

U.S. Recession Risk Monitor

December, 2019

Key Messages

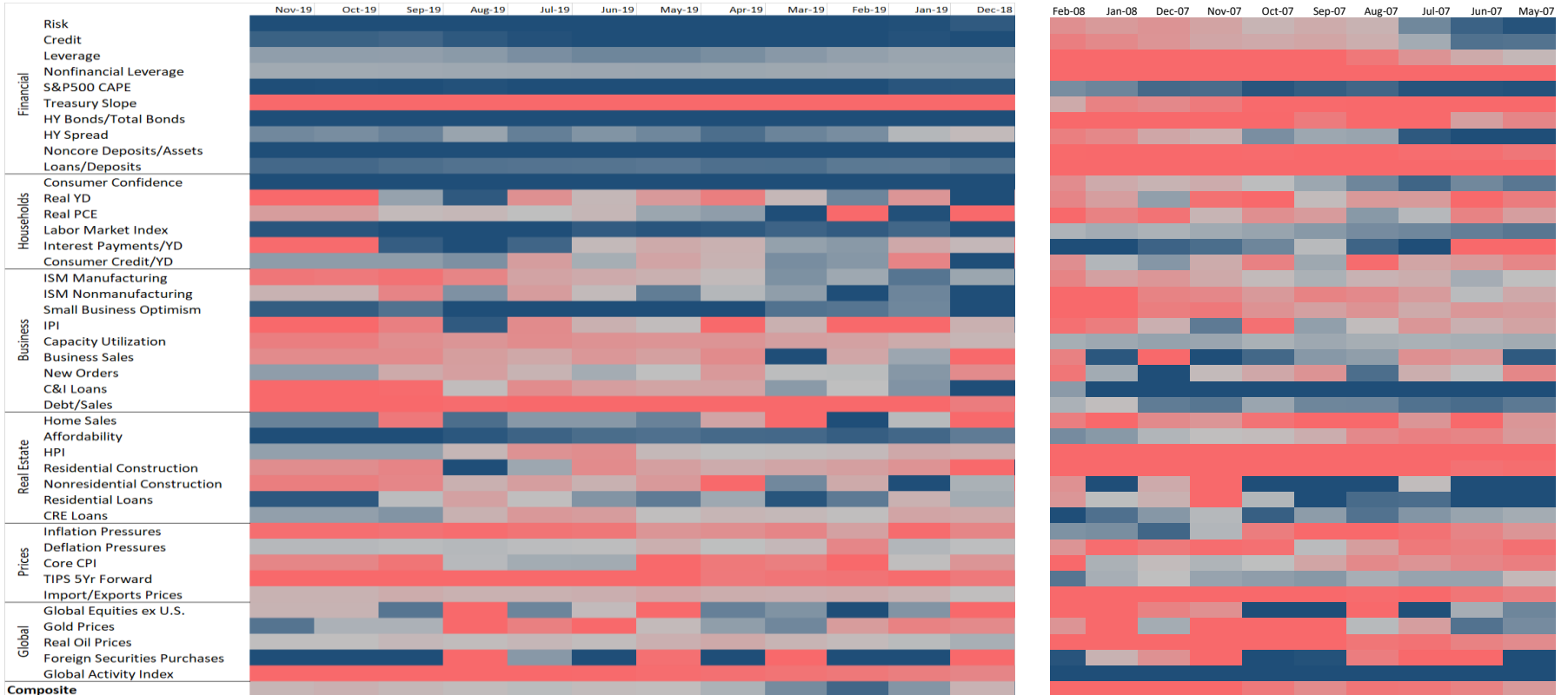
- Probability of recession in 12 months at one-year lows (30%)
- Financial conditions remain solid after Fed “mid-cycle” adjustment
- Strong household finances supporting consumption
- Slight pullback in riskier business lending, but tail risks remain
- Key concerns: trade frictions, market liquidity & equity price correction
- Despite industrial recession in advanced economics, global system risks muted

Heat Map

Upside  Downside

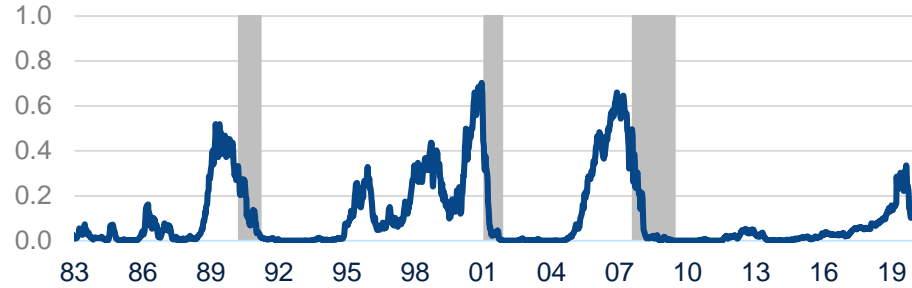
Current

2007 Crisis

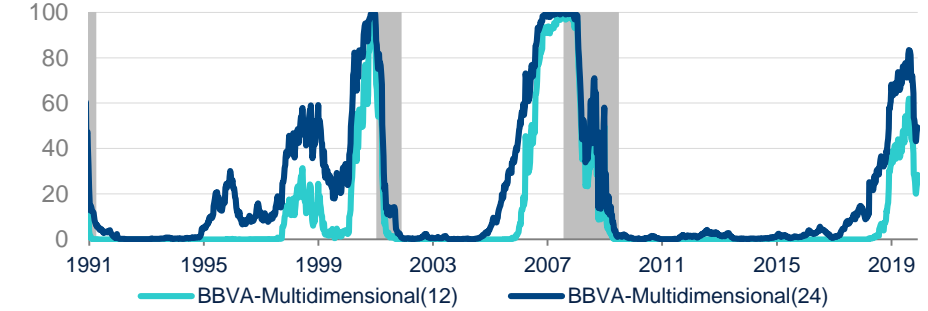


BBVA U.S. Recession Probability

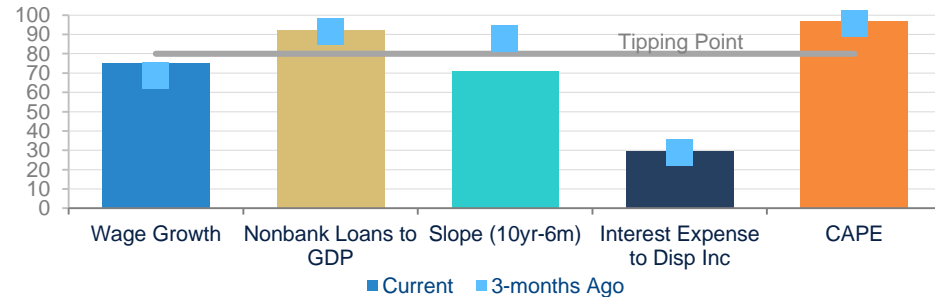
TREASURY SPREAD TERM-PREMIUM ADJUSTED
%, 12M-AHEAD



