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Trade, Businesses and Economy of U.K. post-Brexit—A Quantitative Analysis

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Abstract: Many studies have been carried out on Brexit's economic impact on the UK, EU27, the US, and the rest of the world. Depending on the assumption of whether Brexit will be a hard Brexit or a soft Brexit, almost all studies predicted Blows to the economies of the UK and the EU, with a more severe blow to the UK economy. With the Trade Co-operation Agreement signed by the end of the year 2020 and the actual divorce of the UK from the EU with effect from 01-01-2021, the actual effects of Brexit came to reflect in various economic data reported by various national and international agencies. This paper has made an effort to analyse these hard data and examined the Brexit impacts on various sectors. It has also taken clues from the various surveys on the problems faces by businesses on the border, shortage of labour, etc. In February 2023, a protocol on Ireland/Northern Ireland, commonly referred to as the Northern Ireland Protocol was finalized which became a part of the EU-UK withdrawal agreement that ensures that hard border is avoided on the island of Ireland. The protocol takes into account the unique circumstances of the island of Ireland. It was agreed between the United Kingdom of Great Britain and Northern Ireland (UK) and the European Union (EU) as a stable and lasting solution designed to protect the all-island economy and the Good Friday (Belfast) Agreement in all its dimensions, and to safeguard the integrity of the EU single market. The study concludes that the UK has done a relatively good job of managing the inevitable Brexit disruptions, including transitional measures for the border. It has also set a laudable goal of having the best border in the world by 2025, which will require streamlining the Regulatory Control Systems, The UK has done very well on the external trade policy agenda, concluding a *de novo* deal with Australia and New Zealand. The UK is also exploring seriously a Comprehensive Agreement with Trans-Pacific Partnership. But much is still to be done on the Domestic Regulatory Reform front. Unless the UK uses 20233 to engage in meaningful and comprehensive regulatory reforms, the opportunities of Brexit are in danger of being squandered.

Introduction

The last 100 years of Britain have been described as a 'managed decline' by Douglas Carswell (Carswell, 2016) as the country has itself been reduced from the World's major superpower to a relatively insignificant island off the French coast and this has compelled it to join the European Union (EU). During 1963 and 1967, the UK applied for membership of the European Economic Community (EEC); but the proposal was vetoed by French president Charles de Gaulle, stating that the UK harbours deep-seated hostility to any pan-European projects and that UK's economic practices, ranging from Agriculture to working practices, were incompatible with Europe. (BBC, 1967). It was only after the then president of France Gaulle stepped down in 1972, that the Treaty of accession was signed by the British Premier Edward Heath followed by the final validation of the UK's EEC membership w.e.f. January 1, 1973 (BBC, 1973).Thus, the admission of the UK into the EU was fraught with a lot of reluctance and has always been uncomfortable politically also. The first-ever national referendum on the issue of the UK continuing in the EEC was held in 1975 in which 67.2% turned out in favour of staying with the EU and thus the UK continued to be a member of the EEC. The second referendum held in 2016 came out with the Leave decision securing a simple but decisive majority of 51.9% further involving a two-year time period for negotiating the terms of Exit with the EU. Finally, the United Kingdom left the European Union on 31 January 2020, after 47 years of EU membership. In accordance with the 'Withdrawal Agreement', it became a third country to the EU, no longer participating in EU decision-making. However, EU and UK jointly agreed on a 'Transition Period' during which negotiations were held to draw out a fair partnership plan for the future. The said long negotiations since mid-2016 which ended just a day before Christmas eve 2020 giving birth to what is called 'The EU-UK Trade and Cooperation Agreement (TCA)' signed on 30 December 2020, came to signify the final leg of the divorce, fundamentally changing the basis of trade between Europe and the United Kingdom.

Joining the European Economic Area is closest to remaining a member of the EU, like Norway. They are members of the European Single Market, which means that they commit to its four freedoms: free movement of goods, services, capital, and labor. As a result, the member states adopt all the EU laws relating to employment, consumer protection, product standards and competition policy. They also contribute monetarily by paying in the EU budget as a part of single market. The Single Market lowers the trade costs across the border, which are imposed when goods and services cross borders as well as the costs after crossing the border, which arise from differences in regulation and economic policies of various countries. For example, Single Marketing passporting rights give financial firms the right to provide services throughout the Single Market. Similarly, it is ensured through regulatory harmonization that the producers do not have to adapt their goods to different product standards in different countries.

