2ND QUARTER ▪ 2017

GLOBAL EX US PE/VC BENCHMARK COMMENTARY

OVERVIEW

In second quarter 2017, in USD terms, the Cambridge Associates LLC Global ex US Developed Markets Private Equity and Venture Capital Index (PE/VC) returned 10.2% to bring its first half performance to 14.7%. The Cambridge Associates LLC Emerging Markets Private Equity and Venture Capital Index earned 3.3% in second quarter, bringing its six-month return to 7.5%. Since the end of 2016, and especially in second quarter, the euro strengthened against the US dollar, which helped boost the developed markets index return when measured in USD terms (Figure 1). The developed markets PE/VC index has outperformed its public market counterparts across time, while the emerging markets PE/VC index has struggled against its public market peers recently (based on modified public market equivalent [mPME] returns).

SECOND QUARTER 2017 HIGHLIGHTS

- The developed markets PE/VC index outperformed the comparable public equity index (MSCI EAFE Index), based on mPME returns, for all time periods ending June 30, 2017, listed in Figure 1. The emerging markets PE/VC index had success against its corresponding public market benchmark (MSCI Emerging Markets Index) in longer time periods, but fell short in periods of one year or less.
- Geographically, Western Europe continued to dominate the developed markets index; in the emerging markets, only three countries, China, India, and South Korea accounted for more than 5% of the index.
- Based on market values at June 30, 2017, public companies accounted for nearly 8% of the developed markets PE/VC index and more than 16% of the emerging markets PE/VC index.

C|A CAMBRIDGE ASSOCIATES

FIGURE 1 GLOBAL EX US DEVELOPED AND EMERGING MARKETS PE/VC INDEX RETURNS
Periods Ended June 30, 2017 • Percent (%)

Index	Qtr	YTD	1 Yr	3 Yr	5 Yr	10 Yr	15 Yr	20 Yr	25 Yr
CA Global ex US Dev Mkts PE/VC (US$)	**10.2**	**14.7**	**21.1**	**8.0**	**12.3**	**6.8**	**13.8**	**13.5**	**13.3**
CA Global ex US Dev Mkts PE/VC (€)	**3.3**	**6.1**	**18.5**	**16.4**	**14.9**	**8.9**	**13.5**	**13.5**	**13.5**
MSCI EAFE (US$) mPME	6.1	13.8	20.2	0.2	9.1	2.4	5.4	4.7	4.8
MSCI EAFE (€) mPME	-0.5	5.3	17.4	7.6	11.6	4.7	6.3	5.4	5.7
MSCI World/MSCI All Country World (US$) mPME*	4.5	11.9	19.4	4.5	11.5	5.5	7.6	6.7	6.9
CA Emerging Markets PE/VC (US$)	**3.3**	**7.5**	**11.4**	**9.4**	**11.3**	**9.6**	**11.0**	**9.4**	**9.4**
MSCI EM (US$) mPME**	6.4	18.6	24.3	2.2	4.6	3.0	7.4	6.1	6.3
MSCI World/MSCI All Country World (US$) mPME*	4.5	11.8	19.5	5.6	11.1	6.4	7.7	6.7	6.9
MSCI EAFE (US$) AACR	6.1	29.5	20.3	1.1	8.7	1.0	6.3	4.3	5.9
MSCI EAFE (€) AACR	-0.5	10.8	17.1	7.5	11.0	2.7	5.3	4.2	6.9
MSCI EM (US$) AACR**	6.4	40.7	24.2	1.4	4.3	2.2	11.0	5.8	7.5
MSCI World/MSCI All Country World (US$) AACR*	4.5	25.0	19.4	5.4	11.1	4.3	7.9	5.9	7.9

Sources: Cambridge Associates LLC, Global Financial Data, Inc., MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: The PE/VC indexes are pooled horizon internal rates of return and are based on limited partners' fund-level performance; the returns are net of fees, expenses, and carried interest. Because the indexes are capitalization weighted, performance is mainly driven by the largest vintage years. Public index returns are shown as both time-weighted returns (average annual compound returns) and dollar-weighted returns (modified public market equivalent). The CA mPME replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME net asset value is a function of mPME cash flows and public index returns.

* MSCI All Country World Constructed Index: Data from 1/1/1986 to 12/31/1987 represented by MSCI World Index gross total return. Data from 1/1/1988 to present represented by MSCI ACWI gross total return.

