THE ROLE OF OLSON’S INTEREST GROUPS THEORY
IN EXPLAINING THE DIFFERENT LEVEL OF AGRICULTURAL SUPPORT
IN COUNTRIES WITH DIFFERENT DEVELOPMENT LEVEL

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Abstract. The character of agricultural policy is different in countries with different development level. Well-developed countries subsidize agricultural producers, while less developed countries often tax them. This phenomenon is difficult to explain on the basis of classical economic arguments, however Mancur Olson’s theory of interest groups seems to give an answer. The main aim of this paper is to explain the phenomenon of the development paradox with the use of Mancur Olson’s theory of interest groups. Theoretical considerations and empirical analysis have led to the conclusion that the theory of interest groups and collective actions seems to provide a well-grounded political explanation of the development paradox. Since farmers group in well-developed countries is relatively small, the benefits from the support per capita are significant, and so are the incentives to collective action. At the same time, consumers/taxpayers group is relatively big, and agricultural support costs per capita are small, which weakens the incentives to act against agricultural policy. Empirical analysis also confirms that the level of support to agriculture is an inverse function of the relative size of farmers’ interest group and that the relation between GDP per capita and agricultural support is significantly positive.

Key words: public choice theory, agricultural support.
JEL code: Q18, H41

Introduction
The agricultural sector is a part of the economy, which was and still is the subject to strong government’s interference; however, the character of such actions is different in countries with different development level. Well-developed countries support agricultural producers, protect domestic markets, and subsidize export, while the least developed countries often tax their agricultural sector. This phenomenon, well known and described in the literature (Swinnen J., Banerjee A., Rausser G., de Gorter H., 2000; Olper A., 2001, Grzelak A., 2011), was called by the author of this paper “a development paradox”. It means that there exists a positive relation between the level of economic development and the amount of support provided to the agricultural sector. This situation contributes to the growth problems and poverty accumulation in developing countries. On the other hand, in developed countries support goes mainly to large producers, while the income of smaller farmers does not substantially increase. From an economic perspective, it makes little sense because development paradox is contrary to the classical theories of economic and foreign trade, which indicates that agricultural policy intervention reduces both the welfare level of the whole world and of an individual country. Hence, one might search for the explanation of this phenomenon not in the classical economic arguments, but in the concepts of the public choice theories (Anderson K., 2009), including the Mancur Olson’s theory of interest group, which explains why smaller interest groups have larger influence on government’s policy than the larger ones.

Although agricultural producers in developed countries constitute a small share of labour force, their political influence is strong, and hence the level of support they receive is much higher than in less developed countries, where farmers constitute majority of the labour force. This paper assumes the following research hypothesis: the level of support agricultural producers receive is an inverse function of the relative size of their interest group. The main aim of this paper is to explain the phenomenon of the development paradox using Mancur Olson’s theory of interest groups. The first part of the paper gives some theoretical background and describes the logic of Olson’s theory. The second part presents an empirical analysis, which proves the assumed hypothesis.

Research results and discussion
1. Conceptual framework
The theory of interest groups has been formulated in “The Logic of Collective Action: Public Goods and the Theory of Groups”, the most important book by Mancur Olson, first published in 1965 (Olson M., 1965). The book questions two widespread opinions: that in a democracy the majority will prevail over the minority; and that everyone in a group will act collectively to achieve common interest. Olson argues that incentives to act collectively decline, as the interest group is getting relatively larger, and that the smaller interest groups gather greater political power. There are several factors, which explain this phenomenon. Firstly, in order to act collectively, a group requires a kind of organization, communication, and coordination among its members.
Some authors try to justify intervention in agriculture in the developed countries with the attempts to maintain a macroeconomic balance and a need to return an economic surplus to agriculture, which drains in the process of economic development (Czyzewski A., Kulyk P., 2010).

Decrease in the share of food expenditure in total consumer spending.

Both, the core and supplementary databases from 2007 have been updated to 2010 (or to 2009 in some developing countries). Another seven countries have been added as well, namely Belgium, Cyprus, Greece, Israel, Luxembourg, Malta, and Morocco, to make a total of 82 countries.