What was agreed in the TCA:

The TCA was fundamentally designed to smooth Customs formalities and other controls that would have applied to trade between the UK and EU. Specifically, the TCA set out a basis of free trade agreement which provided for zero tariff and no quotas on the imported goods. It also targeted support for assisting the businesses in the rule complying with the rules of origin requirements and also in regard to customs requirements/frauds and VAT. Whereas in relation to the financial services sector, these provisions have very limited application. Importantly, The TCA did not extend the right to the firms automatically to offer services on a pan-EU basis, while within the EU area (the so-called “passporting”). This meant that following the end of the transition period on 31 December 2021, the firms would no longer benefit from automatic access to the EU single market and it would be mandatory to comply with the applicable host country rules.

Additionally, the TCA provisions for the coordination of citizens’ social security benefits and a good governance clause in which both UK and EU agreed to uphold standards in anti-tax avoidance, public tax transparency, and exchange of information. In order to ensure fair competition, it also included high-level provisions to manage any future divergence of state aid and subsidy control.

What does the Windsor Framework cover?

The protocol, and the joint solutions under the Windsor Framework, include new arrangements that respect the integrity of both the UK and the EU single-market. These arrangements include:

- Customs—facilitation for trusted traders.
- VAT and excise—avoiding unintended consequences of EU VAT and excise rules applying in Northern Ireland.
- Agri-food (sanitary and photo-sanitary rules)—facilitating retail goods to enter Northern Ireland.
- Medicines—ensuring supply of new medicines to Northern Ireland.
- State aid—clarifying when state aid is applicable to subsidies that have a genuine and direct link to Northern Ireland.
- Pet travel—facilitating pet travel between Northern Ireland and Great Britain.

Stormont brake

The framework introduces a mechanism called the “Stormont brake”, which would allow the Northern Ireland Assembly to temporarily stop any changes to EU goods regulations from applying in Northern Ireland if the assembly feared that the changes would have a significant and lasting effect on everyday lives. According to the agreement, the Northern Ireland Assembly can trigger the brake on any new significantly different rule implemented if 30 Members of the Assembly from two or more parties object, giving way to a 14-day consultation period before the reference to the UK government for consideration. Cross-community consent (support from both Unionists and Nationalists) is not required for this.

The Consequences of Brexit

The United Kingdom is a small open economy with a comparative advantage in the Services Sector, which is primarily dependent on trade with the EU. Brexit has a diversified effect on various sectors like trade, employment, transportation, economy, financial services, labour availability, etc. However, Brexit was majorly an economic gamble which could diminish Britain’s place in the world. However, little attention was paid to the economic implications by a campaign that came to be dominated by immigration (Missy, 2016).

Trade

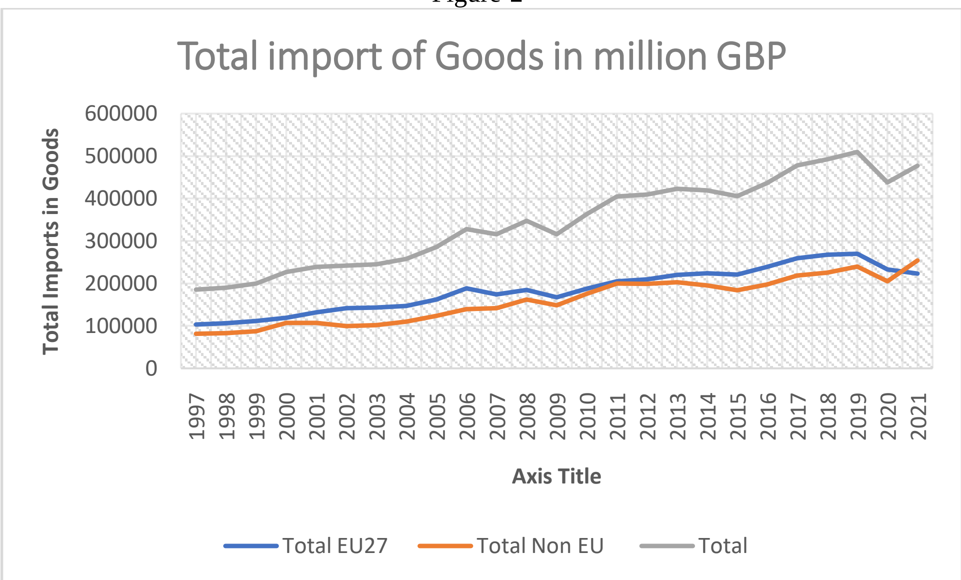
The trade openness, measured as the sum of exports and imports relative to the GDP, of the UK in 2015 was 0.57 compared to 0.86 for Germany and 0.28 for the United States (World Bank 2017). However, the share of exports and imports of the UK with the EU was 44% and 53% respectively in 2015. Therefore, UK-EU trade is substantially more important to the United Kingdom than to the EU. This is the reason why most of the researchers believed that after Brexit, because of customs difficulties, bureaucratic red tape,etc., the UK will suffer from a decline in trade. New rules governing EU-UK trade took effect on January 1, requiring 4-page customs forms for all goods and health certificates for meat and dairy products. As a result, British exports to the EU fell nearly by 15% in the first 10 months of the year, according to Eurostat, while UK agri-food exports dropped by more than a quarter.Figure-1 below shows the export of goods to EU and non-EU countries separately and the total exports in goods.

