



FYROM

COULD THE GOVERNMENT REDESIGN THE AGRICULTURAL SUBSIDY SCHEME SO AS TO ALLEVIATE POVERTY IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA?

CONTEXT

Food crop commodities – namely wheat, maize and rice – are important for the former Yugoslav Republic of Macedonia: 24.5 per cent of Macedonian households produce one or more of these crops, and more than 50 per cent of rural households spend more than 10 per cent of their budget on them. Prices of food crop commodities have been increasing since 2006: in October 2012, they were 46.5 per cent higher than the average level in 2006. However, the production of these commodities has been declining since the 1990s when the planning system was abandoned, and today it represents on average 60 per cent of the production in 1991. The recent increase in food prices has been insufficient to stimulate an increase in production.

Agricultural subsidies have been among government policy programmes pursued in times of commodity price increases (Wodon and Zaman, 2010). The government of the former Yugoslav Republic of Macedonia, which took office in late 2006, undertook an ambitious agenda of subsidizing agriculture with budget funds reaching 4.5 per cent of total government expenditure in 2011, from virtual zero in 2006. Despite ambiguously communicated, it seems that an overarching objective of the programme was to increase the food crop production and improve the living conditions of those who are predominantly living in or temporarily migrating to rural areas. The programme was designed so that production is subsidized with specifically determined lump sums, to support current producers as well as steer former producers to resume crop production.

However, despite an increase in government subsidies, the production of all food crop commodities – except for rice – has further declined and household welfare, judging by the increase in poverty in the country, has not improved.

Two related policy-relevant questions arise in this context. First, how have the increased food crop prices influenced household welfare in the former Yugoslav Republic of Macedonia? And second, what are the effects of the government subsidy programme on household welfare, and could another subsidy disbursement scheme have a more positive impact on the welfare of households? The research we undertook provides answers to these questions and recommends a new subsidy scheme that may improve household welfare.

METHODOLOGY AND DATA

We use non-parametric techniques to estimate the production, consumption and labour income effects of the price changes over 2006–2012, and of the current subsidy scheme. First, we disentangle effects on households by geographical distribution (urban versus rural households) and gender to be able to judge which group, which part of the income distribution and which specific food crop commodity may benefit the most from agricultural subsidies. Once we identify these groups, we conduct a simulation of the effect of subsidies on production. Based on the findings, we propose an alternative scheme for disbursement of the proposed amount of agricultural subsidies for 2012, i.e. we direct the funds to specific

groups of households instead of them being disbursed linearly to everyone. We then evaluate the welfare effects of this alternative subsidy scheme.

For the analysis, we use the Household Budget Survey (HBS) of the former Yugoslav Republic of Macedonia, conducted in 2011. In addition to the usual demographic and labour market data, the HBS contains data on production and consumption of the above-mentioned food crops. A disadvantage, however, is that the HBS reports the values for wheat and maize grains together. Therefore, these two crops are examined as one category in our study.

FINDINGS

Results suggest that increasing prices of wheat, maize and rice had positive welfare effects on male-headed rural households only, whereas the effects on female-headed rural and all urban households were generally negative. The welfare effects of the government subsidy programme on wheat and maize production were positive for all rural households: fairly large for male-headed

households and small for female-headed rural households. The effect on rice production was zero or negligible, largely owing to the small subsidy amount versus the large effort needed for the cultivation of rice. Overall, both price and subsidy effects were found unfavourable for rural female-headed households and all urban households.

Could the government redesign the agricultural subsidy scheme so as to alleviate poverty in the former Yugoslav Republic of Macedonia?

PROPOSALS AND POLICY RECOMMENDATIONS

Given the findings about the limited welfare-enhancing effect of the current subsidy scheme, we propose a new scheme for subsidy disbursement that could generate larger positive effects and a more equal distribution of benefits.

Table 1 New proposed scheme for subsidy disbursement

Wheat-Maize	Rice
<i>All households</i> – Reduction of the subsidy to €110 per ha	<i>All households</i> – Increase of the subsidy to €250 per ha
<i>Female-headed rural households with per capita income of less than €220</i> – Increase of the subsidy to €185 per ha	<i>Female-headed rural households with per capita income of less than €360</i> – Increase of the subsidy to €375 per ha
<i>All urban households with per capita income of less than €360</i> – Subsidy of €100 per ha – State-owned land up to 1.15 ha at usufruct – Initial lump sums for investment into minimal machinery for agricultural production	<i>Male-headed rural households with per capita income of less than €80</i> – Increase of the subsidy to €375 per ha

Source: Author.

This scheme is proposed on the assumption that the government will not change the overall amount devoted to subsidizing wheat-maize production, whereas that for rice production is assumed to double.

Results suggest that the new scheme for wheat-maize production could generate a sizeable positive effect (up to 30–40 per cent of the initial income) on the targeted urban households as they are already poor, and even a small “intervention” by the government could turn the welfare effect from significantly negative into significantly positive. Despite the large effort that will be needed for urban households to decide to engage in agricultural production, the results suggest that the effects may be considerable and would unquestionably rescue these households from falling into destitute poverty, as their share of income from wages is low. Targeted female-headed rural households may also reap large benefits but only if they decide for larger-scale production. If this is the case, the poorest female-headed rural households may increase the welfare effect of the scheme from virtually zero to about two-thirds of the income of their male counterparts.

Results of the new subsidy scheme for rice for rural households suggest that the effects may be sizeable, assuming that the considerably larger subsidy per hectare offered will steer increased production by the poor households who otherwise cultivate smaller plots of land. For the poor female-headed rural households, the overall welfare effect would turn from slightly negative into significantly positive: income from rice production accounts for a considerable share of the overall income, due to the low initial income level.

The policy recommendations for the government dovetail to putting particular emphasis on poor female-headed rural households for both wheat-maize and rice production, increasing the subsidy for rice production due to its specificity and large effort needed, and offering the usufruct of state-owned land and start-off grants for poor urban households to encourage them to produce wheat and maize and prevent them from falling into destitute poverty.

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REFERENCES

Wodon, Q. and Zaman, H. (2010). “Rising Food Prices in Sub-Saharan Africa: Poverty Impact and Policy Responses.” *World Bank Research Observer*, 25 (1): 157–176.

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