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[Editorial Review]

## The Effects of Airline Deregulation: A Comparative Analysis\*

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### Abstract

**Purpose** - The purpose of this study is to explore and examine the effects of airline deregulation in the United States and South Korea as a comparative analysis. The study focuses on identifying the purposes of airline deregulation and analyzing its benefits and consequences.

**Research Design, Data, and Methodology** - This is a case study, a comparative method, which analyzes and measures the benefits and disadvantages of airline deregulation in both the United States and South Korea.

**Results** - Airline deregulation removed unnecessary and ineffective government controls, resulting in more efficient airline industries in both countries. However, the negative consequences are much greater than the benefits of airline deregulation.

**Conclusion** - The purpose of airline deregulation was to foster an efficient and effective environment in airline industry, and clear evidence of the positive intended effects of airline deregulation e.g., increasing domestic competition, decreasing airfare, increasing productivity, and removing unnecessary government regulations in the beginning of airline deregulation. However, the current state of airline industry in both countries depicts only the consequences of airline deregulation.

**Keywords:** Airline Deregulation, Korea Airline Industry, U.S. Airline Industry.

**JEL Classifications:** K2, L5, L9.

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### 1. Introduction

Many scholars and practitioners suggest that airline deregulation drastically transformed the airline industry throughout the world and that airline deregulation of the United States in 1978 lowered the average airline fares, removed unnecessary government regulations, generated greater number of flights and non-stop destinations, and increased productivity (Borenstein & Rose, 2008). Baily (2010) claims that the 1978 Airline Deregulation Act was one of the greatest microeconomic policy accomplishment. Since the airline deregulation, the airline industry of the

United States experienced fierce competition, mergers and acquisitions, financial losses and bankruptcies, and union issues and disputes until 2008. The major airlines in the United States, American, Delta, Southwest, and United airlines, started to see the profits in 2009, and these four domestic airlines posted record profits in 2015, about \$22 billion, (Mouawad, 2016). However, the United States Justice Department announced that they are investigating the major airlines for possible price fixing or collusion of airfares in 2015. According to Harwell, Halsey, and Moore (2015), "Lawmakers and consumer advocates have routinely called for investigations into whether airlines, to boost price, limit the number of tickets they sell, with Senator Richard Blumenthal (D-Connecticut) recently alleging wide spread anticompetitive, anti-consumer conduct (p. 1)". Another Senator, Charles Schumer (D- New York) suggested, "It is hard to understand, with jet fuel prices dropping by 40 per-

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cent since 2014, why ticket prices haven't followed. We know that when airlines merge, there is less price competition. What we need now is a top-to-bottom review to ensure consumers aren't being hurt by industry changes" (Naylor, 2015, p. 1).

Did airline deregulation actually help domestic airline industry to form an oligopoly in the U.S. and duopoly in Korea? In general, the oligopolies, the few major airlines in the United States in this case, are competitors, but they tend to cooperate with each other to benefit as an oligopoly while consumers pay for their gains. The purpose of this study is to explore and examine the effects of airline deregulation in the United States and South Korea. The study focuses on identifying and analyzing the purpose of airline deregulation including its benefits and consequences.

## 2. Airline Deregulation

Although there were many reasons, such as rising fuel costs, recession, and inflation, for transforming the United States airline industry, below the target rate of return of the industry in 1970s was the major reason to enact the Airline Deregulation Act in 1978 (McDonnell, 2015). Additionally, stagflation, which is the combination of high rates of both inflation and unemployment over the period, and the economic inefficiency generated by the massive regulated economic sectors during the 1970s were some of the other reasons for the airline deregulation. According to Brown (2014), there were three major sectors extensively regulated by the government: FIRE sector (finance, insurance, and real estate), public utility sector, and transportation sector, including the airline industry.

The reason for the extensive regulation was to prevent moral hazard problem, natural monopoly, price discrimination, and fierce competition. During 1950s and 1960s, the airline industry thrived with rapid technical advance of the postwar economy, and the regulation blocked new entries except intrastate airlines, California, Texas, and Tennessee (Baily, Graham, & Kaplan, 1985; Caves, 1962). Furthermore, the policies associated with economic regulation were suppressing competition among regulated industries, including the airline industry. The results of Brookings Institute's program review of the regulation of economic activity found the empirical evidence of the inefficiency in economic regulation in the '60s.

