CRISIS SUPPORT TO AVIATION AND THE RIGHT TO RETRAIN

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SUMMARY

We propose a co-ordinated sector-wide package to support workers in the aviation sector in transitioning through a period of disruption and uncertainty, including:

1. A new bespoke, sector-wide, crisis support plan and package for aviation, with oversight from a new sector panel with representation from unions, businesses and government.
2. Commitment to a union-negotiated limit on redundancy rates across the sector.
3. Delivery of a new skills and employment strategy, including conversion of the job retention scheme into a new job reskilling programme which protects employment while workers are supported to transition into alternative roles.
4. Accelerating the Government's review of aviation sector tax arrangements and introduction of new mechanisms which ensure a fair contribution from all employers to the costs of the retraining programme.
5. Ensuring a fair public return on bailouts. Taking equity stakes in all large businesses bailed out in the aviation sector, and attaching the right to take further stakes (warrants) with any other financial support. Attaching conditions to all financial support to suspend shareholder dividends, to end excessive executive pay and unethical tax practices, and to require investment in green technology and decarbonisation.

FOREWORD

Trades Union Congress

This paper sets out proposals for a sectoral recovery plan for the aviation sector. The proposals seek to address both the short-term crisis created by the disruption to travel caused by Covid-19 and subsequent government policy to address the crisis as well as proposals to address the longer term challenges of new technology, automation and climate change within the sector. It is intended as a first step in this process, and a key proposal is that an aviation recovery panel, with representation from unions and employers, should be established, to discuss and agree detailed plans for the sector and oversee their implementation.

The paper has been drafted by NEF in consultation with the TUC and aviation unions. It does not necessarily reflect the specific policy recommendations of every union but is intended as an urgent intervention to make the case for both short-term and longer-term support for the sector to enable it to recover from Covid-19 and address the challenges of new technology, automation and climate change.

New Economics Foundation and Possible

As society has begun to wake up to the gravity of the environmental crisis over recent years, and to recognise the scale of the changes needed to avert a catastrophe, organisations such as ours have promoted the concept of a 'just transition'. But so far this has remained, for the most part, an abstract idea. We see the profound impact of the pandemic on the aviation sector as the first test of what the principle of a just transition should look like in practice. The policy proposals in this report are therefore the start of a vital dialogue to develop a model which protects workers' livelihoods as the economy undergoes the rapid decarbonisation required to fulfil the UK's climate commitments.

This dialogue has found a strong agreement between the climate movement and the labour movement that the transition must prioritise protecting workers' livelihoods, and ensuring that any state support for affected sectors goes to workers, not bosses or shareholders. NEF and Possible believe that protecting the wellbeing of workers and taking the urgent action required to tackle the climate crisis are not in opposition – rather, they are two sides of the same coin in creating the better future we all need.

A SYSTEM SHIFT IN AVIATION

Tens of thousands of aviation sector jobs are at immediate risk as a result of the Coronavirus crisis and the measures put in place to contain it. Across Europe airline owners and executives are lobbying for, and in many cases receiving, generous unconditional loans and underwritings from governments to prop up their struggling businesses. Yet these interventions do little to protect the wellbeing of workers, nor do they address major challenges facing the sector, such as the need to stabilise core national and regional infrastructure and to rapidly reduce greenhouse gas emissions. This briefing calls for an urgent change of course, and proposes a new approach to bailouts in the UK aviation sector which protects workers' interests while steering the sector through its transition.

THE CRISIS CONTEXT

Generous condition-free government-backed loans disproportionately favour the interests of shareholders over workers and consumers. None of the loans or underwritings issued thus far by the UK government include conditions or measures which protect jobs, nor do they adequately address core industrial strategy issues, such as the need for rapid decarbonisation, increasing automation and economic connectivity. The UK must go further, and ensure that bailouts protect aviation sector workers' livelihoods, not shareholder profits.

In extending publicly subsidised loans to airlines, the government is handing yet another form of generous state subsidy to wealthy airline owners. NEF analysis shows that this subsidy adds to an existing pot of around £7bn a year handed over by the Exchequer to airline companies in the form of exemption from VAT and fuel tax, net of air passenger duty (see **Appendix B** for further details).

In increasing its subsidy to the aviation sector the government is letting big business owners and executives off the hook for imprudent risk management. British Airways recently received a £300m loan from the UK Government's Coronavirus support scheme, while EasyJet received £600m. In contrast, NEF analysis shows over the past five years the shareholders of BA's parent company, IAG, were paid over £3.4bn in dividends and share buy-backs, while EasyJet shareholders gained a sum of £1bn. Some aviation sector businesses also utilise tax practices which enable them to reduce their exposure to UK corporation tax, and therefore reduce their contribution to UK government revenues.[1] In addition to excessive wealth extraction, businesses have been squeezing workers' conditions across the aviation sector. Outsourcing, zero-hours contracts and fixed-term contracts have all been used to drive down the quality of work in the sector while further boosting the potential for wealth extraction at the top.[2]

Despite the exceptional levels of both general and crisis-linked state support provided, aviation sector companies are not protecting workers. BA has already announced it intends to continue with cutting 12,000 jobs, whilst 'firing and rehiring' the remainder.[3] Concerns have been raised that some businesses are attempting to use the crisis to worsen employees' conditions, either by using the crisis as an excuse to make direct changes to contracts or through firing and rehiring staff on worse conditions.

