

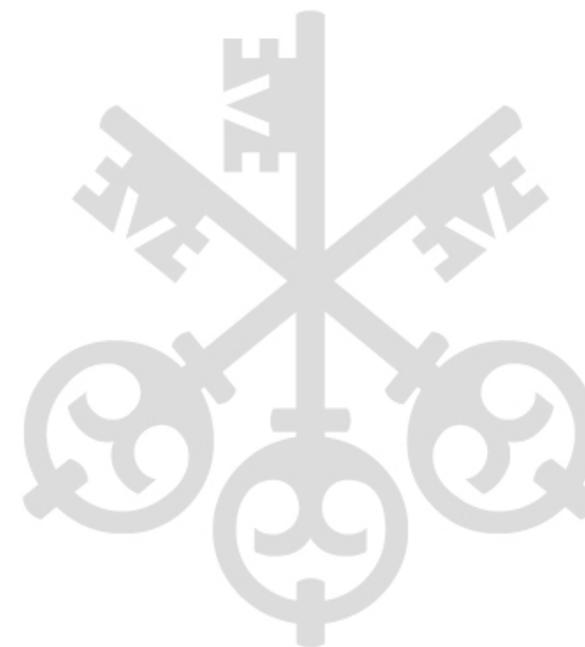
ULI UK Annual Conference

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Global Housing - Context

- Global real GDP growth back to just above its long run average
- DM credit growth running at a quarter of its pre-crisis pace (less borrowing capacity is less purchasing power)
- The debt super-cycle
- Labour markets continue to heal (more jobs + higher wages = more purchasing power)
- Extraordinary central bank accommodation + a very cautious exit (lower rates = better affordability)
- Global housing markets in perspective

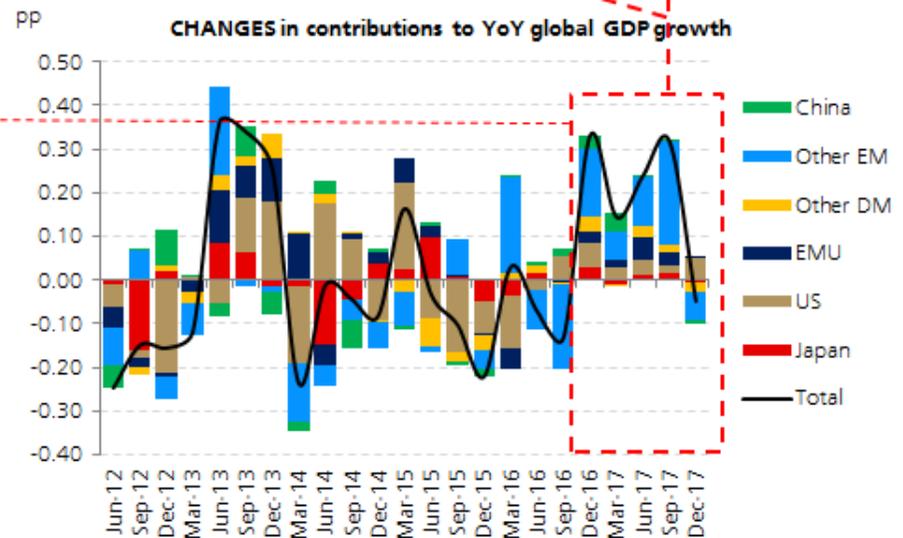
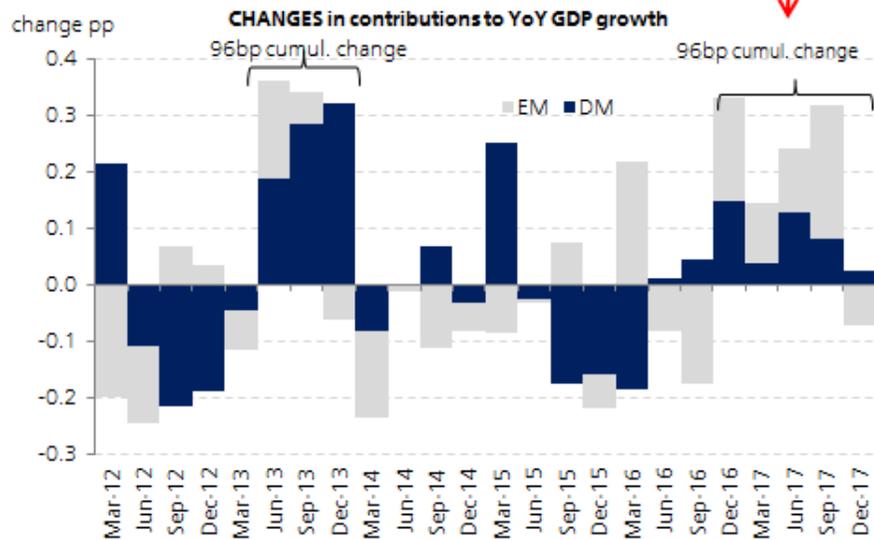
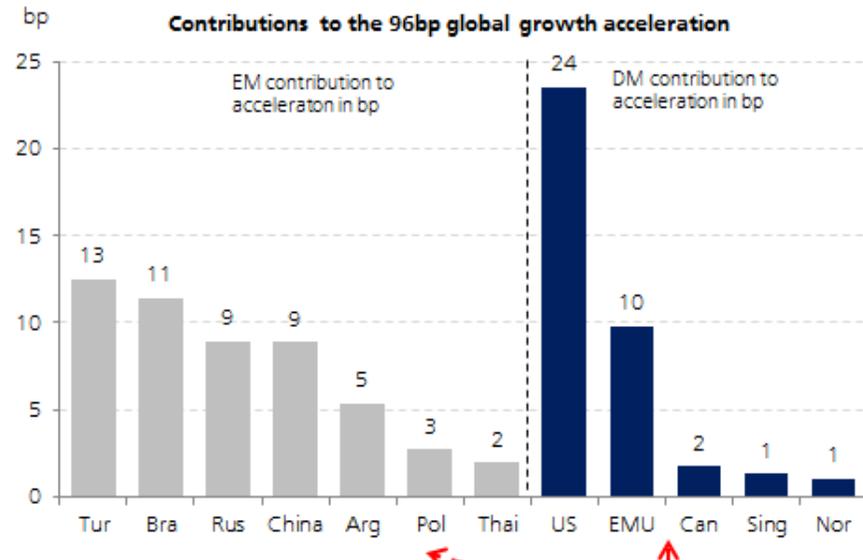
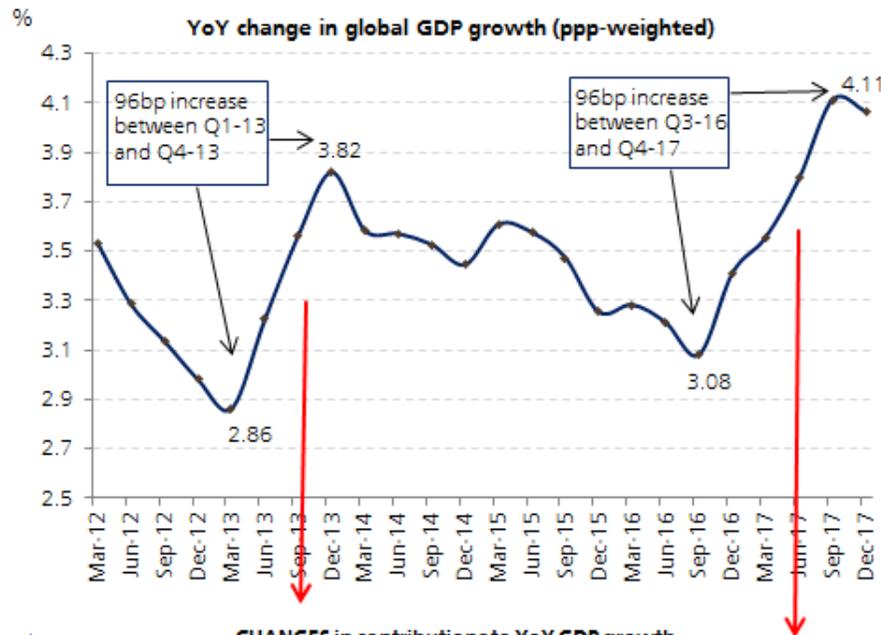
Global Growth is back to slightly above its long run average

Global growth over the last 50 years has averaged 3.7% (PPP-weighted) and in 2017 was back up to 3.9%. Consensus is for growth to increase further to about 4.1% this year and then to edge down to 4% in 2019. The stable long run average hides the shifting weight of developed markets (DM) vs emerging markets (EM). In the mid 1990s DM contributed 60% of global growth; today it contributes only 25%).



