

# DECADES OF DATA: EMERGING MARKETS

1987–2022



Stuart Brown

Investment Director  
Capital Markets Research

## Key Points

- Basing investment decisions on the extrapolation of capital markets returns from recent, relatively short periods is a common mistake. A core tenet of our research process is to “know the history,” which is the underlying theme of our Decades of Data publication.
- Emerging markets (EM) equities are more volatile than developed (DM) peers. This results in a wider returns distribution, greater drawdown severity, and more frequent bear markets.
- Still, EM stocks have outperformed DM since index inception in the late 1980s. This period has been characterized by several large relative performance cycles that last several years.
- Earnings growth and dividend reinvestment are the primary drivers of return in EM, whereas valuation multiple contraction since index inception has detracted.
- EMs are subject to higher rates of inflation than DMs, but the differential has stabilized in recent decades compared to the hyperinflationary rates seen in the 1990s.



CAMBRIDGE  
ASSOCIATES

## Executive Summary

- **The MSCI Emerging Markets Index geographic composition has shifted over time.** Today, the Asia region dominates the index with a nearly 80% weight versus less than 50% at the index's inception in the late 1980s. Latin America moved in the opposite direction, constituting 8% of the index today versus nearly 50% at inception. The largest countries in the Asia region—China (32%), India (14%), Taiwan (14%), and Korea (11%)—alone make up more than 70% of the broader index market capitalization. Just ten years ago, China represented only 18% of the index. Changes in index composition over time are a defining characteristic of EM as income levels rise, the corporate sector matures, and local stock exchanges open to international investors. A prime example is China, whose investable equity universe has been reshaped by the inclusion of domestically listed A-shares in benchmark indexes.
- **EM equities experience a wider range of returns than their DM peers.** This was true over one-, five-, ten-, and 20-year trailing periods relative to DM, in both nominal and real terms, over the past 35 years. As in DM, the range of investment results for EM stocks narrows as holding periods increase. While EM equities exhibited greater potential upside over all trailing periods, they actually displayed more muted downside potential over the longer-term ten- and 20-year periods. For investors that can stomach short-term volatility, EM allocations proved fruitful in the long run, outpacing inflation.
- **Higher volatility results in a wider calendar-year return distribution for EM relative to DM.** EM equities are more likely to deliver stellar results in any given year, having achieved 50%+ gains in six calendar years since 1988. However, negative performance occurs more frequently and with greater severity than in DM. EM declined for a second straight year in 2022, trailing DM counterparts for the fourth time in the past five years. EM and DM tend to move the same direction in any given calendar year (as was the case in 2022), with performance diverging between gains and losses in only eight of 35 years since 1988. In such years, EM typically declined while DM advanced. There has been only one calendar year across the available history when EM stocks gained and DM shares declined.

## Executive Summary (continued)

- **EM equity drawdowns are typically more severe than those in DM.** Overall rolling five-year periods since 1992, EM experienced a deeper maximum drawdown than DM counterparts 93% of the time, coming in more than 12 percentage points (ppts) worse than the equivalent DM measure, on average. The three EM financial crises during the 1990s (the Mexican peso crisis, Asian financial crisis, and Russian financial crisis) and the 2008–09 Global Financial Crisis (GFC) produced two severe EM equity drawdowns. The COVID-19 drawdown's magnitude was similar for EM and DM, with both segments declining roughly 34% peak-to-trough in USD terms in early 2020. Corrections, defined as a peak-to-trough sell-off of more than 10%, are common occurrences in any given five-year period for EM and DM alike.
- **Earnings growth is the primary contributor to EM equity total return over time.** The earnings growth contribution has exceeded dividend reinvestment by 1.7x since the mid-1990s. On the other hand, valuation multiple rerating has detracted from performance overall, as the price-earnings (P/E) multiple today is lower than the mid-1990s levels. Higher dividend yields in EM translated to a higher dividend reinvestment return contribution relative to DM. But, despite the generally better growth prospects in EM (and thus the expectation of higher earnings growth), the contribution to return from earnings growth in EM lagged that of DM over the common period analyzed.
- **EM equities have outperformed DM counterparts since inception, but relative performance cycles span multiple years and are characterized by a high degree of performance reversion.** EM stocks outperformed DM equivalents by a cumulative 300% in two outperformance cycles since 1987, which lasted roughly seven and 12 years, respectively. The 2000s commodity boom boosted earnings per share in the heavily resource-exposed EM countries, helping drive outperformance versus DM. EM has experienced a sustained drawdown vis-à-vis DM since relative performance peaked in September 2010 following the GFC, underperforming by more than 7% annualized over that time. The current period has not been as severe as the cycle ended in early 1999, which saw EM lag DM counterparts by 73% cumulative (26% annualized) in just over four years.

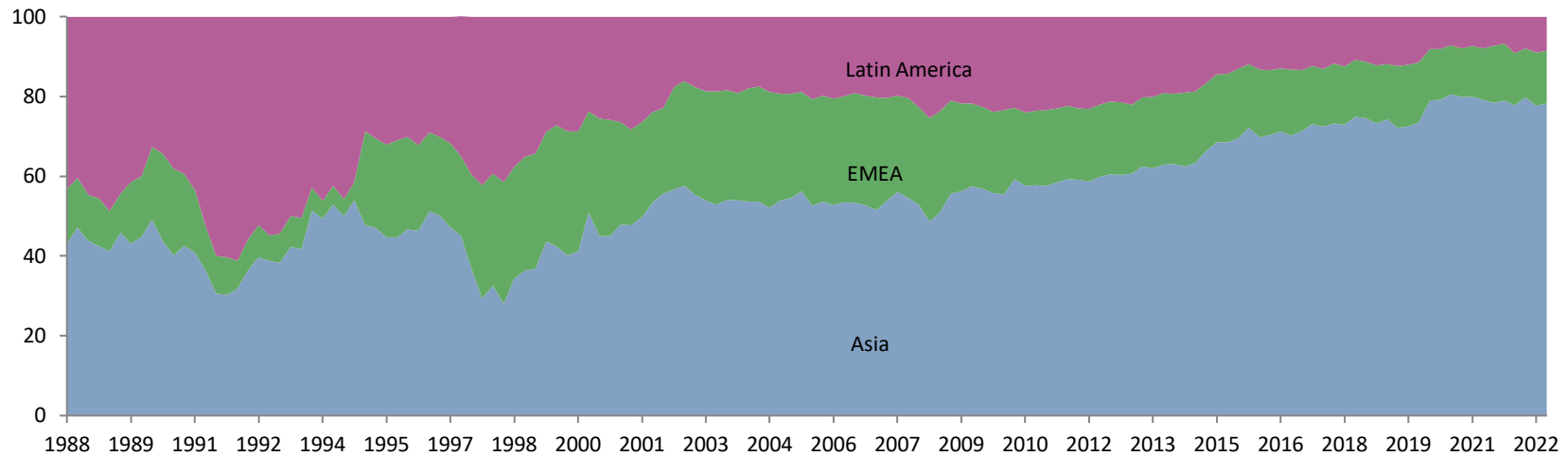
## Executive Summary (continued)

