An Illustrative Evaluation of External Factors That Affect Performance of an Airline

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ABSTRACT

Since the beginning of globalisation and open sky policies, airlines experience intense competition, and their performance get affected by many external factors in addition to internal issues. Fuel price fluctuation, aircraft maintenance, labour and aircraft technical operations cost are primary factors that significantly drain the budget of an airline while exerting strong impact on its operational performance. However, this study focused on effects of external factors, such as political, economic and legal mandates on an airline performance. Therefore, relationships between these factors and airline operational performance are identified and analysed in this paper. Kenya Airways has been chosen as a representative airline for this study. Nevertheless, examples from other airlines are also included for the analysis. Data for this research were collected though a descriptive survey designed according to a qualitative mixed approach. Consequently, focused interviews and questionnaires were used, and reliability of obtained results was checked using Cronbach’s alpha method. The results indicate strong positive correlations between the external factors and performance of an airline. This study therefore confirms that performance of an airline can be influence by market driven fluctuations or intentionally altered external factors discussed in this project.

Keywords: Aircraft; Airline; Aviation; Flight; Operations; Performance.

INTRODUCTION

Political turmoil and economic crises are known to bring disruptions to businesses, but airlines and aviation industry in general is a highly regulated and global industry. Therefore, it is also vulnerable to changes in statutory or legal environments. Consequently, these external factors may affect an airline performance at time, if they are unstable or unpredictable. Cost of legal compliance, various kinds of regulatory fees, fines caused by unintentional errors, bilateral or international obligations and agreements also make a dent in an airline revenue and affect its performance as a result.

For examples, a report by CAPA (2017) discusses about the economic recession of Europe in 2016 caused slackening of tourism and business travel in that region. Similarly, the European Commission was mandated to negotiate the bloc level open-sky agreements with Qatar, the United Arab Emirates and other Gulf states replacing the existing bilateral level relationships. This led to low performance of certain airlines in the European Union (EU) and Middle East regions. Likewise, the report further stated that China had been one of the expanding source markets for Middle Eastern airlines, but its economy was forecasted to expand a relatively modest 6.4% in 2017 as compared to an average of 9% in 2011-2015. This had impacted the performance of airlines in the region.
According to Kozubikova et al. (2019), favourable political environment is one of the crucial factors influencing a business. Alike on legal front, air transport is regulated by several laws and regulations. Mhlanga and Steyn (2017) found that South African Airways was ordered to pay more than 104 million Rand in damages to Nationwide by the South Gauteng High Court following the ruling of the Competition Tribunal in 2016 under fair competition laws. Air Namibia similarly lost several lawsuits from aircraft service providers due to certain legal operational issues. Consequently, it was forced to pay 337 million Namibian dollars after it lost a case against Challenge Air. Researchers also believe that influences of these factors at workplace practices of employees also affect the performance of airlines, because they relate to stability of flight operations (Ombego and Makori, 2015). Airlines have to deal with these factors to manage their performance as a result.

To evaluate the effects of these factors, this study has identified few related elements, such as political stability, appreciation at workplace and job morale for political factor. Similarly, air service agreement, guidelines on trade wars, imposition of tariffs, violation of air service compliance and government charges are examined for the legal factor.

The study conducted a descriptive survey with a qualitative mixed approach. Therefore, a questionnaire was handed over to 182 employees of different categories and departments of Kenya Airways. Out of these, 170 employees provided their feedback according to the questionnaire. Additionally, focused interviews of few key position holders were also conducted to substantiate the data and to get deeper insight on the issues.

Strong correlations are found about both political and legal factors on performance of an airline according to Karl Pearson’s correlation method used by this study. Most respondents agreed with the influence of political factor on performance of an airline, but the opinions were divided on legal factors. This indicates that trade wars may not affect airlines significantly. A big number of respondents agreed about effects of workplace issues though. Primary weakness of this study is that it was limited to one airline. Data from many airlines may be required for more conclusive results. Similarly, small regional airlines may not have similar effects observed by this project.

**IMPORTANCE OF EXTERNAL FACTORS ON THE PERFORMANCE OF AN AIRLINE**

The purpose of investigating key factors affecting economic environment in measuring airline performance is to assist in generating a national economic growth and sustainable development. Aviation sector had sustained approximately a US$ 1.6 billion aggregated benefit bequeathing to gross domestic product (GDP) of Kenya in the year 2014 in addition to US$ 1.6 billion contributed by foreign tourists (IATA 2018). As a result, the sector had contributed to 5.1% of the national GDP (Roy 2017). This shows the impact of airlines on economy of a country in general.

