tobaccotaxation
Economic Research Informing
Tobacco Taxation Policy

Tobacco Consumption in North Macedonia

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GLOSSARY

Cigarette: A thin cylinder of ground or shredded tobacco that is wrapped in paper, lit, and smoked. It includes manufactured cigarettes and hand-rolled cigarettes.

Current smoker: An adult who has smoked 100 cigarettes in his/her lifetime and who currently smokes cigarettes.

Daily smoker: An adult who has smoked at least 100 cigarettes in his/her lifetime and who now smokes every day.[1]

Electronic cigarettes: A device that has the shape of a cigarette, cigar, or pen and does not contain tobacco. It uses a battery and contains a solution of nicotine, flavorings, and other chemicals, some of which may be harmful. When electronic cigarettes are used, the nicotine solution turns into a mist that can be inhaled into the lungs. The amount of nicotine in individual e-cigarettes can vary. It is not yet known whether electronic cigarettes are safe or if they can be used to help smokers quit smoking. Also called e-cigarettes.

Ever smoker: A person who has ever been a cigarette smoker or cigar smoker. More precisely, a person who has smoked at least 100 cigarettes or cigars during the course of his/her life.

Ever daily smoker: A person who has ever smoked any tobacco product at least once a day.

Former smoker: An adult who has smoked at least 100 cigarettes in his/her lifetime, but who had quit smoking at the time of interview.

Heated tobacco products (HTPs): Heated tobacco products are tobacco products that produce aerosols containing nicotine and other chemicals, which are inhaled by users through the mouth. They contain the highly addictive substance nicotine (in the tobacco), which makes HTPs addictive. They also contain non-tobacco additives and are often flavored. HTPs mimic the behavior of smoking conventional cigarettes, and some make use of specifically designed cigarettes to contain the tobacco for heating.

Less than daily smoker (occasional smoker): An adult who has smoked at least 100 cigarettes in his/her lifetime and who smokes now but does not smoke every day. Previously called an "occasional smoker."

Never smoker: An adult who has never smoked or who has smoked fewer than 100 cigarettes in his/her lifetime.

Non-smoker: A person who does not smoke tobacco and is not a smoker.

Quit ratio: Number of former daily smokers as a proportion of the total number of people who have ever smoked daily in a population. It is a statistical measure of smoking cessation activity that is recommended for use in tobacco behavior research.

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[1] https://www.cdc.gov/nchs/nhis/tobacco/tobacco_glossary.htm

Secondhand smoke (SHS): Smoke that comes from the burning of a tobacco product and smoke that is exhaled by smokers. Inhaling secondhand smoke is called involuntary or passive smoking. Also called environmental tobacco smoke (ETS).

Smokeless tobacco: A type of tobacco that is not smoked or burned. It may be used as chewing tobacco or moist snuff or inhaled through the nose as dry snuff. Smokeless tobacco contains nicotine and many harmful, cancer-causing chemicals. Using it can lead to nicotine addiction and can cause cancers of the mouth, esophagus, and pancreas. It may also cause heart disease, gum disease, and other health problems.

Smoking cessation: Counseling, behavior therapy, medicines, and nicotine-containing products—such as nicotine patches, gum, lozenges, inhalers, and nasal sprays—may be used to help a person quit smoking.

Age of smoking initiation: The age of initiation of smoking among ever smokers.

Smoking intensity: Average number of cigarettes smoked in a typical day.

Other smoked tobacco product: Any combustible tobacco product that is designed to be smoked—other than cigarettes—including cigars, cigarillos, little cigars, blunts, and bidis or biris (small, flavored unfiltered cigarettes commonly found in South Asia).

Primary education level: Typically the first stage of formal education, coming after preschool and before secondary school. Primary education takes place in primary school. It is completed in the first eight years of schooling.

Secondary education level: The education level that is completed in two or three years of secondary education (lower secondary) or in four years (upper secondary level). In North Macedonia, high school for general education, or high school, lasts four years (ages 15 to 19). High school for general vocational or technical education can last from two to four years, according to the three different programs: a vocational training program, which lasts two years and provides the lowest qualification; an industry, trade, or service program, which lasts three years and offers intermediate qualification; and a four-year technical training program that offers the highest qualification.

Higher education level: The education level when one has obtained a degree from a professional university (completed three years at so-called "colleges" or "higher schools"), or a bachelor's, master's, or doctorate degree.

CHAPTER 1: EXECUTIVE SUMMARY

This study presents data on tobacco use in North Macedonia based on the Survey on Tobacco Consumption in Southeastern European Countries (STC-SEE) conducted in 2019 and offers recommendations to policymakers for adopting more effective tobacco control policies. This is one of the first studies in North Macedonia that provides such comprehensive information and estimates on tobacco use. Monitoring and availability of accurate and timely information on tobacco use and control are among the key prerequisites for successful health and fiscal policies to ensure prevention, reduce the harmful effects of tobacco use, and protect human health and life.

Although North Macedonia ratified the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) in 2006 and instituted a general ban on smoking in public places, including restaurants and bars, on January 1, 2010, this progress has stagnated in recent years. In early 2018, tobacco control measures deteriorated, as the smoking ban was weakened by allowing smoking in specially designated areas and open-air terraces.[2] At the same time, the government has continued to provide high agricultural subsidies aimed at stimulating tobacco production. Moreover, North Macedonia has the lowest cigarette prices in the region, reflecting the lowest tax burden among the observed countries.[3] As a result, North Macedonia ranks among the top ten countries worldwide based on smoking prevalence and average number of cigarettes smoked per smoker.[4] According to STC-SEE, tobacco consumption in 2019 in North Macedonia was one of the highest (48.4 percent) in the SEE region.

In order to closely monitor and efficiently control tobacco use in the country, the availability of data on smoking prevalence and other indicators is crucial. This report provides relevant information for policymakers in North Macedonia to be able to effectively monitor tobacco use and other important indicators to support the development of comprehensive tobacco control policies. The survey in North Macedonia was part of a regional survey (STC-SEE),[5] which aims to produce internationally comparable data on tobacco use as well as to understand attitudes related to smoking behavior and specific measures to reduce smoking. The survey in North Macedonia included a nationally representative sample of 1,006 men and women aged 18–85, and was implemented face-to-face, door-to-door. Respondents were asked questions on tobacco use, cessation, secondhand smoke exposure, economics of tobacco use, media, and attitudes and perceptions towards tobacco use and policies.

This survey was conducted to produce comparable data on tobacco use and tobacco control policies with other countries in the SEE region. In this regard, policymakers should pay particular attention to the results of this survey in order to enforce more efficient mechanisms for tobacco control in the country, to introduce a new strategic framework in line with WHO

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[2] For more details regarding tobacco control laws in North Macedonia, see:
https://www.tobaccocontrollaws.org/legislation/country/macedonia/laws
[3] Improving tobacco taxation policies in Southeastern Europe. The Institute of Economic Sciences in Belgrade. http://tobaccotaxation.org/cms_upload/pages/files/Policy-Brief-Southeastern-Europe.pdf
[4] http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf; https://www.telegraph.co.uk/travel/maps-and-graphics/world-according-totobacco-consumption/
[5] STC-SEE was conducted in six countries in the region: Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia.

recommendations, to contribute to the alignment of national legislation with current EU legislation, and to revise existing tobacco tax policy in order to reduce tobacco consumption. Creating and implementing a new policy should involve all major institutions including the Ministry of Finance, Ministry of Health, Customs Administration, Institute for Public Health, and civil society groups.

The key findings of this study are the following:

The results from the survey indicate a high rate of adult smoking (48.4 percent) in North Macedonia, with almost 81.4 percent of current daily smokers initiating smoking before 25 years of age. Most smokers in North Macedonia use manufactured cigarettes (92.0 percent) versus hand-rolled cigarettes (12.5 percent), while only about 1.0 percent of current smokers use other tobacco products. Women are almost two times more likely (39.4 percent) to have never tried smoking than men (20.3 percent). Current daily tobacco smokers in North Macedonia are more likely be male, between 45 and 54 years of age, live in a rural area, and have a lower secondary level of education and a monthly household income between 901 and 1,200 €.

Nearly one in five current smokers (19.3 percent) have tried to quit in the past 12 months. The youngest group of smokers (18–24 years of age) has the highest rate of attempts to quit smoking (41.0 percent) followed by the second-youngest group (25–34 years of age) (32.1 percent). While the youngest smokers have the highest rate of quit attempts, they also have the lowest average duration of abstinence. The opposite goes for older age groups, who make fewer attempts to quit but remain abstinent for longer when they do. The most important reasons for an attempt to quit smoking are increased knowledge of the harmful effects of smoking (36.0 percent), high cigarette prices (31.6 percent), and illness (25.8 percent). The overall quit ratio is 18.1 percent. This ratio is higher for male smokers (20.0 percent) than for female smokers (15.1 percent).

Most adults report exposure to tobacco smoke at home (44.2 percent), in bars or nightclubs (73.6 percent), and in restaurants (42.2 percent). Less than half of non-smokers (42.9 percent) and 11.9 percent of smokers do not allow smoking in their homes. A greater percentage of female smokers (57.5 percent) than male smokers (49.2 percent) claim to be exposed to tobacco smoke at home.

Smokers of manufactured cigarettes spend, on average, 30.68 € per month, which is more than twice the average monthly amount spent on hand-rolled cigarettes (13.29 €). The high prevalence of smoking is related to the very low price of manufactured cigarettes (1.73 €) and hand-rolled cigarettes (0.94 €) and also to the low average monthly amount spent by current smokers of both manufactured and hand-rolled cigarettes (27.6 €). An average smoker smokes 382.0 manufactured cigarettes or 308.8 hand-rolled cigarettes per month. As the smoker's level of education increases, the number of manufactured cigarettes smoked per month decreases (from 425.1 at the lowest education level to 325.1 at the highest).

More than half of current smokers (56.9 percent) and only 19.5 percent of non-smokers are strongly against a cigarette price increase of five percent. Almost half of adults (44.8 percent) consider cigarettes to be expensive, and 38.2 percent believe they are very expensive. Nevertheless, 34.4 percent of adults find that making smoking or sales of tobacco products illegal would be the most useful strategy to reduce tobacco consumption. The strategy of offering free support for tobacco cessation and nicotine replacement therapy was perceived to be the least useful by the most respondents (27.7 percent). An indicator of the successful

implementation of the prohibition on cigarette advertising is the fact that respondents had not noticed any significant promotional activities regarding cigarettes or other tobacco products.

Based on the survey findings, this study offers the following policy recommendations:

- **Significantly increase the price of tobacco products by increasing the excise tax.** Price increases through higher taxes have been shown to be the most effective measures worldwide in reducing tobacco use and saving lives, including discouraging smoking initiation among adults and youth.[6]

- **Raise awareness about the harmful health effects of tobacco consumption and introduce comprehensive tobacco control programs in order to reduce smoking among both youth and adults** by organizing public campaigns in the media as well as in schools, hospitals, and workplaces. In addition, the harmful effects of tobacco should be introduced as a topic in education curriculum, starting with primary schools and especially in secondary schools.

- **Develop effective smoking cessation services and make them accessible and affordable to all smokers.** Cessation services in the form of consultations with medical professionals by phone or in person should be made widely available in schools, colleges, general practitioner offices, and hospitals. They are especially important to encourage and motivate young smokers to quit as well as to inform older age groups about the harms of smoking to themselves and their household members. In addition, well-functioning telephone help lines and government-funded support groups could aid smokers in cessation.

- **Apply evidence-based policy and coordinate the efforts of all relevant stakeholders.** For the policy to be effective, constant monitoring and data collection on tobacco use should be performed by all actors involved at various levels, including the Ministry of Health, the Institute for Public Health, and Customs Administration as well as schools, hospitals, and regional social departments.

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[6] *Preventing tobacco use among youth and young adults: A report of the Surgeon General*. (2012). National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health.

CHAPTER 2: INTRODUCTION

2.1. GENERAL COUNTRY INFORMATION

North Macedonia is a mountainous landlocked country located on the Balkan Peninsula in the southeastern part of Europe. It covers an area of 25,713 square kilometers, bordering Kosovo and Serbia to the north, Bulgaria to the east, Greece to the south, and Albania to the west. The country was one of the constituent republics in the former Socialist Federal Republic of Yugoslavia. It gained independence in 1991, following a referendum with an overwhelming majority vote in favor of its independence. Ethnic Albanians constitute the second largest ethnic group after ethnic Macedonians, accounting for 25 percent of the total population. Other ethnic groups include Turks, Roma, Serbs, Bosniaks, Vlachs, and others. The country is bisected from northwest to southeast by its longest river, the Vardar. It possesses three natural lakes (Ohrid, Prespa, and Dojran) as well as several man-made lakes and dams. Its highest point is Mount Korab, at 2,764 meters, which borders Albania to the west.

North Macedonia has a total population of just over two million people according to the latest census in 2002. The capital of North Macedonia is its largest city, Skopje. The official language is Macedonian, and its alphabet is based on the Cyrillic alphabet.

Table 1.1. *General characteristics about North Macedonia*

General info	Data
Region	Southeastern Europe
Income category (2019)	Upper-middle-income
Population (2002)	2.1 million
Surface area (km^2) (2019)	25,713
Capital city	Skopje
Macroeconomic indicators	
Gross domestic product, in millions (2019)	11,795 €
Gross domestic product, per capita (2019)	5,672 €
Gross domestic product, real growth rate (2019)	3.6%
Inflation rate (2019)	0.8%
Unemployment rate (2019)	17.3%
Wages (average per month) (2019)	410 €
Employment level (2019)	797,651

Approximately 40 percent of the population lives in rural areas. The country's agriculture is dominated by small and highly fragmented family farms. Agricultural exports consist mostly of tobacco and tobacco products, wine, grapes, fruit, early market garden vegetables, and lamb/mutton. The main trading partners are the European Union (EU), Serbia, and Montenegro.[7, 8]

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[7] Kabranova, R. & Arsov, Z. (2009). Territorial and natural priorities of Macedonia - Important factor for tobacco production development. Faculty of Agricultural Sciences and Food. University 'Ss. Cyril and Methodius.' Skopje, Macedonia.

