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Reauthorisation of the Air New Zealand and Air China Strategic Alliance

Independent Economic Analysis to inform the Ministry of Transport's Advice to the Acting Minister of Transport

Final Report

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[Square brackets denote material confidential to the Applicants.]

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Executive Summary

The Ministry of Transport ("the Ministry") engaged Motu to undertake independent economic and competition analysis of the strategic alliance between Air New Zealand and Air China. The alliance governs both airlines' operations on the Auckland–Shanghai and Auckland–Beijing routes, and the authorisation is due to expire in March 2026. This report provides analysis to help inform the Ministry of Transport's advice on a proposed decision about whether to authorise the alliance, to the Acting Minister of Transport. The alliance partners have applied for a five-year authorisation, until 31 March 2031.

The Civil Aviation Act 2023 ("2023 Act") intends to improve the transparency and robustness of the process for authorising airline alliances. Under the 2023 Act the Minister may grant authorisation if they are satisfied that:

- granting authorisation will contribute to the main purpose or any of the additional purposes of the Civil Aviation Act; and
- giving effect to the agreement would result, or be likely to result, in a benefit to the public that would outweigh any lessening in competition.

To support the 2023 Act, the Ministry introduced an assessment framework and application guidelines. These resources are designed for airlines to provide consistent of information, data and analysis in applications, and enable the Ministry to consistently assess applications. Under the Ministry's assessment framework, applicants are required to demonstrate the benefits of cooperation, present credible counterfactual scenarios, and provide evidence on competition effects and wider public value.

The alliance between Air China and Air New Zealand enables deep cooperation and a merger-like level of integration on the two alliance routes. On Auckland–Shanghai and Auckland–Beijing services, the airlines share revenue, coordinate capacity and schedules, and align customer service functions. While the alliance excludes cargo, it covers most aspects of passenger services. On connecting feeder routes, they coordinate sales and marketing but do not share revenue.

Under the alliance, Air New Zealand operates the Auckland–Shanghai alliance route and Air China operates Auckland–Beijing. Air New Zealand has operated Auckland–Shanghai since 2006, and previously operated Auckland–Beijing between 2008 and 2012 before withdrawing to focus on Shanghai. Air China did not previously operate either route. Air China launched its Auckland–Beijing service in December 2015 as part of the alliance.

Relevant markets

We defined relevant markets for the alliance routes by combining a qualitative understanding of relevant geographic markets with empirically estimated cross-price elasticities. Starting with narrow sets of nearby candidate routes and progressively widening the candidate set, we examine where observed substitution is strong and where it tapers off. Drawing on the SSNIP logic outlined in the Ministry's Assessment Framework, these approaches helped to pin down the set of credible substitutes (i.e., relevant markets) for each alliance route.

Results suggest that substitution is concentrated within specific economic regions, and that distinct relevant markets are appropriate for each alliance route: the New Zealand–Yangtze River Delta economic region (NZ–YRD) for the Auckland–Shanghai route, and New Zealand–Jing-Jin-Ji

economic region (NZ–JJJ) for the Auckland–Beijing route. On the New Zealand side, all international departure points are appropriately categorised within a single relevant market.

In NZ–YRD, nonstop alternatives to the Air New Zealand operated Auckland to Shanghai service include China Eastern's Auckland–Shanghai service, as well as China Eastern's newer Auckland–Hangzhou option. In the year ending June 2025, the Applicants held an average market share of 48% among O&D ("origin and destination") passengers. China Eastern has expanded its market share over time to an average of 23% for the most recent year. Outside of Covid-19, the average fares offered by the Applicants appear equal to, or slightly below, those of China Eastern. Since Covid-19, and in contrast to before Covid-19, China Eastern's seated (nonstop) capacity in the market has outstripped that of the alliance partners. When connecting passengers are included, China Eastern has a materially larger share of overall passengers in the market – 47%, versus 32% for the Applicants.

The only nonstop service in the NZ-JJJ market is the Applicants' Auckland–Beijing service operated by Air China. Since the Applicants introduced this service as part of the alliance, they have achieved a market share of 40-50% among O&D passengers (47% average for the most recent year). One-stop options continue to provide viable alternatives, mostly through other Asian hubs. In the two years following the introduction of the Applicants' nonstop Auckland–Beijing service, the size of the NZ-JJJ market increased by 28.5% and 57.6% relative to pre-alliance passenger volumes. Before and after Covid-19, the average fare on Air China's direct AKL-PEK service has frequently been below the average fare of many one-stop alternatives.

Factual and counterfactual scenarios

In the New Zealand–YRD market, s 9(2)(b)(ii), s 9(2)(ba)(i) We accept that Air New Zealand would s 9(2)(b)(ii), s 9(2)(ba)(i) but suggest the counterfactual case may overstate certain disadvantages encountered by Air New Zealand. For Air China, s 9(2)(b)(ii), s 9(2)(ba)(i)

s 9(2)(b)(ii), s 9(2)(ba)(i) While data suggests that the Beijing service is currently a significant contributor to Air China's portfolio of international routes, s 9(2)(b)(ii), s 9(2)(ba)(i) Many of these sales depend on the alliance. s 9(2)(b)(ii), s 9(2)(ba)(i)

Overall, we treat the counterfactual as binary: either the alliance operates across both routes, or the relationship between the two airlines reverts to basic arm's-length cooperation. We do not adopt scenarios of a "partial alliance" (i.e., limited to one route) due to the imbalance of common incentives that would likely undermine the cooperation. We also do not incorporate dynamic competitive responses from potential new entrants in the counterfactual. There is insufficient evidence that such responses would occur and, if they did, they are likely attributable to underlying route profitability more than the presence or absence of the alliance.

Competition effects

The Applicants argue that the alliance creates no competitive detriment because the two airlines have never operated on the same route at the same time. In their own material, however, the Applicants acknowledge overlapping competition from one-stop services. Some of these one-stop services involve long-haul sectors which are operated by Air New Zealand, or where pricing is coordinated by Air New Zealand through its other alliances. Such coordination on the long-haul leg (e.g., between Auckland and Hong Kong or Singapore) gives Air New Zealand indirect influence over the associated through-fare to Beijing or Shanghai, because the price of the long-haul component dominates the one-stop cost structure and effectively sets the floor for end-to-end pricing. These one-stop options are not fully independent competitive alternatives. Before the alliance, these one-stop options provided independent competition on the Beijing route. The alliance has served to align Air New Zealand's indirect influence on these one-stop options with direct influence on the Air China operated service, thereby weakening the overall constraint. This is not the primary effect of the alliance but, equally, it is not credible to suggest that the alliance creates no competitive detriment.

Our assessment of competition effects is guided by two related questions: how does the alliance affect competition in the NZ–YRD and NZ–JJJ markets, and what options would consumers face without the alliance?

In the New Zealand to Yangtze River Delta market, growth since 2015 has been driven primarily by China Eastern's entry and subsequent expansion rather than increased capacity from the Applicants. In the NZ-YRD market, the alliance contributes to Air New Zealand's position as a viable competitor, but is not determinative of market structure. The market gradually became less concentrated prior to Covid-19. While Air New Zealand's recovery on the Auckland–Shanghai route has lagged behind China Eastern, the Applicants' passenger traffic and capacity are not out-of-step with recovery rates across other nonstop New Zealand–China services. The investments of China Eastern in the NZ-YRD market do not indicate that the alliance has constrained other carriers from investing.

In the New Zealand to Jing-Jin-Ji market, the alliance has been central to sustaining a nonstop Auckland–Beijing service, which expanded the market significantly following its introduction. Without the alliance, consumers would face only less convenient one-stop alternatives. This would represent a material reduction in choice and likely contract the size of the market. After an initial increase in concentration following the authorisation of the alliance, the market became less concentrated up until Covid-19.

Public value

The principal public benefit from the alliance is the continued operation of a nonstop service between Auckland and Beijing. Following the introduction of this service in December 2015, the NZ–JJJ market grew considerably in the two subsequent twelve-month periods. This likely reflected new demand stimulated by the direct service. The alliance also makes Air New Zealand's service a more viable competitor to China Eastern between Auckland and Shanghai. Additional benefits may include modest contributions to the recovery of tourism flows post Covid-19, the stability needed for future planning, and government and commercial ties between New Zealand and Beijing.

Conclusions and net impact

The alliance likely affects the market between New Zealand and YRD by shifting some passengers from China Eastern's direct services to the Air New Zealand service. The alliance makes Air New Zealand's service a more viable competitor to China Eastern, but it is unclear that there would be

any major change in the NZ–YRD market without the alliance (i.e., entry or exit of operating airlines). It is, however, quite plausible that any direct service between New Zealand and the Jing-Jin-Ji region depends on the cooperation of the Applicants. The empirical evidence suggests that NZ–JJJ is a distinct market, not well served by other routes between New Zealand and the eastern China seaboard.

We acknowledge potential competition concerns associated with the alliance, including one-stop services to JJJ where Air New Zealand has shared or exclusive ability to influence the pricing of the long-haul leg. Available evidence suggests that this is a relevant but minor concern. The Air New Zealand and Air China alliance does not involve the loss or consolidation of nonstop competition. Even if the alliance mildly softened competition in the short term, the prospect of longer-run entry or expansion acts as a disciplining force on profitability. The possible loss of a nonstop service between New Zealand and JJJ without the alliance would, in our view, create a more material impact. For these reasons, we conclude that the net impact of the alliance over the proposed reauthorisation period is more likely than not to be beneficial for consumers and New Zealand.

Where warranted, the Ministry may recommend conditions to an alliance that sufficiently reduce the competitive detriments, while enabling public benefit. In this case, we agree with the Applicants' position that imposing a reauthorisation condition (e.g., maintaining or increasing capacity) would undermine their ability to make commercially motivated decisions. Given that load factors below 80% are not unusual on both routes, imposing this type of condition could disadvantage the Applicants relative to rivals. The underlying economic incentives indicate that the alliance is sustainable only if it covers both routes, so imposing an agreement restriction that excludes one of the routes would make the alliance unviable.

Acknowledgement and disclaimer

This analysis was commissioned and funded by the Ministry of Transport. The Ministry facilitated access to the necessary data and material, including access to the Cirium datasets to conduct our analysis. Professor Arthur Grimes (Motu/ Victoria University of Wellington) provided helpful suggestions on an earlier draft. Conclusions offered in this report, as well as any errors, remain the responsibility of the authors alone.

Glossary table

Air NZ	Air New Zealand
Applicants	The airlines seeking authorisation for their cooperation; Air New Zealand and Air China.
CA	Air China
Direct or nonstop flights	Flights that operate from origin to destination without any intermediate stops.
EBIT margin	Operating profitability ratio, equal to Earnings Before Interest and Taxes as a percentage of revenue.
IATA	The International Air Transport Association (IATA) is the trade association representing 350 airlines and over 80% of global air traffic.
JJJ region	The Jing-Jin-Ji economic region (Auckland to Beijing route) integrates the municipalities of Beijing and Tianjin with Hebei Province.
Load factor	Percentage of available seats filled with passengers.
Metal neutral alliance	A form of agreement where partner airlines share revenues and costs regardless of which airline ("metal") operates the flight.
MIDT	MIDT refers to global airline booking data extracted from Global Distribution Systems (GDSs). These datasets record passenger bookings made through travel agencies, capturing information on itineraries, origins and destinations, carriers, and fares.
Ministry or MOT	The Ministry of Transport | Te Manatū Waka.
NZ	New Zealand
O&D	The starting point and final destination of a passenger's journey, regardless of any stops or connections made along the way. O&D passengers start and finish their travel within a relevant market, rather than connecting through the market to another destination.
One-stop or two-stop flights	Flights that require passengers to change planes or connect through one or two intermediate airports before reaching the final destination.
RBD	A Reservation Booking Designator is a one- or two-letter code used in airline reservation systems to classify a flight's booking class, fare type, and associated fare rules such as restrictions, change policies, and mileage accrual.
SAA	Strategic Alliance Agreement
SSNIP test	The small but significant non-transitory increase in price test (also known as the hypothetical monopolist test) is a conceptual tool used to define relevant markets under the assessment framework. The test asks whether a hypothetical monopolist could profitably impose a SSNIP in a given market (Ministry of Transport, 2025b).
SPA	Special Prorate Agreement. A form of cooperation agreement about how to split fares for itineraries that include flights operated by multiple airlines.
YRD region	The Yangtze River Delta (YRD) economic region (Auckland to Shanghai route) encompasses the municipality of Shanghai and the provinces of Jiangsu, Zhejiang, and Anhui.

1 Introduction and background

1.1 Context and scope of analysis

Motu Economic and Public Policy Research (henceforth "Motu" or "we") have been engaged by the Ministry of Transport to undertake independent economic and competition analysis relating to Air New Zealand's alliance agreement with Air China. The agreement governs both airlines' commercial activity on routes between Auckland and Shanghai, and Auckland and Beijing. The statutory authorisation for the alliance expires at the end of March 2026. This economic analysis has been commissioned to inform the Minister's proposed decision regarding reauthorisation, following a recent reauthorisation application from the airlines.

The Civil Aviation Act 2023 introduced a new process for considering alliance applications. Compared with the previous regime, the 2023 Act places greater emphasis on transparency and stakeholder engagement. Under the Act, the Minister publishes a draft Proposed Decision setting out the intention either to grant or to decline authorisation before any final determination is made. Interested parties then have the opportunity to provide submissions, ensuring that relevant commercial and public interest perspectives are tested before the decision is finalised.

To support this process, the Ministry has developed a structured assessment framework (Ministry of Transport, 2025b). The framework sets out the principles and analytical steps that will guide the Ministry's advice to the Minister. It requires that applicants clearly define the relevant markets, present credible counterfactual scenarios, and provide robust evidence on competition effects, public benefits, and net impacts. The depth of expected analysis is proportionate to the nature of the agreement.

Motu's economic and competition analysis will feed into six assessment areas considered by the Ministry. Several of these questions, particularly 2, 4 and 5, contain a policy aspect that the Ministry will address separately.

1. Does the application data and supporting information supplied by the applicants validate their claim for authorisation? Does third-party data available to the Ministry, such as Cirium, support their claims?

2. Is the counterfactual provided by the airlines credible?

3. Have the previous authorisations led to material changes in market share, capacity, market concentration and pricing (airfares)?

4. Are the claimed wider benefits and detriments of the alliance reasonable and is there sufficient evidence provided in accordance with the Assessment Framework?

5. Based on information available, does the economic analysis support authorisation? Would competition be enhanced/promoted by including conditions in the authorisation? If so, what conditions should apply?

6. Any key issues raised in submissions, e.g. the effect of other alliance and cooperation agreements authorisations.

Within the Ministry's framework, the scope of our analysis covers five topics. First, an analysis of nearby routes is used to carefully define the relevant market boundaries, within which competition

and public benefits are assessed. Second, a market assessment will be undertaken across relevant dimensions. Third, factual and counterfactual scenarios will be examined, with attention to how they differ from the status quo and the credibility of the Applicants' claims. Fourth, we will address competition effects of the alliance under both scenarios. Fifth, the public value and net impact of the alliance will be considered. Analysis falling outside the Ministry's Assessment Framework is generally considered out of scope.

1.2 Our team

Established in 2000 as an independent charitable trust, Motu is the top-ranked economic research group in New Zealand (based on RePEc rankings) and specialises in economic and public policy research. Dr. Tadhg Ryan-Charleton has overall responsibility for the economic analysis of the Air New Zealand and Air China reauthorisation, collaborating with Dr. Stuart Donovan and Dr. Leon Stirk-Wang. Ryan-Charleton brings over a decade of research on horizontal cooperation between firms, including Marsden-funded research on alliance partnerships among New Zealand firms and earlier work on competitor alliances in the semiconductor industry. He is a Fulbright Scholar with a PhD from the National University of Ireland. Donovan holds a PhD in economics from the University of Amsterdam and has more than twenty years' experience in spatial, urban, and transport economics across Australia and New Zealand. Stirk-Wang earned his PhD in economics from the University of Otago. His research focuses on econometric theory, causal inference and applied policy evaluation.

1.3 The strategic alliance agreement

Air New Zealand and Air China have applied for reauthorisation of their Strategic Alliance Agreement (SAA) under Part 6 of the Civil Aviation Act 2023. The alliance was initially authorised on 23 March 2015 and last renewed in March 2021. The current authorisation is due to expire on 31 March 2026, and the parties seek approval for a further five-year term until 31 March 2031.

The alliance agreement governs cooperation between the airlines on two direct routes: Auckland–Shanghai (AKL–PVG) and Auckland–Beijing (AKL–PEK). It also extends to feeder routes which connect with these long-haul services. While the parties do not revenue share on feeder routes, they coordinate on pricing, sales, marketing, and frequent flyer handling. This enables the airlines to coordinate traffic feeding into and out of the long-haul routes.

On the direct alliance routes, the SAA provides for a high level of integration, including revenue sharing, joint network planning, capacity decisions, coordination of operational requirements, and alignment of airport and customer service functions. The alliance is supported by a set of implementing agreements, covering code-sharing, special prorate arrangements, frequent flyer programme reciprocity, and mechanisms for revenue sharing. The alliance does not cover cargo coordination, with each carrier continuing to compete independently in the freight market. Both partners are members of the Star Alliance network.

Air New Zealand has operated between Auckland and Shanghai since November 2006. Air New Zealand introduced a route between Auckland and Beijing in July 2008 (just prior to the Beijing Summer Olympics) but withdrew in June 2012 to focus on Shanghai. Air China has operated a direct service between Auckland and Beijing since it was introduced by the alliance partners in December 2015. This service has been the only direct service between the cities in this period.

1.4 Methods and data

As data permits, we use descriptive and econometric analysis of the alliance routes and relevant surrounding routes to inform our conclusions. This includes estimating fare elasticities using an instrumented regression approach; disaggregating market share, size, airfares, capacity and load factors for relevant routes and markets; modelling plausible counterfactual scenarios; and examining relevant competition statistics.

Our priority is to provide analysis that can inform the reauthorisation decision up to 2031, and our analysis of recent and historical trends is approached with this objective. The Covid-19 affected period, involving Chinese and/or New Zealand governmental restrictions on air travel, spanned the months of February 2020 to January 2023. Data from the Covid-19 affected period is of limited value for understanding current and future market conditions, but is included in our figures and tables for completeness. Naturally, the post Covid-19 recovery of capacity and demand is an important consideration.