The stagflation and regulated economic inefficiency in the '60s eventually set the table for the airline deregulation in the '70s, and President Gerald Ford used his deregulatory agenda, open competition and pricing flexibility, to combat inflation (Derthick & Quirk, 1985). This deregulation

movement ensured the incoming president and its administration to plan and implement industry deregulation. During the Jimmy Carter's presidency (1977-1981), Alfred Kahn, the chair of Civil Aeronautics Board (CAB), changed and codified the CAB policy to give airlines to choose their own fares and routes and to protect airlines flexibility after his tenure at the CAB. Alfred Kahn and his altered CAB policy to protect airline flexibility was the groundwork of enacting the Airline Deregulation Act of 1978. The flexibility made airfares to fall and airlines to increase revenues and promote pro-competitive reform, and the Congress approved and President Carter signed the bill on October 28, 1978. The bill gradually removed regulatory authorities, and the route entry became free. The CAB control of airline fares terminated, and the CAB was dissolved in 1985. Its duties on air service were moved to Department of Transportation (Baily, Graham, & Kaplan, 1985).

## 3. Post-Deregulation

In general, overall performance of airline industry after the Airline Deregulation Act of 1978 improved, especially in the significant entry of airlines and cutting of airfares. The airlines used the pricing flexibility to offer frequent flyer programs and supersaver rates to create competitive advantages. However, the initial benefits gradually seemed to dissipate as the largest airlines benefited the most from deregulation. The computerized reservation system during 1980s gave competitive advantages to the largest and system controlled airlines, and a single major airline controlling the majority of the passenger traffic of a specific hub was another problem created by the deregulation (Levine, 1987).

Initially, there were two major expectations from the deregulation: many low-cost airlines would enter the industry and the major airlines before deregulation would be greatly damaged by new and cost-efficient airlines. There were many new and low-cost entries, but the major airlines remained strong because of their ability to reorganize the routes and to manage hubs and its network efficiently to crush the new and low-cost entries. The hub and spoke networks use many small flights to move passengers from many destinations to a center hub where passengers can change aircraft to be flown to their final destinations. This re-routing and use of a center hub strategy improved airline operational efficiency and utilization of equipment, and the rapid advancement in technology made this efficiency possible (Baily, Graham, & Kaplan, 1985).

However, if the efficiency in airline industry and airline operations is one of the successful factors of airline deregulation, then the issue of customer service is one of the ma-

major negative consequence of deregulation. Shrinkage of seating space, termination of free in-flight meals, charging of checked baggage and preferred seats, and reduction or cancellation of the number of flights from the small hubs are a few examples of the issues of service quality (Morrison & Winston, 1995).

In the beginning years of the post-deregulation, low-cost competition intensified and this competitive environment stayed for a while until new entrants realized that their resources or markets were shared by everyone in the industry, which made it difficult to compete with the major airlines before deregulation: "The combination of regulations (Department of Transportation and Federal Aviation Administration), external standards (airport, booking systems), shared resource pools (aircraft, fuel, labor) and markets (city pairs, fare classes) leave airlines with little room to maneuver" (Hannigan, Hamilton, & Mudambi, 2014, p.142). The costs of fuel, labor, aircraft, and airport operations are significant to airlines and are shared resources, and airlines don't have any control over these costs and their suppliers because they are price-takers (Porter, 1980). Low cost carriers have caused the market disruption in the beginning of deregulation, but it was only temporary. Therefore, maintaining a network of flights and routes is the core competitive advantage in the airline industry, and those airlines with network advantages are likely to charge higher airfares. The results of the study using a resource-based view and competitive dynamics to examine the US airline industry from 1996-2011 suggests, "in mature industries with common sources, there may be significant limitations to how firm can compete," and "the price is the main driving force behind performance and operational efficiency is the dominant capability for airlines" (Hannigan, Hamilton, & Mudambi, 2014, pp.149-150).

Rose (2012) on the other hand suggests, "The airline industry's considerable and persistent turmoil over the nearly 35 years since deregulation has been surprising and troubling. Much has been made of low and volatile aggregate profits and high rates of firm turnover and bankruptcies, particularly by those calling for a return to regulation" (p.378). She believes aggregated losses, adverse demand oil price shocks, union bargaining are some of the variables that caused volatility in the industry and not related with deregulation. [She also indicates that the competition and new entrants of low cost carriers (LCCs) drastically increased and the ability of the higher costs of major airlines decreased: "More than 60% of US passengers in 2010 traveled on routes with LCCs presence, and the aggregate LCCs shares of passenger miles has tripled since 1990, and LCCs expansion also appears coincident with some reduction in fare dispersion" (p. 378).