[8] Tuna, E. (2006). The tobacco sector in the Republic of Macedonia - Competitiveness analysis. SLU University Department of Economics.

In North Macedonia, there is a long history and tradition of cultivating and exporting raw tobacco, particularly the oriental type of tobacco—mainly the Prilep, Jaka, and Basma varieties. As such, North Macedonia is an important producer of raw tobacco leaf and finished cigarettes in the region. Tobacco production has a very important place in the economy of North Macedonia, due to both economic and social reasons.[9] With an estimated share of three percent of global tobacco leaf production, North Macedonia is among the eight major tobacco producing countries in the world. The land area dedicated to tobacco is 3.4 percent of total arable land in the country, while the land devoted to energy crops represents approximately 81.1 percent of the total area.[10]

2.2. TOBACCO CONSUMPTION AND TRENDS

North Macedonia is among the top-ranked countries globally when it comes to the prevalence of smoking and the total number of cigarettes smoked daily per smoker.[11] In 2017, smoking prevalence estimates based on household expenditure data in North Macedonia were approximately 40 percent,[12] while in 2019 according to the STC-SEE, which is based on individual-level data prevalence was 48.4 percent, which places the country well above the EU average in terms of tobacco consumption. In 2017, the average smoker in Macedonia smoked 21.3 cigarettes per day.[13] For comparison, smoking prevalence in 2014 ranged from 8.7 percent in Sweden to 27 percent in Greece and Bulgaria.[14] Moreover, in 2017, only six percent of the EU population over the age of 15 consumed at least 20 cigarettes per day, and around 13 percent consumed fewer than 20.[15] Particularly worrying is the smoking prevalence among youth (aged 13–17). According to the most recent European School Survey Project on Alcohol and Other Drugs (ESPAD) study in 2015, 38.4 percent of minors smoked at least once in their lifetime, while 14.7 percent answered that they smoked 1–2 times in their lifetime.[16]

Recent trends suggest that, while moderate, there has been a negative relationship between cigarette prices and consumption in North Macedonia.[17] While the average price per pack of cigarettes increased from 2015 to 2017 by almost 17 MKD, or nearly 23 percent, consumption of cigarettes has declined by 7.5 percent, or 2.3 packs per household per month, on average. Smoking prevalence has, however, remains high. This moderate change in consumption is

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[9] Ibid.

[10] Cooperation Centre for Scientific Research Relative to Tobacco – Tobacco production in Macedonia, 2016

[11] http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf; https://www.telegraph.co.uk/travel/maps-and-graphics/world-according-totobacco-consumption/

[12] Trajkova Najdovska, N., Mijovic Spasova, T., Mijovic Hristovska, B., & Trenovski, B. The responsiveness of smoking prevalence and cigarette consumption to changes in price and income in North Macedonia. Analytica think tank, North Macedonia.

[13] Mijovic Spasova, T., Mijovic Hristovska, B. (2018). Improving tobacco tax policy in the Republic of Macedonia, Analytica think tank.

[14] Tobacco consumption statistics, EUROSTAT, 2016, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tobacco_consumption_statistics.

[15] Trajkova Najdovska, N., Mijovic Spasova, T., Mijovic Hristovska, B., & Trenovski, B. The responsiveness of smoking prevalence and cigarette consumption to changes in price and income in North Macedonia. Analytica think tank, North Macedonia.

[16] http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

[17] Trajkova Najdovska, N., Mijovic Spasova, T., Mijovic Hristovska, B., & Trenovski, B. The responsiveness of smoking prevalence and cigarette consumption to changes in price and income in North Macedonia. Analytica think tank, North Macedonia.

most likely due to the still relatively low prices of cigarettes, averaging only around 1.3 € per pack.

Projections from the World Health Organization (WHO) suggest that 39,000 tobacco-related deaths will occur in North Macedonia in the next 40 years if the current levels of tobacco consumption continue. The WHO Framework Convention on Tobacco Control (FCTC) recommends significant increases in tobacco taxes and prices as the most effective way to reduce tobacco use and its devastating health consequences. Price and tax increases on tobacco can be effective in improving people's health, reducing health care costs, and, at the same time, increasing government revenue.[18]

2.3. CURRENT TOBACCO CONTROL POLICIES

The legislative framework in North Macedonia regulating tobacco and tobacco products consists of several tobacco control laws and policies (Box 1). The primary goals of these regulations are to curb illicit trade, prevent underage tobacco sales, improve tax collection, and adjust excises, as well as impose greater financial discipline on local retailers and the major domestic and international manufacturers in the country. There are corresponding laws regulating production, distribution, packaging, and implementation of health warnings on tobacco products and raw tobacco. Additionally, there are laws related to tobacco-specific taxation and smoking in general.

Box 1. Tobacco control laws in North Macedonia

- Law on Tobacco and Tobacco Products (Official Gazette 24/06, 88/08, 31/10, 36/11, 53/11, 93/13, 99/13, 164/13, 151/14, 193/15, 213/15, and 39/16)
- Law on Protection from Smoking (Official Gazette 36/1995, 70/03, 29/04, 37/05, 6/07, 103/08, 140/08, 35/10, 100/11, 157/13, and 51/18)
- Excise Law (Official Gazette 32/01, 50/01, 52/01, 45/02, 98/02, 24/03, 96/04, 38/05, 88/08, 105/09, 34/10, 24/11, 55/11, 135/11, 82/13, 98/13, 43/14, 167/2014, 188/2014, 129/2015, 154/2015, 192/2015, 23/2016, 31/2016, 171/2017, and 120/2018)
- Law on Environmental Protection (Official Gazette 53/2005, 81/2005, 3 decisions 2006.24/2007, 159/2008, 83/2009, decision 2009, 47/2010, 124/2010, 51/2011, 123/2012, 93/2013, 187/2013, 42/2014, 44/2015, 129/2015, 192/2015, and 39/2016)
- Law on Health Protection (Official Gazette 43/2012, 145/2012, 10/2013, decision 2013, 87/2013, 164/2013, 39/2014, 43/2014, decision 2014, 188/2014, 10/2015, 61/2015, 154/2015, 192/2015, 17/2016, 37/2016, and decision 2017)
- Law on Broadcasting (Official Gazette 100/2005, 19/2007, decision 2007, decision 2008, 103/2008, 152/2008, 6/2010, decision 2010, 145/2010, 97/2011, 13/2012, and 72/2013)

A general ban on smoking in public places, including restaurants and bars, came into effect in North Macedonia on January 1, 2010. Since 2003, the Law on Protection from Smoking had partially prohibited smoking in public places, allowing for separate designated smoking areas

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[18] Ibid.

to be established in public offices, restaurants, and bars. An amendment to the partial public smoking ban was first introduced in 2008 when smoking was prohibited in most public places, including educational institutions and other public buildings accommodating small children, young people, and students. In early 2018, the newly-elected Government of North Macedonia amended the Law on Protection from Smoking and weakened the smoking ban by allowing smoking in specially designated areas and open-air terraces. The amendment aimed to ease the ban on public smoking, which, according to Hotel-Restaurant-Cafe (HoReCa) establishments in the country, had been damaging to the hospitality industry.

Tobacco control policy in North Macedonia has three main objectives: health promotion; prevention of tobacco use; and an integrated, systematic, and gender-sensitive approach to policymaking on a national and local level that meets the specific needs and rights of the citizens.[19]

In the past, the Government of North Macedonia has conducted elaborate mass media campaigns and activities aimed at promoting healthier lifestyles by exposing the harmful effects of smoking and raising public awareness about the benefits of early smoking cessation. Some of these activities coincided with the process of approximation of local legislation to EU legislation as a prerequisite for the country's membership in the EU.

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[19] Kjosevska, E. (2017). Harmful effects from tobacco use: A challenge for local interaction cooperation in the Republic of North Macedonia. *Journal of European Affairs*.

CHAPTER 3: METHODOLOGY

STC-SEE was conducted as part of the Accelerating Progress on Effective Tobacco Tax Policies in Low- and Middle-Income Countries project funded by the University of Illinois at Chicago's (UIC) Institute for Health Research and Policy. The survey was carried out in Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro, and Serbia using the same questionnaire.

STC-SEE is the first survey of its kind conducted in North Macedonia to monitor tobacco use. The data collection took place in September 2019, using a face-to-face method, with a total sample size of 1,006 respondents. The average duration of the interview was 30 minutes. The STC-SEE questionnaire was designed using best practices from other international studies and instruments, including the Global Adult Tobacco Survey (GATS), the International Tobacco Control (ITC) Project survey, and the Pricing Policies and Control of Tobacco in Europe (PPACTE) survey.[20] In addition to detailed information on tobacco consumption, cessation, expenditures, and prices, STC-SEE provides information on attitudes towards tobacco prices and consumption, exposure to secondhand smoke at home and in public places, anti-smoking sentiment, exposure to tobacco advertising, and sociodemographic characteristics of the respondents.

3.1. STUDY POPULATION

The target population of the survey included men and women in North Macedonia, ages 18 to 85. The survey was not conducted in institutionalized living facilities or collective dwellings such as military institutions, prisons, convents, hotels, dormitories, hospitals, or nursing homes. People experiencing homelessness were also excluded.

3.2. SAMPLING DESIGN

The survey was designed to be nationally representative for the adult (ages 18–85) population in North Macedonia, based on the latest census from 2002. The survey employed a three-stage probability sample.

In the first stage, 100 primary sampling units (PSUs) were selected in North Macedonia with urban versus rural split in accordance with the proportion in each of the populations. At the second stage, ten housing units in each PSU were randomly selected by random-route technique, starting from the randomly selected address with a fixed periodic interval (the sampling interval). In the third stage, household members were randomly selected using a next-birthday method.

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[20] https://www.cdc.gov/tobacco/global/gtss/index.htm; https://itcproject.org; http://www.tri.ie/ppacte.html

> **Box 2. Sample design – Stages of selection**
>
> Sample size: 1,006 respondents
>
> Sampling frame is based on data from the 2002 census.
>
> Target population: Residents aged 18 to 85 years in the territory of North Macedonia
>
> Sample type: Stratified three-stage probability sample
>
> Sampling stages
>
> - Eight statistical regions: Vardarski, Skopski, Pelagoniski, Poloshki, East, Southeast, Northeast, Southwest
> - Type of residence (urban/rural)
> - Households by random-route technique starting from the given addresses
> - Household member with same probability (SRSWoR)
> - Ten respondents per sampling point
>
> - Allocation of the sample by strata is proportional to the size of the stratum (number of persons aged 18–85 years).
> - Post-stratification according to: gender, age, type of residence, geo-economic region, and education level
> - 95 percent confidence interval for incidence of 50 percent on sample size of 1,006 is CI 3.1 percent (46.9 percent, 53.1 percent).

3.3. SURVEY QUESTIONNAIRE

The questionnaire for STC-SEE, prepared by the Institute of Economic Sciences in Belgrade, Serbia, was mostly based on the GATS core questionnaire,[21] with several questions adopted from the ITC and PPACTE surveys as well. The survey results were used to calculate various indicators about tobacco use, tobacco cessation, secondhand smoke exposure, economics of tobacco use, media, and attitudes and perceptions. The questionnaire was developed in English and translated to Macedonian language.

The questionnaire was designed to cover the following topics:

Section A. Demographic questions on gender and age: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), former/past tobacco consumption, and consumption of different tobacco products (cigarettes, cigars, cheroots, cigarillos, pipe tobacco, and water pipes).

Section B. Tobacco smoking: Age of initiation of smoking, number of tobacco products consumed on a weekly basis, and amount of money spent on various tobacco products.

Section C. Electronic cigarettes: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), reasons for using this type of product, and places where it is bought.

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[21]

https://www.who.int/tobacco/surveillance/en_tfi_gats_corequestionnairewithoptionalquestions_v2_FINAL_03Nov2010.pdf

Section D. Smokeless tobacco products: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), age of initiation, reasons for using this type of product, and places where it is bought.

Section E. Heated tobacco products: Questions covering patterns of use (daily consumption, less than daily consumption, not at all), age of initiation, reasons for using this type of product, and places where it is bought.

Section F. Nargile/shisha/waterpipe with tobacco: Age of initiation.

Section G. Brands of tobacco products used: Brands of tobacco products used at time of the interview, the origin of the products, the price paid for that exact product, and the place of purchase of the product.

Section H. History of smoking behavior: Current smoking habits, amount of cigarettes smoked in the past compared to present, reasons for smoking less, factors that influenced smoking reduction, the effect of price on smoking habits.

Section I. Cessation – Tobacco smoking: Questions related to quit attempts, methods used to try to stop smoking, reasons for intention to quit.

Section J. Cessation – Heated tobacco users: Questions related to quit attempts, methods used to try to stop smoking, reasons for intention to quit.

Section K. Cessation – Smokeless tobacco users: Questions related to quit attempts, methods used to try to stop smoking, reasons for intention to quit.

Section L. Attitudes towards prices and tobacco taxation (economics): Questions about the most recent purchase of cigarettes including quantity bought, cost, brand, source of purchase, and type.

Section M. Exposure: Exposure to smoke at home and in public places, anti-smoking sentiment, and exposure to advertising.

Section N. Other demographic questions: Education, employment, personal and household income, number of household members, and marital status.

The data collection method used in this survey was face-to-face interviews conducted at respondents' homes using CAPI (Computer-Assisted Personal Interviewing) methodology. A face-to-face interview is a data collection method where the interviewer directly communicates with the respondent in accordance with the prepared questionnaire. This method enables surveyors to acquire information along with respondents' evaluations, attitudes, preferences, and other information during the conversation.

3.4. RECRUITMENT AND TRAINING

3.4.1. Implementing agency

A market research and consulting firm, Deep Dive, based in Belgrade, Serbia, was responsible for coordinating the data collection in all six countries. Data collection in North Macedonia was carried out through TIM Institute, [22] which is Deep Dive's partner. A Deep Dive project manager provided overall direction for implementation of the survey in North Macedonia and

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[22] http://www.timinstitut.mk/en/index.html

was in continuous day-to-day communication with the fieldwork director at TIM Institute to ensure that all procedures were properly followed. TIM was obliged to adhere to the same rules and regulations as the Deep Dive agency, as stipulated in contract agreements between the agency and each of the subcontractors.

