SOM *Macro Strategies*

State Of the Markets: Year Ahead 2019— Global Slowdown

January 2019

Alan Brazil

SOM Macro Strategies

State Of the Markets: Year Ahead 201—Global Slowdown

Step 1: Macro Themes

Table of Contents

- Intro to The Global Slowdown Macro theme
  - Recommended Trades
- EMU Slowdown
- Position For A Stronger USD, Weaker EM And Commodities
- The Coming Economic War Between the USA And China
- Model Portfolio Performance Year-End 2018

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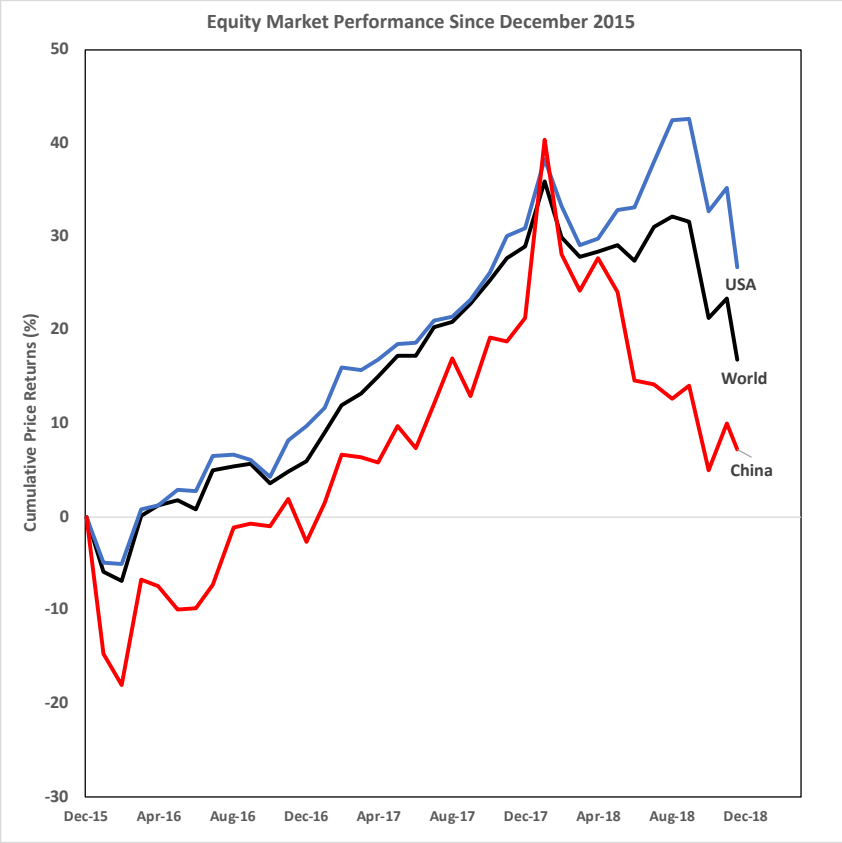
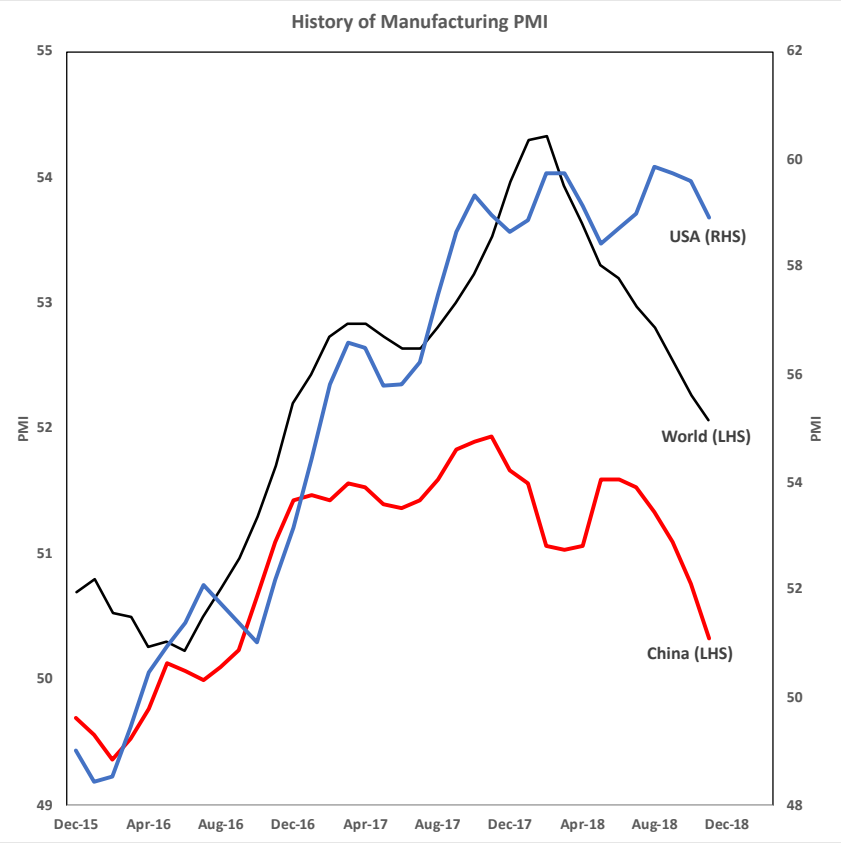
Step 1: Macro Theme

Is The Sell-off Temporary Or Does It Reflect A More Fundamental Issue: A Global Economic Slowdown[1]

Global Equities Have Fallen Substantially From Their Recent Highs…



But So Has World Economic Growth, With The Exception of The US



1. Bloomberg

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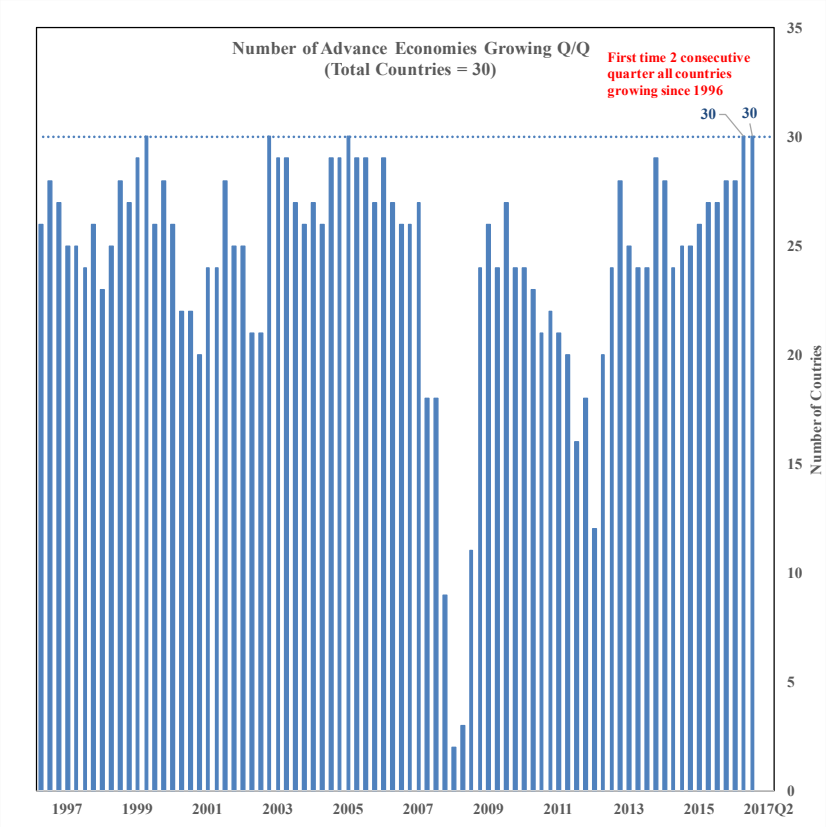
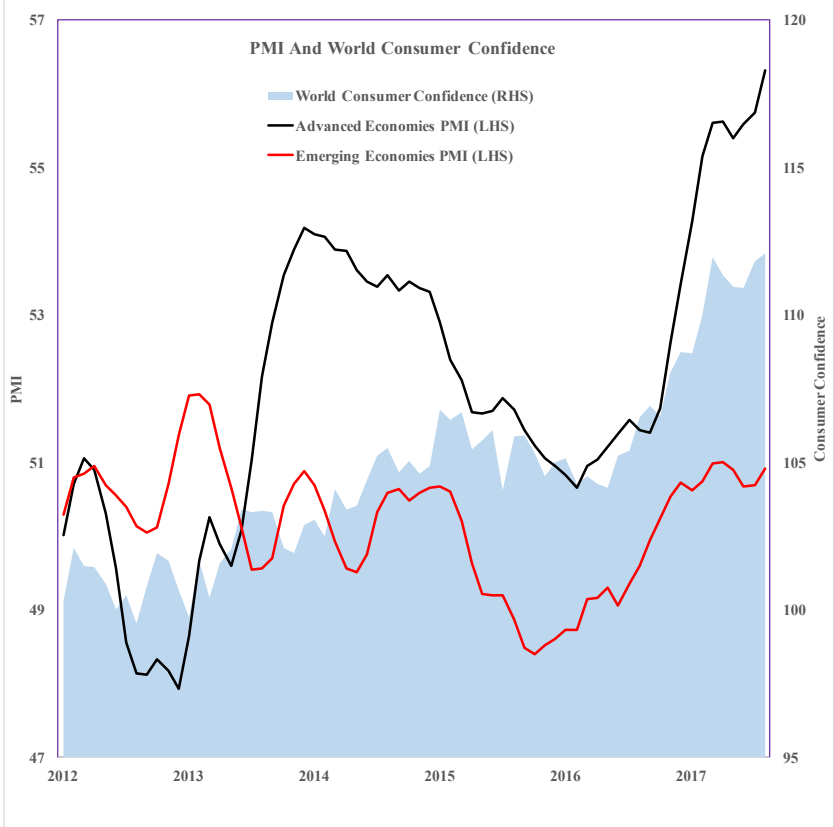
Step 2: Fundamental Economic Framework

Global Growth Looks Dramatically Different From The Synchronized Growth of Late 2017[1]

Advanced Economies Are Growing At An Historically Pace…



Pulling EM Is Coming out of a Recession, Pushing up Confidence



1. IMF, World Economic Outlook Data Base

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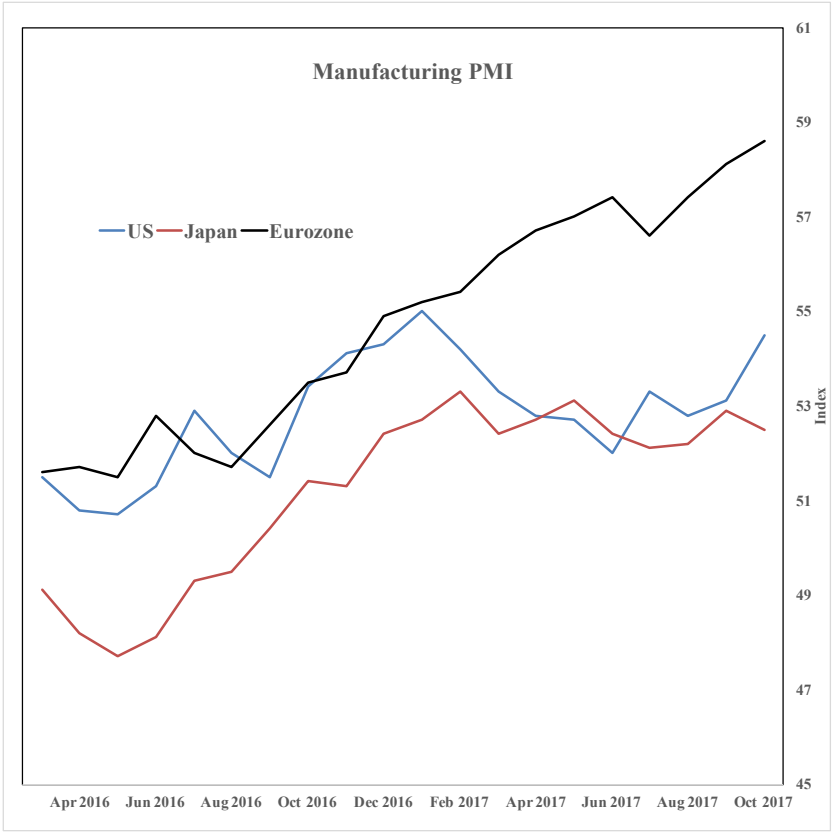
Step 2: Fundamental Economic Framework

Economic Growth In The Developed Markets Was Strong Particularly In The Eurozone[1]

All Three Major Advanced Economies Aare Growth

Eurozone Growth Looked Stronger and Potentially Getting Stronger

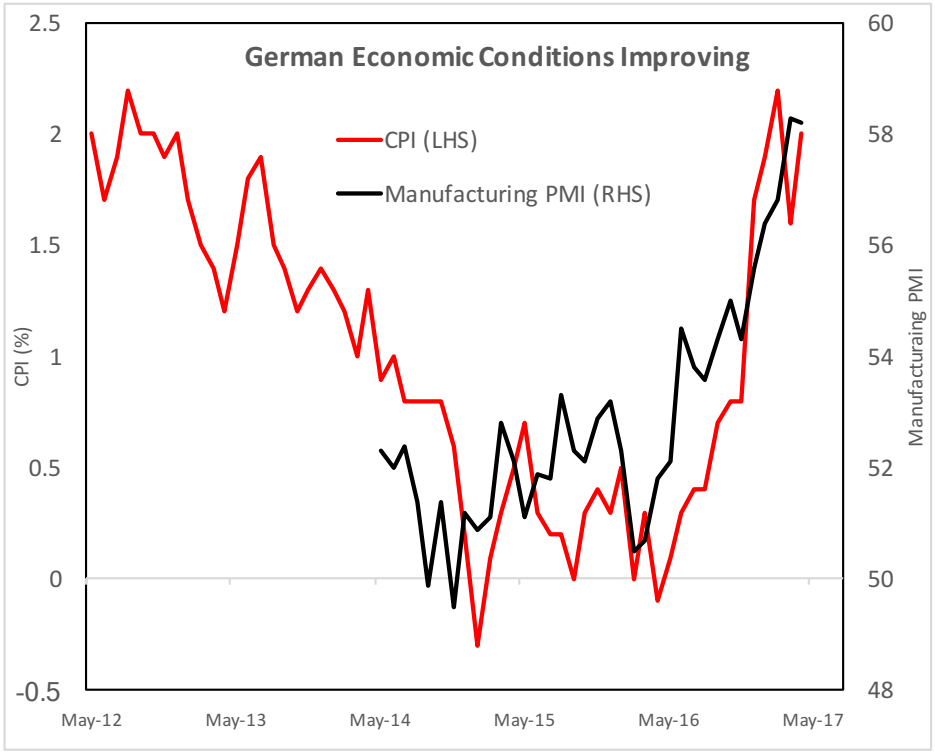


1. IMF World Outlook Data Base

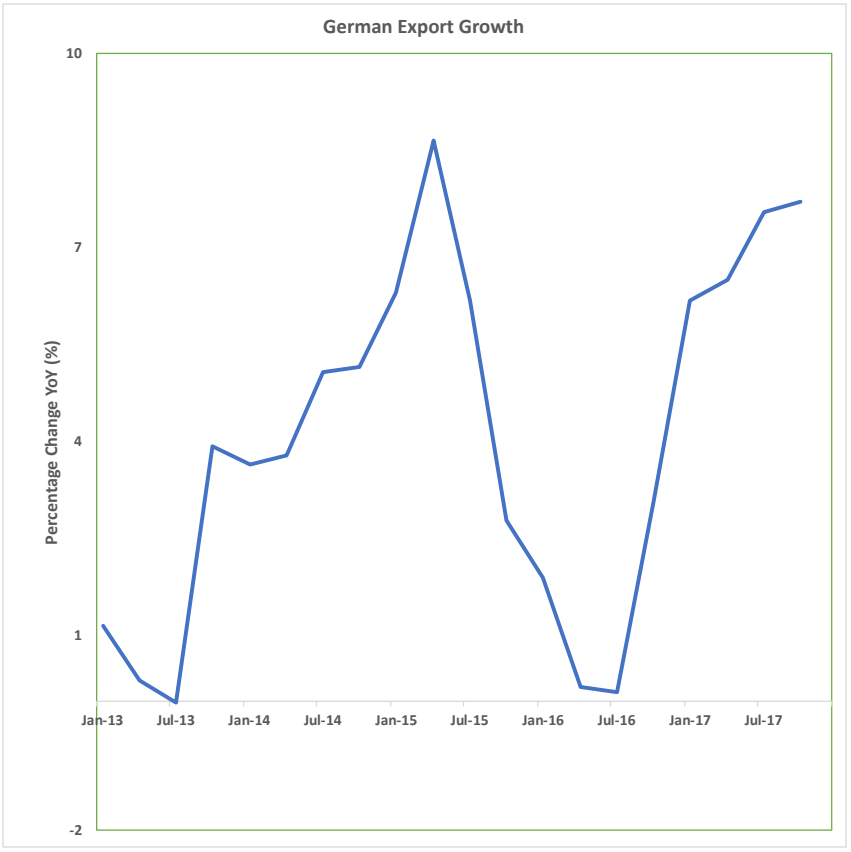
Step 2: Fundamental Economic Framework

The German Economy Rebounded Strongly From The 2015 Slowdown, Driven By Trade[1]

German Economy Was Rebounding…



Lead By A Rebound In Exports



1. Bloomberg

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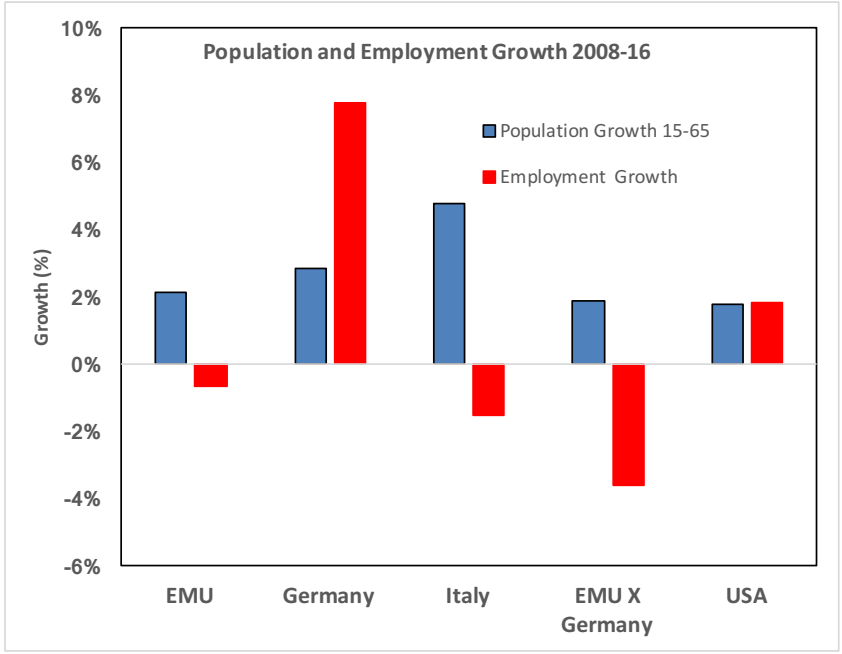
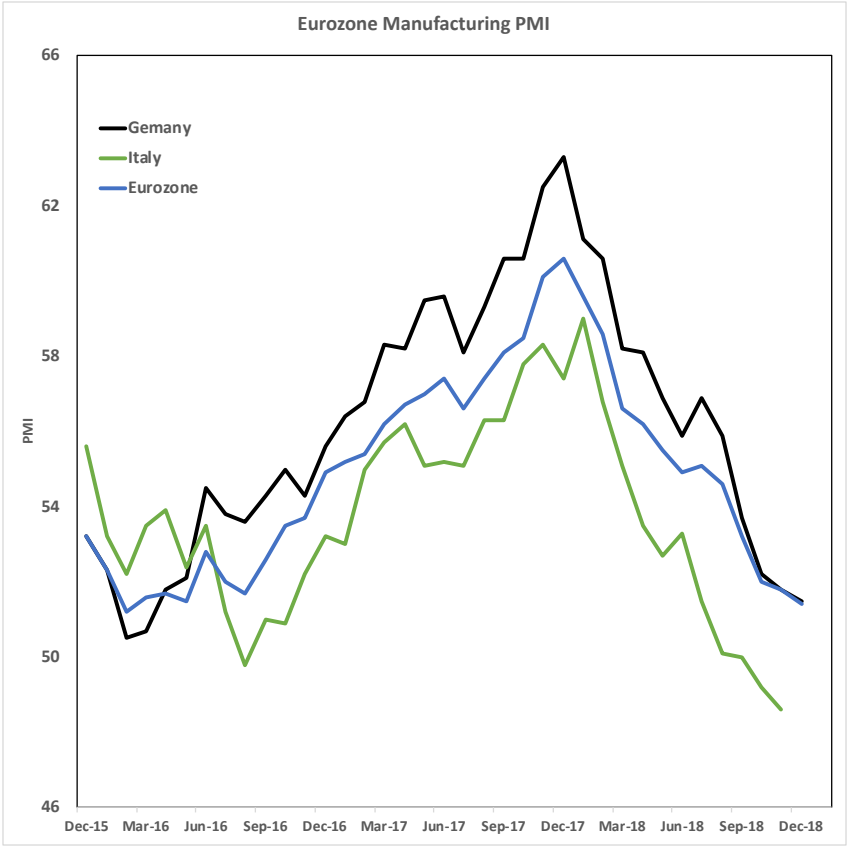
Step 2: Fundamental Economic Framework

Germany Looked To Have The Ingredients Of Sustained Growth But Then Picture Changed…Why?

Population Growth Lead To Labor Growth[1]



European Economic Growth Fell Back To Early 2016 Levels[2]



1. Eurostat
2. Bloomberg

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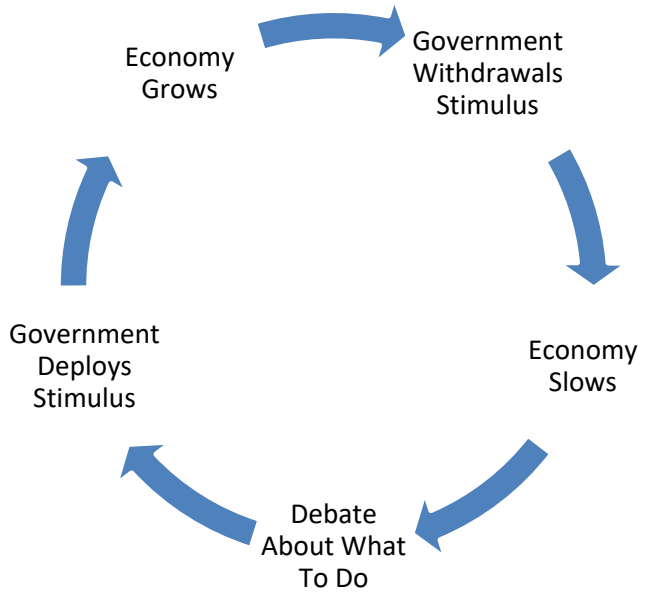
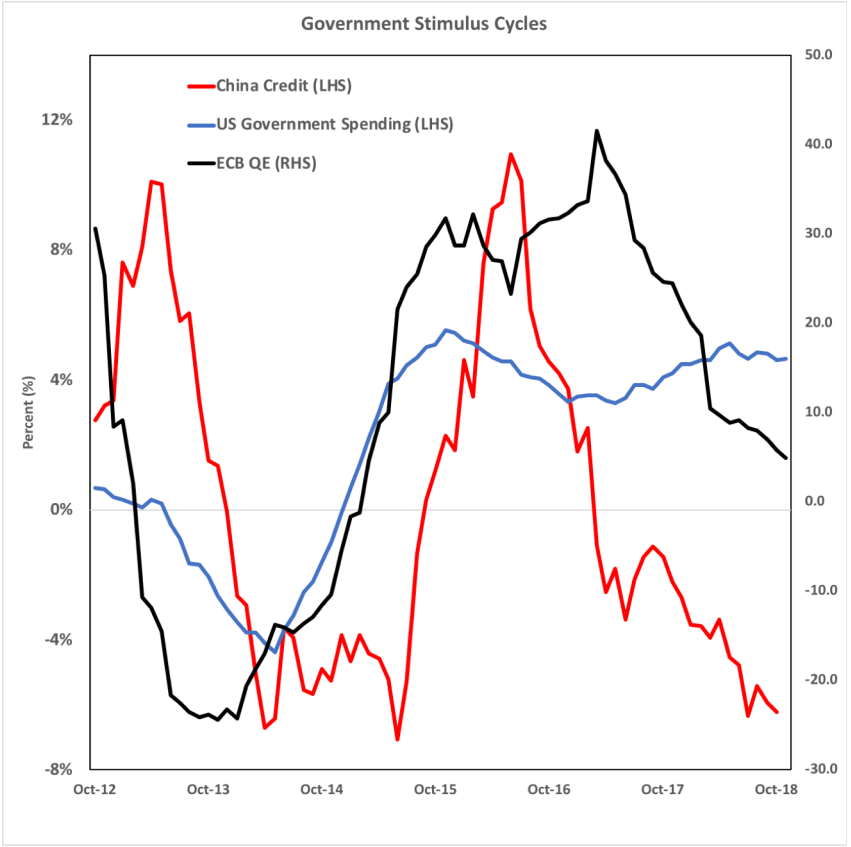
Step 2: Fundamental Economic Framework

The Turn Of The Economic Growth And Government Stimulus Cycle Explains The Boom and Bust[1]

The Economy and Government Stimulus Cycle



Both China And The US



1.Bloomberg

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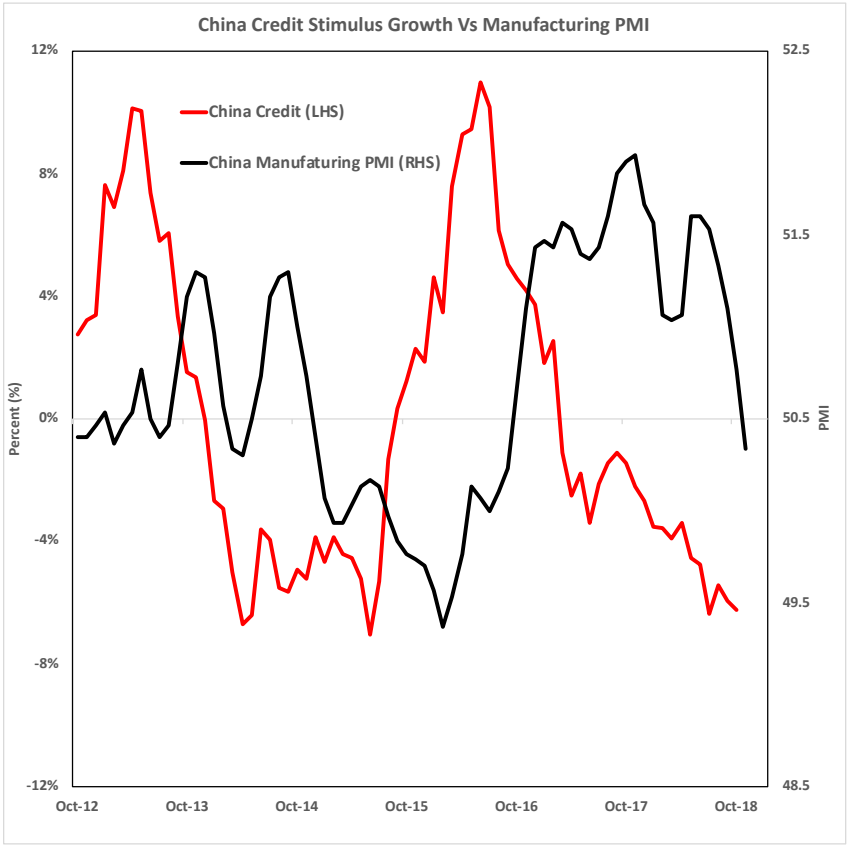
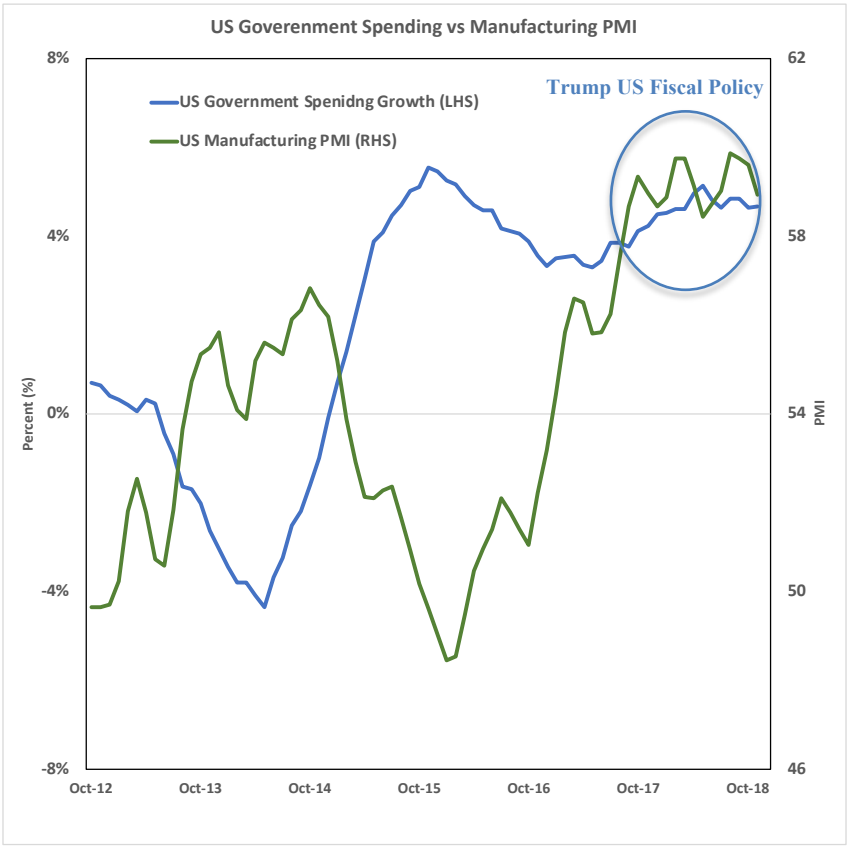
Step 2: Fundamental Economic Framework

Cycles of Economic Growth Can Be Partly Explained By This Cycle of Stimulus Policy[1]

The Case of China



The Case of The US With New Trump Fiscal Policy Impact

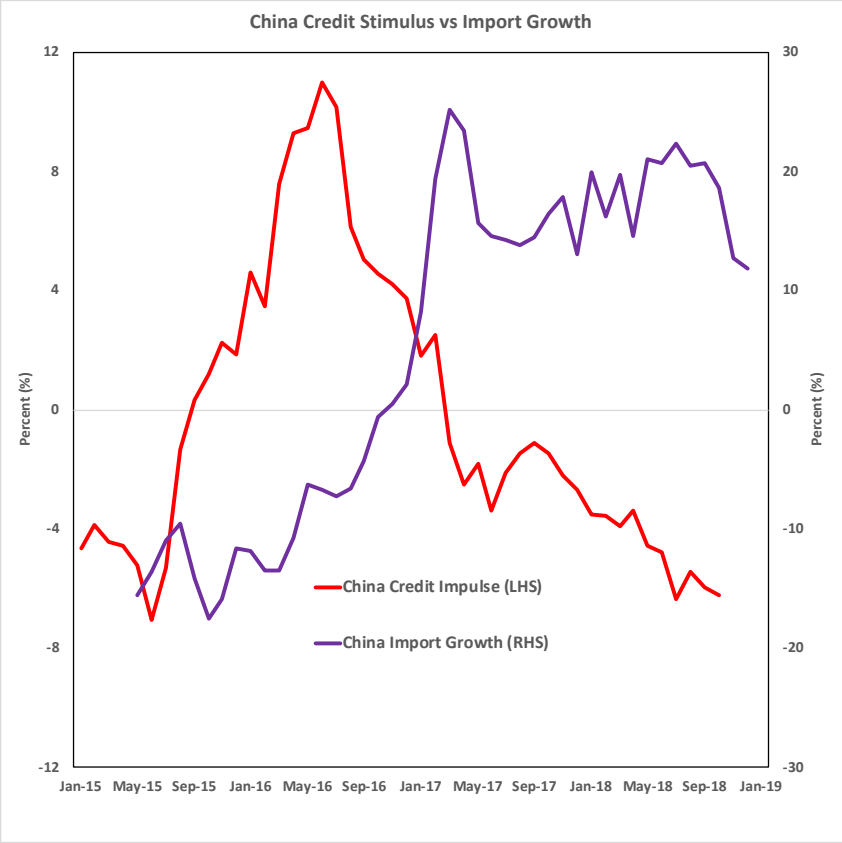


1. Bloomberg

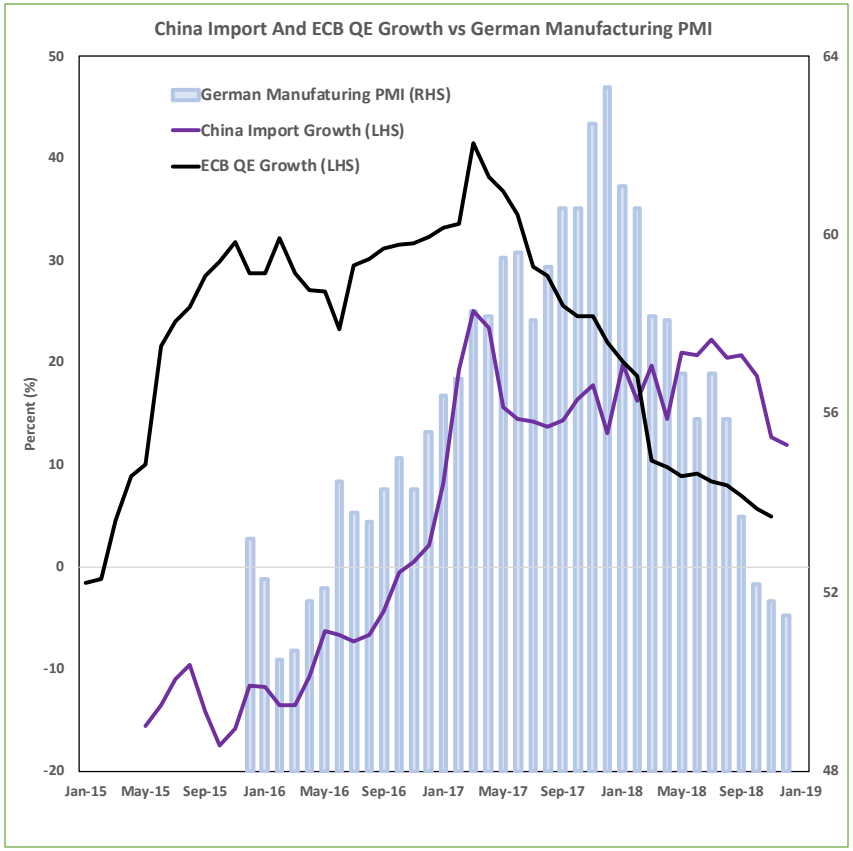
Step 2: Fundamental Economic Framework

Cycle Also Explains The Double Impact On Germany From Both ECB and China Policy[1]

China Stimulus Pushed Up China Imports



Germany Was Affect By Both China And ECB Stimulus Cycles



1. Bloomberg

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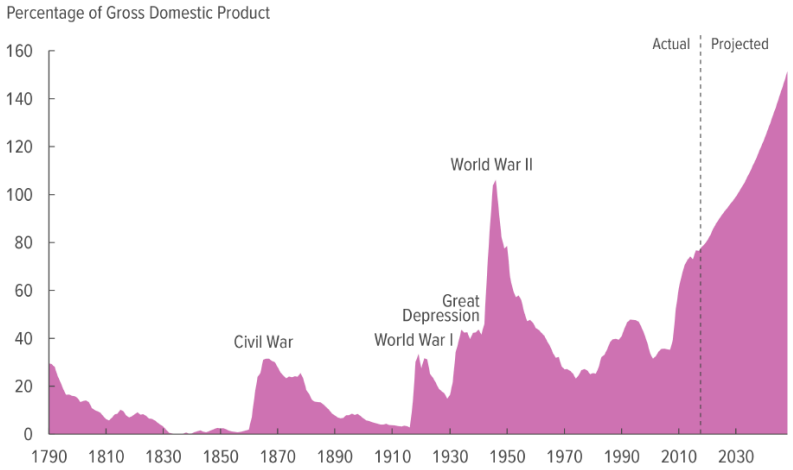
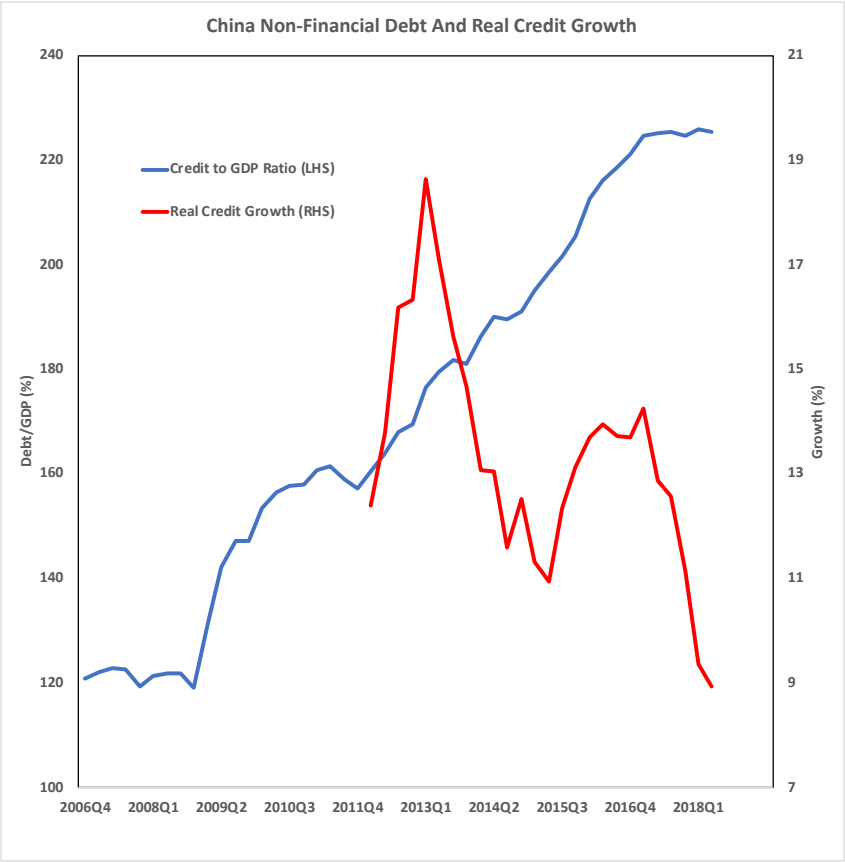
Step 2: Fundamental Economic Framework

Debt Barriers To Putting Another Round of Government Stimulus To Push Up Economic Growth

The US Has A Debt Issue[1]



While China Has A Credit Issue[2]



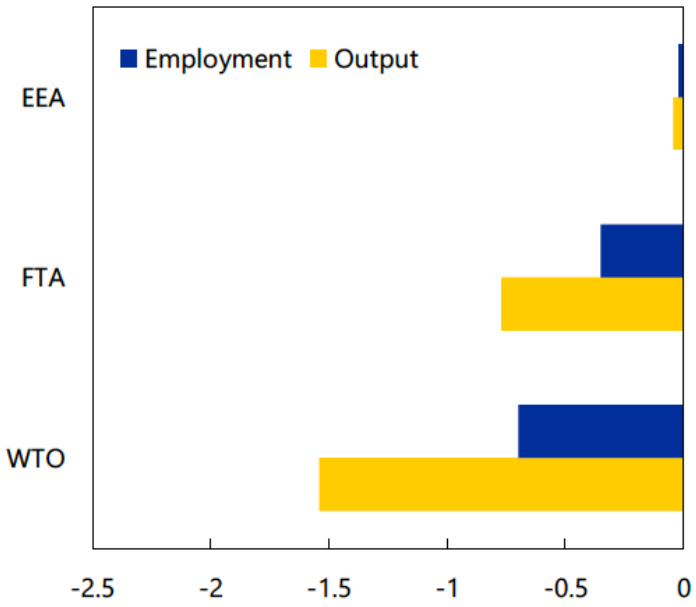
1. "The 2018 Long-Term Budget Outlook", CBO, September 2018
2. IMF, World Economic Outlook, October 2018

Step 3: Identify Potential Repricing Events

Hard Brexit: Economic Fallout Could Push Down World Growth Particularly In Europe[1]

Hard BREXIT Hard Even On Europe Both In The Short Run…

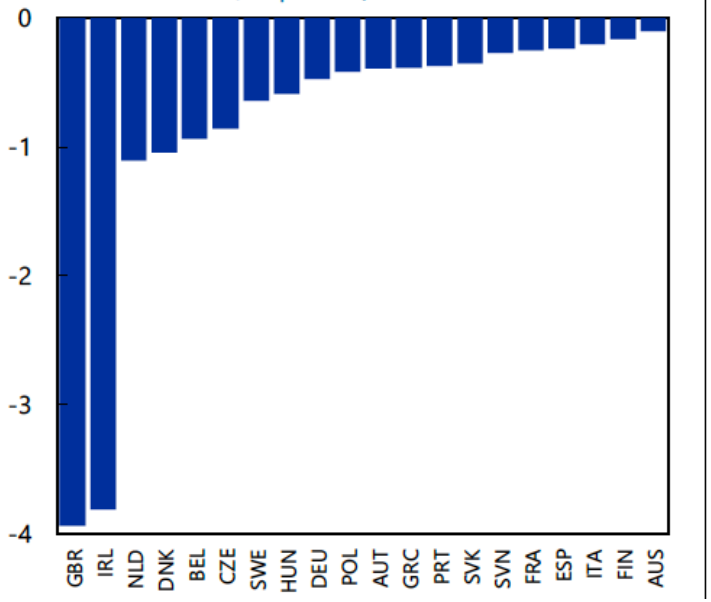
EU27: Long-Run Decline in Output and Employment
(In percent; losses due to Brexit)



Source: IMF staff estimates.

