

# UK Brexit update

## Taking stock, one year in

Free to View  
Economics - United Kingdom

- ◆ A year into the (effective) post-EU era, UK exports are weak and the labour market is suffering acute shortages
- ◆ But the pandemic clouds the picture and it is too soon to draw firm conclusions on how much is due to Brexit
- ◆ As global trade and migration flows normalise, the impact may become more evident

---

**Elizabeth Martins**  
Senior Economist  
HSBC Bank plc

---

### Happy birthday, dear Brexit

It is now just over a year since the end of the post-Brexit transition period, and in this note we take stock of the impact so far. Of course, the waters have been muddied by the impact of the pandemic. While we might have predicted weak exports, supply shortages and outward migration, all of these can, to some degree, be attributed to other factors. Indeed, in terms of goods exports, sales to non-European markets are down by considerably more than those to the EU.

The impact is more evident in imports, and in services, where the opposite is true: a divergence in financial, legal and professional service exports to EU and non-EU markets suggests there has been an impact. Indeed, no progress has been made on a financial services deal, and there is evidence of an impact in some areas, like equity trading. But the worst predictions have not come to pass, and London retains its number two spot in the global financial centre rankings (after New York) and its dominance of the European derivatives clearing market.

### Labour market unclear too

We also think it is a little too soon to know how much of the UK's labour market shortages can be attributed to Brexit. ONS data suggest there may be around 300,000 fewer EU-born people in the UK compared with the peak in Q1 2020, but the pandemic may have been at least as decisive a factor as Brexit in these departures. As the situation normalises in 2022, we may see the UK stand out, due to its more stringent inward migration rules. This could mean the UK's inflation risks are particularly acute.

### Article 16 still on the table

If post-EU life has been complicated with a trade deal, it would likely be considerably more so without one. With the UK still saying it could trigger Article 16, effectively annulling all or part of the Northern Ireland protocol, we could, in a worst case scenario, be back in the limbo land of 2016-19, where the fate of the whole Trade and Cooperation Agreement is in doubt. A 'no deal' Brexit may not yet be off the table.

*This is an abridged version of a report by the same title published on 18-Jan-22. Please contact your HSBC representative or email [AskResearch@hsbc.com](mailto:AskResearch@hsbc.com) for more information.*

### Disclosures & Disclaimer

This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it.

Issuer of report: HSBC Bank plc

View HSBC Global Research at:  
<https://www.research.hsbc.com>

# Taking stock, one year in

- ◆ A year into the post-EU era, UK exports are weak and the labour market is suffering acute shortages
- ◆ But the pandemic clouds the picture and it is too soon to draw firm conclusions on how much is due to Brexit
- ◆ As global trade and migration flows normalise, the impact may become more evident

## Happy birthday, dear Brexit

### A year on from the end of the transition

New Year's Day 2022 marked the first anniversary of the end of the post-Brexit transition period, and hence the first year in which the UK was fully, effectively, out of the EU. In this note we take stock of the first year and the outlook from here.

### Exports: weak both in and out of the EU

Let us begin by reviewing the data. UK goods exports have not recovered from the hit from the pandemic. While overall GDP was just 1.5% below pre-pandemic levels in Q3, exports of goods and services were over 20% below. Although the latest monthly data do point to the beginnings of a pick-up in October and November (chart 1), volumes remain very low indeed by historical standards, and the latest manufacturing PMIs show new export orders falling between September and December.

In terms of the breakdown, as far as goods are concerned, it is actually exports to *non-EU* destinations that have led the drag since the pandemic (being down 36% relative to pre-pandemic highs in Q3, compared with 13% for goods to the EU). The biggest falls by goods type were in UK mechanical machinery (particularly to the US, UAE and Singapore), while UK car exports to the US were also down quite a bit.

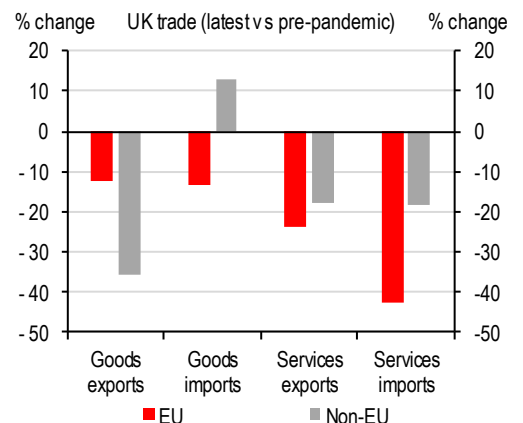
UK goods exports are weak...  
but Brexit is not the obvious  
culprit

### 1. UK export volumes have not recovered from their pandemic lows



Source: ONS, HSBC

### 2. Trade flows have been hit hard by the pandemic



Source: ONS (NB goods data refer to change from Q321/Q419, services from Q221/Q419, services non-seasonally adjusted)

### Considerable headwinds for those exporting into the EU

2019 is a slightly misleading comparison, due to a surge in non-monetary gold exports from the UK to non-EU destinations in the last quarter of the year. But the same is true if we compare with 2016, for example (chart 3). Non-EU exports are down by more than EU exports.

