U.K. Brexit: Watch The Tail Risks

- We expect the U.K. to vote to remain within the European Union. However, there are four major Brexit-related risk factors that investors need to keep in mind heading into tomorrow's referendum.
- A vote to "leave" would result in non-trivial trade-related drags for both the U.K. and its trading partners, especially the euro area. The U.K. economy will need to deflate and/or devalue its way back to competitiveness.
- A Brexit outcome would significantly heighten uncertainty for households and businesses, causing a notable retrenchment in spending. Conversely, a vote to "remain" will unleash some pent-up demand that has been built up this year.
- A major concern is that the U.K. economy is littered with excesses (including a housing and credit bubble) and cannot withstand much of an adverse shock. These imbalances will eventually erupt, but Brexit could make the day of reckoning imminent.
- A deleveraging cycle could create strains for the U.K. banking system, which is too big to fail, but also too big to bail out. This will have global ramifications.

Global investors are closely watching as the U.K. votes this week on its continued membership within the European Union (EU). While the polls are tight, betting odds (which had a better track record of predicting U.K. political events in 2015) favor the "remain" camp (**chart 1**). This is encouraging, given that Brexit would be a policy mistake (one that is not easily reversed) and damage the U.K. economy, equities and pound. There are also contagion risks for the global economy and capital markets, given that London is a major financial center. The threat is elevated in the current backdrop as the global economic expansion is sluggish and the world is attempting to digest the unwinding Commodity Supercycle and rebalancing efforts in China.

The U.K. is a core element of our research coverage. We provided a thorough analysis and outlook for the economy and domestic asset markets in our February 25 ***MRB U.K. Report***[1]. In a three-part ***MRB Theme Report***[2] earlier this month, we evaluated the effectiveness and likely evolution of U.K. policy in either Brexit outcome. The objective of today's ***MRB Research Highlight*** is to reiterate some crucial points for clients immediately ahead of the vote.

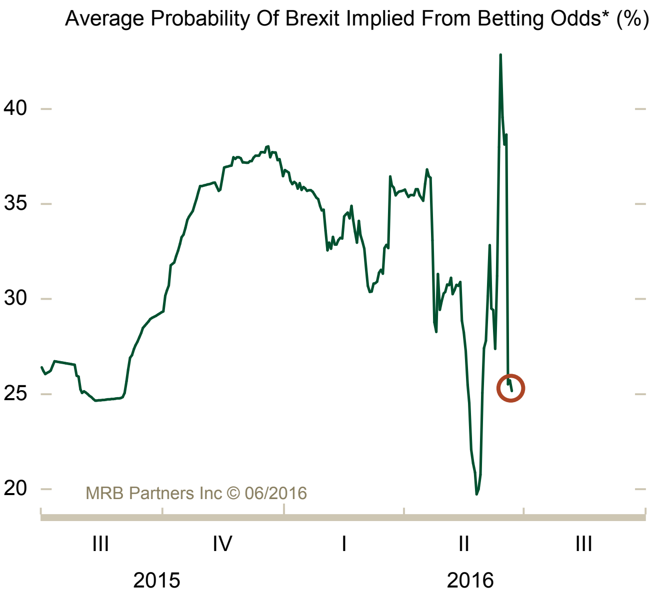
Brexit would be a policy mistake that cannot be easily reversed

There are four major Brexit-related risk factors for the U.K. (and potentially global) economy. These include two direct threats: the reduction in trade, and the potential for heightened risk aversion that causes a retrenchment in economic activity. There are also two indirect threats: the bursting of the U.K. housing and credit bubbles, and the potential for banking system strains. The direct risk factors have a greater likelihood of rapidly

[1] **MRB *U.K. Report***, "***U.K.: Limited Room To Maneuver***", February 25, 2016

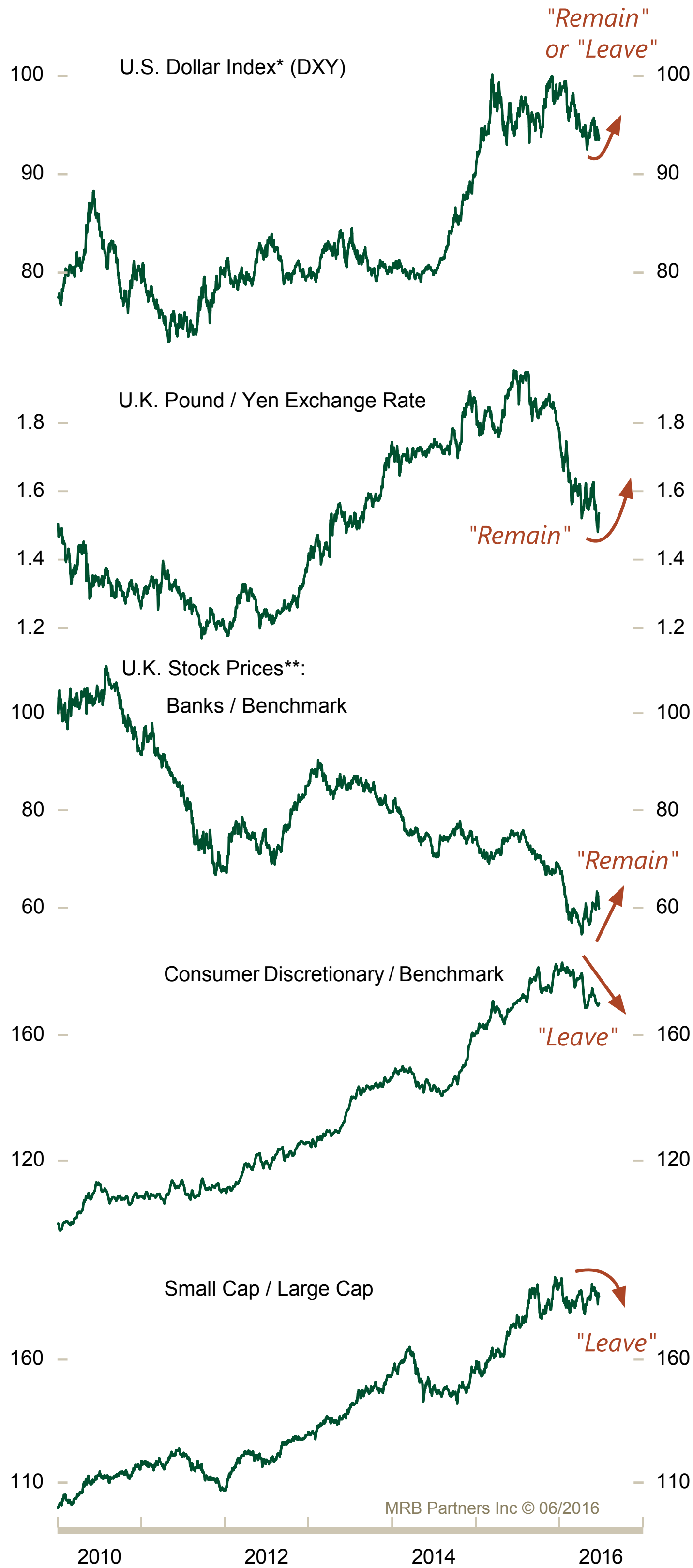
[2] **MRB *Theme Reports***, "***Reflating A Deleveraging World (Part I): Understanding Monetary Policy***", June 9, 2016, "***Reflating A Deleveraging World (Part II): Breaking The Liquidity Trap***", June 1, 2016 and "***Reflating A Deleveraging World (Part III): Regional Assessment***", June 15, 2016

Chart 1 **Betting Odds Favor "Remain"**



* Sources: Bloomberg and Oddschecker

Chart 2 **MRB's Favored Brexit Vote Positions**



* Source: Bloomberg
** Rebased; source: MSCI

unfolding, but the indirect risk factors are also probable and could create much more economic damage. The latter are also likely to ***eventually*** come home to roost regardless of this week's vote result. It is merely that a Brexit would threaten to trigger a crisis much sooner.

