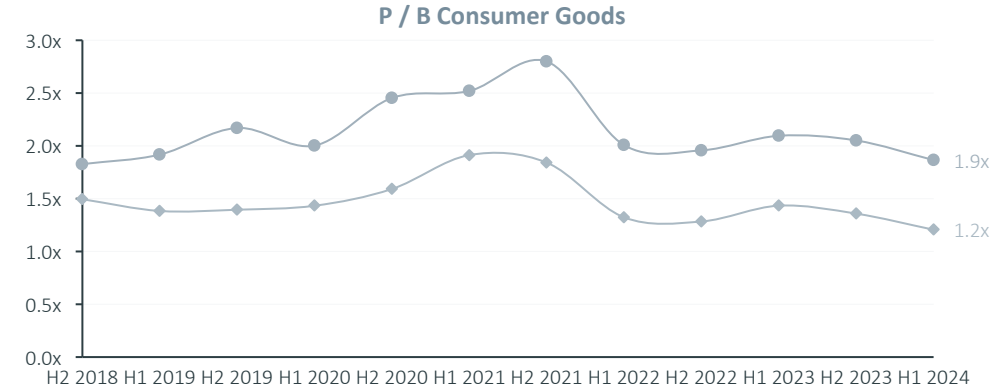
Consumer Goods

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



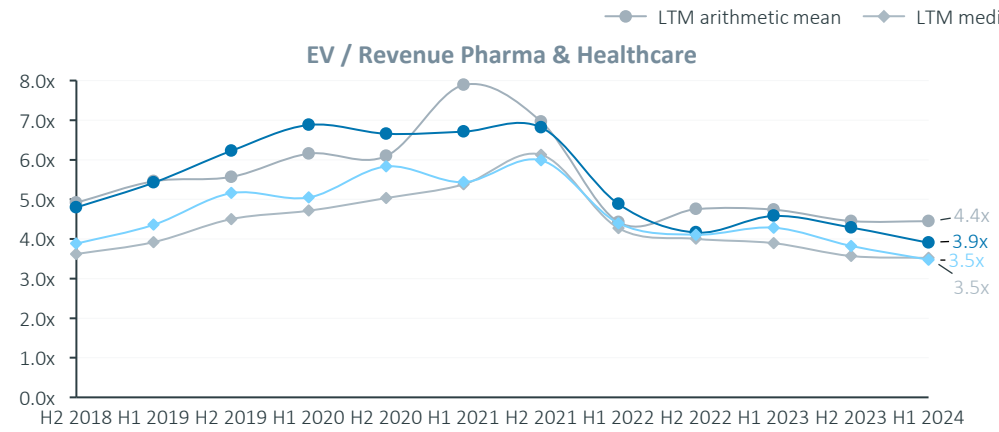


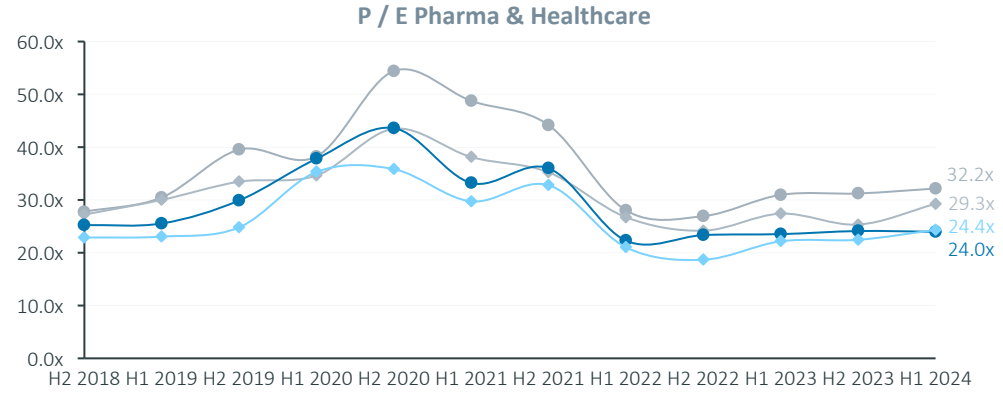


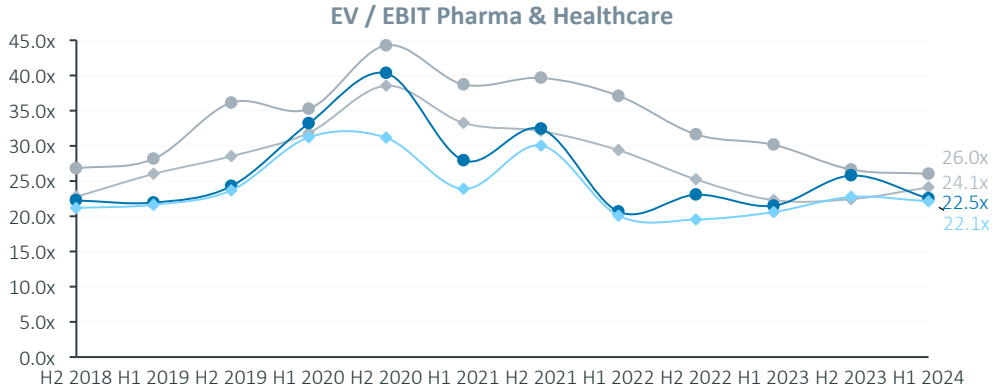


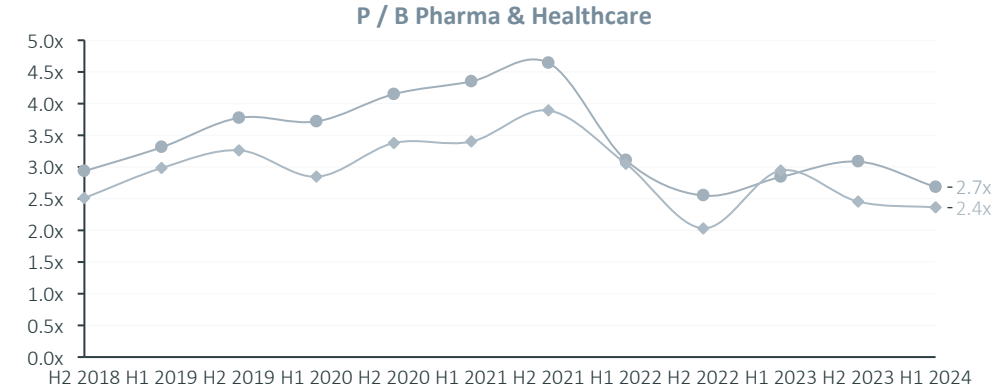
Pharma & Healthcare

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



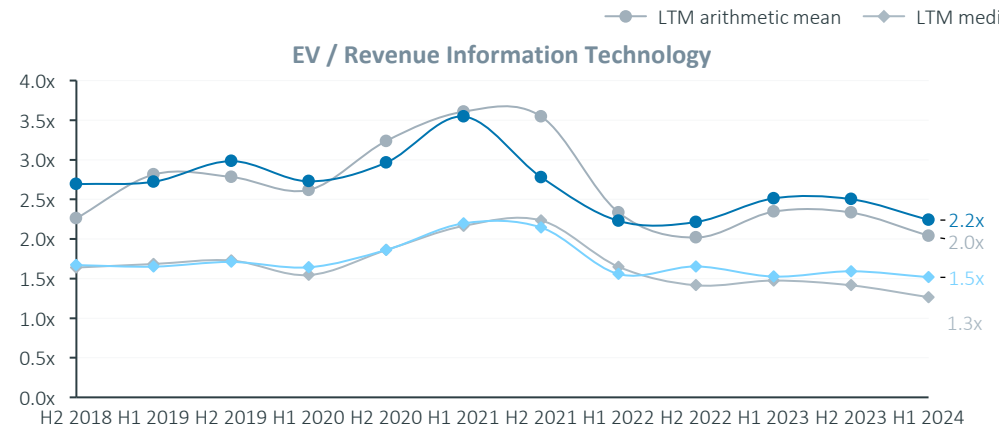


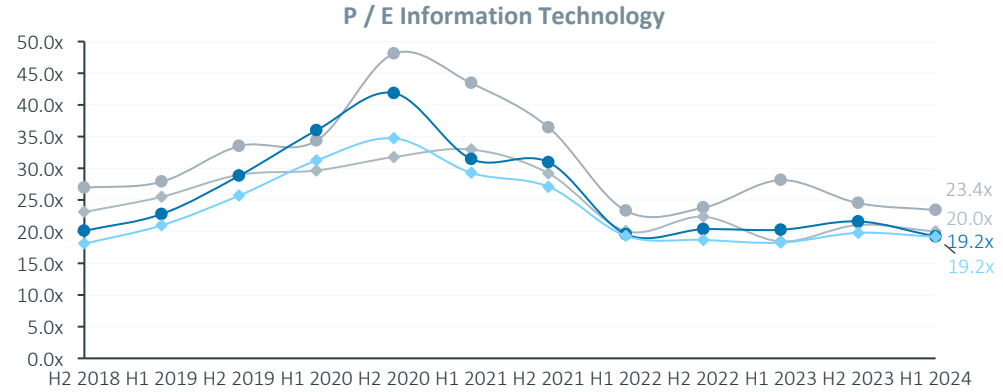


