

## ESG FOCUS: WOMEN AND WEALTH

No better time than now

### Women’s wealth across the globe is growing significantly and now approaching a tipping point

Why should this matter for women? We make the case for more active participation by women in managing their wealth, given the following unique considerations:

- I. **A longer life expectancy:** Women live longer, and hence need to plan for a longer retirement.
- II. **Less earning power compared to men:** The gender gap in wages also translates into wealth and retirement gaps that need to be actively managed.
- III. **Tendency to make fewer large financial decisions in a household:** This results in women potentially being less prepared for retirement or feeling pressured over their personal finances.
- IV. **Are not inferior investors:** Studies suggest that despite their tendency to underestimate their financial knowledge, women as a group tend to outperform men.

Investment implications for female investors:

- I. **Review cash positions:** More risk tolerant women could consider selectively increasing exposure to risky assets in their portfolio in anticipation of higher returns for longer-term needs.
- II. **Start investing now:** There is no better time to start investing than now. Invest early and often, for longer periods to take advantage of the magic of compounding.

#### CONTACT

Jen-Ai Chua  
+65 6827 1773, [jenai.chua@juliusbaer.com](mailto:jenai.chua@juliusbaer.com)

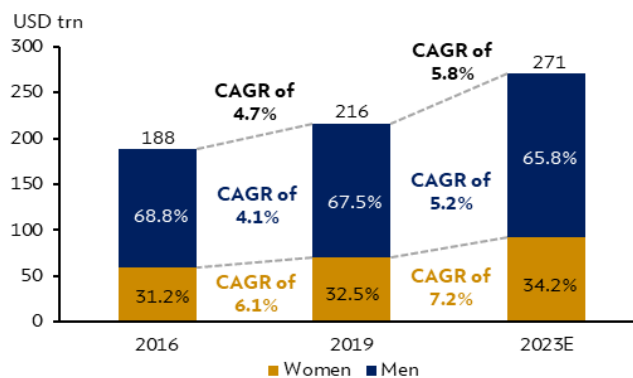
Mark Matthews  
+65 6827 1829, [mark.matthews@juliusbaer.com](mailto:mark.matthews@juliusbaer.com)

#### APPROACHING A TIPPING POINT

In its 2019 report ‘The (Financial) Future is Female’, S&P Global estimates female control of the world’s investible wealth at USD72trn by 2020, with women holding – by some estimates – as much as a third to 40% of the world’s total wealth.

Consultancy group Boston Consulting Group (BCG) forecasts that women’s wealth could grow by a CAGR of 7.2% from 2019 to 2023, outpacing the 5.2% CAGR projected for men. While women’s share of regional wealth is highest in North America (at 37.3%), it is growing the fastest in Asia, forecast at 10.4% CAGR over the same period.

#### BREAKDOWN OF GLOBAL WEALTH BY GENDER



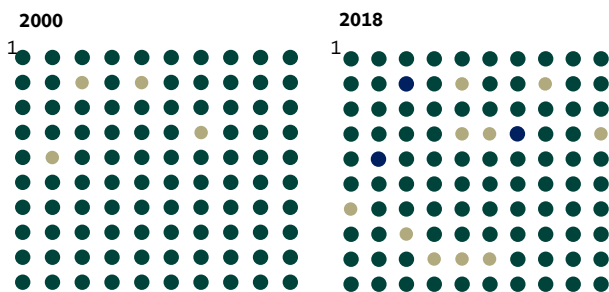
**Note:** CAGR = compound annual growth rate

**Source:** BCG Global Wealth 2019 Market Sizing Database, Julius Baer

Although the ongoing Covid-19 pandemic could impact these projections in the near term, larger thematic trends pertaining to the role of women are likely to persist.

Within the ultra-high net worth segment, the number of women represented in the world’s 100 richest individuals has also increased, rising from just four in 2000 to ten in 2018.

### 100 RICHEST INDIVIDUALS BY GENDER (2000 VS 2018)



Source: Note: ● = male, ● = female. Source: The Economist, Forbes, BCG, Julius Baer

### ASSETS OF TEN RICHEST BY GENDER, SELECTED HOLDINGS

#### MEN

Global rank	Name	Assets (USDbn)	Business
#1	Jeff Bezos	128	Amazon
#2	Bill Gates	91	Microsoft
#3	Warren Buffett	88	Berkshire Hathaway
#4	Bernard Arnault	75	LVMH
#5	Mark Zuckerberg	74	Facebook
#7	Carlos Slim	68	Grupo Carso <sup>2</sup>
#7	Amacio Ortega	65	Zara (Inditex)
#8	Larry Ellison	63	Oracle
#9	Charles Koch	61	Koch Industries
#9	David Koch	61	Koch Industries
	<b>Total</b>	<b>744</b>	

#### WOMEN

Global rank	Name	Assets (USDbn)	Business
#15	F. Bettencourt Meyers	44	L’Oreal
#28	Alice Walton	41	Walmart
#35	Susanne Klatten	25	BMW, Altana
#36	Jacqueline Mars	25	Mars Inc
#40	Yang Huiyan	24	Country Garden <sup>1</sup>
#61	Laurene Powell Jobs	19	Apple, Disney
#73	Gina Rinehart	17	Hancock Prospecting
#84	Abigail Johnson	16	Fidelity Investment

#85	Iris Fontbona	16	Antofagasta
#86	C. de Carvalho-Heineken	16	Heineken
	<b>Total</b>	<b>243</b>	

Note: As of 8 March 2018.

#### Julius Baer coverage

Amazon.com (Buy, Price/Target: USD 3,095/4,100)  
 Microsoft (Buy, Price/Target: USD 234/275)  
 Berkshire Hathaway A Shares (Buy, Price/Target: USD 377,835/394,000)  
 Berkshire Hathaway B Shares (Buy, Price/Target: USD 249/260)  
 LVMH (Buy, Price/Target: EUR 549/560)  
 Facebook (Buy, Price/Target: USD 259/330)  
 Inditex (Buy, Price/Target: EUR 28/30)  
 Oracle (Hold, Price/Target: USD 66/62)  
 L’Oreal (Buy, Price/Target: EUR 309/355)  
 Walmart (Hold, Price/Target: USD 130/150)  
 BMW (Hold, Price/Target: EUR 75/70)  
 Apple (Hold, Price/Target: USD 125/100)  
 Walt Disney (Hold, Price/Target: USD 193/200)  
 Antofagasta (Hold, Price/Target: GBX 1,869/1,550)  
 Heineken (Hold, Price/Target: EUR 82/86)

#### Morningstar coverage

Country Garden<sup>1</sup> (★★★★, Price/Target: HKD 9.6/13.0)

<sup>1</sup> Reference to this Morningstar-covered stock does not constitute a recommendation by Julius Baer. Relevant information (e.g. analyst name) may be found in the annex. The Morningstar Equity Research Report can be requested free of charge via your Julius Baer Relationship Manager. <sup>2</sup> Not covered. Julius Baer offers no recommendation and does not provide any advice on potential risks and opportunities. All other companies/institutions mentioned in this list are not listed.

Source: Forbes, BCG, Morningstar, Julius Baer. This list contains Julius Baer and Morningstar covered stocks

In coming years, we expect to see a number of societal shifts. Women will likely be solely responsible for their finances in their lifetime. They will also increasingly be breadwinners or co-breadwinners in the majority of homes.

