
**INFLUENCE OF STRATEGIC ALLIANCES ON THE
PERFORMANCE OF AIRLINE CARRIERS REGISTERED
UNDER IATA: A LITERATURE BASED REVIEW**

Thendu Bedan Kimeria¹, Dr. Kariuki Paul², Prof. Muturi Willy³ & Dr. Wanjohi Peter⁴

**¹PhD Candidate, Strategic Management, Jomo Kenyatta University of Agriculture and
Technology**

^{2,3,4}Lecturers, Jomo Kenyatta University of Agriculture and Technology

Email: bthendu@gmail.com

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ABSTRACT

Purpose: Most of the airline companies want to serve beyond their current markets and extent their networks. Airlines use alliances as a means to achieving global service networks, getting access, and establishing identities in new markets without providing aircrafts, and providing services which would be unprofitable if operated alone. On the other hand, consumers have demonstrated a preference for dealing with airlines with large service networks to minimize their cost of travel, to get better services, and to take advantage of more attractive frequent flyer programs. Alliances can also lead to better access at congested airports, where landing restrictions, lack of landing and take-off slots, and other constraints would otherwise exist. However limitations and restrictions to reach foreign markets pushed companies to forge strategic alliances. Recruitment and training of pilots, engineers, air traffic controllers and security screeners is rather expensive pushing airlines to form alliances.

Methodology: Through literature based review, this paper determined influence of strategic alliances on the performance of airline carriers registered under IATA. Results: It was found that strategic alliances come along with numerous benefits that include reduced operational costs resulting from joint purchasing, economies of scale, economies of density, larger profits from pricing on code sharing routes, marketing and branding benefits, control on barriers to entry, knowledge sharing, customer benefits and reducing level of the competition. However, it is not always factually true that strategic alliances will result to performance growth of airline operators in strategic alliance agreement. Airlines joining the alliance group may not necessarily achieve significant improvements in their performance.

Conclusions and Policy Implications: From this paper, it can be concluded that strategic alliances may result to enormous benefits that include sharp reduction in airlines operational costs, improved economies of scale, reduced trade barriers, knowledge sharing, customer benefits and reducing level of the competition. It is also concluded that not every time an airline joins an alliance will reap the benefits associated with it. Airlines joining the alliance group may not necessarily achieve significant improvements in their performance. Through, formation of

strategic alliances, unnecessary competition in the airline industry can be eliminated thus minimizing operational cost reduction, increasing economies of scale and expanding market share. Moreover, airlines can share human resources thus reducing hiring costs while facilitating knowledge and skill sharing in the airline industry. It is also evident that not all strategic alliances formed results to enhanced performance of airlines. Thus, an airline should first determine whether it is viable to join an alliance by conducting proper market study and also by engaging airline operations experts in the matter. The airline should also evaluate her position in the market and chances of reaping benefits in case it enters into an alliance.

Key words: *Strategic alliances, performance, airline carriers, IATA*

1. INTRODUCTION

Air industry plays a key role in the development of the world economy, stimulating exchanges between countries and facilitating international economic relations. Thus, air transport is a major industry in the world economy on its own, with air travel revenues usually accounting for about 2.4% of global GDP (ICAO report, 2018). In the wake of prolonged world-wide recessions and skyrocketing oil prices, the airline industry lost \$16 billion in 2008 and \$9.9 billion in 2009 (Zacks, 2011). Although there is a growing optimism for the revival of the airline industry with the recent profit gains, the global airline industry has been hit hard by rising fuel prices, unstable yields, weak traffic volumes, security hassles, and increased taxation for the last few years (Button, 2017). To make it worse, the competition in the global airline industry gets tougher after a series of deregulations and open skies agreements across the world that liberalized commercial aviation services and then opened up international airports and transcontinental routes to full competition.

Still, the provision of cross-border air services is very constrained by international regulation (Muchemi, 2016). Since the Chicago Convention of 1944 established the rules of airspace, international air transport markets have been governed by bilateral air service agreements (ASAs) between national governments (Iatrou & Alamdari, 2015). This implies that the country of registration of an airline and the bilateral agreements of that country with other countries has determined the airline's possible routes of service and the conditions of capacity and frequency offered.

To survive in this deteriorating market condition, many international flag carriers chose to consolidate their operations and created economies of scale through strategic alliance. Airline strategic alliances take the form of code-sharing, equity swaps, insurance pooling and joint governance (Min & Joo, 2016). Airline alliances refer to a distinct form of the market entry mode which provides airlines with a low-cost means of gaining access to new markets and local infrastructure such as airports. One of the most popular and simplest forms of airline alliances is code sharing which is a commercial agreement between two airlines (operating and marketing carriers) that allows an airline (marketing carrier) to put its two-letter identification code on the flights of another airline (operating carrier) as they appear in computer reservations systems (Garg, 2016). A distinctive element in the airline business is that most of the largest carriers in the world are enrolled in one of the three existing international strategic alliances Oneworld, Star Alliance, and SkyTeam which are often recalled as the global airline alliances. These networks

of airlines provide their members with a rich international route portfolio at a marginal cost that would be difficult to be reached through organic growth.

Most of the airline companies want to serve beyond their current markets and extent their networks. However limitations and restrictions to reach foreign markets pushed companies to forge strategic alliances. Airlines use alliances as a means to achieving global service networks, getting access, and establishing identities in new markets without providing aircrafts, and providing services which would be unprofitable if operated alone (Butigan & Benić, 2017). On the other hand, consumers have demonstrated a preference for dealing with airlines with large service networks to minimize their cost of travel, to get better services, and to take advantage of more attractive frequent flyer programs. Alliances can also lead to better access at congested airports, where landing restrictions, lack of landing and take-off slots, and other constraints would otherwise exist (Teo & Leong, 2012).

Moreover, alliances are theorized to reduce costs through economies of scale associated with joint marketing, maintenance, shared flight, fuel, ground facilities, training, computer reservation systems, and through elimination of duplication and redundancy in operation (İlarslan, Vurur & Biyikli, 2014). Through alliance cooperation, airlines can improve their profitability and market share, benefiting from schedule convenience, connectivity and flow improvement. Alliance activities help airlines to reduce the cost per passenger, taking advantage of economies of scale, scope and density across geographical boundaries due to increased traffic, joint advertising and equipment sharing, as well as accessing resources that would otherwise not be attainable (Villar, Tafur & Jia, 2016). Thus, the overall aim of airline alliances is considered to be enhancing partner airlines' competitive position and also achieving higher profits for each of the partners.

Airline growth and competitive strategies not only include cost cutting measures and better revenue management tools, but also strategic alliances with other airlines. In many cases the airlines have entered into code sharing agreements to maintain or expand network coverage, and international code sharing has now become part of bilateral negotiations (Min & Joo, 2016). Airlines use alliances as a means to achieving global service networks, getting access and establishing identities in new markets without providing aircrafts, and providing services which would be unprofitable if operating alone (Muchemi, 2016). The list of these seven alliances by order of formation is: Global Excellence Alliance (1989), Wings (1989), Qualiflyer (1992), Atlantic excellence (1997), Star Alliance (1997), Oneworld (1999) and SkyTeam (2000) with Wings, Star Alliance, oneworld and SkyTeam controlling over 56% of world Revenue Passenger Kilometers.