RECESSION PROBABILITY FACTOR
%, 12-MONTHS & 24-MONTHS AHEAD

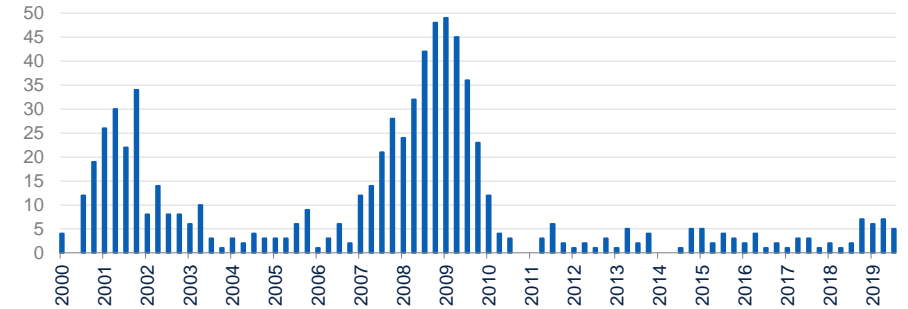


RISK FACTORS
PERCENTILE RANK



REGIONAL CONDITIONS

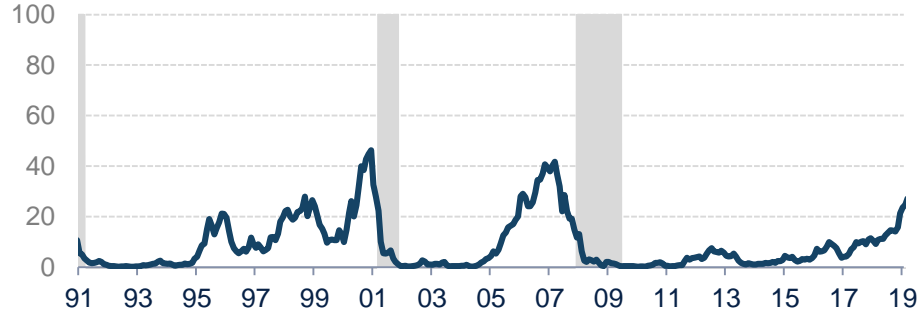
OF STATES WITH GREATER THAN 30% PROBABILITY



