

The Evolution of the Philippine Airline Industry

This article documents the changes in the Philippine airline industry since 1995, the year the government liberalized the civil aviation industry. A monopoly for more than 20 years, liberalization transformed the domestic industry into virtual duopolies in major airline markets while minor routes remain virtual monopolies, suggesting that the government’s goal to make the industry more competitive has not been realized.

By Wilfred Manuela

To spearhead policymaking for the passenger airline industry, the Philippine Government passed the Civil Aeronautics Act (Republic Act 776) in 1952. It gave the Civil Aeronautics Board (CAB) and the Air Transportation Office (ATO) the authority to promote adequate, economical, and efficient passenger airline service and those of other carriers at reasonable charges and promote competition between passenger airlines and other carriers to the extent necessary in order to ensure the development of the Philippine air transportation system. CAB administers the economic regulation of the industry while ATO supervises the technical aspect. The government liberalized the airline industry in 1995 under Executive Order (EO) 219.

The passage of two Letters of Instructions (151 and 151A) in 1973 ushered in a major policy shift for the industry, granting Philippine Airlines (PAL) a virtual monopoly of the country’s civil aviation industry. The passage of Presidential Decree 1590 in 1978 gave PAL a new franchise but with a provision that the franchise should not be interpreted as an exclusive grant of privileges. The industry, however, remained uncontested between 1973 and 1994 compelling the government to regulate fares to prevent PAL from engaging in monopoly pricing, capping the airline’s return on investment (ROI) to 12 percent. The ROI regulation allowed PAL to recover losses through government subsidies and to charge higher fares in high-density markets to subsidize unprofitable routes. Although extremely inefficient and a drain on government coffers, the

cross-subsidization allowed PAL to provide airline service in thinly traveled routes.

The Social Costs of Monopoly Power
Regulation of the US airline industry resulted in a government-supervised cartel (Keeler 1972; Poole and Butler 1999), while the Philippines’ one-airline policy resulted in a government-authorized monopoly. Although the government compelled PAL to subsidize missionary routes, increasing output for the entire domestic industry, the airline restricted the number of departures and passenger seats in a number of high-density markets.

The number of passenger seats in the Manila–Cebu and Manila–Davao markets increased 38 percent and 75 percent, respectively, from the previous year when Grand Air entered these markets in 1995 (see table 1), indicating that PAL restricted output before the industry was liberalized. The entry of three airlines in the Manila–Iloilo market in 1996 also resulted in a 61 percent increase in the number of passenger seats from a year earlier, while the Manila–Cagayan de Oro market experienced a 30 percent increase in the number of passenger seats between 1995 and 1996. PAL increased the number of passenger seats supplied in the Manila–Bacolod market by 42 percent



between 1994 and 1995 even without a competitor to preempt a potential rival, indicating that PAL has been restricting output before liberalization. Although the mere transfer from passengers to PAL does not, by itself, affect efficiency, the restriction of output below competitive levels in some markets has resulted in efficiency losses. Economists have estimated that the deadweight loss that results from restriction of output and higher prices ranges from a negligible amount to as much as 13 percent of gross national product and that even a relatively small deadweight loss may be associated with a large redistribution of wealth (Carlton and Perloff 1994). The resources used to hire economists, lobbyists, and lawyers to argue the case of PAL before the Philippine congress is also a cost to society because these resources could have been used for more productive ends. The airline monopoly in the Philippines resulted in financial losses

	1994	1995	1996	1997
Manila–Cebu City	1,196,265	1,647,797	2,080,542	2,207,365
Manila–Davao City	436,511	762,447	1,001,111	1,103,104
Manila–Iloilo City	396,054	416,624	669,931	762,100
Manila–Bacolod	287,531	408,947	421,150	593,854
Manila–Cagayan de Oro	300,302	309,435	401,169	548,618

Table 1: Total Passenger Seats in the Top Five Markets Source: Civil Aeronautics Board

for PAL, largely due to its mismanagement and inefficiency (Austria 2000), while limiting output in some markets may have resulted in higher fares before 1995 (see Manuela 2007).

The use of bigger aircraft by PAL after 1994 and the choice of bigger aircraft by Cebu Pacific and Air Philippines indicate that PAL has been using smaller aircraft than what is required by demand and passenger preferences before liberalization, resulting in more seats per flight.

The Role of CAB under Liberalization

The airline industry was liberalized in 1995 under EO 219, establishing the domestic and international civil aviation liberalization policy in the country. The EO stipulates the removal of restrictions on routes and flight frequencies, as well as government control on fares and charges. On market entry, the provision encourages at least two operators in any route and operators are free to leave any unprofitable routes. With regard to fare, markets with at least two operators are deregulated, while regulation still applies in single-airline markets.

