



Royal Jordanian Airlines

Certified Financial Consultant Project – July 2018



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| Table of Contents | Page |
|--|-------------|
| List of Acronyms | 3 |
| Investment Summary | 4 |
| Introduction | 6 |
| Macro-Economic Factors | 8 |
| Global Industrial Outlook | 11 |
| Regional Outlook | 17 |
| Local Outlook | 19 |
| Royal Jordanian Information and Company Analysis | 20 |
| SWOT Analysis | 22 |
| PESTLE Analysis | 23 |
| Financial Analysis | 24 |
| Company Valuation | 29 |
| Appendices | 33 |

List of Acronyms:

| | |
|-----------|--|
| APAC | Asia Pacific |
| ASE | Amman Stock Exchange |
| CAGR | Compounded Annual Growth Rate |
| CAPM | Capital Asset Pricing Model |
| COGS | Cost of Goods Sold |
| EBIT | Earnings Before Interest and Taxes |
| EBITDA | Earnings Before Interest, Taxes, Depreciation & Amortization |
| FTK | Freight Ton Kilometers |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GP | Gross Profit |
| IATA | International Air Transport Association |
| LCC | Low-cost carriers |
| MENA | Middle East and North Africa |
| RJ / RJAL | Royal Jordanian Airlines |
| RPK | Revenue Passenger Kilometers |
| USD | United States Dollar |
| WACC | Weighted Average Cost of Capital |

Investment Summary:

The following report serves as a valuation of Royal Jordanian's shares and provides a "buy / hold" recommendation based on the accompanying analysis, market data, and future outlook, in addition to speculation on the fact that a significant restructure to turn the Company around is inevitable considering the "national carrier" status of the airline, its importance to the image of the Hashemite Kingdom of Jordan, and its position as one of the most important employers in the Country.

The Company's shares are traded on the Amman Stock Exchange under stock symbol RJAL and Company Code 131213.

The valuation of RJAL's shares yields a value of JOD 0.41 per share which, when graphed along with the closing price for the Company's shares over the last 19 months, shows an upside potential as shown in the graph below.

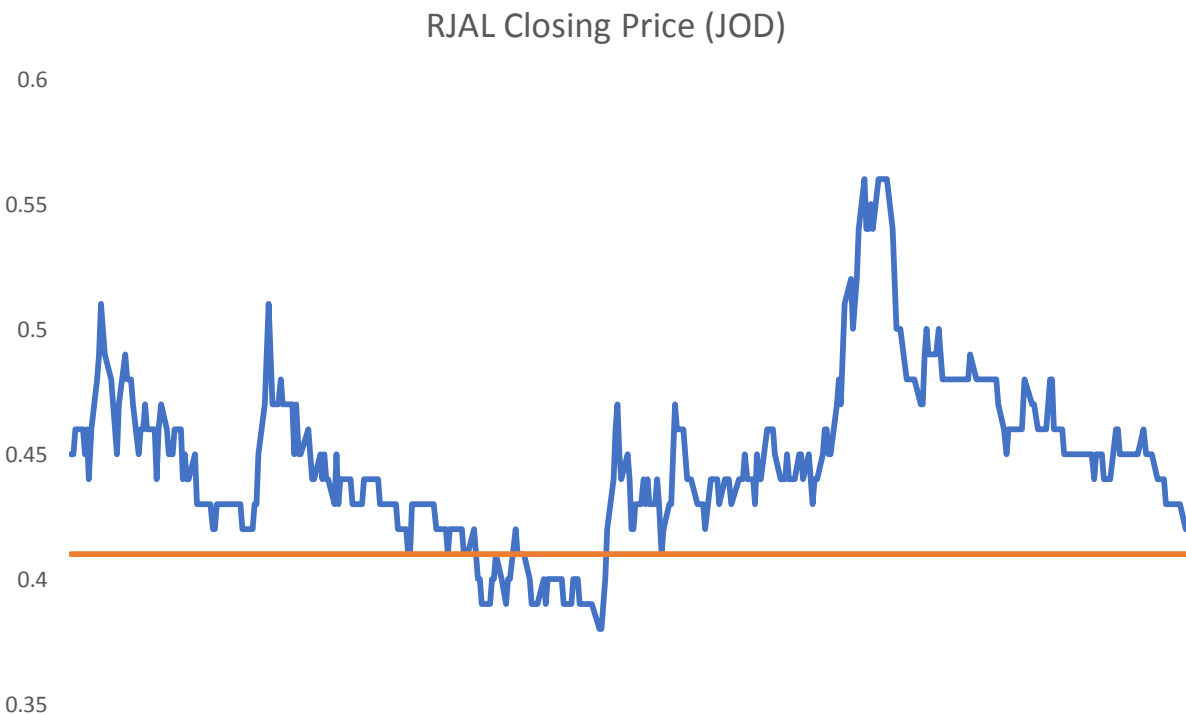


Figure 1: Source: RJAL Stock Price, ASE Website

A set of financial projections were developed for purposes of valuating the airline and its shares. Based on the information we have on hand, and the high level information available from the Company's declared business plan, the revenues were grown by the 2017 GDP growth rate of 2.2%. Also, with the cost saving

plans set in motion by the airline, the Gross Profit was assumed to grow at the inflation rate of 3.3%.

The Company is currently suffering from depressed asset utilization rates and its plans are to improve these rates to turn the airline around through its trading activities.

The 2015 – 2019 business plan highlighted on the Company’s website highlights the approach going to be taken by the airline and they include reexamining the current active routes and replacing dangerous or non-rewarding routes with more viable ones, increasing transit traffic through the airline, tapping new revenue streams, implementing various fuel saving initiatives, and improving aircraft financing structures.

It is through these various initiatives that the airline hopes to turn its business around and start generating profits for its shareholders in an effort to break the vicious loss making cycle it has been going through in recent years.

Introduction

The aviation industry is one of the fastest growing transportation sectors due to the ever-increasing global demand for fast and reliable transportation; one that is necessary to fulfil the global interdependence on goods and services. Between 2009 and 2017, annual revenue in the global aviation industry grew at a compound annual growth rate (CAGR) of around 5.9%, reaching USD 754 billion in 2017, and is expected to reach a record USD 834 billion in 2018¹.

The USA, Brazil, China, and Europe are among the most critical air travel markets. The world's busiest airports are Hartsfield–Jackson Atlanta International Airport, with over 104 million passengers passing through each year, and Hong Kong International Airport, where about 4.9 million tons of freight are handled annually. Where revenues are concerned, American, Delta, and United Continental Holdings are the leading airlines worldwide.

The introduction of ancillary revenue streams, online self-service access to services, and the continuing deregulation of the global civil aviation industry have paved the way to a growing low-cost airlines sub-industry. Examples of this new offshoot includes Ryanair (Ireland) and Southwest Airlines (USA) which cater to a growing market demand that offers lower air fare prices to customers in return for basic services, and can generate extra revenue by charging extras for even the simplest of services that may include food, beverages, flight entertainment access, and even earphones.

It is very difficult for someone to truly appreciate something until it is taken away, and the world felt what it was like to have air traffic interrupted – albeit in a specific region and not on a global scale. The 2010 Icelandic volcano was a testament to just how much our lives and livelihoods are dependent on air transportation, as the eruption caused a week-long interruption of air traffic in Europe, and disrupted the lives of over 10 million passengers, and cost the global economy an estimated USD 5 billion. The volcano erupted spewing debris, ash, and heavy smoke to as high as 3 kilometers, which due to strong winds spread to most of Europe.

In the wake of this natural disaster, the world saw industries across the board being affected in a display of just how critical air travel was in our daily lives. Industries reliant on just-in-time inventories were especially hard hit; everything from

¹ Source: Air Transportation – Statistics & Facts, Statista, www.statista.com

perishables to electronic components were delayed and significant losses were experienced along all the stages of the supply and manufacturing chains.

Air transportation is becoming the transportation method of choice especially in light of increased carrier competition, more affordable pricing, and strengthening of safety records.

Macro-Economic Factors

Consumers

Air travelers are expected see a significant increase in the value they get from air transport this year and beyond, including price stability. New destinations are forecast to rise further, alongside increased flight frequencies; both to the benefit of the consumer. It is estimated that 1% of world GDP will be spent on air transport in 2018. Revenue Passenger Kilometers (RPKs), which have been growing well above historical trends, are forecast to remain strong going forward as global economies improve and as the spending patterns of consumers increasingly favor air travel. Reductions in overall travel costs have contributed positively to RPK growth; on average, and after inflationary adjustments, it now costs 59% less than it did 20 years ago to purchase a round trip plane ticket.

