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Competition in the Domestic Air Transport Industry: *Can it be sustained without competition policy?*

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For more than two decades, the country's *one-airline policy* had protected the Philippine Airlines (PAL) from domestic competition. This monopoly, however, resulted in a great deal of inefficiency in the service of PAL. With the absence of competition, little was done to improve its service. Delays and troubles of PAL flights were commonplace, earning for the company's acronym another meaning—"**P**lane **A**lways **L**ate." Likewise, because it was a government-owned corporation, there was no incentive to make the airline a profitable venture as government funds and subsidies were always available in case of need, as during its financial woes.

This was the situation prior to the deregulation of the industry that began in 1995 under Executive Order 219. Today, however, things have radically changed. For one, PAL has been privatized and ceased to be the lone domestic airline in the country. Restrictions on domestic routes and frequencies have been eliminated, including government controls on airfares, except when there is a single operator in a route. Airlines now have the freedom to determine where to fly, when to fly and what price to charge. These changes, as a result, have attracted new airlines to join the industry. Passengers now have several choices not only of airlines and flight schedules but most of all, of budget fares. Indeed, competition in the domestic airline industry has greatly intensified with the entry of new airlines.

As customers enjoy these changes, an important policy issue worth looking into is what will happen to the industry as competition persists. Considering that domestic traffic in the country is relatively small, there is a limit to the number of airlines that would render the do-

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Table 1. Market share in domestic passenger traffic by airline, 1994-1999 (in percent)

Airline	1994	1995	1996	1997	1998	1999
Philippine Airlines	100.0	95.7	79.4	67.3	55.1	49.0
Cebu Pacific Air			6.4	14.7	22.0	24.3
Air Philippines			4.6	9.9	16.6	21.5
Grand Airways		4.3	8.6	5.3	3.3	
Asian Spirit			1.0	2.6	2.8	4.8
Mindanao Express				0.1	0.2	0.4
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

Sources: Civil Aeronautics Board and various airlines

mestic air transport industry efficient. The experience of other countries has shown that fierce competition arising from deregulation has pushed a number of airlines either into bankruptcy or merger and consolidation. Two of the airlines in the country have already ceased to operate even only after three years in the business. Will the exit of these players leave a more controlled market? Is the consolidation of the existing ones likely to happen in the future?

This *Policy Notes* seeks to examine the effects of the domestic competition brought about by the deregulation of the air transport industry. It also identifies the areas where competition policy and regulations have remained undefined, but are crucial for the continuity and effectiveness of the competition that the industry now enjoys.

Deregulation and competition

The deregulation of the industry paved the way for the entry of five new airlines: Grand International Airways in 1995 and Cebu Pacific Air, Air Philippines, Asian Spirit and Mindanao Express, all in 1996. Grand Airways, however, ceased its operations in early 1999 and Mindanao Express in early 2000. Before their closure, seat capacity in the industry increased from 5.7 million in 1994 to 8.5 million in 1999.

Market structure. In general, PAL remains the dominant carrier in the domestic air transport industry, enjoying an average market share of 63 percent of the total passenger traffic for the period 1996-1999 (Table 1). Nonetheless, it suffered a significant decline in market share, and perhaps in overall patronage, as new airlines slowly inched their way to compete with PAL.

While the number of players has remained the same since the industry was deregulated in 1995, the degree of competition has nevertheless intensified. This may be gleaned in the inverse of the Herfindahl-Hirschman Index[1] (HHI) that shows that the number of effective competitors has been increasing since 1996 (Table 2).

This situation is not true, however, for all the routes. Competition exists only for the major routes while most of the secondary and tertiary routes are serviced by only one airline. Why is this so?

Deregulation resulted in the establishment of niche markets. The bigger players, for instance, as defined by the size of their fleet and aircrafts—PAL, Grand International Airways, Cebu Pacific Air and Air Philippines—concentrate on the major routes where traffic demand is

Table 2. Measure of the degree of effective competition, domestic air industry, 1996-1999

Year	Herfindahl-Hirschman Index (HHI)	1/HHI
1995	0.9177	1.09
1996	0.6439	1.55
1997	0.4878	2.05
1998	0.3818	2.62
1999	0.3476	2.88

Note: Index is based on market share

[1]*The index is measured as the sum of the squares of the market shares. It is compared with the ratio 1/n where n is the number of players in the industry. The higher the index relative to 1/n, the less competitive the industry is. The inverse of the index gives the number of equal sized competitors that would provide a degree of competition equivalent to that actually observed in the market share data. Hence, it is used as a measure of the number of effective competitors.*

heavier while the smaller airlines—Asian Spirit and Mindanao Express—are flying the secondary and tertiary (missionary or rural) routes where traffic demand is lighter.