Crisis cutbacks also have implications for the UK's progress tackling the industrial transition needed to meet its national and international carbon reduction commitments. At risk in the crisis are the private sector investments into skills, research and development aimed at operationalising the technologies and practices which will deliver carbon reduction in aviation and other sectors of the economy, and will create the jobs of the future.

THE SECTOR OUTLOOK

NEF analysis of recent corporate reports suggests across the aviation sector employers are planning to cut an estimated 27% of jobs in the immediate short-term, i.e. within the next two to three months, due to the Covid-19 health measures which suppress sector demand. This equates to around 39,000 direct aviation jobs, but potentially up to 70,000 jobs are at risk when those dependent on the aviation supply chain (indirect jobs) are considered.

However, the figures above are unlikely to reflect the full extent of job losses. It is impossible to know what the precise final total will be, but further NEF analysis, based on recent trends and evidence from the 07/08 financial crisis suggests the industry, without additional government support, could ultimately seek to cut 50% of the workforce, or 69,000 directly employed staff in this financial year (refer to **Appendix A** for further detail). When jobs dependent on the aviation supply chain (indirect jobs) are included, up to 124,000 jobs could be at risk.

The short-term job losses projected are larger than the number of job losses seen at the peak of the UK coal industry's socially damaging decline. Approximately 65,000 coal jobs were lost between 1980-81.[4]

Employees most vulnerable to redundancy are likely to be those on low pay and on insecure contracts. These workers are also likely to be those with the weakest skills base to fall back on when seeking new employment, and those with the lowest financial reserves with which to endure unemployment.

Looking beyond the immediate impact on the sector's employment, long-term projections on passenger demand after the pandemic are extremely difficult. Projections will only improve when the extent of the public and business behaviour shift resulting from the crisis becomes clearer. There have been suggestions that the Covid crisis may mean a new, lower, normal in passenger numbers. Airlines on the other hand, are hoping that passenger numbers and kilometres will return to pre-crisis levels within 5 years.[5]

In most eventualities it is likely that a proportion of the jobs lost now will return over a 3-7 year time horizon. But without intervention, the sector may see a repeat of the socially and economically damaging trends which followed the 2007/08 crisis. Employees were put through a wave of redundancies only for jobs to later be re-recruited, often with worse pay and conditions. Furthermore in air traffic control, the redundancy wave resulted in a critical capacity shortage when traffic levels grew again, which undermined operational performance (i.e. increased delays – which are generated in order to protect the safety of air operations).[6]

Under all of the mooted future scenarios of passenger demand it is also highly likely that a proportion of the impending job losses will be permanent. Over the past 20 years efficiency drives have reduced the sector's job intensity by an average of around 2.6% per year. On this basis, NEF analysis suggests stagnation of the sector for five years would lead to at least a 12% decline in long-term job numbers (equivalent to around 17,000 job in aviation, and potentially a further 14,000 in its supply chains).

Given that some level of permanent job loss seems inevitable, and the risk that a further cohort of redundancies could be made permanent if any wider shifts in demand and/or government interventions materialise, a precautionary approach is needed which strengthens the safety net for the aviation workforce. This safety net would function both to stabilise the sector and retain essential capacity, and to smooth the transition for workers leaving the sector.

It is imperative for both social and economic reasons to smooth the process for workers at risk of leaving the industry and to prevent the short-term spike in unemployment which airline bosses are threatening. A stable and managed transition should be the priority for any bailout programme and, given the restructuring needed in aviation and the important public and economic service it provides to the UK it will not be secured via loan arrangements alone.

National and international climate commitments also influence the sector's outlook. The extent to which efficiency savings can reduce aviation emissions has limits, and low-carbon methods of long-haul air travel are unlikely to be commercially available for decades at best, yet previous projections show significant demand growth. The aviation sector faces a major challenge to achieve the levels of fuel efficiency improvement necessary to achieve climate goals. Rather than declining as recent indications suggest, public and private research and development must increase in the aftermath of this crisis, in order to ensure that the sector recovers on a more sustainable technological basis.

The UK Committee on Climate Change has previously suggested that the only way the UK can meet its commitments to cut emissions would be for projected rises in passenger numbers to be managed below their unconstrained level. However, the direct impact of Covid-19 on airline operations, wider behaviour changes, and the recession we are entering are expected to lead to larger declines in passenger numbers, and hence jobs, in coming years. Nonetheless the core principle of securing a just and fair transition for workers in vulnerable industries, remains critical in aviation today.