- **Starting normalized valuations are a useful guide in setting longer-term return expectations.** For EM, initial valuations—such as our cyclically adjusted price-to-cash earnings ratio—exhibit a decent relationship with subsequent ten-year returns, with an R2 value of 0.46. However, the relationship weakens over shorter time horizons, with an R2 of just 0.23 versus subsequent five-year return periods. It should be noted that all normalized P/E ratios in the top decile of historical observations occurred during the 2006–08 lead-up to the GFC; other starting valuation decile ranges show a wider subsequent returns distribution.
- **Bear markets occur more frequently for EM stocks than they do for DM peers.** Although the average bear market length and drawdown magnitude in EM and DM is roughly the same, the lifespan of bull markets in DM are about twice as long as those in EM, with roughly the same upside. EM stocks are currently mired in one of their longest bear market drawdowns on record, which started in February 2021, coinciding with China’s regulatory crackdown on the tech and real estate sectors. DM stocks didn’t enter bear market territory until nearly a year later when inflation and central bank tightening started to intensify. One common characteristic of bull markets across EM and DM is that they are, on average, longer in duration than their respective bear markets and tend to have a higher performance magnitude in absolute terms, consistent with the observation that equity markets trend upwards over time.
- **Inflation for EM economies runs hotter than DM counterparts, but the differential has stabilized in recent decades.** High inflation plagued EM economies in the late-1980s/early-1990s period, due largely to hyperinflation in Argentina and Brazil. From 1988–95, year-over-year inflation in EM exceeded that of the United States by more than 40 ppts, on average, according to an equal-weighted basket of countries within the MSCI Emerging Markets Index. Over the past 20 years, however, EM inflation was 2.5 ppts higher than the United States, on average. The inflation differential reached 4.0 ppts in 2022, which was the largest divergence since 2009, driven by surging inflation in Turkey. However, median EM inflation in 2022 was 7.2%, based on those countries in the equity index at year-end, compared to 6.5% for the United States.

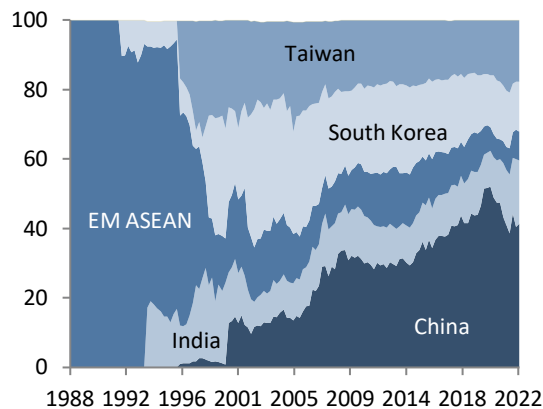
## Country composition of the EM index has shifted over time

### GEOGRAPHIC EXPOSURES OVER TIME

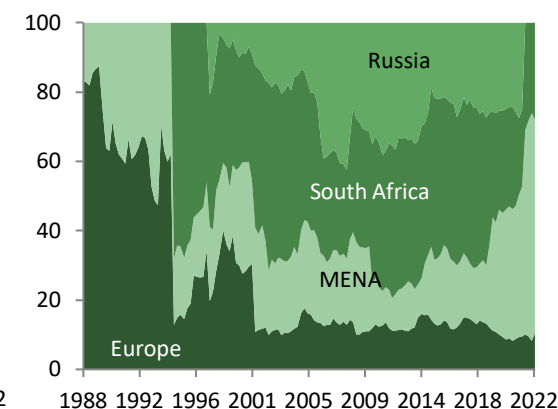
1988–2022 • Percent (%)



