



MarketLine Industry Profile

Global Airlines

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1. Executive Summary

1.1. Market value

The global airlines industry grew by 8.3% in 2018 to reach a value of \$681,963.1 million.

1.2. Market value forecast

In 2023, the global airlines industry is forecast to have a value of \$1,005,404.7 million, an increase of 47.4% since 2018.

1.3. Market volume

The global airlines industry grew by 4.2% in 2018 to reach a volume of 3,930.4 million passengers.

1.4. Market volume forecast

In 2023, the global airlines industry is forecast to have a volume of 4,996.4 million passengers, an increase of 27.1% since 2018.

1.5. Category segmentation

Domestic is the largest segment of the global airlines industry, accounting for 59.1% of the industry's total volume.

1.6. Geography segmentation

Asia-pacific accounts for 34.5% of the global airlines industry value.

1.7. Market rivalry

The large size of competitors operating in this industry, alongside high fixed costs and difficulties in exiting, contribute to strong rivalry.

1.8. Competitive Landscape

Globally, the US airlines industry remains the single largest industry. Many of the leading players in the US airlines industry have been exposed to the worldwide grounding of the Boeing 737 MAX and rising fuel costs. Passenger numbers are climbing at a healthy rate and the airlines are becoming more efficient at transporting people to their destinations. In China the industry is rapidly advancing. The Chinese airline industry continues to grow very quickly thanks to an expanding middle-class and rising wages, even though the economy is slowing down. Because the industry is home to such a large domestic consumer base, the speed of expansion of both domestic and overseas flights has been rapid and is predicted to continue to be so. In Europe, the United Kingdom continues to be the largest industry. The industry there is dominated by budget airlines due to strong downward pressure on prices from consumers. Increases in fuel costs have mostly been coped with well by the industry, but because airlines normally operate on low margins, adapting is highly important for airlines.

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2. Market Overview

2.1. Market definition

The airlines industry comprises passenger air transportation, including scheduled flights but excluding air freight transport.

Industry volumes are defined as the total number of passengers carried on all airlines within the specified country or region, segmented by international and domestic passengers. For the US and Canada, transborder passengers departing from either country are considered as part of the international segment.

Industry value is defined as the total revenue obtained by airlines from transporting those passengers, calculated by applying the average revenue per passenger and applying this to passenger volumes.

All currency conversions in this profile were carried out using constant 2018 average annual exchange rates.

For the purposes of this report, the global market consists of North America, South America, Europe, Asia-Pacific, Middle East, South Africa and Nigeria.

North America consists of Canada, Mexico, and the United States.

South America comprises Argentina, Brazil, Chile, Colombia, and Peru.

Europe comprises Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

Scandinavia comprises Denmark, Finland, Norway, and Sweden.

Asia-Pacific comprises Australia, China, Hong Kong, India, Indonesia, Kazakhstan, Japan, Malaysia, New Zealand, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam.

Middle East comprises Egypt, Israel, Saudi Arabia, and United Arab Emirates.

2.2. Market analysis

There has been good growth in the global airlines industry in recent years, a trend that looks set to continue in the forecast period.

The growth of economies, particularly in the Asia-Pacific region, is leading to increasing income. This has been an important factor for the stimulation of demand for flights in recent years.

The global airlines industry had total revenues of \$682.0bn in 2018, representing a compound annual growth rate (CAGR) of 5.5% between 2014 and 2018. In comparison, the Asia-Pacific and US industries grew with CAGRs of 6.6% and 9.8% respectively, over the same period, to reach respective values of \$235.3bn and \$215.5bn in 2018.

In parts of North America and Europe, the industry is highly consolidated, which has prevented a steep downfall in terms of ticket fares. In addition, the growth of Western economies following a recent downturn has enhanced leisure travelling. As such, the industry has remained in good growth.

Industry consumption volume increased with a CAGR of 6.2% between 2014 and 2018, to reach a total of 3,930.4 million passengers in 2018. The industry's volume is expected to rise to 4,996.4 million passengers by the end of 2023, representing a CAGR of 4.9% for the 2018-2023 period.

The Canadian industry is probably the only major airlines industry that has no ultra-low-cost carriers. In this way, ticket fares are higher in comparison to other countries, as a result of limited price competition. However, there are signs that LCCs are beginning to have an impact on pricing. In early 2018, Air Canada launched new economy fares to

compete with low-cost carriers. Furthermore, in 2017, it was announced that WestJet would be launching an ultra-low-cost airline, Swoop, with flights commencing from 2018 onwards.

Domestic had the highest volume in the global airlines industry in 2018, with a total of 2,323.6 million passengers, equivalent to 59.1% of the industry's overall volume. In comparison, international had a volume of 1,606.8 million passengers in 2018, equating to 40.9% of the industry total.

The airlines industry is highly dependent on the economic conditions of a country. As the economic outlook for many countries look relatively stable, so too does the outlook for the airlines industry.

The performance of the industry is forecast to accelerate, with an anticipated CAGR of 8.1% for the five-year period 2018 - 2023, which is expected to drive the industry to a value of \$1,005.4bn by the end of 2023. Comparatively, the Asia-Pacific and US industries will grow with CAGRs of 8.2% and 9.1% respectively, over the same period, to reach respective values of \$348.6bn and \$333.1bn in 2023.

Short-term growth in the US industry will be hard to come by, partly thanks to the grounding of the Boeing 737 MAX. Major US airlines have been leading buyers of the aircraft which was grounded in March 2019 following two fatal crashes which have subsequently been blamed on anti-stall systems. The Southwest Airlines pilots union is suing the plane maker for allegedly deliberately misleading them about the new plane. Chinese airlines have been expanding aggressively in the international market, winning market share from foreign airlines. As of early 2019, there were 29 Chinese airlines operating in the international market, compared with just 12 five years prior. Growth in the international segment is expanding swiftly but it continues to be a fraction of the size of the domestic segment. During April 2019, Air China announced that revenue grew 3% to \$4.84bn and net profit climbed 3.6% to \$402m for the first quarter of the year.

3. Market Data

3.1. Market value

The global airlines industry grew by 8.3% in 2018 to reach a value of \$681,963.1 million.

The compound annual growth rate of the industry in the period 2014–18 was 5.5%.

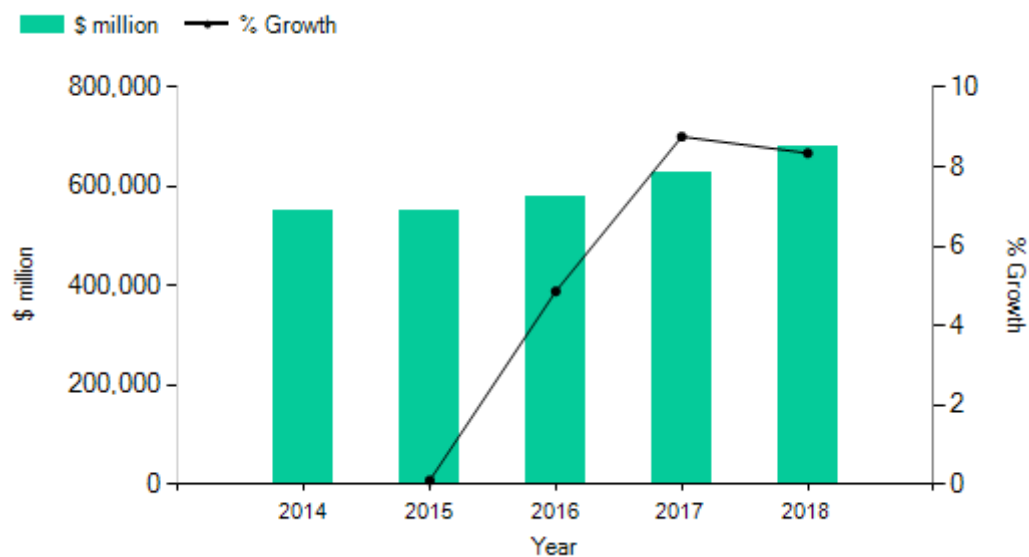
Table 1: Global airlines industry value: \$ million, 2014–18

Year	\$ million	€ million	% Growth
2014	551,385.4	466,875.8	
2015	551,946.8	467,351.1	0.1%
2016	578,784.0	490,075.0	4.9%
2017	629,454.2	532,979.1	8.8%
2018	681,963.1	577,440.1	8.3%
CAGR: 2014–18			5.5%

SOURCE: MARKETLINE

MARKETLINE

Figure 1: Global airlines industry value: \$ million, 2014–18



SOURCE: MARKETLINE

MARKETLINE

3.2. Market volume

The global airlines industry grew by 4.2% in 2018 to reach a volume of 3,930.4 million passengers.

The compound annual growth rate of the industry in the period 2014–18 was 6.2%.

