Brexit and its Impact on the Pound in the Foreign Exchange Market

Professor Keith Pilbeam

City, University of London ECIV 0HB

e-Mail k.s.pilbeam@city.ac.uk

Abstract

In this paper we outline the impact and likely future impact of Brexit on the pound. We argue that Brexit implies a significant depreciation of the pound and the degree of depreciation required is heavily linked to whether there will be a soft or hard Brexit. We find that the pound has had broadly similar depreciations to date against both the dollar and the euro. Brexit has considerably raised UK economic policy uncertainty and this, in turn, has at times led to an significant increase in future implied volatility of the pound. While there is an overall link between the state of the ongoing Brexit negotiations with the European Union and movements in the pound in the foreign exchange market, the link is not especially strong unless the perception that the negotiations are going badly has exceeded 60%.

Keywords: Brexit, economic policy uncertainty, implied volatility, pound

JEL Classification :F31

1 Introduction

Following the 23rd June 2016 referendum when 51.9% of those voting voted for the UK to leave the European Union against 48.1% who voted to Remain the fall in the value of sterling both immediately after the referendum and its subsequent movements all the way to August 2019 has been the focus of much coverage in the Financial Press and is frequently cited as a key indicator that Brexit is bad for the UK economy. In this article we look at the economic and financial reasons as to why Brexit implies a weaker pound and argue that the eventual required depreciation is heavily linked to whether there is an eventual soft Brexit or a hard Brexit. In a soft Brexit scenario the UK would remain in the customs union and single market while in a hard Brexit characterised by a No Deal situation there will be no transition period and the UK trading will resort immediately to trading with the European Union on World Trade Organisation Terms. An intermediate scenario whereby the UK remains in the Customs Union but leaves the political institutions of the EU but also has a 2 year transition deal as is broadly contained in the deal negotiated by Theresa May would ultimately lead to a depreciation of the pound somewhere in the middle of the soft and hard Brexit scenarios. In this article we explain why Brexit implies a weaker pound. This is followed by an analysis of how the pound has actually performed in the foreign exchange market and to what extent this is linked to how badly the negotiation with the European Union have been going.

2 Why Brexit Implies a Significant Depreciation of the Pound

Let us firstly consider why Brexit is almost certainly implies a depreciation of the pound vis-à-vis key currencies such as the US dollar and the Euro and why the harder the Brexit the greater the required eventual depreciation of the pound.

i.

The initial fall in the value of the pound which was mainly related to the news element of the vote, the betting odds on the eve of the referendum gave a 25% chance of a win for the Brexit side, as such, there was a large element of surprise when the results of the referendum came through. The pound depreciated from \$1.48/£1 on 23 June to \$1.3021 by 5 July 2016 when the pound seemed to stabilize for a few weeks representing a depreciation of 13.6%.

ii.

Brexit will make it harder for the UK to export goods to the European Union especially in a hard Brexit scenario because a range of UK exports will face EU tariffs ranging from 40% on lamb to 10% on automobiles and a weighted average estimated to be 4% of the value of UK exports to the European Union. The precise effect on imports will largely depend on the set of tariffs schedules that that the UK notifies to the World Trade Organisation.

iii.

There is also likely to be a significant hit to UK services exports due to the loss of passporting rights to sell financial services throughout the EU. Since the UK has a positive trade surplus on financial services of around £50 billion there is the potential to lose a significant amount of financial services export business. This will also be exacerbated over time by job relocations in the financial services industry to other financial centres such as Frankfurt, Paris, Dublin, Luxembourg and Amsterdam as UK based financial services firms seek to service their European Union based clients.

iv.

Brexit will also have a negative effect on domestic investment and inward foreign direct investment and possibly increase the flow of outward FDI which will decrease the demand for sterling on the part of domestic and international investors. The reasons for negative impact on foreign direct investment are clear, reduced easy access to the EU market, the prospect of expensive border control checks and the risk to disruptions in supply chains will all make the UK a less attractive country to invest in. In addition, UK based firms, particularly those that are heavily reliant on exports to the EU will start considering setting up or expanding their European based subsidiaries in order to retain their European Union customers and avoid EU tariffs and non tariff barriers.

v.