Global Economy

Global economic development is being supported by the growth in air transport, which in turn contributes positively to other supporting industries like logistics, hospitality, and manufacturing, to name a few. Additionally, and as demand for air travel continues to rise, the number of destinations (or route pairings) also rises with many airlines adding smaller cities in destination countries instead of previously only focusing on capital, or major, cities.

The reduction in air transport cost and the increase in service coverage lead to enhanced trade flows; which has a direct positive effect on jobs both directly and indirectly related to the industry, where it is estimated to employ over 70 million people in 2018.

Capital Providers

Financing aircrafts is critical to the industry, and the ability to secure financing to expand fleets is considered a core competency in most cases. The airline industry is capital intensive and requires a significant cost for maintaining these mobile assets. As such, the majority of aircrafts are long term debt financed through operating or finance leases, and as the borrowers become more profitable and cash

generative with an improved debt profile, their financing costs typically reduce and, as a result, profitability increases which further fuels the investment cycle.

Until recently, returns on equity have not been commensurate with the risks involved in the investment, save a few exceptions. Investors have been diligently trying to reduce the cost of financing and other operating costs to yield higher returns on their investment. Of late, under the growing global economy carried by oil prices, and by the increasing cash in the economies, lending appetite has also increased especially where the underlying assets were easily identifiable and transferable – which is the typical definition of an aircraft – and the associated financing structures more favorable.

Aircraft

In 2018, commercial airlines are expected to take delivery of over 1,900 new aircrafts², indicating heavy investments by the industry, driven by the gradual increase in investment returns. Additionally, and under the pressure of environmental consciousness coupled with rising and fluctuating fuel costs, airlines are upgrading existing fleets, to enhance fuel efficiency from newer engines and aircraft designs.

The global commercial airline fleet is expected to reach almost 30,000 aircraft by the end of the year; availing travelers of over 4.4 million seats. Aircraft passenger load factors are also on the rise, which will in turn increase financial yield.

The ultimate goal being to move more people and cargo in fewer trips and at lower costs.

Fuel

This year, it is forecast that the airlines fuel bill will rise to \$188 billion, which will represent 24.2% of average operating costs³. It is common for airlines hedge their fuel purchases which are directly related to crude oil prices. Fuel constitutes a large portion of airline operating costs and as such, there is an ever-increasing effort to reduce fuel procurement costs, improve fuel efficiency, and enhance airspace and airport flight paths and procedures to further reduce unnecessary fuel burn.

² Source: Airbus Global Market Forecast 2017-2036, 2017, Airbus, www.airbus.com

³ Source: Economic Performance of the Airline Industry, 2018, IATA, www.iata.org/economics

Labor

The airline industry is constantly creating job opportunities and are expecting to accelerate hiring further in the short to medium term to fulfil the growing demand for air travel and the growing aircraft fleet size.

In addition to job creation in related industries, there is a ripple effect whenever a new job is created. Simple economic forces take hold and job creation starts to take effect not only in the airline or supporting services industries but rather in most economic activities.

Global Industrial Outlook

The changing landscape for global air travel

The airline industry is moving towards expansion. Not only are fleet sizes on the rise, but passenger carrying abilities are also being increased as evidenced by major airlines ordering larger aircrafts like the Airbus A380 and Boeing Dreamliner, and airports around the world making the necessary adjustments to their facilities to be able to handle the larger planes.

Airlines are also listening to their customers and trying to deliver a flying experience that goes beyond the actual commute to increase market share. Some airlines provide a range of luxurious offerings that include gourmet food, in-flight entertainment, connectivity options, larger seats, and in some cases private cabins fit for royalty.

Low-cost airlines are also changing their business model and through servicing longer journeys and airports typically ignored by major airlines. While the main business model for low-cost remains competition on price, the general flight offering is being expanded to include some advantages to the traveler in addition to the “cheap” ticket; an example of this is the growing “weekend warrior” flight plan that caters to employees that travel home at the start of their weekend and return to work after their weekend is over.

Air Passenger Growth

Perhaps the most important factor driving growth in any activity in the world is the constantly increasing global population. Over the last 20 years, the annual population growth rate has been around 1.2%. The graph below shows the progression of world population and projected growth until 2022 where it is expected to reach 8 billion people.

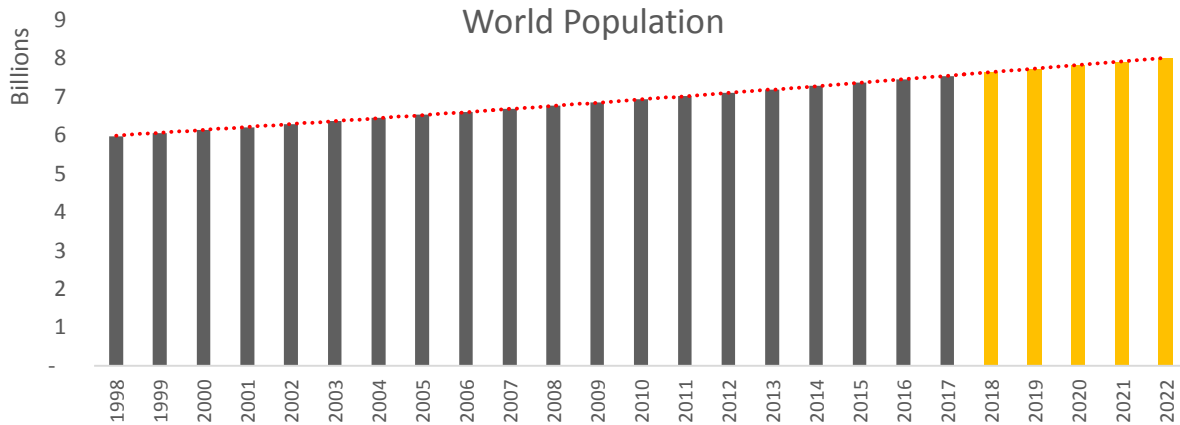


Figure 2. Source: World Bank, Extrapolation by Author.

The growth in the global population, coupled with the demographic shift and reduction in the rural population, and the shift in people’s lifestyles, the increase in air passengers is expected to outgrow the natural population growth.

Shown below is the annual growth in global air traffic passenger demand between 2005 and 2018. In 2017, global air traffic passenger demand increased by 8.1% and is projected to grow a further 7% in 2018⁴. The effect of the global economic crisis in 2008 is visible and the most influencing factor for the drastic dip in passenger growth figures in 2008 and 2009.

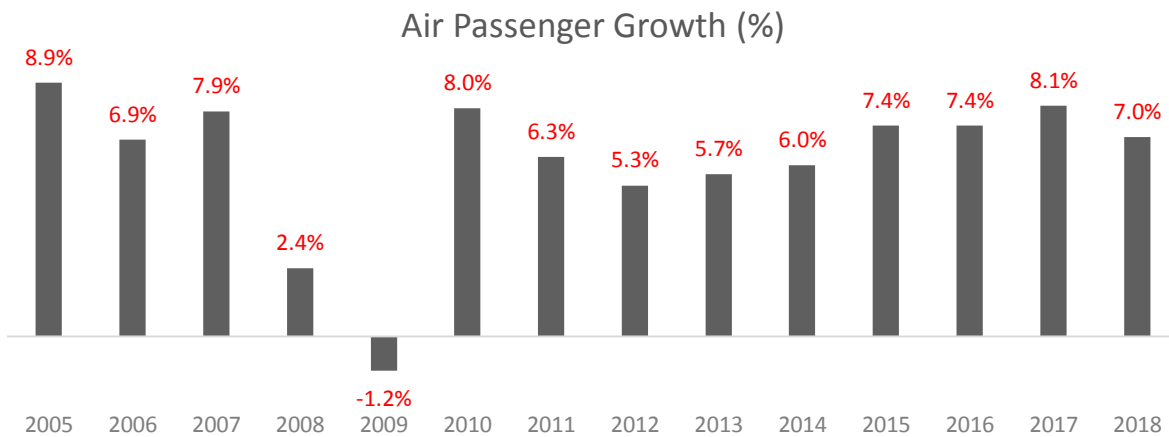


Figure 3. Source: Air Transportation – Statistics & Facts, Statista

While GDP remains an important driver for air transport, it is evident that it is not the only factor that drives air traffic growth. Below is a chart showing the global

⁴ Source: Air Transportation – Statistics & Facts, Statista, www.statista.com

GDP over the last 20 years overlapped with the number of global travelers for the same period.