And In The Long Run

Long-Term Impact of Brexit: WTO scenario
(Decline in the level of output compared to a non-Brexit scenario; In percent)



1. IMF Article IV, Europe Area Policies 2018

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Step 3: Identify Potential Repricing Events

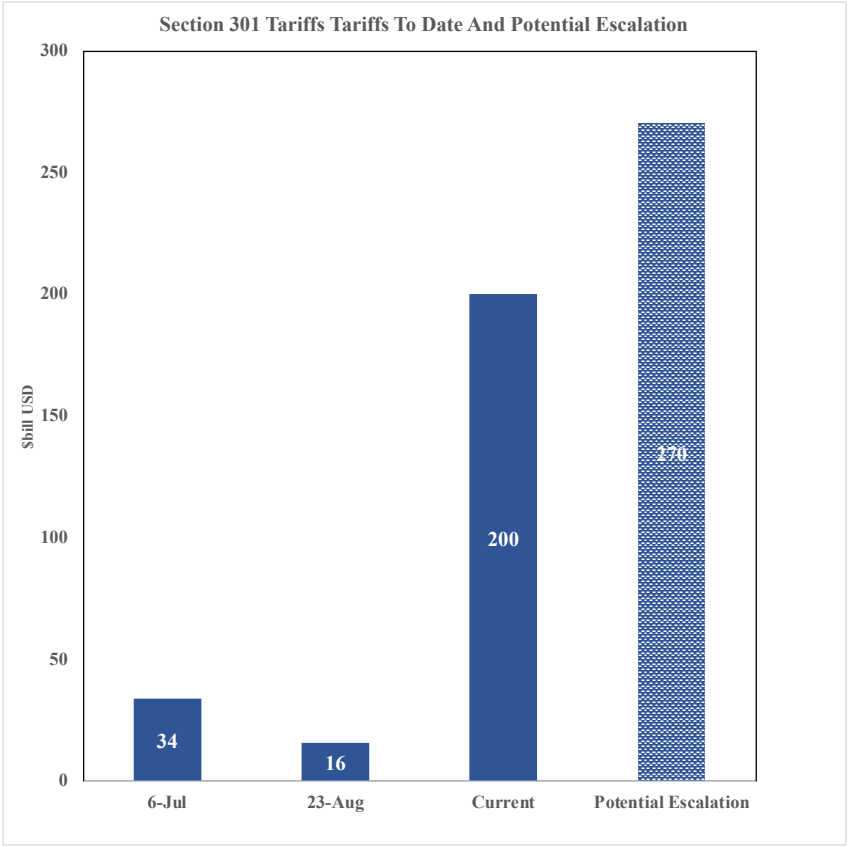
China/US Economic War: Can The US And China Agree In Less Than 90 Days?

Words Alone May Not Satisfy The US Given Chinese History[1]

Table I.1 China's Bilateral Commitments Relating to Technology Transfer, 2010 - 2016

Year	Mechanism	Commitment
2010	S&ED	China reaffirmed that the terms and conditions of technology transfer, production processes, and other proprietary information will be determined by individual enterprises.
2011	JCCT	China confirmed that it does not and will not maintain measures that mandate the transfer of technology in the New Energy Vehicles Sector. China further clarified that "mastery of core technology" does not require technology transfer for NEVs.
2012	S&ED	China reaffirmed its commitment that technology transfer is to be decided by firms independently and not to be used by the Chinese government as a pre-condition for market access.
2012	Xi Visit Commitment	China reiterated that technology transfer and technological cooperation shall be decided by businesses independently and will not be used by the Chinese government as a pre-condition for market access.
2012	JCCT	China reaffirmed that technology transfer and technology cooperation are the autonomous decisions of enterprises. China committed that it would not make technology transfer a precondition for market access.
2014	JCCT	China committed that enterprises are free to base technology transfer decisions on business and market considerations, and are free to independently negotiate and decide whether and under what circumstances to assign or license intellectual property rights to affiliated or unaffiliated enterprises.
2014	JCCT	China confirmed that trade secrets submitted to the government in administrative or regulatory proceedings are to be protected from improper disclosure to the public and only disclosed to government officials in connection with their official duties in accordance with law.
2015	Xi Visit Commitment	China committed not to advance generally applicable policies or practices that require the transfer of intellectual property rights or technology as a condition of doing business in the Chinese market.
2015	Xi Visit Commitment	China committed to refrain from conducting or knowingly supporting cyber-enabled theft of intellectual property cyber-enabled theft of intellectual property, including trade secrets or other confidential business information, with the intent of providing competitive advantages to companies or commercial sectors.
2016	Xi Visit Commitment	China committed not to require the transfer of intellectual property rights or technology as a condition of doing business.

More Likely That The US Escalates and Puts Tariffs On All Imports[2]



1. *FINDINGS OF THE INVESTIGATION INTO CHINA'S ACTS, POLICIES, AND PRACTICES RELATED TO TECHNOLOGY TRANSFER,INTELLECTUAL PROPERTY, AND INNOVATION UNDER SECTION 301 OF THE TRADE ACT OF 1974, USTR, March 22, 2018*
2. Bloomberg

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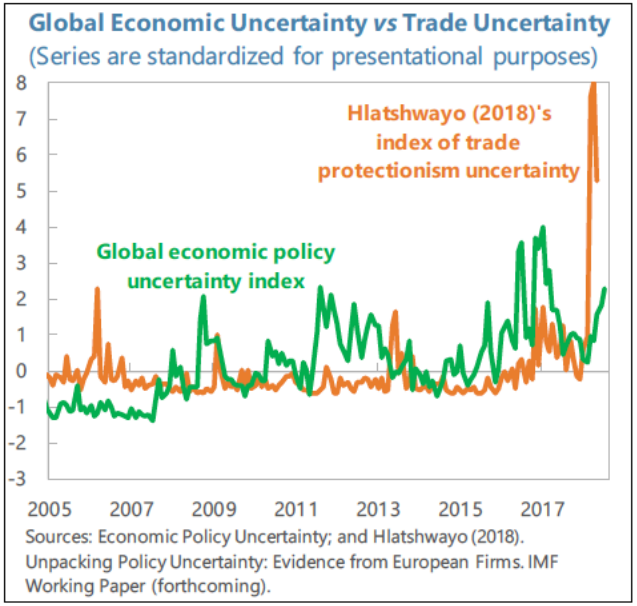
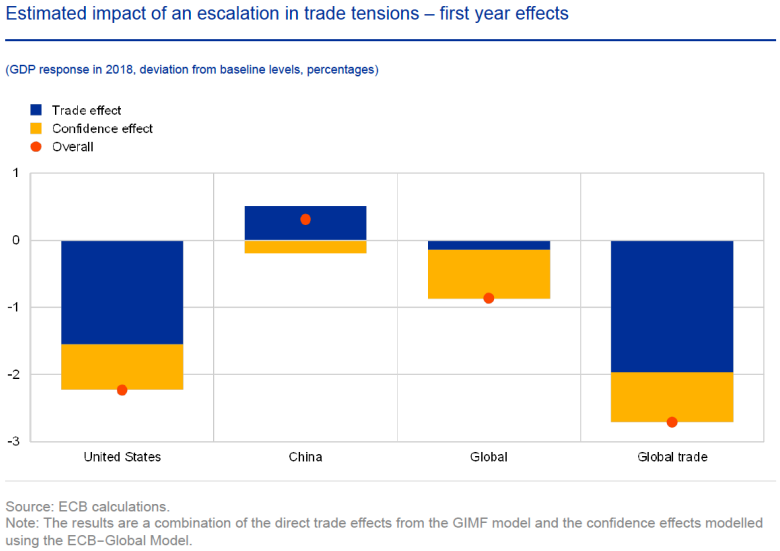
Step 3: Identify Potential Repricing Events

China/US Economic War: Impact of The China and US Economic War Could Grow Substantially

Rising Uncertainty Will Lead To A Fall In Investment



Impact In 2018 Has Already Been Large[2]



1.Ebeke and Siminitz, "Trade Uncertainty and Investment in the Euro Area", IIMF working paper, December 2018
2. "Macroeconomic implications of increasing protectionism", ECB Economic Bulletin, Issue 6/20/18

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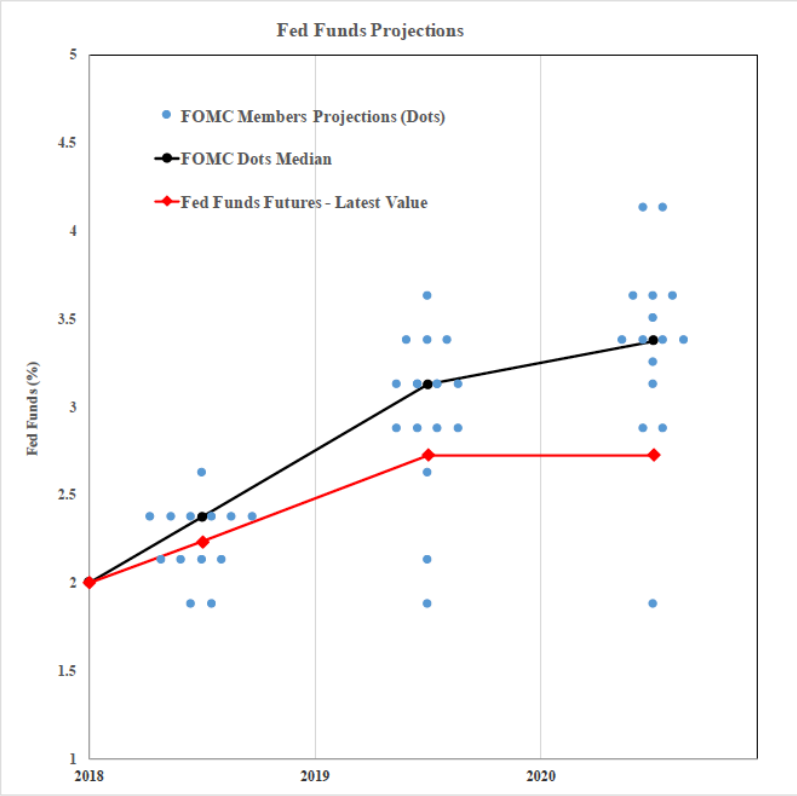
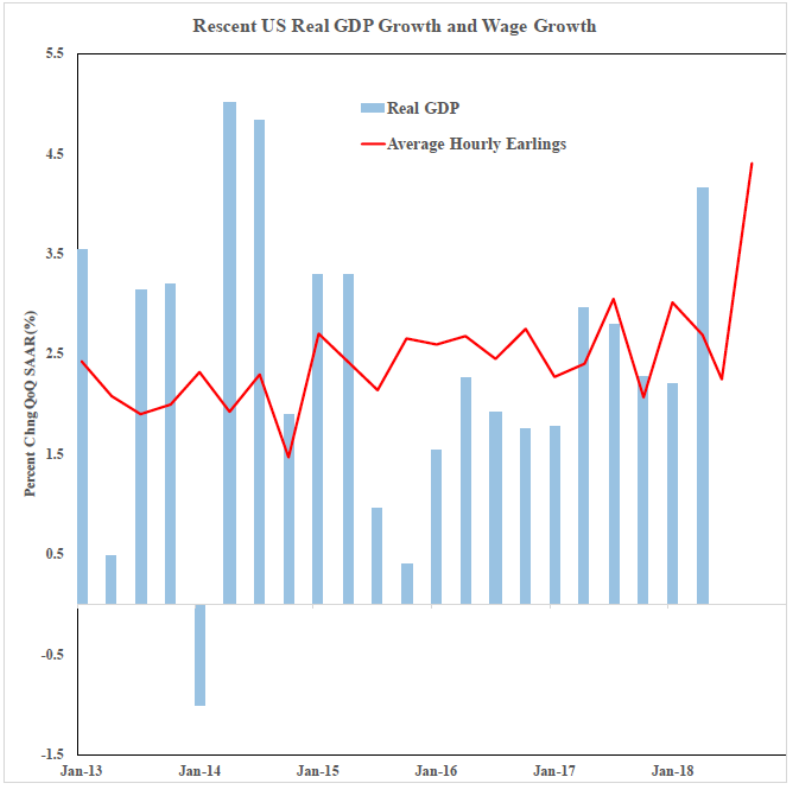
Step 3: Identify Potential Repricing Events

Further USD Strength: USD Could Strengthen Further Given Fed Rate Policy[1]

The "Dots" Say Fed Continues To Hike To 3.5% By Next Year



Economy and Labor Market Support Higher Fed Rates



1. Bloomberg

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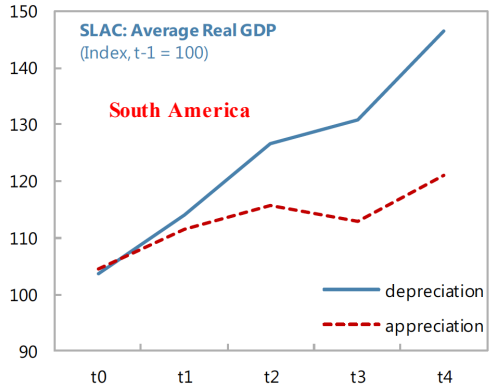
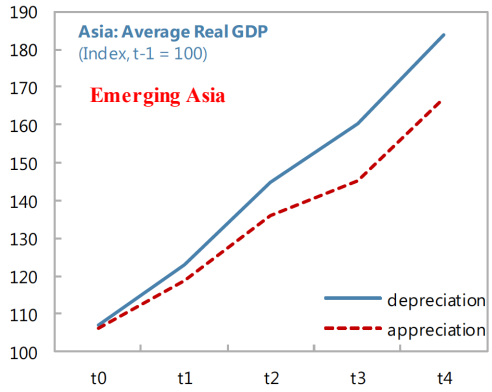
Step 3: Identify Potential Repricing Events

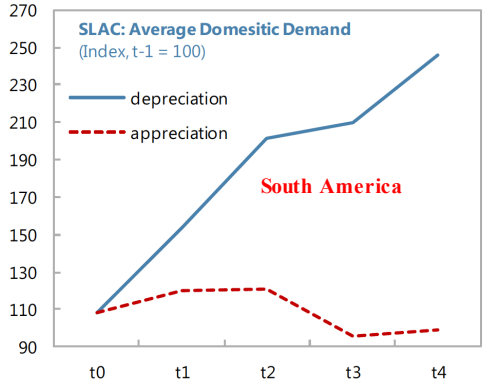
Further USD Strength: USD Strength Has Historically Lead To A Slowdown In EM Growth[1,2,3]

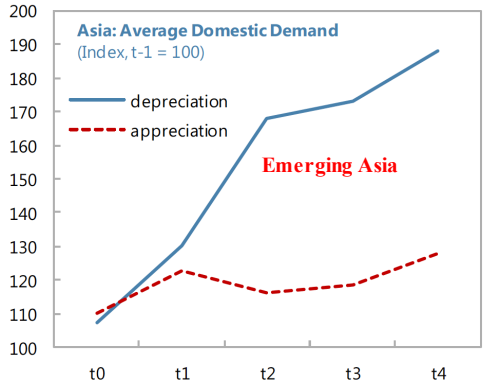
Average EM GDP Growth EM Is Sensitive to The USD





Domestic Demand is Even More Sensitive to The USD





1. Druck, Magud, Mariscal, " Collateral Damage: Dollar Strength and Emerging Markets' Growth", IMF Working Paper, 15/179
2. SLAC is South America, Asia is emerging Asia
3. Domestic demand is GDP less Exports

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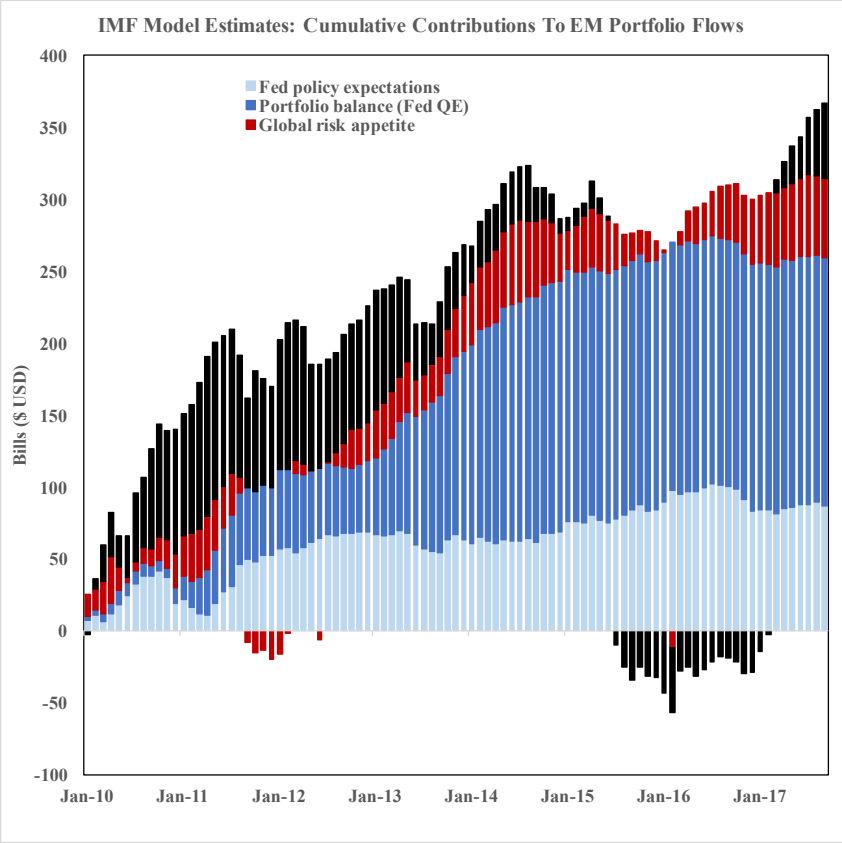
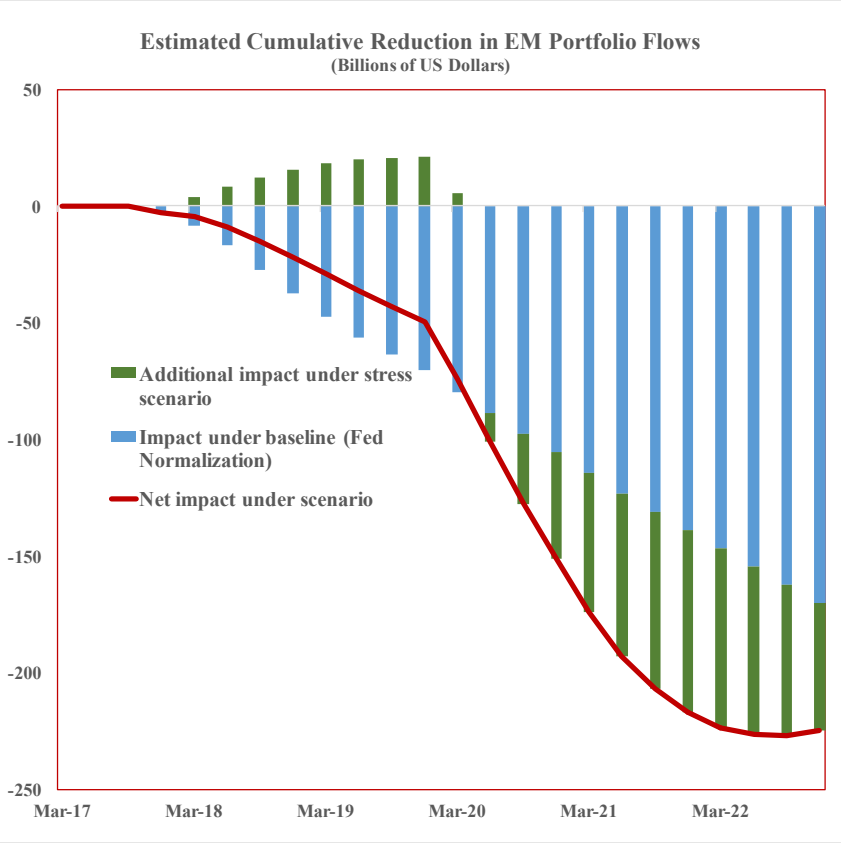
Step 3: Identify Potential Repricing Events

Fed Unwinding QE: The Unwinding Of US QE Could Push EM Economic Growth Even Lower[1]

US QE Has Been A Major Factor in Driving Capital Flows To EM



The Unwind Could Reverse Those Flows

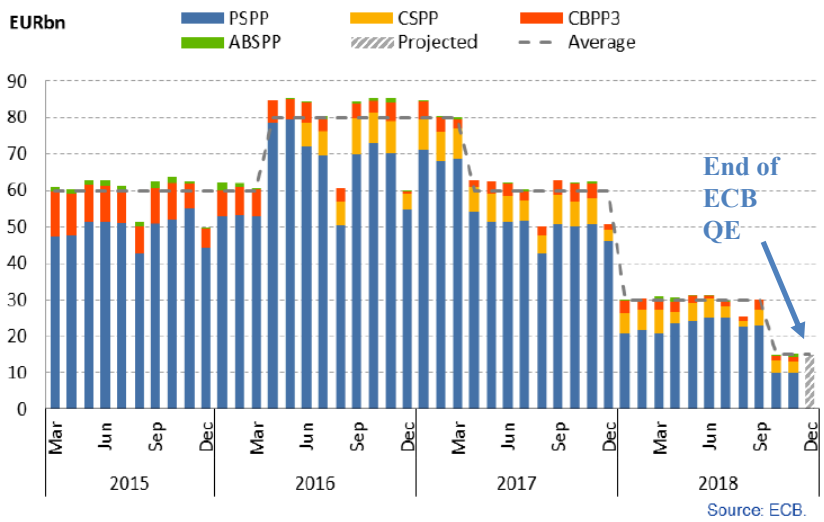


1. IMF, Global Financial Stability Report, October 2017

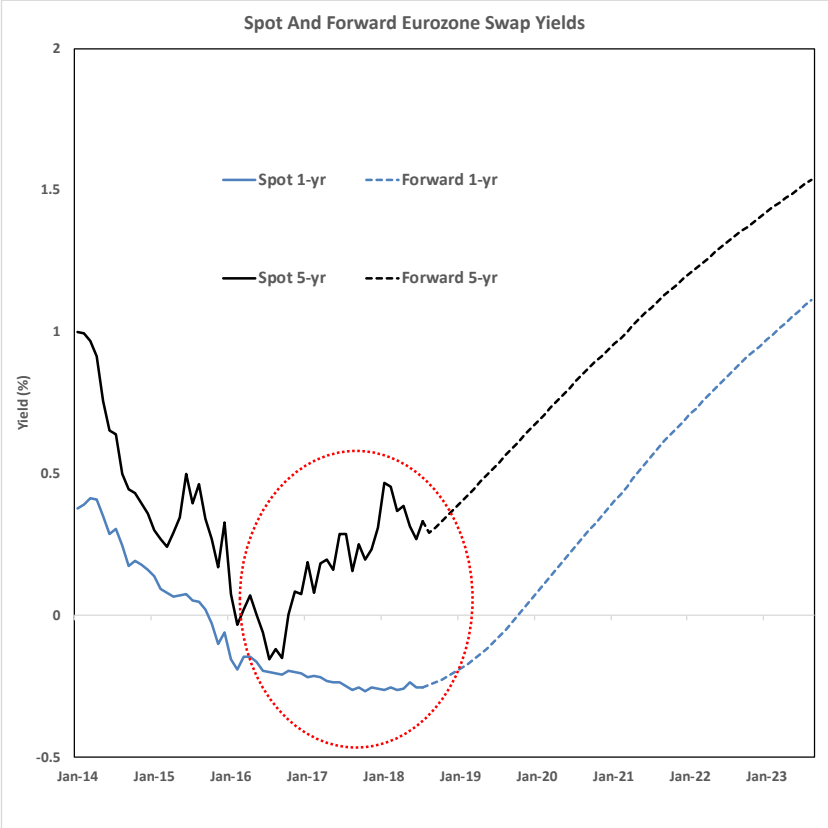
Step 3: Identify Potential Repricing Events

The ECB Stopping QE: The Impact of ECB Monetary Policy Could Add To The EM Economic Slowdown

The ECB Has Stopped Their QE



Could Rate Hikes Follow?



1. ECB
2. Bloomberg

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Step 4: Find Asymmetric Trades

Recommended Trades For A Global Slowdown

		Initial Position				Current Valuation (12/19/2018)		
SOM Strategy	Trade	Date	MM/Shares	Price	Face (MM)	Price	Investment (MM)	Total Return
EMU Slowdown	2/5 Euro Receiver Swaption 0.62 Strike	11-Oct-18	1000	0.5	5.0	1.0	10.0	100%
The Return of The King/EMU Slowdown	Buy 6-month Euro Puts/Dollar Calls, 1.12 strike	22-Nov-18	500	1.00	5.0	1.0	5.0	0%
Position For A Weaker EM and Commodities	Buy USD, Sell A Basket of EM Commodity FX (BRL, RUB, ZAR)	22-Nov-18	100	100.0	100.0	103.5	8.5	70%
Position For A Weaker EM and Commodities	Buy Bovepa 4-month 10% OTM spot puts	22-Nov-18	9542	524.0	5.0	630.0	6.01	20%
The Coming Economic War Between The US and China	Sell CNH One Year Forward vs USD	25-Jul-18	100	100.0	100.0	106.0	11.0	120%
Position For A Weaker EM and Commodities/China and US	Buy 4-month 7% OTM Puts on USD Denominated EM Equity Index	22-Nov-18	417	1.2	5.0	1.5	6.3	25%
The Coming Economic War Between The US and China	Short AAA CMBX/Buy Protection on IG	25-Jul-18	-250	100.0	250.0	104.0	15.0	200%

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State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

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State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

- ***Step 1: Macro Theme: Position For A EMU Slowdown***
  - The EMU yield curve has steepened while the US curve has flattened
  - The EMU reflects the anticipation that the ECB would follow the path of the US and raise rates
  - Yet, the EMU is slowing while the US is growing
- ***Step 2: Fundamental Economic Framework***
  - The EMU economies are falling from their levels in the 2nd half of 2017
  - Rates and currency markets where pricing in those 2017 growth rates anticipating the ECB would unwind QE and start raising rates
  - However, that surge in economic growth has given way to a continue slowdown
  - The economic war between the US and China is putting downward pressure on the EMU
  - Oil price increases is yet another headwind to growth in the area
- ***Step 3: Identify Potential Repricing Events***
  - ECB exiting QE
  - Periphery bank meltdown
  - EMU existential crisis
  - Hard BREXIT
  - Global trade war
- ***Step 4: Find Asymmetric Trade***
  - Trade 1 : 2yr receiver swaptions on the 5yr Euro swap curve
  - Trade 2: Buy USD calls/Euro Puts

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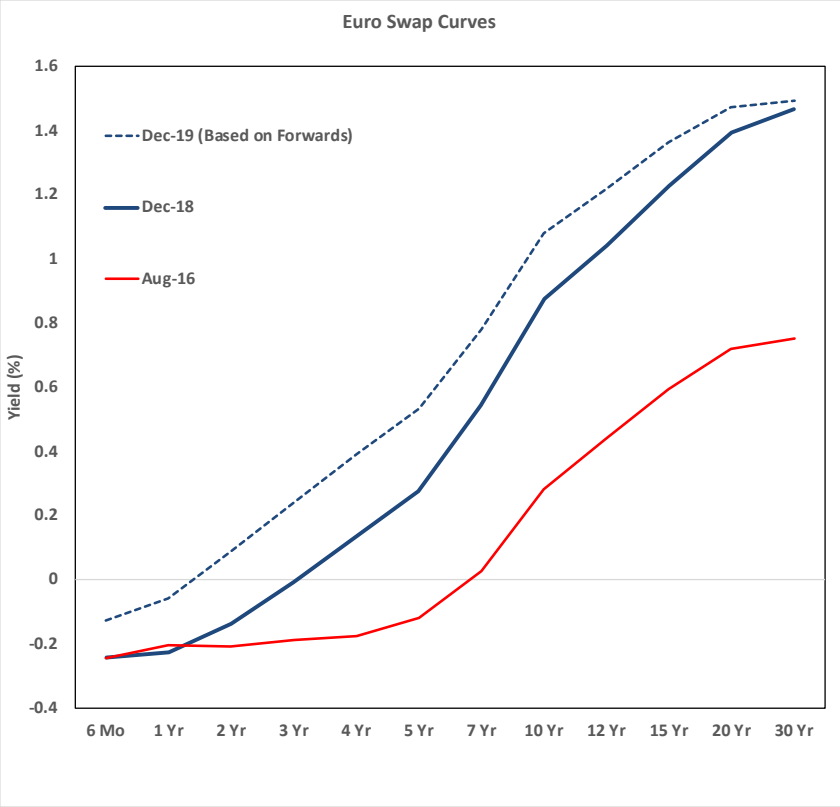
State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

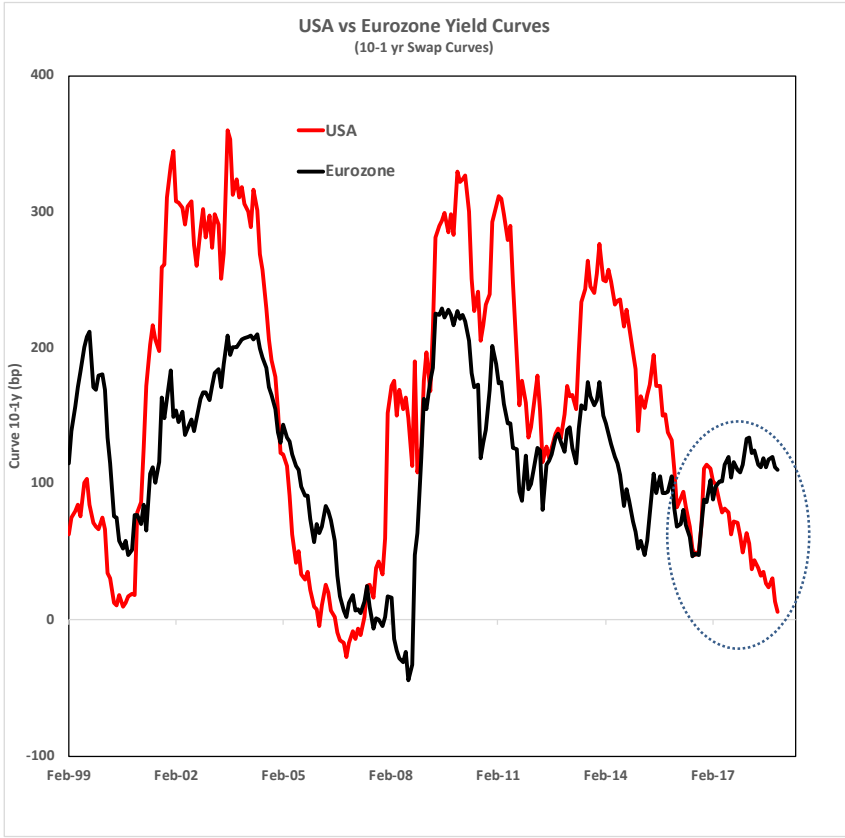
Step 1: Macro Theme

European Curve Continues to Steepen While the US Curve Is Flattening…Which Is Right?[1]

EMU Curve Has Steepened Substantially Since 2016



This Has Put the EMU Curve At Historical Odds Vs The US Curve



1.Bloomberg

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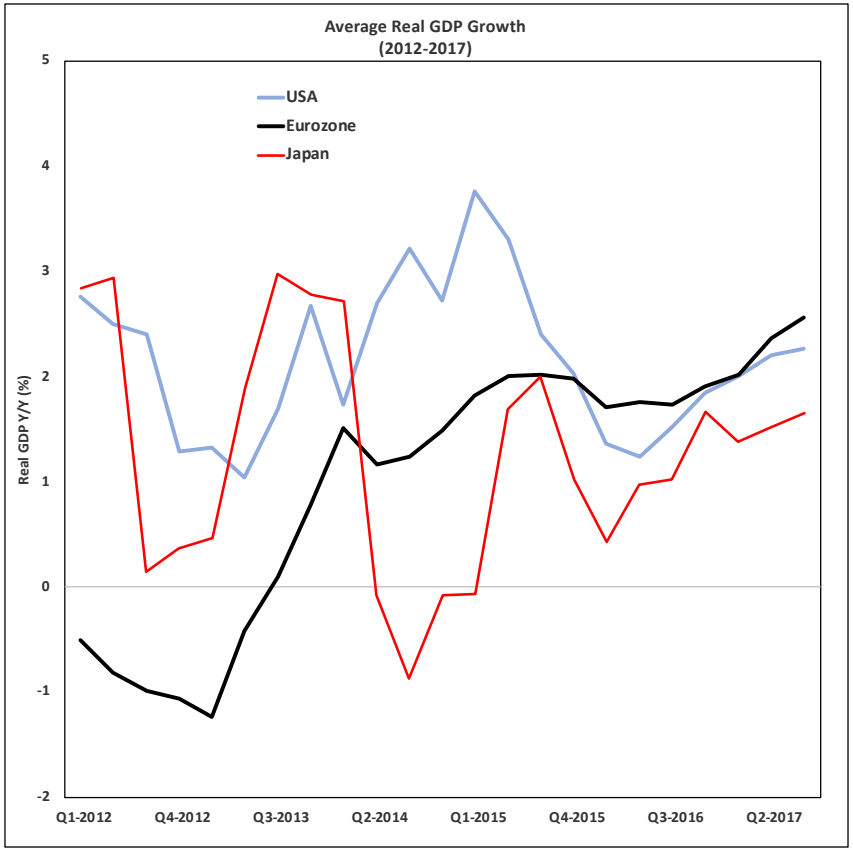
Step 2: Fundamental Economic Framework

The Move In The EMU Curve Was Driven By Anticipation of ECB Policy Given Inflation and GDP[1]

Eurozone Inflation Had Moved To The ECB Target Level..

