UZBEKISTAN 'S AGRICULTURAL PRODUCTS
COMPARATIVE ADVANTAGES IN RUSSIAN MARKET

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The calculation of the revealed comparative advantage of exported products to foreign markets will inform us about the competitiveness of exported commodities. Uzbekistan significantly increased the export of vegetables and fruits to Russia market during the last two years. In further, to increase the export of these products, it is important to analyze competitiveness of each exporting product across the export dimensions. In the present paper by using Balasa indices, we calculated revealed comparative advantages for main vegetables and fruits exported from Uzbekistan to the Russian market during the 2006-2015
Data

• Data on Russia import of selected agricultural products from all countries are extracts from UN COMTRADE database. We used Harmonized system 2002 (HS-2002) classification data at the 4-digit level.

• We selected eight agricultural commodities (products), such as, 0702-“Tomatoes, fresh or chilled”, 0703 “Onions, shallots, garlic, leeks and other alliaceous vegetables”, 0706-“Carrots, turnips and similar edible roots”, 0707- “Cucumbers and gherkins, fresh or chilled”, 0806- “Grapes, fresh or dried.” 0807-“Melons (including watermelons) and papaws (papayas), fresh”, 0808-“Apples, pears and quinces, fresh.” 0809-“Apricots, cherries, peaches (including nectarines), plums...” Study period includes years from 2006 to 2015.
Methodology

To measure the Revealed Comparative Advantage we used Balassa Index (BRCA). It is expressed as follows:

\[ BRCA = \frac{Xjm/Xj}{Xkm/Xk} \]

where,
- \( Xjm \) is Exports of Uzbekistan of product `m'
- \( Xj \) is Total exports of selected product of Uzbekistan to Russia market
- \( Xkm \) is Total world exports of product `m' to Russia market
- \( Xk \) is Total world exports of selected products to Russia market

*The country has a revealed comparative advantage if BRCA>1. If BRCA is less than 1, we concluded that the country has a comparative disadvantage in this commodity within the set of selected commodities.*
Table 1 illustrates the result of our calculations of BRCA for agrarian commodities within the selected group of agrarian products. Our results showed that Uzbekistan has a revealed comparative advantage in the Russian market for commodities as 0806 -“grapes”, 0807 -“Melons”, 0809-“Apricots, cherries, peaches” during the 2006-2015. We also find that some agrarian products exported from Uzbekistan had revealed comparative advantage in the Russian market for several years within the study period. For example, 0702-“Tomatos” in 2014, 0703-“Onions garlic..” in 2008, 2014 and 2015. 0706-“Carrots” in 2015.
Table 1. REVEALED COMPARATIVE ADVANTAGES (by Balassa index) OF UZBEKISTAN’S SELECTED VEGETABLES AND FRUITS RUSSIAN MARKET DURING THE 2006-2015

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<tbody>
<tr>
<td>0702</td>
<td>Tomatoes, fresh or chilled.</td>
<td>0.726</td>
<td>0.927</td>
<td>0.479</td>
<td>0.747</td>
<td>1.042</td>
<td>0.655</td>
<td>0.286</td>
<td>0.557</td>
<td>1.227</td>
<td>0.333</td>
</tr>
<tr>
<td>0703</td>
<td>Onions, shallots, garlic, and other alliaceous vegetables</td>
<td>0.594</td>
<td>0.842</td>
<td>1.114</td>
<td>0.111</td>
<td>0.119</td>
<td>0.083</td>
<td>0.150</td>
<td>0.662</td>
<td>1.210</td>
<td>1.076</td>
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<tr>
<td>0706</td>
<td>Carrots, turnips and similar edible roots,</td>
<td>0.973</td>
<td>0.850</td>
<td>0.731</td>
<td>0.846</td>
<td>0.636</td>
<td>0.571</td>
<td>0.085</td>
<td>0.926</td>
<td>0.746</td>
<td>1.227</td>
</tr>
<tr>
<td>0707</td>
<td>Cucumbers and gherkins, fresh or chilled.</td>
<td>0.706</td>
<td>0.565</td>
<td>0.465</td>
<td>0.283</td>
<td>0.391</td>
<td>0.063</td>
<td>0.120</td>
<td>0.105</td>
<td>0.133</td>
<td>0.186</td>
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<tr>
<td>0806</td>
<td>Grapes, fresh or dried.</td>
<td>2.125</td>
<td>1.808</td>
<td>1.909</td>
<td>2.256</td>
<td>1.431</td>
<td>2.846</td>
<td>3.678</td>
<td>0.227</td>
<td>1.695</td>
<td>4.534</td>
</tr>
<tr>
<td>0807</td>
<td>Melons (including watermelons) and papaws (papayas), fresh.</td>
<td>2.740</td>
<td>4.186</td>
<td>6.042</td>
<td>3.803</td>
<td>10.16</td>
<td>13.53</td>
<td>15.37</td>
<td>4.558</td>
<td>15.493</td>
<td>3.985</td>
</tr>
<tr>
<td>0808</td>
<td>Apples, pears and quinces, fresh.</td>
<td>0.129</td>
<td>0.093</td>
<td>0.075</td>
<td>0.051</td>
<td>0.033</td>
<td>0.062</td>
<td>0.015</td>
<td>0.013</td>
<td>0.010</td>
<td>0.020</td>
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<tr>
<td>0809</td>
<td>Apricots, cherries, peaches.</td>
<td>1.414</td>
<td>1.684</td>
<td>1.119</td>
<td>1.744</td>
<td>2.124</td>
<td>2.441</td>
<td>1.890</td>
<td>5.243</td>
<td>2.365</td>
<td>1.591</td>
</tr>
</tbody>
</table>

Source: Authors’ own calculations are based on UN Comtrade database at the 4-digit level of HS-2002.
In contrast, some agricultural commodities included in our sample had comparative disadvantages during the 2006-2015. These are 0707-“Cucumbers and gherkins”, 0808-“Apples, pears and quinces, fresh.”
Conclusion

These findings enhance our understanding of Uzbekistan’s agricultural sector comparative advantages in Russian market. In our view in the short-run, Uzbekistan should increase the production and export of fruits and vegetables, which have revealed comparative advantages in the Russian market. In the long-run, Uzbekistan should find the ways to increase the competitiveness of other agricultural products, which have not comparative advantages at present time.
References:

- Faustino, Horácio (2008), Intra-Industry Trade and Revealed Comparative Advantage: An Inverted-U Relationship, WP03/2008/DE/SOCIUS, Department of Economics, School of Economics and Management, Technical University of Lisbon, Portugal.
Thank you!