Our base-case scenario is that the "remain" camp will prevail. However, last Friday's ***MRB Weekly Macro Strategy Report*** outlined the major shifts in global asset allocation that we plan to make in the event of a "leave" vote. Likewise, last Thursday's ***MRB Strategic Trader Report*** provided recommended changes for absolute return investors, as well as some opportunities for those looking to make an explicit Brexit bet heading into the referendum (**chart 2**). In line with our base case, our top speculative "remain" trade is to buy U.K. bank stocks funded in Japanese yen[3]. This Friday (following the vote results) we will provide our latest thoughts and outline any further shifts in investment strategy.

Risk #1: Reduction In Trade

- The U.K. economy, exports and financial sector have benefited from membership in the EU and would not

[3] We will add the position to the **MRB *TradeBook***, but recommend a tight 2% stop-loss, which means you may have to use instruments also traded in Asia.

be their current size without it. Although difficult to quantify, some shrinkage will occur.

- The EU countries account for almost 45% of U.K. exports (**chart 3**). Disrupting trade agreements with the region is a major economic threat. Higher barriers or tariffs to trade would weaken competitiveness of the U.K. economy. Note that leaving the EU would also require trade agreements with other economies to be renegotiated, creating uncertainty for exporters for a number of years.

- The U.K. export sector does not have a strong competitive starting point. The IFO Institute's survey indicates that the U.K. economy is chronically less competitive than the U.S. or Germany (**chart 4**). Unit labor costs have risen much more rapidly and productivity growth has been considerably weaker (**chart 6**). As a result, the U.K. runs a persistent current account and trade deficit.

- Wages would have to deflate and/or the pound would have to depreciate substantially from current levels in order to provide the offset and restore competitiveness in the event of Brexit.

Chart 3 **The European Union Is A Major Export Market For The U.K.**

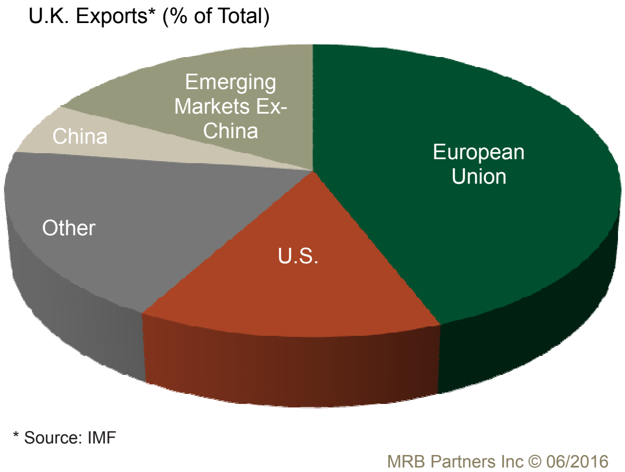
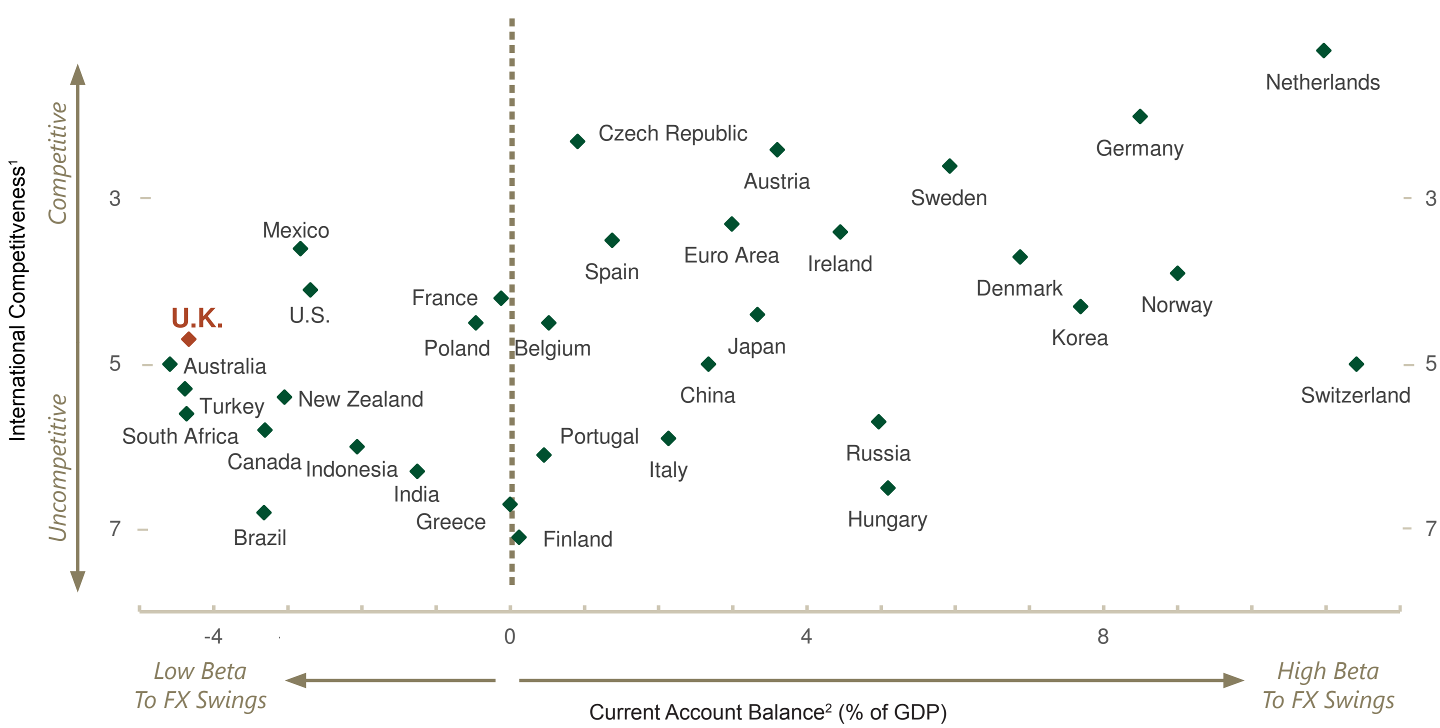