A JUST TRANSITION

It is vital that transition arrangements are put in place which ensure that good quality employment in the sector is protected, while also facilitating the development of the skills necessary for roles in the future workplace. Priorities include providing workers with both the expertise needed to work within a lower emission and increasingly automated aviation sector, with new technologies and practices, and to enable shifts into other emerging industries and sectors. Particularly, arrangements are needed which put protections in place for lower-skilled and lower paid workers who will be most vulnerable.

NEF, Possible, unions, and a wide range of stakeholders have been calling on the Government to put in place arrangements for workers affected by industrial transition within the UK economy. The Covid-19 crisis has accelerated this transition and aviation now represents our first test of the principle of a just transition. In the structuring of its aviation sector bailouts the UK Government has its first opportunity to ensure that we build back better both supporting ordinary people, and building resilience against future crises, including by ensuring that assistance provided to help companies through the Covid-19 crisis supports decarbonisation.

The UK suffers from critically low investment in skills and retraining. Adult education is at an all time low.[7] Economists across the spectrum have called for investment in skills and training to be put at the heart of the Covid-19 recovery.[8] The present Government has both recognised this deficit and committed funding to address it. The Government now has the opportunity to make good on its offer to workers of a 'right to retrain' and to bring forward the investment promised in its National Skills Fund to support workers in this time of need.

In addition to supporting worker and wider societal wellbeing, there are three macro-economic incentives to investing in jobs and skills. First, the fiscal multipliers provided by investing in skills development. Second, avoiding workers transferring onto social security and its associated costs to the state. Third, the wider economic benefits of smoothing the coming spike in unemployment and the fiscal multipliers of ensuring money keeps circulating in the economy.

POLICY PROPOSALS

Aviation workers face a tumultuous and uncertain future. The trauma of job loss, both permanent and temporary, the potential erosion of the quality and availability of work and, for those affected, the prospect of finding work in a new and unfamiliar industry. We have an opportunity to ensure this transition is managed in a fair way which prioritises workers' wellbeing, retains employment where possible, upskills workers, and where necessary supports them into new industries and good quality jobs.

The following policy package is designed to address the complex needs of a diverse sector. Beyond primary wellbeing motives, this package offers significant economic incentives to the UK's ailing economy. Approximate costs and benefits of the proposed policy package to the state are detailed in **Appendix B.**

PROPOSAL 1: A SECTORAL RECOVERY PLAN FOR AVIATION

In order for working people to be represented in discussions and decisions on what kind of economy we rebuild from the current crisis, the TUC has called for a National Recovery Council, bringing together unions, employers and government, to be established. The development of sectoral recovery plans, reflecting the varying conditions and pressures of different sectors, will also be vital, and sectoral recovery panels, with representation from unions and employers, should be set up for this purpose. An aviation recovery panel should be established as a matter of urgency to agree on plans to stabilise and decarbonise the sector, as set out in this paper.

The context facing the aviation sector is distinct from that facing most other sectors of the UK economy. Aviation represents a core component of our national infrastructure, supporting provision of goods, public services and the wider economy. Yet the sector is in a state of flux and likely faces a longer crisis period than most other sectors, in part because of a longer period of suppressed demand due to Covid-19 health measures. Alongside uncertain levels of future demand, re-orientation of service models is accelerating and the imperative to decarbonise is urgent. A proportion of the jobs lost now will never return.

New jobs may emerge, including jobs linked to the drive to reduce emissions in the sector, but these jobs will require new skills and are unlikely to fully offset job losses. These jobs are also at risk from cutbacks and under investment in research and development at the sector level. Given this context the aviation sector must be an early candidate for a sectoral support package that builds on the government's primary support packages (which are only designed to protect against a temporary suspension of business).

A sectoral recovery plan must immediately be developed for aviation which covers a period of at least the next 5-7 years to manage the transition from lockdown to a new normal. Such a plan should be developed for any industry or sector where national infrastructure and public service provision is at risk, and/or a long-term transition in work is expected. Alongside this plan should come a new bespoke financial assistance mechanism, and a new bespoke job retention and retraining scheme.

PROPOSAL 2: PROTECTING JOBS

Across all sectors the government must ensure a soft landing for workers facing redundancy due to the Covid-19 crisis. However, for industries where crisis impacts will be prolonged, and a proportion of jobs will not return as the recession eases, the only way to achieve this is to slow the rate of job losses. It is not in worker, government, or the public interest for there to be a sudden spike in long-term unemployment. Ample historical evidence points to the damaging social cost of such a surge.

In response to the immediate crisis the government must work with unions to agree a deal which locks in a fair and manageable decline in employment. This decline will vary, as appropriate, across the different sub-sectors of aviation. Such an agreement must recognise the need to retain specialist capacity in the sector and safe operating practices. The maximum rate of decline proposed by Unite the Union, of 10% of their workforce in this financial year, represents an illustrative example. This cap on redundancy rates must be applied to any and all forms of government support extended during the crisis, including any loans extended at commercial rates.