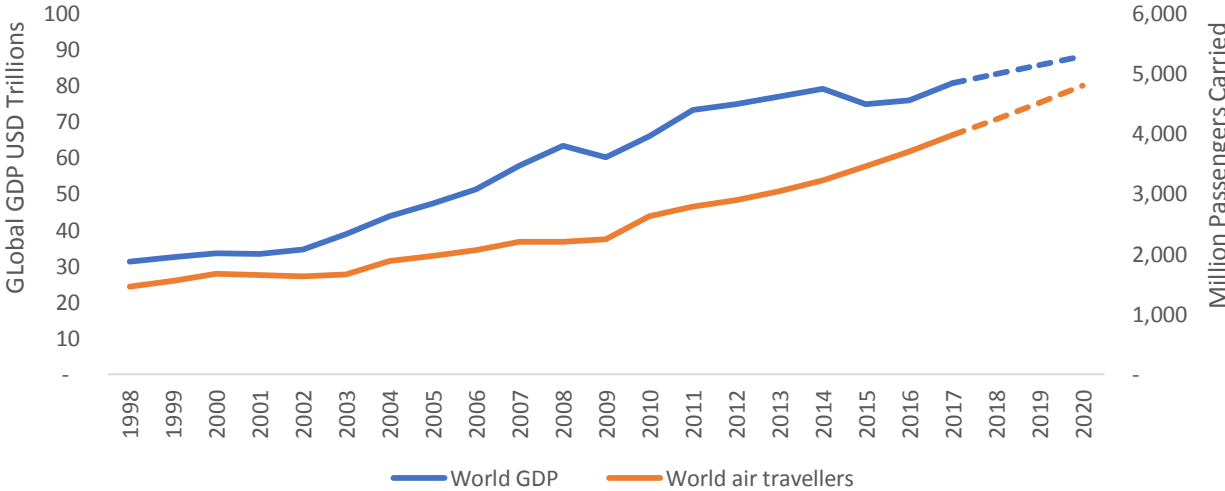


Figure 4. Source: Data Bank, World Bank.

Other drivers that define where and how air travel will develop include the evolution of airline business models, liberalization, tourism development, shifts in population age demographic, unemployment rates, urban expansion, and population growth.

Middle classes in emerging economies are on the rise and help global air traffic growth along other factors discussed earlier. The annual growth rate for world travelers is expected to grow at a CAGR of 4% through to 2034, despite several challenges faced by the industry, including high jet fuel prices and sluggish economic growth. This effect can most clearly be seen in Latin America and China, for example, where Chinese tourists spend approximately USD 300 billion annually on vacations outside China. Especially where seasonal events are taking place, the entire region in which they are held usually experience a travel boom, for example the FIFA World Cup, Olympics, and Expos.

As well as growth on existing routes, positive political activity between states can also lead to growth, due to organic growth being constrained. This is evidenced by the opening of previously closed destinations like Cuba, Iran, and possibly North Korea.

Air traffic growth

Shown below, is a graph of the leading airlines in terms of Revenue Passenger Kilometers (RPK). It is worth noting that four of the airlines on that list are American, with three of which topping the list, and that two airlines, Emirates Airlines and Qatar Airways, have made the list at fourth and twelfth place respectively.

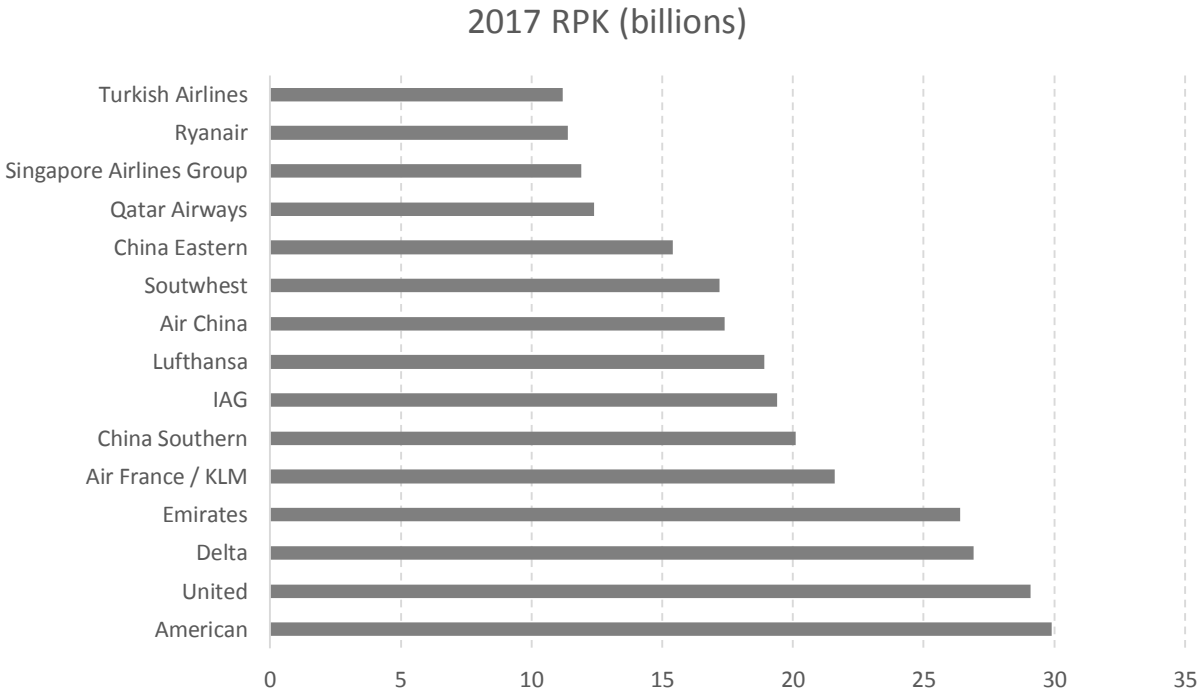


Figure 5. Source: *Air Transportation – Statistics & Facts, Statista*

Where freight air traffic is concerned, the two Middle Eastern giants named above place an impressive second and fourth place in a list that is filled with seasoned and dedicated freight carriers.

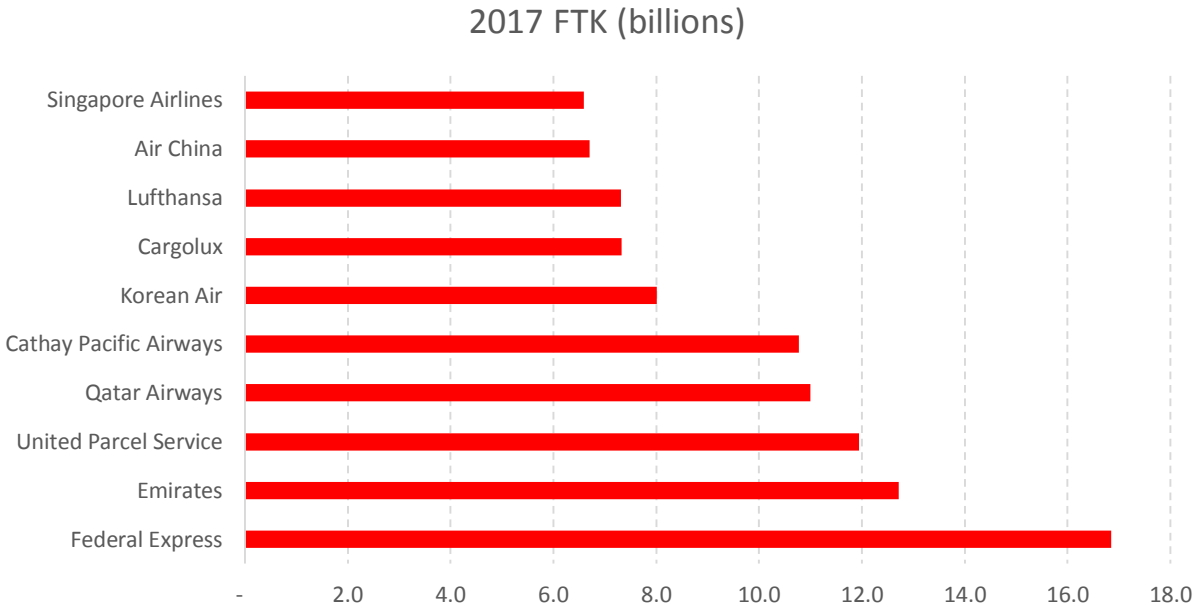


Figure 6. Source: Statista.

The graph below shows the number of plane departures worldwide on an annual basis for the last 20 years and an extrapolation through till 2022.