IATA is a body that registers and manages group of airlines by inspecting technical well-off of airlines and flight price determination. From 57 founding members in 1945, IATA now represents some 290 airlines in 120 countries (IATA report, 2019). Carrying 82% of the world's air traffic, IATA members include the world's leading passenger and cargo airlines (IATA report, 2019). IATA membership is open to airlines operating scheduled and non-scheduled air services that maintain an IATA Operational Safety Audit (IOSA) registration.

Kenyan airline industry is primarily dominated by one player, which is Kenya Airways. Other players are Five Forty, & Jet link which are small compared to Kenya Airways. Kenyan airline industry is regulated by The Kenya Airports Authority (KAA), which was established in 1991 under KAA ACT CAP, Chapter 395 of the Laws of Kenya, to provide facilitative infrastructure for aviation services and Kenya Civil Aviation Authority (KCAA) that was established by the Civil Aviation (Amendment) Act, 2002 to plan, develop, manage, regulate and operate a safe, economically sustainable and efficient civil aviation system. According to KAA the airline industry business both in cargo and passenger has been growing at a rate of more than 9% from 2005 to 2011. In Kenya, airlines have embraced formation of strategic alliances with other organizations to be able to compete effectively in the global arena (Kyalo, 2016). Strategic alliances provide an avenue for airlines to grow; such growth is seen in the number of destinations an airline is able to service. The need for cooperation arises mostly from the desire of major airlines to offer global services, increase service quality, exploit size economies and gain market power. Competition threats from multinational players across the globe are increasingly making domestic airlines more conscious of their vulnerable state and incentivizing them to proactively engage in an effort to ensure their sustainability in these turbulent times (Farah, Munga & Mbebe, 2018). KQ is a member of Sky team alliance. Despite the previous strategies implemented by KQ portfolio decisions such as the Jambo Jet, route expansion, optimization, efficiency and expansion related and partnership agreements the airline has poorly performed financially with the latest being the financial year 2014 huge loss amounting to Ksh. 7.9 billion attributed to harsh economic and geopolitical conditions (Mutema, 2016). KQ also posted a Ksh. 26 billion loss in the fiscal year 2015/2016 (NSE, 2016). In 2016/2017 Kenya Airways recorded net loss of Ksh. 10.202 billion. In the year 2017, KQ reported a net loss of Ksh. 7.5 billion when higher costs offset a jump in revenue. In 2018, the carrier posted an adjusted full year loss of Ksh.9.4 billion with a corresponding full year loss of Ksh.683 billion in spite of a notable increase in revenues to Ksh.114.2 from Ksh.80.8 billion in 2017. In FY 2019, Kenya Airways announced a more than doubled loss of Ksh.8.6 billion though a slight drop from Ksh. 9.4 billion in 2018 (KQ annual report, 2019).

2. PROBLEM STATEMENT

Most of the airline companies want to serve beyond their current markets and extent their networks. However limitations and restrictions to reach foreign markets pushed companies to forge strategic alliances. Recruitment and training of pilots, engineers, air traffic controllers and security screeners is rather expensive pushing airlines to form alliances (Chao & Kao, 2015). Airlines use alliances as a means to achieving global service networks, getting access, and establishing identities in new markets without providing aircrafts, and providing services which would be unprofitable if operated alone. On the other hand, consumers have demonstrated a preference for dealing with airlines with large service networks to minimize their cost of travel, to get better services, and to take advantage of more attractive frequent flyer programs. Stubbings and Curry (2012) in their report referred to collaborative travel as the future in the airline industry, one form such collaboration takes is through strategic alliances.

Strategic alliance is technique for pooling of resources and sharing of costs and risks in a venture (Min & Joo, 2016). Determinants of strategic alliance in the airline industry vary from airline to airline, but they have similar needs which include; need for automatic transit systems that focus

on flow of people rather than individuals, wider route network, better privileges like frequent flying schedules, seamless customer service, lounge access, smoother transfer of crews, passengers and cargo, luggage handling and airplanes (Lin, 2013). Several airlines that have gone under receivership were because of the increase in cost of operations and the inability of the airline to reduce/avoid such costs. Global airlines that have been able to weather this storm have not done it alone; most of them are in some sought of collaboration with other airline (s).

Kenya Airways has been in joint venture with KLM, that enabled grow a decade ago. However, Kenya Airways has been making losses in the recent years. According to Kamau and Kavale (2015), in the State of the Airline Industry currently, the Kenyan sky is dominated by the European and Middle East carriers. These carriers for example, Qatar airways, Emirates, British Airways and KLM Royal Dutch airlines are well known internationally, and have better equipment compared to local carriers (Kyalo, 2016). They also have more to offer in terms of connectivity to the World. The stiff rivalry has led to restructuring in the local commercial airlines and also cancelation of some flights in a bid to cut cost and remain competitive. The aviation industry has re-shaped itself to cope with investing in new fleets, adopting more efficient processes, carefully managing capacity and consolidating larger customer base. In 2016/2017 Kenya Airways recorded net loss of Ksh. 10.202 billion. In the year 2017, KQ reported a net loss of Ksh. 7.5 billion when higher costs offset a jump in revenue. In 2018, the carrier posted an adjusted full year loss of Ksh.9.4 billion with a corresponding full year loss of Ksh.683 billion in spite of a notable increase in revenues to Ksh.114.2 from Ksh.80.8 billion in 2017. In FY 2019, Kenya Airways announced a more than doubled loss of Ksh.8.6 billion though a slight drop from Ksh. 9.4 billion in 2018 (KQ annual report, 2019).

3. LITERATURE REVIEW

Due to today's business environment, the importance of strategic alliances has become a great point of discussion in organizations. At the same time, strategic alliances are becoming more and more prominent in the global economy. Strategic alliances are fast becoming a trend in the corporate business (Iatrou & Alamdari, 2015). In fact, the biggest change in corporate culture and the conduction of business is the rapidly growing number of corporate deals based not on ownership, but on partnerships. Strategic alliances are a common phenomenon in the airlines industry. Some of the largest alliances in the air industry include Oneworld, Star Alliance, and SkyTeam. Amid that, the success of alliances in industry is not guaranteed (Rajasekar & Fouts, 2009). The success rate of alliances is perceived by insiders to be about 50 percent, and as a measure of excellence in alliances, only 9 percent of companies believe that they have success in 80 percent or more of their alliances (Payán-Sánchez, Pérez-Valls & Plaza-Úbeda, 2019). In the airline industry, carriers enter into cooperative arrangements to generate greater revenue, to reduce unit costs from economies of size and to minimize or share risks by strengthening their position out of their domestic market. Some of major airline strategic alliances include; Wings, Star Alliance, Oneworld and SkyTeam.

Wings is the non-official name for the alliance of KLM, Northwest Airlines and Continental Airlines. KLM and Northwest have had a far reaching alliance agreement since 1989, with common branding, purchasing, management, marketing and FFP, although equity stake that KLM had in Northwest was sold after disagreement of control of Northwest. In 1999 Northwest

Airlines bought a stake in Continental Airlines, and announced co-operation including code sharing and frequent flyer participation. In 1998, KLM and Alitalia concluded an alliance agreement, setting up passenger and cargo joint-ventures to manage the airlines' operations and marketing but the agreement was dismantled in August 2000. KLM and Northwest received antitrust immunity from the US DOT in November 1993.

