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**Political Economy of Competition Policy in Japan:
Case of Airline Services**

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1. Introduction

The Airline services industry in Japan has gone through gradual, but cumulatively large, changes in the last fifteen years. Before 1986, airline routes were controlled by regulation: international routes were served by Japan Airlines (JAL) only; domestic major routes were served by JAL and All Nippon Airlines (ANA); and domestic local routes were served by ANA and Japan Air System (JAS). Moreover, the individual routes and flight capacity was subject to approval. Airfares were also tightly regulated: airfares were approximately proportional to the distance of the route; no discount airfares but round-trip discounts and multiple-coupon discounts. New entries to passenger service were not allowed or not even attempted.¹

However, in 2003, airfares are as diverse as those in the US market. Although regular airfares are still roughly proportional to distance, discount airfares are widespread. Availability of various discount airfares depends on the season, day of the week, time of the day, advance ticketing, birthday of a passenger, and, most importantly, competitive pressure of the route. The deep discount (restricted days with far-advance ticketing) could be more than 60% off. New entries to the market have increased following deregulation. JAL expanded its routes in the domestic market and ANA entered into major international routes; so they compete against each other in many of the routes, both international and domestic. In the domestic market, new carriers entered the industry in the last five years.

Although deregulation produced massive gains among consumers, the future of the

¹ See Ito, Takatoshi (1992). for comparing the deregulated US and regulated Japan in the 1980s in the pricing and other characteristics of the airline industry. See also Ito, Takatoshi and Hirota Yamauchi, (1996) for some of the major deregulation steps in the late 1980s and the early 1990s.¹

industry may not be as promising as before. Newly entered companies, Air Do, Skymark Airlines, and Skynet Asia, are not thriving. Air Do has failed twice, restructured, and now has affiliation with ANA, while Skymark and Skynet are just surviving. The number one, JAL and the number three, JAS merged and integrated their network in 2002, so that there are only two major airlines in Japan now.

Even in major countries in the world, airline failure and mergers are in progress. Many companies failed one way or another: for example, Swiss Airlines, United Airlines, Air Canada, and Air New Zealand have gone through failure and restructuring recently. They were taken over by others or rehabilitated with protection from creditors. Some of the reasons of the difficulties among major airlines in the world may be common—such as SARS and 9-11—but many of them are idiosyncratic. As airline services became global, several hub-and-spoke systems became successful, while others failed. The wave in mergers and failures of airline companies has barely come to Japan and its neighboring countries in Asia. The merger of JAL and JAS is a first of major mergers in the region.

The appearance of competitive pressure in the airline industries in Japan has become deteriorated in the last few years. First, the so-called shuttle service, a fix-price carrier-interchangeable ticket system for the three carriers (JAL, ANA, JAS) was permitted for the route between Tokyo and Osaka (either Itami or Kansai airports) by the Fair Trade Commission of Japan (FTCJ). This is an apparent, approved collusion.

Second, the merger of JAL and JAS and the affiliation of ANA and Air Do have lessened

the number of operating companies from 4 to 2 in the route of Tokyo-Sapporo, one of the most heavily traveled routes in the world. Third, a normal domestic fare was raised with permission of the Ministry of Land, Infrastructure and Transport (hereafter the Ministry), despite deflation in many of other prices.

To anticipate conclusions, the appearance of declining competition can be rebutted as follows. Approving the shuttle service is based on the view that there is enough competitive pressure from the high-speed rail service between Tokyo and Osaka so that an apparent collusion does not automatically mean that airlines gain monopolistic power. Second, a merger of JAL and JAS may be justified from pursuing efficiency (scale economies) in a more competitive environment. However, monitoring the industry developments for maintaining competitive pressure is important, and assuring the access to facilities for new entrants to the market is important.

It is a challenge for the regulatory agencies to consider what kind of competition policy should guide the regulatory policies of the airline services in Japan. In addition, there is a possible conflict between the Ministry and FTCJ over regulatory issues of pricing and routing.

