

Topics@CreditEdge Webinar

Navigating Choppy Markets: Focus on Asia

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Speakers



Presenter

Samuel Malone, Ph.D

Director – Research



Presenter

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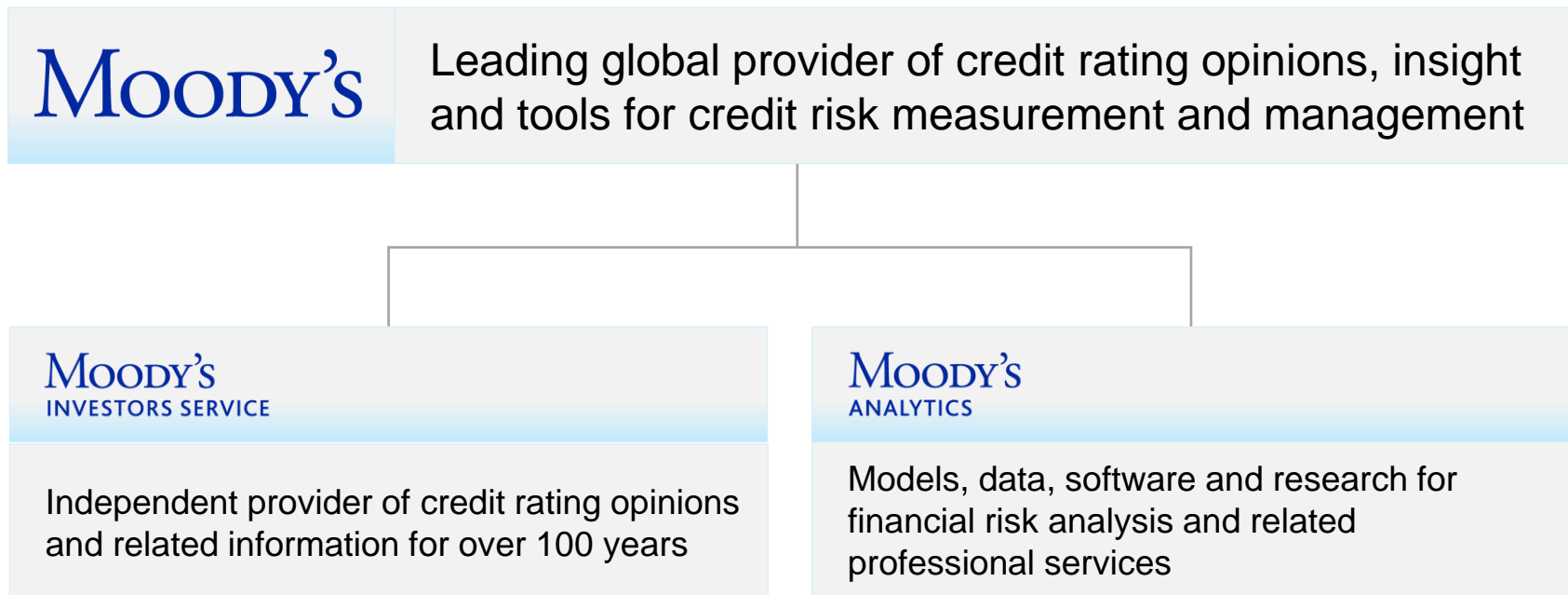


Moderator

Ryan Donahue

Product Strategist

About Moody's Analytics



CreditEdge by the numbers

50

Years of default data

1989

*When the first EDF measure was
calculated*

60,000+

*EDF measure for publicly traded
firms*

250+

Data fields

11,700+

Defaults in our global data base

76,000+

Active CUSIPs in our database

New Topics@CreditEdge

November 2018

Credit Risk Analytics Research

MOODY'S
ANALYTICS

TOPICS @CreditEdge

Moody's Credit Risk Analytics Group

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Navigating Choppy Markets: Safety-First Equity Strategies Based on Credit Risk Signals

Introduction

In early October, US equity markets suffered their second major correction this year and their worst fall in more than eight months. Values of stocks worldwide plunged to levels not seen in more than one year.

Widely cited drivers of the rout include the nascent US-China trade war, rising interest rates, and recent concerns related to Italy and several emerging markets. The sustainability of current levels of US growth and low unemployment over the medium term is also a growing concern.

Rising yields in particular increase the potential for equity volatility. Assuming stable expectations for the path of company earnings, upward shifts in the yield curve exert downward pressure on the prices of equities through the valuation channel. For equity prices to remain stable in a rising interest rate environment, therefore, investors must believe that the expected path of earnings continues to improve.

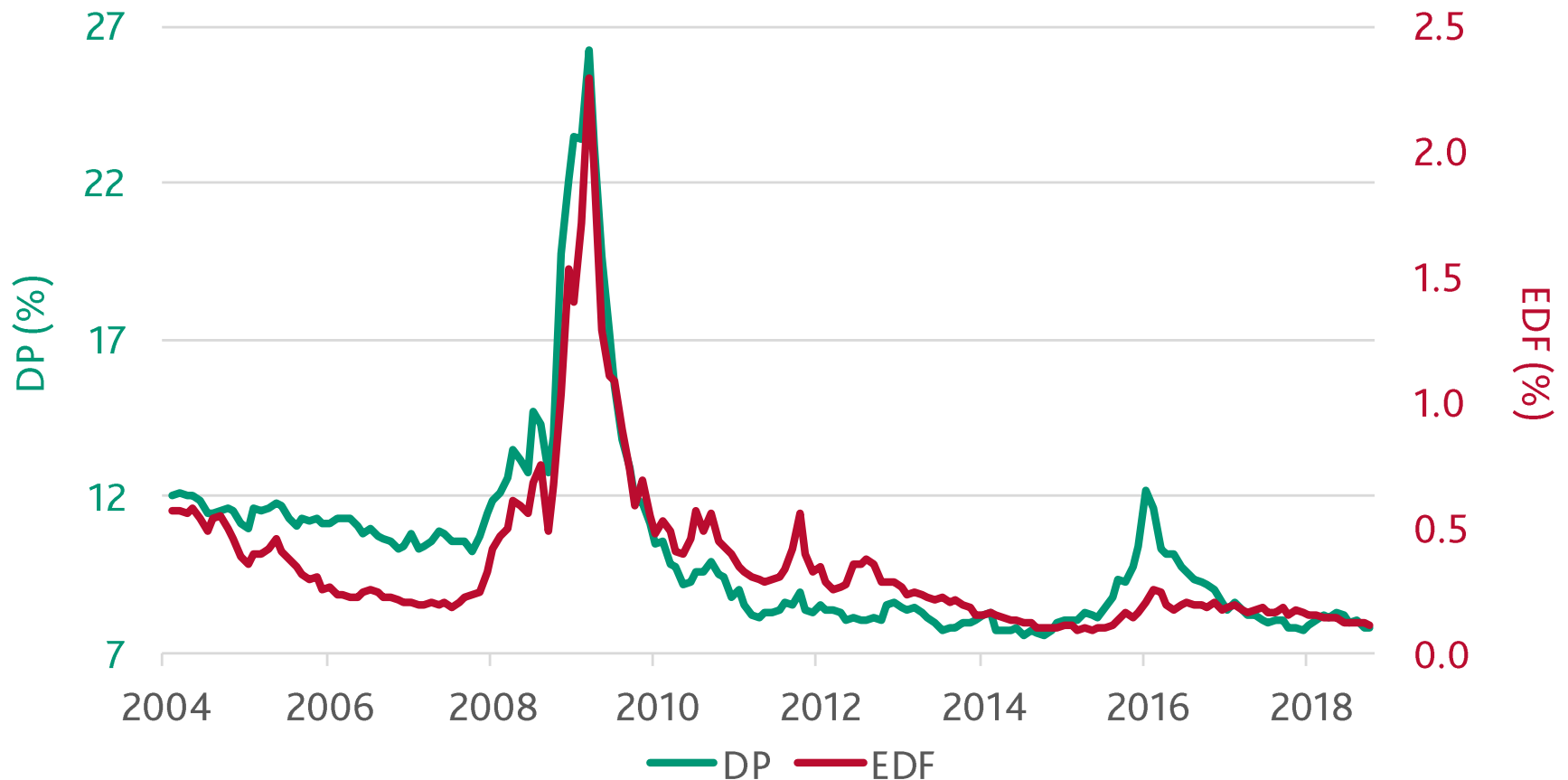
Agenda

1. Risk trends in the US and Asia
2. Default risk and credit migration risk
3. Safety-first investment strategies: United States
4. Safety-first investment strategies: Asia
5. Strategy alpha in the US

