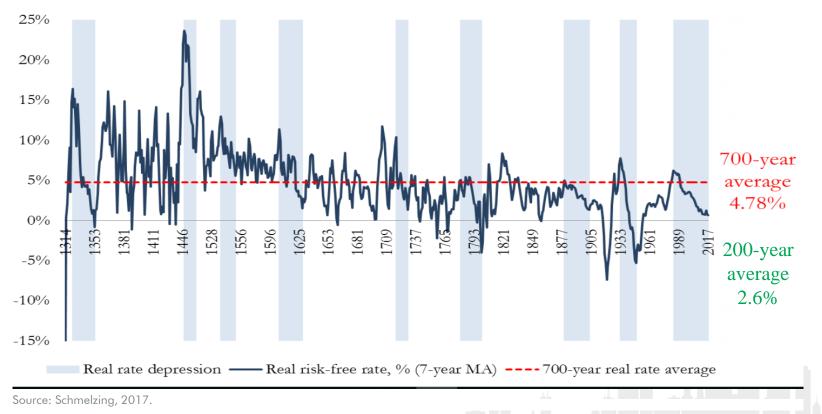


Interest rates in the ultra-long run

CBRE ECONOMETRIC ADVISORS CLIENT FORUM

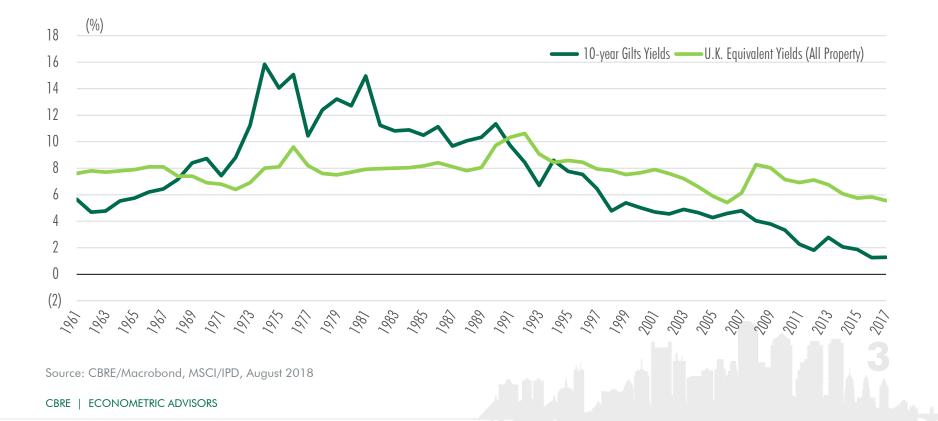
NEIL BLAKE, PHD | EMEA CHIEF ECONOMIST, GLOBAL HEAD OF FORECASTING RICHARD BARKHAM, PHD MRICS CRE | GLOBAL CHIEF ECONOMIST

