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BBVA Research

U.S. Recession Risk Monitor

December 2018

Creating Opportunities

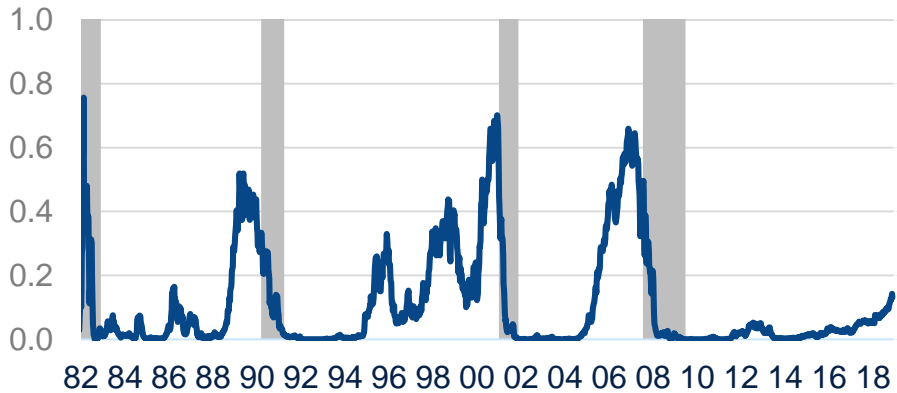
Highlights

- The probability of a recession is increasing
- Correction in financial markets as participants adjust monetary policy and growth expectations
- Treasury yield curve continues flattening
- Increase in corporate spreads highlight downside risks from elevated nonfinancial business leverage
- Economic fundamentals for households and financial institutions remain solid
- Downside risks from weaker global growth and increased global risk aversion

BBVA U.S. Recession Probability

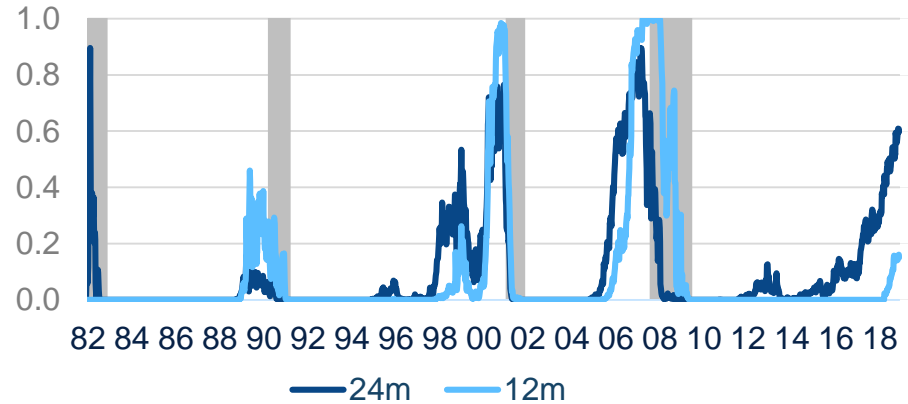
Treasury Spread Term-Premium Adjusted

%, 12m-ahead



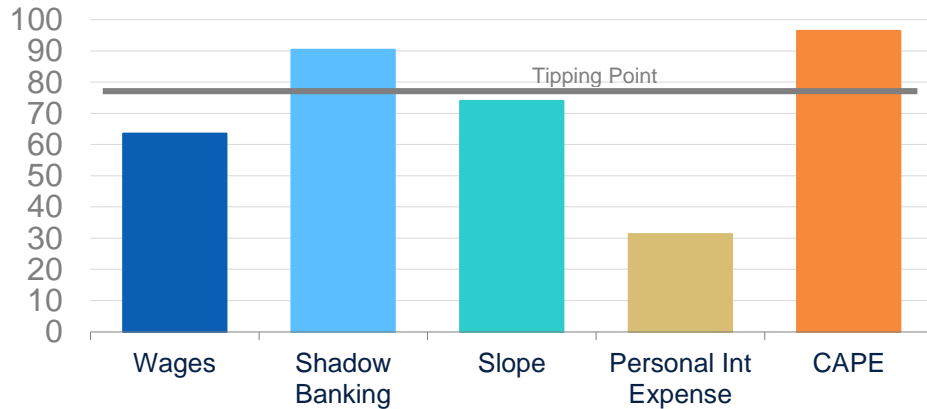
Factor Model

%, 12-months & 24-months ahead



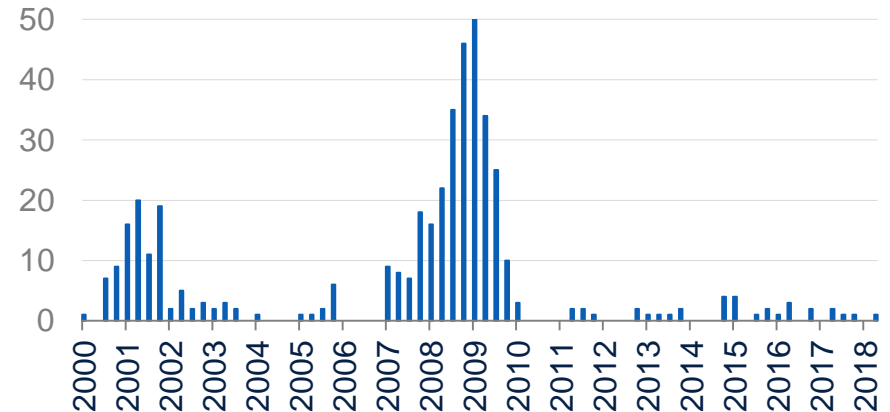
Risk Factors

Percentile Rank



Regional Conditions

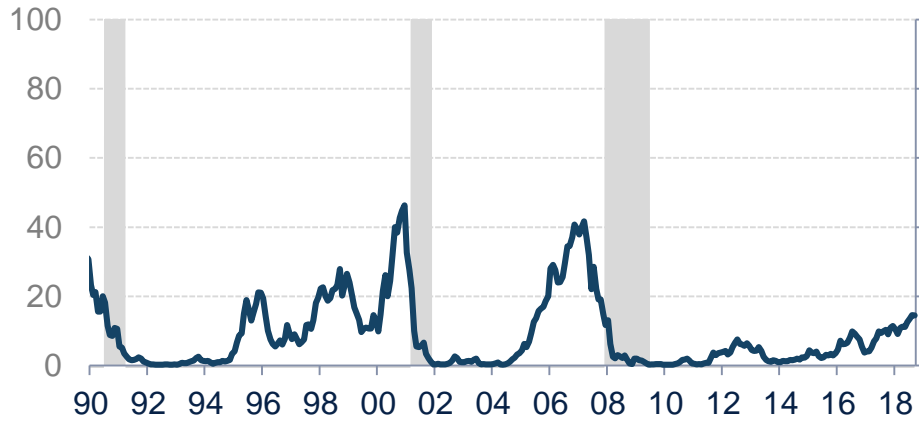
of States with greater than 50% probability



