The impact of 'BREXIT' on UK Air Transport

June 2016

- The UK has voted to leave the EU – the so-called 'Brexit' scenario. Considerable uncertainty remains regarding the precise detail of the exit and it could be 2 years or more before these issues are fully resolved; prolonged uncertainty will influence both the magnitude and persistence of the economic impacts.
- Preliminary estimates suggest that the number of UK air passengers could be 3-5% lower by 2020, driven by the expected downturn in economic activity and the fall in the sterling exchange rate. The near-term impact on the UK air freight market is less certain, but freight will be affected by lower international trade in the longer term.
- A big issue is with aviation regulation. The UK faces a trade-off between accessing the European Single Aviation Market and having the policy freedom to set its own regulations.

Introduction

In the referendum held yesterday, the UK voted to leave the European Union; the so-called 'Brexit' scenario has become reality. This decision has wide-ranging impacts throughout the UK and, to a lesser extent, more broadly through Europe and beyond.

This note focusses on the implications for the UK air transport sector, considering both the economic and regulatory impacts in turn.

As for any significant policy decision, the details are critical, and with many of these still to be determined in the case of Brexit, the analysis that follows is necessarily preliminary in nature.

1. Economic Impacts

The immediate impact on air traffic will be governed by the effect of Brexit on two key variables: economic activity and the sterling (GBP) exchange rate.

Analytical framework

The referendum result is widely expected to present a significant negative shock to the UK economy.

According to HM Treasury,[1] the most pronounced near-term impacts derive from heightened uncertainty causing businesses and households to delay spending and investment decisions, as well as transmission via financial channels.

There is a wide range of estimates of the economic impact that Brexit will have in the short term. A number of these are summarized in the table below.

Figure 1: Impact of Brexit on the level of UK GDP

	Scenario	2018	2020	2030	2030 range	
HM Tsy	*Shock*	-3.6%*				
	Severe shock	-6.0%*				
	EEA			-3.8%†	-3.4%	4.3%
	FTA			-6.2%†	-4.6%	-7.8%
	WTO			-7.5%†	-5.4%	-9.5%
OECD	-	-1.3%	-3.3%	-5.1%	-2.7%	-7.7%
NIESR	-	-2.3%	-2.5%		-2.7%	-7.8%
CBI/PWC	*FTA*	-	-3.1%	-1.2%		
	WTO	-	-5.5%	-3.5%		

* up to mid-year 2018, † after 15 years

Impacts vary according to the different scenarios and assumptions used, but broadly point to UK GDP being 2.5-3.5% lower in level terms by 2020 compared to the 'no Brexit' baseline.

It is worth noting that the impact of Brexit is expected to be a permanent downward shift in the level of GDP, not a temporary impact that is recovered after a period of time.

Income elasticities

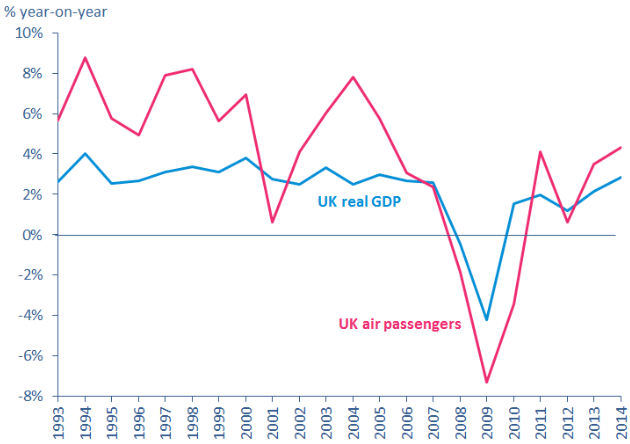
Estimates of the elasticity between income (proxied by GDP) and air travel demand vary – for example, between developed and emerging markets – but are consistently positive and greater than one.

Developed markets are estimated to have an income elasticity of 1.3 at a national level.[2] It may be that a simple income elasticity approach picks up other factors that affect demand for air travel over the long run, such as trade openness etc. Consequently, a conservative approach would be to use a unit elasticity between GDP and air travel in the near term (as a measure of 'underlying' demand).