REAL LONG-TERM INTEREST RATES SINCE 1311

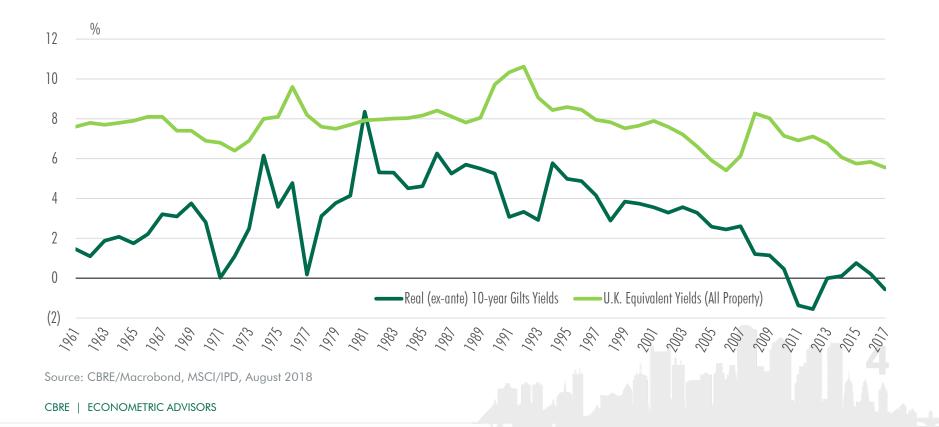


CBRE | ECONOMETRIC ADVISORS

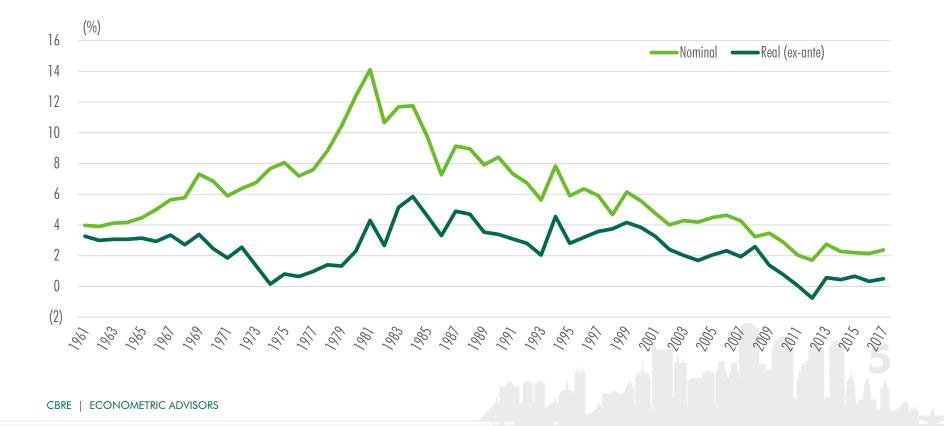
UK OFFICE YIELDS AND NOMINAL LONG-TERM INTEREST RATES



UK OFFICE YIELDS AND REAL LONG-TERM INTEREST RATES



REAL AND NOMINAL YIELDS ON 10-YEAR U.S. TREASURY BONDS

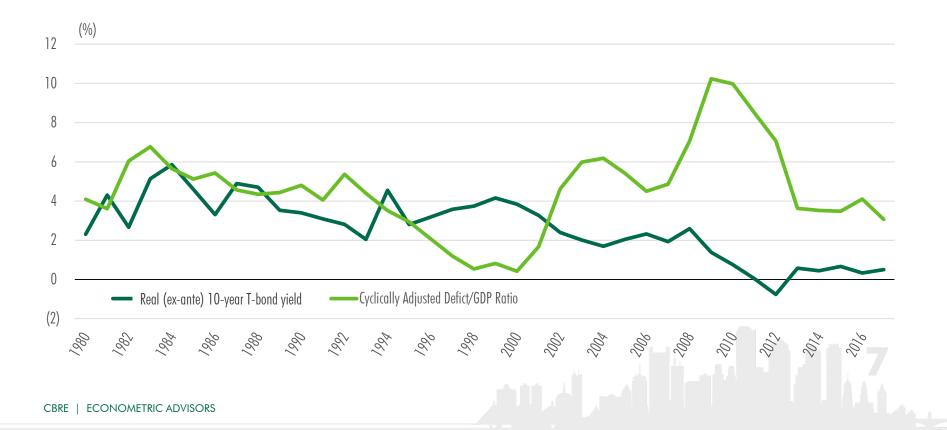


APPROACH

LOOK AT:

- INFLATION (ADAPTIVE EXPECTATIONS)
- GDP GROWTH
- DEMOGRAPHICS
- QUANTITATIVE EASING
- RISE OF CHINA
- INCREASE IN HIGH NET WORTH INDIVIDUALS
- FALLING PRICE OF INVESTMENT GOODS
- GOVERNMENT DEFICITS