Figure-1[1]

It can be seen that the export of goods to non-EU countries has increased and surpassed the figure of export to EU27 countries from 2015 onwards and it continues to do so. Moreover, the total export of goods reduced from 2019 to 2020 and then partially recovered in 2021.

Similarly, the imports' trend in respect of goods is shown below graphically in Figure-2. It can be seen that the import of goods from non-EU countries has also exceeded that from EU27 countries in 2021. Similar to the export trend, the total import of goods has declined since 2019 with a partial recovery in 2021. It is, therefore, evident that imports and exports have declined from 2019 to 2020 and recovered partially in 2021. However, these changes are not solely attributable to Brexit as the incidence of Coronavirus coincided with this period of time. Nevertheless, it can perhaps be safely derived that the trade has started shifting partially out of EU27 countries.

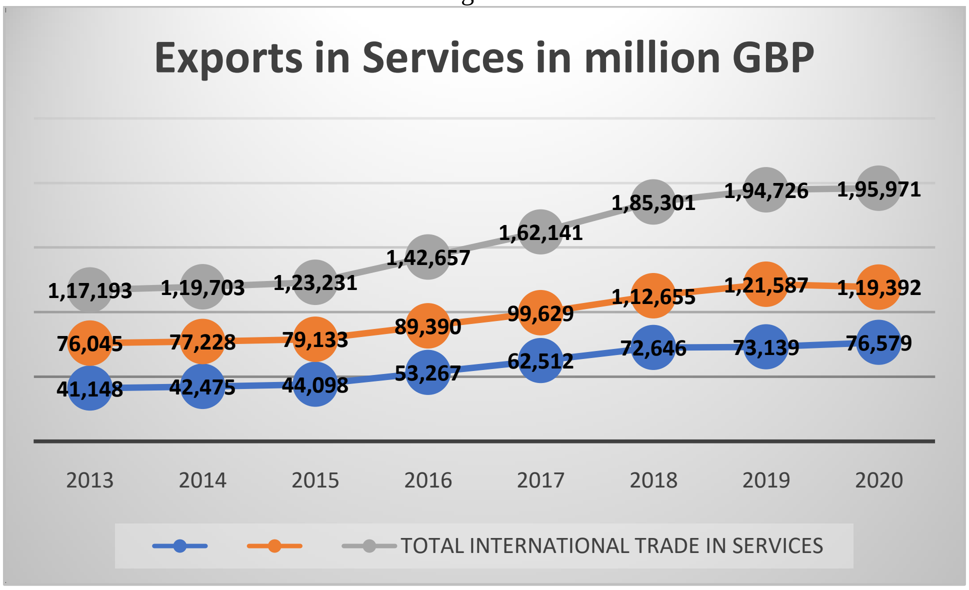
Figure-2[2]



[1] *Data Source: Brexit monitor 2022 and Eurostat*
[2] *Data: Eurostat 2022*

Exports and Imports in Services (excepting Travel, Transport and Banking) have trended as displayed in Figure-3 and Figure-4. The figures are available only up to 2020. It is seen that

Figure-3



Export of services has slightly decreased to the non-EU countries, while the export to EU27 has increased marginally from 2019 to 2020. As the actual Brexit started with effect from 01.01.2021, the effect of Brexit will be seen pronounced in and after 2021. Nevertheless, as the export of services to non-EU countries is about 50% higher as compared to EU27 countries, the effect of Brexit can be expected to be minimal in terms of value. Additionally, the figures may be flattered by the fact that the UK has delayed implementing many of its post-Brexit border controls until 2022. From January 2022, imports from the EU need to be immediately accompanied by a customs declaration.

