

AIPA

Comments on the Productivity Commission's Draft Report on International Air Services

July 1998

EXECUTIVE SUMMARY

- 0 Titled the Draft Report on “International Air Services”, the Commission’s recommendations have a greater bearing on domestic air services as opposed to international air services.
- 0 Bilateral liberalisation of the freedoms and cabotage, unrestricted code-sharing rights on Australian airlines and stop-over carrying rights will all impact the domestic air services market.
- 0 The Commission’s narrow interpretation of its terms of reference and the Productivity Commission Act 1998 lead the Commission to disregard safety, failing to recognise that airline safety is an important aspect of product quality.
- 0 The Productivity Commission’s Report fails to consider how the Commission’s recommendations will impact airline safety performance.
- 0 Airline safety represents a moral hazard problem since airlines’ safety investment actions are hidden, and there is reason to suspect that the market may supply less safety than consumers would demand if fully informed.
- 0 Standard measures of welfare gain will overstate the true benefits provided by deregulation where the less observable dimensions of product quality, such as safety, decline post-deregulation.
- 0 The Productivity Commission’s Report failed to identify substantial impediments to the maintenance and establishment of Australian Airline Industry. The report seems to be pre-occupied with the rights of the economy/tourist market.
- 0 The Productivity Commission’s Report failed to adequately address the rights and abilities of the Australian Aviation Industry workforce.
- 0 The Productivity Commission’s Report failed to correctly appreciate the full process of the IASC.
- 0 The Productivity Commission’s Report correctly identified the need for Australian aviation policy and treaties to be clearly stated.

REFERENCES

- Barnette, Arnold, and Higgins, Mary (1989) "Airline Safety: The Last Decade", *Management Science*, January, Vol. 35, pp. 1-21.
- Boeing (1996) "Statistical Summary of Commercial Jet Airplane Accidents, Worldwide Operations 1959-1996", *Boeing Commercial Airplane Group*.
- Evans, William, N. (1989) "Deregulation and Airline Safety : Evidence from Count Data Models", *Manuscript, Colledge Park, University of Maryland*. (Cited in Rose (1992)).
- OECD (1997) "The Economic Benefits of Regulatory Reform", *OECD Economic Studies*, No. 28, 1997/1.
- Quiggin, John (1997) "Evaluating Airline Deregulation in Australia", *The Australian Economic Review*", Vol. 30, No. 1. pp. 45-56.
- Rose, Nancy (1992) "Fear of Flying? Economic Analysis of Airline Safety", *Journal of Economic Perspectives*, Vol. 6, No. 2. pp. 75-94.
- Rose, Nancy (1990) "Profitability and Product Quality: Economic Determinates of Airline Safety Performance", *Journal of Political Economy*, Vol. 98, No. 5. pp. 944-964.

COMMENTS ON THE PRODUCTIVITY COMMISSION'S DRAFT REPORT ON INTERNATIONAL AIR SERVICES

July 1998

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1. INTRODUCTION

Comments on the conduct of the Inquiry.

The inquiry into Australia's international air service policy was announced on 28th June 1996 but submissions were not called for until late December 1997, with a final date for initial submissions of late February 1998. This timing corresponded with the peak activity of airline staff over the Christmas period and the normal shutdown of the AIPA industrial office. As a result a severe strain was placed on both voluntary and professional staff to meet the Productivity Commission deadline.

Through 1998 AIPA has been compelled to redraft three industrial awards under the 1997 Industrial Relations Act and was requested to participate in a number of industry inquiries in which our membership has a vital interest. The workload has meant that some inquiries have had no AIPA input and an intolerable load has been placed on both our voluntary and professional staff. The lack of understanding by Government of professional and trade unions' capacity, when commencing inquiries requiring input from bodies in the Aviation Industry is far from satisfactory.

Comments on the Draft Recommendations

AIPA is concerned that the inquiry failed to identify more impediments to the establishment or maintenance of Australian carriers, but instead concentrated on impediments to global non-Australian carriers entering the Australian market.

AIPA is concerned that the inquiry failed to adequately address the rights and abilities of the Australian aviation industry workforce. The inquiry seems to be preoccupied with the interests of the Australian travel industry. Australian policy makers must ensure when making changes in this area, that the end result is not the creation of part-time semi-skilled jobs in place of full-time highly skilled jobs.

AIPA is concerned that the inquiry failed to identify the products of the aviation market. In failing to identify the full extent of the products, the inquiry then failed to address how changes to regulations would effect the individual products.