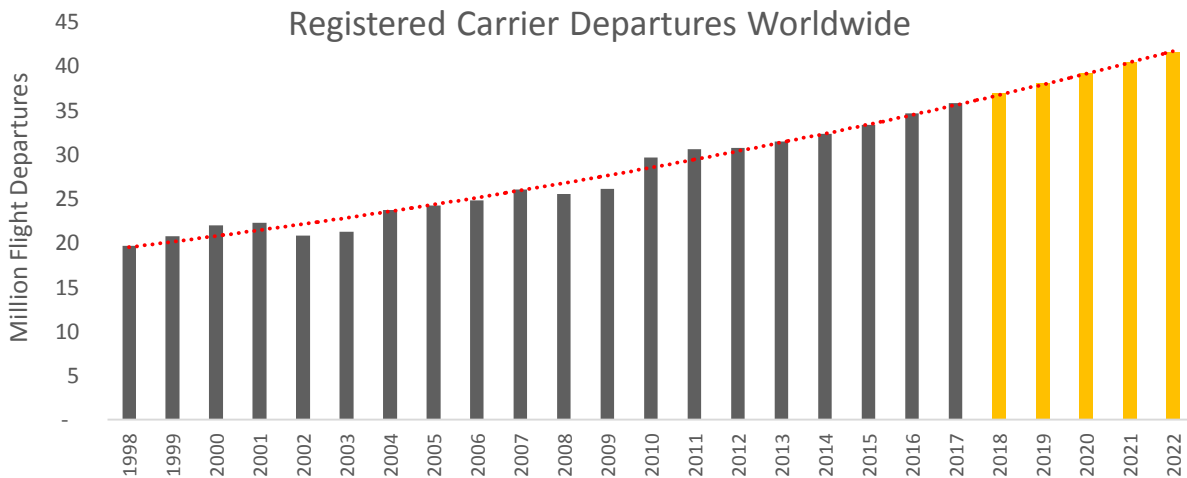


Figure 7. Source: World Bank, Extrapolation by Author.

Except for some anomalies, there has been a steady growth in air traffic throughout this period to a point where almost 4 billion people were carried on just under 36 million flights in 2017. The trend is expected to continue throughout the projection period to reach more than 41.5 million flight departures in 2022.

Based on an Airbus study, the APAC region will lead world traffic by 2036, with a three fold increase in the traffic serving this region by the end of the forecast period, and China is expected to lead the domestic flights category, displacing the United States. Although not home to the largest traffic flow, the Middle is expected to host the largest annual growth at 6.7%, followed by the APAC and Africa at 5.6% and 5.3% respectively.

Contrary to road or rail transportation, and like maritime shipping, the aviation industry is responsible for most of its own infrastructure and maintenance.

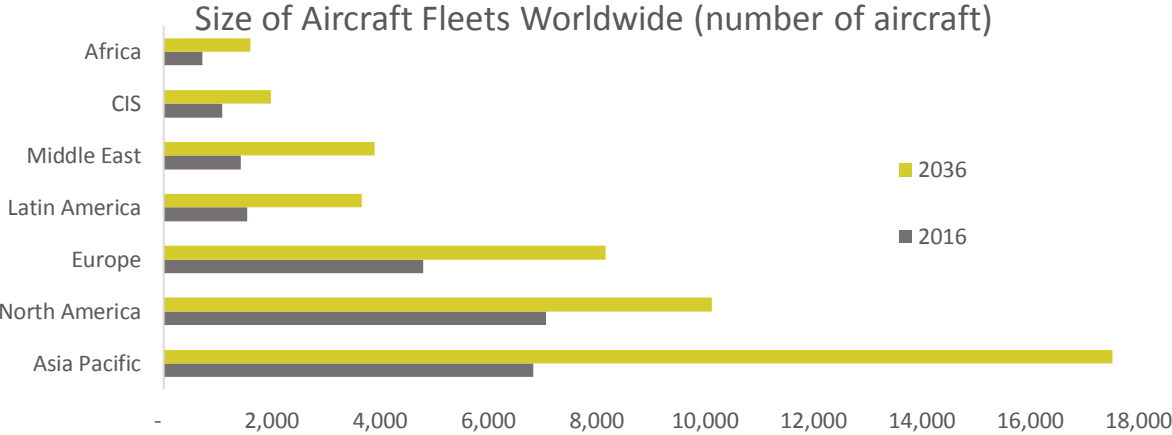


Figure 8. Source: Air Transportation – Statistics & Facts, Statista

The graph above compares a projection of the global aircraft fleet size in 2036 to what it was in 2016, with a breakdown by region. It is noteworthy that the Middle East region is expected to host the fastest growing aircraft fleet size followed closely by APAC and Latin America, while APAC is expected to be home to the largest aircraft fleet.

Financial Performance

The graph below shows the net profit of commercial airlines worldwide from 2005 to 2018. In 2018, the net profit of commercial airlines is projected to reach a record USD 33.8 billion⁵. While there have been some fluctuations during the years attributed to somewhat turbulent global economic conditions and heavily fluctuating fuel prices, there definitely seems to be a positive overall movement in

⁵ Source: Economic Performance of the Airline Industry, 2018, IATA, www.iata.org/economics

the industry as a whole. The return on investment for the industry is projected to be around 8.5% for 2018, which is a record high.

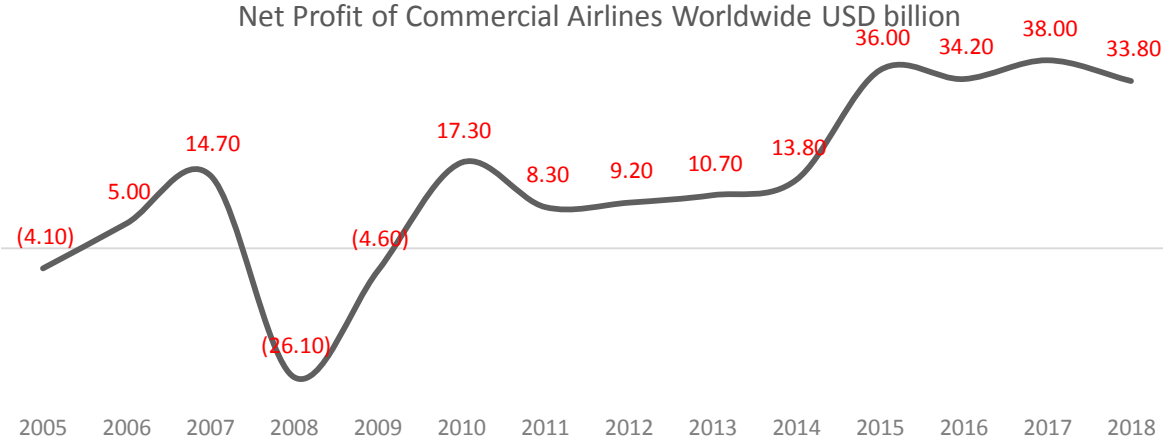


Figure 9. Source: Air Transportation – Statistics & Facts, Statista

Regional Outlook

Lower crude oil prices and reduced government spending are currently restraining economic growth in the Middle East and North Africa. With oil prices showing signs of recovery, and with the numerous conflicts in the region being actively resolved, the region’s real GDP is forecast to grow at 3.4% per year over the next 20 years.

The table below shows the breakdown of the growth forecasts in air traffic flow between the Middle East and other world countries and regions:

| Traffic flow to/from Middle East | 2016-2026 CAGR | 2026-2036 CAGR | 2016-2036 CAGR |
|----------------------------------|----------------|----------------|----------------|
| Advanced Asia | 5.5% | 4.3% | 4.9% |
| Australia/NZ | 5.7% | 4.0% | 4.8% |
| Canada | 9.5% | 6.2% | 7.8% |
| Central America | 11.0% | 6.1% | 8.5% |
| Central Europe | 9.4% | 3.5% | 6.4% |
| CIS | 6.5% | 2.5% | 4.5% |
| Domestic Middle East | 3.7% | 3.4% | 3.5% |
| Emerging Asia | 7.7% | 4.9% | 6.3% |
| Indian Sub-Continent | 7.1% | 5.5% | 6.3% |
| Intra Middle East | 7.4% | 4.2% | 5.8% |

| Traffic flow to/from Middle East | 2016-2026 CAGR | 2026-2036 CAGR | 2016-2036 CAGR |
|----------------------------------|----------------|----------------|----------------|
| Japan | 5.5% | 4.3% | 4.9% |
| North Africa | 7.1% | 4.1% | 5.6% |
| PRC | 7.5% | 5.7% | 6.6% |
| Russia | 6.5% | 5.3% | 5.9% |
| South Africa | 8.4% | 6.0% | 7.2% |
| South America | 11.0% | 6.1% | 8.5% |
| Sub Saharan Africa | 7.5% | 5.7% | 6.6% |
| USA | 9.5% | 6.2% | 7.8% |
| Western Europe | 4.9% | 4.3% | 4.6% |

Figure 10. Source: Airbus Global Market Forecast 2017-2036, 2017, Airbus

The largest growth with the Middle East is projected to be with the American continent from Canada to South America. In general, the growth is expected to be driven by the expansion of new longer routes as apposed to the more traditional regional air traffic.