Table 2: Global airlines industry volume: million passengers, 2014–18

Year	million passengers	% Growth
2014	3,090.6	
2015	3,311.7	7.2%
2016	3,525.4	6.5%
2017	3,773.1	7.0%
2018	3,930.4	4.2%

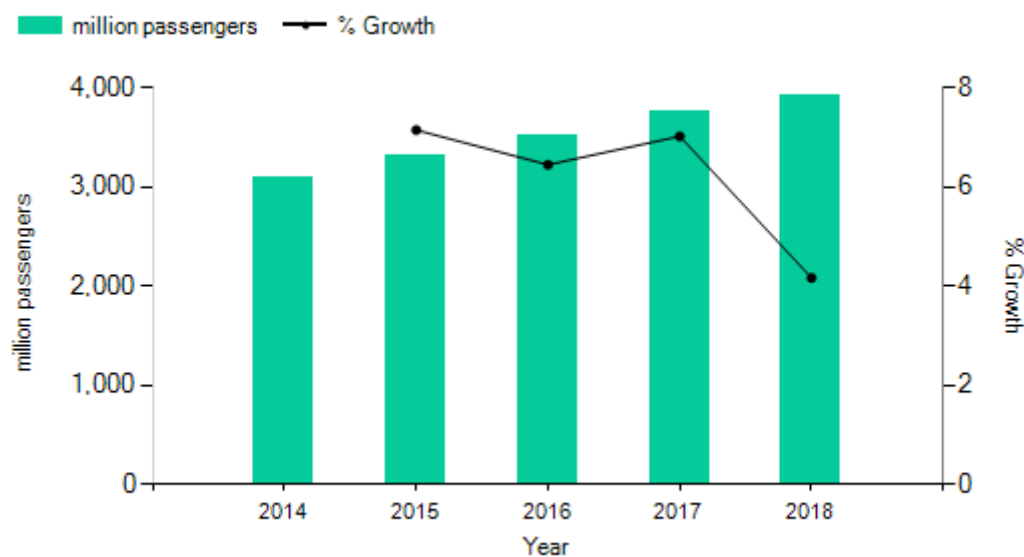
CAGR: 2014–18

6.2%

SOURCE: MARKETLINE

MARKETLINE

Figure 2: Global airlines industry volume: million passengers, 2014–18



SOURCE: MARKETLINE

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4. Market Segmentation

4.1. Category segmentation

Domestic is the largest segment of the global airlines industry, accounting for 59.1% of the industry's total volume.

The International segment accounts for the remaining 40.9% of the industry.

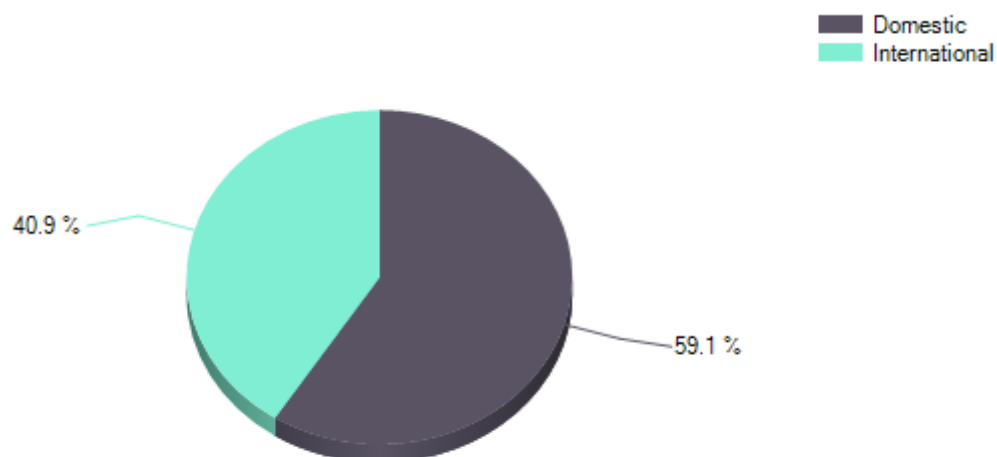
Table 3: Global airlines industry category segmentation: million passengers, 2018

Category	2018	%
Domestic	2,323.6	59.1%
International	1,606.8	40.9%
Total	3,930.4	100%

SOURCE: MARKETLINE

MARKETLINE

Figure 3: Global airlines industry category segmentation: % share, by volume, 2018



SOURCE: MARKETLINE

MARKETLINE

4.2. Geography segmentation

Asia-pacific accounts for 34.5% of the global airlines industry value.

United States accounts for a further 31.6% of the global industry.

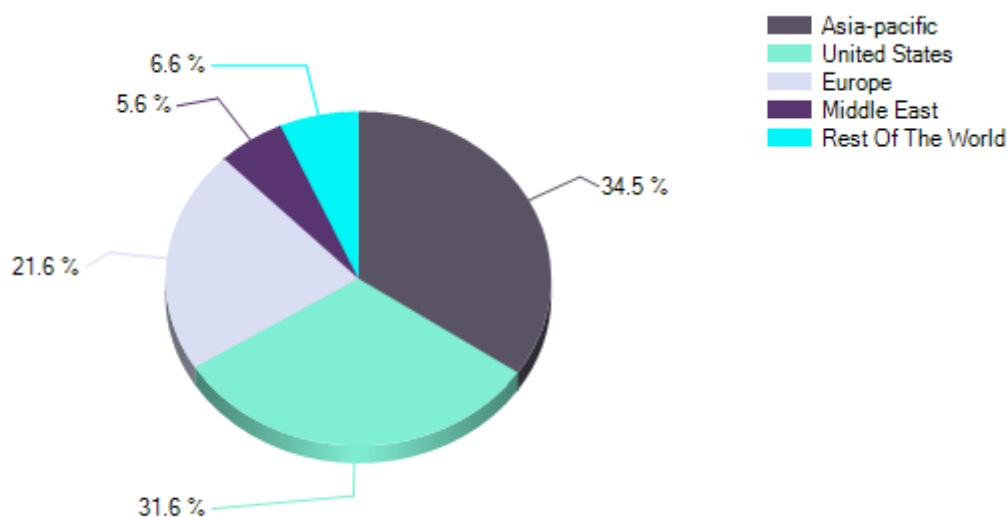
Table 4: Global airlines industry geography segmentation: \$ million, 2018

Geography	2018	%
Asia-pacific	235,328.6	34.5
United States	215,477.0	31.6
Europe	147,401.3	21.6
Middle East	38,499.3	5.6
Rest Of The World	45,257.0	6.6
Total	681,963.2	99.9%

SOURCE: MARKETLINE

MARKETLINE

Figure 4: Global airlines industry geography segmentation: % share, by value, 2018



SOURCE: MARKETLINE

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5. Market Outlook

5.1. Market value forecast

In 2023, the global airlines industry is forecast to have a value of \$1,005,404.7 million, an increase of 47.4% since 2018.

The compound annual growth rate of the industry in the period 2018–23 is predicted to be 8.1%.

Table 5: Global airlines industry value forecast: \$ million, 2018–23

Year	\$ million	€ million	% Growth
2018	681,963.1	577,440.1	8.3%
2019	729,125.9	617,374.4	6.9%
2020	794,241.1	672,509.5	8.9%
2021	859,993.2	728,183.9	8.3%
2022	930,043.1	787,497.4	8.1%
2023	1,005,404.7	851,308.5	8.1%
CAGR: 2018–23			8.1%

SOURCE: MARKETLINE

MARKETLINE

Figure 5: Global airlines industry value forecast: \$ million, 2018–23



SOURCE: MARKETLINE

MARKETLINE

5.2. Market volume forecast

In 2023, the global airlines industry is forecast to have a volume of 4,996.4 million passengers, an increase of 27.1% since 2018.

The compound annual growth rate of the industry in the period 2018–23 is predicted to be 4.9%.

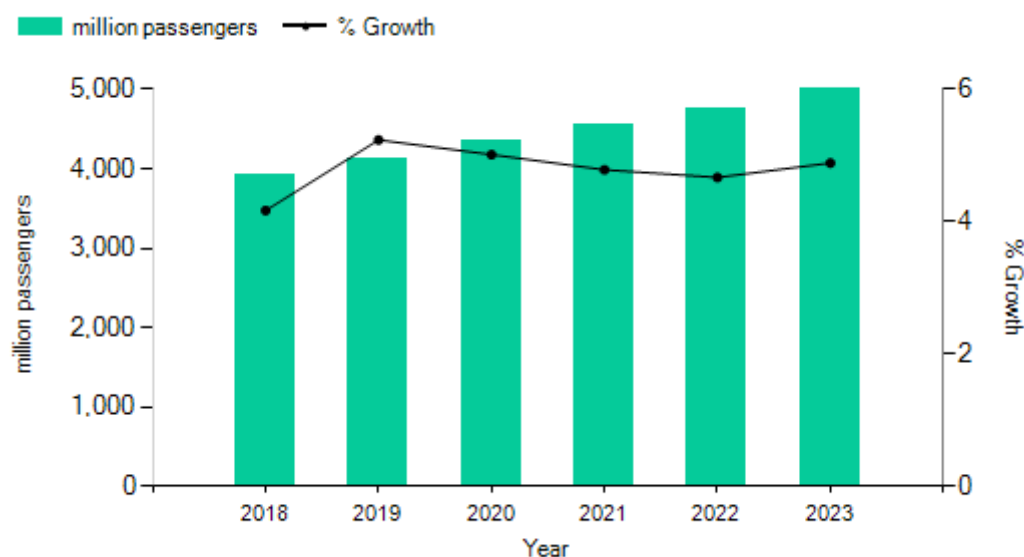
Table 6: Global airlines industry volume forecast: million passengers, 2018–23

Year	million passengers	% Growth
2018	3,930.4	4.2%
2019	4,136.2	5.2%
2020	4,343.5	5.0%
2021	4,551.2	4.8%
2022	4,763.7	4.7%
2023	4,996.4	4.9%
CAGR: 2018–23		4.9%

