Chambers Ireland submission on the Commission for Aviation Regulation's Draft Determination for Dublin Airport 2020-2024

Chambers Ireland represents the interests of over 40 affiliated Chambers of Commerce throughout Ireland, including the Northern Ireland Chamber of Commerce and Industry. This gives us a unique geographic context to infrastructure issues around the country. As a small island nation our airport infrastructure is critical to business development, tourism and how our airports impact the lives of everyone on the island.

In addition, Dublin Airport is our biggest window to the world. It is a major national asset and we should be proud of it. First impressions count and it is vital that visitors, be they tourists, businesspeople or potential investors obtain an impression of Ireland as a modern thriving economy, that is open for business, upon arrival here. It is vital that we are well prepared for future growth and that we have the infrastructure to support the expansion of the Irish economy into other countries, necessitated by Brexit.

Our long-term economic potential is contingent on having airport infrastructure which lets us diversify from traditional trading partners by integrating us deeper into the wider global economy. The long-term potential of our country is facilitated by the huge increase in Free Trade Agreements, recently concluded by the EU, which will increasingly present Irish businesses with new opportunities in Japan, Singapore, Vietnam, Mexico, Canada, and the Mercosur nations. These opportunities will give rise to growth in air passenger traffic and opening new route to these trading nations.

In the short to medium term however 'economic headwinds' are before us. The US/China trade war is depressing global growth, a breakdown in the US/EU trade negotiations or the imposition of punitive tariffs could seriously affect our producers. Tge continued cost of Brexit uncertainty on our economy, and the very real potentiality of Brexit occurring is holding us back and has the potential to trigger an economic downturn. We believe that the Draft Determination of the Commission is incorrect as it is too optimistic in its assumptions and does not account for foreseeable downside economic risks.

The main concern of Chambers Ireland arises from the threat which the Draft Determination of the Commission poses for continued future investment in Dublin Airport.

The cause of these concerns has much to do with the methodology the Commission for Aviation Regulation has used to make its 2019 assessment, the correlated risks in their 2019 price determination, and the externalities which are unaccounted for in their 2019 Draft Determination.

In particular, our criticisms involve:

1. **The methodology that the Commission uses to model PAX over the 2020-2024 period.**
2. **The absence of a strategy to react to an economic downturn over this period.**
3. **The lack of a Brexit contingency plan.**
4. **The absence of consideration for how the 2019 Determination would undermine the logic of the Commission's Cost of Capital Report for DAA.**

In addition to the foreseeable risks which are not accommodated by the Commission for Aviation's Draft Determination for Dublin Airport 2020 - 2024, are the unforeseen. We recommend that the Commission should reconsider their methodology and take a gradualist approach to the development of the airport and one which incorporates contingencies for the economic volatility that Ireland, as a small open advanced economy is likely to experience.

1. GDP forecasting, and associated methodological problems

The model which the Commission for Aviation Regulation determination on the Maximum Level of Aircraft Charges relies "on the accuracy of the GDP forecast"[1] from the International Monetary Fund. This is concerning given that the Commission for Aviation Regulation itself acknowledged that 2014 GDP forecasts did not accurately map onto actual GDP outcomes, as a result, the the Commission used in its 2014 determination were incorrect. Given the poor track record GDP forecasts have had as a proxy for passenger numbers in the past, it is concerning that the Commission has used a model where the sole dependent variable is a GDP forecast.

While it is intuitive that the use of a major airport is correlated with local economic activity, careful consideration should be given to the measure of activity chosen. GDP itself is an increasingly poor measure of activity in the Irish Economy, given that in recent years contract manufacturing has been a major factor in nominal GDP growth, to the extent that both Government and European economic literature and analysis typically rely on the GNI* measure[2]. Projected GDP growth is not just poorly correlated with domestic economic activity, it is increasingly poorly correlated, therefore the utility of the metric in the Irish context is usually of little value.

The Commission's Draft Determination implicitly ignores the volatility which we know to be a factor GDP when it assumes that the benign economic climate of the last five years will continue over the next five years. Simultaneously the Commission discounts novel factors such as contract manufacturing on the GDP metric, and assumes that BEPS-2 will have no impact on the same measure, even though the short-run impact of BEPS-1 undermined their 2014 model.