Airlines were affected badly by tourism slump caused by COVID-19 pandemic, and they were forced to adopt cost cutting measures. Regrettably, airlines are worried about increasing their ticket prices due to the highly competitive environment adopted by the industry since globalization and open sky polices. The pandemic affected the operational profitability and agility of airlines to change amid unpredictable markets. For example, a field study revealed that the pandemic greatly affected Kenya Airways during its onset when almost 98% of the airline fleet were grounded (International Airport Review 2019). Since flying is the primary source of revenue for the airlines, they incur big expenses in the maintenance of their aircraft. Aviation regulatory regimes require periodic maintenance of aircraft even if they are not flying. This leads to further losses that make a dent in economic performance of airlines.

Sustainability of air transport is closely related to operational, economic, social, and environmental dimensions (Janic 2004). The researcher further elaborates that these broad dimensions depend on each other, but operational dimension is primary in addition to the other dimensions, it also relates to other factors, such as characteristics of demand, capacity, effectiveness, safety, and security of services. Similarly, the economic dimension relates to operating revenues and the social dimension links to contributions an airline makes for regional and national community in addition to contributions to globalisation and internalisation of business and leisure activities, such as trade, investments and tourism. Likewise, the environmental dimension relates to physical impacts on people’s health, such as air pollution, airport noise, aircraft accidents and generation of waste caused by airlines. Janic (2004) also reveals that some studies consider only economic, social, and environmental dimensions though. Nevertheless, all the dimensions are affected by political and legal issues and thereby influencing operations of an airline. This has direct impact on economic and operational performance of an airline (Fig. 1).
Political environment is an important external factor that affects airlines performance in Kenya. Recognising a political trend is important in assessing its influences on airline operations. According to Kozubikova et al. (2019), political environment can transform a business depending on the approach and performance of a government at national to local levels. Therefore, it is imperative that a business is flexible enough to the mutability of government guidelines and legislations to keep a steady pace of the business. For example, political instability like the Brexit and American President Trump’s coronation in 2017 affected the broader aviation industry (Butcher, 2018).

According to the Airports Council International (ACI 2018), the potential consequences for aviation of the UK leaving the EU was something that warranted worries. The council raised concerns about doubtfulness over rules that would regulate aviation between the UK and the EU. The council had suggested a transparency for passenger services, airline operations, and airport management to enable pursued investment. The then director general of the council was troubled by the fact that the airline industry was to be kept apprised for long time to transpire thereby ending up restricting route channel development for airports that affected air alliance for their communities (Steele 2018). For example, a ban on laptops and other electronic equipment in aircraft cabin onboard instigated by the United States (US) and replicated by other countries, such as the UK, Australia and Canada had impacted some airlines in the past.

Emirates airlines was one of them that reduced flights to the US, as a result (Steele 2018). According to Popova (2011), the Middle East had seen GDP slowdown in the wake of the Arab Spring in 2011 despite being one of the wealthiest regions in the world. As a result of the political turmoil, several destinations suffered in 2011 including Egypt, Tunisia, Yemen, Syria, and Libya while others like the United Arab Emirates and Saudi Arabia were benefited from the crisis. Air transportation was negatively affected, because it was the main method of travel among the major distant areas in the Middle East region.

Alike, political instability through tension imposed during general elections in Kenya had disrupted air traffic between Rwanda, Burundi, and Kenya, in the past (Kimani 2008). Kenya Airways therefore had to discontinue its nonstop flights to Paris impacting transiting passengers from Seychelles, Comoros, Burundi, Rwanda, and Democratic Republic of the Congo. Political factors of a country can affect any corporate body initiating a risk quotient that can induce the business to either incur losses or jeopardize its revenue stream. Kenya airways primarily operates international flight and during national elections between 2007 and 2013 the airline had to ground part of its fleet, because there were not enough international travel activities in the election months. In view of forthcoming general election late in 2022, the airline is considering necessary corrective measures to minimize negative impacts of the election on its economic performance. For example, increasing its cargo operations as compared to passenger flights. So, they have converted two of their passenger aircraft into freighters, this study has observed.
Aviation is a highly regulated industry both nationally and internationally. Therefore, legal and regulatory environment is a major and complex factor affecting an airline performance, because airline operations require a strict compliance of relevant civil aviation regulations. Although certain other legal procedures imposed in a country may not be directly applied to airlines, they greatly affect their operational or economic performance. With there being several laws that affect airlines indirectly, this study narrowed down its focus to government intervention through imposition of taxes and fines, and how foreign trade agreements affected by trade wars between countries influence air services agreements.