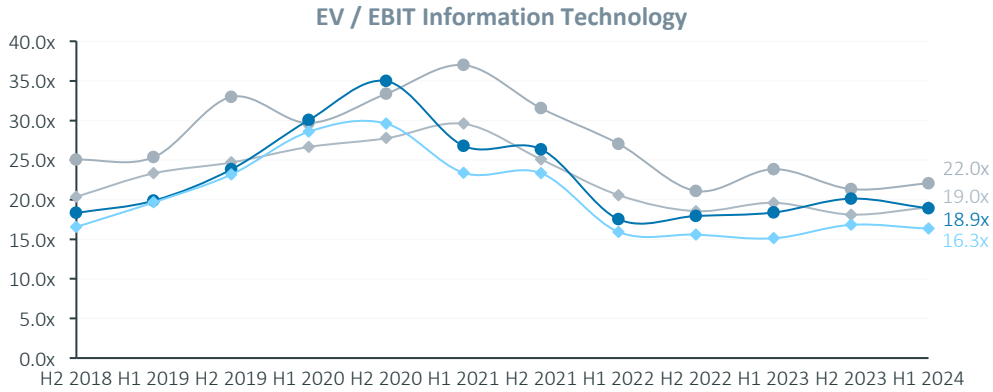


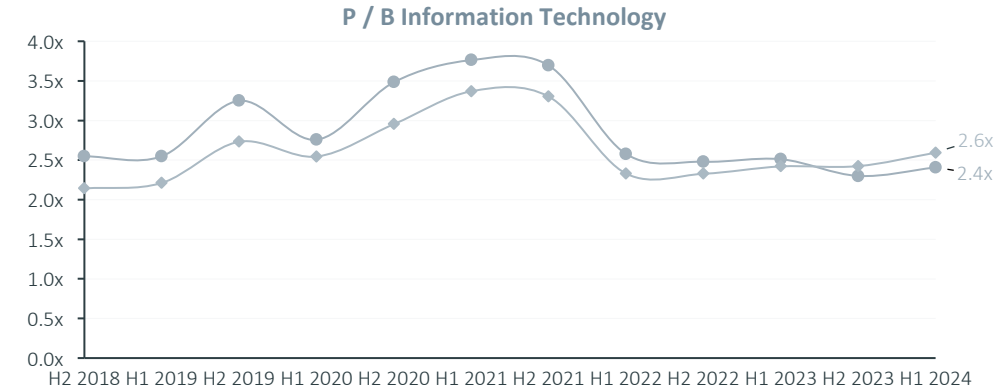
Information Technology

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



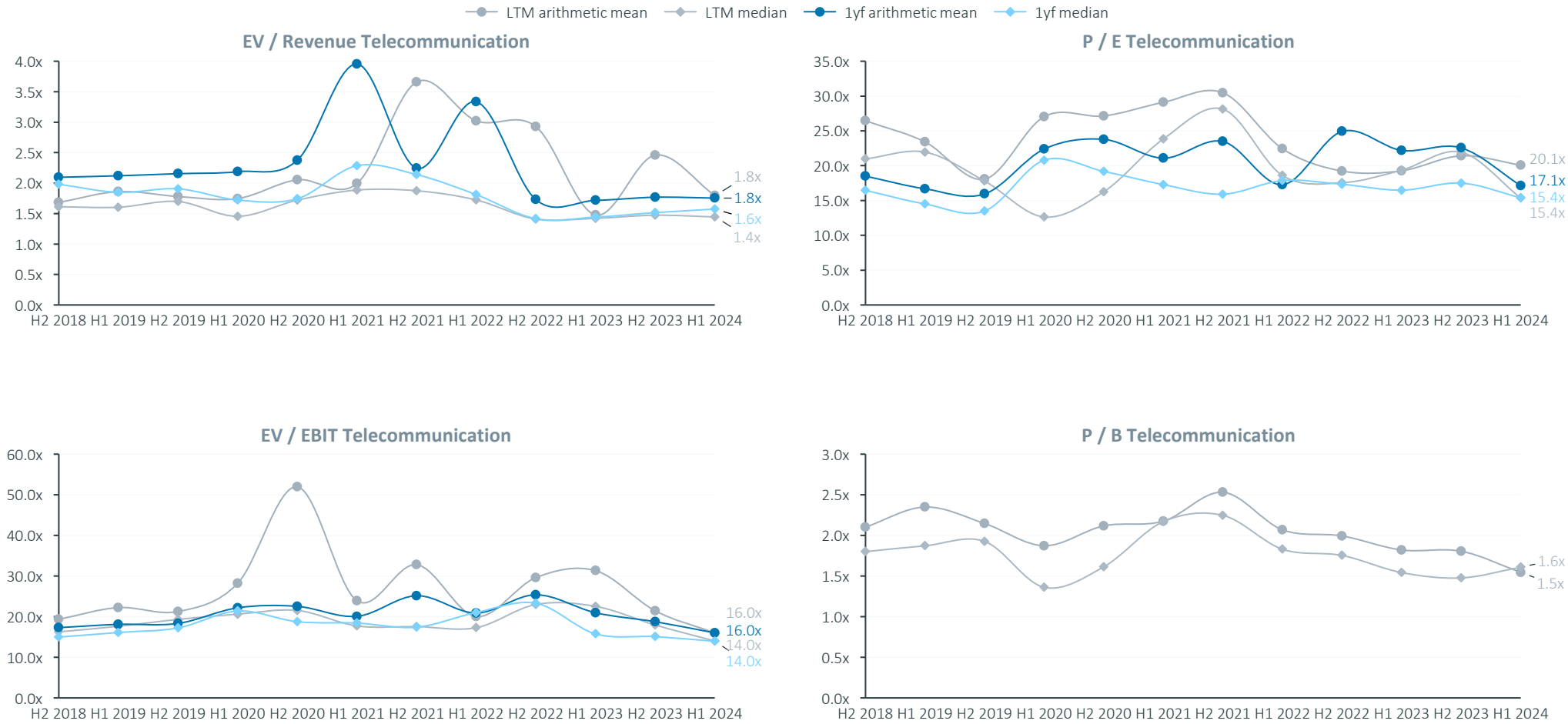






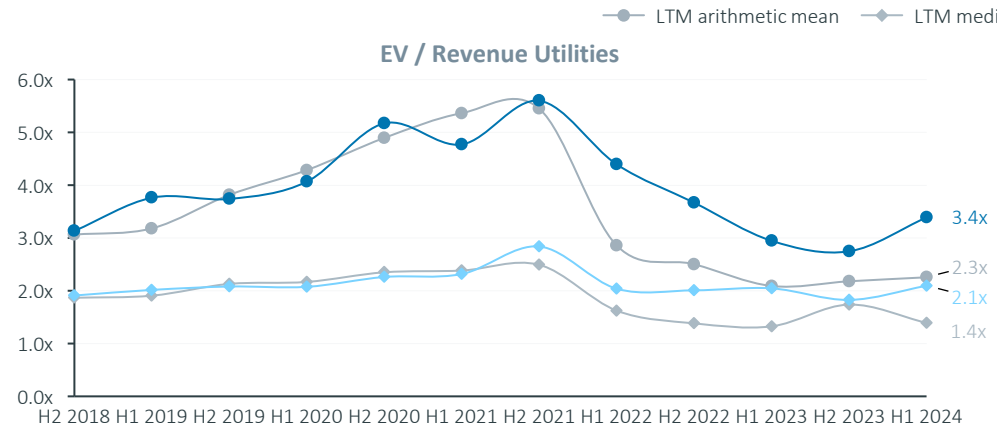
Telecommunication

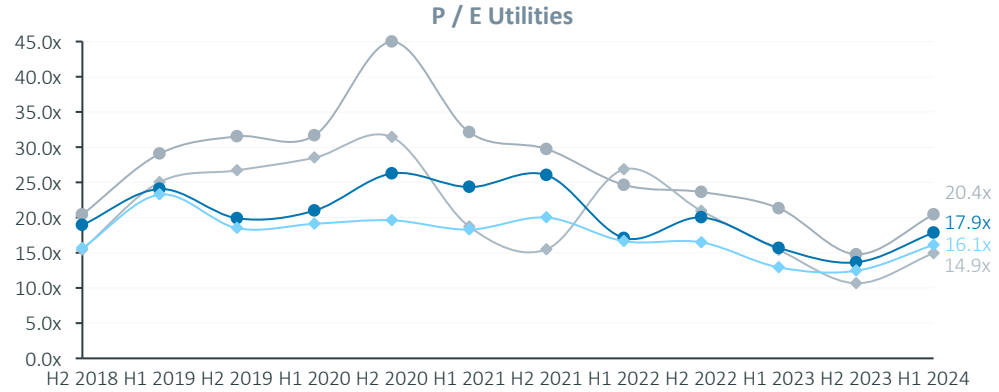
Revenue-, EBIT-, P/E- and P/B-Multiples

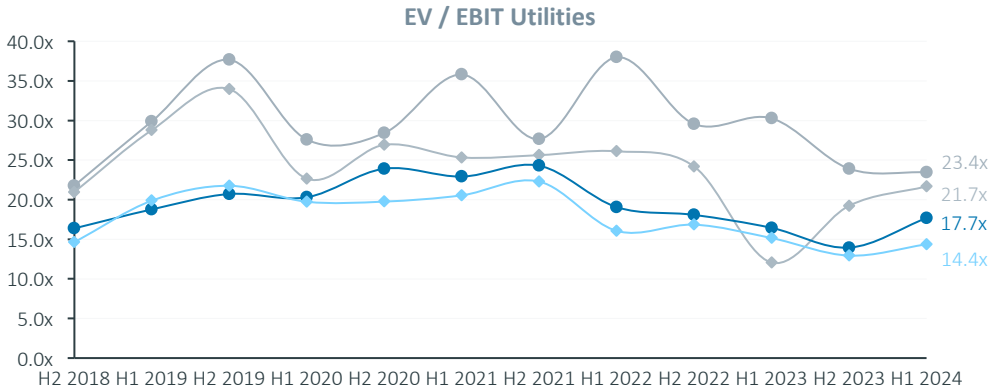


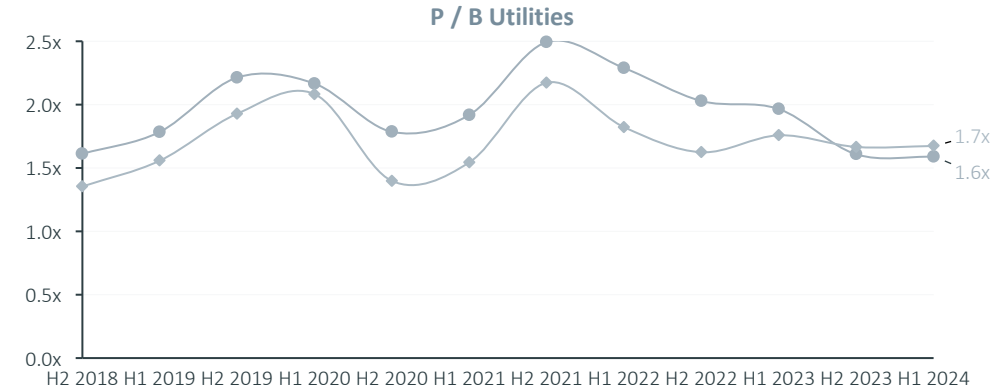
