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# Analysis of Low-Cost Carriers in Post-Soviet States

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***Abstract***

*The research paper provides an overview of low-cost carrier (LCC) development in the post-Soviet states with a focus on the aviation market in Russia. The LCC model seeks to achieve a competitive advantage through the reduction of operating costs below the traditional airline model. While much of the global community enjoys the benefits offered by LCCs, the question remains why this model has not been successful in the fifteen newly formed countries, with the exception of the Hungarian low-cost subsidiary Wizz Air Ukraine. Despite an advantageous geographic location, large population with comparable GDP per capita, and strong passenger growth forecast, airlines operating in post-Soviet regions are faced with a high level of uncertainty associated with emerging economies, namely the strength of government involvement and regulation. The research addresses strategies employed by airlines as well as the challenges and opportunities that are presented to them. The airline classifications and data were collected using the Flightglobal database. Future business strategies and government legislation reformation are discussed in order to promote the LCC business model as a successful option to compete in these markets.*

***Keywords:*** *low-cost airlines, comparative market analysis, business model characteristics*

## 1. Introduction

After the breakup of the Soviet Union in 1991, the former fifteen Soviet Republics obtained their independence. In December 1991, most of these countries, with the exception of the Baltic States and Georgia, formed the Commonwealth of Independent States (CIS) to promote trade, economic cooperation and security. Georgia joined the organization in 1993 and then withdrew in 2008. These former Soviet Republics differ in a number of ways: size, population, natural resources and the state of economic development. The newly formed countries went through a lot of changes to transition to open market economies. This process included the re-structuring of the previously centralized aviation industry and emergence of new airlines, including low-cost carriers (LCC).

Two groups of low-cost airlines could be observed in the post-Soviet states. The first group is airlines with the rights to carry passengers in the domestic routes. These include domestic operators, or airlines formed either as a joint-venture or a partnership between domestic firms and foreign entities. Examples of this type include, the first Russian LCCs Avianova and SkyExpress. This group also includes foreign airline subsidiaries with the rights to operate within the domestic market, such as Wizz Air Ukraine, a subsidiary of Hungarian low cost carrier Wizz Air. The second group is foreign-based airlines without

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any domestic rights to carry passengers (cabotage). As of September 2013, examples of this type of LCCs operating in post-Soviet states include [1]:

- UK easyJet with one non-stop destination to Estonia and 1 to Russia as of March 2013.
- Irish Ryanair with one non-stop destination to Estonia, one to Latvia, and two non-stop destinations to Lithuania.
- Norwegian with one non-stop destination to Russia, one to Ukraine, one to Estonia, one to Latvia, and two non-stop destinations to Lithuania.
- Turkish Pegasus Airlines with one non-stop destination to Russia, one to Kazakhstan and one to Georgia.
- UAE Air Arabia with five non-stop destinations to Russia, four to Ukraine, and two to Kazakhstan.
- UAE FlyDubai with five non-stop destinations to Russia, three to Ukraine, one to Armenia, one to Azerbaijan, and one to Georgia.

This study provides an overview of the LCCs operating in the former Soviet states. The airline classification and data were collected using the Flightglobal database. The study concludes with the discussion on why the LCC model is not widely established in this part of the world, and what strategies should be implemented in order to successfully compete in these markets.

## 2. Low Cost Carrier Model

The Low Cost Carrier (LCC) concept is considered to have originated in the United States [2]. Started by Southwest Airlines in the early 1970s, the model was later adapted to the European market by Irish carrier Ryanair in 1991, and followed by the UK-based easyJet in 1995. It seems that the establishment of LCCs follows a natural industry progression and a country's economic development. Vasigh and Harraf (1994) noted that during an economic downturn and the accompanying reduction of disposable consumer income, large carriers faced reductions in passenger traffic and, therefore, downsized [3]. As a result, a large pool of skilled labor and discounted aircraft can facilitate the emergence of new low cost carriers.

The LCC model seeks to achieve a competitive advantage through the reduction of operating costs below the traditional airline model. According to Cento (2009), the now classic LCC model includes the following characteristics:

1. *Core business*: passenger air-service.
2. *Route structure*: point-to-point network. The carriers fly to main destinations on short or medium haul domestic routes without providing connecting flights for their passengers.
3. *Airport choice*: secondary airports, which are less expensive in terms of landing and handling fees and are also less congested.
4. *Aircraft fleet*: single type with a higher utilization rate.
5. *Service*: no frills; no product differentiation; no lounge services at the airports; no frequent flight program; fares are not refundable and cannot be used on other airlines.
6. *Distribution system:* sales/reservation costs are minimized. All tickets are in the electronic format, and the distribution channels only include the internet and telephone sales.
7. *Ancillary services*: additional revenue generation from other sources including hotels, car rentals, in-flight food and beverages, *etc*.

 

A number of research studies have been conducted to compare the development of LCCs and their operations across different geographic areas (see Table 1). For example, Reynolds-Feighan (2010) conducted a North American and European comparison [4], while Barbot, Costa and Sochirca (2008) analyzed 49 airlines across the world including LCCs [5].