The International Trade Administration (ITA 2021) indicates that Kenya has several agreements signed not only with the US and other African countries, but also with countries outside African continent. With these agreements a bilateral or multilateral air service agreement was also signed in conjunction with the trade agreement so that export and import of goods could be done across these countries freely by air.

Since flying is a mode to penetrate a border even without landing in a country, it is considered a smooth way of opening borders for business or tourism. If states declare war, express discontents or mess up diplomatic ties, the easiest way of closing the borders is stopping airline flights. When airlines cease operations partially or fully, their economic performance significantly get affected.

This study found that airlines generally do not have guidelines on trade agreements, because they are government instituted and are nonrelated matter to aviation. Therefore, states are at their own disposition instigate the guidelines. Generally, trade wars are caused by disagreements between countries. For instance, the insecurity created by the Al Shabaab between Somalia and Kenya led to cessation of flights between the two countries in the past. Similarly, the Indian variant of COVID-19 resulted in suspension of passenger flights to-and-from the Asian nation in compliance with Kenyan Government directive (Tongola 2021). This study could not verify whether the decision was political or medical though.

Trade wars also seen to have affected aviation industry in other parts of the world. For example, in 2019 a trade war was started between China and the US after the US government imposed a tariff of 25% on Chinese imports worth US$ 300 billion in addition to 10–25% levy on steel and aluminium imports already enforced in the previous year (Rushe 2018). The levy enhanced the price for US companies to produce airframes and aircraft components, which increased the price of new aircraft in the US.

High custom duties and government fines imposed on airlines are also a kind of counterproductive legal environment that affects performance of airlines. In addition to generic excise, taxes and other government charges on airline tickets, airport companies charge arrival and departure taxes from airlines, which are passed on to passengers. For example, aviation taxes in the EU include ticket taxes, value added tax, taxation on aircraft fuel, environmental taxes, and taxes for air cargo according to a report by the European Commission (2019). The report indicates that taxes lower demands and have negative economic impact on airlines. As a result of the impact on air ticket prices due to taxes, the demand for aviation activities also reduces. The impact depends on the price elasticity of demand related to types of flights. In most part of the world, a 10% increase in a ticket price, results in a 9% - 11% lower demand. The report argues that the number of passengers would increase by 4%, if the EU eradicates all aviation taxes. This would result in an approximately equivalent increase in the number of flights, connections, aviation jobs and add value in the aviation sector. This implies that tax exemption in aviation results in higher passenger demand, a larger aviation sector and more flights. For the wider economy, this means more connectivity that may have a positive effect. This project made similar observations while carrying out field study of Kenya Airways. The extent of taxes that result in lower competitiveness is debatable though.

According to a consumer requirement report on American airlines, US$ 395,850 were paid as fine in 2012 by US Airways for infringing rules on freight of dangerous goods (Dempsey 2013). There are also fines proposed for events of violation of passenger rights, such as frailty to furnish replete fare publicity, airplane status changes, information to passengers every thirty minutes of flight delay, abortive attempt to food and water for passengers during the two-hours of pushback, and tarmac hold up over three hours (Jenkins and Mark 2010). The researchers also found that, if an airline delays, loose passenger baggage on transit or fails to provide flight status changes to passengers, they end up paying money for accommodation to the passengers and compensating them for the inconvenience. Government punitive fines were also found to be imposed on airlines when a violation or noncompliance on any travel regulation occurred, for example, ferrying an undocumented passenger either by having an expired passport or not having a passport at all. These taxation, legal and regulatory compliance issues directly affect performance of airlines.

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METHODOLOGY AND DATA COLLECTION

A descriptive survey was carried out with a qualitative mixed approach to collect data for this project. The survey was done on 182 employees of Kenya Airways using a questionnaire and focused interviews including few key position holders (Table 1).

| Department category                        | Target population |
|--------------------------------------------|-------------------|
| Flight operations fuel group employees     | 58                |
| Technical department production employees  | 96                |
| Engineering finance employees              | 7                 |
| Legal department employees                 | 4                 |
| Technical managers                         | 10                |
| Human resource work life cycle employees   | 7                 |
| **Total**                                  | **182**           |

Source: Elaborated by the authors.