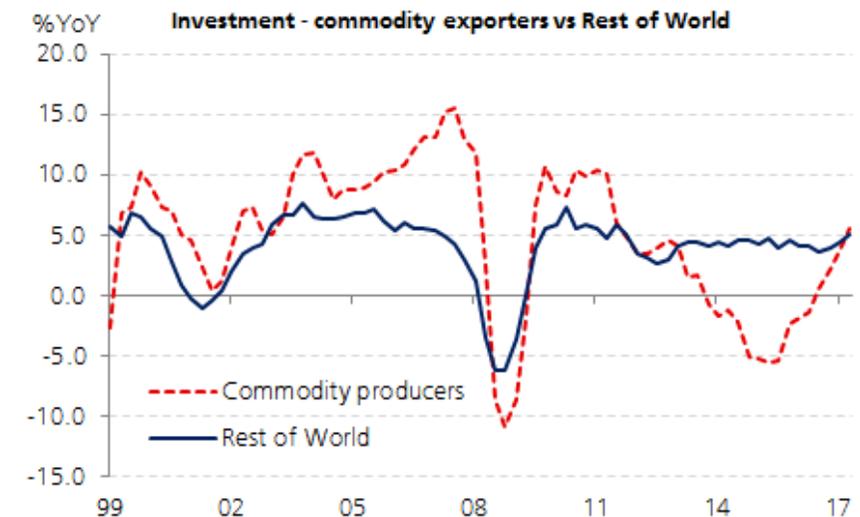
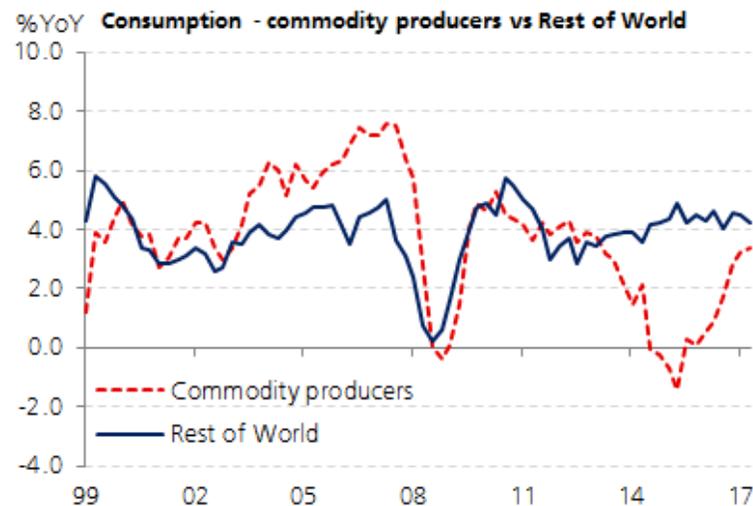
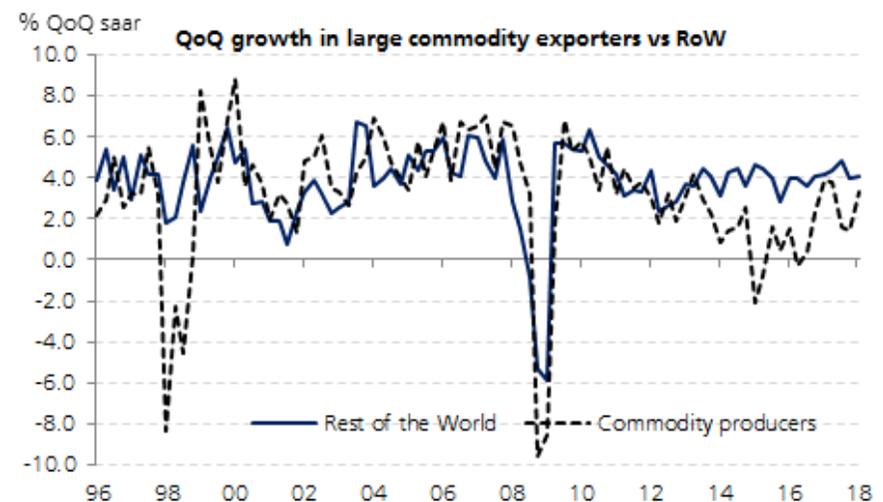
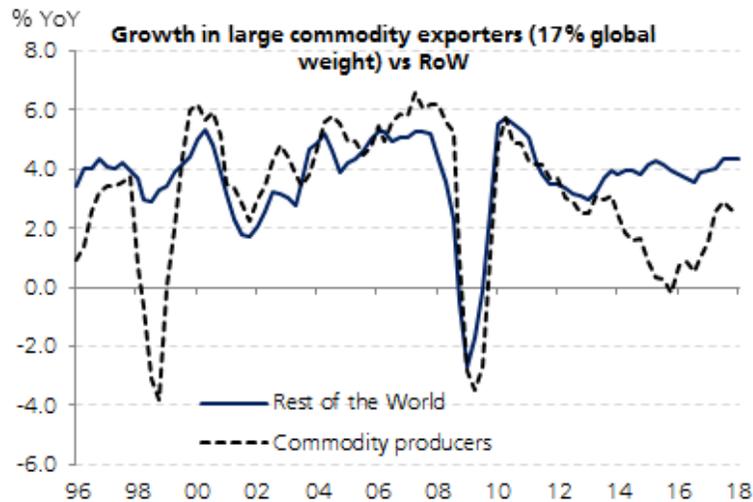
Source: IMF, Haver, UBS calculations

The recent acceleration is largely (60%) driven by emerging markets and about 80% by EM/commodities