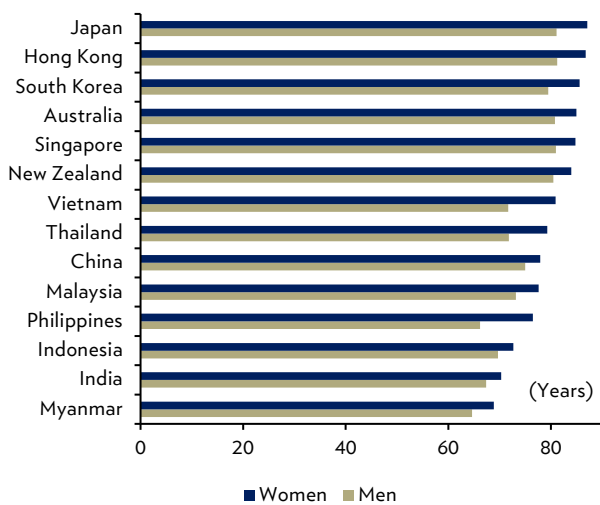
### THE CASE FOR GREATER FEMALE PARTICIPATION IN INVESTMENT

Why should these matter for women and their assets? The reasons are multi-faceted. First, as Beatriz Sanchez, Member of the Executive Board of Bank Julius Baer and Head Latin America succinctly comments, “As we look forward, women will continue to hold a greater and growing share of global wealth, and our voices will be heard more often and more consistently.”

Second, there are still a number of unique considerations that belie the case for increased participation by women in wealth management. We highlight four of these:

**Longer lives:** Women live longer than men on average, with average life expectancy for women in Asia outstripping that of men by 4.5 years.

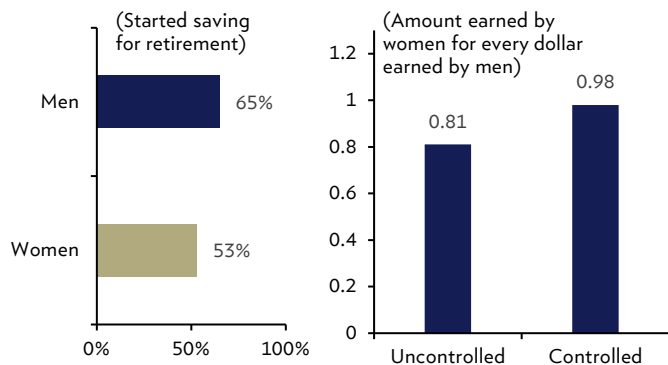
**LIFE EXPECTANCY AT BIRTH BY GENDER**



Source: OECD Health Statistics 2018, World Bank World Development Indicators Online, Julius Baer

Yet, women may not be prepared for a longer retirement with only 53% of women reportedly starting to save for retirement vs 65% for men.

**PERCENTAGE WHO HAVE STARTED SAVING FOR RETIREMENT AND HOW MUCH WOMEN MAKE COMPARED TO MEN**

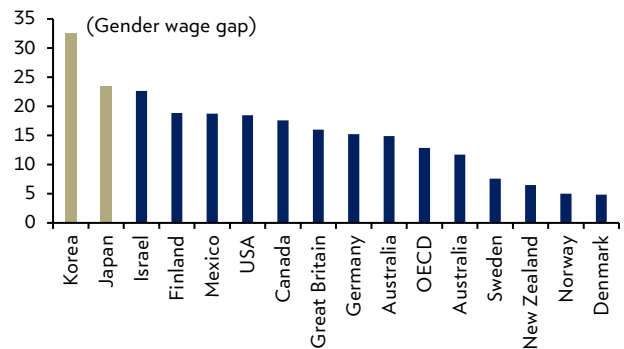


Source: Blackrock Global Investor Impulse (Median figures), December 2015, Payscale, Julius Baer

**Lower wages:** Women earn less than men, with women earning 81 cents for every dollar earned by men on an uncontrolled basis (this measures median salary for all men and all women). Even on a controlled basis (measuring median salary for men and women with the same job and qualifications), women still earn less, at 98 cents for every dollar earned by men.

Within Asia, Korea and Japan are among the most biased markets, with women earnings 33% and 24% less than men respectively.

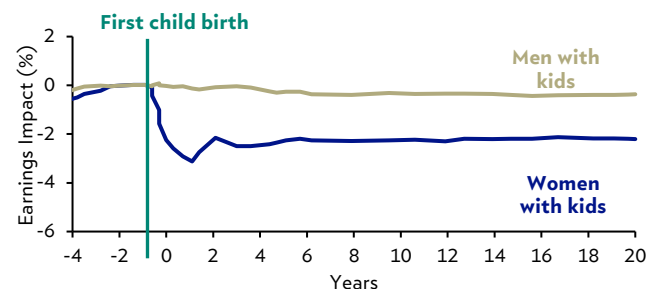
**GENDER WAGE GAP IN ASIA**



Note: The gender gap is defined as the difference between the median earnings of men and women relative to median earnings of men for full-time employees. Source: OECD, Julius Baer

Part of this is because women lose earnings with time out of the workforce as they spend more time on child rearing than men. This appears to be the case even in Scandinavia, where social policies are more generous and culture, more egalitarian.

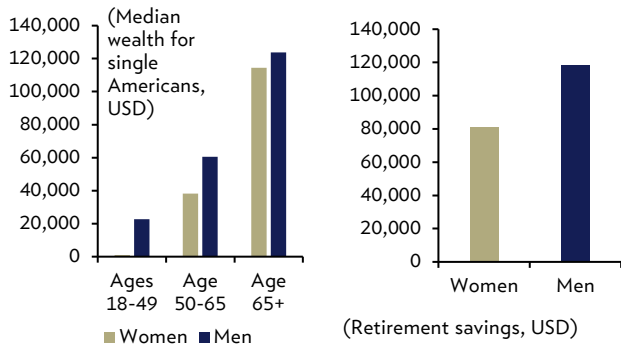
**EARNINGS OF DANISH WOMEN AND MEN BEFORE VS AFTER CHILDREN**



Source: Herik Kleven, Camille Landais and Jakob Egholt Sogaard, The New York Times, Julius Baer

Over time, the disparity has resulted in yawning wealth and retirement gaps that are hard to close.

### MEDIAN WEALTH FOR SINGLE AMERICANS AND MEDIAN RETIREMENT SAVINGS AT AGES 55-64

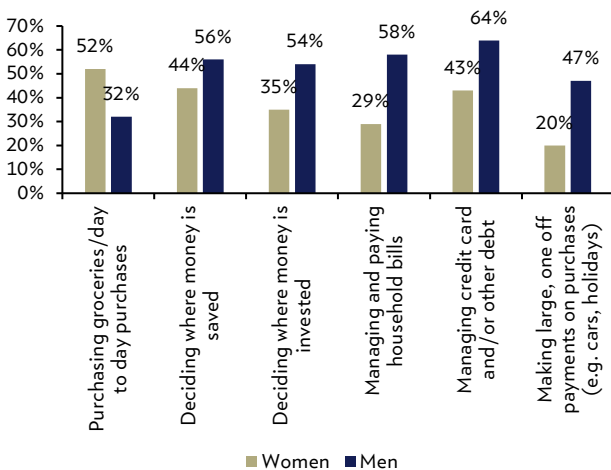


Source: Chicago Foundation for Women, Blackrock Global Investor Pulse, Julius Baer

**Make fewer financial decisions and worry more about their finances:** It is no wonder, then, that S&P Global found that more than 80% of women in Japan and Korea are worried about their personal finances, with 85% and 87% of Korean and Japanese women saying that they were in ‘fair’ or ‘poor’ financial shape.

Women were also less likely to be responsible for household financial decisions. In Singapore, studies indicate that the only area where women assumed sole financial control was in groceries and day-to-day purchases (52% of women are solely responsible for this vs 32% of men).