Unless stated, our analysis is based on data that comes primarily from the Cirium FM Traffic and Schedules datasets. These datasets provide reasonably comprehensive coverage of international and domestic aviation activity, allowing us to track traffic flows, market shares, and capacity at the carrier or route levels from 2014 onwards. Cirium data provides consistency and comparability across markets, enabling meaningful benchmarking of alliance and non-alliance routes.

That said, the Cirium datasets have certain limitations that readers should consider alongside our analysis:

- Cirium use a 'traffic and fares methodology model' to generate passenger and fare estimates where data coverage is incomplete. In the markets we examined, this model appears to under report itineraries sold by airlines ('Marketing Carriers') on flights they do not operate.
- Unless an airline provides specific seat counts associated with their aircraft configuration, Cirium total seat data from the Scheduling dataset reflects the default seat count for the scheduled equipment type. As such, reported capacities (and therefore load factors) are likely to be a close approximation rather than a precise measure.
- Fare classes are not reliably reported by Cirium, so it is necessary to aggregate fare data across all classes. Cirium assigns tickets to fare classes using IATA RBDs (Reservation Booking Designators), but not all airlines using codes consistent with IATA standards.
- Despite certain data documentation implying otherwise, itineraries with three or more connecting points are not included by Cirium. After engagement with Cirium technical specialists, we could not find a way to re-integrate these itineraries. We expect the extent of omitted passenger on three-or-more stop itineraries is quite small, given that only around 10% of passengers on alliance routes have two-stop itineraries.

We supplement Cirium data with Applicant provided data where possible.

1.5 Key definitions and analytical boundaries

In this report, we use the term nonstop (or direct) to describe services that operate between two cities without intermediate stops. One-stop services involve a single connection, requiring passengers to change planes or transit through another airport before reaching their final destination. Two-stop services involve two connections.

Analysis of market shares and airfares focuses on origin and destination ("O&D") passenger traffic. Passenger participation in a relevant market depends on true origin and destination, regardless of whether they travel nonstop or via connections. Connecting passengers whose O&D lies outside NZ–China (e.g. Nadi–Auckland–Shanghai, or Auckland–Shanghai–Tokyo) are important for contributing to feeder traffic and overall route viability, but are not constrained by the competitive options, and have credible alternatives outside the market (e.g. Nadi–Sydney–Shanghai, or Auckland–Tokyo nonstop). In contrast, passengers beginning and ending their journey in New Zealand and the Yangtze River Delta (YRD) are the consumers for whom NZ–YRD services are the relevant competitive options.

Additional elements of our analysis (e.g., overall passenger shares) include both O&D and connecting passengers. For parsimony, we refer to this broader group as passengers who "engaged" with a market – meaning that they either travelled between an origin and destination in the market, or travelled through the market.

1.6 Report structure

To address the questions posed, our report is organised as follows. We begin by outlining our approach to defining relevant markets for alliance routes and the results of our analysis. We proceed to a descriptive analysis of relevant markets: between New Zealand and the Yangtze River Delta economic region (Auckland to Shanghai route); and between New Zealand and the Jing-Jin-Ji economic region (Auckland to Beijing route). We then unpack the counterfactual scenario against which the alliance can be assessed, and consider likely competition effects under both factual and counterfactual conditions. A subsequent section considers the public value of the alliance, before closing with conclusions about the alliance's net impact and a discussion of analytical limitations.

2 Defining the relevant market(s) for the alliance routes

Defining the relevant markets is an appropriate first step in setting boundaries within which competition will be assessed. Market definition clarifies which services and routes genuinely constrain each other, ensuring later analyses of airfares, concentration, market shares, and counterfactuals are meaningful:

> *"A market is a description of an area or space for transactions for a product or service. It includes both actual and potential transactions. A market includes those products or services that are considered substitutable for one another as a matter of fact and commercial common sense. The market seeks to capture the factors that directly shape and constrain the rivalry between firms supplying the relevant products or services."* (Ministry of Transport, 2025b, Note 3)

A key tool is the small but significant non-transitory increase in price (SSNIP) test (Ministry of Transport, 2025b). This conceptual test asks whether a hypothetical monopolist controlling a candidate market could profitably raise prices. If customers would switch in sufficient numbers to substitute offerings, the market definition should be broadened. Phrased differently, the SSNIP test assesses the extent to which the relevant market would need to be broadened, before a hypothetical monopolist could generate monopoly rents.

In this way, the SSNIP test operationalises the logic of demand substitution: markets are drawn narrowly where passengers have few substitutes, and more broadly where switching is easy. This discipline helps ensure that the economic assessment reflects real competitive constraints, rather than arbitrary route or product definitions.

2.1 Applicant material

The Applicants argue that the relevant primary market is appropriately defined as China–New Zealand. The application does not contain a rationale for defining the relevant market in this way, other than that it is consistent with the previous reauthorisation in 2021.

Within the relevant primary market, the applicants highlight two focus Chinese catchment areas:

> "(a) The Yangtze River Delta region that comprises the city of Shanghai, and the provinces of Jiangsu, Zhejiang and Anhui.
>
> (b) The Beijing Tianjin-Hebei Region that includes the cities of Beijing and Tianjin, and the province of Hebei." (Air New Zealand & Air China, 2025, para. 7.3).

The relevant New Zealand catchment area is argued to be the area around Auckland. According to the Applicants, the New Zealand market includes domestic feeder routes operated by Air New Zealand. The Applicants do not state whether they have worked through relevant tests in determining relevant markets.

2.2 Defining relevant markets

Consistent with the Ministry's framework, careful definition of relevant markets is a key initial assessment step. In a qualitative sense, the Chinese catchment areas outlined by the Applicants: Yangtze River Delta and Jing-Jin-Ji, are appropriately treated as distinct relevant geographic markets. Noted in Section 3, the Yangtze River Delta and Jing-Jin-Ji regions are large, separate economic areas with multiple airports and surface transport links. Passengers originating from Shanghai, Hangzhou, Nanjing, or other Yangtze River Delta cities can access the same international gateways within a few hours' travel. The major cities within the specific regions are highly interconnected by extensive high-speed rail and expressway networks. Separately, the same is true for those originating from Beijing, Tianjin, or Hebei.

Due to the proximity to other hubs along China's eastern seaboard, we supplemented the qualitative intuition with quantitative analysis of substitution patterns. To define relevant markets for a given alliance route, we sought to examine how changes in the average direct fare on the alliance route cause passengers to switch to other nearby routes. This highlights the possibility to use econometric methods within the Assessment Framework to define relevant markets based on customers' willingness to switch from alliance routes to other route options.

We approach this by estimating cross-price elasticities for a range of potential nearby route candidates. Our approach involves estimating the passenger increase on nearby routes in the event of a price increase on the alliance route, using Cirium monthly records of fares and passengers from January 2014 to June 2025. The elasticities give us a little more confidence in the relevant market definition by identifying nearby routes which see increased passenger volumes when prices increase on the alliance routes. This is a helpful step in identifying substitution patterns; it demonstrates which nearby routes customers used as alternatives to the alliance route.

We began by testing a narrow definition of nearby routes and then examined how demand substitution changed as the definition of "nearby routes" got progressively broader. The narrowest definition of routes nearby to the AKL-PVG and AKL-PEK (nonstop) alliance routes is (i) indirect routes to PVG/PEK. We then expanded the definition to (ii) other routes in the surrounding city area and, in turn, (iii) economic region. We also examined (iv) other potential hubs along China's eastern seaboard (including Hong Kong), [1] and finally (v) all of China. Both Auckland-centric and New Zealand-wide market definitions are tested for each of (i) to (v), resulting in a total of ten possible nearby routes for each Alliance route.

To estimate elasticities, we used the following general regression model where all variables are in natural logarithm and our unit of analysis is a calendar month:

$$\ln D_{ij} = \beta_1 \ln P_{ij} + \beta_2 \ln P_{ij}^A$$

Where:

- $\ln D_{ij}$ denotes the total number of passengers that travel on nearby routes that are not the alliance route.
- $\ln P_{ij}$ denotes the average fare paid by those that travel between origins and destinations on nearby routes that are not the alliance route.
- $\ln P_{ij}^A$ denotes the average fare for nonstop flights on the alliance route.
- β_1 and β_2 denote parameters to be estimated. As all variables are in logs, these parameters can be interpreted as constant elasticities.

In advance, we expect $\beta_1 < 0$ and $\beta_2 > 0$. That is, an increase in average fare on nearby routes, $\ln P_{ij}$, is associated with reduced demand on nearby routes, $\ln D_{ij}$ and an increase in average fare on the Alliance route is associated with increased demand on nearby routes $\ln D_{ij}$. The models we estimate also included controls for seasonality (month and year effects) as well as time trends.

Due to the small numbers of observations, we estimate models in a Bayesian setting. [2] This allowed us to impose priors for the elasticity on the alliance route, β_1, which were informed by the literature, specifically $\mathbb{N}(-1.25, 0.25)$ (Perera & Tan, 2019). For the cross-price elasticity, β_2, we impose weakly positive priors $\mathbb{N}(0.20, 0.20)$. In estimating these models, we address the risk of endogeneity by instrumenting $\ln P_{ij}^A$ with the NZ dollar exchange to US dollar rate. The identifying

[1] This is a broad, functional definition of eastern China, spanning the coastal provinces from Liaoning in the north to Guangdong, and Hong Kong, in the south. It aligns with international trade, shipping, and aviation markets, but is different (i.e., broader) than political interpretations of "East China".

[2] Specifically, *brms* in R Studio.

Table 1: Example of estimated cross-price elasticities of demand on nearby routes with respect to AKL–PVG and AKL–PEK direct fares

Demand response		Fare driver	
	to/from	AKL-PVG	AKL-PEK
Indirect routes to same airport	AKL	0.52**	0.57**
	NZ	0.51**	0.63***
... plus surrounding city area - respectively, SHA and NAY/PKX airports	AKL	0.55**	0.56**
	NZ	0.47**	0.56**
... plus surrounding economic region - respectively, Yangtze River Delta and Jing-Jin-Ji regions	AKL	0.62**	0.47*
	NZ	0.64***	0.47**
... plus eastern seaboard from Liaoning to Guangdong (incl. Hong Kong)	AKL	0.20**	0.17*
	NZ	0.14	0.07*
... plus rest of mainland China	AKL	0.33***	0.15
	NZ	0.25**	0.08*

*Notes: *, **, and *** denote statistical significance at the 95%, and 99% and 99.9% levels. Monthly unit of analysis; n=91 for AKL-PVG and n=70 for AKL-PEK. SHA: Shanghai Hongqiao International Airport. PKX: Beijing Daxing International Airport (opened in 2019). NAY: Beijing Nanyuan Airport closed in 2019. Estimates are based on aggregation of bidirectional fares and traffic. .*

assumption here is the exchange rates represent exogenous shocks to demand that isolate the effects of fares on demand. [3]

In theory, the effects operating via $\ln P_{ij}$ and $\ln P_{ij}^{A}$ can be interpreted respectively as the own-price and cross-price elasticities of demand on nearby routes. The cross-price elasticity of demand, captured by the parameter β_2, is of primary interest. The larger the value of β_2, the stronger the evidence that passengers on the alliance route readily substitute the alliance route for other direct or one-stop options on nearby routes.

Table 1 presents a representative example of the estimated cross-price elasticities of demand for each nearby route option, with respect to AKL–PVG and AKL–PEK direct fares for one model specification. [4] Here, the coefficients reflect the fractional change in passenger volumes on the nearby route when fares on the alliance route rise by 1%. For example, the upper right most cell suggests that a 1% increase in the average nonstop fare on the AKL-PEK route causes a 0.57% increase in passengers on indirect routes between AKL and PVG airports. The row directly beneath reports the corresponding increase across indirect routes between NZL and PVG.[5]

In practice, our estimates of the own-price elasticities, β_1, which were of a plausible magnitude, that is, approximately -1. We found estimates of the cross-price elasticity, β_2, were relatively sensitive to the chosen model specification. This finding is not itself unusual. Cross-price elasticities are often hard to estimate even in normal circumstances given that their magnitude depends on the relative size of the two markets being compared. Such challenges are only amplified in this setting, given the small number of observations. We also found our instrument was relatively weak.

[3] We did not use the CNY (renminbi) exchanged rate as this is a managed float, rather than a fully floating currency.
[4] A complete set of estimates is included with the Supplementary Data.
[5] The asterisks (*, **, ***) mark coefficients that are statistically significant at conventional thresholds; (i.e., less uncertainty associated with the estimate), although we emphasise that this does not -- in itself -- necessarily imply a large or economically important causal effect.

By examining patterns of cross price elasticities across nearby routes under different model specifications, we gained some empirical insights that were useful for pinning down relevant markets (i.e., the set of credible substitute routes for each alliance route). Consistent with the SSNIP logic, we defined the relevant market for an alliance route as the point where marginally expanding the nearby route definition shows declining cross-price elasticities, indicating that including expanded origins and destinations no longer provides credible substitution for the alliance route.

The results in Table 1, for example, suggest the level of substitution tails off significantly as the definition of nearby routes is expanded beyond the surrounding economic region. In particular, the top six rows of coefficients (both columns) are suggestive of reasonably strong substitution patterns on nearby routes as broad as New Zealand and the relevant economic region. The effect tails off once the nearby route definition is expanded to include the eastern China seaboard and then all of China (i.e., the bottom four rows). Similar results were found for other model specifications.

On balance, and when triangulated with other evidence, we suggest the cross-price elasticities are capturing useful insights about the viable alternatives within narrowest market definitions and, ultimately, the addition of less relevant alternatives for the broadest definitions. We suggest that immediately surrounding routes (involving Auckland and New Zealand airports) are viable substitutes for many customers; however, farther away routes (i.e., those in other parts of eastern China or further afield) do not provide credible substitution for the alliance routes.

2.3 Summary

Our conclusions broadly support the Applicants' proposed Chinese "catchment areas" as the appropriate market definitions on the Chinese side. The Yangtze River Delta and Jing-Jin-Ji regions are large, separate economic areas with multiple airports and surface transport links. The elasticities indicate that many passengers treat routes within each region as substitutable. By contrast, expanding the market to encompass "all of China" adds routes with little evidence of meaningful substitution. It is not clear that one can treat "New Zealand–China" as a single market: substitution does not appear to extend that broadly, and such a definition would mask actual competitive constraints faced by the alliance on the AKL–PVG and AKL–PEK routes. On the New Zealand side, departure ports anywhere in the country appropriately fall within the same market.

3 Descriptive analysis of relevant markets

Figure 1: Key cities and provinces in China

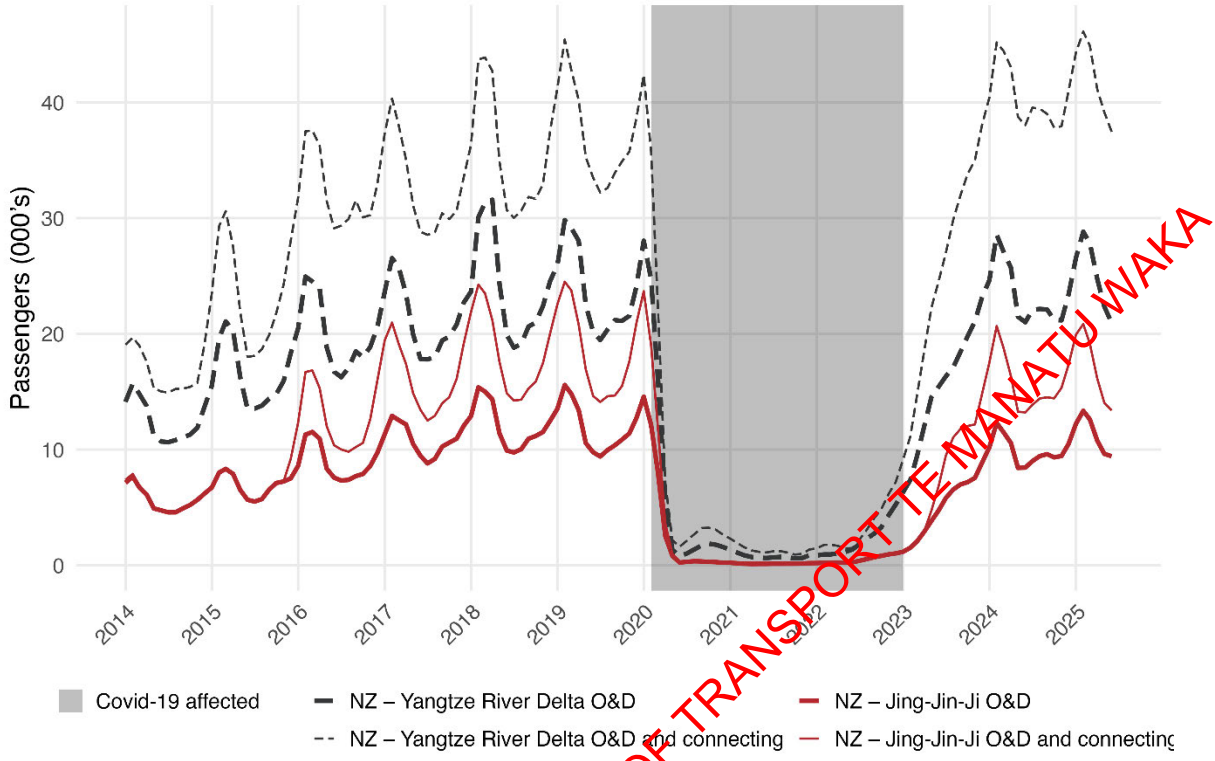
s 6(a)

Overall, markets between New Zealand and China are dominated by inbound visitors (i.e., resident in China), comprising approximately 60.5% of all travellers for the year to June 2025. [6] Most of China's international air traffic is concentrated along the eastern seaboard (see Figure 1) where the country's largest metropolitan and economic regions are located. Long-haul services from the South Pacific almost exclusively enter through these coastal gateways, including Hong Kong, and the cities/ provinces of Guangdong (Guangzhou and Shenzhen), Shanghai, and Beijing. This strong concentration of hub airports in China's coastal regions dominate international connectivity compared to inland provinces.