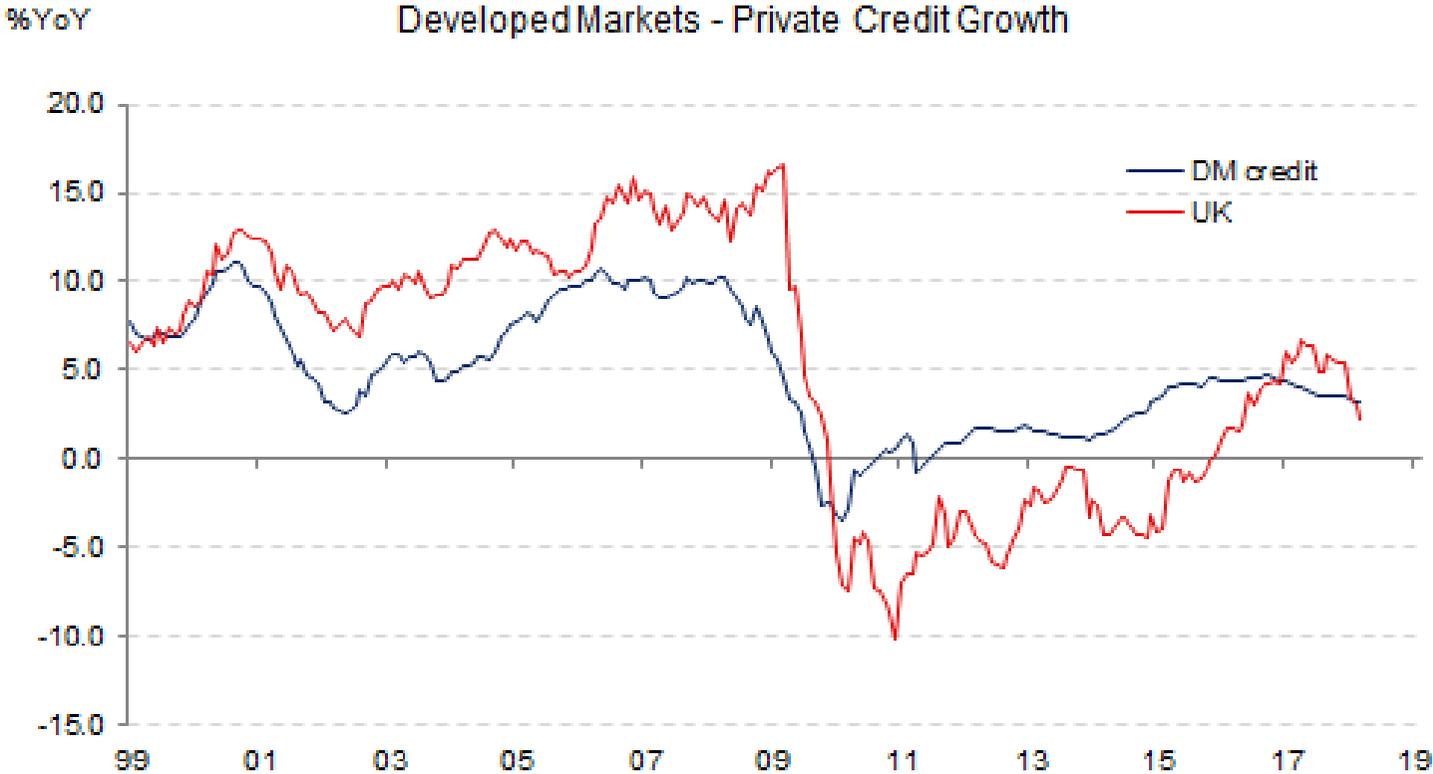
Most of the recent volatility in growth, inflation and trade has come from commodities

Chart shows real GDP growth (PPP weighted) split into large commodity exporters (>40% of exports in fuel, metals or food) and everyone else.



Developed Markets – Private Credit Growth YoY

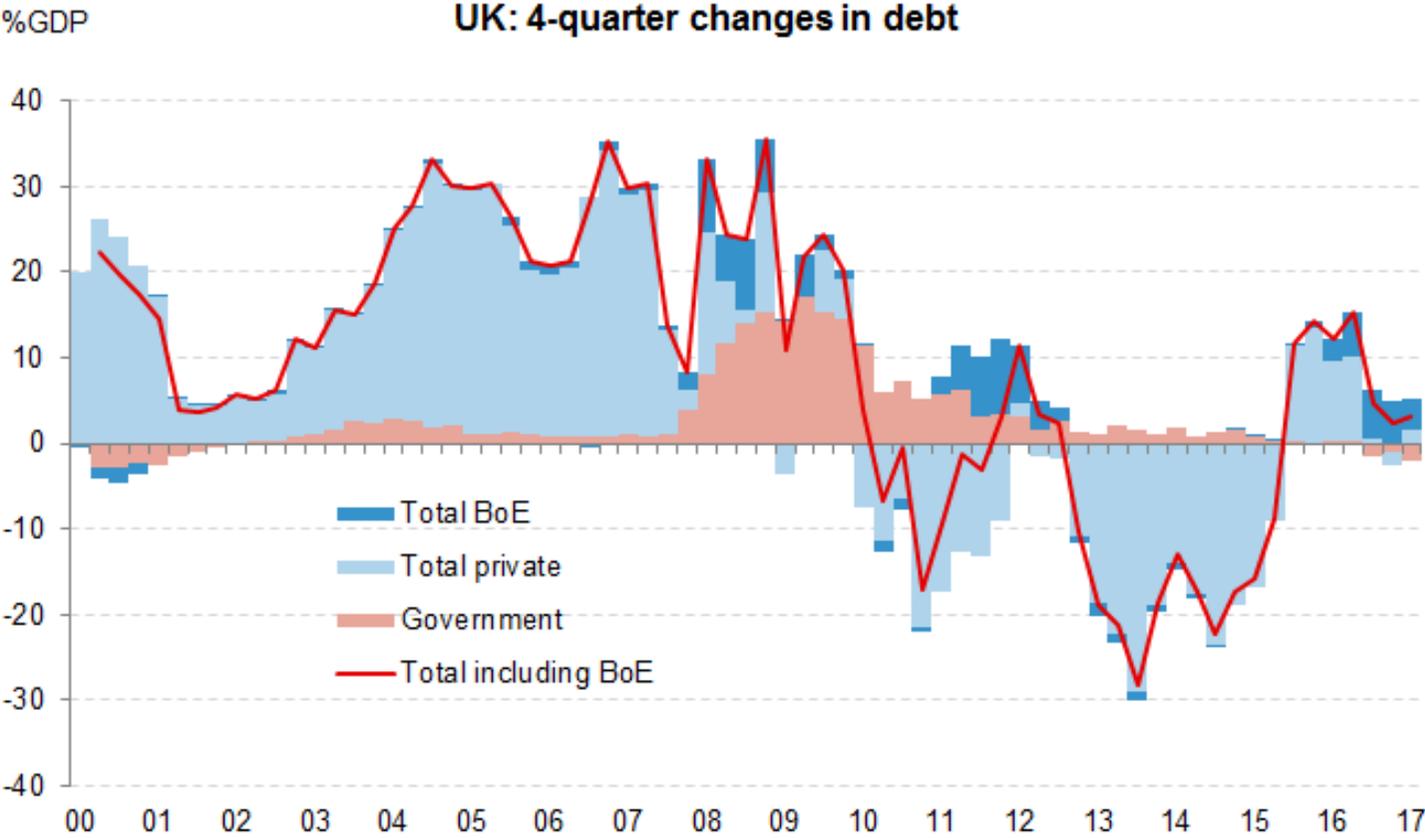
The UK has gone from having above average private credit growth pre-crisis to below average credit growth post-crisis. DM as a whole has averaged 2.2% YoY credit growth the last 8 years (since Jan-2010) compared to 7.7% in the 8 years prior to the Global Financial Crisis. The equivalent UK numbers are +11.5% vs -1.6%.



Source: Haver, UBS

Why has credit growth been low? The debt-supercycle.