Utilities

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



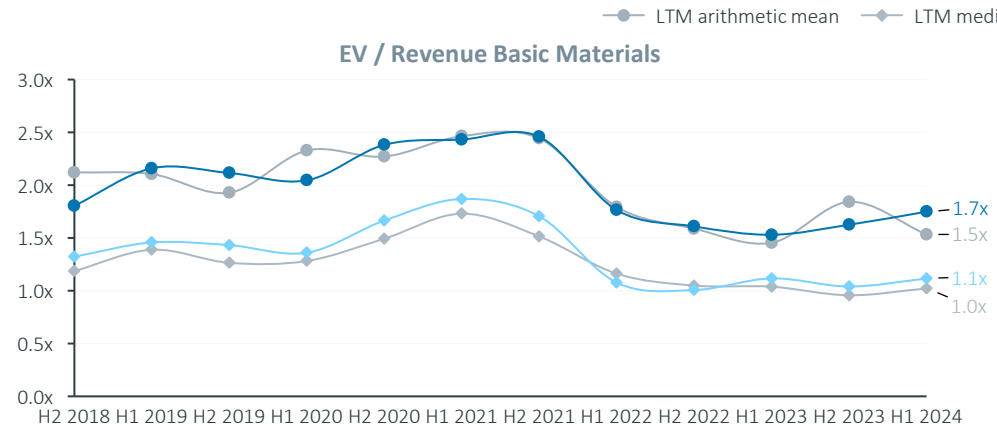


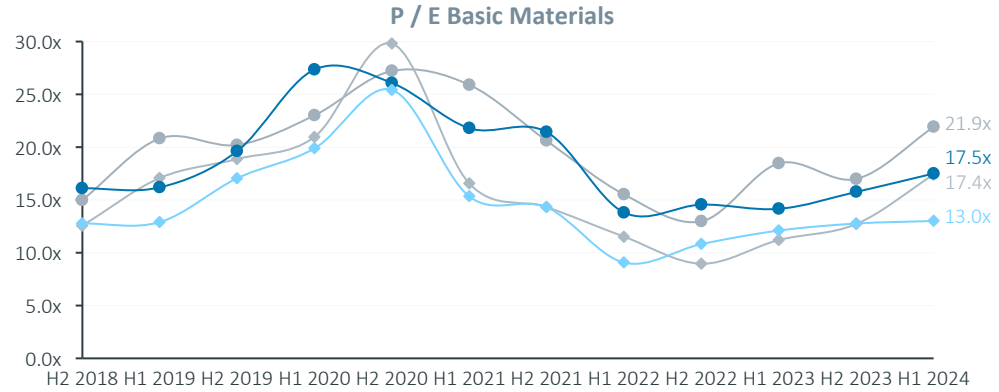


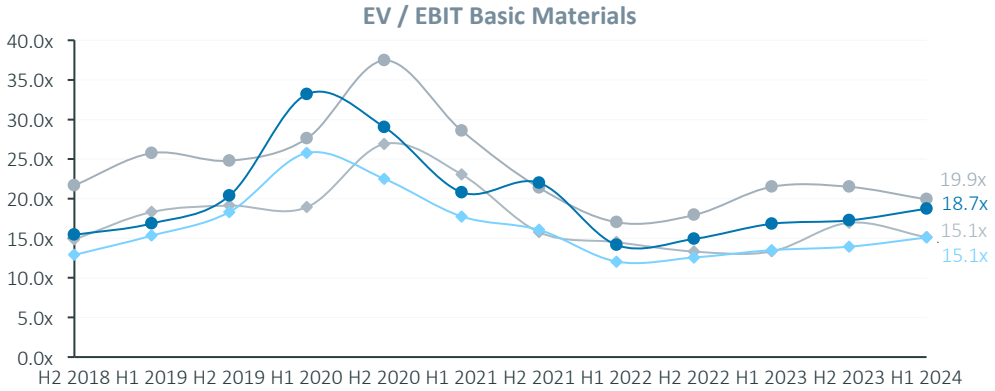


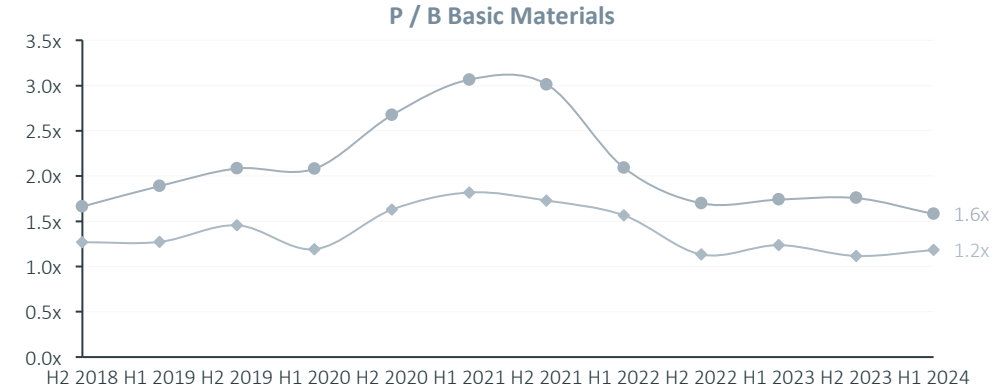
Basic Materials

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



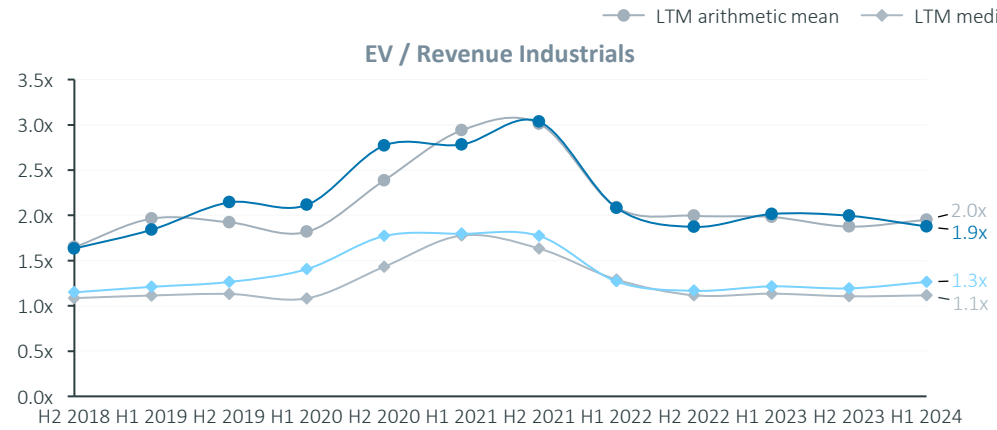


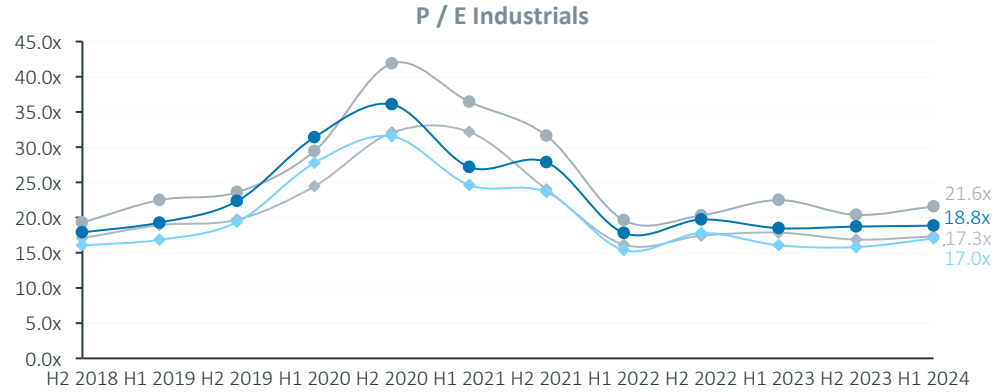


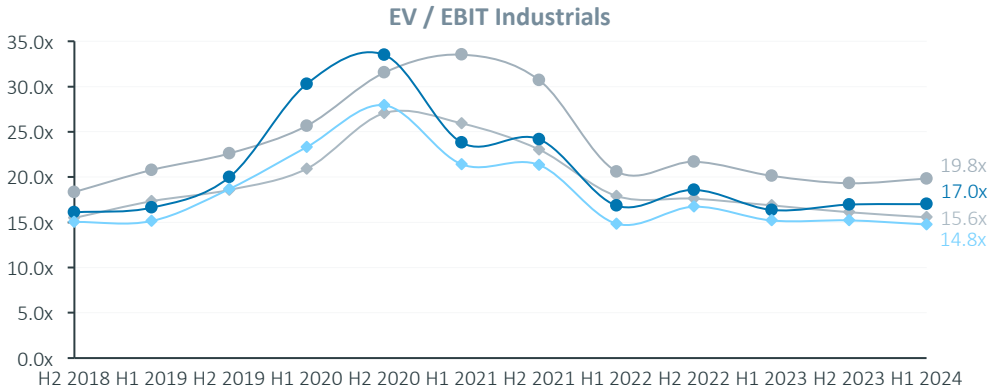