AIPA is concerned that the PC inquiry failed to address implications for airline safety, which is an important aspect of product quality, and disputes that safety is outside the guidelines of the PC. We believe that if the PC feels it is not equipped to handle the safety issue then a parallel inquiry examining the effects of proposed regulatory changes on aviation safety should be convened. The results of both inquiries should then be reviewed by persons capable of analysing both economic and safety issues before any recommendations are taken to the Federal Treasurer.

2. COMMENTS ON DRAFT RECOMMENDATIONS

4.1 The Commonwealth Government should publish, and keep up to date a statement of its aviation policy
AIPA is in total agreement with this recommendation.

4.2 Formal direct consultation process with all major interested parties.
AIPA is in total agreement with this recommendation.

Regional reform package 5.1

(a) Unilateral removal of restrictions on city designations of secondary gateways.

AIPA disagrees with this recommendation. This recommendation, if acted upon, will result in severe curtailment of any future international secondary gateways *for* Australian operators, as the bargaining power for Government negotiators is lost. Bilaterals are exactly as the word implies, two party trade. To trade, both parties must have something to offer. Obviously it is impossible trade arrival/departure points if secondary gateways have previously been given away in a unilateral action.

There is a simplistic view bordering on a “cargo cult” mentality, that increasing the number of Australian secondary gateways would lead to increased tourism. This cargo cult mentality has been reinforced by the emergence of Cairns as a primary tourist city after the designation of Cairns airport as an international gateway. Cairns however is adjacent to the Great Barrier Reef. With the exception of possibly Townsville, this attribute is unique.

Tourism infrastructure requires *regular air services on a year around basis*. Airline operators need maximum return on aircraft investment. As a result any schedule that creates a need for aircraft utilisation that does not approach 15+ hours per day is not sustainable *in the long term*. Because of Australia's geographical position, international curfews and time zones, a secondary gateway often creates poor utilisation of aircraft. It is to be noted that most major airliners have attempted services through Adelaide but ceased services due to low year round demand and low aircraft utilisation.

A secondary consideration is a concern that secondary gateways may be used as a lever to obtain primary gateways. It is not hard to imagine a scenario whereby an airline is granted say Bali/Broome. The airline then requests Perth as the only way to make the original route perform. Having obtained Perth, Broome is then dropped as non-economically viable. The aviation environment is highly political and the above scenario is far from unrealistic.

Removal of cabotage restrictions

(b) *Unrestricted rights for foreign airlines to code-share on Australian carriers to all points in Australia*

AIPA disagrees with this recommendation. This "reform" is in reality, the removal of aviation cabotage restrictions in Australia. The first item, domestic code-share, is to some extent already in existence, when it has been part of bilateral agreements. There appear no grounds to suggest that these types of agreements will not continue to be negotiated giving bilateral advantages to both sides. AIPA can see no long-term advantage to Australia, by unilaterally changing the current system.

The recommendation that, "unrestricted rights for foreign airlines to carry their own stopover traffic" (within Australia) was covered extensively in our original submission (pages 53-55). AIPA restates its opposition to this proposal. In particular we again suggest that this recommendation if implemented will result in a lower quality product to *all* users of air services to Australia. We restate that the requirement to clear customs and quarantine *does* exist for domestic passengers on international services and given the constraints of all international terminals in Australia at peak times, the resulting lower standards of processing to international passengers and freight customers is a realistic concern.

In making recommendations on domestic cabotage, the PC has failed to state the definition of what constitutes an airline's passenger and a "stopover". Is an airline only the carrier on which the passenger travelled to Australia, or does the airline's passengers include passengers from a code-share or alliance partner? Over what time frame does a passenger remain "the property" of the airline? Does a ticket from say SYD to MEL remain in force a year after travelling into Australia? Does this right accrue to all passengers who have travelled into Australia on a particular airline or only those with a ticket purchased outside of Australia? Does the definition only include foreign nationals?

(c) *Unrestricted rights for foreign airlines to offer freight services within Australia*

Australia currently has a small domestic airfreight fleet consisting of 1 x B727 100F, 2 x B727 200F, 2 x DC9 33F and 5 x Bae 146 100/300 QT. If the Trans Tasman is included in the domestic market then 2 x B727 200F are to be added (1 on wet lease from the US operator, Kittyhawk). The domestic jet airfreight fleet has grown substantially from 2 x B727 100/200F and 1 x DC9 33F in 1987.