The MENA enjoys a strategic geographical presence that is central to major economic and tourism hubs, and a true link between east and west. This has been the main reason behind the robust activity in the region that enabled it to weather the somewhat turbulent global political and economic times. While countries in the region exhibited varying rates of growth and prosperity, a spillover effect is expected to ripple through. The region and its airlines have been growing. As well as its large world class airports by offering connections to destinations around the globe.

According to IATA, the Middle East’s aviation market is expected to grow by an annual rate of 5% in the next two decades to reach 517 million passengers. The region’s high forecast growth rate is part of a wider trend towards eastern markets driving future air passenger growth.

To meet this expected demand, airlines in the region benefit from new state of the art airports and advanced fleets as well. Regional airlines are steadily increasing flight frequency, geographical coverage, and offered seats on their more popular routes.

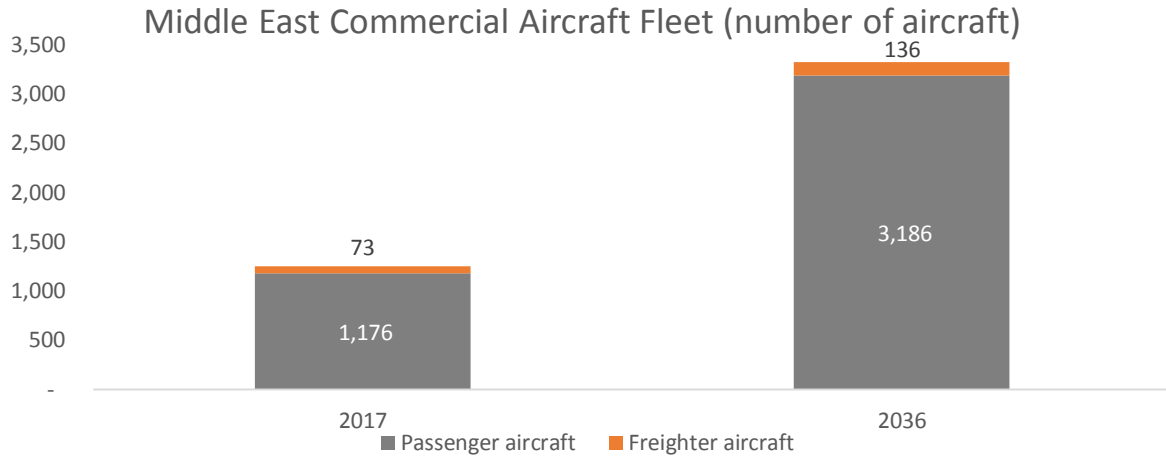


Figure 11. Source: Airbus Global Market Forecast 2017-2036, 2017, Airbus

Shown above, is a projection of the size of the commercial aircraft fleet in the Middle East which represents 6.1% and 7.8% of the global aircraft fleet size in 2017 and 2036 respectively, yet another testament to the “above-the-curve” growth in the region.

Local Outlook

In Jordan, there is one dominant player in the airline industry. The reason for the dominance of Royal Jordanian is the fact that the other, smaller, airlines mostly fly short routes and local flights between Queen Alia International Airport in Amman and King Hussein International Airport in Aqaba. Further, the airline was established, and remains, the national airline of the Hashemite Kingdom of Jordan.

Royal Jordanian Airlines Corporate Information⁶

RJ was established by a Royal Decree issued by His Majesty King Hussein at the end of 1963, as the national air carrier of the Hashemite Kingdom of Jordan. The airline currently owns and operates 25 aircrafts of different sizes.

Royal Jordanian shares were listed on the Amman Stock Exchange in December 2007, and has maintained its national carrier status. Throughout its history, RJ has constantly developed by upgrading its aircrafts, expanding its routes, enhancing operating procedures and systems.

The airline contributes a great deal to Jordan's economy, as it constitutes about 3% of the national GDP and helps bring in a significant amount of foreign currency into the country. As is the case with this industry in other parts of the world, the company employs thousands of people directly, and due to its size, is a significant customer to suppliers and service providers all over Jordan.

The company is headquartered in Amman, and it flies out of Queen Alia International Airport, one of the newest airports in the region. RJ also operates a charter business through its subsidiary, Royal Wings.

In 2014, the airline introduced the first 5 Boeing 787s dedicated to long and medium-haul routes. Two more 787s joined the fleet by the end of 2016 and a last one is due to arrive in 2018.

RJ joined the oneworld airline alliance in 2007. Membership of this prestigious alliance of 13 international carriers avail passengers the ability to fly between Amman and more than 1,000 cities in 150 countries. In addition to having access to a large number of destinations, this membership keeps the airlines motivated to maintain a high standard of quality in line with those of its peers.

The human resources are the airline's biggest asset; they have the highest level of qualifications and expertise in their different areas.

Business plan 2015-2019

Royal Jordanian is in the process of acting out its business plan for 2015-2019, which was based on five pillars.

⁶ Source: RJ History, Royal Jordanian website, www.rj.com

1. Route network and fleet: The airline decided to terminate 8 destinations due to low demand and unfavorable feasibility, while it has also suspended operations to 8 other cities for security reasons. Along with this decision, the airline also expanded its high capacity fleet by adding Boeing 787s to service its more popular medium and long haul routes.
2. Boosting local market share: the company started growing by directly increasing the number of passengers to and from Jordan by increasing transit traffic.
3. Revenue management: focusing on ancillary revenues in order to boost revenue performance.
4. Fuel efficiency: the company is implementing fuel saving initiatives which include revamping procedures to reduce fuel burn. It also is investing in newer engines which are more fuel efficient. There is also a focus on fuel procurement to reduce costs.
5. Aircraft ownership: in expanding its aircraft fleet, the company is determining the optimal capital structure and funding options to reduce the cost of ownership.

SWOT Analysis

| Strengths | Weaknesses |
|---|--|
| <ul style="list-style-type: none"> • Dominant market position in Jordan • Member of oneworld airline alliance • Operating out of one of the newest and most advance airports in the region • Large aircraft fleet compared to other carriers in the region • Seasoned professionals with vast industry experience • Large geographical coverage | <ul style="list-style-type: none"> • Does not offer most updated entertainment and connectivity options • Aircraft fleet needs upgrading • Cabin below traveler expectations • Unavailability of luxury class especially for long haul flights • Behave like a low cost carrier on short haul flights |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Improving returns as financing options and cost reduction / revenue diversification plans are implemented • The growth in individual incomes, thus increasing the amount of disposable income on a global level • Growth in global tourism • Jordanian government is actively promoting the country as a world destination for historical artifacts, nature, culture, and medical treatment • Ever increasing population • Air travel is considered a safe and fast way to travel • Technological advancements in aircraft design | <ul style="list-style-type: none"> • Low cost airlines gaining market share through enhanced business models, services, and routes • Fluctuating fuel prices • Political instability • Competing airlines gaining regional and international dominance |

PESTLE Analysis

This analysis is conducted on the airline industry as a whole, and not limited to Royal Jordanian Airlines or the general business environment in Jordan. The reason for this is the fact that a great deal of international regulations dictate the way in which airlines operate, in addition to the fact that airlines have to also abide by the regulations of the destinations they visit outside their home country. As such, the environmental restrictions in Europe, for example, will have to apply to any airline flying to Europe regardless of the airlines' nationality or the flights origin.

| | |
|---------------|--|
| Political | <ul style="list-style-type: none"> • The political arena shifts travel from unstable regions to flourishing, safe, and stable areas. • International sanctions restrict travel to certain countries. • Opportunity for new routes developing to pick up the slack of currently less travelled destinations. |
| Economic | <ul style="list-style-type: none"> • Fuel prices are a large factor affecting the feasibility of flight routes. • Interest rates which eat into profits and are directly linked to investments in the industry. |
| Social | <ul style="list-style-type: none"> • The increasing population size is an opportunity. • Demographic shifts in the population are advantageous to the airline industry. • Naturally growing target market ahead of other indicators. |
| Technological | <ul style="list-style-type: none"> • Continuous technological advancements in the industry is a great opportunity. • May be burdensome and expensive to keep up with the technological changes. |
| Legal | <ul style="list-style-type: none"> • Increased regulations governing all aspects of the airline business serving as both opportunity and threat. |
| Environmental | <ul style="list-style-type: none"> • Pressure being placed on airplane manufacturers and operators to minimize the negative impact on the environment through reducing fuel consumption. • Can be financially difficult to manage the requisite upgrades. |

Financial Projections

A set of financial projections were prepared for the airline to arrive at proforma financial statements for the 2017-2019 period as shown in Appendix A. A simple projection method was followed (not statistical or regression based) because of the non-constant nature of the historical financials in addition to the information available on the Company's business plan. The projections were made based on simple historical averages, growth rates, and other financial indicators, which were later subject to a sanity check.