While Economic Growth Has Accelerated At the End of 2017

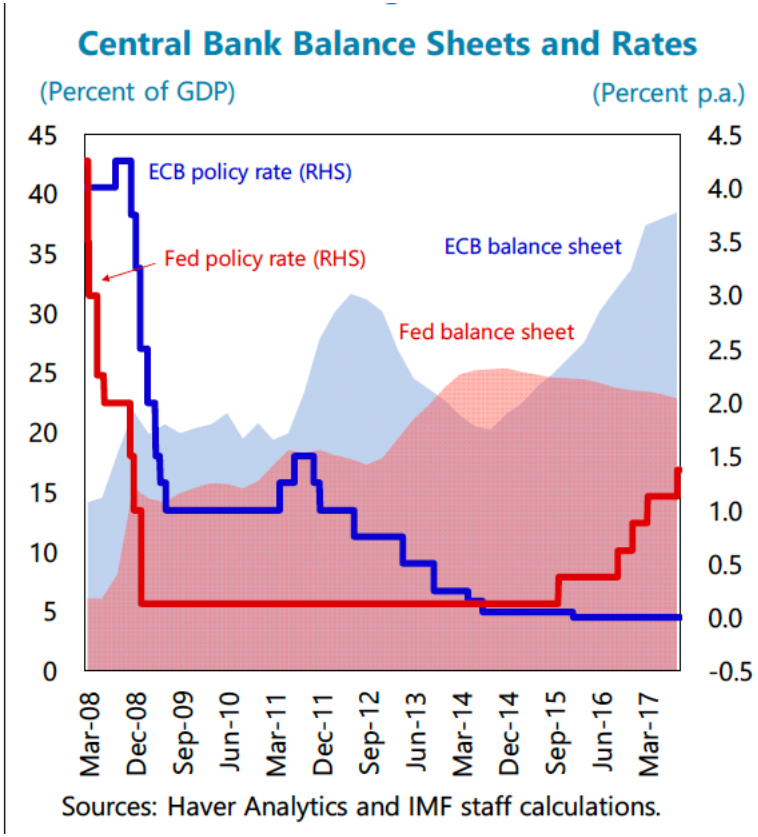


1., Federal Reserve Bank of St. Louis, Fred Data

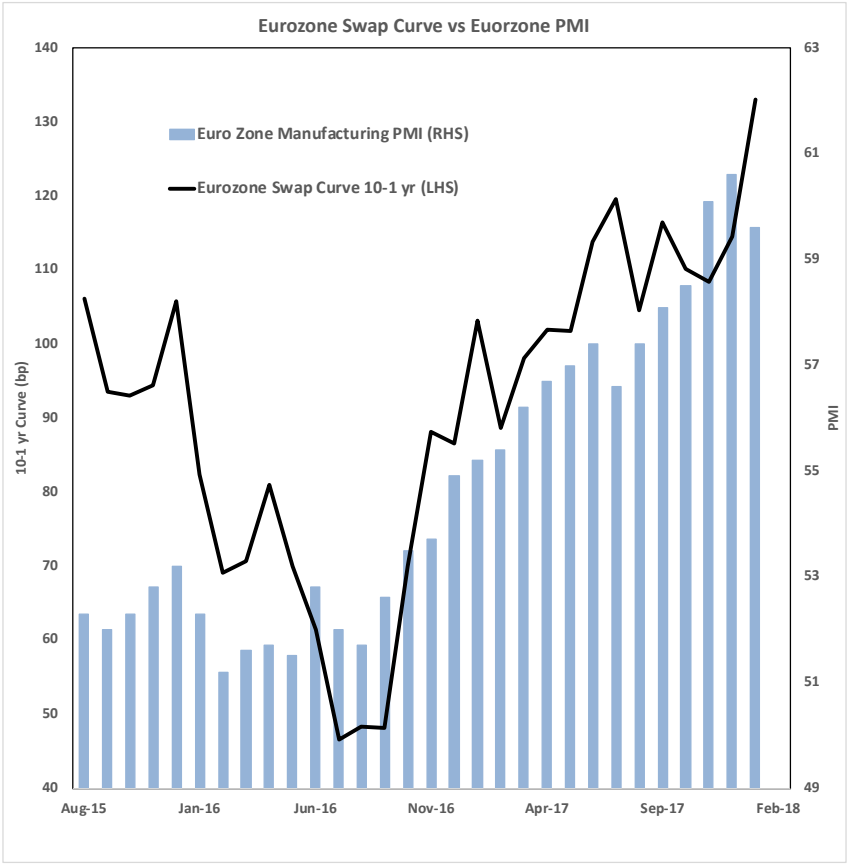
Step 2: Fundamental Economic Framework

The ECB Was Projected To Follow The Fed's Monetary Policy

The ECB Was Poised To Follow The Fed[1]



By The End of 2017, The EZ Curve Was Consistent With Growth[2]



1. IMF, Article IV Report, Euro Area Policies, July 2018
2. Bloomberg

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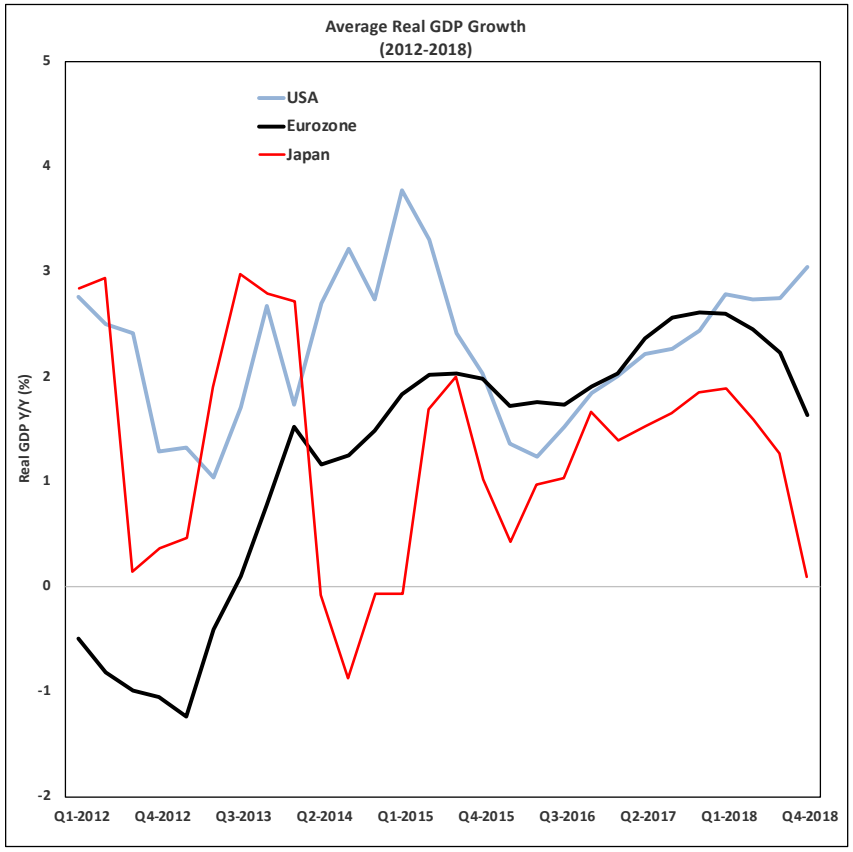
State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

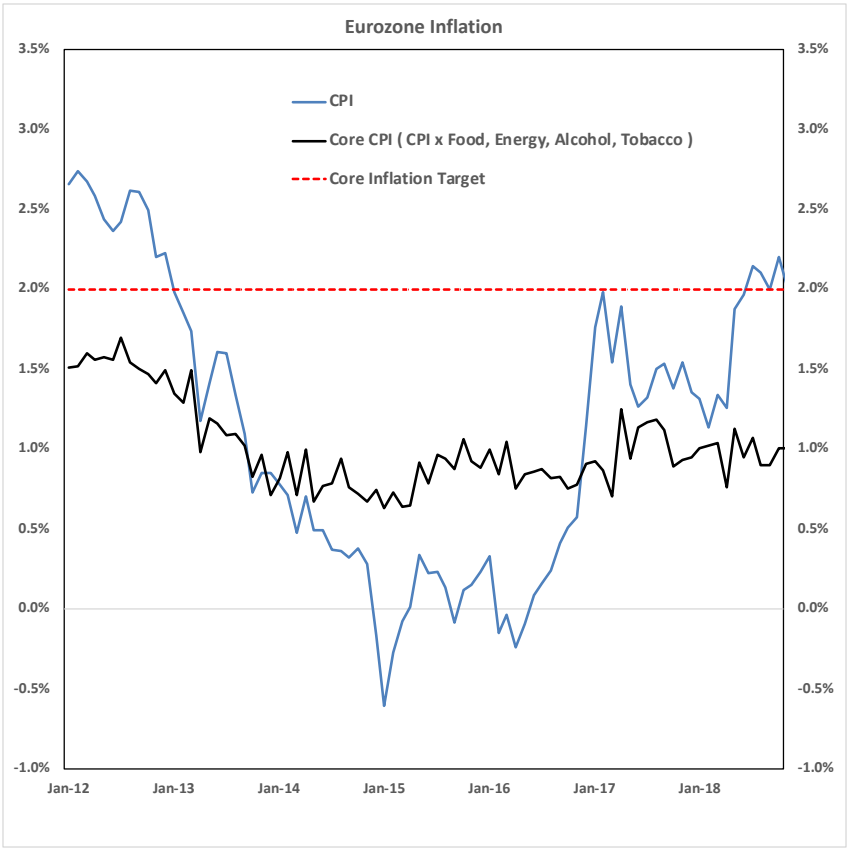
Step 2: Fundamental Economic Framework

However, The Economic Profile of The Eurozone Has Softened From That Late 2017 Period

Economic Growth in Japan And The EZ Has Turned Down..



While Core Inflation Has Not Really Moved To The ECB Target



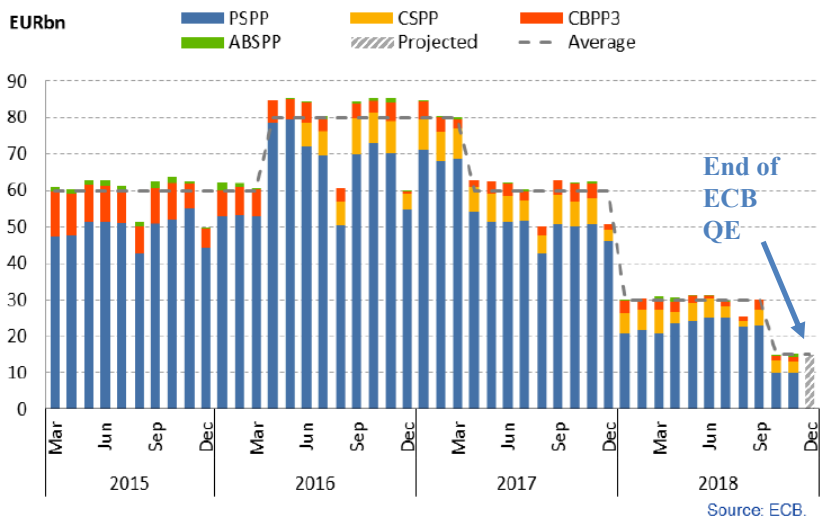
1., Federal Reserve Bank of St. Louis, Fred Data

State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

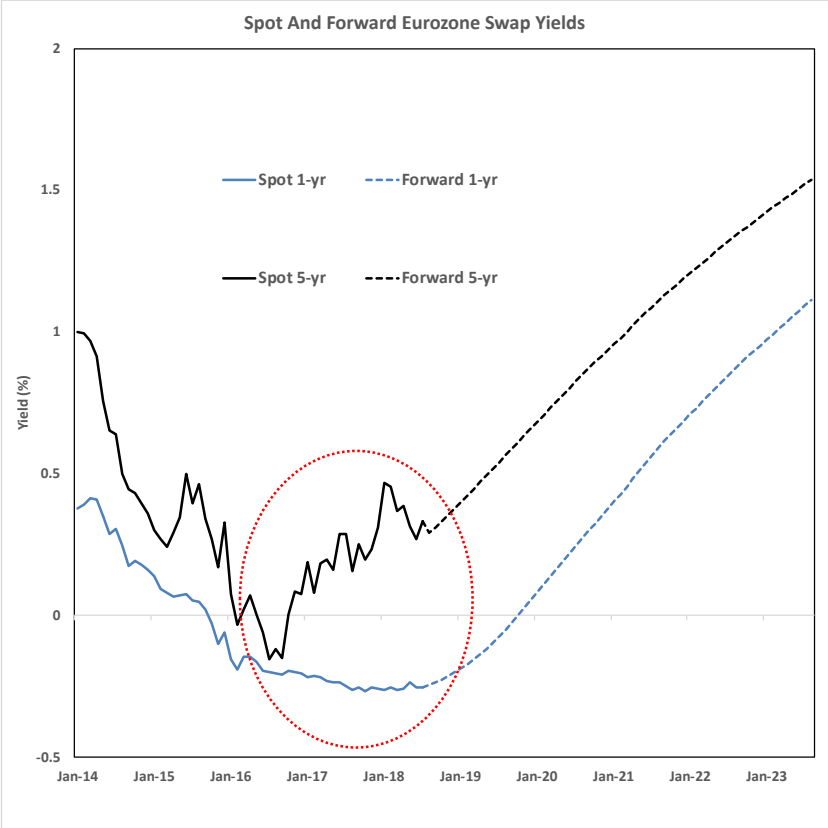
Step 3: Identify Potential Repricing Events

The ECB Stopping QE: The Impact of ECB Monetary Policy Could Add To The EM Economic Slowdown

The ECB Has Stopped Their QE



Could Rate Hikes Follow?



1. ECB
2. Bloomberg

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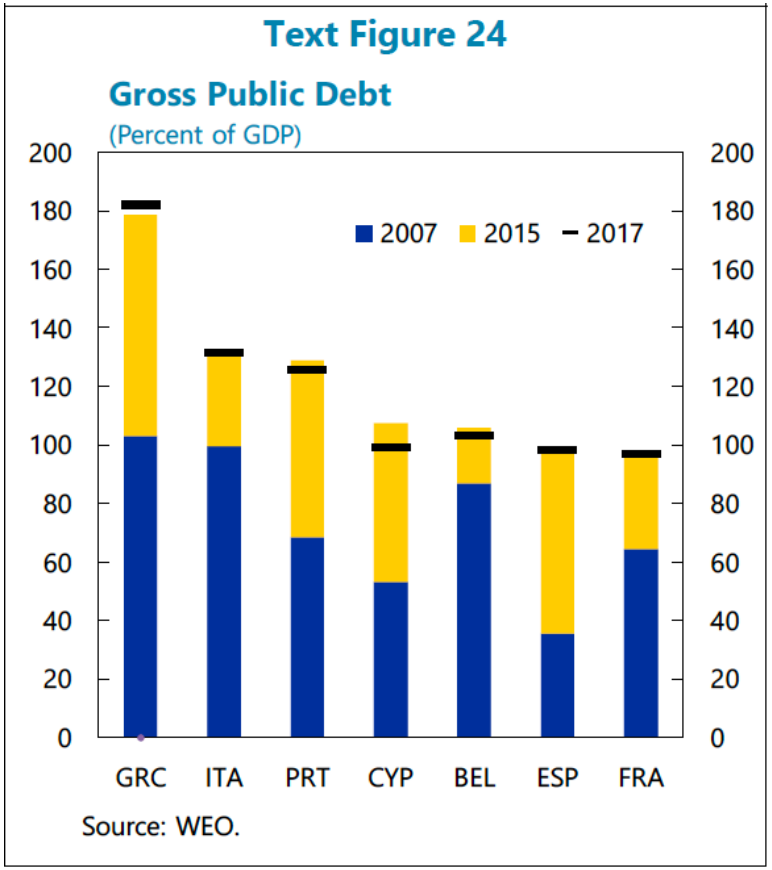
State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

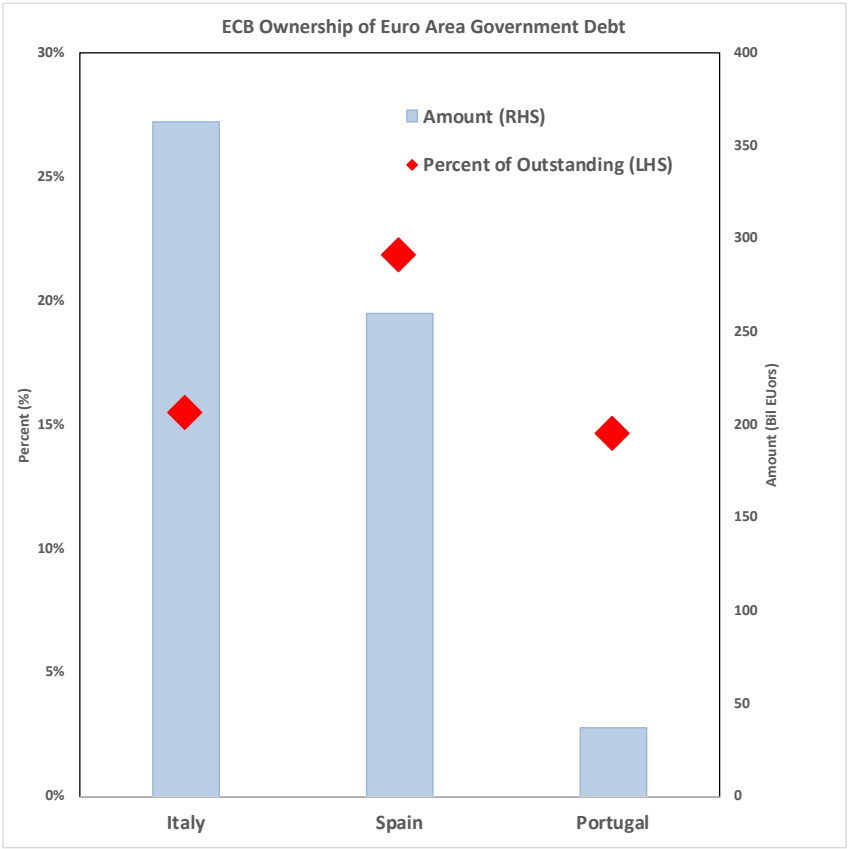
Step 3: Identify Potential Repricing Events

ECB Stopping QE: If Not The ECB Who Will Be Buying Sovereign Debt

The EMU Periphery Continues To Grow Sovereign Debt



And the ECB Was The Major Purchaser of the Growth In That Debt



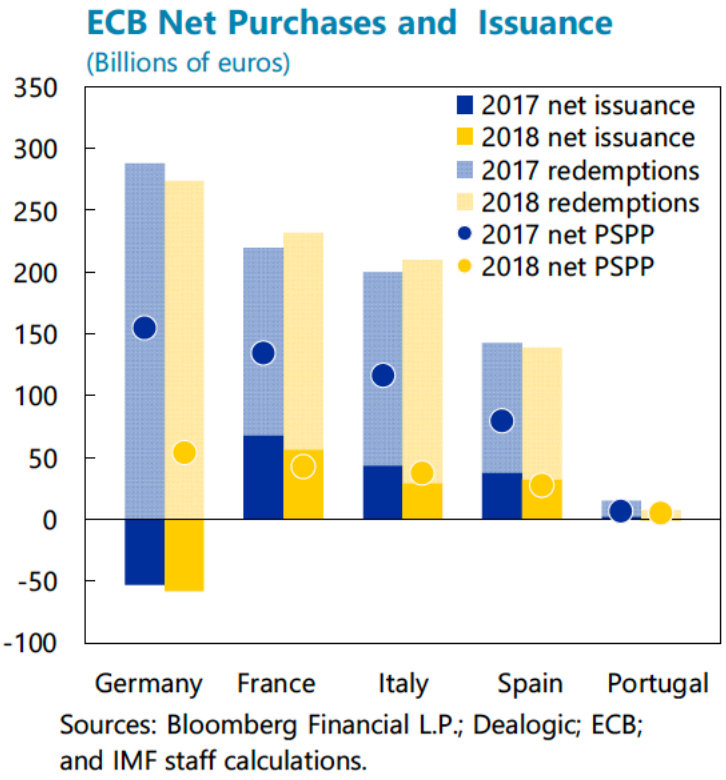
1. IMF, Article IV Report, Euro Area Policies, July 2018

State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

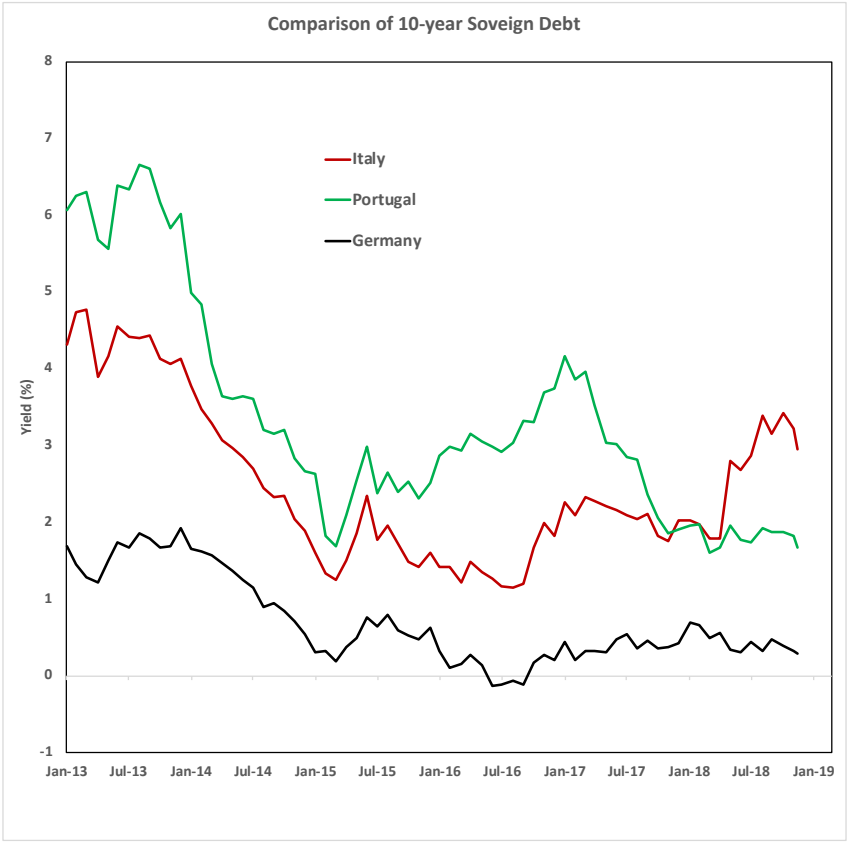
Step 3: Identify Potential Repricing Events

ECB Stopping QE: Uncertainty Could Push Periphery Sovereign Debt Wider

ECB Purchases Could Be Difficult to Replace[1]



Concerns About The ECB Buying Italian Debt Was A Problem[2]

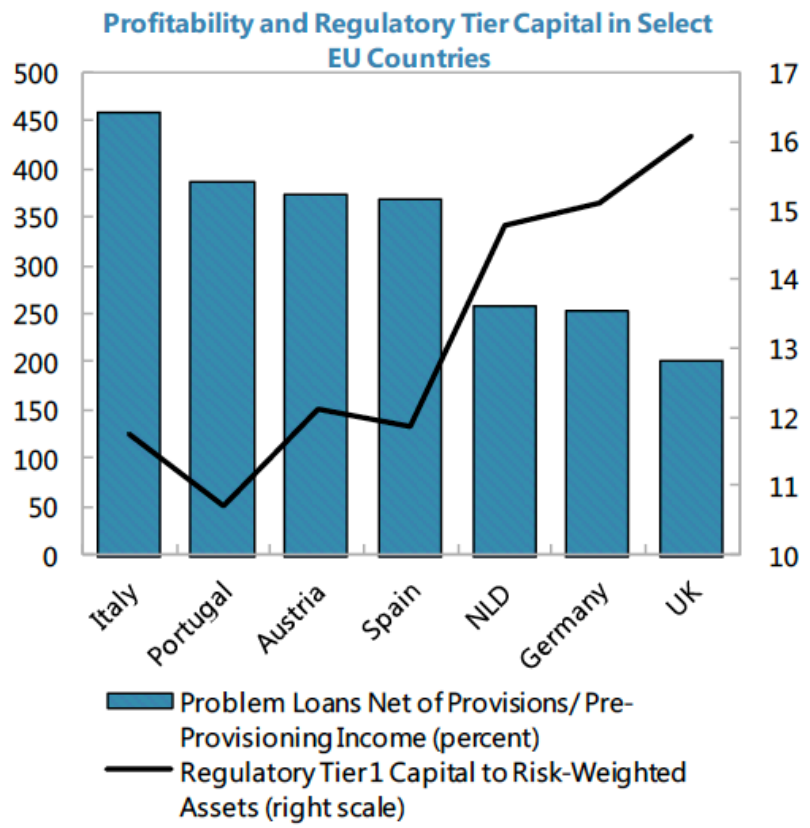


1. IMF, Article IV Report, Euro Area Policies, July 2018
2. Bloomberg

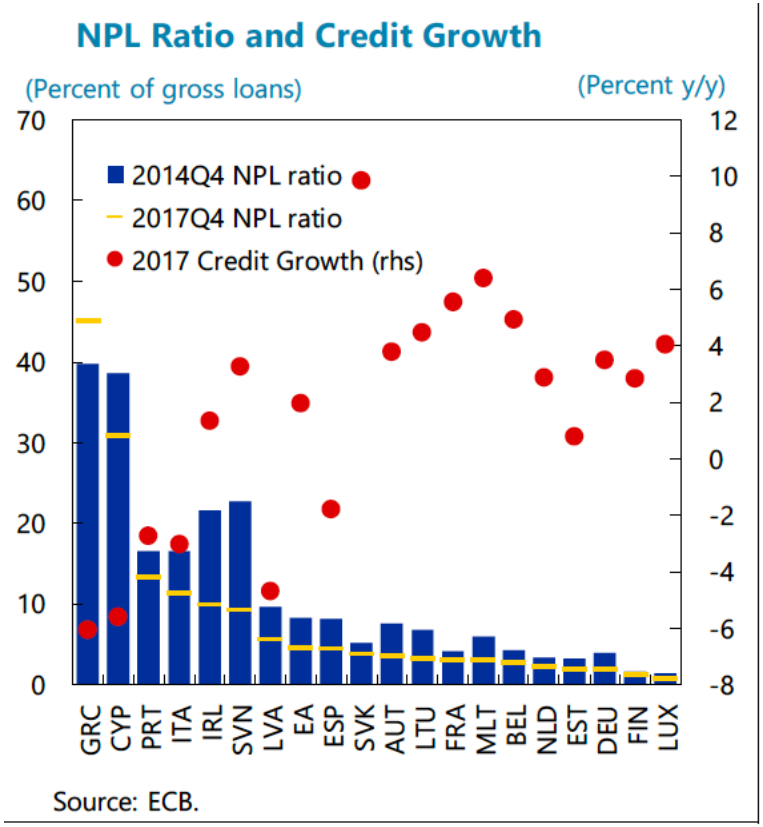
Step 3: Identify Potential Repricing Events

Periphery Bank Meltdown: Economic Pressure Could Lead To An NPL Problem

NPL Problems Could Point to More Financial Crisis[1]



Dealing With NPLs Hindered By Structural Issues[2]



1. Garrido, Kopp, Weber, IMF Working Paper, "Cleaning-Up Bank Balance Sheets: …For Italy", WP/16/135, July 2016
2. Jobst, Weber, IMF Working Paper, " Profitability and Balance Sheet Repair of Italian Banks", WP/16/175, August 2016

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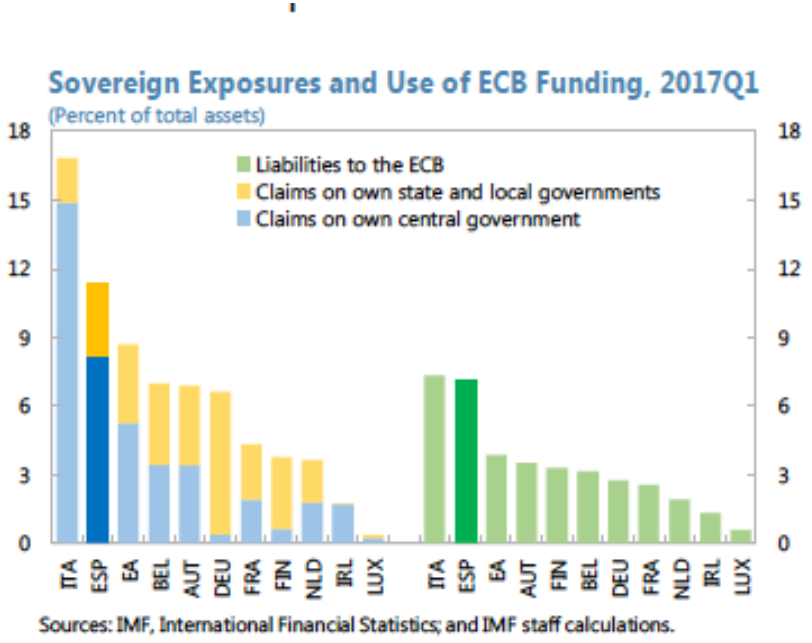
State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

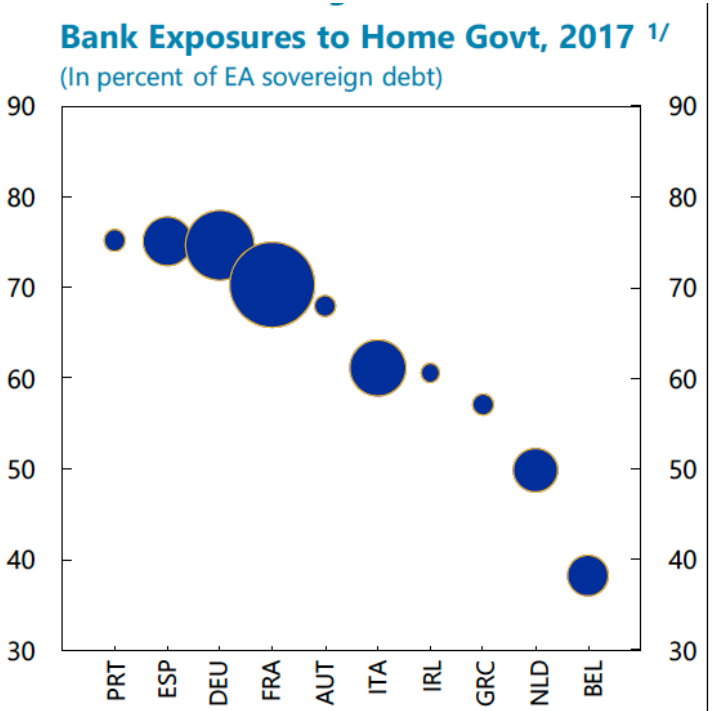
Step 3: Identify Potential Repricing Events

Periphery Bank Meltdown: A Sovereign Debt Problem Could Rapidly Become a Bank Problem

Periphery Banks Loaded With Sov Debt Funded By ECB



This Exposure Is Substantial



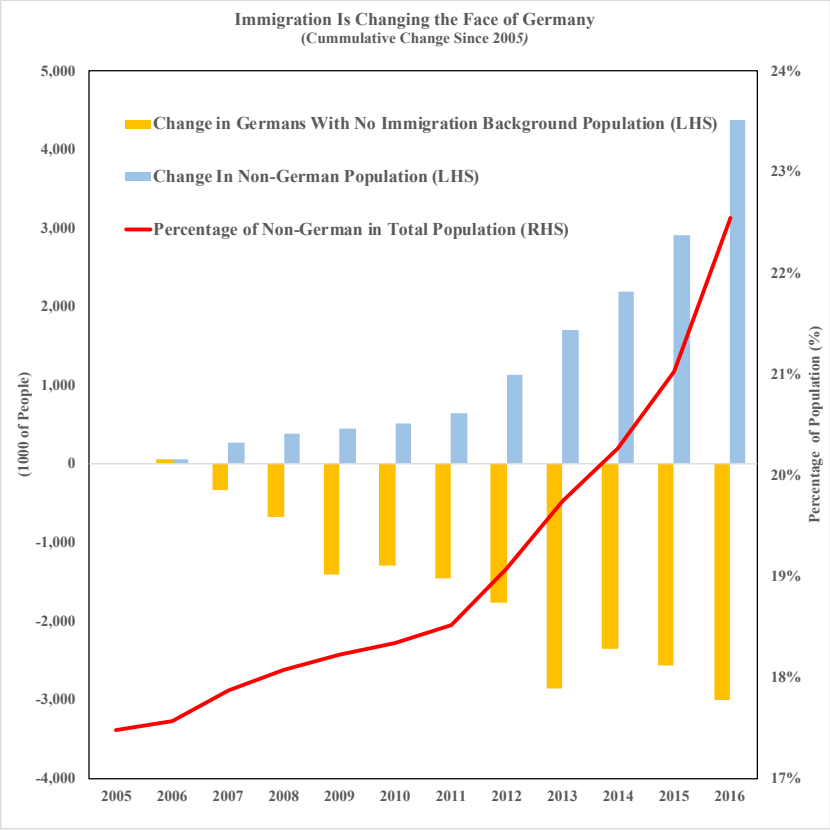
1. IMF, Article IV Report, Euro Area Policies, July 2018

State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

Step 3: Identify Potential Repricing Events

EMU Existential Crisis: Many Issues Could Lead to A Breakup of The EMU, For Example Immigration

Immigration In Germany Has Become a Defining Issue For The EMU[1]



Germany Is Not Alone: Survey Of Most Important Issue By Country

Country	Rank	Percent
Denmark	1	53
Finland	1	53
Greece	1	51
Sweden	1	49
Italy	1	47
Germany	1	43
Poland	1	42
France	1	41
GB	1	39
Lithuania	1	35
Spain	2	26

1. Eurostat
2.Yougov survey

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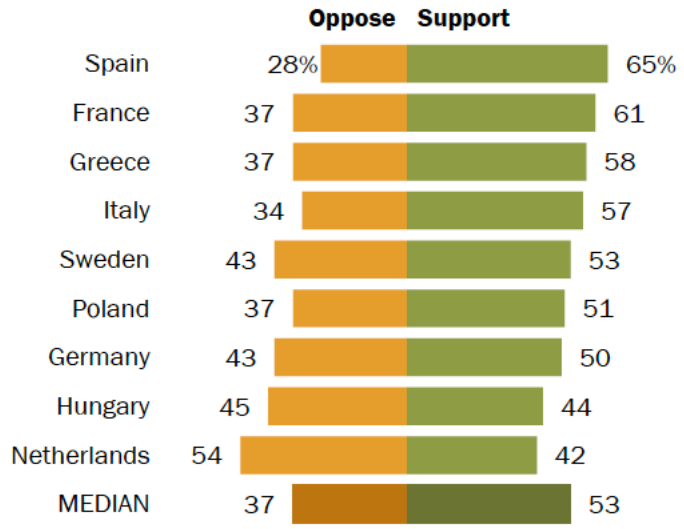
State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

Step 3: Identify Potential Repricing Events

EMU Existential Crisis: Reform Is Still Necessary Which Could Still Created Political Risk

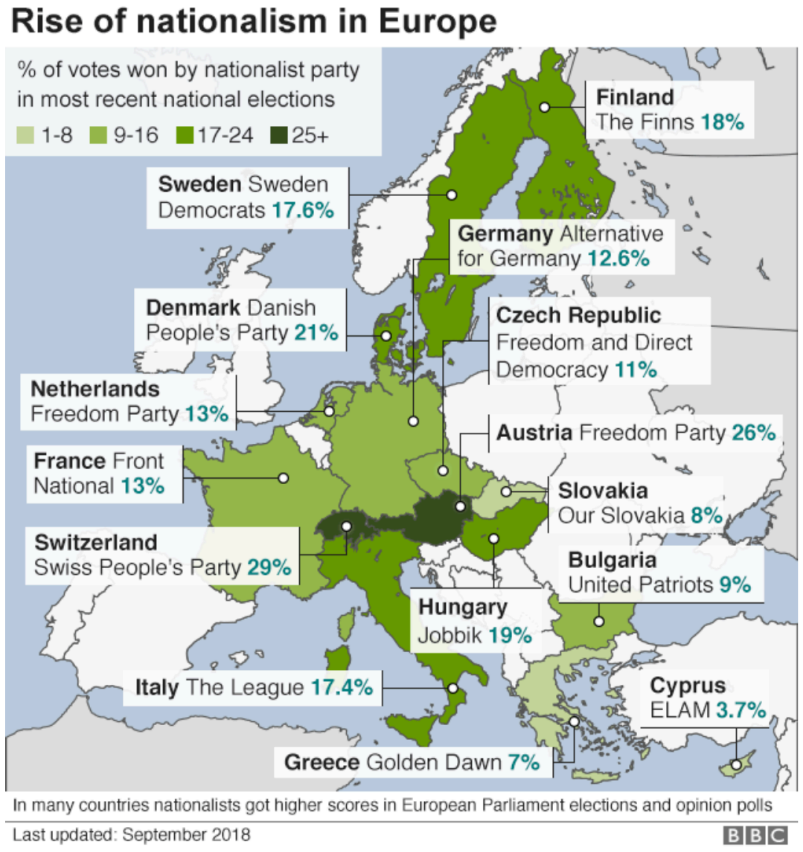
What Happen In BREXIT, Could Happen In the EMU[1]

Would __ holding a national referendum on our country's European Union membership



Source: Spring 2017 Global Attitudes Survey. Q44.

