Specific Aspects of Forming the Tariff Policy of an Airline Company

The objective of the article consists in refinement of methodological approaches to the process of forming the tariff policy of an airline company with application of aggregate tariffs as a certain set of tariffs formed according to a homogeneous operational focus and reflecting characteristic features of the existing market environment. The article deals with the process of forming the tariff policy of an airline company as a significant component of its commercial activities which ensures competitiveness of the airline company on the air transport service market and positive financial results. Finding a solution to the problem of efficient tariff rate setting within the variable context of market environment serving as an economic lever for profit growth will ensure improved efficiency of operations of the airline company and achievement of a certain cost-effectiveness level, which will help the airline company survive within a challenging economic environment. For this reason, solving the task of setting tariff rates by an airline company taking into consideration its objectives, strategies, and methods determines the relevance of forming aggregate tariffs. For alignment of basic business processes of the airline company, estimation of the required resources, as well as their optimum utilization, a mechanism should be employed which allows achieving a specific goal of the airline company with varying mutual effects taking place, realizing a complex of its strategic objectives through an efficient tariff policy. The influence mechanism is essentially a multi-aspect analysis of integrated indicators of company operations from the perspective of its strategic priorities, anticipated profits, risks associated with implementation of the tariff policy with a view to balancing the interests of all market participants, which necessitates estimation of the viability of implementation of aggregate tariffs and taking into account expenditures resulting from this decision. The conducted analysis allows drawing a conclusion concerning viability of functioning of aggregate tariffs of an airline company aimed at reducing the total of expenses and increasing profits, which can be achieved by providing an adequate and timely response to emerging risks and potential threats. For this reason, the ultimate goal of forming aggregate tariffs concerns the nature and value of the costs associated with operating processes and reflecting the degree of their interaction and the amount of saving achieved by the airline company.

Keywords: airline company, tariffs, tariff policy, aggregate tariffs, tariff policy factors


Panasiuk Iryna P. – Postgraduate Student, Department of Finance, Accounting and Auditing, Institute of Economics and Management of the National Aviation University (prosp. Kosmonavta Komarova, 1, Kyiv, 03058, Ukraine)

Email: irinipanasiuk@meta.ua

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Setting of the problem. One of the ways of increasing the efficiency of airline company in the turbulent external economic environment is the implementation of effective tariff policy, which is embedded in the systematic coordination of its material, financial, information and human relationships, which are indicators of the actions of all external and internal factors and their impact on the formation of the airline tariff aggregate that is the subject of research.

Analysis of recent research and publications. Problems of formation of tariffs and tariff policy in the transport sector were examined by the following scientists: Afasayev V. G., Kostromin O. V., Artamonov B. V., Smurova M. Yu., Avvakumov S. M., Akse- nov I. M., Alifimov S. A., Zagarulko V. N., Ishchenko S. V., Koba V. G., Shchelkunov V. I., Polyanskaya N. Ye., Kosarev O. Yo., Kon- ovalova N. A., Kostromina E. V., Kotenko A. M., Kotlubai O. M., Kreymer V. Yu., Krynin A. V., Kulayev Yu. F., Mazo L. A., Makar- enko M. V., Marintseva K. V., Sych Ye. M., Vysotska I. I., Sadlovskaya I. P., Horodetska L. O., Tretjak V. P., Chebanova N. V., Chorniy V. V. and others. Mentioned above scientists have made a significant contribution to the development of theoretical, methodological, organizational and economic basis of aircraft transport, but it should be noted that the issue of structuring passenger tariffs and tariff policy formation caused by the airline market situation is still not well understood. The main drawbacks of the existing order of formation of tariffs is the absence of reasoned methodical approach to setting tariffs. The existing procedure needs improvement, which requires further deepening of complex theoretical and methodological research related to the development of flexible and adaptive rate policy of airlines, due to the high sensitivity of air transport market to political and economic instability. All the above said predetermined the study of the details of air company tariff policy conditions for wage formation altogether. In this regard, these studies are important in scientific as well as applied aspects.