SOURCE: MARKETLINE

MARKETLINE

Figure 6: Global airlines industry volume forecast: million passengers, 2018–23



SOURCE: MARKETLINE

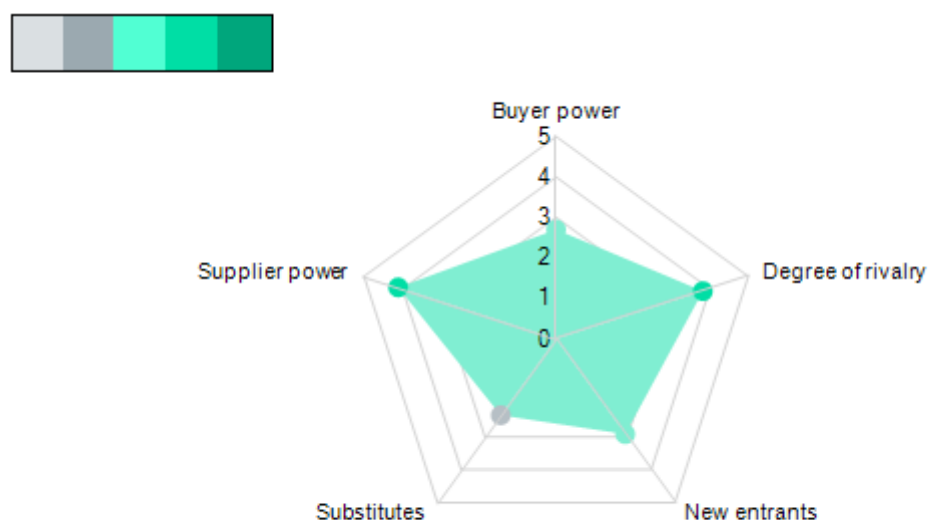
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6. Five Forces Analysis

The airlines market will be analyzed taking airlines as players. The key buyers will be taken as individual consumers, corporate accounts, travel agencies, and aircraft manufacturers and leasers, airport operators, aircraft manufacturers and leasers, airline maintenance providers, airline service providers, fuel companies as the key suppliers.

6.1. Summary

Figure 7: Forces driving competition in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

The large size of competitors operating in this industry, alongside high fixed costs and difficulties in exiting, contribute to strong rivalry.

Buyers are generally consumers, business account holders and travel agencies who have agreements with individual airlines. These, taken as individuals, represent a very small amount of a given airline's business. Airlines may deal with larger freight companies. As most buyers are individual consumers, financial muscle is low. Consequently, only travel agencies in this industry have slight bargaining power against airlines.

Supplier power is strong in this industry. Aircraft manufacturers form an oligopoly. Aircraft manufacturing is highly capital intensive and as such there are very few players in the industry. For large, wide-body aircraft there are only two suppliers worldwide, namely Boeing and Airbus. Other manufacturers such as Embraer, Bombardier and United Aircraft Corporation (parent company of Ilyushin, Tupolev and Sukhoi) have limited supply in the civil airlines industry. There are a comparatively large number of suppliers in the small jet market but choice is still limited.

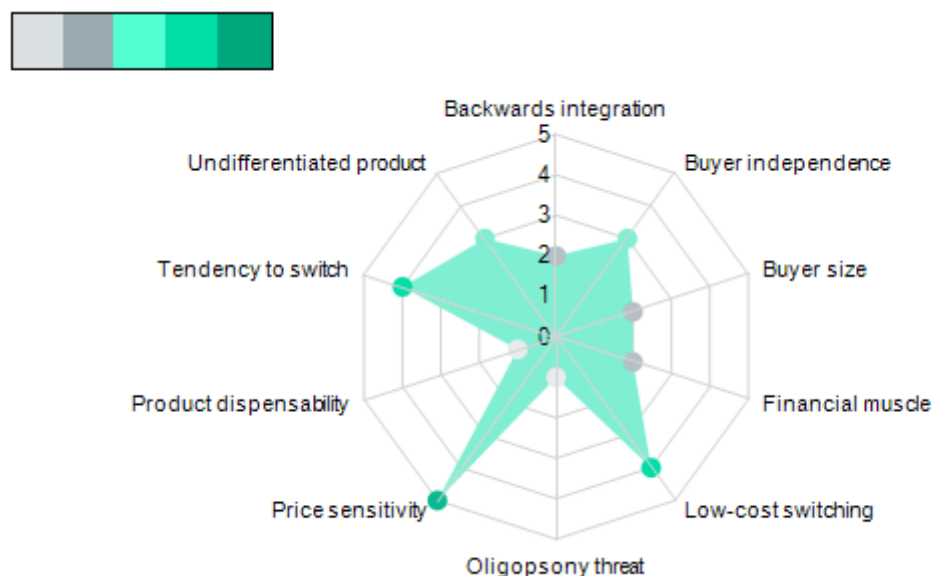
Economies of scale are crucial to the success of an airline. Profit margins are often thin and it can be hard for any airline to turn a profit, especially those that are reliant on a single market. Thus, it is extremely difficult for new players to enter, especially when considering the amount of capital required and the low level of profitability.

Even though it has been known for travel agencies to form 'charter' airlines, these are not established as main airline carriers. This is because charter airlines operate seasonally and have limited destination offerings, which supplement the lack of supply from the main carriers.

The availability of a substitute to flying depends on the route in question and varies according to the cost and the benefit of the alternative. Therefore, over particularly long distances, there are virtually no alternatives to travelling by airplane.

6.2. Buyer power

Figure 8: Drivers of buyer power in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

Buyers are generally consumers, business account holders and travel agencies who have agreements with individual airlines. These, taken as individuals, represent a very small amount of a given airline's business. Airlines may deal with larger freight companies. As most buyers are individual consumers, financial muscle is low. Consequently, only travel agencies in this industry have slight bargaining power against airlines.

Switching costs are low if another airline can fly the same route, or a similar route. Many airlines have 'frequent flier' schemes to encourage repeat custom. Foregoing the perks associated with these schemes could be seen as the only cost of switching. Some routes and countries are more prone to monopolies than others. In general, the more demand for a route, the more airlines will service it.

Many airlines highlight service quality as well as punctuality in marketing material. Consumers are mainly driven by price, however, and air travel is rarely bought for its own sake. A poor reputation for punctuality, safety records, or for the quality of services offered, is likely to prevent consumers from selecting a particular airline. For instance, the US airlines industry has been upset by incidents related to passenger overbooking and the mistreatment of passengers. United Airlines and American Airlines have been involved in high profile incidents and could be in fear of a boycott created by a negative brand image among consumers. In fact, the backlash from one such incident in 2017 caused some airlines to scrap the practice of overbooking, while others offer better incentives for travelers to give up seats.

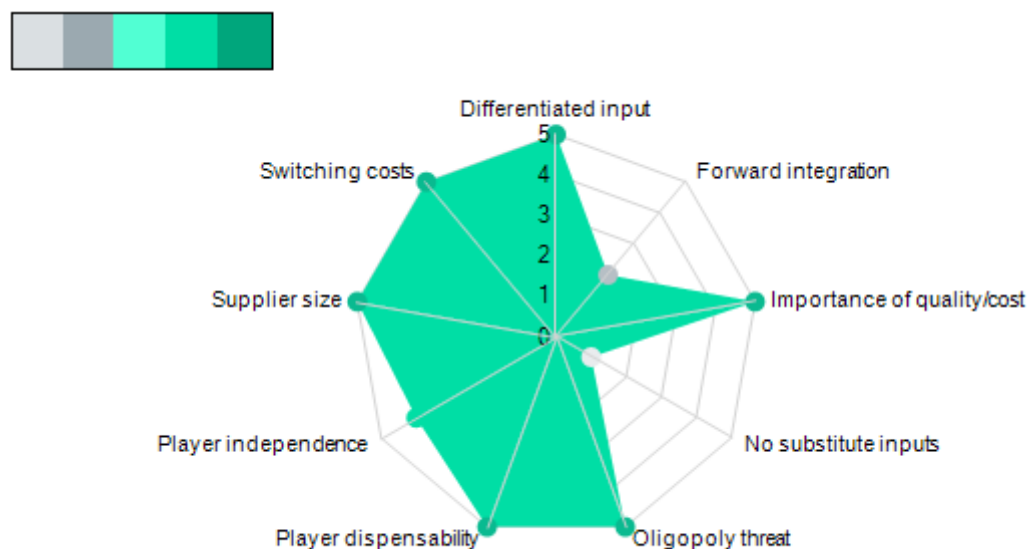
Products are largely undifferentiated on busy routes. The only differentiation from the point of view of most consumers is the difference between so called 'full-service' (legacy) and 'low-cost' carriers (LCCs). Low-cost carriers tend to attract mainly price-sensitive consumers. Customers have a fairly high propensity to switch airline if the same (or similar) route is offered at a lower price. This is a highly price sensitive industry, evidence of this can be seen in the rapid rise of low-cost carriers. Some consumers are willing to travel to different airports for lower prices. Furthermore, leisure travelers are more price-sensitive than business travelers.

Most airlines already sell tickets directly to consumers without the need for travel agents or other intermediaries; further forward integration is not likely. Many flights are bought directly by consumers from airlines via websites or by phone, with low-cost carriers having pioneered the use of online booking and check in to save fixed costs. Airlines also operate ticketing offices and some sell holidays and other travel services via their websites to complement their services. There are also travel fare aggregator websites such as Expedia and Trivago which may not have significant power against players of the industry, but they increase consumer awareness over prices.

Overall, buyer power in the global airlines industry can be assessed as moderate.

6.3. Supplier power

Figure 9: Drivers of supplier power in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

The size of suppliers to major airlines is large. Aircraft fuel is sold by major oil companies and airlines will usually enter into long term agreements with them. Most major cities have, at most, a small number of airports which are run either by large corporations or the local government.

Most importantly, aircraft manufacturers form an oligopoly. Aircraft manufacturing is highly capital intensive and as such there are very few players in the industry. For large (wide-body) aircraft there are only two suppliers worldwide, namely Boeing and Airbus. Other manufacturers such as Embraer, Bombardier and United Aircraft Corporation (parent company of Ilyushin, Tupolev and Sukhoi) have limited supply in the (civil) airlines industry. There are a comparatively large number of suppliers in the small jet market but choice is still limited.