There will also be a negative impact on net UK immigration figures from the EU which will impact the profitability and productivity of UK firms and sectors of the economy which have traditionally relied upon migrant labour and skills. This impacts upon both skilled and unskilled labour supply. The UK higher education sector, the national health service, manufacturing, agricultural, retail and hospitality sectors are known to be quite heavily dependent upon EU labour. Failure to recruit sufficient labour will drive up labour costs for firms and also reduce the quality of the labour supply available to them which will mean lower profitability, lower productivity and in some cases businesses will become unprofitable.

vi.

There is likely to be an adverse impact on financial and portfolio flows this is because the depreciation of sterling reducing the return to foreign based investors. The performance of UK economy will be adversely affected by any form of Brexit and there is an increased perception that the UK is a risky country and it is also at risk of a further sovereign downgrades from both Moodys and Standard and Poors.

vii.

It is highly likely that in a hard Brexit scenario, the Bank of England would resort to a softer approach to monetary policy resulting in lower short-term interest rates for a prolonged period of time and possibly further Quantitative Easing in a bid to soften the immediate impact of a no deal Brexit. This will likely weaken sterling further in both the short and medium term.

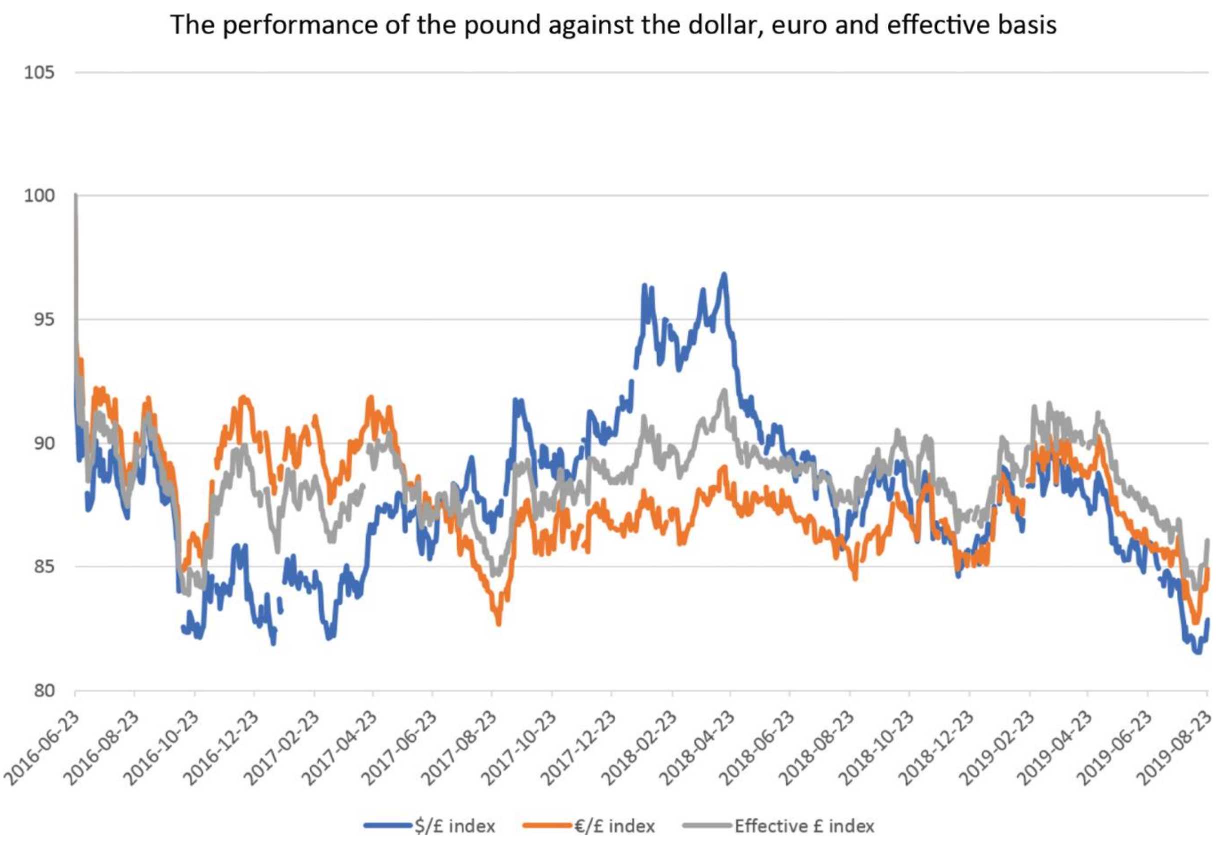
3 The Impact of Brexit on the Pound's Exchange Rate