** MSCI EM Constructed Index: Data from 1/1/1986 to 12/31/1987 represented by GFD Emerging Markets price return. Data from 1/1/1988 to present represented by MSCI Emerging Markets total return gross.

GLOBAL EX US DEVELOPED MARKETS PRIVATE EQUITY AND VENTURE CAPITAL PERFORMANCE INSIGHTS

- During second quarter 2017, all eight meaningfully sized vintage years (those that represented at least 5% of the index's value) performed well as all but two, 2006 and 2008, earned double-digit returns. Combined, the eight vintages represented more than 86% of the benchmark's value (Figure 2) and returns ranged from 4.8% to 13.4% for the quarter. Write-ups for IT, health care, consumer discretionary, and industrials companies (in rank order) were the main drivers for the best-performing vintage, 2007; each sector's values increased by at least $500 million. In the lowest-performing vintage, 2008, valuation changes were less robust and the sectors that did the best were consumer discretionary, IT, industrials, and financials. For the largest vintage, 2012, write-ups were led by financials, industrials, and IT.

FIGURE 2 GLOBAL EX US DEVELOPED MARKETS PE/VC INDEX VINTAGE YEAR RETURNS: NET FUND-LEVEL PERFORMANCE

Percent (%)

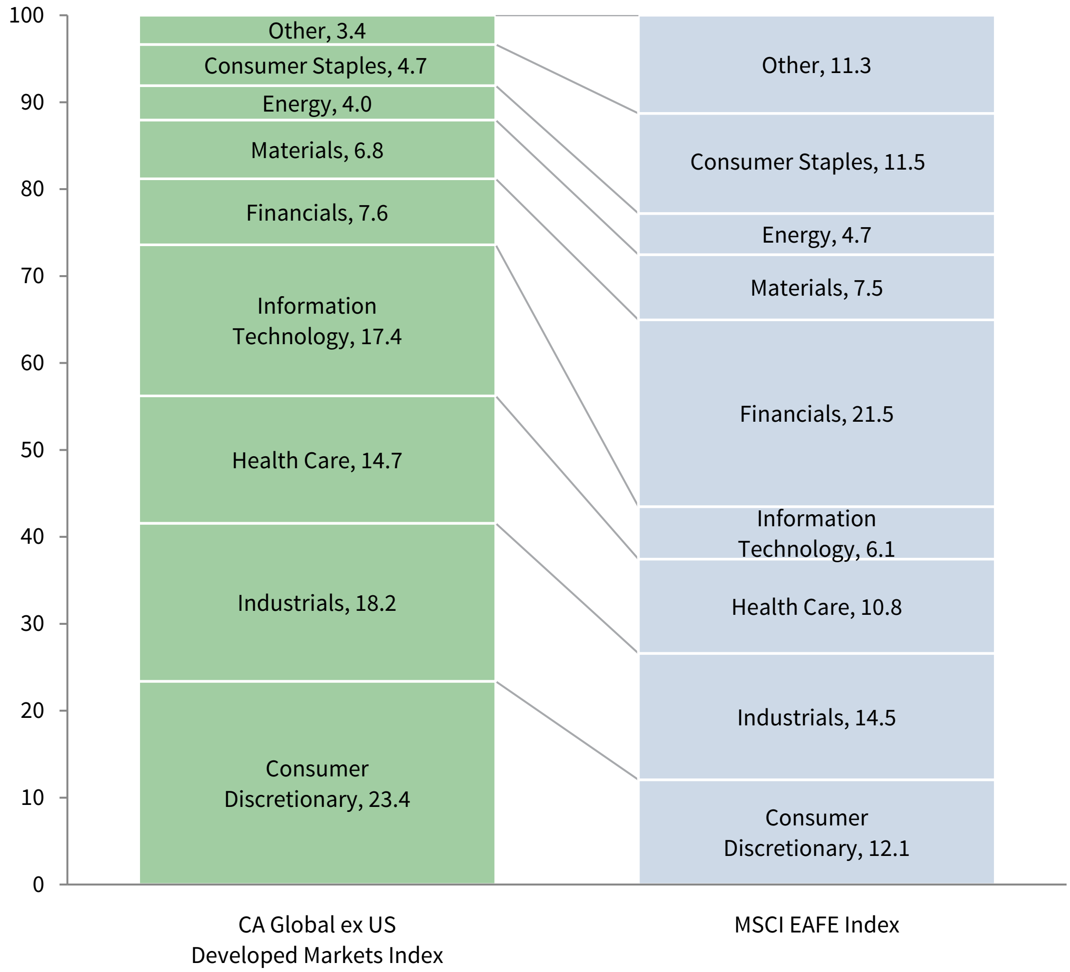
Vintage Year	Q2 2017 Return	6/30/17 Weight in Index
2006	5.3	9.4
2007	13.4	11.9
2008	4.8	7.8
2010	10.2	6.9
2011	13.2	9.8
2012	11.9	20.9
2013	11.6	13.5
2014	12.3	6.0