Immigration One of The Driving Forces In the Rise of Nationalisam[2]



1. PEW Research Center, June 2017
2. BBC

State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

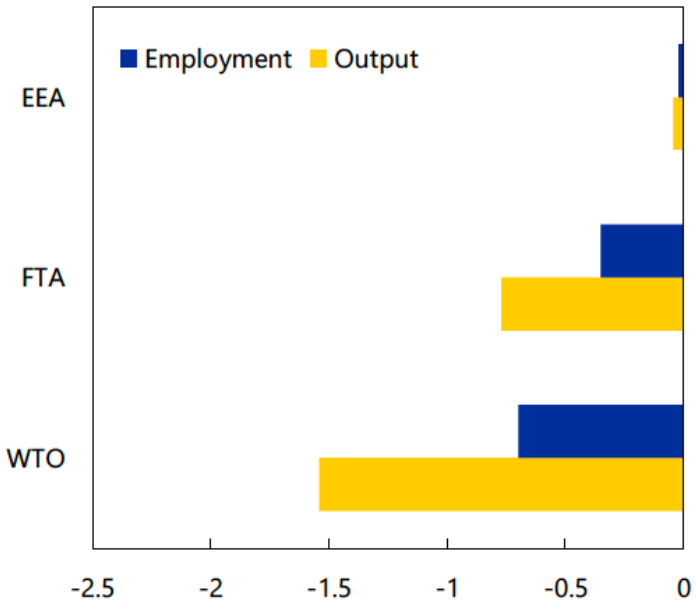
Step 3: Identify Potential Repricing Events

Hard Brexit: Economic Fallout Could Push Down World Growth Particularly In Europe[1]

Hard BREXIT Hard Even On Europe Both In The Short Run…

EU27: Long-Run Decline in Output and Employment

(In percent; losses due to Brexit)

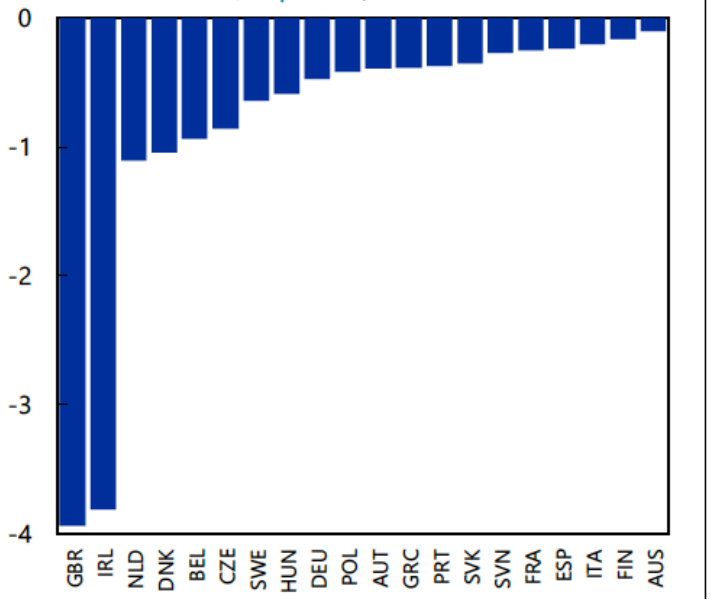


Source: IMF staff estimates.

And In The Long Run

Long-Term Impact of Brexit: WTO scenario

(Decline in the level of output compared to a non-Brexit scenario; In percent)



1. IMF Article IV, Europe Area Policies 2018

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State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

Step 3: Identify Potential Repricing Events

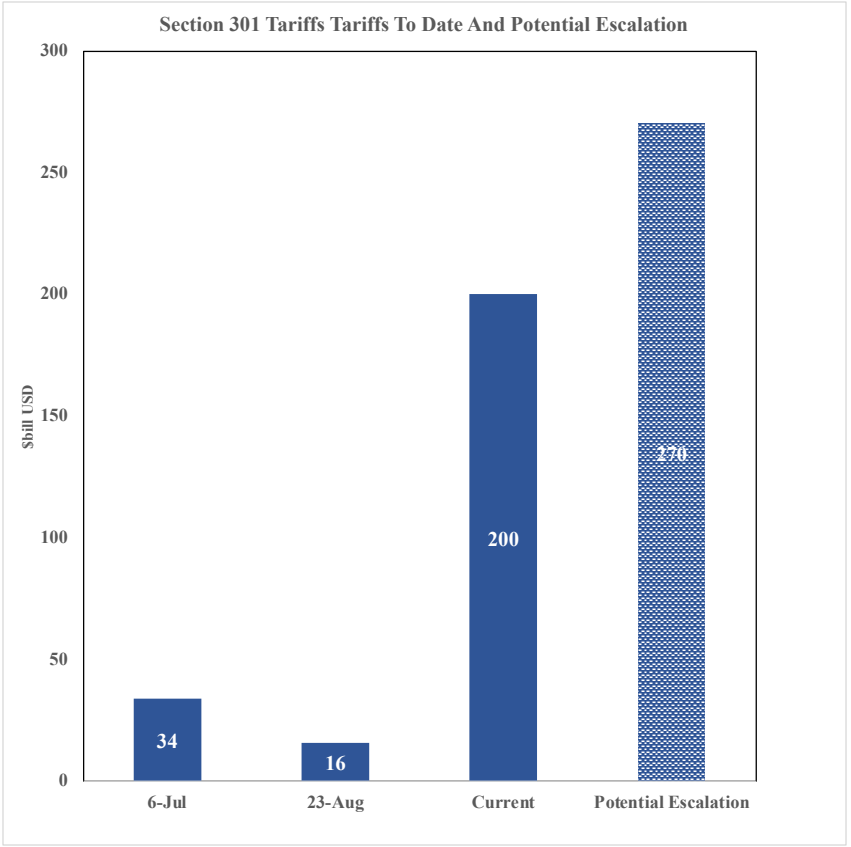
China/US Economic War: Can The US And China Agree In Less Than 90 Days?

Words Alone May Not Satisfy The US Given Chinese History[1]

Table I.1 China's Bilateral Commitments Relating to Technology Transfer, 2010 - 2016

Year	Mechanism	Commitment
2010	S&ED	China reaffirmed that the terms and conditions of technology transfer, production processes, and other proprietary information will be determined by individual enterprises.
2011	JCCT	China confirmed that it does not and will not maintain measures that mandate the transfer of technology in the New Energy Vehicles Sector. China further clarified that "mastery of core technology" does not require technology transfer for NEVs.
2012	S&ED	China reaffirmed its commitment that technology transfer is to be decided by firms independently and not to be used by the Chinese government as a pre-condition for market access.
2012	Xi Visit Commitment	China reiterated that technology transfer and technological cooperation shall be decided by businesses independently and will not be used by the Chinese government as a pre-condition for market access.
2012	JCCT	China reaffirmed that technology transfer and technology cooperation are the autonomous decisions of enterprises. China committed that it would not make technology transfer a precondition for market access.
2014	JCCT	China committed that enterprises are free to base technology transfer decisions on business and market considerations, and are free to independently negotiate and decide whether and under what circumstances to assign or license intellectual property rights to affiliated or unaffiliated enterprises.
2014	JCCT	China confirmed that trade secrets submitted to the government in administrative or regulatory proceedings are to be protected from improper disclosure to the public and only disclosed to government officials in connection with their official duties in accordance with law.
2015	Xi Visit Commitment	China committed not to advance generally applicable policies or practices that require the transfer of intellectual property rights or technology as a condition of doing business in the Chinese market.
2015	Xi Visit Commitment	China committed to refrain from conducting or knowingly supporting cyber-enabled theft of intellectual property cyber-enabled theft of intellectual property, including trade secrets or other confidential business information, with the intent of providing competitive advantages to companies or commercial sectors.
2016	Xi Visit Commitment	China committed not to require the transfer of intellectual property rights or technology as a condition of doing business.

More Likely That The US Escalates and Puts Tariffs On All Imports[2]



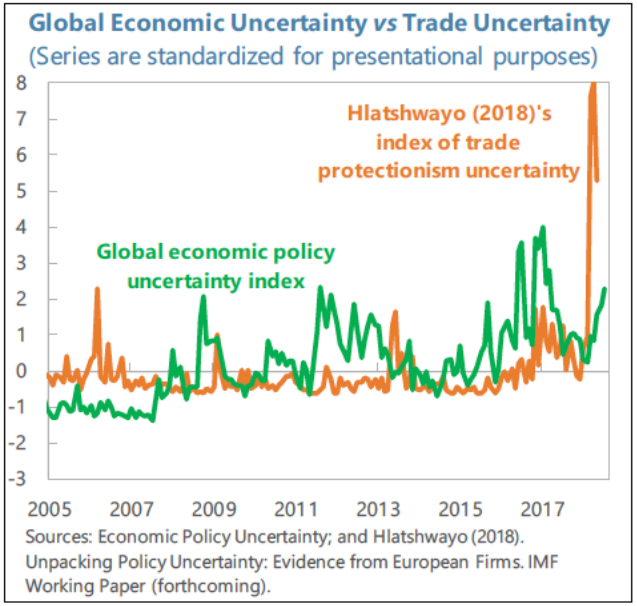
1. *FINDINGS OF THE INVESTIGATION INTO CHINA'S ACTS, POLICIES, AND PRACTICES RELATED TO TECHNOLOGY TRANSFER,INTELLECTUAL PROPERTY, AND INNOVATION UNDER SECTION 301 OF THE TRADE ACT OF 1974, USTR, March 22, 2018*
2. Bloomberg

State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

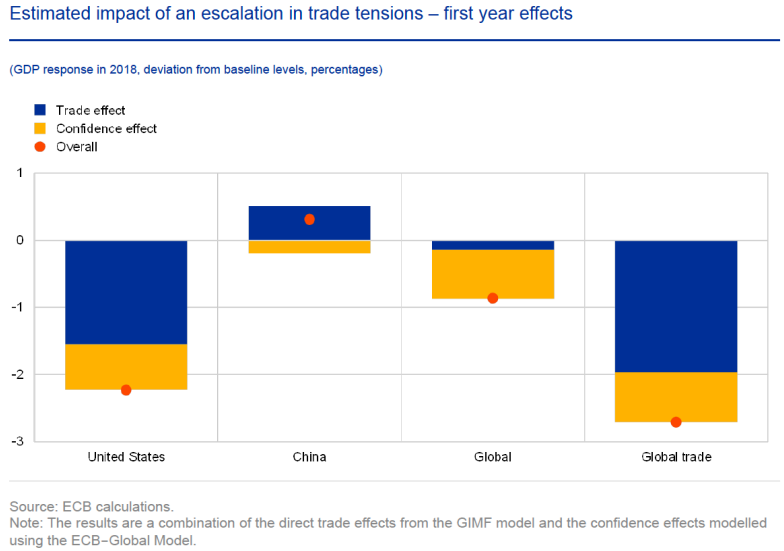
Step 3: Identify Potential Repricing Events

China/US Economic War: Impact of The China and US Economic War Could Grow Substantially

Rising Uncertainty Will Lead To A Fall In Investment



Impact In 2018 Has Already Been Large[2]



1.Ebeke and Siminitz, "Trade Uncertainty and Investment in the Euro Area", IIMF working paper, December 2018
2. "Macroeconomic implications of increasing protectionism", ECB Economic Bulletin, Issue 6/20/18

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State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

Step 4: Find Asymmetric Trades

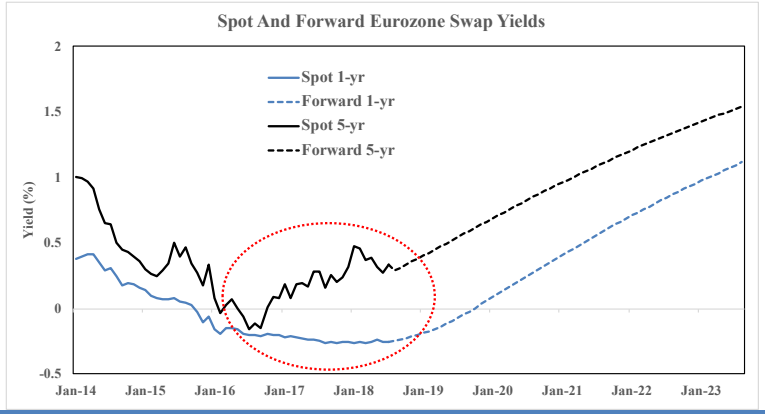
Trade 1: Position For An EMU Slowdown—Buy A 2yr Receiver Swaption on the 5yr Euro Swap Curve

Trade Thesis

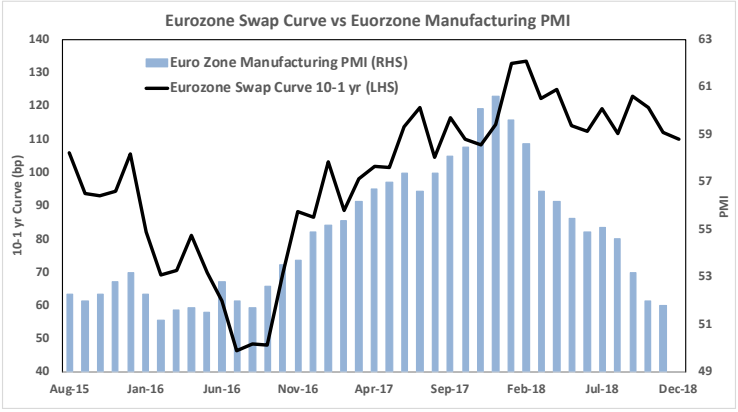
- USD could rebound from current weakness

Risk is continue weakening of USD

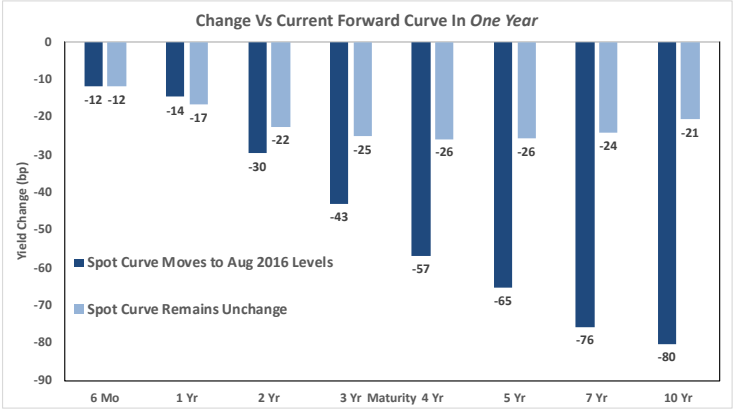
Rebound Could Be Swift Given Current Positioning[2]



Euro Looks Vulnerable if ECB Does Not Normalize Rates[1]



Potential Net Payouts of Euro Put/USD Calls



1. Bloomberg
2. BIS Quarterly review, March 2018

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State Of the Markets: Year Ahead 2019— Position For A EMU Slowdown

Step 4: Find Asymmetric Trades

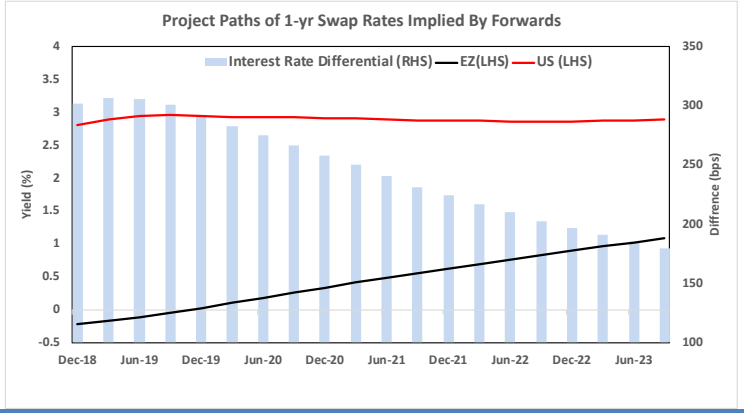
Trade 2: Position For A Weaker Euro—Buy OTM EUR Puts/Dollar Calls

Trade Thesis

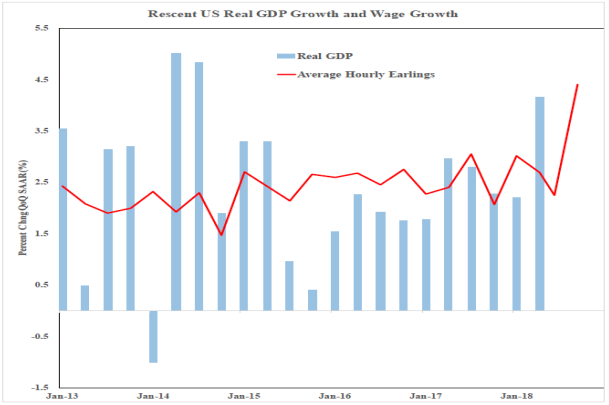
- EURO could weaken as EMU growth slows
  - Euro curve could flattens vs US if the ECB does not raise rates
  - The US could continue to raise rates and strengthen the USD
- Euro could weaken from BREXT, global growth slowdown, or pressure on the periphery from the ECB stopping QE
- Buy 4-month OTMF of Euro Puts/USD calls

Risk is continue weakening of USD

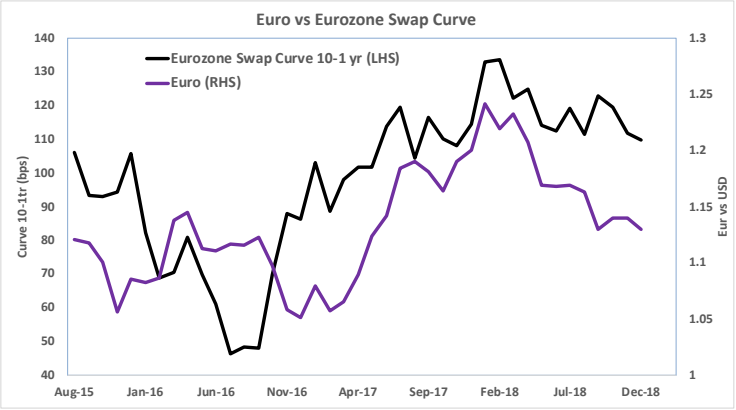
However, The Markets Are Pricing In ECB Hiking Rates Faster[2]



The US Economy And Labor Markets Look Strong



A Flatter EMU Curve Could Put Additional Pressure on The Euro



1. Bloomberg
2. BIS Quarterly review, March 2018

SOM Macro Strategies

State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

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State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

- ***Step 1: Macro Theme: Potential Impact of a Stronger Dollar on EM***
  - The USD depreciation since the end of 2015 could reverse as US continues to grow, while the ROW slows
  - EM could weaken as the dollar strengthens along with rising US rates—the real "taper tantrum"
- ***Step 2: Fundamental Economic Framework***
  - The dollar has weakened against a backdrop of synchronized growth across advanced and EM economies
  - The weaker dollar explains much of the synchronized growth particularly for EM
  - A stronger dollar could weaken EM GDP substantially and domestic growth even more
  - Commodity prices, another source of EM growth, could also weaker with a stronger dollar
  - EM relies on a substantial flow of external capital, most of it denominated in USD
- ***Step 3: Identify Potential Repricing Events***
  - The Fed unwinding QE
  - The ECB unwinding QE
  - The Fed continuing To Raise Rates
  - EM credit contraction
  - The USD, EM, commodity cycle
- ***Step 4: Find Asymmetric Trade***
  - Trade 3: Buy USD, sell a basket of EM commodity currencies
  - Trade 4: Buy OTM puts on EM equities

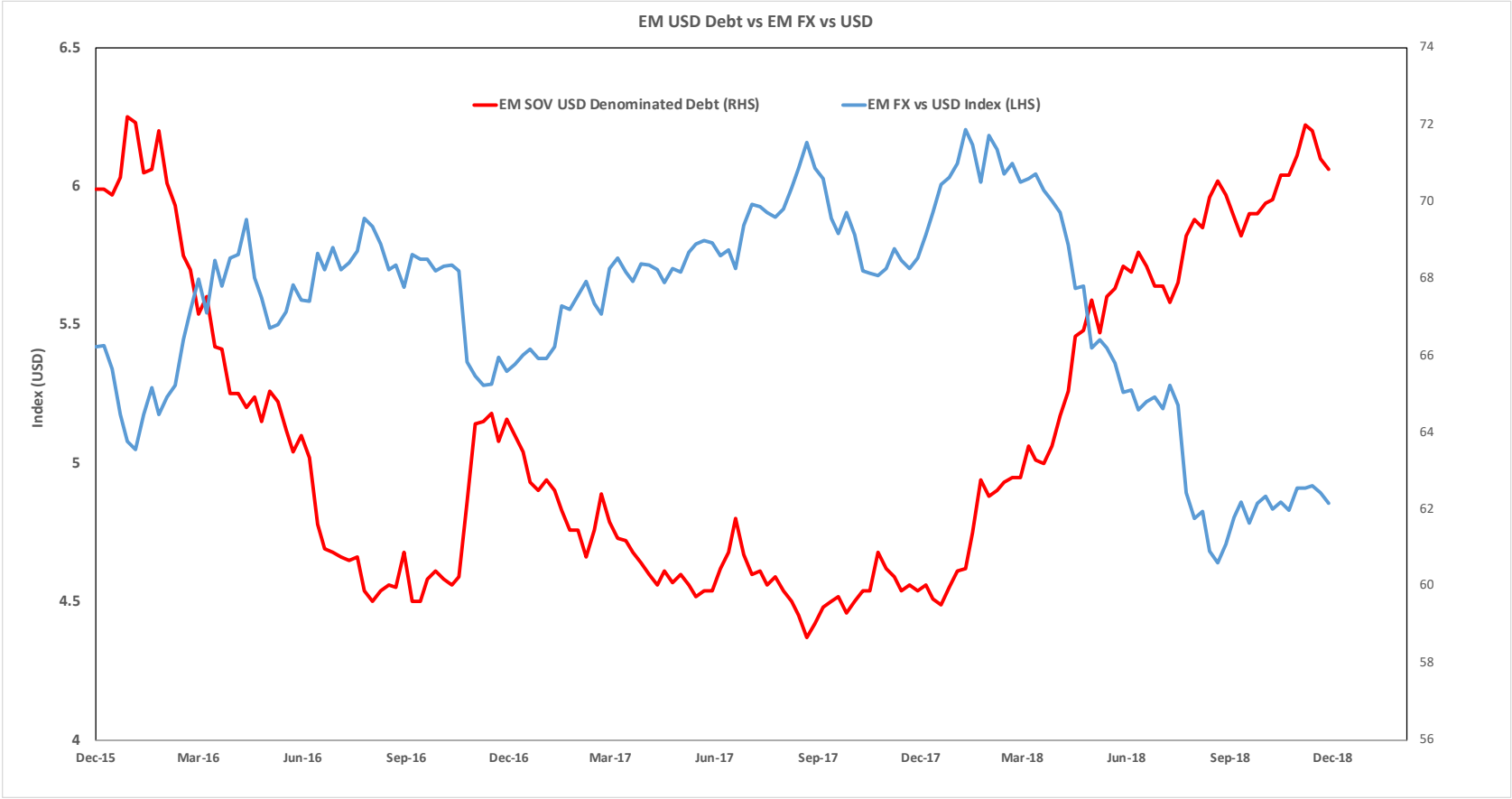
SOM Macro Strategies

State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

Step 1: The Macro Theme

Has The Repricing of EM Assets Gone Too Far?

EM Assets Have Been Repriced Back to 2016 Levels[1]



1. Bloomberg

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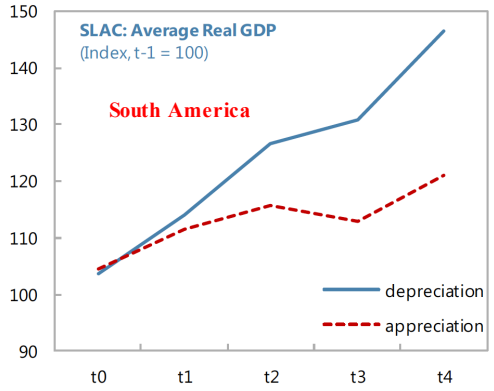
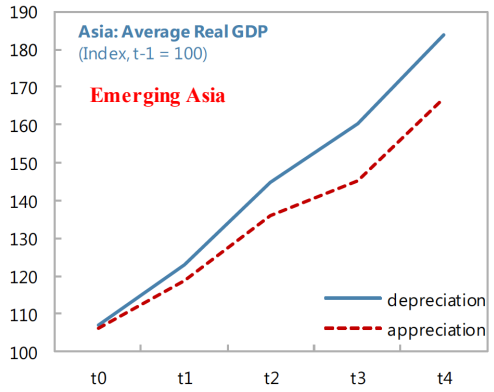
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

Step 2: Fundamental Economic Framework

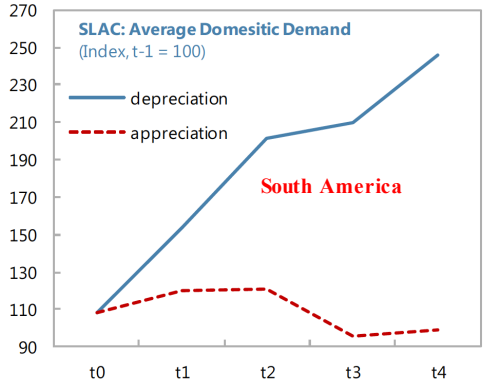
EM Growth Is Historically Very Correlated to The Dollar Particularly EM Domestic Demand[1,2,3]

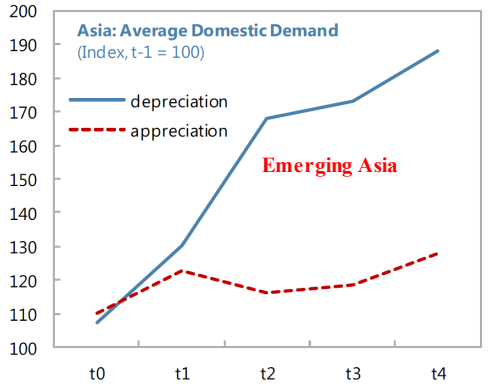
Average EM GDP Growth EM Is Sensitive to The USD





Domestic Demand is Even More Sensitive to The USD





1. Druck, Magud, Mariscal, " Collateral Damage: Dollar Strength and Emerging Markets' Growth", IMF Working Paper, 15/179
2. SLAC is South America, Asia is emerging Asia
3. Domestic demand is GDP less Exports

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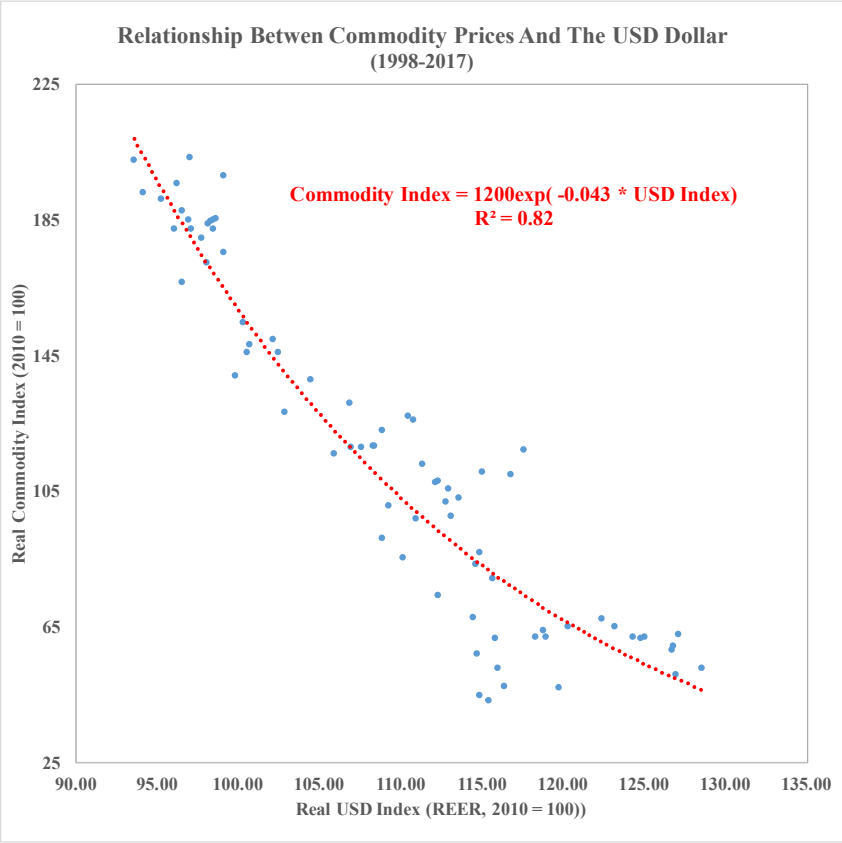
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

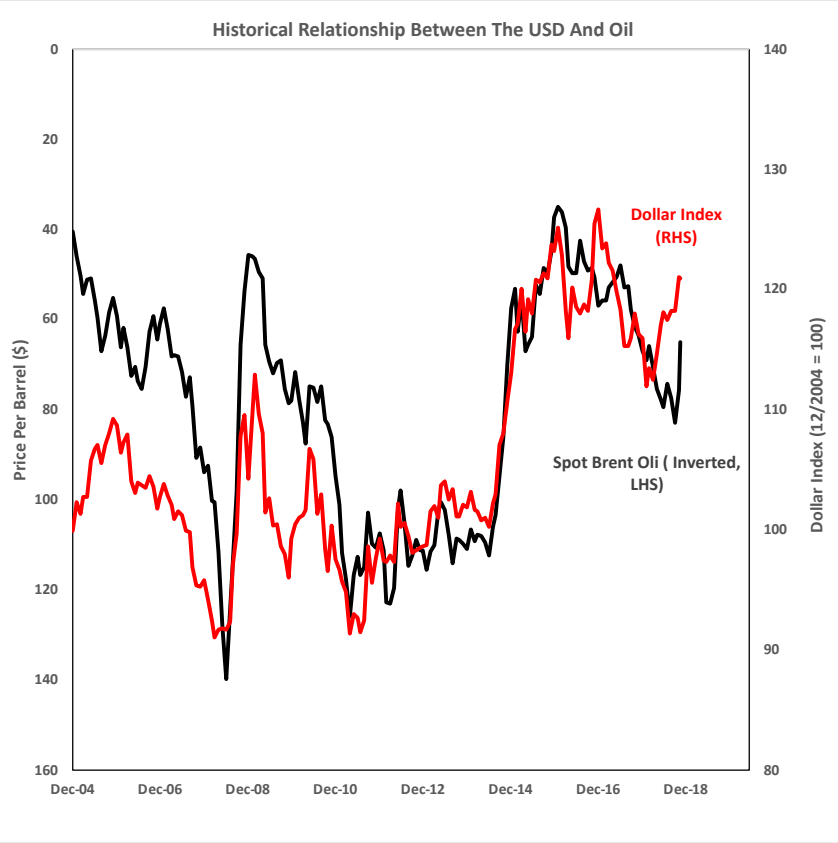
Step 2: Fundamental Economic Framework

High Negative Correlation of Commodity Prices And USD[1]

Stronger USD Could Affect EM Through A Fall In Commodity Prices



Up Until Recently Oil Seemed Immune To the USD But…



1. Bloomberg and Author's calculation

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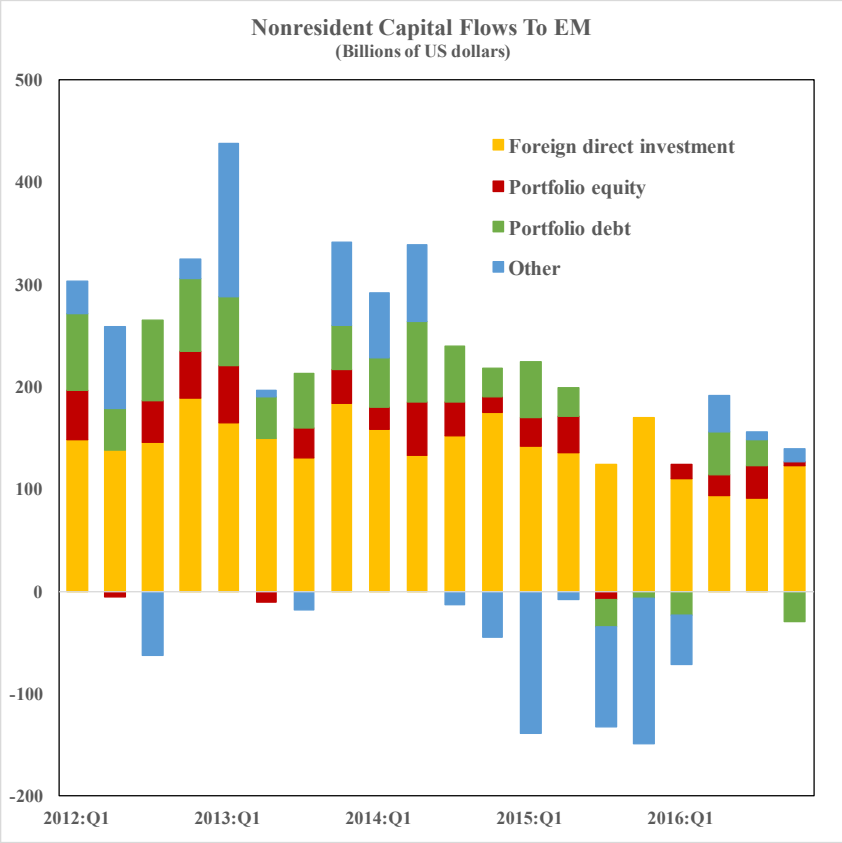
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

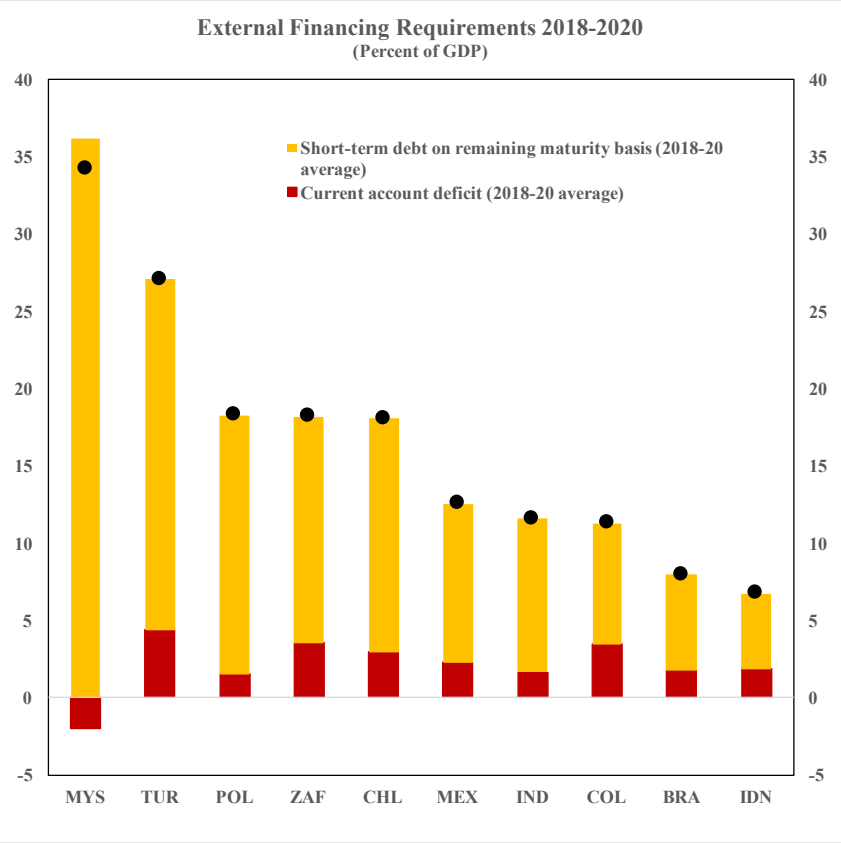
Step 2: Fundamental Economic Framework

EM Is Very Dependent On External Funding USD

EM Needs A Substantial Amount of External Capital[1]



EM Will Continue to Need A Substantial Amount of External Capital[2]



1. IMF, Global Financial Stability Report, April 2017
2. IMF, Global Financial Stability Report, October 2017

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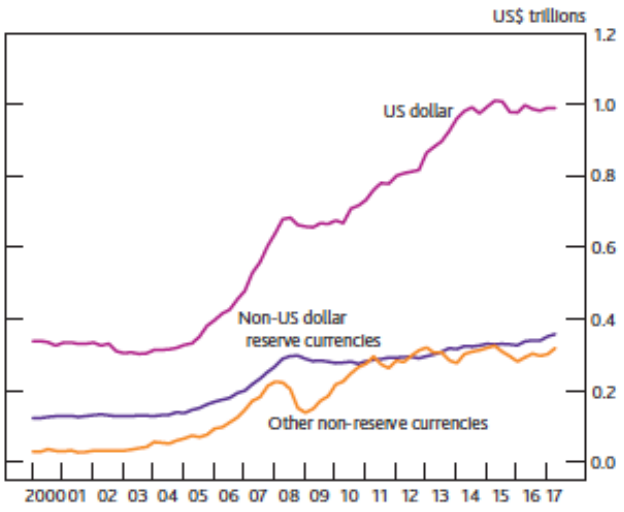
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

Step 2: Fundamental Economic Framework

EM Is Even More Vulnerable to The USD Than Historical Given Growth Of External USD Borrowing[1]

Bank Lending To EM Typically in USD

Chart 5 International bank lending — to emerging markets, non-bank sector[a]

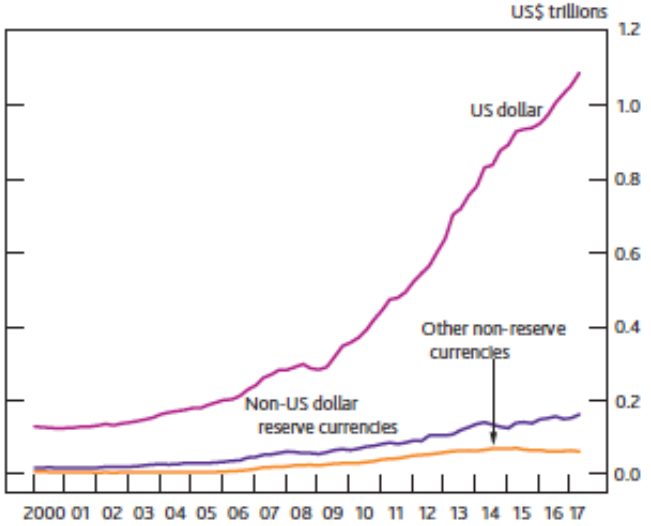


Sources: BIS and Bank calculations.

(a) Cross-border loans and deposits from all BIS-reporting banking systems to residents in emerging markets. To account for exchange rate valuation effects, the chart shows cumulative exchange rate adjusted changes in bank loans and deposits added to their respective start period (2000 Q1) stocks. Non-US dollar reserve currencies: British pound, euro, Japanese yen and Swiss franc.

EM Debt Issuance Has Surged IN USD

Chart 4 Debt securities issued in international markets by corporates from emerging markets[a]



Sources: Bank for International Settlements (BIS) and Bank calculations.

(a) International debt securities refer to amounts outstanding of international debt securities issued on a nationality basis by corporates from emerging markets. Non-US dollar reserve currencies: British pound, euro, Japanese yen and Swiss franc.

