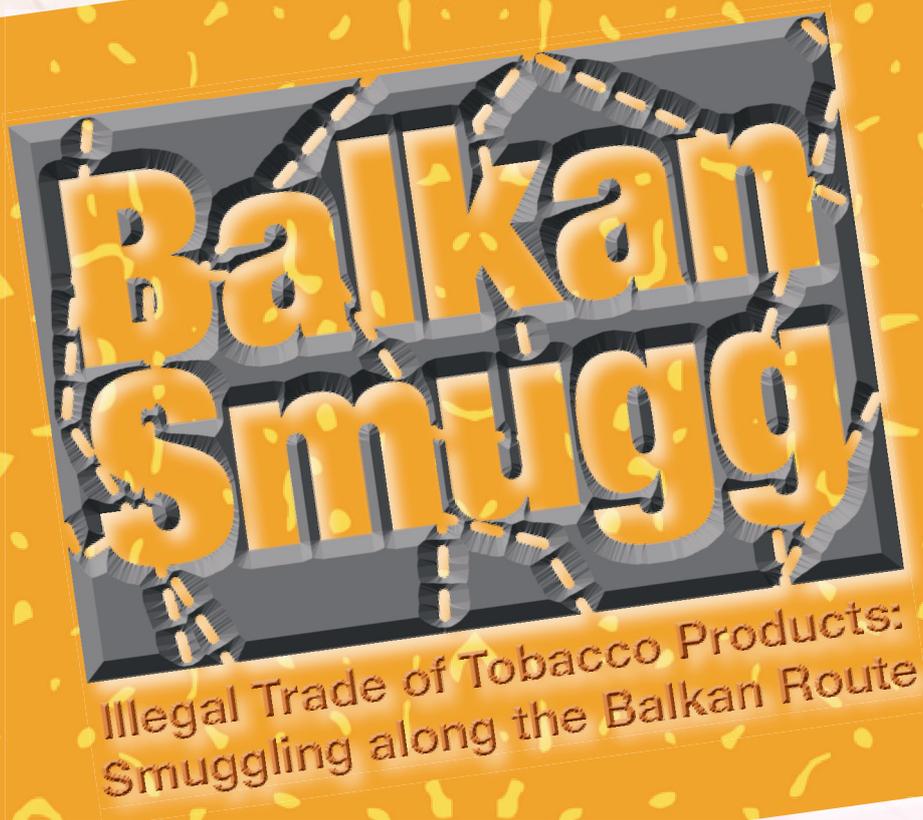
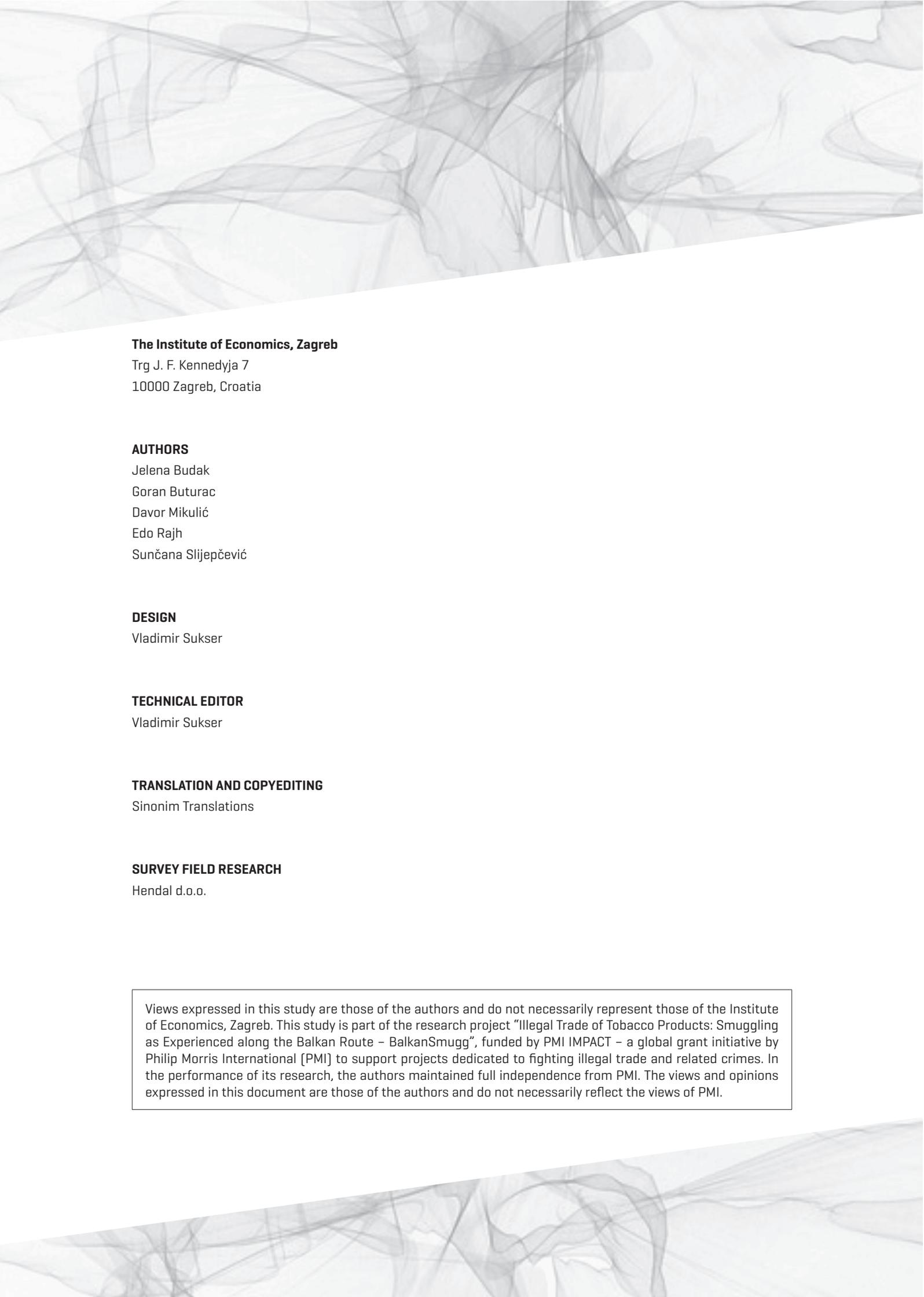