Chart 4 **The U.K. Is Not Starting From A Competitive Position**



[1] Survey ranges from 1 to 9; source: IFO Institute
[2] Source: IMF

Chart 5 A Weak Pound Will Push Up Consumer Prices

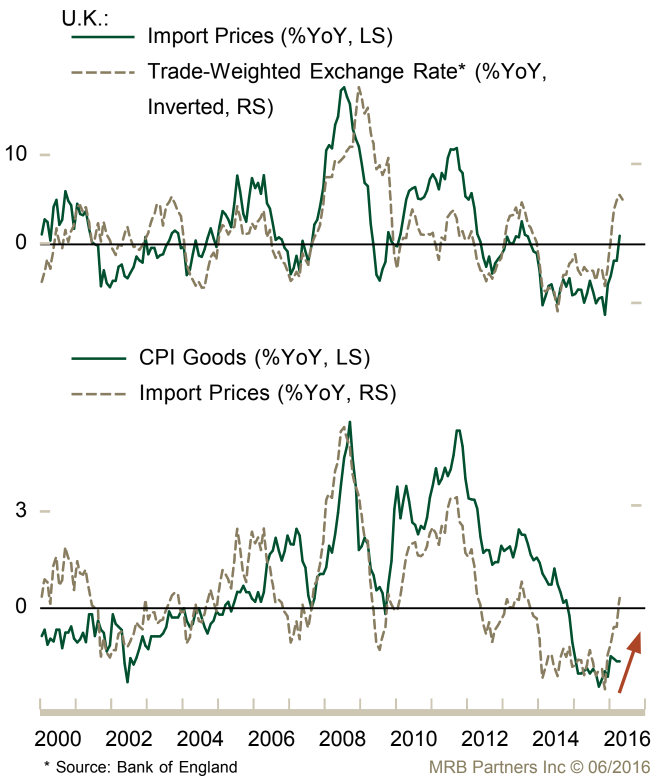
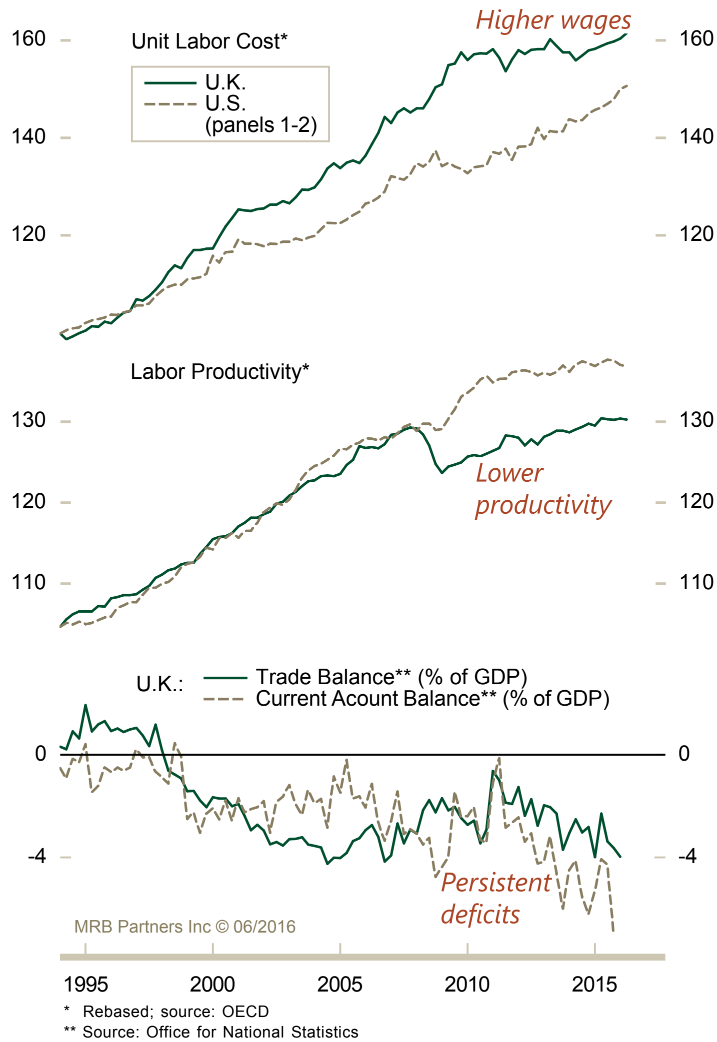


Chart 6 U.K. Business Sector Lacks Competitiveness



- Greater trade frictions and a weaker pound will also put upward pressure on CPI inflation, despite weakening growth (**chart 5**). We expect that deflationary pressures will ultimately prevail, but there could be a whiff of stagflation in the interim, limiting support from lower Gilt yields.

- The U.K. also accounts for a significant portion of EU exports, which would weaken in a Brexit scenario and present an additional headwind to the global economy.

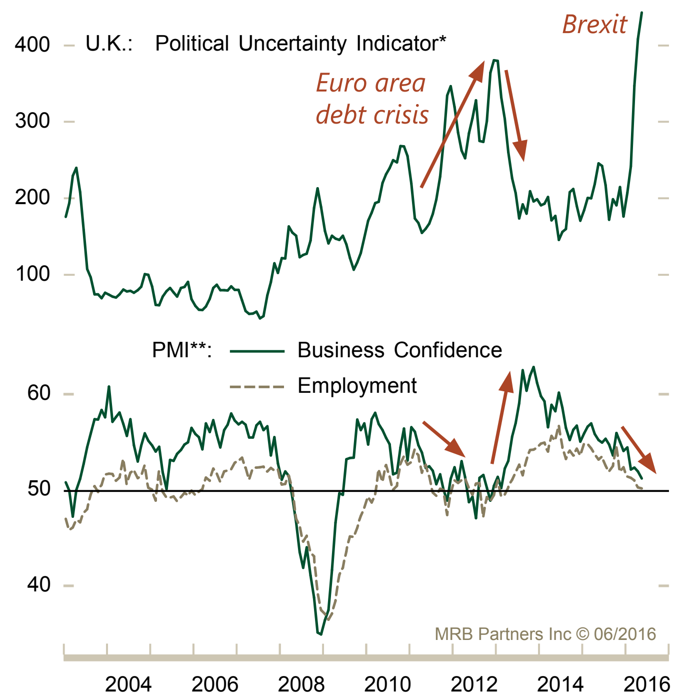
The pound will weaken substantially in a Brexit scenario

Final Word: *The direct trade-related economic drags resulting from Brexit are hard to quantify in isolation, but are likely to be non-trivial. The economy will need to either deflate or devalue its way back to competitiveness. Either way, a portion of national wealth will evaporate.*