Unsolved part of the formation of tariff problems. The mechanism of airlines policy is based on calculations of financial results on the basis of available data on the demand for aviation services and its sensitivity to changes in rates. Therefore, the lack of clearly defined criteria for the fare conditions of changes affecting the activity of the airline and in particular, on the functioning process of tariff policy has revealed the need to develop methodological, organizational and practical recommendations for improvements that will improve the competitiveness of the airline market of air transportation.

The purpose of the article is to improve methodological approaches to the process of tariff policy tariff airline in the application of aggregate tariff as a specific set of tariffs that are formed in accordance with uniform orientation of action and reflect the specific characteristics of the current market environment. Development Mechanism compensation destabilizing factors Using the administration, within the legal framework and tariff strategies based on the highly competitive air transport market and relying on the strategic goals of the airline.

Presentation of material. The main task of improving airline tariff policy is to ensure passengers’ own economic interests and the needs of passengers, providing the stability of tariffs, their flexibility and predictability that will adequately respond to changes in external conditions and needs market and ensure the achievement of the objectives for maximum effectiveness.

When forming airline tariff policy it is necessary to analyze the likelihood, nature and the oncoming of social, economic, technological, market and unpredictable events that cause destabilization of activities and elimination of risk; carry out a comprehensive assessment of the effectiveness of interventions to develop effective solutions to prevent or neutralize deviations from the system, situational and integrated approach to the development of economically sound decisions on airline tariff policy adjustments[1; 2].

Basic methods and goals when making management fees should ensure:

- formation of objective conditions to increase the profitability of the industry of air transportation by creating favorable rates;
- precise control of management of a set of airline fares and tariff creation as a means of stimulating the development of air transportation;
- flexible regulation of financial resources, current cost and revenues control to ensure stable and dynamic development of the airline;
- creation of new, flexible methods for the formation of a certain type of tariffs based on demand and customer needs and competition in the aviation market;
- competitive airline;
- calculation of economically sound solutions to support loss-making airline routes for additional load on the route and ensure profits;
scheduled airline traffic to deepen and expand its market share;

- improvement of flight profitability by properly selected routing grid, which has a positive impact on aggregate financial performance of the airline;

- transportation tasks [3, 4].

A distinctive feature of the organization and management of business processes airlines in today’s market conditions is unpredictable impact of external and internal environment, which leads to the formation of aggregate tariff in order to adequately and timely adjust tariff policy [5]. Development and operation of the airline aggregate tariff closely related to the problem formulation and implementation of economic mechanisms that eliminate the time, economic and structural barriers, reducing the time and costs on the collection, storage and processing of information will help in forming strategic relationships with airline customers and partners in the air transport market [6, 7].

In forming the aggregate tariff airline should consider economic duality of an airline as a business entity, on the one hand, it is a part of the macroeconomic system as it is a part of the process dependent on consumption and production of wealth, on the other hand airline is microeconomic production system, which has etc [8].

Increased competition in the airline market, especially in the “Open Sky” requires solving problems of strategic airlines with optimal use of leverage to maximize positive results. This leads to analyzing of large amounts of information, significant investments and appropriate training methods and decisions on tariff policy changes in a short time interval.

The formation of the airline tariff policy includes not only forming prices because the market impact of air transportation carries a large number of destabilizing factors in the objective need for control and correction rates. Therefore, the mechanism of tariff policy includes the following steps:

- air transportation market research in order to highlight its segments and their size. This assessment allows the airline to make the choice of target segments and concentrate their efforts on them;

- analysis and evaluation of the resource potential and airlines and comparison with the needs and desires of passengers;

- identification of market structure of air transportation by percentage between sub segments on their flights and the market in general.

- determining the relationship between different rates for different classes of service, carried out by analyzing the possible methods of pricing for each market segment based on the elasticity of demand, market conditions, the availability of tariff factors together and building tariffs tactics by competitors [9, 10].

By the methods of expert estimates the desired relationship between rates for different classes of service is determined. The next step is to determine the percentage value of each of the proposed tariffs.