The Yangtze River Delta (YRD) economic region (Auckland to Shanghai route) encompasses the municipality of Shanghai and the provinces of Jiangsu, Zhejiang, and Anhui. Several nonstop flights have operated between New Zealand and the Yangtze River Delta (NZ-YRD). Air New Zealand has operated nonstop flights between Auckland and Shanghai since November 2006. China Eastern launched a seasonal service on the same route in December 2014 that has since moved to a year-round schedule. Since 2023, China Eastern has also operated flights between Auckland and Hangzhou.

[6] According to Statistics New Zealand, 248,391 overseas visitors arrivals reported China as their last permanent residence, relative to 162,396 NZ-resident traveller arrivals visiting China (Statistics New Zealand, 2025).

Figure 2: Size of relevant markets by passenger volumes, 2014-2025



Note: Data points reflect three month moving monthly averages. Figures are bidirectional totals (sum of each passenger in each direction). O&D passengers are those whose origin and destination are within the relevant market, regardless of whether their itinerary involves stops. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel, spanning February 2020 to January 2023.

The Jing-Jin-Ji economic region (Auckland to Beijing route) integrates the municipalities of Beijing and Tianjin with Hebei Province. There has never been more than one nonstop between New Zealand and Jing-Jin-Ji (NZ-JJJ) at a given time. Air New Zealand operated direct flights between Auckland and Beijing from July 2008 until June 2012 when they exited to focus on Shanghai (Hembry, 2012). Shortly after the Applicants' alliance was authorised, Air China launched a direct Auckland to Beijing flight in December 2015 that continues to operate. [7]

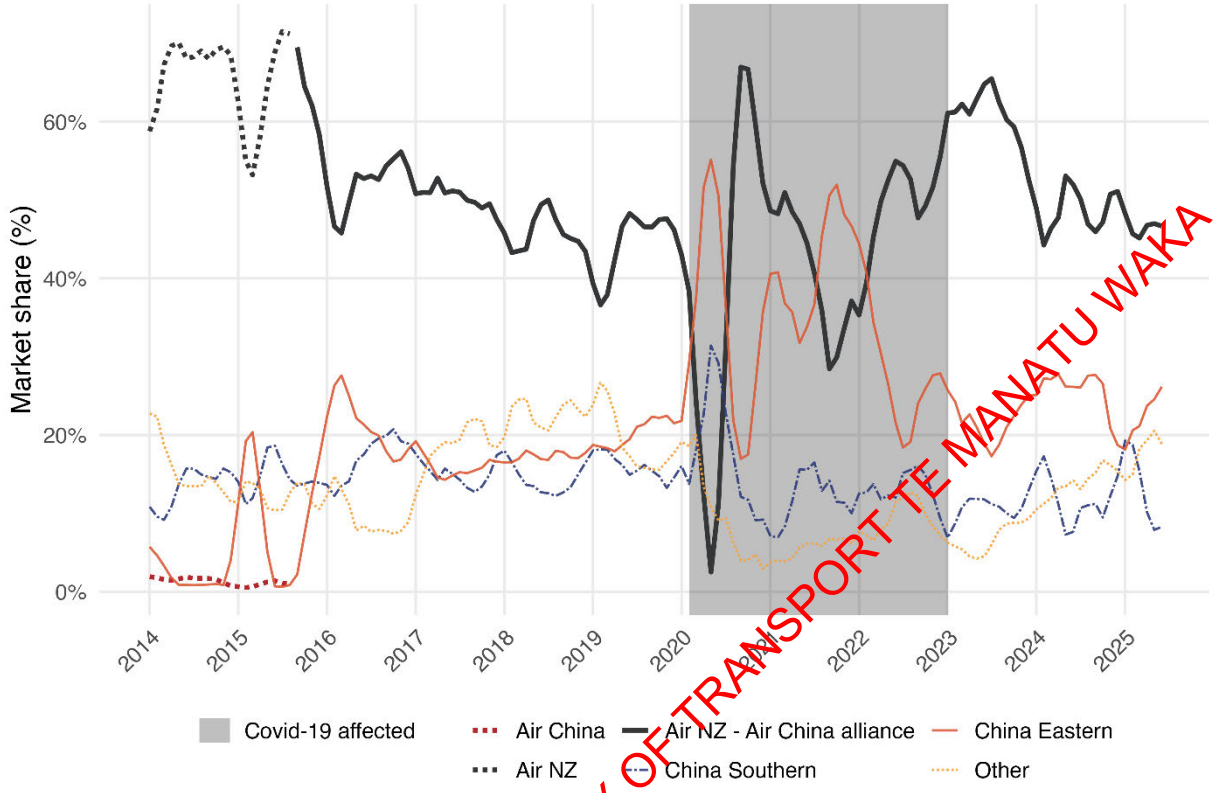
Figure 2 illustrates how demand in both markets is highly seasonal. The NZ-YRD market is the larger of the two markets. NZ-YRD has recently averaged almost 30,000 O&D passengers in peak months, exceeding 40,000 when connecting passengers are included. The New Zealand to Jing-Jin-Ji (NZ-JJJ) is smaller; with recent monthly volumes that are a little less than half of those in the NZ-YRD market. NZ-JJJ passenger volumes grew considerably in the period the introduction of a direct flight between Auckland and Beijing (December 2015) shortly after the alliance began.

3.1 Descriptive analysis of New Zealand - Yangtze River Delta market

As the country's leading hub for trade, finance, and advanced manufacturing, the Yangtze River Delta economic region contributes a substantial share of national GDP and plays a key role in global supply

[7] From 2016 to 2019, Tianjin Airlines (GS) operated a flight between Auckland (AKL) and Tianjin (TSN) that is recorded in some outlets as a direct flight. This flight operated with a technical stop in either Xi'an (XIY) or Chongqing (CKG), both in central China. For analytical purposes, and from a consumer perspective, this is appropriately categorised as a one-stop flight.

Figure 3: Market shares in the New Zealand - Yangtze River Delta market, 2014-2025



Note: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023.

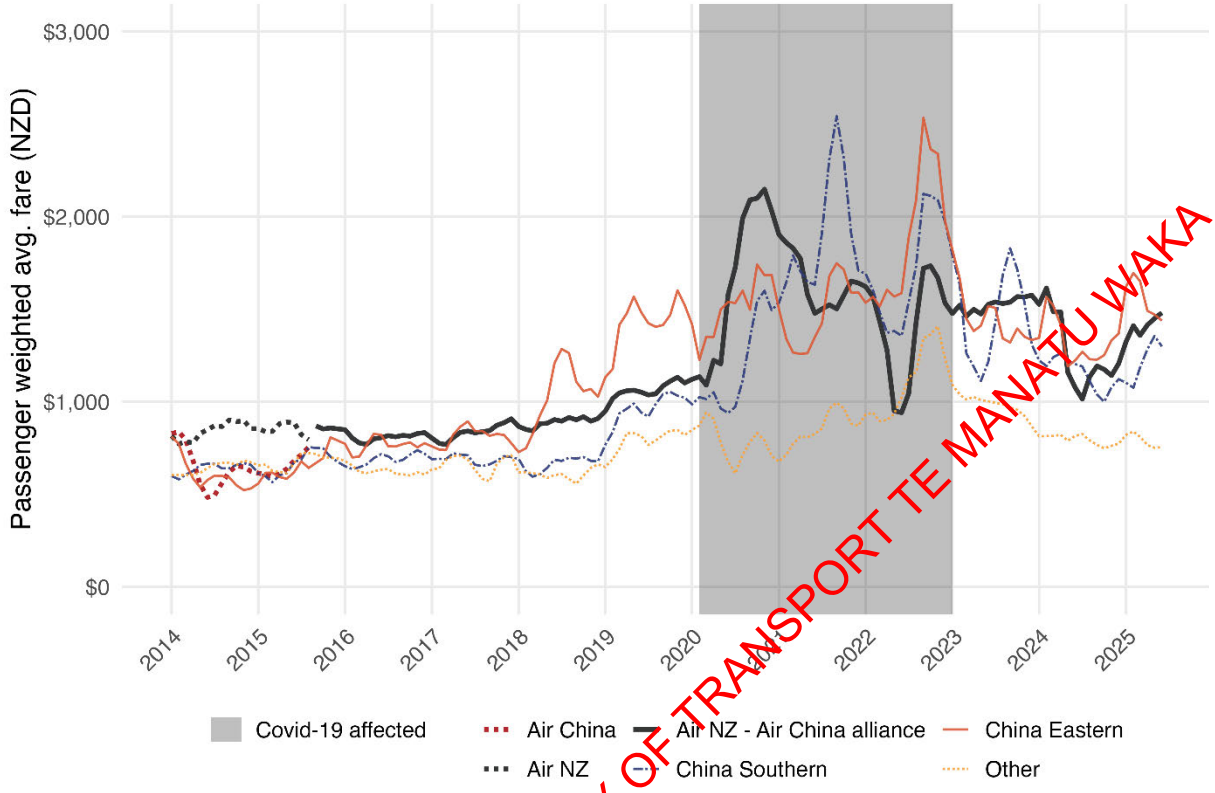
chains. Aviation infrastructure is central to regional integration, anchored by four major international airports: Shanghai Pudong International Airport (PVG), Shanghai Hongqiao International Airport (SHA), Hangzhou Xiaoshan International Airport (HGH), and Nanjing Lukou International Airport (NKG). Pudong serves as the region's main international gateway, handling long-haul intercontinental flights and acting as a major air cargo hub. Hongqiao, closer to central Shanghai, primarily supports domestic and regional business travel, linking the YRD to China's political and commercial centres with high frequency. Hangzhou Xiaoshan complements the Shanghai airports by serving both a growing international portfolio, and the technology and e-commerce industries concentrated in Zhejiang. Nanjing Lukou, the key hub of Jiangsu, supports regional business connectivity and provides international links for the province's industrial base.

3.1.1 Market shares

Analysis of market shares and airfares focuses on origin and destination ("O&D") passenger traffic only, regardless of whether they travel nonstop or via connections. Unlike connecting passengers who are not constrained by the options in the market, passengers beginning and ending their journey in New Zealand and the YRD are the consumers for whom NZ–YRD services are the relevant competitive options. The breakdowns of market shares and airfares also focus on the 'marketing carrier' that sells the ticket and therefore holds market power at the point of sale (Ministry of Transport, 2025b). (Section 3.1.3 decomposes passenger share by operating airline.)

Figure 3 outlines how market share in the NZ-YRD market has evolved since 2014. In the year ending June 2025, the Applicants' held an average market share of 48%. China Eastern has expanded

Figure 4: Average fares in the New Zealand-Yangtze River Delta market, 2014-2025



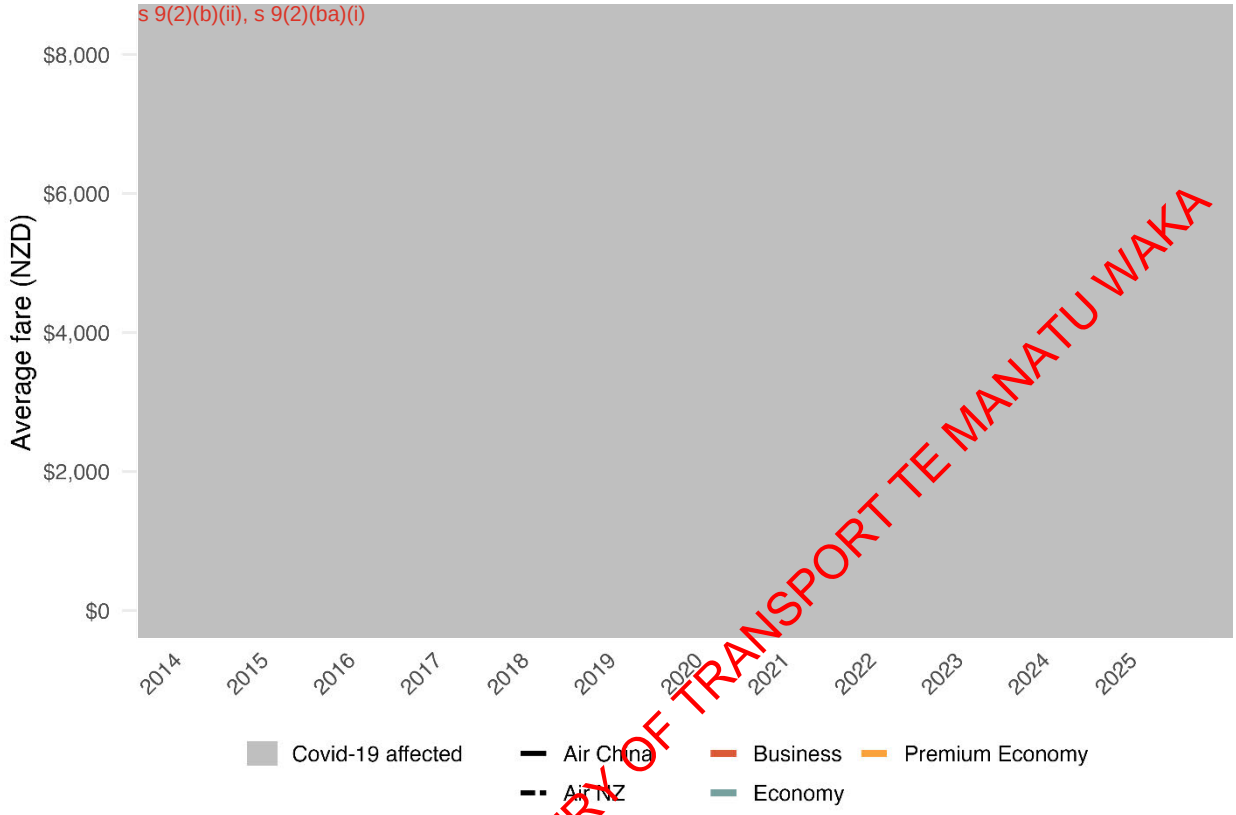
Note: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. Fares are expressed in NZD (nominal values) and aggregated across all fare classes.

its market share over time, from an average of 20% in the year ending January 2020 to 23% for the most recent year of data (ending June 2025). Alongside China Eastern's recent announcement of a new Shanghai-Auckland-Buenos Aires route, this pattern does not suggest that the alliance has dissuaded China Eastern from entering and expanding in the market. China Southern one-stop sales, commonly via Guangzhou from either Auckland or Christchurch, have averaged 12% recent market share. Other indirect carriers, including Hainan Airlines and Cathay Pacific, offer additional competitive constraint (recent average share: 16%).

3.1.2 Average fares

Figure 4 reports average fares in the NZ-YRD market. Values are imprecise (due to the lack of credible fare class data) but suggest comparable average fares across major airlines serving the market. Outside of Covid-19, the average fares offered by the Applicants appear equal to, or slightly below, those of China Eastern who are the alternative direct service provider in the market.

Figure 5: [Average fares by fare class for the Applicants' Auckland to Shanghai route, 2015-2025



Note: Relies on commercial data provided by the Applicants. Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. Fares are expressed in NZD (nominal values).]

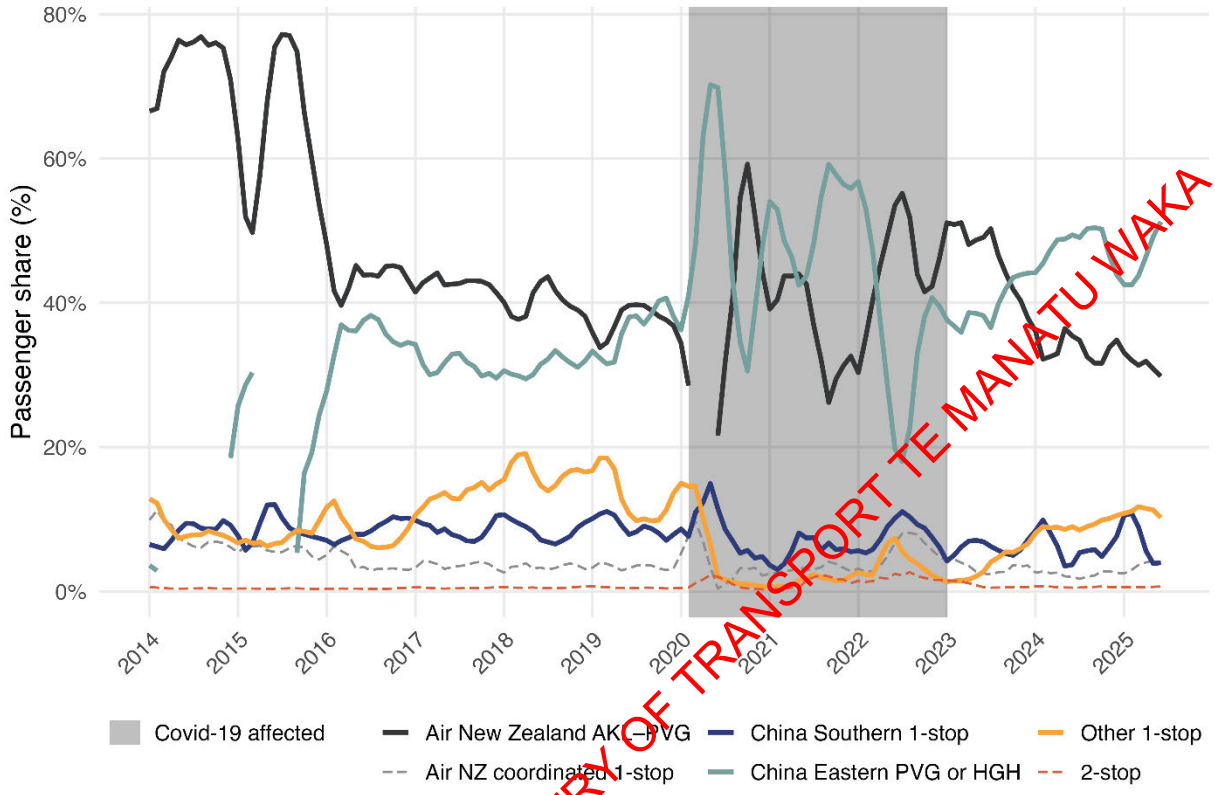
[Fare aggregate figures extracted from Cirium are broadly consistent with trends in specific fare class, based on data provided by the Applicants outlined in Figure 5.]