3.4.2. Pilot survey

The pilot study (pretest) was conducted in North Macedonia in June 2019. The pilot survey ensured clarity, logical flow or sequence of the questions, adequacy and appropriateness of response categories, and clarity and correctness of formulations in local languages. The pilot also aimed to determine if the respondents' attitude, interest, and motivation to answer the questions would be consistent as well as to establish the average interview time in order to set a reasonable daily quota. Another important objective of the pilot was to test the script (programmed questionnaire), as the survey was administered using the CAPI (Computer-Assisted Personal Interviewing) data collection method. The pilot survey was conducted in both urban and rural areas, with a total of ten respondents in each sampling point. Pilot interviews were adequately distributed by gender, type of residence (urban versus rural), smoking status, and age group.

3.4.3. Training

The training for all personnel involved in the field operations was conducted in four regional sessions in North Macedonia in September 2019. Project managers served as trainers while participants in regional training sessions included regional supervisors, fieldwork supervisors, and fieldwork interviewers. Each training session covered survey concepts and definitions as well as questionnaire administration using tablet computers.

3.4.4. Fieldwork

For the survey in North Macedonia, TIM Institute employed a total of 41 fieldwork interviewers distributed among eight geo-economic regions. A team supervisor was responsible for three to five interviewers and ensured that the team strictly followed the protocol and prescribed procedures. Ten regional fieldwork managers were assigned to supervise implementation of the survey in their area and to provide technical assistance on survey concepts, questionnaire items, and field operation procedures. They also provided technical assistance on the use of tablet computers, while the Deep Dive IT team was in charge of more complicated issues. The fieldwork supervisors conducted spot checks, and the TIM Institute quality control supervisors conducted short verification interviews. Fieldwork was conducted from September 17 to October 7, 2019. Control of the data collection procedures was conducted via telephone for at least 12 percent of the total sample. Additionally, logic and consistency control of collected data was performed on all (100 percent) of the interviews.

3.4.5. Confidentiality/informed consent

Taking into account the surveyed population (aged 18 to 85 years) no parental consent was required. At the beginning of the survey all respondents were assured that all answers in the

survey would only be used for research and analysis, could not be used for any other purpose, and would never be associated with their identifying data such as name and address.

In accordance with European Society for Opinion and Marketing Research (ESOMAR) recommendations, Deep Dive followed the main principles developed by the Organization for Economic Co-operation and Development (OECD) for guidance on social and market research companies' responsibility within a global protection framework. This framework includes a set of principles for use in designing and conducting surveys to ensure privacy and protect personal data.

> **Box 3. OECD Privacy Framework – Basic principles[23, 24]**
>
> *Collection limitation* – limiting the collection of personal data to only those items that are necessary to the research purpose and ensuring the data are not used in any manner incompatible with these purposes
>
> *Data quality* – using procedures to ensure that all personal data are accurate and complete by performing quality checks at every stage of the research process (questionnaire testing before fieldwork begins to minimize the risk of errors in data collection; monitoring and validating interviews during the fieldwork stage; additional quality checks during data processing and reporting to ensure that the analysis, conclusions, and recommendations are consistent with the data)
>
> *Purpose specification and use limitation* – transparency to the data subject when collecting personal data from a data subject including sufficient information about the intended use of the personal data collected and any sharing with third parties

3.5. DATA PROCESSING AND AGGREGATION

STC-SEE used an electronic questionnaire posted on tablet computers. The survey setup, processing, software management, and integration of the data was managed by Deep Dive, where Deep Dive technical staff served as the data managers. Field interviewers from TIM Institute uploaded data onto the server daily. For the early detection and resolution of problems in the data files, data managers reviewed and inspected the data upon receipt. They provided a weekly status report to Deep Dive indicating the number of completed and uncompleted cases per interviewer. After ensuring the completeness of the database the Deep Dive data managers converted the data into SPSS format for initial evaluation of data quality.

3.6. STATISTICAL ANALYSIS

Sample weights were computed for each respondent, following standard procedures. The details of sampling weight values are provided in Appendix A.

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[23] https://www.oecd.org/sti/ieconomy/oecd_privacy_framework.pdf

[24] World research codes and guidelines, ESOMAR DATA PROTECTION CHECKLIST, ©2016 ESOMAR. Issued January 2015. Last updated April 2016.
https://www.esomar.org/uploads/public/knowledge-and-standards/codes-and-guidelines/ESOMAR-Data-Protection-Checklist_update-April-2016.pdf

3.7. WEIGHTING

Data adjustments were made in order to correct weights to the 2002 census distribution. The variables used for calibration were geo-economic region (eight statistical regions), type of residence (urban versus rural), age group, gender, and level of education.

3.8. SAMPLE AND POPULATION CHARACTERISTICS

The 1,006 completed interviews represent an estimated 1.7 million adults aged 18 to 85 years in North Macedonia. The sampling frame was based on data from the latest census conducted in North Macedonia in 2002 (Tables A3.4–A3.18 in Appendix A).

CHAPTER 4: TOBACCO USE

This chapter reports the findings from STC-SEE in North Macedonia on tobacco use and other tobacco-related behaviors.

> 🎯 *Key findings*
>
> 1. *Nearly half of adults in North Macedonia (48.4 percent) currently use tobacco. Smoking prevalence is 57.9 percent among men and 39.0 percent among women.*
>
> 2. *Smoking prevalence increases with the age of smokers, reaching its peak at 45–54 years (60.1 percent for current daily smokers). After age 55, the prevalence rate begins to decrease until it is reduced by almost half at age 65–74.*
>
> 3. *Most smokers in North Macedonia use manufactured cigarettes (92.0 percent) versus hand-rolled cigarettes (12.5 percent). Other tobacco products used by only about one percent of current smokers.*

In North Macedonia, 48.4 percent of adults (aged 18–85) are current smokers. Table B4.1 in Appendix B shows that the prevalence of current smoking is higher for men than for women (57.9 percent and 39.0 percent, respectively). Among all adults, 43.0 percent are daily smokers, while 5.4 percent smoke less than daily (Figure 4.1). The daily smoking prevalence among men is higher than among women (50.6 percent and 35.4 percent, respectively). See Table B4.1 in Appendix B.

Figure 4.1. Almost half of adults in North Macedonia are smokers (n=1,006)
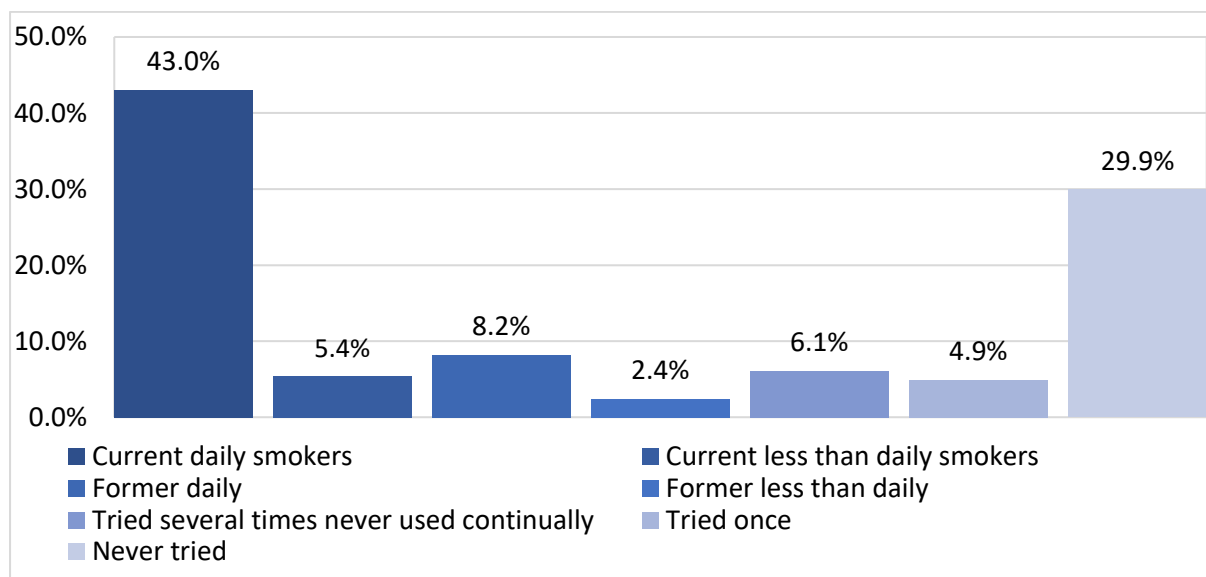
Source: Authors' calculations based on STC-SEE data for North Macedonia

Women are almost twice as likely (39.4 percent) to have never tried smoking than men (20.3 percent). Regarding the age of current smokers, as shown in Figure 4.2, above-average daily smoking prevalence is among adults 45–54 years (60.1 percent), after which it begins to

decrease until it is reduced by almost half by age 65–74 (32.4 percent) (Table B4.1 in Appendix B).

Figure 4.2. Daily smoking prevalence is highest among smokers aged 45–54 (n=1,006)
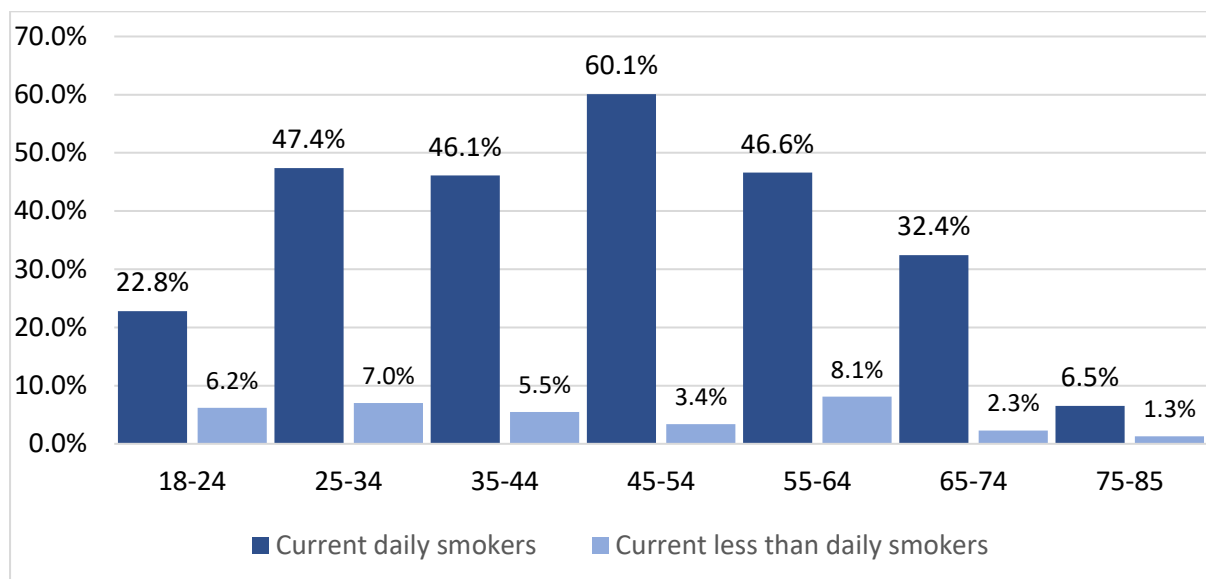
Source: Authors' calculations based on STC-SEE data for North Macedonia

Table B4.1 also shows that the percentage of current smokers is very similar in urban and rural areas. In terms of education, adults with secondary education have the highest percent of current daily smokers (58.6 percent), while the other three education levels have nearly equal prevalence of current daily smokers, at close to 40 percent.

Regarding income levels of respondents (Table B4.1 in the Appendix B), the highest proportion of current daily smokers (68.2 percent) is among adults with average household income between 901 € and 1,200 € per month. The next highest proportion of current daily smokers is among adults with household incomes greater than 1,200 € per month (48.9 percent), while the other income groups have a relatively equal percentage of current daily smokers (around 45.0 percent).

4.1. USE OF VARIOUS SMOKED TOBACCO PRODUCTS

The majority of current smokers use "classic" tobacco smoking products (97.5 percent), while other tobacco products are scarcely used: electronic cigarettes (1.2 percent) and smokeless tobacco (0.3 percent). The use of heated tobacco products was not reported by any of the respondents.

Among current smokers of "classic" tobacco products, most smoke manufactured cigarettes (92.0 percent), 12.5 percent smoke hand-rolled cigarettes, and the prevalence for other categories is very low: 0.6 percent for waterpipe with tobacco and 0.1 percent for both pipes full of tobacco and cigars and cigarillos. Data are presented in Table B4.2 in Appendix B.

4.2. CIGARETTES SMOKED PER DAY

In order to reveal the smoking intensity, or number of cigarettes smoked per day, of current smokers, the average number of daily smoked cigarettes is divided into three categories:

fewer than 10 cigarettes, between 10 and 20 cigarettes, and more than 20 cigarettes smoked per day.