The survey has collected certain demographic information, such as gender, age group, level of education, professional qualifications, year of service and employment status of the respondents, but they are not considered as a factor in data analysis. However, consent and prior approvals were taken from participants and authorities, including the National Commission of Science Technology and Innovation of Kenya for data collection and for conducting this research. Likewise, the participation in the survey was voluntary and anonymity of individuals taking part in the survey was ensured. The focused interviews and questionnaire collection were done physically, but emails and phones were also used as alternate methods. Generally, closed questions were asked to get firm responses and the questionnaire used the Likert scale of 1 to 5, where 1 = strongly disagreed, 2 = disagreed, 3 = neutral, 4 = agreed, and 5 = strongly agreed. The purpose of the study was mentioned on the questionnaire booklet, and it was also clearly explained during the focused interviews to the respondents. Likewise, the research validity was tested using Karl Pearson’s coefficient of correlation to confirm correlations between the factors and performance of an airline (Table 2). Similarly, the reliability of the study was checked with Cronbach’s alpha to assess the internal consistency (Table 3).

| Variable                        | Coefficient (r) | Number of items | Comment                |
|---------------------------------|-----------------|-----------------|------------------------|
| Economic operational environment| 0.691           | 5               | Strong positive correlation |
| Political operational environment| 0.687           | 5               | Strong positive correlation |
| Legal operational environment    | 0.729           | 5               | Strong positive correlation |

Source: Elaborated by the authors.

| Variable                        | Cronbach’s alpha | Number of items | Comment |
|---------------------------------|-------------------|-----------------|---------|
| Economic operational environment| 0.719             | 5               | Acceptable |
| Political operational Environment| 0.721             | 5               | Acceptable |
| Legal operational environment    | 0.763             | 5               | Acceptable |

Source: Elaborated by the authors.

Return rate of the questionnaire was promisingly high with more than 90% respondents returning the questionnaire (Table 4). General category staff return rate shows 100% while 93.4% of the professional respondents had returned the questionnaires. The professional respondents were primarily engineers, technicians, legal officers, accountants, and technical executives. Conversely, the general staff were from administrative and clerical roles.
Table 4. Return rate of the questionnaire.

| Category of respondents | Number of questionnaires administered | Number of questionnaires returned | Percentage |
|-------------------------|---------------------------------------|----------------------------------|------------|
| General category respondents | 65                                    | 65                               | 100%       |
| Professional category respondents | 117                                   | 105                              | 90.0%      |
| Total                   | 182                                   | 170                              | 93.4%      |

Source: Elaborated by the authors.

Male to female ratio of the respondents was 7:13 (Table 5). Thus, 69.2% of the general respondents were males while 30.8% were females. Similarly, in the professional category 69.5% were males and 30.5% females. Though the total number of respondents in both categories were different, but the ratio is quite similar.

Table 5. Gender ratio of the respondents.

| Gender | Number of respondents | Percentage |
|--------|-----------------------|------------|
| Male   | 45                    | 69.2%      |
| Female | 20                    | 30.8%      |
| Male   | 73                    | 69.5%      |
| Female | 32                    | 30.5%      |
| Total respondents | 170                   | 100%       |

Source: Elaborated by the authors.

According to Table 6, 48.6% of the professional respondents were in the age group of 26–35 years, 41.9% from 36–50 years and 9.5% were over 50 years of age. While 55.4% of general category respondents belong to 26–35 years age group, 44.6% from 36–50 years and none were above 50 years of age. Similarly, Table 7 shows qualification background of the respondents of both the categories. Information about qualifications were collected to ensure that the respondents are well qualified to participate in the survey and provide expert opinions during focused interviews.

Table 6. Distribution of respondents by age.

| Age         | Number of respondents | Percentage |
|-------------|-----------------------|------------|
| General category respondents |                      |            |
| 17–25 years | 0                     | 0.0%       |
| 26–35 years | 36                    | 55.4%      |
| 36–50 years | 29                    | 44.6%      |
| Over 50 years | 0                     | 0          |
| Professional category respondents |                   |            |
| 17–25 years | 0                     | 0.0%       |
| 26–35 years | 51                    | 48.8%      |
| 36–50 years | 44                    | 41.9%      |
| Over 50 years | 10                    | 9.5%       |
| Total respondents | 170                   | 100%       |

Source: Elaborated by the authors.
Table 7. Distribution of respondents by level of education.

| Level of education                   | Number of respondents | Percentage |
|--------------------------------------|-----------------------|------------|
| General category respondents         |                       |            |
| Diploma level                        | 15                    | 23.1%      |
| Vocational/technical degree or certificate | 0                    | 0.0%       |
| Bachelor’s degree                    | 43                    | 68.2%      |
| Master’s degree                      | 7                     | 10.7%      |
| Doctorate degree                     | 0                     | 0.0%       |
| Professional category respondents    |                       |            |
| Diploma level                        | 36                    | 34.3%      |
| Vocational/technical degree or certificate | 21                   | 20.0%      |
| Bachelor’s degree                    | 30                    | 28.6%      |
| Master’s degree                      | 18                    | 17.1%      |
| Doctorate degree                     | 0                     | 0.0%       |
| Total respondents                    | 170                   | 100%       |

Source: Elaborated by the authors.