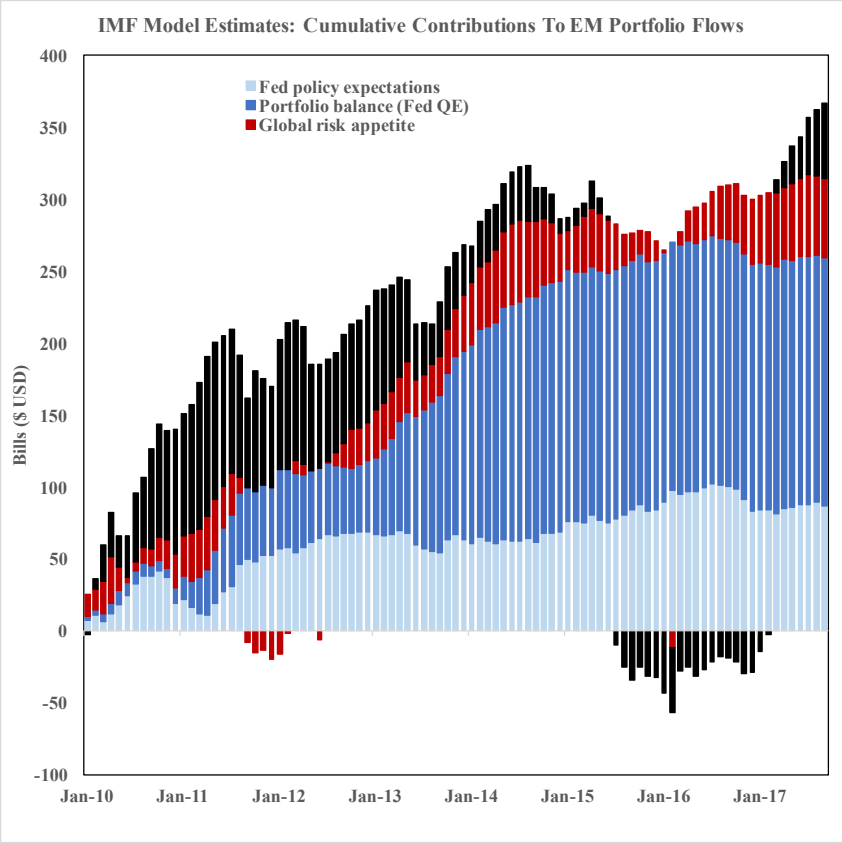
1. "The global role of the US dollar and Its consequences", Quarterly Bulletin, 2017 Q4

State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

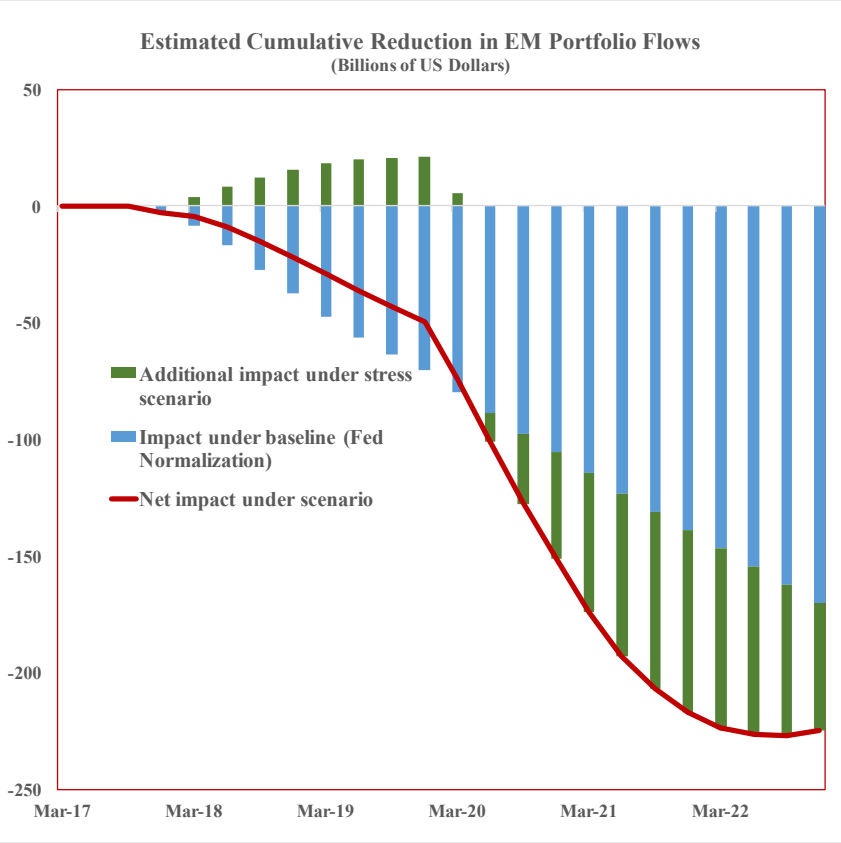
Step 3: Identify Potential Repricing Events

The Fed Unwinding QE: EM Weakness Also Reflects The Impact of The Fed's Unwinding Of QE [1]

US QE Has Been A Major Factor in Driving Capital Flows To EM



The Unwind Could Reverse Those Flows



1. IMF, Global Financial Stability Report, October 2017

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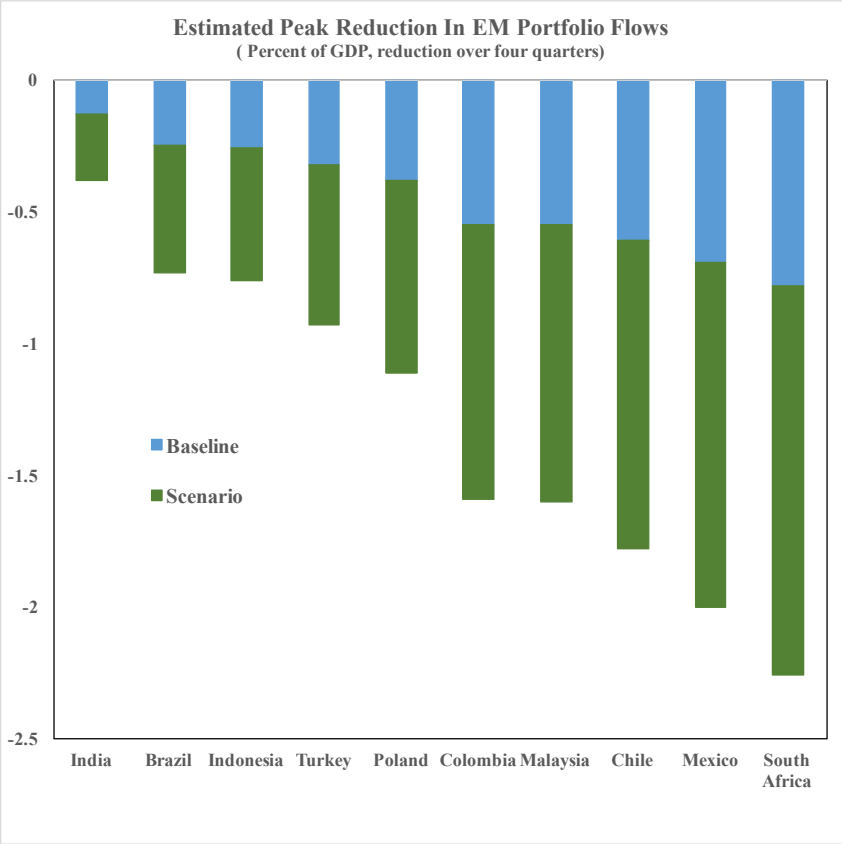
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

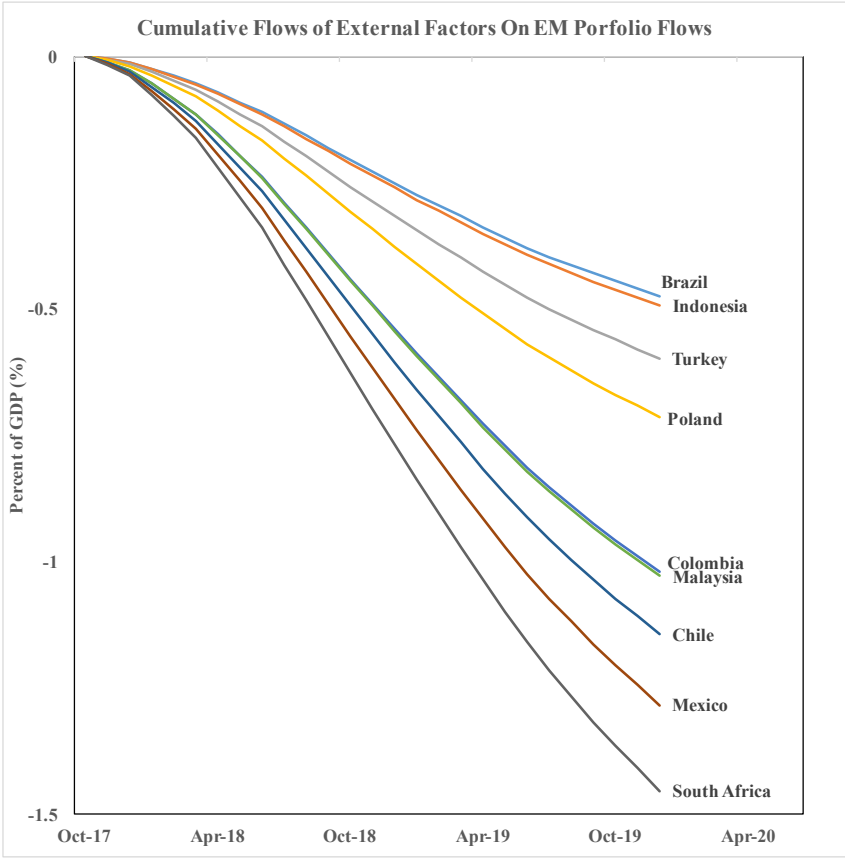
Step 3: Identify Potential Repricing Events

Fed Unwinding QE: Impact On Reversal of Flows Into EM Could Be Substantial[1]

Outflows Would Be Problem For EM, Particularly in A Crisis



Even In the Base Case the Cumulative Impact Could Be Large



1, IMF, Global Financial Stability Report, October 2017

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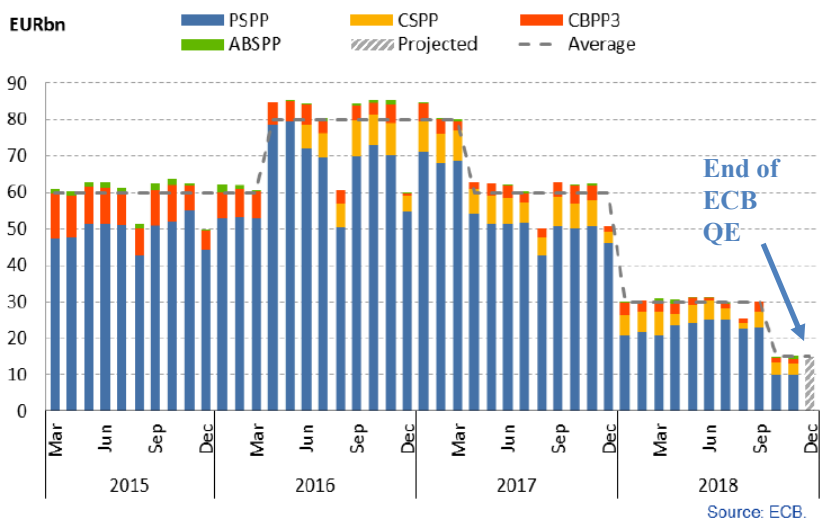
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

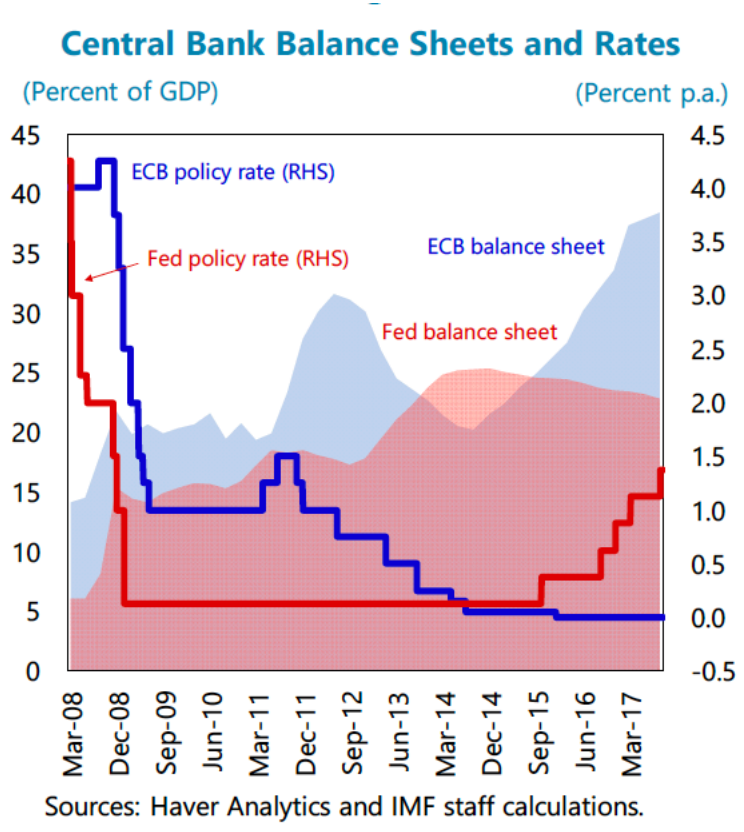
Step 3: Identify Potential Repricing Events

EMU Stopping QE: The Next Shoe To Drop For EM Capital Flows?

The ECB Has Stopped Their QE Program



The Next Step Could Be To Follow The Fed And Unwind QE



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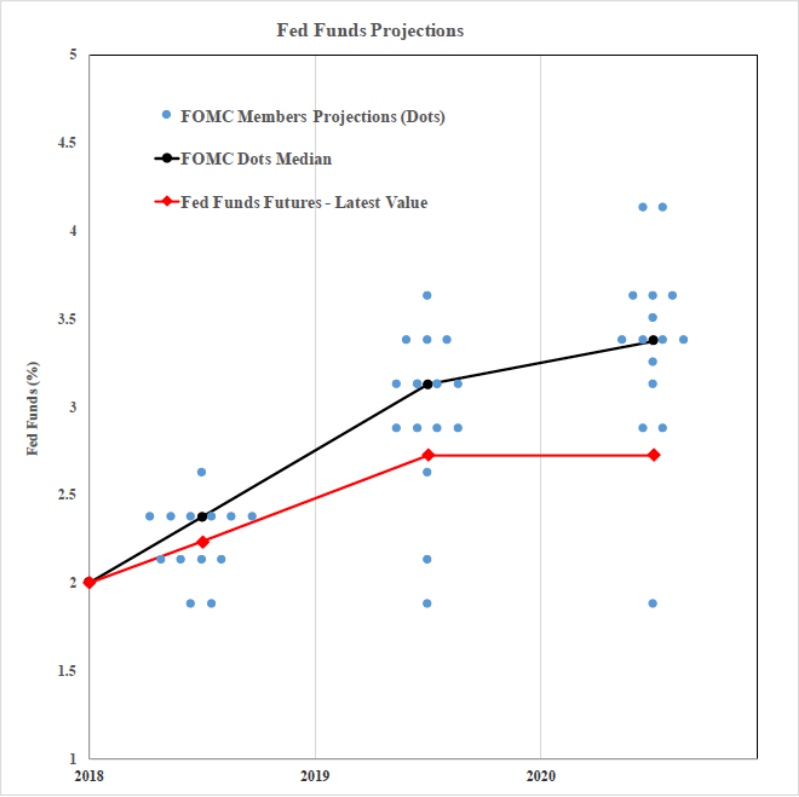
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

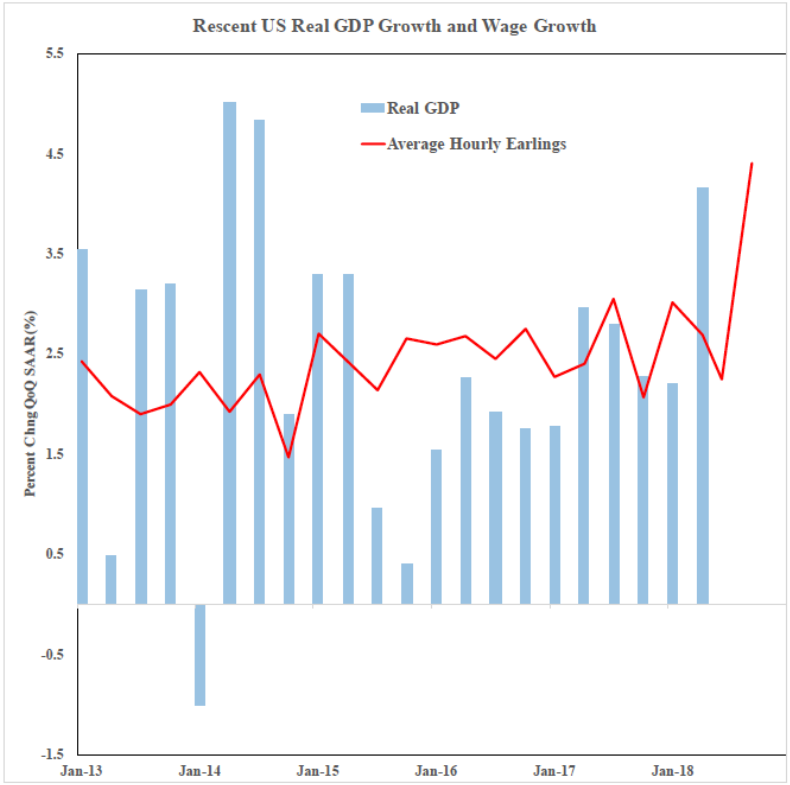
Step 3: Identify Potential Repricing Events

Further Fed Rate Hikes: USD Could Strengthen Given Potential Fed Rate Hikes[1]

The "Dots" Say Fed Continues To Hike To 3.5% By Next Year



Economy and Labor Market Support Higher Fed Rates



1. Bloomberg

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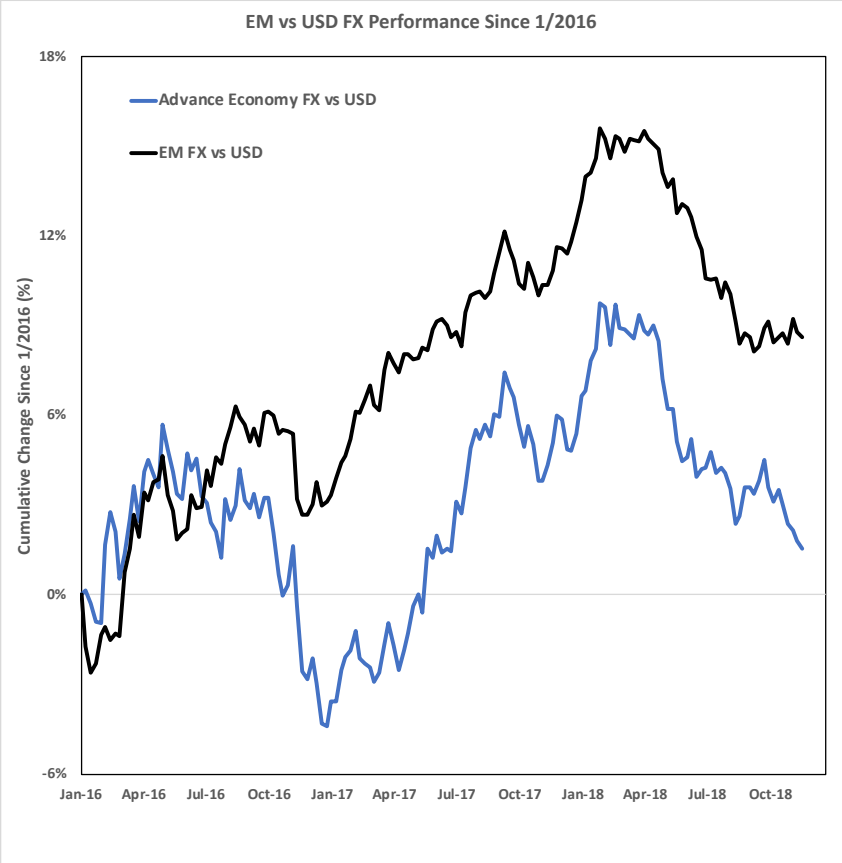
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

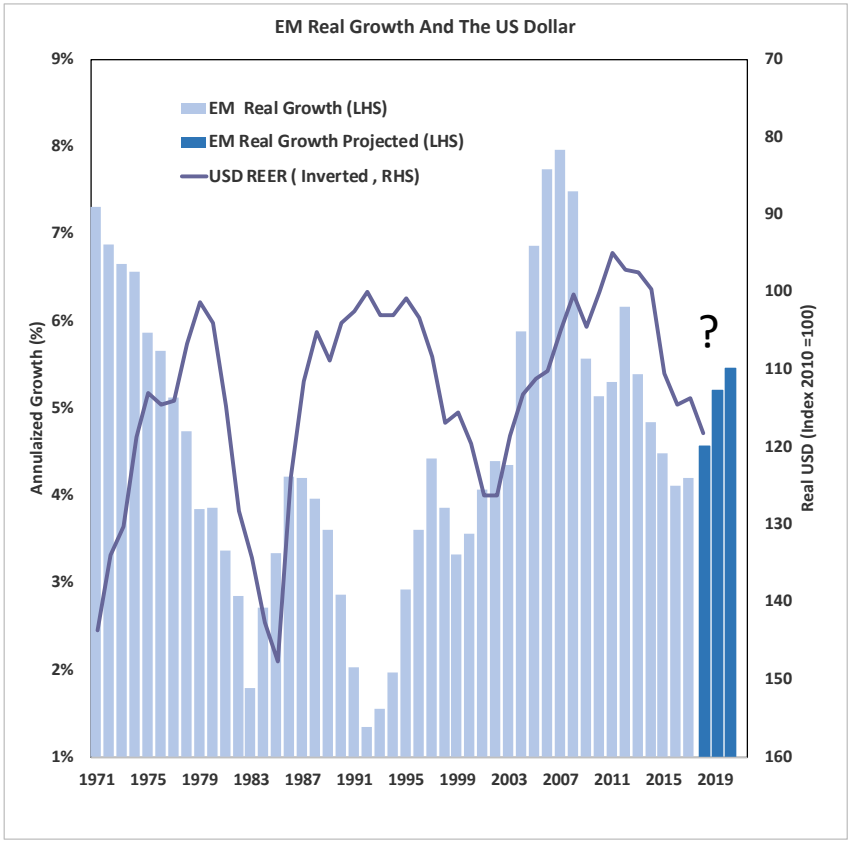
Step 3: Identify Potential Repricing Events

Further Fed Rate Hikes: EM FX And Economic Growth Projection Have Not Fully Reflected USD Strength

Dollar Though Stronger Still Has Room To Run[1]



But EM GDP Projections Still Do Not Reflect The USD Strength [1,2]



1. Bloomberg
2. IMF World Economic Outlook 2018

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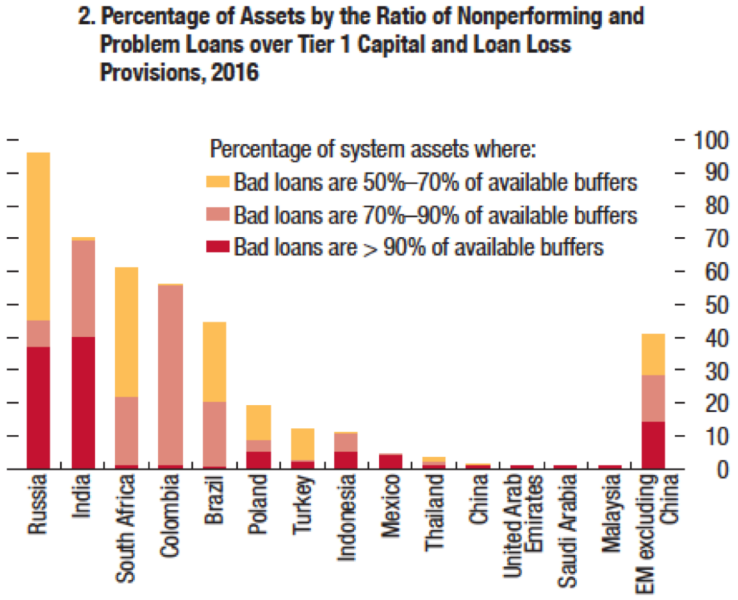
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

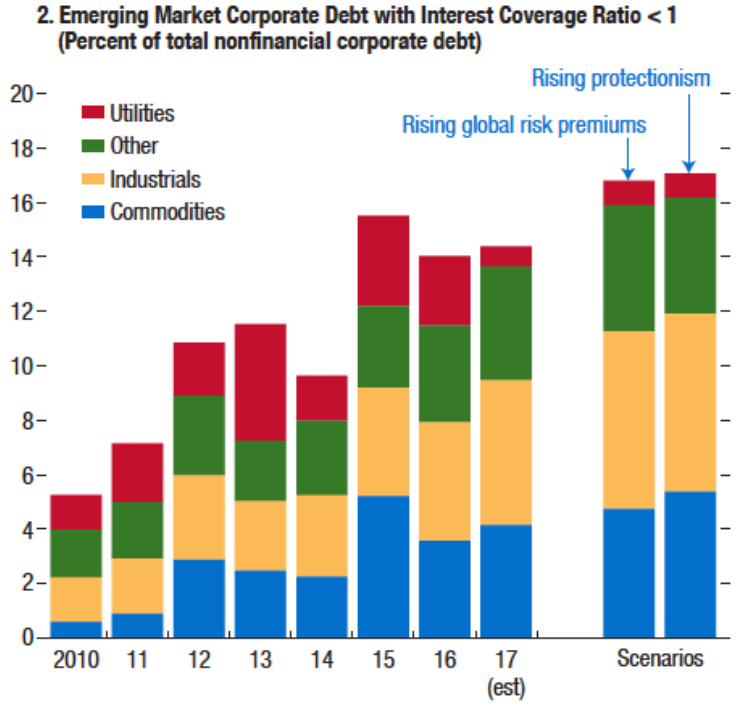
Step 3: Identify Potential Repricing Events

EM Credit Contraction: EM Banks Could Slow Credit If Economic Growth Faulters[1]

EM Banks Have Rising NPL Problem



A Stress Scenario Could Make It Worse



Sources: S&P Capital IQ; and IMF staff estimates.
Note: Current represents last 12 months, except for India, which uses fiscal year 2016 data. Est = estimate.

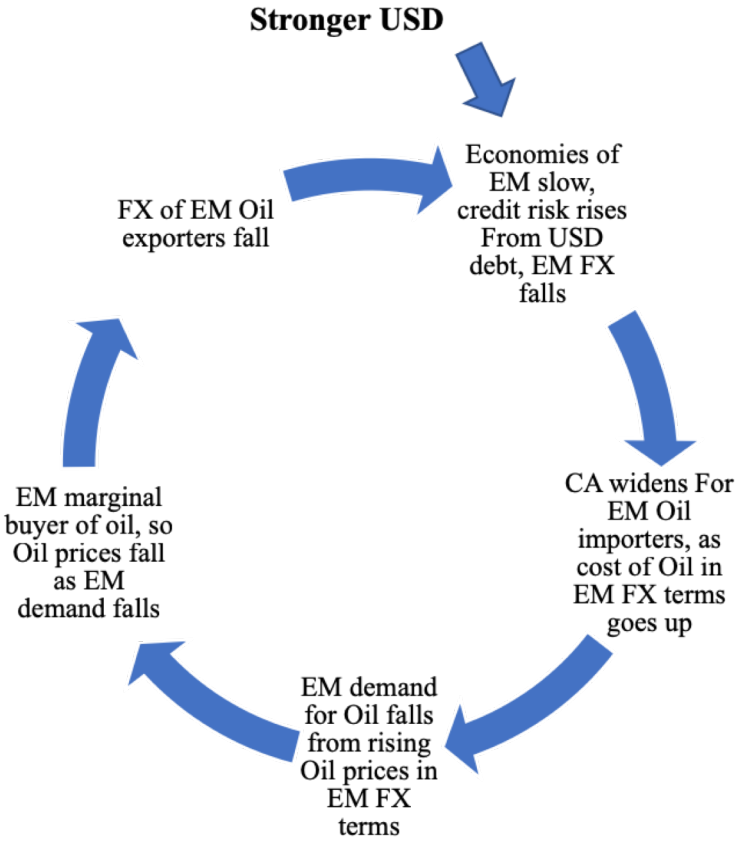
1. IMF, Global Financial Stability Report, April 2017

State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

Step 3: Identify Potential Repricing Events

The USD, EM And Commodity Cycle: The Example of Oil

Stronger USD + Slower EM Economies + Falling EM FX + Lower EM Demand For Oil = Falling Oil Prices



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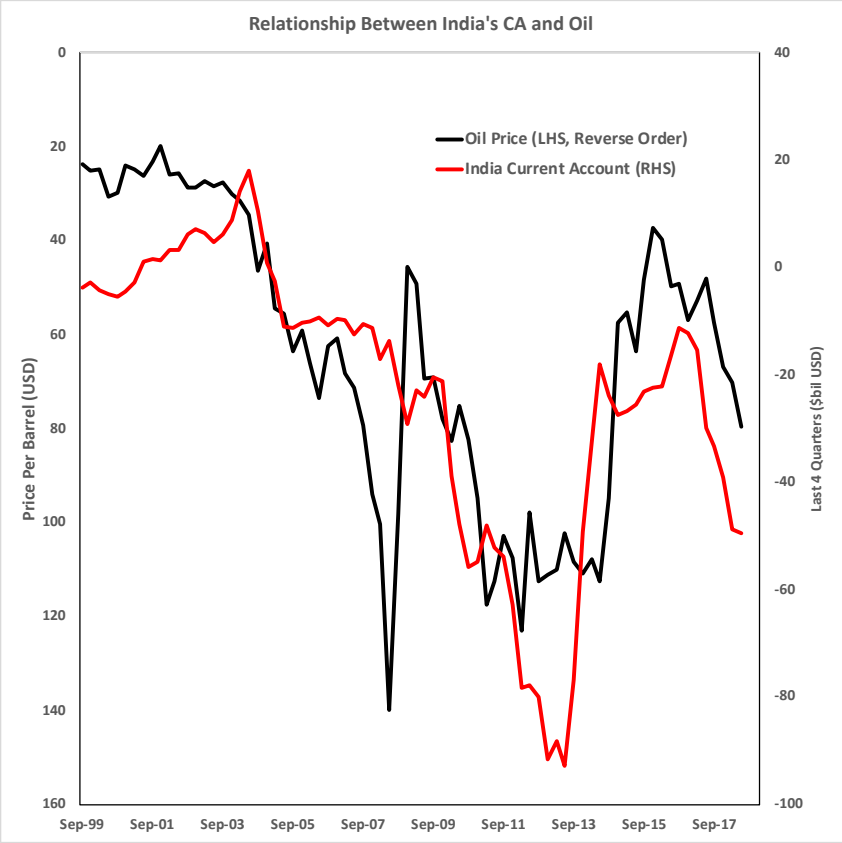
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

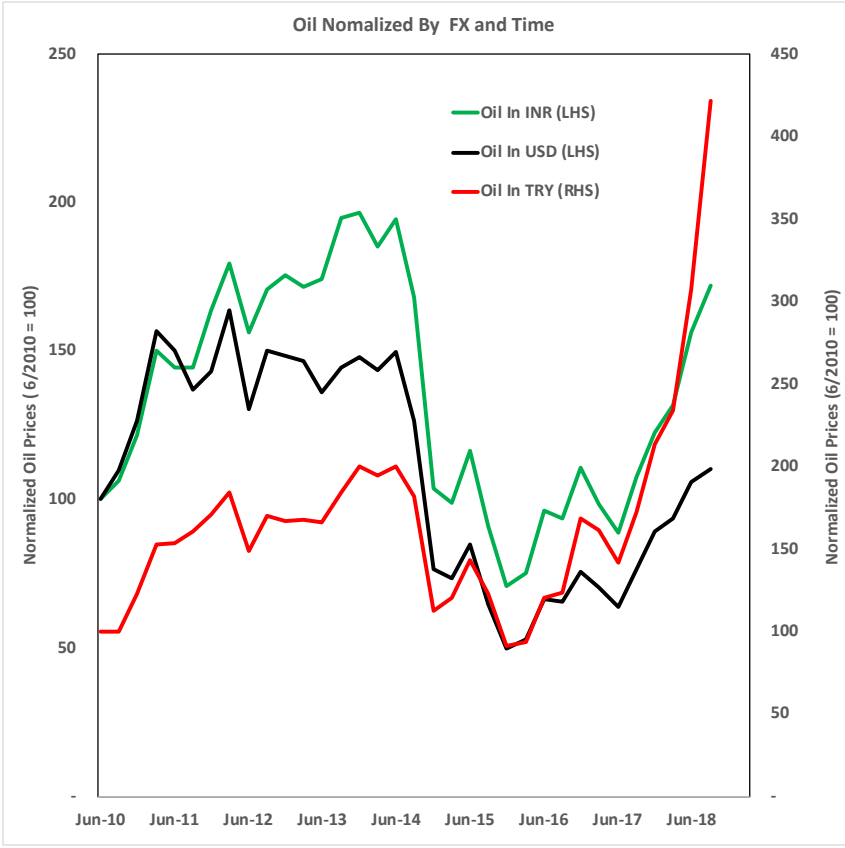
Step 3: Identify Potential Repricing Events

The USD, EM And Commodity Cycle: Cycle Creates Even Lower Oil Prices And Weaker EM FX [1]

Increasing Oil Prices Puts Pressure on EM and FX Through CA



Weaker EM FX Compounds This Effect Which Should Slow Demand



1. Bloomberg

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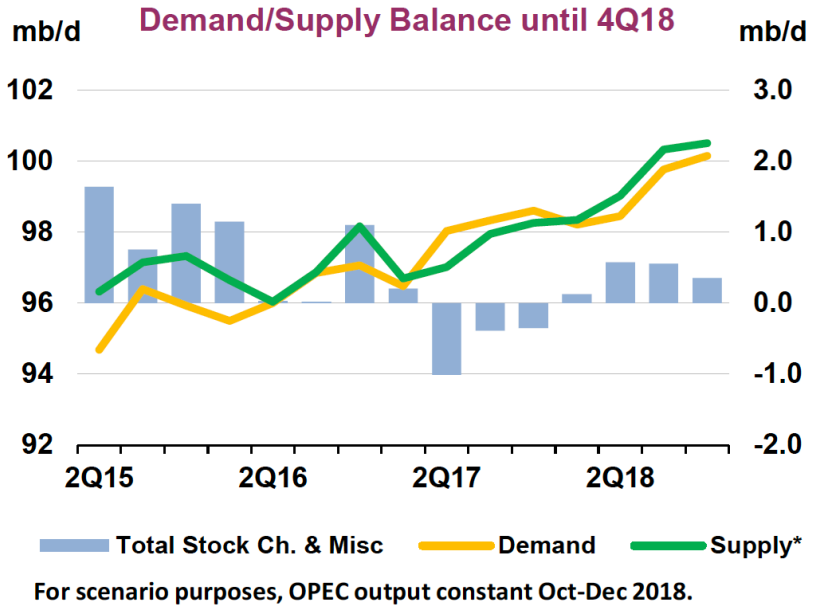
State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

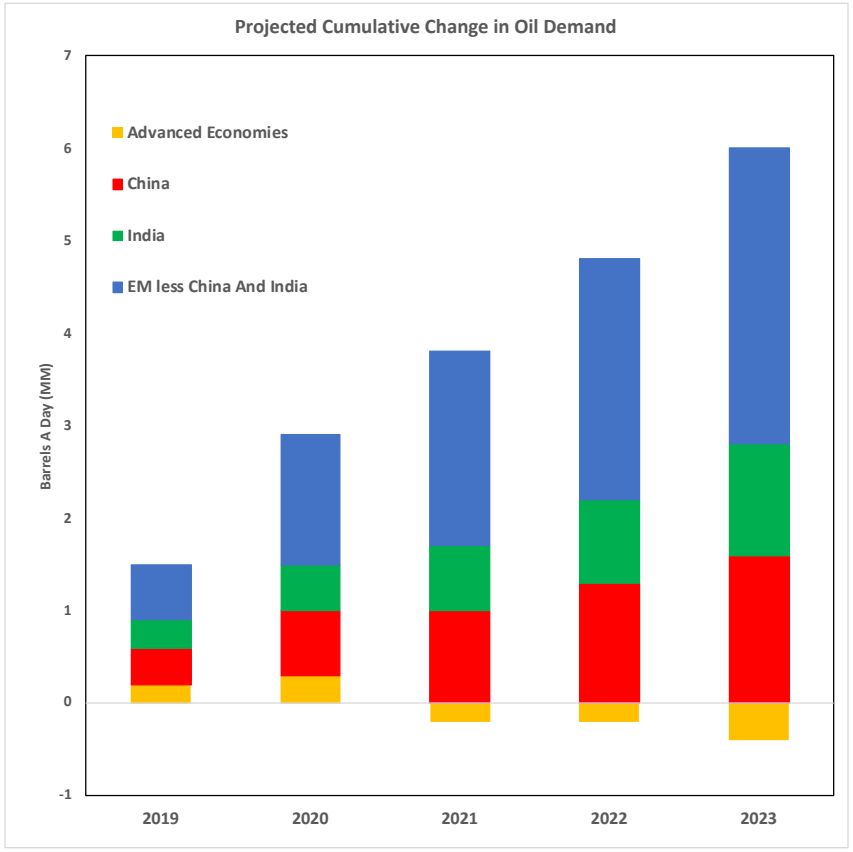
Step 3: Identify Potential Repricing Events

The USD, EM And Commodity Cycle: Falling EM Demand Puts Downward Pressure Commodity Prices [1]