The government should support businesses in adhering to the agreed redundancy rate by converting its current Job Retention Scheme into a bespoke part-time job retraining scheme. In line with the principles of a 'just transition' for workers, the aviation sector would be able to make use of this bespoke extension until the sector has stabilised at a level of passenger departures compatible with the UK's national and international climate agreements.

The current Job Retention Scheme contribution from government, of 80% of payroll costs up to £2,500 per month, would continue to apply - pro rata - for hours not worked. However, two new requirements would be added. First, that a minimum income is guaranteed for workers, such that no workers' income drops below their appropriate real living wage rate. Second, that workers are required to spend unused working hours on education and training designed to upskill them and prepare them for work in climate-friendly roles.

Costing: There are significant financial returns to the government and wider society in reducing the unemployment spike associated with the crisis. NEF analysis suggests a worker made redundant during a recession is likely to spend at least 5 weeks longer unemployed than outside of recession times. This policy can therefore save the state significant funds, estimated at around £100m to £200m NPV (net present value), in welfare payments.

PROPOSAL 3: A RIGHT TO RETRAIN AND RESKILL

We propose that the government respond to the decline in employment threatened by aviation sector executives with a new skills and employment strategy which facilitates retraining of aviation sector workers at risk of redundancy and supports them into other roles - including emerging job opportunities outside the sector and related to within-sector decarbonisation. This proposal would build upon and accelerate Government's ongoing work around establishing a 'right to retrain' and could draw financing from its commitment to a National Skills Fund.

A condition of any bailout for airlines and other aviation sector businesses would be that all workers are offered the opportunity to remain on the company books, while working reduced hours (e.g. part-time hours) and pursuing training in their non-utilised working hours. All workers would be paid their existing wage for hours spent conducting their usual work activities. For hours spent retraining worker pay would be guaranteed at 80% of normal wages up to the scheme limit of £2,500 per month, and subject to the real living wage minimum income. Education costs would be covered by the government through the National Skills Fund.

Alongside the training programme the government must develop a wider programme of job creation in green sectors through its Covid-19 recovery package, and ensure these jobs are available to upskilled aviation sector workers. In particular, in keeping with the Government's 'levelling up' programme, creation of good quality work in regions which have been left behind, and deprived of inward investment must be prioritised.

Costing: Upskilling of workers will both reduce the amount of time they spend in unemployment (hence saving £100m to £200m NPV in welfare payments) and ensure workers enter into higher skilled positions with greater value added and higher tax multipliers. NEF analysis suggests that moving a worker up one tier of education (e.g. from no qualifications to GCSE-level qualifications, or from A-level to degree level qualifications) can reduce the average *length of time they spend unemployed by around 4 weeks. Once they obtain employment, workers will likely enter a more productive job and estimates suggest this should increase the Government's tax take per employee by around 6%-12% (worth £700m to £1.4bn NPV).*

PROPOSAL 4: TRANSITION TAX ARRANGEMENTS

To equip the aviation sector for the future, it is vital that the regulatory environment of the sector is brought up to date. It is widely understood that significant changes are needed to the sector's regulation, as highlighted by the Committee on Climate Change's letters to the government.[9]

The government can use its upcoming review of tax arrangements in the aviation sector to this end, introducing a reformed system which is progressive (i.e. not penalising poorer members of the public) and supports the reduction of emissions across the sector. Through this legislation the government would also instigate a taxation mechanism which ensures all aviation sector companies make a fair contribution. This contribution should include paying towards the costs of the Right to Retrain and job retention scheme, increasing investment in research and development within the sector, as well as investing in emissions reducing practices and technologies.

Other measures such as slot allocation and retention, as well as tiered landing charges should also be conditional on achieving such targets. Payments on a new fiscal mechanism might be deferred until such a time as businesses return to profitability.

Until such a time as the regulatory environment of UK aviation is updated, airlines, and other aviation sector companies, will remain incorrectly valued on the stock market. Given the importance of properly understanding a company's value for any bailout arrangements, and the health of the broader financial sector, this issue must urgently be addressed.

*Costing: NEF analysis, detailed in **Appendix B**, shows that the retraining and job retention policy package should cost the government somewhere in the range of £2.9bn and £3.2bn over its lifetime. NEF analysis shows that between 65% and 104% of these costs should be recovered directly through increased tax take and reduced welfare payments. Introducing a new taxation mechanism for the sector can raise further revenues for the exchequer which might offset any losses if returns to the government fall at the lower end of the range. Air Passenger Duty (APD) currently raises around £3bn per year for the exchequer, this is already more than sufficient to cover all of the costs of the proposed Right to Retrain Scheme. However, exemption from VAT and fuel duty mean the sector effectively receives a tax break (net of APD) worth £7bn every year. Placing a new tax on all departing flights will ensure there is no competitive advantage for* *non-UK domiciled companies. There will be minimal induced impact as business dependency on passenger aviation in sectors outside aviation is low and declining, and tourism represents a significant outflow from the UK economy.*

PROPOSAL 5: ENSURING A FAIR PUBLIC RETURN FROM BAILOUTS

The existing approach to industry bailouts in the UK, of large condition-free Government-backed loans, disproportionately favours the interests of shareholders. Workers are not protected, nor can fundamental changes to the sector's operations be fairly managed. It is likely that most aviation sector businesses will be in need of further capital injection in coming months. The government must put social and environmental objectives at the heart of a new bailout approach and act immediately to set up a new financial assistance scheme. This scheme will need to treat small and large businesses differently, and some specific sub-sectors of aviation will also need bespoke treatment.