3.1.3 Passenger shares by operating airlines

Several additional patterns emerge when focusing on passenger share according to the airlines who carry passengers, rather than those selling the tickets. Figure 6 decomposes the share of passengers by operating airlines. The analysis includes both O&D and connecting passengers (i.e., all passengers who "engaged" with the NZ-YRD market).

In the year ending June 2025, the Applicants' direct Auckland to Shanghai service achieved an average share of 32% of passengers travelling through the market (O&D and connecting combined). China Eastern has significantly expanded its share from an average of 37% during the pre-Covid-19 year to 47% for the most recent year. This is reflective of the comparably high volume of connecting passengers carried by China Eastern, particularly when considered against the earlier market share analysis (Figure 3, "O&D" passengers only). Most remaining passengers travel via other one-stop routes (recent average: 10%), and China Southern one-stop routes (recent average: 7%).

Figure 6: Passenger share by operating airline in the New Zealand - Yangtze River Delta market, 2014-2025



Note: Data points reflect three month moving monthly averages. Shares are based on bidirectional totals (sum of each passenger in each direction), including passengers whose origin and destination are within the relevant markets, and connecting passengers. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. AKL: Auckland, PVG: Shanghai Pudong, HGH: Hangzhou.

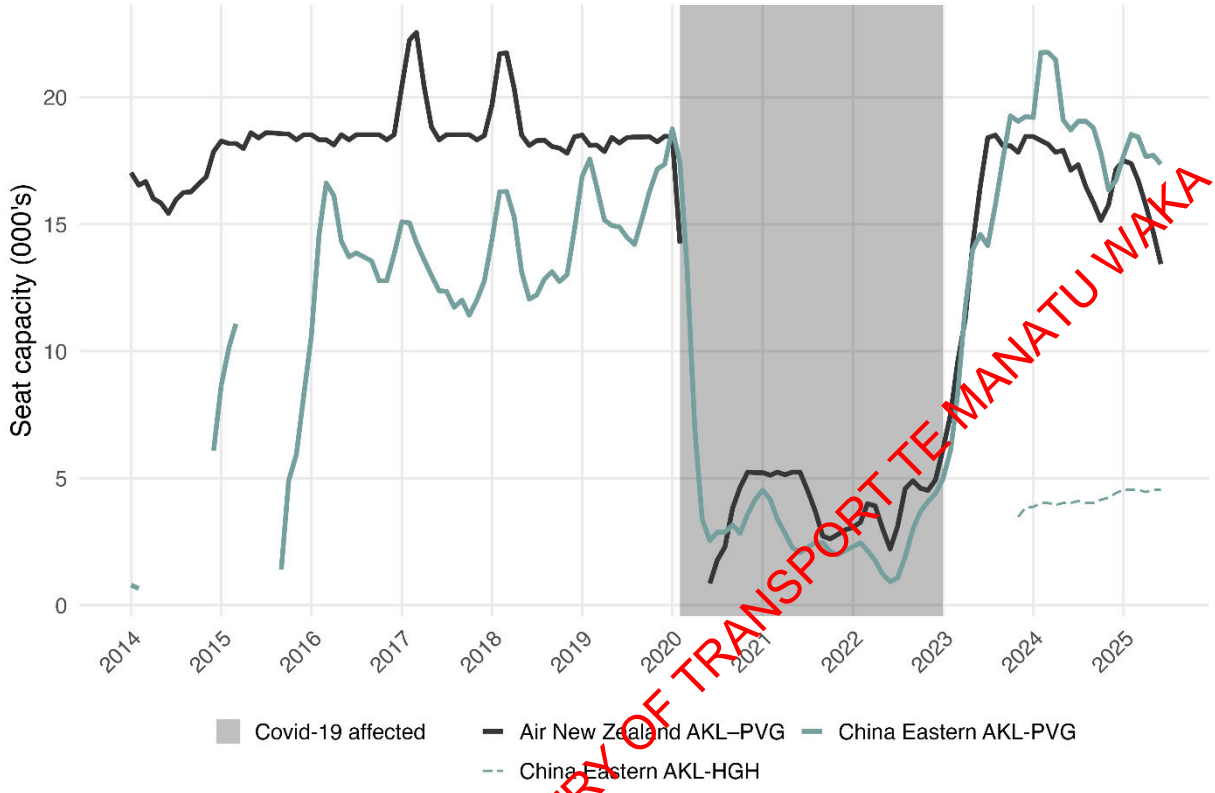
The introduction of the alliance's service between Auckland and Beijing (December 2015) coincided with a drop in Air New Zealand's passenger share in the YRD market. One possibility is that the new Beijing route captured Air New Zealand passengers who previously travelled to/from/via Shanghai. It is likely that Chine Eastern's decision around that time to transition from a seasonal route to a year-round route between Auckland and Shanghai, while also investing in considerable extra capacity, was a bigger factor in Air New Zealand's passenger share drop.

Some relevant one-stop services to Shanghai involve long-haul flights where Air New Zealand has other extensive cooperation agreements (including with Singapore Airlines and Cathay Pacific). We recognise that Air New Zealand does not coordinate with Singapore Airlines and Cathay Pacific outside of the jurisdictions covered by those authorisations (Air New Zealand & Air China, 2025b n. 61). Nonetheless, the issue of how Air New Zealand's coordinated pricing on those long-haul flights may have knock-on effects on the competition and pricing of one-stop services to YRD is of significance to the authorisation decision. We return to this topic later in the report. We note in Figure 3 that one-stops where Air New Zealand has shared or exclusive coordination power on the key long-haul leg have a recent average 3% share of NZ-YRD passengers.

3.1.4 Direct capacity

Two of the three direct services in the NZ-YRD market link Auckland and Shanghai Pudong (PVG) airports – one operated by Air New Zealand as part of the alliance and the other operated by China

Figure 7: Capacity (nonstop seats) in the New Zealand - Yangtze River Delta market, 2014-2025



Note: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. Reported capacities are likely a close approximation rather than a precise measure (see Section 1.4).

Eastern. Since late 2023, China Eastern has also operated direct flights between Auckland and Hangzhou (HGH).

Figure 7 highlights how capacity on these services have changed over time. Since Covid-19, and in contrast to pre Covid-19, China Eastern's capacity in the market has outstripped that of Air New Zealand. Across July 2024 to June 2025, China Eastern has offered 22,272 monthly seats in the market versus Air New Zealand's 16,099 (moving monthly average, three month window, both direct routes combined). For the most recent Northern summer season, Air New Zealand pointed to s 9(2)(b)(ii) s 9(2)(ba)(i) and weak post-Covid-19 demand as factors which caused them to trim capacity. Air New Zealand state they intend to return to daily services for the Northern winter season and do not rule out adding capacity in the future "... where supported by underlying demand and commercial viability". (Air New Zealand & Air China, 2025b, para. 1.4).

We revisit this topic later in the report as part of a wider discussion about post-Covid-19 recovery of air travel between New Zealand and China.

3.1.5 Feeder traffic before/beyond New Zealand and YRD ports

Feeder traffic refers to passengers whose journeys on other routes connect into a long-haul hub and who support the viability of a long-haul route or market. From the perspective of a long-haul operator, feeder flows are important because they supplement demand from local passengers,

Table 2: Feeder routes before/beyond the New Zealand-YRD market, 2014-25

	Before/ beyond NZ port Top 10 are all to/from AKL:			Before/ beyond YRD port Top 10 are all to/from PVG:		
Rank	Route	Pax.	Pct.	Route	Pax.	Pct.
1	Christchurch (NZ)	189,751	5.6%	Beijing (MU)	40,041	1.2%
2	Wellington (NZ)	90,877	2.7%	London (VS)	34,483	1.0%
3	Queenstown (NZ)	54,803	1.6%	Frankfurt (LH)	33,055	1.0%
4	Dunedin (NZ)	22,397	0.7%	Fuzhou (MU)	25,920	0.8%
5	Palmerston N. (NZ)	16,698	0.5%	Osaka (MU)	24,743	0.7%
6	Napier (NZ)	10,047	0.3%	Osaka (CA)	21,690	0.6%
7	Nelson (NZ)	9,055	0.3%	London (MU)	20,344	0.6%
8	Tauranga (NZ)	8,439	0.3%	Paris (AF)	19,966	0.6%
9	New Plymouth (NZ)	5,565	0.2%	Zurich (LX)	18,568	0.6%
10	Christchurch (JQ)	4,736	0.1%	Qingdao (MU)	18,376	0.5%
	No connection	2,920,266	86.7%	No connection	2,131,450	63.3%
	Total passengers	3,369,740		**Total passengers**	3,369,740	

Notes: Figures reported are bidirectional totals (sum of each passenger ("Pax.") in each direction) for immediate beyond/before connections. Both "O&D" and connecting passengers are included. Totals do not capture passengers who travelled on flights that were booked as part of separate itineraries. The lack of data for three stop itineraries in Cirium is likely causing us to underestimate the volume of feeder passengers. NZ: Air NZ, AKL: Auckland, JQ: Jetstar, PVG: Shanghai Pudong, MU: China Eastern, VS: Virgin Atlantic, LH: Lufthansa, CA: Air China, AF: Air France, LX: Swiss.

raising load factors and reducing per-passenger costs on routes that require high aircraft utilization and fixed investments.

The availability of feeder traffic also has competitive implications. Airlines with wider networks and alliance partners can aggregate more connecting passengers through their hubs, strengthening their market position relative to rivals who lack significant feeder traffic. Conversely, constraints or foreclosure of feeder flows reduce the effective catchment for a long-haul service, diminishing its competitiveness and viability.

While the Applicants do not revenue share on feeder routes, they coordinate on pricing, sales, marketing, and frequent flyer handling. This enables both to coordinate traffic feeding into and out of the long-haul routes. The alliance does not involve commitments for either partner to provide an exclusive feed to the other.

Combining O&D and connecting passengers, Table 2 outlines the largest immediate feeder routes for passengers finishing beyond or beginning before their New Zealand and YRD ports. [8] The table uses Cirium data that does not include three-stop itineraries and excludes additional flights taken as part of different itineraries (see Section 1.4). As such, reported figures likely understate the true extent of feeder traffic and the patterns discussed should be treated as indicative.

Analysis of the Cirium data suggests that 13.3% of passengers come from behind or go beyond the New Zealand port. s 9(2)(b)(ii), s 9(2)(ba)(i)

This rate of domestic feeder traffic is significantly lower than comparable figures in prior reports

[8] For 95.9% of passengers, the New Zealand port is Auckland. 3.5% of passengers leave/enter New Zealand to/from Yangtze River Delta region through Christchurch, mostly on one-stop routes offered by China Southern. A tiny fraction leave/enter New Zealand through Wellington (0.4%) and Queenstown (0.1%) via a connecting stop in Australia.

(e.g., Brueckner et al., 2016). [9] On Air NZ operated long haul flights, about a quarter of passengers had a beyond/ behind connection in New Zealand. The volume of beyond/ behind connections on non-Air NZ operated flights is significantly lower (contributing to the low overall averages reported).

Nine of the top ten feeder routes before/ beyond Auckland are operated by Air New Zealand. Overall, 97.5% of passengers who take a flight immediately behind/beyond Auckland do so on an Air New Zealand-operated service. This control over feeder traffic gives Air New Zealand leverage on long-haul routes, as competing carriers depend on its domestic network to provide connecting passengers.

A larger proportion (36.7%) of passengers take a flight behind/beyond the YRD port than the NZ port. Before/ beyond traffic is distributed reasonably even across a range of Chinese, European and Japanese onward flights.

Five of the top ten feeder routes before/ beyond the YRD are operated by China Eastern. Overall, China Eastern feeders carry 55.9% of the immediate feeder traffic to and from the YRD port. When considered alongside the previous patterns, this highlights how China Eastern planes are filled with connecting passengers to a greater degree than Air New Zealand's flights. This trend will likely become more pronounced with China Eastern's introduction of a Shanghai to Buenos Aires route via Auckland at the end of 2025.

3.2 Descriptive analysis of New Zealand - Jing-Jin-Ji market

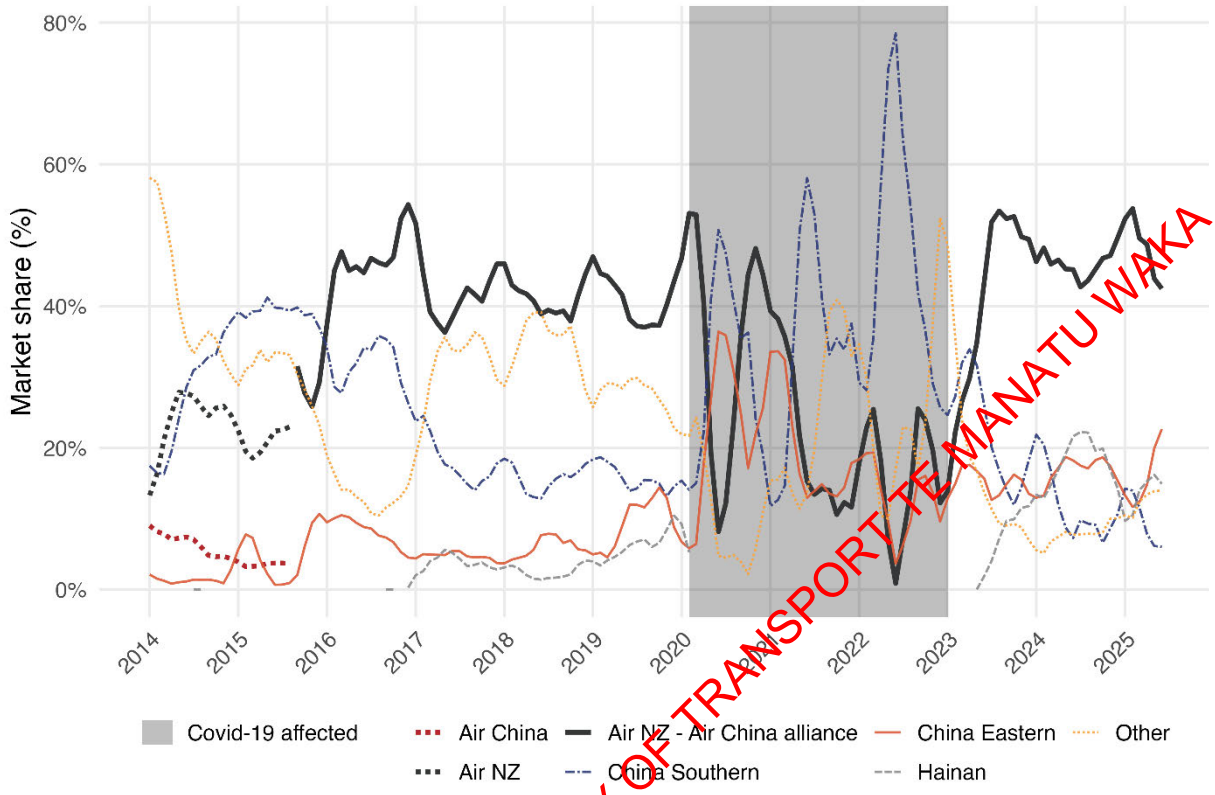
The Jing-Jin-Ji economic region is one of China's most important economic clusters, integrating the municipalities of Beijing and Tianjin with the Hebei Province. In the northeast of China, it is a hub of political authority, and industrial and technological development, housing over 100 million people and generating a GDP comparable to that of medium-sized countries. Aviation plays a key role in connectivity and growth, with three major international airports serving as gateways: Beijing Capital International Airport (PEK), Beijing Daxing International Airport (PKX), and Tianjin Binhai International Airport (TSN). Beijing Capital is a critical hub for government and diplomatic travel, reflecting its proximity to China's central political institutions. Beijing Daxing, inaugurated in 2019 with a starfish-shaped terminal, was designed to ease congestion at Capital and to position Beijing as a global aviation hub, particularly for long-haul international business connectivity. Tianjin Binhai, while smaller, is strategically significant as a base for low-cost carriers and as a cargo hub supporting the manufacturing and export-driven economy of Tianjin and Hebei.

3.2.1 Market shares

Figure 8 reports market shares in the NZ-JJJ market since 2014. As above, analysis of market shares and airfares focuses on origin and destination ("O&D") passenger traffic only, regardless of whether they travel nonstop or via connections. The breakdowns of market shares and airfares also focus on the 'marketing carrier' who sells the ticket.

[9] This study suggested that almost half of Air New Zealand long-haul passengers travelled before/ beyond Auckland, and around one third of passengers on Air New Zealand's alliance sector flights travelled before/ beyond Auckland (p. 76). Using Air New Zealand's proprietary data may have allowed Brueckner and colleagues to look at distinct passengers, which could result in a larger number than the bidirectional total. Even so, it is notable that feeder aggregates for the NZ-YRD market are significantly below prior reported averages.

Figure 8: Market shares in the New Zealand - Jing-Jin-Ji market, 2014-2025



Notes: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023.