Oil Excess Supply Is Expected To Extend Into 2019



This Imbalance Could Get Worse If EM Demand Slows



1. IEA, Oil Market Report, October 12, 2018

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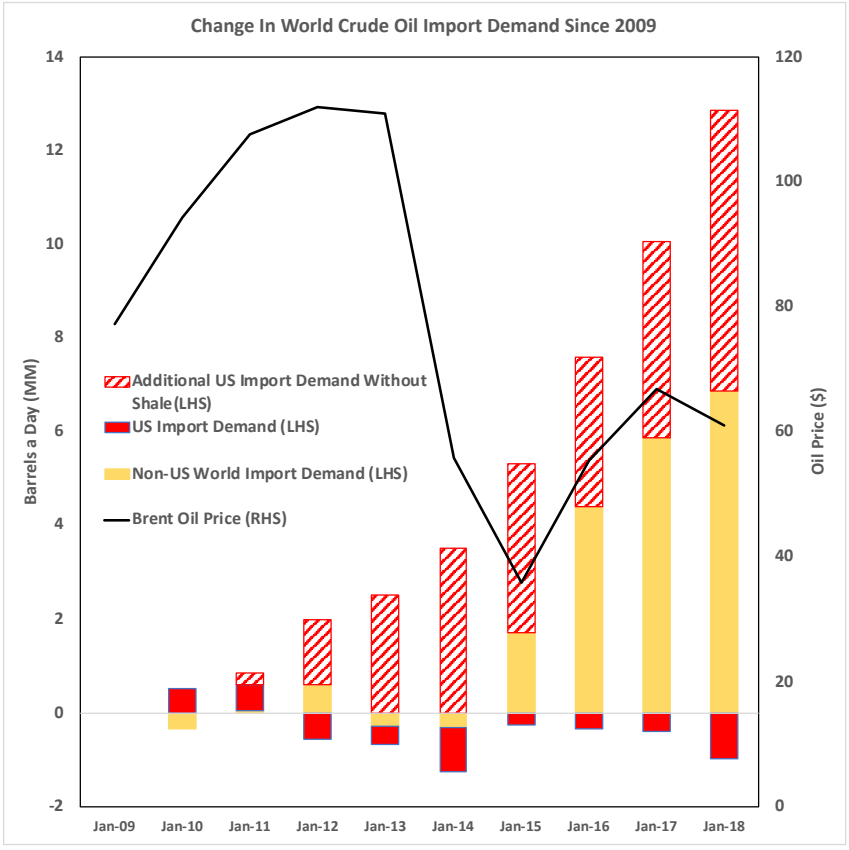
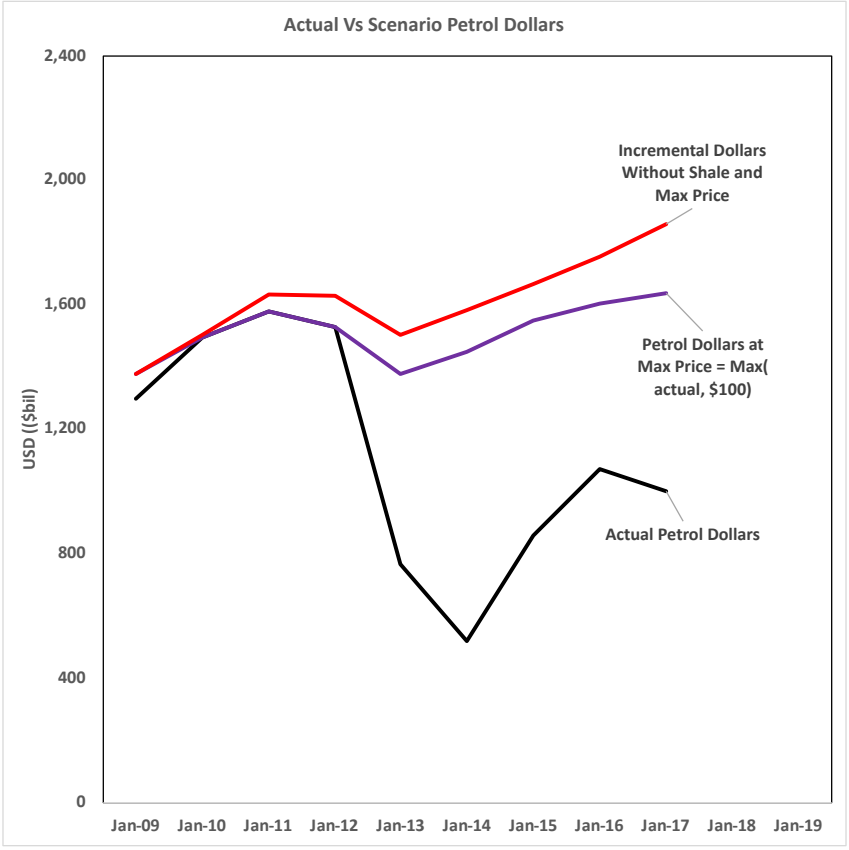
Step 3: Identify Potential Repricing Events

The USD, EM And Commodity Cycle: Lower Oil Prices Reduces Available External Capital For EM





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State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

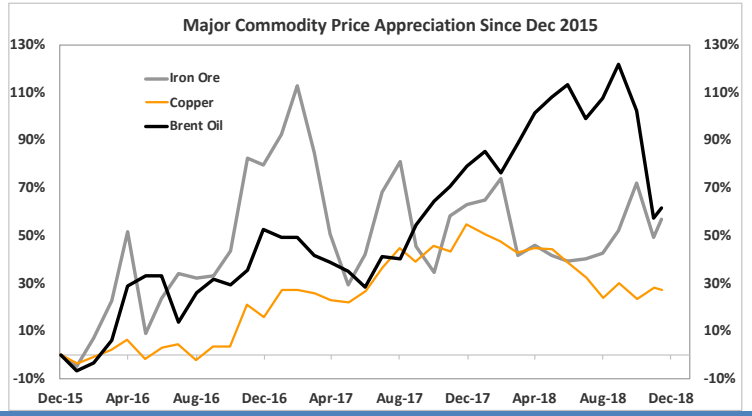
Step 4: Find Asymmetric Trades

Trade 3: Position for Weaker EM FX — Buy USD Against EM Commodity Country FX

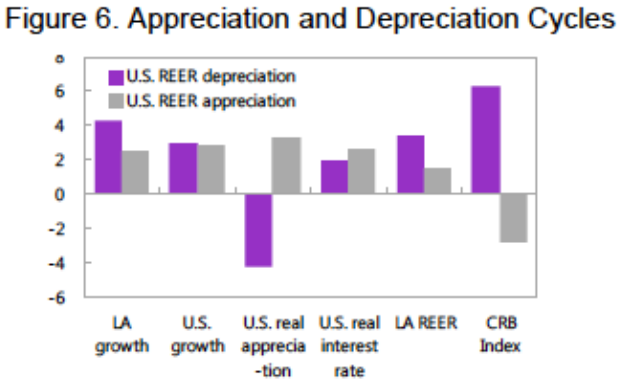
Trade Thesis

- USD could strengthen
  - The dollar could strengthen as the Fed could continues to raise rates and unwind QE as the US economy continues to grow
  - Capital flows into the US spurred by tax reform could also strengthen the dollar result is a strengthening of the USD
- EM commodity country FX could weaken as their economies slow
  - External capital flows could dry up and reverse
  - Dollar funding costs could rise with higher US rates and stronger USD
  - Commodity income could fall as commodity prices fall in the face of a stronger US
  - Domestic credit growth could decline in face of rising problem loans
- Buy USD vs a basket of EM commodity country FX (BRL, RUB,CLP) or an USD Call/EM Put 3-mo, 30 delta on the basket

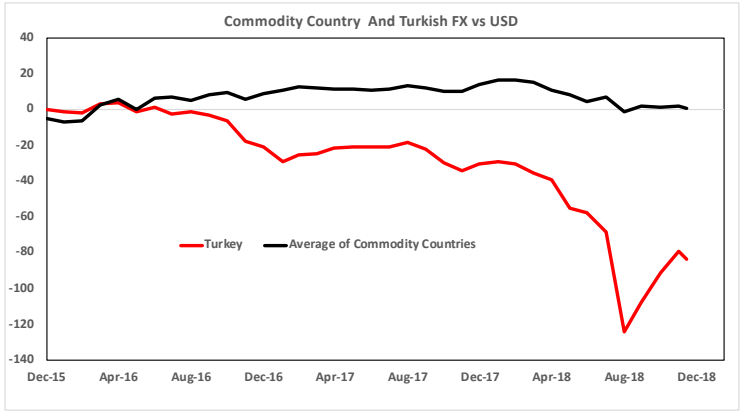
Commodity Prices Have Surged As The USD As Deprecated…[2]



Dollar Highly Correlated With Commodities and EM[1]



Which Has Supported Commodity Country FX vs Other EMs[2]



1. Druck, Magud, Mariscal, " Collateral Damage: Dollar Strength and Emerging Markets' Growth", IMF Working Paper, 15/179
2. Bloomberg

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State Of the Markets: Year Ahead 2019— Position For A Weaker EM And Commodity Prices

Step 4: Find Asymmetric Trade

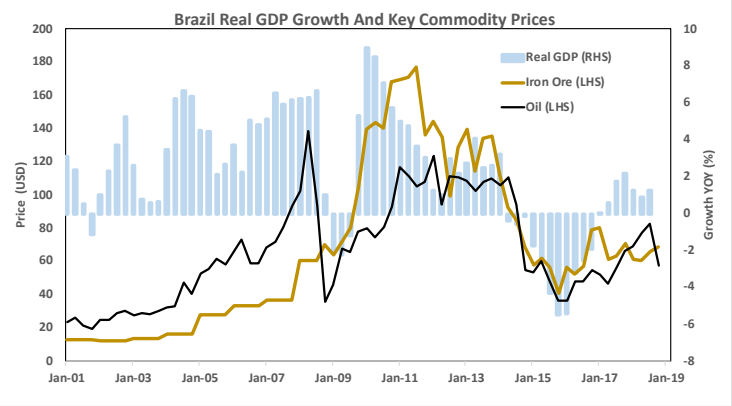
Trade 4: Buy Downside On Brazil Equities

Trade Thesis

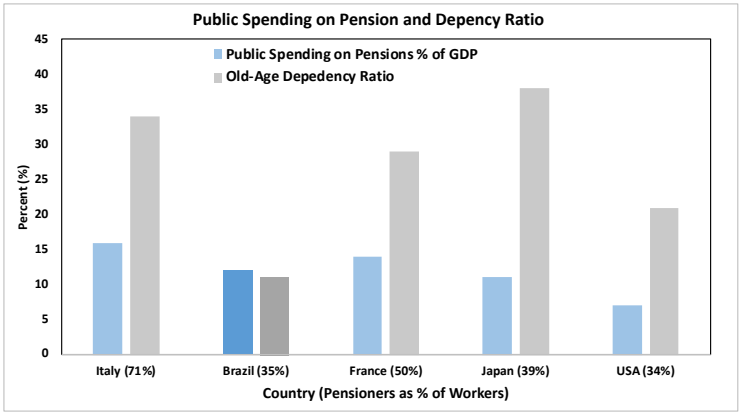
- Dollar strength could slow economic growth and that could reverse the recent rally in Brazil equities
- Pension reform under new government may not big enough, even if it happens
- Brazil equities look overvalued without a pickup in growth or in commodity prices

Risk is Brazil economy rebounds

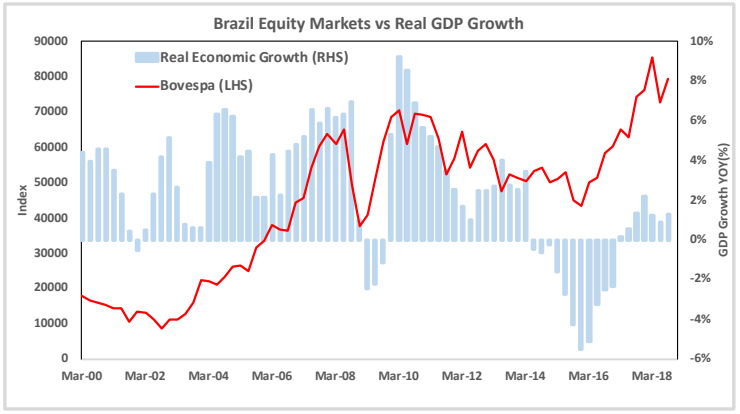
Falling Commodity Prices Could Weigh On Growth



Pension Problem Could Be Too Big Even With New Government



Without Growth, Brazil Equites Look Rich



SOM *Macro Strategies*

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

SOM Macro Strategies

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

- ***Step 1: Macro Theme: The Coming Economic War Between the US and China***
  - The Trump administration is determined to engage in an economic war with China
  - They believe that China has been actively engaged already in this war, which goes far beyond trade
  - The question is how far will the US go to win this war, and how will China respond?
- ***Step 2: Fundamental Economic Framework***
  - The US trade balance with China is growing
  - China is escalating their acquisition of intellectual capital both directly and indirectly
  - China has put barriers to US technology companies entering into China
- ***Step 3: Identify Potential Repricing Events***
  - More tariffs
  - China retaliation
  - 90 days
- ***Step 4: Find Asymmetric Trade***
  - Trade 5: Receive USD and Sell CNH on a forward basis
  - Trade 6: Buy puts on USD based EM equities
  - Trade 7. Buy tail protection on highly rated corporate credit

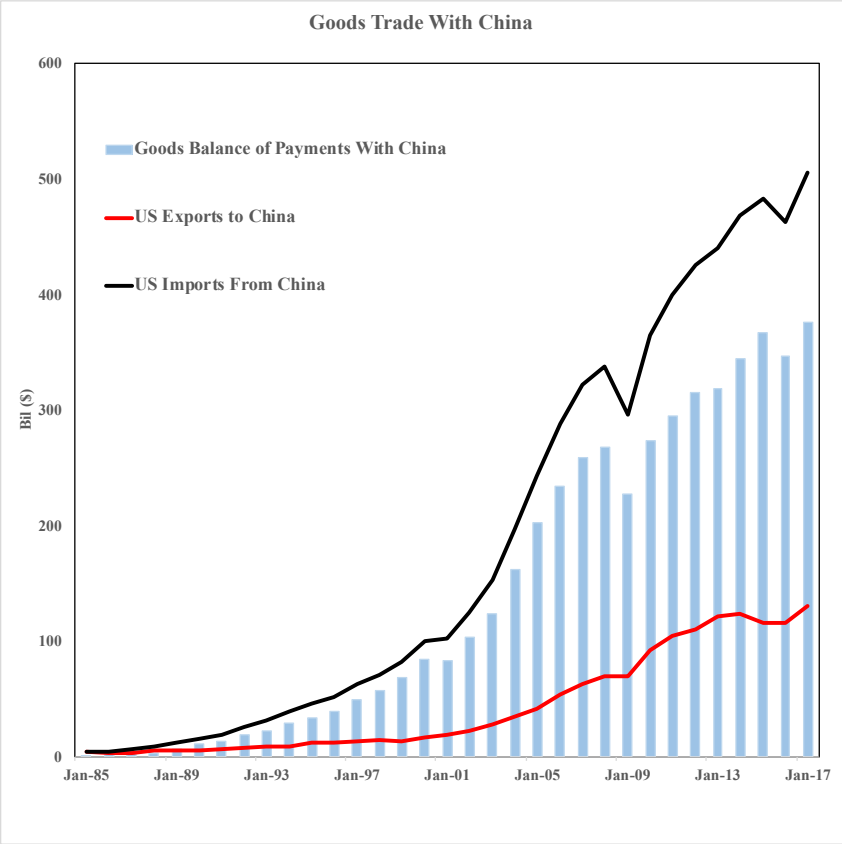
SOM Macro Strategies

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

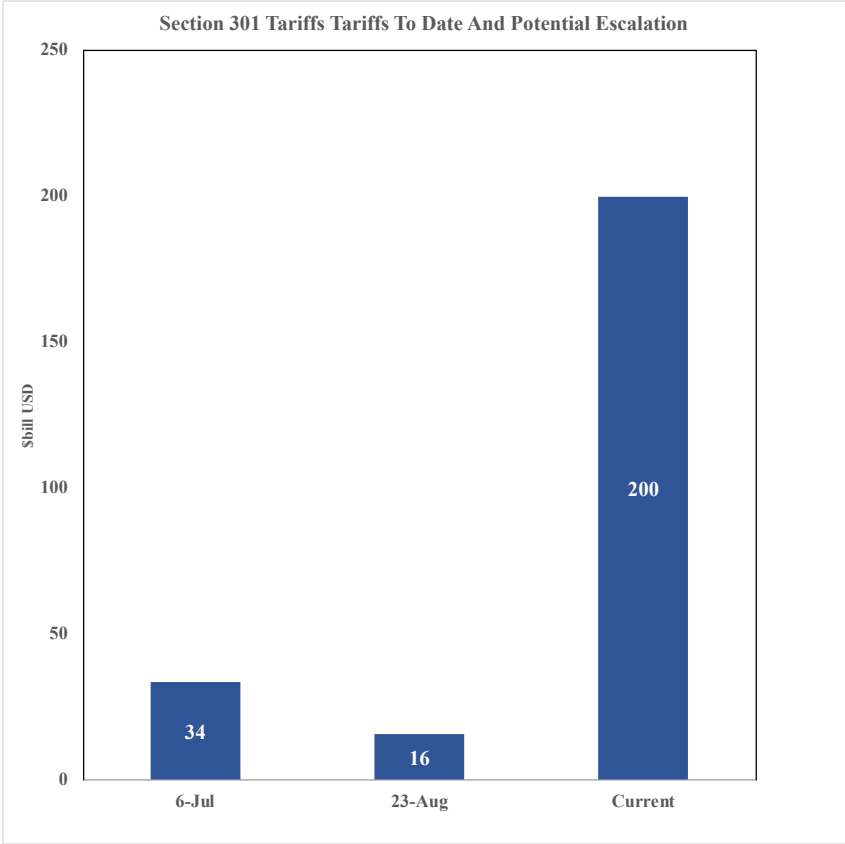
Step 1: Find Macro Theme

Will Trump Tariffs Start A Trade War With China?[1]

Trade Deficit with China is Growing To Unstainable Levels…So



The US Is Raising Tariffs That Could Start A Trade War With China



1. Federal Reserve Bank of St. Louis, FRED Data base

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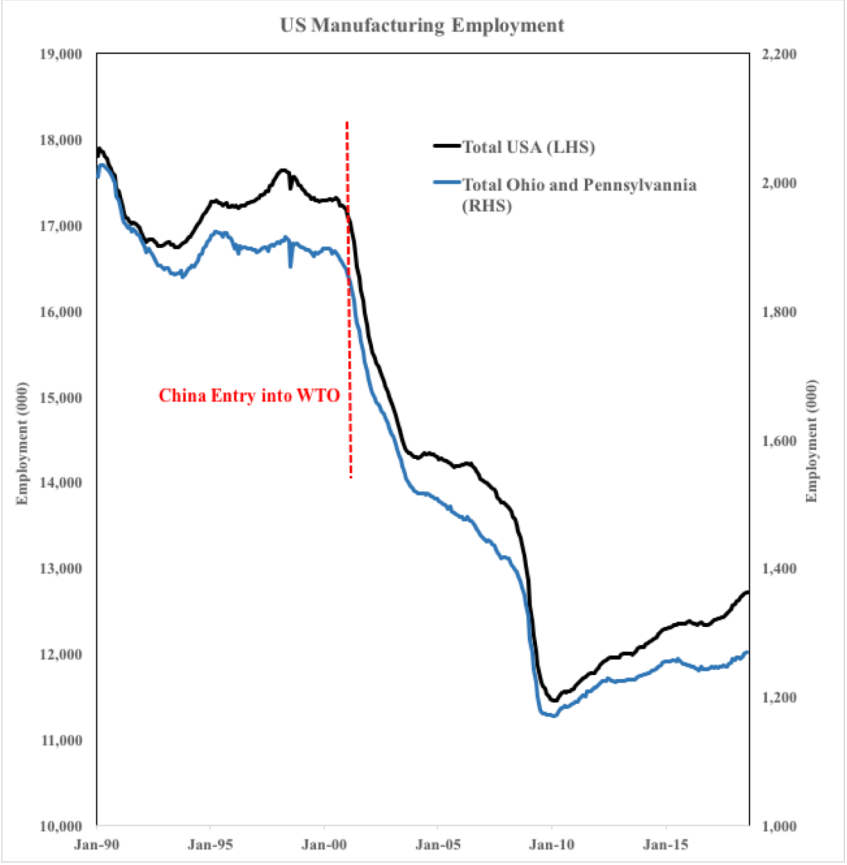
State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

Yes, And That Will Likely Escalates Into An Economic War Because Of What Happened in 2001

US Manufacturing Jobs Where exported to China After 2001[1]



Sector Never Recovered Even With A Robust Growth in The US[2]

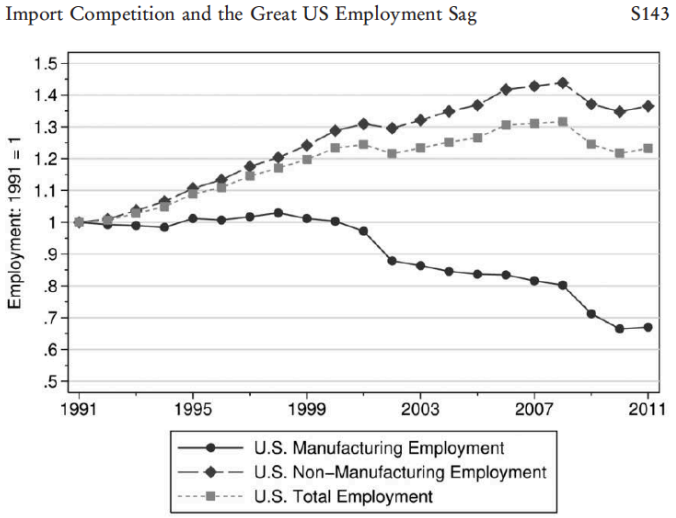


FIG. 1.—Changes in US manufacturing and nonmanufacturing employment, 1991–2011. Employment is computed in the CBP. Employment counts are normalized to unity in 1991. A color version of this figure is available online.

1. Federal Reserve Bank of St. Louis, FRED data
2. Acemoglu, Autor, Dorn, Hanson, and Price," Import Competition and the Great US Employment Sag of the 2000s" ,Journal of Labor Economics, Vol. 34, No. S1 (Part 2, January 2016)

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

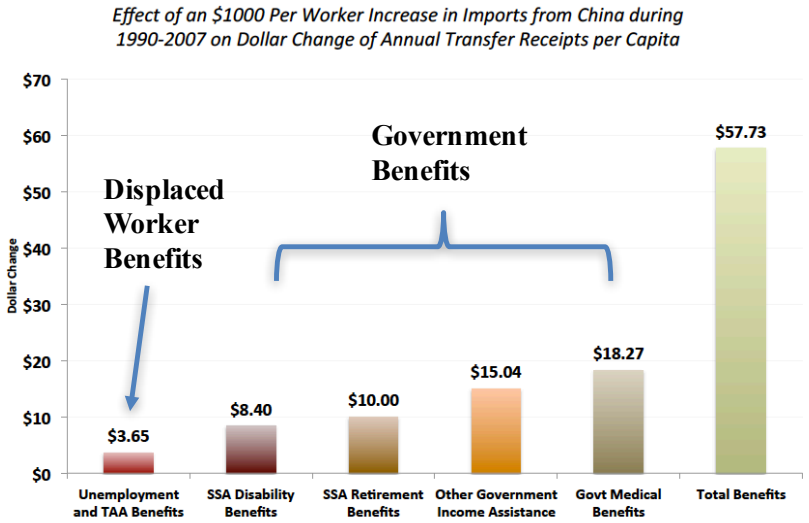
Step 2: Fundamental Economic Framework

China's Entry In WTO Started The Process That Turned The Rust Belt Into A Welfare State

The Rust Belt Is Still In Their China Driven Great Depression[1]

City	1970	2015	Change
Pittsburgh	41.3	40.7	-1%
Cleveland	45.9	26.2	-43%
Buffalo	42.3	31.9	-25%
Detroit	51.1	25.7	-50%
USA	**41.3**	**51.4**	**24%**

Wage Income Was Replaced By Government Transfer Payments[2]



1. Census Data
2. Autor, Dorn and Hanson, " The China Shock: Learning From Labor Market Adjustment to Large Changes In Trade", NBER, Working Paper 21906, January 2016

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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

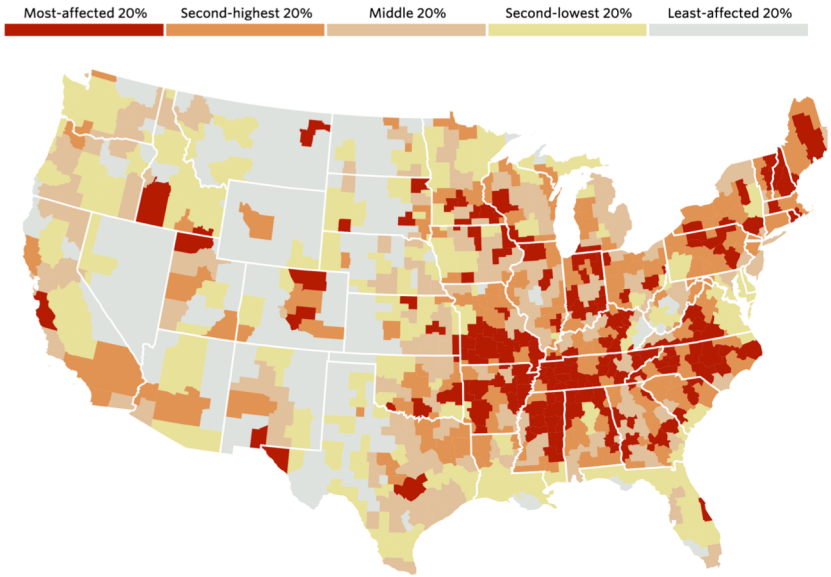
Step 2: Fundamental Economic Framework

Trump Political Support For The Coming Economic War Comes the First Victim Of the War: the Rust Belt

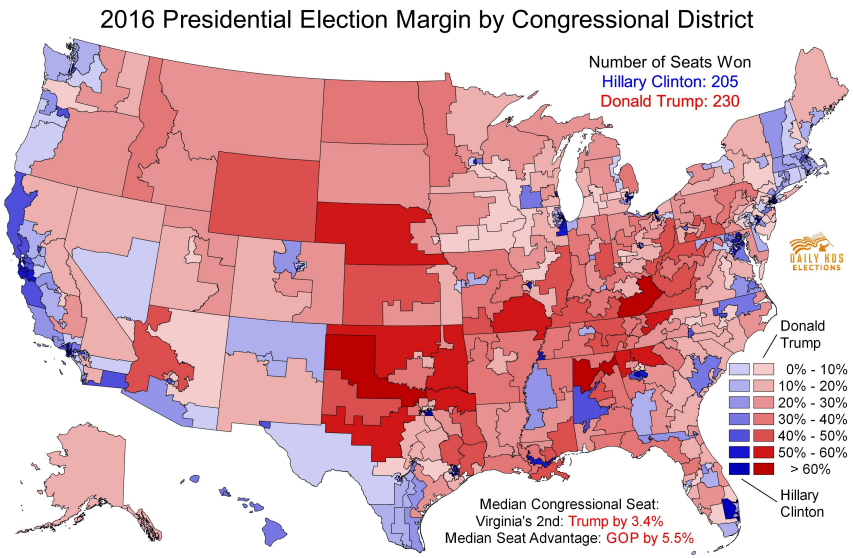
US Areas Affected By The Growth of China Imports[1]

Most-affected areas of the U.S.

Colors show which areas were most affected by China's rise, based on the increase in Chinese imports per worker in each area from 1990 to 2007. Hovering over each area on the map will show a demographic breakdown of that area, below, and its most-affected industries, at right.



Not Surprisingly, These Areas Voted For Trump



1. Autor, Dorn and Hanson, " The China Shock: Learning From Labor Market Adjustment to Large Changes In Trade", NBER, Working Paper 21906, January 2016

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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

The Coming Economic War With China Is The Likely Path Given Trump and His Mandate

China Imports A Powerful Tool To Predict Voting Patterns[1]

Table 2: **Counterfactual Outcomes in Closely Contested States**

	Vote Margin in Favor of Republican Candidate							
			Chinese Import Growth					
	Actual Outcome		10% Smaller		25% Smaller		50% Smaller	
Georgia	215,380	(5.28%)	202,810	(4.97%)	183,956	(4.51%)	152,531	(3.74%)
Arizona	84,904	(4.12%)	77,860	(3.78%)	67,295	(3.27%)	49,685	(2.41%)
North Carolina	177,009	(3.78%)	141,689	(3.03%)	88,708	(1.89%)	407	(0.01%)
Florida	119,489	(1.27%)	100,727	(1.07%)	72,584	(0.77%)	25,679	(0.27%)
Pennsylvania	73,224	(1.24%)	52,630	(0.89%)	21,739	(0.37%)	-29,746	(-0.50%)
Wisconsin	24,081	(0.81%)	11,067	(0.37%)	-8,455	(-0.28%)	-40,991	(-1.38%)
Michigan	13,107	(0.27%)	-3,979	(-0.08%)	-29,608	(-0.61%)	-72,324	(-1.49%)
New Hampshire	-2,687	(-0.37%)	-6,830	(-0.94%)	-13,045	(-1.80%)	-23,404	(-3.22%)
Minnesota	-43,783	(-1.49%)	-54,009	(-1.84%)	-69,347	(-2.36%)	-94,911	(-3.23%)
Electoral Votes Trump	306		290		280		260	
Electoral Votes Clinton	232		248		258		278	

Notes: The computation of the counterfactual is based on the estimate that a growth of import penetration by one percentage point reduces the Republican share of the two-party vote by 1.67 percentage points. Numbers in parentheses indicate the vote margin in favor of the Republican candidate as a percentage of the total vote.

Trump Has Delivered on the Other Parts of His 2016 Promises

Trump Promises 2016	Action 1	Action 2	Action 3	Action 4
Financial Reform	Put a Trump appointee in every financial regulatory body	Removed DF From banks < 250 bill of assets		
Repeal Obama Care	Removed the individual mandates	Failed on full removal		
Tax Reform	Signed a $1.5 Trillion Tax cut and reform			
Energy Reform	Approved Keystone	Opened offshore oil fields to exploration		
Infrastructure	Nothing			
Immigration Reform	Travel ban from 6 Muslim countries approved by Supreme court	Ending DACA		
Other	Moved US embassy to Jerusalem and recognized it as the capital of Israel	Removed US from Iran Accord	Bomb Syria after they used chemical weapons	Negotiating with North Korea
End of Off Shoring	***Removed US from FTTP, renegotiating NAFTA***	***Reduced incentives to hold profits overseas***	***Imposed tariffs on Steel***	***Impose tariffs on China imports***

1. Autor, Dorn, Hanson, And Majlesi, "Importing Political Polarization he Electoral Consequences of Rising Trade Exposure", January 6, 2017

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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

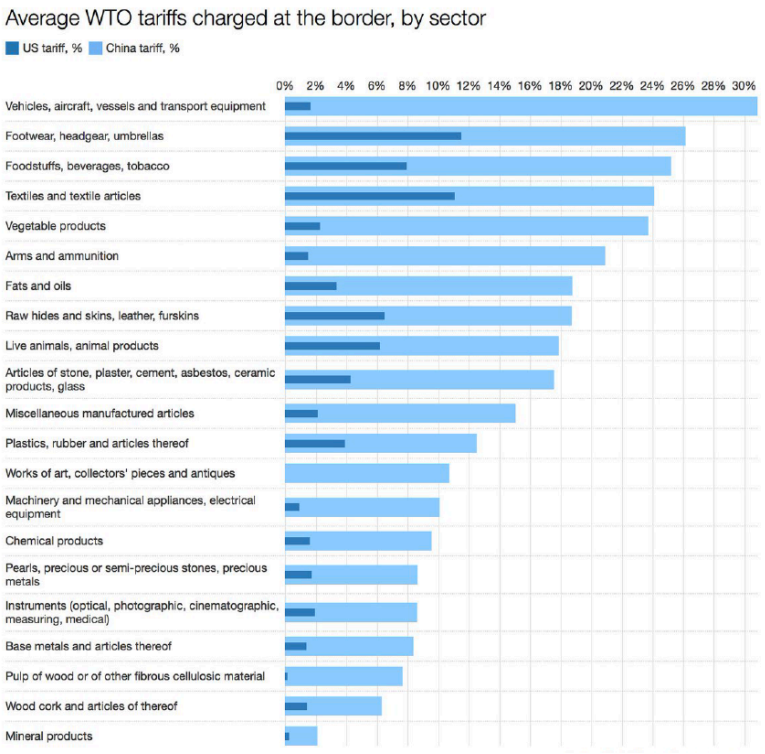
Step 2: Fundamental Economic Framework

Before "American First", There Was "China First"

China's Economic Policy Is A Zero Sum Game[1]

- **Protect China's Home Market From Imports and Competition**
  - This category features high tariffs, non-tariff barriers, and other regulatory hurdles
- **Expand China's Share of Global Markets**
  - Uses policy tools that includes financial support to boost exports and the consolidation of State-Owned Enterprises into "national champions" that can compete with foreign companies in both the domestic and global markets.
  - Chinese enterprises also benefit from preferential policies that lead to subsidized overcapacity in China's domestic market, which then depresses world prices and pushes foreign rivals out of the global market.
- **Secure and Control Core Natural Resources Globally**
  - China uses a predatory "debt trap" model of economic development and finance that proffers substantial financing to developing countries in exchange for an encumbrance on their natural resources and access to markets
- **Dominate Traditional Manufacturing Industries**
  - China has achieved a leading position in many traditional manufacturing industries. It has done so in part through preferential loans and below-market utility rates as well as lax and weakly enforced environmental and health and safety standards.

Even After WTO, China Tariffs Were Much Higher Than The US[2]



1. "How China's Economic Aggression Threatens the Technologies and Intellectual Property of the United States and The World" OTMP, June 2018
2. "import tariffs charged by China at the border (in comparison to U.S. tariffs) , Trade News Analysis, December 2016

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

China Policy Has Created Substantial Barriers For US Companies To Invest or Export to China[1]

E-Commerce and Logistic Access Barriers

E-Commerce	
Barrier	***Description***
Licensing	Although as of 2015, foreign investors are allowed to establish wholly foreign-owned e-commerce companies in China, to date only one foreign company has been awarded the value-added telecommunications services permit for online data processing and transaction processing business necessary to operate an e-commerce company.
Data localization	China's draft e-commerce law mandates local storage of Chinese consumer data. Under the draft law, foreign platforms allowing Chinese companies to sell on them and companies operating outside of China but targeting Chinese consumers would be subject to the requirement. China's new cybersecurity law may also mandate data localization for companies in the e-commerce sector if e-commerce is deemed "critical information infrastructure."
Logistics	
Barrier	***Description***
Ownership ban	Foreign companies are blocked from operating in the document segment of China's domestic express delivery market, where China Post maintains a monopoly.
Licensing	While both domestic and foreign firms have to apply for business licenses to operate in the express delivery sector, foreign companies experience longer waiting periods than domestic companies for getting their business licenses approved.

Access Barriers to US Companies Producing or Selling in China

Sector	Summary of Requirements
Selection and cultivation of new varieties of crops and production of seeds	Chinese party must be the controlling shareholder.
Exploration and development of oil and natural gas	Limited to CJV or EJV
Manufacturing whole automobiles	Chinese party's investment cannot be lower than 50 percent, and the same foreign investor may establish no more than two JVs in China for the same kind of automobiles, subject to certain exceptions.
Manufacturing commercial aircraft	Chinese party must be the controlling shareholder.
Construction and operation of nuclear power plants	Chinese party must be the controlling shareholder.
Value-added Telecommunications Services	Foreign investment cannot exceed 50 percent, excluding e-commerce, and is limited to WTO commitments. Note that China classifies a broad range of internet and technology-related services under this sector.
Basic telecommunications services	Chinese party must be the controlling shareholder and foreign investment is limited to WTO commitments.
Banks	Foreign financial institution investment cannot exceed 20 percent or 25 percent depending on how the investment is structured.
Medical institutions	Limited to CJV or EJV.
Surveying and mapping companies	Chinese party must be the controlling shareholder.

Source: Foreign Investment Catalogue (2017 Amendment).