The rest of this paper will be organized as follows. Section 2 describes some of the recent cases involving competition policy in the Japanese airline industry and section 3 points out challenges in the competition policy in the future.

2. Cases

2.1. Shuttle Service

In 2000, JAL, ANA, and JAS applied for introducing a concept of “shuttle” service in the Tokyo-Osaka (Itami or Kansai airports) route. The purpose of the shuttle service is to standardize the airfare, make the tickets interchangeable among the three companies, and expedite the boarding process. Joining forces, the airlines offer a frequency of two or more flights every hour. (In the beginning, schedules were not coordinated to be “on-the-hour or on-the-half-hour” services. After a few years in operation, it is now converging to a situation that JAL offers half-hour service, while ANA offers on the hour service.) On the surface, this is a blatant collusion.

In the case of the original shuttle service in the U.S., between Boston and New York, and between New York and Washington, measures have been taken to ensure that two airlines would be competing in the same route.² Another example is the shuttle between Singapore and Kuala Lumpur where Singapore Airlines and Malaysian Airlines have the check-in counter side-by-side and accept the ticket of each other.

The shuttle service between Tokyo and Osaka was proposed with a notion that airlines, collectively, would be competing against the bullet-train (*shinkansen*) service, that had

² Originally, the route was exclusively served by Eastern Airline before the deregulation of the 1980s. Passengers could just walk in a plane up to a few seconds before closing the gate without reservation or check in. The payment was made on board. It was quite efficient in shortening waiting time at the airport. In fact, no reservation was taken. If a plane became full, a second plane would take off within fifteen minutes. After deregulation, New York Air entered the market, and Eastern and NY Air were competing in the shuttle market. When both NY Air and Eastern was taken over by Continental in 1987, it was ordered to spin out one of the shuttle services to PanAm. When PanAm failed, the shuttle was sold to Delta that has continued to date, and when Continental developed the financial difficulty, its shuttle was sold to US Air that has continued to date.

introduced a faster train service between Osaka and Tokyo.³ It takes only two and half hours for the fastest train between the Tokyo station and Osaka station. It takes just one hour for an airline between a gate at the Haneda airport and a gate at the Itami (Osaka) airport. But, when ground travel time from downtown and airport at both ends and waiting time at the airport are counted, airlines barely have an advantage in total travel time. In order to compete against the *shinkansen*, waiting time at the airport was targeted to be cut down.

According to the logic of airlines, the Tokyo-Osaka is under strong competition from *shinkansen*, so that an apparent collusion among the airlines does not make it possible for airlines to exercise monopoly power. In other words, the price elasticity of demand for airline services is quite high, and the monopoly pricing would not be much different from marginal costs.

The airlines logic won, and the FTCJ approved the shuttle service. Indeed, competitive pressure from trains so far seems to be real and consumers are offered real competitive choices.

However, a few concerns remain. The validity of the airlines logic and FTCJ's affirmative decision rests on several assumptions. First, it is assumed that train fares are determined

³ The shuttle between New York and Washington can be said to have competitive pressure from Amtrak metroliner services. However, the competitive pressure in the Tokyo – Osaka, *shinkansen*, is much more intense than the U.S., because time difference between air and train is narrower, train service frequency is higher, and on-time reliability is higher.

independent of airfares. In other words, there would not be implicit collusion between airlines and train companies. Second, when there would be significant (downward) changes in cost structure of airlines, the shuttle prices would be adjusted. Third, the explicit price fixing that would involve communication among the airline companies in the Tokyo-Osaka segment would not lead to tacit collusion in other markets.