Recession Probability

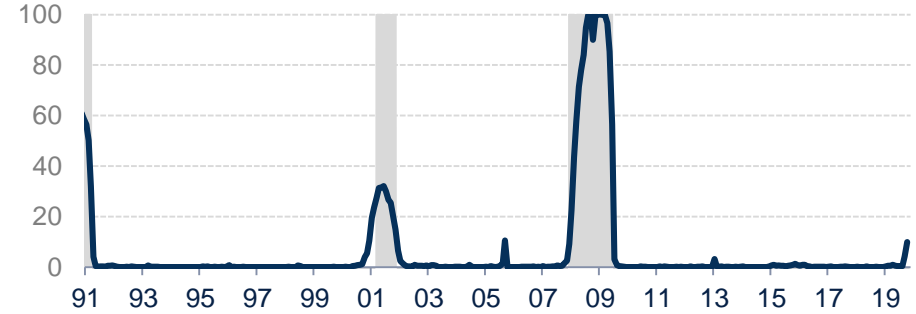
TREASURY SPREAD MODEL

%, 12-MONTHS AHEAD



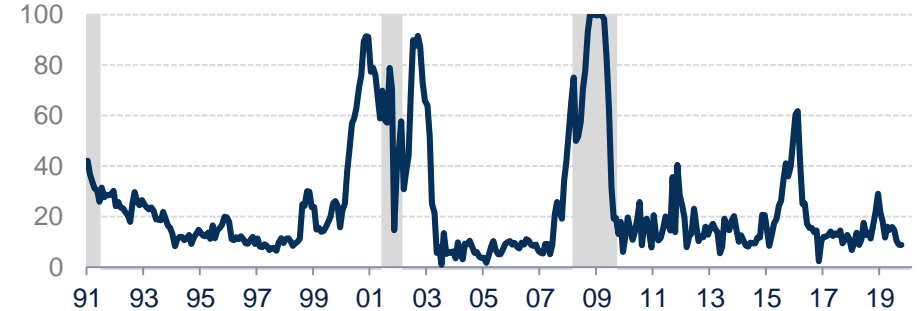
DYNAMIC-FACTOR MARKOV-SWITCHING MODEL

%, 12-MONTHS AHEAD



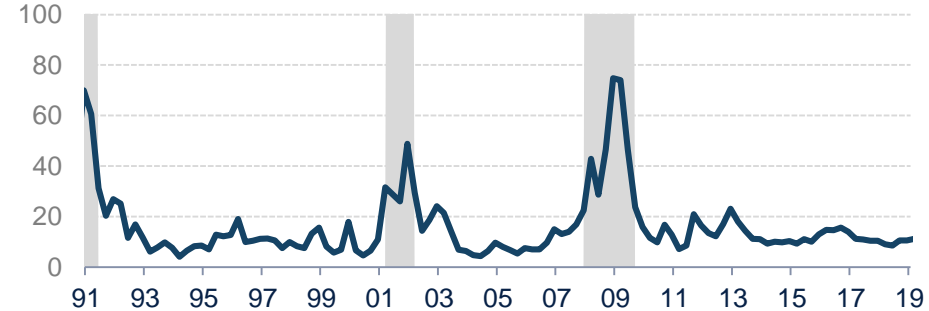
CREDIT SPREAD MODEL

%, 12-MONTHS AHEAD



SURVEY OF PROFESSIONAL FORECASTERS

%, DECLINE IN REAL GDP NEXT QUARTER

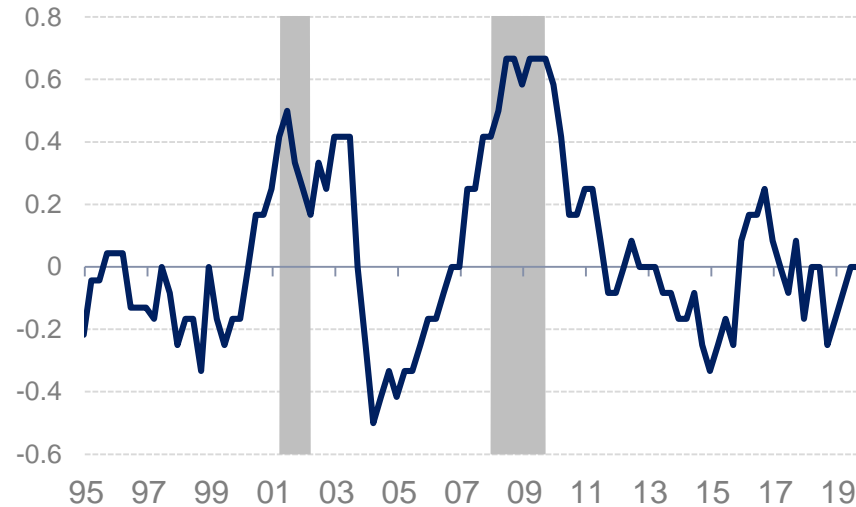


Credit Cycle and Recession Timing Indexes

Fed's "mid-cycle" easing should help to prolong the expansion

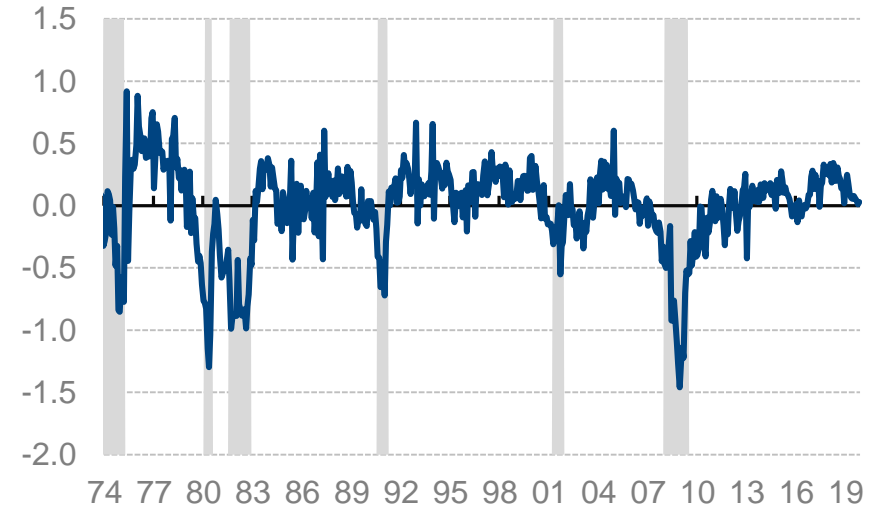
BBVA CREDIT CYCLE RISK INDEX

ABOVE 0 = ABOVE AVERAGE RISK



BBVA RECESSION TIMING INDEX

ABOVE 0 = LONGER LAG TO RECESSION