### HOW WOULD YOU DESCRIBE YOUR ROLE REGARDING FINANCIAL RESPONSIBILITIES IN YOUR HOUSEHOLD?



Note: Responses to ‘How would you describe your role regarding the following financial responsibilities in your household?’ ‘I am mainly or solely responsible for this’  
Source: HSBC, Julius Baer

**Are not inferior to men in investing:** A number of studies over time suggest that women tend to outperform men in their investments. This is despite the fact that behaviorally, research indicates that women tend to be less confident about their investing than men, and hence more likely to be risk averse (47% vs 39% for men, based on 2015 industry research by SigFig, the Wall Street Journal and Vanguard) and open to advice (64% vs 56% for men).

- The University of Warwick tracked investors’ performance for three years. Its findings in the research paper ‘Are women better investors than men?’ published on 28 June 2018 indicated that women outperformed men at investing by 1.8%. Men were likely to pick more speculative stocks, while female investors had a longer-term perspective.
- The University of Sydney Business School and University of New South Wales Business School studied the relationship between gender and stock trading performance using data on trades by Finnish investors from 1995 to 2011. Findings published in its research paper ‘The gender face-off: Do females come out on top in terms of trading performance?’ on 4 September 2016 documented ‘significant and remarkable gain made by female investors at the expense of male investors... yielding an impressive internal rate of return of 21.44% p.a.’. Females were better at recognizing patterns in data with superior trading intuition, and preferred to purchase underpriced stocks and sell over priced stocks based on trading signals.
- The University of California, Berkeley studied common stock investments of men and women from 1991 to 1997. In its research paper ‘Boys will be boys: Gender, Overconfidence, and common stock investment’ published in 2001, it noted that in areas such as finance, men were more overconfident than women and traded 45% more than women. Trading reduced men’s net returns by 2.65ppt a year vs 1.72ppt for women.

### INVESTMENT IMPLICATIONS

While studies exploring the investing differences between men and women can yield interesting observations, it is also the case that men and women share a number of fundamental similarities as investors. Differences could be shaped by social and demographic factors like education, employment status and financial circumstances, just as much as innate characteristics.

We end this piece with two investment conclusions for female investors.

**Potential shifts in asset allocations:** Longevity is to be desired, but it becomes even better when planned for. Some practitioners have called for more risk tolerant women to consider selectively increasing exposure to risky assets in their portfolio in anticipation of higher returns for longer-term needs.

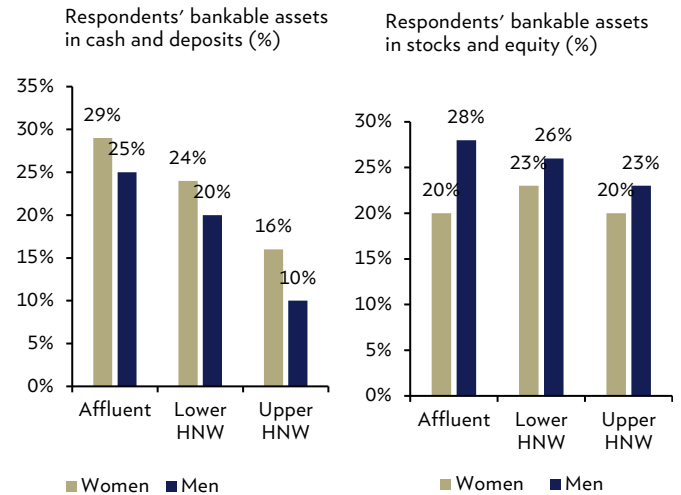
### ASSET ALLOCATION SHIFTS

Women's age	25 years old	45 years old	65 years old
<b>Suggested approach</b>			
Stocks	75%	60%	40%
Bonds	10%	20%	40%
Cash	5%	10%	15%
Alternatives	10%	10%	5%
<i>Total</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>
<b>Traditional approach</b>			
Bonds	40%	60%	100%
Stocks	60%	40%	0%
<i>Total</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

Source: Oppenheimer Funds, Julius Baer

This makes sense because women, in general, tend to avoid uncertainty and seek more data before making an investment decision. Women in most wealth bands tend to be more risk averse than men. They are likely to keep a higher percentage of assets liquid, i.e. in cash. This preference for cash would mean women could miss higher yielding opportunities.

### DISTRIBUTION OF BANKABLE ASSETS ACROSS VARIOUS ASSET CLASSES



Note: HNW = high net worth. Source: BCG survey, Julius Baer

This has practical implications for wealth managers. Quoting from Ms. Sanchez again, 'Women do not want special treatment, they expect equal treatment. Women expect to be listened to, to be understood, to be informed and empowered to make fact based decisions. Women increasingly understand financial risks and opportunities as well as men, nevertheless, we execute differently and tend to be more risk adverse and detailed in our approach. What we do not want is to be patronized as we seek investment advice.'

**Start investing now:** Invest early and often, for longer periods to take advantage of the magic of compounding. According to BCG's report 'Women in wealth: Managing the next decade of women's wealth' published in April 2020, 70% of millennial women (born between 1980 and 1995) said they would take the lead in financial decisions whereas only 40% of baby boomers (born between 1946 and 1964) did. While this may be due to the higher financial literacy of younger women and their increased sense of empowerment, there is no better time to start investing for all age groups of women, than now.

## IMPORTANT LEGAL INFORMATION

### MORNINGSTAR ANNEX

Morningstar disclaimer (for the Julius Baer disclaimer, please refer to the end of the document)

The equity research in this publication marked with '1' and in italics was produced by Morningstar and is not the result of independent financial/investment research of Bank Julius Baer & Co Ltd. and/or any of its affiliates (Julius Baer). Julius Baer acts solely as the distributor of such Morningstar Equity Research. Bank Julius Baer & Co Ltd., Zurich, is authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA). Julius Baer is exempt from any and all liability in relation to, or arising from, the Morningstar Research mentioned in this publication.

### Table of Morningstar covered equities mentioned in this publication

Topic	Equity	Rating	Fair value	Closing price	Analyst name	Date of issuance of Morningstar Qual./Quant. Equity report
Assets of ten richest by gender, selected holdings	Country Garden Holdings Co Ltd	★★★★	HKD 13	HKD 9.6	Phillip Zhong <sup>1</sup>	10.02.2021

<sup>1</sup> The conduct of Morningstar's analysts is governed by a Code of Ethics/Code of Conduct Policy, Personal Securities Trading Policy (or an equivalent thereof), and Investment Research Policy. For information regarding conflicts of interest, please visit:

<http://global.morningstar.com/equitydisclosures>

<sup>2</sup> Morningstar Important Disclosure: There is no one single analyst responsible for Quantitative Fair Value Estimate and Quantitative Star Rating; however, Mr. Lee Davidson, Head of Quantitative Research for Morningstar, Inc., is responsible for overseeing the methodology that supports quantitative fair value. As an employee of Morningstar, Inc., Mr. Davidson is guided by Morningstar, Inc.'s Code of Ethics and Personal Securities Trading Policy in carrying out his responsibilities. For information regarding conflicts of interest, please visit:

<http://global.morningstar.com/equitydisclosures>

Contents under 'Morningstar Research Methodology For Valuing Companies' below have been produced by Morningstar; therefore, the first person (e.g. "we" and "our") refer to Morningstar.

## MORNINGSTAR RESEARCH METHODOLOGY FOR VALUING COMPANIES

### Morningstar qualitative equity reports overview

#### Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modelling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analysing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach. Morningstar's equity research group ("we", "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-Star ★★★★★ stocks sell for the biggest risk-adjusted discount to their fair values, whereas One-Star ★ stocks trade at premiums to their intrinsic worth. Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our single-point star rating.