Star Alliance was launched in May 1997, by Air Canada, Lufthansa, SAS, Thai and United airlines to create a global airline network. Varig joined the alliance in October 1997, with Ansett Australia and Air New Zealand in March 1999. Ansett subsequently left as it ceased operations in March 2002. All Nippon Airways joined the Star Alliance in October 1999, Austrian Airlines Group including Lauda Air and Tyrolean Airways joined in March 2000 and Singapore Airlines in April 2000. British Midland and Mexicana joined in July 2000. Star Alliance has a total of almost 2000 aircraft, serves around 800 destinations in 130 countries worldwide and transports more than a quarter of a billion passengers annually, through extensive code share agreements, with 'round the world' fares for global travellers. The alliance allows access to over 500 Star Alliance lounges around the world, reciprocal FFPs, through check-in, streamlined airport operations, cargo co-operation, joint purchasing, advertising and promotions. US Airways will join the alliance as United Airlines has come up serious financial problems. Lufthansa/UA alliance has received antitrust immunity from the US DOT.

Oneworld is a global marketing alliance announced in September 1998. American Airlines, British Airways, Canadian, Cathay Pacific, Finnair, Iberia and Qantas offer closer linking of FFPs, reciprocal access to airport lounges, smoother transfers between carriers and a range of global products including 'Oneworld Explorer' fares. After the takeover by Air Canada, Canadian Airlines left Oneworld on June 1, 2000, while Lan Chile and Aer Lingus joined on the same date.

SkyTeam is the most recent global alliance. Formed in 1999 by Air France and Delta Air Lines, it has extended its reach with Aeromexico and Korean Air as well as Czech carrier CSA in October 2000 while Alitalia joined in July 2001. With a marketing focus on passenger service, that is, code sharing, joint marketing and reciprocal frequent flyer programs, its strategy is based on market synergies and the growth potential of Paris-CDG as a connection platform. Cargo cooperation is also part of the alliance. SkyTeam is expanding and currently offers nearly 7,100 flights to more than 470 destinations. It also has 289 reception lounges.

3.1 Potential benefits of strategic alliances

The growth of airlines' international networks, and the use of collaborative strategies for this purpose, has to be interpreted as a strategy of airlines to improve their profitability by exploiting new revenue sources while reducing marginal costs. In this direction, multilateral strategic alliances have the potential of achieving diverse benefits from a close collaboration between airlines. These gains may vary from those achievable with code share routes to the potential benefits associated with close partnerships that resemble an international multi-brand airline. Most of the benefits of multilateral airline alliances are linked with the reinforcement of the competitive advantages of other key features of the airline industry like the hub-spoke network, code share routing, and antitrust immunity for airlines coordinating joint operations. In addition,

global alliances also contribute per se with initiatives like joint marketing and exclusive membership. Following, we can decompose the most relevant potential gains to allied members that global alliances can amalgamate.

Economies of scale

Economies of scale are the decrease in unit costs with respect to the increase in network size and the provision of services. They can also derive from learning, specialization and the distribution of fixed costs over a larger output (Iatrou & Oretti, 2007). There can be potential economies of scale with aircraft size, as the unit costs in fuel and crew, among other items, increase to a lesser degree than the available seats-km if laboring under the *ceteris paribus* assumption when considering aircraft technology and pilots' seniority (Panzar & Willig, 1981). Stage length also provides economies of scale as fixed costs in airport-based costs are the same for a longer covered distance.

Fuel costs also reduce with longer stage lengths as there is lower fuel consumption at cruise altitude and the higher consumption in takeoff and descent are distributed over a longer period (Lin, 2013). Alliances with foreign airlines bring to more international flights, enhancing economies of scale from a larger average stage length and, tentatively, the operation of a larger number of flights. Min and Joo (2016) showed the potential economies of scale with inventory pooling spare components for aircrafts between airlines, with a decrease in inventory levels of up to 30%.

Economies of density

Economies of density refer to the decrease in unit costs when the transportation services within a network increases, not by an expanded network size but a higher traffic density. Although economies of scale in operations seem to be relatively limited, there are very clear economies to be obtained from generating denser flows of passengers, which boosts seat utilization and enables the use of larger and lower unit cost aircraft (Zou & Chen, 2017). By this, airlines might use larger aircraft, i.e. more cost effective, at a higher load factors. Higher network densities allow a more intensive use of ground facilities, human capital, and aircraft (Chao & Kao, 2015). This effect led to the emergence of hub-and-spoke networks. Airlines opt to grow by expanding the frequencies on the routes where they are already established, increasing their market share.

Airlines can increase the flow density by merging or partnering with competing airlines. In the particular case of global alliances, aligned airlines can benefit from economies of traffic density in two different manners. One is by consolidating operations with airlines with overlapping networks, which reduces the number of contenders in the market, and increases the traffic density on their routes, diminishing marginal costs (Butigan & Benić, 2017). The existence of economies of density can help to explain the phenomena of airlines partnering or merging to increase revenues even when they serve the same nodes and significant increase in network size is not expected. The reduction in the number of competitors may also help the airline to increase market power (Lin, 2013). The second manner is by funneling connecting passengers in code share from partner airlines, resulting in a higher volume of passengers per route and a lower passenger-mile cost. Compared to a non-collaborative scenario, aligned airlines can serve

connecting passengers that before would have been handled by the partner airline with a low route density or by another competing airline.

Economies of scope

This term was first coined by Panzar and Willing (1981) to refer to the cost savings achieved by having a multiproduct enterprise in which the joint cost of producing two or more outputs is less than the sum of the costs of producing each output by itself. In the field of air transportation this term is intrinsically associated with spatial scope (Lin, 2013). Economies of scope appear when as an airline adds new nodes, i.e. destinations, to their network, the production costs for all the new routes that the new nodes generated is lower for an incumbent carrier than if the new routes were served by a new company created ad hoc (Butigan & Benić, 2017). This source of efficiency is especially remarkable when airlines operate with a network close to a theoretically pure hub-and-spoke network with n airports, for which the addition of m new destinations increases the number of route combinations between destinations in the network from $n \cdot (n-1)$ to $(n+m) \cdot (n+m-1)$.

If economies of scope were not considered it should be interpreted that expanding networks is inconvenient, and to increase density would be profitable (Teo & Leong, 2012). Nevertheless, this would hold as an inconsistent conclusion considering the effort of airlines to increase their network size through natural growth, and the development of alliances, mergers, and acquisitions between airlines with complementary networks. As presented by Basso & Jara-Díaz (2005), with a large network size there is an increase in the number of products, and this comes at a cost advantage. According to Oum *et al.* (2000), economies of scope are one of the reasons for the formation of alliances. In fact, as an airline code shares with a hub of a partner airline, a myriad of new routes are added to its destinations' portfolio at a minor cost.

Larger profits from pricing on code sharing routes

Airlines partnering in a code share agreement not only adjust schedules to provide a seamless trip to clients, but they also might adapt fares in multi-airlines code share tickets. According Brueckner and Proost (2010), interline alliances lead to lower fares, both in the case of codeshare agreements, and under granted antitrust immunity to coordinate prices between airlines. Under antitrust immunity, airlines can collaborate in setting prices (Teo & Leong, 2012). In code share agreements between unimmunized partners, airlines opt for a fare that is split between the operating carriers according to a distance-based prorated formula. In both cases, airlines stimulate demand with lower interline fares that can translate into higher profits than without collaboration (Zou & Chen, 2017). This pricing behavior contrasts with a non-cooperative case in which the airlines on a multi-leg route sets a separate fare for each leg. From that, the multi-stop route is marketed at a higher total fare, by summing local fares. This situation, in which the two or more carriers combined have a large market share, may lead to collusive behavior between them. In this case, coordination of pricing for the airlines could translate into a higher fare and, again, higher profits.