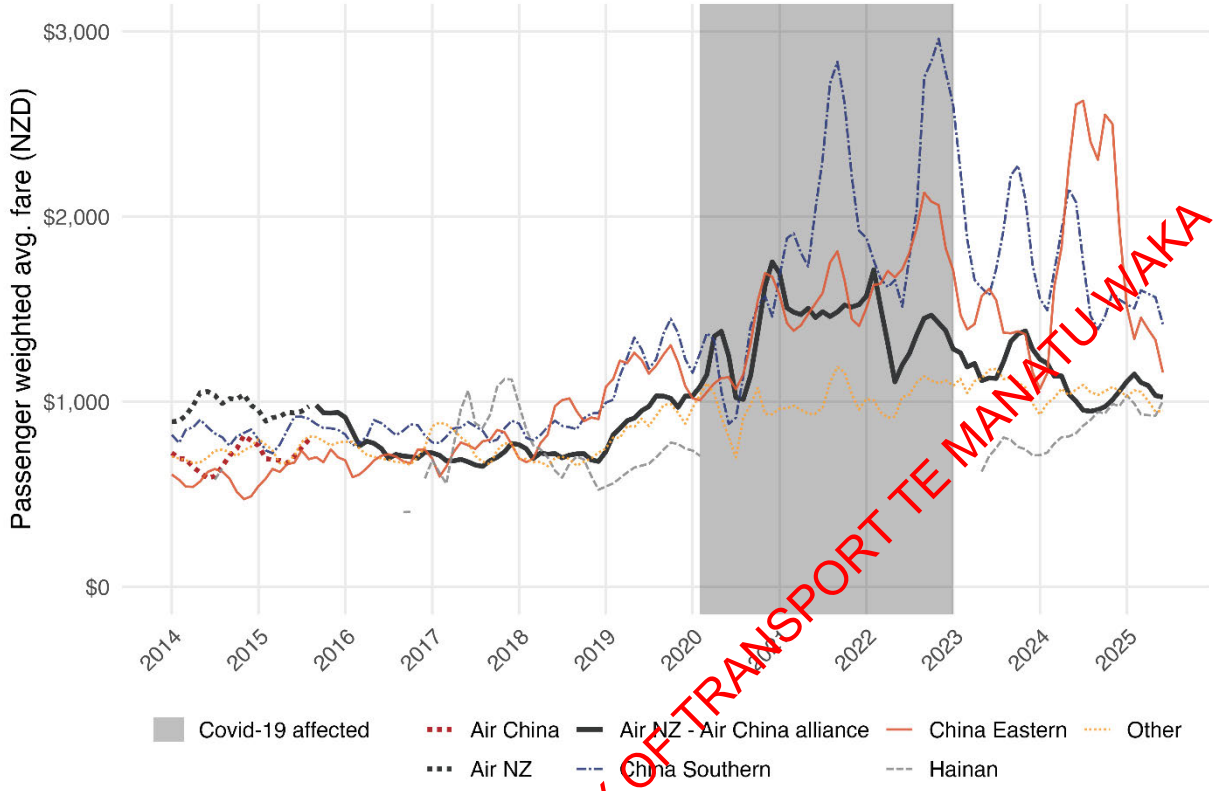
Since Air China introduced the direct Auckland to Beijing service as part of the alliance with Air New Zealand, the Applicants have achieved a market share of 40-50% (47% average for the most recent year). Airlines providing one-stop services held an average monthly share of 53% across the most recent year, and include services operated by China Eastern, Hainan Airlines, and Cathay Pacific. Figure 11 also appears to suggest that a nontrivial fraction of the market share gained by the Applicants upon introduction of the direct service came at the expense of China Southern one-stop options.

3.2.2 Average fares

Figure 9 reports average fare trends in the New Zealand - Jing-Jin-Ji market, aggregated across all fare classes. Exit from the Covid-19 affected period coincided with a spike in average airfares, particularly among China Eastern and China Southern one-stop tickets. This spike appears settled somewhat in 2025.

Before and after Covid-19, the average fare on Air China's direct AKL-PEK service has been below that of most one-stop options in the market (excluding Hainan Airlines). This is notable in a situation where there is a single provider of a premium (i.e., nonstop) flight in a market. Air New Zealand argue that s 6(a)

Figure 9: Average fares in the New Zealand - Jing-Jin-Ji market, 2014-2025



Note: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. Fares are expressed in NZD (nominal values) and aggregated across all fare classes.

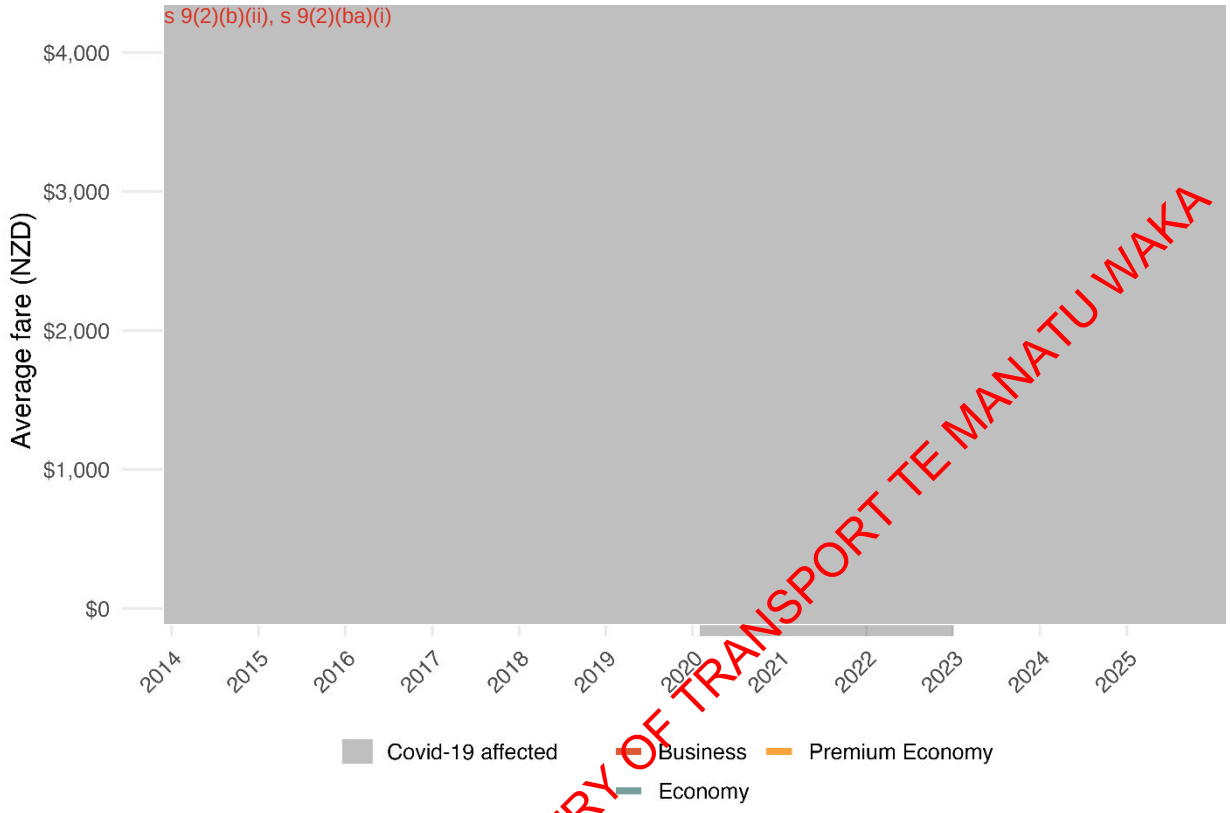
The Applicants state that Beijing fares have decreased since the route was introduced in December 2015 (Air New Zealand & Air China, 2025b, para. 1.4b). s 9(2)(b)(ii), s 9(2)(ba)(i)

3.2.3 Passenger shares by operating airlines

As with NZ-YRD, it is instructive to also examine passenger share (both O&D and connecting passengers) according to the airlines who carry passengers. Since Air China introduced the direct Auckland to Beijing service as part of the alliance, Figure 11 illustrates how it has achieved a passenger share of 55-65%, depending on the season (60% average for the most recent year).

One-stop services have offered sustained, viable alternatives. Figure 11 illustrates how the passenger shares of the Air China-operated direct flight have oscillated with that of one-stop services on a seasonal basis. This appears to be influenced by Air China's increased direct capacity during the Southern Hemisphere summer. These one-stop services (excluding one-stops operated by China Southern or involving Air New Zealand coordinated long-haul legs) held an average monthly share of 27% across the most recent year, and include services operated by Hainan Airlines, China Eastern, and Korean Air.

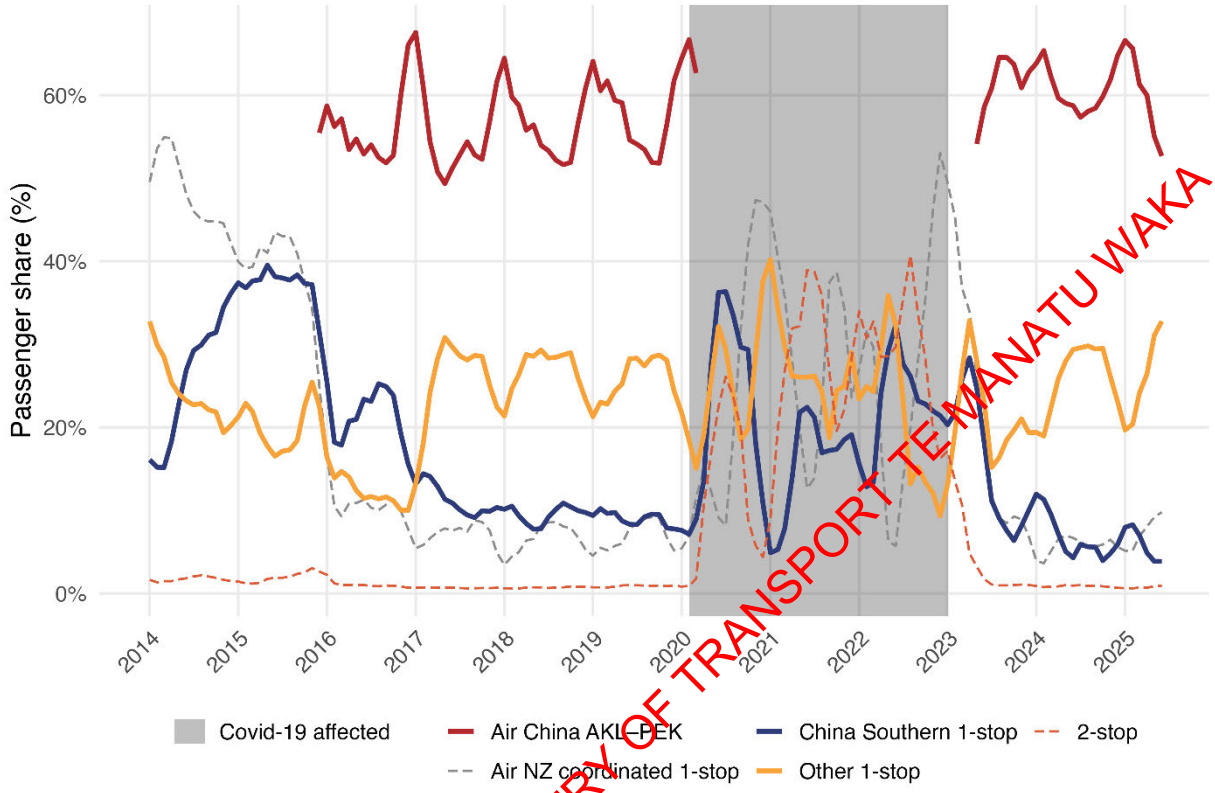
Figure 10: [Average fares by fare class for the Applicants' Auckland to Beijing route, 2015-2025



Note: Relies on commercial data provided by the Applicants. Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. Fares are expressed in NZD (nominal values).]

China Southern one-stop options, most commonly via Guangzhou from either Auckland or Christchurch, have averaged 6% recent passenger share. As with market share above, Figure 11 appears to suggest that a nontrivial fraction of the passenger share gained by Air China upon introduction of the direct service came at the expense of China Southern one-stop options.

Figure 11: Passenger share by operating airline in the New Zealand - Jing-Jin-Ji market, 2014-2025



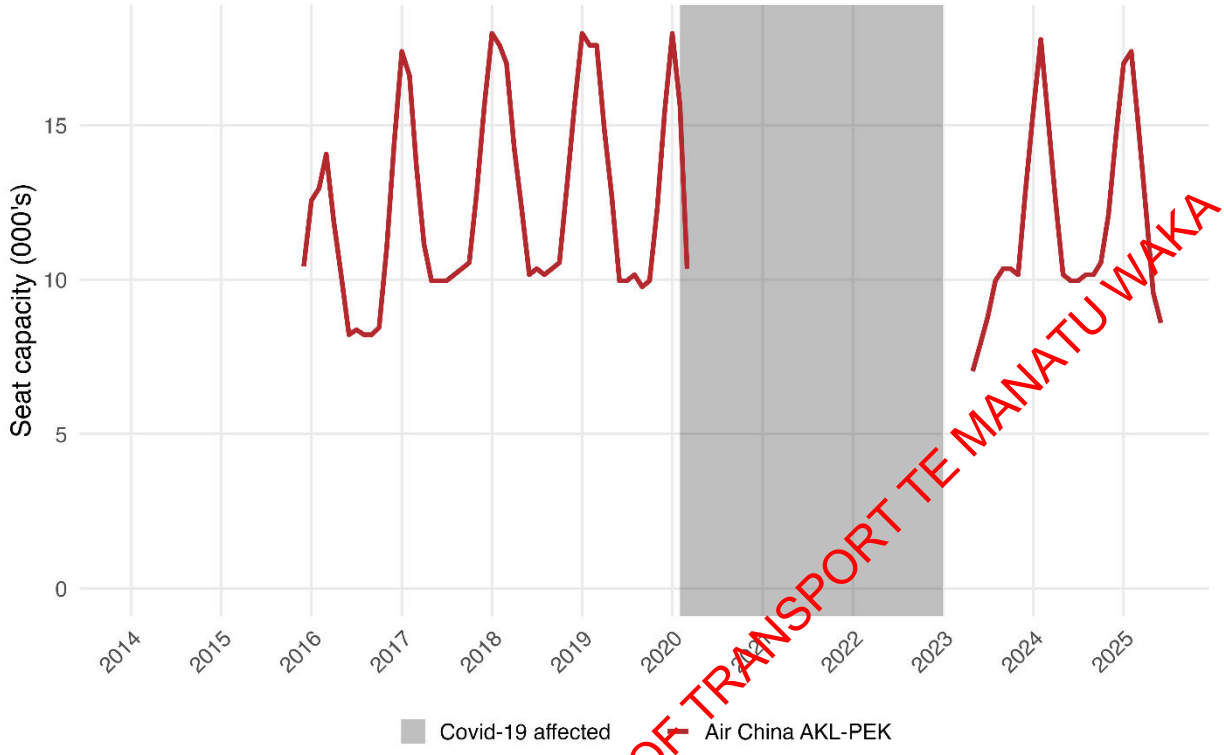
Note: Data points reflect three month moving monthly averages. Shares are based on bidirectional totals (sum of each passenger in each direction), including passengers whose origin and destination are within the relevant market, as well as connecting passengers. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. AKL: Auckland, PEK: Beijing Capital.

Up to November 2015 (i.e., prior to the introduction of the Auckland to Beijing direct route), an average 44% of passengers travelling in this market used one-stops where Air New Zealand had shared or exclusive coordination on the key long-haul leg. This has since dropped below 10% since (most recent 12 month of data: 7% average).

3.2.4 Direct capacity

In Figure 12, the only direct capacity in the New Zealand to Jing-Jin-Ji market is provided by Air China on the Auckland to Beijing route, as part of the alliance with Air New Zealand. Air New Zealand operated this route from before the 2008 Summer Olympics until June 2012 when they exited to focus on Shanghai (Hembry, 2012). Since 2015, Air China have adjusted the direct capacity based on a seasonal schedule with a full suspension during Covid-19.

Figure 12: Capacity (nonstop seats) in the New Zealand-Jing-Jin-Ji market, 2014-2025



Note: Data points reflect three month moving monthly averages. The Covid-19 affected period reflects Chinese and/or New Zealand governmental restrictions on air travel between the countries, spanning February 2020 to January 2023. As noted, reported capacities are likely a close approximation rather than a precise measure. AKL: Auckland, PEK: Beijing Capital.

3.2.5 Feeder traffic before/beyond New Zealand and JJJ ports

Examining all passengers engaged in the NZ-JJJ market, Table 3 outlines the largest immediate feeder routes for passengers finishing beyond or beginning before their New Zealand and JJJ ports. As above, the table relies on Cirium data that does not include three-stop itineraries and excludes additional flights taken as part of different itineraries (see Section 1.4). Reported figures therefore likely understate the true extent of feeder traffic.

According to the Cirium data, the proportion of immediate feeder traffic is smaller in the JJJ market than comparable YRD figures at both ends. Just 7.2% of passengers come from behind, or go beyond, their New Zealand port. As previously, nine of the top 10 feeder routes are operated by Air New Zealand. An extremely high proportion (97.9%) of passengers with a New Zealand before/beyond flight are on an Air New Zealand-operated flight.

A little less than one third of passengers travel behind/beyond their JJJ port (30.7%). Feeder traffic is spread across a range of locations, including domestic, Asian and European airports. Like Air New Zealand at the other end, Air China carry an extremely high portion of this traffic. All of the top ten feeder services are operated by Air China, and 88% of total before/beyond passengers take an Air China flight.

Table 3: Feeder routes before/beyond the New Zealand-JJJ market, 2014-25

	Before/ beyond NZ port Top 10 are all to/from AKL:			Before/ beyond JJJ port Top 10 are all to/from PEK:		
Rank	Route	Pax.	Pct.	Route	Pax.	Pct.
1	Christchurch (NZ)	36,553	2.6%	London (CA)	21,782	1.6%
2	Wellington (NZ)	35,006	2.5%	Shenyang (CA)	15,705	1.1%
3	Queenstown (NZ)	8,057	0.6%	Dalian (CA)	10,420	0.7%
4	Dunedin (NZ)	5,445	0.4%	Chengdu (CA)	8,466	0.6%
5	Palmerston N. (NZ)	3,666	0.3%	Qingdao (CA)	7,789	0.6%
6	Napier (NZ)	2,049	0.1%	Paris (CA)	7,436	0.5%
7	Nelson (NZ)	1,852	0.1%	Xianyang (CA)	7,152	0.5%
8	New Plymouth (NZ)	1,393	0.1%	Harbin (CA)	6,904	0.5%
9	Tauranga (NZ)	1,307	0.1%	Incheon (CA)	6,841	0.5%
10	Christchurch (JQ)	863	0.1%	Frankfurt (CA)	6,612	0.5%
	No connection	1,299,640	92.8%	No connection	970,786	69.3%
	Total passengers	1,400,968		Total passengers	1,400,968	

Notes: Figures reported are bidirectional totals (sum of each passenger ("Pax.") in each direction) for immediate beyond/before connections. Both "O&D" and connecting passengers are included. Totals do not capture passengers who travelled on flights that were booked as part of separate itineraries. The lack of data for three stop itineraries in Cirium is likely causing us to underestimate the volume of feeder passengers, albeit probably by a small amount. NZ: Air NZ, AKL: Auckland, JQ: Jetstar, PEK: Beijing Capital; CA: Air China.