Cebu Pacific and Air Philippines are providing PAL stiff competition in the major routes. Both have consistently succeeded in increasing their market shares since joining the industry, with Air Philippines passenger traffic growing by 72 percent in 1996-1999 and Cebu Pacific passenger traffic by 60 percent. For the secondary and tertiary routes, on the other hand, PAL had the monopoly of these routes until 1998 when it stopped flying these routes for two reasons. One, the airline used to cross-subsidize its operations in these routes by charging airfare below cost in these routes and recovering such loss by charging a higher airfare than what the market dictates in the major routes. In a deregulated environment, however, cross-subsidization is no longer feasible as it would make the airline uncompetitive in the major routes. And two, the financial and labor problems of the airline in 1998 resulted in the downsizing of its fleet from 54 to 24 aircrafts making it impossible for the airline to service all types of routes.

The high cost of air travel stands as the biggest hindrance to the promotion of domestic tourism among the local populace. The increased competition in the domestic air industry, however, provided travelers with lower airfares, and from the traveler's perspective, this is the most important result of deregulation.

With PAL canceling its operations in these routes, Asian Spirit and Mindanao Express got the markets left by the airline. As Table 3 shows, both airlines now have their respective niche markets as noted by their 100 percent market shares. And since there is no competition, these smaller airlines are able to charge fares higher than normal. It is therefore clear in this case that deregulation has yet to create an impact on competition in these routes.

It is important to note, however, that one significant factor contributing to the absence of competition in the secondary and tertiary routes is the small size of airports in these areas. Because of this, the wide-bodied aircrafts of the big airlines cannot be accommodated. Neither can several aircrafts be allowed to fly in at the same time.

Intermodal competition. The deregulation of the shipping industry and the improvement of land transportation are becoming an important source of competition for air transport since this brings in more choices for those traveling between the country's islands in the south. The introduction of comfortable high-speed ferries, as a result of the deregulation of the inter-island shipping industry, opened up an alternative mode of travel to a market that previously considered travel by air only.

Likewise, the improvement of roads in Mindanao has significantly reduced travel time by land. Since land travel is a lot cheaper than by air, this has become a source of competition for the air transport industry. An example of this is the Davao-General Santos route of Mindanao Express. The airline's load factor was substantially reduced from 90 percent to 20-30 percent when travel time by land along this route was reduced from 6 to 2 hours due to the road improvement in the area.

This intermodal competition in the secondary and tertiary routes will likely intensify with the continued improvement of the inter-island shipping industry and road transport.

Airfares. It is common knowledge that air travel remains a luxury that only a few Filipinos can afford. In fact, the high cost of air travel stands as the biggest hindrance to the promotion of domestic tourism among the local populace. The increased competition in the domestic air industry, however, provided travelers with lower airfares, and from the traveler's perspective, this is the most important result of deregulation.

Table 3. Market share per sector, per airline, 1995-1999 (in percent)