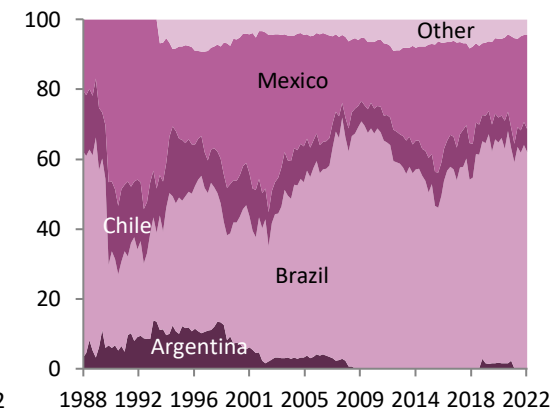
#### EM Asia



#### EM Europe, Middle East & Africa



#### EM Latin America

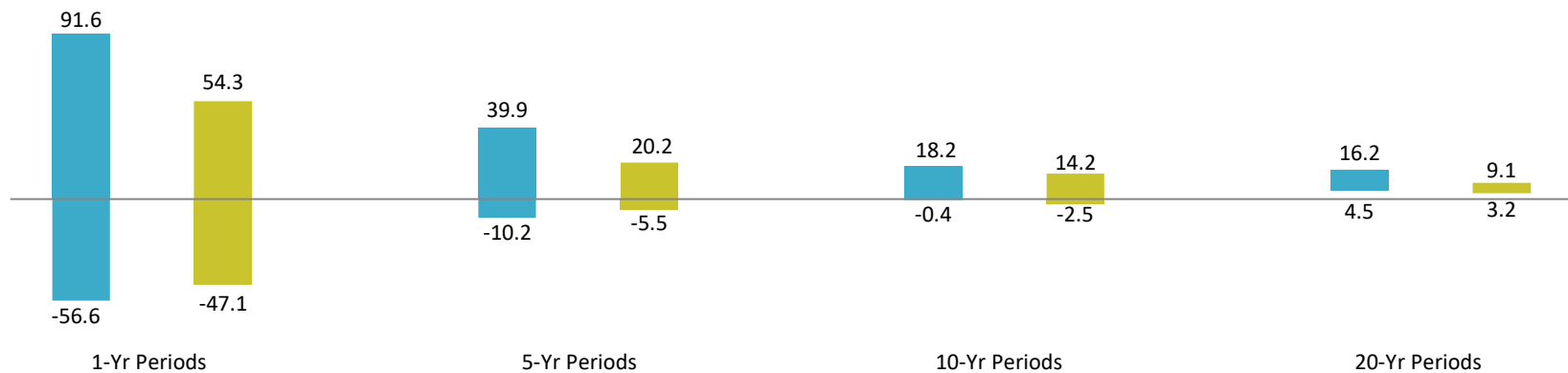


## Distribution of returns for EM is wider than developed peers across all horizons

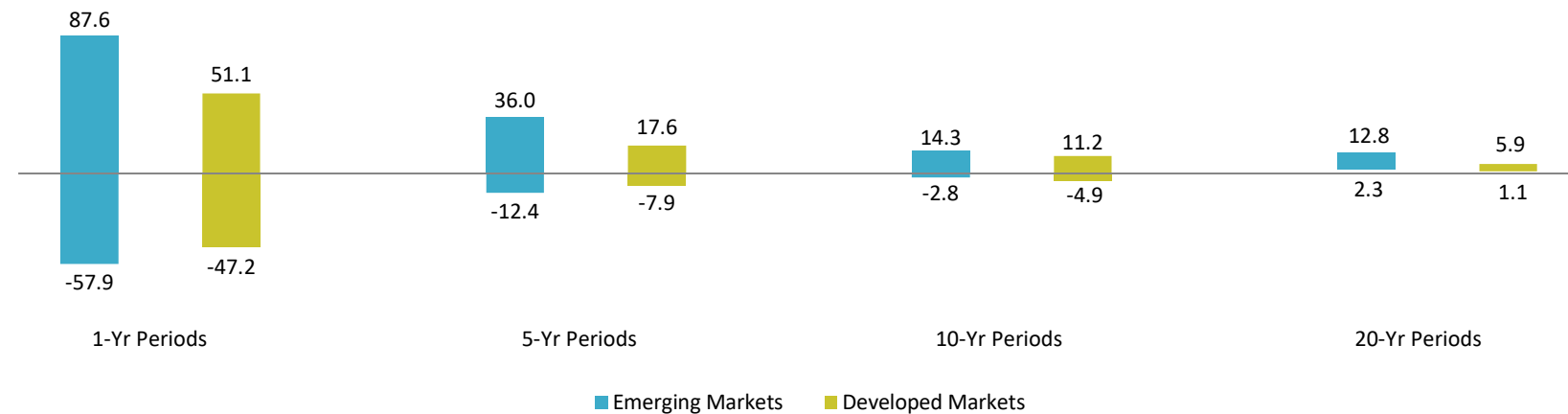
### RANGE OF EQUITY RETURNS FOR VARIOUS ROLLING MONTHLY TIME HORIZONS

1988–2022 • Average Annual Compound Return (%) • US Dollar

#### Nominal Returns



#### Real Returns

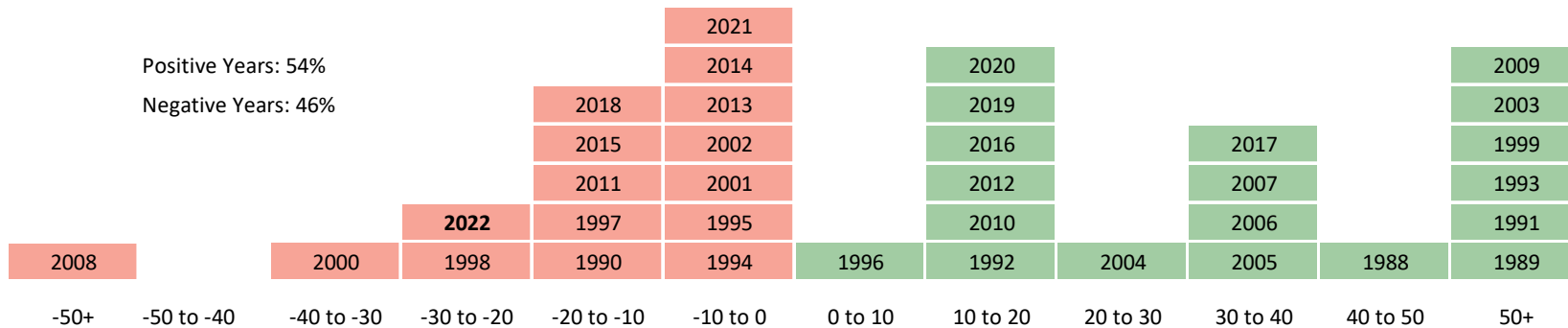


## Calendar year returns can be more extreme than in DM

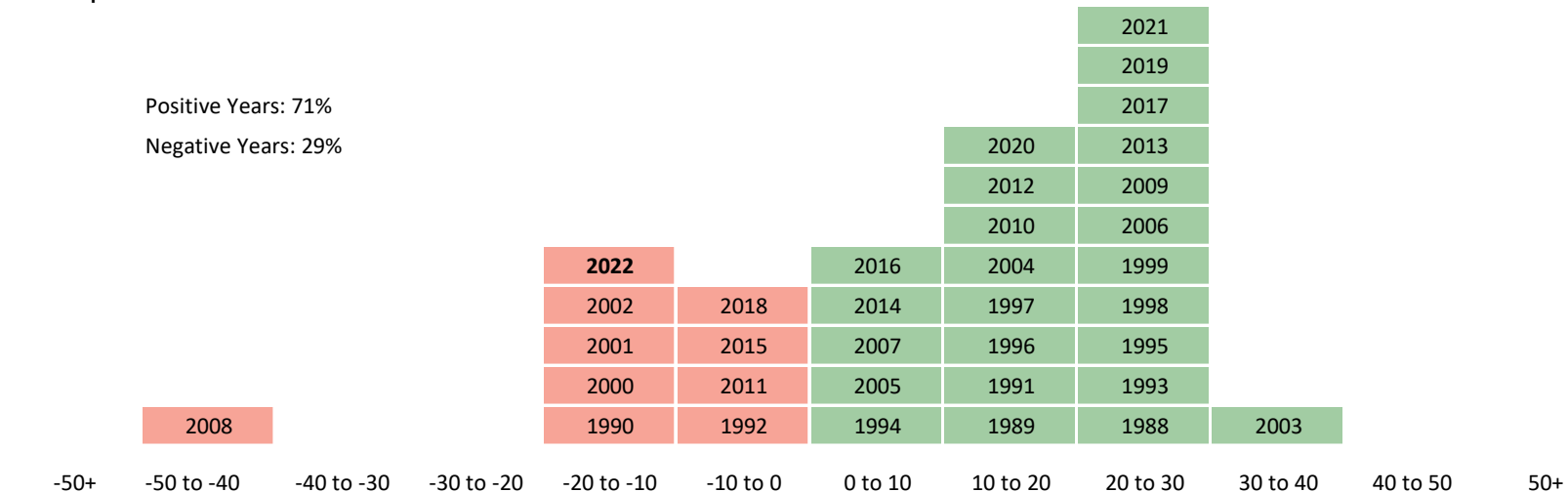
### DISTRIBUTION OF CALENDAR YEAR RETURNS