Recession Probability Models and Surveys

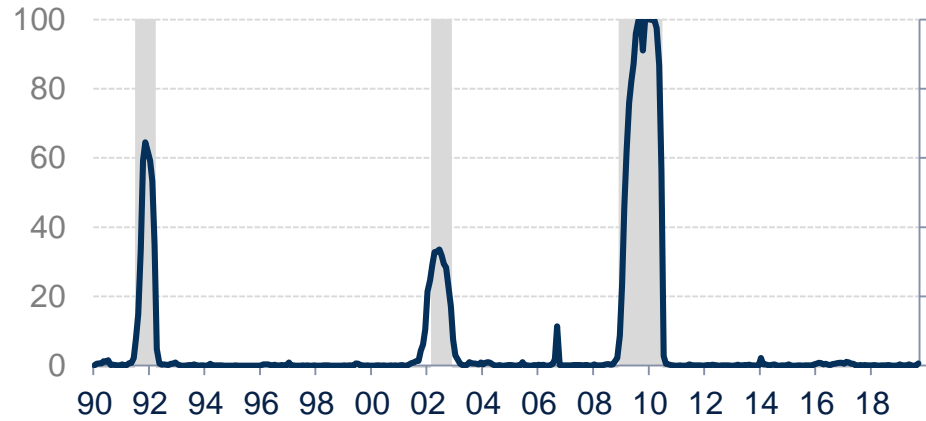
Treasury Spread

%, 12-months ahead



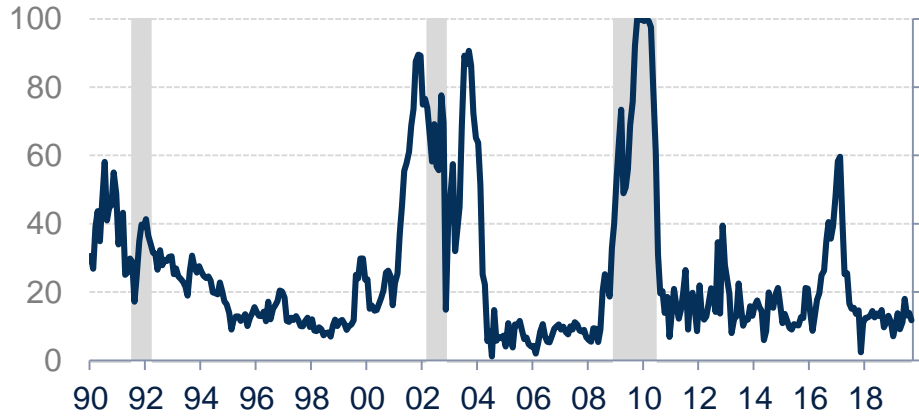
Dynamic-Factor Markov-Switching

%, 12-months ahead



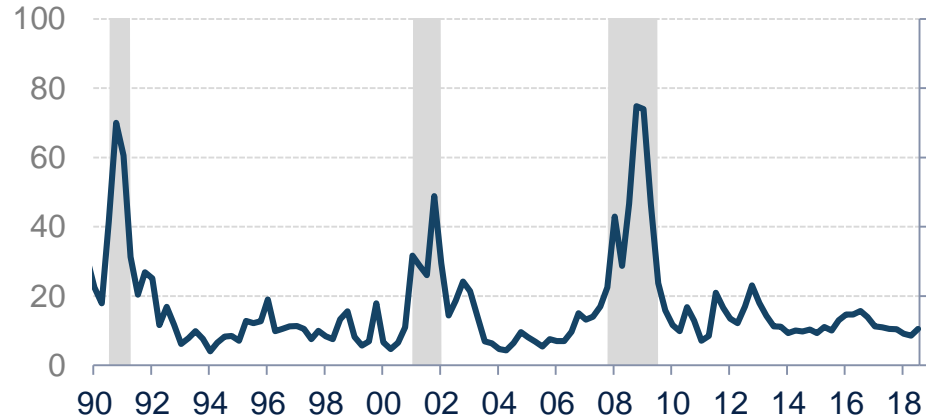
Credit Spread

%, 12-months ahead



Survey of Professional Forecasters

%, Decline in real GDP next quarter

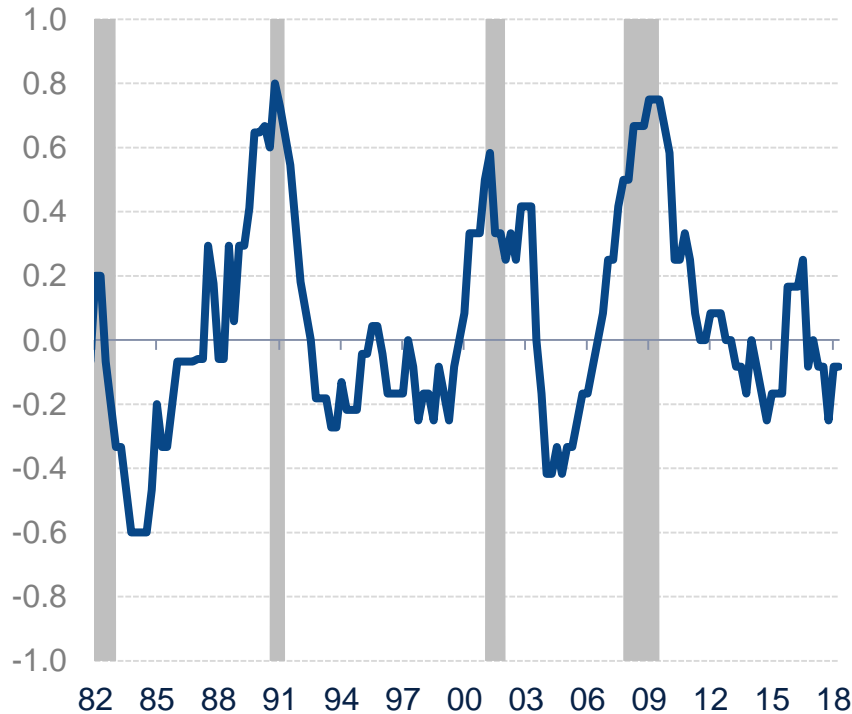


Credit Cycle and Recession Timing Indexes

Risk of systemic crisis remains low.
No imminent risk of recession

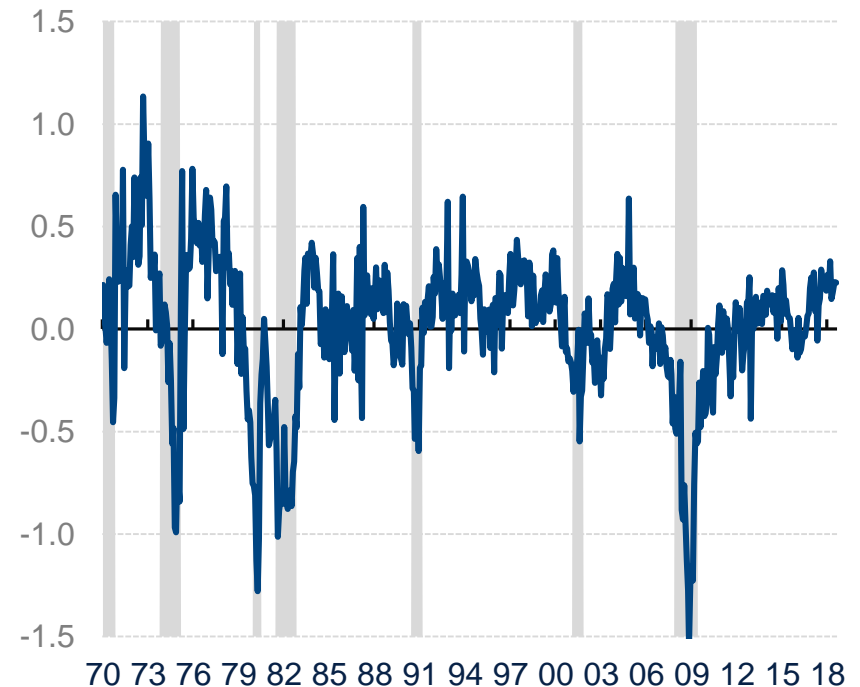
BBVA U.S. Credit Cycle Risk Index

Above 0 = above average risk



BBVA U.S. Recession Timing Index

Above 0 = longer lag to recession

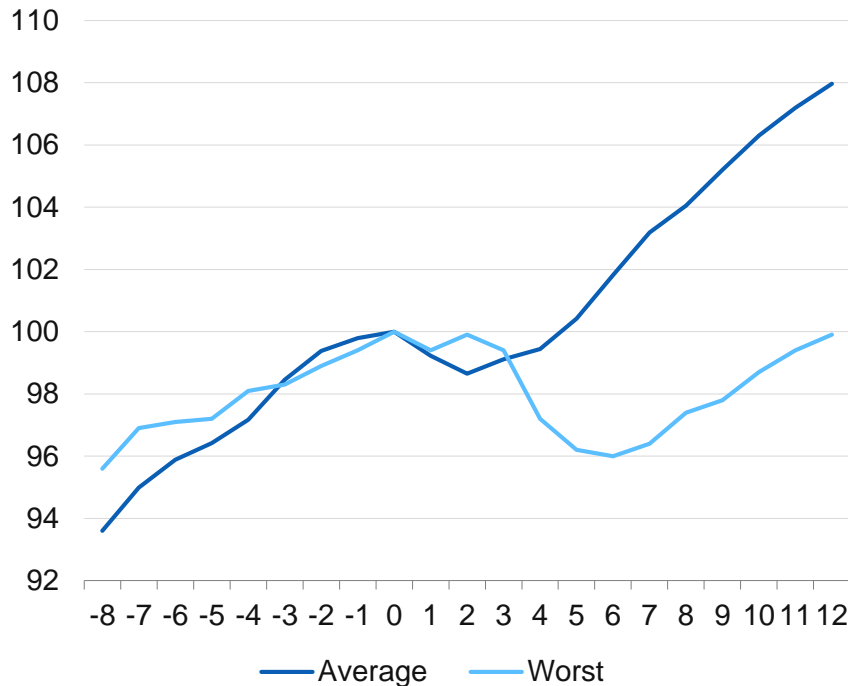