These aircraft manufacturers do have other business interests such as defense contracts, especially Bombardier and United Aircraft Corporation. However, for leading aircraft manufacturers, the majority of revenues come from the manufacture of passenger airliners. For example, in 2018, Airbus derived almost 82% of revenue from the manufacture of commercial aircraft. Because of the oligopoly in commercial aircraft manufacture, the business of a single airline is not as important for these manufacturers. The purchasing of aircraft is reliant on a quality product and suppliers in the market trade on reputations earned over decades.

Many airlines lease aircraft, but due to the capital investment just one aircraft requires, leasing companies are large and not numerous. Some service providers may be smaller but by and large airlines only usually deal with other large companies. Overall, the cost of fuel accounted for approximately 23.5% of airlines' total operating expenses in 2018, while in 2017 that cost accounted for 17.3%, according to the IATA.

Switching costs are likely to have a sustained impact on airline revenue. For example, if an airport is situated in an airline's key market, it is unlikely to switch. New airports are not opened often and when they are, it is often to replace existing infrastructure anyway.

Due to the capital investment required, the purchasing of new aircraft is done over a long time period, and whilst many airlines buy from more than one supplier, they cannot just switch instantly. Suppliers can have a big impact on the business of industry players. For example, in 2017, Southwest Airlines permanently parked 90 of its oldest aircraft. However, the airline could not immediately replace these as it was waiting for more fuel efficient replacements from Boeing. Consequently, the company had to make changes to the way in which it operated in the meantime by using its existing aircraft to carry out more flights. This forced the company to add flights at times when the aircraft would be available.

Some airlines have engaged in backward integration by performing aircraft maintenance and conducting some airport services, such as food and baggage handling, through subsidiaries. Many airline holding companies also incorporate airport service providers. With the exception of the purchase of an oil refinery by Delta Airlines, now regarded as unnecessary by most analysts, no major airlines own airports, manufacture aircraft or control fuel supply. The capital required for this would be huge. Other than in some airline services, major backward integration is unlikely.

Airports are dependent on airlines pushing passenger traffic for key components of their business, including shops, parking and hotels. Some airports are more reliant on one airline than others; airlines often enter into long term agreements with airport operators to create 'hub' airports, a model usually followed by legacy carriers. This can be seen with the major US airlines. United represents by far the most traffic at Houston Airport, Delta has a large presence in Atlanta and American does at Dallas/Fort Worth. Similarly, this can be seen with all major airlines within the European industry that are dependent on Heathrow, Charles de Gaulle, Frankfurt and Schiphol airports. These airlines are indispensable to these airports but would have a hard time moving their hub operation. Furthermore, regional airports are more important to low-cost carriers that tend to use a point-to-point network-model, as landing taxes are lower because of reduced traffic volume.

Some suppliers of goods to airlines, such as maintenance, staffing and food providers, could be substituted but these often are tied to specific airports or routes. Each airport will have a sole catering supplier and a sole maintenance supplier; these are sometimes owned by an airport company or the airline itself. The airports themselves can be difficult to substitute as each serves a given area within a country and an airline will have little choice if it wants to fly that route and cater to that national market; if an airline is in a dominant position in a given airport, it will likely be able to have more influence on these functions of the airport.

Consumer experience of an airline's product is largely dependent on their experience of an airport, so for airlines the quality of an airport is a key part of their reputation. Airports often invest in new infrastructure solely to appease airlines.

Jet fuel is commoditized, which weakens supplier power, as individual companies cannot retain an airline's custom on the basis of superior product quality. However, fuel cannot be substituted for anything else and prices are at the mercy of global oil prices shaped by the OPEC. Many airlines 'hedge' prices by pre-agreeing a set price with major oil companies for a given period to mitigate against spikes in oil prices. Jet fuel is a large market but is a small percentage of oil revenues overall, this strengthens supplier power.

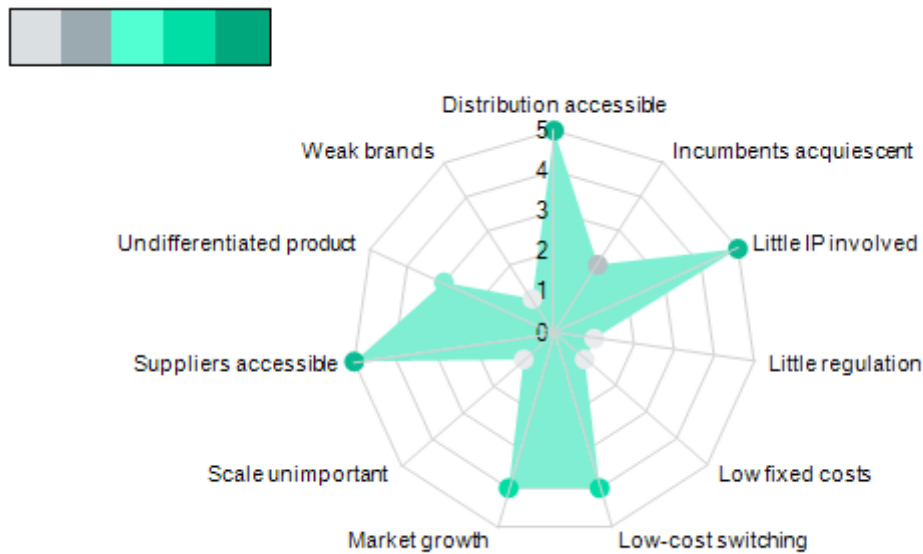
The supply of on-board staff is also important for airlines as piloting is a specialized and highly-skilled job that affects fixed costs. In addition, the airlines industry is characterized by strong labor unions.

With regard to forward integration; suppliers are unlikely to start their own airline, although some shareholding arrangements exist between airport, air service and airline groups.

Overall, supplier power is assessed as strong.

6.4. New entrants

Figure 10: Factors influencing the likelihood of new entrants in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

There has been good growth in the global airlines industry in recent years, which would ordinarily attract new players. In many individual country industries, consolidation indicates that there is no significant room for new players. Similarly, many European industries are already heavily populated by low-cost carriers, leaving little room for companies wishing to enter using this strategy.

Economies of scale are crucial to the success of an airline; profit margins are often thin and it can be hard for any airline to turn a profit, especially those that are reliant on a single market. Thus, it is extremely difficult for new players to enter, considering the amount of capital required and the low level of profitability.

Even though it has been known for travel agencies to form 'charter' airlines, these are not established as main airline carriers. This is because charter airlines operate seasonally and have limited destination offerings, which supplement the lack of supply from the main carriers.

Low-cost carriers have grown more organically than legacy carriers, which tend to grow by acquisition and mergers. What is more, it is easier for prospective players to enter as low-cost carriers (LCC). However, it would be difficult for an LCC to change from that business model afterwards and so far none have attempted to offer legacy carrier services as a means of brand differentiation. In contrast, legacy carriers have adopted a low-cost business model through subsidiaries in an effort to compete with low-cost carriers, leading to the saturation of the industry. However, the major air carriers in the US industry have refrained from this combined business model.

Fixed costs are high. Buying or leasing planes is a large cost and the purchasing and maintenance of 'slots' is also costly. Staff costs are also high; airlines often have difficulty turning a profit if market conditions are not completely favorable. The airlines industry is vulnerable to macroeconomic changes and other demand-shocks. Specifically, the demand of both types of buyers, leisure and business travelers, is strongly affected by changes in their income. In the case of leisure travelers, these services are considered a 'luxury' good and are greatly dispensable. Similarly, business travelling is connected to the growth of trade and of the economy as a whole. The airlines industry is particularly vulnerable to economic crisis, as already experienced some years ago. Moreover, demand shocks are also dictated by safety issues regarding terrorism or the socioeconomic stability of countries' destinations.

Airlines are a highly regulated industry, governments regulate on safety, security, staff training and aircraft procedures. Because of the international nature of the industry, certain globally agreed standards are upheld and airlines can live or die on their safety records. Green taxes also apply, referring to the emissions of aircraft.

Because of the highly price sensitive nature of the industry, airlines are in constant price wars with one another, especially in more established markets. Nevertheless, the nature of this industry dictates price-competition caps, as instant demand shifts cannot be satisfied by limits of supply. The entry of a new player into the industry is unlikely to go unanswered and fares have been forced down by keen competition, especially from low-cost carriers. The US and some European carriers are currently lobbying legislators in their respective countries over what they claim is the unfair subsidies that Gulf-based carriers have received from their respective governments. In December 2017, a number of executives from US airlines met with government officials over the issue. Following this, in January 2018, Qatar Airways agreed to disclose its financial information within 12 months. While this represents some progress, it is unlikely that any significant changes to open-skies regulation will occur in the near-term.

Landing slots and routes are strictly controlled by airports and governments; large investment is required from a new player to establish profitable routes. The opening of new routes may be easier but can be risky compared to competing on established routes; this depends on the operating environment individual to a chosen country.

There is little IP required to start an airline, patents will be held by aircraft manufacturers and only brands themselves represent significant IP value. Most large airlines are well known in their native countries and have some customer loyalty built up through the use of frequent flier programs. Consumers in some markets may be wary of new players due to safety concerns.

Overall, the threat of new entrants in the global airlines industry can be assessed as moderate.

6.5. Threat of substitutes

Figure 11: Factors influencing the threat of substitutes in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

The availability of a substitute to flying depends on the route in question and varies according to the cost and the benefit of the alternative. Therefore, over particularly long distances, there are virtually no alternatives to travelling by airplane.