Marketing and branding benefits

The change in cost structure is not enough to explain the behavior of airlines. The marketing strategies and the demand response are crucial in the bottom line of the firm (Abeyratne, 2017). Above we have seen that, by being part of global alliances, airlines can offer consumers a larger and denser global network with smoother connections; while from the efficiency gains from economies of scope, scale and density, they can also be more competitive in price, boosting demand (Kleymann & Seristö, 2017). Together, the ability of airlines to retain and generate passengers in an airline's international and domestic hub-feeding network increases as the firm offers a better product to customers.

An aligned airline has the potential to sell tickets from its own distribution channels to any location that the alliance covers, increasing the utility of the airline to the eyes of the consumer as a competent provider of air transportation services for a wide range of destinations, thereby potentially increasing the brand loyalty (Douglas & Tan, 2017). Another additional marketing benefit is that the consumer appraisal can potentially increase by offering a more attractive frequent-flyer program (FFP) because passengers can earn mileage on routes all over the world whenever they fly with partners of the FFP's issuer airline (Min & Joo, 2016). Vice versa, there are also marketing benefits as FFP holders from aligned airlines give value to a partner airline for counting FFP mileage on their routes. In fact, benefits from more attractive FFPs from combined networks were reported as soon as in the 1980s (Wang, 2014).

Another contribution of alliances is the promotion of service quality among customers, who after building an idea of the quality of an airline they apply this perception of airline's service to the rest of markets the airline offers (Douglas & Tan, 2017). Hence, there is a potential for alliances to position all its members under the alliance brand as a similar market product, by making most of the attributes of the alliance brand extensive to all the alliance members (Teo & Leong, 2012). Hence, they can create a competitive advantage that is resilient to pricing competition.

Financial economies

Some of the potential benefits of diversification have already been outlined from the perspective of economies of scope, as this brings to more sources of revenues at a lower marginal cost. In addition, here we also consider the theory that diversification allows a superior risk return on assets, as well as limited cash flow fluctuations in the firm. Global Airline Alliances (GALs), due to its reach, provide its members the best platform available to build a diversified portfolio within the same sector (Min & Joo, 2016). Vice versa, there are also marketing benefits as FFP holders from aligned airlines give value to the airline operator. By including destinations in new markets, airlines limit their exposure to a limited number of revenue sources (Lee & Moon, 2016). Although globalization makes economies increasingly more interconnected, if airlines can generate demand in other countries with lower correlation with its domestic economy, this can reduce their exposure to economic downturn in a particular country or economic region, which brings to a reduced risk of financial distress for their overall business. This feature increases the value of the firm, as reported by Mansi & Reeb (2002) for multinational corporations.

Due to the geographic diversification provided by GALs, airlines could potentially reduce the negative effects of economic downturns in their domestic market on average yield and/or load factor as other markets might be still sustaining demand (Lee & Moon, 2016). In addition, the dispersion in revenues between economic periods is reduced, limiting the tensions on treasury, and reducing the amount of working capital required (Vasigh, Fleming & Tacker, 2018). From another perspective, given a fixed amount of working capital, the risk of financial distress would be reduced. These gains, however, would be even higher in case of airline mergers with consolidated finances.

Geographical diversification in the airline industry brings together other great opportunities amid other notable limitations (Mellat-Parast, Golmohammadi, McFadden & Miller, 2015). On the one hand, airlines have a potential high mobility of resources, as aircrafts and crews can be swapped from one route to another, providing an opportunity to allocate resources where the returns are higher whenever the supplies are scarce. Here, GALs have widened the range of opportunities to reallocate resources among routes and regions; however, this requires a high level of integration between airlines (Vasigh, Fleming & Tacker, 2018). Also, the national regulations applying on international workers limit human resource mobility. In addition, although GALs certainly might help to overcome the constraints from trade costs and barriers to entry, these should not be disregarded as potential limitations to the reallocation of services.

Joint purchasing

Global alliances can have a negotiating power in benefit of its members, achieving better deals when dealing with suppliers. Garg (2016) mention fuel, spare-parts, maintenance, catering, airport charges, or cabin crew training as potential sources of cost reduction. In 2016 Star Alliance pursued to save US\$550 million each year through joint procurement, which only stated for a 0.1% of the total expenses of the alliance members, although some analysts thought that there was room for cuts of up to 3.6% of total expenses if the management of external services handling, maintenance, catering and fees, among others was pooled (Mellat-Parast, *et al.*, 2015). In fact, it is not in the joint fuel purchase where significant room to negotiation can be found. There is an extensive record of joint procurement on the main airlines' asset, its aircrafts. A recent example of joint procurement is Star Alliance's project of building a common economy-class seat specification for all its member airlines, with a stronger emphasis in lowering costs in a commodity resource than in homogenizing the fleet.

Control on barriers to entry

As noted in Young *et al.* (1989), the motives of firms in any industry for establishing international joint ventures can be distinguished between the establishment of corporate linkages that benefit both firms, like economies of scale, sharing investment risks, learning and exchange, etc.; and the role of international cooperation in corporate entry strategies, mainly the entry to new geographical markets (Douglas & Tan, 2017). In fact, one of the main resources that an airline can offer to alliances is its airport slots and hub location, as well as its traffic rights with other countries. Access to slots, i.e. a time interval available for scheduling an arrival or departure, is a highly relevant barrier to entry at capacity-constrained airports, given the existence of non-tradable rights like that of "grandfather rights", i.e. the preservation of slot times for occupant airlines instead of incoming airlines (Garg, 2016). The degree of control of airports by hub-dominant carriers is such that among the 20 largest airports in the world in 2010,

on average, over 40% of the flights corresponded to the dominant carrier and its affiliated regional carriers. The importance of hub control remains in the fact that the dominant airline can exploit economies of hub density, lowering costs and attracting passengers with higher frequencies through the hub and- spoke network. In addition, airlines in minority and potential entrants can only compete with the hub-dominant carrier in a limited number of markets.

Learning

A substantial area of benefit comes from the standardization of practices and the sharing of regional preferences among the airline members. The learning process can improve airlines' efficiency and the service quality provided, bringing to a potential increase in profits (Zou & Chen, 2017). As a difference to less integrative models of collaboration, Global Airline Alliances can be a forum for sharing practices and technologies that have proved to be more successful in the managerial and operational sphere, for the generation and discussion of new improvements, and the understanding of the preferences of customers from different backgrounds (Kleymann & Seristö, 2017).

By joining a global alliance, incoming partners are firstly exposed to an integration process that may require a period of several months or years. During this time, new airlines might have to adapt its operations, IT systems, dress-code, office layouts, chain of command, hierarchy structure, customer service, fidelity program, safety standards (Vasigh, *et al.*, 2018). If we consider a wider range of collaborative scenarios for an given unallied airline joint venture, bilateral alliance, multilateral alliance and merger and acquisition joining a global alliances implies much more assimilation and less mutual adaptation or bidirectional learning, because the incumbent airline needs to adapt to a large number of firms with existent standards and procedures (Kuzminykh & Zufan, 2014). Hence, any significant change in the alliance forced by the new partner may affect the rest of the members, implying a larger cost of integration for the group.