Sector	Philippine Airlines					Cebu Pacific Air				Air Philippines				Grand Airways				Asian Spirit				Mindanao Express			
	1995	1996	1997	1998	1999*	1996	1997	1998	1999	1996	1997	1998	1999	1995	1996	1997	1998	1996	1997	1998	1999	1996	1997	1998	1999
A. Major Trunkline																									
Manila-Cebu-Manila	88.6	69.3	63.7	58.3	59.9	10.9	17.4	23.1	24.6		5.5	11.9	15.5	11.4	19.8	13.4	6.7								
Manila-Davao-Manila	78.1	54.2	47.5	47.4	50.0	13.3	23.4	24.9	28.4	1.5	17.0	21.2	21.6	21.9	31.0	12.1	6.6								
Manila-Zamboanga-Manila	100.0	83.1	69.2	57.3	40.0			1.2	21.8	16.9	30.8	41.6	38.2												
Manila-Bacolod-Manila	100.0	98.2	69.9	52.0	39.8	1.8	23.9	31.2	42.5		6.3	16.7	17.7												
Manila-Iloilo-Manila	100.0	63.7	56.0	44.6	35.5	16.6	22.0	26.7	29.9	19.4	21.7	28.7	34.6		0.3	0.3									
Manila-Legazpi-Manila	100.0	92.3	82.7	76.7	70.0					7.7	17.3	23.3	30.0												
Manila-Tacloban-Manila	100.0	85.6	53.9	38.5	26.0	7.1	36.7	55.6	56.5			0.5	17.5		7.3	9.4	5.5								
Manila-Puerto Princesa-Manila	100.0	81.5	66.4	64.9	48.1					17.7	32.7	35.1	51.9		0.9	0.9									
Manila-Cagayan de Oro-Manila	100.0	79.0	58.3	52.1	43.6	15.0	32.2	37.1	36.6			2.3	19.8		6.0	9.5	8.4								
Manila-Cotabato-Manila	100.0	78.9	53.3	30.2	35.1					21.1	46.7	69.8	64.9												
Manila-Dumaguete-Manila	100.0	100.0	100.0	100.0					4.3				95.7												
Manila-San Jose-Manila	100.0	85.6	63.9	53.4								25.1	55.6					14.4	36.1	21.5	44.4				
Manila-Roxas-Manila	100.0	100.0	100.0	100.0	65.1				34.9																
B. Secondary/Rural Route																									
Manila-Baguio-Manila	100.0	98.8	87.9	100.0								0.0	34.8					1.2	12.1		65.2				
Manila- Kalibo-Manila	100.0	89.4	72.9	68.6	53.6		12.8	11.7	20.2	10.6	14.4	19.8	26.2												
Manila-Calbayog-Manila	100.0	100.0		78.8															100.0	21.2	100.0				
Manila-Catarman-Manila	100.0	97.8	60.7	85.1														2.2	39.3	14.9	100.0				
Manila-Daet-Manila	100.0	92.5	90.4	100.0														7.5	9.6						
Manila-General Santos-Manila		100.0	100.0	61.1	67.5							38.9	32.5												
Manila-Laoag-Manila	100.0	100.0	100.0	100.0									100.0												
Manila-Marinduque-Manila	100.0	100.0	100.0	90.3																9.7	100.0				
Manila-Masbate-Manila	100.0	72.6	34.1	23.2														27.4	65.9	76.8	100.0				
Manila-Naga-Manila	100.0	73.1	65.8	62.3	44.7					26.9	27.4	2.2	14.2						6.9	35.6	41.0				
Manila-Tablas-Manila	100.0	73.6																26.4	100.0	100.0	100.0				
Manila-Tagbilaran-Manila	100.0	100.0	100.0	100.0	26.7																73.3				
Manila-Virac-Manila	100.0	78.9	69.4	59.6								2.2	31.4					21.1	30.6	38.1	68.6				
Cagayan-Davao-Cagayan	100.0	100.0	95.0	76.7									14.3												85.7
Cagayan-Zamboanga-Cagayan	100.0		100.0																				5.0	23.3	100.0
Cebu-Bacolod-Cebu	100.0	100.0	100.0	96.5	44.3			3.5	55.7																0.1
Cebu-Butuan-Cebu	100.0	100.0	100.0	100.0																					100.0
Cebu-Cagayan-Cebu	100.0	100.0	97.1	89.8																	68.0				32.0
Cebu-Cotabato-Cebu	100.0	100.0	100.0	100.0																			2.9	10.2	100.0
Cebu-Davao-Cebu	100.0	100.0	74.0	44.1	44.4		26.0	54.9	55.6			1.0													
Cebu-Dipolog-Cebu	100.0	100.0	100.0	100.0																					100.0
Cebu-General Santos-Cebu	100.0	100.0	100.0	100.0									100.0												
Cebu-Iloilo-Cebu	100.0	100.0	90.0	69.4	34.5			30.6	65.5		10.0														
Cebu-Kalibo-Cebu	100.0	100.0	100.0	100.0					75.2																24.8
Cebu-Pagadian-Cebu	100.0	100.0	100.0	100.0																	74.0				26.0
Cebu-Puerto Princesa-Cebu				100.0																					100.0
Cebu-Surigao-Cebu	100.0	100.0	100.0	98.6																					100.0
Cebu-Tagbilaran-Cebu	100.0	100.0	100.0	100.0																	100.0			1.4	
Cebu-Tandag-Cebu	100.0	100.0	96.8	91.4																	71.5				28.5
Cebu-Zamboanga-Cebu	100.0	100.0	100.0	100.0	3.6								96.4										3.2	8.6	
Cotabato-Zamboanga-Cotabato	100.0	100.0	94.5																						100.0
Davao-Zamboanga-Davao	100.0	100.0	100.0	97.5									93.8										5.5	100.0	6.2
Dipolog-Zamboanga-Dipolog	100.0	100.0	100.0	100.0																			100.0	100.0	100.0
Iloilo-Puerto Princesa-Iloilo	100.0	100.0	100.0	100.0																				2.5	100.0
Pagadian-Zamboanga-Pagadian	100.0	100.0	100.0	100.0																					100.0
Tacloban-Cebu-Tacloban	100.0	100.0	100.0	100.0																					100.0
Tawi-Tawi-Zamboanga-Tawi-tawi	100.0	100.0	97.8	93.3																					100.0