#### 4. The Effects of Airline Deregulation

"The U.S. airline industry has been plagued by financial losses, bankruptcies, union disputes, and expensive mergers over the past decade. Since 2009, profitability has returned for most airlines, and the four largest U.S. based airlines each reported operation profits of over \$2 billion in 2014" (MIT, 2015)." The total operation profits of the four major airlines, American Airlines (\$7.6), Southwest Airlines (\$2.2), Delta Airlines (\$4.5), and United Airlines (\$7.3) were about \$22 billion, and the primary reason for the huge profits was the low jet fuel price (Mouawad, 2016). However, passengers have not seen any changes in customer services or decreases in airfares because the demand is rising and each major airline is charging more for flights at their dominant airports or hubs, e.g., United Airlines with a merger with Continental in 2010, accounts for 70 percent of flights into Newark Airport. Therefore, there is no incentive for the major airlines to cut airfares unless policies or regulations from the Department of Transportation encourage or force them to decrease airfares. After successive mergers in airline industry, the big four airlines account for 80 percent of all domestic seat capacity. While the Justice Department investigates the possible price collusion among the big four airlines, the major airlines are not increasing seats to meet the demand to maintain the airfares. Furthermore, these airlines continue to find more ways to increase their profits by charging for preferred seats, checked in bags, priority boarding, and more business class seats in a plane by shrinking legroom in the economy class. The LCCs, such as Spirit, Frontier Airlines, and Allegiant Air, do offer discounted tickets for specific routes, but the major airlines are not intimidated by these low priced tickets but, in fact, increased their airfares. One of the frequent flier passenger suggests, "We've allowed the industry to monopolize. As a result, they have enormous pricing power" (Mouawad, 2016, p. 3).

Harwell, Halsey, and Moore (2015) indicated that the U.S. Justice Department is investigating possible price collusion among the major four airlines, keeping airfares high when jet fuel price is at the lowest level. Although the four major airlines deny and refute the claim of price collusion and suggest, "It is customers who decide pricing, voting every day with their wallets on what they value and are willing to pay for" (p. 2), both lawmakers and consumer advocates are supporting the decision of the Justice Department to investigate the airlines. Some scholars and practitioners in the airline industry suggests, "reduced air competition had led to climbing ticket prices, reduced flights and denser cabins: a natural consequence of the merger that eroded competition" (p. 3). This is not the first time the major net-

work airlines have behaved anticompetitively, but their anti-competitive conduct this time is strictly against consumers by keeping airfares high.

In 1998, many press reports and customer advocates reported the practice of predatory pricing by the major airlines, but the Department of Transportation and Justice Department sided with the major airlines. One of the predatory pricing examples of the major airlines is when United Airlines decreased their airfares 30 percent below their costs to match those of Frontier Airlines. United Airlines and then recoup their loss by increasing their airfares at their major hubs, where no competition exist. This type of practice was seen as reasonable to the Department of Transportation because they believe the majority of consumers gain benefits because of low airfares (Brady & Cunningham, 2001). There were ten major airlines and many national and regional airlines before deregulation in 1978, eleven major and many national and regional airlines in 1994 (Brady & Cunningham, 2001).

## 5. Korea Airline Deregulation

Before airline deregulation in Korea, the Korean airline industry was characterized as duopolies. Korean and Asiana Airlines were the two major airlines without LCCs, and these two major airlines were targeted heavily on international routes. The first LCC entered the Korean airline industry in 2004, and a growing number of LCCs and passengers using LCCs in Korea have increased since then. Prior to the Korean Airline Deregulation Act in 2008, Korean government had full control of licensing airlines in accordance with their policies, and this helped the two major airlines to keep high airfares and restrict new LCCs from entering the industry. Those licensing restrictions, including aircraft size and age, were removed, and Deregulation Act of May 2008 opened the industry. Aggregated market share by LCCs reached about 40 percent in domestic market in 2011, and average domestic airfares decreased.