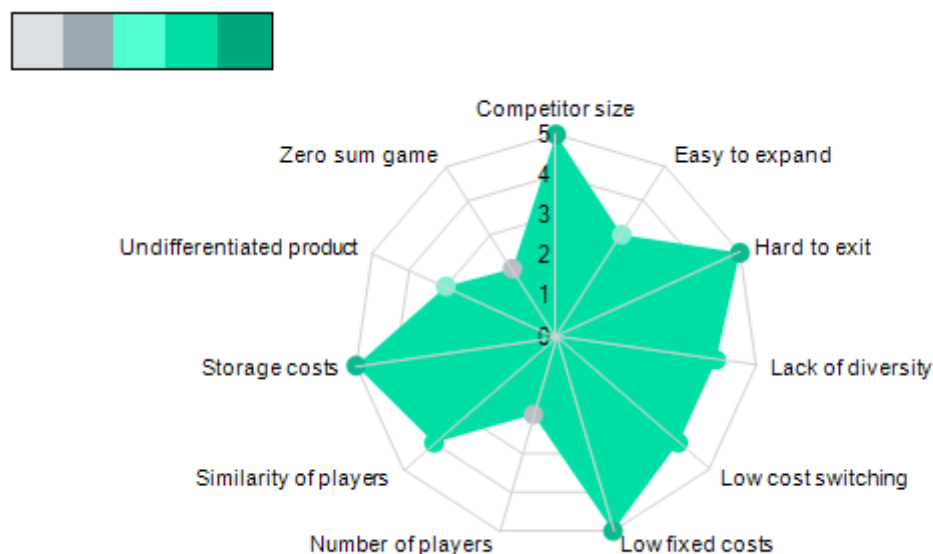
Switching costs for consumers are low, the only cost being foregoing frequent flier miles. Some short haul routes can be substituted for rail or car travel, but in many cases this is more expensive and time-consuming for consumers. No feasible alternative exists to flying long haul. In general, the geographical spread of a country reduces the availability of substitutes to air travelling.

There are many geographically large countries globally, so flights are usually the only viable option on many routes across them. However, some of them such as China, India and Japan, are among the countries with the highest usage of rail transportation in the world, based on the extensive rail networks across them. Nevertheless, long distances on these services are time-consuming and eventually domestic flights are considered as the best option.

Overall in the airlines industry, the threat of these substitutes is weak.

6.6. Degree of rivalry

Figure 12: Drivers of degree of rivalry in the global airlines industry, 2018



SOURCE: MARKETLINE

MARKETLINE

The airlines industry at its most basic level has two types of players: full-service and low-cost (LCCs). Most airlines operate one of these business models. However, many long established 'legacy' carriers have entered into the low-cost market with new subsidiaries. Until recently, low-cost carriers were operating entirely in short-haul flights. However, this is about to change, as some low-cost carriers have also entered in the international flights (long-haul) segment of the industry. In this way, competition among airlines is expected to intensify as legacy carriers are more dependent on the long-haul flight operating segment, on which they have enjoyed greater profit margins so far. Accordingly, the airlines' share of the international flights segment will be subject to change in the future.

Due to the capital investment required in aircraft, airlines tend to be large companies, many of which were established as state-owned enterprises. Whilst there are a large number of airlines globally, and on popular and profitable routes there may be a great deal of choice, on a specific route there will often be limited choice for a consumer. With the exception of a limited number of truly global players, most airlines concentrate on routes to and from the country in which they were established.

Frequent flyer loyalties aside, consumers can easily switch between players. Apart from the differences between low-cost and full-service carriers, products are largely undifferentiated. Some full-service carriers are even beginning to use some of the practices seen in the low-cost market, such as no-frills services on board.

Landing slots and routes are strictly controlled by airports and governments; large investment is required from a new player to establish profitable routes. The opening of new routes may be easier but can be risky compared to competing on established routes; this depends on the operating environment individual to a chosen country. Expansion by mergers and acquisition is common in order to improve cost efficiency. Efficiency is the major growth driver in the industry, which is reflected by certain indicators such as the revenues per mile/km, load factors and unit costs.

Airlines require large capital investment in aircraft and staff training; they are also often contracted for long periods in agreements with airport authorities. Exit from the industry is difficult, and is mostly only done due to financial insolvency.

Some airlines have diversified into offering other associated travel services but most only focus on air travel. Diversification into freight can be another revenue stream, most major airlines already do this. Moreover, many airlines tend to bundle their services by offering hotel bookings and car rentals, gathering commission fees added to ancillary revenues.

The concept of storage cost refers to the lifespan of a product. Here, the lifespan of a flight ticket is up to the time of the flight. If a flight seat is not sold before the flight departs then it is worth nothing. Many airlines auction off premium classes of service if they are unsold to raise revenue. This increases the degree of rivalry in the industry.

Overall, the degree of rivalry in the airlines industry can be seen as strong.

7. Competitive Landscape

Globally, the US airlines industry remains the single largest industry. Many of the leading players in the US airlines industry have been exposed to the worldwide grounding of the Boeing 737 MAX and rising fuel costs. Passenger numbers are climbing at a healthy rate and the airlines are becoming more efficient at transporting people to their destinations. In China the industry is rapidly advancing. The Chinese airline industry continues to grow very quickly thanks to an expanding middle-class and rising wages, even though the economy is slowing down. Because the industry is home to such a large domestic consumer base, the speed of expansion of both domestic and overseas flights has been rapid and is predicted to continue to be so. In Europe, the United Kingdom continues to be the largest industry. The industry there is dominated by budget airlines due to strong downward pressure on prices from consumers. Increases in fuel costs have mostly been coped with well by the industry, but because airlines normally operate on low margins, adapting is highly important for airlines.

7.1. Who are the leading players?

American Airlines is an airline holding company which offers passengers and cargo air transportation services. The group operates wholly-owned regional airline subsidiaries and third-party regional carriers operating as American Eagle.

Lufthansa is an aviation company that offers scheduled passenger and air freight transportation services. The company offers logistics services through its own freighters, chartered cargo aircraft and belly capacities on passenger aircraft.

Delta is a global airline company which provides scheduled air transportation for passengers and cargo. Its service portfolio includes passenger transport; cargo transport; aircraft management; professional security; training and consulting; aviation solutions; vacation packages; and maintenance, repair and overhaul (MRO). It also has bilateral and multilateral marketing alliances with foreign airlines, and service agreements with multiple domestic regional air carriers.

Emirates is an air transportation service provider. The company provides services such as passenger transportation, cargo services, flight booking, hotel booking, car rental, check-in, flight status and baggage allowance services.

7.2. Which players have been most successful in the past three years?

American Airlines has been forced to respond to higher expenditure on fuel, but its share of operating expenses is in line with other major players in the US airlines industry. In 2018, the figure was 23.65%, up from 17.6% just two years before. The average age of the fleet is relatively young at 10.6 years but that includes the Boeing 737 MAX aircraft, of which the company has 20, according to the latest annual filings. By 2024, the company is due to operate a total of 80 Boeing 737 MAX aircraft. However, those aircraft are grounded around the world. Even if the plane is cleared to reenter service, it will still take weeks to get that part of the fleet in the air again. This means the company has missed out on the use of cutting-edge aircraft that should have helped to improve fuel economy and has had to work to plug holes in service schedules. As of mid-2019, the company was cancelling 115 flights per day. Net income has been under pressure. 2018 filings for net income stood at \$1.4bn, which is an improvement on the \$1.3bn registered the year before, but is still lower than \$2.5bn in 2015. This has occurred even though operating revenues have risen to \$44.5bn in 2018 from \$40.1bn in 2016.

Revenue for Lufthansa increased by 0.7% to EUR35.8bn (\$40.4bn) during 2018 but net profit fell 7.6% to EUR2.1bn (\$2.4bn). In the year from 2017 to 2018, Lufthansa flew 1.2 million flights, up 9%. Passenger numbers rose accordingly, increasing 10% to 142 million. The Network Airlines segment of the business outperformed Eurowings in terms of revenue, registering EUR22.7bn (\$25.6bn), while Eurowings recorded EUR4.23bn (\$4.77bn), accounting for 61% and 12% of revenue, respectively. However, Network Airlines expanded revenues by 5%, while Eurowings grew

by 19%. Because Lufthansa is a global airline, the performance of the business is subject to global events, including trade wars, macro-economic growth and oil price fluctuations. As with other leading airlines, expenditure on aviation fuel has risen, denting company performance in an industry that is notoriously tight on margins. For the short-term, the airline must cope with the grounding of the Boeing 737 MAX because the aircraft is expected to make up most of its new fleet, alongside the Airbus A320neo.

The Emirates group currently serves 156 airports in 84 countries and operates the largest fleets of Airbus A380 and Boeing 777 aircraft. The group has suffered from reducing margins, which from 2018 to 2019 fell from 5.2% to 3.6%. However, during that time, revenue increased by 6.7% to \$28.9bn. The Emirates airline itself accounted for \$26.6bn but experienced a decline in margin from 4.4% to 2.7%. This represents a growing problem for the airline because the number of passengers carried only increased by 0.2% to 58.6 million. Passenger traffic from the Middle East rose by 4.2% in 2018, but this was down from 6.9% the year before. Fuel prices for the airline soared by 22% over the last financial year. To improve matters, the airline is investing nearly \$4bn in new aircraft and equipment, as well as state-of-the-art technologies.

Delta has replicated other major airlines in the US industry in regards to fuel consumption as a percentage of total operating expense. From 2016 to 2018, the percentage rose from 18.3% to 23%. Such an increase is not easy to cope with over a short-period of time, but because the trend is industry-wide, Delta has not been as adversely impacted compared to rivals. The company has benefited from the Boeing 737 MAX grounding. Delta has not purchased any aircraft of that model, meaning the company is gaining from spillover demand from competitors and artificially low growth in capacity. Even though this is likely to be temporary, assuming the Boeing built plane does return to service reasonably soon, the improvement in business environment for the company has been helpful given the notoriously slim margins the industry traditionally operates on.