*PAL data for 1999 include first to third quarters only.
Sources: Civil Aeronautics Board and various airlines

Table 4. Average fare by airline per sector, 1997-1999 (PhP)

Year	Manila-Cebu	Manila-Davao	Manila-Iloilo	Manila-Cagayan	Manila-Tacloban	Manila-Bacolod	Manila-Kalibo	Manila-Zamboanga
1997								
Philippine Airlines	1,977	3,019	1,543	2,255	1,791	1,603	1,348	2,408
Cebu Pacific Air	1,479	2,519	1,322	2,031	1,469	1,395	1,057	
Air Philippines	1,116	1,063	1,187	2,255		1,216	893	1,753
1998								
Philippine Airlines	2,135	3,443	1,880	3,320	2,509	2,193	1,783	3,340
Cebu Pacific Air	1,636	2,716	1,479	2,209	1,626	1,555	1,520	2,956
Air Philippines	1,898	2,998	1,784	2,748	2,098	1,933	1,748	3,193
1999								
Philippine Airlines	2,405	3,802	2,251	3,421	2,683	2,356	1,898	3,762
Cebu Pacific Air	2,107	3,307	1,963	2,822	2,095	2,035	1,495	3,004
Air Philippines	2,108	3,308	1,958	2,748	2,098	2,038	1,648	3,198

Source: Various airlines

In terms of airfares, Table 4 shows that PAL still charges the highest fare. Its cost base and leverage is very high relative to other airlines because of financial obligations that it incurred from loans which financed its fleet modernization program. Moreover, the airline's crew training is more stringent, given the state-of-the-art equipment that it operates, thereby making its cost of training higher than other airlines. Its greatest advantage, however, over the others is its good safety record.

As seen in Table 4, the price difference among the major airlines began to narrow down in 1999. This may be due to the fact that the new airlines were pricing below cost during their initial years of operation and accounting for initial losses as investment costs used to foster goodwill.

The situation in the secondary and tertiary routes, though, is different. Airlines flying these routes are able to charge higher-than-market fares because of the absence of competition as pointed out earlier. For example, Mindanao Express fare is equivalent to the business class fare charged by PAL for the same route when the airline was still servicing it. Paying a higher price for a lower class of service left the travelers worse off. However, it would also be unprofitable for smaller airlines to charge a lower fare because their cost spread is small, i.e., a small aircraft would only have a small number of passengers to share the flight cost. Hence, as long as airlines in the secondary and tertiary routes do not see a threat of competition, they will set their fares higher than they would in a more competitive environment.

Revenues. Since PAL dominates the passenger traffic, it would seem natural for it to capture the bulk of the industry's total revenue. Surprisingly, though, it has been registering a net loss that continues to balloon each year as gleaned in Table 5. These losses are a manifestation of PAL's inefficiency resulting from years of government interference and of operating in a monopoly status. PAL could have easily reduced its operating costs when it suffered financial and labor problems but the government did not allow its restructuring and reengineering. Hence, compared with other foreign and local airlines, PAL has more employees per aircraft (a sure sign of inefficiency), lower productivity and higher labor cost.

In contrast, PAL's major competitors (Air Philippines and Cebu Pacific) registered favorable financial performances except, understandably, during their initial years

Table 5. Net income (net loss) by airline, 1995-1999 (PhP million)

Airline	1995 Net Income (Net Loss)	1996 Net Income (Net Loss)	1997 Net Income (Net Loss)	1998 Net Income (Net Loss)	1999 Net Income (Net Loss)
Philippine Airlines	(227)	(2,182)	(2,502)	(1,639)	(2,854)
Cebu Pacific Air		(15)	6	66	
Air Philippines		(250)	8	3	
Grand Airways	(92)	(91)	(150)		
Asian Spirit			(22)	(13)	
Mindanao Express	(1)	(2)	(12)	(11)	
Total	*(320)*	*(2,541)*	*(2,671)*	*(1,594)*	*(2,854)*

Sources: Civil Aeronautics Board and various airlines

of operation. This indicates that competition in the industry enables the more efficient, low-cost airlines to operate at fares lower than pre-competition days but still remain profitable.