COUNTRY STUDY:  
**NORTH  
MACEDONIA**





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## Key Findings

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- Out of 39 percent of the adult smoker population of North Macedonia, 96 percent purchase tobacco products at authorized retailers. 94 percent smoke industrially manufactured cigarettes, and 6 percent buy cut tobacco to roll and make their own cigarettes.
- Approximately 4 percent of smokers buy tobacco products on the gray market in North Macedonia, which is below the regional average.
- Most of the smokers in North Macedonia buy cut tobacco on the gray market.
- Most of the Macedonian smokers shifted to the gray market of tobacco products due to an increase in cigarette prices (52 percent) and the beginning of the economic crisis (16 percent). For 73 percent of them, the main reason for buying tobacco products on the gray market is their favorable price.
- Most of the buyers on the gray market are loyal to their illicit points of sale. Eight out of ten buyers on the gray market would look for a new place of purchase within the gray market if, for some reason, they could no longer buy illicit tobacco products at their usual place.
- The usual points of sale on the gray market are resellers on the street. Since all smokers make their purchases in the country, it can be concluded that the gray market of tobacco products is functioning well in North Macedonia.
- Every fifth buyer reports that they would be willing to reduce their consumption of gray market cigarettes or cut tobacco if the price of legal cigarettes decreased. Health concerns would motivate almost half of smokers to exit the gray market. Decrease of prices on the legal market would motivate 32 percent of smokers to stop buying on the gray market.
- Most of the smokers in North Macedonia report that the availability of both cigarettes and cut tobacco on the gray market has not changed in the last two years.
- North Macedonia is a net exporter of tobacco products. It imports unmanufactured tobacco (89 percent of total Macedonian tobacco export) and cigarettes. The main export partner is Greece. North Macedonia has a positive trade balance in tobacco products which resulted in a trade surplus of EUR 103.5 million in 2017 and indicates that North Macedonia has a comparative advantage in regional tobacco products markets.
- The gray market and undeclared work are closely connected, an estimate was made regarding the supply and demand of undeclared work in North Macedonia. Over 6 percent of respondents bought goods that they assume were produced by undeclared work. Only 1.4 percent of respondents received payment for undeclared work in the last 12 months. A younger, better educated and high-income population is more prone to participate in both the supply and the demand side of undeclared work in North Macedonia.

- Generally, citizens have a negative opinion about illicit tobacco trade. The majority of Macedonian citizens [about 86 percent] believe purchasing tobacco products on the gray market is not acceptable behavior.
- Almost eight out of ten individuals in North Macedonia agree that gray market of tobacco products cause substantial damages to the state budget and that tobacco product smuggling is an integral part of organized crime.

# 1 Introduction

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Illicit trade, gray market, and tobacco smuggling have been present in the Balkans region for a long time. The research project **Illegal Trade of Tobacco Products: Smuggling as Experienced along the Balkan Route – BalkanSmugg**, funded by the PMI IMPACT and implemented by the Institute of Economics, Zagreb from July 2017 to September 2019, assesses the illegal trade of cigarettes and other tobacco products in seven countries along the Balkan smuggling route.

The specific objective of the project is to produce a strong evidence base on the illegal trade of Tobacco in Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, North Macedonia and Kosovo. Therefore, the core of this research is represented by a survey assessment of smokers' attitudes and practices of buying cigarettes on the black market and citizens' opinion regarding illegal trade of cigarettes and other tobacco products. In 2018 we conducted a survey of 3,000 respondents per country, totaling 21,000 respondents net in the region.

**BalkanSmugg Country Study: North Macedonia** presents the key findings regarding North Macedonia as one of the countries of interest. It sheds light on smokers' habits and practices in buying cigarettes and cut tobacco, including the experience of purchasing tobacco products on the gray market. The insight into the characteristics of the gray market, the typical purchase 'package' and how smokers rated the quality and accessibility of products, offer valuable first-hand information.

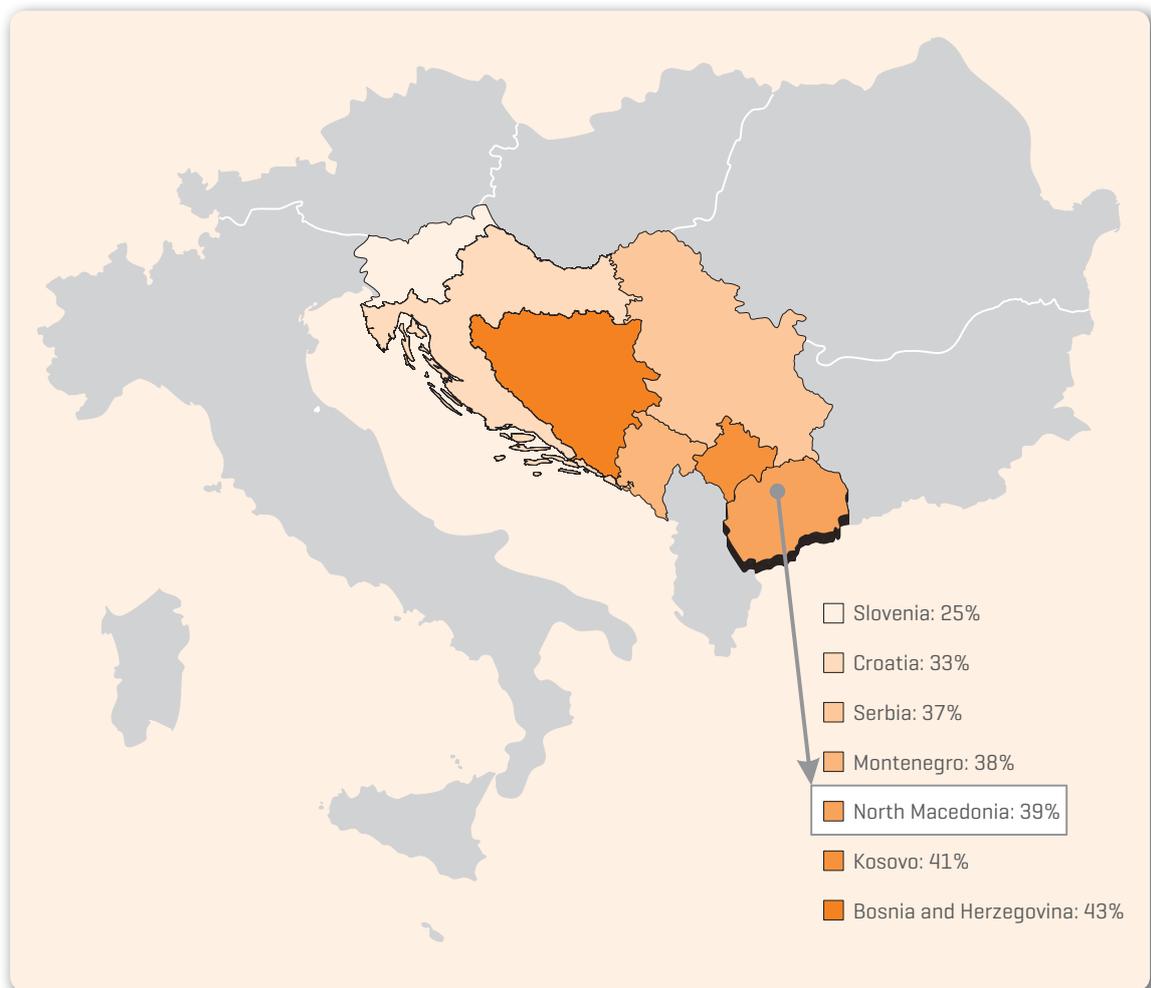
The study explores the public opinion on acceptable behavior related to the illicit trade of cigarettes and tobacco products, and perceptions regarding their negative effects, making the BalkanSmugg project the first all-encompassing study of the black market illegal trade in cigarettes and other tobacco products in the Balkan region that tackles the problem from both citizens' and tobacco consumers' point of view.