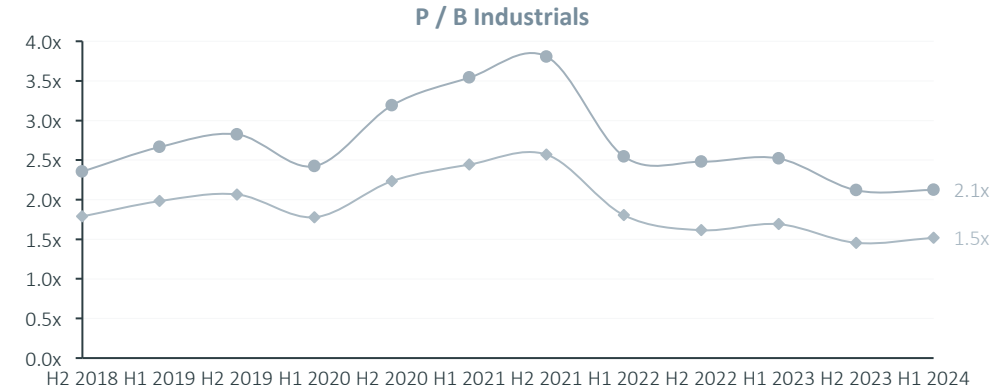
Industrials

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



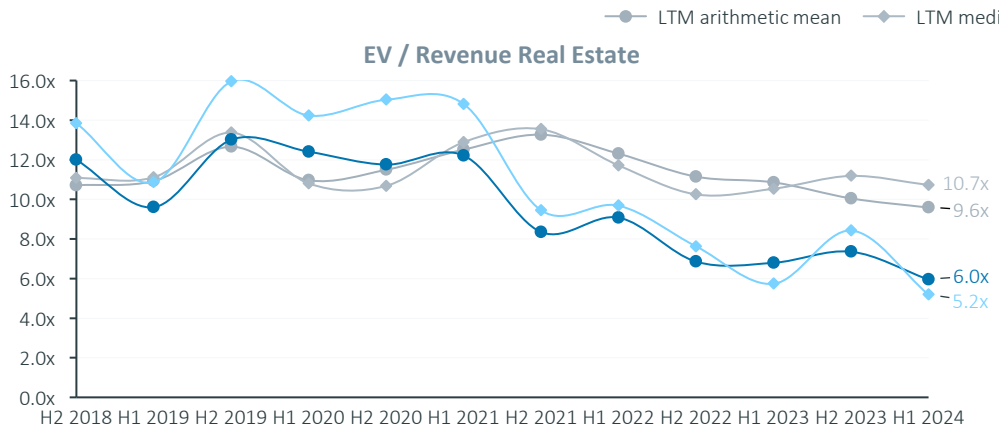


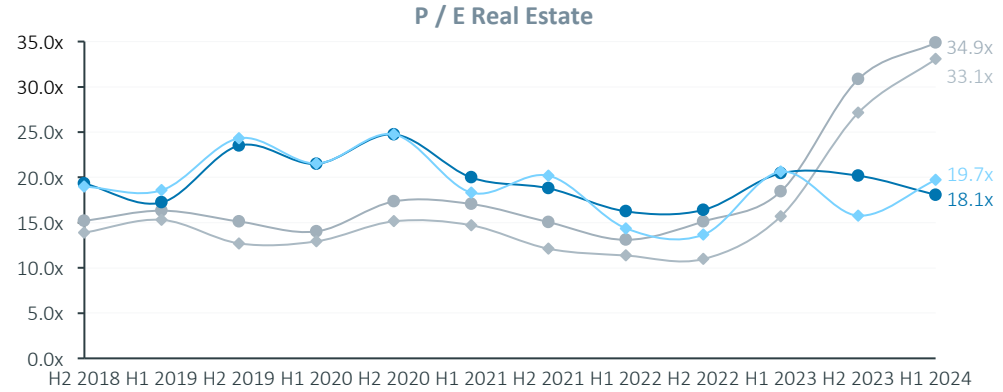


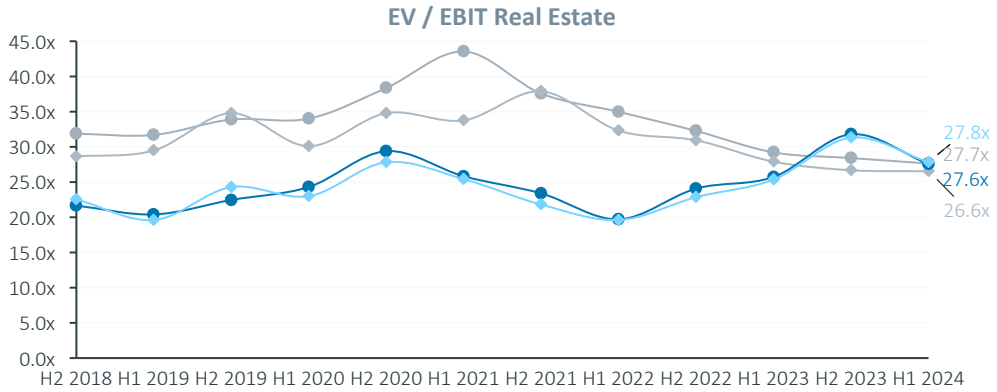


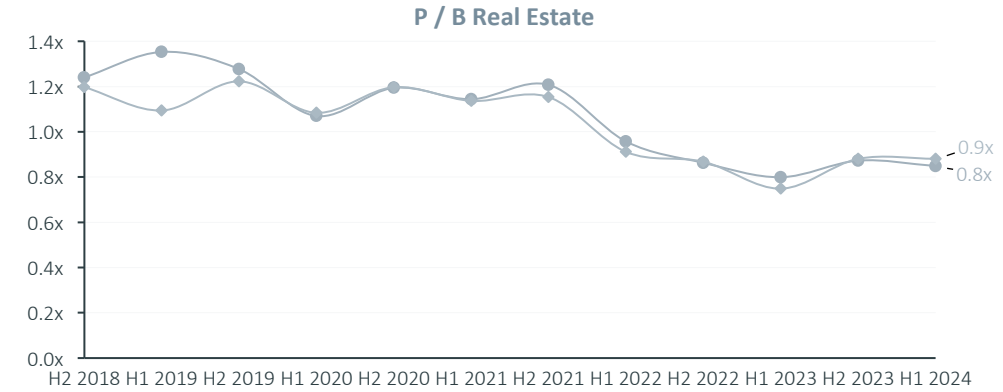
Real Estate

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







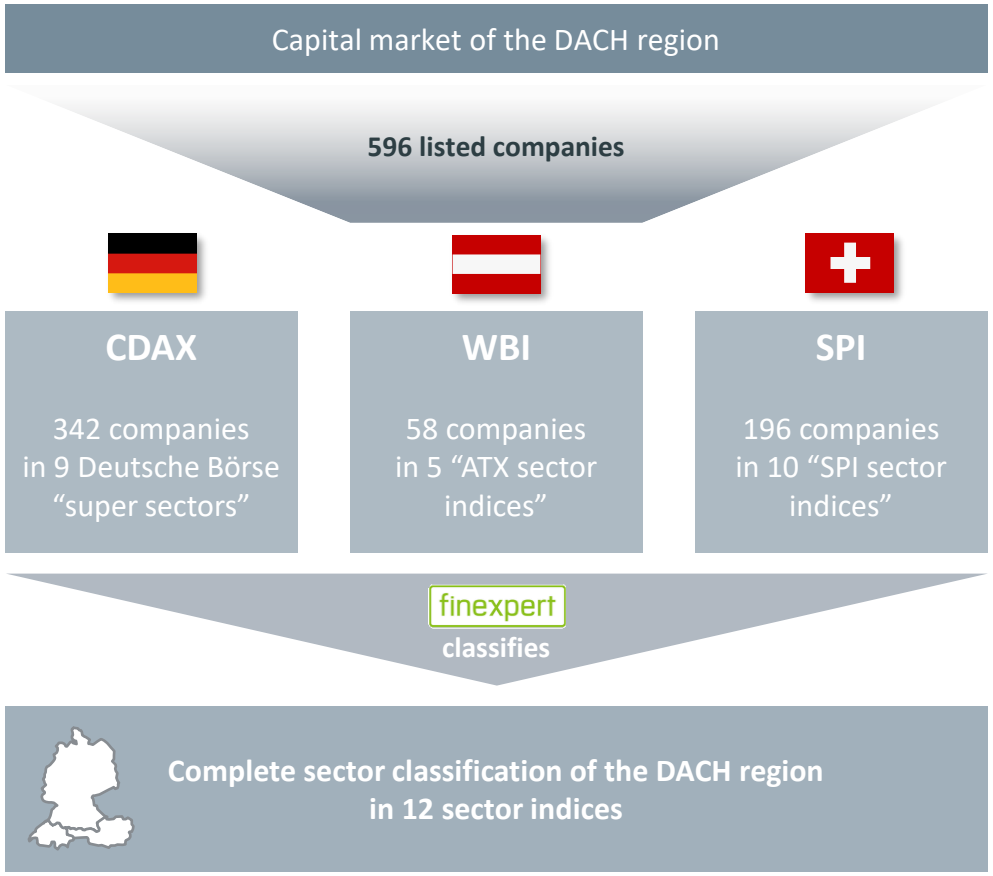


Appendix

Composition of the sectors of CDAX, WBI and SPI as of 30 June 2024

The capital market of the DACH region comprises 596 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 **596 public companies**, which are listed in the mentioned indices as of 30 June 2024, build the base for the **sector classification** and the **subsequent analyses**:

- The German DAX Sector All Index[1)] includes 342 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.