Reliability of the questionnaire was measured using Cronbach’s alpha for internal consistency. The value 0.72 of alpha for political environment and 0.76 for legal environment factors as presented in Table 8 and Table 9, respectively are within the reliability acceptable range.

Table 8. Two-factor analysis of variance without replication on political environment and performance of an airline.

| Source of variation | SS         | df  | MS          | F            | P-value | F critical |
|---------------------|------------|-----|-------------|--------------|---------|------------|
| Rows                | 493.7933   | 148 | 3.336441    | 3.584104     | 3.61E-28| 1.229192   |
| Columns             | 4.907383   | 4   | 1.226846    | 1.317914     | 0.261913| 2.386986   |
| Total               | 551.0926   | 592 | 0.930900    |              |         |            |

Alpha = 1 – (MSE/MSR); α = 0.72

Source: Elaborated by the authors.

Table 9. Two-factor analysis of variance without replication on the legal environment and performance of an airline.

| Source of Variation | SS         | df  | MS          | F            | P-value | F critical |
|---------------------|------------|-----|-------------|--------------|---------|------------|
| Rows                | 64.1905    | 20  | 3.209524    | 4.225705     | 1.92E-06| 1.70316    |
| Columns             | 2.4381     | 4   | 0.609524    | 0.802508     | 0.527151| 2.485885   |
| Error               | 60.7819    | 80  | 0.759524    |              |         |            |
| Total               | 127.3905   | 104 |              |              |         |            |

Alpha = 1 – (MSE/MSR); α = 0.76

Source: Elaborated by the authors.
Likewise, Karl Pearson’s correlation analysis was used to determine the degree of relationships between political environment and performance of an airline. None of the results are below 0.63 (Table 10). Similarly, Table 11 shows the correlation between legal environment and performance of an airline, which is equally strong.

**Table 10.** Correlation analysis between political environment and performance of airline.

| Item                                | Political instability and tension | Appreciation at workplace | Poor compensation and work imbalance | Relationships with managers | Low job morale |
|-------------------------------------|----------------------------------|---------------------------|--------------------------------------|-----------------------------|----------------|
| Political stability and tension     | 1                                |                           |                                      |                             |                |
| Appreciation at workplace           | 0.474471981                      | 1                         |                                      |                             |                |
| Poor compensation and work imbalance| 0.39520546                      | 0.444919818               | 1                                    |                             |                |
| Relationships with managers         | 0.27297228                      | 0.317026256               | 0.309146102                          | 1                           |                |
| Low job morale                      | 0.307781105                     | 0.235374641               | 0.348311371                          | 0.301201327                 | 1              |
| Performance                         | 0.70408014                     | 0.721164104               | 0.735764232                          | 0.636826046                 | 0.638631808    |

Source: Elaborated by the authors.

**Table 11.** Correlation analysis between legal environment and performance of airline.

| Item                                | Air Service Agreement | Guidelines on Trade wars | Imposition of tariffs | Violation of Air service compliance | Government taxes and fines |
|-------------------------------------|-----------------------|--------------------------|-----------------------|--------------------------------------|-----------------------------|
| Air Service Agreement               | 1                     |                          |                       |                                      |                             |
| Guidelines on Trade wars           | 0.356753              | 1                        |                       |                                      |                             |
| Imposition of tariffs              | 0.590909              | 0.356753                 | 1                     |                                      |                             |
| Violation of Air service compliance| 0.530337              | 0.313748                 | 0.626277              | 1                                    |                             |
| Government taxes and fines         | 0.27191               | 0.462595                 | 0.333208              | 0.372291                             | 1                           |
| Performance                         | 0.720055              | 0.695031                 | 0.763606              | 0.736754                             | 0.731686                   |

Source: Elaborated by the authors.

Table 10 shows that all the five questions have correlation. The political environment has 0.71 as the average coefficient value, which is a strong correlation with performance of an airline. Similar correlation value of 0.72 can be seen for appreciation at workplace and performance of an airline. Other elements of the political factors are also showing a positive correlation. Likewise, Table 11 indicates that all the five questions regarding legal environment are found to have correlation with the performance of the airline. Coefficient values for air service agreement, guidelines on trade wars, tariffs, air services compliance and government taxes are obtained as 0.72, 0.69, 0.76, 0.74 and 0.73, respectively. The outcomes of the survey also corroborate with an empirical study carried out by Ombego and Makori (2015).