As far as the import of services is concerned, export is more in value than import. From 2019 to 2020, imports from EU and non-EU countries both increased, however more from the EU27 countries.

Figure-4

Trade openness is defined as goods and services trade as percentage of GDP. UK trade openness has fallen more quickly than other advanced economies. Figure-5 shows the trends.

Figure-5[3]

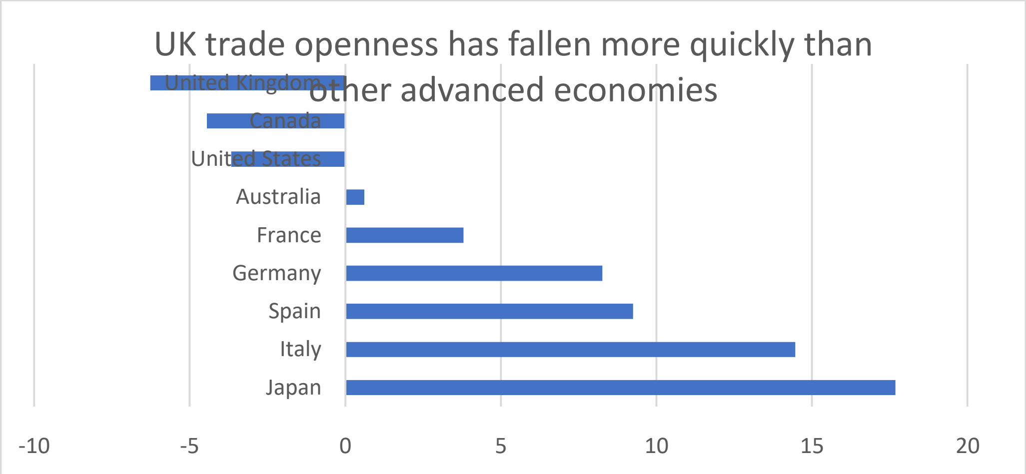


Table-1

% Change in Trade Openness, Q1 2017-Q4 2021

Japan	17.6889367
Italy	14.4648742
Spain	9.254634047
Germany	8.268519349
France	3.80563048
Australia	0.616934943
United States	-3.662778578
Canada	-4.44879403
United Kingdom	-6.263503835

This is a substantial blow to globalization efforts and may be in coming years trade openness will improve when UK diversifies its trade with other countries. Britain has made only limited progress in signing trade deals that go beyond the agreements it enjoyed while in the EU. Early December 2021, the UK signed its first wholly independent trade deal with Australia and preliminary terms have been agreed with New Zealand. But the economic boost from these two deals is forecast to be limited. A trade deal with the U.S., touted as one of the major prizes of Brexit, appears years away. UK is also trying to finalize a trade deal with India by the end of this year.

UK has done a relatively good job of managing the inevitable Brexit disruptions as much as it can with its new Border Operating model, including transitional measures. It has also set up a laudable goal of the Best Border in the world by 2025, an ambitious commitment to streamlined single trade window. The U.K. has done very well on external trade policy, by concluding a de novo deal with Australia in record time. But UK's domestic 'regulatory reforms' agenda where it does not even cross the passing grade. Unless the U.K. uses 2022 to engage in a meaningful pro-competitive regulatory reform domestically, starting with the body of EU acquis which has been ported into UK law post Brexit, the big opportunities of Brexit are in danger of being squandered.