So, while Brexit has clearly not helped, we cannot say that it is the reason for the export underperformance. Instead, we would have to say that Brexit has added complications at a time when UK exports were already facing headwinds. After all, since the start of 2021, exporters have faced:

- ◆ New customs procedures, including UK export declarations and import requirements on entry to EU Member States
- ◆ Tariffs in cases where goods do not meet rules of origin requirements
- ◆ Health certification, new biosecurity requirements and border checks in the case of animal and plant exports
- ◆ The need for certification of both UK regulatory standards for goods produced in the UK and EU regulatory standards for those sold into the EU
- ◆ Separate checks, registration and VAT requirements for goods moving between Great Britain and Northern Ireland

Certainly, the surveys suggest the new trade barriers have been causing headaches for manufacturers:

**“ Exports remained the main area of weakness across the UK manufacturing sector, with new orders from abroad falling for the fourth month running. Brexit-related trade difficulties featured prominently in the comments**

**IHS Markit PMI Press Release (UK flash, December 2021)**

An additional survey conducted by the manufacturing association Make UK also found that the impact had been meaningful;

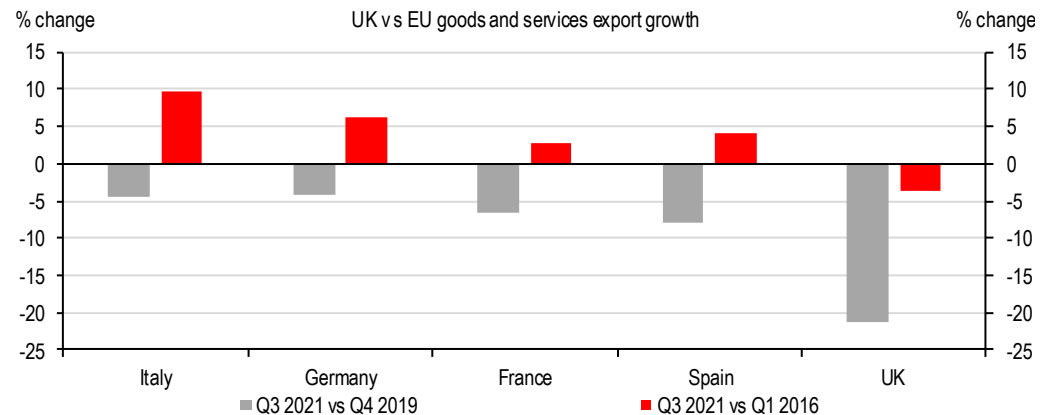
**“ One year on from leaving the EU, two thirds of companies said that leaving had moderately or significantly hampered their business, with over a half of companies (56%) fearing a further impact this year from customs delays due to import checks and changes in product labelling.**

**Make UK Survey, 10 January 2022**

### UK exports compare poorly to European equivalents

Of course, we might argue that some of the recent weakness has been supply driven. Car exports, for example, have plummeted globally due to the shortage of chips. But other countries face the same challenges, without the same overall result. For example, German exports of goods and services were just 4% off their Q4 2019 levels in Q3 2021, despite significant exposure to the auto sector, while the UK's were 22% off (chart 3). Again, some of this might be explained by the surge in UK exports in Q4 2019 creating a high base. But the comparison with Q1 2016 does not show the UK in a much more favourable light.

### 3. UK underperformance suggests more than just global factors in play



One possibility is that there may be indirect impacts of Brexit, perhaps via lower investment in manufacturing ahead of the UK's departure, the relocation of manufacturers to other countries to avoid the complications, or difficulties in sourcing input goods. Whatever the explanation, we are not particularly optimistic about a reversal in fortunes: as Shanella Rajanayagam points out in her Trade Outlook, UK exports are forecast to be among the slowest to recover to pre-pandemic levels.