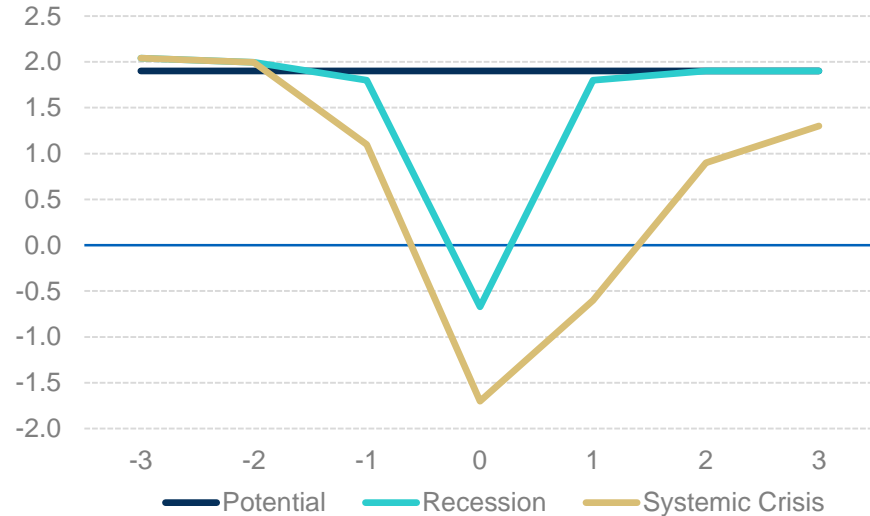


Scenarios

Probability of recession at its lowest since November 2018

RECESSION SEVERITY

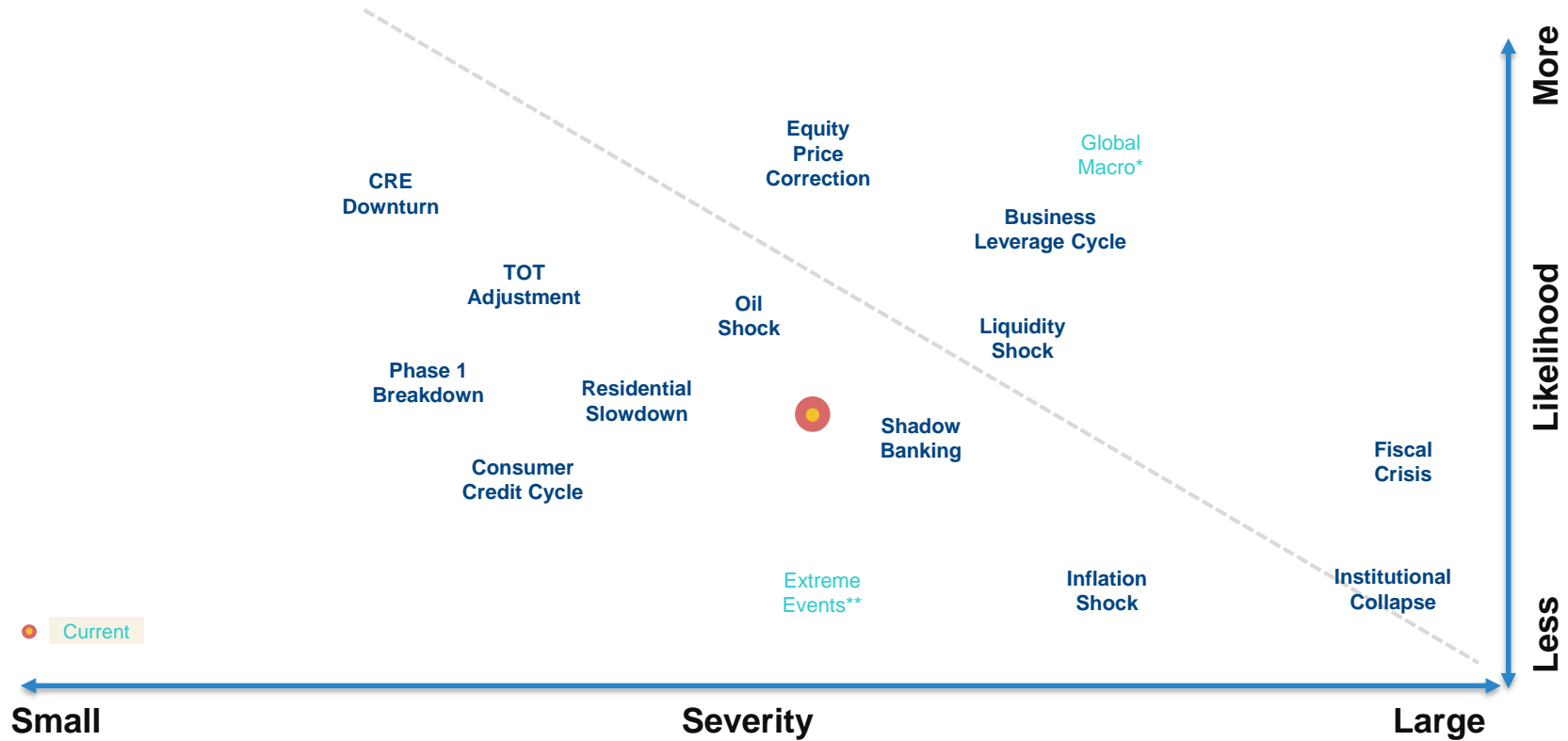
REAL GDP GROWTH; T=0 YEAR OF RECESSION



Source: BBVA Research

Outcome	Probability 2020-2021	t	t+1
No recession	70%	1.9 (Baseline avg. 2020-22)	
Recession	30%	-0.7	1.8
<i>Systemic crisis</i>	4%	-1.7	-0.6

Risk Matrix



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

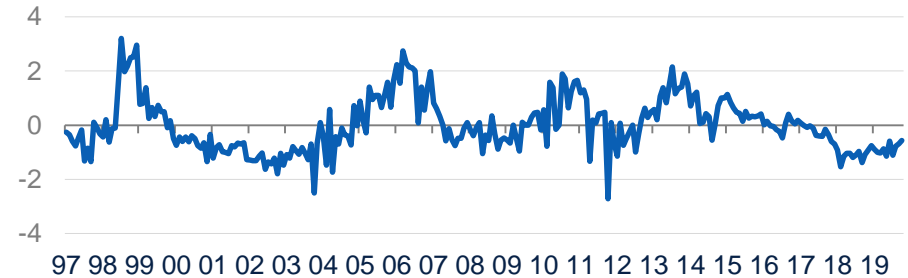
* Includes macroeconomic conditions in China, Euro Area, Brexit, Emerging Markets ** Includes non-economic factors: Climate, Cybersecurity, Pandemic, Terrorism, Migration, etc.

