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EVALUATION OF THE UKRAINE INTERNATIONAL AIRLINES (UIA) COMPETITIVENESS ON THE AIR CARRIAGE MARKET

Abstract. *The issue of Ukrainian air transport system adaptation to the business practices of European and world market has been urgent for the last twenty years. One of the main obstacles in this process is domestic airlines and airports low competitiveness. Key factors in achieving the competitive advantages by the air carriers are not only service cost but service quality, business processes and management system organization as well. Nowadays, most airlines management teams are conscious of the quality factor importance in the competition on both domestic and international markets.*

The airlines competitiveness on the air transport market has been evaluated in the article. The airlines competitive recovery strategies have been determined according to the specific development of the air carrier “MAU” on the air transport operations market. The ways of further development of domestic airlines and the airline competitiveness management strategy have been proposed.

Keywords: *airline, competitiveness, air carriage, model.*

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ОЦІНКА КОНКУРЕНТНОЇ ПОЗИЦІЇ АВІАКОМПАНІЇ «МАУ» НА РИНКУ АВІАПЕРЕВЕЗЕНЬ

Анотація. *Проблема адаптації української авіатранспортної системи до умов функціонування європейського та світового ринків актуальна протягом останніх двадцяти років. Одним з основних перешкод у цьому процесі є низька конкурентоспроможність послуг вітчизняних авіакомпаній і аеропортів. Ключовими факторами досягнення конкурентних переваг в роботі авіакомпаній є не тільки вартість обслуговування, але і якість наданих послуг, організація бізнес-процесів і систем управління. Сьогодні керівництво більшості авіакомпаній розуміє важливість фактора якості в конкурентній боротьбі як на внутрішньому, так і на міжнародному ринках.*

В статті проведено оцінку конкурентоспроможності авіакомпанії на ринку авіап перевезень. Відповідно до особливостей розвитку авіакомпанії «МАУ» на ринку авіатранспортних послуг було сформовано стратегії зростання конкурентоспроможності авіакомпанії. Було запропоновано шляхи подальшого розвитку вітчизняних авіакомпаній та схему управління конкурентоспроможністю авіакомпанії.

Ключові слова: авіакомпанія, конкурентоспроможність, авіап перевезення, модель.

Introduction. The global financial and economic crisis of recent years, which has led to a significant decline in production in the real sector of the national economy significantly influenced the increased competition in the transport market as between different modes of transport (road, rail, air, etc.) as transport enterprises of public, private ownership and entrepreneurs in the same field. In addition, the inclusion of domestic transport in the global economic system revealed the presence of complex problems in their activities given tough competition from foreign transport companies. In these circumstances, the entities operating in this sector of the market, with great urgency facing the task of finding effective methodological and practical approaches to ensure the high level of competitiveness. An important part of the solution to this problem is a reliable methodology for the analysis of competition in the transport market. After all, the competitiveness of any subject of market relations can be defined only in the actual competition; so the question of strengthening competitiveness should be considered in the light of the problems of competition efficiency and competitive relationships.

Literature review. The achievements of native and foreign scholars on the airline's competitiveness, its modeling and the use of lagged models are in the works Helych A.O., Sych E.M., Kulayev Y.F., Zlamanyuka T.V., Podryzy S.M., Hurina G.S. and others. Analysis of studies published in national and international scientific sources suggests a lack of research in this area.

The purpose of the article is to assess the competitive position of the airlines in the airline market.

Characteristics of the research sample. The competitiveness of the airline market for air transport services can be assessed on five important criteria that have an equal degree of importance: cost, productivity, service level, price factor and management.

To measure and assess the competitive position of the airline market, all used figures must be objective and quantitatively determined.

Airline's competitiveness indicators with which it can compare themselves with competitors, and thus determine its competitive advantage and develop a strategy to increase competitiveness, presented in Table 1.

Table 1

Criteria and indicators used for competitiveness evaluation of the airline

Criteria	Indicators
C ₁ – costs	C ₁₁ – expenses for 1 passenger seat per 1 hour of flight → min
C ₂ – productivity	C ₂₁ – workers productivity (for 1 UAH paid wages) → max C ₂₂ – aircraft fleet productivity → max C ₂₃ – seat occupancy rate → max
C ₃ – service level	C ₃₁ – flights regularity level → max C ₃₂ – flights frequency → max C ₃₃ – average age of aircraft fleet → min
C ₄ – price factor	C ₄₁ – average fare → min
C ₅ – management	C ₅₁ – annual revenue growth → max C ₅₂ – profitability → max C ₅₃ – market share C ₅₃₁ – market share by revenue → max C ₅₃₂ – market share by passenger traffic → max

Costs (C_1): for airlines is very important to determine the optimal spending level and the place where these costs arise.