#### So what's the good news?

On the plus side, the UK's manufacturers appear to be a little more optimistic as we have moved into the new year: the aforementioned Make UK survey found three quarters of companies expected conditions to improve this year. Moreover, as our trade economist, Shanella Rajanayagam points out, the UK has already signed a trade deal with Australia since leaving the EU, is in talks to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), is negotiating with New Zealand and India, and is set to start talks with the Gulf Cooperation Council.

Moreover, the UK government said in September 2021 that it was launching plans to capitalise on regulatory independence by shelving laws that originated in the EU where they are not beneficial, and introducing reforms to improve digitisation and unleash innovation.

#### The opposite is true for services

Looking at the services trade data, the opposite is true: exports to and imports from the EU are down by more than elsewhere, though this is less timely, with the latest release with a breakdown by destination only showing data to Q2 2021. At that point, UK service exports were down 20% from their pre-pandemic levels, comprising a 24% fall in EU orders and an 18% fall in those from the rest of the world. Given the divergence is starkest in the regulated services that would be affected by Brexit – financial services (-18% versus -8%), legal services (-24% versus -5%) and professional/management consultancy services (-30% versus 11%), for example – the argument for Brexit as a driver here may carry more weight than it does for goods.

Indeed, there has been no progress on plans for a financial services trade deal, as laid out in the Memorandum of Understanding (MoU) as part of the Trade and Cooperation Agreement (not helped by the ongoing dispute over the Northern Ireland protocol, of which more below). While there has not been an exodus from the UK financial service sector, a lot of banks are now conducting more operations out of European subsidiaries – meaning more employment and investment in Europe and less in the UK (see for example, *Reuters, Bankers quit London as Brexit relocations to EU step up, 12 May 2021*). London has also lost its place as the Europe's top equity trading centre, with Amsterdam now seeing a (slightly) bigger share of that pie.

**Deregulation and new trade deals may bring good news this year**

**The service sector divergence suggests a Brexit impact**

Still, the worst predictions for UK financial services have not come to pass: London retained its second place ranking in the Global Financial Centres Index in September 2021 (after New York), with European rivals seeing mixed performances:

**“ Other leading Western European centres had mixed results, with Paris, Amsterdam, Madrid, Stockholm, Hamburg, and Munich moving up the rankings while Frankfurt, Zurich, Edinburgh, Luxembourg, Stuttgart, and Brussels fell back, as centres compete following Brexit.**

**The Global Financial Centres Index 30, September 2021**

**The worst predictions for financial services haven't come to pass... but it hasn't been great news either**

Moreover, in November, the European Commission announced its intention to extend the waiver for European banks accessing UK based clearing houses, which still handle around 90% of euro-denominated derivatives transactions (*FT, Brussels to extend EU banks' access to UK clearing houses past June 2022, 10 November 2021*). Clearly, there is no financial centre in the bloc with the capacity to take on this EUR80trn market (*FT*), or at least not yet. But the EU still intends to reduce its reliance on London as a clearing centre.

So, a mixed picture so far, clouded by the collapse in services trade brought on by the pandemic. As global services trade recovers, we will continue to observe the trends in UK exports to the EU and outside it.

#### **Imports look healthier... but geographical divergence significant**

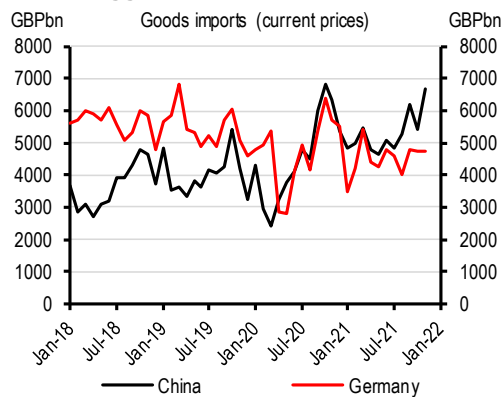
UK imports look decidedly healthier than exports. Relative to their pre-pandemic level, goods import volumes were down 1% in Q3 2021, while services imports were down 9%. However, the breakdown for both is striking: goods imports from the EU were down 13%, while those from outside the EU were up by the same amount. And this is before the UK implemented full customs checks for goods coming from the EU at the start of 2022.

Part of the strength of non-EU imports may reflect imports of personal protective equipment from mainland China (see, for example, *The Guardian, China replaces Germany as UK's biggest import market, 25 May 2021*, and chart 4). The need for the latter may fall away with time. But the contrast is nonetheless striking.

