

## Taxing Problems and a Gilt-y Solution?

**Tax receipts in several countries are facing headwinds from job losses and structural changes to their economies. The new world of tougher-to-obtain and less abundant credit will impact the composition of tax revenues, and in many cases will reduce the overall tax-take.**

**These effects will persist long after monetary stimuli have provided their temporary ‘sugar rush’. We look at the UK as a prominent example of an economy with potentially many tough years ahead of it.**

- > The UK has benefited from a return of risk-appetite – GBP has rallied almost 10% over the last 3 months, house prices have recorded their third consecutive month-on-month increase, and both the service and manufacturing PMIs have rebounded to the over 50 level associated with economic expansion, ahead of the US and Germany.
- > These are short-term almost automatic responses to huge fiscal and monetary stimuli – structural issues, currently brewing in the background, will ultimately dictate the UK’s economic fate.
- > The structure of the UK’s economy has ensured national income from tax revenues will face increasing headwinds, as receipts from financial and real-estate activities dwindle.
- > We look at the composition of UK tax revenues to try to gauge how severe the impact will be for the UK economy.
- > We then examine the response to falling tax revenues and bank support initiatives: wartime levels of gilt issuance and a budget-deficit widening at an alarming rate.
- > We look at who are the owners of gilts, and the destabilizing effects this may have on the market for UK government debt.
- > Finally we consider how the Bank of England’s quantitative easing program, introduced to support the gilt market, may due to its sheer size and rate of expansion ultimately have the opposite effect.

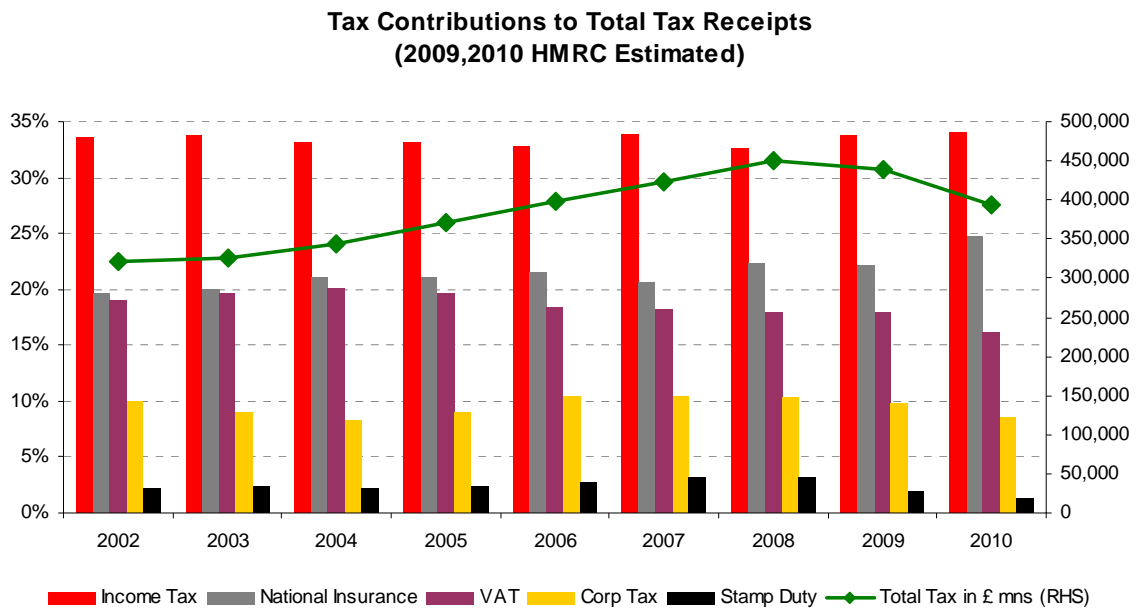
At Variant Perception we believe that many markets are short-term overbought, but we are aware that the extraordinary liquidity measures that have been implemented by central banks around the world could keep markets in such an overbought state for an extended period of time. However, we believe it's important to keep an eye on long term structural trends that will, necessarily, reassert themselves.

With this in mind we turn our attention to the UK-rebound story and ask, "How sustainable is it?".