[1] See https://www.gov.uk/government/publications/hm-treasury-analysis-the-immediate-economic-impact-of-leaving-the-eu

[2] See http://www.iata.org/publications/economic-briefings/air_travel_demand.pdf

Figure 2: UK GDP vs air passengers (%yoy growth)



Sources: UK CAA, Thomson Reuters Datastream

Exchange rate impacts

Sterling fell sharply in volatile trading conditions following the result, broadly in line with expectations. The general view amongst analysts is that it will recover somewhat over the medium to longer term. Nonetheless, the currency is expected to remain weaker than otherwise would have been the case under a no Brexit scenario (in the region of 10-15%).

The impact that this would have on air travel is more clear-cut than the economic effects. The weaker pound has immediately made outbound trips for UK inhabitants more expensive (because a given amount of GBP will now buy less goods and services overseas). At the same time, for overseas visitors to the UK, their local-currency earnings will now stretch further than they did previously.[3]

All told, the short-term movement in sterling will affect purchasing power immediately and, over time, will serve to discourage outbound travel by residents and to encourage inbound trips by foreigners.

The precise effect of the GBP depreciation on air transport hinges on two key variables:

a) The inbound/outbound shares of air travelers.

All else equal, if traffic on a given market is split equally between inbound and outbound travelers, the outbound residents who would be discouraged to travel abroad by the weaker exchange rate would be entirely offset by the additional inbound traffic encouraged by their increased purchasing power.

b) The sensitivity of inbound and outbound air travelers to the exchange rate.

The exchange rate affects the price of overseas travel. The literature suggests a price elasticity in the region of -0.7 (ie, a 10% increase in the price of travel would, all else equal, correspond with a 7% decrease in outbound traffic). While the exact impact would depend on exchange rate developments in 3rd party currencies, the inbound elasticity is likely to be higher, as a weaker GBP has raised the attractiveness and affordability of the UK relative to other destinations.[4]

In passing, while the discussion above holds overall, the GBP will not move by the same magnitude against all currencies, leading to different impacts. Also, there are typically lags between significant exchange rate shifts and this being reflected in the pattern of passenger travel as trips are typically planned some months in advance. These factors complicate but do not invalidate the more straightforward assessment noted above.

UK dominated by outbound traffic

The UK air market is dominated by outbound traffic, with such traffic accounting for just over two-thirds of total flows (in 2015 there were 53.9 million visits overseas by air by UK residents, compared to 26.2m visits to the UK by overseas residents).

The table below shows the estimated impact of weaker sterling, based on the forecast profile from the HM Treasury analysis, over the next two years.

Figure 3: Exchange rate impact on UK air passengers*

	Price elasticities		Est. impacts on air traffic		
	Inbound	Outbound	Inbound	Outbound	Net
Case A	-0.7	-0.7	2.8%	-5.6%	-2.9%
Case B	-1.0	-0.7	4.0%	-5.6%	-1.7%

* Both scenarios apply a 12% devaluation & an In/Out-bound market share of 33% and 67%, respectively.

Case A shows the estimated impact if inbound and outbound traffic flows are assumed to exhibit the same price elasticity of -0.7. In this case, the movements in the exchange rate discourage (encourage) outbound (inbound) travelers by the same degree, but the fact that the market is weighted towards outbound means that this impact dominates.

- Overall, in Case A, the weaker exchange rate is expected to correspond with a net reduction in traffic of around 3%.

Case B examines a scenario more in keeping with what we would expect in which the elasticity for inbound passengers is higher than that for outbound (-1.0 versus -0.7). In this case, inbound demand is encouraged more than outbound is deterred.

[3] See https://www.iata.org/publications/economic-briefings/FX%20impacts%20on%20airlines%20(Dec%202015).pdf

[4] Note that the elasticities will vary across individual markets. For example, primarily leisure markets will be more price sensitive (a higher price elasticity) than primarily business markets.

- As a result, despite representing around ⅓ of total traffic on the route, the higher sensitivity helps to offset the negative impact on the larger outbound traffic part of the market, and the net impact on total traffic is reduced.