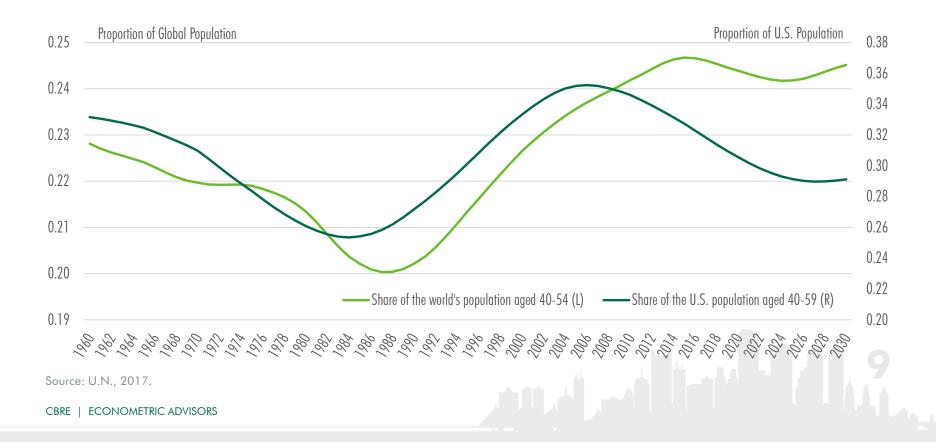
U.S.: REAL INTEREST RATES VS. THE BUDGET DEFICIT



REAL 10-YEAR U.S. TREASURY BOND YIELDS AND DEMOGRAPHICS



COMPARATIVE DEMOGRAPHIC SHARES



REAL LONG-TERM INTEREST RATES

| | U.S. | U.K. | Germany |
|---------------------|------|------|---------|
| end-2017 | 0.5 | -0.5 | -0.8 |
| 2028 | | | |
| CBRE analysis | 0.9 | 0.5 | 0.2 |
| "Consensus" | 1.6 | 1.4 | 1.0 |
| Full Normalization* | 2.4 | 3.1 | 2.7 |

assumes a 50% reversal of QE from end-2017

*Full normalization is defined as interest rates returning to their 2000-2007 average.

Source: CBRE, August 2018; Consensus Economics, April 2018.

NOMINAL LONG-TERM INTEREST RATES

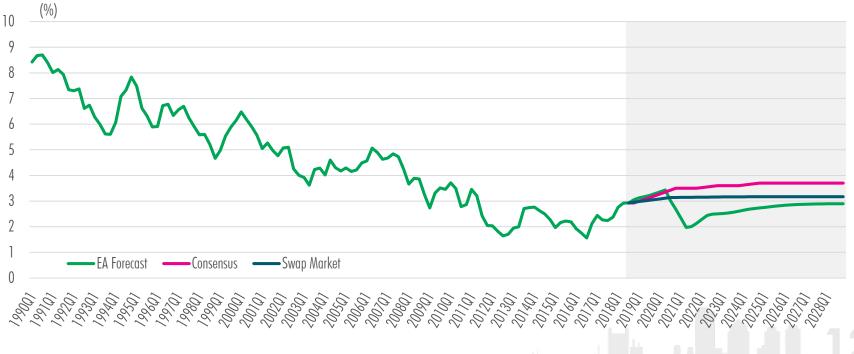
| | U.S. | U.K. | Germany |
|---------------------|------|------|---------|
| end-2017 | 2.4 | 1.3 | 0.4 |
| 2028 | | | |
| CBRE analysis | 2.9 | 2.5 | 2.0 |
| "Consensus" | 3.7 | 3.5 | 2.8 |
| Full Normalization* | 4.5 | 4.7 | 4.3 |

assumes a 50% reversal of QE from end-2017

*Full normalization is defined as interest rates returning to their 2000-2007 average.

Source: CBRE, August 2018; Consensus Economics, April 2018.

YIELD ON 10-YEAR T-BILLS – THE TEN YEAR FORECAST



Source: CBRE EA; Consensus Economics, April 2018; Macrobond.

CBRE | ECONOMETRIC ADVISORS

SUMMARY

• It's all about demographics and the savings-investment balance.

But

• That doesn't mean we've seen the end of the cycle in long-term interest rates.



THANK YOU

CBRE ECONOMETRIC ADVISORS CLIENT FORUM