3.3 Summary

The descriptive analysis highlights the distinct characteristics of each relevant market. In the NZ–YRD market, competition is defined by dual nonstop AKL–PVG services (one operated by Air New Zealand as part of the alliance and another operated by China Eastern) and a newer AKL–HGH link, with China Eastern now operating more capacity and gradually expanding its market share. The Applicants (Air New Zealand and Air China) have a higher share of O&D passengers. Post Covid-19, China Eastern has achieved higher overall passenger shares (accounting for connecting passengers also). In contrast, the NZ–JJJ market remains centred on a single nonstop AKL–PEK service operated by Air China within the alliance, supplemented by one-stop alternatives that provide some competitive constraint. Across both markets, feeder traffic plays a salient role. Feeder volumes are more material before/beyond the Chinese port via the connecting networks of China Eastern and Air China. Air New Zealand's domestic network generates a proportionally smaller fraction of feeder traffic before/beyond the NZ port. In the next section, we consider potential counterfactuals, with a view to considering how existing market conditions would change without the alliance.

4 Counterfactual scenarios

This section assesses the counterfactual scenarios submitted by the Applicants in the application, alongside other relevant issues. A counterfactual scenario is an evidence-based "what if" that helps understand what would likely happen if the alliance did not exist. It is not a prediction of the future, but rather a benchmark used to compare against the actual situation with the alliance in place. Asking how relevant markets might look in the absence of the alliance helps to unpack whether the alliance improves outcomes for passengers and, more broadly, the New Zealand economy.

We begin by considering whether it is appropriate to consider the factual against a black-and-white counterfactual of 'without the alliance', or whether there are viable scenarios between the two extremes (e.g., a restricted or partial alliance). We then consider key arguments in the application relating to the Applicants' counterfactuals on the Auckland to Shanghai route (AKL-PVG) and, in turn the Auckland to Beijing (AKL-PEK) route. We also address points raised in third party submissions regarding dynamic responses from other participants, or potential participants, if the alliance did not exist.

4.1 Counterfactuals involving modified forms of the alliance

Ministry guidelines outline how proposed conditions may be recommended by the Minister for inclusion in an authorisation (Ministry of Transport, 2025a). One such condition is an 'agreement restriction', which would require the Applicants to exclude from their cooperation a route where competitive detriments are believed to exceed benefits. This type of condition is most likely to be applied when the alliance delivers most benefits on one route which could be preserved, while a less beneficial route could be excluded.

When asked to consider a scenario where the alliance was authorised for only one of the two routes, the Applicants made clear that "… the Alliance would not operate on a split or partial basis" (Air New Zealand & Air China, 2025a, p. 3). They stated that if either Auckland–Shanghai (AKL–PVG) or Auckland–Beijing (AKL–PEK) were excluded from authorisation, cooperation between the carriers would revert to arm's-length arrangements reflecting "the baseline obligations of Star Alliance membership" (Air New Zealand & Air China, 2025a, p. 3). This would entail interline connectivity, limited loyalty reciprocity, and some access to each other's networks, but without coordination of pricing, capacity, revenue management, or sales and distribution support.

The Applicants' position is consistent with the symmetrical incentives of the alliance: each partner contributes one direct, revenue-sharing long-haul service (Air New Zealand operate Auckland–Shanghai while Air China operate Auckland–Beijing). The symmetry breaks down if cooperation were authorised on one route only. The carrier operating the route excluded from coordination would be left bearing the full cost and risk without the support of the alliance, while its counterpart would continue to enjoy joint benefits on the retained route. Such an arrangement would create a misalignment of Applicants' shared incentives to generate revenues across both routes, thereby undermining cooperation (see, e.g., Arslan, 2018). An agreement restriction would also limit opportunities for schedule coordination and reciprocal network access, undermining the connectivity gains claimed as benefits of the alliance.

This suggests that the appropriate counterfactual is a binary one: either the alliance is reauthorised to operate across both routes or cooperation reverts to arms-length arrangements. In our view, the economic incentives underlying the arrangement reinforce the Applicants' position that they would not maintain the alliance on a single-route basis. There do not appear to be viable intermediate scenarios in which the alliance is sustained on one route but not the other. It is therefore not appropriate to evaluate the factual against a counterfactual involving partial or constrained versions of the agreement.

While the Applicants note that basic Star Alliance obligations do not guarantee access to commercially attractive SPA rates, it appears reasonable that they would maintain arm's-length cooperation on market terms without the alliance, such as an interline agreement and basic codeshare (Ministry of Transport, 2021, para. 168). [10] These transactional arrangements are qualitatively distinct from an alliance, as they do not involve coordination of pricing, capacity, revenue management, or sales.

4.2 AKL-PVG counterfactual (New Zealand - Yangtze River Delta market)

4.2.1 Air China's AKL-PVG counterfactual

s 9(2)(b)(ii), s 9(2)(ba)(i)

As part of their counterfactual submission, Air China provided modelling results s 9(2)(b)(ii), s 9(2)(ba)(i) We requested additional information about how load and fares had been projected, as well as the basis for projected costs. We received a short response stating that the modelling is based on s 9(2)(b)(ii), s 9(2)(ba)(i) Given the lack of detail across these areas, it has not been possible to draw conclusions about the credibility of estimates provided by Air China.

It is significant that Air China has never operated the Auckland–Shanghai route independently of the alliance. In 2024–25, the airline operated only 14 international routes from Shanghai Pudong (out of 131 in total), none of which involved Australia, New Zealand, or the South Pacific. s 6(a) On this basis, the claim that s 9(2)(b)(ii), s 9(2)(ba)(i) is accepted as the most likely situation if the alliance did not exist.

4.2.2 Air New Zealand's AKL-PVG counterfactual

s 9(2)(b)(ii), s 9(2)(ba)(i)

The data and information we have been provided are supportive of Air New Zealand's counterfactual s 9(2)(b)(ii), s 9(2)(ba)(i) . The data also suggests that, without the alliance, Air New Zealand's competitive position in the market may somewhat erode.

Noted by the Applicants, the lack of support from Air China would likely make Air New Zealand less competitive in the NZ-YRD markets with its AKL-PVG service. The Applicants state that Air China's

[10] s 9(2)(b)(ii), s 9(2)(ba)(i) Absent the alliance, an ongoing codeshare appears plausible in the medium-term. Including a codeshare in the counterfactual is helpful for separating the benefits that are truly incremental to the revenue sharing alliance from those that might occur under reasonable arms-length cooperation.

support helped Air New Zealand to secure better departure times and a reduction in ground times; which both reduce costs and increase passenger convenience (Air New Zealand & Air China, 2025b, para. 1.4). s 9(2)(b)(ii), s 9(2)(ba)(i) The Applicants also point to their collaborative sales activities, which has strengthened Air New Zealand's abilities in North and Mid-China (Air New Zealand & Air China, 2025b, para. 5.24).

There are several other aspects related to Air New Zealand's counterfactual that are worth highlighting as relevant in later parts of the report. s 9(2)(b)(ii), s 9(2)(ba)(i)

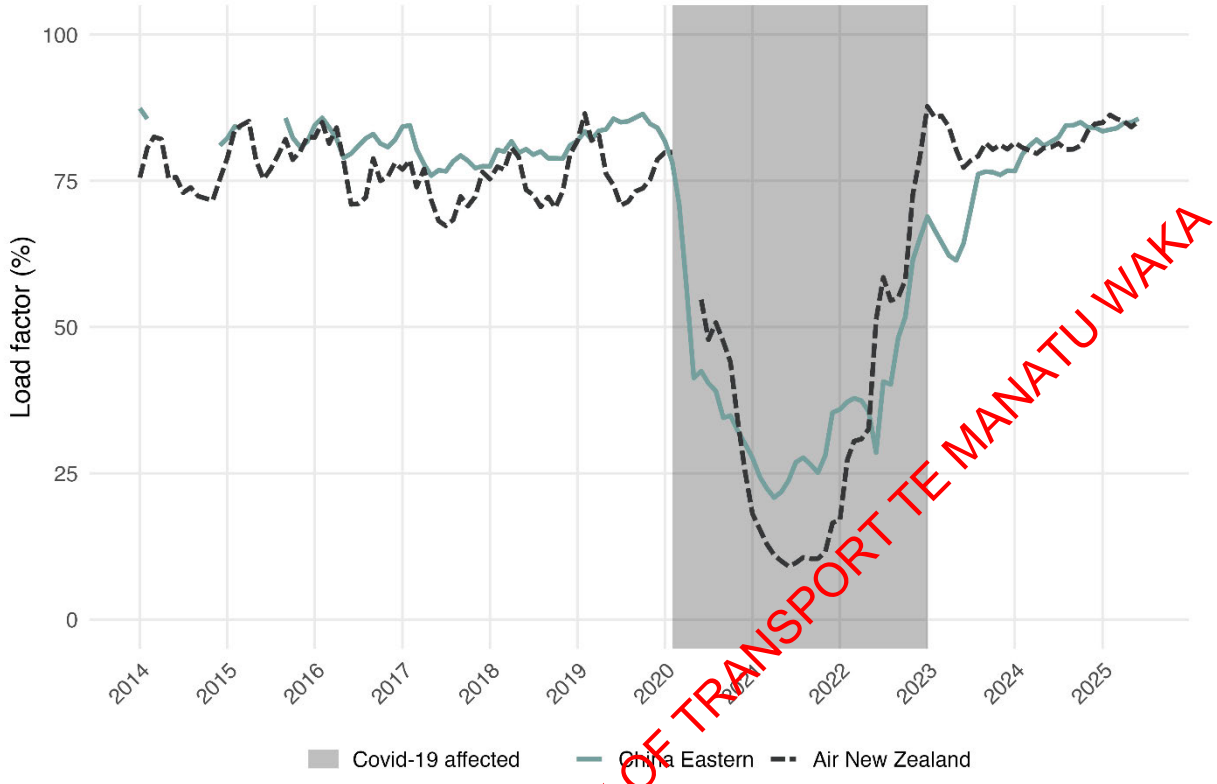
s 9(2)(b)(ii), s 9(2)(ba)(i) As noted, greater volumes of passengers come from before/beyond the YRD port (allowing China Eastern to leverage their hub and domestic route network) than come from before/beyond the NZ port.

In addition, Figure 13 highlights how China Eastern have typically carried greater passenger loads (i.e., fuller planes) across both directions than Air New Zealand. Excluding months most severely affected by Covid-19 restrictions (Feb 2020-Jan 2023), Air New Zealand's flights to and from Shanghai have operated at around 78.1% capacity versus 81.4% for China Eastern. The trend is somewhat more pronounced (a) pre-Covid-19 and (b) on flights departing Shanghai (PVG). Since Covid-19 restrictions lifted (i.e., part-year 2023, full year 2024 and part-year 2025), load factors on Air New Zealand operated flights have bounced back a little more quickly than China Eastern flights, particularly for flights departing Auckland (AKL). A contributing factor may be China Eastern's investment in additional capacity, which has not been matched by Air New Zealand.

s 9(2)(b)(ii), s 9(2)(ba)(i)

Air New Zealand's segmentation of traffic across potentially overlapping partnerships is a broader topic that falls outside the scope of the present analysis. It is, however, worth noting that there may reasonable medium-term options for Air New Zealand to improve its AKL-PVG performance (outside of the alliance) should it choose to do so—primarily by adjusting its approach to segmenting passengers to/from/through Asia.

Figure 13: Load factors for nonstop flights between Auckland and Shanghai, 2014-2025



Notes: Reported load factors are nondirectional averages (3 month moving window) based on Cirium passenger numbers and seat data. Noted in Section 1.4, reported load factors are likely a close approximation rather than a precise measure.

4.3 AKL-PEK counterfactual (New Zealand - Jing-Jin-Ji market)

4.3.1 Air New Zealand's AKL-PEK counterfactual

s 9(2)(b)(ii), s 9(2)(ba)(i) The high-level modelling that underpins Air New Zealand's counterfactual suggests that operating AKL-PEK s 9(2)(b)(ii), s 9(2)(ba)(i) [11]

The most convincing evidence supporting Air New Zealand's AKL-PEK counterfactual is its historical experience with the route. Air New Zealand launched a service to Beijing in July 2008, shortly before the Beijing Summer Olympics. The service was suspended at the end of June 2012, with Air New Zealand attributing this to s 9(2)(b)(ii), s 9(2)(ba)(i)

[11] s 9(2)(b)(ii), s 9(2)(ba)(i)

s 9(2)(b)(ii), s 9(2)(ba)(i)

Given the ongoing constraints on Air New Zealand's long-haul operations s 9(2)(b)(ii), s 9(2)(ba)(i) we consider it unlikely that Air New Zealand would re-enter the NZ-JJJ market absent the alliance. In this scenario, the more plausible counterfactual is a reversion to the pre-alliance pattern, where Air China's absence from Auckland–Beijing would strengthen Air New Zealand's passenger share of the long-haul component of one-stop routes to/from Beijing, and reinforce the earlier strategic choice to prioritise other Asian hubs (including Shanghai) over Beijing (Hembry, 2012).

4.3.2 Air China's AKL-PEK counterfactual

Arguably the most important counterfactual question relates to the future of the Air China operated Auckland - Beijing route. s 9(2)(ba)(i), s 9(2)(b)(ii) A core tenet of the application is that the viability of the route depends on the combined beyond/behind connections and sales networks of both airlines. s 9(2)(b)(ii), s 9(2)(ba)(i)

Auckland to Beijing within Air China's international route portfolio

A theme in the application is that the Auckland to Beijing service would be of limited benefit/ significance to Air China without the alliance. As the Applicants note, "For other carriers (i.e. other than Air New Zealand), New Zealand is generally just one route on offer in their wider network and they are not concerned with furthering New Zealand's wider interests or re-building New Zealand's tourism market per se. They are much more likely to exit services (or offer more limited services) if they see better opportunities elsewhere." (Air New Zealand & Air China, 2025b, para. 5.9)

It is helpful therefore to consider the position occupied by the Auckland to Beijing service among the overall portfolio of international routes operated by Air China. Using Cirium, we collated passenger volumes and seat capacity across all international routes operated by Air China from China and Hong Kong to examine how the Auckland to Beijing service performed relative to Air China's other international routes.

For the year ending June 2025, Auckland to Beijing had the 39th highest passenger volume of 131 Air China operated international routes. Across the year, the average load factor on the Auckland to Beijing route (80%) ranked 68th of the 115 routes where credible capacity data was available. This suggests that the current Auckland to Beijing service makes a significant contribution to Air China's overall international passenger pool, while generating satisfactory load factors.

In their counterfactual submission, Air China compared the Auckland to Beijing route to the Brisbane to Beijing route launched by Air China in December 2017 (Air China, 2025, para. 3.2). Air China suggested that both were comparable because they were Southern Hemisphere locations and shared similar peak and off-peak seasons. s 9(2)(b)(ii), s 9(2)(ba)(i) With this in mind, it is interesting to note that Beijing to Brisbane ranked 102nd of Air China's 137 international routes for passenger volume across the February 2018 to January 2019 year, and 74th (of 118) for load factor (average 74%). This was well behind the outcomes of the Auckland to Beijing route on both metrics during the same period (39th for load factor and 33rd for passenger volume).

Changes to Auckland to Beijing demand without the alliance

Before applying a quantitative lens, it is worth outlining the qualitative changes that would shape demand for the Auckland to Beijing service without the alliance. If the alliance did not exist, the first order effect would be a loss of passengers, driven by a reduction in itineraries sold by Air New Zealand on the Air China operated service. By "itineraries sold", we are referring to passengers who buy tickets for the route under the "NZ" airline code and flight number. When an itinerary is sold by Air New Zealand, their code appears on the ticket issued, even though the flight is operated by Air China.

Even if a standard interline SPA remained in place, creating the possibility for some through-ticketing, Air New Zealand would have a weaker incentive to place traffic on Air China's service without the alliance. Without metal neutrality (revenue sharing) on the Beijing route, there would be fundamental shift in incentives: Air New Zealand may instead prefer to prioritise selling one-stop routes to the JJJ region, including its own Shanghai service and its other routes involving other revenue sharing alliances (e.g., Hong Kong or Singapore). This shift would likely significantly reduce Air New Zealand sales on the AKL–PEK route. The reduction would be most acute among passengers originating from behind Auckland (e.g., Dunedin, Wellington, Christchurch) requiring domestic connections to/from Auckland, as well as South Pacific origins. [12]

There are likely also several ancillary factors that would impact AKL-PEK demand absent the alliance. These factors are arguably less certain and significant. For instance, Air China-marketed passengers on Air New Zealand's Auckland to Shanghai service may switch to Air China's one stop route between Auckland and Shanghai via Beijing.

Air China's modelling

Air China submitted the results of modelling which it claimed showed ["... that if the two airlines did not cooperate s 9(2)(b)(ii), s 9(2)(ba)(i)

The accompanying calculations relied on a third-party analytics module which, like Cirium FM Traffic, may underreport tickets sold by airlines on flights they do not operate. s 9(2)(b)(ii), s 9(2)(ba)(i)

We conducted our own analysis because we lacked the detail to assess or replicate the results submitted by Air China. When asked for this detail, Air China pointed to a third-party analytics module they used, but the assumptions and formulae underpinning the analysis were not made available (Air New Zealand & Air China, 2025c, p. 8). There was also no evidence that Air China understood, or agreed with, the results that the third-party module had generated.]

[12] Lost Air New Zealand sales may include higher-yield passengers through corporate accounts and travel agents. As part of the revenue sharing alliance, Air China's Auckland to Beijing route has been a credible option for Air New Zealand's business and government travellers, and agency channels. Some higher yield passengers in the NZ-JJJ market valuing convenience and/or comfort may continue to choose the direct route, even if it was more difficult or expensive to procure.

[13] [s 9(2)(b)(ii), s 9(2)(ba)(i)

Quantifying the potential demand change

The Star Alliance relationship between Air China and Air New Zealand suggests that there would remain some arms-length cooperation between the Applicants without the alliance. It seems likely that there would be standard Star Alliance frequent flyer reciprocity, a SPA on market terms, and, at most, perhaps an ongoing codeshare. [14] These arms-length arrangements make it unlikely that Air China's Auckland to Beijing route would lose the entirety of Air New Zealand sales, absent the alliance. Instead, the key question concerns the proportion of passengers on itineraries sold by Air New Zealand who would be lost to the AKL-PEK route.