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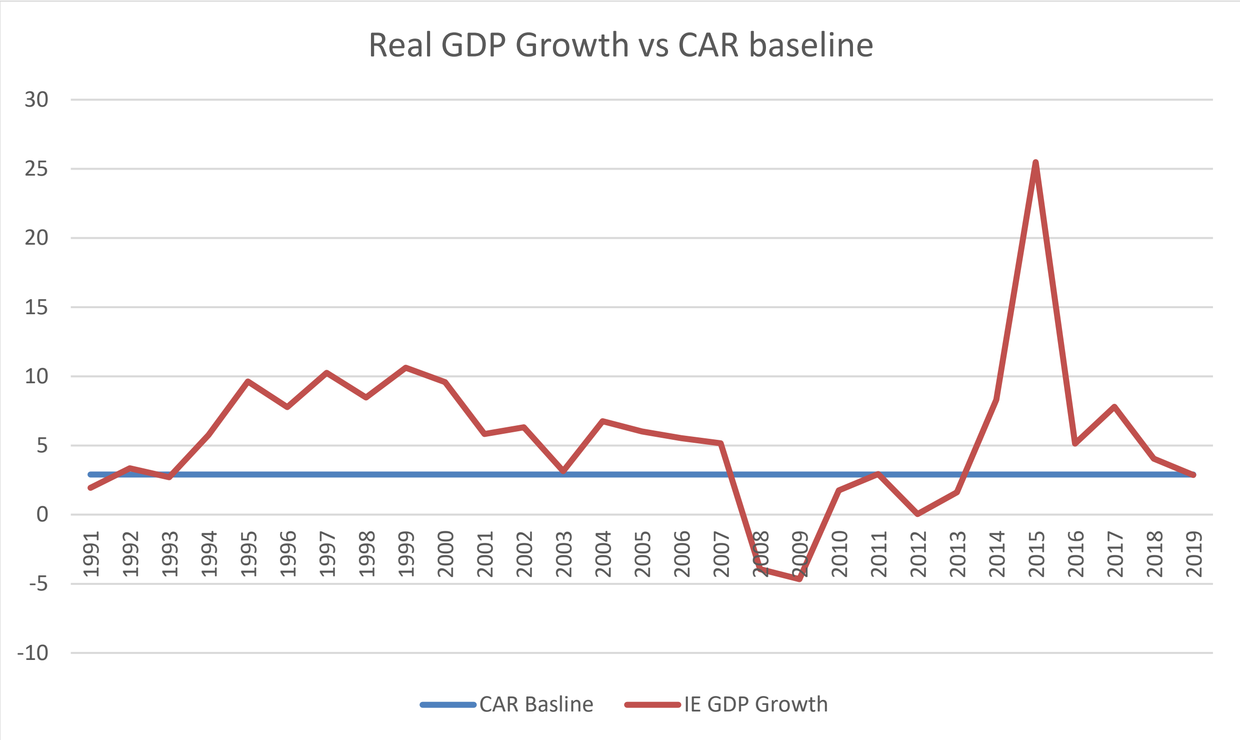
1 Maximum Level of Airport Charges at Dublin Airport 2020-2024 Draft Determination https://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Determination.pdf

2 GDP AND 'MODIFIED GNI' – EXPLANATORY NOTE https://assets.gov.ie/4910/181218123252-71a2c297f26b419fa3696d7349e3e788.pdf



Source: OECD, historical data (YoY %age change in real GDP)

Further in using a model dependent on stable GDP growth, the model is not coherent with the historical evidence; in nine of the last 28 years real GDP growth has been less than the Commission for Aviation Regulation expects it to be for the next five years.[3] The Commission does not account for negative real GDP growth, or even the Irish Economy merely undershooting IMF Expectations.

The Commission's reasoning for choosing the IMF's forecast for the basis of their model rests not in its demonstrated efficacy in predicting Irish GDP, but because the organisation "produces a long-run forecast while many other sources do not extend beyond a couple of years." This overlooks the reason why many organisations do not extend GDP forecasts 'beyond a couple of years', they do so because there is no consensus for doing so accurately. This is demonstrated by OECD's long-term forecast (the OECD produces indicative long-run GDP projections out to 2060) which projects a mean real GDP growth for Ireland which between now and 2024 that is only 2.5% p.a.