Productivity (C_2): firm's productivity criterion reflects how well it sells its competitive advantage in the market. The airline's overall productivity can be divided into productivity of work, aircraft fleet productivity and seat occupancy rate. The last figure is an indicator of the efficiency of use of available facilities.

Service level (C_3): quality of service is one of the most important criteria for selecting flights for business passengers and tourists. Service quality can be assessed by conducting market research by surveys of passengers, for example. Level of regularity and frequency of flights can be used as measurable indicators. The average age of aircraft fleet indicates flights' comfort and safety.

Price factor (C_4): the price is always used as the main tool in the competition. The airlines average ticket price (average fare) can be an indicator which reflects the airline's cost advantage compared to its competitors.

Management (C_5): Management determines the efficiency of resource usage. The key indicators which measure the effectiveness of management are increase of revenue, net profit, and market share. Primarily, management reflects airline capacity to adapt to the market condition changes, while maintaining their competitive advantages [1].

To assess the overall competitiveness of an airline's i -year can be used the next formula:

$$V_i = \sum_{j=1}^n \frac{x_{ij}}{\max x_{ij}} \times w_j, \quad (1)$$

де w_j – scales criteria [2].

Table 2

Evaluation of the "UAI" airline's competitiveness for 2008 - 2013

Year	Overall assessment of the competitiveness	Airline's rating by years
<i>1</i>	<i>2</i>	<i>3</i>
2008	0,7034	3
2009	0,6636	5
2010	0,6681	4
2011	0,6417	6
2012	0,7112	2
2013	0,9047	1

The estimates presented graphically (Fig. 1.)

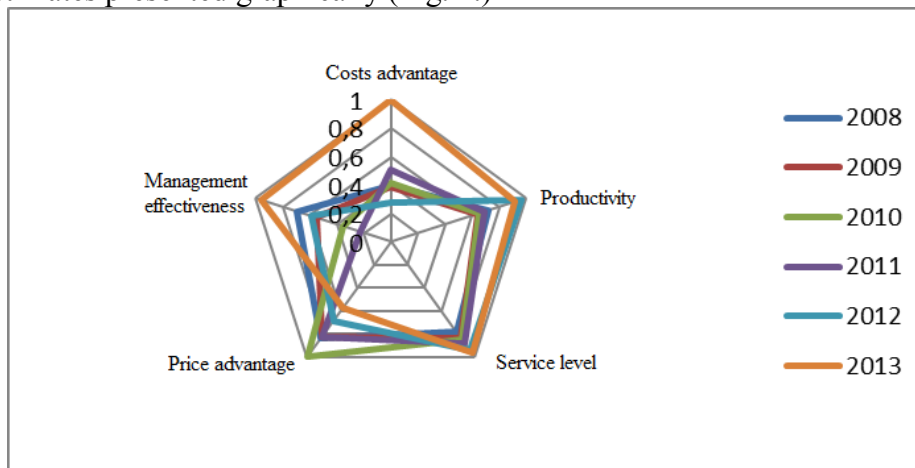


Fig. 1. The "UAI" airline's polygon of competitiveness for the period 2008 – 2013

The analysis of the results and polygon of competitiveness above shows that the values of the airline's competitiveness were the highest in 2013. For this year the estimates are presented graphically (Fig. 2).