The domestic jet passenger fleet stands at 130+ aircraft. In 1987 the domestic jet fleet stood at 65 aircraft. It can be seen from these figures that the domestic (excluding trans Tasman) freighter fleet has grown in ten years by a factor of 3.3 while the passenger fleet has only grown by 2.0. If left to natural expansion, as the local package freight market emulates the US and European experience, further substantial expansion will occur. This domestic expansion will ultimately form the basis for international regional freight services based on Australian requirements, not on backload requirements of Asian, European and US freight companies. The expansion of domestic carriers will be of great benefit both to Australian industry and to aviation employment in Australia. Since these operators are independent of the large airlines they are by definition "small business".

Discussions that AIPA representatives have had with airfreight organisations indicate that the only possible routes, which could currently utilise international freight operators on domestic routes, are SYD/MEL, SYD/DRW, MEL/DRW, PER/MEL and MEL/PER. This statement is based on the current movements of long haul freighter aircraft, which are predominantly B747F aircraft. As discussed and accepted in the draft report these freighters are utilised on the US/AUS market or EUR/AUS, positioned to Asia and utilised on the Asia to US or EUR market. The aircraft enter Australia about three days a week. The outbound Australian market is of little or no profit in this circuit.

The proposed injection of say a Polar Air B747 (US operator) between SYD and DRW en route to say HKG, for 2 days a week would in theory give lower freight rates on that route (northbound only) for the two days of

widebody operation. The reality is that there could be two outcomes:

On the days that the widebody aircraft heads north the current domestic operator would not operate a service (including the return journey). Thus there are cheaper rates northbound but no service southbound on the day of widebody operation.

Another possibility is that the domestic operator would suspend services on the route altogether as the aircraft utilisation falls below a sustainable level.

Recent discussions with all three domestic B727F operators indicate that their aircraft are already operating at low levels of utilisation. This low utilisation is normal for domestic freight operations worldwide and is a major reason for the utilisation of older aircraft with low purchase price, however, there is still a minimum level of utilisation required and any changes to current schedules would result in a fall of utilisation below that critical level.

A further consideration is the lack of a level playing field for Australian operators. US operators of widebody freight aircraft have had a de facto subsidy via the Civil Reserve Airforce scheme. This has resulted in below cost aircraft being placed with US freight operators. This benefit is not possible in Australia.

Asian freight operators often utilise Australian based crews under section 23 AG of the tax Act (see attachment 7 of original AIPA submission), resulting in substantially reduced wages payments. This taxation advantage is not available to Australian operators.

Australian freight operators are prevented by cabotage restrictions from operating domestic markets in both North America and the EEC.

AIPA believes that there is little advantage to Australia as a whole to utilise irregular long haul freight aircraft for domestic airfreight. Australia should concentrate on improving the existing domestic operator's products.

AIPA also believes that any changes that advantage foreign freight carriers should not be considered until reciprocal advantages are negotiated for Australian carriers.

AIPA believes that the government should acknowledge the uphill playing field that Australian freight operators currently face and put in place procedures to level the playing field.

AIPA believes that rather than encouraging foreign freight operators into domestic market, Australia should put in place a policy to encourage the establishment of Australian long haul freight operators.

AIPA believes that despite putting the question, “what taxation, labour market or other issues that impede the efficient development of Australia’s international air services” the Productivity Commission has failed to identify these issues and failed to provide recommendations to counteract these issues. The PC has only addressed the issues of problems of non-Australian operators servicing or seeking to service Australia.

6.1 Public benefit test.

AIPA is in total agreement with this recommendation.

6.2 The objectives of the IASC Act 1992 should be amended to (include):

Enhance the welfare of Australians through the promotion of greater efficiency in the provision of international air services

AIPA opposes this recommendation as it is currently written. We do not oppose the provision of air services that enhance the welfare of all Australians

We are concerned that this recommendation is based on the misconception that airline services supply a single homogeneous product. The airline product range consists of:

1. First class
2. Business class
3. Economy purchased immediately before the flight
4. Advance purchase economy
5. Package holidays
6. Frequent flier points use
7. Bulk freight
8. Package freight
9. Community benefits other than direct airline services

The resources that would be required to adequately address this issue are well beyond those possessed by the IASC. As explained in 6.3 AIPA believes the IASC already has a role in assessing the viability of potential route

operators. This role however should not extend to a full economic analysis. We believe that the recommendations of the PC in 6.2 and 6.3 are contradictory, because integral to evaluating proposals which enhance greater competition and efficiency is the assessment of a potential carrier's medium-term financial viability.

6.3 The IASC should not be involved in assessing the viability of airlines or anticipating approvals by other government agencies.