Had the Commission chosen the OECD's figures instead of the IMF's, the OECD also being an "independent, unbiased forecaster of Irish GDP", the Commission would settled upon a different proposed price cap. This is because, given the other Commission for Aviation Regulation assumptions

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[3] Real GDP long-term forecast https://data.oecd.org/gdp/real-gdp-long-term-forecast.htm#indicator-chart

about PAX/GDP elasticity, the predicted number of passenger which the Commission expects to pass through Dublin Airport in 2024 is 500,000 higher than what they would expected, had the Commission for Aviation Regulation made the reasonable decision to use OECD estimates of GDP Growth. The lower level of passenger growth would necessitate a higher Maximum price per passenger.

	2020	2021	2022	2023	2024
CAR Passenger estimates	33.6	34.6	35.7	36.7	37.8
OECD based passenger estimates	33.60	34.41	35.30	36.27	37.30
OECD Real GDP Growth Estimates	2.21%	2.29%	2.47%	2.61%	2.69%
Passenger Growth @ 1.05*GDP growth	2.32%	2.41%	2.60%	2.75%	2.83%

This suggests that the model which underlines the Commission's determinations is volatile, given that an arbitrary decision to choose one data source over another, where both largely agree, translates into 1.52 million fewer passengers over the lifetime of the determination.

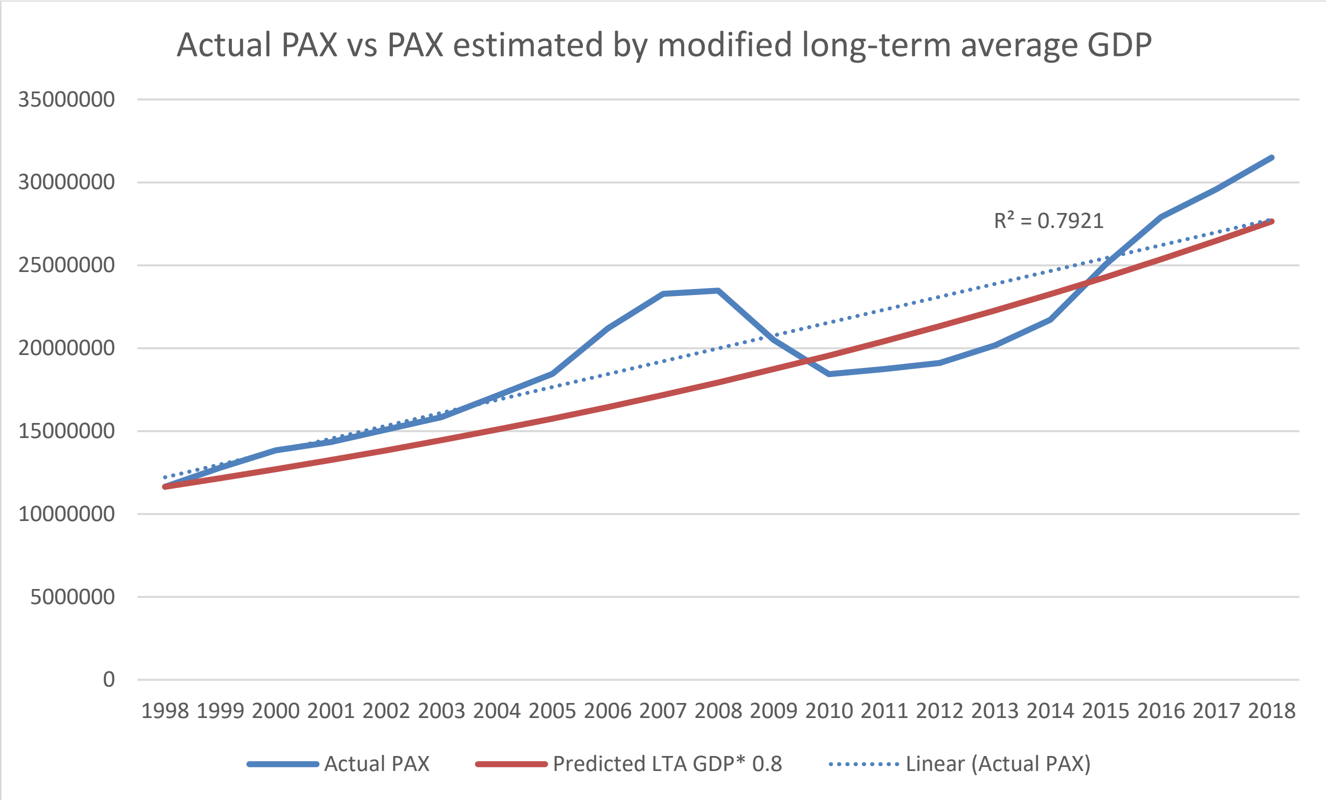
A more considered model would both attend to the long-run trends in passenger numbers, while also including price triggers for passenger numbers which confound expectations, and which are particularly sensitive to the risks attached to overestimating PAX which result in underinvestment in airport infrastructure. It is reasonable to argue that DAA can, and should, increase PAX to increase revenue and profitability, but given the volatility in passenger numbers over the last decade, and the persistent warnings of an economic slowdown both here[4], and internationally[5] the Commission should prepare for contingencies other than a continuity of the relatively benign economic environment which we find ourselves in. While it is true that the Commission's "model is simple and transparent"[6]. That simplicity is only as good as it is useful.