1988–2022 • US Dollar

#### Emerging Markets



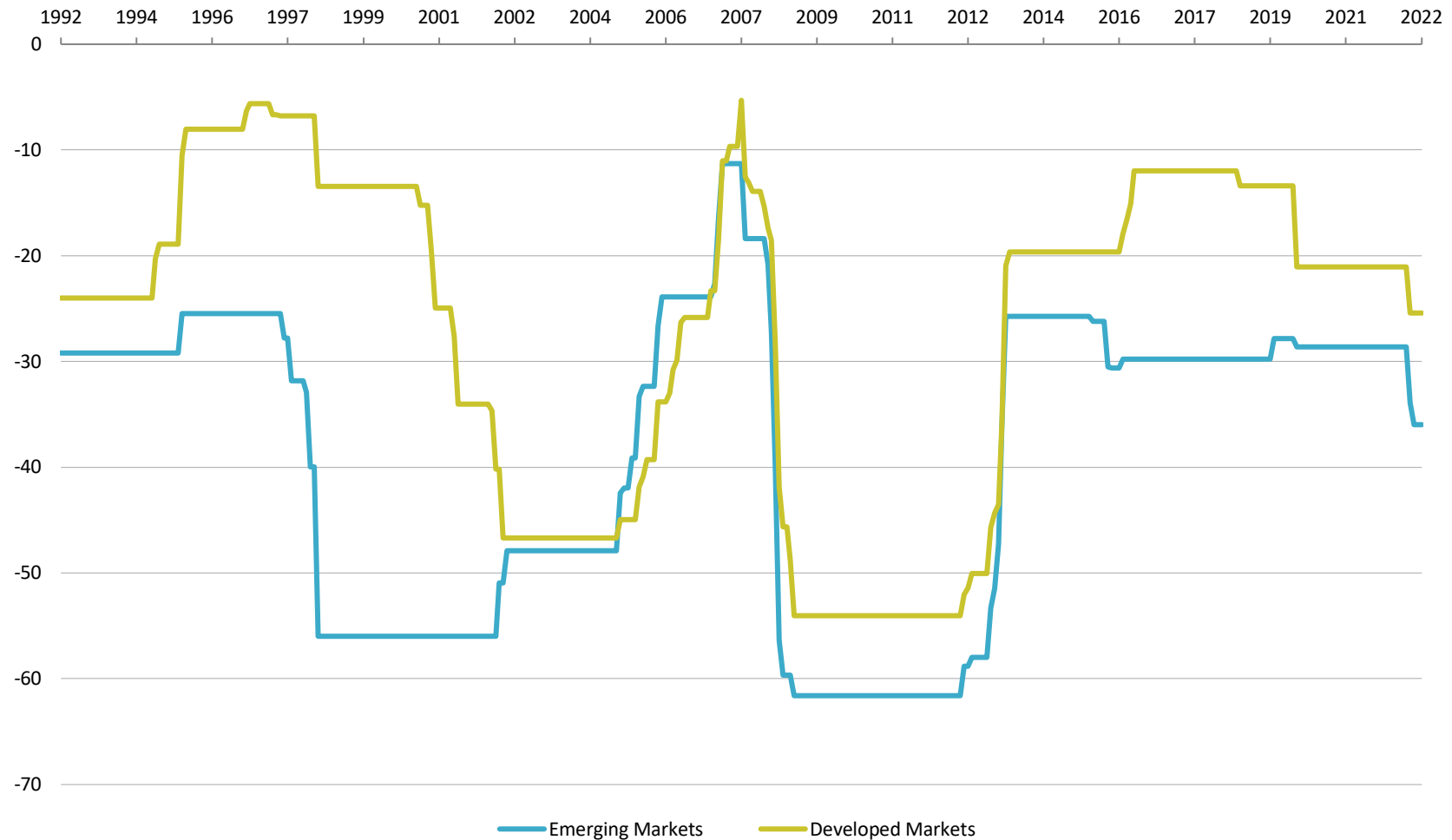
#### Developed Markets



## EM experience deeper drawdowns than DM

### ROLLING MONTHLY 5-YR MAXIMUM DRAWDOWN OF EQUITIES

1992–2022 • Percent (%) • US Dollar

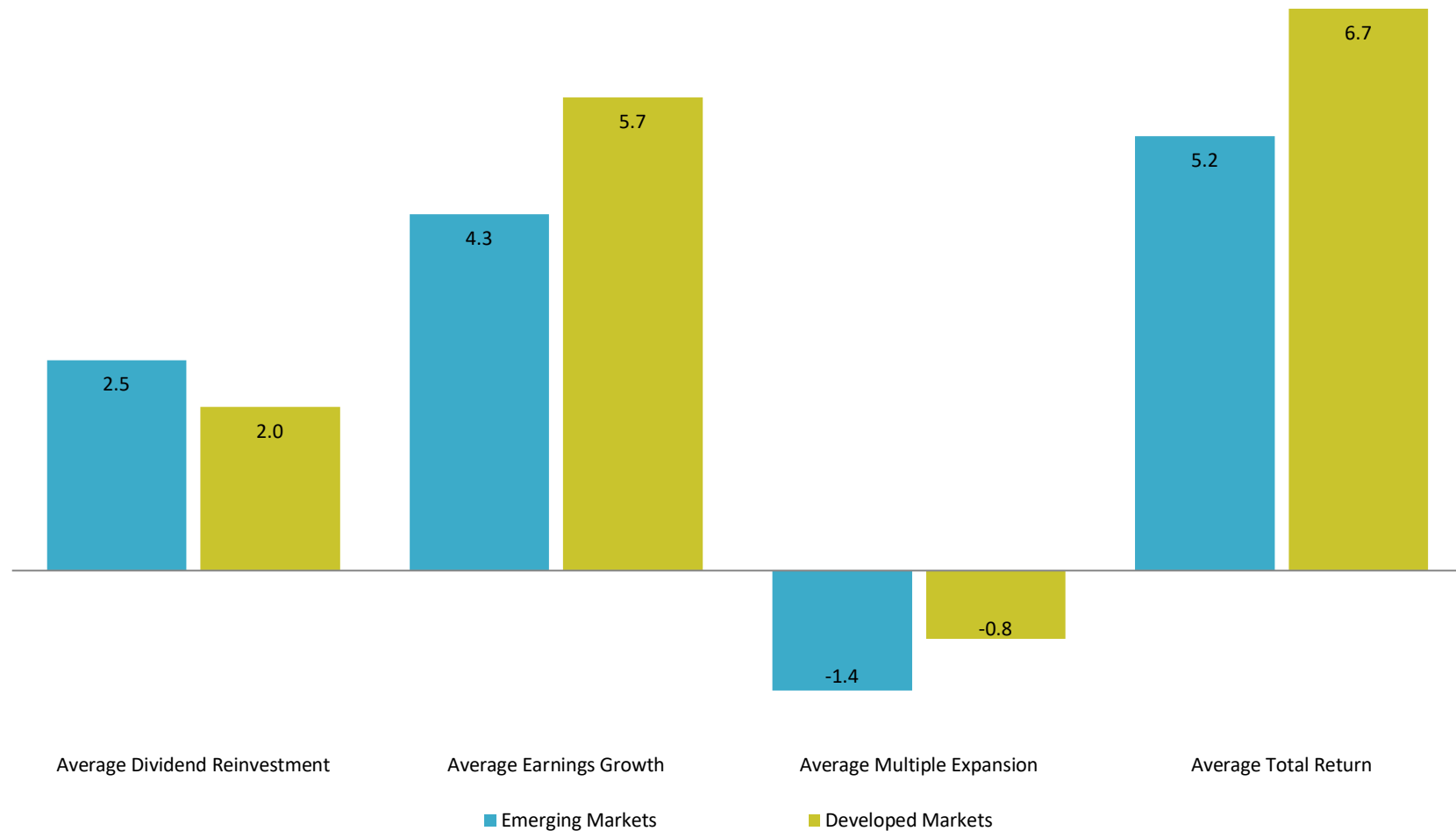




## Earnings growth and dividend reinvestment are the key drivers of EM equity returns

### BREAKDOWN OF TOTAL RETURN AACR OVER TIME

1996–2022 • Percent (%) • US Dollar



## EM equity returns cycle about the long-term average

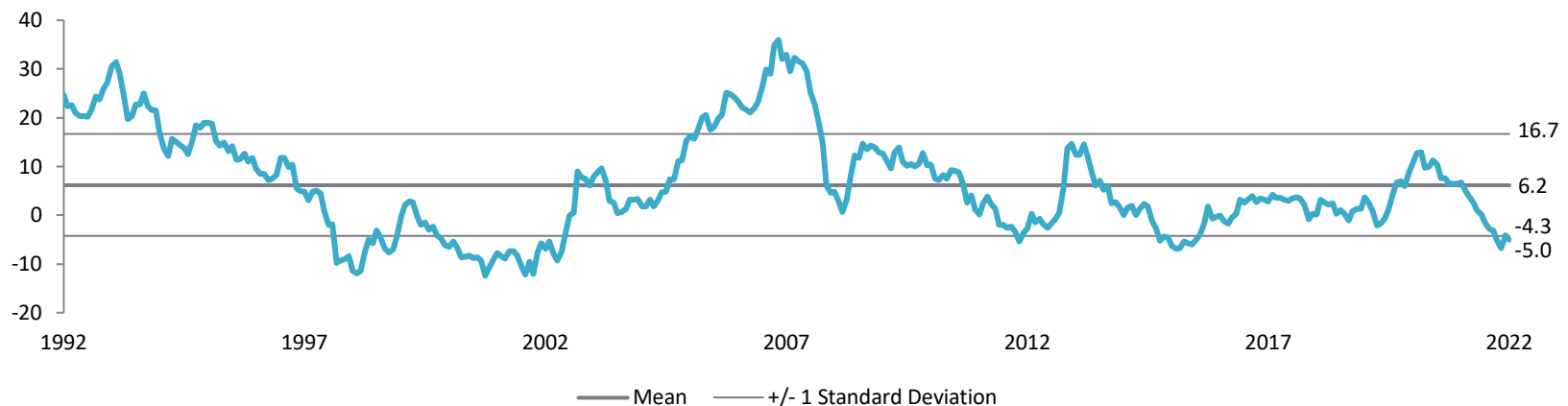