Large businesses

Over-accumulation of debt in the private sector represents a macro-economic risk. To mitigate this financial risk, and the risk of non-compliance with bailout terms, the Government must follow in the footsteps of the German and American governments and take equity stakes in exchange for investment. All large-business bailouts must require a meaningful equity stake, which we suggest should be at least 30%, in return.

Warrants must also be issued which enable the Government to take a majority stake in the event that a business cannot repay a loan, or cannot meet the conditions of bailout. The government maintaining warrants to this effect puts the state in a position to take full control of operators, such as smaller airports (e.g. those serving less than 3 million passengers per year), which represent core national infrastructure and may ultimately struggle to return to a sound commercial footing.

Conditions should include:

1. The Government must follow in the footsteps of the Bank of England, and make suspension of shareholder dividends and excessive executive payouts a condition of support.
2. Businesses must rule out any attempts to exploit the crisis to reduce the quality of work in the sector, including protecting wages, pensions, benefits, and contract arrangements.

3. The Government must follow in the footsteps of many other European countries and make support conditional on transparent and ethical tax practices, including banning support to companies with an ultimate ownership structure domiciled in a tax haven. Companies presently domiciled in tax havens should only be able to access support with a clear and accountable commitment to immediate and permanent re-location to the UK.
4. The Government must follow in the footsteps of the French Government and make support conditional on investment in practices and technologies which reduce aviation emissions.

Small businesses

All financial commitments made to small businesses in the aviation sector should have warrants attached which permit the Government to take equity in lieu of repayment where appropriate. However, the taking of equity stakes may not be appropriate or possible as a default position for all small businesses. Loans to small businesses should be subject to the same conditions as large businesses, and small businesses should be exposed to the same taxation mechanisms. However, deferment on outstanding taxes and loan repayments may need to be considered in special circumstances.

Air Navigation Service Providers (ANSP)

ANSP's provide a public service which is critical to the safety of national infrastructure operations. Unlike most commercial operators in the aviation sector ANSPs have a fixed cost base which is somewhat de-coupled from the wider revenue trends of the sector. Yet, in their present privatised form, these entities rely on wider sectoral revenue trends for their income.

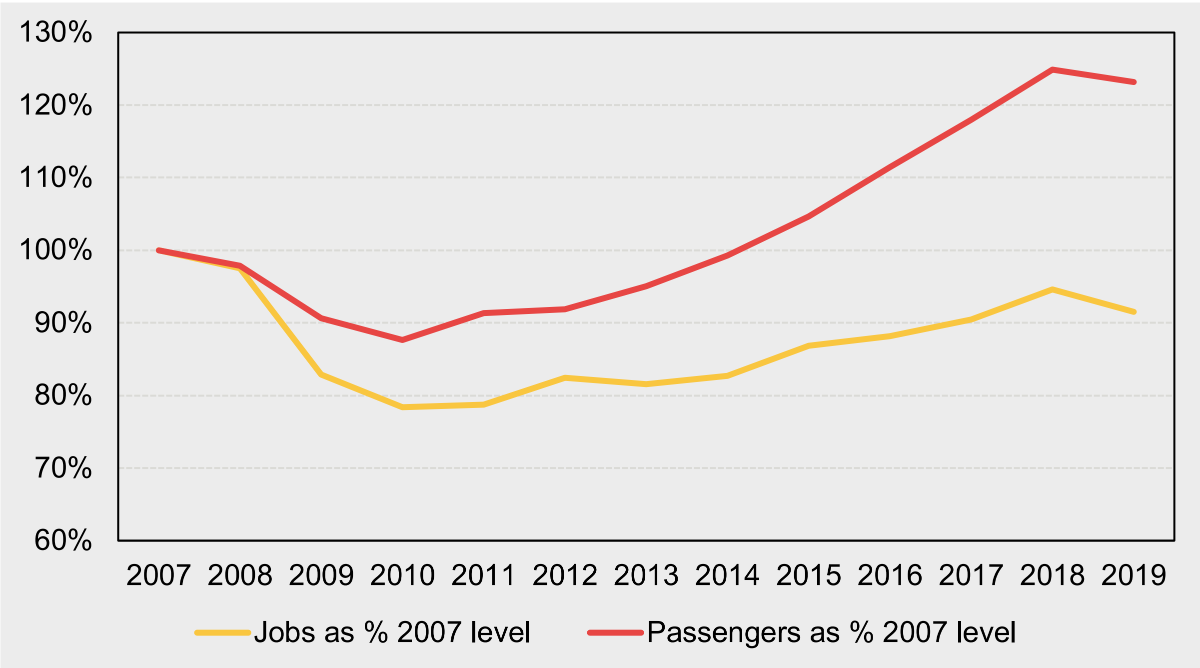
Different short-term schemes have been proposed by sector bodies such as Eurocontrol. The services provided can broadly be divided into terminal air navigation services, and en-route services. The fortunes of terminal-based services will be tied to the success of the airport, and as such the government's wider support package to airports. Prospect have outlined a bespoke package which can protect terminal based services through the crisis. At this point in time, with the government mobilising the infrastructure necessary to increase state ownership of private businesses, the best approach to protecting en-route air navigation would be full nationalisation of the service.

