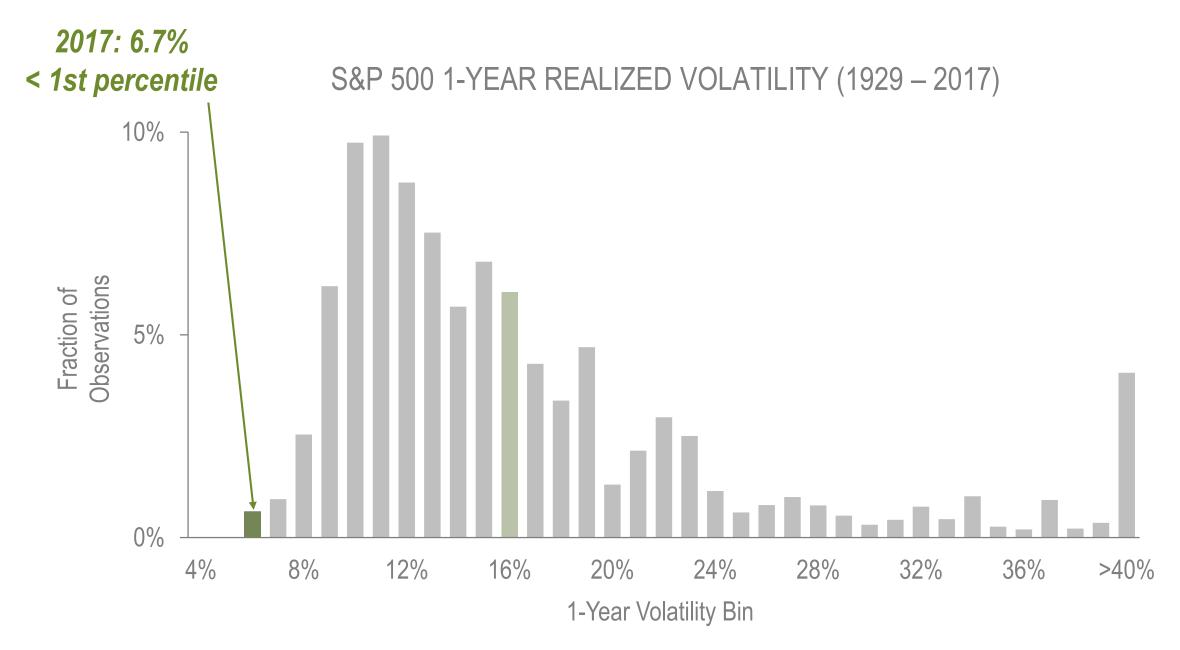




# YET A HISTORICALLY QUIET MARKET

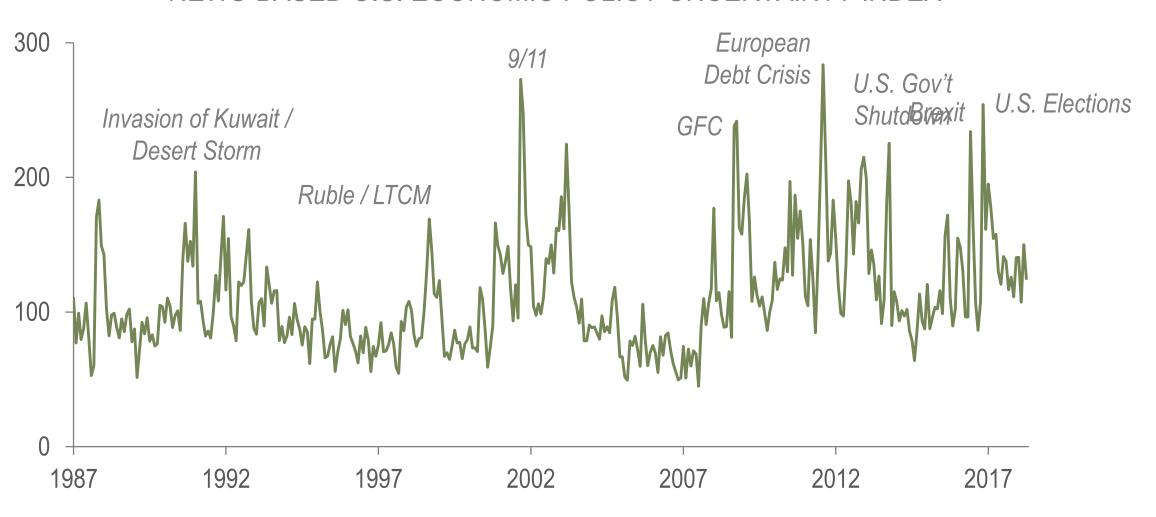


Source: Acadian estimates and calculations. Frequency diagram based on rolling one-year volatilities of daily S&P 500 returns (overlapping windows) from Jan1928 - Dec 2017. Calculated using trading-day returns and a 252-day annualization factor. For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