Growth

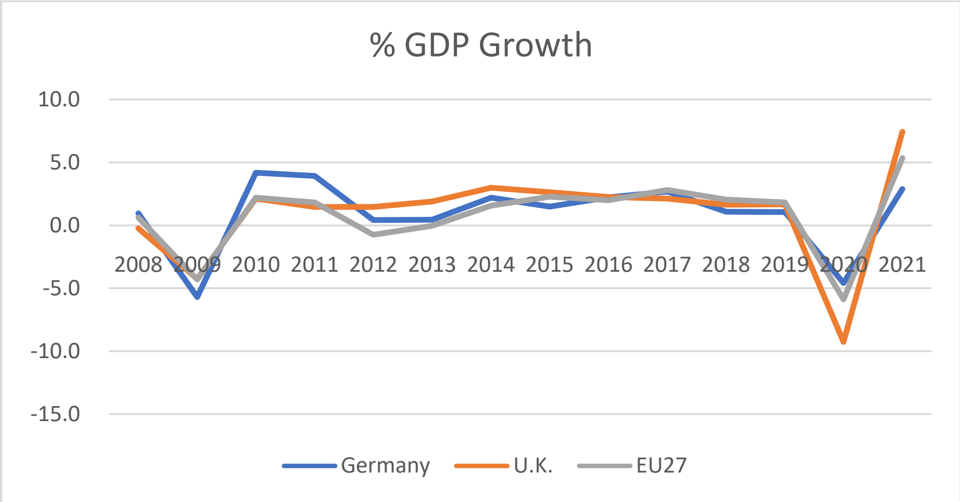
Even before Britain completed its split from the EU at the end of 2020, Brexit had reduced the size of the UK economy by about 1.5%, according to the estimates from the Office for Budget Responsibility. That was

[3] *OECD Data.*

due to a fall in business investment and a transfer of economic activity to the EU in anticipation of higher trade barriers. The percentage GDP growth rate of UK, EU27 and Germany is shown in the following figure.

It can be seen that during pandemic the GDP growth rate was negative in case of all the three countries i.e., UK, EU27 and Germany. But the maximum fall was in the case of Britain. This may include some effect due to Brexit vote. But in 2021, there was considerable recovery but many other countries like India have registered much better recovery than UK. While the underperformance of UK economy is not disputed, it could have many causes apart from Brexit.

Figure-6



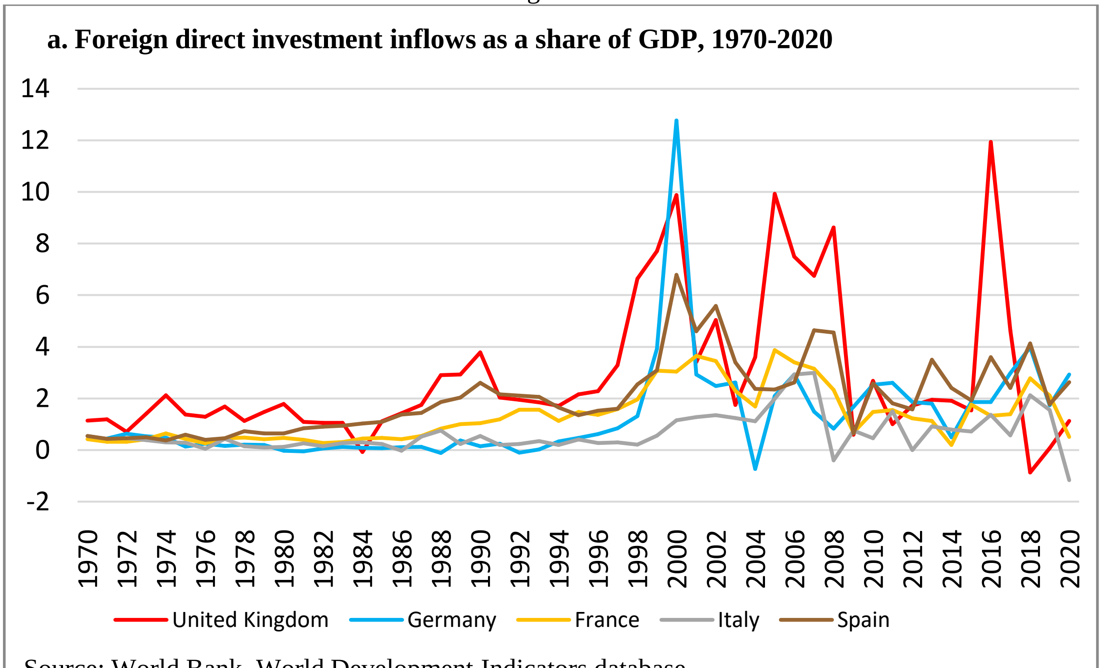
Data Source: Eurostat

Economists worry that variations in counting GDP by the ONS have potentially temporarily depressed the UK number. These variating data may also be due to varying experiences of covid-19 pandemic.