It may appear on the surface that fares and flight frequency are still regulated by CAB due to the airlines' practice of informing CAB of their intentions. However, the practice of readily granting the airlines' requests for revisions in airfare and flight frequency and schedule in a matter of days seem to indicate that CAB has been implementing the provisions of EO 219. It simply monitors rates and charges in the domestic airline industry to promote competition and the welfare of consumers.

Austria (2000) observes that the role of CAB has been limited to regulating capacity, flight frequency, and airfare in the international air transport sector after 1995. CAB, however, still issues

operating permits, approves the routes that airlines serve, and still reviews and approves airfares in single-airline markets. CAB is also a member of the government panel that negotiates air service agreements with other countries.

Market Structure under Liberalization

The airline industry has changed drastically since 1995—PAL was privatized and restrictions on entry and capacity were lifted. Moreover, government controls on the number of domestic routes served and flight frequency have also been eliminated, as well as restrictions on fares, except in markets with only one airline. In the years following liberalization, the domestic airline industry has attracted as many as five entrants, but this number has dwindled to three following

Liberalization appears to result in a sizeable increase in passenger traffic in most of the 15 biggest airline markets in the country

the failures of Grand Air (national operator) and Mindanao Express (regional operator). The demise of new entrants in a relatively short period is comparable to the US experience in the early 1980's (Kahn 1988 and Borenstein 1992). With the entry of South East Asian Airlines (SEAir) in the scheduled airline sector in 2003, three airlines now compete in major markets (PAL, Cebu Pacific, and Air Philippines) while two airlines serve short-distance routes (Asian Spirit and SEAir), giving passengers at least two choices in some markets, offering them a range of fares, departure frequency, and service quality.

The steady decline in PAL's market share, from 96 percent in 1995 to 49 percent in 1999, indicates that competition has intensified after liberalization. The four-firm concentration ratio (CR4) measures the revenue share of the four largest firms to total industry

sales (Carlton and Perloff 1994). The CR4 for the period 1996–2003 is shown in table 2. The annual CR4 ratio indicates that the industry is basically an oligopoly with two dominant firms. PAL, however, still dominates the market with more than 50 percent share of the industry's revenues except in 1999 when it withdrew from missionary routes. PAL's revenue share has hovered between 50 and 54 percent although Cebu Pacific has managed to take away revenue share from the incumbent, indicating that Cebu Pacific is able to compete against PAL. Cooper (1999), however, argues that an industry must have more than six firms in order for it to sustain competition in the long run.

The Herfindahl-Hirschman Index (HHI), a measure of industry concentration, sums the squared market shares of each firm in the industry (Carlton and Perloff 1994). When the domestic airline industry is taken as a single market, the HHI is basically stable (see table 3). The US

Department of Justice contends, however, that an HHI above 1,800 is considered highly concentrated (Cooper 1999). The much higher HHI observed in the Philippines is due to the dominance of PAL in most routes and the near duopoly that exists between PAL and Cebu Pacific in almost all markets served by both airlines.

When the industry is divided into major (more than 20,000 passengers annually) and minor routes, major routes appear to be more concentrated than the entire industry, while minor routes are almost twice as concentrated as the entire industry (see table 3). The numbers seem to indicate that minor routes are virtually single-airline markets while major routes are virtual duopolies.

High-Density Markets under Liberalization

Liberalization appears to result in a sizeable increase in passenger traffic in most of the 15 biggest airline markets in the country (see table 4). Between 1994 and 2003, the number of markets with an annual passenger traffic of at least 100,000 increased from 11 to 15, although most of these markets are virtual duopolies.

One of the benefits of liberalization is the introduction of airline service in

Airline	1996	1997	1998	1999	2000	2001	2002	2003
PAL	75	65	64	40	50	54	52	53
Grand Air	12	8	3	—	—	—	—	—
Cebu Pacific	7	14	16	29	28	26	30	30
Air Philippines	4	9	13	26	17	16	12	13
Asian Spirit	1	2	2	5	5	4	4	3
Mindanao Express	1	1	1	—	—	—	—	—
SEAir	—	—	—	—	—	—	2	1
CR4	98	97	97	100	100	100	98	99

Table 2: Four-Firm Concentration Ratio Annual Revenue Share in Percent Source: Civil Aeronautics Board

new markets, either by the incumbent or the new airlines. Two airline markets that opened in 1996 (Manila–General Santos and Manila–Caticlan) experienced phenomenal growth in traffic between 1996 and 2003 (see table 4). The more than four-fold growth in passenger traffic in the Manila–General Santos market may be attributed to the opening of an alternate international airport and the upgrading of the seaport in General Santos, making it a leading destination for business and leisure in the region. The more than three-fold increase in the Manila–Caticlan market is indicative of Boracay’s rise as a premier tourist destination in the country. The introduction of direct flights between Manila and Caticlan, however, diverted traffic away from the Manila–Kalibo market. Kalibo used to be the gateway to Boracay before the introduction of direct flights to Caticlan.