4 Fiscal Assessment Report June 2019
https://static.rasset.ie/documents/news/2019/06/full-draft-fiscal-assessment-report-june-2019..pdf

5 German Factory Orders Plunge Across Industries
https://www.bloomberg.com/news/articles/2019-07-05/german-factory-orders-plunge-amid-persistent-trade-uncertainties

6 Dublin Airport Cost of Capital for 2019 Determination
https://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Determination.pdf (SS 5.20)

Modelling PAX in ways that don't rely on extending the current economic growth point estimate out onto a five-year horizon need not be particularly complicated. Over almost any timeframe the simplest model for PAX is likely to be related to the long run health of the economy.



The Commission's assumptions are predicated on the Irish economy being at a point equivalent to where it was circa 2001/2002 and that is not the most robust of assumptions to make. A Model which was based on a long-term trend, with compensation for unexpected economic circumstances would be a wiser alternative, would be less volatile, and would serve the long-term interests of Dublin Airport better.

2. The lack of an economic downturn contingency

This decision to not provide for an economic downturn, also highlights a secondary issue, the Commission's strategy regarding Risk Allocation places all the weight on Dublin Airport to meet targets which are, to an extent, artefacts of the Commission's methodology, and unrelated to the facts of operating an airport.

Had the Commission been able to accurately model real Irish GDP in the 2014-2019 period, and had the Commission applied their 2019 determination then their projected 2019 throughput would be in excess of 42 million PAX, had the baseline year been 2009, the 2019 estimate would be circa 58 million PAX.

Overall, this high PAX growth assumption seems to be an overcorrection that has arisen from the Commission's underestimation of passenger growth in 2014. But, as Swiss Economics notes[7], the costs of underfinancing an airport are asymmetric with the costs of overfinancing it. While excessive airport charges harm consumers directly, "there likely exist fewer indirect dynamic effects on welfare than in the case of underinvestment since fewer long-run negative effects on economic development are to be expected", alternatively "under-investments are likely to have dynamic effects on welfare. In the context of airports, dynamic effects are likely to include a worsening of user experience compared to an optimal level of investment. For example, waiting times for departing passengers during security checks may increase due to a lack of infrastructure or flight delays may increase due to missing capacity. In the longer run, travellers, especially transfer passengers, may try to avoid or bypass Dublin Airport, which comes with negative consequences on the Irish air transport industry and tourism and economic activity in general."[8]

It is necessary for the Commission on Aviation Regulation to be conservative in its assessments precisely because of this asymmetry, in the event of an economic downturn they will cause financial distress which will undermine the business model of Dublin Airport.