FDI Inflow

FDI inflow as percentage of GDP has declined drastically since the time of Brexit vote in 2016, then improving slightly till 2020. These trends compared with similar data w.r.t. other countries from 1970 to 2020 are shown below as in figure-7. This is because of uncertain regulatory environment in the U.K. after Brexit.

Figure-7



Source: World Bank, World Development Indicators database

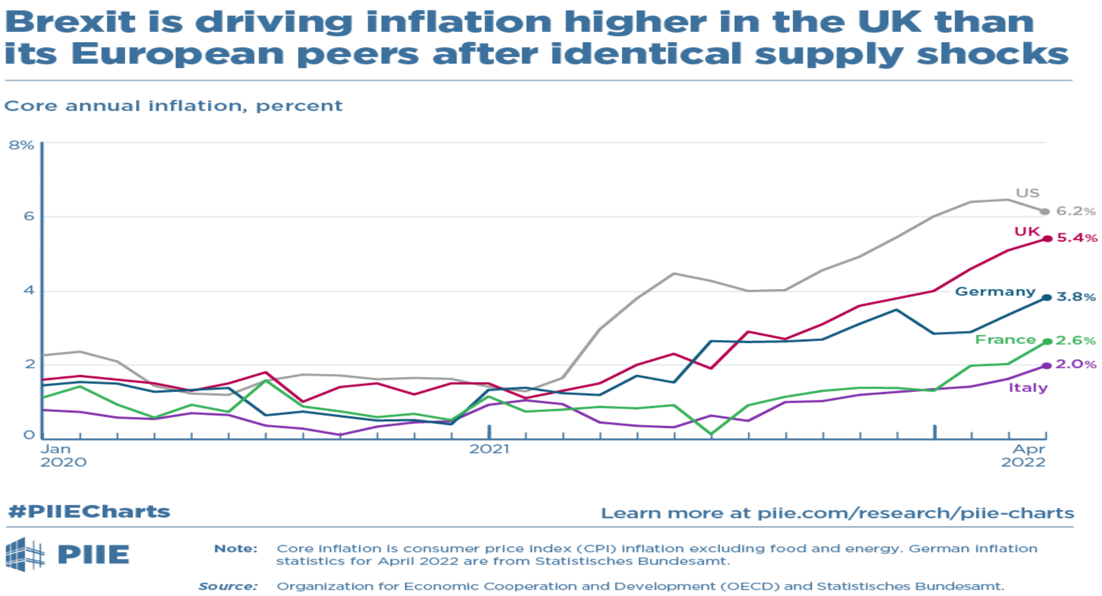
With the TCA, the UK can no longer avail any benefit from a seamless entry to the EU Single Market and Custom's Union as well as to the ecosystem EU policies and international trade agreements **("EU Market").** Although EU and UK will now form two distinct markets with different regulatory environments, there is certainty of stricter customs checks controls at the borders. Nevertheless, the TCA will ideally serve to limit such disruptions, businesses, stakeholders and customers will most likely be impacted on both the sides of the borders. Brexit may cause FDI to fall in the UK due to no more 'direct approach' to the EU single market, making it a less attractive destination for MNCs. Moreover, complex supply chain between headquarters and local branches of such MNCs and coordination costs entailed by them, resulting in more difficult management.

The financial services industry in UK is one of the largest recipients of FDI in the UK. However, there is a minimum mention of financial services in the TCA, and has been left to future discussions as presently, 'passporting rights' are not available which hitherto were available with such businesses.

Overall, the trading uncertainty created by Brexit is likely to have an unfavorable impact on the foreign direct investment landscape in the UK. This will also affect the companies situated outside the U.S. that solely relied on the UK as a door to the EU single markets. They will have to find distinctive strategies and find commercially viable solutions to avoid ancillary expenditure in establishing distinct entities in the EU and the UK, while still taking advantage of frictionless movements of goods and services.

Inflation: Many high-income economies are suffering 40-year highs in inflation. They all have faced the same series of major supply shocks to their economies simultaneously: the reopening of the economy after the first wave of the Covid-19 pandemic in spring 2021, global supply chain disruptions for critical goods throughout the last 18 months, and energy and food prices' shocks caused by the Russian invasion of Ukraine in February 2022.