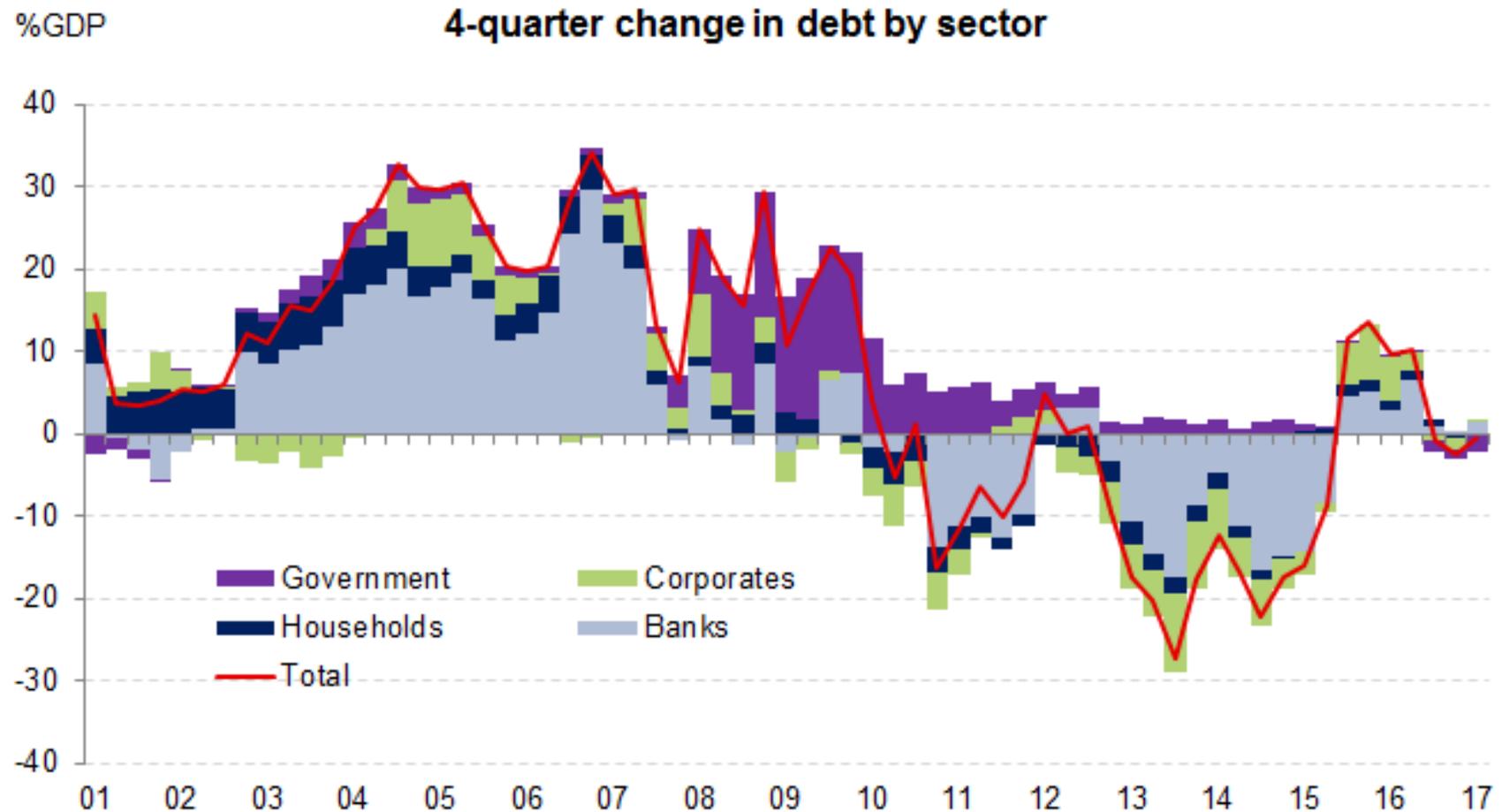
This chart shows 4-quarter changes in debt (as a % of GDP) by sector in the UK. The chart looks similar to that for DM as a whole. A massive build-up of debt prior to 2008 goes into reverse the last 8 years. It just so happens that by mid-2016 (around the time of the EU referendum) this process had run its course, helping buffer the UK economy.



Source: BIS, IMF, Haver, UBS

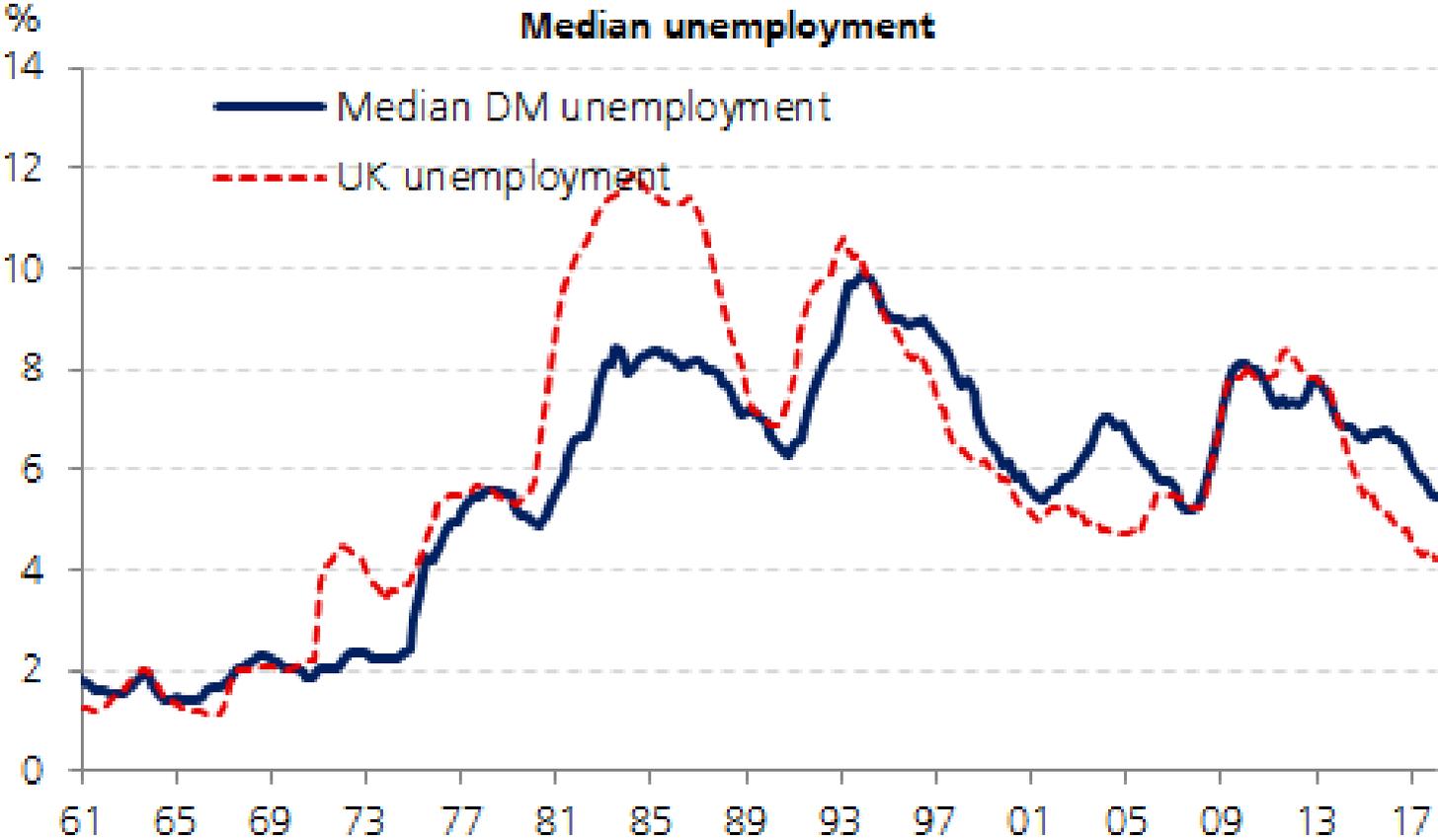
Same slide – but now by borrowing sector

The bulk of the pre-crisis debt build-up was with the banks (wholesale, external and interbank funding to leverage up the balance sheets and extend credit). The timing of the post-crisis deleveraging roughly follows regulatory reform.