The current provisions of the IASC Act require the IASC to anticipate approvals by other Government agencies. This provision is important because when limited capacity is applied for by more than one airline, it is little use assigning capacity to an airline operator who is not in a position to commence operation. This situation occurred in the contested application for UK capacity when Australian Connection Airlines applied for UK capacity in opposition to Qantas. As UK capacity and slots were restricted, any capacity assigned to ACA required a reduction in the Qantas allocation. In this situation it is vital that the IASC be able to anticipate the issuing of an Air Operators Certificate (AOC). A similar situation could arise when additional capacity is available on a route or a new route becomes available and the capacity is contested.

6.4 International Capacity should be advertised.

AIPA agrees that when International capacity becomes available or is applied for an appropriate body should advertise it. AIPA believes that the current IASC system works well, particularly the newly introduced procedure of automatically contacting regular submitting organisations to the IASC. This recent improvement should continue under any alternate arrangements.

Under the current IASC practice all capacity is advertised when an application is made by a potential operator. Any interested party can comment on the allocation. This proposal would result in no public benefit test being applied in the case of a non-contested allocation. If the IC proposal on automatic uncontested allocation goes ahead, AIPA or any other body or person with reasonable grounds for interest would lose the avenue of comment on route allocation.

6.5 Submissions should not be called for unless a contested allocation is referred to the IASC.

AIPA disagrees that submissions to the IASC should not be called for unless allocations are contested. Bilateral rights are the property of the Commonwealth of Australia, not the airlines allocated the capacity. Interested parties with a legitimate position should be provided with a forum to present their positions. This proposal, if accepted, will remove the IASC forum, which currently provides a workable public benefit test on all bilateral allocations.

6.6 The criteria used by the IASC to allocate contested capacity should be simplified according to the principles outlined in this report.

AIPA is satisfied with the current IASC criteria to allocate contested capacity. However the current presentation of that criteria in numerous documents, ministerial statements and press releases should be presented in one concise document. This position is consistent with the PC recommendation 4.1.

8.1 Australia's ASAs should incorporate a more liberal means of designating airlines which does not rely on ownership restrictions.

Relaxation of foreign ownership in Australia has implications well beyond the price of an economy seat. Aside from the foreign exchange, employment, sovereignty and taxation issues. Airlines provide far more than tourist transport. Increasingly airlines provide freight, defence and employment opportunities for their country of origin. The IC on page XXVI refers to "wasting precious capital and other resources on inefficient airlines". This comment alone shows that the IC has not realised the non-economic reasons for poorer countries to continue to run an airline. Even in the shining example of rampant free enterprise, the US government has implemented the Civil Reserve Air Force scheme as a back up to the USAF transport capacity, yet this "inefficient" use of resources is ignored in any study of aviation resources.

8.2 Australia should seek to negotiate bilateral open skies agreements with like-minded countries a number of elements.

This section of the IC recommendations draws heavily on chapter 5 of the report. Australia has only recently withdrawn from a policy of regulating the domestic and international airlines. The major airlines however have restructured rapidly to be some of the most efficient in the world. AIPA believes there is little evidence that wages are higher than normal or productivity is lower. The evidence that AIPA has is in fact that our productivity is higher than average and our wages equal to the world level when all factors are taken into account. When airlines state employee levels and productivity there is a distinct tendency to not mention subsidiary divisions that carry out vital work for the parent company. Given the short time since Australian deregulation and the small size of our domestic market there seems little evidence to indicate that any change is needed to reform our market.

In particular the negotiable rights of seventh freedom and passenger cabotage that is suggested in this paragraph ignores any evidence that the North American market would present. The most obvious comparison with the Australian market is the Canadian market with similar population spread along an east west line compared to the Australian north south line. In this market despite numerous attempts, Canada remains a two-airline market. This obviously equates to the Australian two-airline market. This opinion is consistent with the conclusions of a recent study of airline deregulation. The distinct possibility is presented here that removal of cabotage restrictions and/or allocation of seventh freedom rights whether passenger or freight would see the demise of one of the two major Australian carriers. This demise might in theory be economically acceptable, but AIPA does not believe that it is politically acceptable to the Australian people.

8.3 *Countries for which bi-lateral open skies agreements can't be negotiated, ASAs should be renegotiated to incorporate as much of the policies specified in draft recommendation 8.2*

As explained in paragraph 8.2 AIPA is opposed to the "core package" as proposed in 8.2

8.4 *Australia should invite like minded countries to discuss the formation of an open club of nations committed to liberalising international aviation through a common plurilateral "open skies agreement".*

AIPA acknowledges that there has been a worldwide trend towards regional trade bloc formation over the last decade. AIPA welcomes a regional approach to an open skies club formation, conditional upon

- (i) No club member being made worse-off through the freeing up of international air services
- (ii) The removal of countries' regulatory frameworks which exert inherent biases in terms of carriers' competitiveness (by regulatory framework we mean aviation, taxation and trade regulations).