Asian Spirit and Mindanao Express are also incurring losses which may affect the future structure of the industry. The financial problem besetting the industry is an indication that only a few large efficient airlines may survive in the long run. The continued losses of the unprofitable airlines could drive them either to leave the industry or to merge with the profitable ones.

Growth in domestic air travel. With greater competition in the major routes, lower airfares and more available flights, domestic travel has grown rapidly after the deregulation (Figure 1). Competition arising from promotional and discount fares continues to open the air industry to travelers who previously could not afford to travel by air. However, the downsizing of PAL's operation in 1998, coupled with the Asian financial crisis that affected the inflow of foreign tourists to the country, resulted in a decline in passenger traffic in 1999. Nonetheless, Figure 1 shows that the potential demand for domestic air travel is high, something that could only be met if the airlines have enough capacity to provide the required air services.

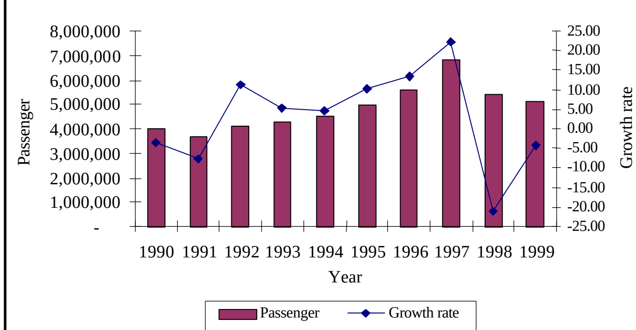
Areas for competition policy

Ideally, where effective competition exists, the need for regulation is reduced principally because the strong competition itself constitutes a self-regulating mechanism whereby excess profits and anti-competitive behavior are eliminated (Stewart-Smith 1999). The role of policies and regulations under a liberalized and deregulated environment is therefore to ensure that competition is effective. This becomes more important in an oligopolistic industry structure like the air transport industry where the failure of any one player would have a dramatic impact on the market power of competitors.

In this regard, this *Notes* concludes by identifying areas where competition policy should be defined and formulated.

Merger and acquisition. The fierce competition that resulted from deregulation in other countries has pushed a number of airlines either into bankruptcy or merger and consolidation. Merger and consolidation have both positive and negative effects. On the positive side, efficiency is enhanced as it allows airlines to achieve economies of

Figure 1. Domestic passenger traffic and its annual growth rate, 1990-1999 (in percent)



Sources: National Statistics Office and Civil Aeronautics Board

> The government should thus set up a system that would give airlines incentive to provide air services that otherwise would be money losers. Other countries have adopted several approaches in addressing this kind of issue. One approach is a competitive bidding for government subsidy, i.e., giving the subsidy to the airline that values it the most.

scale and scope by consolidating airline functions such as ground handling, repair and maintenance, marketing, and others. On the negative side, there is the fear that the end result will be a large airline becoming so dominant that it can exert considerable market power.

Domestic traffic in the country is relatively small. This by itself limits the number of airlines that would make an efficient domestic air transport industry. Given that only two of the country's airlines are currently profitable and that two of the existing airlines are substantially owned by the same person, the potential of seeing a merger and consolidation happening in the country should not be taken lightly. Hence, a policy on merger should be defined in such a way that mergers and consolidation would not result in reduced service and less competition. The government should weigh the efficiency-enhancing effects against the market power effects.

Essential air service. Cross-subsidization is no longer feasible under a deregulated environment. However, considering the country's archipelagic setting, there are remote areas where air services are deemed necessary on social grounds or for developmental reasons even if they are not commercially viable. The government should thus set up a system that would give airlines incentive to provide air services that otherwise would be money losers. Other countries have adopted several approaches in addressing this kind of issue. One approach is a competitive bidding for government subsidy, i.e., giving the subsidy to the airline that values it the most.

Intermodal competition. The shipping industry has become a source of competition for the air transport industry in providing transport services in the country's islands in the south. The system for providing government subsidy to air services in the tertiary routes or remote areas should therefore be designed in such a way that the efficiency arising from the intermodal competition will not be distorted.

Airfares. Finally, in terms of airfares, these should continue to be regulated in routes where air services are provided by only one airline.

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