Although airline travel is still out of reach to most Filipinos, the increased competition in the industry has provided passengers with discounted fares available throughout the year in various forms. As far as the traveler is concerned, the lower fares are the most tangible benefits of liberalization. PAL served unprofitable markets

Kahn (2002) notes that cabin space per passenger fell after deregulation in the US due to narrower seating to accommodate more passengers per flight, which results in higher load factors. In the Philippines, however, the average load factor has decreased after 1994 (see figure 1). The observation in the top five airline markets that load factors are lower under liberal-

departure delays have become the norm. In the US, travelers endure an undeniable increase in congestion, departure delays, and discomfort due to the enormous response of passengers to the availability of options with regard to fares, flight schedules, and aircraft technology (Kahn 2002). In the Philippines, the congestion at airports is exacerbated by the lack of

	1999	2000	2001	2002	2003
HHI Domestic Industry	3,517	3,928	3,758	3,731	3,598
HHI Major Routes	3,623	4,025	3,892	3,809	3,785
HHI Minor Routes	4,021	8,174	7,585	9,029	6,370

Table 3: *Herfindahl-Hirschman Index Source: Civil Aeronautics Board*

ization is contrary to the findings of Graham, Kaplan, and Sibley (1983) that load factors increased after airline deregulation in the US and that load factor tends to increase with distance. Overall, it appears that capacity has been growing faster than demand after 1994, at least in the five city-pairs. This may indicate that airlines are using a combination of bigger aircraft and more frequent flights as a means to compete for passengers and increase profitability. The decreasing passenger load factor, however, does not augur well for the airlines’ profitability. The lower load factor observed after liberalization indicates,

adequate infrastructure to support the increase in the number of departures after 1994. Although the current Medium-Term Philippine Development Plan addresses this issue in some respects, it will be some time before airport facilities are upgraded. Kahn (2002) adds that as for the supply side, the airline industry relies primarily on the government to provide adequate air traffic control facilities and personnel at airports. The practice of price discrimination among airlines has increased search costs, making passengers spend more time comparing fares among airlines and travel agencies (relative to 1994 when PAL was the only airline). While CAB admonishes airlines to have an annual ROI of 12 percent in order to reduce the probability of bankruptcy, the airlines tend to engage in cutthroat competition that has driven weaker competitors like Grand Air and Mindanao Express out of the market. The boon to passengers is that fares tend to decrease as competition intensifies (Bresnahan and Reiss 1991; Manuela 2007), but this may not be sustainable if some of these airlines fold-up.

Missionary Routes under Liberalization

One of the benefits of regulation is the acceptability of an inefficient market outcome due to the provision of airline service in communities that could otherwise not support an airline. Missionary routes have been cross-subsidized by PAL for decades. The practice of cross-subsidizing unprofitable routes persisted until 1998 when PAL, feeling intense competition from new entrants, abandoned its missionary routes in 1999 in order to focus on markets with the highest passenger traffic and confront Cebu Pacific, which has been grabbing market share from the incum-

City-Pair	Passenger Traffic		Percent Change	Number of Airlines	
	1994	2003		1994	2003
Manila–Cebu City	927,105	1,315,406	42%	1	3
Manila–Davao City	341,788	763,270	123%	1	3
Manila–Iloilo City	345,359	568,491	65%	1	3
Manila–Cagayan de Oro	249,251	450,861	81%	1	3
Manila–Bacolod	238,938	430,782	80%	1	3
Manila–Tacloban	204,366	303,476	48%	1	2
Manila–Zamboanga City	123,425	220,252	78%	1	3
Manila–Kalibo	201,447	218,595	9%	1	3
Cebu City–Davao City	110,675	175,692	59%	1	2
Manila–Puerto Princesa	110,715	168,641	52%	1	3
Manila–Dumaguete	79,372	149,804	89%	1	2
Manila–Caticlan	26,102	147,813	348%	1	2
Manila–General Santos	27,355	143,541	425%	1	2
Manila–Butuan	32,149	106,396	231%	1	2
Cebu City–Iloilo City	98,137	104,436	6%	1	2

