

# How “passive” indexes can lead investors astray

## THE TROUBLE WITH BUBBLES

The end of a market bubble is never pleasant, but it can be especially painful for investors in passive strategies that track major stock indexes. **A key reason: those indexes tend to increase the weighting of rapidly rising sectors as bubbles inflate, setting up investors for a bigger fall.**

### Market indexes: nothing succeeds like excess

A brief look at the fallout from four high-profile market bubbles is revealing. As shown below, the weights of popular sectors at the peaks of these bubbles can be enormous. Example: At the end of 1989, Japan represented nearly 63% of the MSCI EAFE Index — which is constructed to reflect all developed equity markets in Europe, Australasia and the Far East. Yet after Japan’s “Lost Decade”, Japan stocks accounted only about 20% of that same index. Meanwhile the broader EAFE Index itself rose about 34% (cumulative) during that same period, as the weightings of other countries with rising equity markets rose to fill the gap.

### Short, sharp changes can be worse

When sector bubbles collapse over shorter time periods, the overweights can impact major market indexes as well. Example: as the Internet bubble of the late 1990s collapsed, the weight of the S&P 500 Info Tech sector, one of the ten sectors represented in the S&P 500, shrank by more than half,

from 33.3% to 15.4%, as the sector generated a cumulative loss of 73.8%. The same effect could be seen during the global financial crisis, with financials plummeting nearly 80%.

### Lessons learned: bubbles and benchmarks

These are only a small sample of the kinds of distortions reflected in passive capitalization-weighted indexes, whose construction forces them to overweight sectors as they become more popular with investors. When added to the well-documented tendency of investors to herd toward supposedly “hot” opportunities, the damage to investment returns can be substantial.

The core issue, however, is not that every success contains the seeds of its own destruction. Rather, it’s that using conventional passive, index-based investing as the center of a balanced investment strategy can introduce unexpected — and unwanted — volatility into a supposedly conservative portfolio, at just the moment when investors may be seeking refuge. And that’s the real trouble with bubbles.

### As sector bubbles deflate, their weights can inflict damage on broader indexes

Event	Time frame	Sector/region	Weighting in its market index (%)		Cumulative loss (%)
			Peak	End	Sector
Japan “Lost Decade”	12/31/89–12/31/98	MSCI Japan	62.6	20.2	-58.0
Internet bubble & aftermath	2/29/00–2/28/03	S&P 500 Info Tech	33.3	15.4	-73.8
Global Financial Crisis	12/31/06–2/28/09	S&P 500 Financials	22.4	9.9	-79.6
Energy Bust	6/30/08–9/30/15	S&P 500 Energy	15.9	6.7	-30.8

Sources: Bloomberg, MSCI, Standard and Poors, as of November 17, 2015. Past performance is no guarantee of future results. All returns are cumulative rather than annualized, and calculated on a monthly basis. Market indexes for each sector are Japan: MSCI EAFE; S&P 500 Info Tech, Financials and Energy: S&P 500. All index and sector returns reflect price appreciation/depreciation; returns due to dividends are excluded. Please note that an investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charges. This information is provided for illustrative purposes only and does not reflect the performance of an actual investment.

Brandywine Global  
Clarion Partners  
ClearBridge Investments  
EnTrustPermal  
Martin Currie  
QS Investors  
RARE Infrastructure  
Royce & Associates  
Western Asset

Legg Mason is a leading global investment company committed to helping clients reach their financial goals through long term, actively managed investment strategies.

- Over \$732 billion\* in assets invested worldwide in a broad mix of equities, fixed income, alternatives and cash strategies
- A diverse family of specialized investment managers, each with its own independent approach to research and analysis
- Over a century of experience in identifying opportunities and delivering astute investment solutions to clients

 [lmthoughtleadership.com](http://lmthoughtleadership.com)

The **Morgan Stanley Capital International (MSCI) EAFE Index** is an unmanaged index of equity securities from developed countries in Western Europe, the Far East, and Australasia. The **MSCI Japan Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of Japan. The **S&P 500 Index** is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S. The **S&P 500 Information Technology Sector, Financials Sector, and Energy Sector indexes** are three of ten GICS industry sector subsets of the S&P 500 Index. Indexes are unmanaged, and not available for direct investment. Index returns do not include fees or sales charges.

**IMPORTANT INFORMATION:**

**All investments involve risk, including possible loss of principal.**

The value of investments and the income from them can go down as well as up and investors may not get back the amounts originally invested, and can be affected by changes in interest rates, in exchange rates, general market conditions, political, social and economic developments and other variable factors. Investment involves risks including but not limited to, possible delays in payments and loss of income or capital. Neither Legg Mason nor any of its affiliates guarantees any rate of return or the return of capital invested.