Financial Markets

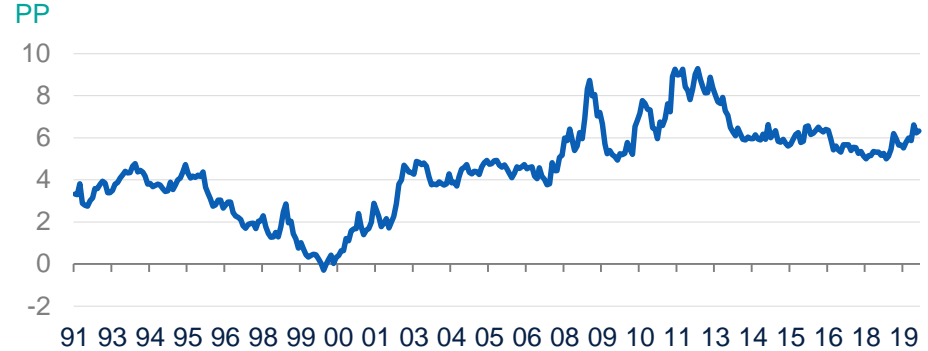
FORWARD PE RATIO OF S&P 500 FIRMS



CORP. BOND PREMIUM OVER EXPECTED LOSSES STANDARD DEVIATION



S&P SPREAD FORWARD EP RATIO TO REAL 10YTN

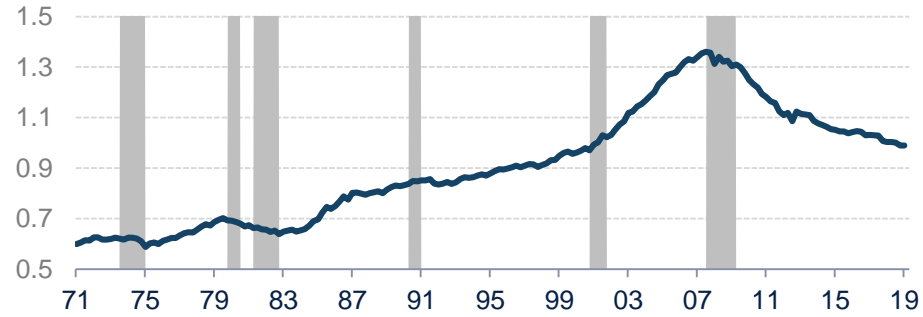


TERM-PREMIUM 10 YEAR BOND

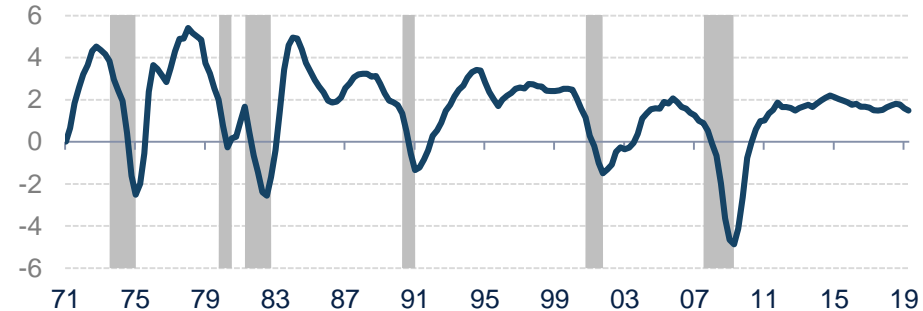


Households

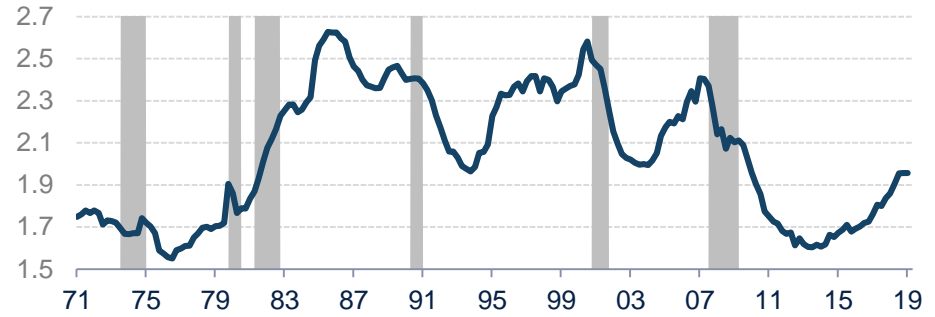
LIABILITIES/DISPOSABLE INCOME RATIO



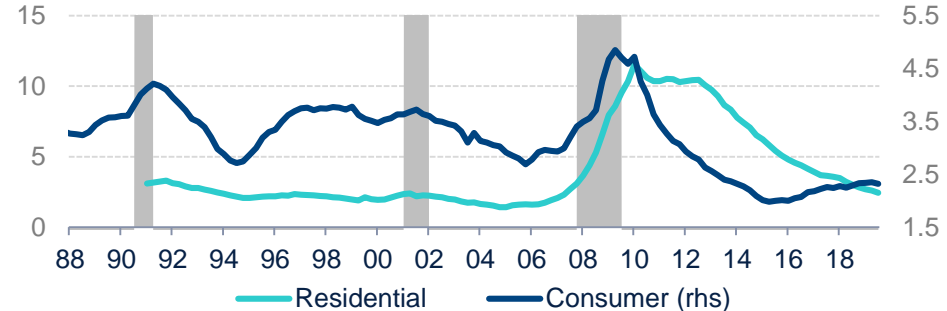
NONFARM PAYROLL YOY % CHANGE



INTEREST PAYMENTS/PERSONAL INCOME %



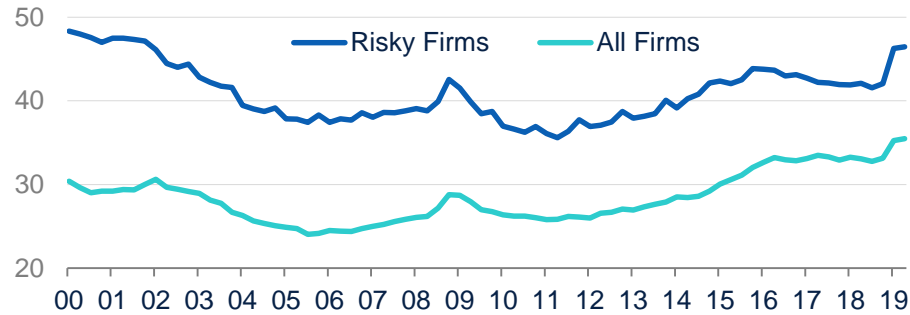
DELINQUENCY RATE %



Businesses

GROSS BALANCE SHEET LEVERAGE

PUBLIC NONFINANCIAL CORPORATIONS, %



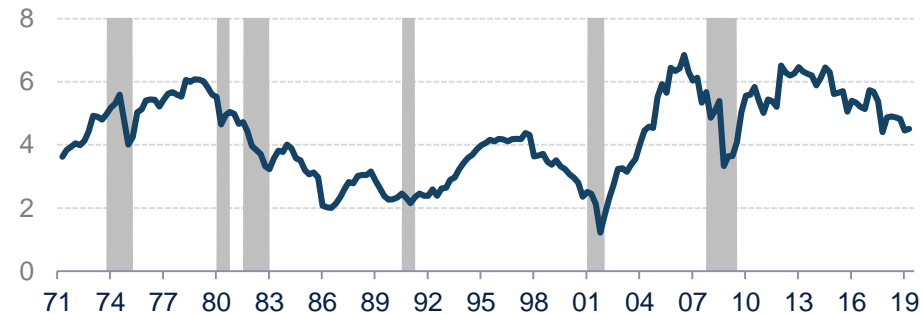
INTEREST COVERAGE RATIO