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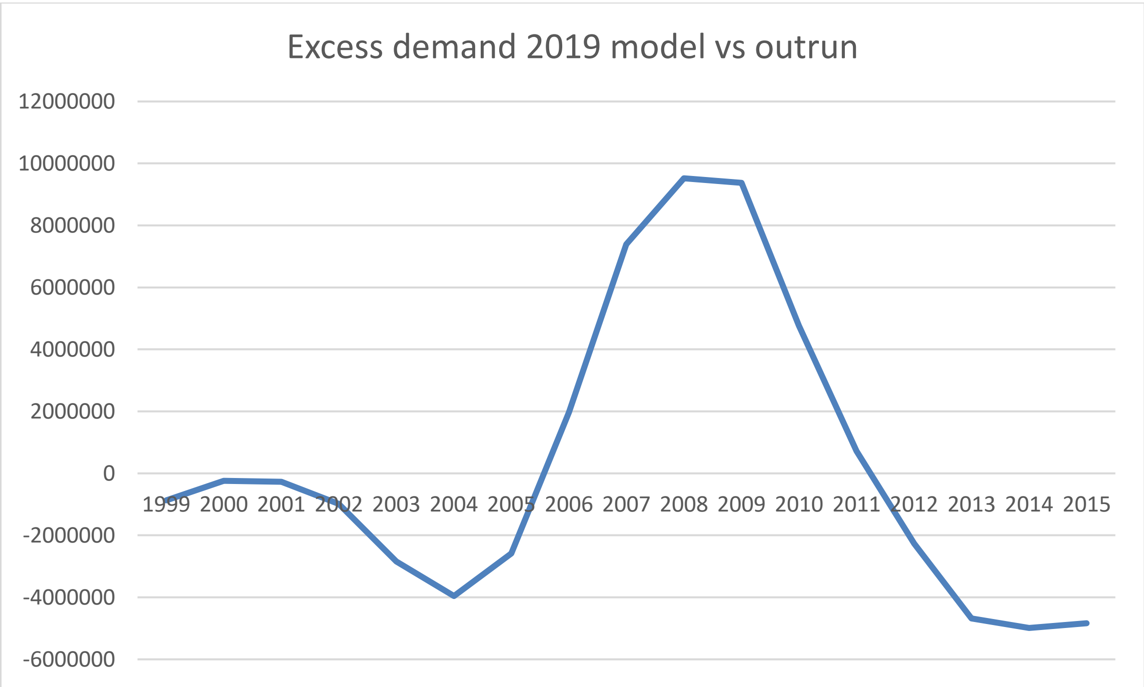
7 Dublin Airport Cost of Capital for 2019 Determination http://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Efficient%20Cost%20of%20Capital%20Study.pdf (SS 223)

8 Dublin Airport Cost of Capital for 2019 Determination http://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Efficient%20Cost%20of%20Capital%20Study.pdf (SS 222)

If we are to consider how the model that the Commission is using for the 2020-2024 period would have performed ex post over the years since 1999 then we can see how highly geared it, and how much more likely it is to overestimate PAX during periods of economic contraction. Such a model greatly overestimates the numbers of passengers an airport can expect to receive, thereby greatly depressing the maximum per passenger charges, precisely at the point where the business of the airport is under most potential strain.

This model also biased towards amplify economic shocks, the closer the determination is to the peak of the economic growth cycle.