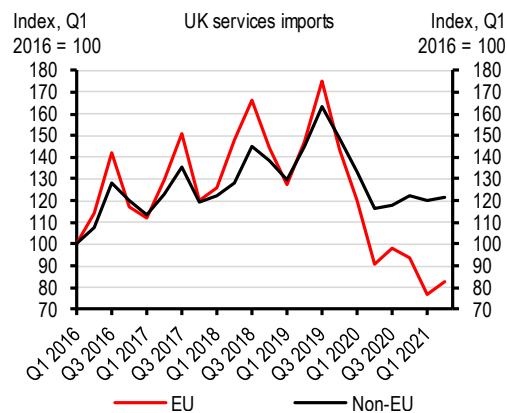
**Could the UK become more reliant on imports?**

In general, though, it seems to be the case so far that UK exports have been hit harder than imports. Indeed, in some ways, Brexit may result in the UK being *more* reliant on imports, of food in particular. Trade deals with Australia and New Zealand could increase food imports from further afield (see for example, *the Grocer, NFU slams newly signed Australia trade deal as 'one-sided', 17 December 2021*), and farmers are worried about the impact of the phasing out of the EU Common Agricultural Payment subsidies. A report by the UK Parliament's public accounts committee found that plans to replace these with so called green payments were insufficient and unclear, and incentives to convert farmland to other uses, such as forestry, could result in an increase in food imports (*FT, UK's post-Brexit farm payment overhaul fuelled by 'blind optimism', 9 January 2022*).

#### 4. Mainland China has overtaken Germany as the biggest source of UK imports



#### 5. The Brexit factor seems to be in play for services too



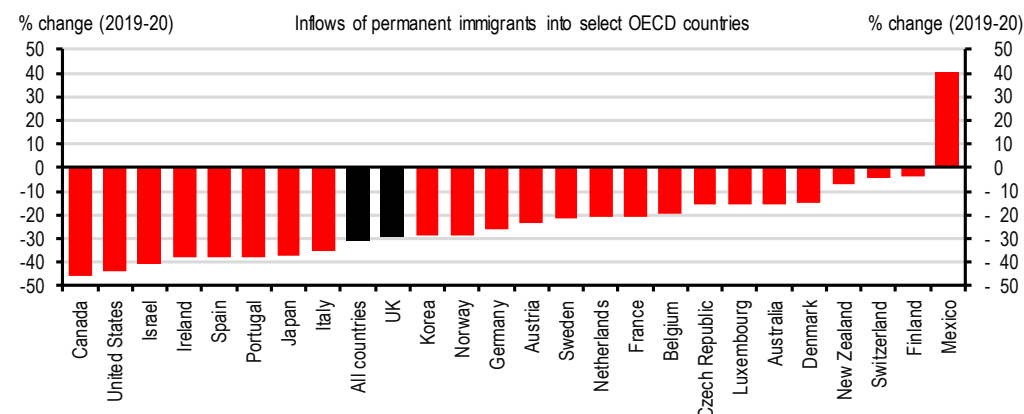
#### Disentangling the labour market factors

#### Impact on the labour market

The UK labour market has, in common with others worldwide, been struggling with a shortage of workers. Some of this has been attributed to Brexit (see, for example *Euronews, A year since Brexit: How bad are the UK's labour shortages now?*, 3 January 2022), though in reality there are multiple factors in play, not least a tightness in global labour supply which is pervading most developed market economies – and much reduced migration due to COVID-19 restrictions. For the UK, changes to the laws around self-employment (IR35) and long-standing recruitment issues (for example in HGV drivers) have also contributed.

So, is the UK in much worse a position than other DM economies due to Brexit? We would argue: not yet. Chart 6 shows what happened to inward migration across the developed world in 2020. The UK saw a fall of 30% in inward migration – far from the largest across the developed world. And that is not because it was coming from a low base. Indexing back to 2012 (chart 7), shows the UK inward migration in a similar position to the global average, and considerably lower than in the US.

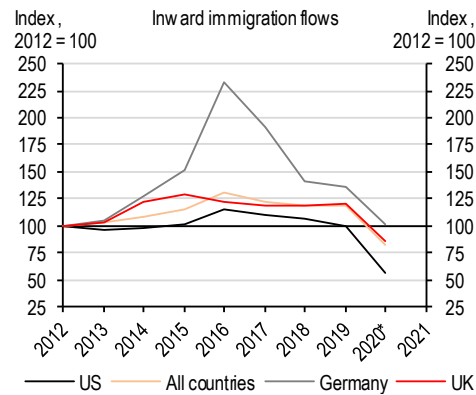
#### 6. The UK did not see bigger falls in immigration than other developed markets in 2020