On the first point, it was thought that train fares of *shinkansen* would not be affected by developments in the airline industry at all. If anything, fares of the fastest trains were decreasing. However, in October 2003, shinkansen train fares were essentially raised by making expensive fastest train services more frequent. One may wonder whether the *shinkansen* fare hike was possible if airlines were fiercely competing. An answer to the counterfactual question may not be completely obvious. Second, changes in shuttle airfares have not occurred yet. Third, tacit collusion because of friendly relationships in the particular segment is a worry, and this should be monitored carefully in the future.

In sum, the shuttle service seems to have increased benefits of consumers who travel between Tokyo and Osaka, at least in the short run, by shortening waiting time at airports. However, it is a challenge for a regulatory authority how to define and monitor contestability from another means of transportation.

2.2. Merger of JAL and JAS and Affiliation of ANA and Air Do

In the Japanese airline industry, three companies, JAL, ANA, and JAS, had been the Big Three companies. In the international markets, JAL has been dominant, and ANA is new to the market (it was allowed to enter international routes late 1980s). JAS had only a few,

short-distance destinations. In the domestic market, ANA has been the largest company. JAL was competing with ANA in major routes, but many routes were served by ANA only. JAS was a distant third. See Figure 1 for domestic market shares of ANA, JAL, JAS, and others in 2002, before the merger of JAL and JAS.

In 2002, JAL and JAS announced a plan to merge. This would not change the picture in the international markets, but create a network of domestic services that would rival ANA. The competitive situation in the domestic market would significantly change.

In March 15, 2002, the FTCJ publicly published a concern over the planned merger of JAL and JAS.⁴ In the published concern, the FTCJ raised several points.

- (1) The number of major companies will decline from 3 to 2. This makes it easier for them to practice collusive pricing behavior.
- (2) The ratio of special discount flights is less and the discount percentage of special discount flights is lower in the routes where the number of competing flights is smaller. Therefore, the reduction in the number of competing companies may reduce competitive pressure.
- (3) Due to congested airports and restrictions on landing rights and check-in counter space, new entries are extremely difficult. Therefore, pressure from new entries cannot be counted on.
- (4) As a result, consumers will suffer.

⁴ <http://www.jftc.go.jp/pressrelease/02.march/020315.pdf>

The data analysis to back up these concerns, especially point (2) above, is compelling. The relationship between competitive pressure (reverse of the number of competing airlines) and pricing is shown convincingly. In other words, contestability from potential entries is not necessarily working. The ratio of all of the flights in the routes being offering special discount fares is 48.3% for the routes with monopoly; 56.8% for the routes with duopoly; and 73.1% in routes with three companies competing. The average ratio of special discounts was 15% for monopoly routes, 18.9% for duopoly routes, and 26.0% in three-company routes; and 38.7% in four-company routes. This is quite an interesting result.

The restrictions on new entries, point (3), are serious for those who hoped that contestability would be an answer to the problem of oligopoly that is inevitable for network industries such as the airline industry. Reading these points, one might have thought that the approval of the merger as planned would not have been easily obtainable.

However, JAL and JAS offered a modified proposal on April 26 with the following counter-measures, and these measures were regarded as satisfactory by FTCJ.

- (1) Normal airfares will be reduced by 10%. The airfare would not be raised in at least three years unless business environment changes drastically.
- (2) Special discounts will be offered on all routes that are competing with another major airline, or new monopoly routes due to the merger of JAL and JAS. The degree of discounts would not change.
- (3) The JAL-JAS will make efforts to enter ANA-only routes or increase the

number of flights in routes dominated by ANA.

(4) 9 slots (landing rights) at the Haneda airport will be given up. Moreover, if new entrants are planned, an additional 3 slots will be given up. The latter measure is until 2005 when all slots will be reviewed.

(5) When new entrants are planned, JAL-JAS will make efforts to accommodate in airport facilities and maintenance of airplanes.

Of these measures, (1)-(3) correspond to the FTCJ concerns on competitive pressure due to the number of competing companies. Even if the number of companies declines from 3 to 2, the market results (pricing) would not deteriorate, but improve (lower airfares). Counter measures (4)-(5) are an answer to the concern on physical restrictions on entry. The JAL-JAS will cooperate in efforts to encourage entry.