**Table 1. Worldwide LCC Research**

| | |
|---|---|
| European Market: | Zheng & Morrell (2010)[6]; Conrady, Fichert & Klophaus (2010)[7]; Coles & Rader (2009)[8]; Malighetti, Paleari,& Renato (2010)[9]; Zenelis & Papatheodoro (2008)[10]; Gaggero & Piga (2008)[11] |
| Eastern Europe: | Rucinska & Knorr (2009)[12] |
| Asian Market: | Koichi (2009)[13]; Albers, Koch & Heuermann (2008)[14] |
| Korea: | Hew (2010)[15], Choi (2008)[16] |
| Japan: | Masako (2010)[17\] |
| China: | Chiou, Chen & Shon (2009)[18] |
| Thailand: | Thanasupsin, Chaichana & Pliankarom (2010)[19] |
| Australia: | Forsyth (2003)[20] |
| Brazil: | Oliveira (2008)[21\] |
| North America: | |
| US: | Murakami (2011) [22], Yetiskul and Kanafani (2010)[23], Chia-Mei (2009)[24], Kumar, Johnson & Steven (2009)[25], Hofer, Dresner & Martin (2008)[26], Pitfield (2008)[27], Cobb (2005)[28], Morell (2005)[29], Windle & Dresner (1999)[30] |
| Canada: | Flouris & Walker (2005)[31\] |

## 3. The Post-Soviet States

The post-Soviet states are the former Soviet Union 15 republics which were formed after the breakup of the USSR in 1991. The newly formed countries are located in four different geographic regions: Eastern Europe, the Baltic Sea basin, Central Asia, and the Southern Caucasus (see Table 2).

While some of the post-Soviet states are classified as industrialized economies, Tajikistan, Kyrgyzstan and Uzbekistan in central Asia remain mostly agricultural with low GDP per capita. Three Baltic States (Lithuania, Latvia and Estonia) have been members of the European Union since 2004. Naturally, Russia has the largest land area in the region, with a population of approximately 142.5 million citizens, ranked number nine the world, and a GDP per capita of $17,700. The smallest country by population is the Baltic State of Estonia with approximately 1.2 million and $21,200 GDP per capita. The Baltic countries have the highest GDP per capita among the 15 states, and the highest Human Development Index (HDI), an indicator of population health, education and income. The lowest HDI values are found in the agricultural counties of Tajikistan and Kyrgyzstan in Central Asia. The top countries with the largest number of paved airports are Russia and Ukraine with 593 airports, respectively. Likewise, the top countries for international tourism receipts, which are expenditures made by foreign visitors for goods or services received in the designation country including payments to national carriers for international transport, are Russia ($17 billion) and Ukraine ($5.4 billion). These characteristics support that a large market exists, which needs to be served by airlines, including low cost carriers.

 

**Table 2. The Characteristics of post-Soviet States**

| | Country | Capital | Area* | Population * | GDP PPP* | GDP per capita | HDI[2] | Paved Airports * | Tourism 3 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Sq. km | x 1,000 | x 1,000,000 | PPP* | | | x 1,000,000 |
| | **Eastern Europe** | | | | | | | | |
| 1 | Russia | Moscow | 17,098,242 | 142,501 | $2,504,000 | $17,700 | 0.788 | 593 | $17,031 |
| 2 | Ukraine | Kiev | 603,550 | 44,573 | $335,400 | $7,600 | 0.74 | 179 | $5,406 |
| 3 | Belarus | Minsk | 207,600 | 9,626 | $150,300 | $16,000 | 0.793 | 34 | $900 |
| 4 | Moldova | Chisinau | 33,851 | 3,620 | $12,270 | $3,500 | 0.66 | 5 | $262 |
| | **Baltic States** | | | | | | | | |
| 5 | Lithuania | Vilnius | 65,300 | 3,516 | $64,800 | $20,100 | 0.818 | 26 | $1,417 |
| 6 | Latvia | Riga | 64,589 | 2,179 | $37,040 | $18,100 | 0.814 | 19 | $1,098 |
| 7 | Estonia | Tallinn | 45,228 | 1,266 | $28,440 | $21,200 | 0.846 | 13 | $1,683 |
| | **Central Asia** | | | | | | | | |
| 8 | Uzbekistan | Tashkent | 447,400 | 28,662 | $104,700 | $3,500 | 0.654 | 33 | $137 |
| 9 | Kazakhstan | Astana | 2,724,900 | 17,737 | $231,300 | $13,900 | 0.754 | 64 | $1,524 |
| 10 | Tajikistan | Dushanbe | 143,100 | 7,910 | $17,720 | $2,200 | 0.622 | 17 | $40 |
| 11 | Kyrgyzstan | Bishkek | 199,951 | 5,548 | $13,470 | $2,400 | 0.622 | 18 | $689 |
| 12 | Turkmenistan | Ashgabat | 488,100 | 5,113 | $47,550 | $8,500 | 0.698 | 21 | $50 |
| | **Southern Caucasus** | | | | | | | | |
| 13 | Azerbaijan | Baku | 86,600 | 9,590 | $98,160 | $10,700 | 0.734 | 30 | $1,500 |
| 14 | Georgia | Tbilisi | 69,700 | 4,556 | $26,520 | $5,900 | 0.745 | 18 | $1,059 |
| 15 | Armenia | Yerevan | 29,743 | 2,974 | $18,950 | $5,600 | 0.729 | 10 | $485 |