The PC Report claims that trade in "most other goods and services is being increasingly liberalised in a multilateral framework ... (a) different system for international air services is increasingly hard to justify" (PC (1998, XXIII)). The recent wave of regional trade group formations and enlargements throughout the world trading system suggests otherwise. In addition, there are few countries currently pursuing unilateral liberalisation policies, given that much of what may be unilaterally conceded is useful negotiating coin in bilateral and multilateral negotiations, as acknowledged by the Commission (PC(1988, XXXIII)). Indeed, the bilateral system is largely attributable to Countries' desire to guard their sovereignty and maintain national prestige, in the form of a national airline, something no country would ever freely concede.

In terms of the domestic and international air services market, the bilateral approach in the form of ASAs has had the benefit of enabling Australia to monitor and ensure safety certification of foreign carriers flying to, within and beyond Australia. Hence an argument can be made that regulation, while raising costs and restricting the potential for competition, has upheld the quality of service in terms of airline safety. In particular, where regulation has supported higher profitability in QANTAS and Ansett, and profitability is correlated with airline safety performance as argued by Rose (1990, 1992), regulation has been responsible for higher airline safety.

8.5 *The Australian Government should promote the establishment of a working party of WTO members to determine a process for including all air services in the GATS. The working party should feed into the forthcoming review of the GATS.*

AIPA is in total agreement with this recommendation as GATS provides a vehicle by which restrictions on aviation services trade can be reformed on a multilateral, non-discriminatory basis.

8.6 *The Australian Government should invite the New Zealand Government to establish a full common aviation market with multiple designation of Australasian carriers in international markets*

AIPA recognises that a full common aviation market with New Zealand would lead to increased competition in the Australian market (although most likely leave the NZ market unchanged). The enhanced competition that follows, while likely to produce lower air fares in the economy and discount markets, will affect product quality in the form of reduced flight schedules and freight services, and on-board service. AIPA therefore contends that the standard measures of welfare gain may be overstated, and whether the net welfare gain is positive remains ambiguous. The brief appearance of Kiwi Air and Freedom Air produced greater price competition in the economy and discount markets, but the former airline's short-lived operation, left its customers stranded with no way home. Consequently, any assessment of the welfare changes that follow from a common aviation market must incorporate a long-term time frame and consider not the immediate market structure that arises but the long-term structure that eventuates.

3. COMMENTS BY INVITATION

DTRD should make an in principle commitment that all of Australia's ASAs should be publicly available, limiting confidentiality strictly to those parts of the ASAs specifically required by other countries.

AIPA supports the suggestion that as much as possible of Australia's ASAs should be publicly available

Start up provisions should be removed from the Minister's IASC policy statement.

AIPA supports the suggestion that the *start up provisions* should be removed from the minister's policy statement.

IASC determinations for the allocation of capacity should be made in perpetuity.

AIPA supports the suggestion that *allocation of capacity* should be made in perpetuity **with the exception** of routes covered by code-share agreements or operated by lease carriers other than the carrier that holds the determination. In the case of routes not operated by the actual designated carrier, routes should be examined on a regular basis with full public scrutiny, to ensure that the maximum economic benefit falls to Australia as a whole.

Peak pricing and slot market

The theory of peak load pricing and take-off/landing slots indicates that the PC has failed to understand the current problem of the lack of available space at Australia's airports coupled with the geographical position of Australia and the curfew situation throughout the world. No airline chooses to operate at the same time as every other operator. Coinciding schedules inevitably results in inefficient flight levels, higher ground costs and delays. In the case of Australian destinations there is no choice. There are only a small number of time windows, which give the required utilisation of aircraft. Peak pricing will generate additional airline costs as their demand increases, since they will have to purchase additional slots to enable their expansion.

4. QUESTIONS CONCERNING AIRLINE SAFETY IN A DEREGULATED AIR SERVICES MARKET

4.1 Safety Performance and the Inquiry's Terms of Reference

An Airline's safety performance is a function of two sets of factors; safety investments and operating conditions. Safety investments consist of the airline's actions undertaken to enhance the safety of its operations. Some examples include more regular maintenance scheduling, training programs that qualify pilots at levels above those required by international standards, purchasing new aircraft that carry more advanced safety technology. Operating conditions relate to the environment in which an airline operates, and cover such factors as weather, air traffic control technology and airport quality variations. Hence an airline's safety performance is only partly attributable to its chosen level of safety investment. However, while airlines determine their safety investment level

through balancing the benefits of reduced accident or incident risk against the cost of additional safety-enhancing investment, they are the sole observers of their own safety performance.