The results presented for North Macedonia are also compared with other observed countries in order to frame the regional context of the findings.

We hope that policy makers and stakeholders involved in this project will find results inspiring and beneficial in the fight against illegal trade. An ultimate purpose of this study is to raise awareness about the harmfulness of illegal trade of cigarettes and other tobacco products in North Macedonia.

## 2 Smoking Habits

Figure 2.1 Smoking prevalence, by country



Source: Survey data.

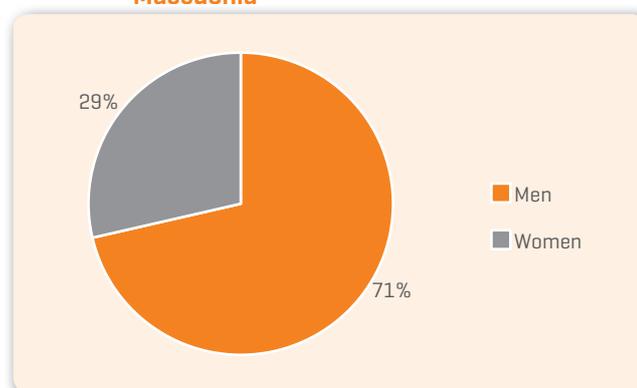
**Smoking prevalence in North Macedonia is 39 percent.**

- Survey data revealed that almost four out of ten adult individuals in North Macedonia smoke cigarettes or some other tobacco product (Figure 2.1). Exactly 39 percent of surveyed individuals aged 18+ declared themselves as smokers, which is slightly above the average smoking prevalence of all analyzed countries in the region (36 percent).
- Smoking prevalence in North Macedonia is higher among men than among women (Figure 2.2).

- **The most popular tobacco products in North Macedonia are industrially manufactured cigarettes** which are used by 94 percent of smokers (Figure 2.3). Around 6 percent of smokers uses cut tobacco to roll their own cigarettes, while other tobacco products are used by only a small number of users.
- The share of cut tobacco smokers in North Macedonia is below the regional average.

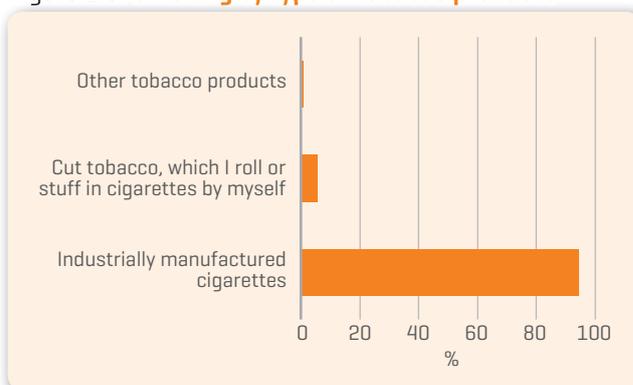
Figure 2.2 **Smoking prevalence by gender in North Macedonia**

**When compared with women, men smoke more tobacco products.**



Source: Survey data.