# Can we reconcile high uncertainty with the market's calm?

## UNCERTAINTY QUANTIFIED

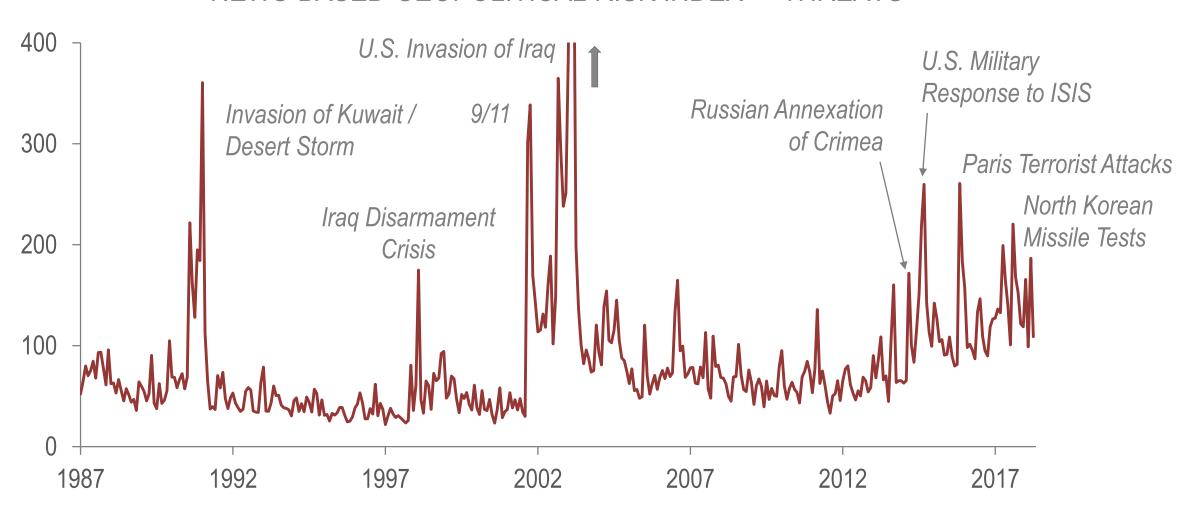
#### NEWS-BASED U.S. ECONOMIC POLICY UNCERTAINTY INDEX



Index data source: News Based Policy Uncertainty index from "Measuring Economic Policy Uncertainty" by Scott Baker, Nicholas Bloom and Steven J. Davis at the Policy Uncertainty website. For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