*Source: *The World Fact Book, CIA 2013, data for 2012*
*[2]Human Development Report, UN 2013, data for 2012*
*3 The World Bank 2013, data for 2011*

## 4. Low Cost Airlines in the Post-Soviet States

Given the size, population, economic development, and high level of tourism, it seems that the LCC model would be a viable model in the post-Soviet states for domestic and international travel. However, the history of the domestic low-cost airlines has not been successful; four domestically established low cost airlines stopped their operations within a few years of starting up (see Tables 3 & 4).

Russia's Avianova and SkyExpress, both formed with the help of foreign capital, were considered the first LCCs in the Russian market and both terminated their operation in 2011, while Russian Red Wings Airlines lost its Air Operator's Certificate in February 2013. Moreover, Lithuanian Star1 Airlines lasted only about a year between 2009 and 2010. As of May 2013, there were only two active LCCs in the post-Soviet states. They are the Hungarian subsidiary Wizz Air Ukraine with the domestic rights to carry passengers between Kiev and Simferopol, and the newly established LCC Kyrgyzstan's Pegasus Airlines Asia, which is a joint venture between Pegasus Airlines of Turkey and the Kyrgyzstan's Air Manas, which started operations in March 2013.

In addition to the major national carriers, 10 out of the 15 countries operate either regional or leisure (charter) airlines with the structure in some way similar to the LCC model. Latvian airBaltic is the national Latvian airline and is classified as regional by

 

Flightglobal database. However, in some publication airBaltic is referred as a hybrid low cost airline [32].

## Table 3. Passenger Airlines in the Post-Soviet States

| | | Low Cost Carrier | Regional | Leisure | Mainline | ACMI/Group | Total |
|---|---|---|---|---|---|---|---|
| | **Eastern Europe** | | | | | | |
| 1 | Russia | Avianova (Aug 2009 - Oct 2011), SkyExpress (Jan 2007 - Oct 2011)<br>Red Wings Airlines (1999-2013) | 40 | 6 | 18 | 4 | **68** |
| 2 | Ukraine | Wizz Air Ukraine (July 2008-present), a subsidiary of Hungarian WIZZ Air | 11 | 1 | 7 | 4 | **23** |
| 3 | Belarus | 0 | 2 | 0 | 1 | 0 | **3** |
| 4 | Moldova | 0 | 0 | 0 | 2 | 1 | **3** |
| | **Baltic States** | | | | | | **0** |
| 5 | Lithuania | Star1 Airlines (2009-Oct 2010) | 1 | 3 | 1 | 1 | **6** |
| 6 | Latvia | 0 | 1 | 1 | 0 | 0 | **2** |
| 7 | Estonia | 0 | 2 | 1 | 2 | 0 | **5** |
| | **Central Asia** | | | | | | **0** |
| 8 | Uzbekistan | 0 | 0 | 0 | 1 | 0 | **1** |
| 9 | Kazakhstan | 0 | 15 | 1 | 6 | 0 | **22** |
| 10 | Tajikistan | 0 | 0 | 0 | 4 | 0 | **4** |
| 11 | Kyrgyzstan | Pegasus Airlines Asia (March 2013-present), a joint venture between Pegasus Airlines of Turkey and Kyrgyzstan's Air Manas | 4 | 0 | 2 | 1 | **7** |
| 12 | Turkmenistan | 0 | 0 | 0 | 1 | 0 | **1** |
| | **Southern Caucasus** | | | | | | |
| 13 | Azerbaijan | 0 | 1 | 0 | 2 | 0 | **3** |
| 14 | Georgia | 0 | 3 | 0 | 2 | 2 | **7** |
| 15 | Armenia | 0 | 2 | 2 | 0 | 0 | **4** |