Risk #2: Risk Aversion & Retrenchment

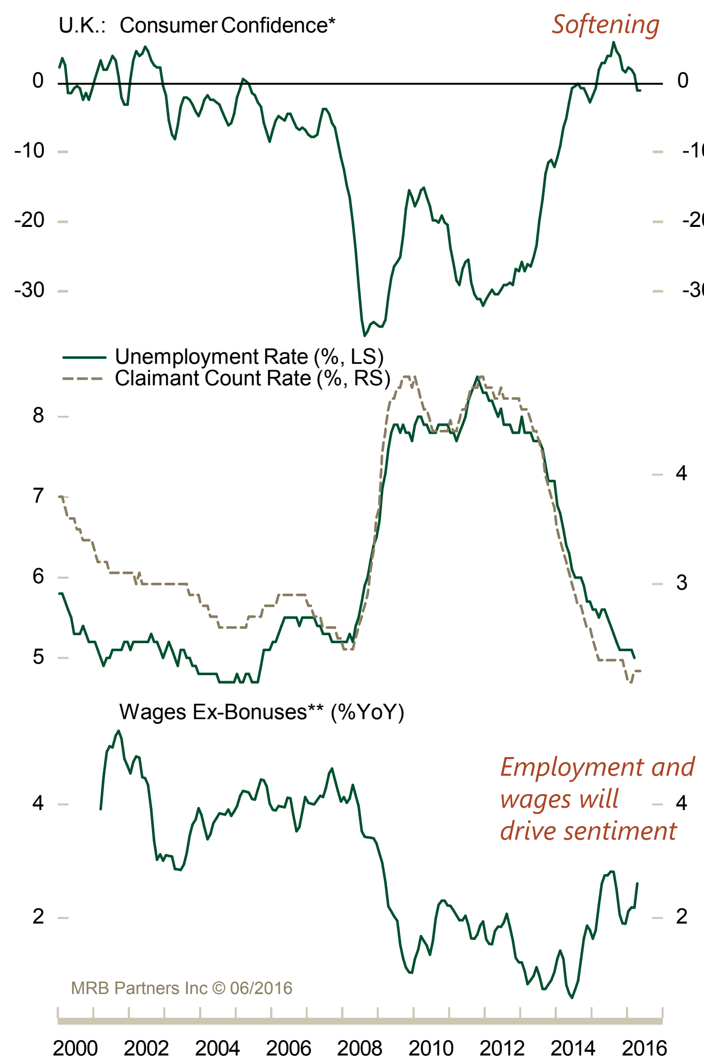
- The much larger Brexit-related drag is that it would create tremendous uncertainty for U.K. consumers and businesses (especially the financial sector). This could lead to a retrenchment in spending and investment.

Chart 7 **U.K. Brexit Fears Are Weighing On Business Confidence And Activity**



* Smoothed; source: United States Economic Policy Uncertainty
** Equally-weighted aggregate of the manufacturing and non-manufacturing sectors; source: Markit Economics

Chart 8 **U.K. Consumers Are Not Panicking, Yet**



* Smoothed; source: GfK Group
** Smoothed

- Measures of confidence for both the U.K. manufacturing and non-manufacturing sectors have already weakened substantially from cyclical highs to their boom/bust lines. This decline coincided with the recent escalation in political uncertainty (**chart 7**). Likewise, plans to hire and expand operations have been shelved, at least until after the referendum results are known.

- Consumer sentiment has also already softened, although it remains cyclically elevated and spending has held up (**chart 8**). Conditions could weaken materially in response to a deterioration in the employment and wage outlook.

- Business confidence soured in a similar fashion during the 2011-2012 sovereign debt crisis in the euro area (**chart 7**). Encouragingly, sentiment and corporate activity surged once policymakers ring-fenced the contagion. There is likely to be a replay upon a "remain" vote, as businesses unleash pent up demand.

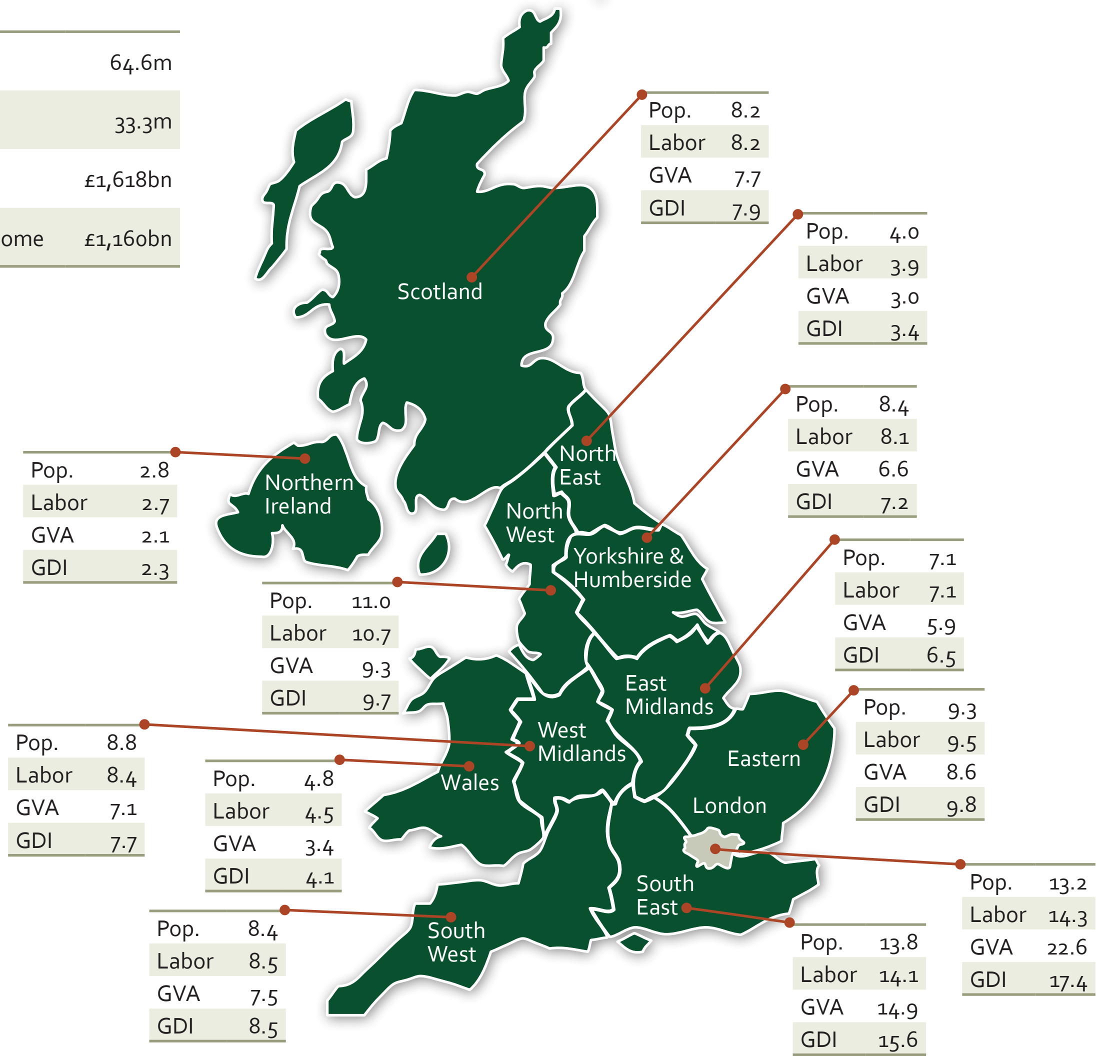
- Conversely, a "leave" vote would create several months of heightened uncertainty for businesses and households, causing a freeze in expansion plans and discretionary spending. This could lead to a recession.