Source: BIS, IMF, Haver, UBS

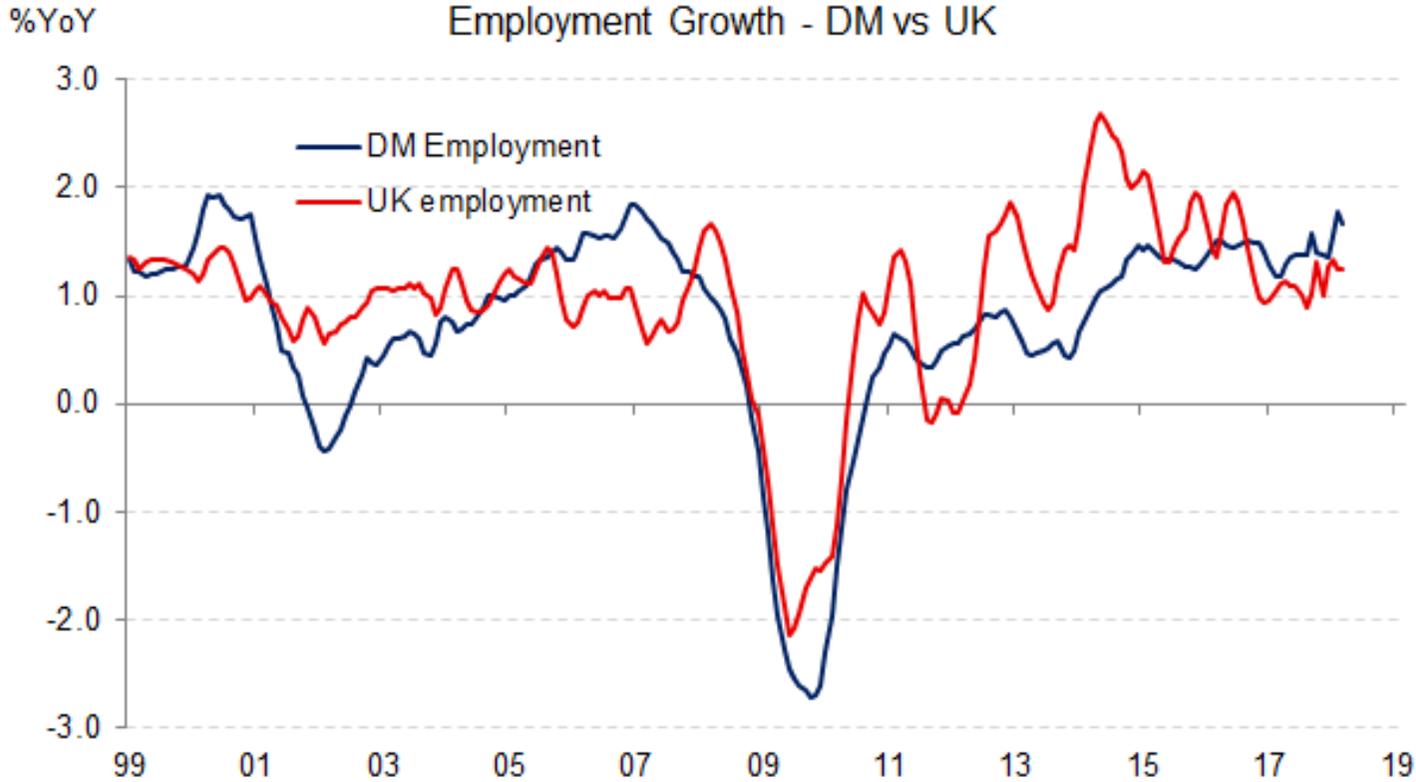
UK unemployment is back at the lowest level since the early 1970s



Source: Haver, UBS

Developed Markets – Employment Growth

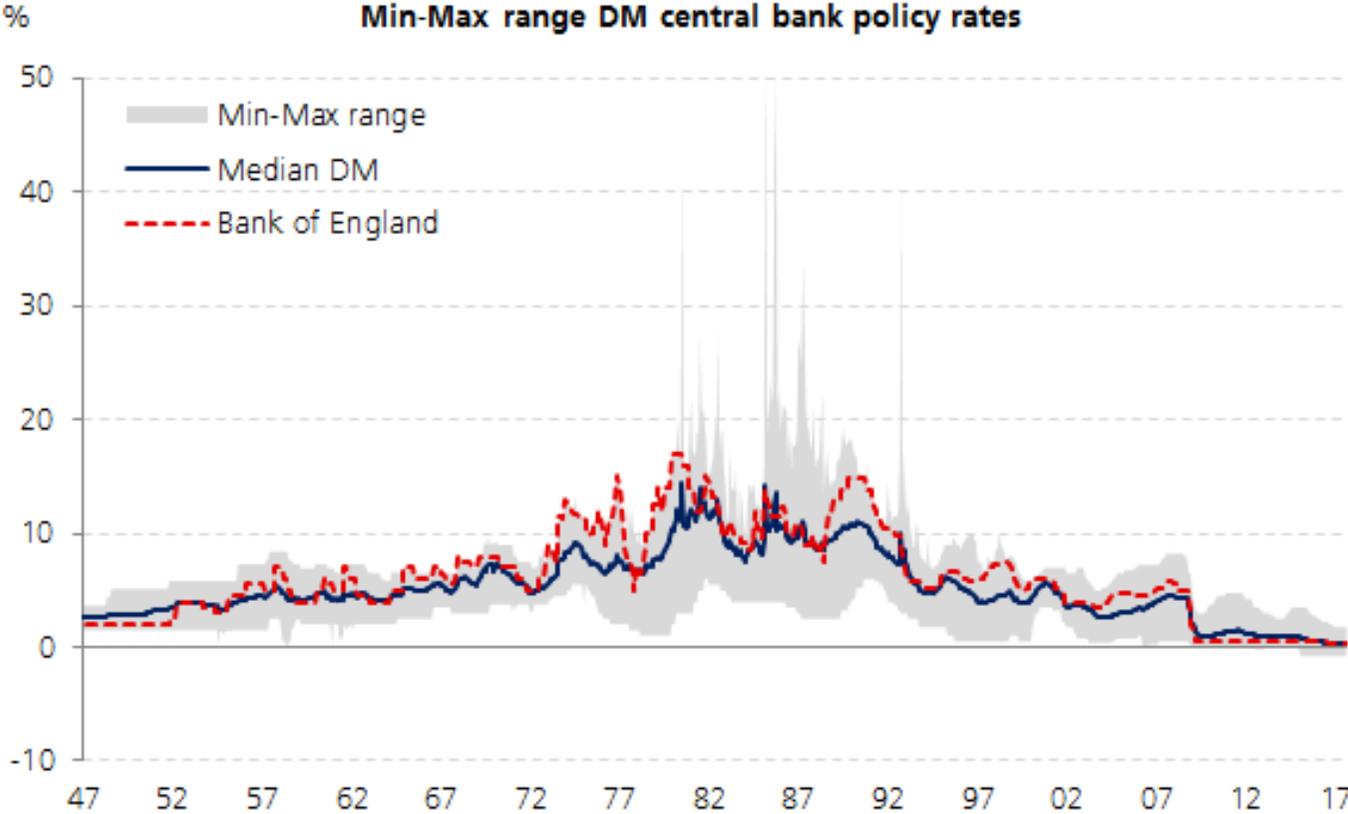
The mirror image of unemployment declining is strong employment growth. We are starting to run out of slack but wage growth remains subdued.



Source: Haver, UBS

DM Policy rates are still sitting near all time low levels and the Min-Max range is the lowest since the late 1940s

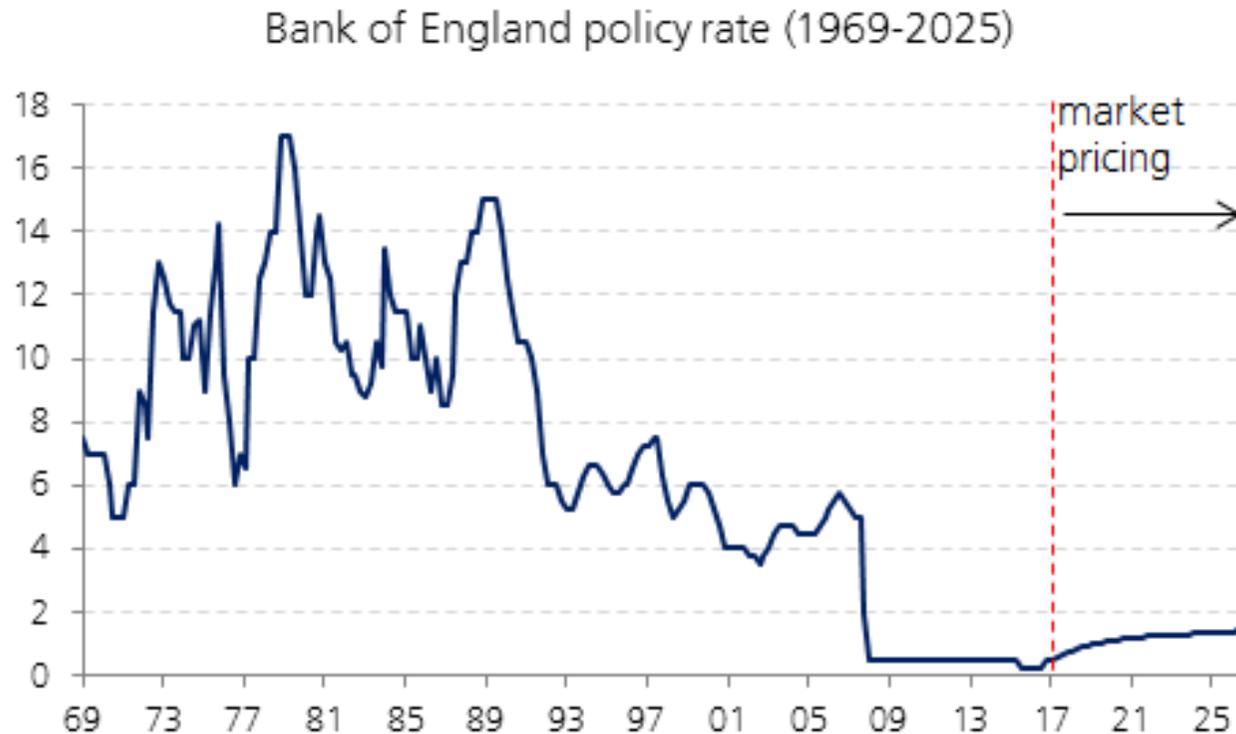
Inflation is starting to slowly increase, allowing for a (very) gradual normalization of DM policy rates.