Scenarios

A slow U-shape recovery is more likely under less effective monetary and fiscal response

Real GDP Growth During Recessions

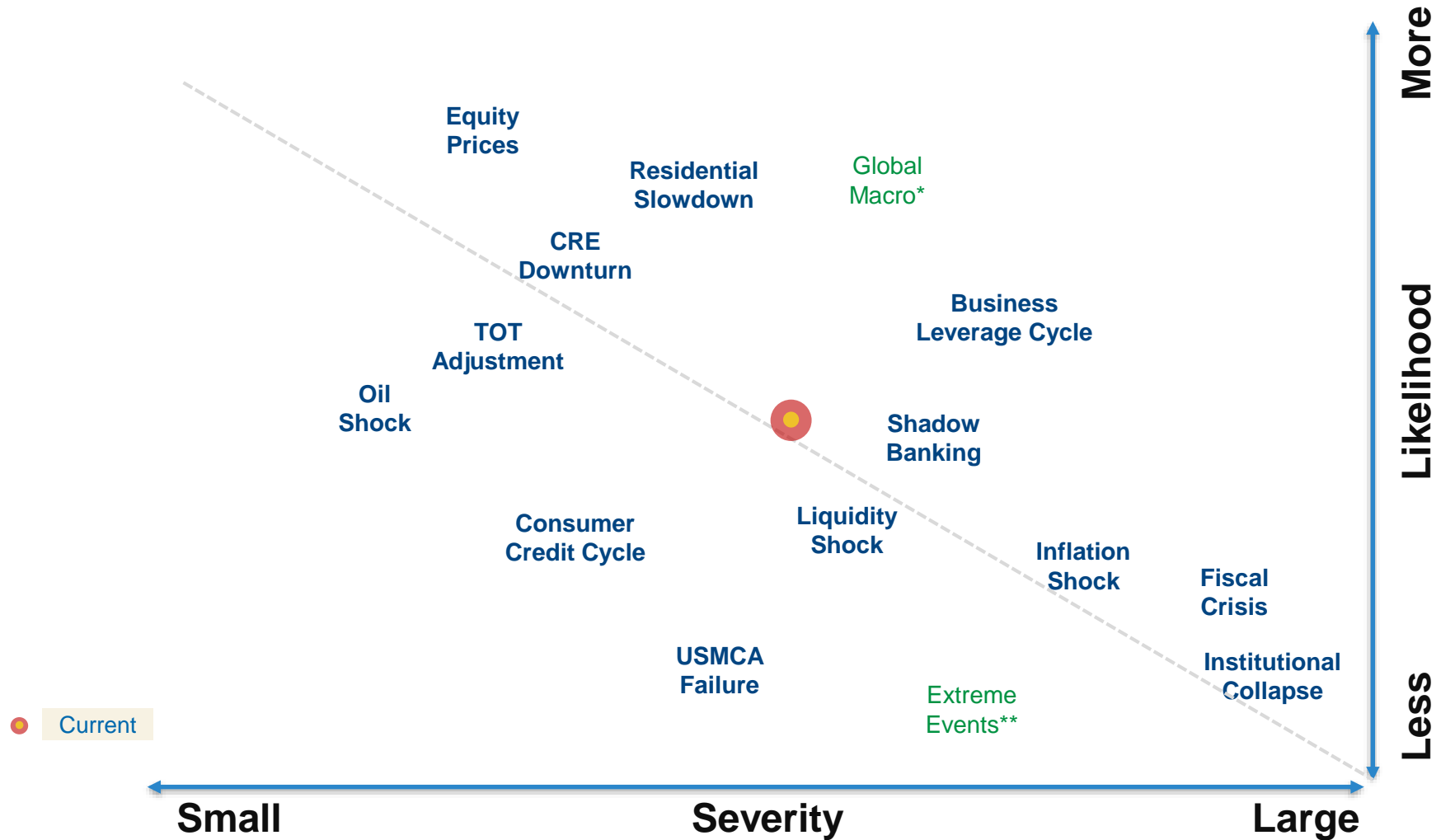
Index = 100 cycle peak, 0 = start of downturn, quarters



Source: BBVA Research

Outcome	Probability	t	t+1
No recession	60%	2.1 (Average)	
Recession	40%	-0.7	1.8
<i>Systemic</i>	2%	-1.7	-0.6

Risk Matrix



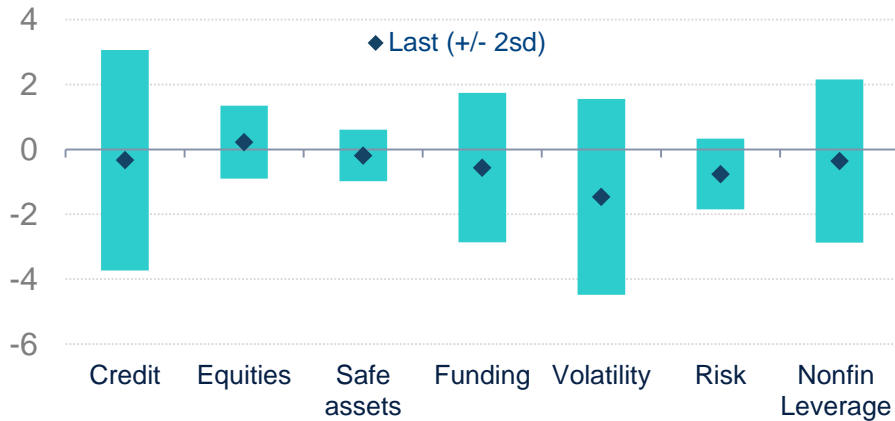
Source: BBVA Research; This assessment is not static and can change significantly depending on future developments

* Includes macroeconomic conditions in China, Euro Area, Brexit, Emerging Markets ** Includes non-economic factors: Climate, Cybersecurity, Pandemic, Terrorism, Migration, etc.