Figure 4.3. *More than half of male smokers and 34.7 percent of female smokers smoke more than 20 cigarettes daily (n=431)*
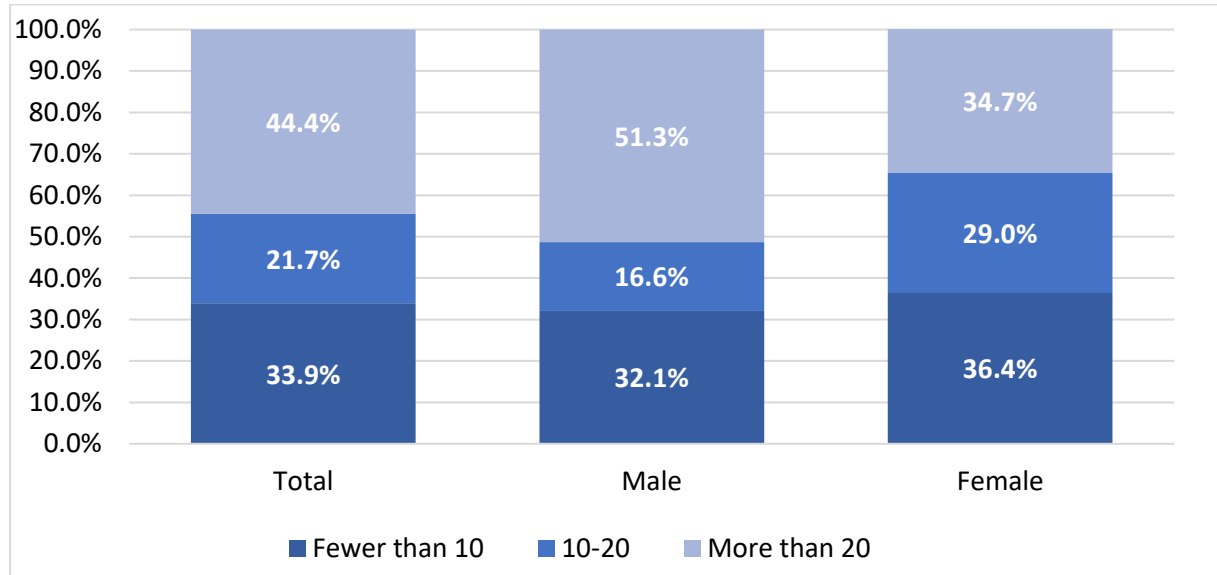
Source: Authors' calculations based on STC-SEE data for North Macedonia

As presented in Figure 4.3, most adult smokers (44.4 percent) smoke on average more than 20 cigarettes per day. This rate is relatively higher among male smokers than female (51.3 percent and 34.7 percent, respectively).

Figure 4.4. *After 45 years of age, the percentage of smokers with high (more than 20 cigarettes per day) smoking intensity declines (n=431)*
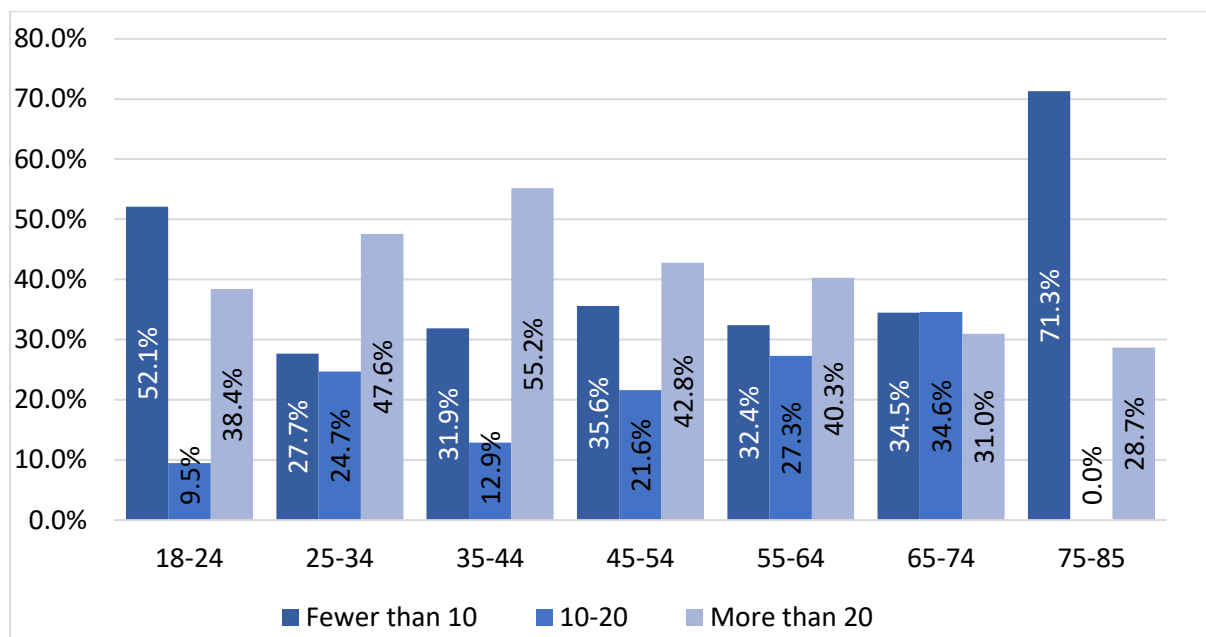
Source: Authors' calculations based on STC-SEE data for North Macedonia

Smokers in age groups 35–44 (55.2 percent) and 25–34 (47.6 percent) have the highest prevalence of smokers with high smoking intensity of more than 20 cigarettes smoked per day. Most smokers in the highest age group (75–85 years) have a relatively lower smoking intensity, with fewer than ten cigarettes for their daily average (71.3 percent). Data are presented in Figure 4.4, and more detailed data can be found in Table B4.4a in Appendix B.

The highest proportion of smokers with high smoking intensity are adults with a secondary level of education (59.2 percent). Adults with a higher level of education (46.3 percent) and those with monthly household income greater than 1,200 € (63.6 percent) have the highest proportion of smokers with low smoking intensity. Further details can be found in Table B4.4a in Appendix B.

In terms of smoking intensity, there are three profiles of average smokers in North Macedonia: heavy (more than 20 cigarettes per day), medium (between 10 and 20 cigarettes per day), and light smokers (fewer than 10 cigarettes per day). The largest percentage of heavy smokers is among men between 35–44 years of age, among adults living in a rural area, and among adults with a lower secondary education (Tables B4.4a to B4.4c).

In Appendix B, calculations for smoking intensity are presented for manufactured cigarettes (Table B4.4b) and hand-rolled cigarettes (Table B4.4c). The highest proportion of users of manufactured cigarettes are heavy smokers (43.0 percent), while the highest proportion of users of hand-rolled cigarettes are light smokers (56.4 percent).

It is interesting that the percentage of light smokers of both manufactured and hand-rolled cigarettes is very similar across all demographic and socioeconomic groups, except age groups. Female smokers of manufactured cigarettes aged 18–24 and female smokers of hand-rolled cigarettes between 35–44 years have the highest proportion of light smokers.

4.3. AGE AT INITIATION OF DAILY SMOKING

Around half of smokers (51.3 percent) began to smoke between 18 and 24 years of age (49.5 percent for men and 54.0 percent for women).

Figure 4.5. *Around half of ever daily smokers began to smoke when they were legally adults, between 18–24 years of age (n=486)*
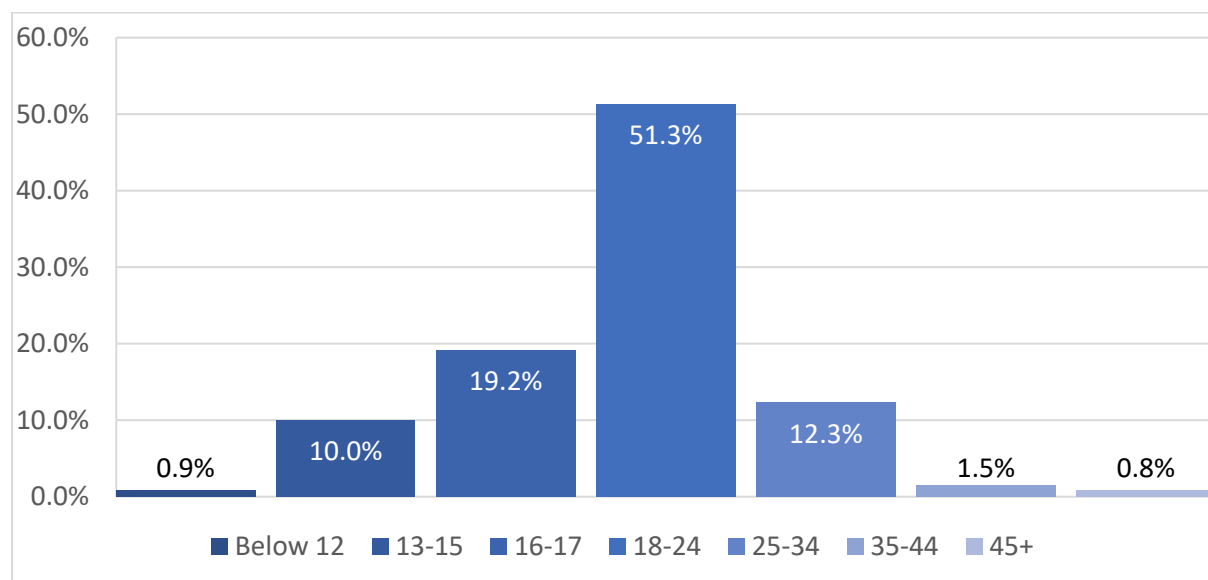
Source: Authors' calculations based on STC-SEE data for North Macedonia

The second highest percentage (19.2 percent) of ever daily smokers began smoking at 16 or 17 years. More men (11.6 percent) than women (7.6 percent) start smoking at a very young age (13–15 years), while young women are more likely than men to start smoking at age 25–34 (15.3 percent versus 10.3 percent, respectively) (Table B4.5 in Appendix B).

Data presented in Table B4.5 in Appendix B show that in almost all age groups of current smokers the most common time frame for smoking initiation is between the ages 18 and 24 years, followed by ages 16–17.

In rural areas, the percentage of smokers who began smoking between ages 18–24 is larger (56.9 percent) than in urban areas (47.1 percent). Regarding the education level of ever daily smokers, less educated respondents (with primary or less education) seem to start smoking younger, with 15.3 percent beginning at 13–15 years old and 23.1 percent at 16 or 17 years old.

Smokers who have a monthly household income greater than 1,200 € start smoking at younger ages, 16 or 17 years (63.0 percent). Smokers with a monthly household income of 901 € to 1,200 € have a significant share (79.1 percent) of smokers who start smoking between 18–24 years of age. Among ever daily smokers with lower household monthly income, the predominant age of smoking initiation is between 18–24 years, followed by ages 16 or 17. Detailed data are provided in Table B4.5 in Appendix B.

CHAPTER 5: CESSATION

One way to reduce the harms of tobacco use is to help smokers quit smoking as soon as possible. International experience shows that the quit rate (percent of ever smokers who quit smoking successfully) is higher if a range of programs and professional assistance are available to support smokers in the cessation process.

> ◎ *Key findings*
>
> 1. *Only 19.3 percent of all current smokers have tried to quit in the past 12 months, and the average period of smoking abstinence was 1.7 months. While the youngest smokers have the largest percentage of quit attempts, they also have the lowest average duration of abstinence. The opposite is true for older age groups.*
>
> 2. *The most common reasons for an attempt to quit smoking are increased knowledge of the harmful effects of smoking (36.0 percent), high cigarette prices (31.6 percent), and illness (25.8 percent).*
>
> 3. *The quit ratio (ratio of former smokers to ever smokers) is 18.1 percent.*

Out of all current smokers, 19.3 percent have tried to quit in the past 12 months. A larger percentage of male than female smokers have tried to quit smoking (20.8 and 17.1 percent, respectively). The youngest adult smokers (18–24 years old) have the highest rate of quit attempts (41.0 percent), followed by smokers aged 25 to 34 (32.1 percent). The percentage of quit attempts is lowest for smokers aged 45 to 54 (8.6 percent). While it is encouraging to see that the younger generations are keen on quitting smoking, they clearly need more support since their success rates are low.

Figure 5.1. *Quit attempts in the past 12 months were more common among men than women (n=486)*
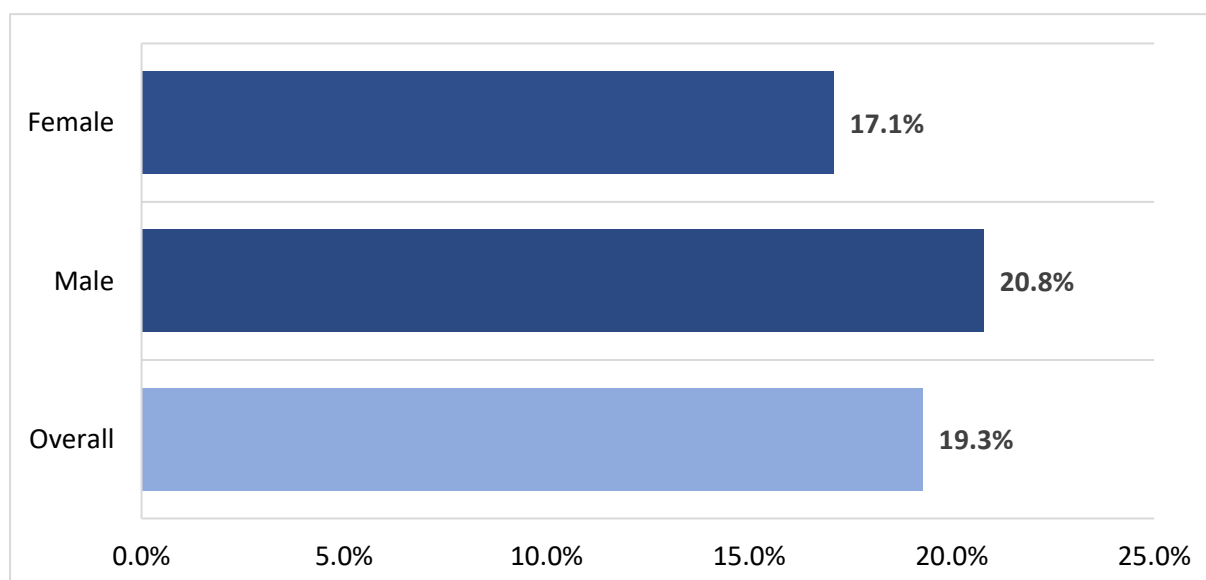
Source: Authors' calculations based on STC-SEE data for North Macedonia

Regarding the place of residence, a slightly higher percentage (21.0 percent) of smokers who attempted to quit live in a rural area compared to an urban area (18.0 percent). Smokers with an upper secondary education have the highest percentage of quit attempts (22.0 percent), as do smokers with monthly household income between 301 € to 600 €. Detailed data are available in Table B5.1 in Appendix B.