Ratio Analysis

Put simply, financial ratio analysis is a quantitative method by which financial indicators are mathematically manipulated to yield percentages or multiples to enable the analyst to compare companies in the same or different industries. This analysis method does not deal with absolutes, rather takes size out of the equation and compares the effectiveness of a company in doing it business by putting them against an industry or market standard.

There are dozens of ratios in common use today, and each industry has developed some more of its own over time. For our purposes, we will consider a few that we believe are strong indicators of the company's state.

As the Company is historically fluctuating between profit and loss (with more loss), it would not be of great use to measure profitability or performance ratios. Instead, we will focus on working capital and asset management indicators.

Unless otherwise stated, the ratios have been calculated from the company's 2016 audited financials.

Liquidity Ratios

The following Current and Quick ratios belong to a class of financial metrics used to determine the Company's ability to settle its liabilities without resorting to external funding or financing sources.

Current Ratio

The Current Ratio serves as a measure of a company's liquidity. It measures the ability of a company to meet or fund its short term obligations through its short term assets.

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

The Current ratio for RJAL was 1.01 which is significantly less than the ideal value of 2.0 as shown graphically below. In the absence of any major change in policies or business plan, to which there is no indication, the ratio is expected to remain the same for the projection period at the level of 1.01.

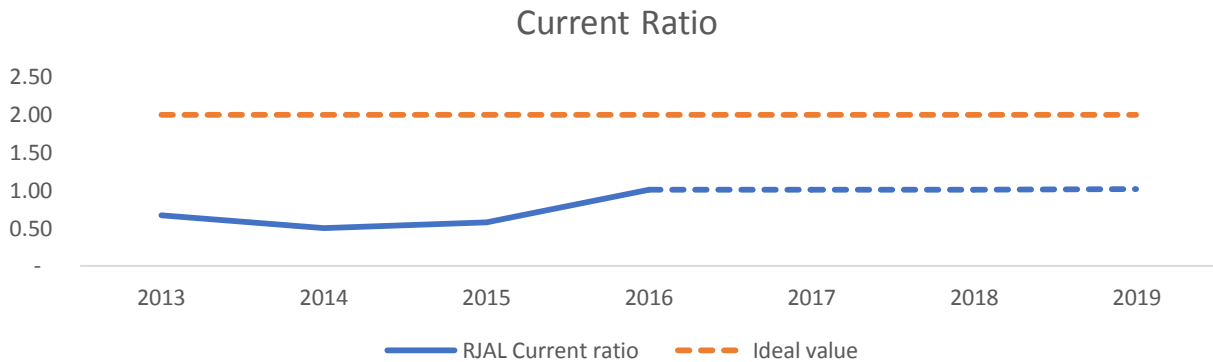


Figure 12: Source: RJAL Financial Information, Amman Stock Exchange, Author projections

Quick Ratio

The Quick or Acid-Test Ratio is a measure of how effectively a company can meet its short term obligations as financed through its short term assets. The difference between this ratio and the Current Ratio is that only the Current Assets that can be converted easily to cash are considered; in accordance to the following formula:

$$\begin{aligned} \text{Quick Ratio} &= (\text{Cash} + \text{Marketable Securities} \\ &+ \text{Accounts Receivable}) / \text{Current Liabilities} \end{aligned}$$

RJAL's Quick Ratio was 0.81, which is less than the ideal value of 1. However, the industry average is around 0.4 as shown below and as such, RJAL is outperforming the industry in this metric. As indicated above, the ratio is expected to be maintained at the 0.81 level throughout the projection period.

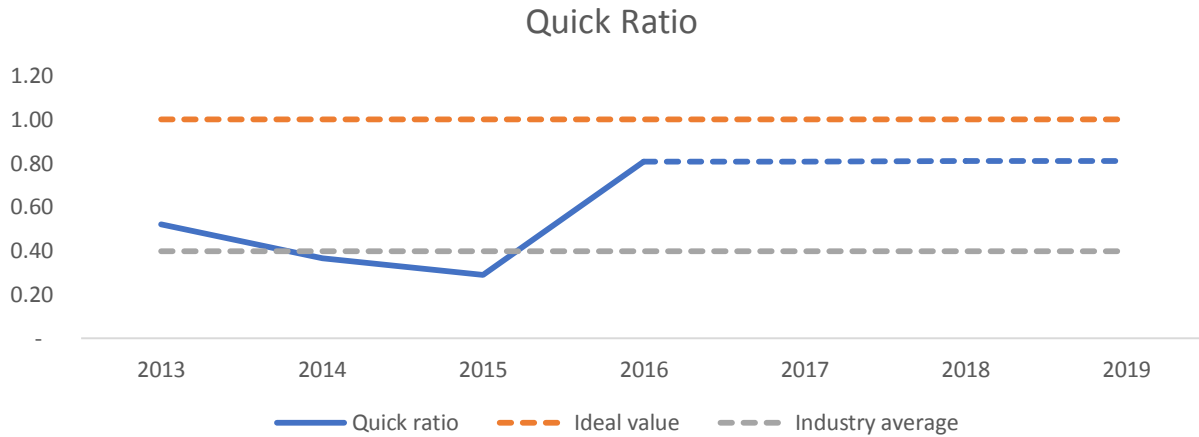


Figure 13: Source: RJAL Financial Information, Amman Stock Exchange, CSIMarket.com, Author projections

Asset Management Ratios

The metrics in this financial analysis category attempt to determine the effectiveness of a company to utilize its assets to generate revenue.

Asset Turnover Ratio

This ratio is a measure of the utilization of a company's assets in producing turnover, and is calculated as follows:

$$\text{Asset Turnover Ratio} = \text{Total Turnover (Sales)} / \text{Total Assets}$$

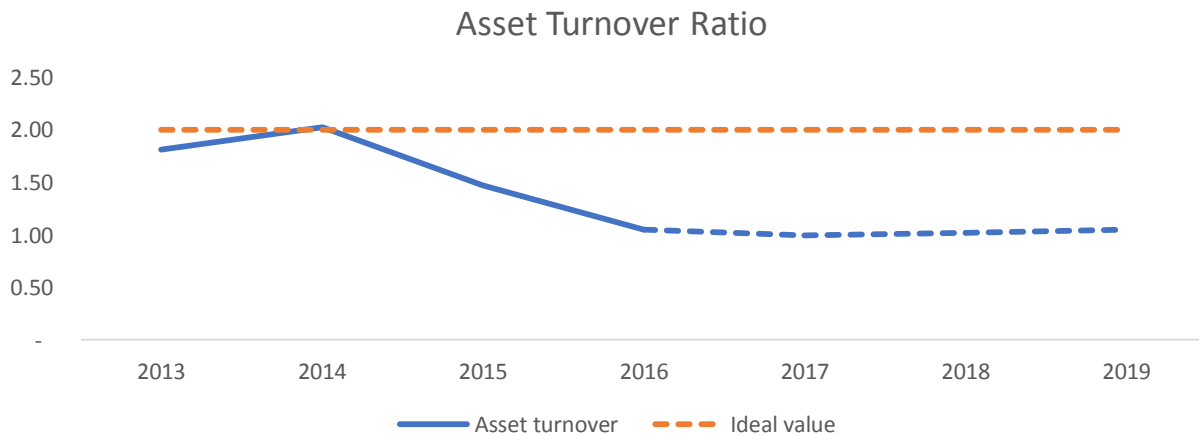


Figure 14: Source: RJAL Financial Information, Amman Stock Exchange, Author projections

As seen in the graph above, the company is significantly under utilizing its assets, and based on its revenue growth assumptions, is expected to stay well below the ideal ratio throughout the forecast period, at 0.99, 1.02, 1.05 for 2017, 2018, and 2019 respectively. The carrier is should pay special attention to this metric as it is key in turning the business around.