In this section, we review how the foreign exchange market has reacted the Brexit vote and how to some extent the movements have been linked to changes in the perception as to whether the negotiations have been going well or badly. The first thing to note as depicted in Figure 1 is that the depreciation of the pound was initially stronger against the US dollar than it was against the euro. It depreciated on an index basis from 100 against the dollar on 23 June 2016 to 82.1 and from 100 to 87.6 against the Euro by 10 March 2017. However, it then recovered to 96.4 against the dollar by the 25 January 2018 while staying roughly the same at 87.8 against the euro. It then continued to depreciate to 82.8 against the dollar, to 84.5 against the euro and to 86.0 on an effective basis by 23 August 2019. As such, we can say there has not been a very significant difference in the overall depreciation of the pound in terms of the dollar or the euro or on an effective (trade-weighted) basis.

Figure 1:

The Performance of the Pound against the Dollar, Euro and Effective Basis.

Source: Authors Calculations and the Bank of England



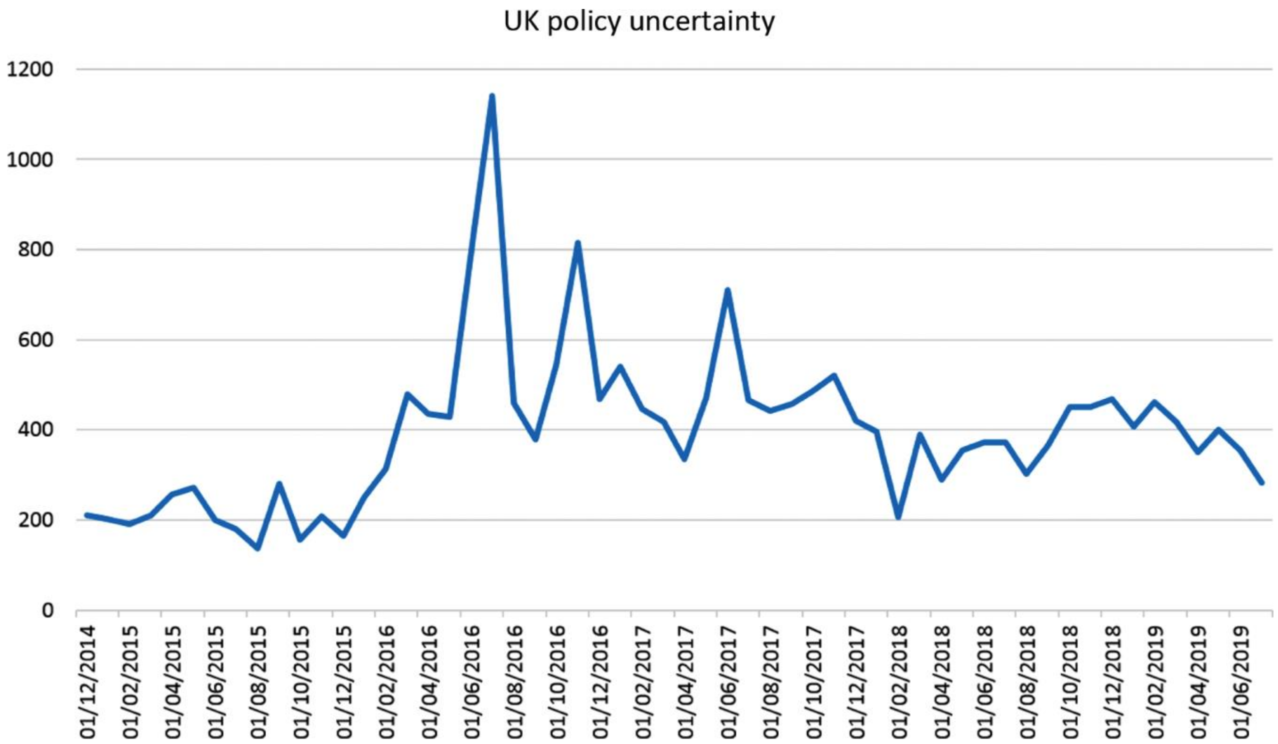
.