8. Company Profiles

8.1. American Airlines Group Inc.

8.1.1. Company Overview

American Airlines Group Inc. (AAG or 'the group') is an airline holding company, which offers passengers and cargo air transportation services. The group operates along with its wholly-owned regional airline subsidiaries and third-party regional carriers operating as American Eagle. The group's through its cargo division, American Airlines Cargo provides a wide range of freight and mail services. It operates its hubs in Charlotte, Chicago, Dallas/Fort Worth, Los Angeles, Miami, New York City, Philadelphia, Phoenix, and Washington, DC. The group has business operations across the US, Latin America, Europe, and Asia Pacific. AAG is headquartered in Fort Worth, Texas, the US.

The company reported revenues of (US Dollars) US\$44,541 million for the fiscal year ended December 2018 (FY2018), an increase of 4.5% over FY2017. In FY2018, the company's operating margin was 6%, compared to an operating margin of 9.9% in FY2017. In FY2018, the company recorded a net margin of 3.2%, compared to a net margin of 3% in FY2017. The company reported revenues of US\$11,960.0 million for the second quarter ended June 2019, an increase of 13% over the previous quarter.

8.1.2. Key Facts

Table 7: American Airlines Group Inc.: key facts

Head office:	4333 Amon Carter Boulevard Fort Worth , Texas, United States
Number of Employees:	128900
Website:	www.aa.com
Financial year-end:	December
Ticker:	AAL
Stock exchange:	NASDAQ

SOURCE: COMPANY WEBSITE

MARKETLINE

8.1.3. Business Description

American Airlines Group Inc. (AAG or 'the group') is a holding company, which provides scheduled air transportation for passengers and cargo. Together with its wholly-owned regional airline subsidiaries and third-party regional carriers operating as American Eagle, the group's airlines operate an average of nearly 6,700 flights per day to 350 destinations in 50 countries. As of December 2017, the group operated 948 mainline aircrafts, supported by regional airline subsidiaries and third-party regional carriers, which operated an additional 597 regional aircraft.

The group operates in the US, Latin America, Europe, and Asia Pacific. In FY2017, AAG recorded a total of 226,346 million revenue passenger miles (RPMs), and 276,493million available seat miles (ASMs) with a combined passenger load factor of approximately 81.9%. The group has hubs in Charlotte, Chicago, Dallas/Fort Worth, Los Angeles, Miami, New York City, Philadelphia, Phoenix, and Washington, DC.

The group operates through its subsidiaries, including American Airlines; Envoy Aviation Group; Piedmont Airlines; PSA Airlines; and third-party carriers, American Eagle. Envoy operates more than the 180 aircraft on approximately 900 daily flights to more than 150 destinations across the world. Piedmont operates daily regional flights to the eastern US from hubs in Charlotte and Philadelphia.. PSA Airlines' operates nearly 150 aircraft on 500 daily flights to nearly 90 destinations. The American Eagle has a network of nine regional carriers that operates 3,400 daily flights to

240 destinations in the US, Canada, the Caribbean, and Mexico. American Airlines Cargo , a division of AAG, provides more than 100 million pounds of weekly cargo capacity to major cities in the US, Europe, Canada, Mexico, the Caribbean, Latin America, and Asia Pacific.

The group also established marketing relationships with other airlines and rail companies. American Airlines currently has marketing relationships with Air Tahiti Nui, Alaska Airlines, British Airways, Cape Air, Cathay Pacific, Cathay Dragon, EL AL, China Southern Airlines, Etihad Airways, Fiji Airways, Finnair, Gulf Air, Hainan Airlines, Hawaiian Airlines, Iberia, Interjet, Japan Airlines, Jetstar Group, Korean Air, LATAM, Malaysia Airlines, Niki Airlines, Qantas Airways, Qatar Airways, Royal Jordanian, S7 Airlines, Seaborne Airlines, Sri Lankan Airlines and WestJet. American Airlines is also a founding member of the oneworld alliance, which serves nearly 1,000 destinations with over 14,250 daily flights to 150 countries.

Geographically, the company classifies its operations into four segments: DOT Domestic, DOT Latin America, DOT Atlantic, and DOT Pacific. In FY2017, DOT Domestic accounted for 70.2% of the group's revenue, followed by DOT Latin America (12.8%); DOT Atlantic (12%); and DOT Pacific (5%).

Table 8: American Airlines Group Inc.: Annual Financial Ratios

Key Ratios	2014	2015	2016	2017	2018
Growth Ratios					
Sales Growth %	59.48	-3.89	-2.07	6.18	4.50
Operating Income Growth %		46.01	-18.44	-16.38	-37.23
EBITDA Growth %		35.58	-11.84	-9.27	-22.97
Net Income Growth %		164.05	-66.04	-50.39	10.14
EPS Growth %	257.04	213.91	-66.27	-3.58	-18.95
Working Capital Growth %	-419.92	118.86	-1.99	75.08	52.27
Equity Ratios					
EPS (Earnings per Share) USD	3.93	11.07	4.65	4.28	3.03
Dividend per Share USD	0.20	0.40	0.40	0.40	0.40
Dividend Cover Absolute	19.63	27.68	11.62	10.70	7.58
Book Value per Share USD	2.90	9.02	7.46	-1.64	-0.37
Profitability Ratios					
Gross Margin %	53.28	64.13	66.44	64.82	60.66
Operating Margin %	9.96	15.14	12.61	9.93	5.96
Net Profit Margin %	6.76	18.57	6.44	3.01	3.17
Profit Markup %	114.05	178.75	197.97	184.26	154.19
PBT Margin (Profit Before Tax) %	7.53	11.26	10.34	7.97	4.23
Return on Equity %	142.60	135.05	68.27		
Return on Capital Employed %	14.25	17.82	13.53	11.30	6.25
Return on Assets %	6.74	16.61	5.18	2.46	2.49
Operating Costs (% of Sales) %	90.04	84.86	87.39	90.07	94.04
Administration Costs (% of Sales) %	26.82	30.34	34.80	35.77	35.32
Liquidity Ratios					
Current Ratio Absolute	0.88	0.73	0.74	0.60	0.48
Quick Ratio Absolute	0.80	0.67	0.67	0.51	0.39
Cash Ratio Absolute	0.54	0.46	0.46	0.33	0.26
Leverage Ratios					
Debt to Equity Ratio Absolute	8.93	3.68	6.43		
Net Debt to Equity Absolute	8.44	3.61	6.35	-31.76	-143.18
Debt to Capital Ratio Absolute	0.90	0.79	0.87	1.03	1.01
Efficiency Ratios					
Asset Turnover Absolute	1.00	0.89	0.81	0.82	0.79
Fixed Asset Turnover Absolute	2.01	1.62	1.37	1.31	1.15
Inventory Turnover Absolute	19.77	15.75	13.77	12.23	12.16
Current Asset Turnover Absolute	3.27	3.77	3.95	4.38	5.01
Capital Employed Turnover Absolute	1.43	1.18	1.07	1.14	1.05
SOURCE: COMPANY FILINGS				MARKETLINE	

Table 9: American Airlines Group Inc.: Key Employees

Name	Job Title	Board
Alberto Ibarguen	Director	Non Executive Board
Alice Curry	Vice President Customer Care	Senior Management
Cornelius Boone	Vice President Team Member Services	Senior Management
Denise M. O'Leary	Director	Non Executive Board
Derek J. Kerr	Chief Financial Officer	Senior Management
Derek J. Kerr	Executive Vice President	Senior Management
Elise R. Eberwein	Executive Vice President People and Communications	Senior Management
Heather Garboden	Vice President Financial Planning and Analysis	Senior Management
James F. Albaugh	Director	Non Executive Board
Jeffrey D. Benjamin	Director	Non Executive Board
Jim Moses	Vice President Philadelphia Hub Operations	Senior Management
John T. Cahill	Director	Non Executive Board
Juan Carlos Liscano	Vice President Miami Hub Operations	Senior Management
Julie Rath	Vice President Customer Planning	Senior Management
Kendall Lock	Vice President Enterprise Technology Services	Senior Management
Kevin Brickner	Senior Vice President Technical Operations	Senior Management
Kimball Stone	Senior Vice President Flight Operations and Integrated Operations Center	Senior Management
Lucretia Guia	Deputy General Counsel	Senior Management
Lucretia Guia	Vice President Labor Relations	Senior Management
Martin H. Nesbitt	Director	Non Executive Board
Matthew J. Hart	Director	Non Executive Board
Maya Leibman	Chief Information Officer	Senior Management
Maya Leibman	Executive Vice President	Senior Management
Michael J. Embler	Director	Non Executive Board
Molly Wilkinson	Vice President Regulatory Affairs	Senior Management
Peter Warlick	Vice President Corporate Development	Senior Management
Poonam Mohan	Vice President Information Technology	Senior Management
Ralph Lopez Massas	Vice President Integrated Operations Center	Senior Management
Ray M. Robinson	Director	Non Executive Board
Richard C. Kraemer	Director	Non Executive Board

SOURCE: COMPANY FILINGS

MARKETLINE

Table 10: American Airlines Group Inc.: Key Employees Continued

Name	Job Title	Board
Robert D. Isom, Jr.	President	Senior Management
Ron Thomas	Vice President Safety	Senior Management
Stephen L. Johnson	Executive Vice President Corporate Affairs	Senior Management
Susan D. Kronick	Director	Non Executive Board
W. Douglas Parker	Chairman	Executive Board
W. Douglas Parker	Chief Executive Officer	Executive Board

SOURCE: COMPANY FILINGS

MARKETLINE

8.2. Deutsche Lufthansa AG

8.2.1. Company Overview

Deutsche Lufthansa AG (Lufthansa) is an aviation company that offers scheduled passenger and air freight transportation services. The company offers logistics services through its own freighters, chartered cargo aircraft and belly capacities on passenger aircraft. It also involves in VIP aircraft servicing, airline maintenance and aircraft overhaul services. Lufthansa develops cabin products and airline related digital products. The company also offers airline catering services and manages airline-specific in-flight sales programs. The company, through its subsidiaries, engages in providing travel management solutions, vocational and professional aviation training. It has operations across Europe, the Americas, Asia-Pacific, the Middle East and Africa. Lufthansa is headquartered in Koln, Hessen, Germany.