PUBLIC NONFINANCIAL CORPORATIONS, %



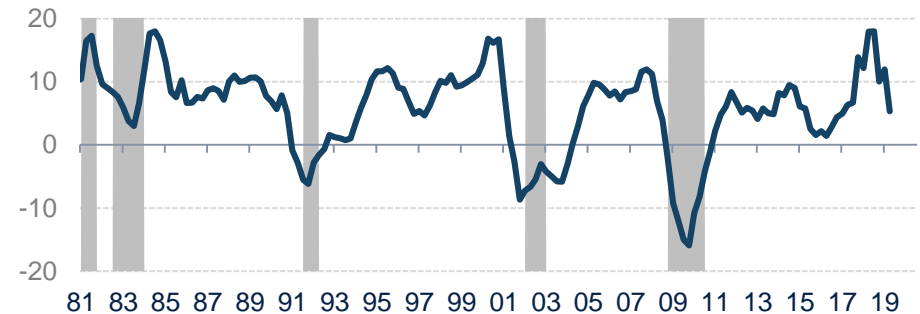
NONFINANCIAL CORPORATE PROFITS

% OF GDP



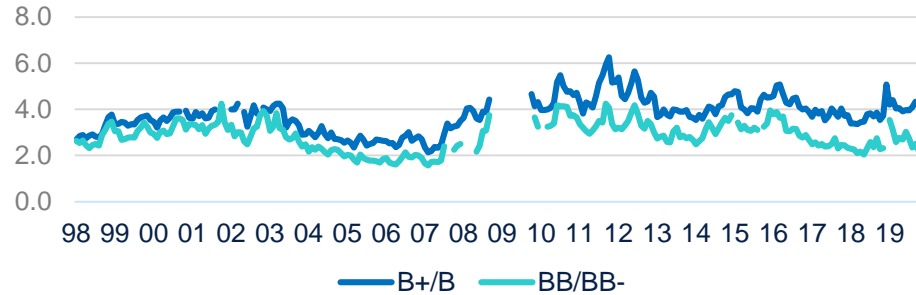
NONFINANCIAL SHORT-TERM LIABILITIES

CORPORATE, YOY % CHANGE

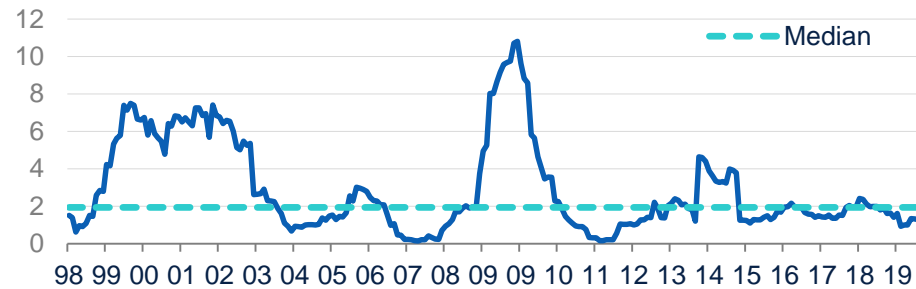


Leveraged Loans and High-Yield Bonds

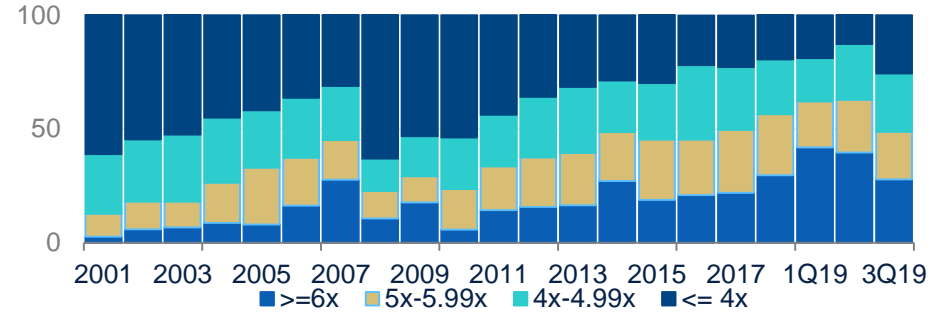
NEWLY ISSUED INSTITUTIONAL LEVERAGED LOANS SPREAD, PP



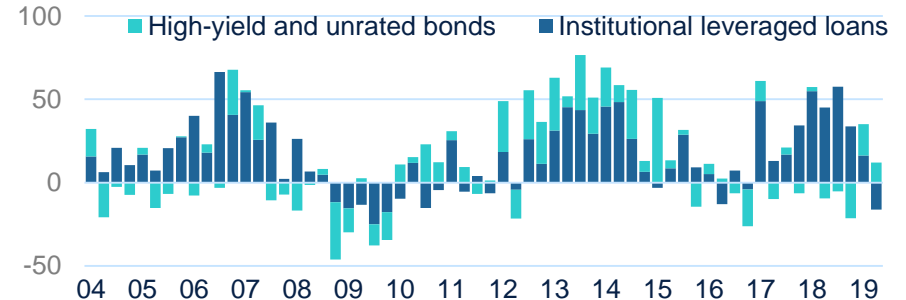
DEFAULT RATES OF LEVERAGED LOANS %



LARGE INSTITUTIONAL LEVERAGED LOAN VOLUMES DEBT-TO-EBITDA RATIO, %



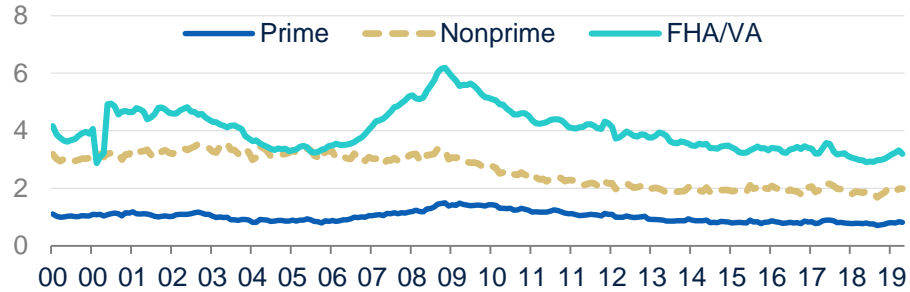
NET ISSUANCE OF RISKY BUSINESS DEBT US\$BN



Real Estate

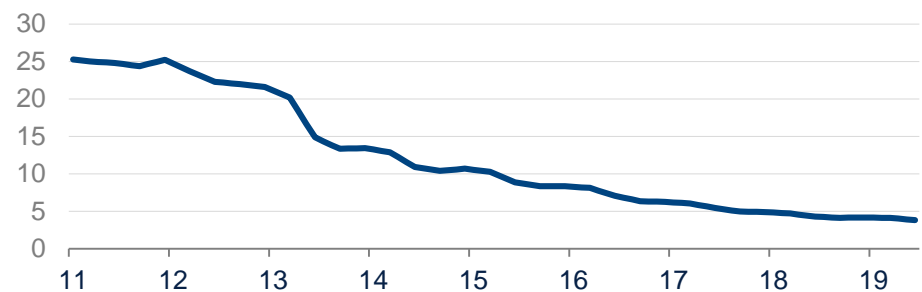
MORTGAGE TRANSITION RATES INTO DELINQUENCY