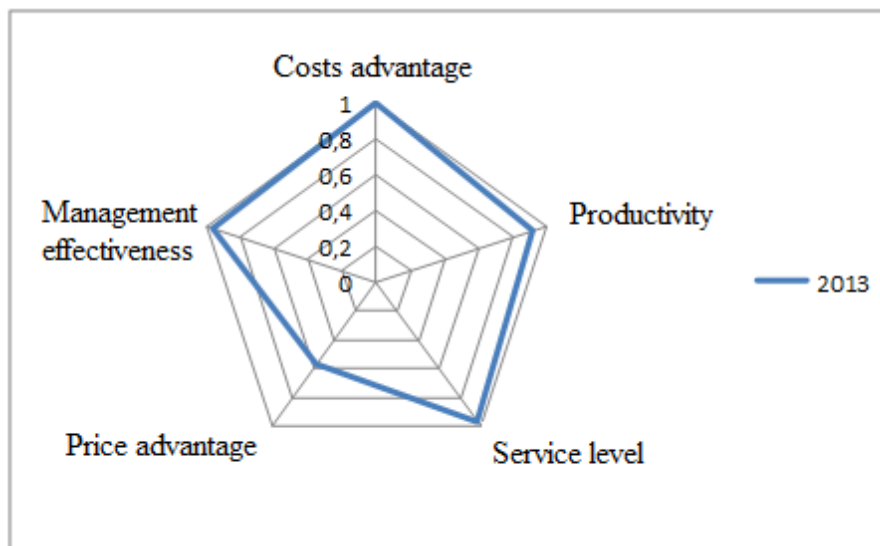


Fig. 2. "UAI" airline's polygon of competitiveness in 2013

The "UIA" carried 64% more passengers in 2013 than in 2012 and increased flight hours by almost 52%, which in turn led to a significant increase in the value of the cost's criterion advantages, which increased by 72% in 2013 compared with 2012. Thus, despite the increase in total operating costs - in 2012 they were 4% lower than in 2013 - the company increased the cost advantages due to the increase in passenger traffic. On the other hand, airline fares significantly overstates. This is because "UAI" focuses on wealthy clients who frequently fly to Europe. This leads to the fact that most of customers take the "low-cost" companies. Productivity during last two years remains at almost the same level that indicates the slight stagnation and partial usage of existing facilities. The effectiveness of management in comparison with the year 2012 increased significantly, pointing the orientation on the strategic plans. In general it can be asserted that the airline is developing rapidly in comparison with previous years. The lowest airline's competitive rates observed in 2011 because of aircraft fleet obsolescence and loss in 92, 239 m. UAH (Fig. 3).

Significant increase in the "UIA" airline's competitiveness in Ukrainian aviation market caused by the bankruptcy of the "Aerosvit" airline. Today, among others ukrainian airlines, the "UIA" airline takes the dominant position on passenger carrier market. Airline takes of about 700 international and domestic flights a week, and provides connections with routes to its international partners in more than 3,000 cities. Since 2012, the airline launched a significant upgrade of aircraft fleet, which currently consists of 38 aircrafts.

Consider the schedule of criteria values changes for years for a more detailed analysis.

Analysis shows (Fig. 4) that company achieved the biggest cost advantage in 2013. This is due to the increase in the airline's fleet, rising fuel prices and the difficult economic situation in the country. Between 2008 and 2011, the number of passengers has not changed and duration of hours was low, which resulted to lower value in costs advantage criterion. Positive growth dynamics of this indicator observed in 2012, due to the increasing number of passengers. In the future, the growth criterion value can be predicted due to the increase in passenger traffic, but, on the other hand, the growth rate may be reduced due to increased operating costs.

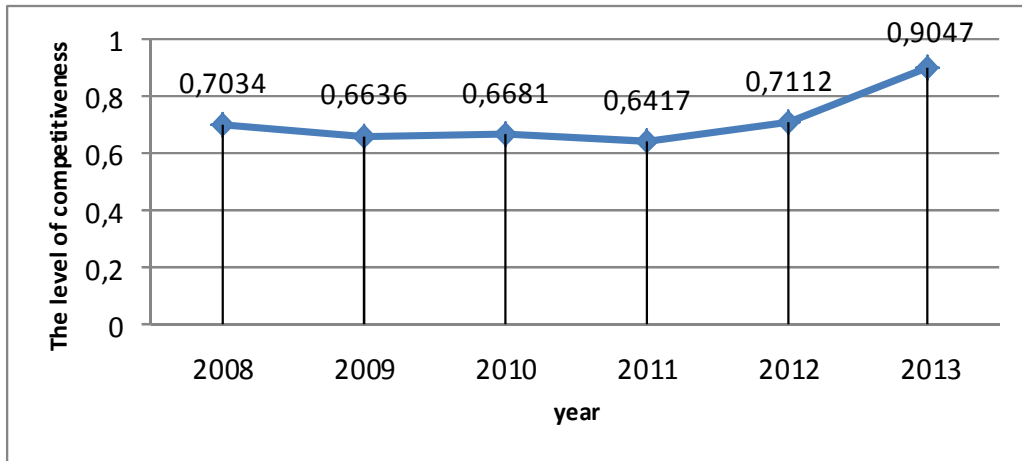


Fig. 3. The overall competitiveness change of the "UIA" during the period of 2008 – 2013