### ROLLING MONTHLY TOTAL RETURN 5-YR AACR

1992–2022 • Percent (%) • US Dollar

#### Nominal Returns



#### Real Returns



## Performance cycles relative to DM typically last for several years

### RELATIVE PERFORMANCE

December 31, 1987 – December 31, 2022 • December 31, 1987 = 1 • US Dollar

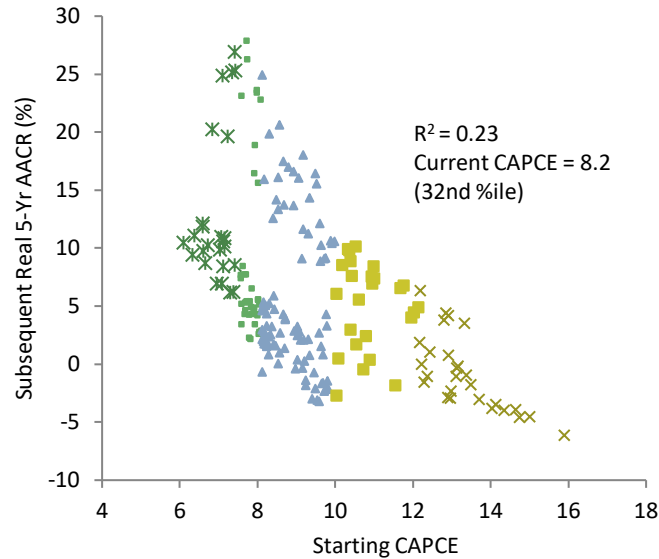


## Starting valuations are a useful guide in setting longer-term return expectations

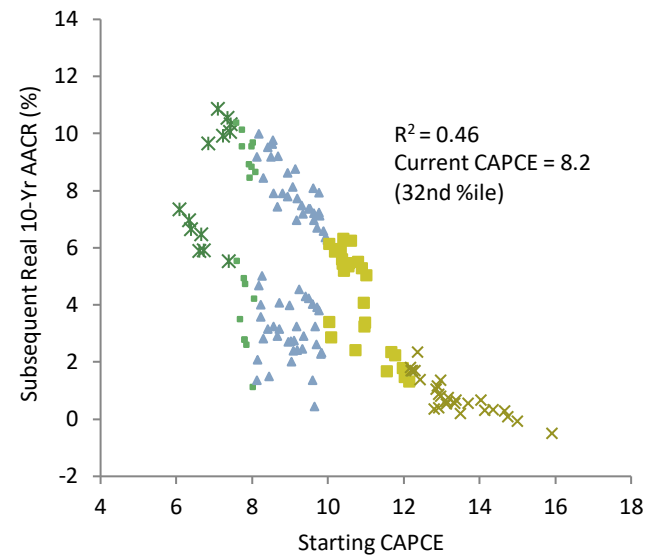
### RELATIONSHIP BETWEEN CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS RATIOS AND SUBSEQUENT REAL 5- AND 10-YR AACRS