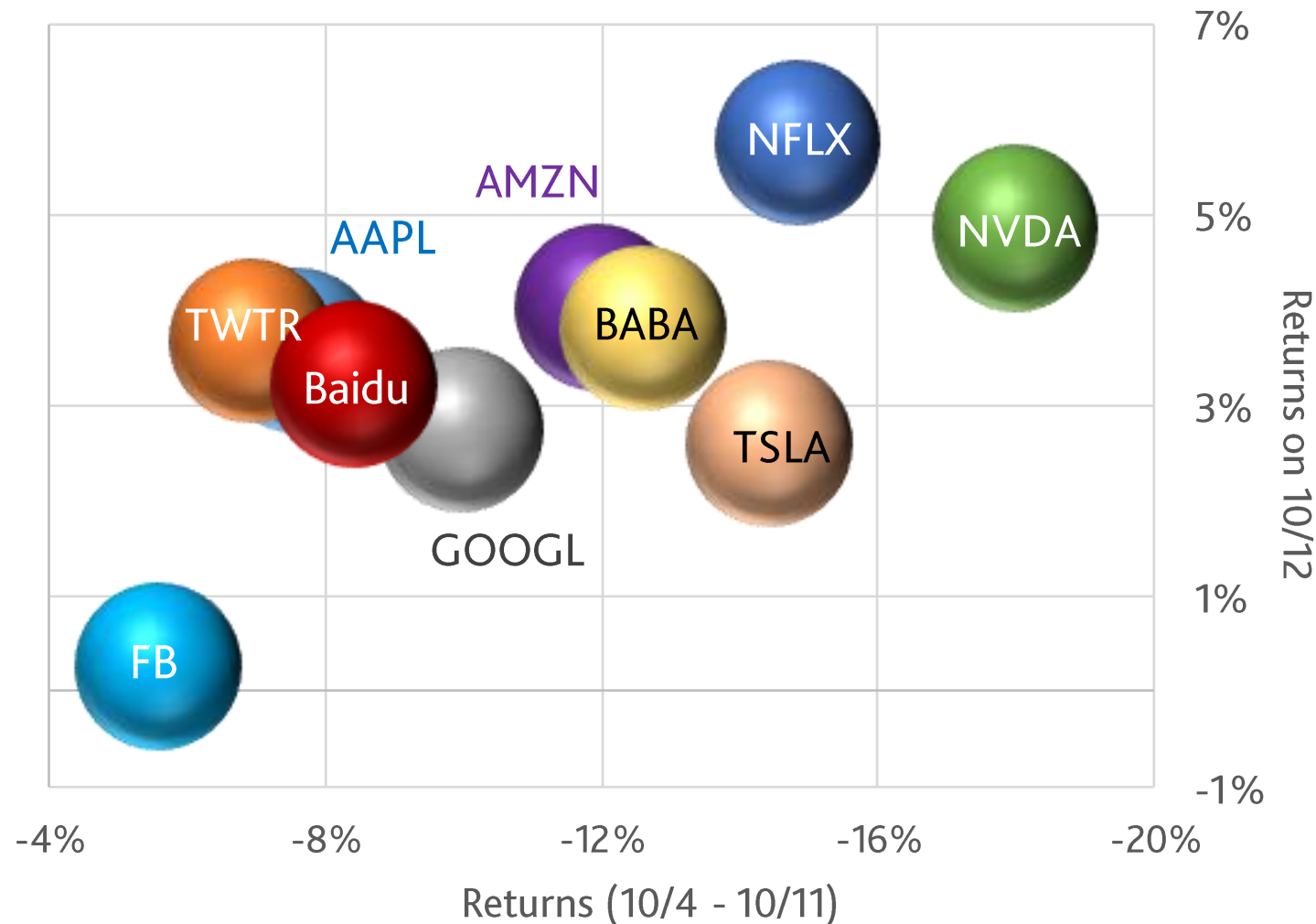
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Risk trends in the US and Asia

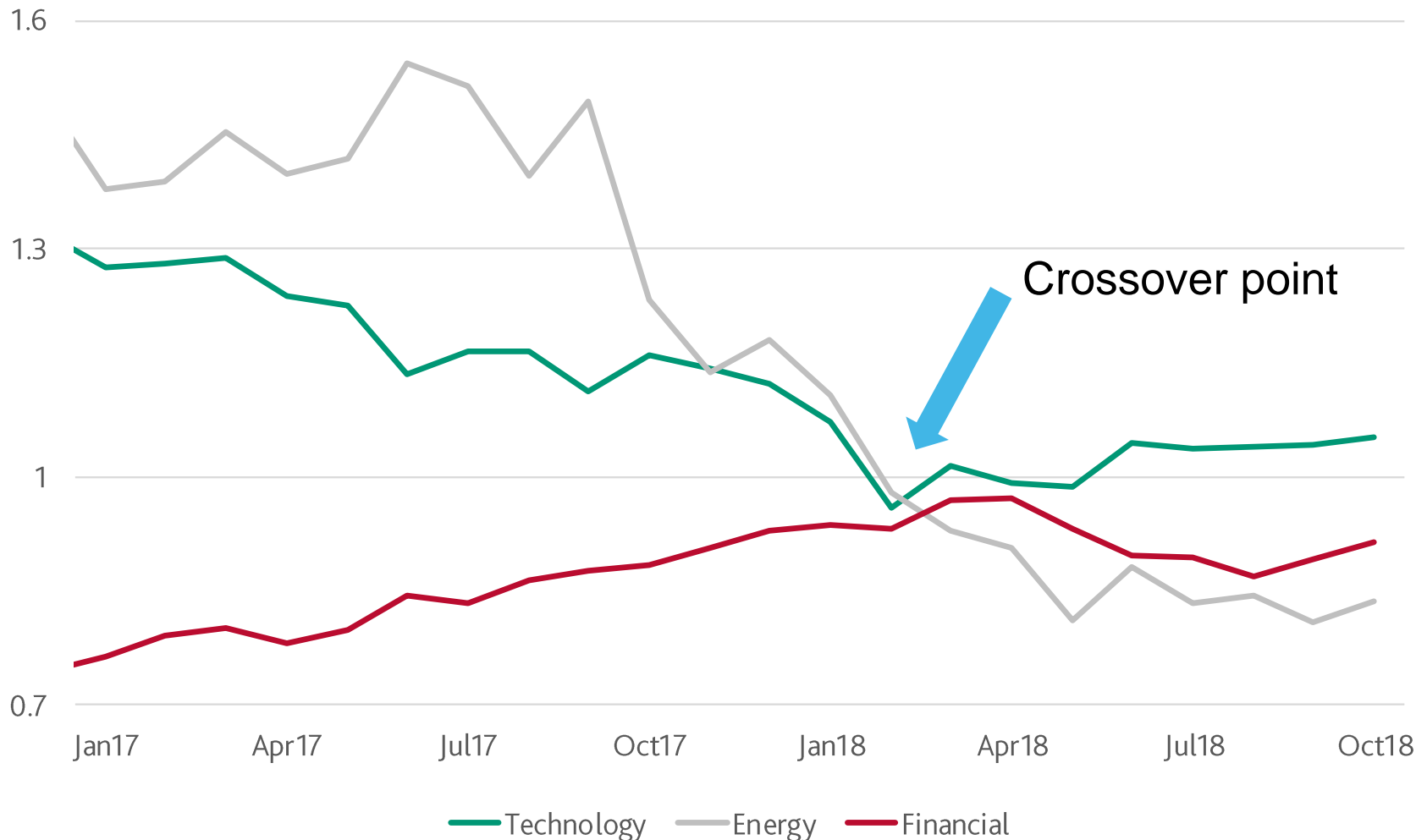
Average DP and EDF for S&P 500



Returns of the NYSE FANG+ Index members during the October 2018 sell-off and partial recovery