Financial Markets

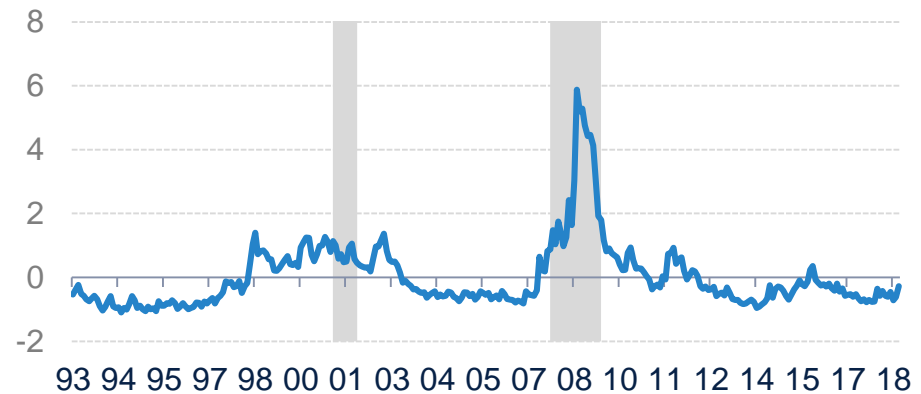
Financial Stress Indicators

>0 = tighter than average



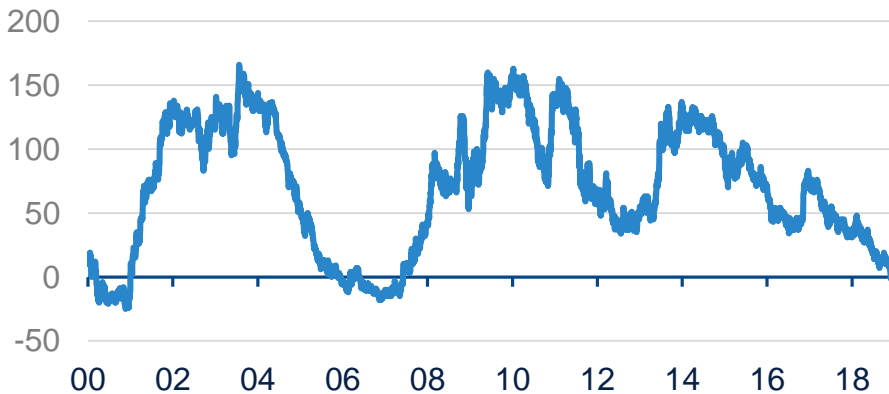
Financial Stress Index

Above 0 = above average stress



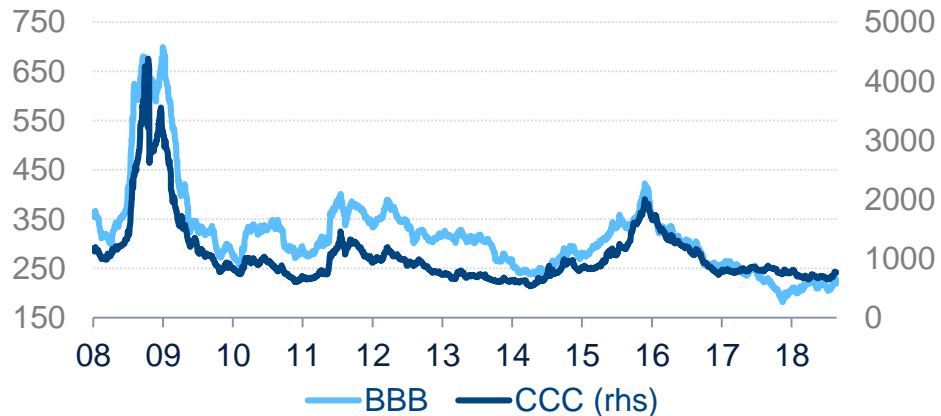
Treasury Yield Curve 5Y Minus 2Y

Basis points



Corporate Spreads

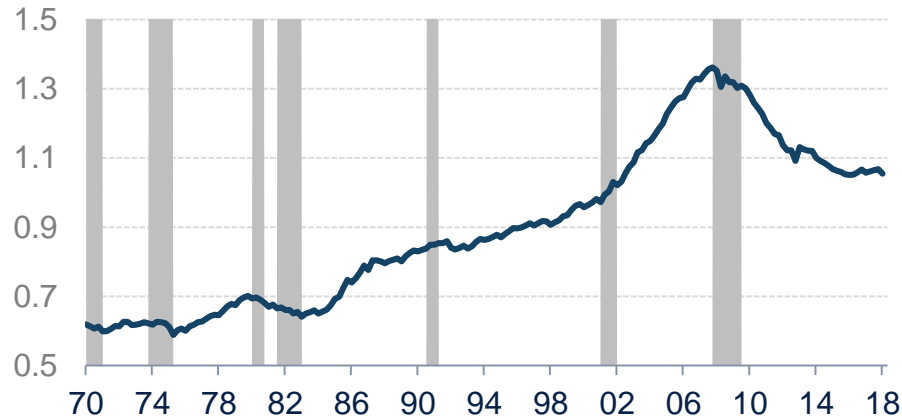
Basis points



Households

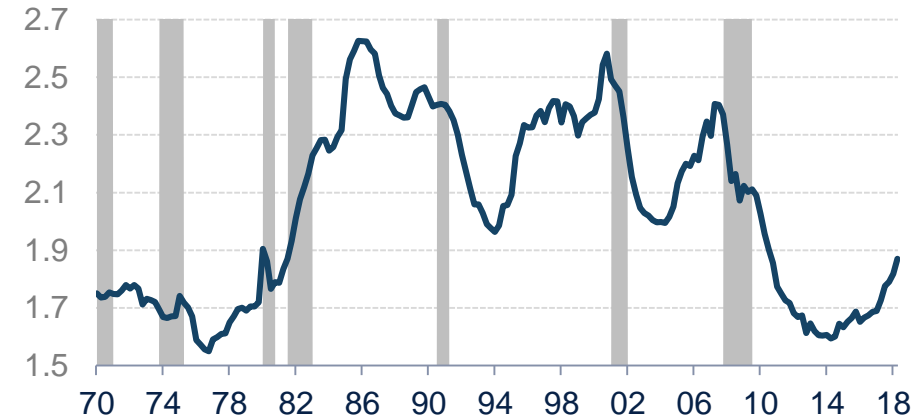
Liabilities/Disposable Income

Ratio