Businesses will unleash pent up demand in a "remain" outcome...

...but will freeze on a "leave" vote

Map 1 U.K. Regional Economic Importance

U.K. Total	
Population	64.6m
Labor Force: Economically Active	33.3m
Gross Value Added	£1,618bn
Gross Disposable Income	£1,160bn



Pop = Population; Labor = Economically Active; GVA = Gross Value Added; GDI = Gross Disposable Income;
All regional numbers are shown as a % of total; source: Office of National Statistics

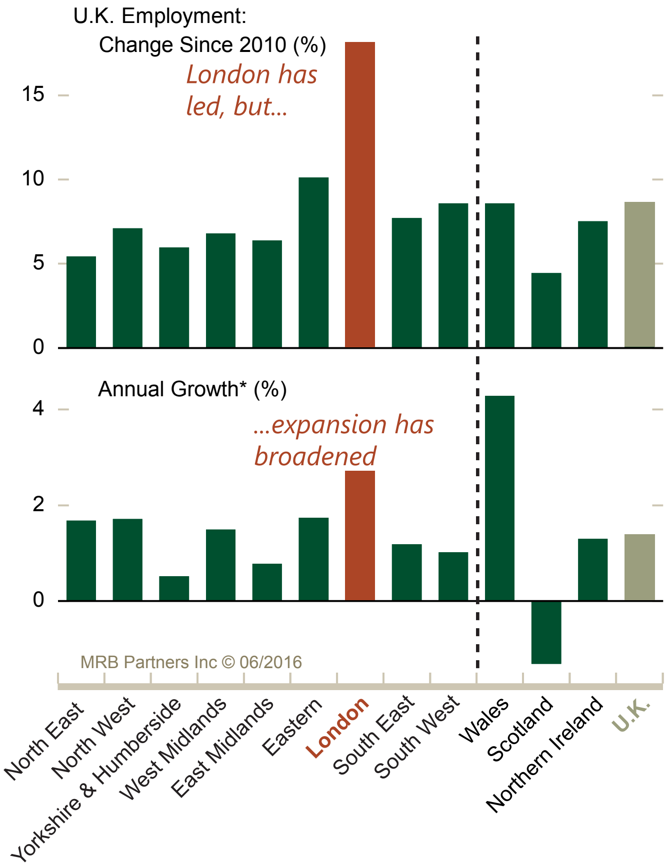
- London would be hit particularly hard in a Brexit outcome. The city is a global financial capital and a hub for global business headquarters, which has benefited from EU membership.

- London and the surrounding area account for a large portion of the aggregate U.K. economy, making weakness in the city hard to offset (**map 1**). Likewise, gross value added and disposable income relative to the size of the population or labor market is far greater in London than the national average.

- London has acted as a critical growth engine for the U.K. since the great recession. The economic expansion has become more broad-based as of late, with employment now rising faster outside the city (**chart 9**). Nonetheless, problems in London would quickly reverberate throughout the rest of the country.

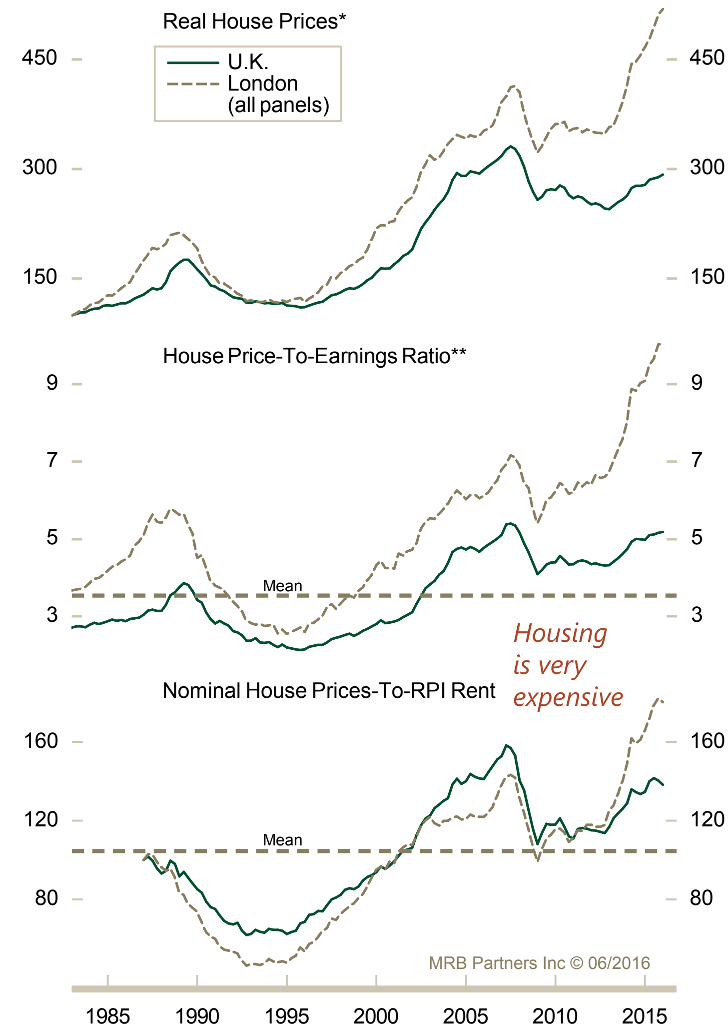
Problems in London mean problems for all of the U.K.

Chart 9 U.K.: Regional Employment Trends



* Smoothed

Chart 10 U.K. House Prices Are In A Bubble Particularly London



* Rebased; deflated by headline CPI; source: Nationwide Building Society
** First-time homebuyer; source: Nationwide Building Society
Note: Historical mean of U.K. series in panels 2-3

❍ The adverse impact to the global economy would be amplified as economic confidence would also deteriorate in other EU nations, holding back spending and investment.