*Source: Flightglobal database, May 2013*

## Table 4. Characteristics of LCCs

| | Inactive | | | Active | | |
|---|---|---|---|---|---|---|
| | **SkyExpress** | **Avianova** | **Star1 Airlines** | **Red Wings Airlines** | **WIZZ Air Ukraine** | **Pegasus Airlines Asia** |
| Country, city | Russia, Moscow | Russia, Moscow | Lithuania, Vilnius | Russia, Moscow | Ukraine, Kiev | Kyrgyzstan, Bishkek |
| Years in operation | 2007-2011 | 2009-2011 | 2009-2010 | 2007-present | 2009-present | March 2013-present |
| Services | Scheduled, Passenger, International, Regional, Domestic | Scheduled, Passenger, Regional, Domestic | Scheduled, Charter, Passenger, International | Scheduled, Charter, Passenger, International, Domestic | Scheduled, Passenger, International, Regional, Domestic | Scheduled, Passenger, International |
| Ownership/ investment | Altima Partners LLP, Mr. Abramivich (25%), the European Bank for Reconstruction & Development (20%), and Sloane Robinsons LLP | A joint venture between the Russian-based A1Group (54%), Texas Pacific Group (35%), and the US-based Indigo Partners (14%) | Star Team Group | The new owners as of Apr. 2013, Mr. Kuznetsov and the Russian finance house GHP Group | Wizz Air Hungary 100% (the largest shareholder is the US-based Indigo Partners LLC) | A joint venture between Pegasus Airlines of Turkey (49%) and the Kyrgyzstan's Air Manas |

| | | | | | | |
|---|---|---|---|---|---|---|
| Non-stop Destinations | 11 | 20 | 5 | n/a | 12 | 1 |
| Fleet in operation | 8 Boeing | 5 Airbus | 1 Boeing 737-700 | 7 Tupolev TU-204-100 | 3 Airbus A320-232 | 2 Boeing 737-800 |
| Airport | Vnukovo International Airport | Sheremetyevo International Airport | Vilnius International Airport | Vnukovo International Airport | Zhulyany International Airport | Manas International Airport |
| Annual traffic statistics: | 2010-11 | 2010-11 | 2010-11 | 2011-12 | 2011-12 | |
| Passengers (thousand) | 942 | 1,048 | 59 | 817 | 556 | n/a |
| Passenger load factor | 80.10% | 75.80% | 77.00% | 77.80% | 85.00% | n/a |
| Revenue Passenger km (million) | 1,422 | 1,407 | 121.7 | 2,164 | 913.3 | n/a |
| Available Seat km (million) | 1,775 | 1,856 | 159 | 2,781 | 1,072 | n/a |

*Source: Flightglobal database, 2013*

### 4.1. The Russian LCC Market

Since 1991, the Russian transportation industry has undergone a dramatic transition from state ownership to privatization, which led to decrease in aircraft production "from over 200 per year in the late 1980s to less than 10 in the 2000s" [33]. The change included the split of the previously government-controlled Russian national airline Aeroflot into numerous companies who tried to survive in the new open-market economy. By allowing foreign companies to sell aircraft to Russia, domestic manufacturers lost their market share of aircraft production to Boeing and Airbus [34]. Currently, the development of the Russian transportation industry is considered to be one of the main areas of government concern. Initiatives include new changes in the legislation, the modernization of airports and aircraft fleet, and an increase in the quality and affordability of aviation services.

Although discount charter airlines, such as Red Wings (formerly VARZ-400 and Airlines 400), founded in 1999, already operated in Russia, the LCC concept entered the market with the establishment of the first low cost operator, SkyExpress, that operated between 2007-October 2011. The ownership of SkyExpress was comprised by a consortium of private investors including Altima Partners LLP, Mr. Abramivich (25%), the European Bank for Reconstruction and Development (20%), and Sloane Robinsons LLP [35]. In addition to domestic passenger flights, SkyExpress operated international charter flights to Eastern Europe, Scandinavia and Spain.

The second Russian LCC operator is considered to be Avianova, which was established in 2006, and operated between 2009-October 2011. Under the ownership of the Russian-registered company Luch, Avianova represented a joint venture between the Russian-based A1Group, which owns 54% of the airline, Texas Pacific Group with 35% ownership, and the US-based Indigo Partners with 14% [36].

Although predominately a charter airline, Red Wings Airlines is classified as an LCC by the Flightglobal database. Red Wings was established in 1999 as a subsidiary of the VARZ aircraft factory, and operated low cost scheduled and charter passenger services from the Moscow to other major Russian cities in conjunction with Russian tour operators. It also offered charter flights to holiday destinations in Spain, Turkey, Croatia, the Czech Republic, and Egypt. On February 2013, Red Wings Airlines operations were stopped after the Federal Air Transport Agency of Russia (Roasaviatsia) suspended its Air Operator's Certificate, following the investigation of a fatal air crash on December 29, 2012 [37]. The airline’s assets were sold in April 2013 to the Russian finance house GHP Group. The carrier was cleared to resume flights in June 2013 after a safety review from the government [38].

In addition to domestically-based LCCs, as of May 2013 there are 11 foreign-based low cost carriers currently operating in Russian markets (see Table 5). "In Oct-2012 these

 

11 LCCs operated approximately 22 routes to Russia with around 33,000 weekly seats. LCCs in the week commencing 29-Apr-2013 operate 24 routes and almost 42,000 weekly seats to and from Russia, according to CAPA and Innovata data. But that only accounts for about 4% of Russia's total international seat capacity"[39]. Most of the airlines had double digit increases in weekly seating capacity, while both Italian-based LCCs had triple digit increases.