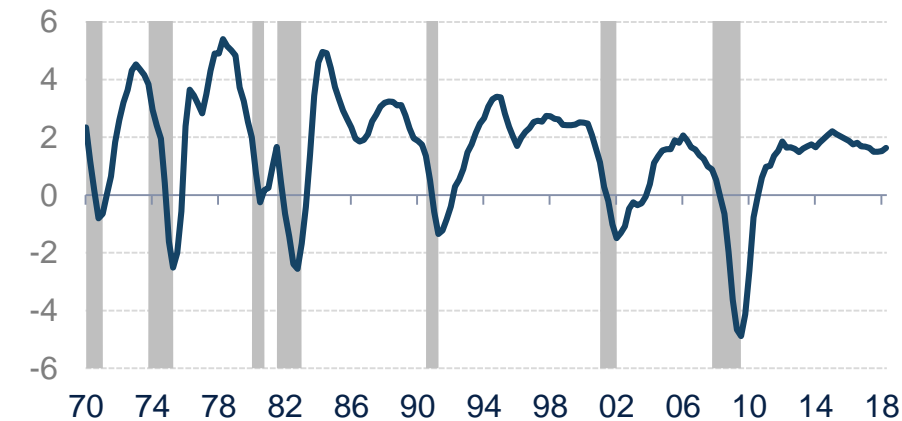
Interest Payments/Personal Income

%



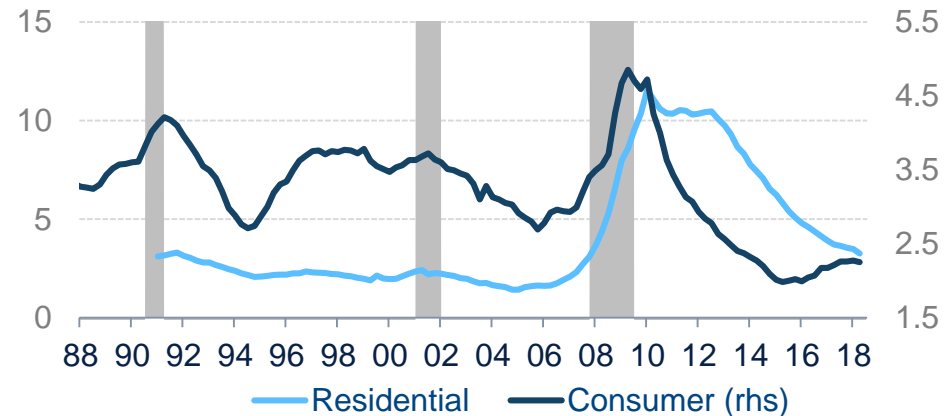
Nonfarm Payroll

YoY % Change



Delinquency Rate

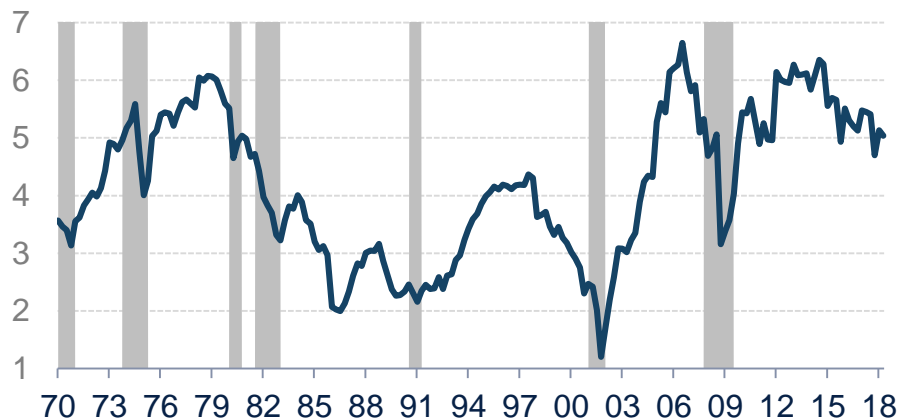
%



Businesses

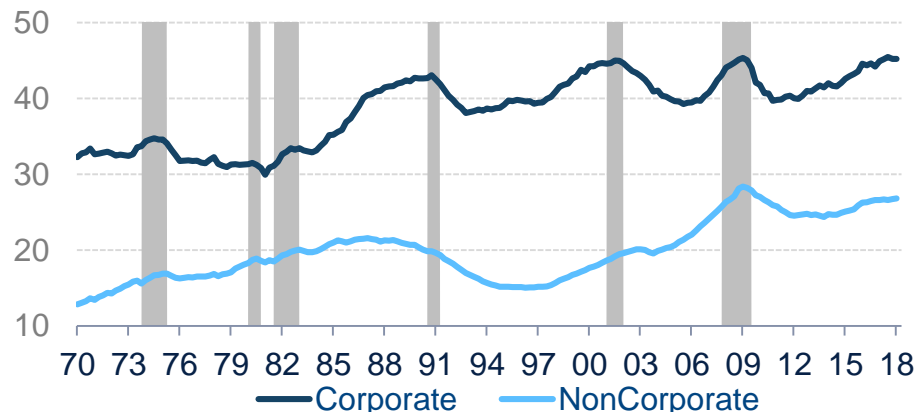
Nonfinancial Corporate Profits

% of GDP



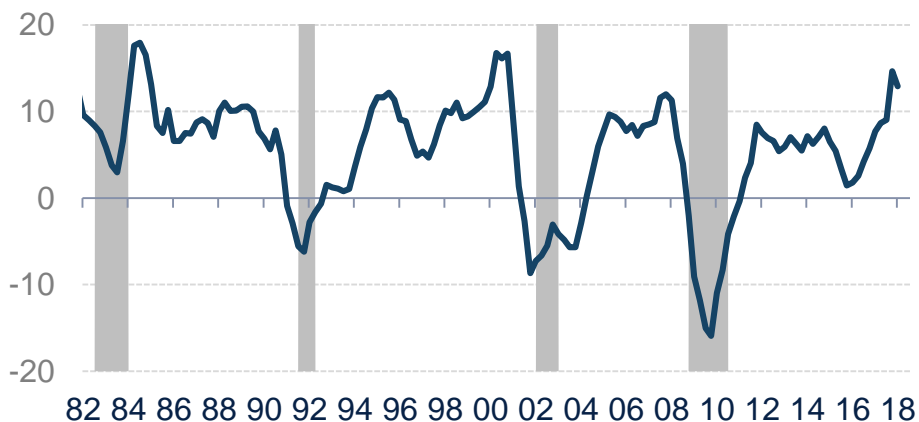
Nonfinancial Business Debt

% of GDP



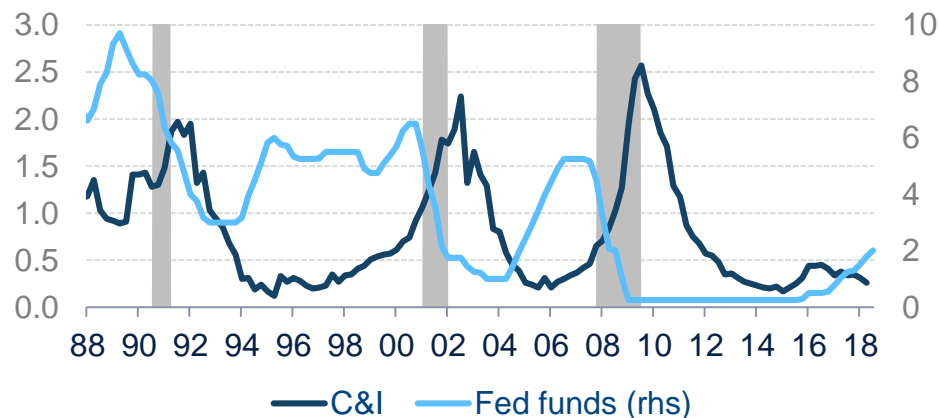
Nonfinancial Corporate Short-term Liabilities