Final Word: *A Brexit outcome is likely to have a noticeable impact on economic sentiment and spending/investment. A favorable result should unleash some pent-up demand, while a vote to leave the EU will create tremendous uncertainty and cause a freezing in activity.*

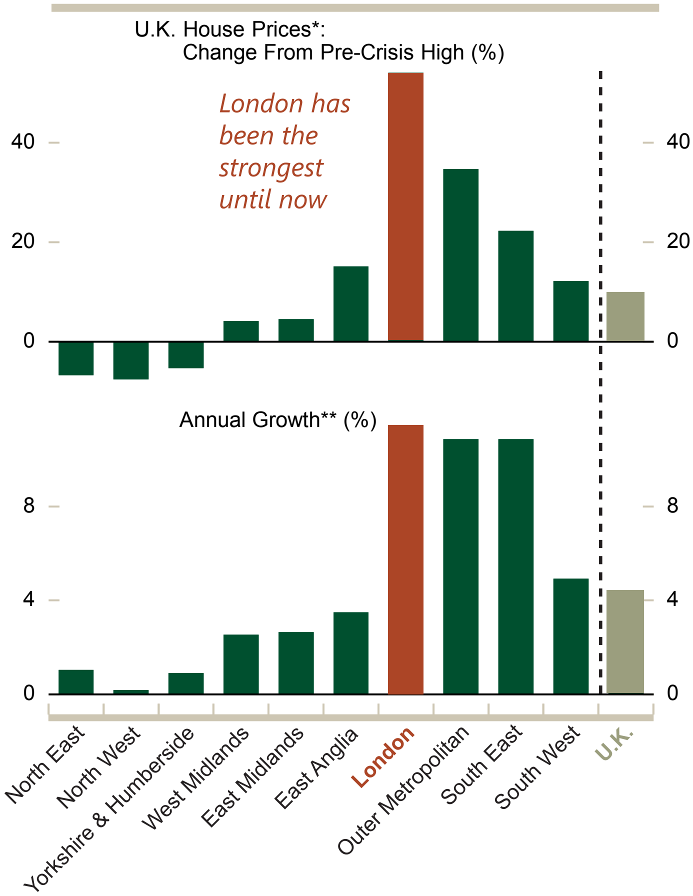
Risk #3: Bursting Of The Housing & Credit Bubble

Housing and credit excesses provide an ongoing threat

❍ A much greater adverse macro shock would occur if the U.K. housing and credit bubbles were to burst, setting in motion painful deleveraging/deflationary forces.

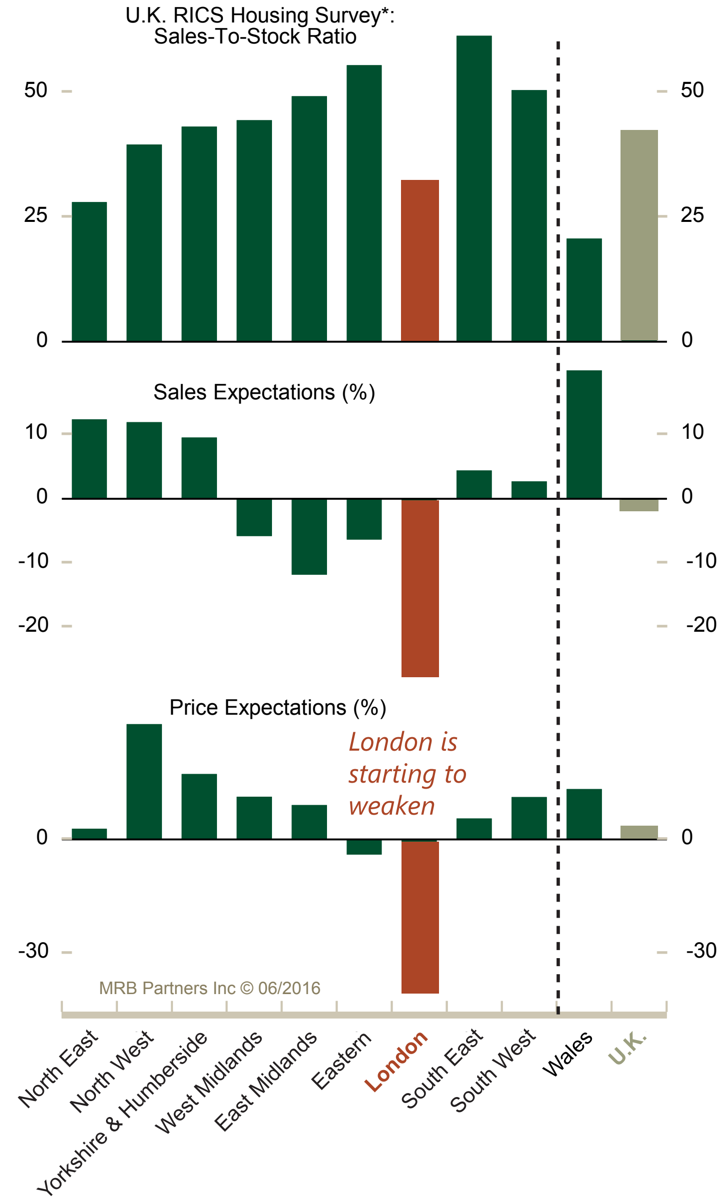
❍ Valuation metrics for the U.K. real estate market are stretched. The house price-to-earnings ratio is now nearly 50% above its historical average and only slightly below the pre-crisis high (**chart 10**). The house price-to-rent ratio is currently more than 30% above its historical average.

Chart 11 **U.K.: Regional House Price Trends**



* Source: Nationwide Building Society
** Panel 2 smoothed

Chart 12 **U.K.: Regional Housing Outlook**



* Smoothed; source: The Royal Institution of Chartered Surveyors

- Home prices are even more extreme relative to their underlying fundamentals within London, which has benefited from global commerce as well as foreign demand, which would likely weaken in a Brexit scenario. London home prices (in aggregate) have surged to levels 52% above their pre-crisis peak (**chart 11**).

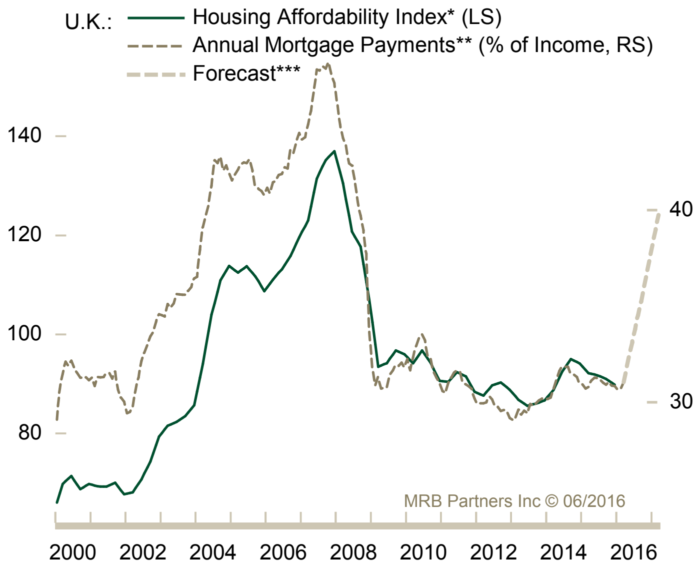
- The Brexit-related threat for U.K. housing is primarily via a deterioration in employment and/or wages from businesses retrenching due to heightened uncertainty. London would be particularly exposed as multinationals curtail operations, expatriates exit and foreign capital flows slow.