Costing: Holding an equity stake can ensure value is retained by the Exchequer over the long-term and avoid saddling companies with excessive debt. After a period of transition aviation sector businesses may return to profitability, generating a return to the taxpayer. The price paid *by the government for any equity stake should take account of the financial benefits it already extends to aviation sector companies, as well as the prudency of business' historic financial governance, and any attempts businesses have made to avoid paying corporation taxes in the UK.*

APPENDIX A: ADDITIONAL DATA ON THE SECTOR OUTLOOK

In 17 out of the last 19 years changes in job numbers have 'underperformed' passenger numbers. Following the 20007/08 financial crisis, passenger numbers took around seven years to return to their pre-crisis level, but at that point (2014) job numbers remained 17% below their pre-crisis peak. Job numbers have never recovered. In the three post-crisis years in which passenger numbers fell, job numbers fell proportionately further. On this basis, the IATA projection of a decline in passenger numbers of 48% for the year 2020-2021 is highly likely to result in a similar level of job losses, particularly if state coverage of worker salaries (furlough schemes) is withdrawn in autumn 2020 as currently planned.[10]

Figure 1: UK aviation job and passenger numbers as a percentage of their level in 2007. Data is derived from the BRES employment register, and the Civil Aviation Authority (CAA).

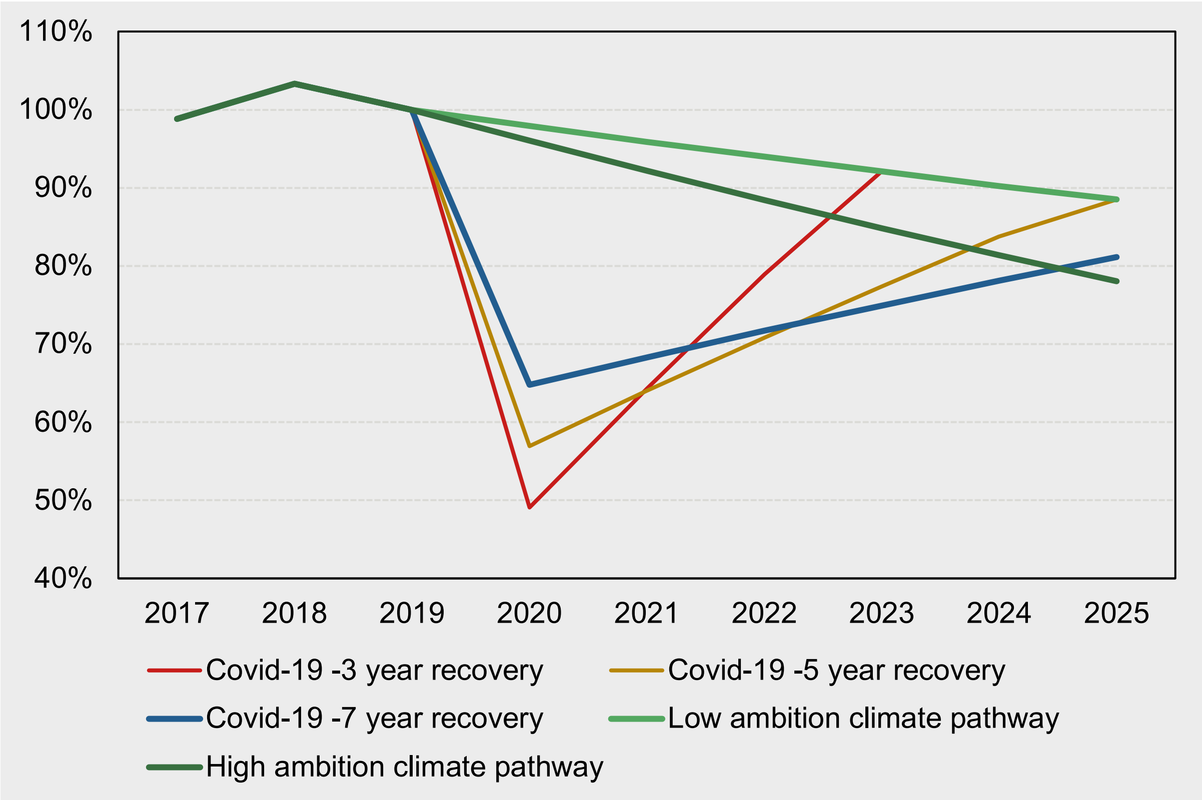


The aviation industry is constantly seeking efficiency gains, including automation which, alongside changes to service models reduce the job intensity of the sector. Between 2000-2019 the 'job intensity' of the UK aviation sector, i.e. the ratio of jobs to passengers, reduced by an average of 2.6% each year.