Notes: Returns in USD terms. Vintage year fund-level returns are net of fees, expenses, and carried interest.

- Limited partner (LP) contribution and distribution amounts rebounded from low levels in first quarter 2017; contributions were roughly in line with the 15-year average and distributions reached their seventh highest quarterly level since the inception of the index. Developed markets PE/VC funds called $8.2 billion from investors, a 52% quarter-to-quarter increase, and distributions totaled $17.8 billion, a 24% jump. Distributions outpaced contributions for the 13th consecutive quarter and have only trailed contributions in two quarters over the past five years.
- Managers of funds raised from 2012 to 2016 called $6.8 billion, or 84% of the total capital called during the quarter. Four of those vintages called more than $1.0 billion (2012, 2014–16). Five vintages, 2005–07 and 2011–12, each distributed more than $1.4 billion for a combined total of $13.7 billion (77% of the total). The 2007 vintage year led the way, distributing $6.4 billion.
- Figure 3 shows the GICS sector breakdown of the Global ex US Developed Markets Private Equity and Venture Capital Index and its public market counterpart, the MSCI EAFE Index. The breakdown provides context when comparing the performance of the two indexes. The chart highlights the relative overweights in the PE/VC index, such as consumer discretionary, IT, health care, and industrials and the underweights in financials and consumer staples.
- All six meaningfully sized sectors earned positive returns for the quarter in both USD and euro terms, although performance was much lower in euro terms (Figure 4). Among the key sectors, materials earned the highest return and health care the lowest. The 2011–13 vintages were responsible for the bulk of the write-ups in the materials sector. Write-ups for health care companies were more widespread, led by vintages 2007 and 2011. The four largest sectors—consumer discretionary, industrials, IT, and health care (in rank order)—represented 74% of the index's value and, on a dollar-weighted basis, returned 10.8%.

FIGURE 3 GICS SECTOR COMPARISONS: CA GLOBAL EX US DEVELOPED MARKETS vs MSCI EAFE

As of June 30, 2017 • Percent (%)



Sources: Cambridge Associates LLC, FactSet Research Systems, and MSCI Inc. MSCI data provided "as is" without any express or implied warranties.

Notes: The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a service mark of MSCI Inc. and S&P Global Market Intelligence LLC and is licensed for use by Cambridge Associates. Other includes sectors that make up less than 2% of the CA benchmark.

FIGURE 4 GLOBAL EX US DEVELOPED MARKETS PE/VC INDEX SECTOR RETURNS: GROSS COMPANY-LEVEL PERFORMANCE

Percent (%)

GICS Sector	Q2 2017 Return (%)	Q2 2017 Returns (€)	6/30/17 Weight in Index (%)
Consumer Discretionary	11.3	4.4	23.4
Financials	12.1	5.1	7.6
Health Care	9.1	2.3	14.7
Industrials	9.6	2.8	18.2
IT	12.9	5.9	17.4
Materials	13.4	6.4	6.8

Note: Industry-specific gross company-level returns are before fees, expenses, and carried interest.

- Consumer (discretionary and staples combined), IT, health care, industrials, and materials companies (in rank order) attracted nearly all of the capital invested during the quarter; consumer alone garnered 40% (split roughly in half between discretionary and staples).
- In USD terms, six of the seven large countries in the index (accounting for 69% of its value) posted double-digit positive returns during second quarter (Figure 5); as with the sectors, returns in EUR were lower, most notably for US-based businesses. Companies based in the Netherlands earned the best return for the second consecutive quarter and five vintages (2006–07, 2011–13) drove that performance in second quarter. For US companies, the worst performers among the large country components, the strongest gains were in vintages 2010 and 2013. For the quarter, the gross dollar-weighted return for the three largest countries—the United States, the United Kingdom, and Germany—was 9.9%, about 110 basis points lower than the index's total gross return.[1]
- Companies in developed European countries attracted 63% of the capital invested during the quarter, 13% shy of the long-term norm for the region. Investment in US-based companies (about 23% of total) was more than 10% higher than what it has been historically in the global ex US manager index.