When examining the weakness of the pound in relation to Brexit a large part of the depreciation can be attributed to the significant rise in Economic Policy Uncertainty as shown in Figure 2. This was particularly marked in the immediate aftermarth of the Brexit vote when it leapt in value from 164.43 at the end of 2015 to 800 by end of June and to an even higher peak of 1141 by the end the end of July 2016. The index has remained at relatively elevated levels ever since.

Figure 2:

Economic Policy Uncertainty in the UK.

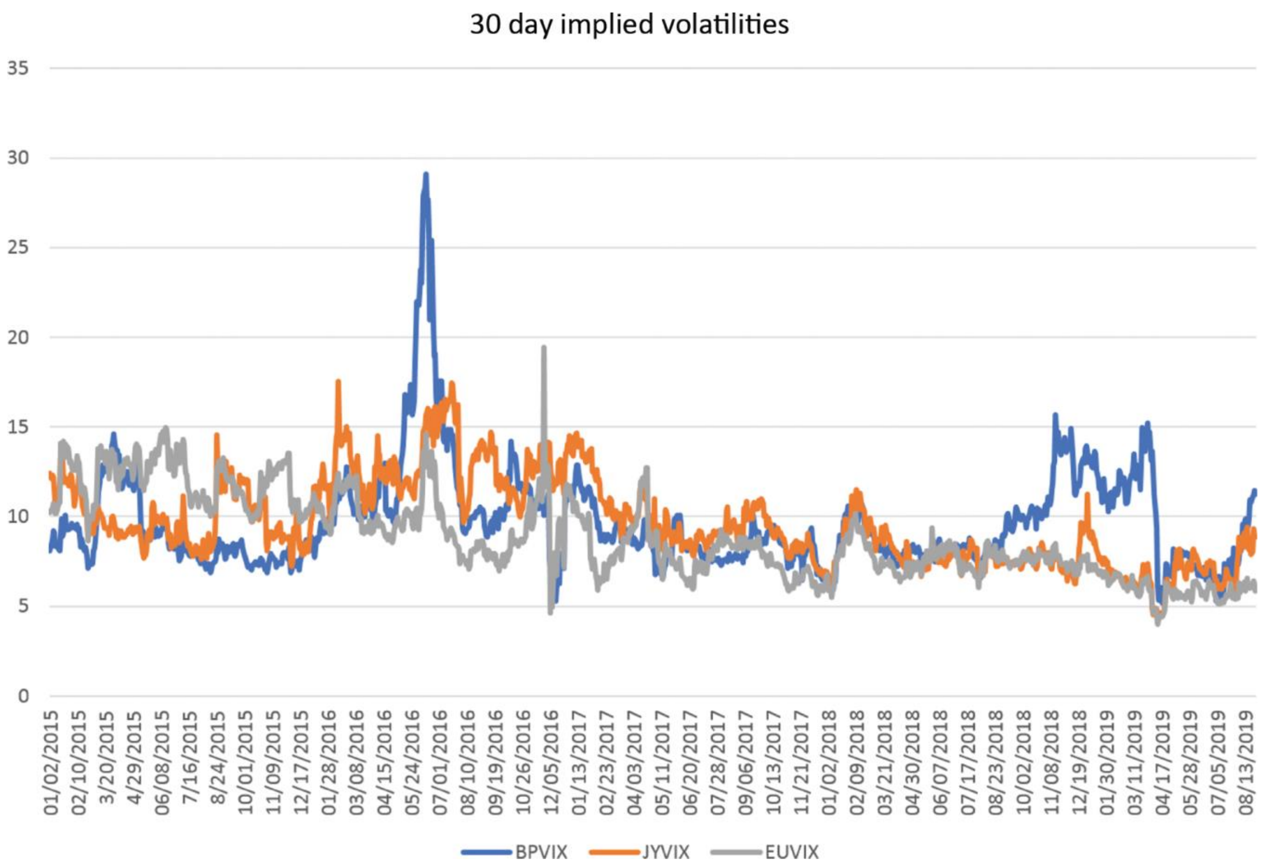
Source: Bloomberg.