1. "U.S. – China Economic And Security Review Commission", 2017 Report To Congress

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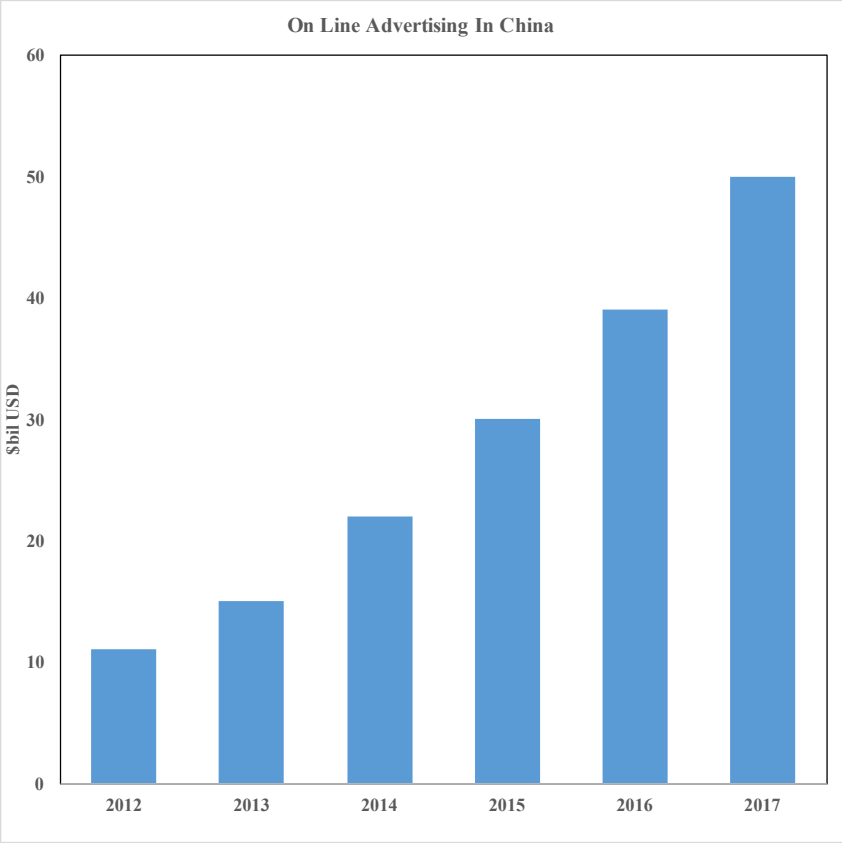
State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

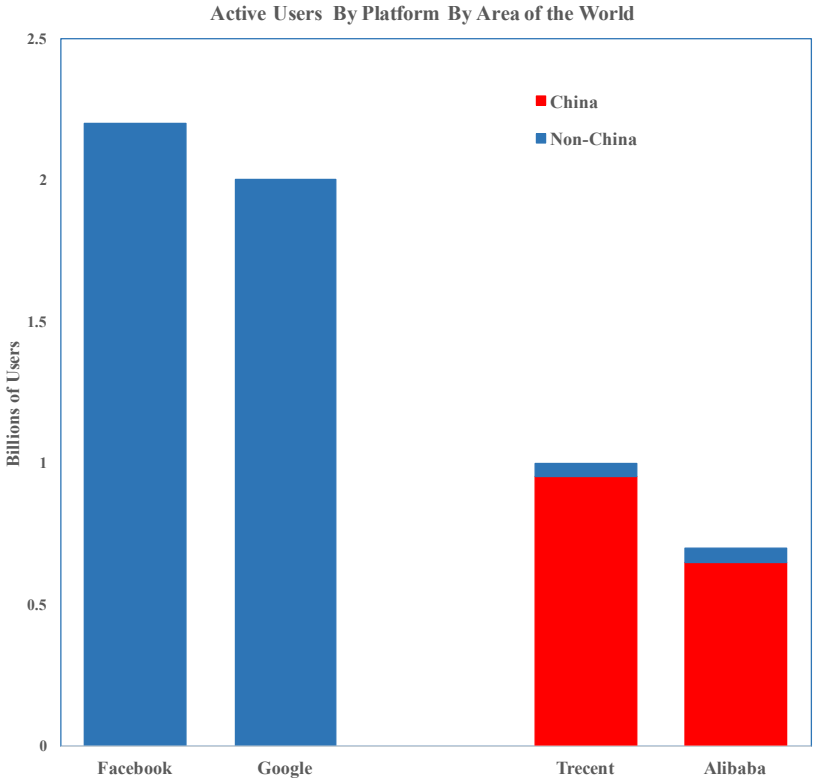
Step 2: Fundamental Economic Framework

Example of On Line Ads : Google and Facebook Banned Allowing Trecent and Alibaba to Dominate[1]

On Line Advertising Has Increased Five Fold in Last 5-years



However, US Companies Were Banned From This Market



1. "U.S. – China Economic And Security Review Commission", 2017 Report To Congress

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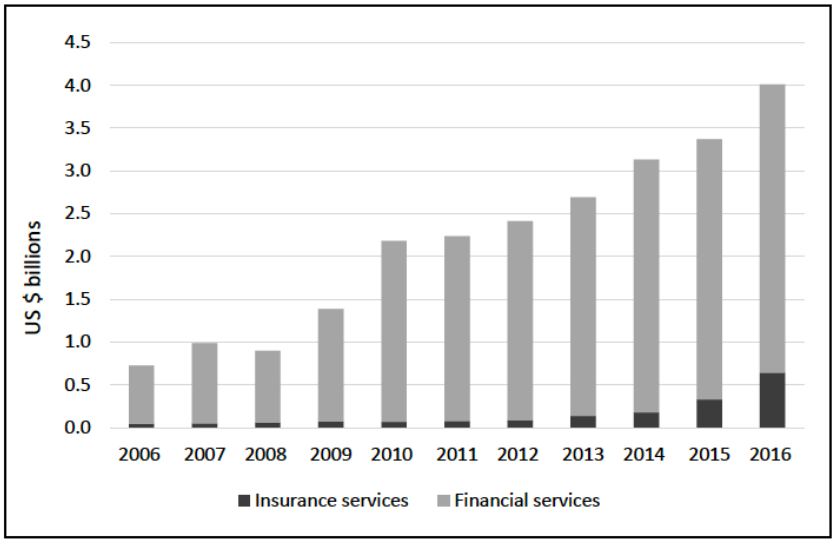
Step 2: Fundamental Economic Framework

US Financial Services Are One of the Major Exports To the World….Except to China[1]

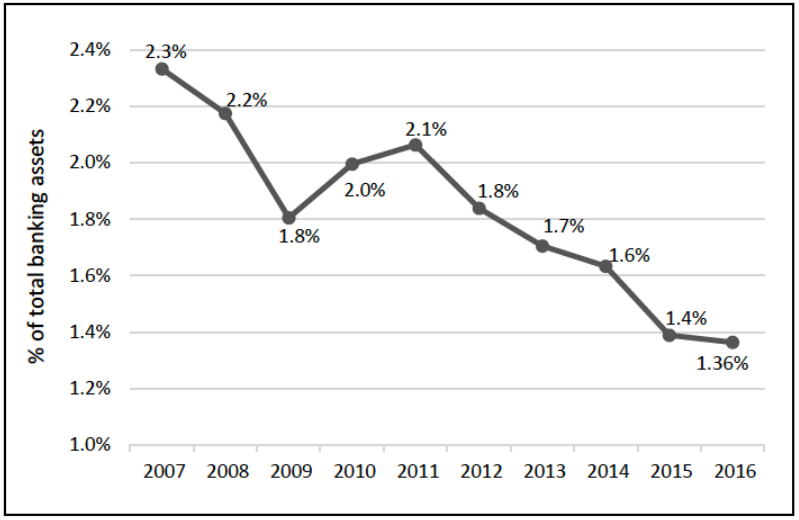
US Financial Exports Are Growing But Not So Much To China



Source: U.S. Department of Commerce, Bureau of Economic Analysis

US Banks Are Leaving China Not Trying To Grow Their Footprint

Figure 6: Foreign Banking Assets in China, 2011–2016



Source: China Banking Regulatory Commission via CEIC database.

1. "U.S. – China Economic And Security Review Commission", 2017 Report To Congress

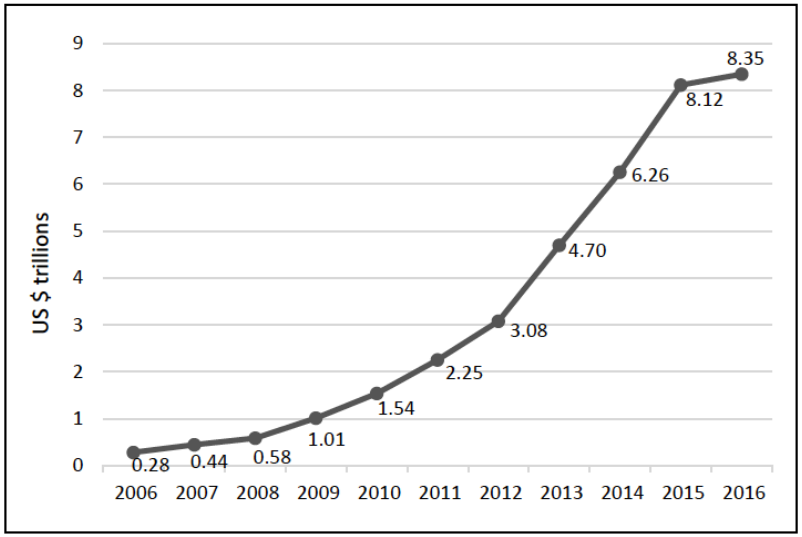
State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

Example of Bank Card Payments: Visa/MC Blocked From China, Allowing UnionPay to Dominate[1]

Bank Card Payments Experienced Exponential Growth In China

Figure 8: Chinese Bank Card Payment Transactions, 2006–2016



Source: People's Bank of China via CEIC database.

China Created Barriers To US Companies Even With The WTO

Year	Event	Bank Card Transactio Data In China
2001	China entered the WTO and made commitments to open up there electronic payment system to foreign electronic payment providers	**Less than $100 billion USD**
2010	US requests a consultation with WTO	***$1.5 Trillion USD UnionPay (Chinese Company) 100% market share***
2012	WTO ruling determined that China violated it agreement on entering The WTO with polices governing access to payment unfairly discriminates against foreign payment card companies	***$3.1 Trillion USD UnionPay 100% market share***
2014	China announced new technical standard that all payment processes must meet the PBOC 3.0 standard. This standard is incompatible with the global industry standard EMV. Only Union Pay follows it. completely	***$6.3 Trillion USD UnionPay 100% market share***
2015	China allows qualified Foreign companies to clear payments if they must follow PBOC 3 standard, so they would need to redesign their cards at a prohibit expense	***$8.1 Trillion USD UnionPay 100% market share***

1. "U.S. – China Economic And Security Review Commission", 2017 Report To Congress

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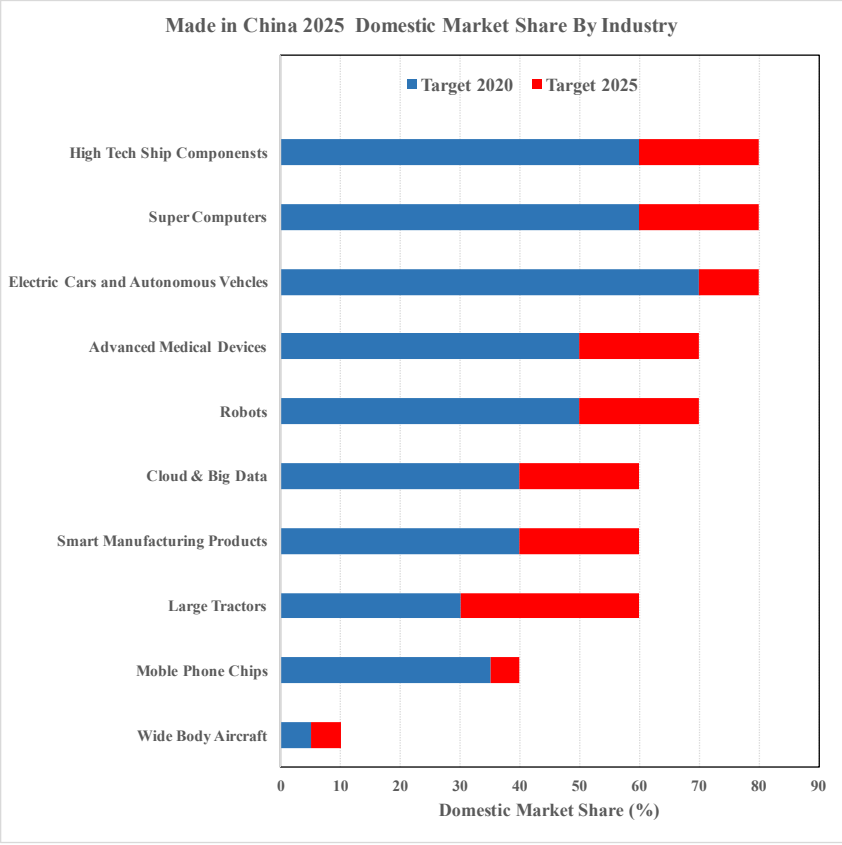
State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

The "Made in China 2025" Policy Is an Escalation of China's Economic War On The US [1]

Goal : 70% of Core Materials Produced in China by 2025



Made In China Will Be Supported By A Every Area of Their Society

- Reaffirms the Chinese government's central role in economic planning
- Calls on all facets of society to mobilize behind the plan
- Seeks technological breakthroughs in key areas for economic and security purposes
- Promotes further civil-military integration and the two-way transfer and conversion of military and civilian technologies
- Leverages state resources, policy support and regulatory systems
- Continues to promote import substitution and rely on indigenous products to meet growing demand in China
- Reaffirms the leading role of backbone enterprises in technology development
- Promotes Chinese enterprises to become dominant in the domestic market and internationally competitive in key industries

1. Made In China 2025, The making of a high-tech superpower and consequences for industrial countries", MERIC Papers on China, December 2016

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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

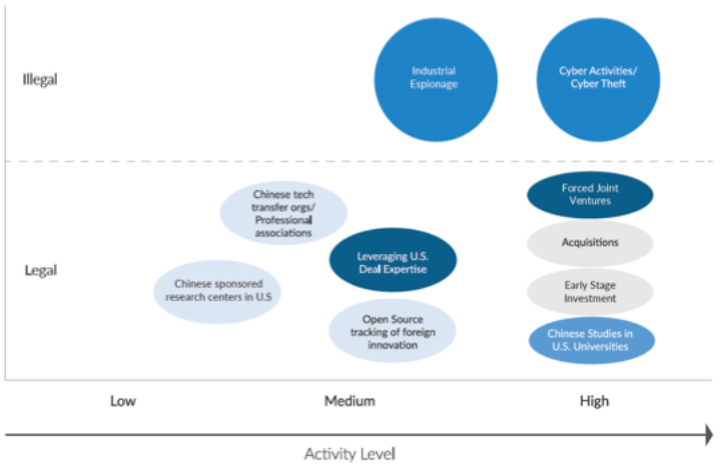
Step 2: Fundamental Economic Framework

As is The Past, China Will Use Legal and Illegal Means, And That Could Mean More Rust Belts Globally

Many Channels Through Which China Can Acquire Tech[1]

Non-Traditional Collectors	China uses individuals for whom science or business is their primary profession to target and acquire US technology.
Joint Ventures (JV)	China uses JVs to acquire technology and technical know-how.
Research partnerships	China actively seeks partnerships with government laboratories-such as the Department of Energy labs-to learn about and acquire specific technology, and the soft skills necessary to run such facilities.
Academic Collaborations	China uses collaborations and relationships with universities to acquire specific research and gain access to high-end research equipment. Its policies state it should exploit the openness of academia to fill China's strategic gaps.
S&T Investments	China has sustained, long-term state investments in its S&T infrastructure.
M&A	China seeks to buy companies that have technology, facilities and people. These sometimes end up as Committee on Foreign Investment in the United States (CFIUS) cases.
Front Companies	China uses front companies to obscure the hand of the Chinese government and acquire export controlled technology.
Talent Recruitment Programs	China uses its talent recruitment programs to find foreign experts to return to China and work on key strategic programs.
Intelligence Services	The Ministry of State Security (MSS), and military intelligence offices are used in China's technology acquisition efforts.
Legal and Regulatory Environment	China uses its laws and regulations to disadvantage foreign companies and advantage its own companies.

Some Of Those Legal, Some Not So Much[2]



1. Brown and Singh, "China's Technology Transfer Strategy: How Chinese Investments in Emerging Technology Enable a Strategic Competitor to Access the Crown Jewels of U.S. Innovations", DIUx, January 2018
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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 2: Fundamental Economic Framework

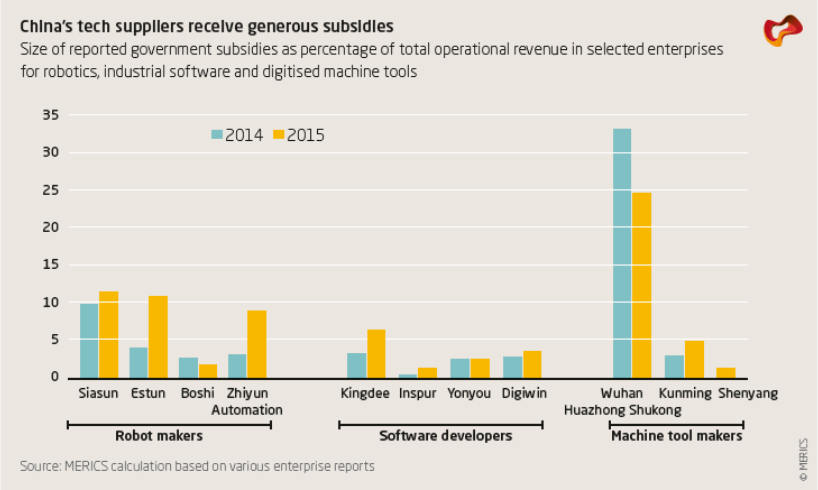
China State Financial Support Will Create Substantial Advantages Vs US Companies

Selected Government Funds to Support Strategic Sectors[1]

Fund	Date Announced	Amount (billions)
National Integrated Circuit Fund	June 2014	$107.5 (RMB 720)
Emerging Industries Investment Fund	January 2015	$6 (RMB 40)
Advanced Manufacturing Fund	June 2016	$3 (RMB 20)
Venture capital fund for state-owned enterprise innovative technology and industrial upgrading fund	August 2016	$30 (RMB 200)
China Development Bank support for Made in China 2025	November 2016	$44.8 (RMB 300)
China Internet Investment Fund	January 2017	$14.9 (RMB 100)
Credit lines for China Internet Investment Fund participants	January 2017	$22.4 (RMB 150)
State-owned enterprise fund for strategic sectors	May 2017	$22.4 (RMB 150)
TOTAL		**$250.7 (RMB 1,680)**

Source: Various.[35]

State Funding For Chinese Tech Suppliers is Substantial[2]



1. "U.S. – China Economic And Security Review Commission", 2017 Report To Congress
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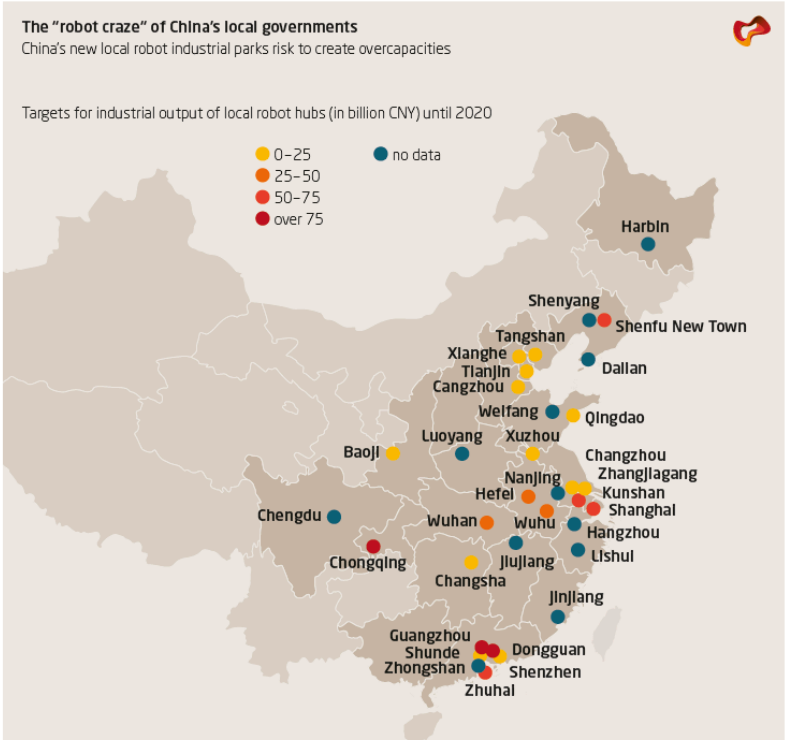
State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

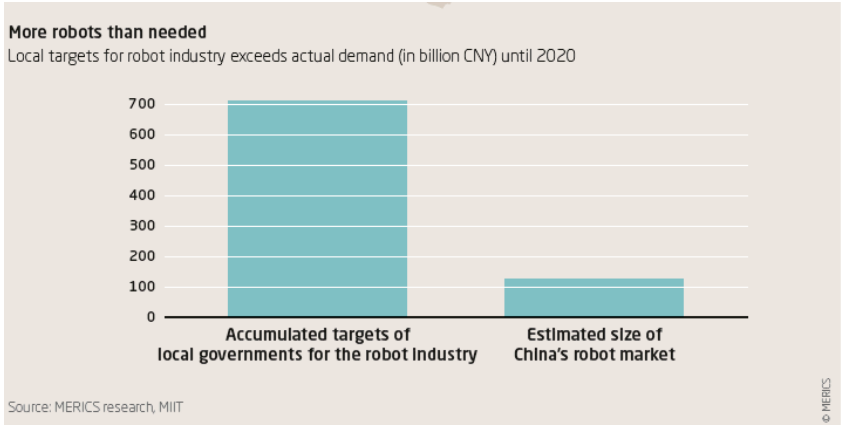
Step 2: Fundamental Economic Framework

One Outcome of the "Made in China 2025" Could Be China Exporting Excess Capacity to The World[1]

Robotics Production Capacity In China Will Grow Substantially



Planed Capacity Growth Dwarfs Growth in Chinese Demand



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Step 2: Fundamental Economic Framework

China is Also Buying High End Developed Market Technology

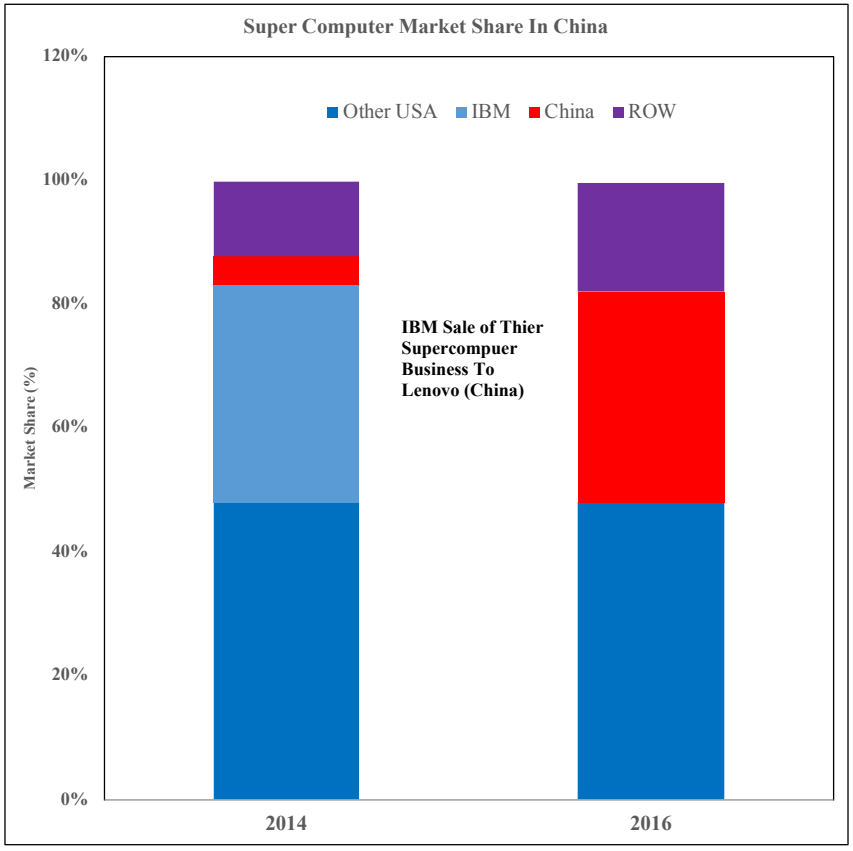
China Also Buying Cutting Edge Tech Companies[1]

Growing number of acquisitions of foreign tech suppliers
Investment by Chinese enterprises in foreign companies specialising in automation and digitisation of industrial production

Date	Chinese Investor	Foreign Target	Country	Share
Dec 2013	AVIC*	KHD Humboldz Wedag	Germany	79%
Jun 2014	Preh (Subsidiary of Joyson Electronics)	IMA Automation	Germany	100%
Dec 2014	Wolong Electric	SIR Solutions Industriali	Italy	89%
Jan 2015	Huachangda Intelligent Equip. (HCD)	Shanghai DEMC/ Dearborn Mid-West Company (DMW)	United States	100%
Jan 2016	ChemChina*	KraussMaffei machine tools	Germany	100%
Mar 2016	Siasun*	Teutloff	Germany	100%
Apr 2016	Wanfeng	Paslin	United States	100%
Apr 2016	AVIC*	Aritex	Spain	95%
Apr 2016 (announced)	Wuxi Lead Intelligent Equipment Co.	JOT Automation	Finland	100%
May 2016	Shanghai Electric*	Manz	Germany	19,67%
May 2016	Dongfang Precision	EDF EUROPE S.R.L.	Italy	100%
Jun 2016	Agic Capital	Gimatic	Italy	N/A
Aug 2016	Shanggong Group	H. Stoll	Germany	26%
Aug 2016	Midea	Kuka	Germany	94,5%
Oct 2016	Shanghai Electric*	Broetje Automation	Germany	100%
Withdrawn	FGC Investment	Aixtron	Germany	N/A

Notes: * = State-owned enterprises (share of state institutions >50%)
Source: MERICS research

As Well as Forcing US Tech to Sell To Chinese Companies[2]



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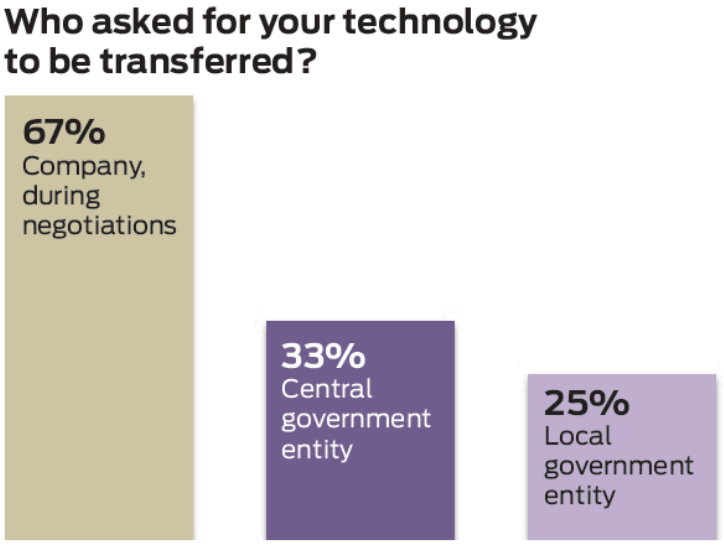
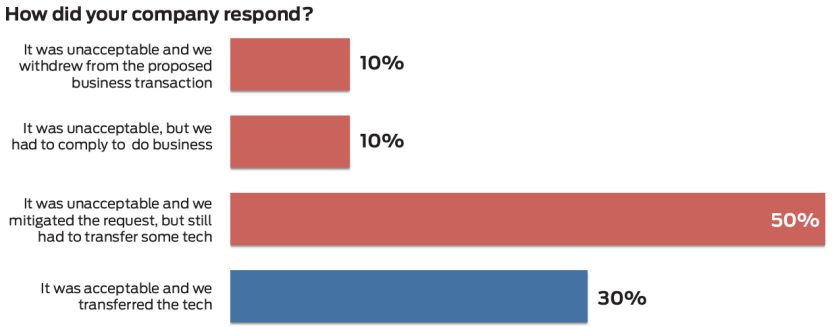
Step 2: Fundamental Economic Framework

They Are Also Forcing Transfer Of US Intellectual Property Through Coercion[1]

Types of Requests



Most Companies Transferred Some Technology



1. Member Survey, US-China Business Council, 2017

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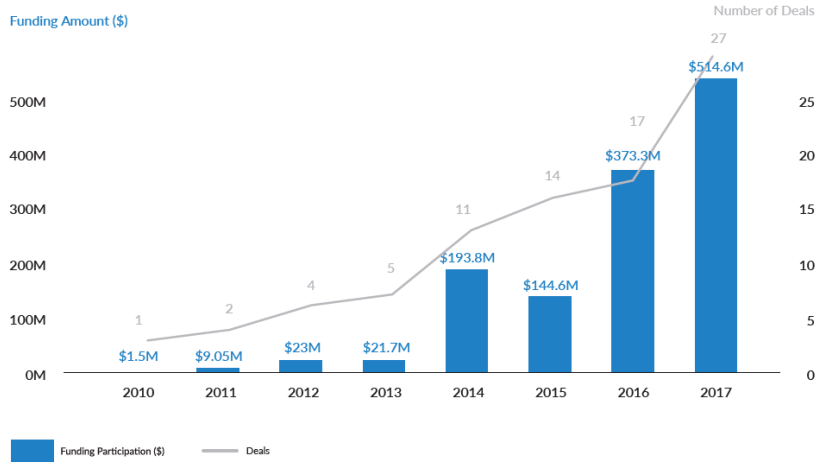
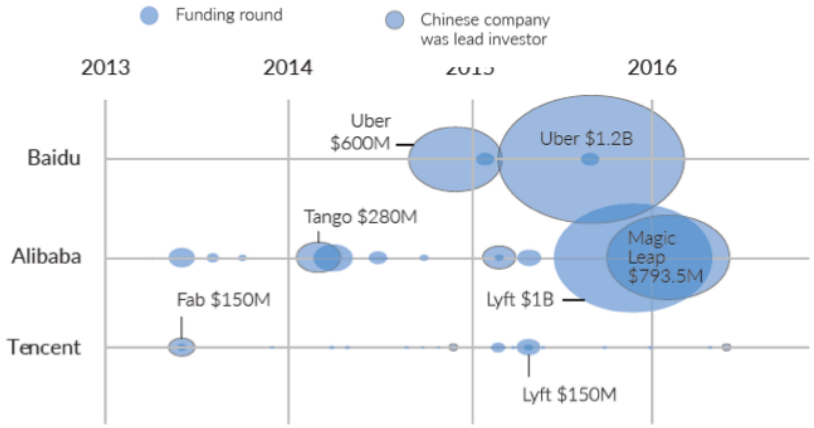
Step 2: Fundamental Economic Framework

China is Also Buying Access To New Technology With Venture Capital Funding[1]

Chinese Venture Funding For US Artificial Intelligence Start Ups



Chinese E-commerce Company Funding of US Startups



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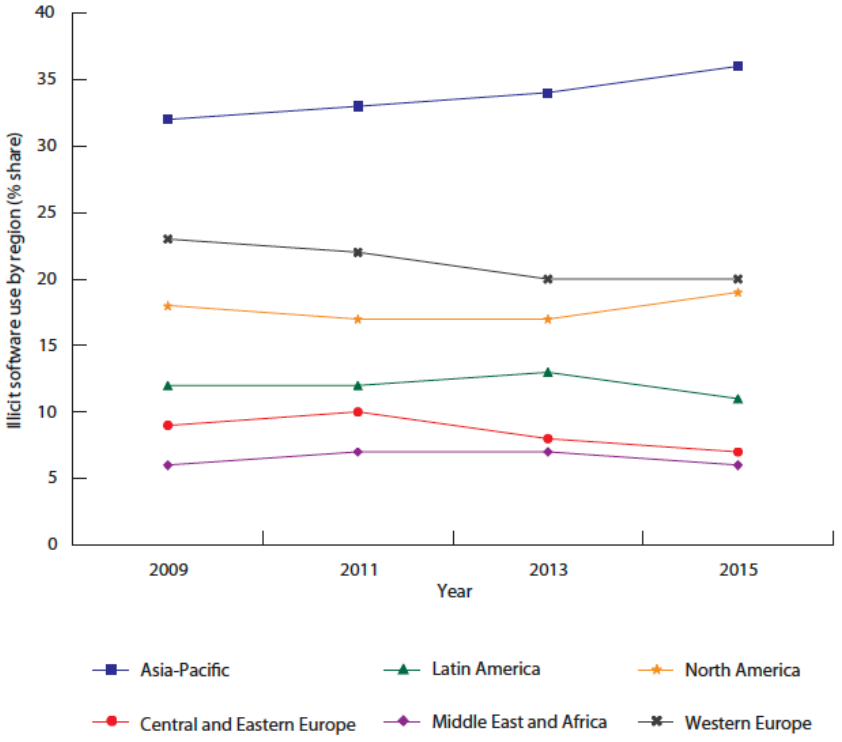
Step 2: Fundamental Economic Framework

Scale of Theft of US IP Is Substantial, While Theft of Military High Tech Is Putting The US At Risk[1]

Estimated Cost of Chinese Theft of US IP

	Per Year ($bil)		Total 2012-2017 ($bil)	
	Low	High	Low	High
Pirated Software	20	50	100	250
Counterfeit Goods	30	140	150	700
Theft of Trade Secrets	200	500	1000	2500

Global Proportion of Illicit Software By Region



1. The Theft of American Intellectual Property: Reassessments of the Challenge And United States Policy". Update To The IP Commission Report, 2017

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Step 2: Fundamental Economic Framework

Chinese State Sponsored Entities Are Conducting A Large Scale Cyber War Against the US

Examples of Chinese Cyber Attracts Against The US Military[1]

- Breach of more than two dozen major weapons system designs in February, 2012 from the military and defense contractors including
  - Patriot missile system (PAC-3)
  - an Army system for shooting down ballistic missiles
  - the Navy's Aegis ballistic-missile defense system,
  - the F-35 Joint Strike Fighter,
- "Titan Rain" a series of coordinated attacks for multiple years since at least 2003 which compromised hundreds of government computers stealing sensitive information
  - In 2004, an analyst traced the origins of a massive cyber espionage ring back to a team of government sponsored researchers in Guangdong Province in China. The hackers, code named by the FBI "Titan Rain" others."
- PLA Unit 61398 (a cyber force within the Chinese military) which penetrated the networks of >141 blue chip companies across 20 strategically targeted industries identified in China's 12th Five Year Plan for 2011-2015
  - Source code was stolen from some of the most prominent U.S. technology companies such as Google, Adobe and others;
  - According to Mandiant, PLA Unit 61398 is just one of more than 20 cyber attack groups within China
- "Hidden Lynx" which according to Symantec has a long history of attacking the defense industrial sector of Western countries with some of the most sophisticated techniques has successfully attacked the tech sector, financial services, defense contractors and government agencies since at least 2009

And Examples Of Cyber Attacks Against The US Private Sector[2]

YEAR	TARGET	SECTOR	DETAILS
2015	Trimble	Software	Chinese nationals allegedly stole 275 megabytes of data from Trimble between December 2015 and March 2016. The Department of Justice noted that the data could assist in the development of competing global navigation systems.[177]
2015	United Airlines	Aviation	United Airlines detected intrusions in its network possibly carried out by the same Chinese hackers responsible for the Anthem attack and other intrusions.[178]
2016	Various	Semiconductors	In 2016, three groups based in China compromised the networks of four companies involved in semiconductor manufacturing, according to a FireEye report.[179]
2016	Various	Information Technology	In "Operation Cloud Hopper," APT10 conducted a sustained cyber campaign against managed IT service providers, accessing intellectual property and sensitive company and customer data.[180]
2017	Medrobotics Corporation	Robotics	A dual Canadian and Chinese citizen gained physical access to the offices of Medrobotics Corporation and attempted to steal information using a variety of computers and other network equipment.[181] The individual had previously attempted to connect digitally with a number of employees at the firm.
2017	Multiple	Public policy	Chinese actors conducted cyber espionage against at least six non-governmental organizations. In at least one case, after the intrusion failed, the actor conducted a DDoS attack against the think tank's website.[182]
2018	Unnamed Contractor	Defense	Chinese government hackers stole sensitive data about a missile project known as Sea Dragon, as well as signals and sensor data and information related to cryptography systems, from a private company working on undersea warfare.[183]

1. Brown and Singh, "China's Technology Transfer Strategy: How Chinese Investments in Emerging Technology Enable a Strategic Competitor to Access the Crown Jewels of U.S. Innovations", DIUx, January 2018
2. Cooper,' Understanding the Chinese Communist Party's Approach to Cyber-Enabled Economic Warfare" , FDD press, September 2018

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State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 3: Identify Potential Repricing Events

More Tariffs: The First Salvo In The Coming Economic War With China Is The 301 Tariffs[1]

The 301 Tariffs Are Focused on Protecting Our Intellectual Property

- ***Protect China's Home Market From Imports and Competition***
  - *This category features high tariffs, non-tariff barriers, and other regulatory hurdles*
- ***Expand China's Share of Global Markets***
  - *Uses policy tools that includes financial support to boost exports and the consolidation of State-Owned Enterprises into "national champions" that can compete with foreign companies in both the domestic and global markets.*
  - *Chinese enterprises also benefit from preferential policies that lead to subsidized overcapacity in China's domestic market, which then depresses world prices and pushes foreign rivals out of the global market.*
- ***Secure and Control Core Natural Resources Globally***
  - *China uses a predatory "debt trap" model of economic development and finance that proffers substantial financing to developing countries in exchange for an encumbrance on their natural resources and access to markets*
- ***Dominate Traditional Manufacturing Industries***
  - *China has achieved a leading position in many traditional manufacturing industries. It has done so in part through preferential loans and below-market utility rates as well as lax and weakly enforced environmental and health and safety standards.*
- ***Acquire Key Technologies and Intellectual Property From Other Countries, Including the United States***
- ***Capture the Emerging High-Technology Industries That Will Drive Future Economic Growth and Many Advancements in the Defense Industry***

The US Has Proven That China Are After Our Tech

Under Section 301 of the Trade Act of 1974, USTR initiated an investigation to determine ***whether China's acts, policies, and practices related to technology transfer, intellectual property, and innovation are unreasonable or discriminatory, and burden or restrict U.S. commerce.***

Following a thorough analysis of available evidence, USTR determined that numerous acts, policies, and practices of the government of China related to technology transfer, intellectual property, and innovation are unreasonable or discriminatory, and burden or restrict U.S. commerce. Specifically, USTR found that:

- China uses joint venture requirements, foreign investment restrictions, and administrative review and licensing processes to require or pressure technology transfer from U.S. companies.
- China deprives U.S. companies of the ability to set market-based terms in licensing and other technology-related negotiations.
- China directs and unfairly facilitates the systematic investment in, and acquisition of, U.S. companies and assets to generate large-scale technology transfer.
- China conducts and supports cyber intrusions into U.S. commercial computer networks to gain unauthorized access to commercially-valuable business information.

1 "How China's Economic Aggression Threatens the Technologies and Intellectual Property of the United States and The World" OTMP, June 2018

State Of the Markets: Year Ahead 2019— The Coming Economic War Between the US and China

Step 3: Identify Potential Repricing Events

More Tariffs: Tariffs Are Being Used To Force Major Changes In a Broad Range of Chinese Behavior[1]

301 Gives The President Almost Unlimited Tariff Powers

Under Section 301 of the Trade Act of 1974, ***USTR has broad authority for a range of possible responsive actions to meet the goal of eliminating or otherwise resolving these unfair practices, such as the imposition of duties or other restrictions on goods or services.*** USTR has determined that appropriate actions for addressing China's unreasonable or discriminatory acts, policies, and practices should include the following:

- ***25 Percent Ad Valorem Duties***: In accordance with the President's direction, USTR has determined to impose an additional 25 percent tariff on approximately $50 billion of products from China that are strategically important to, and benefit from, the ***"Made in China 2025"*** program and other Chinese industrial policies.
- ***WTO Case:*** USTR is pursuing dispute settlement at the World Trade Organization (WTO) to address China's discriminatory licensing practices
- The Department of Treasury will address concerns about Chinese investments in certain technology-intensive sectors.