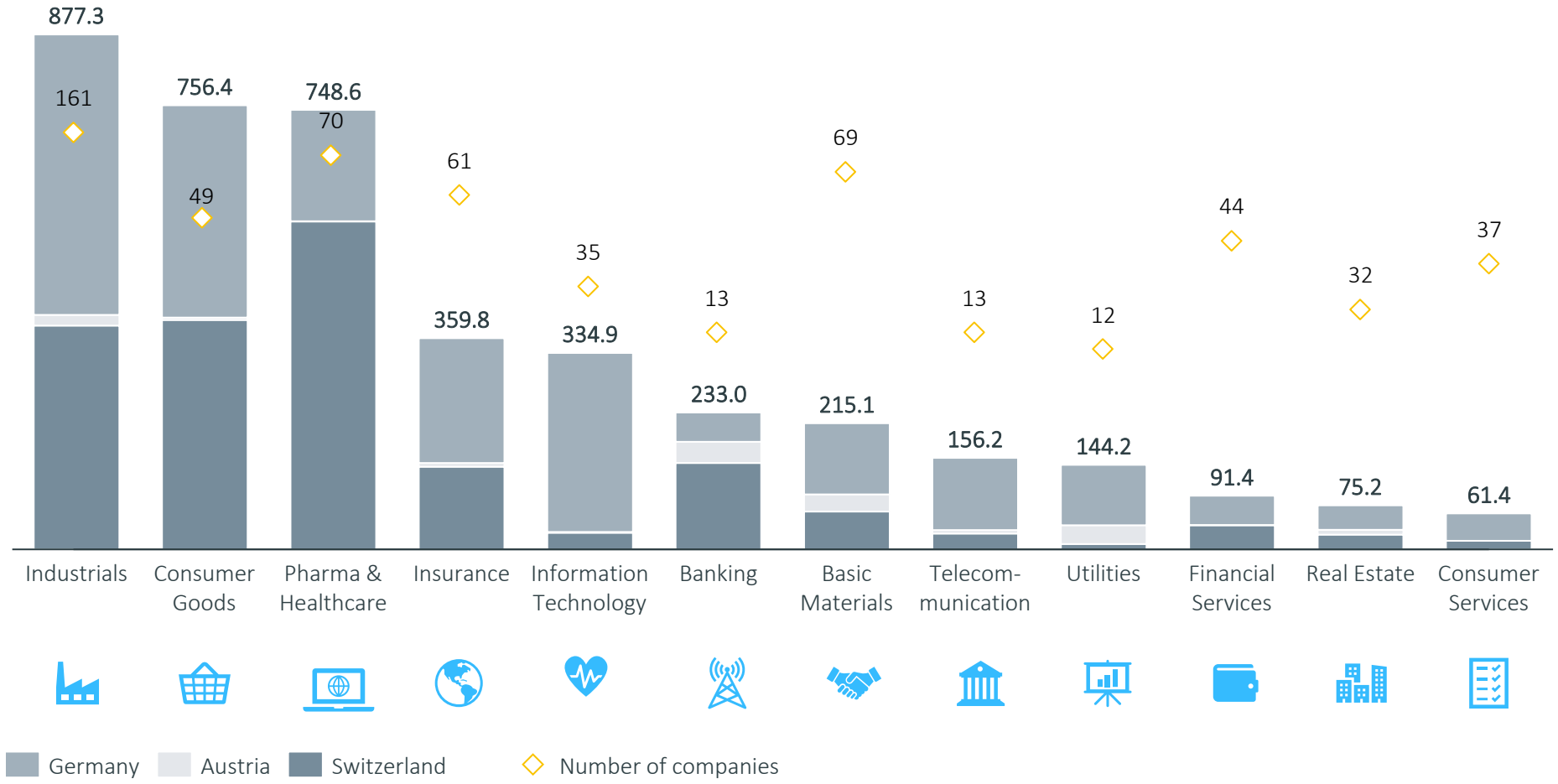
finexpert allocated all constituents of three market indices and the respective sector index classifications to twelve finexpert sector indices, called "super sectors":

- Banking
- Insurance
- Financial Services
- Consumer Service
- Consumer Goods
- Pharma & Healthcare
- Information Technology
- Telecommunication
- Utilities
- Basic Materials
- Industrials
- 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 Information Technology sectors represent over 50% of the market capitalization in the DACH region

finexpert sector market capitalization in the DACH region as of 30 June 2024 (in EUR bn)



Banking, Insurance and Financial Services

DACH Capital Market Study

Banking

Germany
COMMERZBANK AG
DEUTSCHE BANK AG
DT.PFANDBRIEFBK AG
PROCREDIT HLDG AG
WUESTENROT+WUERTT.AG

Austria
BANK FUER TIROL UND VBG AG
BAWAG GROUP AG
BKS BANK AG
ERSTE GROUP BANK AG
OBERBANK AG
RAIFFEISEN BANK INTERNAT. AG

Switzerland
BASELLAND KB PS
BASLER KB PS
BC GENEVE P
BC JURA
BC VAUD
BEKB / BCBE
CEMBRA MONEY BANK
EFG INTERNATIONAL
GLARNER KB
GRAUB KB PS
HYPO LENZB
JULIUS BAER
LUZERNER KB
SNB
ST GALLER KB
THURGAUER KB PS
UBS GROUP
VALIANT
VONTOBEL
WALLISER KB
ZUGER KB I

Insurance

Germany
ALLIANZ SE
DFV DEUTSCHE FAMILIENVERSICHERUNG AG
HANNOVER RUECK SE
MUENCHNER RUECK AG
TALANX AG

Austria
UNIQA INSURANCE GROUP AG
VIENNA INSURANCE GROUP AG

Switzerland
BALOISE
HELVETIA HOLDING
SWISS LIFE HOLDING AG
SWISS RE
VAUDOISE ASSU
ZURICH INSURANCE

Financial Services

Germany
ALBIS LEASING AG
BROCKHAUS CAPITAL MGMT
CAPSENSIXX AG
CREDITSHELF AKTIENGESELLSCHAFT
DEUTSCHE BOERSE
DF DT.FORFAIT AG
DT.BETEILIG.AG
DWS GROUP GMBH & CO. KGAA
FLATEXDEGIRO AG
FORIS AG
GRENKE AG
HEIDEL.BETEIL.HLDG AG
HESSE NEWMAN CAP.
HYPOPORT AG
KAP AG INH
LINUS DIGITAL FINANCE AG
MLP AG
MUTARES SE & CO. KGAA
OVB HOLDING AG
PEARL GOLD AG
SIXT LEASING
SPOBAG
WCM BET.GRD.AG
WEBAC HOLDING AG