Figure 5.2. *Health and price are the main reasons for attempting to quit smoking (n=94)*
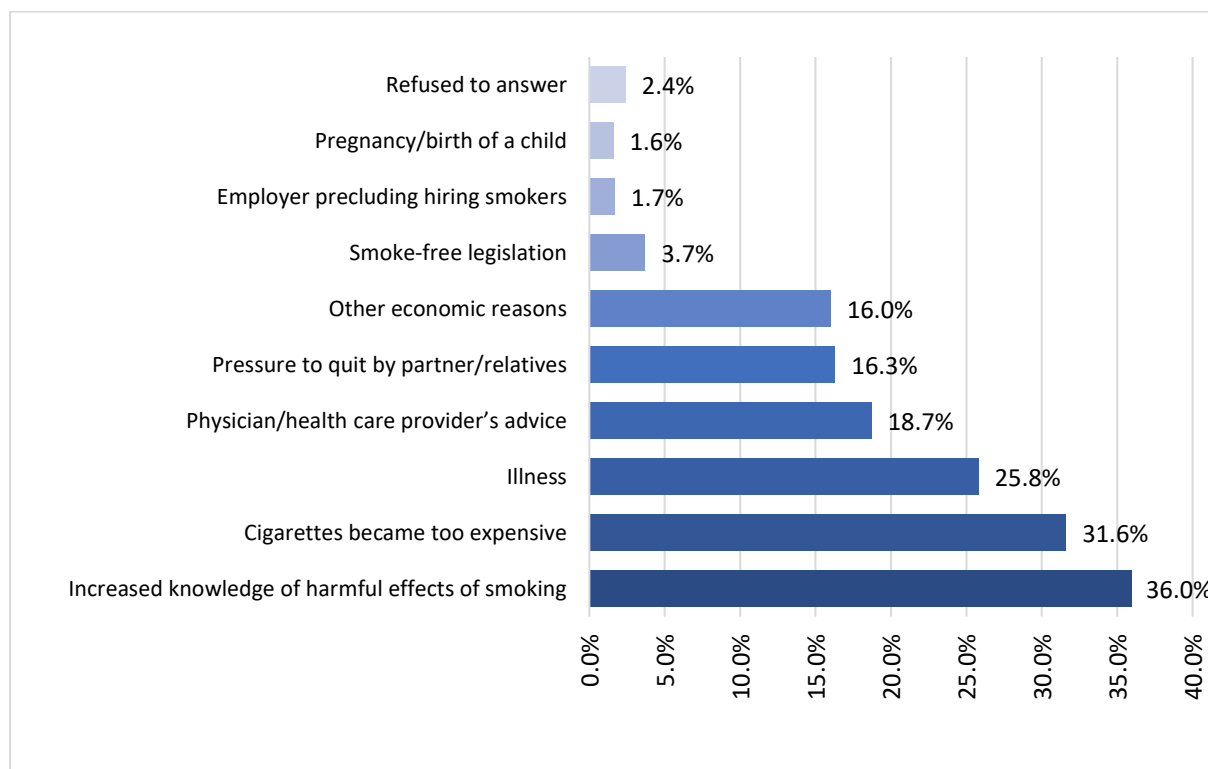
Source: Authors' calculations based on STC-SEE data for North Macedonia

As presented in Figure 5.2, the most common reasons for attempts to quit smoking in the past 12 months are increased knowledge of the harmful effects of smoking (36.0 percent), the high cost of cigarettes (31.6 percent), and illness (25.8 percent). There are other reasons; however, their rate of occurrence is significantly lower (see Table B5.2 in Appendix B for details).

Figure 5.3. The shortest duration of smoking abstinence (in months) is among the youngest smokers, while it is longest among adults aged 45–54 (n=94)
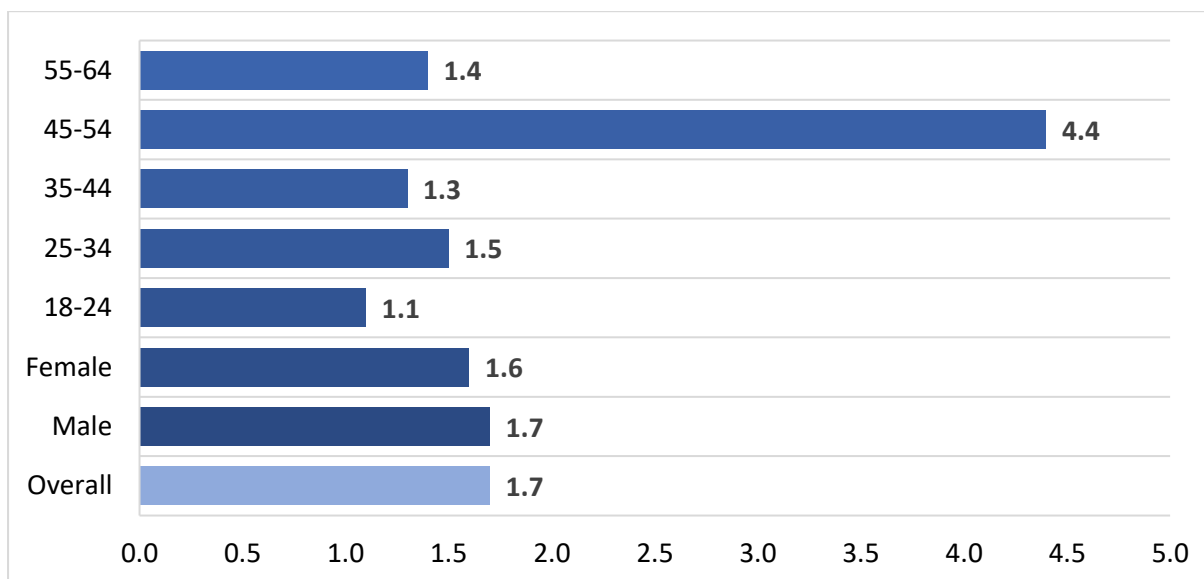
Source: Authors' calculations based on STC-SEE data for North Macedonia

The average period of smoking abstinence for quit attempts in past 12 months was 1.7 months (Figure 5.3), and the duration is very similar between men (1.7 months) and women (1.6 months). Regarding age, the shortest duration of smoking abstinence is among the youngest respondents (only 1.1 months), while it is longest in the group of respondents aged 45–54 (4.4 months). The type of residence does not make much difference in the duration of abstinence of the respondents - around 1.7 months among smokers in both urban and rural areas. The least-educated respondents have the shortest period of abstinence, one month. Respondents whose monthly household income is between 601–900 € and 301–600 € had average abstinence of 1.4 months for quit attempts (Table B5.3 in Appendix B). Slightly less than half (44.0 percent) of current smokers who tried to quit were not able to remain abstinent for longer than one month.

Figure 5.4. Almost half (44.0 percent) of current smokers were able to abstain from smoking for less than one month (n=94)
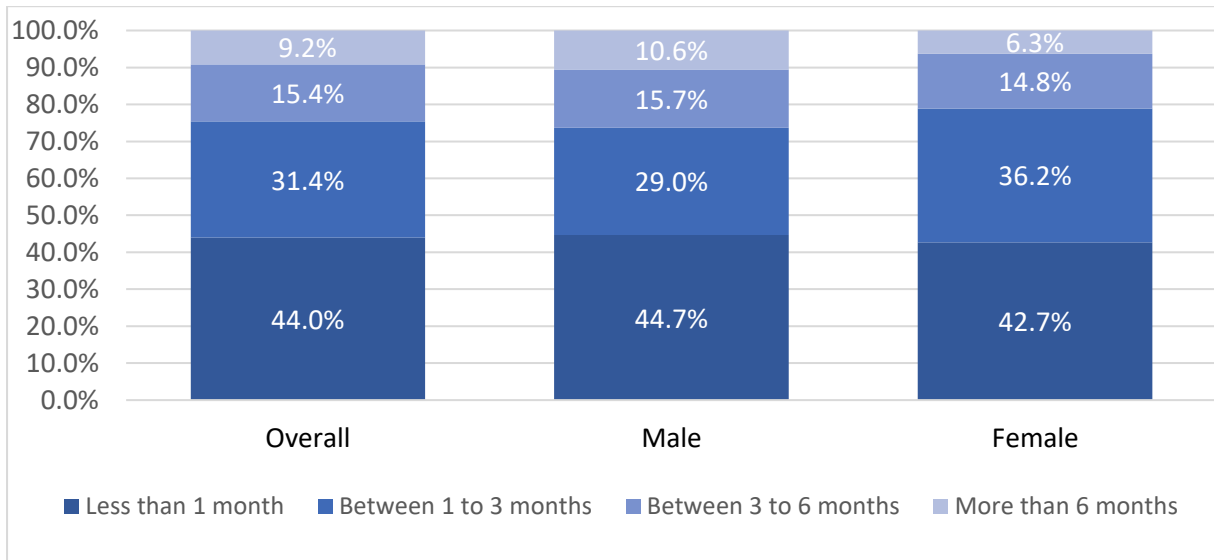
Source: Authors' calculations based on STC-SEE data for North Macedonia

About one third (31.4 percent) of smokers who tried to quit succeeded in maintaining abstinence for a duration of one to three months, with no significant difference between male and female smokers (Figure 5.4).

As presented in Figure 5.5, a significant share (57.6 percent) of respondents aged 45–54 remained abstinent for more than six months. Additionally, the percentage of respondents who maintained abstinence for three to six months is higher for older groups: 30.8 percent for ages 55–64 and 30.9 percent for ages 65–74.

Figure 5.5. More than half of smokers aged 45–54 abstained from smoking for more than six months (n=94)
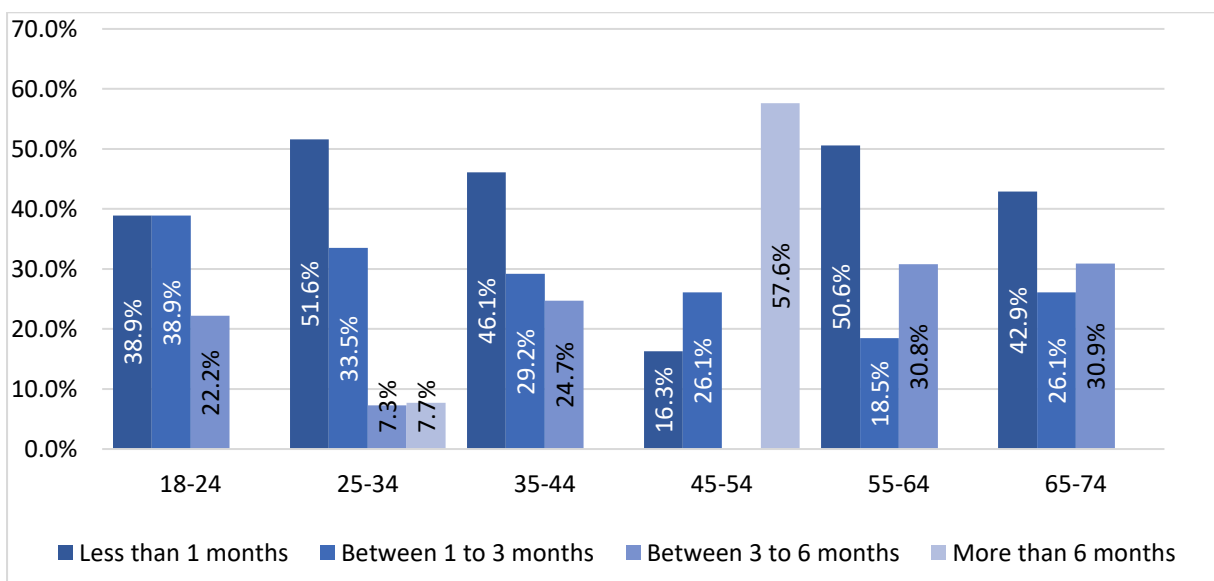
Source: Authors' calculations based on STC-SEE data for North Macedonia

When comparing urban and rural areas, quitting for less than one month is most common for both (43.2 percent for urban and 44.7 percent for rural). Urban areas have a larger proportion of smokers who remained abstinent for three to six months (24.3 percent) than rural areas (7.8 percent). Rural areas have more smokers who quit smoking for one to three months (38.4 percent) than those in urban areas (23.1 percent). Smokers with a lower secondary education have both the largest proportion of smokers who remained abstinent for the shortest period of less than one month (53.2 percent) and the largest proportion of smokers with the longest duration of abstinence of more than six months (16.0 percent) compared to the other education levels. Data are presented in Table B5.4 in Appendix B.

Figure 5.6. *As household income increases, the percentage of current smokers who quit smoking for less than one month increases (n=94)*
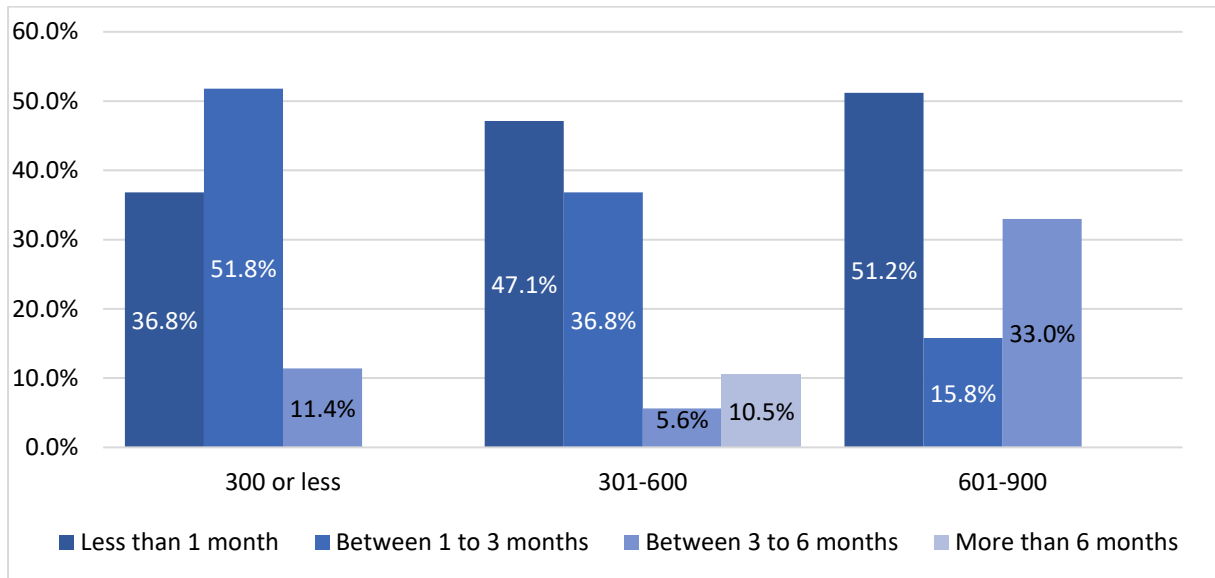
Source: Authors' calculations based on STC-SEE data for North Macedonia

Figure 5.6 shows that as household income increases, the percentage of current smokers who quit smoking for less than one month increases, while the percentage who quit smoking for one to three months decreases.