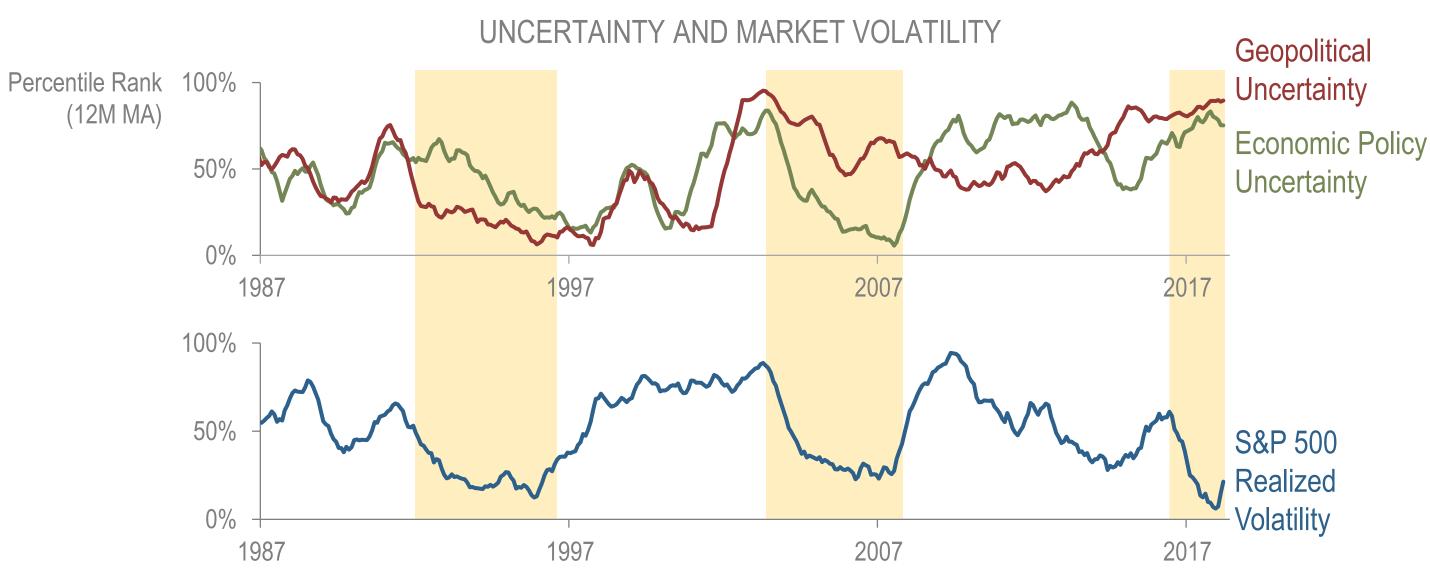
## UNCERTAINTY QUANTIFIED

#### NEWS-BASED GEOPOLITICAL RISK INDEX - "THREATS"



Index data source: Caldara, Dario and Matteo Iacoviello, Measuring Geopolitical Risk," working paper, Board of Governors of the Federal Reserve Board, January 2018 For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

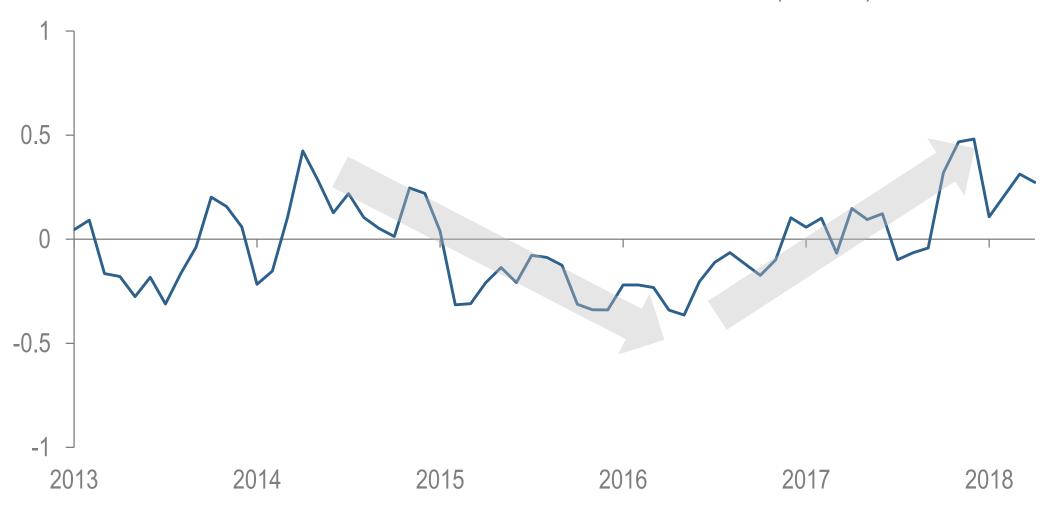
# A DISCONNECT?