Austria
ADDIKO BANK AG
BURGENLAND HOLDING AG
SUNMIRROR AG
WIENER PRIVATBANK SE

Switzerland
BELLEVUE GROUP
CIE FIN TR I
GAM
LEONTEQ
PARTNERS GROUP
PRIVATE EQUITY
R&S GROUP HOLDIN
SWISSQUOTE
VZ HOLDING

Consumer Service and Consumer Goods

DACH Capital Market Study

Consumer Service

Germany

ABOUT YOU HOLDING AG
ARTNET AG
AUTO1 GROUP SE
BASTEI LUEBBE AG
BET-AT-HOME.COM AG
BIJOU BRIGITTE
CECONOMY AG
CTS EVENTIM KGAA
DELIVERY HERO AG
DELTICOM AG
ELUMEO SE
FIELMANN AG
HAWESKO HOLDING AG
HELLOFRESH SE
HORNBACH HOLD.ST
INTERTAINMENT
KLASSIK RADIO AG
LUDW.BECK A.RATHAUSECK
METRO AG
NEXR TECHN.SE
PHICOMM AG.
PROSIEBENSAT.1
READCREST CAPITAL AG
SCOUT24 AG
SPL.MEDIEN AG
SPORTTOTAL AG
STROEER SE + CO. KGAA
TAKKT AG
TRAVEL24.COM AG
TUI AG
UNITED LABELS
WESTWING GROUP AG
WILD BUNCH AG
WINDELN.DE AG
YOUR FAMILY ENTER.AG
ZALANDO SE
ZEALETWORK SE

Switzerland

APG SGA
ASMALLWORLD AG
DUFRY
GALENICA
HIGHLIGHT E AND E I
JUNGFRAUBAHN HLD
MOBILEZONE
O FUESSLI
TITL BN BERG
TX GROUP
VILLARS
ZUR ROSE GROUP

Consumer Goods

Germany

A.S.CREATION TAPETEN
ADIDAS AG
AHLERS AG
BAY.MOTOREN WERKE AG
BEIERSDORF AG
BERENTZEN-GRP.AG
BERTRANDT AG
BIKE24 HOLDING AG
BORUSSIA DORTMUND
CEWEIFT.KGAA
CONTINENTAL AG
DAIMLER TRUCK HOLDING AG
DIERIG HOLDING AG
DOUGLAS AG
EINHELL GERMANYO
ELRINGKLINGER AG
GRAMMER AG
HELLA GMBH+CO. KGAA
HENKEL AG+CO.KGAA
HUGO BOSS AG
KNAUS AG INH
LEIFHEIT AG
MERCEDES-BENZ GROUP AG
META WOLF AG
MING LE SPORTS AG
MISTER SPEX SE
PFERDEWETTEN.DE AG
PORSCHE AUTOM.HLDGO
PROGRESS-WERK OBERK.
PUMA SE
ROY ASSET HLDG INH
SAF-HOLLAND SE INH EO 1
SCHAEFFLER AG INH.O
SCHLOSS WACHENHEIM AG
STO SE+CO.KGAAO
STS GROUP AG
SUEDZUCKER AG
TC UNTERHALTUNGSELEK.
VILLEROY + BOCH AG
VOLKSWAGEN AG
WASGAU PROD.HANDELS AG
WESTAG + GETALIT

Austria

AGRANA BETEILIGUNGS-AG
DO & CO AKTIENGESELLSCHAFT
GURKTALER AG
JOSEF MANNER & COMP. AG
LINZ TEXTIL HOLDING AG
PIERER MOBILITY AG
POLYTEC HOLDING AG
STADLAUER MALZFABRIK AG
WOLFORD AG

Switzerland

AIRESIS
ARYZTA
AUTONEUM
BARRY CALLEBAUT
BELL AG
CALIDA
EMMI
GMSA
HOCHDORF
LECLANCHE
LINDT
MEDMIX LTD
METALL ZUG AG
NESTLE
ORIOR
RICHEMONT
STADLER RAIL AG
SWATCH GROUP
V-ZUG

Pharma & Healthcare and Information Technology

DACH Capital Market Study

Pharma & Healthcare

Germany

2INVEST AG
4SC AG
AAP IMPLANTATE AG
BIOFRONTERA AG
BIOTEST AG
CARL ZEISS MEDITEC AG
CO.DON AG .
DERMAPHARM HOLDING SE
DRAEGERWERK.A.O.N.
ECKERT+ZIEGLER AG
EPIGENOMICS AG
EVOTEC AG
FRESEN.MED.CARE KGAA
FRESENIUS SE+CO.KGAA
GERRESHEIMER AG
HEIDELBERG PHARMA AG
MATERNUS-KLI.AG
MEDICLIN AG
MEDIGENE AG
MEDIOS AG
MERCK KGAA
MORPHOSYS AG
PAION
PHARMASGP HOLDING SE
RHOEN-KLINIKUM
SARTORIUS AG
SCHOTT PHARMA INH
SIEMENS HEALTHINEERS AG
STRATEC SE
SYNLAB AG
VITA 34 AG

Austria

MARINOMED BIOTECH AG

Switzerland

ADDEX
AEVIS VICTORIA SA
ALCON INC.
BACHEM -B-
BASILEA
BB BIOTECHM.
COLTENE
DOTTIKON ES HOLDING AG
EVOLVA
IDORSIA
IVF HARTMANN
KUROS
LONZA
MEDARTIS HOLDING AG
MOLECULAR PARTNERS
NOVARTIS
POLYPEPTIDE GROUP AG
RELIEF THERAPEUTICS
ROCHE GS
SANDOZ GRP
SANTHERA
SIEGFRIED
SKAN GROUP AG
SONOVA
SPEXIS AG
STRAUMANN
TECAN GROUP AG
XLIFE SCIENCES AG
YPSOMED HLDG

Information Technology

Germany

ADESSO AG
ADVA OPT.NETW.SE
AIXTRON SE
ALL FOR ONEEEB AG
ALLGEIER SE
ATOSS SOFTWARE AG
B+S BANKSYSTEME AG
BECHTLE AG
CANCOM SE
CENIT AG
Cherry AG
COMPUGROUP MED.SE
DATA MODUL AG
ELMOS SEMICONDUCTOR AG
FIRST SENSOR AG
FORTEC ELEKTRO.
GFT TECHNOLOGIES SE
GIGASET AG
INFINEON TECH.AG
INIT INNOVATION
INTERSHOP COMM.
INTICA SYSTEMS AG
IONOS GROUP SE
IVU TRAFFIC TECHN.AG
KPS AG
MEVIS MEDICAL SOL.NA
NAGARRO SE
NEMETSCHEK SE
NEW WORK SE
NEXUS AG
NORCOM INF.TECHN.AG
OHB SE
PANAMAX AG
PARAGON AG
PSI AG
Q.BEYOND AG
REALTECH AG
SAP SE
SCHWEIZER ELECTR.
SECUNET SECURITY AG
SERVICEWARE SE
SILTRONIC AG
SNP SCHNEID.-NEUREIT.
SOCIAL CHAIN AG
STEMMER IMAGING AG
SUESS MICROTEC AG
SYZYGY AG
TEAMVIEWER AG
TELES AG
TISCON AG
USU SOFTWARE AG
UTD.INTERNET AG
VIVANCO GRUPPE AG

Austria

AT&S AUSTRIA TECH.&SYSTEMTECH.
AUSTRIACARD HOLDINGS AG
FREQUENTIS AG
KAPSCH TRAFFICCOM AG
MASCHINENFABRIK HEID AG
RATH AG

Switzerland

ALSO
AMS
ASCOM 10
HUBER+SUHNER AG
KUDELSKI SA
LOGITECH
SOFTWAREONE HOLDING AG
TEMENOS
U-BLOX
WISEKEY

Telecommunication, Utilities and Basic Materials

DACH Capital Market Study

Telecommunication

Germany
1+1 AG
11 88 0 SOLUTIONS AG
3U HOLDING AG
DT.TELEKOM AG
ECOTEL COMMUNICATION AG
FREENET AG
LS TELCOM AG
NFON AG
YOC AG
Austria
EUROTELESITES AG
TELEKOM AUSTRIA AG
Switzerland
SWISSCOM AG