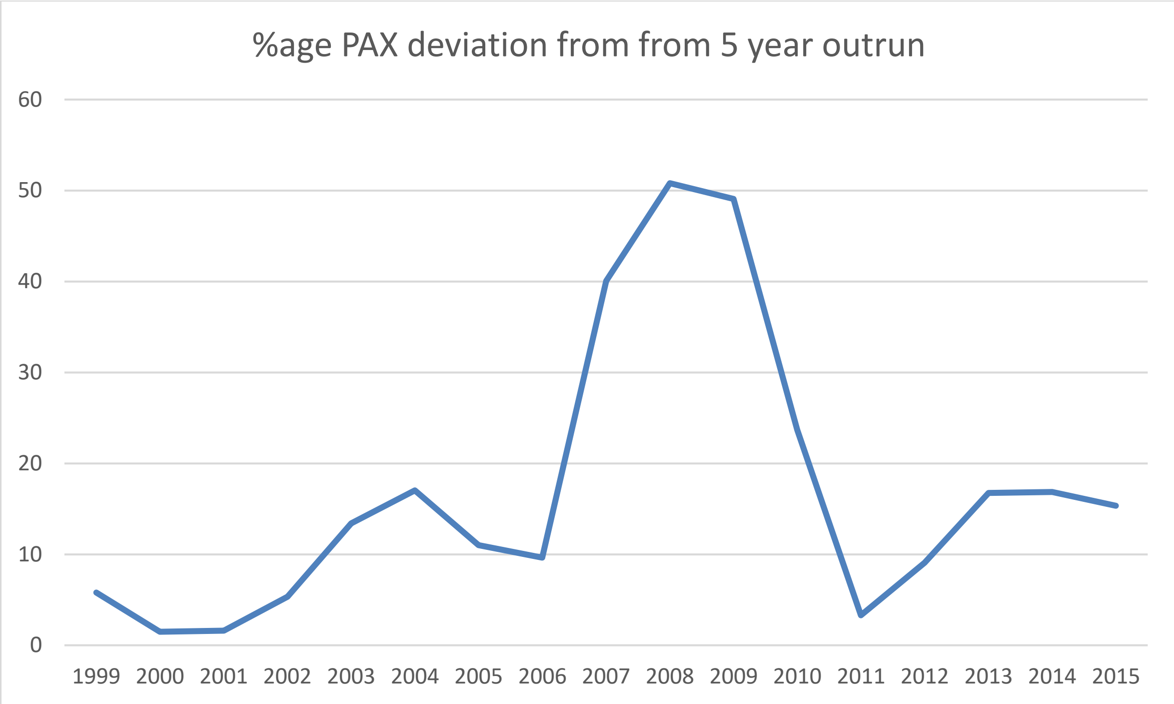


Intuitively this makes sense, as reducing unnecessary travel is an easy cutback to make during a downturn, so the probability range of any prediction will be skewed towards the negative.

When we look back at historical data, the predicted five-year outcome of passenger traffic deviates significantly from the actual volume. Given this volatility, using a point estimate, instead of an estimated PAX range with conditional triggers to account for unexpected economic shifts, is an error.

The Commission's errors are corrected on a quinquennial basis by reference to the actual recorded PAX, rather than an evolution of the Commission's model. Had the Commission has taken used the

2019 methodology, and had it been capable of correctly estimating real GDP growth, then approach would have deviated from the real five-year outcome PAX by an average of 17%



As a small open advanced economy Ireland is particularly vulnerable to changes in the wider global economy. With the US/China trade war reducing Global GDP growth, Irish growth expectations have already been revised downwards in 2019,[9] and separately the IMF have noted that "rising financial vulnerabilities point to elevated medium-term risks to financial stability."[10] In not recognising this downturn risk to the Irish Economy and incorporating contingencies for the same, the Commission undermines the future viability of Dublin Airport.

[9] Irish economic growth to decline as IMF issues bleak global forecast https://www.irishtimes.com/business/economy/irish-economic-growth-to-decline-as-imf-issues-bleak-global-forecast-1.3854575

[10] Vulnerabilities in a Maturing Credit Cycle https://www.imf.org/en/Publications/GFSR/Issues/2019/03/27/Global-Financial-Stability-Report-April-2019

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3. The lack of a Brexit contingency

The Commission is choosing to base its PAX projections on an assumption that what has held true for the last three years will continue to be true for at least another five years, which would place us at the midpoint of a period of economic stability unheralded in the state, despite the "fast-increasing likelihood" of a no-deal Brexit[11].

A Brexit with a deal is predicted to reduce the Irish Economy by 3% over the five years of 2020-2024, with a 'no deal' Brexit likely to reduce Irish GDP by 5%[12]. Either of these events would be catastrophic for DAA and made worse by the application of the 2019 Draft Determination. A 'no deal' Brexit would, according to the CAR model, result in a 6% fall in PAX.

Dublin airport is particularly vulnerable to the unaccounted-for potential for Brexit to disrupt our economy as the Swiss Economics Cost of Capital report notes, a "disruptive No-Deal Brexit" is likely to harm Dublin Airport through "the redirection of airline routes, and amplifying this, Brexit is likely to "cause a weakening of trade between Ireland and the UK"[13] this is likely to reduce GDP and result in hampered passenger numbers and reduced commercial revenues per passenger.

Thus, while an economic downturn is possible, Brexit, should it occur, would not only trigger an economic downturn, it would have a specifically deleterious effect on Dublin Airport, a contingency that the Draft Determination fails to address.

And that is assuming that there isn't a generalised, wider economic slowdown during in the economic pathway that includes a Brexit scenario, which given the trade issues between the US and China, and the trade talks between the US and the EU, is not an unforeseeable complication to Brexit.

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11 Brexit clouds are gathering over the UK's economic prospects https://www.ft.com/content/43fd17fe-9e47-11e9-b8ce-8b459ed04726

12 Budget 2020: macro-economic backdrop.
John McCarthy Chief Economist, Department of Finance
https://www.esri.ie/sites/default/files/media/file-uploads/2019-06/Macroeconomic%20outlook.pdf

13 Dublin Airport Cost of Capital for 2019 Determination
http://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Efficient%20Cost%20of%20Capital%20Study.pdf (SS 222)

4. The absence of consideration for how the 2019 Determination would undermine the logic of the Commission's Cost of Capital Report for DAA.