The company reported revenues of (Euro) EUR35,844 million for the fiscal year ended December 2018 (FY2018), an increase of 0.7% over FY2017. In FY2018, the company's operating margin was 7.8%, compared to an operating margin of 8.8% in FY2017. In FY2018, the company recorded a net margin of 6%, compared to a net margin of 6.6% in FY2017. The company reported revenues of EUR9,633.0 million for the second quarter ended June 2019, an increase of 22.1% over the previous quarter.

8.2.2. Key Facts

Table 11: Deutsche Lufthansa AG: key facts

Head office:	Linnicher Strasse 48 Airport Ring, Koln, Hessen, Germany
Number of Employees:	136795
Website:	www.lufthansagroup.com
Financial year-end:	December
Ticker:	LHA
Stock exchange:	XETRA

SOURCE: COMPANY WEBSITE

MARKETLINE

8.2.3. Business Description

Deutsche Lufthansa AG (Lufthansa) is a holding company that operates airlines. The company offers passenger air transportation services and air cargo services. It also involves in providing aircraft maintenance, repair and overhaul (MRO) and airline catering services. The company operates through five reportable business segments: Network Airlines, Point-to-Point Airlines, Maintenance Repair Overhaul (MRO), Catering and Logistics.

The company route network comprises of 343 destinations in 103 countries.

In FY2018, the company and its subsidiaries carried total 142 million passengers and operated 1.2 million flights across the world.

Table 12: Deutsche Lufthansa AG: Annual Financial Ratios

Key Ratios	2014	2015	2016	2017	2018
Growth Ratios					
Sales Growth %	-0.05	6.81	-1.24	12.38	0.74
Operating Income Growth %	3.66	76.91	40.84	43.38	-10.83
EBITDA Growth %	-6.90	34.85	21.38	37.16	-3.82
Net Income Growth %	-82.43	2987.27	4.59	31.76	-7.56
EPS Growth %	-59.30	1032.63	4.37	32.04	-16.79
Working Capital Growth %	115.23	28.38	-76.69	97.18	245.62
Equity Ratios					
EPS (Earnings per Share) EUR	0.12	3.67	3.81	4.98	4.58
Dividend per Share EUR		0.50	0.50	0.80	0.80
Dividend Cover Absolute		7.33	7.62	6.23	5.72
Book Value per Share EUR	8.57	12.42	15.06	19.11	19.91
Profitability Ratios					
Gross Margin %	43.12	45.60	46.26	47.75	49.40
Operating Margin %	2.93	4.85	6.92	8.83	7.81
Net Profit Margin %	0.18	5.30	5.61	6.58	6.03
Profit Markup %	75.80	83.84	86.08	91.39	97.62
PBT Margin (Profit Before Tax) %	0.60	6.32	7.10	8.88	7.77
Return on Equity %	1.39	29.44	25.16	25.98	22.86
Return on Capital Employed %	4.51	7.77	9.25	13.57	12.73
Return on Assets %	0.18	5.40	5.29	6.64	5.85
Operating Costs (% of Sales) %	97.07	95.15	93.08	91.17	92.19
Administration Costs (% of Sales) %	31.86	32.73	31.14	30.10	32.18
Liquidity Ratios					
Current Ratio Absolute	0.75	0.72	0.93	0.87	0.66
Quick Ratio Absolute	0.69	0.66	0.85	0.80	0.60
Cash Ratio Absolute	0.25	0.25	0.36	0.31	0.20
Leverage Ratios					
Debt to Equity Ratio Absolute	1.55	1.12	0.94	0.76	0.71
Net Debt to Equity Absolute	1.34	0.94	0.78	0.62	0.56
Debt to Capital Ratio Absolute	0.61	0.53	0.48	0.43	0.42
Efficiency Ratios					
Asset Turnover Absolute	1.01	1.02	0.94	1.01	0.97
Fixed Asset Turnover Absolute	1.99	1.98	1.88	2.06	1.96
Inventory Turnover Absolute	25.46	23.87	21.58	21.58	19.35
Current Asset Turnover Absolute	3.35	3.73	3.31	3.35	3.31
Capital Employed Turnover Absolute	1.54	1.60	1.34	1.54	1.63
SOURCE: COMPANY FILINGS				MARKETLINE	

Table 13: Deutsche Lufthansa AG: Key Employees

Name	Job Title	Board
Bettina Volkens	Chief Officer, Corporate Human Resources and Legal Affairs	Executive Board
Bettina Volkens	Director	Executive Board
Carsten Spohr	Chairman	Executive Board
Carsten Spohr	Chief Executive Officer	Executive Board
Detlef Kayser	Chief Officer - Airline Resources & Operations Standards	Executive Board
Detlef Kayser	Director	Executive Board
Harry Hohmeister	Chief Commercial Officer - Network Airlines	Executive Board
Harry Hohmeister	Director	Executive Board
Nadia Sarah Petri	General Manager sales, Kuwait	Senior Management
Thorsten Dirks	Chief Officer-Eurowings and Aviation Services	Executive Board
Thorsten Dirks	Director	Executive Board
Ulrik Svensson	Chief Financial Officer	Executive Board
Ulrik Svensson	Director	Executive Board

SOURCE: COMPANY FILINGS

MARKETLINE

8.3. Delta Air Lines Inc

8.3.1. Company Overview

Delta Air Lines Inc (Delta Air Lines) is a global airline company, which provides scheduled air transportation for passengers and cargo. Its service portfolio includes passenger transport; cargo transport; aircraft management; professional security; training and consulting; aviation solutions; vacation packages; and maintenance, repair and overhaul (MRO). It also has bilateral and multilateral marketing alliances with foreign airlines, and service agreements with multiple domestic regional air carriers and serves passengers primarily in small and medium-sized cities. The company operates a fleet of Boeing, Airbus McDonnell Douglas and Bombardier aircraft. It also has joint venture agreements with Air France and KLM, Virgin Atlantic, Virgin Australia and Korean Air Lines for transpacific route operations. Delta Air Lines is headquartered in Atlanta, Georgia, the US.

The company reported revenues of (US Dollars) US\$44,438 million for the fiscal year ended December 2018 (FY2018), an increase of 8% over FY2017. In FY2018, the company's operating margin was 11.8%, compared to an operating margin of 14.5% in FY2017. In FY2018, the company recorded a net margin of 8.9%, compared to a net margin of 7.8% in FY2017. The company reported revenues of US\$12,536.0 million for the second quarter ended June 2019, an increase of 19.7% over the previous quarter.

8.3.2. Key Facts

Table 14: Delta Air Lines Inc: key facts

Head office:	1030 Delta BoulevardAtlanta, Georgia, United States
Number of Employees:	88680
Website:	www.delta.com
Financial year-end:	December
Ticker:	DAL
Stock exchange:	New York Stock Exchange

SOURCE: COMPANY WEBSITE

MARKETLINE

8.3.3. Business Description

Delta Air Lines Inc (Delta Air Lines) is an air carrier, which provides scheduled air transportation for passengers and cargo globally. Its key hubs include Atlanta, Boston, Los Angeles, Seattle, Detroit, New York-JFK, Minneapolis-St. Paul, New York-LaGuardia, Salt Lake City, London-Heathrow, Amsterdam, Paris-Charles de Gaulle, and Tokyo-Narita. The company is a member of SkyTeam alliance; and also has joint venture agreements with Air France-KLM, Virgin Atlantic, Alitalia, and Virgin Australia.

The company operates its business through two segments: Airline and Refinery.

The company serves 304 destinations in 52 countries on six continents. It carries over 180 million passengers annually with more than 15,000 daily flights. In FY2018, the company incurred capital expenditure of US\$5,200 million, which stood at 11.7% of revenue and 32.8% YoY.