% OF PREVIOUSLY CURRENT LOANS



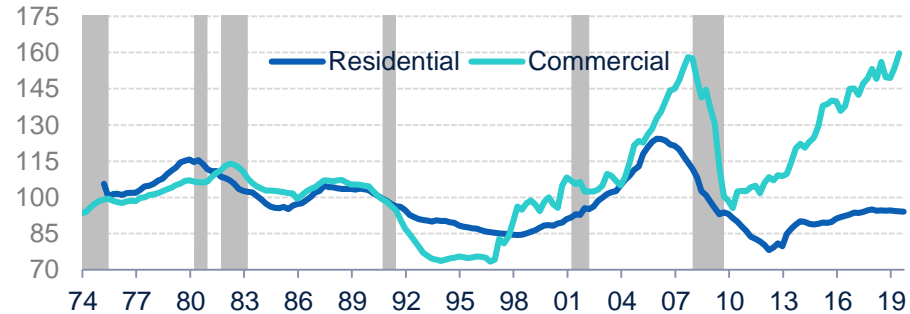
MORTGAGES WITH NEGATIVE EQUITY

%



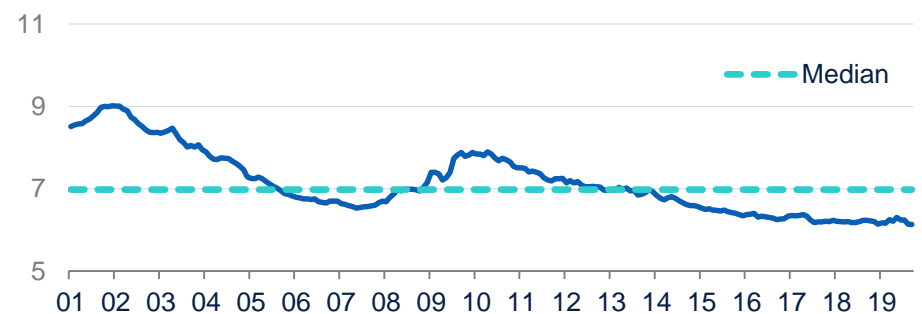
BBVA REAL ESTATE PRICE MISALIGNMENT

1990=100



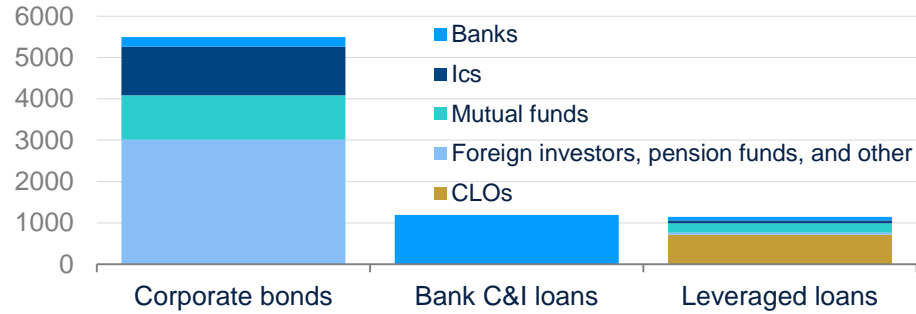
CAP RATES TO 10-YEAR TREASURY YIELD

SPREAD, PP

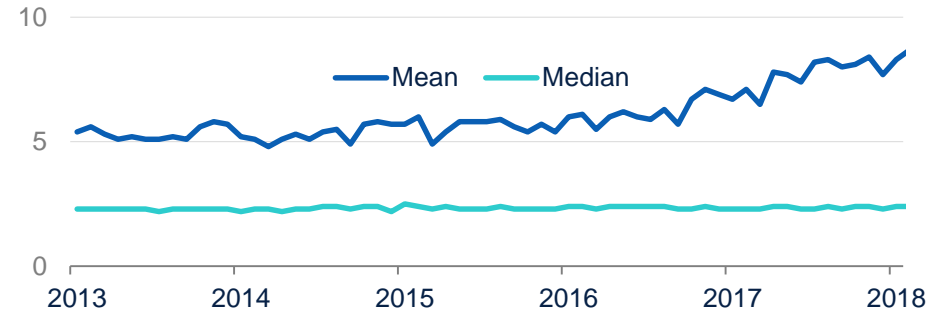


Financial Sector

CORPORATE DEBT, BY TYPE OF DEBT AND HOLDER US\$BN

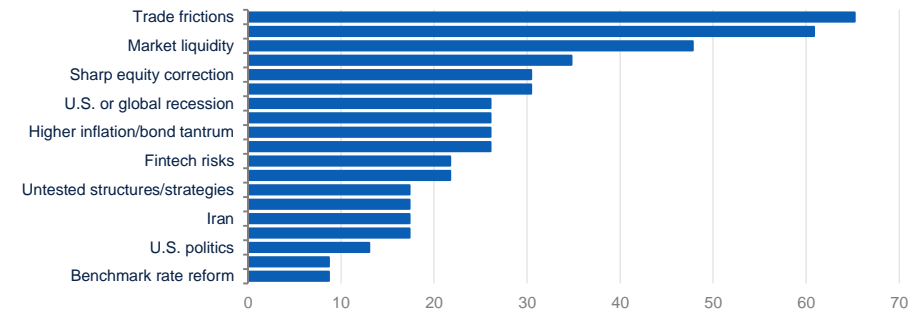


GROSS LEVERAGE OF HEDGE FUNDS RATIO

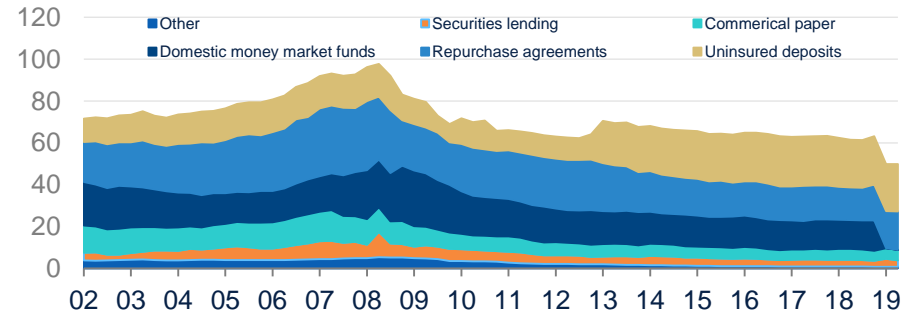


Source: BBVA Research, FDIC, Federal Reserve and Haver

CONCERNS-POTENTIAL SHOCKS SHARE OF CONTACTS CITING SHOCK, % OF TOTAL



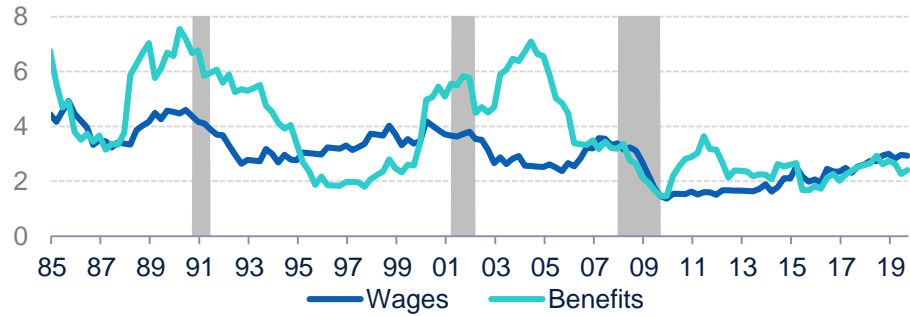
RUNNABLE MONEY-LIKE LIABILITIES % SHARE OF GDP