The Productivity Commission's inquiry into international air services provides a comprehensive set of proposals for bilateral, multilateral and unilateral aviation policy. While the report reviews the economic effects of the regulatory framework on efficiency, competitiveness, and consumer welfare, the report does not address the regulatory effects on airline safety. The fleeting number of references in the report to safety (there are 10 in 295 pages) corresponds with the Commissioners' view that safety falls outside the report's terms of references, as stated on pages XXVI and 79. However, there are valid arguments that challenge the notion that safety necessarily lies outside the report's scope through focusing on the "economic regulation of international air services" (PC(1998, XXVI)).

The PC's approach to any industry inquiry is bound by the Productivity Commission Act 1988 to have regard to specific criteria;

"The Commission, in undertaking this Inquiry, is bound by the *Productivity Commission Act 1988* to have regard for the need:

... (e) to recognise the interests of industries, employees consumers and the community likely to be affected by measures proposed by the Commission."(PC(1998, 3))

Clearly, the interests of these groups and the nation as a whole depend on the safety performance of Australian and international airlines operating in, through and beyond Australia. If safety performance, a less observable dimension of product quality, experiences a decline post-deregulation, standard measures of welfare gain would overstate the true benefits flowing from deregulation. Hence the Commission's forecast gains from deregulation may provide an incorrect picture of the actual gains that will arise post-deregulation.

Where the Commission's recommendations impact airline safety performance, the Commission must pay due regard to those affects, be they positive or negative. By conceiving airline safety as being outside the Commission's terms of reference, the Commission implicitly believes that

- (i) its recommendations will not influence airline safety performance or
- (ii) fails to recognise that airline safety is an attribute of product quality. Anecdotal evidence suggests that airline safety performance is a key aspect of quality shaping consumers' preferences over airline choice.

Safety Performance as an Important Product Quality Aspect

In considering the air services' economic effects on users, the Commission paid considerable attention to various aspects related to international air services from the consumers' perspective (Section 5.5); price competition, non-price effects including frequency and convenience of service, and quality of in-flight service. The report's focus on non-price affects excluding airline safety is puzzling, since airline safety is an aspect of product quality with considerably *greater* merit. The absence of any discussion of the likely effects on airline safety in the report constitutes a serious and alarming omission.

Hidden Actions: Safety Investment as a Moral Hazard Problem

While the Report points out that, "despite price being an important determinant of demand, non-price characteristics may also be important", the report goes on to focus on identifiable characteristics of product quality such as schedule convenience and on-board services. Clearly, the Commission has a role to play in evaluating the effect of its recommendations on quality due to the asymmetric information problem that pertains to airline safety performance. Moral hazard arises in the context of agents undertaking hidden actions. The classic case of moral hazard is in the context of the insurance market where the purchasers of insurance policies do not take the appropriate level of care.

In the market for air services, firms and their employees both have an incentive not to divulge information which may negatively impact their reputation. Given that consumers cannot easily observe or evaluate airline product characteristics, there is reason to suspect that the market may supply *less* safety than consumers would demand if fully informed. While consumers may be able to observe airline accident rates, they cannot observe airline **incident** rates, which are a more meaningful measure of airline safety performance. Consequently, the Commission ought to identify and assess what it sees as the likely effects of airline safety that will follow from its recommendations.

4.2 Does Airline Safety Performance Decline Post-Deregulation? The U.S. Experience

The most demanding reason as to why the Commission should consider the implications for airline safety that will follow from deregulation is the US experience with deregulation. The Commission statement that "the Commission has seen no evidence that economic deregulation need lead to lower safety standards" (PC(1998, XXXVII)) is surprising given the established literature which has addressed the issue from an economic perspective. Economic research has analysed a broad range of issues relating to airline safety; Has airline safety declined since

deregulation? What factors account for differences in safety performance across carriers?

There are numerous measures available for measuring airline safety performance; the absolute number of total and non-fatal accidents; fatal and total accidents per million departures; passenger fatalities per million passengers or per million passenger miles; passenger death risk per million departures; and accidents per million departures.