1 Funds in the global ex US developed markets PE/VC index primarily invest in companies in Europe, but occasionally make investments in US companies as well.

FIGURE 5 GLOBAL EX US DEVELOPED MARKETS PE/VC INDEX REGIONAL RETURNS: GROSS COMPANY-LEVEL PERFORMANCE
Percent (%)

Region	Q2 2017 Return (%)	Q2 2017 Returns (€)	6/30/17 Weight in Index (%)
France	11.9	5.0	8.0
Germany	11.6	4.7	10.5
Italy	15.4	8.2	5.1
Netherlands	17.0	9.7	6.3
Sweden	15.9	8.8	6.5
United Kingdom	11.6	4.7	16.2
United States	7.1	0.5	16.7

Note: Geographic region–specific gross company-level returns are before fees, expenses, and carried interest.

EMERGING MARKETS PRIVATE EQUITY PERFORMANCE INSIGHTS

- As of second quarter, there were nine vintage years (2007–15) that accounted for at least 5% of the emerging markets index's value; combined, the nine represented 90% of the index's value (Figure 6). While the number of vintages considered meaningfully sized did not change during the quarter, the constituents of the group did as the 2015 vintage moved into the sample and the 2006 vintage "left" it (at 4.9%, the 2006 group fell just shy of the 5% threshold). All nine vintages produced positive returns for the quarter, contributing to healthy year-to-date performance (7.5%). The index's second quarter performance was fairly strong with returns among the meaningfully sized vintages ranging from 1.6% to 6.3%. Performance for the 2006 vintage was essentially flat for the quarter.

FIGURE 6 EMERGING MARKETS PE/VC INDEX VINTAGE YEAR RETURNS: NET FUND-LEVEL PERFORMANCE

Percent (%)

Vintage Year	Q2 2017 Return	6/30/17 Weight in Index
2007	2.9	14.8
2008	1.6	10.3
2009	2.8	5.5
2010	2.6	11.2
2011	3.4	16.9
2012	5.2	10.6
2013	6.3	7.2
2014	4.1	8.6
2015	5.8	5.1

Notes: Returns in USD terms. Vintage year fund-level returns are net of fees, expenses, and carried interest.

- Write-ups in consumer discretionary and IT were the main drivers for the best-performing vintage, 2013. The lowest-returning vintage, 2008, was impacted by write-ups in consumer discretionary, IT, and industrials but other sectors' valuations were relatively flat. At the close of the first half of 2017, the largest vintage year was 2011, representing almost 17% of the index. In that vintage, write-ups in consumer discretionary, health care, industrials, and financials were partially offset by write-downs in real estate.