August 31, 2000 – December 31, 2022 • Returns in Local Currency

Initial Valuation and Subsequent 5-Yr AACR



Initial Valuation and Subsequent 10-Yr AACR



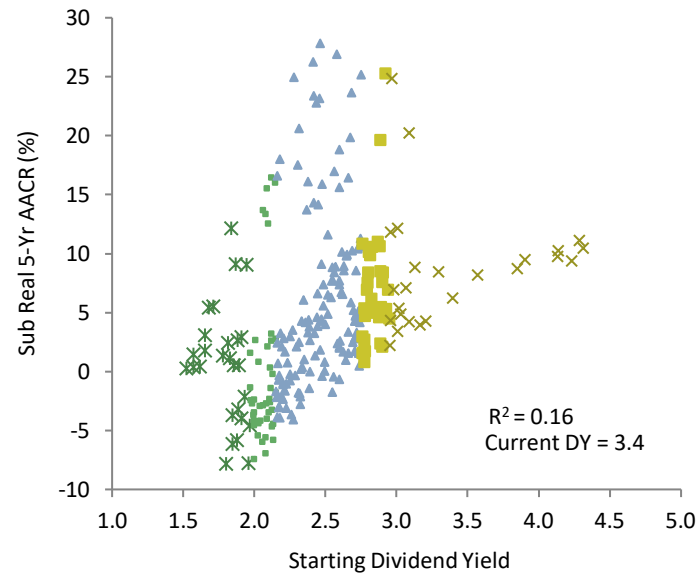
P/CE Ratio Percentile	Starting Cyclically Adjusted Price-to-Cash Earnings Ratio			Subsequent Real 5-Yr AACR (%)			Starting Cyclically Adjusted Price-to-Cash Earnings Ratio			Subsequent Real 10-Yr AACR (%)		
	Median	High	Low	Median	High	Low	Median	High	Low	Median	High	Low
0–10	7.1	7.4	6.1	10.5	26.9	6.2	6.8	7.4	6.1	7.3	10.8	5.5
10–25	7.8	8.1	7.6	5.3	27.8	2.1	7.8	8.1	7.6	7.0	10.4	1.1
25–75	8.9	10.0	8.1	3.2	25.0	-3.2	9.1	10.0	8.1	4.6	10.0	0.4
75–90	10.7	12.1	10.0	6.1	10.1	-2.7	10.7	12.1	10.0	5.0	6.3	1.3
90–100	13.1	15.9	12.2	-1.1	6.3	-6.2	13.1	15.9	12.2	0.7	2.3	-0.5
<b>Overall</b>	<b>8.7</b>	<b>15.9</b>	<b>6.1</b>	<b>4.6</b>	<b>27.8</b>	<b>-6.2</b>	<b>9.4</b>	<b>15.9</b>	<b>6.1</b>	<b>4.2</b>	<b>10.8</b>	<b>-0.5</b>

## Dividend yields exhibit a weak relationship with subsequent performance

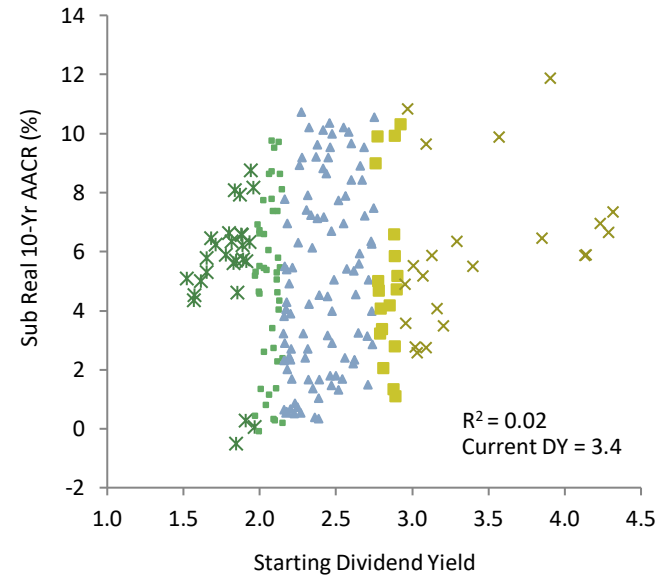
### RELATIONSHIP BETWEEN DIVIDEND YIELDS AND SUBSEQUENT REAL 5- AND 10-YR AACRS

September 30, 1995 – December 31, 2022 • Returns in Local Currency

Dividend Yield and Subsequent 5-Yr AACR



Dividend Yield and Subsequent 10-Yr AACR



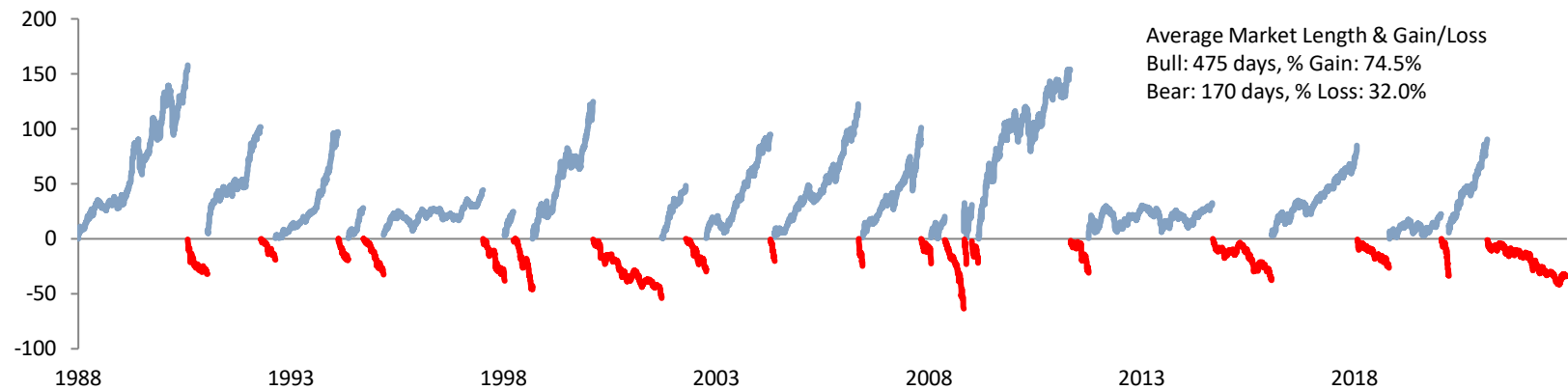
Dividend Yield Percentile	Starting Period Dividend Yield (%)			Subsequent Real 5-Yr AACR (%)			Begin Period Dividend Yield (%)			Subsequent Real 10-Yr AACR (%)		
	Median	High	Low	Median	High	Low	Median	High	Low	Median	High	Low
0-10	1.8	2.0	1.5	0.5	12.1	-7.8	1.8	2.0	1.5	5.8	8.7	-0.5
10-25	2.1	2.2	2.0	-2.7	16.4	-7.4	2.1	2.2	2.0	5.3	9.8	-0.1
25-75	2.5	2.8	2.2	3.8	27.8	-4.1	2.4	2.7	2.2	4.6	10.7	0.3
75-90	2.8	2.9	2.8	5.4	25.3	0.8	2.9	2.9	2.8	4.7	10.3	1.1
90-100	3.1	4.3	3.0	8.5	24.9	2.2	3.2	4.3	3.0	5.9	11.9	2.6
<b>Overall</b>	<b>2.4</b>	<b>4.3</b>	<b>1.5</b>	<b>3.3</b>	<b>27.8</b>	<b>-7.8</b>	<b>2.3</b>	<b>4.3</b>	<b>1.5</b>	<b>5.3</b>	<b>11.9</b>	<b>-0.5</b>

