The Economics of Tobacco Subsidies in North Macedonia
Introduction

North Macedonia is among the 30 major tobacco producing countries in the world and among the 20 major exporters of raw tobacco. Data from the Ministry of Agriculture shows that tobacco comprises 20.4 percent of the total export value of agricultural and food products. Tobacco is also the crop receiving the largest subsidies from the Macedonian government compared to other crops, comprising a quarter of the total agricultural subsidies. This is justified by the government mainly by the large number of families whose main income is from tobacco production.

However, even with subsidies, cultivated land in hectares and the number of signed contracts with tobacco buyers are decreasing.

North Macedonia, as a candidate country for EU membership, will need to comply with the EU Common Agricultural Policy (CAP), and will have to think in time about possible exit strategies and replacement of tobacco with another crop. In a positive development, the government in the new national strategy for tobacco 2021-2027 already states measures and steps for adaptation to the tobacco sector in North Macedonia to the CAP.

There is scant evidence that the subsidy policy is based on rigorous evidence of its costs and benefits, perhaps due to a lack of data and/or political interest. Moreover, it is not clear that the subsidy is achieving much beyond supporting a weak agro-economic sector. Subsidies tend to distort agricultural markets and it is noteworthy that North Macedonia continues to export raw tobacco at low prices while importing valuable crops such as wheat and barley that are also grown domestically as well as many value-added processed food products that could be manufactured locally. Accordingly, one overarching goal of this research is to fill this gap by examining tobacco subsidy policy, its alignment with other economic and agricultural policies, and determining the possible effects from it. This research by Analytica is one of the first such studies in North Macedonia.
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Agriculture is a significant sector in the economy of North Macedonia, particularly in rural areas. Agriculture accounted for eight percent of the country’s gross domestic product (GDP) in 2019, 9.3 percent of total trade, and 14 percent of the total number of persons employed in the country (12 percent in 2020). Approximately 45 percent of the total population lives in rural areas (which cover about 87 percent of the total area of the country), around 21 percent of whom are engaged in the agricultural sector.

The North Macedonian government considers tobacco to be a strategic crop and its cultivation an important contributor to the national economy, for both social and economic reasons.

North Macedonia is a significant producer of raw tobacco leaf and finished cigarettes in the Southeastern European region. In 2019, North Macedonia produced 26,234 tons of tobacco, representing a share of 0.4 percent of global production and 13.9 percent of European production. North Macedonia is among the top 30 tobacco-producing countries in the world and among the top 20 exporters of raw tobacco. Despite the downward trend of raw tobacco production in the European Union (a 75-percent decline from 2005 to 2016) and global demand for tobacco leaf, production in North Macedonia is rather stable.

Tobacco comprises approximately 76 percent of the country’s total area planted with industrial crops. Most (approximately 90 percent) of the tobacco produced in North Macedonia is exported. Tobacco accounts for one fifth (20.4 percent) of the total export value of agricultural and food products, making it one of the country’s largest agricultural exports. Around 28,000 agricultural households (based on the number of production contracts) are engaged in tobacco production (approximately five percent of the total population).
Each year the North Macedonian government allocates significant funds from the central budget to subsidize agricultural production, in the form of direct payments to farmers. During the period 2008–2019 the government paid a total amount of €1.049 billion for agricultural subsidies, or €87 million on average per year (Figure 1). The total amount typically increases each year.

On average crop subsidies exceed livestock subsidies, accounting for around two-thirds of agricultural subsidies in the country. In recent years, crop subsidies increased far more than livestock subsidies (Figure 2). Tobacco subsidies have the highest share of GDP and central budget expenditures compared to subsidies for other crops, comprising a quarter of the total agricultural subsidies.

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**Figure 1. Dynamics of agricultural subsidies in the period 2008–2019**

- **Share of agricultural subsidies in GDP (in %)**
- **Share of agricultural subsidies in Central Budget expenditures (in %)**
- **Agricultural subsidies (rha)**

Source: Ministry of Agriculture, Forestry, and Water Economy

**Figure 2. Crop and livestock subsidies in the period 2008–2019**

- **Share of crop subsidies in total agricultural subsidies (rha)**
- **Share of livestock subsidies in total agricultural subsidies (rha)**
- **Crop subsidies**
- **Livestock subsidies**
- **Agricultural subsidies**