**Table 5. Foreign Low Cost Airlines in Russia, Weekly Capacity**

| | | | | Total Seats* | | |
|---|---|---|---|---|---|---|
| | **Airlines*** | **Country of Origin**** | **Non-Stop Destinations**** | **April 22-28, 2013** | **Oct 22-28, 2012** | **% change** |
| 1 | airBaltic* | Latvia | 4 | 8,750 | 8,552 | 2.30% |
| 2 | easyJet | UK | 1 | 6,480 | N/A | N/A |
| 3 | FlyDubai | UAE | 5 | 5,670 | 4,914 | 13.30% |
| 4 | Vueling Airlines | Spain | 2 | 5,040 | 5,580 | -10.70% |
| 5 | Air Arabia | UAE | 5 | 4,592 | 3,984 | 15.30% |
| 6 | NIKI | Austria | 1 | 3,252 | 2,506 | 29.80% |
| 7 | Pegasus Airlines | Turkey | 2 | 3,024 | 3,024 | 0.00% |
| 8 | Germanwings | Germany | 1 | 2,304 | 3,456 | -50% |
| 9 | Air One | Italy | 1 | 1,080 | 540 | 200% |
| 10 | Blu-Express | Italy | 1 | 948 | 322 | 294% |
| 11 | Norwegian | Norway | 1 | 592 | 592 | 0% |

**CAPA, 2013. Centre for Aviation and Innovata (airBaltic is classified as hybrid LCC)*
***Flightglobal database, 2013*

Sensing opportunities in the growing Russian market, easyJet, a UK-based low cost airline, initiated routes in March 2013 between London Gatwick Airport and Moscow Domodedovo Airport with 14 flights a week operating 180-seat A320 aircraft. The airline soon followed with the addition of the Manchester-Moscow routes into its network. Additionally, the airline is looking into expanding its services to different Russian cities, including flights between domestic destinations if allowed by the Russian government [40].

With potential for expansion, other foreign carriers are also looking into the possibility of expanding their operations. In 2014, Hungarian low-cost Wizz Air had made plans to launch a Russian subsidiary, Wizz Air Russia. The airline would utilize a base fleet of three A320s in Moscow, with aims of carrying 750,000 passengers in the first year of operations [41]. Wizz Air Russia would serve approximately 15-20 destinations if it can obtain the rights to the domestic market [42]. However, Wizz Air chief executive Jozsef Varadi has delayed these ambitions due to uncertainties surrounding the "regulatory landscape"[43]. Likewise, although Ryanair had signaled interest in launching Ireland-Russian flights, CEO Michael O'Leary has noted "considerable regulatory hurdles" which have pushed Russian markets out of consideration for several years [44].

### 4.2. The Ukrainian LCC Market

Wizz Air Ukraine, the Kiev-based subsidiary of Hungarian-based low-cost carrier Wizz Air, was established in July 2008. Wizz Air Hungary, which is the largest low cost airline in Central and Eastern Europe, owns 100% of Wizz Air Ukraine. Wizz Air Hungary was found in Poland in September 2003 by the former Malev CEO Mr. Varadi as a privately-owned low cost carrier [45]. It was reorganized in 2004 as a subsidiary of London-registered Wizz Air Ltd. In December 2004, the largest shareholder of Wizz Air became an investor group led by Indigo Partners LLC, also the founders of Singapore-based low cost carrier, Tiger Airways.

Wizz Air Ukraine operates domestic services between Kiev and Simferopol and international services to cities in Germany, Poland, Spain, Sweden, Turkey and the UK

 

with a total of 88 flights per week [46]. In March 2011, Wizz Air Ukraine relocated its Kiev operating base from Borispol Airport to Zhulyany Airport. The recent expansion of the network includes obtaining the former routes of the Ukrainian national flag carrier AeroSvit, which terminated its operations in February 2013. The Ukrainian authorities distributed flying rights for 35 cross-border routes to second tier airlines [47]. As a result, Wizz Air Ukraine will operate eight AeroSvit routes from Kiev, Donetsk and Kharkov using four Airbus A320s. Other foreign-based low cost carriers operating in Ukraine include the following:

- UAE based *FlyDubai* with non-stop destinations to three Ukrainian cities Kiev, Donetsk and Kharkov
- UAE based *Air Arabia* with non-stop destinations to four Ukrainian cities Kiev, Donetsk, Kharkov and Odessa
- Norwegian low cost carrier with one non-stop flight to Kiev.

Ryanair, the Irish-based low cost carrier, has also considered the possibility of expanding its operation into the Ukrainian market but has had difficulty negotiating airport rates [48].

### 4.3. The Lithuanian LCC Market

Star1 Airlines was established as Lithuania's new, privately-owned, low-cost airline after the termination of the national Lithuanian airline FlyLAL in January 2009. The airline was owned by the Star Team Group, which was also an owner of the Star1 Holidays tour operator. Star1 launched charter flights in June 2009, followed by regular flights to London, Dublin, Gerona for Barcelona, and other major European cities. Services were suspended in September 2010 after the Star1 Airlines single Boeing 737 was seized by the lessor at Dublin [49]. Star1 Airlines filed for bankruptcy two weeks later after the Star Team Group announced that it was unable to continue providing funding to the carrier [50].