## Bull and bear market cycles turn more frequently in EM

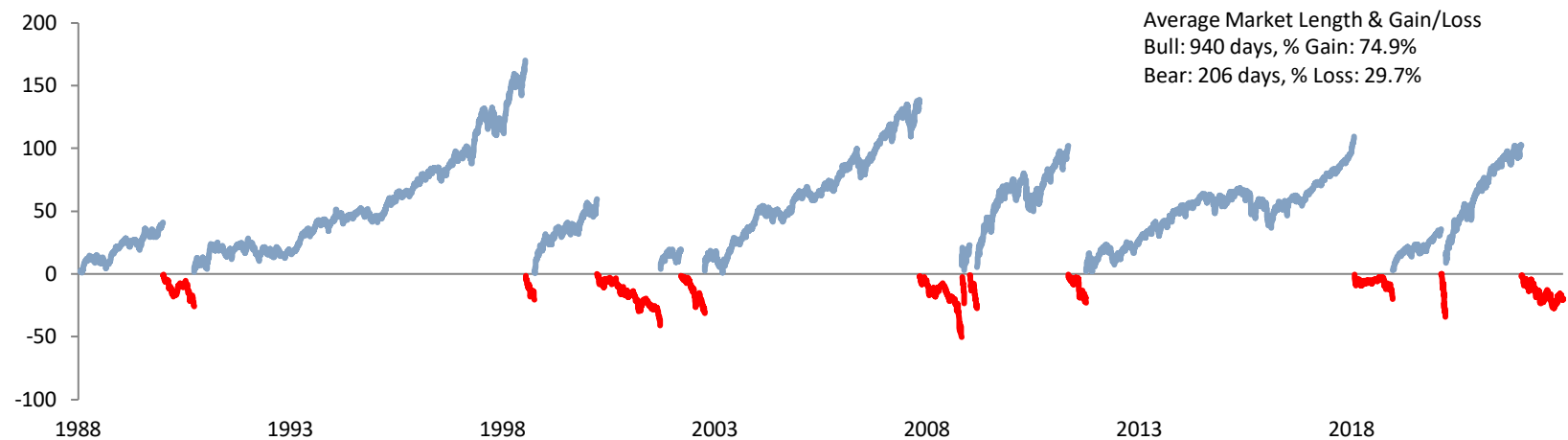
### HISTORICAL LENGTH OF BULL/BEAR MARKET CYCLES

January 1, 1988 – December 31, 2022 • US Dollar • Percent (%)