Both Korean and Asiana Airlines were fined for anti-competitive behavior in 2010: threatening travel agencies to limit ticket sales of the independent LCCs or they will withhold tickets for the peak season on popular routes. The two legacy airlines have further sought to limit independent LCCs by using their own LCCs to compete with independent LCCs without any government regulations or policies (Sun, 2012). As of 2015, there are seven airlines in the market, two major and 5 LCCs, and the five LCCs focus heavily on domestic market, although some have been able to expand into Asian countries. The airfares provided by LCCs for domestic routes dropped approximately 80 per-

cent compare to those of the major airlines. It is almost impossible for LCCs to expand into international market due to the two major airlines and their dominance in international operations. Even so, the Korean government still believes their LCC market is in the growing stages, while both the European and North American market has matured (Air transport Management, 2015; Worldwide Air Transport Conference; 2013).

## 6. Discussion

There is clear evidence of the positive intended effects on airline deregulation e.g., increasing domestic competition, decreasing airfare, increasing productivity, and removing unnecessary government regulations. President Carter's administration and Alfred Kahn deserve their ingenious efforts to initiate and execute deregulation, and many countries saw the benefits of the U.S. airline deregulation and enacted their own airline deregulation, e.g., EU airline deregulation in 1993 (Selwitz, 1993) and Korean airline deregulation in 2008 (Sun, 2012). Many scholars and practitioners overwhelmingly supported the idea of deregulation in airline industry, and they believed removing government regulations was the significant step to promote and establish a free market environment where the market demand and supply are the key factors to determine the price.

However, antitrust and anticompetitive behaviors of the major airlines in America and Korea have led to the opposite effect when the purpose of airline deregulation was to promote free market and not allow major airlines to abuse the system to make more profits at the expense of potential competitors or consumers. The airline deregulation in the U.S. allowed many mergers and acquisitions of the U.S. airlines and in Korea led to the creation of dependent LCCs by the major Korean airlines to either reduce competition or compete with other independent LCCs. Some argue that airline deregulation actually provided legitimate and legal power to the major airlines to monopolize the industry. "Reduced air competition had led to climbing ticket prices, reduced flights and denser cabins: a natural consequence of the merger that eroded competition" (Harwell, Halsey, & Moore, 2015, p. 3). As of today, the airline industries in both America and Korea are operating by oligopolies and duopolies, and consumers are dealing with these major airlines' anticompetitive and antitrust behaviors while both governments witness these illegal activities as a bystander. Is this what Alfred Kahn and the Carter administration expected from their deregulation initiatives?

Alfred Kahn (2004), an economist and the father of airline deregulation claimed that airline deregulation was a

total success despite some unexpected challenges, recession, terrorism, and war. He blamed the government for not enforcing the antitrust laws when the U.S. airline industry was going through the significant turbulence, lamentable failure of the administration to enforce the policies of the antitrust laws (Khan, 1988b, p. 318). Kahn used simple concepts of microeconomics to promote and explain the need of deregulation and later claimed, "Despite complaints about crowded flights and poor service quality, the airline industry and customers are satisfied with the results of deregulation where increases in price competition, load factors, and in-flight amenities decreased average airfares" (Rose, 2012, p. 377). The concept of price competition does not apply to the industry where oligopolies or duopolies monopolize the market: they have legal power to keep airfares high when jet fuel price decreases drastically, to lower airfares to drive their competitors out, and to create their own LCCs to compete with competitors.

In conclusion, that the earlier notion of airline deregulation actually helped airline industry to form a legal oligopoly is absolutely correct based on Kahn's suggestions above. The U.S. government allowed and supported many mergers and acquisitions to create the four major oligopolies in the U.S. airline industry, and the Korean government allowed duopolies with their own LCCs in the Korean airline industry. Although Kahn blamed the government for creating the monopolized airline industry today by not enforcing antitrust or anticompetitive laws, consumers are the only ones who are dealing with false promises of deregulators and its supporters. Kahn supported the concept of the free market enterprise system and applied economics concepts to resolve the problems in a regulated airline industry. However, Kahn, as one of many economists, couldn't see the long term effects of deregulation because he was so focused on a simple and short-term cost benefit analysis. Traveling through airplanes and using internet, cable TV, and cell phone services are no longer luxury items today. People need these services to satisfy their basic and security needs, and they are part of our lives. The case of airline deregulation apparently shows more negative effects of removing government policies on a specific service industry that many people rely on to live their daily lives.

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