Figure 2.3 **Smoking by type of tobacco products**



**94 percent of smokers use industrially manufactured cigarettes.**

**6 percent of smokers use cut tobacco.**

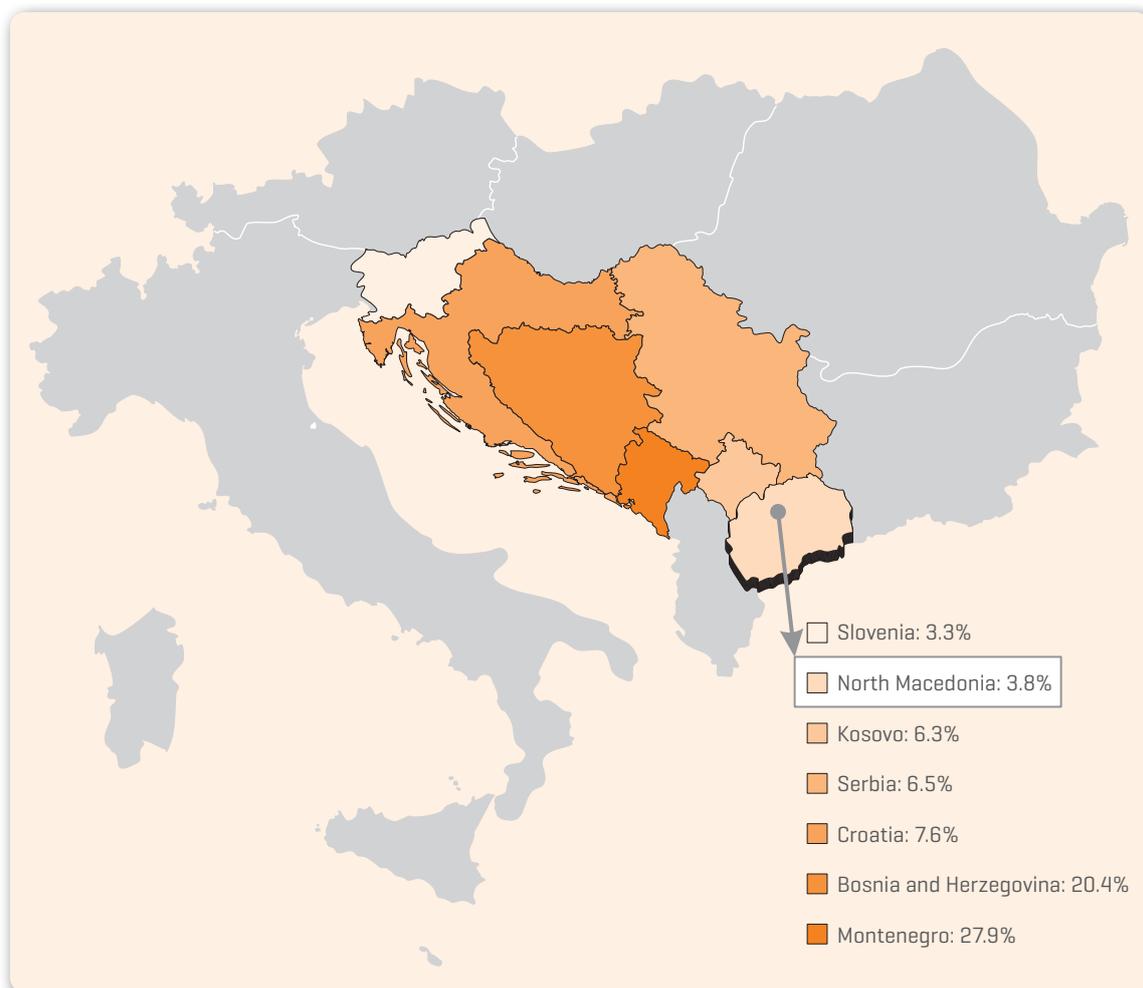
Notes: Multiple answers. In percentage of smokers.  
Source: Survey data.

### 3 Buying Habits: Legal or Gray Markets

- Smokers in North Macedonia predominantly buy tobacco products at the authorized stores. Slightly less than 4 percent of smokers buy their tobacco products on the gray market, which is below the regional average of 11 percent (Figure 3.1).
- **Cut tobacco is the main product bought on the gray market.** Almost 98 percent of smokers buying the tobacco products on the gray market use unofficial suppliers to purchase cut tobacco. Only 2 percent of smokers buy industrially manufactured cigarettes on the gray market (Figure 3.2).
- The main channel of the gray market in North Macedonia where smokers predominantly buy illicit tobacco products are friends and acquaintances (84 percent) (Figure 3.3).
- Buying on the gray market is mostly related with the price competitiveness of tobacco products otherwise available in the regular stores. Over half of Macedonian smokers shifted to the gray market of tobacco products due to an increase in cigarette prices (52 percent). In addition, the economic crisis also had an influence on the higher demand for tobacco products on the gray market (Figure 3.4).
- When explaining why they buy tobacco products on the gray market, 72 percent of smokers report **a more favorable price as the main reason behind their purchase.**

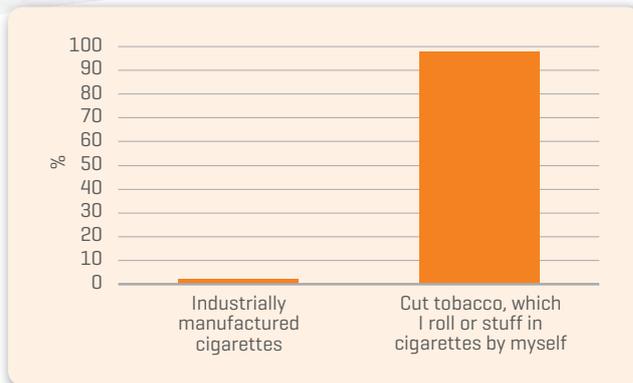
Approximately 4 percent of smokers are **buying on the gray market** in North Macedonia.

Figure 3.1 **Share of smokers buying on the gray market, by country**



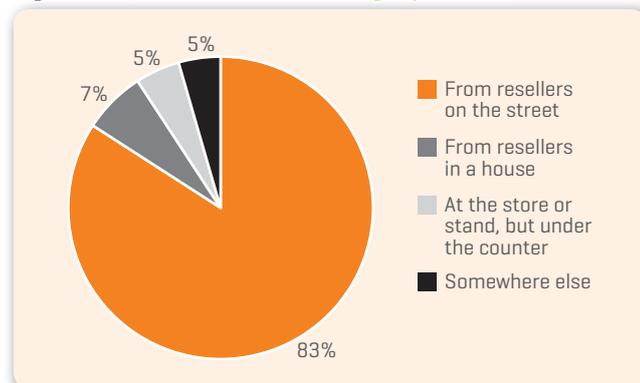
Source: Survey data.

Figure 3.2 **Tobacco products from the gray market**



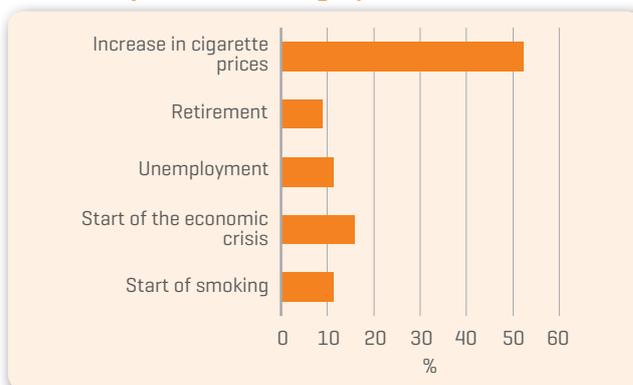
Note: Multiple answers.  
Source: Survey data.