Source: BIS, IMF, UBS calculations

And the market prices this to be the slowest hiking cycle ever during an expansion

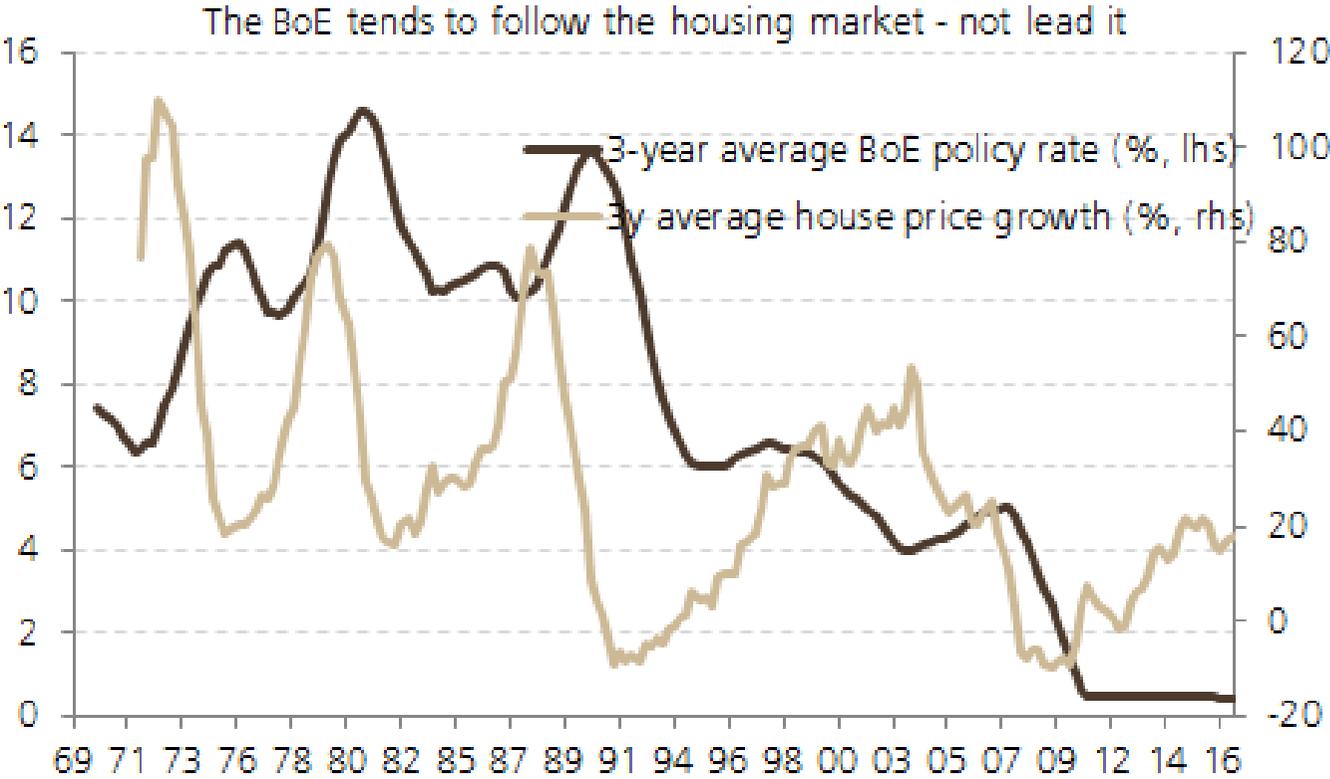
This is true globally. The Federal Reserve, which is furthest along the policy rate normalization path is raising rates at half the pace of the slowest hiking cycle ever. The chart below is for the Bank of England. The market prices the policy rate to increase only 75bp over the next 5 years (from 0.5% now to 1.27% mid-2023) on a combination of subdued growth, low inflation and Brexit related uncertainty.



Source: BIS, IMF, UBS calculations

In any event, the Bank of England seems to follow the housing market rather than the other way around

The Bank of England historically seems to have followed the housing market with roughly an 18 month lag (that lag maximizes the correlation between the two and causality runs from housing to central bank policy; not the other way around).



Source: BIS, Haver, UBS calculations

Recap

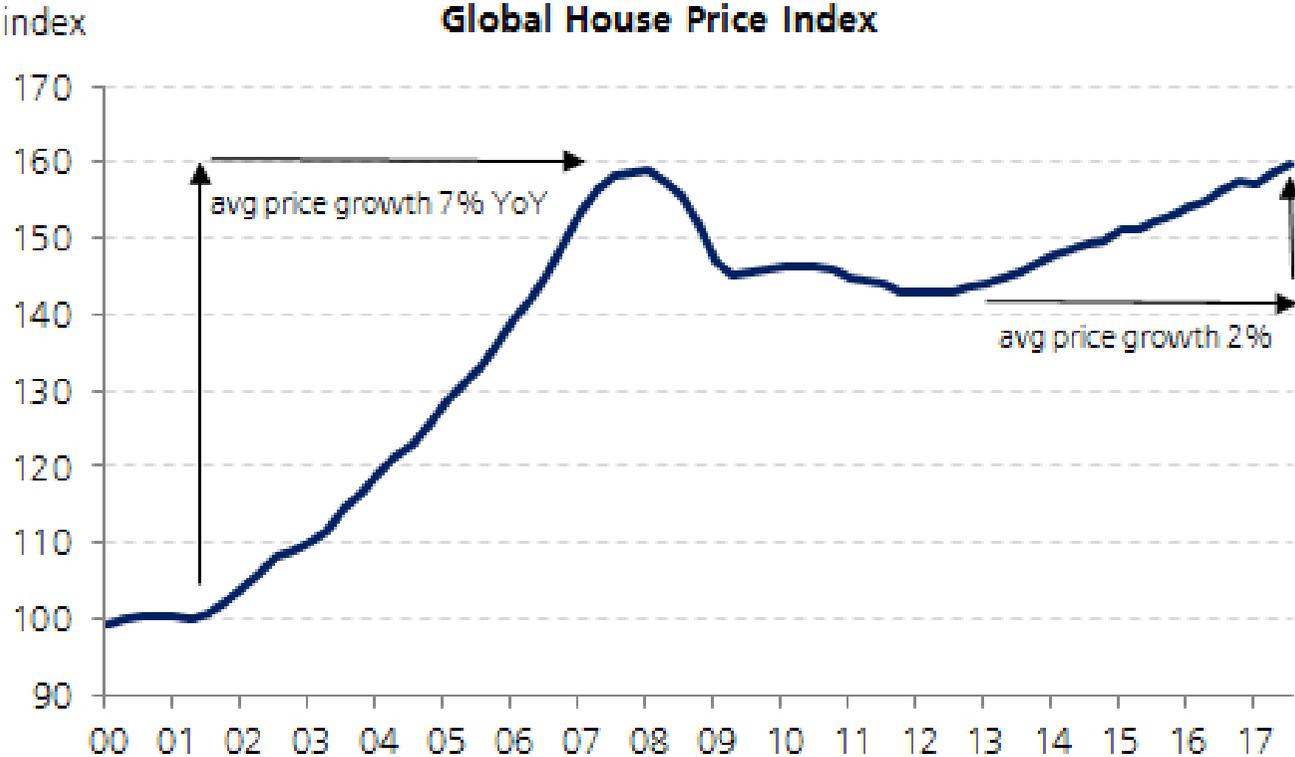
Generally a pretty benign macro-outlook for housing markets:

- Slightly better than average growth.
- Rapidly healing labour markets (but still generally subdued wage growth)
- Credit growth lower than pre-crisis, but slowly edging higher as bank balance sheets are healthier
- Interest rate historically low and expected to remain so for a while. Central banks extraordinarily cautious.