Estimated impact on the UK air passenger market

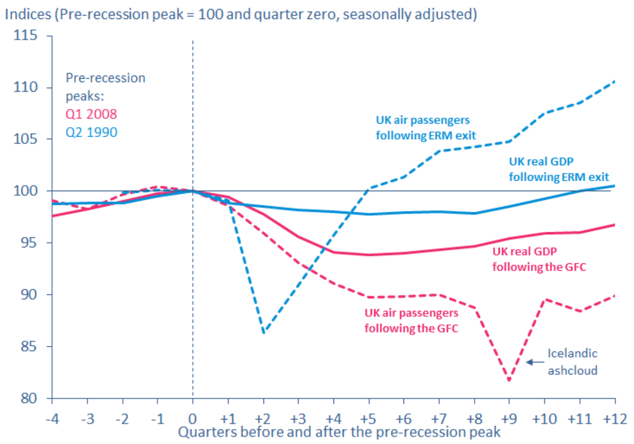
The direct economic impact is likely to see the UK air passenger market be 3-5% lower by 2020 than the no Brexit baseline. In other words, the outcome of yesterday's referendum could reduce air passenger growth by 1.0-1.5 percentage points each year over the near term.

By contrast, the impact of weaker sterling on UK air traffic is likely to be relatively muted. This relates to the fact that we expect the weaker exchange rate to stimulate inbound demand to the UK to a greater extent than it deters outbound trips. As a result, despite inbound traffic accounting for a minority of traffic in the entire market, this will, in part, offset the negative impact on outbound travel.

Comparison with previous economic shocks

Figure 4 depicts the GDP and air passenger impacts of previous adverse economic shocks; the UK's decision to exit the European Exchange Rate Mechanism (ERM) in the early 1990s and the global financial crisis (GFC).

Figure 4: Impact of past events on UK GDP & air travel



Sources: UK CAA, Thomson Reuters Datastream

The expected GDP shock associated with Brexit is broadly comparable to that which followed the ERM exit, with a similarly-sized fall in the sterling exchange rate expected too. But whereas real GDP had recovered to its pre-recession peak within 11 quarters in the early-1990s, the recovery following Brexit is estimated to be longer and shallower.

As such, we would expect the impact on air passenger demand to be somewhat of a mix of the post-ERM and GFC experiences.

Longer-term considerations

The immediate impact of Brexit will be most obviously experienced on the passenger segment of the air transport market. While exchange rate movements will affect the relative price of imports and exports, the near-term impact on the UK air freight market is less certain.

Over the longer-term, however, there will be an impact on international trade when the UK does formally exit the EU and this, in turn, will affect air freight. For example, the OECD[5] estimates that UK trade volumes could fall by 10-20% over the long run (to 2030), relative to the baseline.

In part, the international trade impacts will depend upon the nature and timing of trade agreements and relationships negotiated by the UK and this remains highly uncertain at this stage. The OECD also notes that regulatory divergence could increase over time, increasing trade costs. Many of these issues are addressed more fully – albeit with specific application to air transport – in the following section.

2. Regulatory Impacts

Unlike the economic impact, there will be little or no immediate change to the regulatory environment. Once the UK notifies the EU of its intention to leave under Article 50 of the Treaty on European Union, it will have 2 years to negotiate the exit terms. The Prime Minister has indicated that the timing of this notification will be a matter for his successor but could occur as early as October.

Given the complexity and scope of the negotiations, the UK Government has warned that 24 months would likely be insufficient time to complete all the necessary processes. Indeed, some commentators have argued that the process could take more like 5-10 years, taking recent regional trade deals such as TTIP or the EU-Canada as a reference point.

The UK will need to agree the following:

- The UK's terms of withdrawal from the EU under Article 50 of the Treaty on European Union;
- A new trading relationship with the EU; and
- New trading relationships with the rest of the world.

Finally, all of these changes will need to be incorporated into the UK's domestic regulatory and legislative framework.

[5] See https://www.oecd.org/eco/The-Economic-consequences-of-Brexit-27-april-2016.pdf

The uncertainty around the future regulatory environment is likely to amplify the negative economic impacts discussed above. It also follows that the more protracted the process of agreeing new terms between the UK and the EU, the greater the negative impact on investment and many other types of activity. This creates a potential trade-off between reaching a quick deal to mitigate the short-term impacts and reaching the best deal to mitigate the long-term economic consequences of Brexit.

