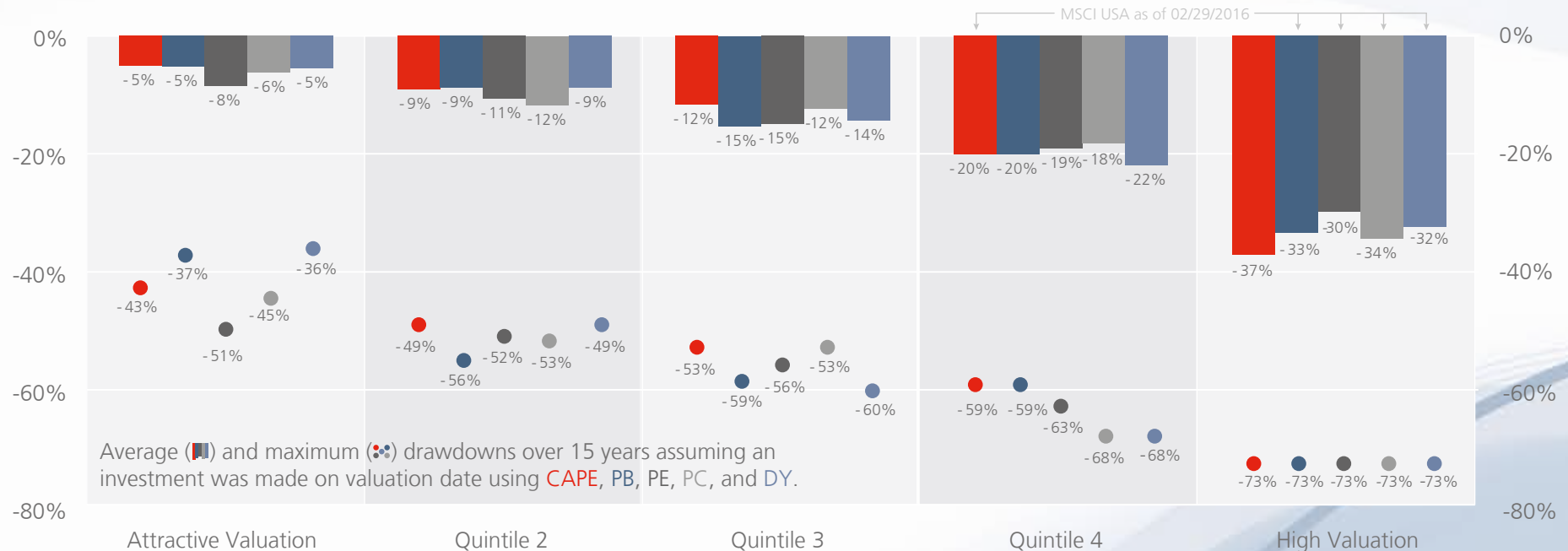


# Relationship between valuation ratios and downside risks

Risk of losses in 17 MSCI indexes increased significantly as valuation increased from 1979-2015



The figure shows the average and maximum drawdowns over 15 years in relation to five frequently used valuation ratios. All valuations observed for one indicator are divided into five quintiles, whereas attractive valuations are the lowest 20% and high valuations are the highest 20% of all valuations seen in the period 12/1979-05/2015 in 17 MSCI Indexes. Analysing the MSCI USA, the current PB, PE, PC and DY valuations are all in the highest quintile and the CAPE is in quintile 4, signaling higher downside risks for the US market. For details, see Research paper **“Predicting Stock Market Returns Using the Shiller-CAPE: An Improvement Towards Traditional Value Indicators?”**.

All returns are inflation-adjusted, in local currency, incl. dividend income and annualized. The calculations are based on indicator values of those periods for which CAPE was available. All 17 MSCI indexes include: Australia, Belgium, Canada, Denmark, France, Germany, Hong Kong, Italy, Japan, Netherlands, Norway, Singapore, Spain, Sweden, Switzerland, UK and USA.

Data-Sources: CAPE calculation based on actual MSCI price-to-earnings-ratios and local CPI Indices obtained from Datastream. Note: MSCI. Neither MSCI nor any other party involved in or related to compiling, computing or creating the MSCI data makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such data. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in or related to compiling, computing or creating the data have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages. No further distribution or dissemination of the MSCI data is permitted without MSCI's express written consent.