Figure-8[4]

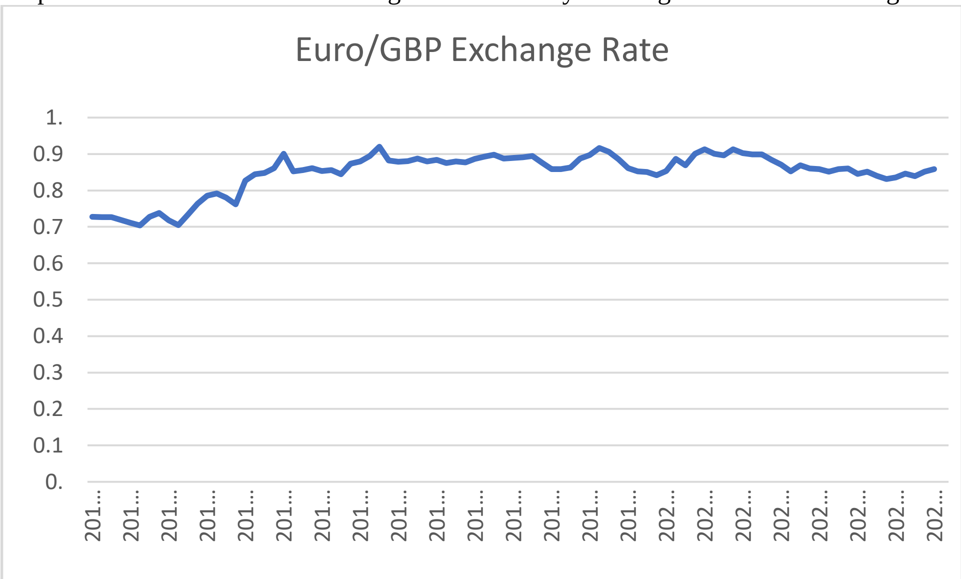


Yet there are significant differences in the inflation experienced by various countries. This has been shown in the Figure-8 above. The inflation in UK has reached to an acute level causing hike in cost of living. The inflation in UK is almost 1.6 percentage points higher than Germany and nearly 3 percentage points higher than in France, and more than 3 percentage points higher than in Italy. Moreover, the core inflation in the UK is catching up with that in the US despite much greater fiscal stimulus and labour market disruption in the US as compared to the UK during 2021. Brexit is the primary driver of the high and widening inflation differential between the UK and its European peers as shown in the figure above. The UK government has unilaterally cut the labor supply and its elasticity by ending the free movement of EU migrant workers as a result of Brexit. Brexit introduced new tariffs and nontariff barriers on imports from the EU, which slashed the purchasing power and triggered inflation during the staggered implementation of the Brexit deal.

[4]This PIIE Chart was adapted from Adam S. Posen's presentation at *The Economics of Brexit: What have we learned* conference 2022, hosted by *UK in a Changing Europe*.

Exchange Rate of British Pound vis-à-vis EURO

It has been just five years since the UK voted to leave the EU, and the world has changed dramatically since 2016. At the start of 2021, the sterling was 15% weaker relative to the euro than it was on the eve of the vote to leave. There are a variety of reasons why currency moves, but over the last five years, one of the main factors of the fluctuation of currency rates is the trade frictions between the UK and the EU. In addition, continued uncertainty and persistent political instability resulted in financial institutions trying to sell off the pound and the pound became weaker. The change in the monthly exchange rate is shown in Figure-9 below.



Data Source: Brexit Monitor 2022.

It can be seen that despite of uncertainty, exchange rate movements were actually minor when the UK actually left the EU and the transition period ending December 31, 2021. One of the reasons for fall in pound-sterling was that foreign goods and services as well as assets became more expensive for UK residents. This resulted in aggravated inflation and a higher cost of living.

Labor Shortages

The year 2021, the first year since the UK operated outside of the EU, saw a plethora of complaints of shortages of labour from across the economic spectrum. Although corona pandemic had a substantial influence on the availability of migrant workers, Brexit also resulted in shortages in areas where the EU migrant's dependence has been more, especially the jobs involving lower skill levels. The UK laws granted work visas to the EU and other countries migrants who received wages above a certain level. Therefore, the following labor-intensive sectors, paying lesser wages than the prescribed level for work visas, suffered the most shortages.

A. Hospitality sector. Many hotels, bars, and restaurants have suffered or struggled to find staff. Before the pandemic, a quarter of workers in hospitality and tourism in the UK were non-British nationals and almost half of them were from other European countries[5]. The latest UK official figures put the number of vacancies in the hospitality sector at 165,000 in the three months period from September to November 2021.