Figure 3.3 **Points of sale on the gray market**



Source: Survey data.

Figure 3.4 **Reasons why smokers buy tobacco products on the gray market**



Source: Survey data.

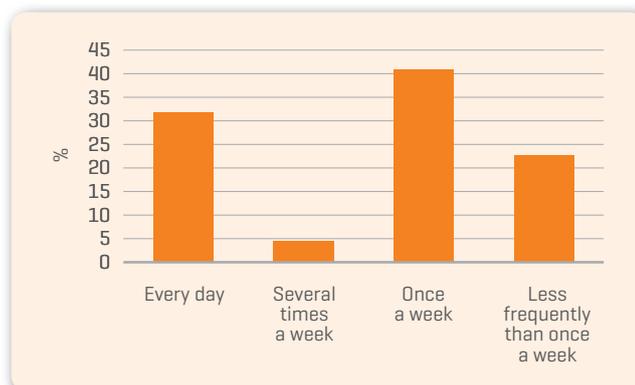
## 4

### Availability of Cigarettes and Cut Tobacco on the Gray Market

- Almost two thirds of respondents state that they buy cut tobacco on the gray market at least once a week, while approximately one third of respondent buy gray market cut tobacco on a daily basis [Figure 4.1].
- Over 70 percent of the buyers believe that the availability of cigarettes and cut tobacco on the gray market has not changed since two years ago [Figure 4.2].
- **16 percent of smokers rate cigarettes as 'more available' on the gray market today** compared to two years ago.
- **18 percent of smokers rate cut tobacco as 'more available' on the gray market today** compared to two years ago.

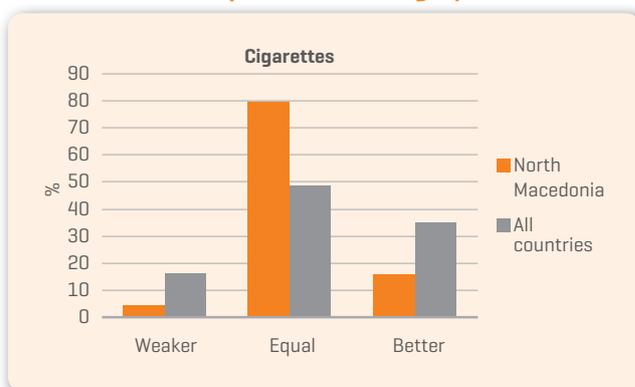
**Most of the smokers in North Macedonia find that the availability of tobacco products on the gray market has not changed in the last two years.**

Figure 4.1 Frequency of buying on the gray market



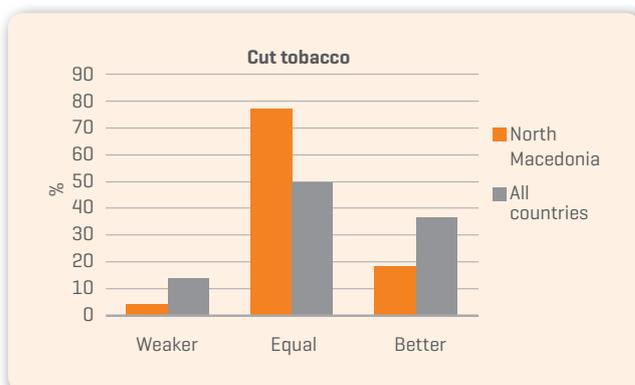
Source: Survey data.

Figure 4.2 Trends in the availability of tobacco products on the gray market



Compared to two years ago:

**16 percent of smokers state that the availability of cigarettes on the gray market increased.**



**18 percent of smokers state that the availability of cut tobacco on the gray market increased.**

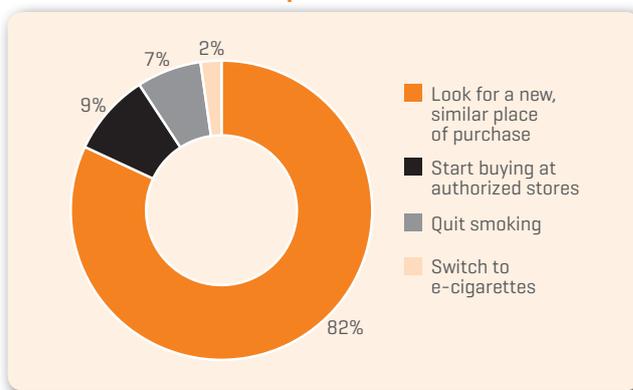
Note: Compared to two years ago.  
Source: Survey data.

## 5 Exiting the Gray Market

- Buyers on the gray market were asked what they would do if they could no longer buy tobacco products at their usual place [Figure 5.1]. Eight out of ten buyers would look for a new place of purchase within gray market, which means that as long as the gray market exists, it will remain the preferred place of purchase for the majority of smokers involved in illicit trade in North Macedonia.
- Approximately, only 9 percent of respondents would start buying at authorized stores and 7 percent would quit smoking if they could not buy tobacco products at their usual place.
- Almost half of smokers in North Macedonia would stop buying illicit tobacco products only in case of health issues. Additionally, almost 32 percent of buyers would exit the gray market if cigarette prices on the legal market decreased.
- Introducing severe punishments for buyers would motivate 11 percent of smokers to stop buying on the gray market [Figure 5.2].

**Most of the buyers on the gray market would remain loyal to illicit points of sale.**

Figure 5.1 Preferred alternatives for smokers who could no longer buy illicit tobacco product at their usual points of sale



Source: Survey data.

**If the usual place for illicit purchase becomes unavailable, 9 percent of smokers report the willingness to switch to the legal market.**

Figure 5.2 Motivation for exiting the gray market of tobacco products



**The affordability of legal tobacco products would motivate smokers to exit the gray market.**

Note: Multiple answers.  
Source: Survey data.