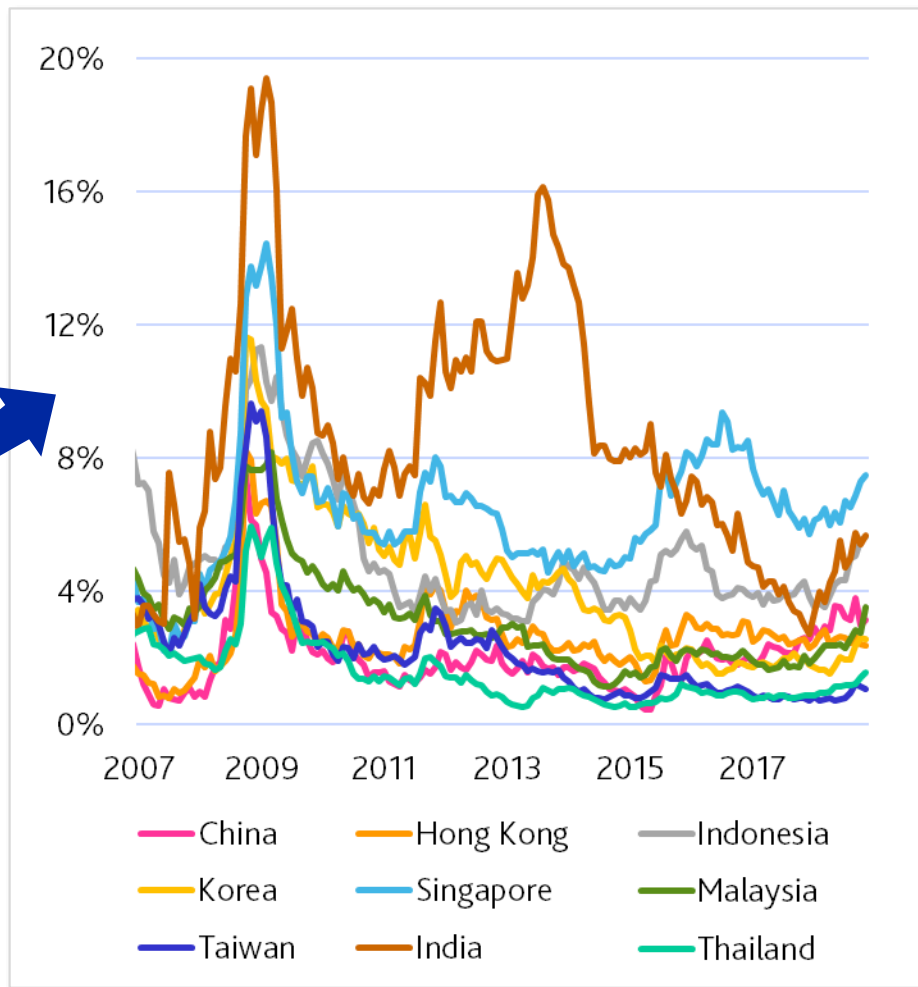
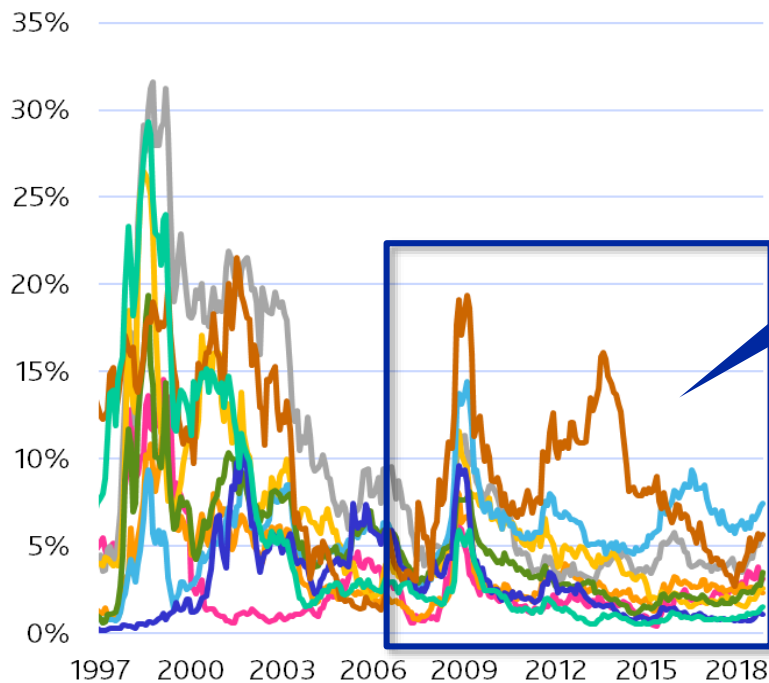


Relative DP ratio for Technology, Energy and Financial sectors: 2017-2018



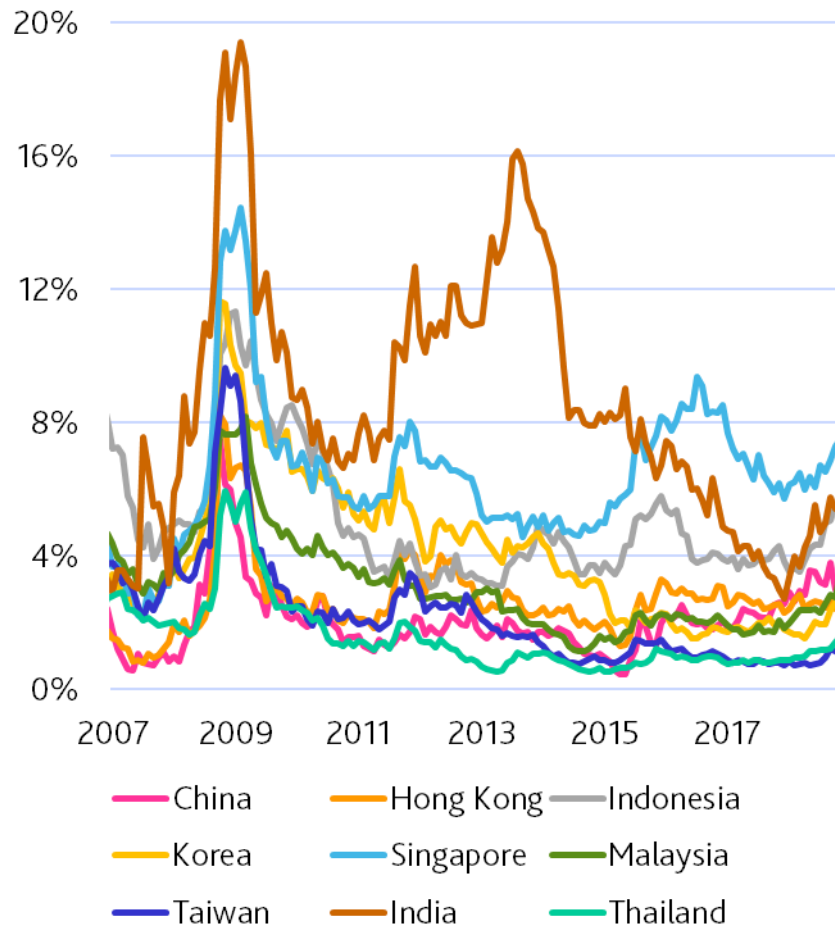
A Reprise of Risk: Asia

[75th Percentile for All CreditEdge Asian Entities]