### 4.4. The Kyrgyzstan LCC Market

A new start-up airline, Pegasus Asia, is a joint venture between the low-cost Pegasus Airlines of Turkey and the Kyrgyzstan-based Air Manas. Air Manas was established in 2006 as the private airline of Kyrgyzstan president, Mr. Bakiyev [51]. However, since December 2003, all Kyrgyz carriers have been banned to operate into the European Union. In 2012, Turkish carrier Pegasus Airlines acquired a 49% shareholding, followed by signing a joint venture agreement on March 12, 2013. This agreement allows Air Manas to operate a new scheduled low-cost service under the "Pegasus Asia" brand name between Bishkek, Kyrgyzstan and Istanbul, Turkey. The Turkish carrier will wet lease Boeing 737-800s to the new start-up airline.

## 5. Discussion

While much of the global community enjoys the benefits offered by low-cost carriers, this model continues to struggle in the post-Soviet states, with the exception of the Ukrainian-based subsidiary Wizz Air. Post-Soviet countries have sizable populations and comparable GDP per capita, but despite these qualities, domestic LCCs have not succeeded to date. "Russia has the ninth largest domestic market in the world and it is the only domestic market among the world’s top 20 that does not have any LCCs" [52]. This aviation passenger growth is projected to continue to increase, especially with the Winter Olympics in 2014 and the FIFA World Cup in 2018. Russia and the post-Soviet states offer a promising aviation market. With its large territory, air transportation is the fastest and the most convenient way of travel [53]. While main carrier airfares remain unaffordable for a large portion of the regional population, LCCs marketing strategy

 

should be able to target potential passengers who currently rely on rail transportation by providing them with faster and cheaper service. Despite the market potential, a large number of barriers exist. They could be classified in the following areas:

a) *Government regulations* Currently, the Russian Air Code forbids foreign carriers from operating domestic flights inside Russia and aircraft import duties make the configuring of foreign planes for LCC business difficult. Moreover, under previous legislation each fare sold by LCCs should include 10 kg of checked luggage, in-flight food and beverages, and offer refundable tickets. This defeated the main goal of LCC to reduce its operating cost. "The inability to offer unbundled fares and create ancillary revenue sources essentially made Russia's previous LCCs full service despite marketing themselves as low cost"[54].
b) *Insufficient infrastructure* Lack of secondary airports and inability of regional airports to meet LCC requests, such as to turn aircraft around in approximately 20 minutes. Also, a lack of adequate domestic maintenance facilities results that aircraft maintenance has to be performed abroad.
c) *Distribution system* Lack of computerized access and online payments outside of major cities. Access to the Internet, commonly used as a distribution channel by LCC in other countries, is not yet widely used in Russia [55].
d) *Lack of trunk routes* The existence of only a few domestic markets with high-density passenger flows.
e) *Aircraft acquisition* Older Russian-built aircraft do not meet international regulatory standards and leases of Western-made aircraft are costly due to import taxes,

The Russian Government has recently recognized the opportunity for LCCs and is in the process of amending the legislation surrounding typical LCC practices. "In November 2012, the government reduced the minimum fleet size scheduled airlines are required to operate from eight to three aircraft with a capacity of at least 55 seats" [56]. Other initiatives include changes to requirements regarding refundable tickets, checked luggage and in-flight food and beverages. "In Nov-2012 the Russian Ministry of Transport proposed the cancellation of a regulation which requires airlines to carry 10kg of baggage per passenger for free" [57]. The Russian Government is also mulling the possibility cabotage rights to allow foreign LCCs to operate domestically which would also create an opportunity for establishment of local subsidiaries or partnerships.

In order to stay competitive, domestic airlines have to develop and implement new strategic approaches. Russia's leading airlines, such as Aeroflot, Transaero and UTair, are interested in launching their own LCCs. Aeroflot is in the middle planning stages of initiating a entirely new low-cost subsidiary to be launched in 2014. The airline's board of directors has hired former Avianova director to lead the project, and is looking to offer fares 20-40% than current offerings using brand new aircraft [58]. However, Aeroflot is waiting on changes to consumer laws before the $100 million project can get fully underway [59]. UTair is planning to utilize Ermilino Airport, which is located about 80 km from Moscow and was previously under the Russian Defense Ministry. Older generation aircraft need to be replaced by more modern versions, allowing certification standards to be adjusted in accordance with international regulations. Newer technology needs to be introduced to improve ticket distribution and sales, including Internet booking and e-tickets.