At this point, the promise of lowering airfares sounded significant in rebutting a criticism that a merger would lead to higher prices. But, it was then not known that airfare would be hiked only a year later. This will be explained in the next section.

It was argued that reverting back 9 slots (and possibly 3 more) is good enough to encourage new entries. In the case of US mergers, it was often frequent that some routes were required to be spun off. If contestability is taken seriously, then a regulatory policy on allocating and re-allocating landing slots should be developed.

In the end, the merger was approved on the condition of counter measures proposed by JAL and JAS. The names of the two airline companies remain as they were under the

common stock holding company, but the routes were rearranged so that they divided the market, and pricing and frequent flier programs were consolidated as of April 2003.

One of the new entries to the market was Air Do (ADO) in the route between Tokyo and Sapporo. It failed twice and was on the brink of stopping services. It was rehabilitated through an affiliation with ANA: ANA put a code-sharing flight number on ADO flights, helped ADO in maintenance, and purchased a certain number of seats on ADO flights. (This will be explained in detail in Section 2.4 below.)

As a result of the merger by JAL and JAS, and code sharing (affiliation) of Air Do with ANA, the number of competing airlines was effectively reduced from 4 to 2. After the consolidation, JAL offered 21 round trips, and ANA (with ADO) offered 24 round trips per day as of April 2003. With these dense schedules by the two giants, it would be very difficult for any potential entrant to break in this market. Since 1972, the Tokyo-Sapporo routes were served by three or more companies. The duopoly situation in a deregulated environment is quite new, and it should be monitored carefully. Figure 2 shows the market share of the Tokyo-Sapporo route before the JAL-JAS merger and ANA-ADO affiliation.

In sum, the process of merger approval poses a few questions. First, it is not logically clear whether FTCJ is truly satisfied with the counter proposal in dispelling concerns that FTCJ itself raised earlier. Second, it is a concern that JAL-JAS offer to give up 9 landing slots to new entrants at the Haneda airport are enough to keep contestability.

2.3. Increases in Normal Airfares

The Ministry announced in January 2003 that it would raise the landing charges of airports starting April 2003. In response, JAL and ANA announced a plan to increase airfare that would shift the incidence of landing fees to passengers, effective in April. However, Minister Ougi, in charge of transportation, announced that she would oppose the airfare increase based on an increase in landing fees, stating that the cost increase should be absorbed by efforts in management. (Reported in Nihon Keizai Shinbun, January 20, 2003.) In response, JAL and ANA announced that they would defer the date of airfare increase by two months. Basically, the Ministry denied JAL and ANA from raising airfares due to cost increases.

Then, in late March, JAL and ANA switched a strategy. They argued that the business environment had changed due to the higher jet fuel prices as a side effect of the Iraqi war, and fare increases were planned for June 2003. However, this argument was rejected by the FTCJ. The FTCJ argued that it would be premature to judge that the business environment had changed due to the Iraqi war. The fuel price increase might not last long. Recall that JAL had promised that it would not increase the airfare unless the business environment changes drastically. In the end, the March plan for fare increases was scrapped.

Finally, in April, JAL and ANA applied for fare increases on the basis of deterioration of the business environment due to SARS. (See JAL press release on April 28, and ANA press release on April 30.⁵) Then, this was approved. In the end, the airline companies got

⁵ JAL press release (in Japanese) at www.jal.co.jp/press/2003/042801/042801.html and ANA press release (in Japanese) at svc.ana.co.jp/pr/03-0406/03-052.html.

airfare increases (or re-winding of the airfare decreases, a condition for the JAL-JAS merger).

This episode poses three questions. First, would a similar amount of pressure for airfare increases have been possible had the JAL and JAS merger not taken place a year earlier? Second, was the reason (justification) for the airfare increase correct? Third, who and on what basis should the airfare increase be regulated?