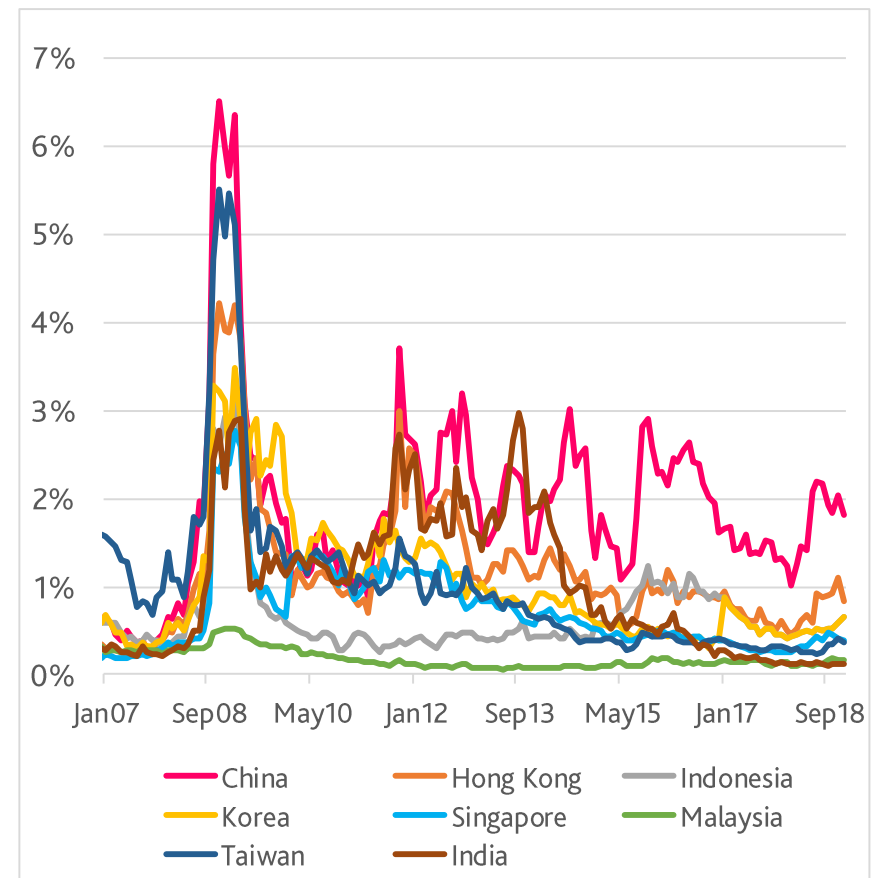


A Reprise of Risk: Asia

75th Percentile for All CreditEdge Asian entities



75th Percentile for the entities within the Index

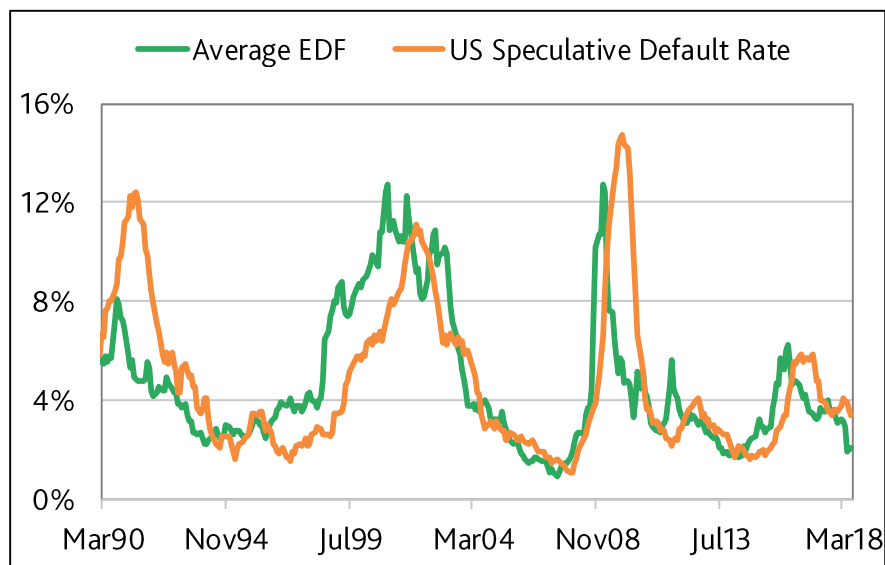


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Default risk and
credit migration risk

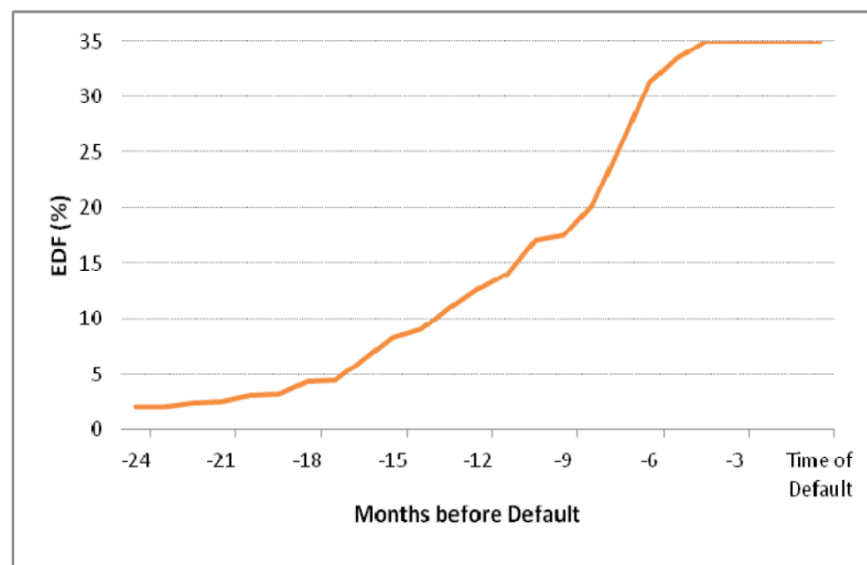
The CreditEdge public firm EDF model predicts default with accuracy and high degree of advance warning

Average EDF for high-yield firms vs.
Moody's high-yield default rate



- » CreditEdge **accurately** and **timely** predicted the level of high-yield default rate

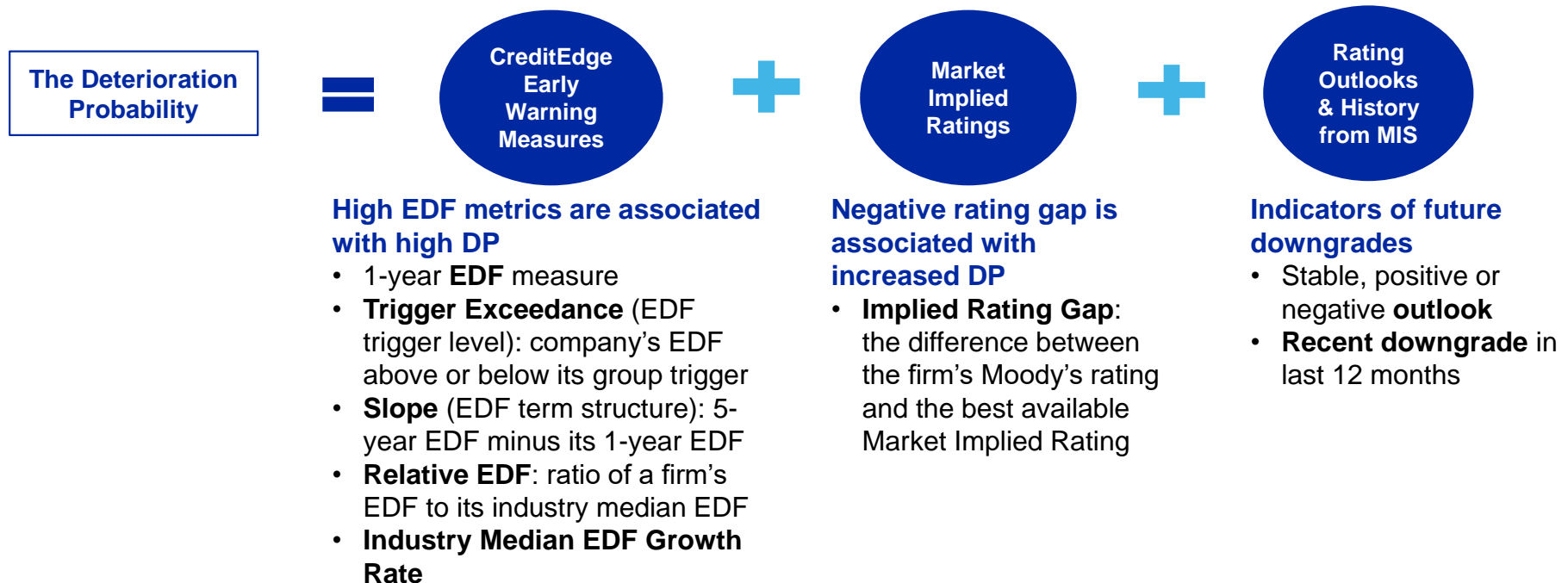
Median EDF for North American firms
that defaulted between 2008-2010