How have those factors impacted global housing prices?

Global House Price Index

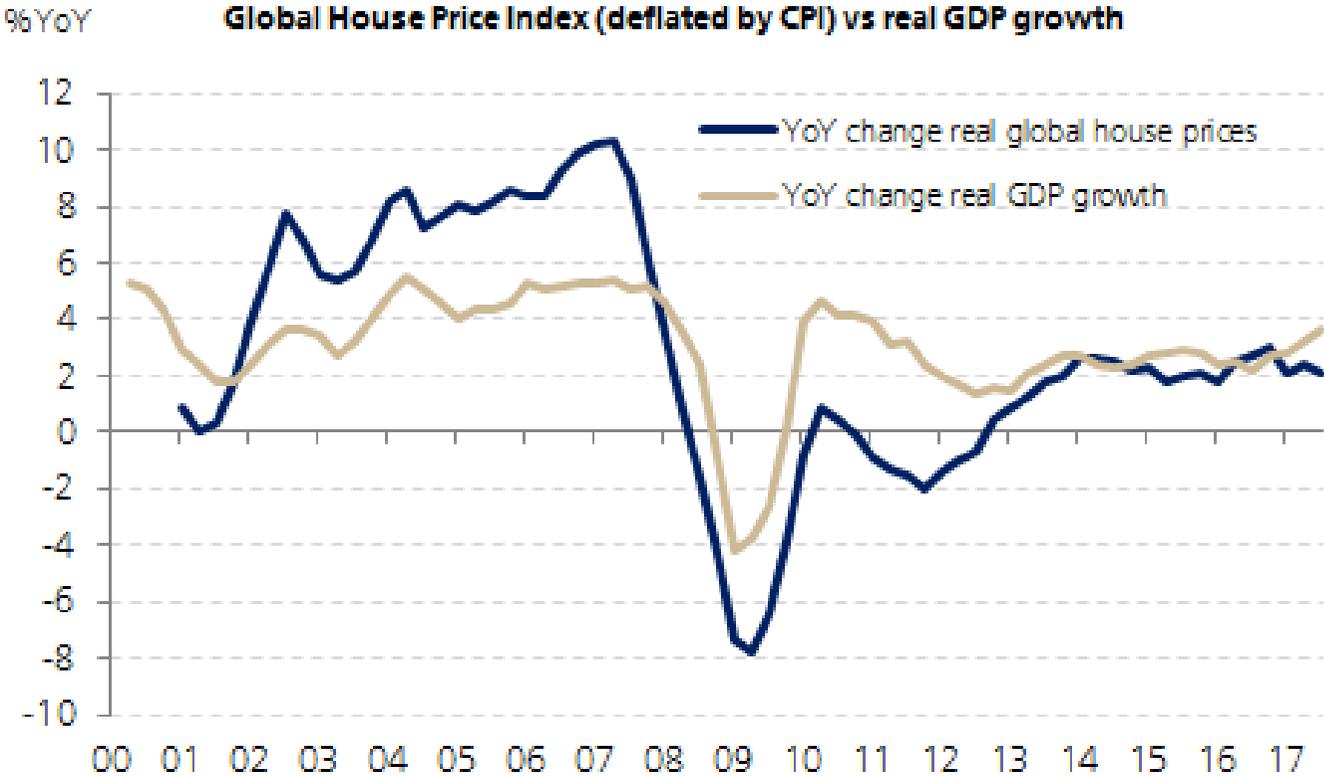
Simple average (unweighted).



Source: IMF, UBS

Global House Price Index vs Global GDP

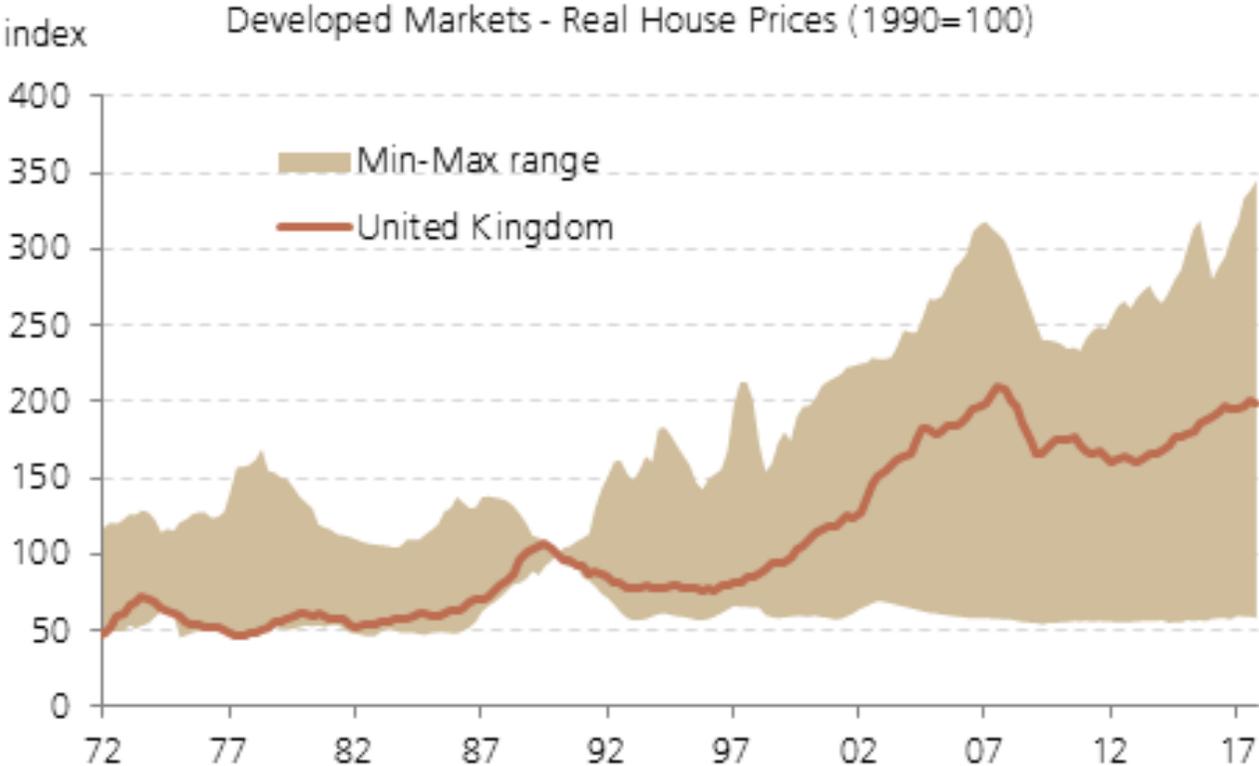
Both simple average rather than weighted.