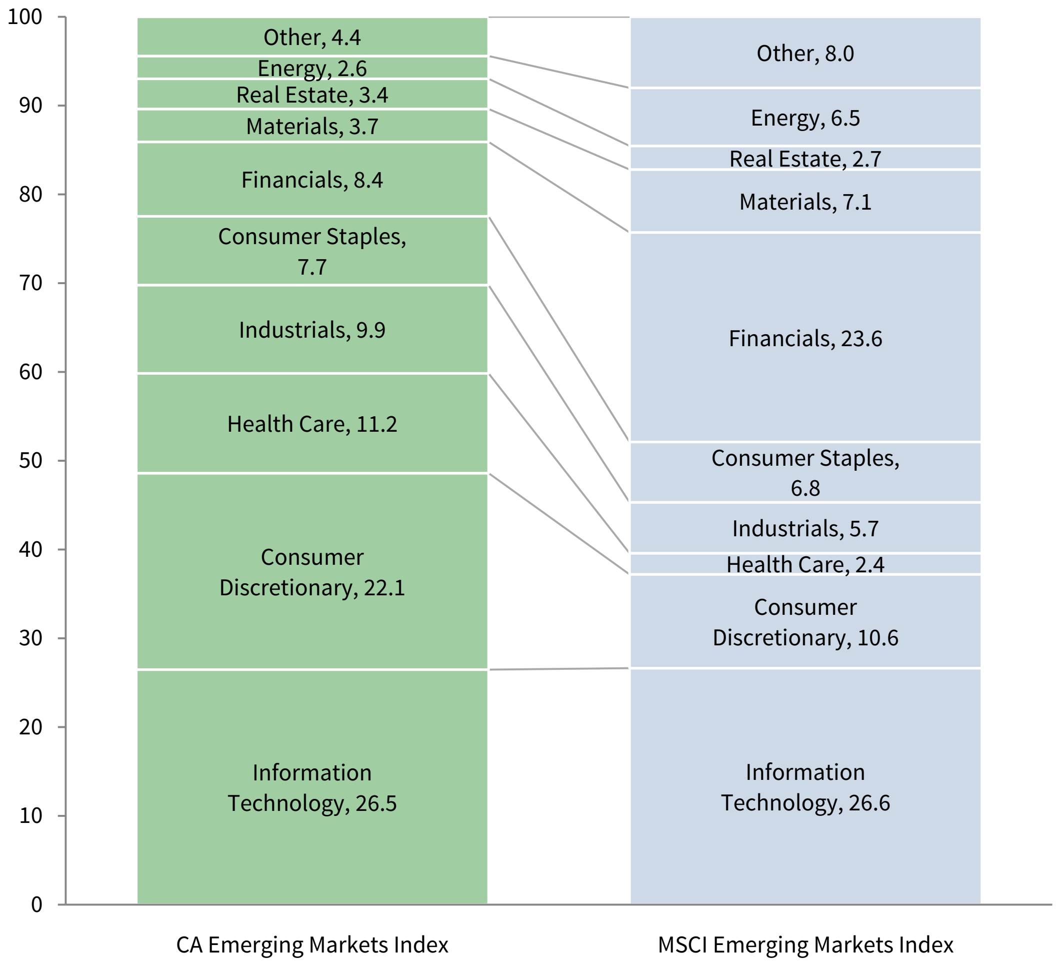
- During the second quarter, emerging markets PE/VC funds called $4.5 billion from investors, an almost 31% decrease from the prior quarter but about an equal amount to the ten-year quarterly average. Managers distributed over $7.3 billion this quarter, which represented a 66% quarter-to-quarter increase. Second quarter distributions amounted to the third largest since the inception of the index in 1986; notably, all three were in the past three years. Since 1986, distributions have outpaced contributions in only 15% of the quarters, but in the past five years they have outpaced contributions in 55% of the quarters.

- Managers of funds that were raised in 2011, 2012, 2015, and 2016 combined to call about $3.6 billion, or 81% of the total for the quarter; all four vintages called more than $500 million and the 2011 and 2015 managers called more than $1.0 billion. On the distributions front, managers in five vintage years (2006–08 and 2010–11) returned at least $800 million to LPs, for a combined total of $6.1 billion, or 84% of the quarter's total.

- Figure 7 shows the GICS sector breakdown of the Emerging Markets PE/VC Index and its public market counterpart, the MSCI Emerging Markets Index. The breakdown provides context when comparing the performance of the two indexes. The chart highlights the relative overweights in the PE/VC index, such as consumer discretionary, health care, and industrials, and the underweights in financials, energy, and materials.

FIGURE 7 GICS SECTOR COMPARISONS: CA EMERGING MARKETS vs MSCI EMERGING MARKETS

As of June 30, 2017 • Percent (%)



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- All six of the meaningfully sized sectors posted positive quarterly returns (Figure 8); returns were highest for consumer discretionary at 7.2%. More than half of the consumer discretionary write-ups were attributed to investments made by funds formed in 2007, 2011, and 2012. Returns for the other five sectors fell within a fairly tight band, 3.7%–4.9%, with IT posting the lowest return in the group. On a gross, dollar-weighted basis, the three largest sectors by market value—IT, consumer discretionary, and health care—returned 5.1% during the quarter, outperforming the return for all companies by about 1.0%.

FIGURE 8 EMERGING MARKETS PE/VC INDEX SECTOR RETURNS: GROSS COMPANY-LEVEL PERFORMANCE

Percent (%)

GICS Sector	Q2 2017 Return	6/30/17 Weight in Index
Consumer Discretionary	7.2	22.1
Consumer Staples	4.0	7.7
Financials	4.0	8.4
Health Care	4.4	11.2
Industrials	4.9	9.9
Information Technology	3.7	26.5

Notes: Returns in USD terms. Industry-specific gross company-level returns are before fees, expenses, and carried interest.