#### Around 300,000 EU-born people may have left the UK since Q1 2020...

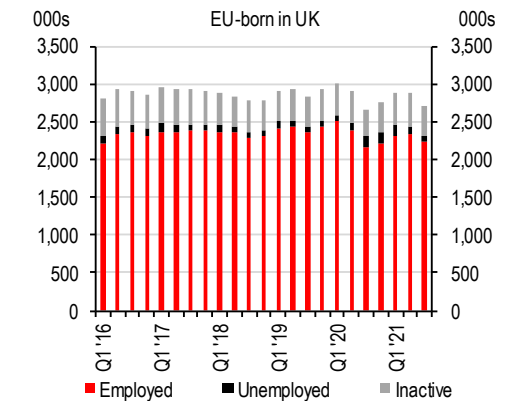
Additional and more timely data are hard to come by. The ONS does publish a breakdown of the labour force by country of birth (chart 8), though there are some doubts around the reliability of the labour force survey since the pandemic. For what they are worth, the data show that employment of EU-born workers was down by 11% in Q3 2021 from its peak in Q1 2020.

### 7. Even going back to 2012, the UK does not look too different



Source: OECD, HSBC Note: \*2020 data are estimates

### 8. ONS figures suggest about 300,000 net departures since Q1 2020



Source: ONS, HSBC

Adding together the number of EU-born people who are employed, unemployed or inactive in the UK, according to the survey, shows a fall of 9.9% (or 300,000).

This suggests that the vast majority of the fall in employment reflects people no longer in the UK, not people becoming unemployed or inactive. It is certainly possible that this in turn reflects concerns over Brexit, but the survey doesn't tell us the reason. For most EU-born people in the UK, whether or not they had UK citizenship, the new Brexit regulations would have allowed them to apply for settled status and the right to remain in the UK. It is plausible that the pandemic prompted at least some of the departures.

### What next?

Whatever the reason for leaving, EU-born workers may now find it harder to return to the UK, given considerably more stringent new rules. The UK government has made a number of concessions regarding inward migration, issuing temporary visas for truck drivers and in particular for fuel tanker drivers during the fuel crisis in October. Most recently, on 24 December, the government announced an extension of a scheme allowing fruit and vegetable growers to bring in seasonal workers for up to six months, and a provision that foreign social care workers will be eligible to enter the UK under a health and care visa "for at least a year".

Without timely migration data, it is hard to say how these initiatives will affect the labour market. We suspect that with their sector and time limitations, as well as the strong job opportunities and wages available elsewhere, the UK may still struggle to attract workers. Much will depend on how much wages rise, and how far the UK government sticks to – and is able to deliver on – its plan to foster a "high skill, high wage" domestic labour force.

So while the UK's labour market issues are clear, we cannot say conclusively that Brexit is the reason yet. That's not to say that Brexit won't have an impact if, as global migration flows normalise in 2022, the UK does not keep up. Indeed, the much more stringent rules and competitive global marketplace for labour make this scenario somewhat likely in our view. With the UK's already low unemployment rate by European standards, that points to supply constraints on growth and particularly acute inflation risks.

### Article 16: Still on the table

It could yet get more complicated, if no solution is found regarding Northern Ireland, and the UK opts to trigger Article 16, annulling all or part of the Northern Ireland Protocol.

We highlighted this risk in October last year. Essentially, the UK is unhappy with what the protocol it signed up to means for GB-NI trade, and wants changes regarding customs and Sanitary and Phyto-sanitary (SPS) arrangements; regulatory burdens; subsidy control; VAT and

**We don't know why people left... but they might find it harder to return**

**The impact may become clearer as global migration flows normalise**



excise procedures; and the oversight of the European Court of Justice<sup>1</sup>. While the government says its preference is to find a negotiated solution to these issues, it also says that talks so far have resulted in only very limited progress (namely on the topic of medicines). The UK says the conditions have already been met for triggering the ‘safeguard’ Article 16.

**Liz Truss says the UK’s position is unchanged and Article 16 is still on the table**

Since we last wrote about it, Brexit Minister Lord Frost has resigned, to be replaced in the job by Foreign Secretary Liz Truss. However, despite commenting on a “reset” in the talks (BBC, 13 January 2022), the new chief negotiator is continuing to talk tough. In an editorial on 9 January, before the latest round of talks began, she said that the UK’s position had not changed:

**“ I want a negotiated solution but if we have to use legitimate provisions including Article 16, I am willing to do that. I will not sign up to anything which [...] still sees goods moving within our own country being subject to checks.**

**Liz Truss, Sunday Telegraph, 9 January 2022**

Reports suggest that the New Year talks held in the UK between Ms Truss and European Brexit commissioner Maros Sefcovic went well, with a joint statement praising the “cordial atmosphere”. Intensified talks are due to take place in late January, with Ireland’s foreign minister Simon Coveney having said he hopes the situation will be resolved by the end of February.