#### 1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.



Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats. To assess the sustainability of excess profits, analysts perform ongoing assessments of the moat trend. A firm's moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don't anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

## 2. Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value. Our model is divided into three distinct stages:

**Stage I:** Explicit Forecast

**Stage II:** Fade

**Stage III:** Perpetuity

## 3. Uncertainty around that fair value estimate

Morningstar's Uncertainty Rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, and other company-specific factors.

Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case, and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate.

Our recommended margin of safety widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the estimated value of the equity, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the uncertainty rating provides guidance in portfolio construction based on risk tolerance. Our uncertainty ratings for our qualitative analysis are low, medium, high, very high, and extreme.

Low:	margin of safety for 5-star ★★★★★ rating is a 20% discount and for 1-star ★ rating is 25% premium.
Medium:	margin of safety for 5-star ★★★★★ rating is a 30% discount and for 1-star ★ rating is 35% premium.
High:	margin of safety for 5-star ★★★★★ rating is a 40% discount and for 1-star ★ rating is 55% premium.
Very high:	margin of safety for 5-star ★★★★★ rating is a 50% discount and for 1-star ★ rating is 75% premium.
Extreme:	Stock's uncertainty exceeds the parameters we have set for assigning the appropriate margin of safety.

## 4. Market Price

The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source. For more detail information about our methodology, please go to:

<http://global.morningstar.com/equitydisclosures>

### Morningstar Star Rating for Stocks

Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted. Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star ★★★★★ stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating. We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time, generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust). Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors. The Morningstar Star Ratings for stocks are defined below:

Five-Stars	★★★★★	We believe appreciation beyond a fair risk-adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.
Four-Stars	★★★★	We believe appreciation beyond a fair risk-adjusted return is likely.
Three-Stars	★★★	Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

Two-Stars	★★	We believe investors are likely to receive a less than fair risk-adjusted return.
One-Star	★	Indicates a high probability of undesirable risk adjusted returns from the current market price over a multiyear timeframe, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

#### Other Definitions

**Last Price:** Price of the stock as of the close of the market of the last trading day before date of the report.

#### Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Uncertainty Rating serves as a useful data point with respect to sensitivity analysis of the assumptions used in our determining a fair value price.

#### Morningstar General Disclosure For Qualitative Report

The analysis within this report is prepared by the person(s) noted in their capacity as an analyst for Morningstar's equity research group. The equity research group consists of various Morningstar, Inc. subsidiaries ("Equity Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission.

The opinions expressed within the report are given in good faith, are as of the date of the report and are subject to change without notice. Neither the analyst nor Equity Research Group commits themselves in advance to whether and in which intervals updates to the recommendation are expected to be made, although the research will typically be reviewed at least four times per year. The written analysis and Morningstar Star Rating for stocks are statements of opinions; they are not statements of fact.

The Equity Research Group believes its analysts make a reasonable effort to carefully research information contained in the analysis. The information on which the analysis is based has been obtained from sources believed to be reliable such as, for example, the company's financial statements filed with a regulator, company website, Bloomberg and any other the relevant press sources. Only the information obtained from such sources is made available to the issuer who is the subject of the analysis, which is necessary to properly reconcile with the facts. Should this sharing of information result in considerable changes, a statement of that fact will be noted within the report. While the Equity Research Group has obtained data, statistics and information from sources it believes to be reliable, neither the Equity Research Group nor Morningstar, Inc. performs an audit or seeks independent verification of any of the data, statistics, and information it receives.

Unless otherwise provided in a separate agreement, recipients accessing this report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Research Services LLC, a U.S.A. domiciled financial institution. This report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors: recipients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, neither Morningstar, Inc. or the Equity Research Group represents that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar, Inc. and the Equity Research Group and their officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report. The Equity Research Group encourages recipients of this report to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar, Inc. or its affiliates to any registration or licensing requirements in such jurisdiction.

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, Inc., or the Equity Research Group guarantees the accuracy of the translations.

This report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst, Morningstar, Inc. or the Equity Research Group. In Territories where a Distributor distributes our report, the Distributor is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.



**Morningstar Conflicts of Interest for Qualitative Equity Report:**

No interests are held by the analyst with respect to the security subject of this investment research report. Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click:

<http://msi.morningstar.com>

<http://mdi.morningstar.com>

Analysts' compensation is derived from Morningstar, Inc.'s overall earnings and consists of salary, bonus and in some cases restricted stock.

Neither Morningstar, Inc. or the Equity Research Group receives commissions for providing research nor do they charge companies to be rated.

Neither Morningstar, Inc. or the Equity Research Group is a market maker or a liquidity provider of the security noted within this report. Neither Morningstar, Inc. or the Equity Research Group has been a lead manager or co-lead manager over the previous 12-months of any publicly disclosed offer of financial instruments of the issuer.

Morningstar, Inc.'s investment management group does have arrangements with financial institutions to provide portfolio management/investment advice some of which an analyst may issue investment research reports on. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.

Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section:

<https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx>

Morningstar, Inc. may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

Further information on Morningstar, Inc.'s conflict of interest policies is available from :

<http://global.morningstar.com/equitydisclosures>

Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

**Qualitative investment rating allocation as of 04/03/2021**

(calculated by and derived from the investment universe of Julius Baer)

★★★★★	5 Stars	5.4%	★★★★	4 Stars	22.4%	★★★	3 Stars	37%
★★	2 Stars	23.7%	★	1 Star	11.5%			

Morningstar has not in the past and will not in the future provide any investment banking services to one of their covered issuers. As a result, no investment banking services have been provided over the last 12 months for the covered issuer in this report or any issuer in the comparable category.

## Morningstar quantitative equity reports overview

### Overview

The quantitative report on equities consists of data, statistics and quantitative equity ratings on equity securities. Morningstar, Inc.'s quantitative equity ratings are forward looking and are generated by a statistical model that is based on Morningstar Inc.'s analyst-driven equity ratings and quantitative statistics. Given the nature of the quantitative report and the quantitative ratings, there is no one analyst in which a given report is attributed to; however, Mr. Lee Davidson, Head of Quantitative Research for Morningstar, Inc., is responsible for overseeing the methodology that supports the quantitative equity ratings used in this report. As an employee of Morningstar, Inc., Mr. Davidson is guided by Morningstar, Inc.'s Code of Ethics and Personal Securities Trading Policy in carrying out his responsibilities.

### Quantitative Equity Ratings

Morningstar's quantitative equity ratings consist of: (i) Quantitative Fair Value Estimate, (ii) Quantitative Star Rating, (iii) Quantitative Uncertainty, (iv) Quantitative Economic Moat, and (v) Quantitative Financial Health (collectively the "Quantitative Ratings").

The Quantitative Ratings are calculated daily and derived from the analyst-driven ratings of a company's peers as determined by statistical algorithms. Morningstar, Inc. ("Morningstar", "we", "our") calculates Quantitative Ratings for companies whether or not it already provides analyst ratings and qualitative coverage. In some cases, the Quantitative Ratings may differ from the analyst ratings because a company's analyst-driven ratings can significantly differ from other companies in its peer group.

**i. Quantitative Fair Value Estimate:** Intended to represent Morningstar's estimate of the per share dollar amount that a company's equity is worth today. Morningstar calculates the Quantitative Fair Value Estimate using a statistical model derived from the Fair Value Estimate Morningstar's equity analysts assign to companies. For information about Fair Value Estimate Morningstar's equity analysts assign to companies, please go to:

<http://global.morningstar.com/equitydisclosures>

**ii. Quantitative Economic Moat:** Intended to describe the strength of a firm's competitive position. It is calculated using an algorithm designed to predict the Economic Moat rating a Morningstar analyst would assign to the stock. The rating is expressed as Narrow, Wide, or None.