Prices

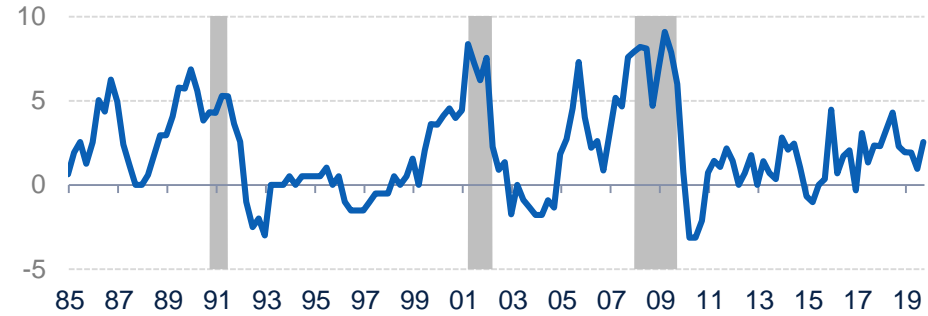
LABOR COSTS

YOY % CHANGE, ECI



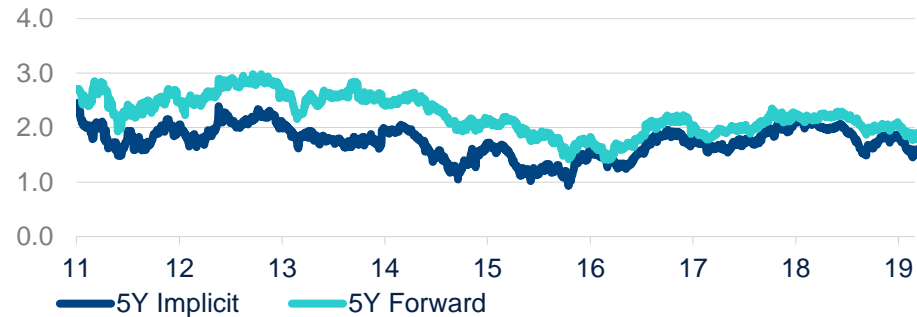
NONLABOR COSTS PER UNIT OF REAL GDP

YOY % CHANGE



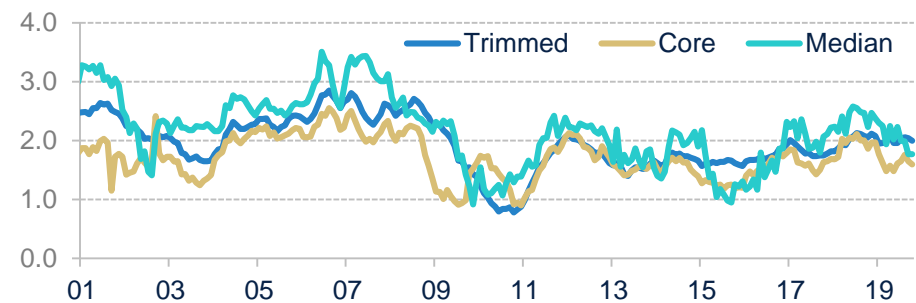
MARKET INFLATION EXPECTATIONS

%



PCE INFLATION

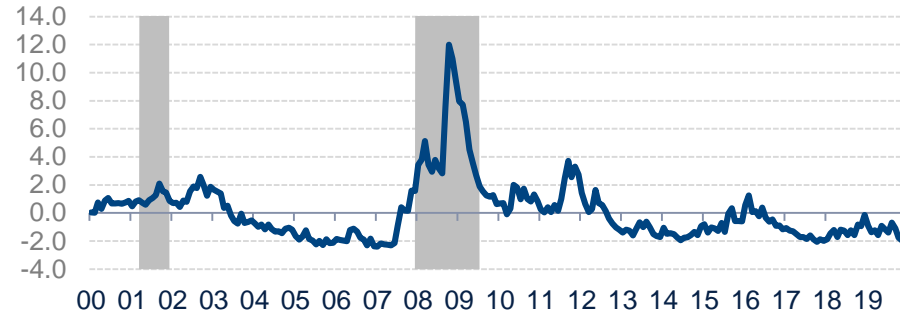
12M % CHANGE



Global Conditions

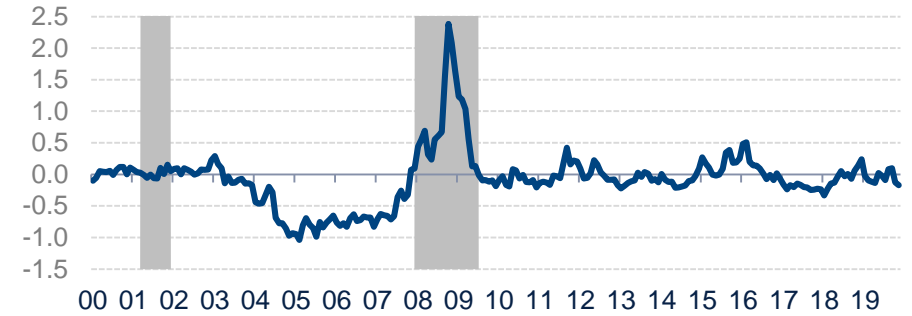
ADVANCED ECONOMIES FINANCIAL STRESS

0=AVERAGE STRESS LEVEL



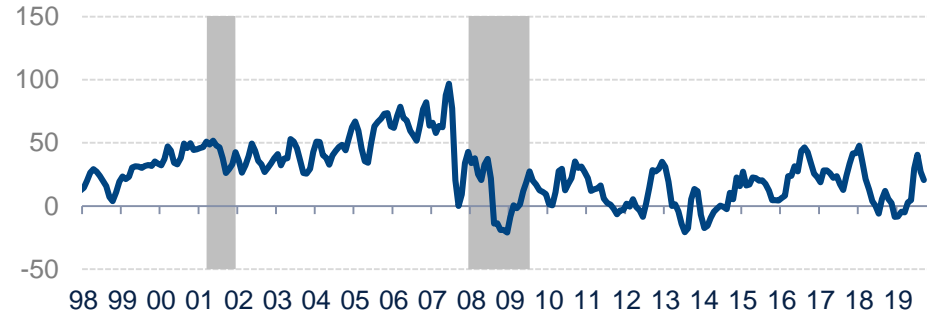
EMERGING MARKETS FINANCIAL STRESS

0=AVERAGE STRESS LEVEL



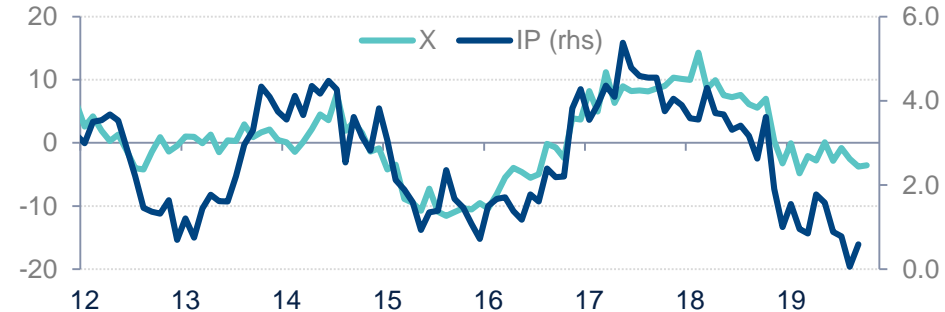
NET FOREIGN PURCHASES OF U.S. SECURITIES

US\$BN, 3MMA, EXCLUDING OFIS AND INT'L ORGANIZATIONS



GLOBAL EXPORTS AND INDUSTRIAL PRODUCTION

YOY % CHANGE, EX. U.S.



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Contact Us:

bbvaresearch_usa@bbva.com

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