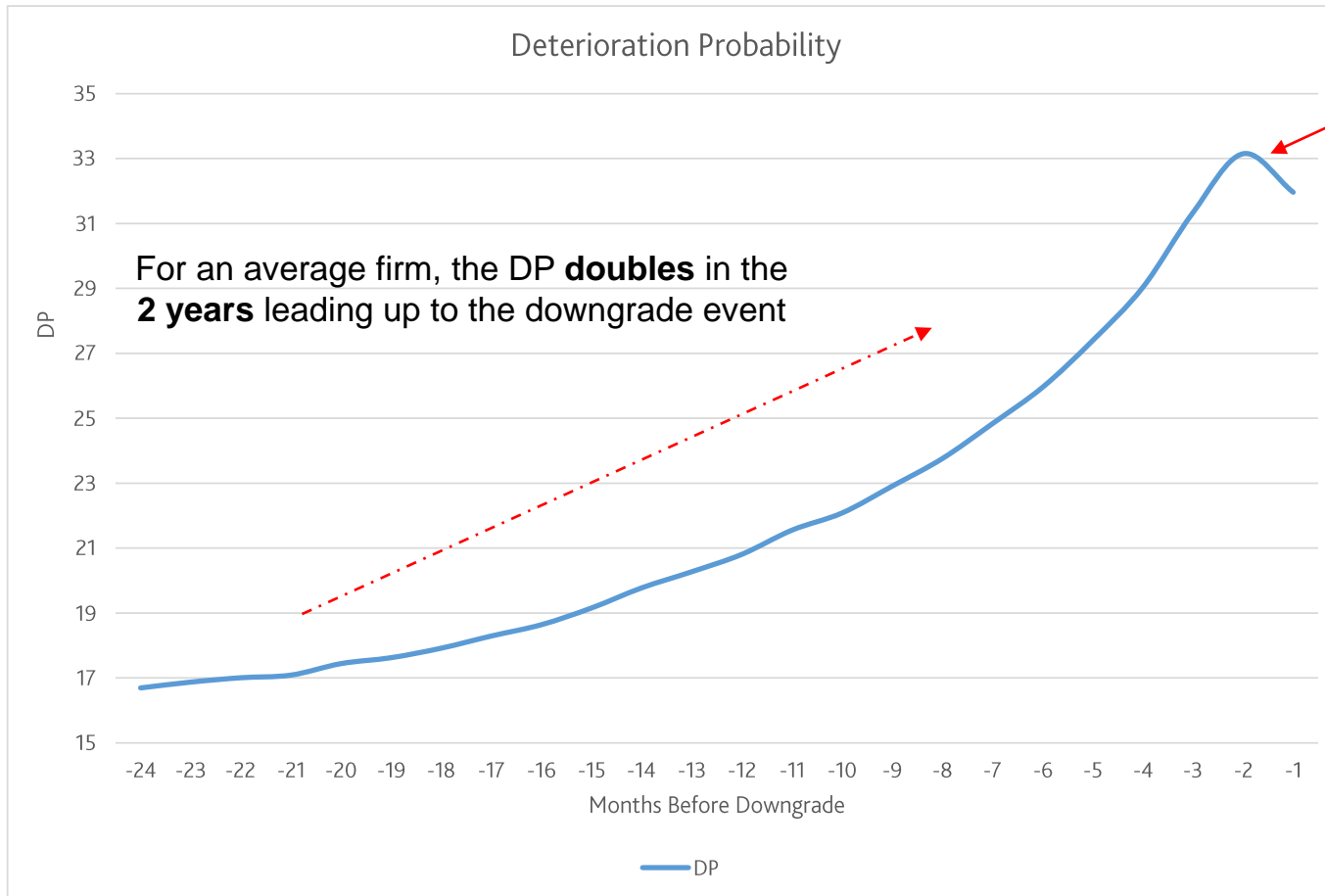
- » The EDFs of the North American credit crisis casualties increased many months before default

The Deterioration Probability (DP) measures the risk of issuer credit deterioration

Deterioration Probability (DP) is a metric ranging from 1-70% that estimates probability of downgrade for rated firms in the next 12 months – DP does not measure the probability of upgrade



On average, the Deterioration Probability provides a strong signal for downgrade events



DP **peaks** roughly **2 months before** the downgrade event – giving risk / investment managers time to take action

3

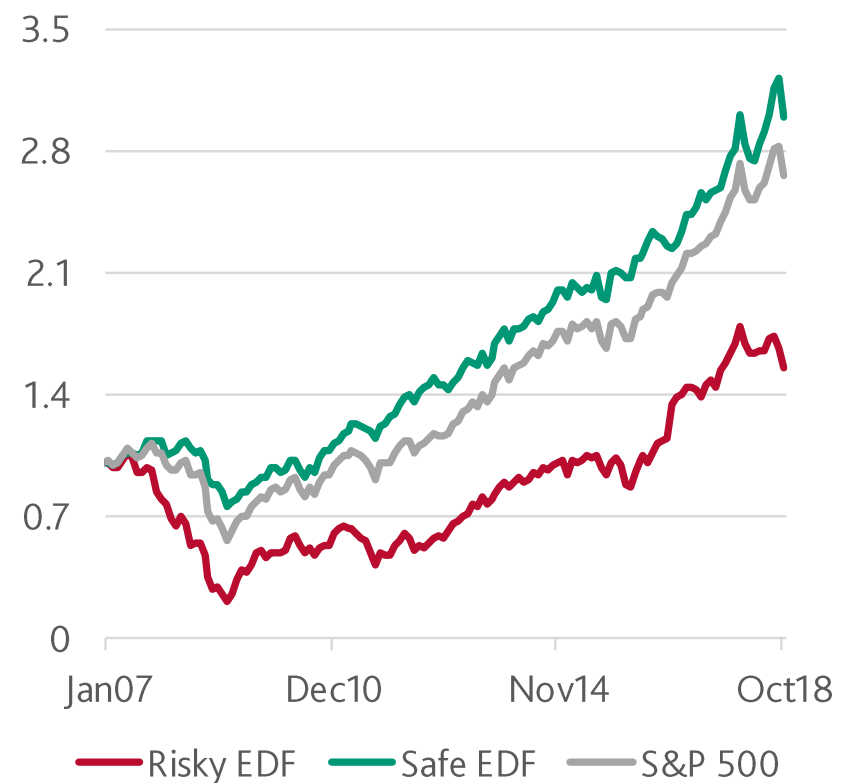
Safety-first
investment
strategies: United
States

Cumulative returns of top and bottom quintiles formed on EDF and Deterioration Probability vs. the S&P 500 benchmark