Narrow	assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 70% but less than 99%.
Wide	assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 99%.
None	assigned when the probability of an analyst receiving a "Wide Moat" rating by an analyst is less than 70%.

**iii. Quantitative Star Rating:** Intended to be the summary rating based on the combination of our Quantitative Fair Value Estimate, current market price, and the Quantitative Uncertainty Rating. The rating is expressed as One-Star, Two-Star, Three-Star, Four-Star, and Five-Star.

Five-Stars	★★★★★	the stock is undervalued with a reasonable margin of safety. $\text{Log}(\text{Quant FVE}/\text{Price}) > 1 * \text{Quantitative Uncertainty}$
Four-Stars	★★★★	the stock is somewhat undervalued. $\text{Log}(\text{Quant FVE}/\text{Price})$ between $(0.5 * \text{Quantitative Uncertainty}, 1 * \text{Quantitative Uncertainty})$
Three-Stars	★★★	the stock is approximately fairly valued. $\text{Log}(\text{Quant FVE}/\text{Price})$ between $(-0.5 * \text{Quantitative Uncertainty}, 0.5 * \text{Quantitative Uncertainty})$
Two-Stars	★★	the stock is somewhat overvalued. $\text{Log}(\text{Quant FVE}/\text{Price})$ between $(-1 * \text{Quantitative Uncertainty}, -0.5 * \text{Quantitative Uncertainty})$
One-Star	★	the stock is overvalued with a reasonable margin of safety. $\text{Log}(\text{Quant FVE}/\text{Price}) < -1 * \text{Quantitative Uncertainty}$

**iv. Quantitative Uncertainty:** Intended to represent Morningstar's level of uncertainty about the accuracy of the Quantitative Fair Value Estimate. Generally, the lower the Quantitative Uncertainty, the narrower the potential range of outcomes for that particular company. The rating is expressed as Low, Medium, High, Very High, and Extreme.

Low	the interquartile range for possible fair values is less than 10%
Medium	the interquartile range for possible fair values is less than 15% but greater than 10%
High	the interquartile range for possible fair values is less than 35% but greater than 15%
Very High	the interquartile range for possible fair values is less than 80% but greater than 35%
Extreme	the interquartile range for possible fair values is greater than 80%

**v. Quantitative Financial Health:** Intended to reflect the probability that a firm will face financial distress in the near future. The calculation uses a predictive model designed to anticipate when a company may default on its financial obligations. The rating is expressed as Weak, Moderate, and Strong.

Weak	assigned when Quantitative Financial Health < 0.2
Moderate	assigned when Quantitative Financial Health is between 0.2 and 0.7
Strong	assigned when Quantitative Financial Health > 0.7

### Other Definitions

- i. Last Price:** Price of the stock as of the close of the market of the last trading day before date of the report.
- ii. Quantitative Valuation:** Using the below terms, intended to denote the relationship between the security's Last Price and Morningstar's quantitative fair value estimate for that security.

Undervalued	Last Price is below Morningstar's quantitative fair value estimate.
Fairly Valued	Last Price is in line with Morningstar's quantitative fair value estimate.
Overvalued	Last Price is above Morningstar's quantitative fair value estimate.

This Report has not been made available to the issuer of the security prior to publication.

### Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. The quantitative equity ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative equity ratings. In addition, there is the risk that the price target will not be met due to such things as unforeseen changes in demand for the company's products, changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative equity ratings can mean that the valuation is subsequently no longer accurate. For more information about Morningstar's quantitative methodology, please visit:

[www.corporate.morningstar.com](http://www.corporate.morningstar.com)

### Morningstar General Disclosure For Quantitative Report

The Quantitative Equity Report ("Report") is derived from data, statistics and information within Morningstar, Inc.'s database as of the date of the Report and is subject to change without notice. The Report is for informational purposes only, intended for financial professionals and/or their clients ("Users") and should not be the sole piece of information used by such Users or their clients in making an investment decision. While Morningstar has obtained data, statistics and information from sources it believes to be reliable, Morningstar does not perform an audit or seeks independent verification of any of the data, statistics, and information it receives. The quantitative equity ratings noted the Report are provided in good faith, are as of the date of the Report and are subject to change. While Morningstar has obtained data, statistics and information from sources it believes to be reliable, Morningstar does not perform an audit or seeks independent verification of any of the data, statistics, and information it receives. The quantitative equity ratings are not a market call, and do not replace the User or User's clients from conducting their own due-diligence on the security. The quantitative equity rating is not a suitability assessment; such assessments take into account may factors including a person's investment objective, personal and financial situation, and risk tolerance all of which are factors the quantitative equity rating statistical model does not and did not consider. Prices noted with the Report are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated. Unless otherwise provided in a separate agreement, recipients accessing this report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Inc., a U.S.A. domiciled financial institution.

This report was created with no regard to investment objectives, financial situation or particular needs of any specific User or User's clients. Therefore, investments discussed and recommendations made herein may not be suitable for all investors: recipients of this report must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data and statistics presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, Morningstar makes no representation that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, Morningstar and its officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data,

analyses or opinions within the report. Morningstar encourages recipients of this report to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar or its affiliates to any registration or licensing requirements in such jurisdiction.

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, or Morningstar affiliates guarantee the accuracy of the translations.

This report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst or Morningstar. In Territories where a Distributor distributes our report, the Distributor, and not the analyst or Morningstar, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

### Morningstar Conflicts of Interest for Quantitative Equity Report:

Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click:

<http://msi.morningstar.com>

<http://mdi.morningstar.com>

The Head of Quantitative Research compensation is derived from Morningstar's overall earnings and consists of salary, bonus and restricted stock units of Morningstar, Inc.

Morningstar does not receive commissions for providing research and does not charge companies to be rated.

Morningstar is not a market maker or a liquidity provider of the security noted within this report.

Morningstar has not been a lead manager or co-lead manager over the previous 12-months of any publicly disclosed offer of financial instruments of the issuer.

Morningstar affiliates (i.e., its investment management group) have arrangements with financial institutions to provide portfolio management/investment advice some of which an analyst may issue investment research reports on. However, the Head of Quantitative Research does not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.

Morningstar, Inc. is a publically traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section:

<https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx>

Morningstar may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

Further information on Morningstar's conflict of interest policies is available from

<http://global.morningstar.com/equitydisclosures>

Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

### Quantitative investment rating allocation as of 04/03/2021

★★★★★	5 Stars	3.6%	★★★★	4 Stars	21.8%	★★★	3 Stars	43.0%
★★	2 Stars	23.2%	★	1 Star	8.4%			

Morningstar has not in the past and will not in the future provide any investment banking services to one of their covered issuers. As a result, no investment banking services have been provided over the last 12 months for the covered issuer in this report or any issuer in the comparable category.

### Morningstar methodology

Please refer to the following link for more information on the Morningstar research methodology:

<http://global.morningstar.com/equitydisclosures>

### Morningstar recommendation history

Please refer to the following link for more information on the Morningstar recommendation history:

<http://www.juliusbaer.com/recommendation-history>

## JULIUS BAER LEGAL INFORMATION

This publication constitutes investment research and has been produced by Bank Julius Baer & Co. Ltd., Singapore branch, which is regulated by the Monetary Authority of Singapore, save in respect of analyses and recommendations expressly identified in this report as being made by an independent third party from Bank Julius Baer & Co. Ltd., Singapore branch. This publication series is issued regularly. Information on financial instruments and issuers will be updated irregularly or in response to important events.

## IMPRINT

### Authors

**Jen-Ai Chua, Equities Research Asia**, jenai.chua@juliusbaer.com <sup>1</sup>

**Mark Matthews, Head of Research Asia**, mark.matthews@juliusbaer.com <sup>1</sup>

<sup>1</sup> This research analyst is employed by Bank Julius Baer & Co. Ltd., Singapore branch, which is regulated by the Monetary Authority of Singapore.