**SURVEY RESULTS AND DATA ANALYSIS**

This project has made an attempt to investigate the influence of political environment on performance of an airline. As the data were collected primarily from Kenya Airways, the study focuses on political factors of Kenya and transnational that affect airlines.
Political environment is considered as an external factor. Therefore, it is evaluated as an independent variable. Consequently, the respondents’ point of view on political stability and its effects on working moral of employees at workplace, employee compensation and manager-worker relationship was solicited (Table 12). These are the primary elements that impact the performance of an airline.

**Table 12.** Survey result for the political environment factor.

| Item | Statement | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Total |
|------|-----------|----------------|-------|---------|----------|-------------------|-------|
| Poe1 | Political instability and tension affect the performance of airlines | 40 | 63 | 17 | 24 | 5 | 149 |
|       | Percentage (%) | 26.8 | 42.3 | 11.4 | 16.1 | 3.4 | 100 |
| Poe2 | Appreciation at workplace may lead to better performance of airlines | 50 | 45 | 25 | 22 | 7 | 149 |
|       | Percentage (%) | 33.6 | 30.2 | 16.8 | 14.8 | 4.6 | 100 |
| Poe3 | Poor compensation of employees and work imbalance leads to poor performance of airline | 46 | 51 | 21 | 20 | 11 | 149 |
|       | Percentage (%) | 30.9 | 34.2 | 14.1 | 13.4 | 7.4 | 100 |
| Poe4 | Relationships with managers are a factor that drives performance of airline | 51 | 54 | 17 | 21 | 6 | 149 |
|       | Percentage (%) | 34.2 | 36.2 | 11.4 | 14.1 | 4.0 | 100 |
| Poe5 | Low job morale leads to poor performance of airline | 38 | 52 | 24 | 28 | 7 | 149 |
|       | Percentage (%) | 25.5 | 34.9 | 16.1 | 18.8 | 4.7 | 100 |

Source: Elaborated by the authors.

According to Poe1 of Table 12 about influence of political instability on performance of airlines, 26.8% respondents strongly agreed, 42.3% agreed, 11.4% were neutral, 16.1% disagreed while 3.4% strongly disagreed. This reveals a wide response with 69.1% of the respondents affirming that the political instability and tension affects the performance of an airline while only 19.5% are arguing for the opposite. Likewise, Poe2 of the Table 12 shows that 33.6% of the respondents strongly agreed, 30.2% agreed, 16.8% were neutral, 14.8% disagreed while 4.6% strongly disagreed with the statement about workplace appreciation. This result therefore depicts that big cluster of participants agreed with the statement, where 63.8% are concurring the agreement and 19.4% think otherwise. Similarly, Poe3 indicates that 65.1% are atesting that the poor compensation of employees and work imbalance affect the performance of an airline projects, but 20.8% of them do not agree with the statement. Alike, the item Poe4 demonstrates that 70.4% of the respondents acknowledge the influence of management relationships on the performance of an airline projects. Finally, Poe5 probed to establish whether low job morale of employees leads to poor performance of an airline, 60.4% of the respondents agreed, but 23.5% argued otherwise.

The view presented by the questionnaire data are supported by focused interview statements and discussions with key respondents. Reporting on how political instability is affecting the performance of Kenya Airways, an engineer responded as follows:

During the general elections held in Kenya in 2007 and 2013, the airline had low operations, because several aircraft from its fleet were grounded. There was unrest during the months of elections that affected inflow of international tourists in the country. Business class passenger number was also reduced due to potential unsafe situations and airports mostly became ghost towns. It took a long time for the airline to recover the lost revenue caused by the reduced operations due to the unrest. That negatively affected the airline performance, and it took months to resume the flight operations at the pre-election level.
An employee of the flight operations department stated that lives were lost, and some staff got displaced from their homes due to the unrest. This negatively affected the employees’ moral and their performance at workplace that led to poor performance of the airline as a result. Furthermore, the airline was also losing customers, because of it. For example, due to the election of 2007, the airline had to discontinue its Kenya-Paris flight that affected passengers from Burundi and Rwanda, because they had to choose to alternate routes that were expensive.

The statements confirms that political environment is an important independent variable that affects an airline performance caused by the disturbance in flight operations and disruption of work or personal lives of employees because of the political unrest.