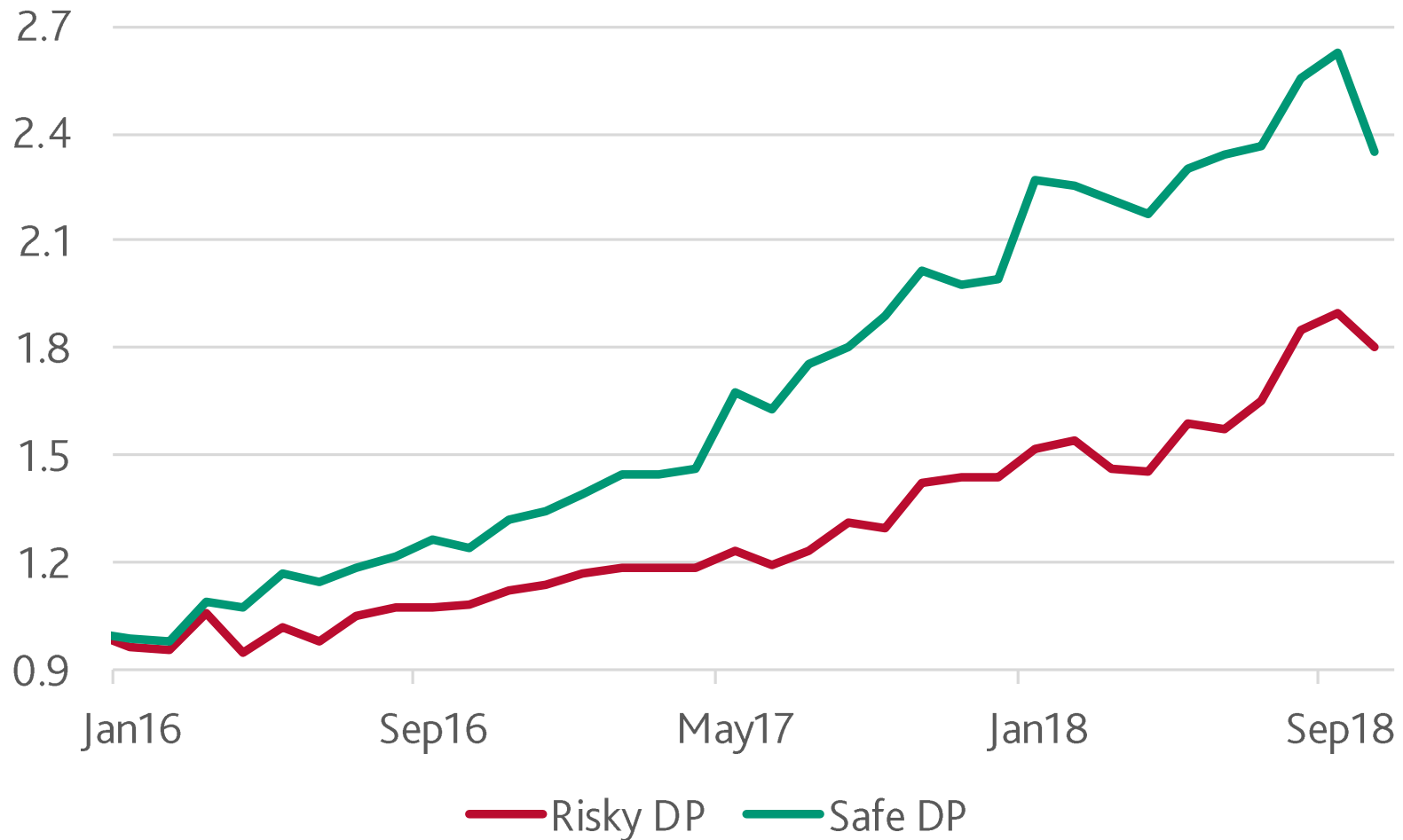
Deterioration Probability
Factor Strategy



EDF
Factor Strategy



Cumulative returns of top and bottom quintiles formed on DP – Technology Sector (Jan. 2016 - Oct. 2018)

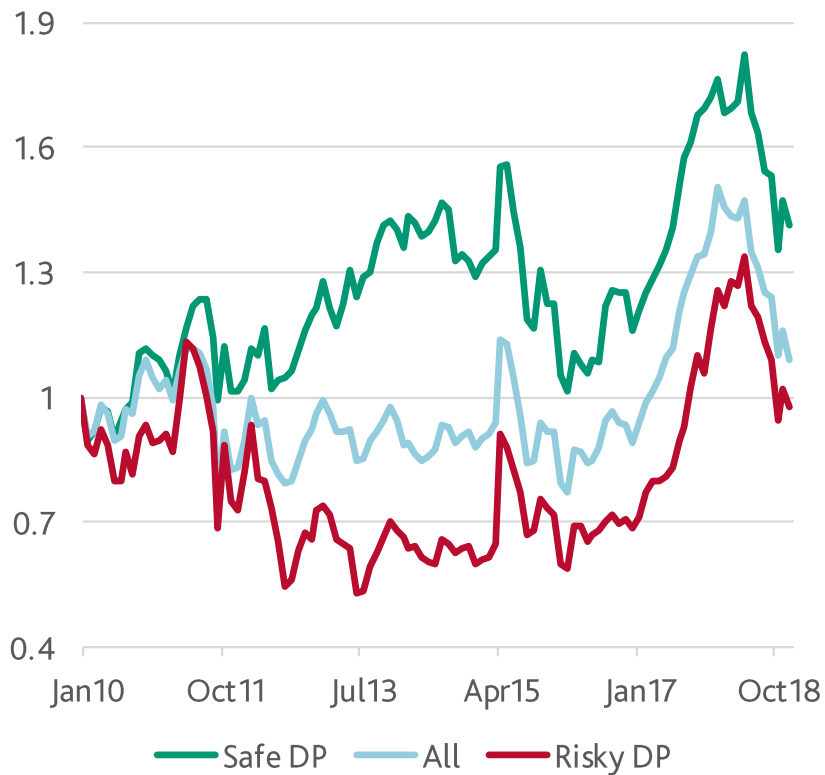


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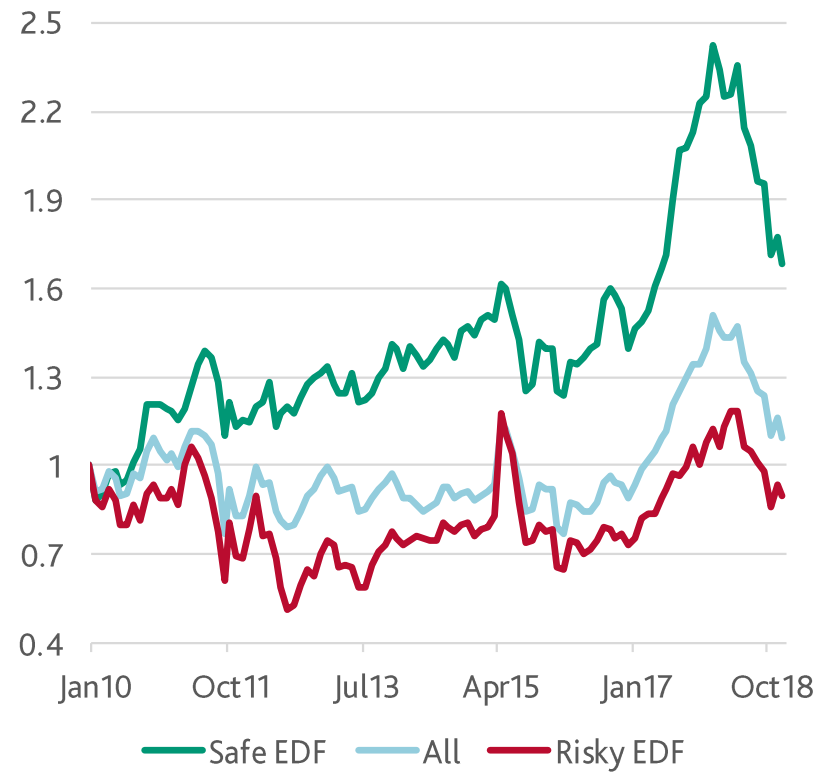
Safety-first
investment
strategies: Asia