The integration process may help the airline to be more competitive if the changes improve the efficiency and service quality. However, this is not assured, as the airline may be reluctant to integrate if their competitive advantages are challenged during the homogenization (Tugores-García, 2016). In the other extreme, integration through merger or acquisition between equal-sized firms is arguably the best scenario for having mutual learning and it can enhance the choice of the best practices of both firms (Kakeesh, 2016).

Another primary goal of alliances could be that they are a vehicle for internalizing new skills, in particular those that are "tacit, collective and embedded" and, hence, not easily obtained by one's own means (Iatrou & Alamdari, 2015). The insights from the bilateral or multilateral exchange can be expanded to the entire firm structure, making of the alliance the spurn for general improvements in the airline. To sum up, two steps of the learning process of an airline joining an alliance can be identified: learning through the adaptation process, and by creating value in the day-to-day collaboration.

Customer Benefits

Airline strategic alliances can benefit passengers in two ways: through scale effects; and through link effects. Scale effects are related to the size of the network, particularly geographical scope, containing proportion of direct flights and access to new services in the post alliance period. On the other hand, link effects are related to service connectivity, such as the ease for passengers in making connections where multiple members are involved (Grunow, 2012).

Cost Reduction

Alliances enable partners to increase efficiency, reducing expenses by cutting back on fixed costs and wedding out redundant operations. By coordinating aircraft and schedules, members can reduce their fleet requirements or take more advantage of the capacity available, as operating a larger aircraft is more suitable for matching the aircraft size with the demand of a particular route (Zou & Chen, 2017). Shared use of ground handling arrangements and airport facilities and staff, joint procurement of fuel and amenities, cooperative advertising and promotional campaigns, mutual handling of baggage transfers and passenger check-in, and combined development of computer systems and software are some of the ways alliances help foster economies of scale.

Reducing Level of the Competition

Alliances have allowed carriers to increase their ability to exercise market power and reduce the level of competition. Carriers which previously competed on a route can agree to cooperate and thus obtain competitive advantages over core airline operators. Traffic feed boosts each carrier's dominance at its respective hub, creating network effects that increase entry barriers (Iatrou, 2007).

4. THEORETICAL REVIEW

Resource Based View Theory

Resource Based View was first advanced by Penrose (1959) who argued that a firm's superior performance is achieved when the resources are prudently channeled in a firm, both physical and human. How a firm controls its key resources will determine its performance (Wernerfelt, 1984). The focus of the RBV is on attributes of resources and capability from the source they are gained to clarify a firm's heterogeneity, performance and sustainability (Lee & Moon, 2016). According to Barney and Hesterly (2010) resources include key constructs: resources, capabilities and competences. The resource-based view suggests that valuable organizational resources are usually scarce, imperfectly imitable, and lacking in direct substitutes (Low & Lee, 2014). Thus, the trading and accumulation of resources becomes a strategic necessity. When efficient market exchange of resources is possible, organizations are more likely to continue alone and rely on the market (Yang & Konrad, 2011). However, although market transactions are the default mode, efficient exchanges are often not possible on the spot market. Certain resources are not perfectly tradable, as they are either mingled with other resources or embedded in organizations. Hence, strategic alliances are variously employed.

Resource based view theory is relevant to the study by highlighting how airline firms pull their resources through strategic alliances in order to improve market competitiveness. Accordingly,

airline operators possess unique resources and capabilities in terms of human resources and even financial resources. When two or more airline firms join together via an alliance, they can enhance their market competitiveness and brand image. Thus, the Resource-based View considers strategic alliances as strategies used to access other organizations' resources, for the purpose of garnering otherwise unavailable competitive advantages and values to the airline operator.

Transaction Cost Economics

Transaction Cost Theory was postulated by Coase (1937). Transaction cost theory argues that, due to economies of scale and specialization provided by suppliers, the market, that is, outsourcing is a more efficient form of governance, unless the transaction involves special circumstances (Promsivapallop, Jones & Roper, 2015). The theory has been developed to facilitate an analysis of the comparative costs of planning, adapting, and monitoring task completion under alternative governance structures (Williamson, 2010). Transaction cost theory is about the actual cost of outsourcing production of products or services including transaction costs, production costs, negotiation costs, costs of opportunism, contracting costs, coordination costs and search costs (Judge & Dooley, 2006). Transaction-cost theory indicates that firms outsource services in order to reduce costs and to achieve cost efficiency (Forbes & Lederman, 2010).

This research considers the transaction-cost theory more applicable as it allows the airline operators to compare the costs of incurred operating alone and operational costs incurred when an airline firm is in alliance and therefore chose an approach with more benefits. Forming a strategic alliance represents an internalization process for an organization, thereby removing it from the price vagrancies of the market place, accompanying negotiations and risks. Thus, forming an alliance represents one way a firm adapts to an uncertain world.

5. EMPIRICAL REVIEW

Semercoz and Kocer (2017) conducted a study on strategic alliances in the aviation industry, an analysis of Turkish Airlines Experience. Both primary and secondary data were collected to evaluate the research question. Semi-structured interview method was used to collect primary data. Liberalization of the airline market allowed carriers to reach a wider area of the world. Especially, airlines with larger fleet and financial resources are more likely to benefit from this trend in the industry. This makes alliance strategy an important source of synergy for developing country airlines to increase their competitiveness against large carriers. As the research conducted displays, alliance success is not a result of micro factors only, but also a consequence of the interdependencies between macro and micro factors.

Muchemi (2016) conducted a study on strategic alternatives for the continued operation of Kenya Airways. The research was done through descriptive survey design, which involved all airlines with scheduled flights in and out of Kenya. The study found that the all the variables have a positive Pearson correlation which shows that the effect is direct proportion to the strategic alternatives for continued operation of Kenya Airways. Organization competitiveness have a strong relationship with organization leadership. The study recommends that unnecessary

competition could be eliminated by the airline operators by forming alliances that shall allow them to rip the benefit of operating in different destination.

Iatrou and Alamdari (2015) conducted a study on an empirical analysis of the impact of alliances on airline operations. To achieve this, a comprehensive survey of the alliance management departments of airlines participating in the four global strategic alliances was carried out. With this framework the survey has examined which type of cooperation among carriers (FFP, Code Share, Strategic Alliance without antitrust immunity, strategic Alliance with antitrust immunity) has produced the most positive impact on traffic and which type of route (short haul, long haul, hub-hub, hub-non hub, non-hub-non hub) has been mostly affected. In addition, the respondent airlines quantified the effect alliances have had on specific areas of their operation, such as load factors, traffic, costs, revenue and fares. Their responses have been analyzed under each global alliances grouping, under airline and under geographic region to establish which group, type of carrier and geographic region has benefited most. The results show that each of the four global alliances groupings has experienced different results according to the type of collaboration agreed amongst their member airlines.

Sánchez, Pérez-Valls and Plaza-Úbeda (2019) conducted a study on the contribution of global alliances to airlines' environmental performance. The results of regression and Analysis of Variance (ANOVA) in a sample of 252 airlines (58 included in one of the three global alliances: Star Alliance, Oneworld, and SkyTeam) show a strong and inverse relationship between environmental performance and belonging to an alliance. The paper also shows empirical evidence of the influence of the business model of the airline on environmental performance.