### TAXING PROBLEMS

Part of the UK's success over recent decades is down to London's standing as global financial centre. This has aided the prosperity of the UK in many ways, one of which is the tax revenues generated from financial and - much linked to this - business activities. Let's look at where UK tax revenues come from and which industries are the main contributors.

Income tax, VAT, national insurance contributions and corporation tax are the main sources of UK tax revenue, together accounting for over 85% of the total £450bn tax received in 2008.

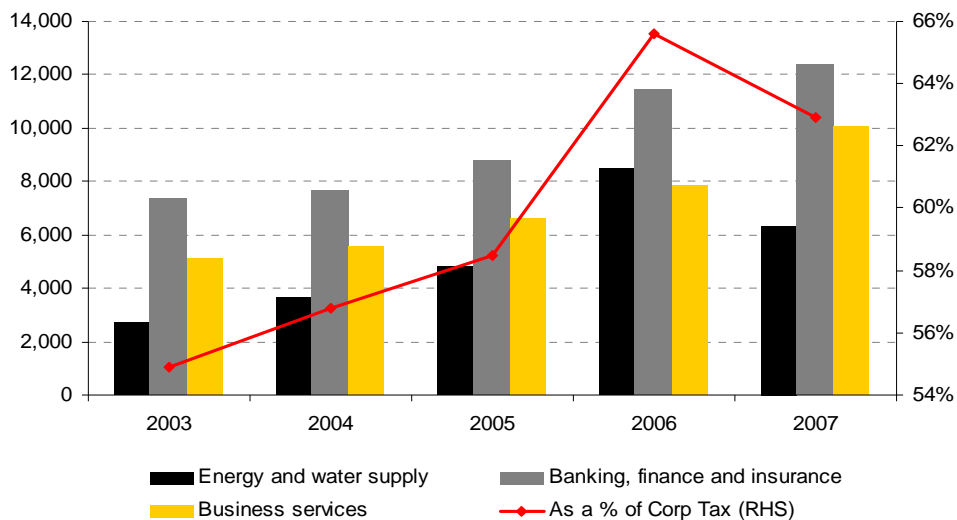


Source: HMRC

As can be seen corporate tax peaked at over 10% of all tax income in 2006 and has been declining since. HMRC (HM Revenue and Customs) projections see it declining to 8.6% of tax receipts by 2010 (your general level of credulousness dictates how seriously you take these estimates). **Year-to-date, corporate tax is down 29% from the same period last year, equating to a £9bn shortfall so far in 2009. This is the ninth consecutive YoY decline, a run only exceeded once - during the previous recession in the early 1990s - throughout the last 45 years.** Stamp duty receipts, suffering after the topping out of the UK property market, have been a comparatively insignificant source of revenue.

The biggest single industry contribution to corporate tax is from banking and finance. Its contribution had been rising in recent years, reaching a peak of 43% of all corporate tax in 2007.

**Main Industry Contributors to Corp. Tax (£mns)  
and their %ge of all Corp. Tax**

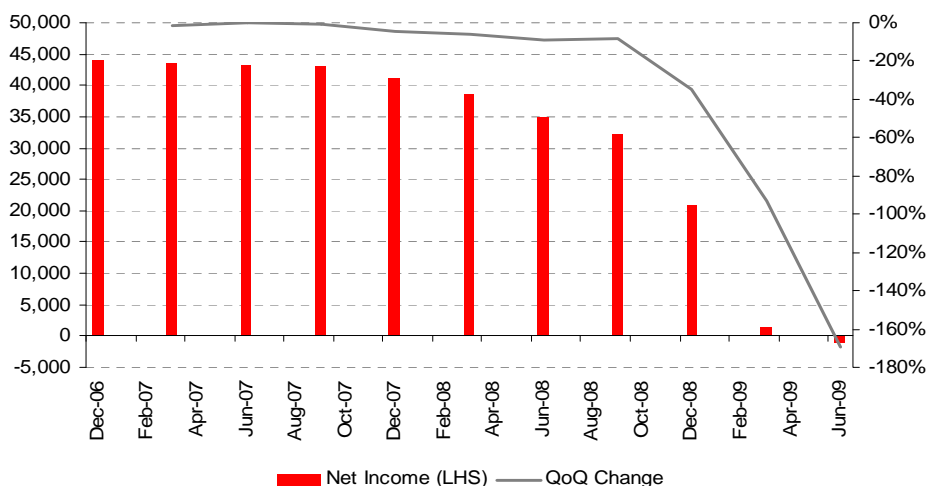


Source: HMRC; 2008 figures unavailable

**In 2006, the three largest constituents together contributed almost two thirds of all corporate tax, declining to just over 62% in 2007; this equates to £29bn of revenue.** Two of these constituents – banking and finance and business services – have their fortunes closely entwined and the reduced profitability of the former will undoubtedly take its toll on the latter.