The lack of observations from a credible comparison period makes it challenging to estimate a causal effect of Air New Zealand's alliance participation on Air New Zealand sales of AKL-PEK itineraries. We can, however, attempt to look at descriptive evidence from recent instances where Air New Zealand had similar incentives to sell codeshare itineraries. We searched for routes from Auckland where Air New Zealand had a code sharing partnership but did not operate on the route itself. [15] These instances would be somewhat comparable to the incentives presented to Air New Zealand to sell AKL-PEK itineraries if the alliance did not exist.

The only nonstop route that fulfilled these criteria during the most recent year (July 2024-2025) was Auckland–Nouméa (AKL–NOU). Aircalin has been the sole nonstop carrier between Auckland and Nouméa since 10 June 2024 when Air New Zealand suspended its AKL–NOU service. The fact that Air New Zealand's decision to suspend was driven by unrest in New Caledonia (Pollok, 2024), among other factors, makes this route an imperfect comparison. At the same time, it may be useful as an indicative benchmark of Air New Zealand sales on a codeshare route from Auckland without a direct Air New Zealand option.

Across the year, the Cirium FM Traffic data suggested 2.1% of passengers came from itineraries sold by Air New Zealand. The corresponding figure for Air New Zealand sales on the AKL–PEK route (with the alliance) is 5.7%. Acknowledging that both these proportions are likely understated (see Section 1.4), the relative difference of 63.4% between Air New Zealand sales with and without a revenue sharing alliance may still be instructive. s 9(2)(b)(ii), s 9(2)(ba)(i)

Conclusions regarding Air China's Auckland-Beijing counterfactual

Our objective has been to use a different set of data to independently assess Air China's claims regarding the Auckland to Beijing route without the alliance. We have examined the role of Auckland to Beijing in Air China's network of international routes and used evidence from a comparison route to approximate likely outcomes without the alliance. The data available offers some basic evidence about the sustainability of the Auckland to Beijing route absent the alliance.

While the relative magnitude of Air NZ sales with and without a revenue sharing alliance may be instructive, the overall proportion of Air NZ sales are likely understated. [16] s 9(2)(b)(ii), s 9(2)(ba)(i) Even though we lack

[14] s 9(2)(b)(ii), s 9(2)(ba)(i) A codeshare appears plausible in the medium-term. Including a codeshare in the counterfactual is helpful for separating the benefits that are truly incremental to the metal neutral alliance from those that might occur under reasonable arms-length cooperation.

[15] We would have preferred to also filter by Star Alliance partners, but no such routes exist.

[16] As noted, the Cirium FM Traffic tends to underreport, perhaps significantly, ticket sales from marketing carriers on flights they do not operate. [From what we can tell, the third-party analytics module used by Air China was constructed in a similar fashion and exhibits similar limitations.]

s9(2)(b)(ii) & s9(2)(ba)(i)

data about Air China's costs to operate this service, a major decrease in these percentages (e.g., in the region of [redacted] 63.4% as above) would create a material impact for route viability. Assuming an unchanged schedule, a decrease of this nature would make AKL-PEK one of the poorest performing routes in Air China's international portfolio in terms of load factors – below the performance of the Brisbane to Beijing route for that metric prior to its suspension.

s9(2)(b)(ii) & s9(2)(ba)(i)

To some degree, it is almost certain that Air New Zealand sales onto the Auckland to Beijing route would reduce without the alliance. Due to the recognised limitations in third party aviation datasets, we expect that the true contribution of Air New Zealand sales to AKL-PEK demand is significantly greater than the [redacted] 5.7% discussed above. Based on the potential decrease in AKL-PEK revenue and passenger numbers without the alliance, it is plausible that conditions would exist for Air China to exit the route without the alliance.

4.4 Dynamic responses from other participants or potential participants

Third-party submissions are correct to note that other airlines might respond dynamically and enter the market in a counterfactual without the alliance (Christchurch International Airport Limited, 2025). In the past, entries by other airlines have not been a stable feature of these markets, or related markets. Services launched independently by Chinese airlines have often proven vulnerable to suspension or exit, in contrast to the applicants' unbroken presence (interrupted only by Covid-19). Except for airlines with the benefit of a hub at one end of the route (e.g., Air New Zealand, Air China, China Eastern), it is difficult to envisage other carriers sustaining a stable service (Brueckner et al., 2016). This risk is particularly relevant given that post-Covid-19 recovery in these markets has been slow and average load factors remain below 80 percent. A recent example is Sichuan Airlines' temporary suspension of its Chengdu–Auckland service over the Northern summer (AeroRoutes, 2025), with only a late-2025 restart now confirmed (Radio New Zealand, 2025). Such cases demonstrate that while new entrants can create temporary bursts of competition, their long-term sustainability is uncertain.

On balance, it did not seem appropriate to include dynamic responses within our counterfactual analysis. In the short run, airlines are likely constrained by their existing aircraft and slots. Similar to "Cournot" competition, rivalry plays out on the pricing of fixed capacity. In a Cournot setting, because output is limited, prices remain above marginal cost (for airlines, this reflects the constraints of a fixed fleet and slot portfolio). In the long run, however, capacity can adjust and new entrants may be drawn in if routes are sufficiently profitable, producing more "Bertrand"-like outcomes. In a Bertrand setting, firms compete mainly on price, and rivalry pushes price down closer to marginal cost (for airlines, this corresponds to reassigning aircraft to profitable routes or new carriers entering a profitable market). This framing is useful because it highlights that dynamic responses may be understood as a disciplining force on a profitable route, regardless of the presence or absence of the alliance.

In the NZ–YRD market, this has played out through the introduction of China Eastern's new route between Auckland and Hangzhou, as well as additional capacity investments between Auckland and Shanghai. Stated simply, expansion or entry may occur if the underlying market conditions support it, regardless of whether the alliance exists.

4.5 Summary

Based on the information above, we consider the competition effects of the alliance against a single, binary counterfactual. In this scenario, cooperation between Air New Zealand and Air China reverts to arm's-length arrangements. The parties may maintain an interline agreement on market terms, basic codeshare, and standard Star Alliance reciprocity, but there would be no coordination of pricing, capacity, revenue management, or sales and distribution.

s 9(2)(b)(ii), s 9(2)(ba)(i)

[redacted]

We do not consider partial reauthorisation—where the alliance is authorised for only one route—because the incentive structure of the alliance depends on the symmetry of each partner contributing one long-haul service. Removing that symmetry would undermine the alliance. We also exclude dynamic responses by other carriers from the counterfactual.

5 Competition effects

Competition effects refer to the ways in which the alliance may change the level and nature of rivalry in the market. Alliances can increase demand and generate efficiencies, but they can also reduce competitive pressure where participating airlines no longer act as independent rivals. We consider whether the alliance concentrates the market in ways that could give the partners scope to raise fares, limit capacity, or reduce service quality; and whether these potential detriments are outweighed by other benefits to consumers and the wider economy.

Advanced methods such as difference-in-differences (DiD) (Ministry of Transport, 2025b) are not suitable for assessing the competitive effects of the Air New Zealand–Air China alliance. DiD requires both a credible control group of routes with comparable market dynamics and sufficient pre-alliance data to establish parallel trends. Neither condition is satisfied in this case. In the NZ-YRD market, only one full season of pre-alliance data exists, which is insufficient to demonstrate whether fares and capacity followed a stable trend. In the NZ-JJJ market, there are no observed months of direct services before the alliance, so the counterfactual cannot be empirically established. These gaps are compounded by over three years of Covid-19 restrictions which broke continuity in relevant markets and disrupted key variables.

If data were more complete, structural differences between these markets and potential comparators (for example, passenger mix, slot access, and competitive dynamics) would still make it rather difficult to defend basic DiD assumptions. Taken together, the lack of sufficient or any pre-alliance data, the absence of a suitable control group, and the Covid-19 impact mean it is problematic to pursue advanced analyses. Examining simpler descriptive and cross-sectional approaches may provide a more credible basis for evaluating competition effects.

Within the constraints of the data, two related questions guide an assessment of the alliance's competitive effects:

- How does the alliance reshape competition in the New Zealand–Yangtze River Delta (YRD) and New Zealand–Jing-Jin-Ji (JJJ) markets? Has it primarily redistributed existing passengers, or expanded (or reduced) market size; for example by enabling more frequent, convenient, or higher-quality services?
- Absent the alliance, what competitive options would consumers face? Would those options deliver greater choice, convenience, or affordability?

These questions are considered against the backdrop of the post-Covid-19 recovery, including concerns that the Applicants have restored capacity more slowly than rivals.

5.1 The Applicants' position

In their reauthorisation application, the Applicants argue there is no competitive detriment associated with the alliance because "the parties have never operated on the same route at the same time" (Air New Zealand & Air China, 2025b, para. 1.2). Expected competition analyses (see Ministry of Transport, 2025, Table 2) are not included with the application. The Applicants state that they discussed with the Ministry that "... given the lack of competitive overlap between the parties, this alliance is not one where such tools are required." (Air New Zealand & Air China, 2025b, para. 8.35)

Claims that the alliance has no competitive detriment are inaccurate, in our view. Within the Applicants' material, the position on competitive overlap is inconsistent. The Applicants assert there is no overlap between the partners on the Beijing route irrespective of the alliance (Air New Zealand & Air China, 2025b, para. 7.19). At the same time, they point to competing one-stop services as a source of competitive constraint between New Zealand and Beijing (Air New Zealand & Air China, 2025b, para. 7.20 (a-d)). Several of these one-stop options involve connections via Hong Kong and Singapore where the long-haul leg is operated or coordinated by Air New Zealand, through revenue sharing alliances with Singapore Airlines and Cathay Pacific.

We recognise that Air New Zealand does not coordinate with Singapore Airlines and Cathay Pacific outside of the jurisdictions covered by those authorisations (Air New Zealand & Air China, 2025 n. 61). In the response to a request for additional information, Air New Zealand restated their position: "...These arrangements do not extend to co-ordination on pricing, capacity or revenue management (or otherwise) to/from Shanghai or Beijing. Any attempt to do so would be outside the scope of the relevant authorisations and raise issues under the Commerce Act. Singapore Airlines and Cathay Pacific manage the onward China sectors independently... Air New Zealand has no ability, either legally or commercially, to influence the overall through-fare to Shanghai or Beijing." (Air New Zealand & Air China, 2025a, p. 2)

Nonetheless, the issue of how Air New Zealand's coordinated pricing on relevant long-haul flights has knock-on effects on the pricing of one-stop services to PEK and PVG is not addressed by the Applicants. We accept Air New Zealand's statement that its alliances with Singapore Airlines and Cathay Pacific do not authorise coordination on onward China sectors. However, the economic reality is that coordination on the long-haul leg (AKL–HKG or AKL–SIN) gives Air New Zealand indirect leverage over the overall through-fare to Beijing or Shanghai, because that long-haul component dominates the cost structure and effectively sets the floor for end-to-end pricing. This means one-stop options via Hong Kong or Singapore are not fully independent competitive alternatives.

"Effective competition" is the first principle of the Assessment Framework (Ministry of Transport, 2025b, para. 7). A thorough analysis requires looking beyond the narrow legalistic interpretation of the Applicants to take an effects-based approach to recognising how Air New Zealand's indirect influence may impact airfares in the real world, even where onward segments are not formally within the scope of coordination. Our intent is not to suggest that Air New Zealand's indirect influence is necessarily good or bad for consumers, merely to establish Air New Zealand's direct influence on pricing on those long-haul legs creates the possibility for indirect influence over one-stops into the relevant markets via Singapore and Hong Kong.

Prior to the alliance, Air New Zealand already exercised shared or exclusive coordination power on the long-haul sectors underpinning key one-stop services to Beijing (Figure 11). In the 2014 calendar year, 48% of passengers travelling in or through the NZ-JJJ market used these one-stop services. With the introduction of a direct Air China service under the alliance, this influence expanded further. In the first year of operation (Dec 2015–Nov 2016), the combined passenger share on routes where Air New Zealand could exert some degree of pricing influence (direct plus indirect) rose to 67 percent.

Illustrated earlier by the cross-price elasticity analysis, and consistent with regulatory precedents, one-stop services represent a credible competitive alternative for many passengers and act to constrain fares on direct routes. The alliance therefore marked a qualitative shift in market power. The practical impact of this shift will be discussed below. At the outset, it is important to

recognise this as an empirical reality and to set aside the Applicants' claim that the alliance entails no competitive detriment. [17]

5.2 How does the alliance reshape competition in relevant markets?

We consider whether the alliance has increased the applicants' market power and assess the likelihood and extent of potential anticompetitive effects. This involves analysing changes in market concentration using Herfindahl–Hirschman Index (HHI) trends since 2014, alongside growth patterns in passenger volumes and average airfares. These indicators help identify whether the alliance may be associated with shifts in competitive dynamics. Each market is considered separately.

5.2.1 New Zealand - Yangtze River Delta

Returning to Figure 2, the NZ-YRD market exhibited considerable growth in the years following the introduction of the alliance. Importantly, this coincided with the entry and expansion of direct AKL-PVG flights by China Eastern, rather than further capacity investment from the Applicants.

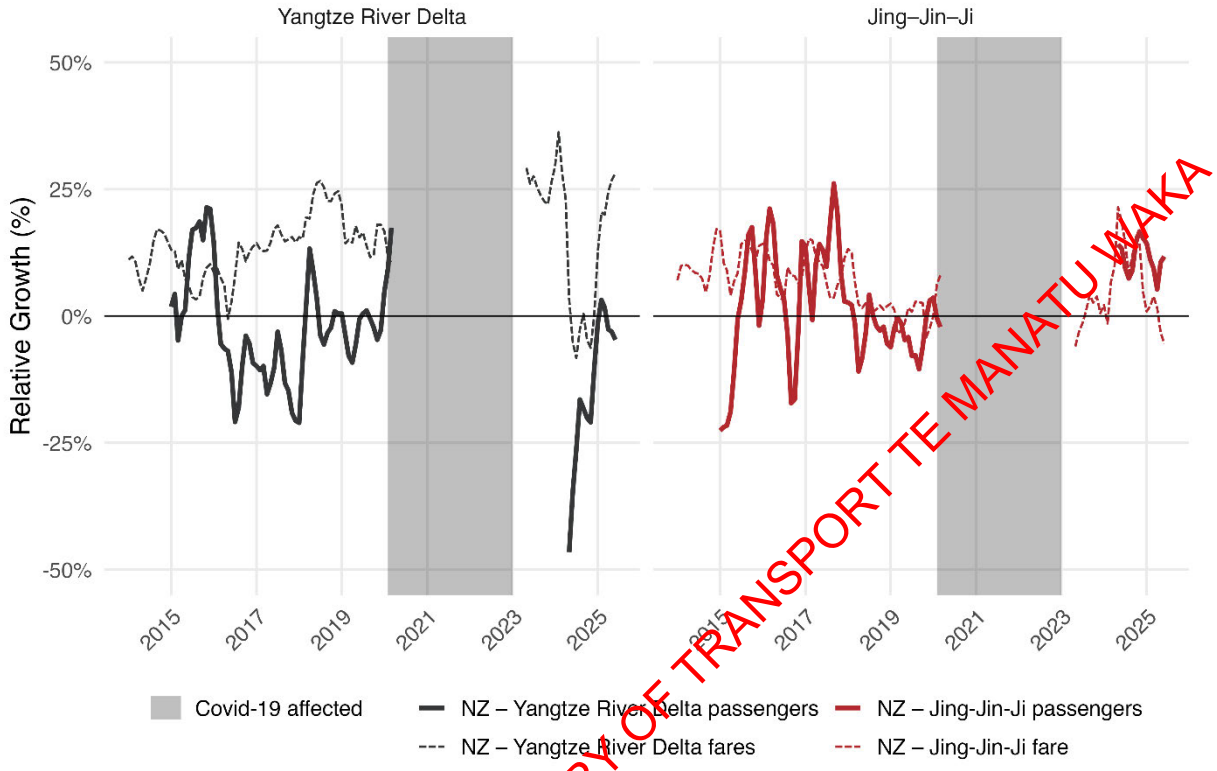
As Figure 7 demonstrated, the alliance has not led the Applicants to increase capacity between Auckland and Shanghai since 2019. China Eastern have invested in additional routes and capacity, while Air New Zealand's capacity has decreased post Covid-19.

Figure 14 highlights how passenger and fare growth in the NZ-YRD market have performed relative to other markets between New Zealand and eastern China and Hong Kong. Passenger trends reflect the growth difference (from the same month of the prior year) between the relevant market and other markets. After a period of high passenger growth following China Eastern's entry and the introduction of the alliance (thick black line), the NZ-YRD market has since grown at a generally slower rate than other markets. s 9(2)(b)(ii), s 9(2)(ba)(i)

Table 4 reports changes in the market concentration of the NZ-YRD market over time. It uses a Herfindahl–Hirschman Index (HHI) as a standard measure of concentration, calculated as the sum of the squared market shares of all firms in a market. Analogous to a merger on a given route, a revenue sharing alliance treating Air New Zealand and Air China as a single 'firm'. Higher HHI values indicate greater concentration, with scores above 1,800 generally considered to reflect a more concentrated and less competitive market.

[17] There is also an acknowledged (small) competitive overlap on the Shanghai route associated with Air China one-stop services via Beijing (Air New Zealand & Air China, 2025b n. 10).

Figure 14: Passenger and fare growth in NZ-YRD and NZ-JJJ markets relative to elsewhere in NZ-eastern China and Hong Kong, 2014-2025



Notes: For each of NZ-JJJ and NZ-YRD, the trends reflect fare and passenger growth relative to other markets between New Zealand and eastern China/ Hong Kong.

Fare trends reflect the difference between average fares in the relevant market versus other markets between New Zealand and eastern China/Hong Kong. In NZ-YRD, for example, average fares (thin black dash line) have generally been higher than other markets.

Passenger trends reflect the growth difference (from the same month of the prior year) in the relevant market versus other markets. Since Covid-19, NZ-YRD growth (thick black line) has grown at a slower rate than other markets between New Zealand and eastern China/Hong Kong.