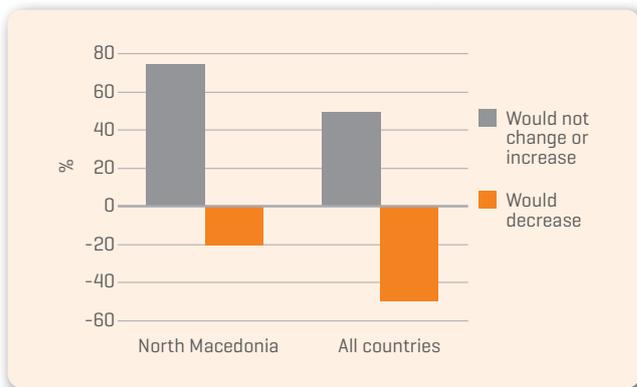
## 6

# Price Sensitivity of Illicit Tobacco Products Consumption

- If the price of cigarettes became equal on the legal and gray market, every fifth buyer reports that they would decrease their consumption of illicit cigarettes. [Figure 6.1].
- Despite the change in the price of legally purchased cigarettes, 50 percent of buyers would not change their consumption of illegally purchased cigarettes.
- Every fifth buyer states that they would reduce their consumption of cut tobacco on the gray market if the price of legal cigarettes decreases [Figure 6.2].
- The level of sensitivity of gray market buyers to price change is lower in North Macedonia than it is on average in the countries in the region.

**Consumption of illicit tobacco products is not sensitive to price changes of legally purchased cigarettes as it is on average in the country in the region.**

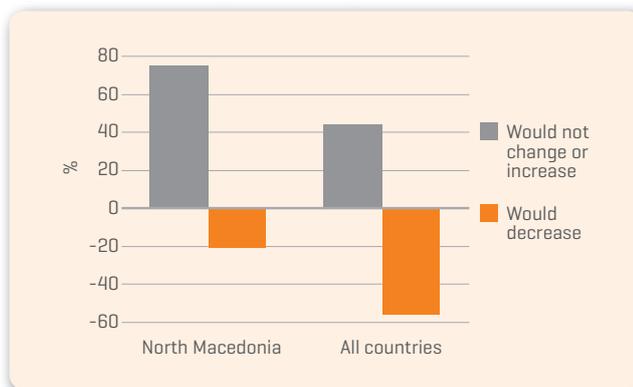
Figure 6.1 **Price sensitivity of illicit cigarettes**



Source: Survey data.

**21 percent of buyers on the gray market in Macedonia would decrease the consumption of illicit cigarettes if the price of legally purchased cigarettes decreased and became equal to the price of cigarettes bought on the gray market.**

Figure 6.2 **Consumption of illegal cut tobacco**



Source: Survey data.

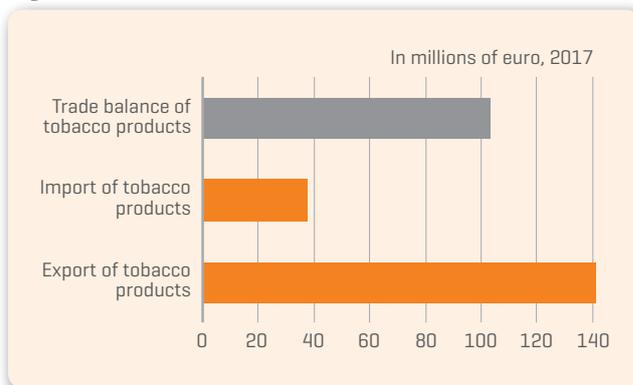
**21 percent of buyers on the gray market in Macedonia would decrease the consumption of illicit cut tobacco if the price of legally purchased cigarettes decreased and became equal to the price of cut tobacco on the gray market.**

## 7 International Trade of Tobacco Products

**North Macedonia is a net exporter of tobacco products.**

- Survey results indicate that **smokers in North Macedonia purchase tobacco products at selling points within country.**
- In 2017, North Macedonia exported EUR 141 million of tobacco products. Trade surplus amounted to EUR 103.5 million in 2017 (Figure 7.1).
- **The main exported tobacco product is unmanufactured tobacco (89 percent)** (Figure 7.2). Export of cigarettes accounts for 11 percent of the total tobacco product export. Cigarettes take up the biggest share of import of tobacco import in North Macedonia [52.4 percent], followed by unmanufactured tobacco [44.7 percent].

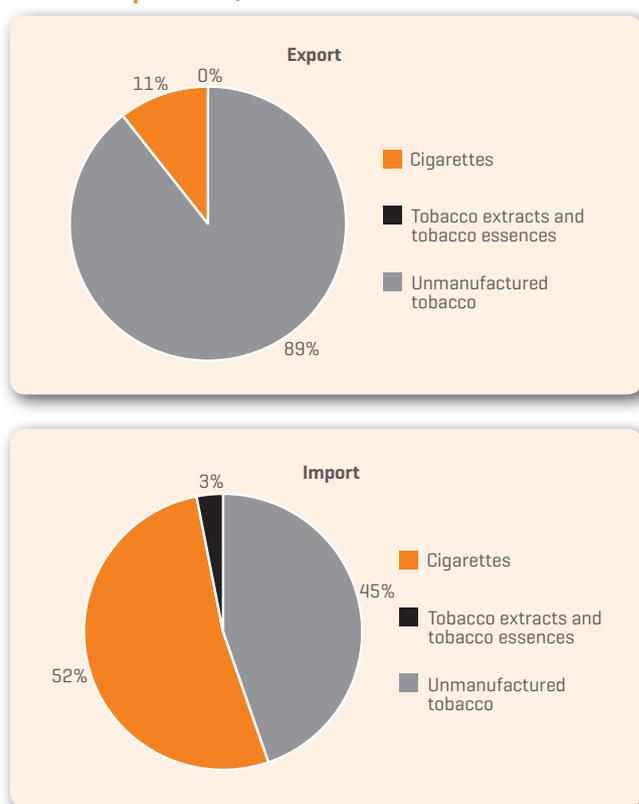
Figure 7.1 **Macedonian tobacco trade**



Source: Author's calculations based on UN Comtrade and ITC statistics.