The increased policy uncertainty has to some extent transferred itself into the foreign exchange market by increasing the implied volatility of sterling as depicted in Figure 3 which shows the 30 day ahead volatility for the pound (BPVIX), the Yen (YYVIX) and the Euro (EUVIX) against the US dollar. As can be seen in the run up to the Brexit referendum, the pound had a generally expected lower 30 day ahead implied volatility than either the Japanese yen or the euro. However, this changed significantly in the run up to the June 2016 referendum and in the few weeks following. Thereafter, the implied volatility was not much different between the various currencies up until then end of 2018 but in the run up to the 31 March 2019 Brexit deadline, the implied volatility increased significantly as concerns about whether Theresa May could get her negotiated withdrawal deal with the European Union approved in the UK Parliament where it was rejected on three separate occasions. Once an extension of UK membership was approved by the European Union for a further 6 months until October 31, 2019 implied volatility fell sharply. However, following the resignation of Theresa May on 7 June 2019 implied volatility on sterling started to rise significantly as it became clearer that the two main candidates to replace her Jeremy Hunt and Boris Johnson were far keener to pursue a “No Deal” Brexit if necessary on October 31, 2019.

Figure 3: 30 Day Implied Volatilities in the Foreign Exchange Market.

Source: Chicago Board Option Exchange.



In their study **Kourus and Celebi (2018)** show that the pound-euro fortunes since the Brexit referendum have been largely determined by "good" and "bad" news relating to the likelihood of a Brexit deal. In good days the pound has generally appreciated and in bad days the pound has generally depreciated and interestingly the effect of bad days is somewhat more persistent than the impact of good days. However, upon closer examination the link between the performance of the pound and the state of the Brexit negotiations is not clear cut. Bloomberg provides periodic surveys of the state of the negotiations and it can be seen in Figure 4 and Figure 5 that an increase in the perception that the UK has been handling the negotiations badly has even coincided at times with an appreciation of the pound against the US dollar. For instance, between 29/9/2016 and 6/4/2017 the perception that the negotiations were going badly fell from 50% to 35% but the pound actually depreciated from $1.2991/£1 to $1.2486/£1. Similarly, between 6/4/2017 and 17/4/2018 the perception that the negotiations were going badly rose from 35% to 53% yet sterling appreciated from $1.2991/£1 to a post referendum peak of $1.4301/£1. However, it seems that a rise in the perception that negotiations were going badly above 60% on 29/05/2018 coincided with a very significant depreciation of the pound from $1.3258/£1 to $1.2170/£1 by 12 August 2019. The depreciation of the pound became far more marked commencing with Theresa May's resignation on the 7th June ($1.2740/£1) and with the election of Boris Johnson as Prime Minister on 24th July 2019 ($1.2498/£1) threatening a "no deal" Brexit leaving the pound at $1.2170/£1 by the 12th August 2019.

Figure 4: Perceptions Concerning How Badly the UK Negotiations with the EU Are Going.

Source: Bloomberg.