Table 4: *Passenger Traffic in Top Fifteen Airline Markets. Source: Civil Aeronautics Board. Manila–General Santos and Manila–Caticlan data are 1996 and 2003*

through cross-subsidy during regulation by inflating fares in profitable markets. This practice, however, has become untenable in a liberalized environment since PAL has to match the lower fares of its rivals in order to stay competitive (Austria 2000), which led the airline to abandon its service in missionary routes.

however, that domestic flights are less crowded, enhancing the comfort of flying and thus the quality of service (Jorge-Calderon 1997).

There are also downsides to the increase in passenger traffic. Airports have become more congested due to more flights (see figure 2) and flight

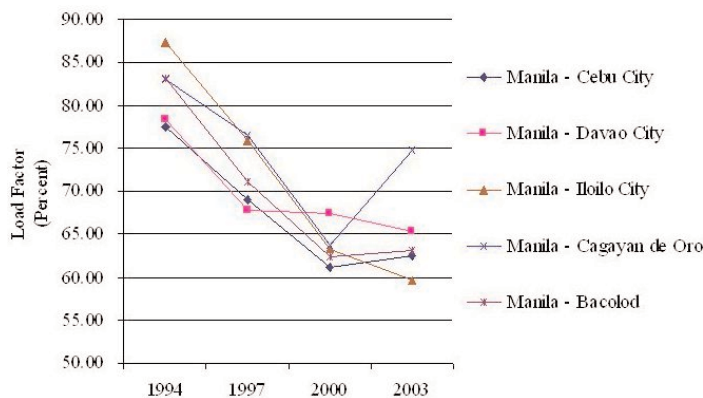


Figure 1: Passenger Load Factor in Top Five Markets. Source: Civil Aeronautics Board

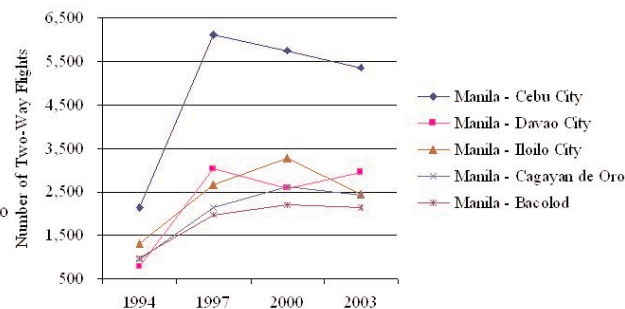


Figure 2: Number of Roundtrip Flights Annually in Top Five Markets. Source: Civil Aeronautics Board

bent in major routes. As a result, the number of routes that PAL served fell from 56 markets in 1998 to 22 markets in 1999 (see table 5). Some of the missionary routes abandoned by PAL were later served by Asian Spirit from 1999 onwards and SEAir starting 2003.

The number of missionary routes served by Asian Spirit and SEAir, however, is less than the number of routes abandoned by PAL. If we account for the overlap in the operations of the two airlines, some 11 markets that used to be served by PAL in 1998 have lost airline service. Another negative impact of liberalization is the reduction in the number of passenger seats in some markets, although improvements in land transport and sea transport may have contributed to the decline in demand, and thus capacity. Less frequent service in seven markets (see table 6) after liberalization resulted in sizeable declines in capacity between 1994 and 2003 due to the airlines' reallocation of resources to more profitable routes.

Despite the provisions of EO 219 that fares remain regulated in markets served by one carrier, airlines serving secondary and tertiary routes charge higher fares due to the absence of competition (Austria 2000), charging the equivalent of PAL's business class fares. The higher fare is necessary to cover for the higher cost per seat-kilometer on smaller aircraft that are used in these routes, making shorter flights cost more per kilometer than longer ones (Kahn 2002). The higher fare observed in these routes is consistent with the findings of Graham, Kaplan, and Sibley (1983) that, following deregulation, fares increased in short-haul markets in the US.

Conclusion

This article has presented the changes in the Philippine domestic airline industry since 1995.

The findings suggest that the impact of liberalization on the domestic industry is mixed. Departure frequency increased in the most profitable markets, while smaller communities either lost service altogether or experienced sizeable declines in departure frequency and capacity. Furthermore, some markets served by a single airline have relatively higher fares, consistent with the impact of deregulation on the US domestic airline industry.

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