In the longer term, the regulatory impact on the aviation sector will depend on the nature of the exit terms and future arrangements between the UK and the EU.

The various models and their implications for aviation regulations are discussed below, but in effect the choice comes down to a trade-off between two key issues; access for UK airlines and customers to the European Single Aviation Market and policy freedom for the UK to set its own regulations.

Market access

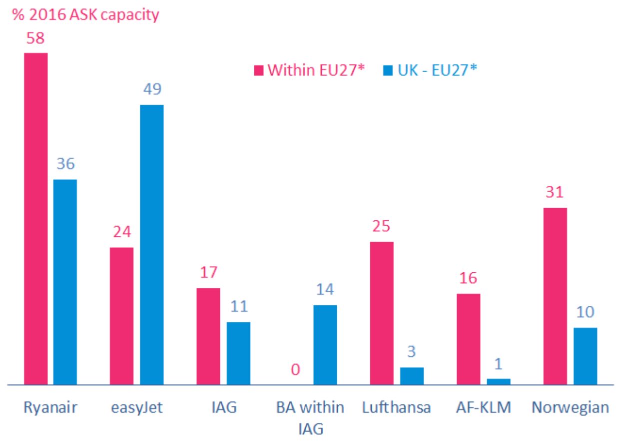
Taken as a whole, the EU is easily the single biggest destination market from the UK, accounting for 49% of passengers and 54% of scheduled commercial flights. Taking into account those countries that have access to the Single Aviation Market as members of the European Common Aviation Area (ECAA) which includes Iceland, Norway and a number of Balkan countries, the importance of market access becomes even more significant.

Of course, the importance of the issue is not just relevant to UK consumers and airlines; the UK is also a very important destination market for air travelers across Europe and is an important source of business for all major European airlines. Figure 5 shows the share of significance of operations between the UK and the EU compared to operations within the rest of the EU (EU27).

In addition to market access, the UK participates in numerous technical programs to facilitate the movement of both passengers and cargo. Continued participation in these schemes will also have an impact on UK competititiveness.

Therefore, a key consideration in understanding the regulatory implications of Brexit is the extent to which the UK is willing or able to negotiate continued access to the Single Aviation Market.

Figure 5: Share of Intra-EU air capacity exposed to Brexit implications



Source: OAG, Morgan Stanley Research. *EU27 = 28 member States less the UK.

Moreover, market access considerations go beyond UK-EU routes. The UK's routes to the rest of the world will also be affected. Since 2002, EU member states have been required to apply the provisions of the Single Market to bilateral air service agreements with third states. Most notably, this requirement is characterized by the Community Carrier clause, which requires third countries to apply the same treatment to all airlines registered in the EU as to those airlines registered in the country signing the bilateral agreement.

At the same time, the EU has also given effect to the external dimension of the Single Aviation Market by negotiating so-called comprehensive agreements with third countries as a single trading bloc. Perhaps the most high-profile of these agreements is the EU-US open-skies agreement which entered into force in 2008.

Depending on the terms of exit, these agreements would potentially cease to apply to the UK, possibly requiring the UK to negotiate a whole raft of separate bilateral agreements.

In theory, this could be a positive in some cases, giving the UK greater flexibility to negotiate agreements suited to the best interests of UK consumers. However, as a single country the UK would lack the bargaining power of a 500-million population trading bloc such as the EU.

Negotiating an air services agreement can be a time-consuming process and this would coincide with a time when UK Government officials will be busy amending a wide range of legislation. In the interim therefore, it is possible that provisions would revert to the last agreement that was in force prior to the entry into force of the comprehensive agreement, for example Bermuda II in the case of air services between the UK and US. Such a situation would have profound implications for airlines and their customers, no matter how unlikely.

In practice, it is expected that agreement would be reached (eg via Memorandums of Understanding) to maintain existing arrangements pending negotiation of a new bilateral agreement.

Once again, whether the UK would need to negotiate new bilaterals would likely depend on the nature of its future arrangements with the EU; broadly speaking, the closer the future relationship with the EU, the less likelihood that the UK would need to amend air services agreements.