5.1. QUIT RATIO

The quit ratio across selected demographic characteristics is presented in Figure 5.7.

Figure 5.7. *Quit ratio increases with age (n=594)*
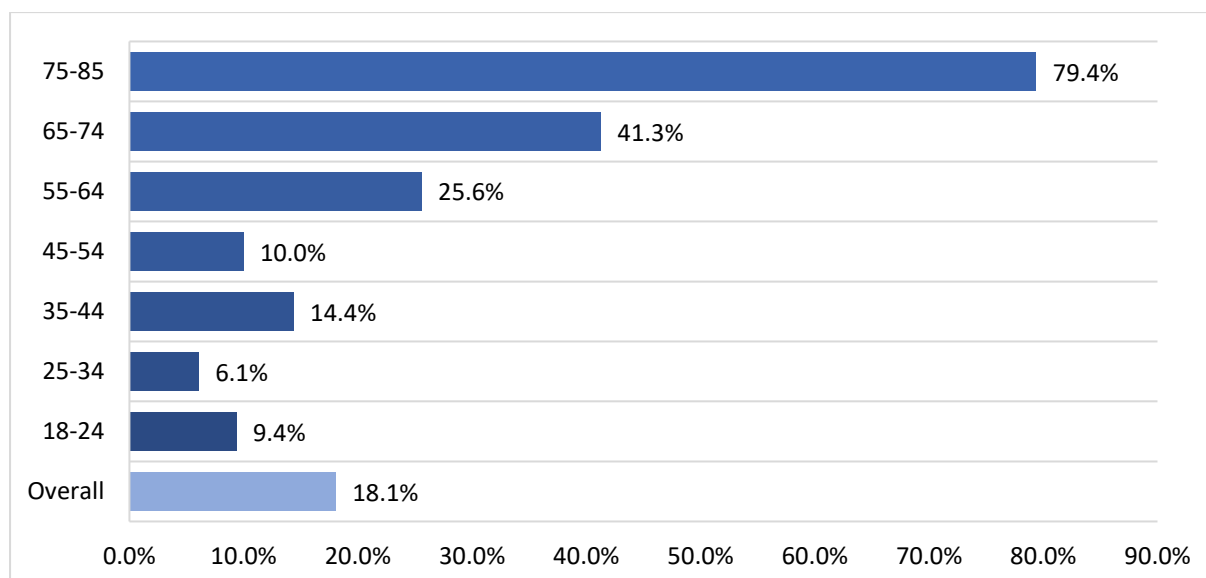
Source: Authors' calculations based on STC-SEE data for North Macedonia

Quit ratio is calculated according to this formula:

$$Quit\ ratio = \frac{Former\ daily + Former\ less\ than\ daily\ smokers}{Ever\ smokers}$$

where

$$Ever\ smokers = current\ daily + current\ less\ than\ daily + former\ daily + former\ less\ than\ daily\ smokers$$

The overall quit ratio is 18.1 percent. This ratio is larger for male smokers (20.0 percent) than female smokers (15.1 percent). Regarding age, the oldest group of respondents (75–85 years of age) has the highest quit ratio (79.4 percent), which may be related to the increased health-related risks with older age. The results suggest that as smokers get older the quit ratio increases (25.6 percent for ages 55–64 and 41.3 percent for ages 65–74). Smokers aged 45–54 have a very low quit ratio of ten percent. The lowest quit ratios are among the youngest age groups, 6.1 percent for ages 25–34 and 9.4 percent for ages 18–24. Smokers in urban areas have a higher quit ratio (20.5 percent) than rural areas (14.6 percent). There are no significant differences in quit ratio when it comes to education levels. Regarding household income, it seems that people with lower incomes have a higher quit ratio (around 19 percent). As household income increases, the quit ratio decreases (5.4 percent for smokers whose monthly household income is more than 1,200 €). Detailed data are presented in Table B5.5 in Appendix B.

5.2. SMOKING INTENSITY

Analyzing smoking intensity as presented in Figure 5.8, most current smokers smoked about the same number of cigarettes in the past as they do today (60.3 percent for manufactured cigarettes and 72.5 percent for hand-rolled cigarettes).

Figure 5.8. Most current smokers of manufactured and hand-rolled cigarettes smoke about the same amount now as they did in the past (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)
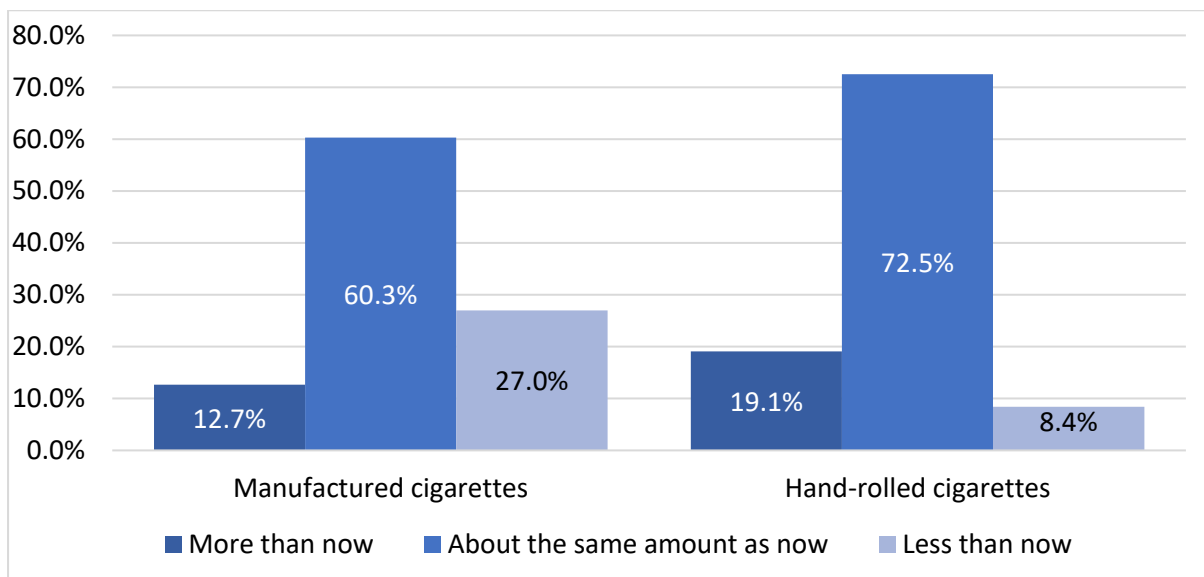
Source: Authors' calculations based on STC-SEE data for North Macedonia

Among smokers of manufactured cigarettes, a significant proportion of the oldest age group smoke less now than in the past (78.4 percent for ages 75–85), while smokers aged 35–44 and 45–54 have intensified their smoking (30.2 percent and 36.0 percent, respectively), smoking more now than in the past. Smokers whose household monthly income is between 900 and 1,200 € have also increased their smoking intensity of manufactured cigarettes, with 45.0 percent smoking more today than in the past.

Among current smokers of hand-rolled cigarettes, a larger percentage of females smoke less today than males (27.5 percent and 11.5 percent, respectively). Younger and middle-aged current smokers of hand-rolled cigarettes are more likely to smoke less today than in the past (54.6 percent for ages 25–34, 28.5 percent for 35–44, and 24.8 percent for 45–54). Detailed representation of the analysis is presented in Table B5.6 in Appendix B.

Among current manufactured cigarette smokers who smoke less today, health reasons are cited as the primary impetus for smoking reduction (67.7 percent). Price increases is also a significant factor for these smokers to reduce smoking (20.1 percent). Adoption of tobacco control policies is the least motivating factor for smoking reduction (12.2 percent).

The situation is different among users of hand-rolled cigarettes, where the main reason for smoking reduction is price increases (68.7 percent). The second most common motivating factor is health reasons, cited by 31.3 percent. Not one respondent pointed out the adoption of tobacco control policies as a reason for smoking reduction. These data are presented in Table B5.7 in Appendix B.

CHAPTER 6: SECONDHAND SMOKE

Secondhand smoke (SHS) is smoke that comes from the burning of tobacco products as well as the smoke being exhaled by smokers. SHS contains all the same harmful chemicals that smokers breathe into their bodies and is dangerous to the health of people around smokers, regardless of whether they are smokers themselves.

⊙ *Key findings*

1. *Less than half of non-smokers (42.9 percent) do not allow smoking inside their homes, and 28.3 percent only allow smoking outside or on the terrace.*

2. *Approximately one-third of smokers (35.2 percent) are allowed to smoke only on the terrace or outside.*

3. *Two in five smokers (41.8 percent) have been told many times that their smoking bothers others, while 37.8 percent heard similar complaints a few times.*

6.1. EXPOSURE TO SHS AT HOME

Analyzing attitudes towards smoking at home reveals that there is a remarkable difference between smoking policies at home for smokers versus non-smokers. Regarding smoking restrictions in the home environment, 42.9 percent of non-smokers and only 11.9 percent of smokers stated that they do not allow smoking in their homes (Figure 6.1 and Table B6.1 in Appendix B). In addition, 35.2 percent of smokers and 28.3 percent of non-smokers only allow smoking outside.

Figure 6.1. *More than one-third of current smokers are allowed to smoke only outside or on the terrace when at home (n=1,006)*
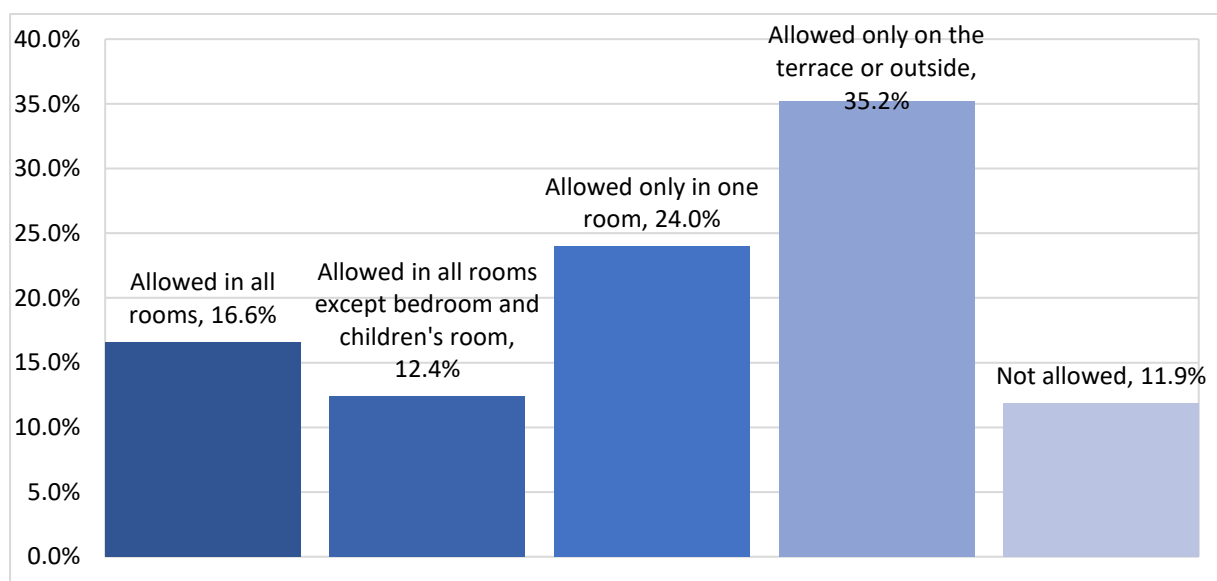
Source: Authors' calculations based on STC-SEE data for North Macedonia

While only 42.9 percent of non-smokers do not allow smoking inside their homes, 72.2 percent claim that they are not exposed to cigarette smoke at home (Table B6.2 in Appendix B). This suggests that a large percent of adults in North Macedonia are not aware of the negative health impacts of smoking. Non-smokers are still exposed to cigarette smoke if they allow smoking only outside or on the balcony, and they are especially exposed if they allow smoking inside their homes, even if the smoking is limited to one room.

6.2. EXPOSURE TO SHS IN PUBLIC PLACES

According to the Law on Protection from Smoking in North Macedonia, smoking is prohibited in all public places such as educational facilities (kindergartens, schools, and universities); health care facilities and social institutions; closed and open areas for sports and games; cultural events and gatherings; public transportation; places for food production, food preparation, and places for serving, selling, or consuming food; rooms for meetings and gatherings; other rooms (halls, offices, waiting rooms, and corridors); government institutions and local governance institutions; and common areas in apartment buildings. Smoking in these facilities is only allowed in specially designated areas, if possible, and a "No Smoking" sign is to be posted in all other non-smoking areas.

A general ban on smoking in public places, including restaurants and bars, came into effect in North Macedonia on January 1, 2010.[25] However, in 2018 the government amended the Law and eased the all-out smoking ban, permitting smoking in designated smoking areas and open air terraces.[26] The move was actually welcomed by the vast majority of smokers and the HoReCa (Hotel Restaurant Café) establishments.[27]

The law is, however, not enforced, as there is significant exposure to tobacco smoke in bars and nightclubs, as well as in restaurants. Visitors to other public places are also not spared from tobacco smoke exposure (Figure 6.2 and Table B6.3 in Appendix B).