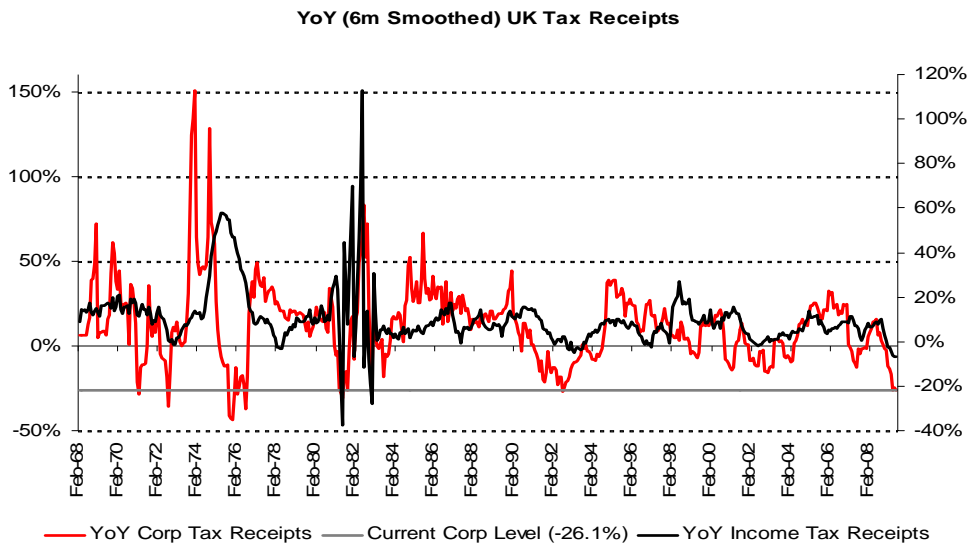
How, then, is the outlook for potential tax revenues from the financial sector? Far from rosy it seems as credit tightening and deleveraging continue to dent bank profitability: net income from the UK's largest banks has collapsed over the last 2 years.

**Net Income of Largest UK Banks in £ mns  
(RBS,HBOS,HSBC,Lloyds,Barclays)**



This will severely impact taxes due from this erstwhile bountiful source of revenue. Moreover, banks may well try to reduce what tax they do pay on declining profits. Barclays, it emerged in their latest results, paid 19.4% tax in the last 6 months, down from 20.4% a year earlier; this is a widening gulf from the standard corporation tax rate of 28%. **Of the UK's largest companies, 20% paid no corporation tax at all during the financial year 2007-2008 due to reporting no profits.**

Indeed, from the graph below, we can see the YoY change in corporate tax receipts has already fallen to a level associated with previous recessions.