With Dublin Airport about to commence a sustained capital investment plan, the negative aspects of an evolving negative economic event will be heightened as CapEx needs will strictly dominate OpEx. In the case of even a small downturn in the economy, the demands to complete the planned infrastructure investments (once commenced) will mean a greatly disimproved experience for passengers, given the absence of contingencies.

As Swiss Economics argued, "an increase in investments, exceeding the current CIP2020+ plan, could weaken daa's financial metrics. This is dependent on whether additional investments will be counted for in the 2019 Determination. S&P considers the regulatory framework under which daa has operated as predictable and supportive, which should mitigate the extent of this threat".[14] It is not certain that Standard & Poor would consider the stepwise change in maximum charge per passenger which is recommended by the Commission's Draft Determination as 'supportive'. Such a change in charges may itself trigger a downgrading of the debt rating of DAA.

Further to this, the changes in the debt to EBITDA ratio are likely to trigger a downgrading of DAA's Debt rating over the lifetime of the Determination as a result of increasing the leverage ratio of the firm.

Added to this, construction arising from the National Development Plan sees significant competition for skilled labour, and inflating construction costs caused by high demand for. DAA will be competing within this sector and is therefore vulnerable to the price inflation which is already a problem within that industry.

As the ESRI has argues "Greater vigilance will also be required to ensure that large infrastructural projects, which are essential for sustainable growth, are delivered on an efficient basis. A number of high-profile cases have emerged recently where the final costs of certain projects seems to be

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14 Dublin Airport Cost of Capital for 2019 Determination http://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Efficient%20Cost%20of%20Capital%20Study.pdf (SS 204)

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significantly different from initial estimates."[15] Thus, inflation risks around the financing of DAA's infrastructure investments are considerable.

These added costs may result in extra debt being necessary to complete the DAA investment projects and given the pressure that the Draft Decision is placing on the credit rating of DAA, this may increase the cost of credit for DAA beyond Swiss Economics' expectations.

Increased costs, and the risk of reduced access to capital is likely to lead to poorer passenger experiences, as "under-investments are likely to have dynamic effects on welfare. In the context of airports, dynamic effects are likely to include a worsening of user experience compared to an optimal level of investment. For example, waiting times for departing passengers during security checks may increase due to a lack of infrastructure or flight delays may increase due to missing capacity. In the longer run, travellers, especially transfer passengers, may try to avoid or bypass Dublin Airport, which comes with negative consequences on the Irish air transport industry and tourism and economic activity in general."[16]

What is peculiar about the Commission's Draft Determination is that these determinations are motivated by ensuring that operating bodies invest in their airports. A maximum charge that is too high allows monopolist providers to capture excess capacity through failing to optimise the use of assets. However, DAA is currently engaged in a very large investment which will see its Regulatory Asset Base more than double over the duration of the Determination. The consequence of this determination is likely to reduce DAA investment in Dublin Airport because of the Determination's effect of reducing financing options for the DAA, which ought to be contrary to the aims of the Commission.

Brexit of course features in the risks associated with the DAA capital costs, given the unaccounted-for potential for Brexit to disrupt our economy, which Swiss Economics noting that the potential decline in traffic arising from Brexit constitutes a real threat to DAA's "A-" credit rating.

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15 QUARTERLY ECONOMIC COMMENTARY SUMMER 2019 https://www.esri.ie/system/files/publications/QEC2019SUM_1.pdf

16 Dublin Airport Cost of Capital for 2019 Determination http://www.aviationreg.ie/_fileupload/2019/Draft%20Determination/2020-2024%20Draft%20Efficient%20Cost%20of%20Capital%20Study.pdf (SS 222)

Recommendations:

In light of these concerns, Chambers Ireland recommends that the Commission does not introduce a step change in the price cap for Dublin Airport.

Given that the price cap is supposed to stimulate and incentivise investment in infrastructure that will reduce OpEx, and that such investment features under the DAA plan for Dublin Airport, then the Commission ought to be more measured in its report.

Given the ambitious changes in methodology since the 2014 determination, and that the Commission failed to accurately predict the passenger demand over the period of that Determination, Chambers Ireland suggests that a stable gradualist approach might be more robust, in an uncertain economic environment.

Considering the extreme volatility that has been shown in PAX over the last decade, we recommend that rather than presuming continuity of current economic circumstances, the Commission should consider using "within period adjustments" to maximum prices so that contingencies exist, even under uncertainty.