The term refers to the support instruments which are not directly related to the current level or type of production. The purpose of these payments is to provide support to agricultural producers in a way which does not distort the level of prices, production, consumption and foreign trade. Since 2004, the majority of direct payments under the Common Agricultural Policy have been decoupled.
shows the relationship between the NRA and GDP per capita in 75 individual countries. The linear correlation of the development paradox, i.e. a positive relationship between the level of economic development and the level of support provided to the agricultural sector. The highest level of agricultural support is in countries like Bangladesh, Ivory Coast, Tanzania and Zimbabwe, where GDP per capita does not exceed a thousand U.S. dollars.

<table>
<thead>
<tr>
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<td>-14</td>
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<td>-13</td>
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<tr>
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<td>56</td>
<td>64</td>
<td>37(^c)</td>
<td>18(^d)</td>
<td>454</td>
</tr>
<tr>
<td>U.S. and Canada</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>16</td>
<td>17</td>
<td>11</td>
<td>636</td>
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<tr>
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<td>6</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>405</td>
</tr>
<tr>
<td>Japan</td>
<td>39</td>
<td>50</td>
<td>67</td>
<td>116</td>
<td>120</td>
<td>81</td>
<td>610</td>
</tr>
</tbody>
</table>

Note: \(^a\) In the updated database from 2012 aggregated data is not available; \(^b\) 2000-2004 average; \(^c\) After taking the decoupled payments into account, the value of the index increases by about 20 percentage points.

Source: author's calculations based on Anderson K., Croser J., Sandr D., 2009

These findings are also confirmed in Figure 1, which shows the relationship between the NRA and GDP per capita in 75 individual countries. The linear correlation coefficient amounts to 0.69, which confirms the existence of the development paradox, i.e. a positive relationship between the level of economic development and the level of support provided to the agricultural sector. The highest level of agricultural support is in countries like Switzerland, Norway, Iceland and Japan, where GDP per capita exceeds 40 thousand U.S. dollars. The countries that continue to impose heavy taxes in favour of agricultural sector are Bangladesh, Ivory Coast, Tanzania and Zimbabwe, where GDP per capita does not exceed one thousand U.S. dollars.

The main aim of the following regression analysis is to verify the hypothesis made in the conceptual framework. As a dependant variable in the regression equation, the NRA estimate for the total agricultural production was used, which also includes non-product-specific assistance and decoupled payments (nra_total). Two potential independent variables were introduced in scope of the study. The first of them was a share of population economically active in agriculture in the overall economically active population (agr_labour). This variable helped to verify the hypotheses that the level of agricultural support is an inverse function of the relative size of their interest group. The assumption was made that only economically active population is willing to engage in...
on this theory, the following hypothesis was formulated: the level of support agricultural producers receive is an inverse function of the relative size of their interest group. Theoretical considerations and empirical analysis have led to the following conclusions.

— Mancur Olson's theory of interest groups and collective actions seems to provide a well-grounded political explanation of the development paradox.

— The regression analysis confirms that the level of agricultural support is an inverse function of the relative size of farmers' interest group measured by the share of agricultural labour within the overall labour force. As farmers' group is getting relatively bigger, agricultural support costs per capita are decreasing, and the incentives to act against agricultural policy are weaker;

— Empirical analysis also confirms that the relation between GDP per capita and agricultural support is significantly positive, which verifies the hypothesis that increase of national income reduces public opposition to agricultural subsidies, since the relative cost of such support for consumers declines.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>t-value</th>
<th>Adjusted R²</th>
<th>F-test</th>
<th>BETA</th>
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</thead>
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<tr>
<td>Intercept</td>
<td>5.394</td>
<td>0.983</td>
<td>0.573</td>
<td>35.877</td>
<td>-0.276</td>
</tr>
<tr>
<td>agr_labour</td>
<td>-0.258</td>
<td>-2.339</td>
<td>-</td>
<td>-0.258</td>
<td></td>
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<tr>
<td>GDPpc</td>
<td>0.001</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.559</td>
</tr>
</tbody>
</table>

Source: author's calculations in STATISTICA

The main aim of this paper was to analyse the phenomenon of development paradox, which refers to the positive relation between a country's development level and the agricultural support level. The author suggested that Mancur Olson's theory of interest groups might be useful in explaining this phenomenon. Based on this theory, the following hypothesis was formulated: the level of support agricultural producers receive is an inverse function of the relative size of their interest group. Theoretical considerations and empirical analysis have led to the following conclusions.

— Mancur Olson's theory of interest groups and collective actions seems to provide a well-grounded political explanation of the development paradox.

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Bibliography