- Compared with first quarter, the investment pace in the second was slower (a decrease of more than 35%). Companies across five sectors (in rank order: consumer discretionary, IT, real estate, consumer staples, and materials) garnered 75% of the capital invested in the quarter; consumer discretionary and IT alone attracted nearly 40% of all capital. Over the long term, managers in the emerging markets index have allocated 60% of their capital to these five sectors.
- Highlighting the index's geographic concentration, China continued to be by far the largest country component of the index and India and South Korea were the only two countries that also qualified as meaningfully sized (Figure 9). Six other countries—Australia, Brazil, Japan, Singapore, the United Kingdom, and the United States—represented between 2.5% and 4.5% of the index.[2]

2 Funds in the global ex US emerging markets PE/VC index may occasionally invest in companies in developed markets regions as well as the emerging markets regions.

FIGURE 9 EMERGING MARKETS PE/VC INDEX REGIONAL RETURNS: GROSS COMPANY-LEVEL PERFORMANCE

Percent (%)

Region	Q2 2017 Return	6/30/17 Weight in Index
China	2.8	44.9
India	3.2	8.1
South Korea	8.5	5.5

Notes: Returns in USD terms. Geographic region–specific gross company-level returns are before fees, expenses, and carried interest.

- China-based companies continued to receive more capital than any other country, 43% of invested capital. Combined, companies in China, Hong Kong, and Vietnam garnered slightly more than 60% of dollars invested during the quarter.
- On a gross dollar-weighted basis, when combined, China, India, and South Korea returned nearly 3.4%. Among countries representing at least 2.5% of the index, the United Kingdom earned the best return, 14.0%. ■

ABOUT THE CAMBRIDGE ASSOCIATES LLC INDEXES

Cambridge Associates derives its Global ex US Developed Markets Private Equity and Venture Capital Index from the financial information contained in its proprietary database of global ex US private equity and venture capital funds. As of June 30, 2017, the database comprised 879 global ex US developed markets private equity and venture capital funds formed from 1986 to 2017 with a value of about $268 billion. Ten years ago, as of June 30, 2007, the benchmark index included 509 global ex US developed markets funds, whose value was roughly $160 billion. The funds in this index invest primarily in developed markets in Australia, Canada, Israel, Japan, New Zealand, Singapore, and Western Europe.

Cambridge Associates derives its Emerging Markets Private Equity and Venture Capital Index from the financial information contained in its proprietary database of global ex US private equity and venture capital funds. As of June 30, 2017, the database comprised 642 emerging markets funds formed from 1986 to 2016 with a value of $190 billion. Ten years ago, as of June 30, 2007, the benchmark index included 307 emerging markets funds, whose value was $37 billion. The funds in this index invest primarily in Africa, emerging Asia, emerging Europe, Latin America & Caribbean, and the Middle East ex Israel.

The pooled returns represent the net periodic rates of return calculated on the aggregate of all cash flows and market values as reported to Cambridge Associates by the funds' general partners in their quarterly and annual audited financial reports. These returns are net of management fees, expenses, and performance fees that take the form of carried interest.

ABOUT THE PUBLIC INDEXES

The MSCI All Country World Index (ACWI) is a free-float-adjusted market capitalization–weighted index designed to measure the equity market performance of developed and emerging markets. As of June 2017, the MSCI ACWI consists of 46 country indexes comprising 23 developed and 24 emerging markets country indexes. The developed markets country indexes included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The emerging markets country indexes included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

The MSCI EAFE Index is a free-float-adjusted market capitalization–weighted index that is designed to measure large- and mid-cap equity performance of developed markets, excluding Canada and the United States. As of June 2017, the MSCI EAFE Index consisted of the following 21 developed markets country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.

The MSCI Emerging Markets Index is a free-float-adjusted market capitalization–weighted index that is designed to measure large- and mid-cap equity performance of emerging markets. As of June 2017, the MSCI Emerging Markets Index included 24 emerging markets country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and the United Arab Emirates.

The MSCI World Index represents a free-float-adjusted, market capitalization–weighted index that is designed to measure the equity market performance of developed markets. As of June 2017, it includes 23 developed markets country indexes: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States.