**Macedonian trade balance of tobacco products is positive. The trade surplus amounted to over EUR 100 million due to the high export and low import of tobacco products.**

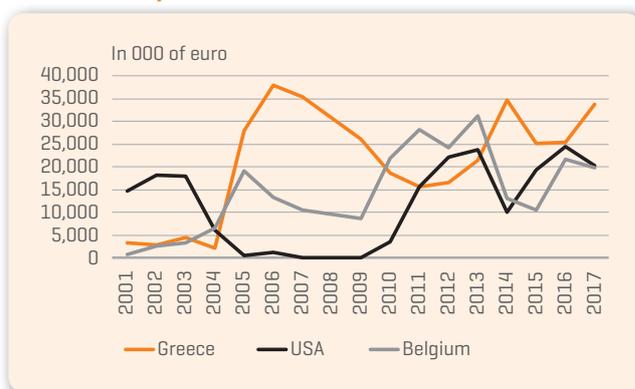
Figure 7.2 Exports and imports by types of tobacco products, 2017



Source: Author's calculations based on UN Comtrade and ITC statistics.

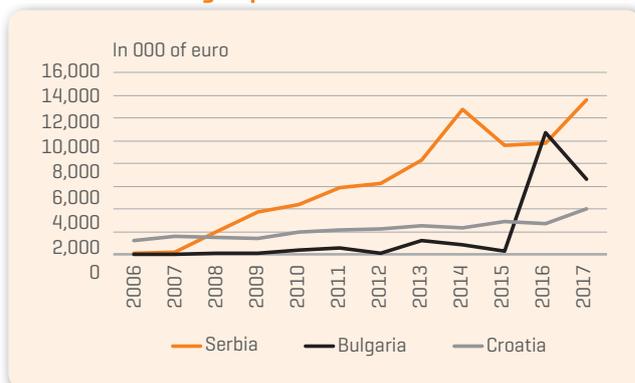
- North Macedonia exported over a half of its total tobacco products to Greece [24 percent], USA and Belgium in 2017 [Figure 7.3]. Countries in the region are less represented in the Macedonian export of tobacco products.

Figure 7.3 **Macedonian tobacco exports to leading export markets - trends 2001-2017**



Source: Author's calculations based on UN Comtrade and ITC statistics.

Figure 7.4 **Macedonian tobacco imports from leading import markets - trends 2006-2017**



Source: Author's calculations based on UN Comtrade and ITC statistics.

- Serbia is the leading tobacco import partner of North Macedonia (Figure 7.4). Over one third of tobacco product imports came from Serbia in 2017. Interestingly, import of tobacco products from Bulgaria, the second most important tobacco import partner, sharply increased in 2015 and in 2016. North Macedonia imported almost 18 percent of tobacco products from Bulgaria. Import of tobacco products from Serbia and Croatia has been rising since 2016.

- North Macedonia has the highest positive trade balance of almost EUR 33 million with Greece, followed by that with the USA (EUR 20 million). A negative trade balance is observed with two countries in the region, Serbia and Croatia (Figure 7.5).

Figure 7.5 **Macedonian trade balance in tobacco products by countries**



Source: Author's calculations based on UN Comtrade and ITC statistics.

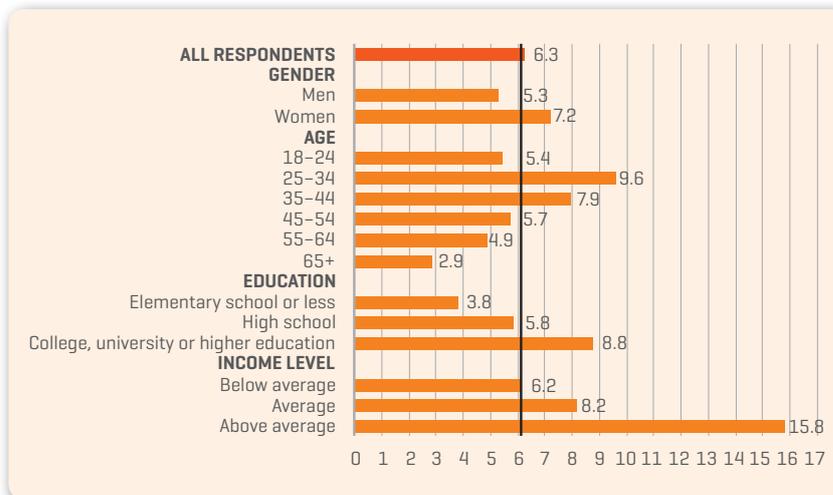
**Tobacco trade with countries in the region is insignificant compared to other countries.**

## 8 Undeclared Work

**Only 1.4 percent of adult population of North Macedonia received income from undeclared work in the last 12 months, while about 9 percent purchased goods they believe were produced by undeclared work.**

- When seen through the prism of tax evasion, the tobacco gray market is a part of the shadow economy due to undeclared work. Smugglers, sellers and resellers of tobacco products on the gray market earn unreported income due to undeclared work.
- The **extent of undeclared work in North Macedonia** is assessed through the demand and supply side of the survey.
- **Over 6 percent of adult population of North Macedonia report to have bought products from the people whose income origin, they believe, was not fully reported** to tax or social security institutions [Figure 8.1.]
- Propensity to acquire products delivered by units engaged in undeclared work is higher for women [7.2 percent vs. 5.3 percent recorded for men]. Demand for products delivered by units engaged in undeclared work is the most pronounced for the population in age group 25-34, where one out of ten persons has been involved in purchasing products assumed to be delivered by the undeclared work sector.
- Contrary to previous studies, where undeclared work is usually found to act as a social buffer, survey results for North Macedonia indicate that **higher educated individuals with above-average income are more likely to acquire goods and services related to undeclared work.**

Figure 8.1 **Buyers of products that might be the result of undeclared work**

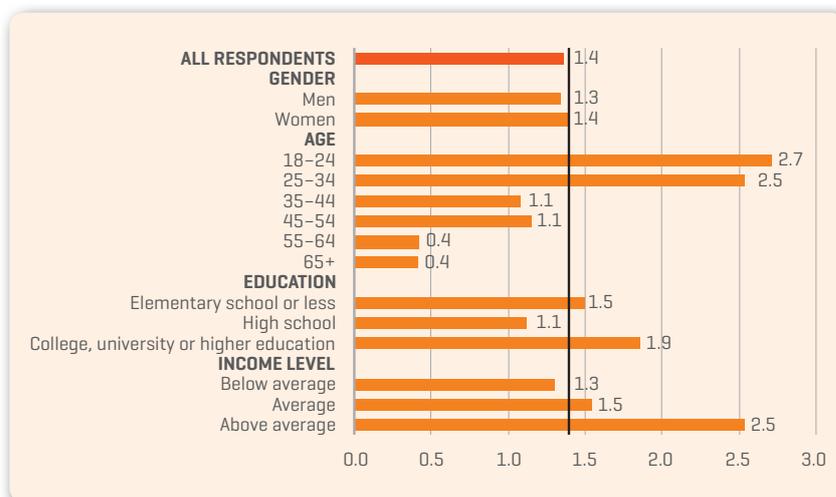


**Buyers of products related to undeclared work are higher educated and wealthier individuals.**

Note: The percentage of individuals who acquired a product they believe originated from undeclared work.  
Source: Survey data.