Values are three month moving monthly averages. Analysis includes passengers whose origins and destinations are within the market. We use a broad, functional definition of eastern China and Hong Kong, spanning the coastal provinces from Liaoning in the north to Guangdong, and Hong Kong, in the south. It aligns with international trade, shipping, and aviation markets, but is different (i.e., broader) than political interpretations of "East China".

Table 4 reinforces the earlier descriptive statistics which suggested that NZ-YRD is a highly concentrated market. Outside of Air New Zealand's share of the O&D market, a large fraction of the remaining share is absorbed by China Eastern. There is evidence that the market is becoming less concentrated over time, driven by the expansion of China Eastern. A reduction in concentration is visible from 2015 until Covid-19.

One view offered in third party submissions that the alliance enables Air New Zealand to defend its share of passenger volumes in the NZ-YRD market (Christchurch International Airport Limited, 2025). This would occur if, for example, Air New Zealand absorbs a moderate level of Air China sales that would otherwise be distributed elsewhere.

Table 4: Herfindahl-Hirschman indices for the NZ-YRD and NZ-JJJ markets, 2014-2025

Year	HHI- YRD	HHH- JJJ
2014	4837	2008
2015	4207	2550
2016	3405	3351
2017	3037	2259
2018	2637	2196
2019	2650	2199
2020	2373	2676
2021		
2022		
2023	4075	2987
2024	3193	2906
2025	2923	2832

Notes: HHI: Herfndahl-Hirschman index. Larger HHI values reflect a greater degree of market concentration. Data from the period affected by Covid-19 governmental restrictions (Feb 2020 to Jan 2023) has been excluded. The alliance was first authorised in September 2015.

It is accurate that Air New Zealand has held a similar share of the NZ-YRD O&D market since the alliance began (see Figure 3), and that the alliance has likely enabled this. s 9(2)(b)(ii), s 9(2)(ba)(i)

1. s 9(2)(b)(ii), s 9(2)(ba)(i)
2. Air New Zealand's aggregate fares in the NZ-YRD market have been, s 9(2)(b)(ii), s 9(2)(ba)(i) (Figure 4).
3. The investments of China Eastern does not support a conclusion that the alliance has constrained other carriers from investing in the NZ-YRD.
4. Air New Zealand's flights to and from Shanghai have operated at around capacity. This highlights a possible constraint on demand, rather than supply. s9(2)(b)(ii) & s9(2)(ba)(i)

5.2.2 New Zealand – Jing-Jin-Ji

Were Air China to stop operating the AKL-PEK route under the counterfactual scenario, the NZ-JJJ market would likely contract. The NZ-JJJ O&D market grew by 28.5% in the first twelve months after the Applicants introduced a direct route between Auckland and Beijing (increase of 23,197 passengers relative to 81,463 passengers in the previous twelve months). A further increase in the second twelve months (total passengers: 128,425) exceeded pre-alliance O&D volumes by 57.6%. As Figure 2 shows, and in addition to the increase in O&D passengers, there was considerable growth in connecting passengers travelling through the market over the four years following the introduction of the Applicants' direct route.

Figure 14 illustrates how O&D passenger growth (from the same month of the prior year) in the NZ-JJJ market has exceeded or equalled passenger growth in other markets between New Zealand and eastern China/ Hong Kong. Passenger growth in the NZ-JJJ market (thick red line) significantly outstripped other markets (from a low base), following the introduction of the alliance and then

s 9(2)(b)(ii), s 9(2)(ba)(i)

Table 4 reports changes in the market concentration of the NZ-JJJ market over time. As above, it uses a Herfindahl–Hirschman Index (HHI) as a standard measure of concentration. Over time, the NZ-JJJ market has exhibited a lower (but still significant) level of concentration relative to the NZ-YRD market. While the Applicants hold considerable fractions of both O&D markets, the remaining share is broadly dispersed in NZ-JJJ (versus concentrated on China Eastern in NZ-YRD).

Consistent with the earlier market share statistics, the introduction of the alliance in December 2015 is associated with increased levels of concentration in the NZ-JJJ market. After the initial HHI spike, Table 4 suggests that the market became less concentrated up until Covid-19.

Concentration in the NZ-JJJ market is in our view the secondary effect on competition. The primary effect is the significant growth in the overall size of the market following the Applicants' introduction of a direct service (e.g., Figure 2, Figure 14). In other words, the alliance appears to have expanded the overall pie between New Zealand and the Jing-Jin-Ji region, rather than redistributing existing slices among competing carriers.

5.3 What competitive options would consumers face without the alliance?

Without the alliance, consumers travelling between New Zealand and the Yangtze River Delta would continue to experience a reasonably competitive market. Air New Zealand would likely still operate its Auckland–Shanghai service, while China Eastern has become a strong and expanding rival with both its Auckland–Shanghai and newer Auckland–Hangzhou services. One-stop connections, including via Australia and Guangzhou, would remain available and provide an additional competition. While Air New Zealand argue that China Eastern holds structural advantages as the hub carrier in Shanghai, Air New Zealand's performance could to some extent reflect strategic choices within its control about how it allocates feeder traffic across alliances, rather than insurmountable disadvantages. The primary change to the NZ-YRD market under the counterfactual might be a redistribution of market share away from Air New Zealand due to fewer passengers coming from Air China. The evidence does not support a conclusion that there would be immediate market entries or exits if the alliance did not exist. Overall, the YRD market is likely to remain competitive without the alliance, with consumers continuing to have several viable nonstop and one-stop options.

s 9(2)(b)(ii), s 9(2)(ba)(i)

Noted by the Applicants, such circumstances could mean that Air New Zealand's direct service would be less effective in competing with China Eastern (Air New Zealand & Air China, 2025b, para. 7.6).

s 9(2)(b)(ii), s 9(2)(ba)(i)

There are fewer nonstop options in the Jing-Jin-Ji market, where the Auckland–Beijing service operated by Air China is the only nonstop service. This service has been introduced and sustained by the alliance. s 9(2)(b)(ii), s 9(2)(ba)(i)

Table 5: Post Covid-19 recovery of routes between New Zealand and China (including Hong Kong), by route based on monthly peaks

Route	Variable	Pre-Covid Peak	Month	Post-Covid Peak	Month	Diff. (#)	Diff. (%)
AKL|CAN	Passengers	27,601	Feb-17	27,875	Feb-24	274	1.0%
	Capacity	32,220	Feb-17	34,274	Feb-24	2,054	6.4%
AKL|HKG	Passengers	50,642	Feb-16	31,345	Feb-25	-19,297	-38.1%
	Capacity	88,277	Feb-18	38,247	Mar-25	-50,029	-56.7%
AKL|PEK	Passengers	15,265	Jan-20	13,669	Feb-25	-1,596	-10.5%
	Capacity	17,971	Jan-19	17,775	Feb-24	-195	-1.1%
AKL|PVG	Passengers	30,318	Feb-19	32,177	Mar-24	1,860	6.1%
	Capacity	38,032	Mar-18	40,056	Feb-24	2,024	5.3%
AKL|SZX	Passengers	7,532	Dec-19	6,354	May-25	-1,178	-15.6%
	Capacity	9,252	Jan-20	7,787	Dec-24	-1,465	-15.8%
CHC|CAN	Passengers	14,743	Feb-19	10,959	Jan-25	-3,784	-25.7%
	Capacity	18,027	Jan-19	12,932	Jan-25	-5,095	-28.3%
CHC|HKG	Passengers	7,610	Feb-20	10,154	Jan-25	2,544	33.4%
	Capacity	9,520	Feb-20	11,857	Jan-25	2,337	24.5%

Notes: Figures reflect monthly bidirectional totals, averaged across a moving 3 month window. Totals include passengers whose origin and destination are within the relevant market, as well as connecting passengers. Auckland to Hong Kong recovery figures are affected by the exit of Hong Kong Airlines in May 2019. AKL: Auckland, CAN: Guangzhou, HKG: Hong Kong, PEK: Beijing, PVG: Shanghai, SZX: Shenzhen, CHC: Christchurch.

5.4 Recovery of direct flights to China and Hong Kong post-Covid-19

The issue of recovery of capacity and passenger traffic on the alliance routes post Covid-19 is highlighted by the Applicants, as well as in third party submissions. Overseas visitor arrivals from China remain well below pre Covid-19 levels. The 248,391 overseas visitor arrivals from China for the June 2025 year represents about 59% of the corresponding figure for the year ending June 2019 (421,113) (Statistics New Zealand, 2019, 2025).

The data suggests that Air New Zealand have lagged behind China Eastern in restoring capacity between Auckland and Shanghai. Overall, however, it is not clear that the recovery of passenger traffic, or seat capacity, on the alliance routes is lagging behind other nonstop routes between New Zealand and China (including Hong Kong). [18]

Table 5 reports peak monthly volumes of passenger traffic and route capacity to China and Hong Kong prior to Covid-19 and compares them against peak volumes and capacity post Covid-19. It includes passengers whose origin and destination are within the relevant market, as well as connecting passengers. On the Auckland to Beijing route, the peak of post Covid-19 passenger traffic (February 2025, 13,669 passengers) is around 11% below pre Covid-19 levels (January 2020, 15,265 passengers). Peak monthly seat capacity has recovered to a level comparable the pre Covid-19 peak on this route. This implies that demand, rather than capacity has been the constraint.

On the Auckland to Shanghai route, the peak of post Covid-19 passenger traffic (March 2024, 32,177 passengers) exceeds pre Covid-19 levels (February 2019, 30,318 passengers) by around 6.1%. Peak monthly seat capacity post Covid-19 exceeds the pre Covid-19 peak by 5.3% or (2,024 seats).

[18] As a more time passes, it will be possible to draw more meaningful conclusions based on annualised patterns.

Table 6: Post Covid-19 recovery of AKL-PVG, by carrier based on monthly peaks

Carrier	Variable	Pre-Covid Peak	3 mos ending	Post-Covid Peak	3 mos ending	Diff. (#)	Diff. (%)
CANZ|AKL|PVG	Passengers	17,468	Feb-17	15,043	Jan-24	-2,425	-13.9%
	Capacity	22,549	Mar-17	18,505	Aug-23	-4,045	-17.9%
MU|AKL|PVG	Passengers	15,339	Jan-20	17,621	Mar-24	2,282	14.9%
	Capacity	18,749	Jan-20	21,763	Mar-24	3,014	16.1%

Notes: Figures reflect monthly bidirectional totals, averaged across a moving 3 month window. Totals include passengers whose origin and destination are within the relevant market, as well as connecting passengers. CANZ: the Air New Zealand operated AKL-PVG route governed part of the Air China revenue sharing alliance. MU: China Eastern, AKL: Auckland, PVG: Shanghai.

We also decomposed the route level figures by individual carriers. For instance, it was argued in a third-party submission that "[t]he alliance has not led to investment for capacity growth from PVG or PEK by the alliance partners. Other carriers outside of the alliance have recovered traffic faster since COVID than the alliance has." (Christchurch International Airport Limited, 2025, para. 6).

China Eastern, who also operate AKL-PVG, is the only non-Alliance airline with a direct flight on either alliance route. As Table 6 shows, China Eastern have recovered passenger volumes and seat capacity on the AKL-PVG route to a greater extent than the Applicants. China Eastern's post Covid 19 peaks have been 14.9% and 16.1% greater than pre Covid-19 peaks for passenger volume and seat capacity respectively. In contrast, the Applicants' post Covid 19 peaks have been respectively 13.9% and 17.9% lesser than pre Covid-19 peaks.

These patterns indicate that the Applicants' have not expanded their investments in line with China Eastern on the Auckland to Shanghai route. However, several additional factors are worth mentioning. The Applicant's load factors on this route do not suggest that there is significant unmet demand, nor a significant difference in average fares versus China Eastern (Figure 4). Returning to points above, demand for Air New Zealand's flight would arguably be further behind China Eastern without the alliance. The Applicants have also highlighted s 9(2)(b)(ii), s 9(2)(ba)(i) as factors contributing to investment decisions. Importantly, the Applicant's AKL-PVG route is not alone in a slow recovery towards pre Covid-19 peaks. Other carriers operating New Zealand to China routes —including Hainan Airlines (Auckland to Shenzhen) and China Southern (Christchurch to Guangzhou)— are similarly below their pre Covid-19 peaks.

5.5 Summary

Overall, the alliance has reshaped competition differently in the two markets. In the Yangtze River Delta market, growth since 2015 has been driven primarily by China Eastern's entry and subsequent expansion rather than by increased capacity from the Applicants. The alliance makes Air New Zealand's service a more viable competitor to China Eastern between Auckland and Shanghai. In the Jing-Jin-Ji market, the alliance has been central to sustaining a direct Auckland–Beijing service, which expanded the overall market significantly following introduction. Post Covid-19, Air New Zealand's recovery on the Auckland–Shanghai route has lagged behind China Eastern. However, the Applicants' passenger traffic and capacity on alliance routes are not out-of-step with the recovery of other nonstop New Zealand–China services.

6 Public value

The principal public benefit from the alliance is the continued operation of a nonstop service between Auckland and Beijing. This service, established under the alliance, has provided direct connectivity between New Zealand and China's capital s 9(2)(b)(ii), s 9(2)(ba)(i) its introduction in December 2015, the NZ–JJJ market grew by nearly 30 percent in the following twelve months, reflecting new demand stimulated by the direct service. In this respect, the alliance delivers a clear incremental benefit beyond what the counterfactual appears to support. The alliance also makes Air New Zealand's service a more viable competitor to China Eastern between Auckland and Shanghai through, for example, s 9(2)(b)(ii), s 9(2)(ba)(i)

Knock-on benefits likely include improved access for Chinese visitors to New Zealand, including to areas beyond Auckland. While overall visitor numbers from China remain below pre-Covid-19 levels, the alliance may have contributed in a modest way to the recovery of tourism flows and the stability needed for future planning. [19] More broadly, the alliance likely advances government-to-government engagement and commercial ties by strengthening New Zealand's aviation and diplomatic links with the Chinese capital.

[19] Tourism New Zealand (2025) provided a submission in support of the alliance, emphasising its role in marketing New Zealand to Chinese travellers through Air China's customer base, improving connectivity via Air China's domestic network, and delivering stability of services that enable long-term tourism planning. In June 2025, the Applicants entered into a tripartite Memorandum of Understanding with Tourism New Zealand, committing NZD $444k towards increasing inbound visitor numbers and promoting travel on the Alliance network (Air New Zealand & Air China, 2025b, para. 4.2).

7 Conclusions: The alliance's net impact

The alliance likely affects the market between New Zealand and YRD by shifting some passengers from China Eastern's direct services to the Air New Zealand service. The alliance makes Air New Zealand's service a more viable competitor to China Eastern, but it is unclear that there would be any entry or exit of operating airlines in the NZ–YRD market without the alliance. s 9(2)(b)(ii), s 9(2)(ba)(i) The empirical evidence suggests that NZ–JJJ is a distinct market, not well served by other routes between New Zealand and the eastern China seaboard.

We acknowledge potential competition concerns associated with the alliance, including one-stop services to JJJ where Air New Zealand has shared or exclusive ability to influence the pricing of the long-haul leg. Available evidence suggests that this is a relevant but minor concern. The Air New Zealand and Air China alliance does not involve the loss or consolidation of direct competition. Even if the alliance mildly softened competition in the short term with respect to one-stop alternatives, the prospect of longer-run entry or expansion acts as a disciplining force on profitability.

s 9(2)(b)(ii), s 9(2)(ba)(i) these reasons, we conclude that the net impact of the alliance over the proposed reauthorisation period is more likely than not to be beneficial for consumers and New Zealand.

Where warranted, the Ministry may recommend conditions to an alliance that sufficiently reduce the competitive detriments, while enabling public benefit. In this case, we agree with the Applicants' position that imposing a reauthorisation condition (e.g., maintaining or increasing capacity) would undermine their ability to make commercially motivated decisions. Given that load factors below 80% are not unusual on both routes, imposing this type of condition could disadvantage the Applicants relative to rivals. The underlying economic incentives indicate that the alliance is sustainable only if it covers both routes, so imposing an agreement restriction that excludes one of the routes would make the alliance unviable.

7.1 Limitations of our analysis

Our analysis is subject to several relevant limitations. First, we do not have access to the intricacies of the Applicants' operational decision-making, which would provide relevant context to the estimates presented. This type of information would normally sit within the detailed analysis envisaged under the Ministry's framework. There were opportunities for the Applicants to provide additional analysis in some areas, which could have improved and expedited our assessment.

Second, our analysis does not anticipate the future recovery of tourism to and from China. Visitor arrivals remain materially below pre Covid-19 levels. While demand is gradually rebounding, projecting the precise rate of recovery would be speculative. Our analysis therefore uses current data as the basis for assessing route demand, acknowledging that actual demand may change over time.

Third, econometric treatment of competition effects, such as difference-in-difference analysis, would have added greater confidence to our conclusions if viable. DiD requires both a credible control group and sufficient pre-alliance data to establish parallel trends, but neither was available in this situation. Only one full pre-alliance season exists for Auckland–Shanghai, none for Auckland–Beijing, and over three years of Covid-19 restrictions further disrupted demand, capacity, and pricing.

Even with more complete data, structural differences with potential comparator routes would undermine such analysis. Descriptive and cross-sectional approaches were therefore more appropriate for assessing competition effects.

Fourth, issues relating to Air New Zealand's portfolio of international alliances are not the main focus of this analysis. Going forward, there may be opportunities to revisit Air New Zealand's cooperative behaviour in totality, rather than on an alliance-by-alliance basis (Brueckner et al., 2016). This could establish a helpful foundation for future assessments, including new authorisations s 9(2)(b)(ii), s 9(2)(ba)(i)

Finally, our analysis relies primarily on Cirium traffic and schedule datasets, supplemented where possible with Applicant-provided data. Cirium provides comprehensive coverage of international and domestic aviation activity from 2014 onwards, but its datasets have relevant limitations. Itineraries sold by non-operating airlines are underreported. Unless an airline provides specific aircraft configurations, seat counts are based on default settings, so reported capacities (and load factors) are approximations. Fares are aggregated across all fare classes, as Cirium does not consistently capture airline-specific booking codes. In addition, itineraries with three or more connecting points are excluded, though we estimate that such itineraries represent a small share of passengers. These caveats should be kept in mind when interpreting results.

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