Sources: Acadian calculations based on 1) S&P 500 index levels from Bloomberg, 2) News Based Policy Uncertainty index from "Measuring Economic Policy Uncertainty" by Scott Baker, Nicholas Bloom and Steven J. Davis at the Policy Uncertainty website, 3) Geopolitical Risk Index (Threats) from Caldara, Dario and Matteo lacoviello, "Measuring Geopolitical Risk," working paper, Board of Governors of the Federal Reserve Board, January 2018 For illustrative purposes only. It is not possible to invest directly in any index. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

# EXPLANATIONS: MACRO (UN)CERTAINTY

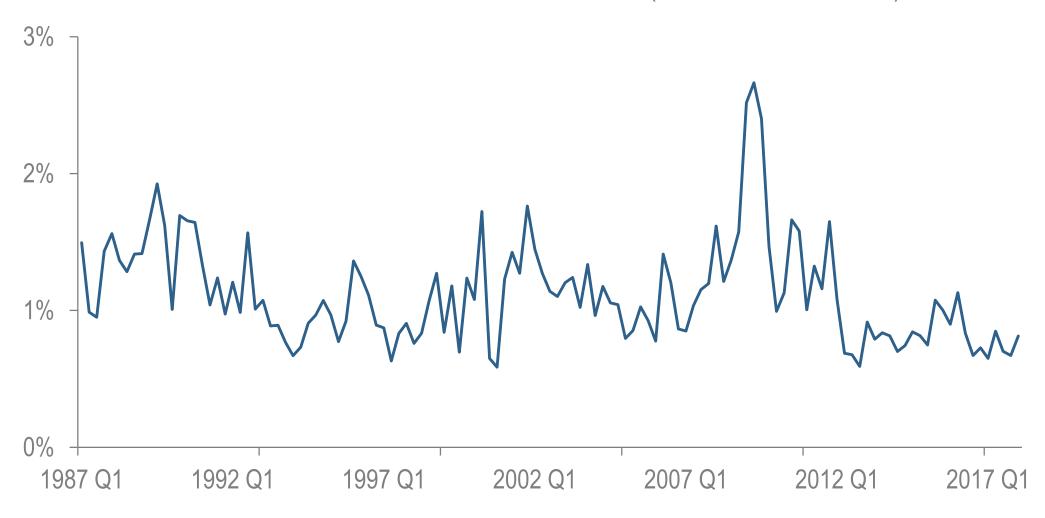
### CHICAGO FED NATIONAL ACTIVITY INDEX (3M MA)



Source: Federal Reserve Bank of Chicago. For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