## APPENDIX

### Analyst certification

The analysts hereby certify that views about the companies discussed in this report accurately reflect their personal view about the companies and securities. They further certify that no part of their compensation was, is, or will be directly or indirectly linked to the specific recommendations or views in this report.

### Methodology

Please refer to the following link for more information on the research methodology used by Julius Baer analysts:

[www.juliusbaer.com/research-methodology](http://www.juliusbaer.com/research-methodology)

### Structure

References in this publication to Julius Baer include subsidiaries and affiliates. For additional information on our structure, please refer to the following link:

[www.juliusbaer.com/structure](http://www.juliusbaer.com/structure)

### Price information

Unless otherwise stated, the price information reflects the closing price of the previous trading day.

### Disclosures

**Morningstar:** For equity research Julius Baer partnered with Morningstar, a provider of global independent investment research. For Morningstar analyses and recommendations expressly identified in this publication, Julius Baer acts solely as distributor of such research content.

## Frequently used abbreviations

adj.	adjusted	bps	basis points	c.c.	constant currencies
capex	capital expenditure	consensus	average analyst expectation	DM	developed market(s)
E	estimate	ECB	European Central Bank	EM	emerging market(s)
Fed	US Federal Reserve	FX	foreign exchange	FY	Fiscal year
GDP	gross domestic product	H1; H2	first/second half of the year	ISM	Institute for Supply Management
l.h.s.	left-hand scale	m/m	month-on-month	market cap.	market capitalisation
p.a.	per annum	PMI	purchasing managers' index	PPP	purchasing power parity
Ppt	percentage point(s)	q/q	quarter-on-quarter	Q1; Q2	first/second/third/fourth quarter
REIT	real estate investment trust	r.h.s.	right-hand scale	WTI	West Texas Intermediate
y/y	year-on-year	YTD	year-to-date		

## Equity research

### Frequently used abbreviations

CAGR	Compound annual growth rate	DCF	Discounted cash flow	EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortisation	EPS	Earnings per share	EV	Enterprise value
FCF	Free cash flow	MV	Market value	PEG	P/E divided by year-on-year EPS growth
P/B	Price-to-book value	P/E	Price-to-earnings ratio	P/TBV	Price-to-tangible book value
ROE	Return on equity	ROI	Return on investment	ROIC	Return on invested capital
RoTE	Return on tangible equity				

### Equity rating allocation as of 04/03/2021

Buy	47.9%	Hold	50.3%	Reduce	1.8%
-----	-------	------	-------	--------	------

### Equity recommendation history

Please refer to the following link for more information on the current and 12-month historical investment recommendations made in relation to equities covered by Julius Baer Research.

[www.juliusbaer.com/recommendation-history](http://www.juliusbaer.com/recommendation-history)

### Rating system

Buy	Expected to outperform the regional industry group by at least 5% in the coming 9-12 months, unless otherwise stated.
Hold	Expected to perform in line ( $\pm 5\%$ ) with the regional industry group in the coming 9-12 months, unless otherwise stated.
Reduce	Expected to underperform the regional industry group by at least 5% in the coming 9-12 months, unless otherwise stated.

### Frequency of equity rating updates

An update on Buy-rated equities will be provided on a quarterly basis. An update for Hold and Reduce-rated equities will be provided semi-annually or on an ad-hoc basis.

### Risk rating system

The risk rating (High/Medium/Low) is a measure of a stock's expected volatility and risk of losses in case of negative news flow. This non-quantitative rating is based on criteria such as historical volatility, industry, earnings risk, valuation and balance sheet strength.

### MSCI ESG Rating

MSCI ESG Research provides in-depth research, ratings and analyses to support companies' and government's efforts in terms of environmental, social and corporate governance (ESG). **MSCI ESG Research Intangible Value Assessment (IVA) Rating** (MSCI ESG Rating) provides ratings of companies' investment risk and opportunities which are not generally detected by traditional research methods. There are three steps to the method: 1) identification of key issues for each sector 2) evaluation of risks and how they are handled within the company 3) drawing up ratings to qualify the ESG risks not identified. The MSCI ESG Rating is expressed on a seven-point scale and they range from CCC (worst) to AAA (best).

## Equity strategy research

Countries, sectors and investment styles are rated 'Overweight', 'Neutral' or 'Underweight'. These ratings are based on our expectations for relative performance versus regional and global benchmark indices.

Overweight	Expected to outperform regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.
Neutral	Expected to perform in line with regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.
Underweight	Expected to underperform regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.

Equity investments are divided into three different risk segments. Risk here is defined as the historical five-year volatility based on monthly returns in CHF. Based on the data of all segments considered (developed markets, emerging markets, global sectors, investment styles) the following distinction is made:

Conservative	Investments whose historical volatility is in the bottom quartile of the universe described above.
--------------	--



---

Medium	Investments whose historical volatility is in the middle two quartiles of the universe described above.
Opportunistic	Investments whose historical volatility is in the top quartile of the universe described above.

---

## DISCLAIMER

### General

The information and opinions expressed in this publication were produced as of the date of writing and are subject to change without notice. This publication is intended for information purposes only and does not constitute an offer or an invitation by, or on behalf of, Julius Baer to buy or sell any securities, securities-based derivatives or other products or to participate in any trading strategy in any jurisdiction. Opinions and comments of the authors reflect their current views, but not necessarily of other Julius Baer entities or any other third party. Other Julius Baer entities may have issued, and may in the future issue, other publications that are inconsistent with, and reach different conclusions from, the information presented in this publication. Julius Baer assumes no obligation to ensure that such other publications are brought to the attention of any recipient of this publication.

### Suitability

Investments in the asset classes mentioned in this publication may not be suitable for all recipients. This publication has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Before entering into any transaction, investors should consider the suitability of the transaction to individual circumstances and objectives. Any investment or trading or other decision should only be made by the client after a thorough reading of the relevant product term sheet, subscription agreement, information memorandum, prospectus or other offering document relating to the issue of the securities or other financial instruments. This publication should not be read in isolation without reference to the full research report (if available) which may be provided upon request. Nothing in this publication constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to individual circumstances, or otherwise constitutes a personal recommendation to any specific investor. Any references to a particular tax treatment depend on the individual circumstances of each investor and may be subject to change in the future. Julius Baer recommends that investors independently assess, with a professional advisor, the specific financial risks as well as legal, regulatory, credit, tax and accounting consequences.

### Information / forecasts referred to

Although the information and data herein are obtained from sources believed to be reliable, no representation is made that the information is accurate or complete. In particular, the information provided in this publication may not cover all material information on the financial instruments or issuers of such instruments. Bank Julius Baer & Co. Ltd., its subsidiaries and affiliated companies do not accept liability for any loss arising from the use of this publication. Important sources for the production of this publication are e.g. national and international media, information services (e.g. Thomson Reuters, Bloomberg Finance L.P.), publicly available databases, economic journals and newspapers (e.g. Financial Times, Wall Street Journal), publicly available company information, publications of rating agencies. Ratings and appraisals contained in this publication are clearly marked as such. All information and data used for this publication relate to past or present circumstances and may change at any time without prior notice. Statements contained in this publication regarding financial instruments or issuers of financial instruments relate to the time of the production of this publication. Such statements are based on a multitude of factors which are subject to continuous change. A statement contained in this publication may, thus, become inaccurate without this being published. Potential risk regarding statements and expectations expressed in this publication may result from issuer specific and general (e.g. political, economic, market, etc.) developments.