Source: Ministry of Agriculture, Forestry, and Water Economy

**Figure 3. Share of different types of subsidies in total agricultural subsidies (%)**

- Tobacco
- Milk
- Vineyards
- Cattle
- Sheep
- Pig
- Fieldcrop
- Beehives
- Orchards
- Hen
- Garden chorsps
- Goat
- Fodder

Source: Ministry of Agriculture, Forestry, and Water Economy
For the period 2008–2019, total agricultural and food exports equaled 73 percent of total agricultural and food imports, resulting in a negative trade balance in this sector (Figure 4). One of the major ongoing challenges of the trade deficit is that much of it comes from the importing of processed products. The country exports fresh vegetables and fruits and then spends millions to import higher-value processed (frozen or canned) versions of many of the same products. These imports are almost double the average value of exported processed products. The most-imported items are meat, grain, fruits, vegetables, and dairy products. Thus, the much-championed foreign exchange inflow from tobacco and beverage exports (€193 million in 2019) is dwarfed by the amount of imported food (€664 million in 2019).

Much of the foreign exchange generated by tobacco exports is spent on food imports instead of stimulating greater food production—for example by increasing areas and production of wheat and barley, which have been declining in recent years. Many of these crops are already produced locally and production could be increased. At the same time, other soil- and climate-suitable food crops could be introduced. The government could invest and/or stimulate investment in food processing and other related value-added activities so that processed food imports would decrease and higher-value processed food exports could potentially increase.

A diagnostics report based on a survey of 2,205 tobacco farmers reveals that 30 percent are prepared to diversify their production, according to the requirements that could arise in the European Union (EU) integration process. According to the new Tobacco Production Strategy 2021–2027, peppers (capsicums) are a good alternative to tobacco because they are supported and subsidized and the pepper market is well developed. Analysis in neighbouring countries (such as Greece) of tobacco alternatives shows that the most profitable alternatives for farmers are fruit trees (pomegranate, pears, cherries, and plums) and aromatic plants.
Tobacco is the only crop for which subsidies are granted per kilogram of production. In all other crops, subsidies are given according to production area. For example, a wheat farmer cannot receive more than €244 per hectare, whereas a tobacco producer can receive up to €2,276 per hectare. The continuing increase in tobacco subsidies motivates tobacco farmers to grow more tobacco to get more subsidies, even though they are not certain that they will be able to sell the produced quantity. This distortion often generates large quantities of surplus tobacco, driving down prices.

Notably, the highest subsidies were given in 2011, 2014, and 2020—all election years (Figure 5). This pattern suggests that subsidies are being used to serve political aims, rather than for the purpose of long-term economic development.

Beginning in 2013 the amount of cultivated land in hectares—as well as the number of signed contracts with tobacco buyers—has been decreasing (Figure 6), indicating that the number of tobacco farmers is declining. Major reasons for this shift include broader rural-to-urban migration and abandonment of tobacco cultivation because it is extremely labour-intensive. Younger generations are not particularly interested in tobacco farming and are reorienting towards other professional activities: in 2019, tobacco producers aged 25–34 made up only 9.8 percent of the total, whereas tobacco producers aged 45–64 comprised 54 percent.

Furthermore, tobacco farmers have an average monthly income of €416 compared to the average North Macedonian’s net monthly salary of €463, as of April 2021. A family of four needs an average of €552 to cover basic monthly expenses (the value of the minimum household consumer basket in April 2021). Thus a tobacco-growing household has €136 less than it needs to survive per month, which is greater than the average monthly household deficit.
EU Common Agricultural Policy requires transitioning away from large tobacco subsidies

Policy makers continue to balance the requirements of the EU and the World Health Organization (WHO) to reduce smoking with strong anti-smoking policies. However, they are doing so while supporting tobacco farming with high subsidies, which directly violates the government’s official commitment to the Framework Convention on Tobacco Control. The government continues to support tobacco farming mostly due to its conception of tobacco as an important traditional and key export crop and its interest in the financial security of thousands of smallholder tobacco farmers.

North Macedonia, as a candidate country for EU membership, will need to comply with the EU Common Agricultural Policy (CAP), which includes a gradual transition to direct support based on farmed hectares, not crop quantity or type. Nevertheless, in its recent National Tobacco Strategy, the government reinforces that targeted production-related direct payments will continue to be used for some subsectors, including tobacco production. Typically, this happens in regions with limited alternatives for other agricultural or non-agricultural activities, in order to provide income and social security to those citizens.
The government justifies high tobacco subsidies as support for the many families who rely on tobacco production for their main source of income. Most tobacco producers are directly dependent on government subsidies, but in the medium and long term this policy is unlikely to be economically sustainable for the government.