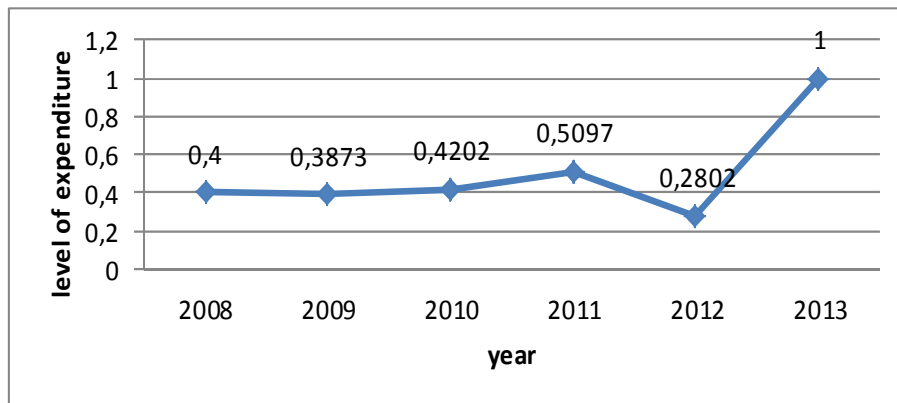


Fig. 4 Cost advantage change of "UIA" by years

As can be seen from the schedule (Fig. 5) the overall airline's productivity did not increase from 2009 to 2011. Increasing aircraft fleet productivity by 24% in 2012 compared to 2011 explained by lower returns 1 UAH. paid wages. But in the absence of plans for the staff development, increasing productivity and reasonable policies focused on strengthen existing and win new market position of passenger traffic, the total value of the criterion may fall to the level of 2012 and may grow only slightly.

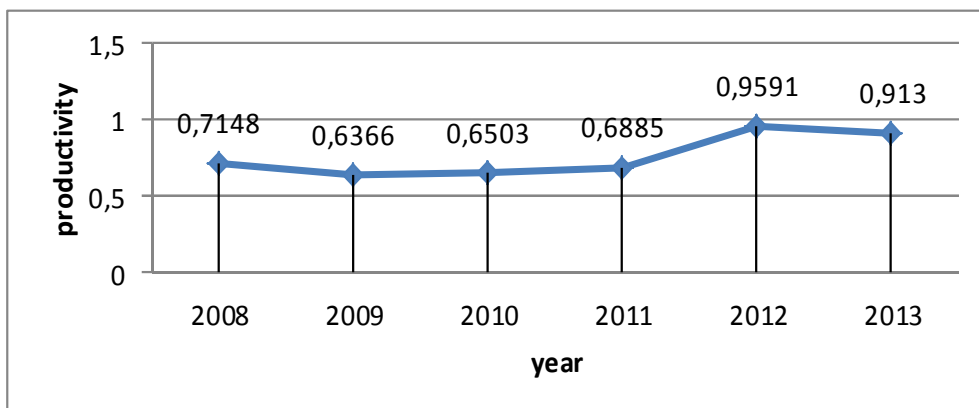


Fig. 5. Productivity change of the "UIA" by years

The service criteria value (Fig. 6) gradually increases, which can be explained by the airline's fleet modernization. On the beginning of 2010, the airline acquired two new airliner "Boeing 737-800". The year of 2012 airline finished with 20 aircraft, and at the end of 2013, there were 38.

Upgrading increases passengers service and ensure their safety. It also reduces the average age of fleet, which has a positive effect on the airline's financial condition.

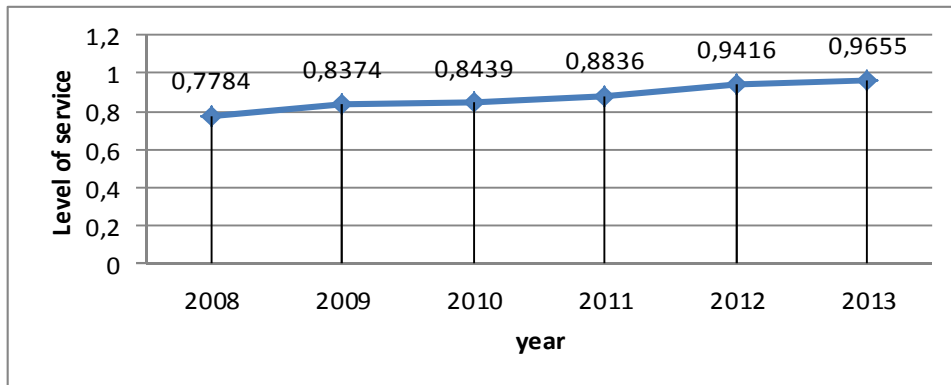


Fig. 6. Changes in the service level of "UIA" by years

The greatest price advantage airline achieved in 2010, which was due to falling prices in UAH against foreign currency (Fig. 7). In general, prices are determined not only by company managers but also by the current market competition between air carriers, so this criterion can be considered as almost entirely dependent on environmental conditions. With a rapid reduction in prices by other carriers the company can not maintain the current rate, and to stay on the market, will be forced to reduce prices, too.