**The role of the ECJ is contentious**

One major factor will be the UK’s position on the ECJ. In mid-December, various media outlets reported that the UK had softened its position on the role of the court (see for example, *The Times*, *Britain accepts EU judges’ role in Northern Ireland protocol*, 17 December 2021). Such a concession if confirmed would in our view be meaningful: the European side had never looked likely to concede the point, suggesting deadlock and, hence (potentially) Article 16. But Ms Truss’ comments on 21 December suggest the UK concession is only a partial one: “we need goods to flow freely between Great Britain and Northern Ireland, end the role of the ECJ as the final arbiter of disputes between us, and resolve other issues”<sup>2</sup>.

So what if the UK does trigger Article 16? The EU has said it would retaliate, but it is not clear what this would entail. It could refer the UK to an arbitration panel, or begin infringement proceedings (or both). If the UK does not comply with the rulings of the panel, the EU could terminate the whole Trade and Cooperation Agreement (with twelve months’ notice) or just the trade part of the deal (with nine months’ notice).

**Could the EU terminate the whole Brexit deal?**

The EU could take this action without a panel judgement, but only if one of the “essential elements” of the TCA is breached. According to a report by the UK’s House of Commons, “it appears unlikely that triggering Article 16 would breach an essential element”. But some on the EU side have suggested it is possible (see for example, *The Guardian*, *EU could shelve Brexit trade deal if UK triggers article 16*, *Irish minister warns*, 7 November 2021).

If the UK’s trade situation is complicated with the trade deal, it could be considerably more so without it. This would essentially be a delayed ‘no deal’ Brexit. And even if it might be averted by talks in the notice period, it would put the UK back onto that uncertain path it was on between the referendum and the end of 2019. This weighed on business confidence and investment the first time round, and would likely do so again.

<sup>1</sup> <https://www.gov.uk/government/news/lord-frost-statement-on-the-protocol-on-irelandandnorthern-ireland-17-december-2021-2>

<sup>2</sup> <https://www.gov.uk/government/news/foreign-secretary-call-with-european-commission-vice-president-maros-sefcovic-21-december-2021>



---

**Waiting for the muddy waters  
to clear****Conclusion: Impact may yet to be felt**

It was always going to be difficult to assess the impact of Brexit: there would always have been counterarguments and alternative explanations for apparently impacted exports, imports and labour market trends. The highly politicised nature of Brexit made that much predictable. But economists could never have predicted just how muddied the waters would become, against the backdrop of a global pandemic.

That is not to say we don't believe Brexit is having and will continue to have an impact: our forecasts for UK GDP growth see more lost output than we see elsewhere. Our forecast export recovery is among the slowest in the world. We also think the impact on the labour market will become clearer as global migration flows normalise. That points to higher inflation pressures in the UK than elsewhere.

But those are forecasts. The impact should become clearer as the global clouds lift.

# Disclosure appendix

## **Analyst Certification**

The following analyst(s), economist(s), or strategist(s) who is(are) primarily responsible for this report, including any analyst(s) whose name(s) appear(s) as author of an individual section or sections of the report and any analyst(s) named as the covering analyst(s) of a subsidiary company in a sum-of-the-parts valuation certifies(y) that the opinion(s) on the subject security(ies) or issuer(s), any views or forecasts expressed in the section(s) of which such individual(s) is(are) named as author(s), and any other views or forecasts expressed herein, including any views expressed on the back page of the research report, accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Elizabeth Martins

## **Important disclosures**

This document has been prepared and is being distributed by the Research Department of HSBC and is intended solely for the clients of HSBC and is not for publication to other persons, whether through the press or by other means.

This document is for information purposes only and it should not be regarded as an offer to sell or as a solicitation of an offer to buy the securities or other investment products mentioned in it and/or to participate in any trading strategy. Advice in this document is general and should not be construed as personal advice, given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. If necessary, seek professional investment and tax advice.

Certain investment products mentioned in this document may not be eligible for sale in some states or countries, and they may not be suitable for all types of investors. Investors should consult with their HSBC representative regarding the suitability of the investment products mentioned in this document and take into account their specific investment objectives, financial situation or particular needs before making a commitment to purchase investment products.

The value of and the income produced by the investment products mentioned in this document may fluctuate, so that an investor may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Value and income from investment products may be adversely affected by exchange rates, interest rates, or other factors. Past performance of a particular investment product is not indicative of future results.