Another independent variable considered by this study is the effects of legal environment on the performance of an airline. Therefore, the survey questionnaire sought perspectives of the respondents on this factor, primarily focusing on national and international trade and air service agreements and regulations. This also includes trade wars, tariffs imposed on international trade, violation of air service compliance, and government taxes and fines imposed on airlines. Results of the questionnaire are presented in Table 13.

Table 13. Survey result for the legal environment factor.

| Item | Statement                                                                 | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Total |
|------|---------------------------------------------------------------------------|----------------|-------|---------|----------|-------------------|-------|
| Loe1 | Trade and air service agreement affect the performance of an airline     | 2              | 9     | 6       | 3        | 1                 | 21    |
|      | Percentage (%)                                                           | 9.5            | 42.8  | 28.6    | 14.3     | 4.8               | 100   |
| Loe2 | Instigating guidelines on trade wars will help improve performance of an airline | 1              | 7     | 6       | 5        | 2                 | 21    |
|      | Percentage (%)                                                           | 4.8            | 33.3  | 28.6    | 23.8     | 9.4               | 100   |
| Loe3 | Imposition of tariffs to international trade affects the performance of an airline | 1              | 6     | 11      | 2        | 1                 | 21    |
|      | Percentage (%)                                                           | 4.8            | 28.6  | 52.4    | 9.4      | 4.8               | 100   |
| Loe4 | Violation of air service compliance affects the performance of an airline | 1              | 6     | 6       | 7        | 1                 | 21    |
|      | Percentage (%)                                                           | 4.8            | 28.6  | 28.6    | 33.3     | 4.8               | 100   |
| Loe5 | Government taxes and fines imposed on airlines affect the performance of an airline | 4              | 6     | 4       | 2        | 5                 | 21    |
|      | Percentage (%)                                                           | 19.1           | 28.6  | 19.1    | 9.4      | 23.8              | 100   |

Source: Elaborated by the authors.

Item Loe1 of Table 13 presents the responses related to effects of trade and air service agreements on performance of an airline; 9.5% of the respondents were strongly agreed, 42.8% agreed, 28.6% neutral, and 4.8% disagreed while 4.8% strongly disagreed with the statement. This shows that more than half agree. Looking at the item Loe2 related to proper guidelines in case of trade wars, it can be seen that 4.8 % strongly agreed, 33.3% agreed, 28.6% neutral, 23.8% disagreed and 9.4% are strongly disagreed. Similarly, item Loe3 shows that 57.2% of the respondents agreed about the influence of tariff of international trade on an airline performance. However, only 33.4% of the respondents ratified that the violation of air service compliance could affect the performance of airline projects and 38.2% disagree. Similarly, 47.7% acquiesced with the statements regarding government taxes and fines imposed on airlines. In overall, it can be argued that most respondents agreed that legal environment affects the performance of an airline.

Therefore, airlines should make allowances to manage the effects of this interdependent variable. For example, air traffic control is not always able to track an exact position of a flying aircraft, every time. This is a fact attributable to the changing landscape and position of the aircraft, especially when the aircraft is travelling over an ocean or over a thick forest (Haider and Khateeb 2018). In these situations, compliance of a mandated operating procedure becomes very important. The situation may also lead to a flight diversion that results in increasing the aircraft operating cost and subsequently affecting performance of the airline.
Key personnel of the relevant departments related to trade and air service governance of the airline were also found to agree during the focused interviews with the result obtained from the questionnaire. Some of them said that trade and air service agreement are very crucial in aviation industry. With trade being central, service level agreement is an operational document which help to actualize and operationalize the trade agreement; safety sensitive nature of the aviation industry requires various regulatory approvals that needs to be adhered to; asides travelling for leisure, people do travel for business and, if trade is affected, then a person might not travel. International Civil Aviation Organisation recommendations also highly discourage imposition of tariffs on international trade and bilateral agreements.

Other personnel commented on guidelines about trade war situations mentioning that countries are at their own disposition to instigate guidelines on trade wars, especially on nonaviation related matters. Currently there are no guidelines available in Kenya about how to mitigate matters arising from trade wars that affect performance of airlines. The personnel believes that, if guidelines are instigated, there would be regulations to protect airlines from losses caused by international border closure or cessation of flights.

Likewise, a legal officer of the airlines talked about how imposition of government taxes and fines affects the performance of an airline. According to the officer, airlines in Kenya are liable to pay tax on both departure and arrival events. These taxes are mandatory and cannot be avoided, because they are important for revenue generation for the government. Fines on the other hand can be punitive and noncompliance can lead to poor reputation of the airline.