- According to self-declared statements of survey respondents, **only 1.4 percent of the population of North Macedonia over the age of 18 acquired extra income through undeclared labor** activity in the past 12 months (Figure 8.2)
- As in the case of the demand side of undeclared work, **the tendency to engage in undeclared labor is more pronounced for younger individuals receiving an above-average income.**
- The participation of individuals with elementary and high school education in undeclared labor is lower than the participation of individuals with higher education.

Figure 8.2 **Population paid for undeclared activities in the last 12 months**



**Youth population is the main supplier of undeclared work in North Macedonia. One out of thirty five individuals aged received compensation for undeclared work in the last 12 months.**

Note: Individuals who, in addition to their regular labor activity, earned extra income through undeclared activities in the past 12 months.  
Source: Survey data.

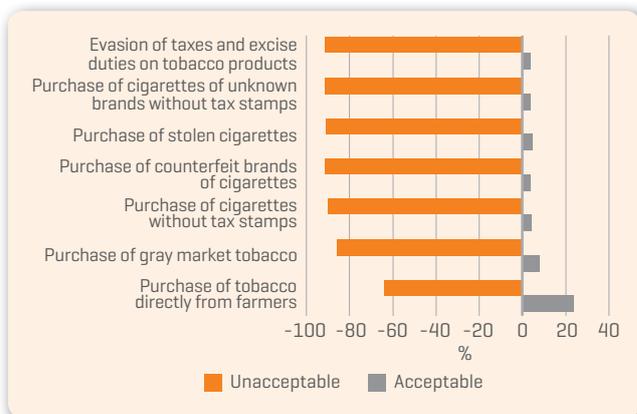
# 9

## Unacceptability of Certain Practices in Illicit Tobacco Trade

- The majority of citizens of North Macedonia, more than 90 percent of them, think that it is mostly unacceptable or completely **unacceptable to purchase stolen cigarettes** [Figure 9.1].
- 91 percent of citizens believe that evading of taxes and excise duties on tobacco product is unacceptable behavior.
- Citizens also have a negative public opinion regarding the malpractice of purchasing cigarettes without tax stamps.
- Purchasing tobacco products on the gray market is not acceptable for 86 percent of citizens.
- Almost 64 percent of citizens of North Macedonia consider that it is unacceptable to buy tobacco directly from farmers.

**There is an overall negative public opinion regarding illicit tobacco trade in North Macedonia.**

Figure 9.1 **Unacceptability of certain practices in illicit tobacco trade**



**Purchasing tobacco products on the gray market is not acceptable for almost 86 percent of citizens.**

Source: Survey data.

## 10

# Public Perceptions and Opinions about Gray Market

- Almost eight out of ten citizens consider that the tobacco gray market causes considerable damages to society.
- More than 77 percent of citizens of North Macedonia agree that gray market of tobacco products causes **substantial damages to the state budget** (Figure 10.1).
- Around 76 percent of respondents recognize that there is a link between the tobacco gray market and other forms of crime, and think **that the gray market of tobacco products causes an increase in other forms of crime.**
- Almost two thirds of citizens of North Macedonia agree that the gray market of tobacco products is responsible for job losses in North Macedonia.
- The majority of respondents in North Macedonia (78 percent) have a negative perception regarding tobacco product smuggling and think it represents an integral part of organized crime (Figure 10.2).

**In general, the majority of the citizens of Macedonia recognize the negative effects of the tobacco gray market.**

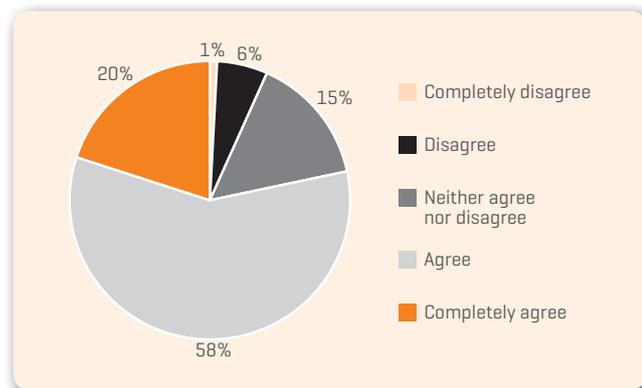
Figure 10.1 Respondents' perception regarding tobacco gray market's impact on society and economy



Source: Survey data.

Figure 10.2 Respondent's views of cigarettes and tobacco smuggling as part of organized crime

**78 percent of citizens consider that tobacco product smuggling is an organized crime.**



Source: Survey data.

## Appendix

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Table A1 **Survey details**

Survey period	February–April 2018
Target population	Resident population of North Macedonia: age group 18+, with smokers quota proportional to the country's smoking prevalence rate (46,6 percent for men, 26,8 percent for women) <a href="http://www.tobaccoatlas.org/country-data/fyr-macedonia/">http://www.tobaccoatlas.org/country-data/fyr-macedonia/</a>
Sample design	Random sampling Nationally representative sample
Quality control	Data collection quality control was done by re-contacting the respondents and crosschecking answers to selected questions with answers from the initial interview A minimum of 25 percent of questionnaires were controlled per interviewer Logic checks conducted on final dataset
Net sample size	3,000
Response rate	50.7 percent
Method	CATI [Computer Assisted Telephone Interviewing]