YoY % Change



C&I Loan Charge-Off Rate & Fed Funds

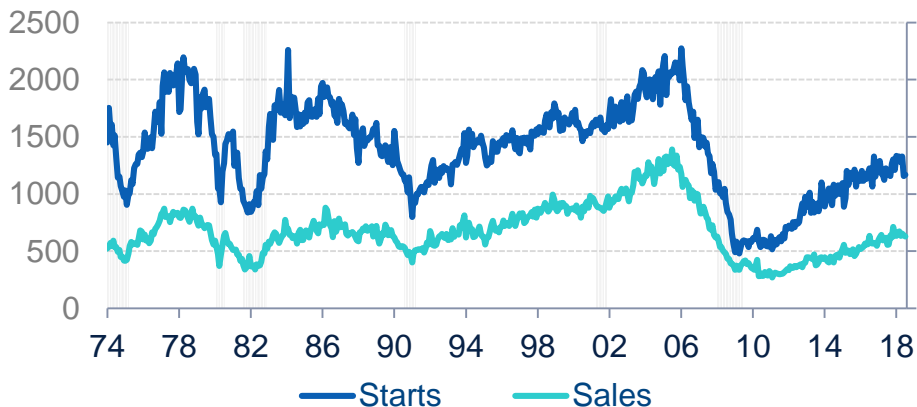
%



Real Estate

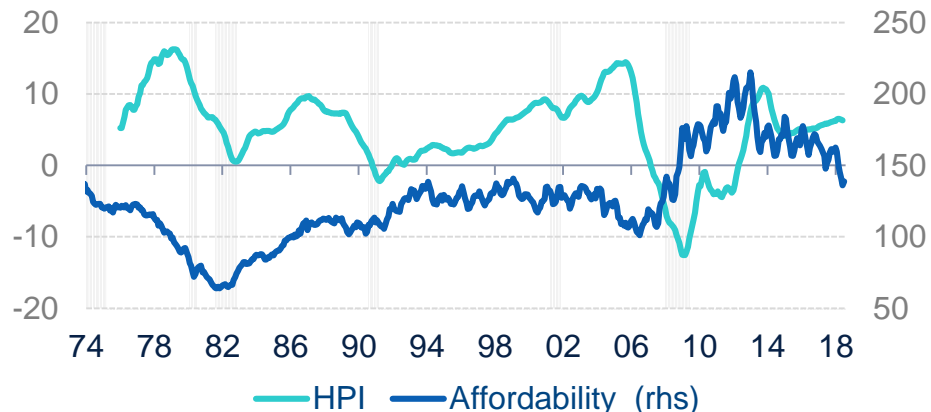
Housing Starts and New Home Sales

Thousand units, annualized



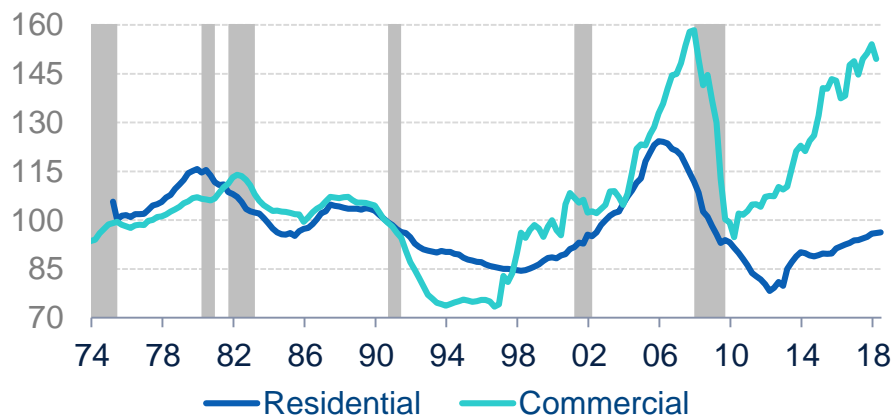
Housing Affordability and Prices

Index and YoY % Change



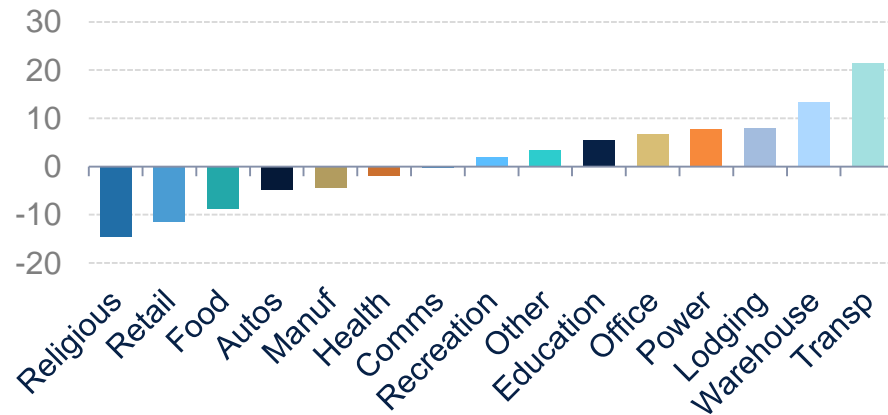
BBVA Real Estate Prices Misalignment

1990=100



Nonresidential Construction

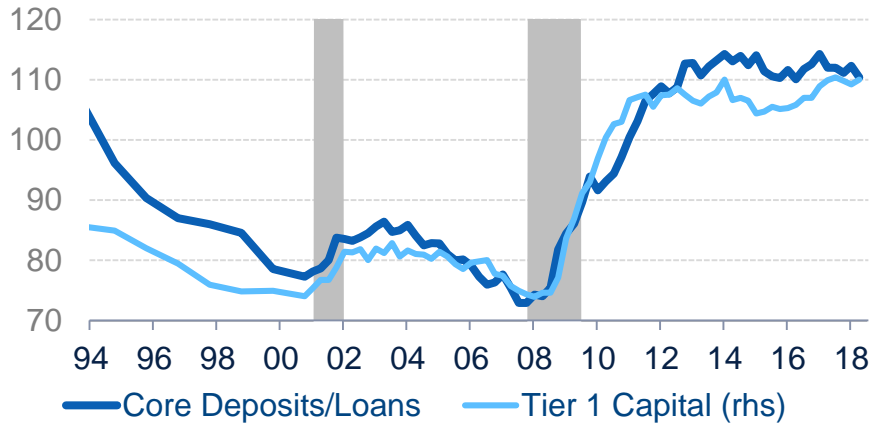
YoY % Change



Financial Sector

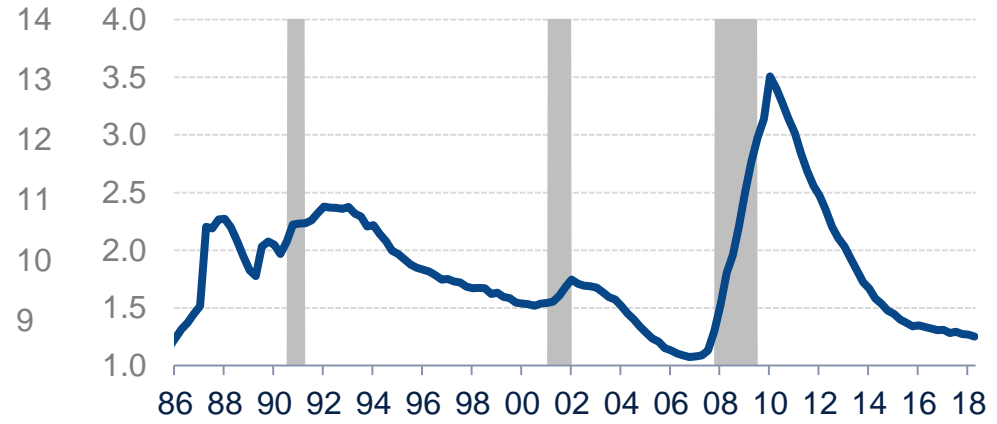
Deposits and Capital Ratios

% of loans and assets, commercial banks



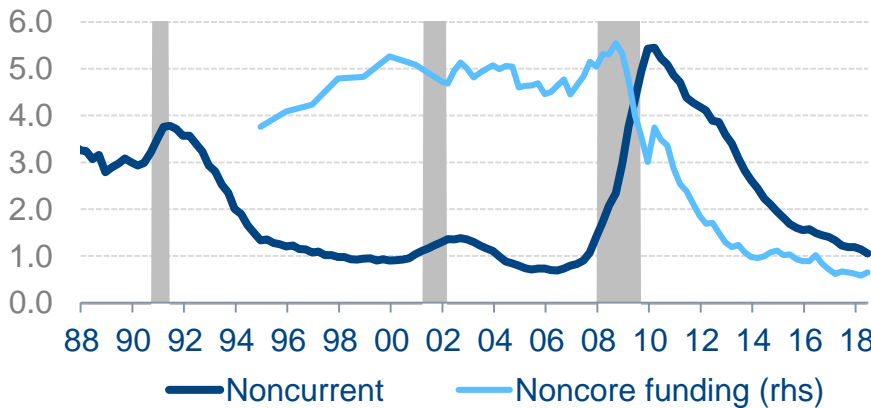
Loan Reserves