### Risk

The price and value of, and income from investments in any asset class mentioned in this publication may fall as well as rise and investors may not get back the amount invested. Risks involved in any asset class mentioned in this publication may include but are not necessarily limited to market risks, credit risks, currency risks, political risks and economic risks. Investments in emerging markets are speculative and may be considerably more volatile than investments in established markets. **Past performance is not a reliable indicator of future results. Performance forecasts are not a reliable indicator of future performance. The Julius Baer fixed-income ratings apply exclusively to bonds of the specific issuer ranked senior unsecured or higher. They are therefore not valid for debentures junior to the mentioned ranking unless mentioned explicitly.** Particular risks in connection with specific investments featured in this publication are disclosed prominently hereinabove in the text of this publication. Any investment should only be made after a thorough reading of the current prospectuses and/or other documentation/information available.

Shares, bank debt securities (e.g. interest bearing bank bonds and certificates) as well as other claims against financial institutions are subject to special regulations such as the 'Bank Recovery and Resolution Directive' and the 'Single Resolution Mechanism Regulation'. These regulations can have a negative effect for the investor / contractual partner of the financial institution in case of a default and the necessity of a resolution of the financial institution. For further details, please refer to:

[www.juliusbaer.com/legal-information-en](http://www.juliusbaer.com/legal-information-en)

### Conflicts of interest

We are required to disclose important information about our interests and potential conflicts. In order to prevent conflicts of interest from adversely affecting the interests of its clients, Julius Baer has implemented the necessary organisational and administrative arrangements to manage conflicts of interests. Julius Baer's arrangements include putting in place information barriers that ensure the separation of its research departments from other areas of the business so that no other area of the business will know the contents of any planned research until the research has been distributed to clients. Adherence to these procedures is monitored by the Julius Baer Compliance Department. Unless explicitly stated in this publication, its information and analysis has not been disclosed to the issuer of the securities referred to herein or a Julius Baer entity before the publication has been published or disseminated.

A Julius Baer entity may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of the

securities referred to herein, perform services or solicit business from such issuers, have a position or effect transactions in the securities or options thereof, have any other significant financial interest regarding the issuers of the securities referred to herein and/or may have done so in the past. For further information about our interest in the investments featured in this publication, see the company-specific disclosures above.

## Important distribution information

This publication and any market data contained therein shall only be for the personal use of the intended recipient and shall not be redistributed to any third party, unless Julius Baer or the source of the relevant market data gives their approval. This publication is not directed to any person in any jurisdiction where (on the grounds of that person's nationality, residence or otherwise) such publications are prohibited.

**External Asset Managers (EAM)/External Financial Advisors (EFA):** In case this document is provided to EAM/EFA, Julius Baer expressly prohibits its redistribution or any other way of making it available to clients and/or third parties. The document is of a purely abstract and general nature and is not intended for, nor directed at, client portfolios in general or clients domiciled in the European Economic Area in particular. By receiving any document, the EAM/EFA confirms that they will make their own independent analysis and investment decisions, where applicable.

**Austria:** Julius Baer Investment Advisory GesmbH, authorised and regulated by the Austrian Financial Market Authority (FMA), distributes research to its clients.

**Chile:** This publication is for the intended recipient only. Financial instruments mentioned in this publication are neither registered with nor under the supervision of the Registro de Valores Extranjeros (Foreign Securities Registry) maintained by the Superintendencia de Valores y Seguros de Chile (Chilean Securities and Insurance Commission or 'SVS'). If such securities are offered within Chile, they will be offered and sold only pursuant to General Rule 336 of the SVS (an exemption to the registration requirements in the Foreign Securities Registry), or in circumstances which do not constitute a public offering of securities in Chile within the meaning of Article 4 of the Chilean Securities Market Law, Law No. 18,045.

**Dubai International Financial Centre (DIFC):** This publication has been provided by Julius Baer (Middle East) Ltd. and does not constitute or form part of any offer to issue or sell, or any solicitation to subscribe for or purchase any securities or investment products in the UAE (including the Dubai International Financial Centre) and should not be construed as such. Furthermore, this publication is being made available on the basis that the recipient acknowledges and understands that the entities and securities to which it may relate have not been approved, licensed by or registered with the UAE Central Bank, the UAE Securities and Commodities Authority or the Dubai Financial Services Authority or any other relevant licensing authority or governmental agency in the UAE. It may not be relied upon by or distributed to retail clients. Please note that Julius Baer (Middle East) Ltd. offers financial products or services only to professional clients who have sufficient financial experience and understanding of financial markets, products or transactions and any associated risks. The products or services mentioned will be available only to professional clients in line with the definition of the Dubai Financial Services Authority (DFSA) Conduct of Business Module. Julius Baer (Middle East) Ltd. is duly licensed and regulated by the DFSA.

**Germany:** Bank Julius Bär Deutschland AG, authorised and regulated by the German Federal Financial Supervisory Authority (BaFin), distributes this publication to its clients. If you have any queries concerning this publication, please contact your relationship manager.

**Guernsey:** This publication is distributed by Bank Julius Baer & Co Ltd., Guernsey Branch, which is licensed in Guernsey to provide banking and investment services and is regulated by the Guernsey Financial Services Commission.

**Hong Kong Special Administrative Region of the People's Republic of China:** This publication has been distributed in Hong Kong by and on behalf of, and is attributable to Bank Julius Baer & Co. Ltd., Hong Kong Branch, which holds a full banking licence issued by the Hong Kong Monetary Authority under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong SAR). The Bank is also a registered institution under the Securities and Futures Ordinance (SFO) (Chapter 571 of the Laws of Hong Kong SAR) licensed to carry out Type 1 (dealing in securities), Type 4 (advising on securities) and Type 9 (asset management) regulated activities with Central Entity number AUR302. This publication must not be issued, circulated or distributed in Hong Kong other than to 'professional investors' as defined in the SFO. The contents of this publication have not been reviewed by the Securities and Futures Commission nor by any other regulatory authority. Any references to Hong Kong in this document/publication shall mean the Hong Kong Special Administrative Region of the People's Republic of China. If you have any queries concerning this publication, please contact your Hong Kong relationship manager. Bank Julius Baer & Co. Ltd. is incorporated in Switzerland with limited liability.

**India:** This is not a publication of Julius Baer Wealth Advisors (India) Private Limited (JBWA) (a group company of Julius Baer, Zurich) or any of its Indian subsidiaries under the SEBI Research Analyst Regulations, 2014. This publication has been produced by Bank Julius Baer & Co. Ltd. (Julius Baer), a company incorporated in Switzerland with limited liability and it does not have a banking license in India. This publication should not be construed in any manner as an offer, solicitation or recommendation by JBWA or any Julius Baer entity globally.

**Israel:** This publication is distributed by Julius Baer Financial Services (Israel) Ltd. (JBFS), licensed by the Israel Securities Authority to provide investment marketing and portfolio management services. Pursuant to Israeli law, 'Investment Marketing' is the provision of advice to clients concerning the merit of an investment, holding, purchase or sale of securities or financial instruments, when the provider of such advice has an affiliation to the security or financial instrument. Due to its affiliation to Bank Julius Baer & Co. Ltd., JBFS is considered to be affiliated to certain securities and financial instruments that may be connected to the services JBFS provides, and therefore any use of the term 'investment advice' or any variation thereof, in this publication should be understood as Investment Marketing, as explained above. This publication does not constitute investment advice and has been prepared by Bank Julius Baer & Co. Ltd. and distributed by JBFS for information purposes only, without taking into account the objectives, financial situation or needs

of any particular client, and does not constitute an offer, a recommendation or an invitation by or on behalf of JBFS to make any investment.

**Japan:** This publication shall only be distributed with appropriate disclaimers and formalities by a Julius Baer entity authorised to distribute such a publication in Japan.