- Already, the London real estate market is cooling, with the RICS housing survey showing a material erosion in expected sales and prices (**chart 12**). This is likely being driven by the recent stamp duty (which disproportionately impacts higher priced London homes) and reduced foreign demand, in part due to the commodity fallout[4]. Brexit would add substantially to the drags.

Any softening in employment could topple housing

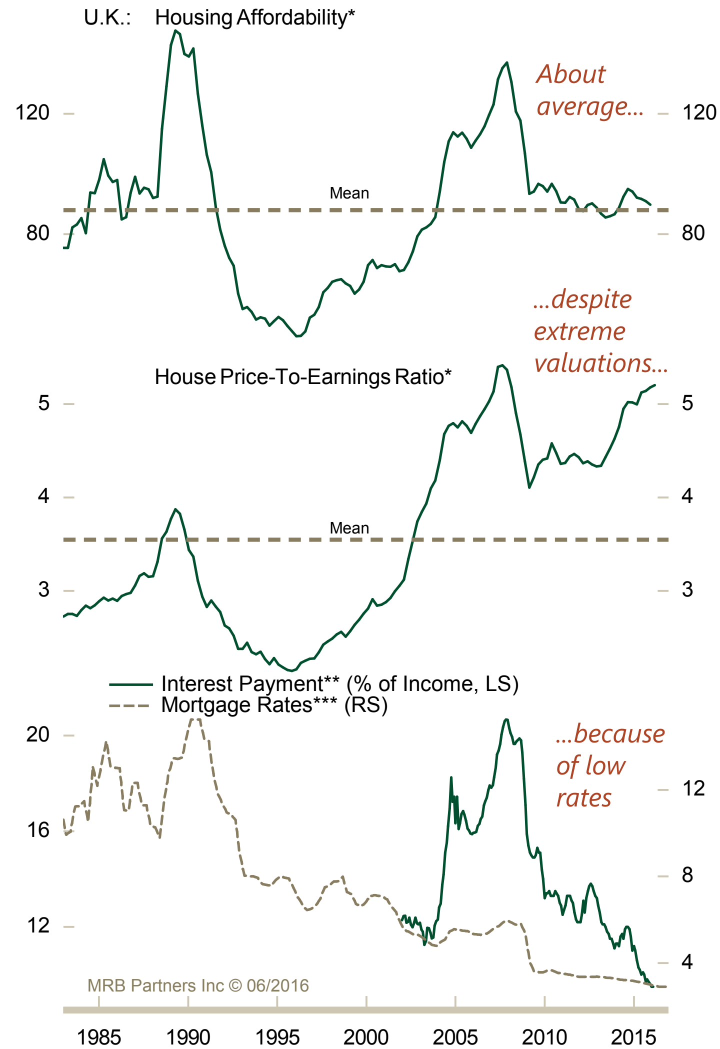
[4] **MRB** ***Theme Report***, "***Commodity Dominos: Update On The Fallout***", November 3, 2015

Chart 13 **Housing Is Very Sensitive To Rising Mortgage Rates**



* First-time homebuyer; source: Nationwide Building Society
** MRB calculation; assumes a 30-year mortgage and a 20% down payment
*** Interest rates rise to 2%, as average wages and house prices remain unchanged

Chart 14 **U.K. Housing Is Only Made Affordable By Depressed Interest Rates**



* First-time homebuyer; source: Nationwide Building Society
** First-time homebuyer; source: Council of Mortgage Lenders
*** Source: Oxford Economics
Note: Historical mean in panels 1 and 2

- Arguments for limited supply keeping a floor underneath the London property market appear increasingly outdated, given that the city is littered with construction cranes as it builds vertically.

- Remarkably, the U.K. Housing Affordability Index shows that the market is not extreme for first time homebuyers, despite the valuation distortion (**chart 13** and **14**). However, this measure is being skewed by depressed interest rates, highlighting the reliance of the U.K. housing market on cheap borrowing costs.

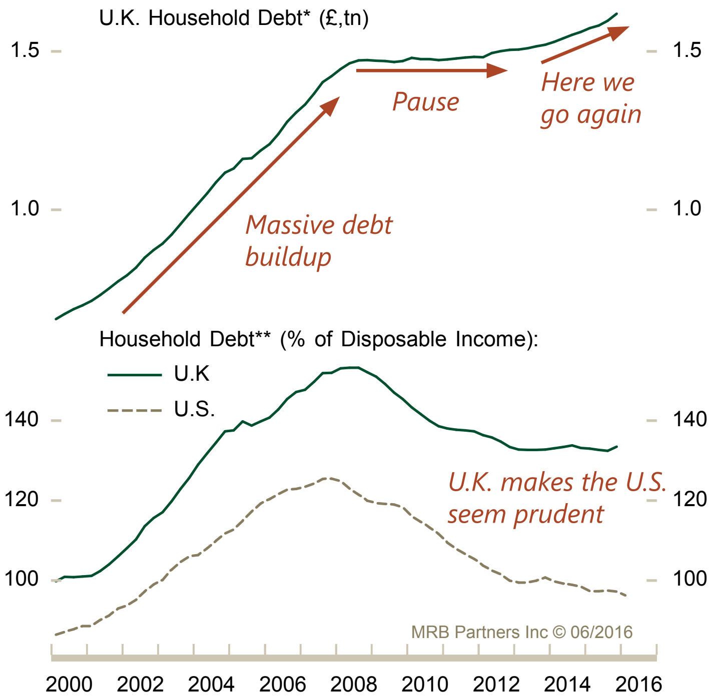
- The BoE will not lift interest rates in a Brexit scenario, but rather provide a reflationary offset. However, any toppling of the housing market could cause bank lending to freeze and mortgage yields to rise materially. Every percentage point rise in mortgage rates will lead to about 4.5% less disposable income available for consumption (**chart 13**).

The U.K. economy is sensitive to any rise in borrowing rates

- The adverse impact from a rise in interest rates would be amplified, since households also have significant unsecured leverage. Indeed, the U.K. has a private sector credit bubble (**chart 15**).