% of total loans, all FDIC institutions



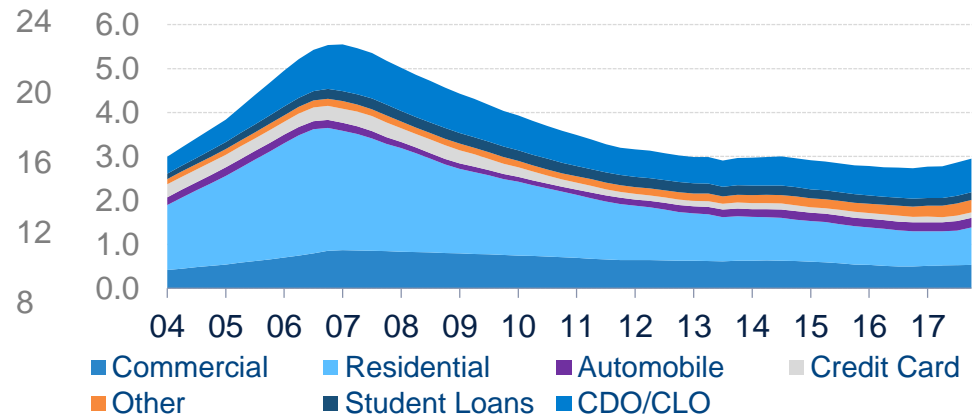
Noncurrent Loans and Funding

% of loans and liabilities, commercial banks



Securizations

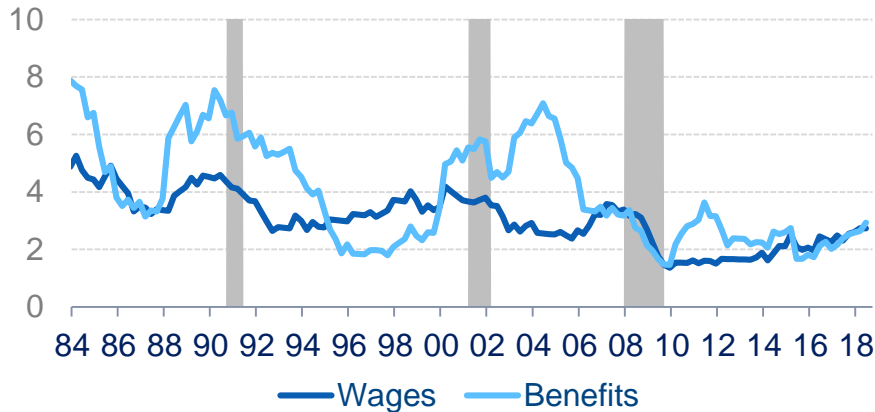
US\$tn



Prices

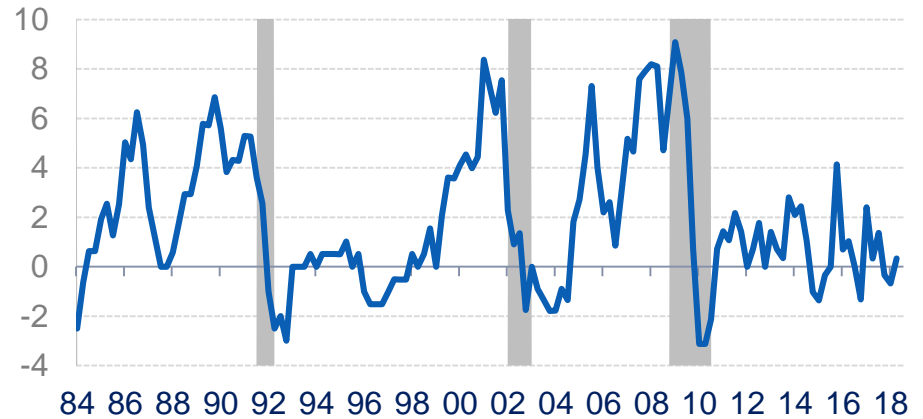
Labor Costs

YoY % Change, ECI



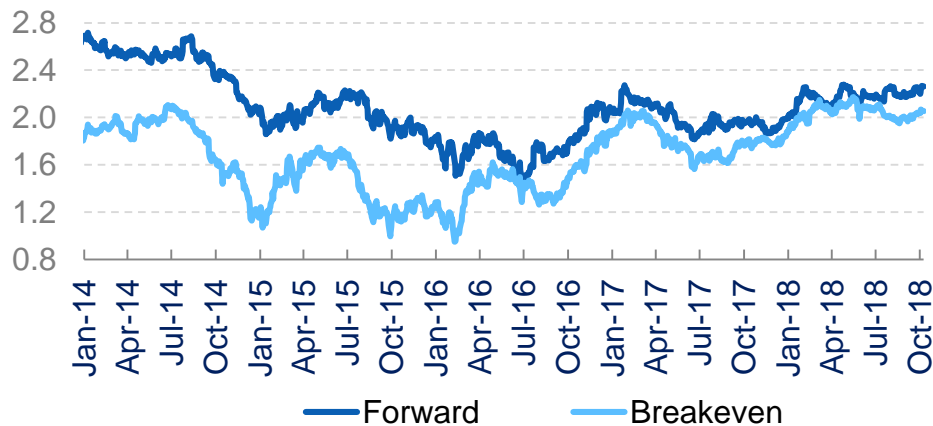
Nonlabor Costs per Unit of Real GDP

YoY % Change



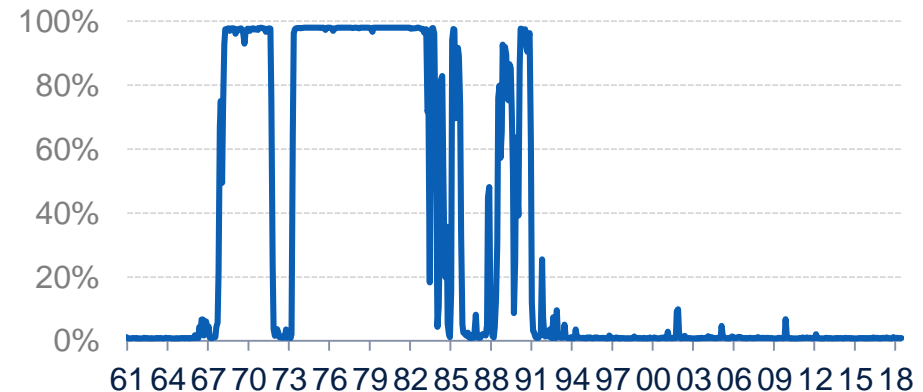
Market Inflation Expectations

%



BBVA U.S. Inflation Regime Probability

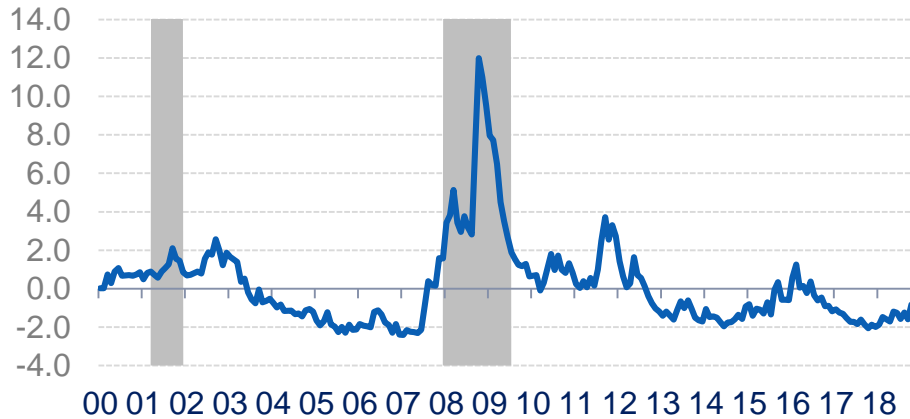
Regime change low to high



Global Conditions

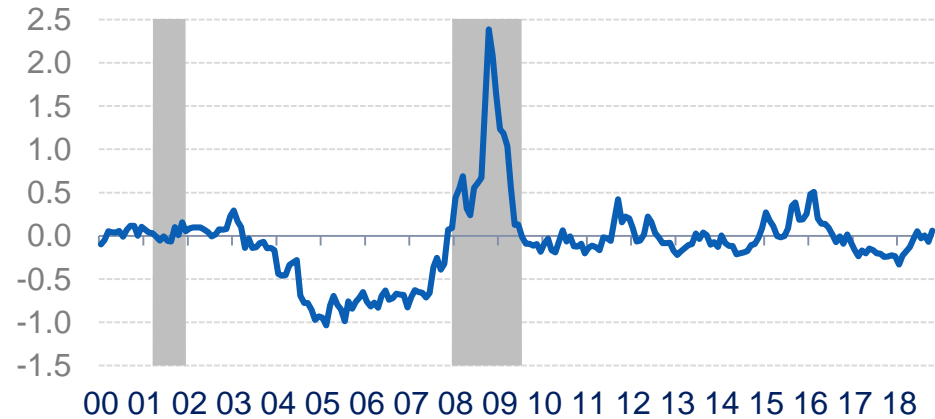
Advanced Economies Financial Stress