## 6. Conclusions

The post-Soviet states can be characterized as a conglomeration of emerging and developing economies, but despite the strong prospects for future growth, airlines considering entering the market are still faced with a high level of uncertainty due to the

 

political and regulatory landscape. Several new aviation regulations recently enacted have already made market conditions more favorable for pure LCCs to operate; however the single greatest obstacle for an LCC to flourish throughout the region is the absence of Russia's participation in the European Common Aviation Area. Anticipating further air transport liberalization, forecasts indicate that Russia LCCs will gain up to 35% market share within 10 years [60]. This should increase competition and, in turn, present a threat to already established airlines. Therefore, major Russian carriers, such as Aeroflot, Transaero and UTair, have initated plans to launch their own LCC subsidiaries. At the same time, foreign LCCs are eager to expand their operations to and within the domestic markets. For example, Hungarian Wizz Air has plans to set up a Moscow-based division Wizz Air Russia to serve international and perhaps domestic routes in Russia. Pending favorable government actions, the future may prove to be promising for LCCs to be successful in the post-Soviet states through providing cheaper and faster services to existing markets as well as those destinations which are currently underserved by incumbent airlines.

## References

[1] Destinations and Schedules, Flightglobal Airline Profile Database. Retrieved, **(2013)** September 3.
[2] A. Cento, "The Airline Industry", Challenges in the 21st Century. Physica-Verlag Heidelberg, a Springer Company, New York, New York, **(2009)**.
[3] B. Vasigh and A. Harraf, "Start-up airlines: a counter-cyclical phenomenon", Transportation Research Forum, 36th Annual Meeting, **(1994)**, pp. 595-602.
[4] A. Reynolds-Feighan, "Characterisation of airline networks: A North American and European comparison", Journal of Air Transport Management, vol. 16, no. 3, **(2010)**, pp. 109-120.
[5] C. Barbot, A. Costa and E. Sochirca, "Airlines performance in the new market context: A comparative productivity and efficiency analysis", Journal of Air Transport Management, vol. 14, no. 5, **(2008)**, pp. 270-274.
[6] L. Zheng and P. Morrell, "An analysis of European low-cost carriers' cost advantages on short-haul routes", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[7] R. Conrady, F. Fichert and R. Klophaus, "European LCCs going hybrid: An empirical survey", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[8] T. Coles and E. Rader, "Low cost but not at any cost: corporate social responsibility among low fares airlines flying to and from the UK", TTRA European Chapter Conference Transport and Tourism: Challenges, Issues and Conflicts, Netherlands, **(2009)**.
[9] P. Malighetti, S. Paleari and R. Renato, "Low cost fares' response to new entry", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[10] P. Zenelis and A. Papatheodoro, "Low cost carriers' penetration. A comparative case study of Greece & Spain", Air Transport Research Society, 12 World Conference, Athens, Greece, **(2008)**.
[11] A. A. Gaggero and C. A. Piga, "Pricing and competition on the UK-Irish aviation market: the case of Ryanair vs. Aer Lingus", Air Transport Research Society, 12 World Conference, Athens, Greece, **(2008)**.
[12] S. Rucinska and A. Knorr, "Low-cost carriers in Eastern Europe - Sky Europe vs. WIZZ Air", Air Transport Research Society, 13th World Conference, Abu Dhabi. UAE, **(2009)**.
[13] T. Koichi, "Regional structure based on the international network of low cost carriers in Asia: a comparison with full service carriers", Air Transport Research Society, 13th World Conference, Abu Dhabi, UAE, **(2009)**.
[14] S. Albers, C. Heuermann and B. Koch, "Internationalization strategies of EU and Asia-Pacific low fare airlines", Journal of Air Transport Management, vol. 16, no. 5, **(2010)**, pp. 244-250.
[15] J. C. Hew, "The attribute and role of perceived risks in South Korean low cost carriers", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[16] H. J. Choi, "The attribute and role of perceived risks in South Korean low cost carriers", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[17] O. Masako, "Main factors that hamper LCCs development in Japan", Air Transport Research Society, 14th World Conference, Porto, Portugal, **(2010)**.
[18] Y. C. Chiou, Y. H. Chen and J. Z. Shon, "An investigation of service quality in China low cost carrier market", Journal of the Eastern Asia Society for Transportation Studies, vol. 8, **(2009)**.
[19] K. Thanasupsin, S. Chaichana and S. Pliankarom, "Factors influencing mode selections of low-cost carriers and a full-service airline in Thailand", Transportation Journal, vol. 49, no. 1, **(2010)**, pp. 35-47.
[20] P. Forsyth, "Low-cost carriers in Australia: experiences and impacts", Journal of Air Transport Management, vol. 9, no. 5, **(2003)**, pp. 277-284.