Table 15: Delta Air Lines Inc: Annual Financial Ratios

Key Ratios	2014	2015	2016	2017	2018
Growth Ratios					
Sales Growth %	6.85	0.85	-3.08	4.28	8.02
Operating Income Growth %	-43.00	302.58	-10.33	-14.72	-11.77
EBITDA Growth %	-26.67	159.83	-7.83	-7.81	-7.27
Net Income Growth %	-93.75	586.80	-7.31	-23.60	22.78
EPS Growth %	-44.00	25.19	19.21	-10.41	13.90
Working Capital Growth %	70.83	10.16	-8.05	43.23	9.71
Equity Ratios					
EPS (Earnings per Share) USD	0.78	5.63	5.56	4.98	5.67
Dividend per Share USD	0.30	0.45	0.68	1.01	1.31
Dividend Cover Absolute	2.60	12.51	8.23	4.90	4.33
Book Value per Share USD	10.68	13.93	16.81	17.72	20.13
Profitability Ratios					
Gross Margin %	37.29	61.20	58.84	55.92	52.32
Operating Margin %	4.80	19.17	17.73	14.50	11.85
Net Profit Margin %	1.63	11.12	10.63	7.79	8.86
Profit Markup %	59.45	157.70	142.96	126.88	109.71
PBT Margin (Profit Before Tax) %	2.66	17.58	16.10	13.37	11.59
Return on Equity %	7.48	41.71	34.14	25.58	28.75
Return on Capital Employed %	5.22	21.91	19.42	17.19	12.63
Return on Assets %	1.24	8.45	8.04	6.11	6.91
Return on Working Capital %	-25.20	-92.11	-89.27	-53.48	-42.94
Operating Costs (% of Sales) %	95.20	80.83	82.27	85.50	88.15
Administration Costs (% of Sales) %	27.02	29.33	31.08	31.48	31.47
Liquidity Ratios					
Current Ratio Absolute	0.54	0.52	0.49	0.41	0.34
Quick Ratio Absolute	0.49	0.48	0.43	0.34	0.28
Cash Ratio Absolute	0.20	0.20	0.21	0.14	0.10
Leverage Ratios					
Debt to Equity Ratio Absolute	1.10	0.77	0.60	0.71	0.71
Net Debt to Equity Absolute	0.86	0.59	0.37	0.56	0.60
Debt to Capital Ratio Absolute	0.52	0.43	0.37	0.41	0.42
Efficiency Ratios					
Asset Turnover Absolute	0.76	0.76	0.76	0.78	0.78
Fixed Asset Turnover Absolute	1.84	1.81	1.66	1.62	1.46
Inventory Turnover Absolute	26.44	20.39	20.45	16.34	17.78
Current Asset Turnover Absolute	4.29	4.47	4.78	5.39	6.28
Capital Employed Turnover Absolute	1.09	1.14	1.10	1.19	1.07
SOURCE: COMPANY FILINGS				MARKETLINE	

Table 16: Delta Air Lines Inc: Key Employees

Name	Job Title	Board
Ashton B. Carter	Director	Executive Board
Ashton B. Carter	Secretary	Executive Board
Charisse Evans	Vice President Customer Experience Integration	Senior Management
Christopher A. Hazleton	Director	Non Executive Board
Daniel A. Carp	Director	Non Executive Board
David G. Dewalt	Director	Non Executive Board
David Garrison	Chief Executive Officer Endeavor Air	Senior Management
David Garrison	Senior Vice President Delta Connection and Delta Global Services	Senior Management
David S. Taylor	Director	Non Executive Board
Edward H. Bastian	Chief Executive Officer	Executive Board
Edward H. Bastian	Director	Executive Board
Eric Anderson	Director Cargo Sales Asia Pacific region	Senior Management
Eric Wilson	Managing Director Cargo Global Sales	Senior Management
Erik Snell	Senior Vice President Operations and Customer Center	Senior Management
Francis S. Blake	Chairman	Non Executive Board
Gary Chase	Chief Strategy Officer	Senior Management
Gary Chase	Senior Vice President	Senior Management
Gary Hammes	Vice President Engineering and Quality Assurance	Senior Management
George N. Mattson	Director	Non Executive Board
Glen W. Hauenstein	President	Senior Management
Jeanne P. Jackson	Director	Non Executive Board
Joanne D. Smith	Chief Human Resources Officer	Senior Management
Joanne D. Smith	Executive Vice President	Senior Management
Joe Esposito	Senior Vice President Network Planning Americas	Senior Management
Kathy N. Waller	Director	Non Executive Board
Keyra Lynn Johnson	Chief Diversity and Inclusion Officer	Senior Management
Keyra Lynn Johnson	Managing Director	Senior Management
Michael Huerta	Director	Non Executive Board
Paul A. Jacobson	Chief Financial Officer	Senior Management
Paul A. Jacobson	Executive Vice President	Senior Management

SOURCE: COMPANY FILINGS

MARKETLINE

Table 17: Delta Air Lines Inc: Key Employees Continued

Name	Job Title	Board
Perry Cantarutti	Senior Vice President Alliances	Senior Management
Peter W. Carter	Chief Legal Officer	Senior Management
Peter W. Carter	Executive Vice President	Senior Management
Rafael Figueroa	Managing Director Cargo Operations and Customer Experience	Senior Management
Rahul Samant	Chief Information Officer	Senior Management
Rahul Samant	Executive Vice President	Senior Management
Rob Walpole	Vice President Cargo Operations and Logistics	Senior Management
Sandy Gordon	Senior Vice President Airport Operations Domestic Stations	Senior Management
Sergio A.L. Rial	Director	Non Executive Board
Steven M. Sear	Executive Vice President Global Sales	Senior Management
Steven M. Sear	President International	Senior Management
Tim Mapes	Chief Marketing and Communication Officer	Senior Management
Tim Mapes	Senior Vice President	Senior Management
Wayne Gilbert West	Chief Operating Officer	Senior Management
Wayne Gilbert West	Senior Executive Vice President	Senior Management
William H. Easter	Director	Non Executive Board
William P. Lentsch	Executive Vice President Flying/Air Operations	Senior Management
SOURCE: COMPANY FILINGS		MARKETLINE

8.4. Emirates Airline

8.4.1. Company Overview

Emirates Airline (Emirates) is an air transportation service provider. The company provides services such as passenger transportation, cargo services, flight booking, hotel booking, car rental, check-in, flight status and baggage allowance. It also provides online booking, cancellation, cabin service, in-flight entertainment, seating, dining, lounges and chauffeur-drive, among others. Emirates operates fleet of aircraft including The Emirates A380, Airbus A340-300, Airbus A340-500, Airbus A330-200, Boeing 777-300, Boeing 777-200LR, Boeing 777-300ER and Boeing 777-200. The company serves destinations such as Sydney, Mumbai, London, Manila, Pakistan, Munich, Orlando, Bali, Budapest, Oslo, Chicago, Taipei, Kabul, and others. Emirates is headquartered in Abu Dhabi, the UAE.

8.4.2. Key Facts

Table 18: Emirates Airline: key facts

Head office:	Al Sawari Tower C Corniche Road , Abu Dhabi, Abu Dhabi, United Arab Emirates
Website:	www.emirates.com/ae
Financial year-end:	April

SOURCE: COMPANY WEBSITE

MARKETLINE

Table 19: Emirates Airline: Key Employees

Name	Job Title	Board
Sheikh Ahmed Bin Saeed Al Maktoum	Chairman	Executive Board
Sheikh Ahmed Bin Saeed Al Maktoum	Chief Executive Officer	Executive Board

SOURCE: COMPANY FILINGS

MARKETLINE

9. Macroeconomic Indicators

9.1. Country data

Table 20: Global exchange rate, 2014–18

Year	Exchange rate (€/€)
2014	1.3290
2015	1.1095
2016	1.1068
2017	1.1320
2018	1.1810

SOURCE: MARKETLINE

MARKETLINE

Appendix

Methodology

MarketLine Industry Profiles draw on extensive primary and secondary research, all aggregated, analyzed, cross-checked and presented in a consistent and accessible style.

Review of in-house databases – Created using 250,000+ industry interviews and consumer surveys and supported by analysis from industry experts using highly complex modeling & forecasting tools, MarketLine's in-house databases provide the foundation for all related industry profiles

Preparatory research – We also maintain extensive in-house databases of news, analyst commentary, company profiles and macroeconomic & demographic information, which enable our researchers to build an accurate market overview

Definitions – Market definitions are standardized to allow comparison from country to country. The parameters of each definition are carefully reviewed at the start of the research process to ensure they match the requirements of both the market and our clients

Extensive secondary research activities ensure we are always fully up-to-date with the latest industry events and trends

MarketLine aggregates and analyzes a number of secondary information sources, including:

- National/Governmental statistics
- International data (official international sources)
- National and International trade associations
- Broker and analyst reports
- Company Annual Reports
- Business information libraries and databases

Modeling & forecasting tools – MarketLine has developed powerful tools that allow quantitative and qualitative data to be combined with related macroeconomic and demographic drivers to create market models and forecasts, which can then be refined according to specific competitive, regulatory and demand-related factors

Continuous quality control ensures that our processes and profiles remain focused, accurate and up-to-date

9.2. Industry associations

9.2.1. International Civil Aviation Organization (ICAO)

999 Robert-Bourassa Boulevard, Montréal, Quebec H3C 5H7, CAN

Tel.: 1 514 954 8219

Fax: 1 514 954 6077

www.icao.int

9.2.2. European Aviation Safety Agency (EASA)

Ottoplatz, 1, D-50679 Cologne, DEU

Tel.: 49 221 8999 000

Fax: 49 221 8999 099

easa.europa.eu

9.2.3. International Air Transport Association (IATA)

800 Place Victoria, PO Box 113, Montreal, H4Z 1M1, Quebec, CAN

Tel.: 1 514 874 0202

Fax: 1 514 874 9632

www.iata.org

About MarketLine

In an information-rich world, finding facts you can rely upon isn't always easy. MarketLine is the solution.

We make it our job to sort through the data and deliver accurate, up-to-date information on companies, industries and countries across the world. No other business information company comes close to matching our sheer breadth of coverage.

And unlike many of our competitors, we cut the 'data padding' and present information in easy-to-digest formats, so you can absorb key facts in minutes, not hours.

What we do

Profiling all major companies, industries and geographies, MarketLine is one of the most prolific publishers of business information today.

Our dedicated research professionals aggregate, analyze, and cross-check facts in line with our strict research methodology, ensuring a constant stream of new and accurate information is added to MarketLine every day.

With stringent checks and controls to capture and validate the accuracy of our data, you can be confident in MarketLine to deliver quality data in an instant.

For further information about our products and services see more at: <http://www.marketline.com/overview/>

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