# EXPLANATIONS: MACRO (UN)CERTAINTY

### U.S. GDP FORECAST DISPERSION (NOMINAL, +4QTRS)

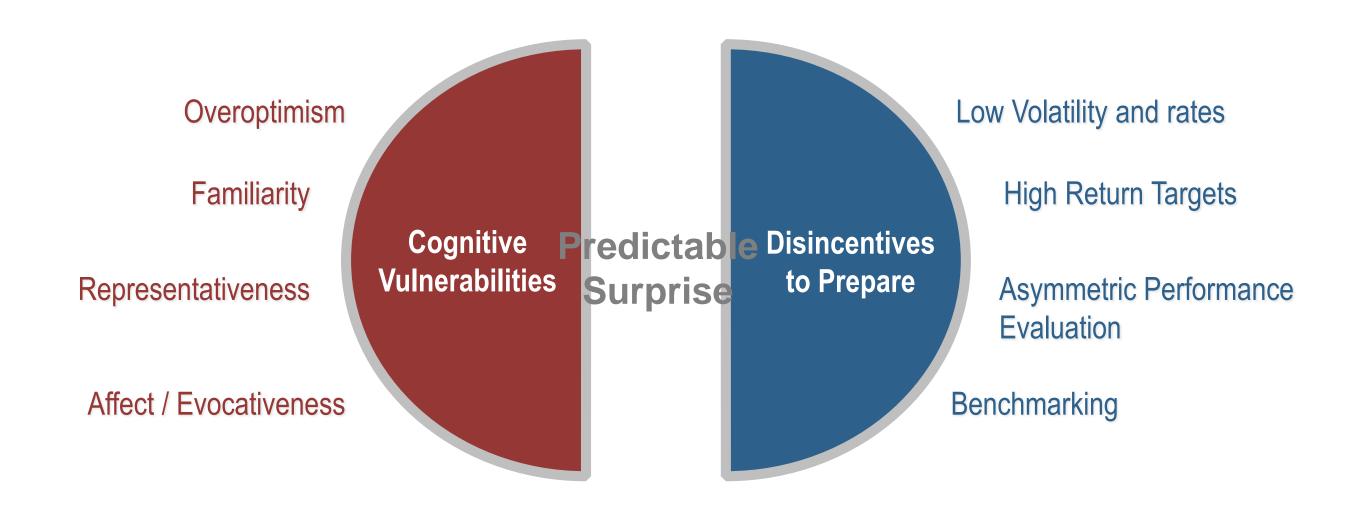


Cross-sectional forecast dispersion, U.S. nominal GDP 4 quarters ahead, as measured by log difference of levels, 75<sup>th</sup> percentile minus 25<sup>th</sup> percentile. Source: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters. For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.

## OTHER RATIONAL EXPLANATIONS

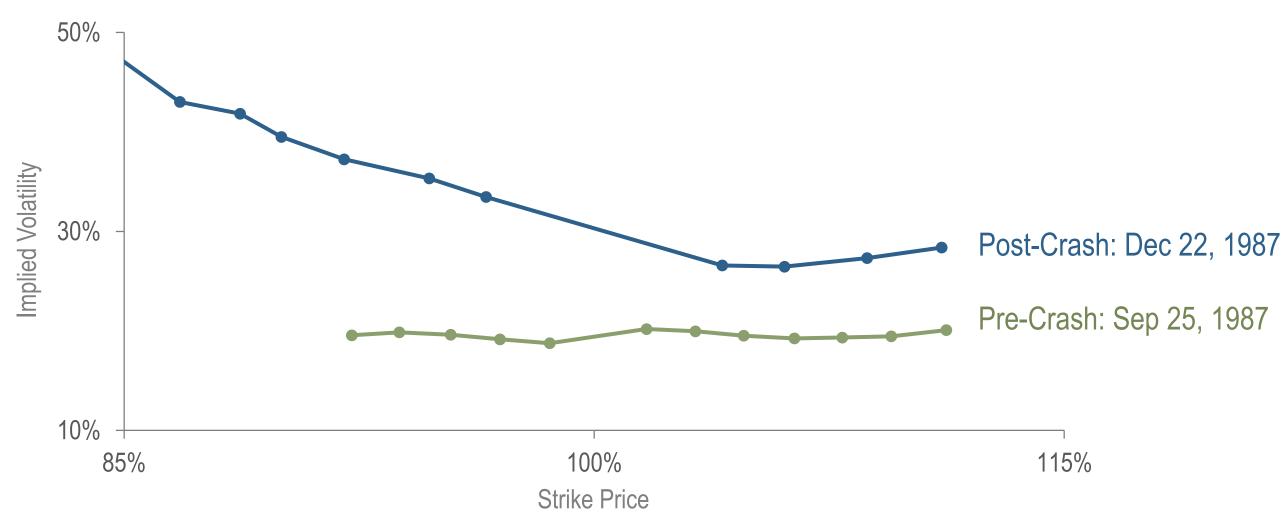
- ❖ Stable economy → diminished market sensitivity to policy news
- Diminished signal-to-noise ratio in policy discussion (deliberate?)
- Ambiguity in the latent variable: What is "uncertainty?"
- Too simple proxy? News flow has its own complex dynamics

# WHAT COULD GO WRONG?



# A MARKET TENDENCY?

#### S&P 500 IMPLIED VOLATILITY SKEW



Source: Acadian. Implied volatilities are mid-market, based on intraday option quotes provided by CBOE. Data for Sep 25 and Dec 22 reflects Oct-87 expiry and Jan-88 expiry options, respectively. Implied volatilities below (above) spot reflect puts (calls). For illustrative purposes only. Past results are not indicative of future results. Every investment program has an opportunity for loss as well as profits.