Figure 2: Passengers per job in the UK aviation sector between 2000-2019, with a linear bivariate trendline added (dotted line). Source: BRES, CAA

Over the short to medium term, the impacts of Covid-19 represent a much greater threat to employment in aviation than the UK's climate commitments.

Figure 3: Five job scenarios for the UK aviation sector over the short-term future (2019-2025). Three scenarios represent potential job numbers following un-mitigated Covid-19 crisis impacts on the aviation sector. Two scenarios show aviation sector job levels implicated by different decarbonisation pathways. Source: NEF analysis



APPENDIX B: COSTINGS

The 'Right to Retrain' policy proposal, including the retention of workers and payment of education costs is costed against three scenarios of sector-level recovery following the Covid-19 crisis. These three scenarios are depicted in the figure above, and relate to 3, 5, and 7 year recovery times. Unless otherwise stated, all costs and benefits are discounted using a rate of 3.5% and represent net present values (NPV) up to the financial year beginning in 2030. Potential scheme benefits are presented as upper and lower bound estimates in order to recognise the inherent uncertainty in projecting returns to education and cash stimulus. Costings assume that the government takes an equity stake in bailed out companies, however, the price paid to take equity, and any returns on that equity are excluded from the analysis. Any takings from new tax arrangements, introduced through the upcoming review of aviation sector taxes are also excluded from the analysis, and might otherwise provide a significant source of additional income to the government.

Estimates on government returns on education spend are derived from the Government Office for Science, which provides upper and lower band estimates.[11] Estimates of the fiscal multipliers accruing to cash stimulus are taken from NIESR[12] estimates of multipliers across Europe (used as our lower band) and the IMF's estimates of fiscal multipliers during recession periods (used as our upper band).[13] Estimates of the cost of welfare payments represent NEF analysis of DWP data from 2020.[14]

Calculation of the tax breaks provided to aviation sector companies follows the methodology outlined by FullFact in 2012.[15] APD forecasts are based on NEF analysis of data produced by the Office for Budget Responsibility (OBR).[16] Estimates of tax breaks extended in regards to VAT and Fuel Duty are NEF calculations based on OBR data,[17] ONS data,[18] and Department for Transport data.[19]

Table 1: Three scenario of policy costs and benefits to the government over the period 2020-2030. Values are shown as 'net present value' i.e. the aggregate value over all years with a discount rate of 3.5% applied.

Coronavirus impact: 3 year recovery				
Income to government (assuming equity stake)	Lower value (NPV to 2030)	Upper value (NPV to 2030)	Cost to government	Lower value (NPV to 2030)
Avoided welfare payments	£308m	£308m	Furlough salary costs	£2,319m
Avoided rehiring costs	£73m	£147m	Education costs	£594m
Cash stimulus multiplier	£950m	£1188m		
Returns to education	£718m	£1396m		
Total	£2,050m	£3,039m		£2,912m
Direct cost recovery	70%	104%		
Estimated APD take over period	£22,230m			
Estimated fuel duty and VAT waived over period	£66,690m			

Coronavirus impact: 5 year recovery				
Income to government (assuming equity stake)	Lower value (NPV to 2030)	Upper value (NPV to 2030)	Cost to government	Lower value (NPV to 2030)
Avoided welfare payments	£227m	£227m	Furlough salary costs	£2,554m
Avoided rehiring costs	£49m	£99m	Education costs	£654m
Cash stimulus multiplier	£1,098m	£1,373m		
Returns to education	£718m	£1,396m		
Total	£2,092m	£3,094m		£3,208m
Direct cost recovery	65%	96%		

Estimated APD take over period	£21,934m
Estimated fuel duty and VAT waived over period	£65,801m

Coronavirus impact: 7 year recovery				
Income to government (assuming equity stake)	Lower value (NPV to 2030)	Upper value (NPV to 2030)	Cost to governme nt	Lower value (NPV to 2030)
Avoided welfare payments	£149m	£149m	Furlough salary costs	£2,420m
Avoided rehiring costs	£27m	£54m	Education costs	£620m
Cash stimulus multiplier	£1,055m	£1,319m		
Returns to education	£718m	£1,396m		
Total	£1,950m	£2,918m		£3,039m
Direct cost recovery	64%	96%		
Estimated APD take over period	£22,103m			
Estimated fuel duty and VAT waived over period	£66,308m			