Tabulated Select Ratios

The table below shows some common ratios calculated for historical as well as forecast data:

| | 2013 | 2014 | 2015 | 2016 | 2017F | 2018F | 2019F |
|------------------------------|--------|--------|-------|--------|--------|--------|--------|
| Liquidity Ratios | | | | | | | |
| Current ratio | 0.67 | 0.50 | 0.58 | 1.01 | 1.01 | 1.01 | 1.01 |
| Quick ratio | 0.52 | 0.37 | 0.29 | 0.81 | 0.81 | 0.81 | 0.81 |
| Profitability Ratios | | | | | | | |
| Gross profit margin | 0.04 | 0.06 | 0.15 | 0.12 | 0.12 | 0.12 | 0.12 |
| Profit margin on sales | (0.05) | (0.05) | 0.02 | (0.04) | (0.01) | (0.02) | (0.02) |
| Return on assets | (0.09) | (0.11) | 0.04 | (0.04) | (0.01) | (0.02) | (0.02) |
| Return on equity | (2.00) | 2.48 | 0.32 | (0.33) | (0.10) | (0.16) | (0.26) |
| Asset Management Ratios | | | | | | | |
| Days sales outstanding | 19.36 | 22.75 | 20.31 | 20.28 | 20.28 | 20.28 | 20.28 |
| Accounts receivable turnover | 18.85 | 16.05 | 17.97 | 18.00 | 18.00 | 18.00 | 18.00 |
| Inventory turnover | 54.95 | 55.85 | 48.73 | 47.93 | 12.35 | 18.83 | 47.33 |
| Days inventory | 6.64 | 6.54 | 7.49 | 7.61 | 29.56 | 19.38 | 7.71 |
| Asset turnover | 1.81 | 2.03 | 1.47 | 1.05 | 0.99 | 1.02 | 1.05 |
| Leverage Ratios | | | | | | | |
| Debt ratio | 0.95 | 1.04 | 0.89 | 0.87 | 0.89 | 0.90 | 0.92 |
| Times interest earned | (4.80) | (4.52) | 3.35 | (0.68) | 0.45 | 0.31 | 0.17 |

Figure 15: Source: RJAL Financial Information, Amman Stock Exchange, Author projections

Conclusion: Beyond the Numbers

It is clear from the financial results of the Company that there are significant issues with the profitability of the operation. However, there are a few things that we can see from the above ratio analysis that sheds some light on what could be driving the situation and what things the airline is doing right.

For example, the Quick Ratio indicates better than industry cash management of the company even though the ratio is low. As shown in the table above, all ratios that deal with returns are negative and that is because the Net Income is almost always negative.

The Company's fleet is underutilized and requires a further study of the outcome of the business plan set into motion by the management team a few years ago. Asset utilization is key indicator of the carrier's performance and management

decisions. Before examining the rest of the business, profitably increasing the utilization of the aircraft fleet is, in my opinion, the first priority.

Beyond that, it is also clear that operating expenses are also high and the cost of financing the Company's debt is adding to the losses. As the carrier improves its financial performance, it may be in a better position to further improve its bottom line by improving its bargaining power.

The figures shown in the table above show a problem in the Company's capital structure and operating effectiveness. This especially apparent when considering that the airline is over 50 years old. This is a further indication of the immediate need to revamp the business to be able to utilize assets effectively, reduce the overall debt level to more manageable levels, and create a situation where the Company is paying money out to its shareholders as opposed to its debtors.

Company Valuation

There are numerous methods to value a company. Some valuation methods use expected cash flows to the firm, dividend growth models, profitability multiples, or market comparables.

To evaluate the Company, a cash flow valuation was used because the Company does not have a dividend history, nor is it profitable, and companies in this industry and region are typically state owned which makes access to data that much more difficult, and even if available, it would be compromised with government subsidies on all operating levels.

WACC

In starting the valuation process, the Weighted Average Cost of Capital must be determined, this is essentially an indication of the Company's cost of funds in accordance to their proportion and cost of funding:

$$WACC = \text{Weight of Equity} * \text{Cost of Equity} + \text{Weight of Debt} * \text{Cost of Debt} * (1 - \text{Tax Rate})$$

The Cost of Equity is determined using the Capital Asset Pricing Model:

$$\begin{aligned} \text{CAPM (Cost of Equity)} \\ = \text{Risk Free Rate} + \beta * (\text{Market Return} - \text{Risk Free Rate}) \end{aligned}$$

Where:

| Term | Definition | Value |
|----------------|---|-------|
| Risk Free Rate | The rate of the 6-month treasury bill in Jordan | 2.08% |
| β | The Beta Coefficient is the measure of a stock's return when compared to the overall market return over the same time period while considering the same frequency of data | -0.84 |
| Market Return | The average return on periodic market performance | 0.046 |

By applying the above equation, the Cost of Equity is 3.78%. While this is considered low, it will be used as a base value and its effects will be taken into consideration in further analysis.

The cost of debt is calculated from the financial statements and works out to 8.2% in accordance to this formula:

$$\text{Cost of Debt} = \text{Total Finance Cost} / \text{Total Interest Bearing Liabilities}$$

To arrive at the weights of debt and equity, we assume that the book value and market value of equity are the same, and we use the interest-bearing liabilities described in the formula above to determine the proportion of each to total funding for the company. We calculate equity and debt weights of 30% and 70% respectively.

The corporate tax rate used for the projection period is 20%⁷, while the other tax items are based on actuals from the Company's financial statements.

Now, and by plugging in all the numbers in the WACC formula, we end up with 5.7% as the Weighted Average Cost of Capital. Again, while this number appears low, we will use it as a base and subject it to sensitivity analysis.

The derived numbers above were not what we typically expected from the Company's shares, however, the Jordanian stock market (Amman Stock Exchange) is not a particularly large market nor is it the most efficient. Also, the fact that the global economy has been less than stable in recent years, we expect to see some anomalies in stock market and rate behavior.

Free Cash Flow Forecast

⁷ Source: Income Tax Rules and Regulations Article 34, 2014, Jordan Ministry of Finance – Income and Sales Tax Department, www.istd.gov.jo

| JOD 000s | 2013 | 2014 | 2015 | 2016 | 2017F | 2018F | 2019F |
|--------------------------------|----------|----------|-----------|-----------|---------|---------|---------|
| EBIT | (40,175) | (40,528) | 29,976 | (9,870) | 7,156 | 5,270 | 3,166 |
| Tax rate | 20% | 20% | 24% | 0% | 20% | 20% | 20% |
| Net Operating Profit After Tax | (32,164) | (32,459) | 22,857 | (9,902) | 5,725 | 4,216 | 2,533 |
| Accrued Expenses | 68,799 | 80,567 | 68,418 | 70,232 | 63,935 | 65,342 | 66,779 |
| Change in Net Working Capital | 49,834 | 4,548 | (86,628) | 116,625 | 119,277 | 121,990 | 124,766 |
| Total change in NWC | (18,965) | (76,019) | (155,046) | 46,393 | 55,342 | 56,648 | 57,987 |
| Net Fixed Assets | 173,166 | 141,425 | 122,689 | 226,520 | 231,503 | 236,597 | 241,802 |
| Total Operating Capital | 154,201 | 65,406 | (32,357) | 272,913 | 286,845 | 293,245 | 299,788 |
| NOPAT | | (32,459) | 22,857 | (9,902) | 5,725 | 4,216 | 2,533 |
| Net Operating Capital | | (88,795) | (97,763) | 305,270 | 13,932 | 6,400 | 6,543 |
| FCF | | 56,336 | 120,620 | (315,172) | (8,207) | (2,183) | (4,011) |

The figure above shows the buildup of the Free Cash Flow model in order to arrive at the Company valuation as shown below:

| | |
|--|---------|
| WACC | 5.74% |
| Cash Flow Constant Growth Rate | 7.42% |
| Value of operations at the end of 2016 | 238,302 |
| Add: Value of Non Operating Assets | 0 |
| Total Corporate Value | 238,302 |
| Less: Interest Bearing Debt | 178,375 |
| Intrinsic Value of Firm's Equity | 59,927 |
| Number of Shares Outstanding | 146,405 |
| Intrinsic Value Per Share | 0.41 |

From a pure fundamental financial analysis point of view, an investment decision would indicate a “hold” on the share of the company since it is relatively close to its spot market price. Since there is an element of inherent risk in any investment decision making process and based on speculations that the Company’s management will make the necessary restructuring required to turn the airline around.

Potential Value Upside

The valuation of the Company, which is directly linked to its ability to turn itself around and sustain stable growth, has a speculation portion attached to it. As the national carrier of the Hashemite Kingdom of Jordan, and one of the major employers in the country, there is an element of comfort in the continuing support the Company will receive to maintain running operations.

As such, and based on the above, we would upgrade my valuation of the share of RJAL to “buy” because of the large upside potential, the fruition of which is inevitable.