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[25] Law on Protection from Smoking (Official Gazette 36/1995, 70/03, 29/04, 37/05, 6/07, 103/08, 140/08, 35/10, 100/11, 157/13 and 51/18)

[26] https://www.slobodenpecat.mk/makedonija/ne-se-trga-zabranata-tuku-se-dozvoluva-pushenevo-najlon-terasite/

[27] http://www.ohridnet.com/vesti/makedonija/11084-ugostitelite-baraat-izmeni-vo-zakonotprotiv-Pushenje

Figure 6.2. *The highest exposure to SHS is in bars or nightclubs and restaurants (n=1,006)*
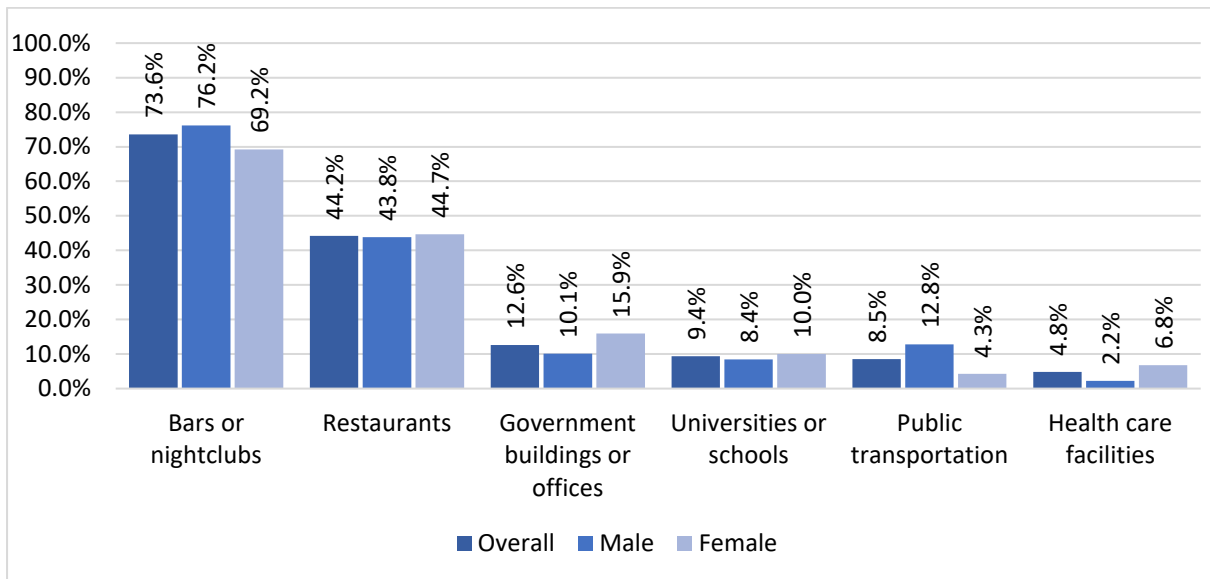
Source: Authors' calculations based on STC-SEE data for North Macedonia

Most adults in North Macedonia are exposed to tobacco smoke mainly in bars or nightclubs (73.6 percent) and restaurants (44.2 percent). Other public places have lower rates of exposure (12.6 percent for government buildings, 9.4 percent for universities and schools, 8.5 percent for public transportation, and 4.8 percent for health care facilities).

There is no significant difference between male and female adults when it comes to sites of SHS exposure (Figure 6.2).

According to age, young adults are mostly exposed to tobacco smoke in bars or nightclubs (83.8 percent). Older adults aged 55–64 and 65–74 also report being exposed to SHS in bars and nightclubs (81.1 percent and 88.1 percent, respectively). There is a similar exposure by age group at restaurants as well, where young people and older groups are exposed to smoke; however, the percentage is lower than in bars and nightclubs.

Figure 6.3. *Among all age groups the highest exposure to SHS is in bars or nightclubs and restaurants (n=1,006)*
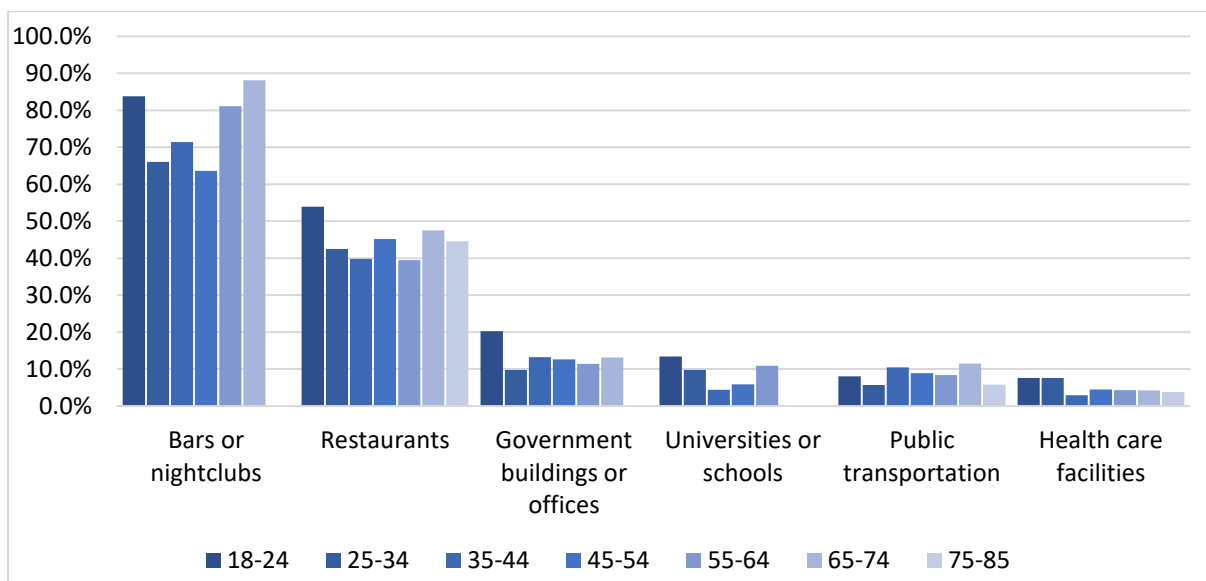
Source: Authors' calculations based on STC-SEE data for North Macedonia

Younger adults (18 to 24 years old) are relatively more than other age groups exposed to smoke in government buildings and offices (20.2 percent) and in universities and schools (13.4 percent).

All age groups are similarly exposed to tobacco smoke on public transportation (Figure 6.3 and Table B6.3 in Appendix B), while at health care facilities younger groups from 18–35 years of age are more exposed compared to other age groups.

Figure 6.4. *There is no significant difference between urban and rural areas in terms of exposure to SHS (n=1,006)*
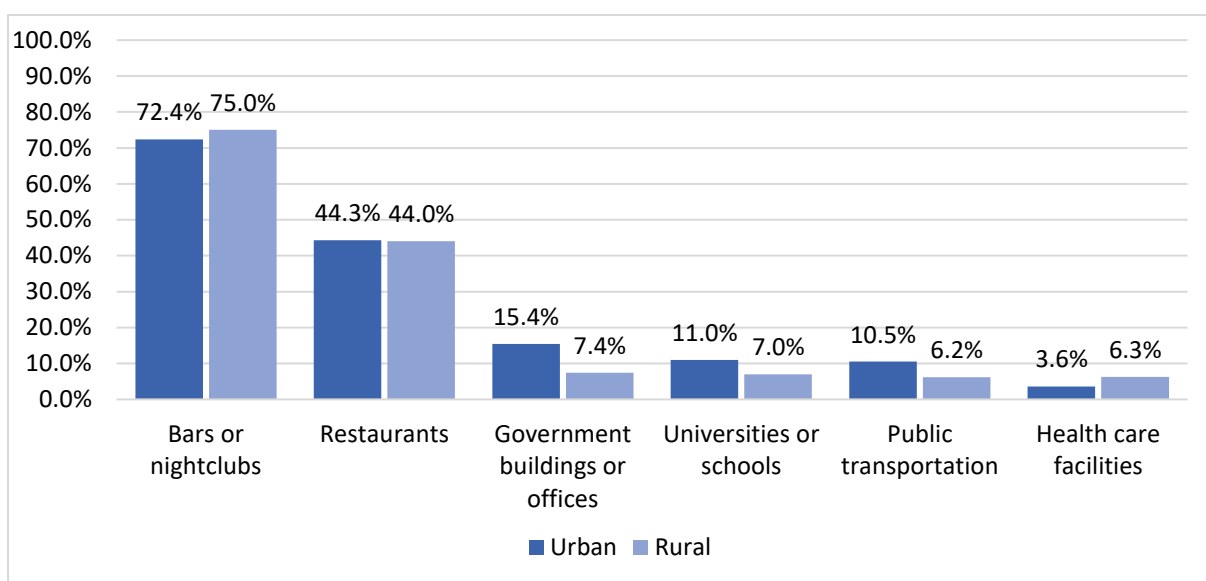
Source: Authors' calculations based on STC-SEE data for North Macedonia

Exposure to SHS in bars and restaurants is almost equal in both urban and rural areas (Figure 6.4 and Table B6.3 in Appendix B). On the other hand, exposure to tobacco smoke in government buildings, universities and schools, and public transportation is more common in urban areas than in rural areas. In contrast, exposure to SHS in health care facilities is greater in rural than in urban areas.

Figure 6.5. *There is no significant difference between smokers with different levels of education for exposure to SHS (n=1,006)*
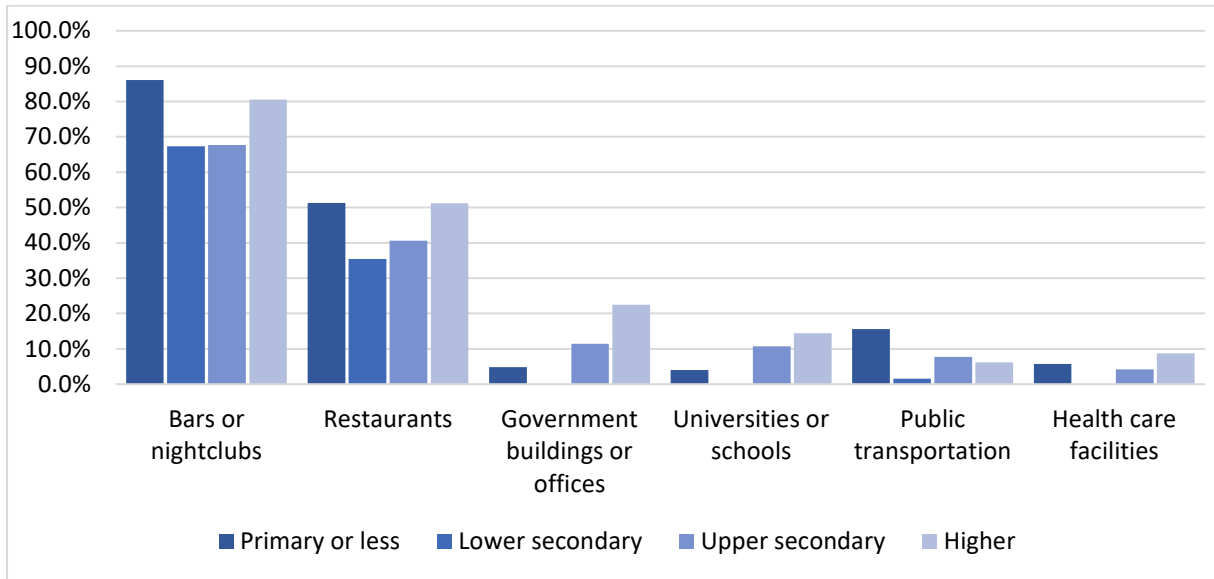
Source: Authors' calculations based on STC-SEE data for North Macedonia

The majority of adults who report exposure to tobacco smoke in bars or nightclubs and restaurants are at the lowest or highest extremes of education levels, with either a primary or less education level or higher education. Adults with a higher level of education also report high exposure to SHS in government buildings, universities, and health care facilities, while adults with primary or less education level have high exposure in public transportation (Figure 6.5 and Table B6.3 in Appendix B).

Figure 6.6. *There is no significant difference between smokers with different levels of household income in terms of exposure to SHS (n=1,006)*
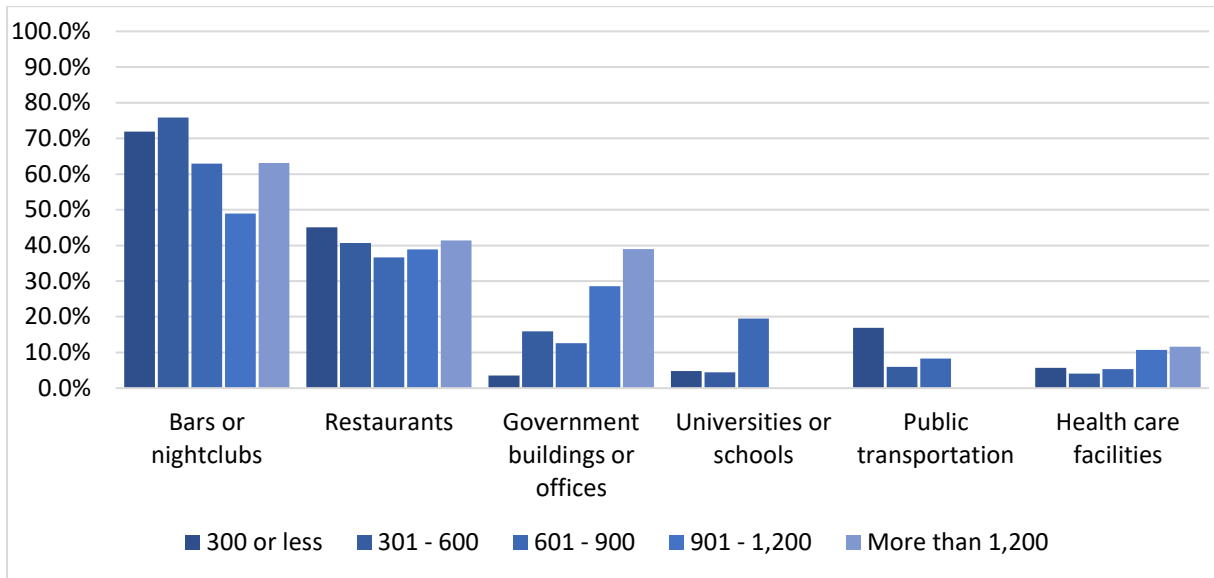
Source: Authors' calculations based on STC-SEE data for North Macedonia

While there is no significant difference between adults across income groups in terms of exposure in different public places, adults in highest income groups are relatively more exposed to SHS in government buildings or offices and universities or schools, while the lower income groups are more likely to be exposed to SHS on public transportation (Figure 6.6 and Table B6.3 in Appendix B).