Aggregate measures by and large suggest that the long-term trend towards increased airline safety has continued since economic deregulation of the US airline industry in 1978. However, Barnette and Higgins (1989) provide a more insightful assessment by differentiating between established carriers (trunk and local service airlines existing as of 1978) and new entrants (carriers birthed out of deregulation). For 1979-86, fatality risk for passengers on established carriers averaged one per 11.8 million, whereas new entrants had an aggregate fatality risk of 1 per 870,000 flights! This finding is skewed however, by that fact that new entrants carried relatively few passengers, and only three of the 19 new carriers had any domestic fatalities during the seven-year period. In addition, attention needs to be paid to airline accident causes, since operating conditions are outside the airline's influence. Nevertheless, an operating condition such as increased congestion may result from deregulation because increased traffic demand is not met with appropriate new supply infrastructure.

However, if deregulation induces carriers to cut maintenance activities or compromise safety standards by hiring less experienced pilots, accidents due to equipment failure and pilot error will become more common. A breakdown of the primary cause factors of US commercial Jet Fleet hull loss accidents provided by Boeing (1996, 21) reveals that accidents due to maintenance have actually increased as a percentage of total accidents in the last 10 years by a factor of 3.3. However, for the world commercial fleet, accidents due to maintenance have increased only by a factor of 1.8. Further, accident cause due to cockpit crew has not declined markedly, despite the fact that there have been significant advances in crew training technology. Hence evidence from the US is not inconsistent with the view that the deregulation experience has featured more equipment failure and pilot error type accidents as a proportion of total US accidents.

In the analysis of factors which account for differences in accident rates across carriers, Rose (1990, 1992) cites airline financial performance effects on airline safety. While the argument that competition reduces profit margins, leading firms to cut corners on safety provisions, has often been trumpeted, there is an array of economic models that establish a link between financial pressure and reduced safety. These models include reputation formation under asymmetric information, liquidity constraints on investment behaviour, and firm decision-making near bankruptcy.

Rose (1990) analyses determinants of airline incidents over the 1981-1986 period for 26 carriers and finds that profitability is negatively correlated with incident data. In addition, Rose differentiates between firms on the basis of size, and finds that low operating margins are strongly correlated with higher reported accident rates for small and medium size carriers. Rose (1990, 959) suggests that "the strength of the profitability-safety link for small and medium carriers may reflect a greater degree of freedom for these carriers in choosing their safety investment levels. Over a larger time period, Rose's analysis of airline safety performance determinants finds that higher operating profits were associated with lower accidents in the following year. Further, "a 5 percentage point increase in the operating margin (for example, from 5 percent to 10 percent) implies about a 5 percent reduction in the total accident rate and more than a 15 percent reduction in the fatal accident rate, other things equal" (Rose (1992, 84)). A study by Evans (1989) of accident rates for nearly 100 carriers over 1970-87 replicates Rose's result.

This research has a direct bearing on the Productivity Commission's recommendations since the likely new entrants into the Australian market will be small to medium sized carriers, and increased competition is likely to lower profits post-deregulation, affecting airline safety performance.

5. THE PRODUCTIVITY COMMISSION'S REPORT ON INTERNATIONAL AND DOMESTIC AIR SERVICES

The title of the Productivity Commission's report, *"International Air Services"*, does not reflect the report's true scope. The report's terms of reference relate to international air services, while its recommendations, specifically those dealing with

- (i) removal of restrictions on secondary gateways (Draft recommendation 5.1(i))
- (ii) unrestricted (domestic) codesharing rights on Australian airlines and unrestricted own-stopover carrying rights (Draft recommendation 5.1(ii)&(iii))
- (iii) domestic freight services (Draft recommendation 5.1(iv))
- (iv) relaxation of domestic carrier ownership restrictions (Draft recommendation (8.1))
- (v) bilateral liberalisation on the freedoms (Draft recommendation 8.2))
- (vi) the establishment of a common aviation market between Australian and New Zealand (Draft recommendation (8.7))

evidently address the market for **domestic air services**. Indeed, the Productivity Commission's recommendations will have a greater bearing on domestic air services than international air services. AIPA acknowledges that any inquiry into international air services will have implications for domestic air services, but the Productivity Commission should acknowledge this link and re-title the report accordingly. Further, the report should avow that the report's recommendations have greater repercussions for domestic air services as opposed to international air services, otherwise the Productivity Commission has not complied with its terms of reference.

6. THE UNIQUE CHARACTER OF THE AUSTRALIAN AIRLINE SERVICES MARKET

The Australian airline services industry has a number of unique characteristics that have implications for the Productivity Commission's recommendations.