Policy freedom

Along with other Member States, the UK is currently subject to a wide range of European legislation covering all areas of the aviation business from rules affecting safety and security, to consumer protection, the environment, economic regulation and beyond. A primary motivation for proponents of Brexit has been to free UK policymakers from what they see as the straitjacket of European rules and regulations.

However, while the UK will almost certainly lose influence over decision-making emanating from Brussels; depending on the nature of future UK-EU arrangements, it may still be subject to most or all European legislation affecting the aviation sector.

For example, in return for access to the Single Aviation Market, members of the ECAA have to comply with the range of EU aviation law, but do not have any role in shaping new legislation.

The UK has been a prominent proponent of some European initiatives such as liberalized market access and airspace reform, often in the face of opposition from other Member States. Accordingly, Brexit could further dent the prospects of progress on these policy agendas.

The trade-off is therefore clear. The closer the post-Brexit cooperation arrangements are the greater the cost in terms of having to accept continuing to be subject to European rules, albeit with much less influence over policy design. On the other hand, a clean break between the UK and the EU would give UK rule-makers much greater discretion over national policy but with much less certainty over market access, particularly to the Single Aviation Market.

Potential models for UK-EU cooperation post-Brexit

The UK Government identified the three most likely options for future UK arrangements with the EU. These are:

- Membership of the European Economic Area (EEA), which is the model currently followed by Norway and which ensures full access to the Single Market;
- Bespoke bilateral arrangements, akin to the bilateral agreements between the EU and Switzerland; and
- WTO relationship (ie, no special arrangement with the EU).

Each of these options has a parallel in terms of possible aeropolitical arrangements: membership of the European Common Aviation Area (ECAA), a negotiated UK-EU horizontal agreement or no formal relationship. Each of these options are discussed in turn below.

ECAA membership

Membership of the European Common Aviation Area would provide the most straightforward avenue for continued access to the Single Aviation Market, which extends access to the single market to a range of non-EU members.

However, membership of the ECAA requires acceptance of EU aviation law across all areas, thus severely limiting the UK's policy freedom. The same would apply to regulations more generally if the UK were to join the European Economic Area. For example, the strongest legal impediment to airport expansion comes from EU local air quality rules which would still apply to the UK if EU membership were exchanged for EEA membership.

Beyond Europe, other air services agreements would need to be negotiated to ensure continued access to markets as important as the US and Canada among others. However, ECAA members Norway and Iceland are both parties to the EU-US agreement despite not being in the EU, so this would likely be a scenario that the UK could look to replicate.

UK-EU comprehensive agreement

An alternative to formal membership of the ECAA would be to negotiate a bespoke comprehensive agreement, equivalent to the EU-US or EU-Canada agreements for example. This would potentially enable the UK to limit its exposure to the full raft of EU aviation law. While this scenario might preserve some policy freedom for UK law-makers, the UK would have no influence over policy-making in Brussels.

No formal arrangement

This option would result in Brexit leading to a full divorce and a clean break in aviation terms. Any bilateral air services arrangements between the UK and the EU would be strictly limited to market access.

This option would secure maximum policy freedom for UK policy-makers with the only supra-national influence coming through the multilateral Chicago Convention framework of ICAO. At the same time, the UK could be excluded from European initiatives such as the Single European Sky which it has long promoted and championed.

Figure 6 (below) summarizes these various options.

Concluding comments

The decision for the UK to leave the EU has significant and wide-ranging impacts, including in both an economic and regulatory context.

Some of these effects will be felt immediately (eg, via the exchange rate impact on the cost of air travel) while others will be more longer-term in nature. In part, these effects are dependent upon the precise terms negotiated as part of the exit agreement.

Figure 6: Key characteristics of potential models of UK-EU cooperation post-Brexit

	Access to Single Aviation Market	Validity of EU Horizontal Agreements	Influence on EU Policy	Policy Freedom
Continued EU membership	Full access	Full validity	High	Very limited
ECAA membership	Full access	Would likely remain valid	Very limited	Limited
UK-EU comprehensive	Access	May need to be renegotiated	None	Potentially limited
No formal agreement	Would need to be negotiated	Would need to be negotiated	None	High

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