Equity securities are subject to price fluctuation and possible loss of principal. Fixed-income securities involve interest rate, credit, inflation and reinvestment risks; and possible loss of principal. As interest rates rise, the value of fixed income securities falls.

International investments are subject to special risks including currency fluctuations, social, economic and political uncertainties, which could increase volatility. These risks are magnified in emerging markets.

Commodities and currencies contain heightened risk that include market, political, regulatory, and natural conditions and may not be suitable for all investors.

**Past performance is no guarantee of future results. Please note that an investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charges.**

The opinions and views expressed herein are not intended to be relied upon as a prediction or forecast of actual future events or performance, guarantee of future results, recommendations or advice. Statements made in this material are not intended as buy or sell recommendations of any securities. Forward-looking statements are subject to uncertainties that could cause actual developments and results to differ materially from the expectations expressed. This information has been prepared from sources believed reliable but the accuracy and completeness of the information cannot be guaranteed. Information and opinions expressed by either Legg Mason or its affiliates are current as at the date indicated, are subject to change without notice, and do not take into account the particular investment objectives, financial situation or needs of individual investors.

The information in this material is confidential and proprietary and may not be used other than by the intended user. Neither Legg Mason or its affiliates or any of their officer or employee of Legg Mason accepts any liability whatsoever for any loss arising from any use of this material or its contents. This material may not be reproduced, distributed or published without prior written permission from Legg Mason. Distribution of this material may be restricted in certain jurisdictions. Any persons coming into possession of this material should seek advice for details of, and observe such restrictions (if any).

This material may have been prepared by an advisor or entity affiliated with an entity mentioned below through common control and ownership by Legg Mason, Inc. Unless otherwise noted the "\$" (dollar sign) represents U.S. Dollars.

**This material is only for distribution in those countries and to those recipients listed.**

ALL INVESTORS IN THE UK, PROFESSIONAL CLIENTS AND ELIGIBLE COUNTERPARTIES IN EU AND EEA COUNTRIES EX UK AND QUALIFIED INVESTORS IN SWITZERLAND:

Issued and approved by Legg Mason Investments (Europe) Limited, registered office 201 Bishopsgate, London EC2M 3AB. Registered in England and Wales, Company No. 1732037. Authorized and regulated by the Financial Conduct Authority. Client Services +44 (0)207 070 7444.

ALL INVESTORS IN HONG KONG AND SINGAPORE:

This material is provided by Legg Mason Asset Management Hong Kong Limited in Hong Kong and Legg Mason Asset Management Singapore Pte. Limited (Registration Number (UEN): 200007942R) in Singapore.

**This material has not been reviewed by any regulatory authority in Hong Kong or Singapore.**

**ALL INVESTORS IN THE PEOPLE'S REPUBLIC OF CHINA ("PRC"):**

This material is provided by Legg Mason Asset Management Hong Kong Limited to intended recipients in the PRC. The content of this document is only for Press or the PRC investors investing in the QDII Product offered by PRC's commercial bank in accordance with the regulation of China Banking Regulatory Commission. Investors should read the offering document prior to any subscription. Please seek advice from PRC's commercial banks and/or other professional advisors, if necessary. Please note that Legg Mason and its affiliates are the Managers of the offshore funds invested by QDII Products only. Legg Mason and its affiliates are not authorized by any regulatory authority to conduct business or investment activities in China.

**This material has not been reviewed by any regulatory authority in the PRC.**

DISTRIBUTORS AND EXISTING INVESTORS IN KOREA AND DISTRIBUTORS IN TAIWAN:

This material is provided by Legg Mason Asset Management Hong Kong Limited to eligible recipients in Korea and by Legg Mason Investments (Taiwan) Limited (Registration Number: (98) Jin Guan Tou Gu Xin Zi Di 001; Address: Suite E, 55F, Taipei 101 Tower, 7, Xin Yi Road, Section 5, Taipei 110, Taiwan, R.O.C.; Tel: (886) 2-8722 1666) in Taiwan. Legg Mason Investments (Taiwan) Limited operates and manages its business independently.

This material has not been reviewed by any regulatory authority in Korea or Taiwan.

ALL INVESTORS IN THE AMERICAS:

This material is provided by Legg Mason Investor Services LLC, a U.S. registered Broker-Dealer, which includes Legg Mason Americas International. Legg Mason Investor Services, LLC, Member FINRA/SIPC, and all entities mentioned are subsidiaries of Legg Mason, Inc.

ALL INVESTORS IN AUSTRALIA:

This material is issued by Legg Mason Asset Management Australia Limited (ABN 76 004 835 839, AFSL 204827) ("Legg Mason"). The contents are proprietary and confidential and intended solely for the use of Legg Mason and the clients or prospective clients to whom it has been delivered. It is not to be reproduced or distributed to any other person except to the client's professional advisers.

\* As of September 30, 2016.