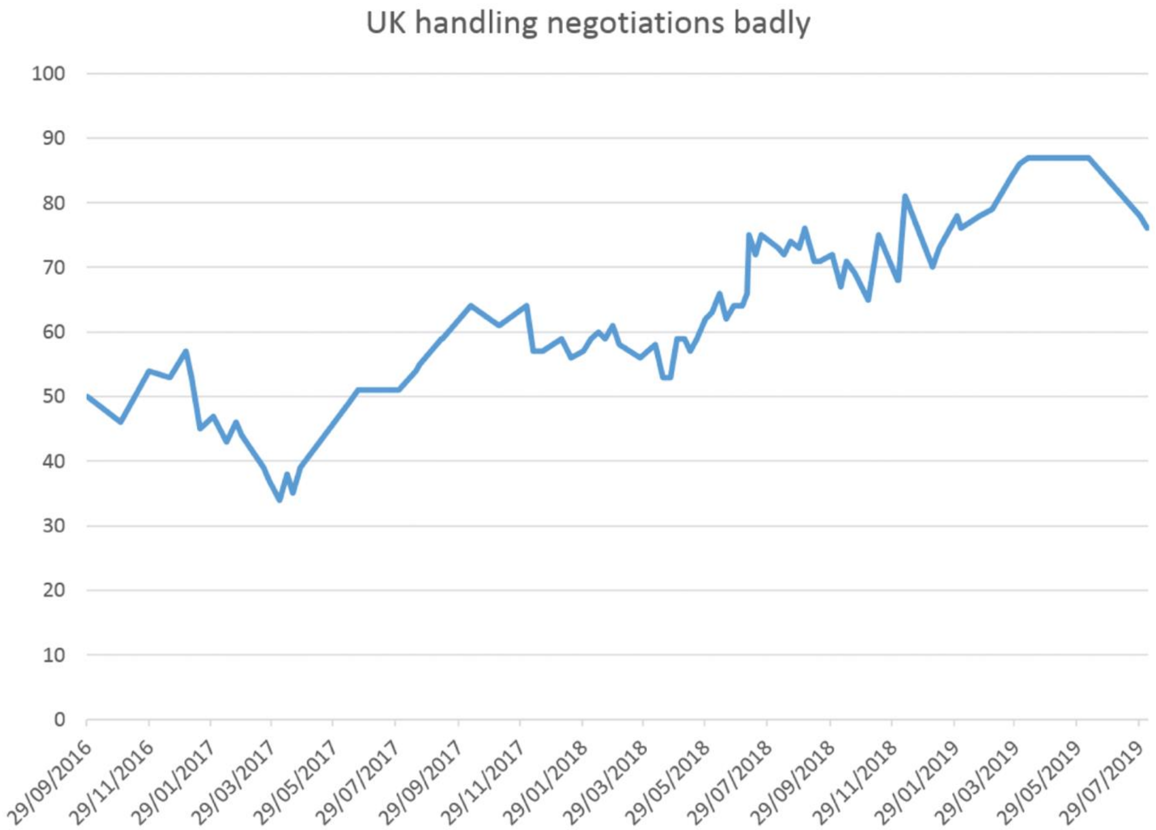
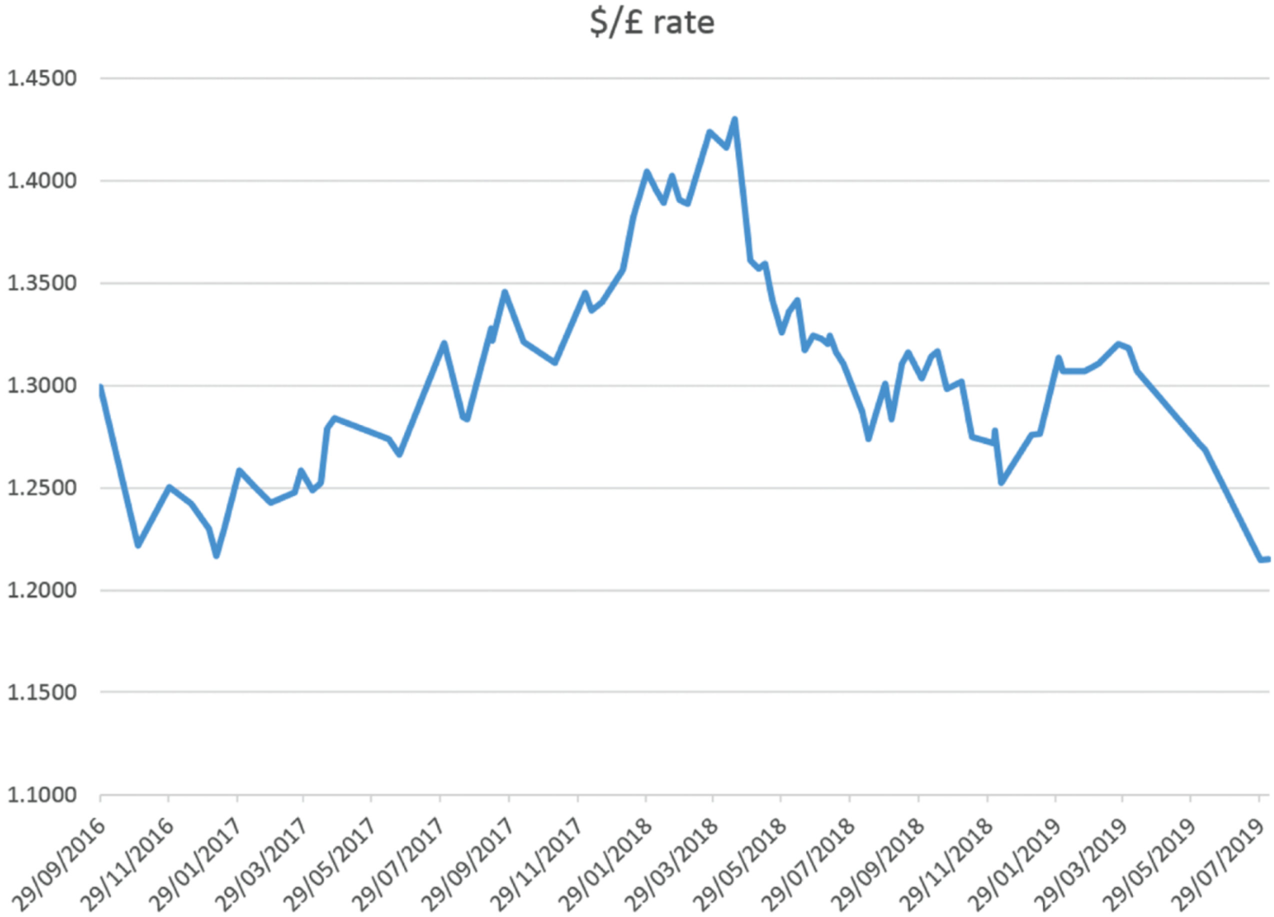