First, one critical view is that, now that there are only two major airlines, an implicit collusion can be easier for them and the aforementioned episode shows that it is a real threat. An opposing view is that what was raised is normal airfare, and most of the competition occurs at the discount airfare, so the availability and degree of discounts depends on competitive pressure, which comes from contestability (threat of new entry). An important part of regulation is to assure new entries. Second, the exchanges of the plan and rejection/approval between airline companies and the regulatory agencies (the Ministry and FTCJ) in the spring of 2003, shows inconsistencies in regulatory reasoning. If airlines plan to raise airfares for the justifiable reasons of cost increases that are rising for external reasons, such as landing fees and jet fuel price increases, then the plan of fare increase has an economic merit. This can be seen as in the simple demand-supply graph, like Figure 3, where the upward shift of the supply curve, reflecting an increase in marginal costs, should result in the fare increase in the case of perfect competition. The airline industry is not under perfect competition, but an analogy holds.

On the other hand, if airlines apply for airfare increases on the ground that demands are

lower, such as effects of SARS, then the application should be rejected. The lower demand in the market should lower the price, not raise the price. The situation is depicted in Figure 4.

A shift of cost (supply curve) upward should raise the price, while a shift in demand curve (to left) should lower the price, in the competitive market. For this reason, the rejection of the first fare increase by the Ministry and FTCJ was wrong, and the acceptance of the second fare increase by the Ministry and FTCJ was also wrong. But, at the end, the airlines got fare increases that could be justified by the first reasoning. Would two wrong answers make one right?

Third, it should be clarified what kind of fare increases are subject to approval of the Ministry, and what kind by the FTCJ. It should be clear that the FTCJ should supervise the overall competitive environment, and any airfare matters related to competition should fall under the FTCJ's supervision.

2.4. Entries of New Airlines

As the deregulation proceeded, Air Do entered the market of Tokyo-Sapporo route in 1998. The market was already crowded with three major airlines and frequent services. Air Do offered discount airfares but only two round trip flights. JAL, ANA and JAS countered the challenge of the new entry by lowering their airfares on the flights that were close in departure time to Air Do flights. This was close to predatory pricing. The FTCJ then did not act. Although Air Do did well in the first several months, their load factor deteriorated after 1999. Air Do never made profits and failed in 2002. Old stock holders including the

Hokkaido government took losses, and the new Air Do is operating in affiliation with ANA. (ANA buys a certain portion of seats on Air Do flights, and puts a code share flight number. Pricing of seats are done independently.)

Another new entry was made by the Skymark Airlines in 1998, for the Tokyo-Fukuoka route. The third new entry was planned in 2002 by Skynet Asia Airways (SNA) for the routes between Tokyo-Miyazaki. For the Tokyo-Miyazaki route, SNA set the normal airfare at 21,000 yen, and two-coupon discount at 18,500 yen, when the majors had set normal airfares at 31,000 yen, and a discount airfare at 23,500 yen.

However, JAL, JAS, and ANA lowered airfares for the routes of Tokyo-Miyazaki, Tokyo-Fukuoka, and Tokyo-Kagoshima. For Miyazaki, the majors planned to lower normal airfare to 27,900 yen, and the special discount to 22,000, with further reduction in November to 18,500 yen (matching the SNA flights). Moreover, the majors planned special bonus miles for their frequent flier (mileage) programs. Similar airfare reduction was planned for Tokyo-Fukuoka, and Tokyo-Kagoshima.

In response, the FTCJ warned the majors about the possibility that the pricing may violate prohibition of monopoly (Anti-Trust Law, article 3). The warning was issued on September 26, 2002. The warning had an immediate impact. The three majors decided to increase special discount airfares from December.