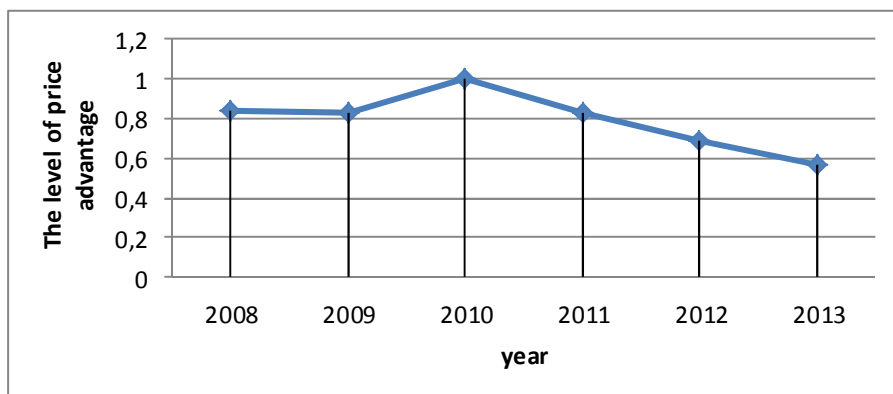


Fig. 7. Change of price advantage of "UIA" by years

As shown in Fig. 8. the indicators of airline's effectiveness management criteria has rapid falls and rises, that point on the instability of the indicator. Effectiveness management criteria determine three main indicators: income growth, profitability and market share. From Table 3.2 can be seen significantly decreased revenues in 2008 - 2011, due to the general crisis in the economy. In the next two years, revenues increased at a significant rate, the airline increased its revenues by 50.5% in 2013 compared to the year 2012. In the future, under favorable macroeconomic situation in the country and GDP growth can be predicted passenger traffic growth and, consequently, the growth of revenue, but the growth rate may still be low compared to the previous period. Airlines profitability vary from year to year, it reached the highest value in 2013 - 11.55%, while in 2012 only slightly exceeded the level of 2008.

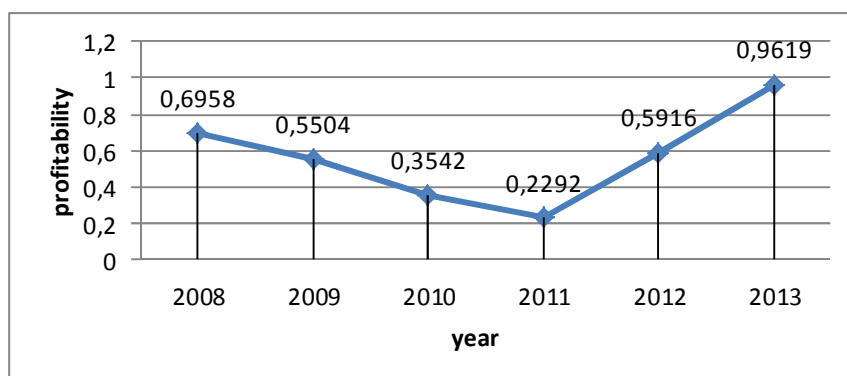


Fig. 8. Change of management effectiveness of "UIA" by years

The market share of the airline stable and growing in very significant rate, which indicates the presence of managers plans to expand its presence in the passenger carrier. Market share by revenue increased by almost 40%, and for passenger traffic - by 46.5% compared with the year 2012.

Implications and conclusions. Forecasts of changes in the overall index of competitiveness of "UAI" show that in the optimistic scenario, it is possible to predict a significant increase - with a high GDP growth rate. For realistic option competitiveness index remain on the level of 2013, or even decrease on condition of deteriorating economic situation in the country and further intensify competition in the airline market.

By using lagged models were simulated competitiveness of "UIA". Under the prevailing models the most potent competitiveness factors of potential is airline's overall productivity and efficiency of management. Evaluation of competitive potential determines the inefficiency and lack of capacity building processes for the formation and competitiveness of the airline. This situation caused to the resource depletion of growth potential, lack of company's strategic orientation, reproductive production processes and marketing research.

This models of the airline's competitive potential are indicators of processes of increasing or decline. The dynamics of competitive potential variables enables systematic control of investigated processes.

According to the features of the "UIA" in the market for air transport services was formed competitive growth strategy. The ways of further development of national airlines and scheme of management competitiveness of airline where suggested.

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