B. Agriculture and Horticulture
British agriculture was particularly reliant on the freedom of movement of EU workers before Brexit. Till the UK was a part of EU, its agriculture was protected from competition with French and other countries' efficient farming practices. As a result, some growers have reportedly cut planting plans for 2022 by more than one third. Other initiatives include a national campaign encouraging more UK residents to "pick for Britain". But an NFU survey suggests it is hard to recruit from the domestic workforce.

C. Meat and Dairy The labor shortage crisis in the UK pig industry witnessed a backlog of animals growing fat on farms for a lack of drivers and abattoir workers.

[5] *Alasdair Sandford & Luke Hanrahan, "A year since Brexit: How bad are the UK's labour shortages now", Euronews . 03/01/2022.*

D. Lorry Drivers
A supply chain logjam from the late summer saw supermarket shelves go empty and petrol stations run dry. The reason was a shortage of delivery drivers, a problem shared by some other European countries also but more acute in the UK and Brexit is one of the several contributing factors. The government needs to take effective steps to make up the shortage by allowing more work visas for longer periods and making wages attractive as compared to other countries, as the efforts to hire from within the country have failed.

E. Social Care. Since Brexit, social care workers are no longer automatically eligible to work in the UK and have to apply for visas. On December 24, 2021, the government announced that it will add care staff to the Shortage Occupation List, opening up the sector to allow workers from overseas on 12-month visas. The effect of the measure will be noted after some time.

F. Industry and Government at loggerheads over Workers' Issue The exodus of European workers is evident in the latest official figures. According to the ONS data, 94,000 more EU nationals are estimated to have left the UK in 2020 than to have arrived—up by almost 40 percent compared to 2019. The government believes that the industry was over-reliant on the cheap EU workers and has not done enough and not offered enough incentives to recruit domestic workers. On the other hand, the industry criticizes the government for not doing enough for getting workers or liberalizing visas. Hence, the only alternative for the industry is to seek solutions other than immigration.

Conclusions

At the end of the first year of new trade terms between the UK and the EU, Brexit has been most notable by the absence of drama at Britain's borders. Of course, there have been a few tailbacks at the ports and little noticeable disruption to the flow of business/trade, but activity has been much lower than expected, despite tighter import controls, especially on food and agricultural goods. According to economists, Brexit's overall effect on the UK economy and people's living standards appears to be negative but uncertain as the effects of the corona pandemic and the Russia-Ukraine war cannot be disentangled at this moment. Perhaps, after a few years, the impact of Brexit on the UK's economy would get clarified. Economists also believe that variations in counting GDP by the ONS have potentially temporarily depressed the UK number. With these potentially confounding causes of economic weakness, a picture has arisen where Brexit has made it harder for the supply side of the British economy to adapt to the reopening of sectors after the lifting of the lockdown. The way the government handled the situation, it can be expected that lower trade would lead to lower growth, but how the trade activity would affect the economy was "extremely uncertain". Still, the detrimental effects of reduced trade with the EU would diminish over time. If the trade performance has been negative till now, the effect on the UK service sector is more of "refocussing geographically" than of large losses.

Although shortages of lorry drivers, farm laborers, and abattoir workers have posed teething problems in the ending of free movement of labour. But the government smoothly introduced a new visa regime to stem the losses. It is not very surprising that immigration to the UK from EU countries as anyone who had wanted to come to the UK could have done so before visas were required in 2021. Moreover, skilled work visas are substantially up compared to the pre-pandemic era. Especially, the huge take up is observed in health and care visas. New import rules being implemented in the first half of 2022 threatened to add more friction but commitments from HM Revenue and Customs to prioritize trade flow over controls are expected to have minimized additional negative impacts.

Moreover, the Windsor Framework entered this year is a post-Brexit legal agreement between the EU and the UK, designed to address the problem of the movement of goods between the European single market and the UK in Northern Ireland. The proposed agreement relates to goods crossing the Irish Sea from Great Britain to Northern Ireland. It would introduce green and red lanes to reduce checks and paperwork on goods that are destined for Northern Ireland and separate them from goods at risk of moving into the EU common market. It also includes a number of agreements on medicine control, VAT, and alcohol duty. All these steps are considered to resolve many of the problems in the movement of trade between the UK and EU, also restoring the position of Northern Ireland with respect to its relationship with the EU single market.

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