Appendix A: Historical and Proforma Financial Statements

Income Statement

| Income Statement (JD 000s) | 2013 | 2014 | 2015 | 2016 | 2017F | 2018F | 2019F |
|-------------------------------------|----------|----------|---------|----------|---------|----------|----------|
| Operating Revenues | 759,940 | 757,415 | 658,055 | 598,271 | 611,433 | 624,884 | 638,632 |
| Operating Expenses | 726,732 | 715,282 | 559,146 | 527,668 | 538,500 | 549,545 | 560,806 |
| Gross Profit | 33,208 | 42,133 | 98,909 | 70,603 | 72,933 | 75,340 | 77,826 |
| General and Administrative Expenses | 20,756 | 21,852 | 21,119 | 20,590 | 21,299 | 22,032 | 22,790 |
| Selling and Distribution Expenses | 47,060 | 49,584 | 46,881 | 45,045 | 48,437 | 52,083 | 56,005 |
| Depreciation (period) | 29,982 | 34,843 | 28,375 | 25,975 | 28,945 | 32,254 | 35,942 |
| Net Operating Income | (34,608) | (29,303) | 30,909 | 4,968 | 3,198 | 1,225 | (969) |
| Other Revenues | 4,441 | 9,081 | 5,444 | 9,671 | 9,884 | 10,101 | 10,323 |
| Other Expenses | 10,008 | 20,306 | 6,377 | 24,509 | 5,925 | 6,056 | 6,189 |
| Income Before Interest & Tax | (40,175) | (40,528) | 29,976 | (9,870) | 7,156 | 5,270 | 3,166 |
| Interest Expenses | 8,362 | 8,964 | 8,949 | 14,621 | 15,793 | 17,058 | 18,425 |
| Net Income before Tax | (48,537) | (49,492) | 21,027 | (24,491) | (8,636) | (11,788) | (15,260) |
| Income Tax (Period) | (9,679) | (9,854) | 4,994 | 80 | (1,727) | (2,358) | (3,052) |
| Net Income | (38,858) | (39,638) | 16,033 | (24,571) | (6,909) | (9,430) | (12,208) |

Balance Sheet

| Balance Sheet (JD 000s) | 2013 | 2014 | 2015 | 2016 | 2017F | 2018F | 2019F |
|---|----------|-----------|----------|----------|----------|-----------|-----------|
| Assets | | | | | | | |
| Cash on Hand & at Banks | 97,338 | 67,826 | 71,985 | 141,974 | 145,097 | 148,290 | 151,552 |
| Account Receivables, Net | 40,316 | 47,203 | 36,620 | 33,233 | 33,964 | 34,711 | 35,475 |
| Short Term Investments | 2,636 | 6 | 0 | 0 | 0 | 0 | 0 |
| Adjustment Account | 0 | 0 | 0 | 0 | 32,379 | 17,716 | 150 |
| Spare Parts | 13,226 | 12,808 | 11,474 | 11,008 | 11,234 | 11,464 | 11,699 |
| Total Current Assets | 179,963 | 156,864 | 216,983 | 219,030 | 223,849 | 228,773 | 233,806 |
| Long Term Investments | 17,881 | 22,509 | 22,869 | 23,474 | 23,990 | 24,518 | 25,058 |
| Fixed Assets, Net | 173,166 | 141,425 | 122,689 | 226,520 | 231,503 | 236,597 | 241,802 |
| Projects in Progress | 333 | 200 | 256 | 674 | 0 | 0 | 0 |
| Total Fixed Assets | 173,499 | 141,625 | 122,945 | 227,194 | 231,503 | 236,597 | 241,802 |
| Other Assets | 48,228 | 52,897 | 85,349 | 101,118 | 103,343 | 105,616 | 107,940 |
| Total Assets | 419,571 | 373,895 | 448,146 | 570,816 | 615,064 | 613,221 | 608,755 |
| Liabilities & Owners Equity | | | | | | | |
| Liabilities | | | | | | | |
| Accounts and Notes Payable | 101,046 | 123,289 | 206,707 | 69,590 | 71,019 | 72,475 | 73,960 |
| Credit Banks | 13,854 | 17,799 | 17,896 | 0 | 0 | 0 | 0 |
| Accrued Part of Long Term Loans | 48,156 | 47,425 | 46,233 | 35,067 | 32,401 | 29,937 | 27,661 |
| Total Current Liabilities | 269,002 | 312,588 | 375,298 | 216,897 | 221,350 | 225,889 | 230,518 |
| Long Term Loans & Notes Payable | 105,671 | 58,931 | 12,672 | 143,308 | 187,261 | 187,261 | 187,261 |
| Corporate Bonds | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Liabilities | 25,332 | 18,211 | 10,468 | 135,500 | 138,481 | 141,528 | 144,641 |
| Total Liabilities | 400,005 | 389,730 | 398,438 | 495,705 | 547,092 | 554,678 | 562,421 |
| Shareholders Equity | | | | | | | |
| Authorized Capital | 84,373 | 84,373 | 46,405 | 146,405 | 146,405 | 146,405 | 146,405 |
| Subscribed Capital | 84,373 | 84,373 | 46,405 | 146,405 | 146,405 | 146,405 | 146,405 |
| Paid-in Capital | 84,373 | 84,373 | 46,405 | 146,405 | 146,405 | 146,405 | 146,405 |
| Compulsory Reserves | 11,380 | 11,380 | 13,455 | 13,455 | 13,455 | 13,455 | 13,455 |
| Other Reserves | (1,000) | (534) | 50,154 | 0 | 0 | 0 | 0 |
| Accumulated Change in Fair Value | 0 | 3,771 | 3,593 | 3,771 | 3,771 | 3,771 | 3,771 |
| Retained Earnings | (75,294) | (114,995) | (64,094) | (88,749) | (95,658) | (105,089) | (117,296) |
| Total Shareholders Equity | 19,459 | (16,005) | 49,513 | 74,882 | 67,973 | 58,542 | 46,335 |
| Non-controlling Interest | 107 | 170 | 195 | 229 | 208 | 179 | 142 |
| Total Liabilities & Shareholders Equity | 419,571 | 373,895 | 448,146 | 570,816 | 615,064 | 613,221 | 608,755 |

Appendix B: Share Value Sensitivity Analysis

By subjecting the price per share valuation to a series of sensitivities, we get the following values:

| | | Cash Flow Growth Rate | | | | |
|------|-------|-----------------------|--------|-------|-------|-------|
| | | 6.62% | 7.02% | 7.42% | 7.82% | 8.22% |
| WACC | 4.24% | -0.07 | -0.23 | -0.36 | -0.45 | -0.53 |
| | 4.99% | 0.46 | 0.13 | -0.09 | -0.25 | -0.37 |
| | 5.74% | 1.89 | 0.92 | 0.41 | 0.10 | -0.11 |
| | 6.49% | 19.85 | 3.95 | 1.73 | 0.84 | 0.37 |
| | 7.24% | -5.64 | -13.67 | 14.00 | 3.50 | 1.58 |

As can be seen from the table above, the valuation of the share price of the airline varies significantly with even the slightest change in WACC or growth rate assumptions. The fact of the matter is that valuing a company with negative earnings can be very tricky. There are the fundamental financial forces at play, which include the expected progression of financial indicators and the relative change of these indicators with respect to each other.

Appendix C: Company Information

| | | | |
|--------------------|--|--------|-------|
| Code: | 131213 | | |
| Symbol: | RJAL | | |
| Address: | 125 Amman - Shmesani | | |
| Telephone: | 5202000 | | |
| P.O. Box: | 302 Amman 11118 | | |
| Email: | rja@rj.com | | |
| Fax: | 5686210 | | |
| Established Date : | 05-02-01 | | |
| Listing Date: | 17-12-07 | | |
| No. of Branches: | Local 0 - Abroad 0 | | |
| Main Objectives: | Opreating secheduled, unscheduled and chartered flights for passengers mail and cargo inside Jordan and abroad in addition to providing handling services for aircraft | | |
| General Manager: | Stefan Pichler | | |
| No. of Employees | | | |
| | Male | Female | Total |
| Jordanian | 3133 | 786 | 3919 |
| Non Jordanian | 150 | 250 | 400 |
| Total | 3283 | 1036 | 4319 |

Figure 16: Source: RJAL Company Information, Amman Stock Exchange

Appendix D: References

1. Air Transportation – Statistics & Facts, Statista,
<https://www.statista.com/topics/1707/air-transportation/>
2. Airbus Global Market Forecast 2017-2036, 2017, Airbus,
<https://www.airbus.com/aircraft/market/global-market-forecast.html>
3. Company Information, Amman Stock Exchange,
https://www.ase.com.jo/ar/company_guide/information/RJAL
4. Economic Performance of the Airline Industry, 2018, IATA,
<http://www.iata.org/economics>
5. Income Tax Rules and Regulations Article 34, 2014, Jordan Ministry of Finance – Income and Sales Tax Department,
<http://www.istd.gov.jo/Arabic/Legislations/Laws.aspx>
6. RJ History, Royal Jordanian, <https://www.rj.com/en/meet-rj/our-standards/profile>
7. RJAL Financial Information, Amman Stock Exchange,
https://www.ase.com.jo/ar/company_historical/RJAL