0=Average Stress Level



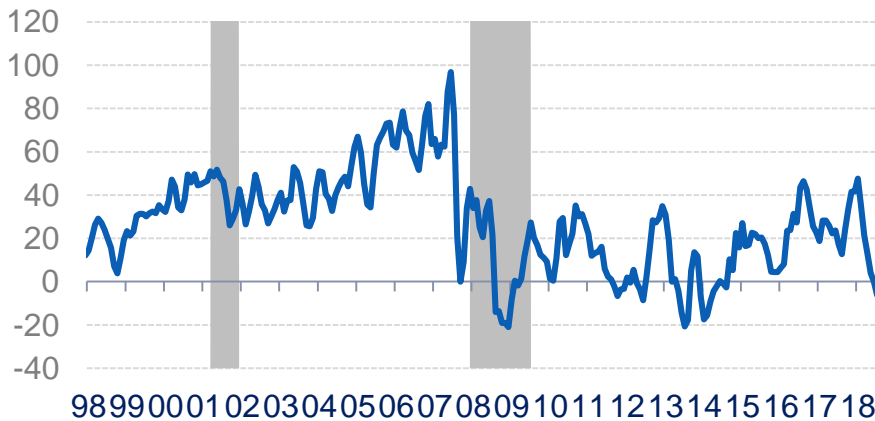
Emerging Markets Financial Stress

0=Average Stress Level



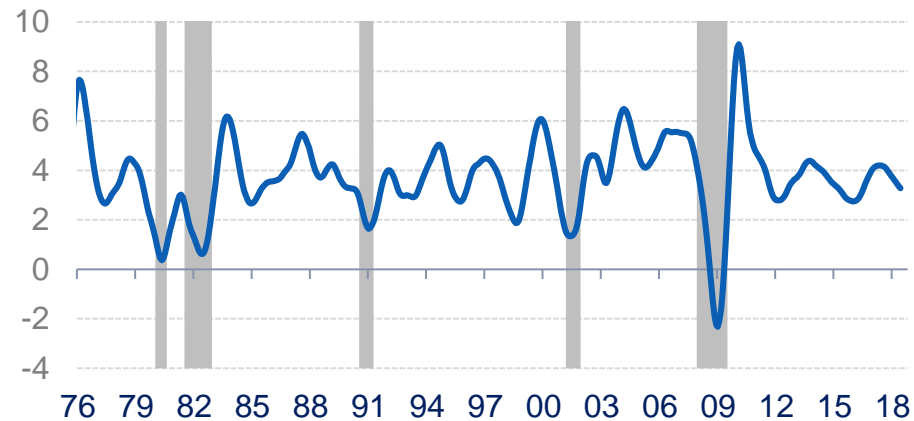
Net Foreign Purchases of U.S. Securities

US\$bn, 3mma, excluding OFIs and Int'l organizations



Global Activity Leading Indicator

YoY % Change



For more information

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[All things come to an end, but is the U.S. headed for recession?](#)

[Corporate debt in the twilight of the credit cycle](#)

[Just what the doctor ordered: real-time recession forecasts](#)

[Recession risk monitor 4Q18](#)

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