The logic of the FTCJ warning, as explained in the FTCJ documents dated September 30, is as follows: A deeper discount by the majors was targeted only in the three routes that

compete with new entries. Discount percentages are much higher for these three routes, as documented by the FTCJ. Moreover, bonus mileages are applicable only for the Tokyo-Miyazaki segment. These actions were regarded as unfair trading practices, similar to predatory pricing, on new entries.

I summarize two views on this episode.

One view is that the FTCJ's action is over-regulation that deprives consumers from benefits of low-cost travel, the fruits of competition, because special discount airfares (by the majors) were raised as a result of FTCJ warning. Applying a brake on lowering prices is misguided. Competition policy should promote competition, not restricting competition (that is, lowering prices by existing firms). New entries should not be treated any differently from existing companies. A typical predatory pricing would have a scenario in that low prices by a major company (incumbent) would drive out a minor company (new entry), and then prices would be raised after the exit of the minor company.

Another view based on the importance of contestability would support FTCJ's decision. For successful implementation of competition policy, it is important to make sure that pressure from potential new entry is applicable. In order to maintain pressure from potential entry, it is important that actual new entries would not be subject to unfair competition. The airline industry is inherently oligopolistic (since scale economies and network values are important), and it takes time for a new entry to develop a network. Targeting a new entry by reducing special discount airfare is indeed unfair, and would reduce the degree of contestability in the future. Maintaining contestability, sacrificing

short-term lower prices, will lead to lower prices in the long run. However, this kind of restrictions on pricing behavior of existing airline companies should be temporary (say, two years). A similar restriction on existing an airline company was established in Germany (Lufthansa vs. a new entry).

In summary, the tradeoff is whether to offer low prices now for consumers or to preserve contestability for the future. My view is that to put weight on the latter is prudent in the industry with large oligopoly firms. In this sense, the FTCJ has evolved in a desired direction from no action in 1998 to active involvement in 2002.

3. Challenges for the Future

The four episodes in the preceding section pose difficult choices in competition policy regarding the airline industry in Japan. Keeping competitive pressure, while allowing companies to pursue scale economies (network externality), is a well-known challenge. Different views, and my personal view, on actions by the Ministry and the FTCJ on each of the four cases are presented. Now that there are only two major airlines, it is most important to maintain competitive pressure through potential entry. Giving a new entrant a preferential access to the common facility, such as facilities in the terminal building and landing slots, for some limited time (say, several years), may encourage the entries, and maintain competition.⁶

⁶ In this respect, a recent report on the direction of Japanese competition policy is on the right track.

In order to maintain competitive market practices, the FTCJ should play a greater role monitoring pricing behavior and other business promotions and practices. Giving freedom to airline companies in developing new services and products is important, but that should not unfairly drive out competitors from the market. Whether the normal fares, essentially the ceiling of a variety of airfares, can be increased can be judged in relation to competition policy, so that it falls on the role of the FTCJ. The Ministry's role is more basic, such as the safety, the international treaties, and the air traffic control system.

In the future, Japan will be more integrated in the Asian region. When the free trade agreements develop in Asia, regional competition may spill over into domestic markets, just like in the EU. Taking the model of the EU, a subsidiary of a foreign carrier may be allowed to serve domestic routes. That would be an ultimate solution for maintaining contestability in the airline industries.

References

Ito, Takatoshi (1992). *Shohisha Jushi no Keizaigaku* (trans. "Consumer-oriented Economics"), Tokyo: Nihon Keizai Shinbun sha.

Ito, Takatoshi and Hirotaka Yamauchi, (1996). "Air Transport Policy in Japan," in G. Huffbauer and C. Findlay (eds) *Flying High*, Washington, D.C.: Institute for International Economics, 1996: 33 - 61.