- (i) The Australian industry constitutes a natural duopoly, where two airlines effectively service the domestic market, and the market is not contestable (Quiggin (1997)). Further, the likelihood of new carriers competing in the domestic market if they were given the opportunity is rather small. In view of the relationship between BA and QANTAS, and Ansett and Air New Zealand, the only possibility of new entrants would be in the form of a US carrier or chartered carriers.
- (ii) Prices and costs in the air services market are likely to differ substantially between countries, in part due to differences in stage length (long flights have lower costs per revenue passenger kilometre), but also due to genuine efficiency differences and the quality of service (OECD 1998). The Commission's comments on page XXVII and elsewhere are not indicative of an awareness of the various factors driving airline costs and prices.
- (iii) Any assessment of welfare changes due to de-regulation in which air travel is treated as a homogenous commodity is flawed (Quiggin (1997)).
- (iv) Binding supply constraints have a bearing on the entire industry's mode of operation. Sydney airport for example, which represents the biggest international gateway, is closed for 15 weeks a year. Every night it closes for seven hours from 11pm until 6am (or 15.2 weeks per annum). Hence this landing/take-off constraint dictates to airlines what are economically viable routes and what are not viable routes. Hence regulatory reform of the industry may not result in sufficient increased competition where a small number of incumbents have a virtual monopoly on take-off and landing slots.

**Appendix 1 BOEING STATISTICAL SUMMARY OF COMMERCIAL JET AIRPLANE
ACCIDENTS, WORLDWIDE OPERATIONS 1959-1996**

Appendix 2 AUSTRALIAN LEGISLATIVE BASIS FOR INTERNATIONAL AIR SAFETY

Page XXVI para 1 makes the statement that the inquiry *"is concerned with the economic regulation of international air services, not the technical regulations governing the conduct, safety and security of aviation"*.

AIPA strongly disagrees with this statement, as our reading of the terms of reference, specifically paragraph 4 "Scope" includes the safety aspect. Mention is made of "the current regulatory/legislative framework in which international air services operate". The most pertinent regulation in Australia to regulation of international air services, is the Air Navigation Act 1920, being the legislative vehicle through which Australia ratified the 1944 Chicago Convention. Australia became a member state of the International Civil Aviation Organisation (ICAO) as a result of this ratification. From the Air Navigation Act flows the "treaty status" of bilaterals.

Attached to The Air Navigation Act 1920 are 96 articles and 12 schedules that cover functions and rules of the ICAO organisation, dispute settling procedures, procedures of route allocation, sovereignty, operational rules, auditing and safety requirements. The document stands as a balanced equation and AIPA fails to understand how any inquiry could assess this legislation without a total examination of all subjects including the "technical regulations of conduct, safety and security of aviation".

Furthermore AIPA disputes that the products supplied by airline operators in Australia does not contain a large portion of safety as an expectation of delivery of those products. The recent major restructuring of the two safety organisations overseeing air operations in Australia were a result of two minor fatal crashes. The restructuring resulted in consumer input at board level into the safety regulators BASI and CASA.

Appendix 3 ECONOMIC MODEL COMMENTS

At this stage AIPA has been unable to examine the computer model used to complement this report.

The PC appears to have based their economic model on analysis of the following routes for a short period post-Australian deregulation. The routes selected are all routes on which Ansett International began competing with Qantas after the decision to allow multiple Australian carrier designations on International routes. Some of the selected destinations have unique characteristics, which will give false results if factored into a formula used for modelling changes to international aviation policy.

1. Korea.

The Korean market has only been available for a short period. Up to approximately 10 years ago Korean nationals were only allowed to leave Korea with permission of the Government. This permission did not extend to tourism. As such the initial Korean market shows a serious distortion due to pent up demand.

2. Taiwan.

The Taiwan market is a market distorted by politics. China placed severe political pressure on any country /airline, which operated into Taiwan. As in the Korean case, the Taiwanese Government also placed restrictions on residents travel. As a result pent up demand existed. Eventually airlines lead by JAL found a way around the impasse by creating "ghost" airlines such as Japan Asia, Australia Asia and BA Asia which circumvented Chinese objections.

3. Hong Kong.

The Hong Kong market was distorted by two factors; the physical limits of Kai Tak airport and the protection of the Hong Kong Airlines by initially the British and more recently Chinese who both held substantial interests in the local airlines.

4. Japan.

The Japanese market revolves around Narita airport near Tokyo. This airport has been the subject of intense political pressure since opening. The second runway is still not completed due to the authorities' inability to resume the necessary farmland. The airport is still heavily guarded 24 hours a day by large para military forces, which protect the airport from demonstrators. Because of these problems capacity at NRT is

physically restrained. Attempts to alleviate this capacity shortage by building alternate airports such as Osaka have only been partial successful.

5. Malaysia

Problems encountered by various airlines which service this airport, MAS for example, support the claim that some Asian carriers are not separated on a commercial basis.

Appendix 4. Definitions