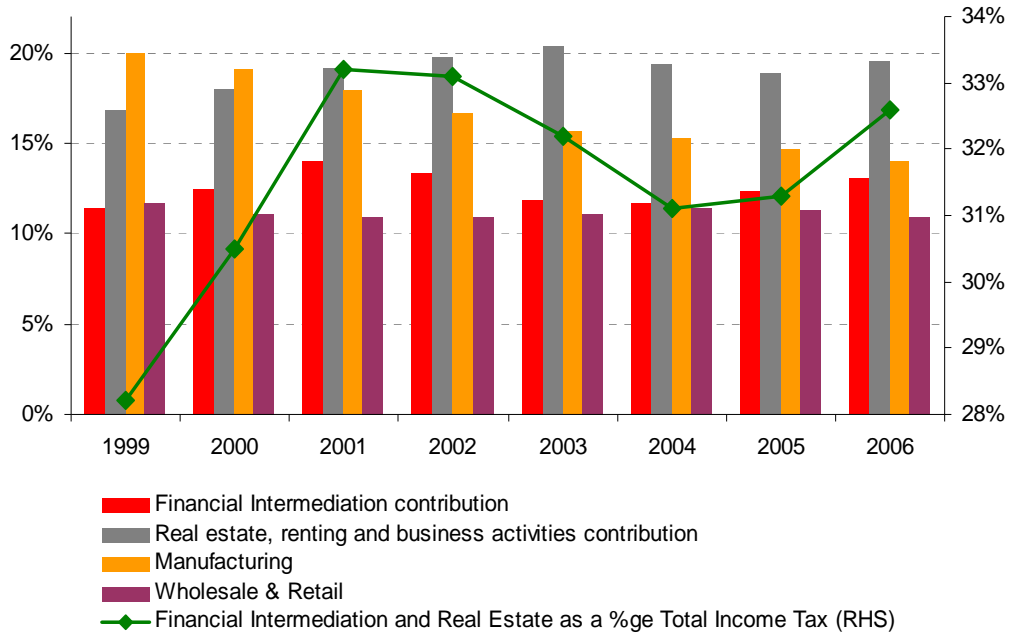


Source: HMRC

It remains to be seen whether they will continue declining to a level that would see the rate of fall exceed that seen in 1976, when Sterling was devalued and the UK humiliatingly had to approach the IMF for a \$3.9bn loan to avoid bankruptcy.

The chart above also highlights the incipient decline in income tax receipts (despite a still relatively healthy annual population growth in the UK of around 0.7%). It will probably not surprise the reader to learn that two of the largest contributions to income tax are from the financial and the real-estate and renting industries. **In 2006 these together accounted for just under a third of all income tax revenues (see green line in chart below):**

**Top 4 Income Tax Contributions by Industry as a %ge of All Income Tax**

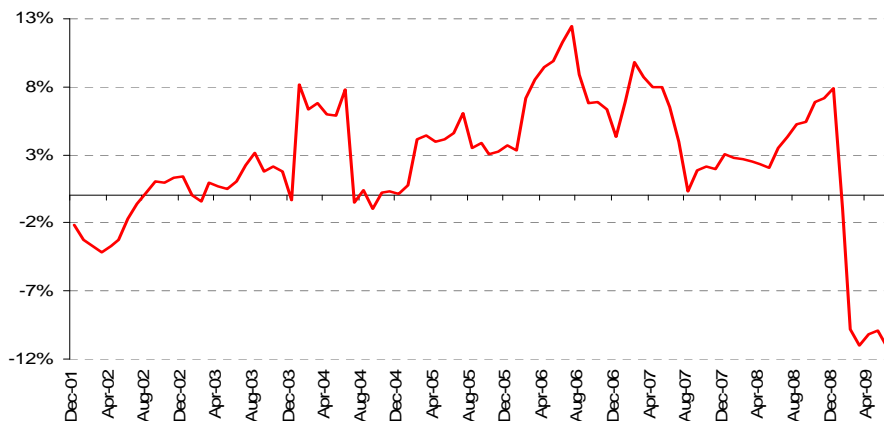


Source: HMRC; 2007, 2008 figures unavailable

It is safe to assume that, with the job losses over the past 2 years in banking (which reached 23,000 at the beginning of last month), coupled with house price declines and a severe contraction in real-estate related activity, receipts from income tax are due to fall further. **So far this year they are down 7.8% from a year earlier, and their year-on-year decline is already at a level not seen since the 1980-82 recession.**

Data showing employee compensation (including bonuses) from financial related activities clearly illustrates the obstacles faced by tax revenues in the coming quarters:

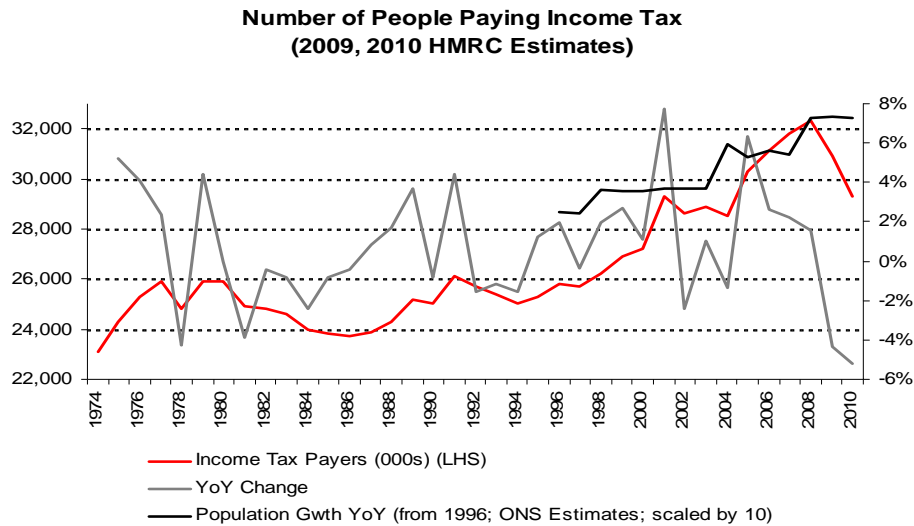
**Earnings from Financial Intermediation (inc bonus)  
Smoothed, YoY Change**



Source: Office for National Statistics

Year-to-date, employee earnings from the financial industry are down over 10%.

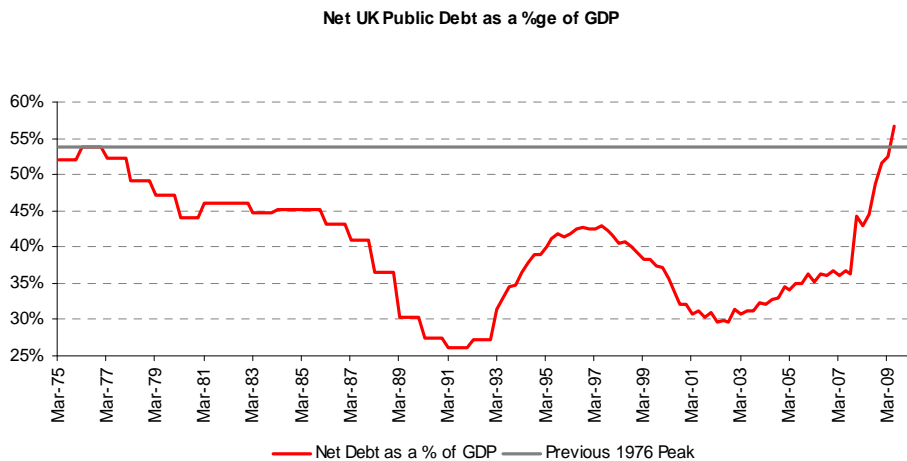
Furthermore, the number of people eligible to pay income tax is projected to decline at a rate not seen in at least the last 35 years:



Source: Office for National Statistics (ONS); HMRC

### HOW TO PLUG THE GAP

It is clear that the headwinds over the coming years to government finances from clipped corporate tax receipts and falling contributions from income tax are already being addressed. Gilt issuance in 2009/10 is expected to total £220bn (a remarkable 16.5% of GDP) - a 50% increase from the year before. **This will bring the level of all gilts outstanding to over £850bn, amounting to 64% of current GDP. The IMF predicts this ratio will swell further - to over 100% - in the next 5 years. Already, we have eclipsed, at an alarming rate, the previous peak of 54% debt-to-GDP ratio seen during the 1976 IMF crisis:**

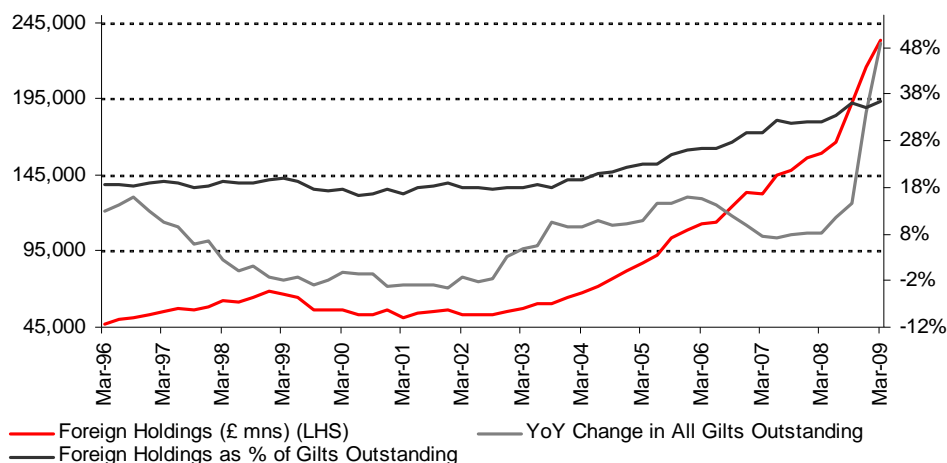


Source: ONS

It is a delicate balancing act for the UK Treasury to significantly increase its issuance of gilts without setting off investor-alarm bells that would send yields uncomfortably (and unaffordably) higher. This task is made yet more precarious by the relatively high number of holders of gilts who are from