 

[21] A. V. M. Oliveira, "An empirical model of low-cost carrier entry", Transportation Research Part A, Policy and Practice, vol. 42, **(2008)**.
[22] H. Murakami, "Time effect of low-cost carrier entry and social welfare in US large air markets", Transportation Research Part E: Logistics and Transportation Review, vol. 47, **(2011)**, pp. 306-314.
[23] E. Yetiskul and A. Kanafani, "How the presence of low-cost carrier competition scheduling differentiation", Journal of Air Transport Management, vol. 16, no. 1, **(2010)**, pp. 7-11.
[24] L. Chia-Mei, "Entry behaviour and financial distress: an empirical analysis of the US domestic airline industry", Journal of Transport Economics and Policy, vol. 43, part 2, **(2009)**, pp. 237-256.
[25] S. Kumar, K. L. Johnson and S. T. Lai, "Performance improvement possibilities within the US airline industry", International Journal of Productivity and Performance Management, vol. 58, no. 7, **(2009)**, pp. 694-717.
[26] C. Hofer, R. J. Windle and M. E. Dresner, "Price premiums and low cost carrier competition", Transportation Research Part E: Logistics and Transportation Review, vol. 44, **(2008)**, pp. 864-882.
[27] D. E. Pitfield, "The Southwest effect: A time-series analysis on passengers carried by selected routes and a market share comparison", Journal of Air Transport Management, vol. 14, no. 3, **(2008)**, pp. 113-122.
[28] R. Cobb, "Today's airlines should adopt a low-cost strategy: can this popular idea be supported by the facts?", Academy of Strategic Management Journal, vol. 4, **(2005)**, pp. 23-40.
[29] P. Morrell, "Airlines within airlines: An analysis of US network airline responses to low cost carriers", Journal of Air Transport Management, vol. 11, no. 5, **(2005)**, pp. 303-312.
[30] R. Windle and M. Dresner, "Competitive responses to low cost carrier entry", Transportation Research Part E: Logistics and Transportation Review, vol. 35, no. 1, **(1999)**, pp. 59-75.
[31] T. Flouris and T. Walker, "Financial comparisons across different business models in the Canadian airline industry", Transportation Research Form, Washington, DC, **(2005)**.
[32] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[33] R. Chustuzian and A. Belianin, "Entry in Russian airline market", International College of Economics and Finance, Higher School of Economics, Moscow, Russia, **(2009)**.
[34] T. Curtis and I. Swenson, "How high will Russian aviation fly?", World Review of Intermodal Transportation Research, vol. 3, no. 3, **(2010)**, pp. 251-266.
[35] Airline Summary, SkyExpress, Flightglobal Airline Profile Database. Retrieved, **(2013)**, September 2.
[36] K. Reals, "Coup attempts to overthrow Avianova management", Flightglobal, **(2011)**, June 11.
[37] D. Kaminski-Morrow, "Tu-204 operator Red Wings grounded after safety audit", Flightglobal, **(2013)** February 1.
[38] T. Zaitsev, "Russian carrier Red Wings cleared to resume flights", Flightglobal, **(2013)** June 18.
[39] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[40] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)**, May 1.
[41] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[42] T. Zaitsev, "Ukraine re-distributes former AeroSvit routes", Flightglobal, **(2013)** March 21.
[43] M. Rivers, "Wizz Air tempers talk of Russian subsidiary", Flightglobal, **(2013)**.
[44] N. O'Keeffe, "PARIS: Ryanair targets Germany but rules out Russia", Flightglobal, **(2013)** June 19.
[45] C. Baker, "Wizz leads eastern low cost explosion", Airline Business, **(2004)** March 1.
[46] Airline Summary, Wizz Air Ukraine, Flightglobal Airline Profile Database. Retrieved, **(2013)** August 12.
[47] T. Zaitsev, "Wizz Air plans to launch Russian subsidiary in 2014", Flightglobal, **(2013)** April 10.
[48] CFTS "Boryspil Airport explains why Ryanair does not fly to Ukraine," Center for Transport Strategies, Retrieved on August 30, **(2013)** From : http://en.cfts.org.ua/news/boryspil_airport_explains_why_ryanair_does_not_fly_to_ukraine
[49] D. Kaminski-Morrow, "Lithuania's Star1 files for bankruptcy", Flightglobal, **(2010)** October 4.
[50] Airline Summary, Star1 Airlines, Flightglobal Airline Profile Database, Retrieved, **(2013)** September 08.
[51] Airline Summary, Air Manas, Flightglobal Airline Profile Database, Retrieved, **(2013)** September 09.
[52] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[53] R. Chustuzian and A. Belianin, "Entry in Russian airline market", International College of Economics and Finance, Higher School of Economics, Moscow, Russia, **(2009)**.
[54] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[55] A. Komarov, "SkyExpress, preparing to introduce low-fare operations in Russia, will face an entrenched air transport system", Air Transport, vol. 166, no. 1, **(2007)**, pp. 43.
[56] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.
[57] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.

 

[58] T. Zaitsev, "Aeroflot lines up ex-Avianova director to head low-cost arm", Flightglobal, **(2013)**, July 29.
[59] O. Clark, "Aeroflot low-cost launch awaits rejig of consumer laws", Flightglobal, **(2013)** July 26.
[60] CAPA, "Russian low-cost airline market set to significantly grow in coming years", Centre for Aviation and Innovata, **(2013)** May 1.

 