#### Emerging Markets



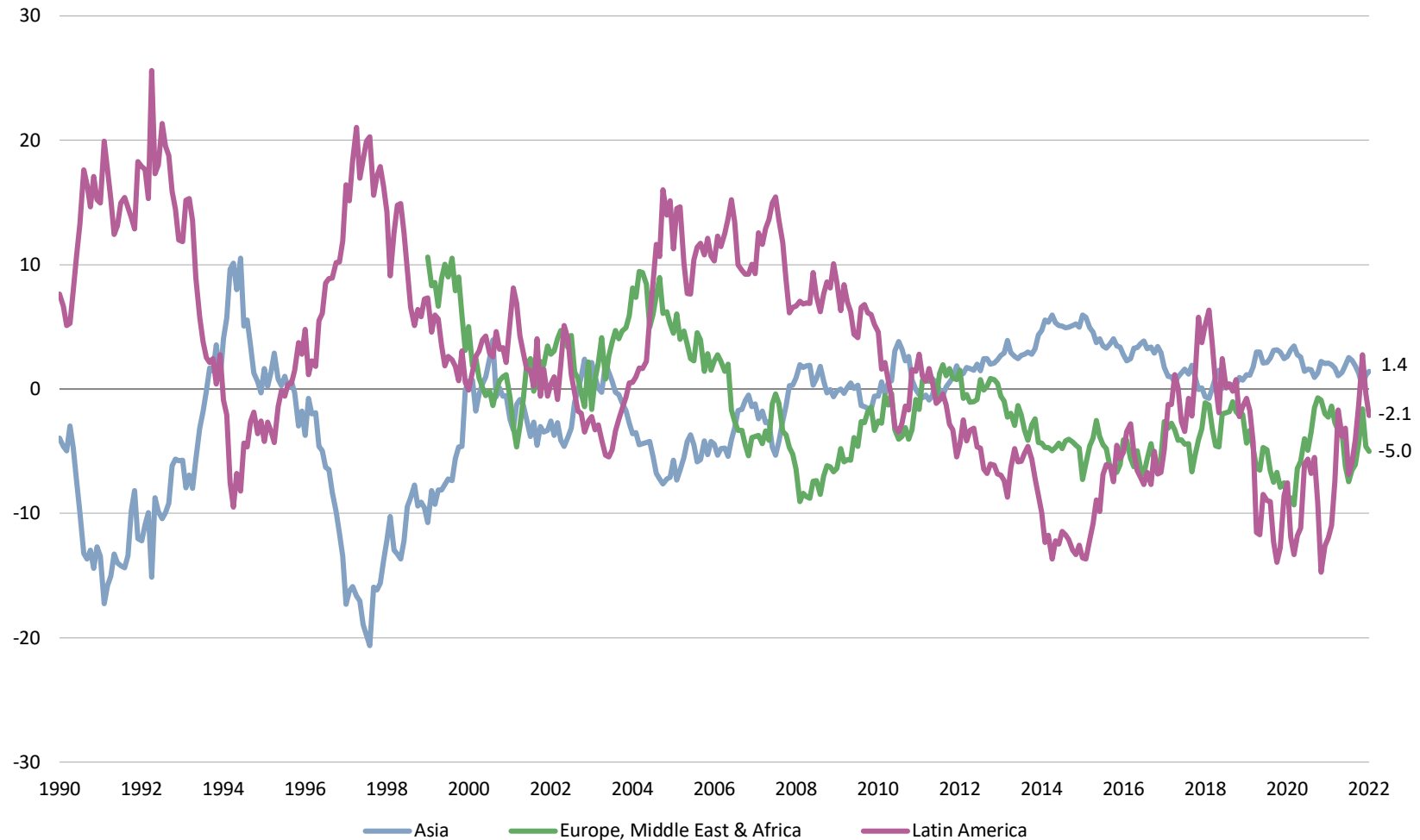
#### Developed Markets



## Performance leadership among major EM regions shifts over time

### ROLLING 3-YR RELATIVE PERFORMANCE BETWEEN EM REGIONS AND BROAD INDEX

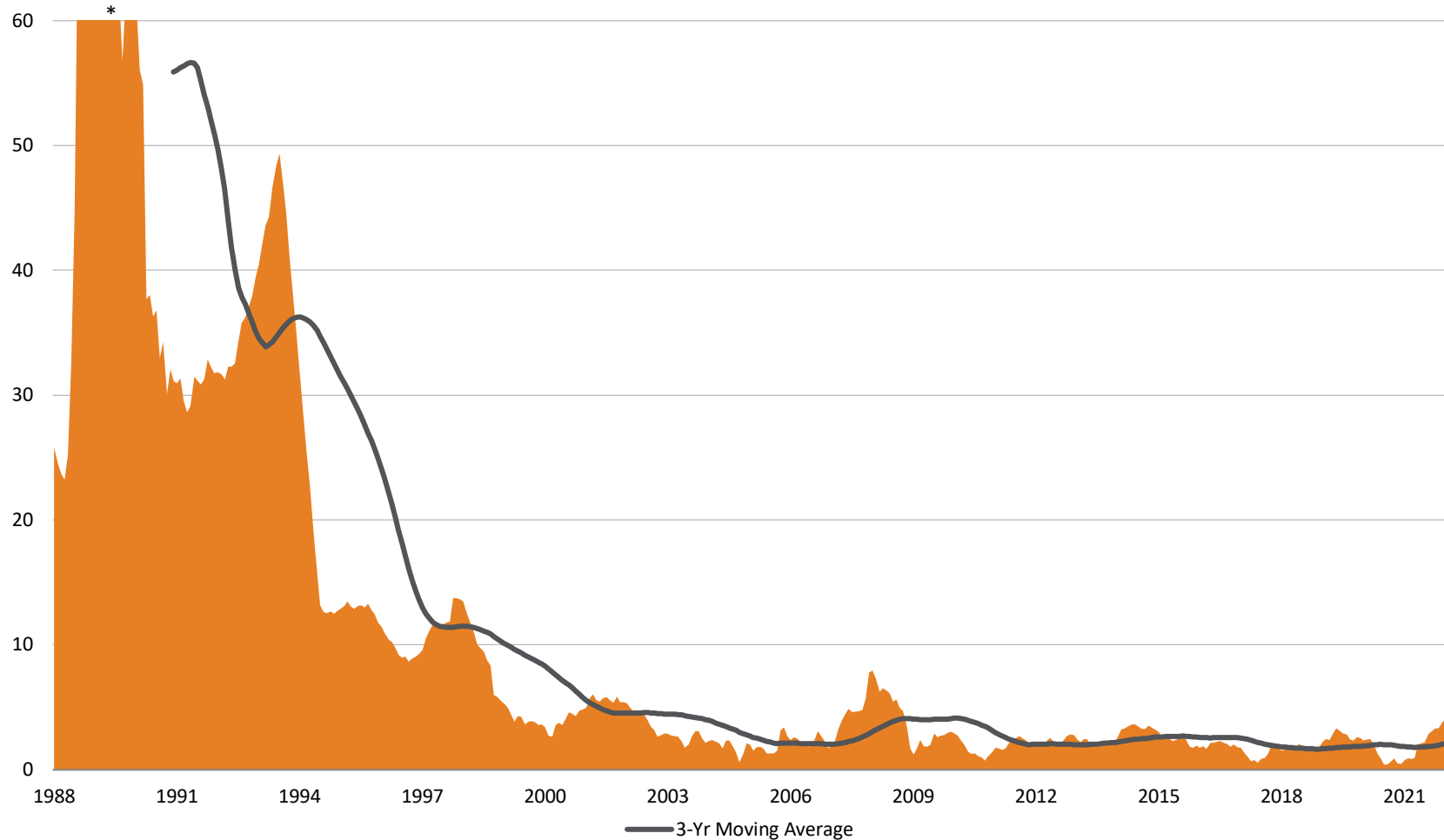
December 31, 1990 – December 31, 2022 • US Dollar • Percent (%)



## Inflation differential versus DM has stabilized but ticked higher in 2022

### TRAILING 12-MONTH EM-US INFLATION DIFFERENTIAL

December 31, 1988 – December 31, 2022 • Percent (%)



\* Capped for scaling. Trailing 12-month inflation differential peaked at 117% in March 1990.





Graham Landrith, Mark Sintetos, and Ilona Vdovina also contributed to this report.

Copyright © 2023 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of US and global copyright laws (e.g., 17 U.S.C. 101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages.

This report is provided for informational purposes only. The information does not represent investment advice or recommendations, nor does it constitute an offer to sell or a solicitation of an offer to buy any securities. Any references to specific investments are for illustrative purposes only. The information herein does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Information in this report or on which the information is based may be based on publicly available data. CA considers such data reliable but does not represent it as accurate, complete, or independently verified, and it should not be relied on as such. Nothing contained in this report should be construed as the provision of tax, accounting, or legal advice. PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE PERFORMANCE. Broad-based securities indexes are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Any information or opinions provided in this report are as of the date of the report, and CA is under no obligation to update the information or communicate that any updates have been made. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified.

The terms "CA" or "Cambridge Associates" may refer to any one or more CA entity including: Cambridge Associates, LLC (a registered investment adviser with the US Securities and Exchange Commission, a Commodity Trading Adviser registered with the US Commodity Futures Trading Commission and National Futures Association, and a Massachusetts limited liability company with offices in Arlington, VA; Boston, MA; Dallas, TX; Menlo Park, CA, New York, NY; and San Francisco, CA), Cambridge Associates Limited (a registered limited company in England and Wales, No. 06135829, that is authorized and regulated by the UK Financial Conduct Authority in the conduct of Investment Business, reference number: 474331); Cambridge Associates GmbH (authorized and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ('BaFin'), Identification Number: 155510), Cambridge Associates Asia Pte Ltd (a Singapore corporation, registration No. 200101063G, which holds a Capital Market Services License to conduct Fund Management for Accredited and/or Institutional Investors only by the Monetary Authority of Singapore), Cambridge Associates Limited, LLC (a registered investment adviser with the US Securities and Exchange Commission, an Exempt Market Dealer and Portfolio Manager in the Canadian provinces of Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia, Ontario, Québec, and Saskatchewan, and a Massachusetts limited liability company with a branch office in Sydney, Australia, ARBN 109 366 654), Cambridge Associates Investment Consultancy (Beijing) Ltd (a wholly owned subsidiary of Cambridge Associates, LLC which is registered with the Beijing Administration for Industry and Commerce, registration No. 110000450174972), and Cambridge Associates (Hong Kong) Private Limited (a Hong Kong Private Limited Company licensed by the Securities and Futures Commission of Hong Kong to conduct the regulated activity of advising on securities to professional investors).