**Kingdom of Bahrain:** Julius Baer (Bahrain) B.S.C.(c), an investment business firm, which is licensed and regulated by the Central Bank of Bahrain (CBB), distributes this publication to its expert and accredited investor clients. Please note that Julius Baer (Bahrain) B.S.C.(c) offers financial products or services only to expert and accredited investor clients in line with the definition of the CBB's rulebook that contains regulations, directives and rules pursuant to the CBB rulemaking powers under the CBB law. This publication may not be relied upon by or distributed to retail clients. The CBB does not take any responsibility for the accuracy of the statements and information contained in this publication nor shall it have any liability to any person for any damage or loss resulting from reliance on any statement or information contained herein.

**Lebanon:** This publication has been distributed by Julius Baer (Lebanon) S.A.L., which is an entity supervised by the Lebanon Capital Markets Authority (CMA). It has not been approved or licensed by the Lebanon CMA or any other relevant authority in Lebanon. It is strictly private and confidential and is being issued to a limited number of individual and institutional investors upon their request and must not be provided to, or relied upon, by any other person. The information contained herein is as of the date referenced and Julius Baer (Lebanon) S.A.L. shall not be liable to periodically update said information. The quotes and values provided herein are for indicative purpose only and shall in no way refer to tradable levels.

**Luxembourg:** This publication is distributed by Bank Julius Baer Europe S.A., a société anonyme incorporated and existing under the laws of the Grand Duchy of Luxembourg, with registered office at 25, rue Edward Steichen, L-2540 Luxembourg and registered with the Luxembourg Register of Commerce and Companies (RCSL) under number B 8495, authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF), 283, route d'Arlon, L-1150 Luxembourg. This publication has not been authorised or reviewed by the CSSF and it is not intended to be filed with the CSSF.

**Monaco:** Bank Julius Baer (Monaco) S.A.M., an institution approved by the Minister of State for Monaco and the Bank of France, distributes this publication to its clients. Julius Baer Wealth Management (Monaco) S.A.M., an asset management company authorised in Monaco, is distributing to its clients this publication.

**Republic of Ireland:** Bank Julius Baer Europe S.A. Ireland Branch is authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF), 283, route d'Arlon, L-1150 Luxembourg, and is regulated by the Central Bank of Ireland (CBI) for conduct of business rules. Bank Julius Baer Europe S.A. is a société anonyme incorporated and existing under the laws of the Grand Duchy of Luxembourg, with registered office at 25, rue Edward Steichen, L-2540 Luxembourg, registered with the Luxembourg Register of Commerce and Companies (RCSL) under number B 8495. Bank Julius Baer Europe S.A. Ireland Branch distributes this publication to its clients. Some of the services mentioned in this publication, which are available to clients of the Ireland branch, may be provided by members of the Julius Baer Group based outside of the Grand Duchy of Luxembourg or the Republic of Ireland. In these cases, rules made by the CSSF and the CBI for the protection of retail clients do not apply to such services, and the CSSF and the Irish Financial Services and Pensions Ombudsman will not be able to resolve complaints in respect of such services.

**Singapore:** This publication is distributed in Singapore by Bank Julius Baer & Co. Ltd., Singapore branch, and is available for accredited investors or institutional investors only. This publication does not constitute an 'advertisement' as defined under Sections 275 or 305 respectively of the Securities and Futures Act, Cap. 289 of Singapore (SFA). As Bank Julius Baer & Co. Ltd., Singapore branch, has a 'Unit' exemption under Section 100(2) of the Financial Advisers Act, Cap. 110 of Singapore (FAA), it is exempted from many of the requirements of the FAA, amongst others, the requirement to disclose any interest in, or any interest in the acquisition or disposal of, any securities or financial instruments that may be referred to in this publication. Further details of these exemptions are available on request. This publication has not been reviewed by and is not endorsed by the Monetary Authority of Singapore (MAS). Any document or material relating to the offer or sale, or invitation for subscription or purchase, of securities or investment funds (i.e. collective investment schemes) may not be circulated or distributed, nor may such securities or investment funds be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 or 304 respectively of the SFA, (ii) to a relevant person (which includes an accredited investor), or any person pursuant to Section 275(1A) or 305(2) respectively, and in accordance with the conditions specified in Section 275 or 305 respectively of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. In particular, for investment funds that are not authorised or recognised by the MAS, units in such funds are not allowed to be offered to the retail public; any written material issued to persons as aforementioned in connection with an offer is not a prospectus as defined in the SFA and, accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply, and investors should consider carefully whether the investment is suitable for them. Please contact a representative of Bank Julius Baer & Co. Ltd., Singapore branch, with respect to any inquiries concerning this publication. Bank Julius Baer & Co. Ltd. (UEN - T07FC7005G) is incorporated in Switzerland with limited liability.

**South Africa:** This document is distributed by Julius Baer South Africa (Pty) Ltd, which is an authorised financial services provider (FSP no. 49273) approved by the Financial Sector Conduct Authority. Julius Baer is also licensed in South Africa as a representative office of a foreign bank.

**Spain:** Julius Baer Agencia de Valores, S.A.U. and Julius Baer Gestión S.G.I.I.C, S.A., both authorised and regulated by the Comisión Nacional del Mercado de Valores (CNMV), disseminate research to their clients.

**Switzerland:** This publication is distributed by Bank Julius Baer & Co. Ltd., Zurich, authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

**United Kingdom:** Julius Baer International Limited, which is authorised and regulated by the Financial Conduct Authority (FCA), distributes this publication to its clients and potential clients. Where communicated in the UK, this publication is a financial promotion that has been approved by Julius Baer International Limited for distribution in the UK. Some of the services mentioned in this publication may be provided by members of the Julius Baer Group outside the UK. Rules made by the FCA for the protection of retail clients do not apply to services provided by members of the Julius Baer Group outside the UK, and the Financial Services Compensation Scheme will not apply. Julius Baer International Limited does not provide legal or tax advice. If information on a particular tax treatment is provided, this does not mean that it applies to the client's individual circumstances, and it may be subject to

change in the future. Clients should obtain independent tax advice in relation to their individual circumstances from a tax advisor before deciding whether to invest. Julius Baer International Limited provides advice on a limited range of investment products (restricted advice).

**Uruguay:** In the case this publication is construed as an offer, recommendation or solicitation for the sale or purchase of any securities or other financial instruments, the same are being placed relying on a private placement exemption (“oferta privada”) pursuant to Section 2 of Law No°18,627 and are not and will not be registered with the Financial Services Superintendence of the Central Bank of Uruguay to be publicly offered in Uruguay. In the case of any closed-ended or private equity funds, the relevant securities are not investment funds regulated by Uruguayan Law No.°16,774 dated September 27, 1996, as amended. If you are located in Uruguay, you confirm that you fully understand the language in which this publication and all documents referred to herein are drafted and you have no need for any document whatsoever to be provided in Spanish or any other language.

**United States:** NEITHER THIS PUBLICATION NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON.

This publication may contain information obtained from third parties, including ratings from rating agencies such as Standard & Poor’s, Moody’s, Fitch and other similar rating agencies, and research from research providers such as MSCI ESG Research LLC or its affiliates. Issuers mentioned or included in any MSCI ESG Research LLC materials may be a client of or affiliated with a client of MSCI Inc. (MSCI) or another MSCI subsidiary. Reproduction and distribution of third-party content in any form is prohibited except with the prior written permission of the related third party. Third-party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings or research, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third-party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings or research. Credit and/or research ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the market value of securities or the suitability of securities for investment purposes and should not be relied on as investment advice.

© Julius Baer Group, 2021