Figure 5: The Dollar-Per Pound Exchange Rate.

Source: Federal Reserve.



4 Conclusions

The longer term fate of sterling will ultimately depend upon the impact of whatever sort of Brexit actually occurs and the degree of the adverse effects on the British economy. One can apply a simple rule – the harder the Brexit the greater the damage to the UK economy and the larger the required eventual nominal and real depreciation of the pound. There is ample reason to think that an eventual relatively soft Brexit could see the pound recover to around $1.40/£1–$1.45/£1 while with a hard Brexit it could depreciate to $1.10/£1 or in a worst-case scenario to $1/£1 within a year of a hard Brexit. Such a wide possible trading range has very different implications for the UK economy, UK living standards and the government finances. Already in the 3 years after the Brexit referendum according to the Bank of England, see **Bloom et al (2019)** Brexit has had a negative effect investment of 11% and reduced labour productivity of between 2% and 5% although the labour market employment has remained resilient. The estimated effect on real GDP is some 1.5%–2% lower than it would have been. These are early warning signs that a hard no deal Brexit will be highly damaging to the UK economy in both the short and long term. The pound depreciation since the referendum has correctly acted as a barometer for the health of the UK economy and it is likely to continue to be so for the foreseeable future, until a long terms stable trading relationship between the UK and the European Union is established.

References

- Bloom, N., P. Bunn, S. Chen, P. Mizen, P. Smietanka, and G. Thwaites. 2019. *The Impact of Brexit on UK Firms*. Bank of England Working Paper 818.

- Korus, A., and K. Celebi. 2018. "*The Impact of Brexit and the British Pound/Euro Exchange Rate*." EIW Discussion Paper disbei243, Universitätsbibliothek Wuppertal, University Library.