## NEGLECTED RISKS?

- ⚠ Inadvertent over-allocation to crash risk
  - Recognize downside exposure in private markets and alternatives

- <u>A</u> Commoditized factor investing implementations: unintended exposures
  - Don't underestimate the value of sophistication in factor implementations
- ♠ Concentration
  - Extend, don't abandon, diversification



## **LEGAL** Disclaimer

Acadian provides this material as a general overview of the firm, our processes and our investment capabilities. It has been provided for informational purposes only. It does not constitute or form part of any offer to issue or sell, or any solicitation of any offer to subscribe or to purchase, shares, units or other interests in investments that may be referred to herein and must not be construed as investment or financial product advice. Acadian has not considered any reader's financial situation, objective or needs in providing the relevant information.

The value of investments may fall as well as rise and you may not get back your original investment. Past performance is not necessarily a guide to future performance or returns. Acadian has taken all reasonable care to ensure that the information contained in this material is accurate at the time of its distribution, no representation or warranty, express or implied, is made as to the accuracy, reliability or completeness of such information.

This material contains privileged and confidential information and is intended only for the recipient/s. Any distribution, reproduction or other use of this presentation by recipients is strictly prohibited. If you are not the intended recipient and this presentation has been sent or passed on to you in error, please contact us immediately. Confidentiality and privilege are not lost by this presentation having been sent or passed on to you in error.

Acadian's quantitative investment process is supported by extensive proprietary computer code. Acadian's researchers, software developers, and IT teams follow a structured design, development, testing, change control, and review processes during the development of its systems and the implementation within our investment process. These controls and their effectiveness are subject to regular internal reviews, at least annual independent review by our SOC1 auditor. However, despite these extensive controls it is possible that errors may occur in coding and within the investment process, as is the case with any complex software or data-driven model, and no guarantee or warranty can be provided that any quantitative investment model is completely free of errors. Any such errors could have a negative impact on investment results. We have in place control systems and processes which are intended to identify in a timely manner any such errors which would have a material impact on the investment process.

Acadian Asset Management LLC has wholly owned affiliates located in London, Singapore, Sydney, and Tokyo. Pursuant to the terms of service level agreements with each affiliate, employees of Acadian Asset Management LLC may provide certain services on behalf of each affiliate and employees of each affiliate may provide certain administrative services, including marketing and client service, on behalf of Acadian Asset Management LLC.

Acadian Asset Management LLC is registered as an investment adviser with the U.S. Securities and Exchange Commission. Registration of an investment adviser does not imply any level of skill or training.

Acadian Asset Management (Japan) is a Financial Instrument Operator (Discretionary Investment Management Business). Register Number Director-General Kanto Local Financial Bureau (Kinsho) Number 2814. Member of Japan Investment Advisers Association.

Acadian Asset Management (Singapore) Pte Ltd, (Registration Number: 199902125D) is licensed by the Monetary Authority of Singapore.

Acadian Asset Management (Australia) Limited (ABN 41 114 200 127) is the holder of Australian financial services license number 291872 ("AFSL"). Under the terms of its AFSL, Acadian Asset Management (Australia) Limited is limited to providing the financial services under its license to wholesale clients only. This marketing material is not to be provided to retail clients.

Acadian Asset Management (UK) Limited is authorized and regulated by the Financial Conduct Authority ('the FCA') and is a limited liability company incorporated in England and Wales with company number 05644066. Acadian Asset Management (UK) Limited will only make this material available to Professional Clients and Eligible Counterparties as defined by the FCA under the Markets in Financial Instruments Directive.