overseas, and who would find it easier to substitute UK debt for what they might consider safer investments:

**Foreign Holdings of Gilts and YoY Change in all Gilts Outstanding**



Source: DMO

**We can see from the chart that almost 40% of all gilts outstanding (conventional and index-linked) are foreign owned.** The figure in the US is nearer to 30% (however they have the luxury of denominating their debt in the global reserve currency) and, as we touched on in the previous monthly, in Japan it is 7%. (This lowly figure has undoubtedly kept JGB yields much lower than they otherwise would have been given the vertiginous 170% debt-to-GDP level for Japan).

### SUPPORTIVE MEASURES?

In part to forestall any wariness from this large clutch of overseas gilt holders, the UK embarked on the largest and most rapid quantitative easing program of the major central banks. The level of reserves targeted by the Bank of England to be achieved by the purchase of gilts has so far reached 13% of GDP.

Emphasising the BoE's continued commitment to QE, the MPC recently agreed to a £50bn extension of the program. To double-underline this commitment, it emerged in the minutes of the August MPC meeting that the Governor himself, Mervyn King, had wanted an even larger extension which would have taken the total level of QE to £200bn. And so far the BoE's zealotry appears to have paid off; a recent IMF study surmised that yields on medium duration bonds would be over 1% higher if it weren't for the Bank's actions.

However, this aggressive tactic to support the gilt market and keep yields low has its own risks. The Bank recently decided to curb buybacks of some gilt issues after it had bought up to 70% of the outstanding bonds, effectively cornering parts of the market; see the shaded rows in the table below.

Figure 1: Eligible gilts for BOE QE purchase operations (£mn)

Basket	Bond	Outstanding	DMO holdings	BOE purchases	BOE/DMO holdings	"Free float"	as %	Total float
3-10y	UKT 4.5 Mar 2013	23,897	3,655		3,655	20,242	84.7%	
	UKT 8.0 Sep 2013	8,378	2,583		2,583	5,795	69.2%	
	UKT 2.25 Mar 2014	23,349	11		11	23,338	100.0%	
	UKT 5.0 Sep 2014	23,176	4,697	12,165	16,862	6,315	27.2%	
	UKT 4.75 Sep 2015	24,968	4,976	11,682	16,658	8,310	33.3%	
	UKT 8.0 Dec 2015	9,998	2,793	3,949	6,742	3,256	32.6%	
	UKT 4.0 Sep 2016	25,827	4,338	5,967	10,305	15,522	60.1%	
	UKT 8.75 Aug 2017	10,502	3,131	2,502	5,633	4,869	46.4%	
	UKT 5.0 Mar 2018	22,388	4,403	11,529	15,932	6,456	28.8%	
UKT 4.5 Mar 2019	26,303	1,212	5,981	7,193	19,110	72.7%	113,213	
10-25y	UKT 3.75 Sep 2019	7,500	0	1,448	1,448	6,052	80.7%	
	UKT 4.75 Mar 2020	16,618	3,374	8,496	11,870	4,748	28.6%	
	UKT 8.0 Jun 2021	22,686	6,291	11,440	17,731	4,955	21.8%	
	UKT 4.0 Mar 2022	9,750	1	6,893	6,894	2,856	29.3%	
	UKT 5.0 Mar 2025	22,099	5,656	4,010	9,666	12,433	56.3%	
	UKT 4.25 Dec 2027	21,179	3,932	6,588	10,520	10,659	50.3%	
	UKT 6.0 Dec 2028	15,932	4,485	3,167	7,652	8,280	52.0%	
	UKT 4.75 Dec 2030	18,790	3,391	4,488	7,879	10,911	58.1%	
UKT 4.25 Jun 2032	23,618	6,040	7,331	13,371	10,248	43.4%	71,142	
+25y	UKT 4.5 Sep 2034	7,000	0		-	7,000	100.0%	
	UKT 4.25 Mar 2036	20,227	5,230		5,230	14,997	74.1%	
	UKT 4.75 Dec 2038	22,759	5,267		5,267	17,492	76.9%	
	UKT 4.25 Sep 2039	7,000	2		2	6,998	100.0%	
	UKT 4.5 Dec 2042	19,120	4,123		4,123	14,997	78.4%	
	UKT 4.25 Dec 2046	17,751	4,003		4,003	13,748	77.4%	
	UKT 4.25 Dec 2049	14,010	1,321		1,321	12,689	90.6%	
UKT 4.25 Dec 2055	20,147	4,152		4,152	15,995	79.4%	103,916	