These outcomes supported by the focused interviews confirm that legal environment is very crucial to the performance of an airline and regulatory issues cannot be tacked frivolously, because they not only affect the performance, but they are also instrumental for reputation of the airline. A similar argument is indicated in empirical studies conducted by Dempsey (2013). Therefore, the influence of this independent variable is significant because imposition of taxes, legal compliance, trade wars caused by legal disputes and characteristics of air services agreements can financially burden an airline. This can result in negatively affecting the performance of an airline.

**DISCUSSION AND SUMMARY OF FINDINGS**

National and international economic situations are significantly shaped by various political and legal issues. These are considered as external factors that affect economical and operational performance of airlines. Economy and operations capabilities of an airline are dependent on each other though. The key factors evaluated in this study are related to political and regulatory issues that affect operations of an airlines. Disturbing events or factors upsetting the operations directly affect the economic performance of an airline, this study has observed.

A field survey carried out under this project at Kenya Airways about influence of both political and legal external key factors demonstrates that a large number of respondents believe that political instability and tension affect the performance of airlines. Around 70% of the respondents are agreeing about the political factor while 19.5% disagreed. On the other hand, majority of the respondents agree about legal factors, but many of them disagreed too. More specifically on the issue of trade and air service agreement effects on performance of an airline projects, 52.3% respondents agreed while 19.1% disagreed. There was an almost equal response on the instigation of guidelines on trade wars with 38.1% agreeing and 15.4% disagreed. However, on the question of government taxes and fines, 47.7% are agreeing and a low percentage disagreed.

Likewise, on general questions, such as influence of these factors on workplace situations of employees, most respondents agreed with a minority that disagreed. For example, 63.8% of the respondents concurred with the statement on appreciating employees’ efforts at workplace affect the performance of airlines while 19.4% said it does not. Alike, on job morale element, 60.4% of the respondents agreeing that lack of purpose and low job morale of employees affect the performance of an airline while 23.5% believe otherwise. The study on both political and legal themes therefore has found a strong positive correlation on all the key questions to confirm that these external factors have strong influence in shaping the performance indicators of an airline. For the political factor, average coefficient ($r$) 0.69 and a reliability ($\alpha$) 0.72 validate the bearing of the study. Equally, the average coefficient ($r$) 0.73 and a reliability ($\alpha$) 0.76 for the legal factors support the relevance of this project.
CONCLUSIONS

This paper has examined the influences of political and legal factors underpinning economic situation on performance of an airline. The factors are determinantal for setting an economic situation in a country or regions, which can affect the performance of an airline both positively or negatively depending on the characteristics of the factors, at time.

Aviation is a highly regulated and global industry. Therefore, stability in legal mandates is important for smooth and efficient operations of airlines. Similarly, cost of legal compliances is enormous, and airlines have to pay fines or compensations even for their unintentional errors sometimes. This study has observed that changes in economic, political, or legal situations in a region can also affect performance of airlines in other regions. It was also noticed that the factors can influence working efficiency of airline employees that affects airline operations and performance as a consequence.

Various elements of the factors, such as political stability, workplace issues, job moral, air service agreements, trade wars, tariffs, legal compliance, government taxes and imposed fines were evaluated using a survey that included a combination of questionnaire and focused interviews of the employees. Karl Pearson’s correlation method was used to identify correlation of the factors with performance of an airline. The study found a strong positive correlation with all the observed indicators of political environment and the performance of an airline at average coefficient of 0.69 and a reliability 0.72. Similar positive correlations with all the indicators of legal environment and performance of airline were noticed from an average coefficient of 0.73 and the reliability of 0.76. A large number of respondents agreed that political factor has strong bearing on performance of an airline, but less than 50% believed that legal factor is as significant as the other where performance of an airline is concerned. However, most respondent concurred that workplace issues and job morale at work are instrumental for performance of an airline.

As the data were collected only from one international airline, the findings of this study may not fully apply to small regional airlines. Therefore, more conclusive results can be achieved if many airlines are considered for this type of project.

AUTHORS’ CONTRIBUTION

Conceptualization: Yadav DK and Goriet MO; Methodology: Yadav DK and Goriet MO; Investigation: Yadav DK and Goriet MO; Writing – Original Draft: Yadav DK and Goriet MO; Writing – Review and Editing: Yadav DK; Funding Acquisition: Yadav DK; Resources: Goriet MO; Supervision: Yadav DK

DATA AVAILABILITY STATEMENT

All data sets were generated or analysed in the current study.

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