HSBC and its affiliates will from time to time sell to and buy from customers the securities/instruments, both equity and debt (including derivatives) of companies covered in HSBC Research on a principal or agency basis or act as a market maker or liquidity provider in the securities/instruments mentioned in this report.

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking, sales & trading, and principal trading revenues.

Whether, or in what time frame, an update of this analysis will be published is not determined in advance.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at [www.hsbcnet.com/research](http://www.hsbcnet.com/research). HSBC Private Banking clients should contact their Relationship Manager for queries regarding other research reports. In order to find out more about the proprietary models used to produce this report, please contact the authoring analyst.

## **Additional disclosures**

- 1 This report is dated as at 18 January 2022.
- 2 All market data included in this report are dated as at close 14 January 2022, unless a different date and/or a specific time of day is indicated in the report.
- 3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking, Principal Trading, and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
- 4 You are not permitted to use, for reference, any data in this document for the purpose of (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments, (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument, and/or (iii) measuring the performance of a financial instrument or of an investment fund.

# Disclaimer

**Legal entities as at 1 December 2020**

'UAE' HSBC Bank Middle East Limited, DIFC; HSBC Bank Middle East Limited, Dubai; 'HK' The Hongkong and Shanghai Banking Corporation Limited, Hong Kong; 'TW' HSBC Securities (Taiwan) Corporation Limited; 'CA' HSBC Securities (Canada) Inc.; 'France' HSBC Continental Europe; 'Spain' HSBC Continental Europe, Sucursal en España; 'Italy' HSBC Continental Europe, Italy; 'Sweden' HSBC Continental Europe Bank, Sweden Filial; 'DE' HSBC Trinkaus & Burkhardt AG, Düsseldorf; '000' HSBC Bank (RR), Moscow; 'IN' HSBC Securities and Capital Markets (India) Private Limited, Mumbai; 'JP' HSBC Securities (Japan) Limited, Tokyo; 'EG' HSBC Securities Egypt SAE, Cairo; 'CN' HSBC Investment Bank Asia Limited, Beijing Representative Office; The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch; HSBC Securities (South Africa) (Pty) Ltd, Johannesburg; HSBC Bank plc, London, Tel Aviv; 'US' HSBC Securities (USA) Inc, New York; HSBC Yatirim Menkul Degerler AS, Istanbul; HSBC México, SA, Institución de Banca Múltiple, Grupo Financiero HSBC; HSBC Bank Australia Limited; HSBC Bank Argentina SA; HSBC Saudi Arabia Limited; The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR; The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch; PT Bank HSBC Indonesia; HSBC Qianhai Securities Limited; Banco HSBC S.A.

**Issuer of report****HSBC Bank plc**

8 Canada Square, London  
E14 5HQ, United Kingdom  
Telephone: +44 20 7991 8888  
Fax: +44 20 7992 4880  
Website: [www.research.hsbc.com](http://www.research.hsbc.com)

In the UK, this publication is distributed by HSBC Bank plc for the information of its Clients (as defined in the Rules of FCA) and those of its affiliates only. Nothing herein excludes or restricts any duty or liability to a customer which HSBC Bank plc has under the Financial Services and Markets Act 2000 or under the Rules of FCA and PRA. A recipient who chooses to deal with any person who is not a representative of HSBC Bank plc in the UK will not enjoy the protections afforded by the UK regulatory regime. HSBC Bank plc is regulated by the Financial Conduct Authority and the Prudential Regulation Authority. If this research is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate. In Australia, this publication has been distributed by The Hongkong and Shanghai Banking Corporation Limited (ABN 65 117 925 970, AFSL 301737) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). Where distributed to retail customers, this research is distributed by HSBC Bank Australia Limited (ABN 48 006 434 162, AFSL No. 232595). These respective entities make no representations that the products or services mentioned in this document are available to persons in Australia or are necessarily suitable for any particular person or appropriate in accordance with local law. No consideration has been given to the particular investment objectives, financial situation or particular needs of any recipient.

In the European Economic Area, this publication has been distributed by HSBC Continental Europe or by such other HSBC affiliate from which the recipient receives relevant services. The document is distributed in Hong Kong by The Hongkong and Shanghai Banking Corporation Limited and in Japan by HSBC Securities (Japan) Limited. Each of the companies listed above (the "Participating Companies") is a member of the HSBC Group of Companies, any member of which may trade for its own account as Principal, may have underwritten an issue within the last 36 months or, together with its Directors, officers and employees, may have a long or short position in securities or instruments or in any related instrument mentioned in the document. Brokerage or fees may be earned by the Participating Companies or persons associated with them in respect of any business transacted by them in all or any of the securities or instruments referred to in this document. In Korea, this publication is distributed by either The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch ("HBAP SLS") or The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch ("HBAP SEL") for the general information of professional investors specified in Article 9 of the Financial Investment Services and Capital Markets Act ("FSCMA"). This publication is not a prospectus as defined in the FSCMA. It may not be further distributed in whole or in part for any purpose. Both HBAP SLS and HBAP SEL are regulated by the Financial Services Commission and the Financial Supervisory Service of Korea. This publication is distributed in New Zealand by The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR.