We know that the cost of flights per one occupied seat in the desired direction is 250 USD, and given the return is 10%, based on the structure of air transport, you can determine the value of the fare Y:

<table>
<thead>
<tr>
<th>Target market segments of passenger traffic (and purpose of travel related to the product flights)</th>
<th>Available airline subsegment (%)</th>
<th>The correlation between rates</th>
<th>Determination of Tariff rate * ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Business passengers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A11 – Business passengers</td>
<td>10</td>
<td>F = 2 × Y</td>
<td>514</td>
</tr>
<tr>
<td>A12 – passengers in business incentive trips</td>
<td>20</td>
<td>C = 1.5 × Y</td>
<td>385.5</td>
</tr>
<tr>
<td>A13–Crews</td>
<td></td>
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<tr>
<td>A2. Holidaymakers</td>
<td></td>
<td></td>
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<tr>
<td>A21–Individual holidaymakers</td>
<td>25</td>
<td>Y</td>
<td>257</td>
</tr>
<tr>
<td>A22–holidaymaker groups</td>
<td>45</td>
<td>Y−30%</td>
<td>179.9</td>
</tr>
<tr>
<td>A23–pensioners</td>
<td></td>
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</tbody>
</table>
Generalized performance
- Profitability of services provided by aviation and non-aviation activities rate of return;
- The volume of delivered passengers, cargo;
- The cost of 1 ton of cargo delivery, 1 pcs. of cargo space, 1 passenger;
- Revenue per 1 ton of cargo, 1 pcs. of cargo space, 1 passenger;
- Earnings per 1 ton of cargo, 1 pcs. of cargo space, 1 passenger the employment

Performance efficiency of labor
- labour capacity of services offered (1 ton cargo shipping, 1 pcs. of cargo space, 1 passenger);
- equipment of fondo;
- salaries capacity of products;
- flight crews work productivity

Performance indicators of operation of specific aircraft
- Annual performance of aircraft- helicopter fleet Park by type of aircraft;
- Flying hours on a single averagely listed plane (by type of aviation equipment);
- Indicators of efficiency in working capital;
- coefficient turnover of working capital;
- coefficient of loading;
- duration of turnover;
- profitability of working capital;
- income(return) and workload for 1 hr average annual value of normalized working capital;
- efficiency of fuel

SYSTEM PARAMETERS AFFECTING AIRLINE TARIFFS

Partial performance of economic activity
- profit from the operation of aircraft investigated routes;
- total profit;
- Airlines profitability

Performance indicators of fixed assets
- assets return plane helicopter fleet;
- assets delivery capacity of 1 ton cargo 1 unit. cargo space, 1 passenger;
- equipment of assets;
- profitability of assets

Performance efficiency of investments
- amount per 1 UAN. capital investments;
- term of payback of capital investment;
- total costs

FORMATION OF AIELINES TARIFF POLICY

Rate formation based on the functional characteristics
- Transportation back and forth (RoundTrip - RT)
- One way transportation (OneWay - OW)
- Circular transportation (CircleTrip - CT)
- Round the world transportation (Round the World - RW)

Rate formation based on expenditure component
- Direct costs
- Other direct costs
- General costs on production
- Direct labor costs

THE VOLUME OF TRANSPORT PRODUCTS

Efficiency points of airlines tariff policy volume shipments, volumes of freight and passenger traffic, passenger, freight turnover

Technical indicators: carrying capacity, capacity, number of units of aircraft and helicopter fleet their power

Performance indicators: hour performance of aircraft flying, annual hours, speed of motion

Economic: revenue (income) from aviation and non-aviation activities, costs and transportation costs, revenue, profitability

The quality and efficiency of the production process, the average distance traffic, speed of delivery, the level of safety of cargo, flight safety, flight regularity

TARIFF POLICY RISKS: ORGANIZATIONAL AND FUNCTIONAL, PRODUCTIVE AND UNPREDICTABLE

Influencing destabilizing factors of tariff policy by the formation of tariff aggregate using cost airline differentiation and formation of optimal tariffs

Fig. 2. Configuration of airline tariff aggregate

\[ 250 \times (1 + 0,1) = 0,1 \times 2Y + 0,1 \times 2Y + 0,2 \times 1,5Y + \\
+ 0,25 \times Y + 0,45 \times Y \times 0,6; \]

\[ 275 = 0,2Y + 0,3Y + 0,25Y + 0,32Y; \]

\[ 275 = 1,07Y; \]
Initial values of air fares airline are complemented by a system of discounts and benefits that are based on market-based monitoring of air transportation.