Tugores-García (2016) conducted a study analysis of Global Airline Alliances (GALs) as a strategy for international network development. Since the late 1990s, network airlines worldwide have been enrolling in one of the three current Global Airline Alliances (GALs), Oneworld, Star Alliance and SkyTeam. The evolution of GALs is characterized here by the analysis of the size of these alliances, as well as by the volume of partnerships and code share agreements between alliance partners during the period 2006-2011. The results of this study illustrate the differences between each of the GALs and the degree of dependence of airlines on alliances to develop their international networks. By most indicators, the largest alliance, Star Alliance, is the GAL in which member airlines rely more on their alliance partners when developing code share agreements with foreign airlines. In all three GALs, code share agreements between alliance partners are much less likely to be broken than with nonpartner airlines. Airlines operating in the transatlantic markets appear to be the most advanced firms in the marketing of code shared itineraries. The empirical analysis is complemented with a review of the theoretical benefits of GALs to airlines, alternative network models for international growth, the impact of alliances on customers' welfare, their potential anti-competition effects on independent carriers, and the current regulatory framework affecting alliances on both sides of the North Atlantic.

Kuzminykh and Zufan (2016) conducted a study, on airline alliances and their influence on firm performance. Therefore the paper focuses on examination of the effects of alliances on size-indicators of airlines based on the panel data analysis of data from 65 air-operators 14 of which are members of one of the three major alliances (Star Alliance, SkyTeam, OneWorld). Panel data analysis examines the influence of alliance membership on turnover, total assets, and number of employees. Source data are taken from the Amadeus database, and reflect 10-year time series of

2003-2012. Calculated values of determination coefficients prove a very strong impact of an alliance membership on turnover and total assets, and relatively strong impact on the number of employees of a particular allied company. Findings confirm the expectation of high benefits of alliance membership and significant positive effects on particular size-indicators of analyzed companies. The positive impacts were quantified for the sample of 65 airlines. Even though the sample is relatively small (having over 3000 airlines included in the Amadeus database), it represents certain comparative basis, which will be further examined and extended.

Makeesh (2016) conducted a study on the impact of strategic airlines alliances on brand management practices, the case of Royal Jordanian Airlines in Oneworld Alliance. A qualitative approach was used; purposive and snowball-sampling techniques were adopted to analyze 61 semi-structured interviews with senior managers and other actors within the airline industry. Two main themes have emerged: the first theme, the Airlines Industry's Attitude towards Brand Alliances, examines the major challenges in the airlines industry, demonstrates the main motivations behind forming strategic airline alliances and explores the relationship between globalization and the initiatives to formulate more strategic airline alliances. The second theme, the key branding and marketing strategies, investigates the alliances' brand practices and marketing strategies and explains how a small national airline company has responded to this trend and offers a set of potential choices for future. Also this study provides compelling evidences of how the Oneworld Alliance creates branding value for the small airlines member and contributes toward understanding the case of the Arab world and the interplay between global alliance brands and national airlines companies. Finally, it demonstrates a number of issues that the alliance members need to address in order to avoid any brand dilution or negative spillover effect.

Rajasekar and Fouts (2009) undertook a study on strategic alliances as a competitive strategy. The data for this research study have been collected primarily from three sources. This research study reveals that code sharing agreements between a domestic and international airline will benefit the former by way of increased Revenue Passenger Miles (RPMs), passenger load factor (PLF), and market share. The effect of code sharing on the market share of domestic airlines is explicit and consistent throughout this research study. The interesting finding in this particular section is the influence of the large size of the alliance partners on all the three dependent variables; RPMs, PLF, and the market share. Therefore, we can conclude that if both the airlines are large enough and they form code sharing agreements, then this may result in increased RPMs, PLFs, and market share for the domestic airlines. Similarly, the study supports the premise that if the partners are unequal, then the domestic airlines may not be able to increase the RPMs, load factor, and the market share.

İlarslan, Vurur and Biyikli (2014) undertook a study, an empirical study for investigation of the effects of strategic alliances in the civil aviation sector, Turkish Airlines. Within the scope of analyze, data collected through the financial statements and annual reports of Turkish Airlines between 1993-2013 period. One of the aforementioned reorganization effort is the strategic alliances between firms. The low rate of full capacity, high costs and high tax rates pushed airline companies for forging partnerships and as a result of this huge strategic alliances occurred as like Star Alliance, One World and SkyTeam. These partnerships has built code sharing, frequent flier programme and similar collaborations helped the existing capacity usage to the maximum level. Airline firms head towards strategic alliances and cooperations in order to

reduce costs and improve themselves in industrial content. Furthermore via alliances firms can operate in international markets without being challenged laws and restrictions and this provide firms to create synergy. Turkish Airlines signed strategic alliance contract with Star Alliance because of similar reasons.

Ustaömer, Durmazb and Zheng (2015) undertook a study on the effect of joint ventures on airline competition: the case of American airlines (AAs), British airways (BA) and Iberia joint business. Regulatory obstacles have led international airlines to make extensive cooperation in the provision of service. The global airline alliances that link U.S. airlines to members in other states is the most visible form of cooperation. Moreover, when the alliance members obtain antitrust immunity, they can determine fares for interline trips that were not possible under traditional pricing arrangements. Paired samples t-test results indicate that there is no significant difference in AA's economy airfare after the introduction of joint venture. Similarly, there is no significant difference in AA's business airfare. As for BA, the picture is vice versa in terms of economy airfare. There is a significant difference in BA's economy airfare. On the other hand, there is no significant difference in BA's business airfare. The goal of this thesis is to quantify the impact of cooperation on international airfares. The effect of BA, AA and IB joint venture on transatlantic airfares were examined to determine whether there was a significant change in airfares after joint venture was formed. Paired samples t-test results indicate that there is no significant difference in AA's economy airfare after the introduction of joint venture. On the other hand, there is significant difference in AA's business airfare. In terms of BA, there is a significant difference in BA's economy airfare. On the other hand, there is no significant difference in BA's business airfare.

Villar, Tafur and Jia (2016) conducted a study on strategic airline alliances: advantages for major airlines being aligned. The methodology of this report includes an analysis of several airlines' performance figures. These performance figures include the revenue passenger kilometers (RPKs), the passenger load factor (PLF) and also the market share (MS). After reading some publications about our research topic, the expected results were that: aligned airlines, especially Star Alliance, achieve invariable improvement of the macroeconomic environment (based on our variables) than the non-aligned airlines and the other two big alliances respectively. However our research paper does not confirm this hypothesis. Empirical study found that during the period 2005-2008 the group of non-aligned members got higher increases in the RPK, ASK and PLF than the aligned group. Furthermore, the alliance that seems to be most successful is Oneworld, far from the results achieved by Star Alliance and SkyTeam.

Karuri (2012) undertook a study on determinants of strategic alliances in the airline industry in Kenya. The research was done through descriptive survey design, which involved all airlines with scheduled flights in and out of Kenya totaling thirty six (36). Key findings of the study showed that market entry and market position-related motives, resource use efficiency-related motives and uncertainties and formulation of technical standards and access of new technologies are major determinants of strategic alliances. In addition, organization strategy, management of the alliances and organizational environment are key factors that influence the performance of alliances. This pointed to the current and future importance of strategic alliances in the airline industry since the era cut throat competition is slowly coming to an end. A key recommendation proposed by this study is that airlines should identify their needs to ensure that as they enter into alliances they can build on their weaknesses. The crafting of the strategy, the involvement of

management, and organizational environment cannot be over emphasized if the alliance is to succeed. This study recommends an expanded study in regard with intermodal alliances, vertical alliances within the airline industry.