China Equity strategy using DP and EDF

DP

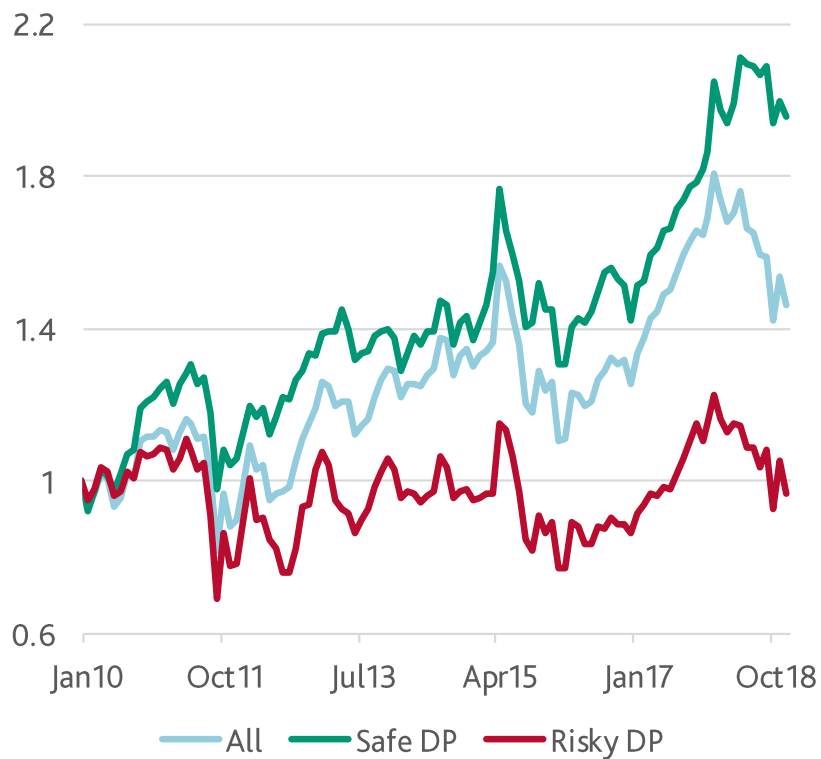


EDF

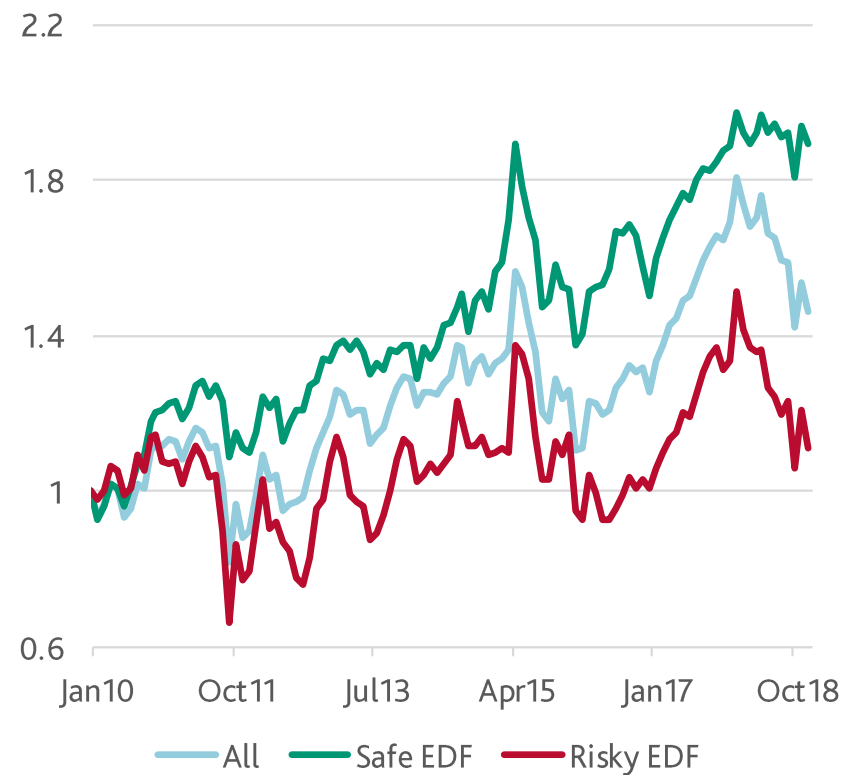


Hong Kong Equity strategy using DP and EDF

DP

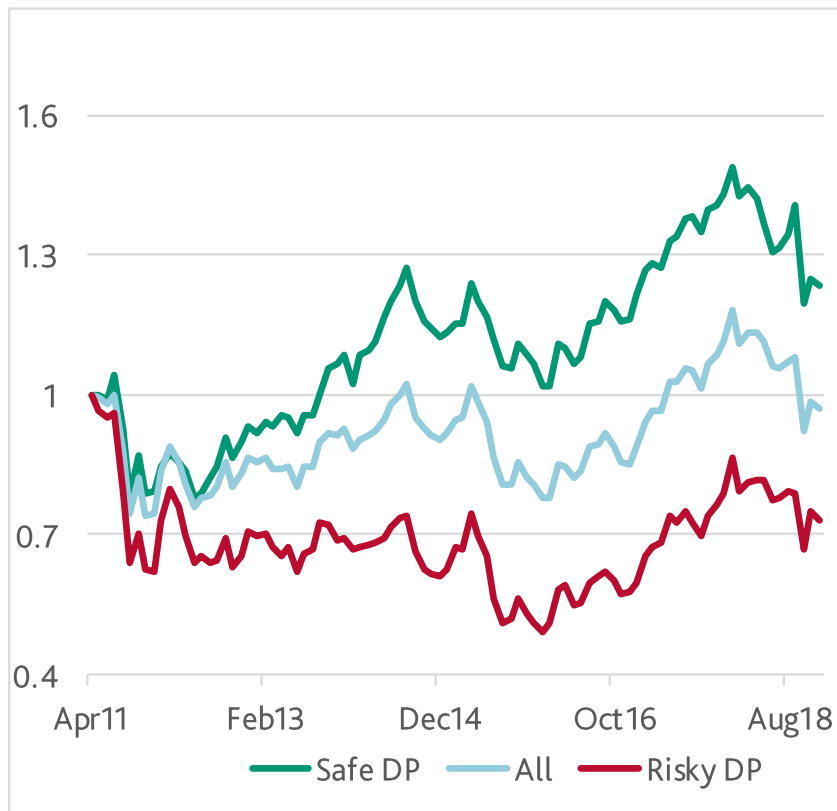


EDF

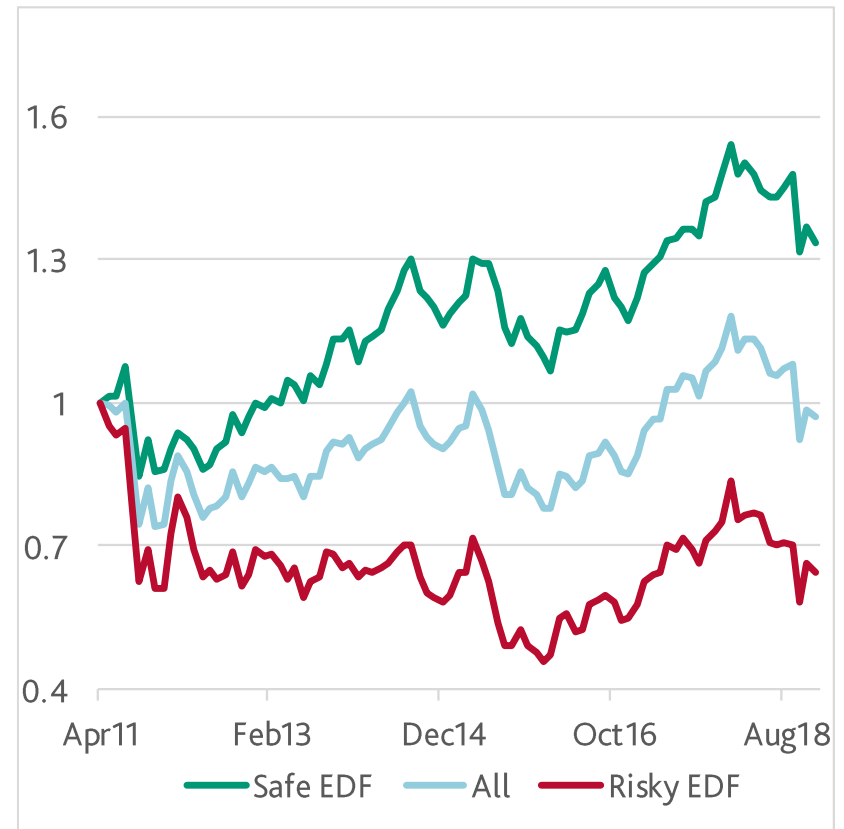


Korea and Taiwan Equity strategy using DP and EDF

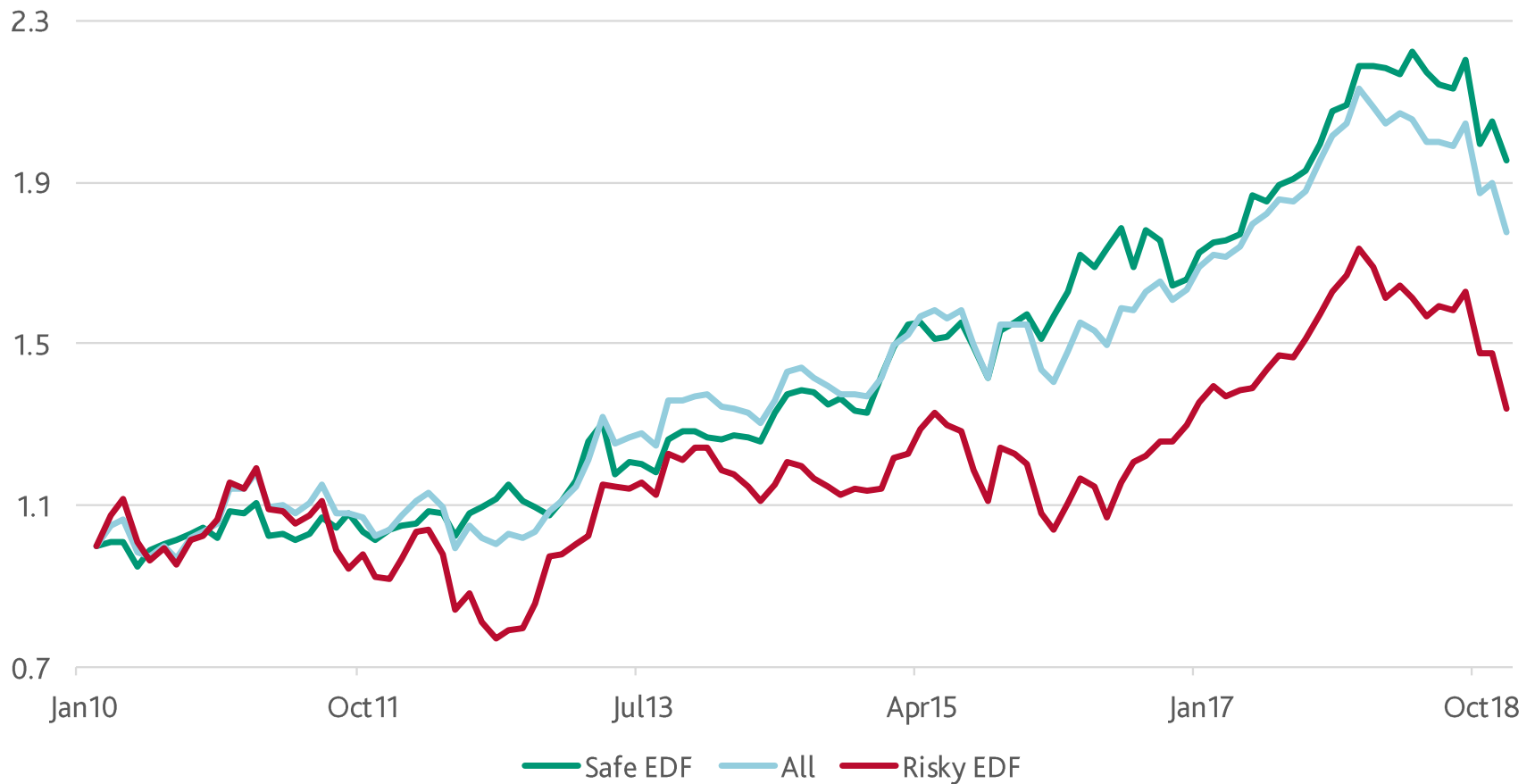
DP



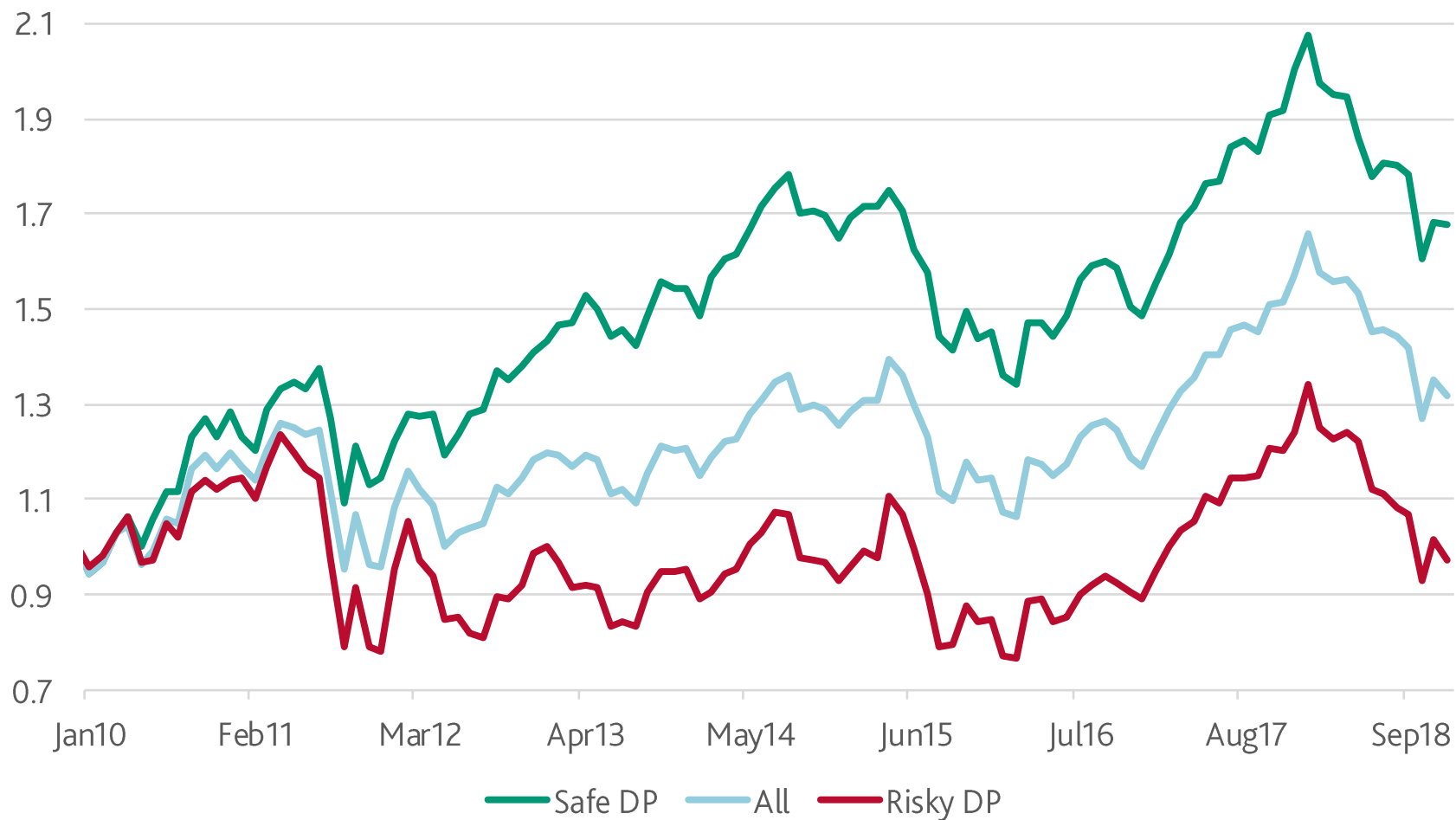
EDF



Japan Equity strategy using EDF



Asia ex.JP Equity strategy using DP



5

Strategy alpha in the
US

The CAPM regression

We run the regression:

$$R_{strategy,t} - r_f = \alpha + \beta(R_{market,t} - r_f) + \epsilon_t$$



to obtain...

$\hat{\alpha}$ = estimate of mean excess return
not due to systematic risk exposure

$\hat{\beta}$ = estimate of systematic risk loading

CAPM regression results based on sign of the change in the slope of the Treasury yield curve

Macro Scenario	Result	RiskyDP	SafeDP	RiskyEDF	SafeEDF
All months	α	-0.20 (0.17)	0.23** (0.11)	-0.66** (0.31)	0.27** (0.12)
	β	1.19*** (0.04)	0.88*** (0.03)	1.67*** (0.07)	0.71*** (0.03)
Yield Curve steepens	α	0.12 (0.34)	0.05 (0.18)	0.32 (0.56)	-0.07 (0.21)
	β	1.21*** (0.07)	0.88*** (0.04)	1.67*** (0.11)	0.72*** (0.04)
Yield Curve flattens	α	-0.44*** (0.15)	0.38*** (0.13)	-1.41*** (0.33)	0.53*** (0.14)
	β	1.16*** (0.04)	0.88*** (0.04)	1.65*** (0.09)	0.68*** (0.04)

Standard errors are shown in parentheses below point estimates.
Significance Levels are denoted as follows: 1% (***), 5% (**), 10% (*).

Conclusions

- Credit risk in Asia has experienced a secular decline since the Asia financial crisis in 1997.
- However, the last four years has seen an uptick in default risk in many countries.
 - China, India, and Singapore top the list of concerning countries.
- EDF- and DP-based “safety-first” equity strategies seem to work well:
 - In the US S&P 500 universe
 - In various equity markets in Asia
 - In environments of flattening yield curves



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