To determine the weight of the aggregate tariff as part of tariff policy author proposed methodological approach to assess the impact of these factors on the activity of airlines based on calculating the amount of scores for individual factors of certain population, estimated by certain flights expert in total sum of points given by this expert to all factors:

\[ F_i = \frac{\sum_{j=1}^{m} (A_{ij} / A_0)}{m}, \]

where \( F_i \) – the weight of the certain factor aggregate of airline tariff;

\( i \) – aggregate tariff factor, \( i = 1, n \);

\( n \) – the total number of tariff factors together;

\( m \) – number of airlines experts;

\( j \) – number of an expert, \( j = 1, m \);

\( A_{ij} \) – score given by a certain expert to a certain factor of aggregate tariff;

\( A_0 \) – the amount of points granted by certain airline expert.

Evaluation of tariff aggregate importance determined by the example of certain market factors of tariff aggregate

\( \beta_1 \) – profitability of air transportation;

\( \beta_2 \) – elasticity of demand for air transportation;

\( \beta_3 \) – seasonality;

\( \beta_4 \) – occupancy of seats;

\( \beta_5 \) – spending levels;

\( \beta_6 \) – airline services cost.

Assessment of importance of market factors (ranging from 1 to 10) and their serial numbers ranked by reducing some significance impact on tariff policy are shown in Table 1:

Analyzing the data in table 4, we can determine that in this example the principal factor that makes impact on tariff policy of a standard airline is the profitability \((\beta_3)\) and the level and structure of the cost of air travel \((\beta_1)\). In this study suggested the formation of tariff policy, which provides an alternative choice of dominant factors of Tariff aggregate.

The author proposed to divide tariff grading factors into two groups: B1 - direct exposure factors \((\beta_3, \beta_1, \beta_4)\) and B2 – Factors of indirect effects \((\beta_6, \beta_5, \beta_2)\). Airline tariff policy is formed depending on the market situation, because of factors B1 will influence the rates.

With information on the effects of tariff factors together, forming airline fares include data factors (table 2):

The rate of the fare \((Z)\) will depend on the option chosen strategy tariff \(\Sigma Sij\):

\[ Z = \frac{(V \times (1 + R))}{N} + \sum C_{ij}, \]

where \( V \) – amount of operating costs in the airline flight, UAH / unit;

\( R \) – profitability, %;

\( N \) – average number of passengers per flight in a certain period, people.

The main objective of this technique is to ensure the formation of adaptive rate policy with limited time. An important component of the methodology is solving the problem of tariff policy adaptability to the changing market environment, which is to determine the optimal airline tariff aggregate by the criterion of maximality of impact and minimizing of costs.

Conclusions and directions for further research. Solving the problem of effective tariff for the changing market environment, as economic leverage revenue growth, will improve the efficiency of airlines and achieving a certain level return to help the airline survive in difficult economic conditions. In this regard, the promotion of airline tariffs taking into account its objectives, policies and methods determines the relevance of tariff aggregate formation.

For the coordination of key airline business processes, identifying necessary resources and their optimal application the mechanism that allows realizing a specific purpose of flights at different mutual effects should be used, as well as set
of strategic objectives through the effective tariff policy should be set [11]. The action of influence is a multidimensional analysis of complex performance of airlines in the light of its strategic priorities, projected profits, expected costs, the risks of tariff strategy to determine the balance of interests of all market, which leads to determine the feasibility of tariff aggregate realization and considering the bundle of related to this decision costs [12, 13].

The analysis leads to the conclusion on the usefulness of airline tariff aggregate, which aims to reduce the total cost and increase benefit which is achieved by an adequate and timely response to emerging risks and possible threats. So, the ultimate goal of creating aggregate tariff is the nature and size of realization and considering the bundle of related to this decision costs [12, 13].

REFERENCES


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