Source: IMF, UBS

Developed Markets – Real House Prices (1)

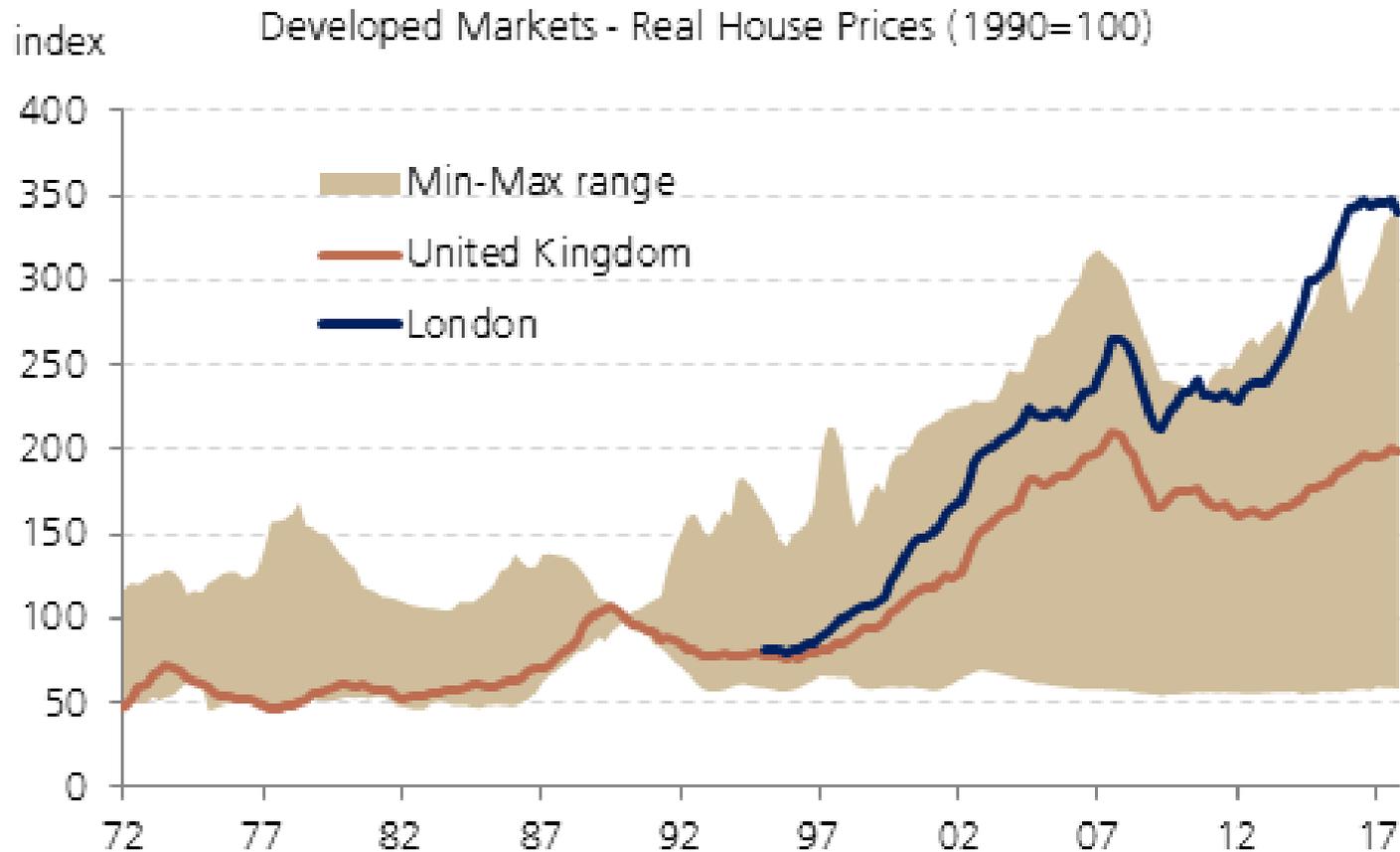
This chart shows the min-max range of an index of 20 developed economies since 1970 (1990=100; nominal house prices are deflated by CPI to normalize across countries). The UK between 1970-1989 was on average in the 13th lowest percentile among developed markets; since then it has climbed up to the 47th percentile.



Source: Haver, BIS, UBS calculations

Developed Markets – Real House Prices (2)

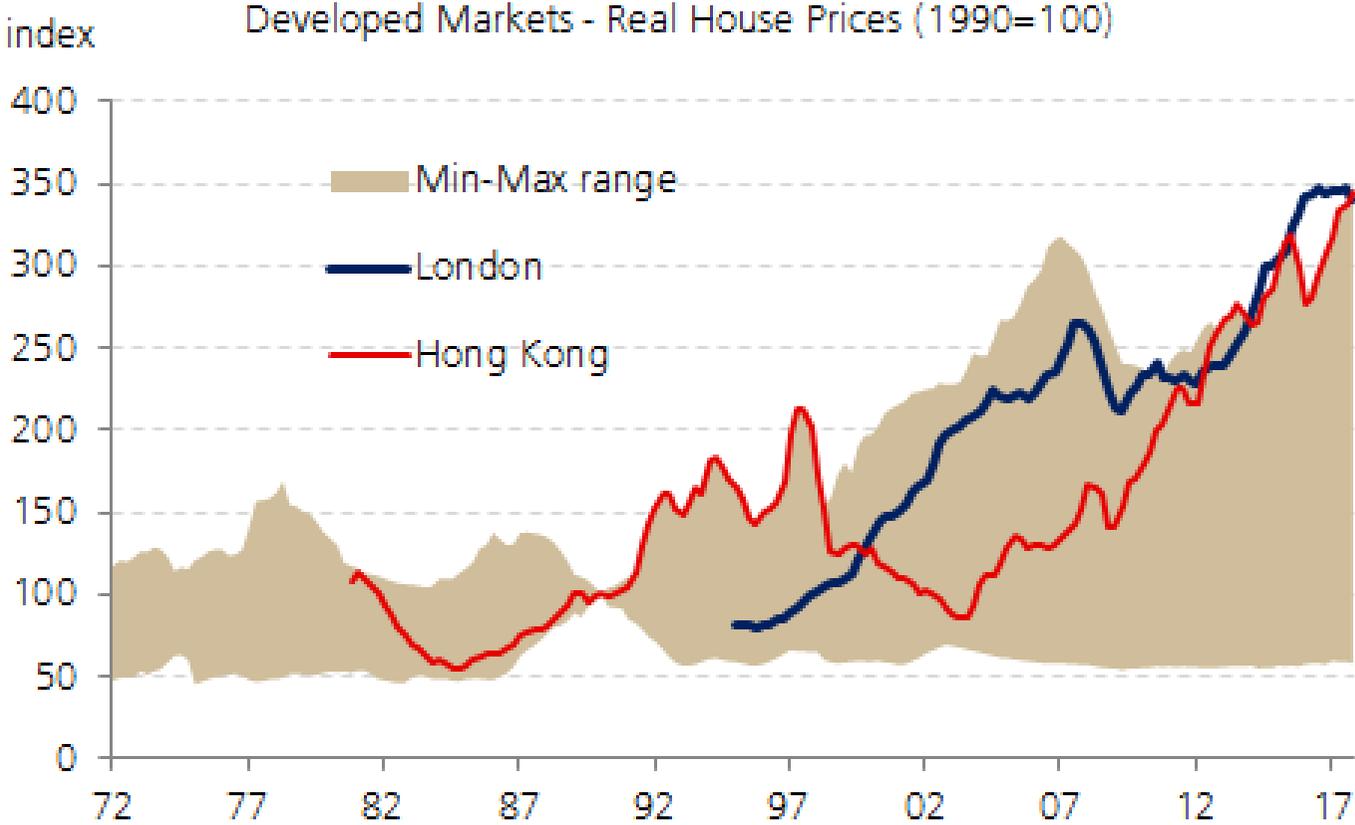
Same chart but now with London shown separately. If London were a country it would have registered 350% real house price growth since 1990 (more than any other developed market).



Source: Haver, BIS, UBS calculations

Developed Markets – Real House Prices (3)

Same chart but now with Hong Kong and London.



Source: Haver, BIS, UBS calculations

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