Figure 1

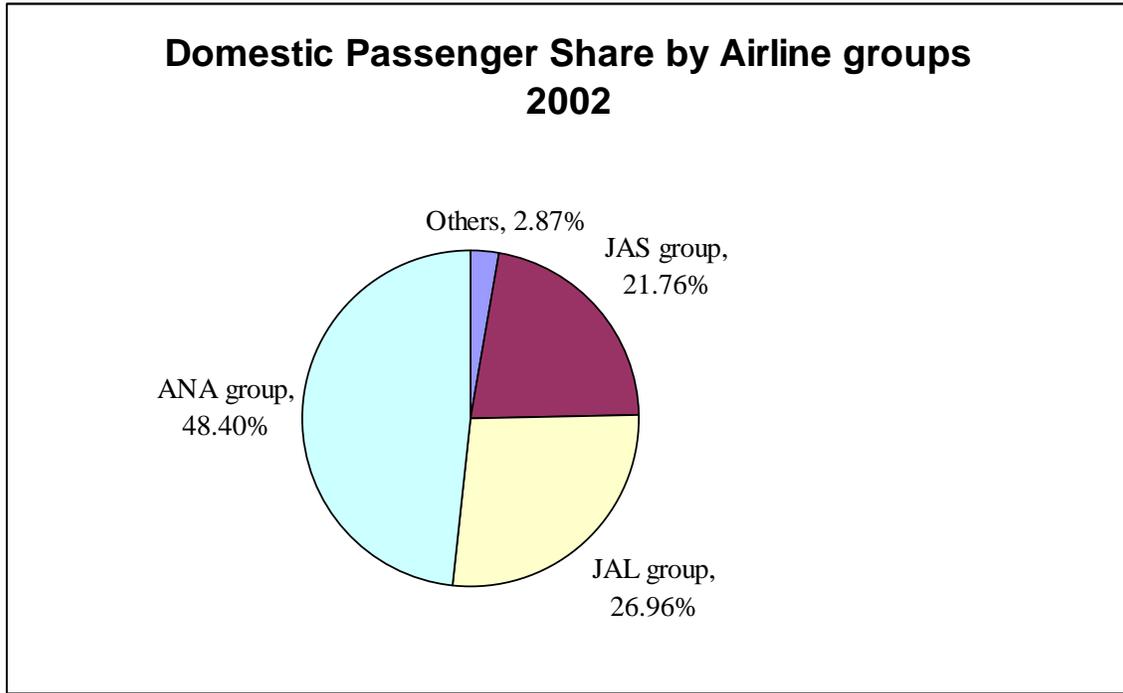


Figure 2

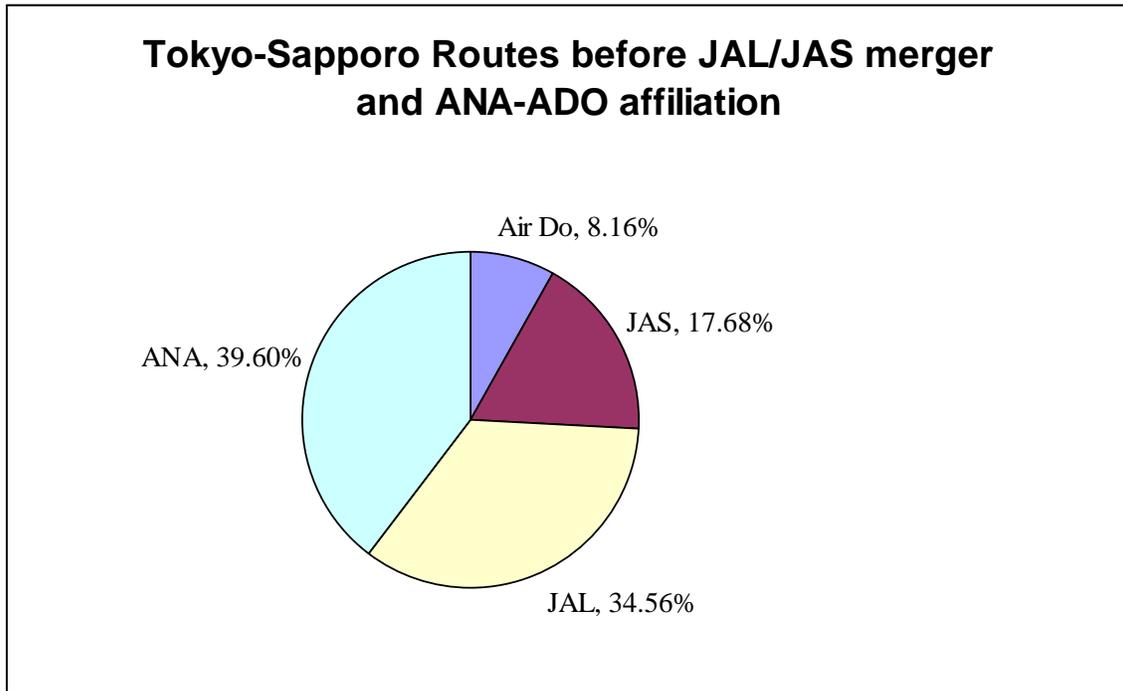


Figure 3: Cost Increase (landing fees) => Price goes up

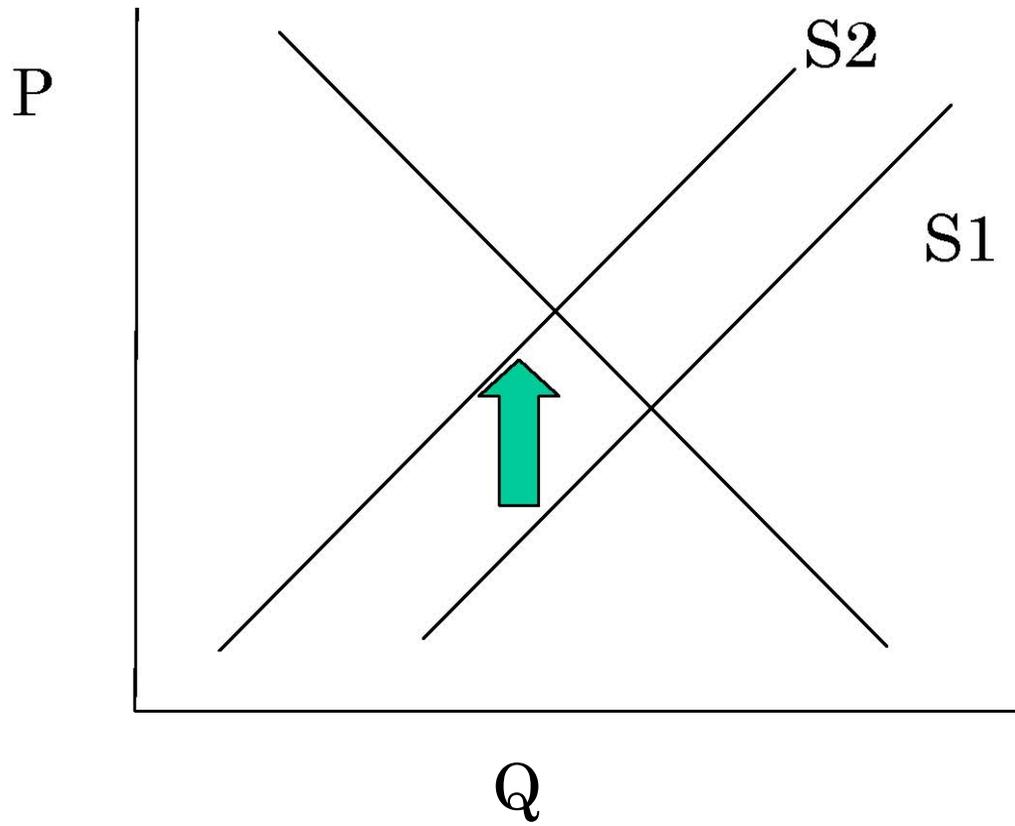


Figure 4: Demand Decrease (SARS) => price goes down