Utilities

Germany
E.ON SE
ENBW ENERGIE BAD.-WUE.
ENCAVIS AG
GELSENWASSER AG
MAINOVA AG
MVV ENERGIE AG
RWE AG
UNIPER SE.
Austria
EVN AG
VERBUND AG
Switzerland
BKW ENERGIE AG
EDISUN POWER EUROPE AG
ROMANDE ENERGIE HOLDING SA

Basic Materials

Germany
ALTECH ADV.MAT.
ALZCHEM GROUP AG
AURUBIS AG
B.R.A.I.N.
BASF SE
BAYER AG
COVESTRO AG
DECHENG TECHNOLOGY AG
EISEN- U.HUETTENWERKE
EVONIK INDUSTRIES AG
FUCHS PETROLUB SE
H+R KGAA INH.
K+S AG
LANXESS AG
SALZGITTER AG
SGL CARBON SE
SIMONA AG
SURTECO SE
SYMRISE AG INH.
WACKER CHEMIE
Austria
AMAG AUSTRIA METALL AG
LENZING AG
OMV AG
PORR AG
SCHOELLER-BLECKMANN OILFIELD EQUIPMENT AG
STRABAG SE
VOESTALPINE AG
WIENERBERGER AG
Switzerland
CLARIANT
CPH
EMS-CHEMIE
GIVAUDAN
GURIT HOLDING AG
SCHMOLZ+BICKENBACH AG
ZWAHLEN & MAYR SA

Industrials

DACH Capital Market Study

Industrials (1/2)

Germany

7C SOLARPARKEN AG
ALBA SE
AMADEUS FIRE AG
AUMANN AG
BASLER AG
BAYWA AG.
BILFINGER SE
BRENNTAG AG
COM.CHARG.SOL.AG INH.O.N.
DEUTSCHE POST AG
DEUTZ AG
DMG MORI AG
DR. HOENLE AG
DR.ING.H.C.F.PORSCHEOI
DUERR AG
ENAPTER AG
ENERGIEKONTOR
FRANCOTYP-POSTALIA HLDG
FRAPORT AG FFM.AIRPORT
FRIEDRICH VORWERK GROUP SE
FRIWO AG
GEA GROUP AG
GESCO AG
HAMBURG.HAFEN U.LOG.A-SP
HAPAG-LLOYD AG
HEIDELBERG.DRUCKMA.
HEIDELBERGCEMENT AG
HENSOLDT AG INH
HGEARS AG
HOCHTIEF AG
INDUS HOLDING AG
INFAS HLDG AG
JENOPTIK AG
JOST WERKE AG INH.
JUNGHEINRICH AGVZO
KHD HUMBOLDT WEDAG
KION GROUP AG
KLOECKNER + CO SE
KNORR-BREMSE AG
KOENIG + BAUER AG
KRONES AG
KSB AG
KWS SAAT SE
LPKF LASER+ELECTRON.
LUFTHANSA AG VNA
M.A.X. AUTOMATION SE
MANZ AG
MASCH.BERT.HER.O
MASTERFLEX
MBB SE
MEDION AG
MTU AERO ENGINES
MUELLER-DIE LILA LOGISTIK
NORDEX SE
NORDWEST HANDEL AG
NORMA GROUP SE
ORBIS AG
PFEIFFER VACUUM TECH.
PITTLER MA.FABR. AG
PNE WIND AG
PVA TEPLA AG
R.AHL AG
RATIONAL AG
RENK GROUP AG
RHEINMETALL AG
RINGMETALL AG
SFC ENERGY AG
SIEMENS AG
SIEMENS ENERGY AG
SINGULUS TECHNOL. EO 1
SINO-GERMAN UTD AG
SIXT SE
SMA SOLAR TECHNOL.AG
SOFTING AG
STABILUS SE INH.
TECHNOTRANS AG
THYSSENKRUPP AG
THYSSENKRUPPUCERA
TRATON SE
TUFF GROUP AG
UZIN UTZ AG
VARTA AG
VERBIO VER.BIOENERGIE
VISCOM AG
VITESCO TECHNOLOGIES GROUP AG
VOLTABOX AG INH.
VOSSLOH AG
WACKEREUSON SE
WASHTEC AG
ZHONGDE WASTE TECHNOLOGY

Austria

ANDRITZ AG
FACC AG
FLUGHAFEN WIEN AG
FRAUENTHAL HOLDING AG
MAYR-MELNHOF KARTON AG
OESTERREICHISCHE POST AG
PALFINGER AG
ROSENBAUER INTERNATIONAL AG
SEMPERIT AG HOLDING
SW UMWELTTECHNIK AG
ZUMTOBEL GROUP AG
CLEEN ENERGY AG
RHI MAGNESITAV

Switzerland

ABB LTD
ACCELLERON INDUSTRIES LTD
ADECCO
ADVAL TECH
ARBONIA
BELIMO HOLDING AG
BOSSARD
BUCHER
BURCKHARDT
BURKHALTER
BVZ HOL
BYSTRONIC AG
CICOR TECH
COMET
DAETWYLER I
DKSH
DORMAKABA
FEINTOOL
FLUGHAFEN ZUERICH
FORBO
GAVAZZI I
GEBERIT
GEORG FISCHER AG
IMPLENIA
INFICON
INTERROLL
KARDEX
KINARUS THERAPEUTICS HOLDING AG
KLINGELNBERG LTD
KOMAX
KUEHNE+NAGEL INT
LAFARGEHOLCIM
LANDIS+GYR
LEM
MCH GROUP
MEDACTA GROUP SA
MEDMIX LTD
MEIER TOBLER
MEYER BURGER
MIKRON
MONTANA AEROSPACE AG
OC OERLIKON
PERROT DUVAL I
PHOENIX I
RIETER
SCHINDLER
SCHLATTER
SCHWEITER I
SENSIRION HOLDING AG
SFS GROUP

Industrial (cont'd) and Real Estate

DACH Capital Market Study

Industrials (2/2)

Switzerland
SGS
SIG COMBIBLOC GROUP AG
SIKA I
STARRAG GROUP
SULZER
VAT GROUP
VETROPACK I
ZEHNDER

Real Estate

Germany
ACCENTRO R.EST.AG
ALSTRIA OFFICE REIT-AG
DEMIRE DT.MTS.RE AG
DEUTSCHE EUROSHOP AG
DEUTSCHE WOHNEN AG INH
DIC ASSET AG
DT.KONSUM REIT-AG
DT.REAL ESTATE AG
FAIR VALUE REIT-AG INH.
FCR IMMOBILIEN AG
GATEWAY REAL ESTATE AG
HAMBORNER REIT AG
INSTONE REAL ESTATE GROUP.V.
LEG IMMOBILIEN AG
PATRIZIA IMMOBILIEN ON
TAG IMMOBILIEN AG
TTL INF. TECHN. AG
VONOVIA SE

Austria
CA IMMOBILIEN ANLAGEN AG
IMMOFINANZ AG
S IMMO AG
UBM DEVELOPMENT AG
WARIMPEX FINANZ- UND BETEILIGUNGS AG

Switzerland
ALLREAL
ARUNDEL
CI COM SA
EPIC SUISSE AG
FUNDAMENTA REAL ESTATE AG
HIAG IMMOBILIEN
INA INVEST HOLDING AG
INTERSHOP
INVESTIS
MOBIMO
NOVAVEST REAL ESTATE AG
ORASCOM DEVELOPMENT HLD AG
PEACH PROPERTY
PLAZZA
PSP
SWISS FIN&PROP INV
SWISS PRIME SITE
VARIA US PROPERTIES
WARTECK
ZUEBLIN IMM
ZUG ESTATES HOLDING AG

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