The information in this document is derived from sources the Participating Companies believe to be reliable but which have not been independently verified. The Participating Companies make no guarantee of its accuracy and completeness and are not responsible for errors of transmission of factual or analytical data, nor shall the Participating Companies be liable for damages arising out of any person's reliance upon this information. All charts and graphs are from publicly available sources or proprietary data. The opinions in this document constitute the present judgement of the Participating Companies, which is subject to change without notice. From time to time research analysts conduct site visits of covered issuers. HSBC policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits. This document is neither an offer to sell, purchase or subscribe for any investment nor a solicitation of such an offer.

HSBC Securities (USA) Inc. accepts responsibility for the content of this research report prepared by its non-US foreign affiliate. The information contained herein is under no circumstances to be construed as investment advice and is not tailored to the needs of the recipient. All US persons receiving and/or accessing this report and intending to effect transactions in any security discussed herein should do so with HSBC Securities (USA) Inc. in the United States and not with its non-US foreign affiliate, the issuer of this report. In Singapore, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch for the general information of institutional investors or other persons specified in Sections 274 and 304 of the Securities and Futures Act (Chapter 289) ("SFA") and accredited investors and other persons in accordance with the conditions specified in Sections 275 and 305 of the SFA. Only Economics or Currencies reports are intended for distribution to a person who is not an Accredited Investor, Expert Investor or Institutional Investor as defined in SFA. The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch accepts legal responsibility for the contents of reports pursuant to Regulation 32C(1)(d) of the Financial Advisers Regulations. This publication is not a prospectus as defined in the SFA. This publication is not a prospectus as defined in the SFA. It may not be further distributed in whole or in part for any purpose. The Hongkong and Shanghai Banking Corporation Limited Singapore Branch is regulated by the Monetary Authority of Singapore. Recipients in Singapore should contact a "Hongkong and Shanghai Banking Corporation Limited, Singapore Branch" representative in respect of any matters arising from, or in connection with this report. Please refer to The Hongkong and Shanghai Banking Corporation Limited Singapore Branch's website at [www.business.hsbc.com.sg](http://www.business.hsbc.com.sg) for contact details. HSBC México, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC is authorized and regulated by Secretaría de Hacienda y Crédito Público and Comisión Nacional Bancaria y de Valores (CNBV).

In Canada, this document has been distributed by HSBC Securities (Canada) Inc. (member IIROC), and/or its affiliates. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offense. In Brazil, this document has been distributed by Banco HSBC S.A. ("HSBC Brazil"), and/or its affiliates. As required by Instruction No. 598/18 of the Securities and Exchange Commission of Brazil (Comissão de Valores Mobiliários), potential conflicts of interest concerning (i) HSBC Brazil and/or its affiliates; and (ii) the analyst(s) responsible for authoring this report are stated on the chart above labelled "HSBC & Analyst Disclosures".

The document is intended to be distributed in its entirety. Unless governing law permits otherwise, you must contact a HSBC Group member in your home jurisdiction if you wish to use HSBC Group services in effecting a transaction in any investment mentioned in this document. HSBC Bank plc is registered in England No 14259, is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange. (070905)

If you are an HSBC Private Banking ("PB") customer with approval for receipt of relevant research publications by an applicable HSBC legal entity, you are eligible to receive this publication. To be eligible to receive such publications, you must have agreed to the applicable HSBC entity's terms and conditions for accessing research and the terms and conditions of any other internet banking service offered by that HSBC entity through which you will access research publications ("the Terms"). Distribution of this publication is the sole responsibility of the HSBC entity with whom you have agreed the Terms. If you do not meet the aforementioned eligibility requirements please disregard this publication and, if you are a customer of PB, please notify your Relationship Manager. Receipt of research publications is strictly subject to the Terms and any other conditions or disclaimers applicable to the provision of the publications that may be advised by PB.

© Copyright 2022, HSBC Bank plc, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of HSBC Bank plc. MCI (P) 037/01/2022, MCI (P) 017/10/2021

[1185207]