Min and Joo (2016) conducted a study, a comparative performance analysis of airline strategic alliances using data envelopment analysis. As “open skies” agreements became more common among different countries and thus began to open up international routes to further competition, the global airline industry has undergone accelerated structural changes for the last two decades. These changes include the consolidation and expansion of airline strategic alliances throughout different regions of the world. Though airline strategic alliances are generally perceived to be a major driver for enhancing the operating efficiency and the subsequent competitiveness of participating member airlines, the concrete evidence supporting such a perception is still lacking in the literature. The paper evaluated the comparative efficiency of the strategic alliances among global airlines and then assesses the managerial impact of airline alliances on the airline's comparative performances.

Teo (2012) conducted a study alliances and performance in the airline industry, 1998-2002: a network perspective. The analyses are based on alliance and performance data drawn from the whole population of international airlines over the five-year period, 1998-2002. Results indicate that when an airline's alliance network is excessively dense, its performance may be adversely affected. Also, excessively deep and intensive alliances may have a negative impact on the partner airlines' performance.

Jangkrajarn (2016) studied strategic alliances in the airline industry. Airline alliances dominate the air transport industry with the largest carriers belonging to one of the alliances. The effects of airline alliances on airline management can be measured by finding the effects of on airlines' productivity and profitability. Since airlines have to find strategies to improve their business with global expansion constrained by restrictive air services agreements which alliance has brought benefits to airlines on cost saving, new markets access, increases in load factors, yield improvement, and shared operations. This study revealed that, in terms of productivity, with the control of partner airline location, distance, and composition of business, airline alliances had a positive significance to firm productivity. It also revealed that route distance did not have any relationship with airline productivity, while proportion of other associate business showed positive effect to productivity. Regarding the profitability, airline alliances had a positive effect to airlines' profitability. Unlike the productivity, profitability could be positively significant from the route distance. This implied that the longer route could result in less cost to the airlines.

Lin (2013) conducted a study on the Effects of Joining a Strategic Alliance Group on Airline Efficiency, Productivity and Profitability. This study adopts three different empirical quantitative analyses to reveal the effects of a strategic alliance group on airline performance. The performance indicators included airline technical efficiency, productivity and profitability. The results suggest that joining an airline strategic alliance group generally will have positive effects on its member airlines' technical efficiency, productivity and profitability. However, the results are not statistically significant. This implies that the effects of an airline alliance group are practically unimportant to the airline performance, particularly during the study period. Thus this research reveals that airlines joining the alliance group may not necessarily achieve significant improvements in their performance. During the pre-maturity stage of the alliance group, joining

an alliance does not necessary bring positive effects to the airlines' performance. Secondly, the research suggests that alliance group membership numbers do not always have a positive impact on the airline performance, so alliance groups should consider their size. For newly entering airlines, choosing a relatively smaller alliance group can reduce the entry cost. Moreover, the research also shows that there is a minimum membership duration before an airline can receive alliance group membership benefits. It implies that airlines who seek to join the alliance group as a quick solution will not have their expectations met. Further, the research has confirmed the strong year effect existing in the airline industry, which further suggested that alliance group effects are limited and should not be considered as a universal solution.

6. SUMMARY OF FINDINGS FROM EMPIRICAL REVIEW

Strategic alliances are employed by airline operators for many reasons. Strategic alliances come along with numerous benefits that include reduced operational costs resulting from joint purchasing, economies of scale, economies of density, larger profits from pricing on code sharing routes, marketing and branding benefits, control on barriers to entry, knowledge sharing, customer benefits and reducing level of the competition. According to İlarslan, Vurur and Biyikli (2014), airlines use alliances as a means to achieving global service networks, getting access, and establishing identities in new markets without providing aircrafts, and providing services which would be unprofitable if operated alone. Semercioz and Kocer (2017) further noted that alliance strategy an important source of synergy for developing country airlines to increase their competitiveness against large carriers.

Through alliance cooperation, airlines can improve their profitability and market share, benefiting from schedule convenience, connectivity and flow improvement (Tugores-García, 2016). Alliance activities help airlines to reduce the cost per passenger, taking advantage of economies of scale, scope and density across geographical boundaries due to increased traffic, joint advertising and equipment sharing, as well as accessing resources that would otherwise not be attainable. Thus, the overall aim of airline alliances is considered to be enhancing partner airlines' competitive position and also achieving higher profits for each of the partners (Min & Joo, 2016; Iatrou & Alamdari, 2015; Sánchez, Pérez-Valls and Plaza-Úbeda, 2019). According to Rajasekar and Fouts (2009) strategic alliances led increased Revenue Passenger Miles (RPMs), passenger load factor (PLF), and market share.

However, it is not always automatic that strategic alliances will result to performance growth of airline operators in strategic alliance agreement. According to Lin (2013) airlines joining the alliance group may not necessarily achieve significant improvements in their performance. During the pre-maturity stage of the alliance group, joining an alliance does not necessary bring positive effects to the airlines' performance. Alliance group membership numbers may not always have a positive impact on the airline performance, so alliance groups should consider their size. There is minimum membership duration before an airline can receive alliance group membership benefits. It implies that airlines who seek to join the alliance group as a quick solution will not have their expectations met. For instance, Kenya Airways have been contemplating to pull itself from Sky Team citing unmet expected benefits from the alliance. The airline prefers to just remain in joint ventures with KLM. Thus, alliance agreements effects are limited and should not be considered as a universal solution that stimulates airline performance.

7. CONCLUSIONS

From the empirical analysis, it can be concluded that strategic alliances may result to enormous benefits that include sharp reduction in airlines operational costs, improved economies of scale, reduced trade barriers, knowledge sharing, customer benefits and reducing level of the competition. Airline firms head towards strategic alliances and cooperations in order to reduce costs and improve themselves in industrial content. Airlines also enter in strategic alliances to develop and widened route network, productivity of the firm, growth and market share, profitability of the firm, transit systems, use of assets, pre-empting competitors, stabilization of prices, formulation of standards, access to new technologies, learning from partners, and regulatory agencies. Furthermore via alliances firms can operate in international markets without being challenged laws and restrictions and this provide firms to create synergy. Airlines in alliance become profitable if airlines offer differentiated services. The authors conclude that joining of airlines in alliances is profitable, because it leads to a sufficiently high differentiation of product and lower competition in the market. Joining in alliances allows the airlines to expand their network without investing new resources. Strategic alliances strategy is extremely important to the small airlines which lack adequate financial resources and marketing knowledge in order to enhance their competitiveness, so these small companies can compete on a large scale.

It is concluded that not every time an airline joins an alliance will reap the benefits associated with it. Airlines joining the alliance group may not necessarily achieve significant improvements in their performance. During the pre-maturity stage of the alliance group, joining an alliance does not necessary bring positive effects to the airlines' performance. There is minimum membership duration before an airline can receive alliance group membership benefits. This implies that airlines who seek to join the alliance group as a quick solution will not have their expectations met immediately.

8. POLICY IMPLICATIONS

Through, formation of strategic alliances, unnecessary competition in the airline industry can be eliminated thus minimizing operational cost reduction, increasing economies of scale and expanding market share. Moreover, airlines can share human resources thus reducing hiring costs while facilitating knowledge and skill sharing in the airline industry.