US Demands Go Far Beyond Trade

- **China will cut the $336 billion U.S.-China trade deficit by at least $200 billion by 2020**
- **China will stop subsidizing tech companies**
- **China will cease stealing U.S. intellectual property**
- **China will cut its tariffs on U.S. goods by 2020**
- **China will not retaliate against the United States (including against U.S. farmers).**
- **The Chinese government will open China to more U.S. investment**

1 Heather Long, "Trump is asking China to redo just about everything with its economy", Washington Post, September 21, 2018

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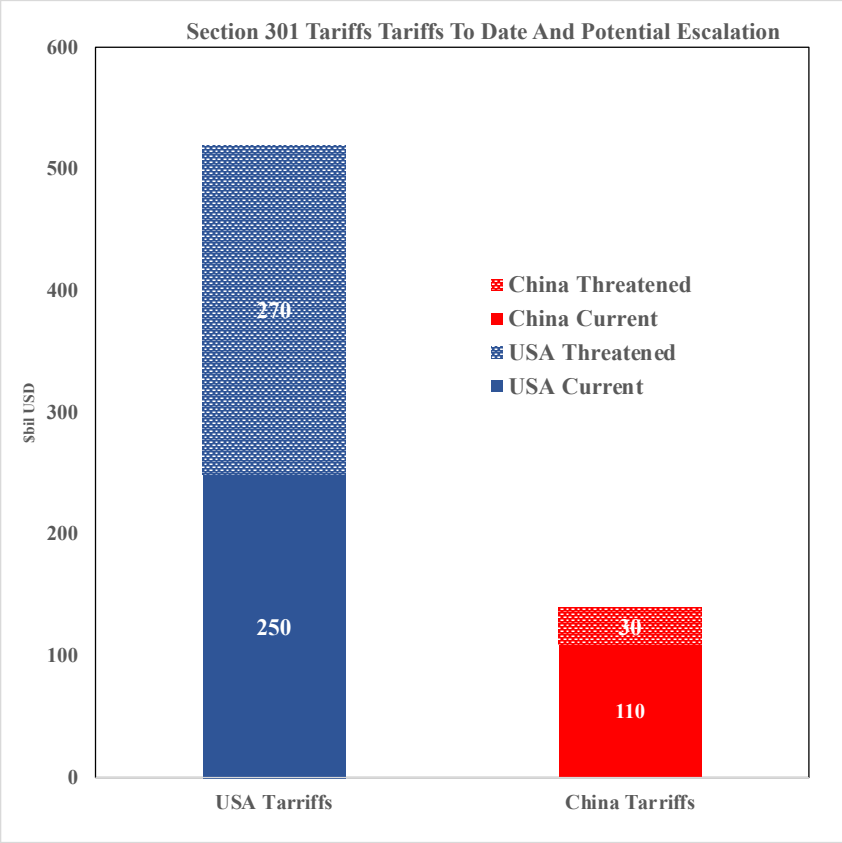
Step 3: Identify Potential Repricing Events

China Retaliation: China Is Likely To Include Non-tariff Strategies

China Unlikely To Do Tit-for-Tat With Tariffs



But There Are Other Avenues That Risk Escalation

- Farm exports—Soybeans
  - China could stop buying soybeans from the US
  - China imports more than 60 million metric tons of soybeans from the US
- Airplanes—Boeing
  - China could stop buying planes from Boeing
  - Boeing sold over 200 planes to China in 2017, which generates over 13% of its revenue
  - China is projected to need over 7000 new planes in the next 20 years
- Autos—GM
  - China could stop GM from selling cars to them
  - GM sold more cars and trucks in China than in the US during 2010-17
  - China demand for cars is expected to grow from 3.9 million per year to 5 million per year by 2020
- Electronics—Apple
  - China could prevent Apple from selling their product in China
  - China represents over 22% of Apple's net income
- US Treasuries
  - China could start selling its position of $1.2 trillion of US Treasuries
- The Yuan
  - China could depreciate their currency to offset the impact of the Tariffs
- Commodities
  - China could use their demand for oil to pressure US allies or to counter US policy in the middle-east and Iran
  - China could disrupt the electric battery market since it processes over 90% of cobalt processing, which is a crucial ingredient for electric car batteries

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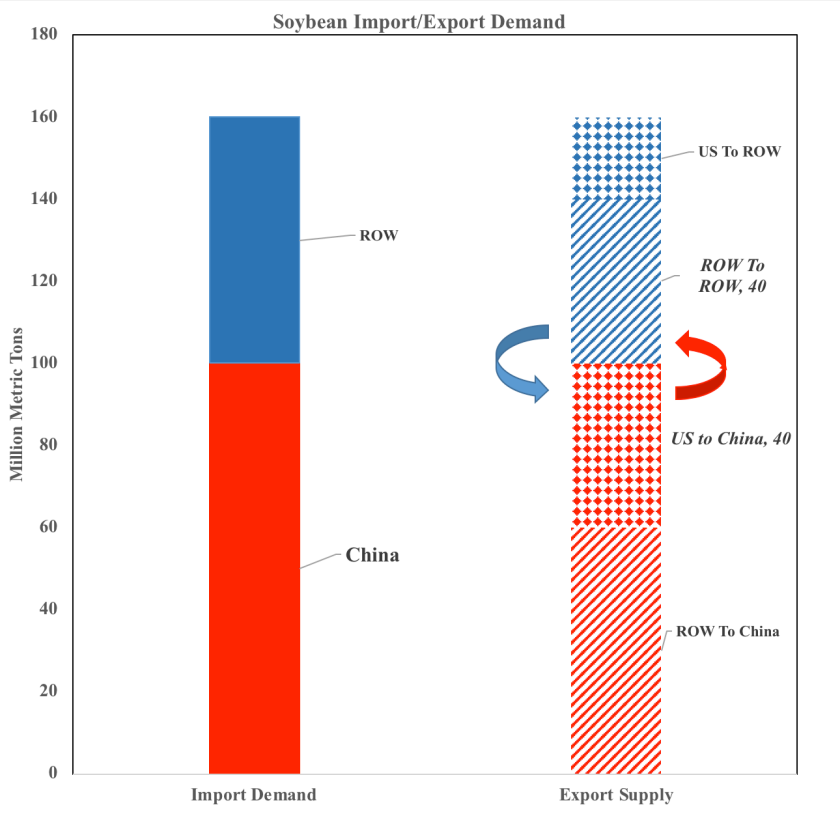
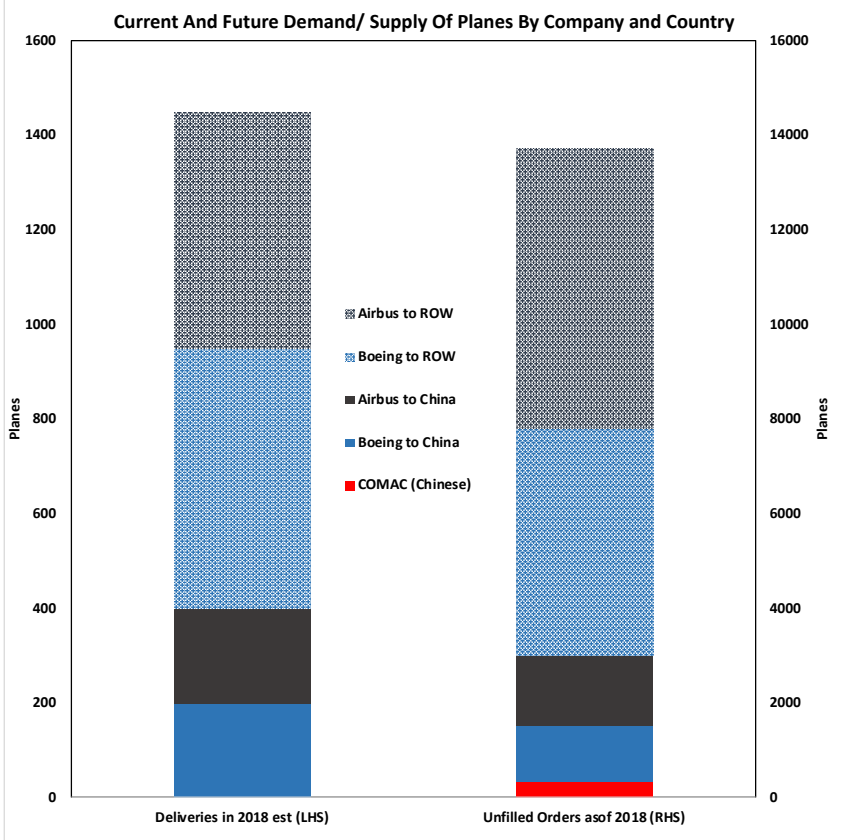
Step 3: Identify Potential Repricing Events

China Retaliation: China Use of Tariffs Will Likely Not Be Effective; Fungibility of Supply and Demand

Other Sources of Demand For Soybeans Other Than China[1]



Not Easy For China To Replace Boeing As A Source of Planes[2]



1. USDA
2. Boeing and Airbus Earnings Reports

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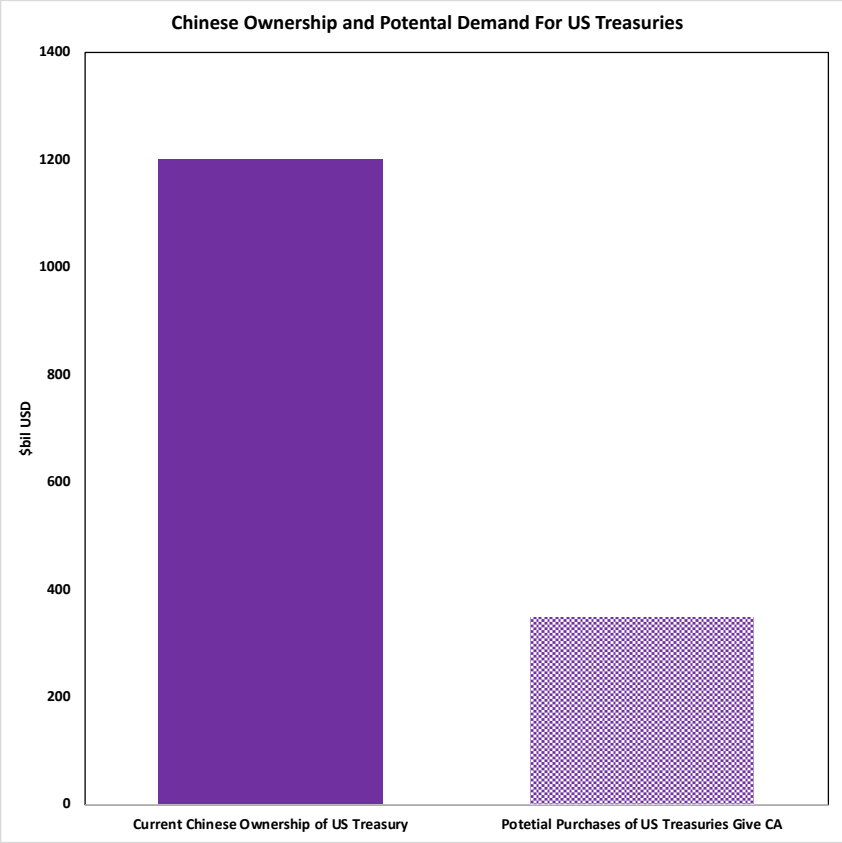
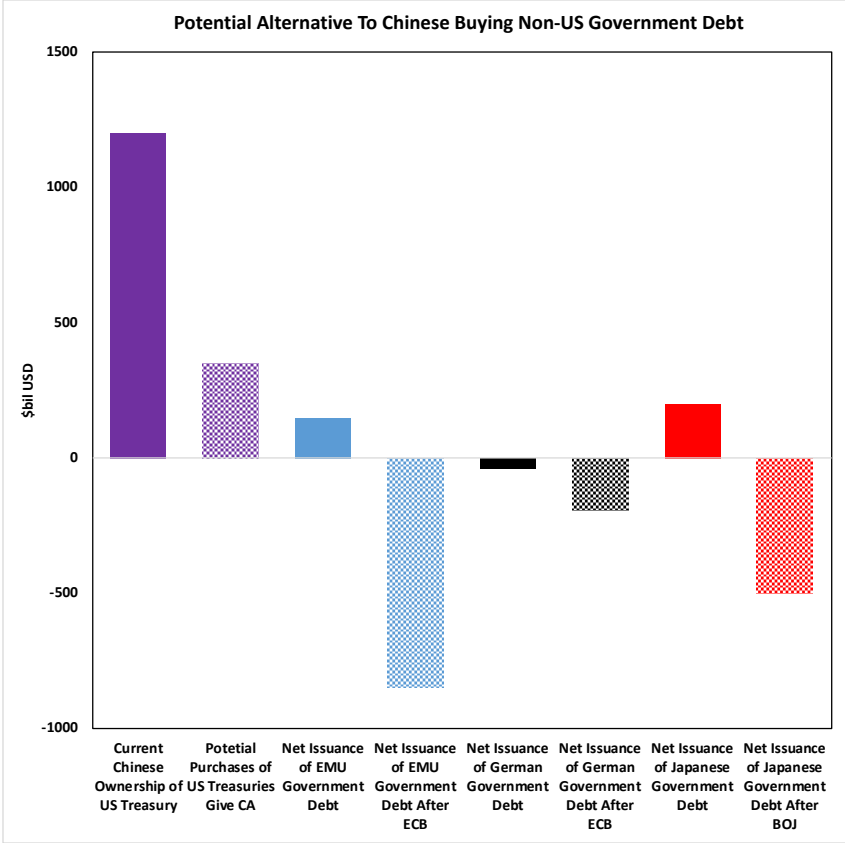
Step 3: Identify Potential Repricing Events

China Retaliation: Selling Treasuries Is A Non-Tariff Option, But What Could They Buy Instead?

China And US Treasuries[1]



Available Supply Of Other DM Government Debt Is Shrinking[2]



1. US Dept of Treasury and IMF Data
2. BOJ, ECB Data

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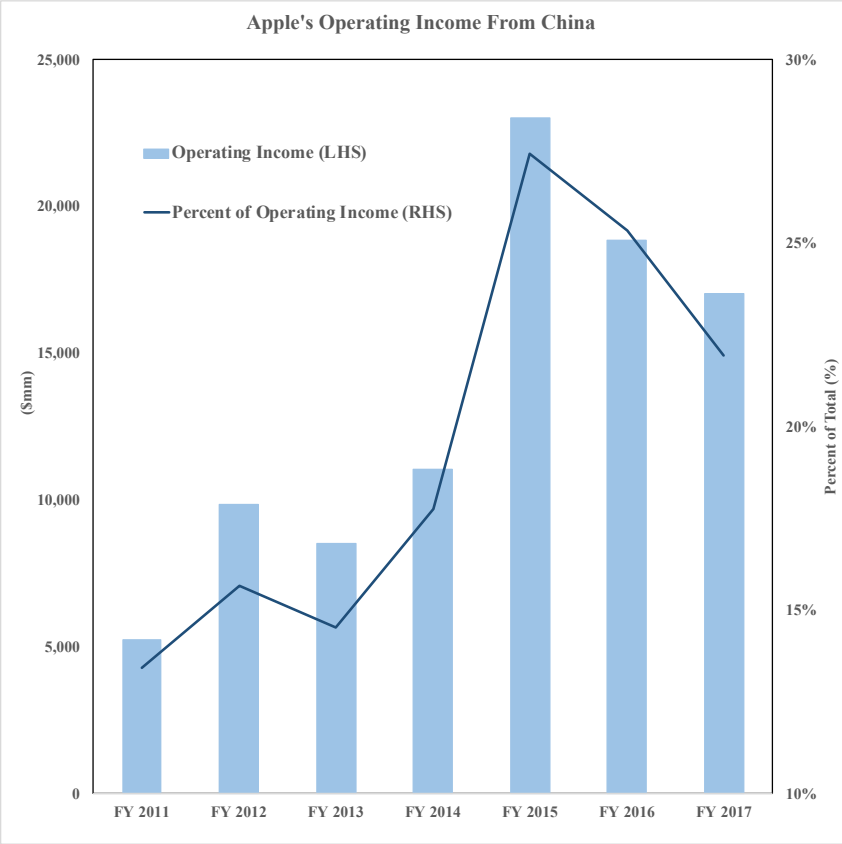
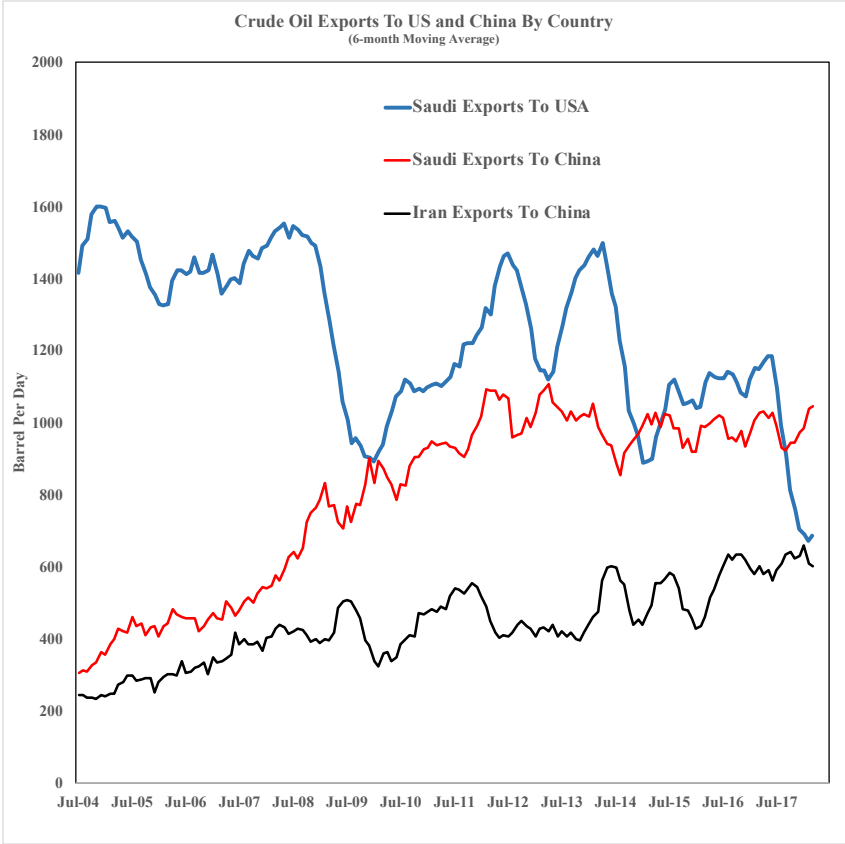
Step 3: Identify Potential Repricing Events

China Retaliation: China's Move Beyond Tariffs Could Result in An Escalation In The Economic War

Apple Looks Vulnerable[1]



China Could Use Oil As A Way to Escalate The Coming Economic War[2]



1. Bloomberg
2. EIA

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Step 3: Identify Potential Repricing Events

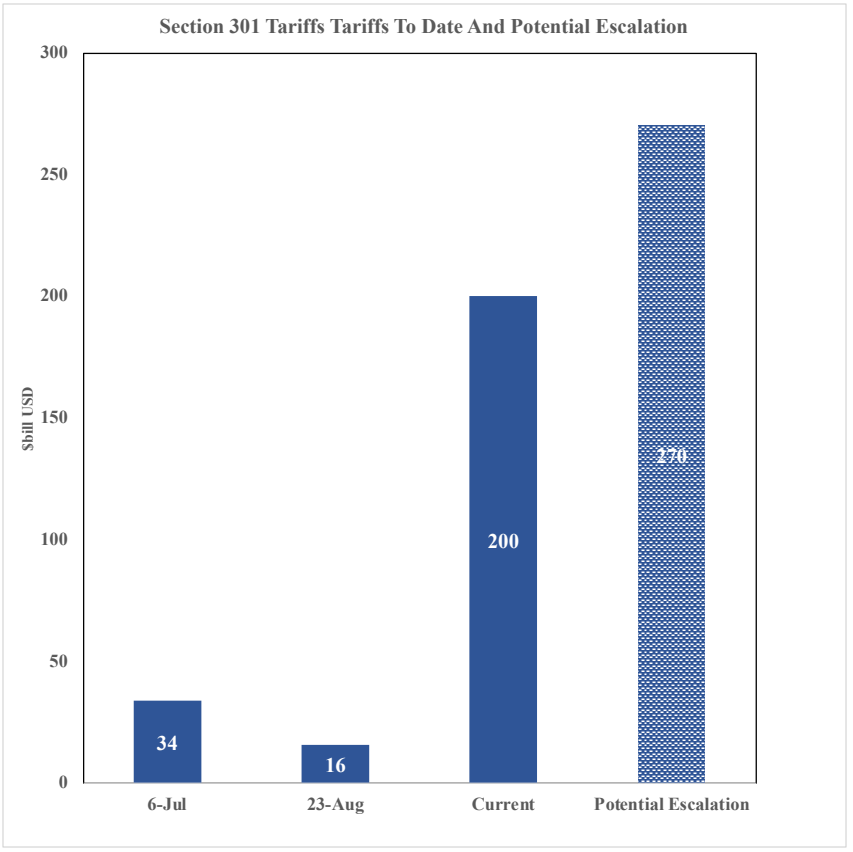
90 Days: Can The US And China Agree In Less Than 90 Days?

Words Alone May Not Satisfy The US Given Chinese History[1]

Table I.1 China's Bilateral Commitments Relating to Technology Transfer, 2010 - 2016

Year	Mechanism	Commitment
2010	S&ED	China reaffirmed that the terms and conditions of technology transfer, production processes, and other proprietary information will be determined by individual enterprises.
2011	JCCT	China confirmed that it does not and will not maintain measures that mandate the transfer of technology in the New Energy Vehicles Sector. China further clarified that "mastery of core technology" does not require technology transfer for NEVs.
2012	S&ED	China reaffirmed its commitment that technology transfer is to be decided by firms independently and not to be used by the Chinese government as a pre-condition for market access.
2012	Xi Visit Commitment	China reiterated that technology transfer and technological cooperation shall be decided by businesses independently and will not be used by the Chinese government as a pre-condition for market access.
2012	JCCT	China reaffirmed that technology transfer and technology cooperation are the autonomous decisions of enterprises. China committed that it would not make technology transfer a precondition for market access.
2014	JCCT	China committed that enterprises are free to base technology transfer decisions on business and market considerations, and are free to independently negotiate and decide whether and under what circumstances to assign or license intellectual property rights to affiliated or unaffiliated enterprises.
2014	JCCT	China confirmed that trade secrets submitted to the government in administrative or regulatory proceedings are to be protected from improper disclosure to the public and only disclosed to government officials in connection with their official duties in accordance with law.
2015	Xi Visit Commitment	China committed not to advance generally applicable policies or practices that require the transfer of intellectual property rights or technology as a condition of doing business in the Chinese market.
2015	Xi Visit Commitment	China committed to refrain from conducting or knowingly supporting cyber-enabled theft of intellectual property cyber-enabled theft of intellectual property, including trade secrets or other confidential business information, with the intent of providing competitive advantages to companies or commercial sectors.
2016	Xi Visit Commitment	China committed not to require the transfer of intellectual property rights or technology as a condition of doing business.

More Likely That The US Escalates and Puts Tariffs On All Imports[2]



1. *FINDINGS OF THE INVESTIGATION INTO CHINA'S ACTS, POLICIES, AND PRACTICES RELATED TO TECHNOLOGY TRANSFER,INTELLECTUAL PROPERTY, AND INNOVATION UNDER SECTION 301 OF THE TRADE ACT OF 1974, USTR, March 22, 2018*
2. Bloomberg

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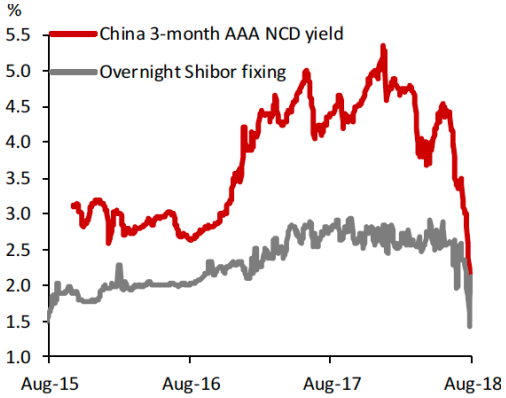
Step 4: Find Asymmetric Trades

Trade 5: Position For A Weaker RMB

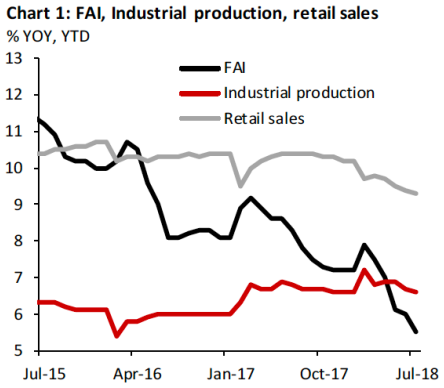
Trade Thesis

- Fed policy could strengthen the USD against all currencies
  - Reversing QE
  - Raising rates
- China could weaken the RMB for a variety of reasons both directly and indirectly
  - They could weaken their currency to offset the impact of tariffs
  - They could weaken their currency by lowering policy rates to spur their economy
  - They could weaken their currency to reignite trade as an engine of growth
  - They could weaken their currency to retaliate against US tariffs
- Buy USD and sell CNH using a 1-year forward contract

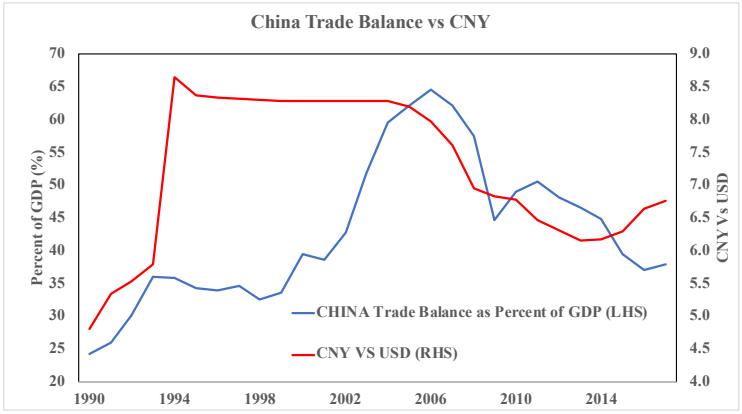
China Trade Engine Has Slowed As Their Currency Appreciated[1]



US Is Raising Rates While China Is Lowering Rates[1]



China Has Plenty of Room to Depreciate[2]



1. Chow, 'Trade war taking a toll on China; expect more policy support", DBS Economics, August, 14, 2018
2. Bloomberg

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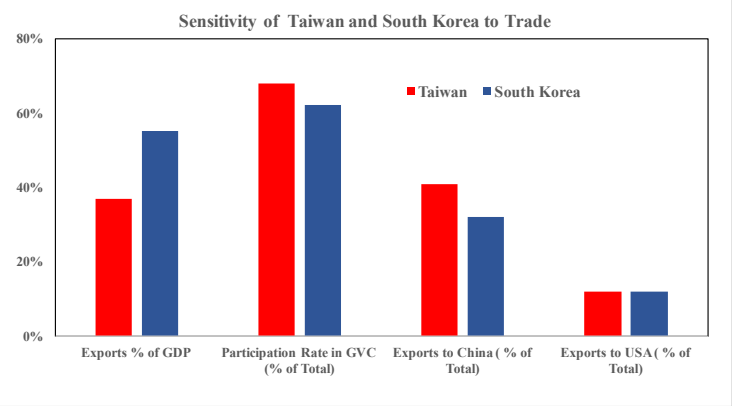
Step 4: Find Asymmetric Trades

Trade 6: Buy Puts On USD Based EM Equity Indexes

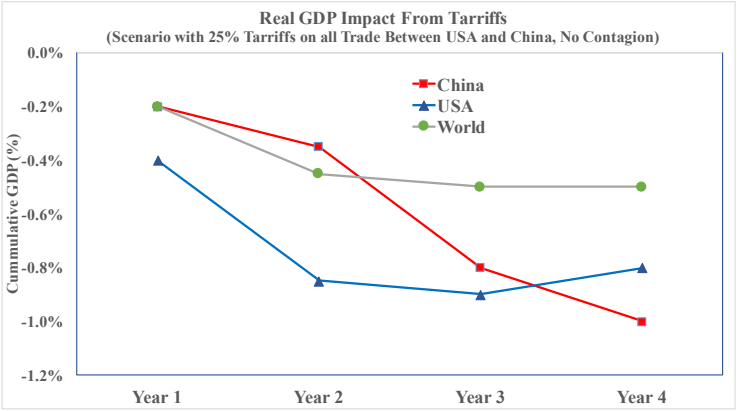
Trade Thesis

- EM equity associated with China and their currencies could sell off in an economic war between the US and China
  - US trade deficit with China is growing, as is the intensity of China's economic war with the US
  - The US could potentially put unlimited tariffs on Chinese imports
- China could retaliate against the imposition of US tariffs
  - They could us oil as a political weapon against the US
- Buy puts on a broad base USD EM equity index
  - Impact of an economic war on the Chinese equity markets could be substantial
  - China and its circle of influence constitute the majority market weight of broad base EM indexes
  - Get two factors of equity and FX sell-off For USD based EM Index

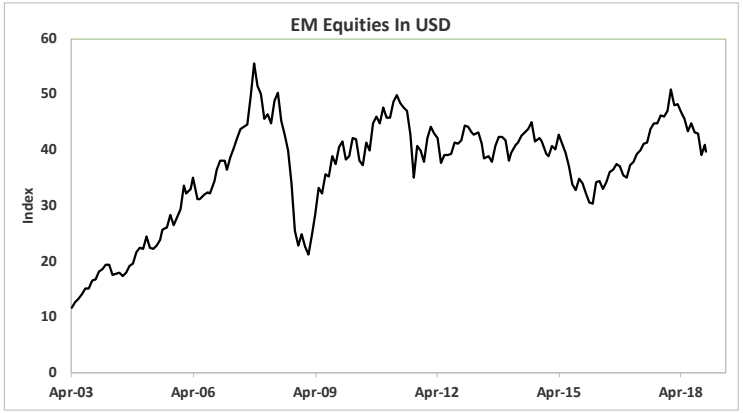
US Technology Companies Are Vulnerable to China Retaliation[2]



US Deficit With China is Growing[1]



Still Substantial Downside Even After Recent Sell-off[1]



1. Bloomberg
2. "Trade Wars : There are no winners", KPMG, August 2018, Just US And China involved

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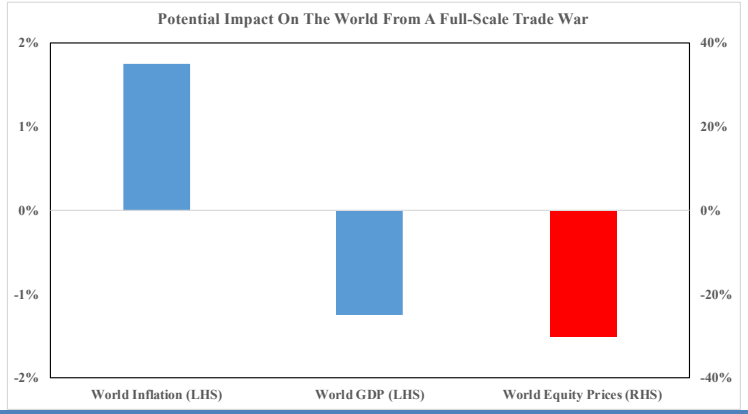
Step 4: Find Asymmetric Trades

Trade 7: Position For A Risk-Off Event From A Full Blown Global Trade War[1]

Trade Thesis

- This Economic war could escalate creating a tail event
  - The US could potentially put unlimited tariffs on all Chinese imports
  - China could escalate conflict bringing in the rest of the world using non-tariff strategies
- Escalation would affect not only the US and China but also the rest of the world
  - GDP could fall substantially, bringing down equity markets around the world
- Buy CDS protection on highly rated US corporates
  - Cheaper protection than buying protection on US High Yield or OTM equity puts
  - 60 bp will buy a 35% OTM 1-year put on S&P500

US Technology Companies Are Vulnerable to China Retaliation[2]



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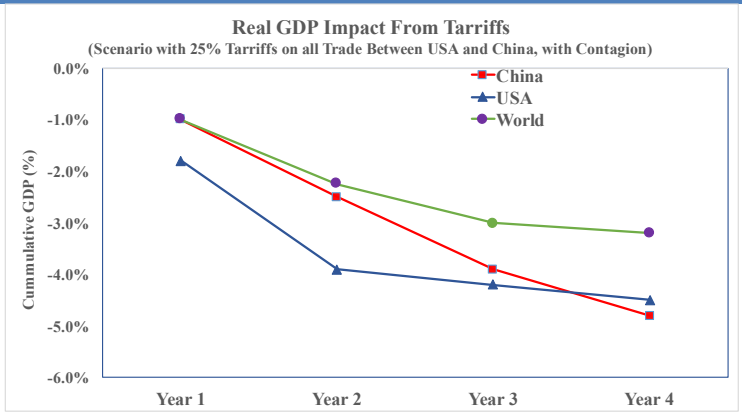

China Could Use It Growing Demand For Oil As A Political Weapon[3]

		Corporate Spread Widening		
Dates	Tail Event	AAA	BBB	S&P 500
5/1998-8/1998	EM Crisis	94%	70%	-16%
9/2011-10/2001	September 2011	16%	14%	-8%
5/2002-9/2002	Telecom/Inasdaq Crash	30%	20%	-24%
5/2008-3/2009	GFC	211%	145%	-48%
5/2011-9/2011	Euro Crisis	82%	63%	-17%

1. "Trade Wars : There are no winners", KPMG, August 2018, World Contagion
2. Luca Paolini,"A zero sum game", PICTET Asset Management, June 2018
3. Bloomberg

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Model Portfolio Performance and Recommended Trades

Year End 2018

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Trade Book: Model Portfolio Performance and Recommended Trades

Performance Since Inception As Of December 19, 2018

			December 19, 2018	
Positions	Number Trades	Initial Investment (MM)	Investment (MM)	Total Return
Open	7	35	62	76.5%
Closed	25	125	318	154.4%
Total	32	160	380	137.3%

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Trade Book: Model Portfolio Performance and Recommended Trades

Closed Recommended Trades As of December 19, 2018

Step 4: Find Asymmetric Trades

		Initial Position					Closed Valuation/Performance			
					Investment (MM)					
SOM Strategy	Trade	Date	MM/ Shares(000)	Price	Face Value	Actual	Date	Price	Investment (MM)	Total Return
Abenomics	Long a 6-month Call 17000/19000 call spread on Nikkei	9-Sep-16	76.9	6.5	5	5	17-Jan-17	14.0	10.8	115%
Abenomics	Long a 6-month Call 15000/17000 call spread on Nikkei	24-Jun-16	62.5	8.0	5	5	9-Sep-16	18.5	11.6	131%
Brazil	Long Mxn Peso vs Short Brazilian Real at 6.1	8-Nov-16	100.0	100.0	100	5	3-Jan-17	95.0	0.0	-100%
Brazil	Long a 6-month 61000 strike put on Bovespa	31-Oct-16	248.8	2.0	5	5	21-Dec-16	5.7	14.2	184%
Credit is Not a Bubble	Short 5-yr HY CDS	5-Sep-17	400.0	330	400	5	22-Mar-18	345	8.6	72%
Credit is Not a Bubble	Short 5-yr IG CDS at 66 bp	22-Mar-18	-333	66 bp	333	5	25-Jul-18	59 bp	6.90	38%
Greece	Long 30yr GGBs	24-Mar-17	29.3	68.2	20	5	7-Feb-18	114	13.4	269%
Greece	Long basket of Greek banks	25-Mar-17	899.0	1.1	10	5	15-Aug-17	2.1	19.1	182%
Position For Higher Rates	1/10 Payer Swaption 2.5% Strike	9-Nov-16	333.3	1.5	5	5	9-May-17	1.4	4.7	-7%
Position For Higher Rates	1/5 Payer Swaption 2.5 % Strike	9-May-17	625.0	0.8	5	5	22-Mar-18	1.5	9.4	88%
Position For Higher Rates	1/5 Payer Swaption 3% Strike	22-Mar-18	556	0.9	5	5	26-Oct-18	1.0	5.6	11%
Strategies For BREXIT	Short GBP vs USD at 1.33	1-Jul-16	159.0	100.00	159	5	11-Oct-16	108.27	13.4	263%
Strategies For Trumpanomics	Long Regional banks	9-Nov-16	1.1	46.5	50	5	25-May-18	64.2	24.1	382%
Strategies For Trumpanomics	Long Materials sector	9-Nov-16	1.04	48.3	50	5	14-May-18	59.6	16.7	235%
Strategies For Trumpanomics	Long Mortgage Insurers and Home Builders	9-Nov-16	2.3	21.7	50	5	14-May-18	26.6	16.2	224%
Strategies For Trumpanomics	Long S&P500	9-Nov-16	0.46	216.0	100	5	4-Dec-17	265	27.7	455%
Strategies For Trumpanomics	Best of Puts Euro, Yen vs USD	9-Nov-16	625.0	0.8	5	5	23-Dec-16	3.7	23.1	363%
The Normalization of The EMU	Long EMU Bank Equities	29-Dec-17	0.32	156.7	50	5	24-May-18	141.0	0.0	-100%
The Return of The King: Long the Dollar	Buy 9-month Euro Puts/Dollar Calls, 1.21 strike	11-Apr-18	515	0.97	5	5	29-May-18	5.80	29.9	498%
The Return of The King/EMU Slowdown	Buy Dec Euro Puts/Dollar Calls, 1.13 strike	29-May-18	454	1.10	5	5	11/22/18	0.5	2.50	-50%
Stronger Dollar Part II---Position For A Weaker EM	Buy December 2018 7% OTM Put on EM Equites	11-Apr-18	285	1.75	5	5	28-Jun-18	3.75	10.7	114%
Stronger Dollar Part II---Position For A Weaker EM	Buy USD, Sell A Basket of EM Commodity FX (BRL, RUB, ZAR)	11-Apr-18	100	100.0	100	5	12-Jul-18	110.5	15.50	210%
Stronger Dollar Part II---Position For A Weaker EM	Buy Bovepa 10% OTM puts for October	25-Jul-18	13513	370.0	5	5	13-Sep-18	800.0	10.8	116%
Stronger Dollar Part II---Position For A Weaker EM	Buy Bovepa 10% OTM puts for Dec	13-Sep-18	13513	370.0	5	5	43453.0	0.0	0.0	-100%
Stronger Dollar Part II---Position For A Weaker EM	Buy December 2018 7% OTM Put on EM Equites	28-Jun-18	295	1.7	5	5	26-Oct-18	4.7	13.9	176%
Stronger Dollar Part II---Position For A Weaker EM	Buy January 2019 7% OTM Put on EM Equites	7-Nov-18	714	0.7	5	5	22-Nov-18	1.3	9.3	86%

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