APPENDIX C: EXAMPLES FROM AROUND THE WORLD

Table 2: Summary information on bailouts in the aviation sector from across the world

Country	Description	Social conditions	Ownership conditions	Environmental conditions	Notes	Source
United Kingdom	£1.2bn+ in government loans to airlines including British Airways, EasyJet, and Jet2	None*	None	None	*Possible Bank of England restrictions on dividends and senior pay	Bloomberg
Germany	£8bn in total support to Lufthansa, including loans and non-voting capital	None apparent*	20% government stake taken, with warrants over an additional 5% providing veto over any takeover attempt and insurance against failure to repay debts.	Investment to reduce per-kilometre emissions is mentioned, but no binding commitments appear to be in place	*Unions disappointed with lack of job protections	Bloomberg
United States	$25bn sector bailout, distributed among airlines, with 70% provided in grant form.	No layoffs until 30th September 2020.* No share buy-backs or dividends until September 2021. Some executive pay restrictions.	Warrants allowing the government to take stock typically ranging from 1% - 5% of company	None reported	*Job cuts very likely after September freeze is passed	FT

France	Loans worth €7bn to Air France	Dividend and senior pay restrictions. No job protections apparent.	None (governments of France and Netherlands already own 28%)	Halve overall carbon-dioxide emissions per passenger-kilometre by 2030, compared with 2005 levels; renew fleet; and source 2% of fuel from sustainable sources by 2025		Flightglobal
Alitalia	Nationalised	Temporary layoff plan agreed until October 2020	Full government ownership	None apparent	Alitalia was already being run by state-appointed administrators	Boomberg

ENDNOTES

[1] Airplane leasing companies commonly base themselves in tax havens, see: https://qz.com/africa/1674113/airplane-leasing-firm-aircastle-avoided-14-8-million-in-south-african-taxes/
As do some airlines, see also: https://www.cbsnews.com/news/richard-branson-island-virgin-atlantic-asks-for-uk-government-money-save-company/
[2] See reports of the European Parliament into employment practices in the EU aviation sector: https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/580915/EPRS_BRI(2016)580915_EN.pdf
[3] Reported in the Guardian on the 14th May 2020 https://www.theguardian.com/business/2020/may/14/ba-to-press-ahead-with-job-cuts-plans-despite-furlough-extension-willie-walsh-coronavirus-airline
[4] DECC cited by OurWorldinData (2020) The death of UK coal in five charts. https://ourworldindata.org/death-uk-coal
[5] IATA (2020) Don't make a slow recovery more difficult with quarantine measures. https://www.iata.org/en/pressroom/pr/2020-05-13-03/
[6] See submission by Prospect (2020) to the Competition and Markets Authority. https://assets.publishing.service.gov.uk/media/5e1f2b1e40f0b65dbc5d8267/Prospect_NATS_submission.pdf
[7] Learning and Work Institute (2019) Adult Participation in Learning Survey 2019. https://learningandwork.org.uk/resources/research-and-reports/adult-participation-in-learning-survey-2019/
[8] Hepburn et al. (2020) Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Smith School of Enterprise and the Environment, University of Oxford. https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf
[9] CCC (2019) Letter: International Aviation and Shipping and net zero. https://www.theccc.org.uk/publication/letter-international-aviation-and-shipping/
[10] IATA (2020) COVID-19 puts over half of 2020 passenger revenues at risk. https://www.iata.org/en/pressroom/pr/2020-04-14-01/
[11] Bhutoria, A. (2016) Economic Returns to Education in the United Kingdom. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/593895/Economic_Returns_To_Education_-_final.pdf
[12] NIESR (2016) Quantifying Fiscal Multipliers. National Institute for Economic and Social Research. https://www.niesr.ac.uk/sites/default/files/publications/DP469.pdf
[13] IMF (2014) Fiscal Multipliers: Size, Determinants, and Use in Macroeconomic Projections. International Monetary Fund. https://www.imf.org/external/pubs/ft/tnm/2014/tnm1404.pdf
[14] DWP (2020) Benefit expenditure and caseload tables. Department for Work and Pensions. https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2020
[15] FullFact (2012) Does the government subsidise airlines by £10 billion? https://fullfact.org/news/does-government-subsidise-airlines-10-billion/
[16] OBR (2019) Air Passenger Duty. https://obr.uk/forecasts-in-depth/tax-by-tax-spend-by-spend/air-passenger-duty/
[17] OBR (2019) Fuel Duties. Office for Budget Responsibility. https://obr.uk/forecasts-in-depth/tax-by-tax-spend-by-spend/fuel-duties/
[18] ONS (2020) Expenditure: Family Spending Workbook. Office for National Statistics. https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/
[19] DfT (2019) Energy and Environment: data tables (ENV). Department for Transport https://www.gov.uk/government/statistical-data-sets/energy-and-environment-data-tables-env