Note: Shaded bonds are those that the BOE has deemed ineligible for purchase due to reduced free float.  
Source: Bank of England, UK Debt Management Office and Barclays Capital calculations.

Source: Barcap

Along with a high level of foreign ownership and the depth of QE, another area of concern in the gilt market relates to a point we made in our August monthly. As governments around the world ramp up their borrowing to exceptional levels, investors are becoming more concerned that swelling budget deficits may incite sovereign borrowers to try to inflate away some of their debt.

This has led to debt buyers becoming more reluctant to buy longer maturity debt, and governments are having to respond to this by issuing more debt with shorter maturities. In Variant's August commentary, we displayed a chart showing a marked decline in the average maturity of US debt outstanding. In the UK, although the trend is not as mature, it is evident from the picture below that the level of shorter maturity gilts outstanding has turned up sharply in the last year, while the ratio of longer-term gilts to the total outstanding has flatlined.

Composition of Gilt Market by Maturity



Source: Credit Suisse

This will, if it continues, expose the UK Government to increased rollover risk and make it more expensive to renew their debt should higher inflation start to emerge.

### NO EASY WAY OUT

Although in some respects the outlook for the UK has recently improved, there are other more long-term, intractable issues that have worsened over the last 2 years and will not vanish overnight.

The UK benefited through corporate tax revenues from unsustainably profitable banks, and through income tax revenues from well-remunerated employees at such banks. Additionally, revenues from the housing and rental sectors provided significant sources of income. Both areas of business will continue to face resistance as the quirk that made them quite so profitable – ultra-cheap and disastrously easy credit – will be in remission for the foreseeable future.

Virtually all sources of tax revenue are facing headwinds. **So far this year, income tax is down 8%, VAT is down almost 20%, corporation tax is down 30% and stamp duty is down 46%. Altogether, taxes are down 12% from a year earlier, a shortfall of £33bn.** With job losses expected to continue well into next year, and a non-negligible risk from a renewed slump in activity, this figure is likely to continue to grow at an intemperate pace.

To try to plug the gap, the UK Government is issuing gilts at a dizzying rate. **The high proportion of foreign buyers of this debt may become disquieted that the sheer volume of issuance will start to have an adverse impact on the currency. This would develop into a source of great destabilization as a sizable proportion of the buyers for UK public debt steps back from the market. Measures taken to support the gilt market – such as quantitative easing – may also introduce destabilizing elements when, as has already happened with several gilt issues, the central bank becomes the principle holder.**

In summary, we believe it is unwise to become too fixated on the more transient measures of economic health in the UK, many of which are almost automatic reactions to the exceptional fiscal and monetary measures undertaken by the Government and the BoE. It is the structural issues brewing in the background, and those in authority's response to them, that will ultimately dictate the UK's long-term economic outlook.

*Disclaimer: Variant Perception's publications are prepared for and are the property of Variant Perception and are circulated for informational and educational purposes only. The content of this report is intended for institutions and professional advisers only. This report is not intended for use by private clients. Recipients should consult their own financial and tax advisors before making any investment decisions. This report is not an offer to sell or a solicitation to buy any investment security. Variant Perception's reports are based on proprietary analysis and public information that is believed to be accurate, but no representations are made concerning the accuracy of the data. The views herein are solely those of Variant Perception and are subject to change without notice. Variant Perception's principals may have a position in any security mentioned in this report.*