It is also evident that not all strategic alliances engaged in shall result to enhanced performance of airlines. Thus, an airline should first determine whether it is viable to join an alliance by conducting proper market study and also by engaging airline operations experts in the matter. The airline should also evaluate her position in the market and chances of reaping benefits in case it enters into an alliance.

REFERENCES

- Abeyratne, R. I. (2017). *Aviation trends in the new millennium*. Routledge.
- Brueckner, J. K., & Proost, S. (2010). Carve-outs under airline antitrust immunity. *International Journal of industrial organization*, 28(6), 657-668.
- Butigan, N., & Benić, Đ. (2017). The Impact of Membership in Strategic Alliances on the Profitability of Firms in the Retail Sector. *Croatian Economic Survey*, 19(2), 47-82.
- Button, K. (2017). *Airline deregulation: international experiences*. Routledge.
- Chao, C. C., & Kao, K. T. (2015). Selection of strategic cargo alliance by airlines. *Journal of Air Transport Management*, 43, 29-36.
- Douglas, I., & Tan, D. (2017). Global airline alliances and profitability: A difference-in-difference analysis. *Transportation Research Part A: Policy and Practice*, 103(9), 432-443.
- Farah, H. A., Munga, J. & Mbebe, J. (2018). Influence of competitive strategies on performance of commercial airlines in Kenya: A survey of the airline industry in Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(1), 170-189.
- Forbes, S. J., & Lederman, M. (2010). Does vertical integration affect firm performance? Evidence from the airline industry. *The RAND Journal of Economics*, 41(4), 765-790.
- Garg, C. P. (2016). A robust hybrid decision model for evaluation and selection of the strategic alliance partner in the airline industry. *Journal of Air Transport Management*, 52(4), 55-66.
- Iatrou, K. & Alamdari, F. (2015). The empirical analysis of the impact of alliances on airline operations, *Journal of Air Transport Management*, 11(3), 127-134.
- İlarslan, K., Vurur, S., N & & Biyikli, F (2014). An Empirical Study for Investigation of the Effects of Strategic Alliances in the Civil Aviation Sector: THY (Turkish Airlines) Case, *Mediterranean Journal of Social Sciences*, 5(22), 102-113.
- Judge, W. Q., & Dooley, R. (2006). Strategic alliance outcomes: a transaction-cost economics perspective. *British Journal of Management*, 17(1), 23-37.
- Takeesh, D. (2016). *The Impact of Strategic Airlines Alliances on Brand Management Practices: The Case of Royal Jordanian Airlines in Oneworld Alliance* (Doctoral dissertation, University of York).
- Karuri, L. (2012). Determinants of strategic alliances in the Airline Industry in Kenya. *Unpublished paper, Faculty of Commerce, University of Nairobi*.
- Kleymann, B., & Seristö, H. (2017). *Managing strategic airline alliances*. Routledge.
- Kuzminykh, N., & Zufan, P. (2014). Airline alliances and their influence on firm performance. *Procedia Economics and Finance*, 12, 329-333.
- Kyalo, R. O. (2016). Collaborations and firms competitiveness among airlines in Kenya. *Unpublished MBA Thesis: University of Nairobi. Nairobi*.
- Lee, W. S., & Moon, J. (2016). Determinants of CEO strategic risk-taking in the airline industry. *Tourism Management Perspectives*, 18, 111-117.

- Lin, B. (2013). *The effects of joining a strategic alliance group on airline efficiency, productivity and profitability: a thesis presented in partial fulfilment of the requirements for the degree of Doctorate of Philosophy in Aviation at Massey University, Palmerston North, New Zealand* (Doctoral dissertation, Massey University).
- Low, J. M., & Lee, B. K. (2014). Effects of internal resources on airline competitiveness. *Journal of Air Transport Management*, 36(4), 23-32.
- Mellat-Parast, M., Golmohammadi, D., McFadden, K. L., & Miller, J. W. (2015). Linking business strategy to service failures and financial performance: Empirical evidence from the US domestic airline industry. *Journal of Operations Management*, 38(9), 14-24.
- Min, H., & Joo, S. J. (2016). A comparative performance analysis of airline strategic alliances using data envelopment analysis. *Journal of Air Transport Management*, 52(4), 99-110.
- Muchemi, R. N. (2016). *Strategic Alternatives for the Continued Operation of Kenya Airways* (Doctoral dissertation, United States International University-Africa).
- Muthoka, M. & Oduor, P. (2018). Effects of Strategic Alliances on Organizational Performance: Supermarkets and Their Alliances in Kenya. *European Journal of Business and Management*, 6 (34), 75-89.
- Panzar, J. C., & Willig, R. D. (1981). Economies of scope. *The American Economic Review*, 71(2), 268-272.
- Payán-Sánchez, B., Pérez-Valls, M., & Plaza-Úbeda, J. A. (2019). The Contribution of Global Alliances to Airlines' Environmental Performance. *Sustainability*, 11(17), 4606.
- Penrose, E. (1959). 1959 The theory of the growth of the firm Oxford: Blackwell.
- Promsivapallop, P., Jones, P., & Roper, A. (2015). Factors influencing hotel outsourcing decisions in Thailand: modifications to the transaction cost economics approach. *Journal of Hospitality & Tourism Research*, 39(1), 32-56.
- Rajasekar, J., & Fouts, P. (2009). Strategic alliances as a competitive strategy: How domestic airlines use alliances for improving performance. *International Journal of Commerce and Management*, 19(2), 93-114.
- Semercioz, F., & Kocer, B. (2017). Strategic alliances in the aviation industry: An analysis of Turkish Airlines experience. *Journal of Transnational Management Development*, 9(2-3), 29-45.
- Teo, A. C., & Leong, A. K. (2012). Alliances and Performance In The AirLine Industry, 1998-2002: A Network Perspective. In *Academy of International Business*.
- Tugores-García, A. (2016). *Analysis of global airline alliances as a strategy for international network development* (Doctoral dissertation, Massachusetts Institute of Technology).
- Ustaömer, T., C. Durmazb, V., Zheng L. (2015). The effect of joint ventures on airline competition: the case of American airlines, British airways and Iberia joint business. 4th International Conference on Leadership, Technology, Innovation and Business Management, Procedia - Social and Behavioral Sciences 210 (2015) 430 – 439
- Vasigh, B., Fleming, K., & Tacker, T. (2018). *Introduction to air transport economics: from theory to applications*. Routledge.

- Villar, J. J., Tafur, J., & Jia, G.(2016). Strategic Airline Alliances: Advantages For Major Airlines Being Aligned.
- Wang, S. W. (2014). Do global airline alliances influence the passenger's purchase decision?. *Journal of Air Transport Management*, 37, 53-59.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Williamson, O. E. (2010). Transaction cost economics: The natural progression. *American Economic Review*, 100(3), 673-90.
- Yang, Y., & Konrad, A. M. (2011). Understanding diversity management practices: Implications of institutional theory and resource-based theory. *Group & Organization Management*, 36(1), 6-38.
- Zacks, L. (2011). As results discussed of in the Preface of this book, professional investors use the anomaly research to create multifactor models to manage market neutral and long portfolios. *The Handbook of Equity Market Anomalies: Translating Market Inefficiencies into Effective Investment Strategies*, 2, 285.
- Zou, L., & Chen, X. (2017). The effect of code-sharing alliances on airline profitability. *Journal of Air Transport Management*, 58(1), 50-57.