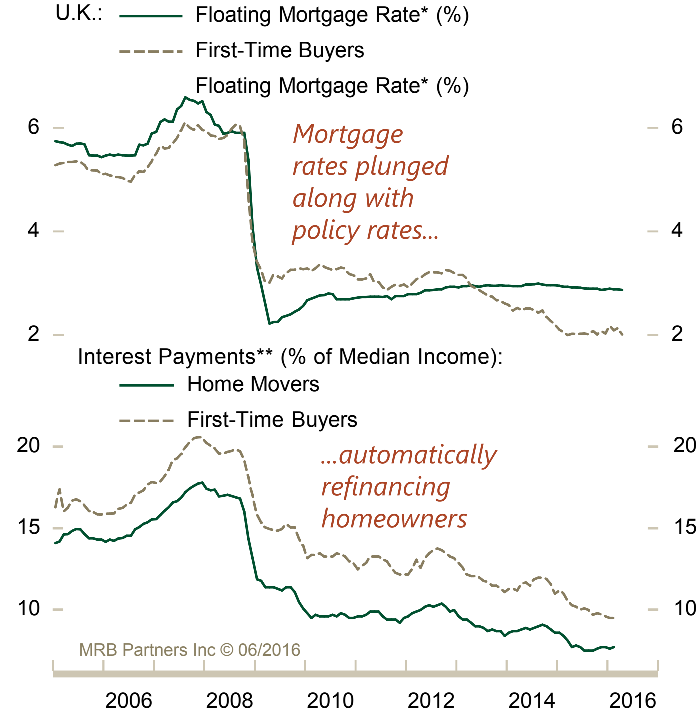
- The BoE was able to slash interest rates during the Great Recession, quickly lowering mortgage payments (despite a widening in spreads) given that the majority of

Chart 15 **U.K. Household Leverage Is Excessive**



* Source: Bank for International Settlements
** Sources: Bank for International Settlements and national sources

Chart 16 **BoE Would Not Be Able To Bailout The Housing Market Again**



* Source: Bank of England
** Source: Council of Mortgage Lenders

mortgages were linked to floating rates (**chart 16**). In short, even homeowners that were underwater were refinanced, which helped stabilize the real estate market. A repeat (if needed) would not be possible, given that interest rates are already at depressed levels.

Brexit would threaten to bring the imbalances home to roost

Final Word: *It is almost inevitable that the U.K. housing and credit bubbles will eventually burst, causing a severe deleveraging cycle. The question is if this will occur now due to an adverse shock like Brexit, or during the next global recession. A vote to "remain" this week would remove an imminent threat to employment and home prices. The BoE will need to tighten in this scenario to prevent a further buildup in imbalances, but it will have to move gradually as the housing market will still be vulnerable to a rise in interest rates.*

Risk #4: Financial System Strains

- There is potential for financial system strains, although this would require the U.K. economy and housing market to topple first.
- Deflationary pressures in the housing and credit markets would severely damage bank balance sheets, causing a negative feedback loop. Strains in U.K. banks (which tend to have significant international linkages) could create notable contagion for the global financial system.

U.K. banking sector would be hard to bail out

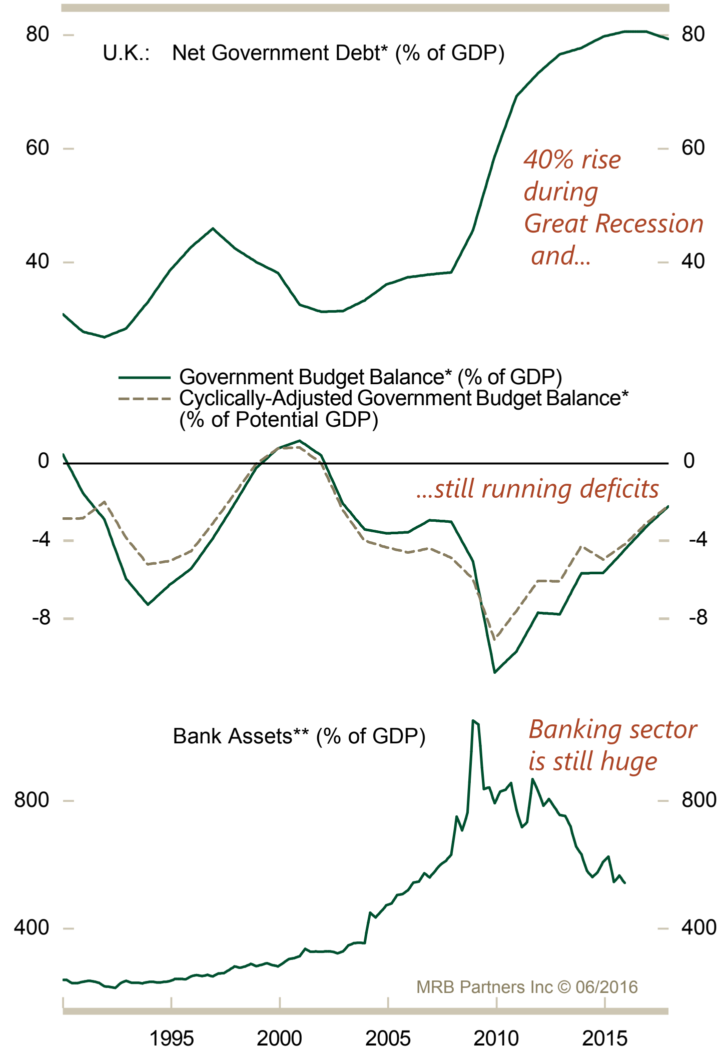
❍ A major problem is that the U.K. banking system is enormous and could not easily be recapitalized[5] (**chart 17**). Government revenues would already be plunging in this scenario due to a weak economy (i.e. causing the budget deficit to blowout). This, plus a banking system bailout, would materially increase the debt-to-GDP ratio. The CDS market is not priced for such an outcome, but could do so rapidly (**chart 18**).

Final Word: *There is a non-trivial chance of U.K. banking sector strains, but only in the event that the housing and credit bubbles burst. Thus, this is not an imminent risk, but it is something to take seriously and monitor, as it would most likely result in heightened sovereign debt risk and global financial system contagion.*

Phillip Colmar

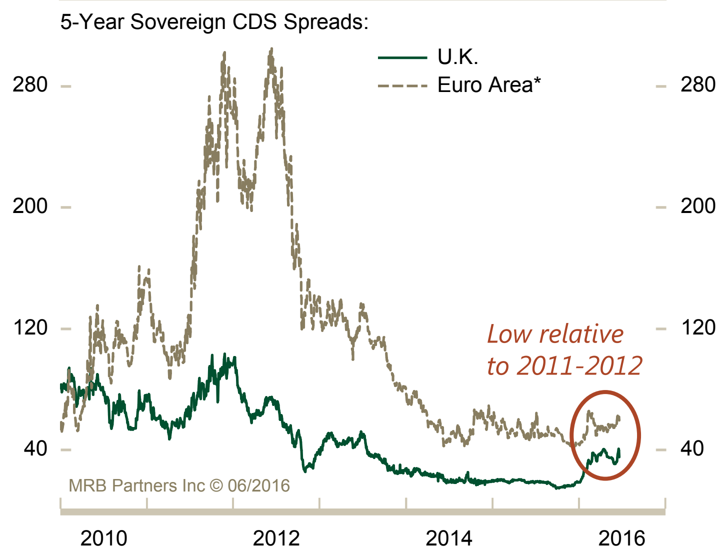
Frank Petrocca

Chart 17 **U.K. Public Finances: Not Great**



* Source: IMF
** Source: Bank of England

Chart 18 **Sovereign CDS: Offer Cheap Insurance**



* GDP-weighted aggregate of France, Germany, Italy and Spain

5 MRB *Fixed Income Research Highlight*, "*Sovereign Debt Markets: Unveiling Potential Risks*", May 3, 2016

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