Despite high subsidies, tobacco farmers’ average monthly income is lower than the average net monthly salary in North Macedonia\(^\text{18}\) and well below the value of the minimum household consumer basket.

Subsidies often generate market distortions by “blurring” market signals. Farmers may decide to grow crops only because of the high subsidies. As a result, more tobacco is produced than can be absorbed by the market, which effectively drives down the prices.

Though tobacco farming has remained stable in North Macedonia, due to the subsidies, over the years the money from tobacco exports has gone to increasing food imports instead of investing in domestic food production.

Global demand for cigarettes is declining, which is already leading to decreases in demand for tobacco leaf and prices. North Macedonia is not an exception to these global trends and will be affected directly by them.

Despite the incentives provided by high subsidies, the number of hectares of cultivated land for tobacco production and signed contracts with tobacco buyers is decreasing.

30 percent of interviewed tobacco producers are ready to diversify their production in accordance with the requirements that may arise during the EU accession process. This percentage is significant and can be increased if the government works on educating and informing tobacco producers in North Macedonia about the need for such preparations.
Recommendations

To increase the effectiveness of agricultural subsidies, it is necessary for them to be conditional and purposeful. The logical near-future transformation is to reorganize the land from tobacco farming to growing food. Tobacco subsidies can be reallocated to support this transition and help develop the closely related food-processing sector. These changes will decrease food imports and likely increase overall agricultural exports as well as improve the trade deficit.

More generally, agriculture subsidies must emphasize long-term investment in the sector that contributes to increased productivity and efficiency.

The government needs to conduct a thorough mapping of tobacco farmers to distinguish between professional agriculture and farmers who only have a short-term goal of taking advantage of the tobacco subsidies. It is easier to begin the transition with casual or new tobacco growers who are more likely to be open to shifting than those who grow larger quantities or have done so for many years.

Focus initial tobacco alternative efforts according to the level of urbanization of regions. In the regions with the best infrastructure, it may be possible to consider reducing tobacco production more quickly because there are more choices about where to sell their other crops and/or to work. This is especially important because—in regions where there is good infrastructure, such as accessible, state-funded kindergarten—parents will not have to worry about where they will leave their children and will have more flexibility to work in different jobs.

North Macedonia, as a candidate country for EU membership, will need to comply with the EU Common Agricultural Policy (CAP), which compels a gradual transition to direct support based on farmed hectares, not crop quantity.

The Ministry of Agriculture and other relevant institutions should conduct a thorough analysis to find crops that generate high value and can help to replace tobacco. This could be supported by investing in improving the quality of the soil on which the tobacco grows so it can be replaced by other crops more easily. Additionally, investment in irrigation systems would greatly increase the possibility of growing more high-value horticultural crops. Less tobacco growing means fewer tobacco subsidy payments, and the difference can be allocated to investing in higher-value crops.

1) http://www.fao.org/faostat/en/#rankings/countries_by_commodity_exports
2) AFSARD, Ministry of Finance, authors’ calculations
3) It should be noted that North Macedonia is a country with a large informal sector and a large number of informal workers. According to data by the State Statistical Office, around 130,000 people work on an informal basis, and the International Labour Organization estimates that approximately half of them work in agriculture. Hence, the agriculture sector engages more workers than the registered number.
4) ILO, 2020
5) State Statistical Office
6) Food and Agriculture Organization (FAO)
8) The downward trend began with the adoption of the European Union’s Common Agricultural Policy (CAP), when the European Community (EC) reduced the number of tobacco varieties for which subsidies were to be paid from 34 to 5 (Virginia, Burley, and three types of oriental tobacco). Since then, the EC has gradually reduced tobacco subsidies (Pasovska, 2020). In addition, tobacco-producing countries in the EU are assigned production quotas they must not exceed.
11) AFSARD, Ministry of Finance, authors’ calculations
12) Tobacco Production Strategy 2021–2027
15) Between anti-smoking policies and tobacco farming subsidies: the case of Macedonia, Vladimir Lazarevíc, Mone Spasović, Doncho Donev
17) National strategy on agriculture and rural development for the period 2021–2027, p.76
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