Most smokers (79.6 percent) have been told at least a few times that their smoking bothers other people, while 12.7 percent have never heard any such complaint (Figure 6.7 and Table B6.4 in Appendix B).

Figure 6.7. *Almost 97 percent of smokers have been told at least once that their smoking bothers other people (n=486)*
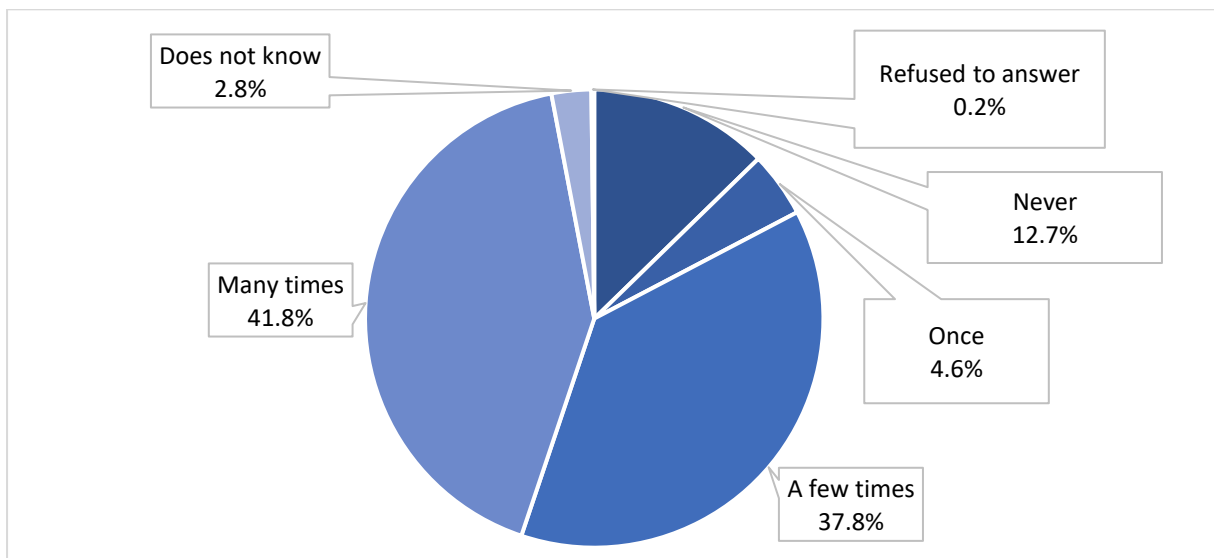
Source: Authors' calculations based on STC-SEE data for North Macedonia

CHAPTER 7: ECONOMICS OF TOBACCO USE

This chapter focuses on the economic aspects of tobacco use among adults in North Macedonia. The most effective measure to reduce tobacco use is increasing prices of tobacco products through higher tobacco taxes.

🎯 *Key findings*

1. *Manufactured cigarettes are twice as expensive as hand-rolled cigarettes (1.7 € versus 0.9 € for 20 cigarettes, respectively).*

2. *Smokers of manufactured cigarettes spend, on average, 30.7 € per month, while they spend 13.3 € per month on hand-rolled cigarettes.*

3. *An average smoker smokes 382.0 manufactured cigarettes or 308.8 hand-rolled cigarettes per month.*

Taxation of tobacco products in North Macedonia includes VAT and excise taxes. According to the North Macedonia Customs Administration, retail price is the individual price set by the manufacturer or importer as a trading price per piece for cigars, cigarillos, and cigarettes, and per kilogram for smoking tobacco. VAT and excise tax are added to the retail price.

The excise tax on cigars and cigarillos in North Macedonia is 21.37 MKD (0.34 €) per piece. For cigarettes, the excise tax is 1.353 MKD (0.02 €) per piece and 9.0 percent of the retail price. The excise tax on smoking tobacco as fine-cut tobacco is 1,500 MKD (24.2 €) per piece. Beginning July 1, 2014 and continuing until 2023, the rates of the excise tax on smoking tobacco as fine-cut tobacco are to be increased by 50 MKD (0.8 €) per kilogram annually on July 1. The excise tax on smoking tobacco as other tobacco is 1,350 MKD (21.8 €) per piece.[28,29]

7.1. AVERAGE AMOUNT SPENT ON MANUFACTURED AND HAND-ROLLED CIGARETTES

The price of cigarettes is very important. As this research shows, most current smokers in North Macedonia use manufactured cigarettes, and a smaller number use hand-rolled tobacco.

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[28] Ad valorem rate on cigars, cigarillos, smoking tobacco and fine-cut tobacco is currently zero percent of the retail price.
[29] http://www.customs.gov.mk/index.php/en/biznis-zaednica-mk-2/akcizi/tutunski-dobra

Figure 7.1. *A pack of 20 manufactured cigarettes is twice as expensive as 20 hand-rolled cigarettes (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)*
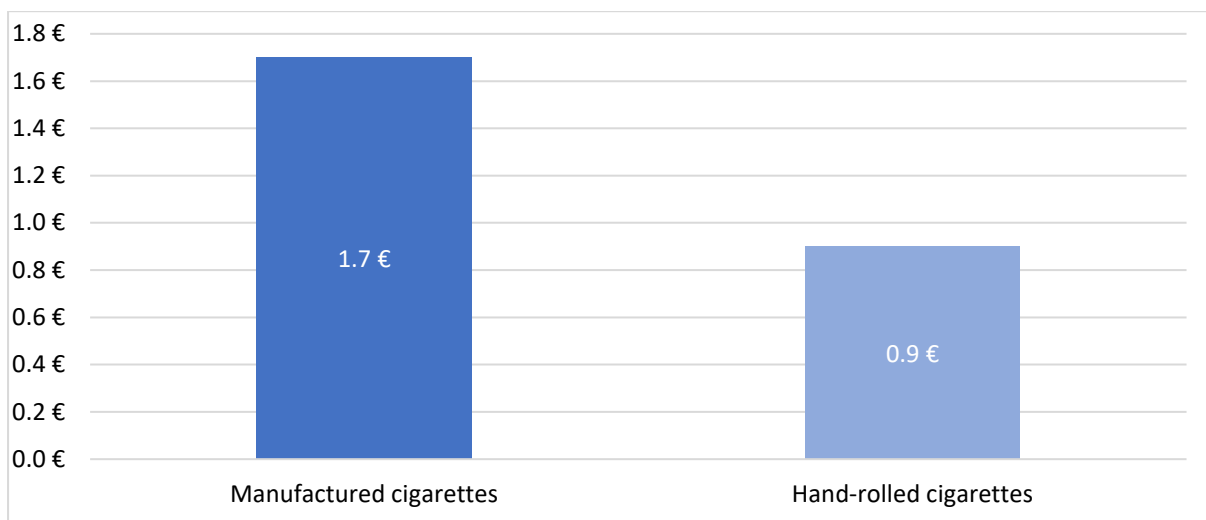
Source: Authors' calculations based on STC-SEE data for North Macedonia

As presented in Figure 7.1, manufactured cigarettes are twice as expensive as hand-rolled cigarettes at 1.7 € (105.4 MKD) and 0.9 € (55.8 MKD) for 20 cigarette sticks, respectively (Tables B7.1a and B7.1b in Appendix B).

7.2. MONTHLY COSTS FOR MANUFACTURED AND HAND-ROLLED CIGARETTES

Figure 7.2. *Men spend relatively more money, on average, on both manufactured and hand-rolled cigarettes than women (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)*
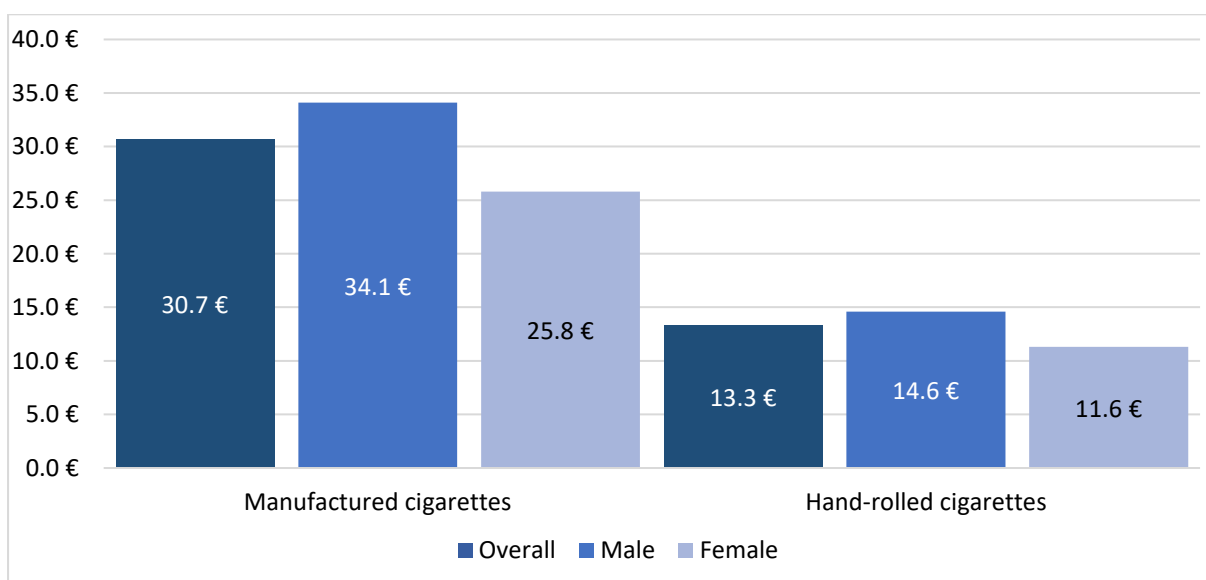
Source: Authors' calculations based on STC-SEE data for North Macedonia

Figure 7.2 compares monthly expenses for both types of cigarettes, in total and by gender. On average, smokers pay 30.7 € monthly for manufactured cigarettes, while they spend less

than half of this amount (13.3 €) on hand-rolled cigarettes. When it comes to gender, men spend more money monthly on average on both manufactured cigarettes (34.1 €) and hand-rolled cigarettes (14.6 €) than women, who spend 25.8 € on manufactured cigarettes and 11.6 € on hand-rolled cigarettes (Table B7.2 in Appendix B).

Figure 7.3. Average monthly spending on cigarettes increases as smokers age, reaching its peak at 45–54 years (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)
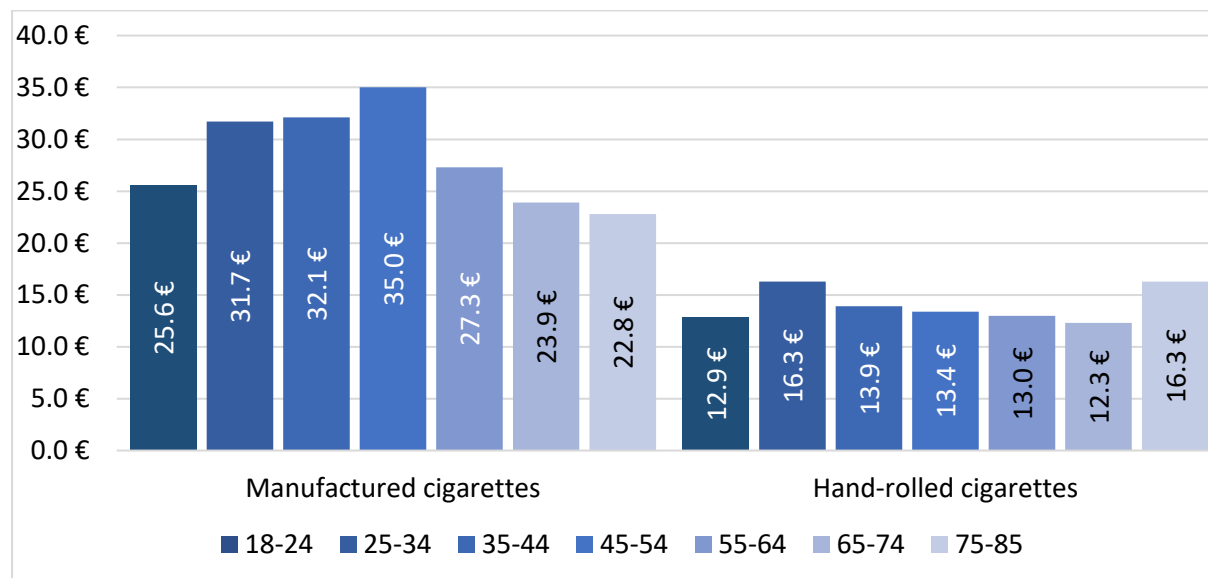
Source: Authors' calculations based on STC-SEE data for North Macedonia

Figure 7.3 provides insight into which age group spends the most on the two different types of cigarettes. Smokers aged 45–54 spend the most on manufactured cigarettes compared to the other age categories. The distribution is as follows: the youngest adult smokers (18–24 years of age) spend 25.6 € per month on manufactured cigarettes. The spending increases as smokers age, reaching its peak at 45–54 years, after which their spending is reduced as they continue to age. The distribution is different for hand-rolled cigarettes. Smokers in the age groups of 25–34 and 75–85 years spend the most on hand-rolled cigarettes (16.3 €), which may be related to financial reasons, especially for older retired smokers with low income (Table B7.2 in Appendix B).

According to the place of residence, smokers living in rural areas spend more monthly on manufactured cigarettes (36.8 €) than those in urban areas (26.1 €). The difference is smaller with hand-rolled cigarettes where the monthly expenditure in urban areas is 13.9 €, while in rural areas it is 12.7 €. Smokers with a lower secondary education have the highest average monthly expenditure on manufactured cigarettes, at 34.1 €, whereas smokers with a primary or less education level spend the most on hand-rolled cigarettes, 15.9 € per month on average (Table B7.2 in Appendix B).

To understand the relationship between income levels and monthly expenditure on cigarettes, Figure 7.4 (Table B7.2 in Appendix B) presents the relevant data. Respondents with a monthly household income between 901 € and 1200 € spend 45.5 € monthly on manufactured cigarettes, while respondents with household monthly incomes of 300 € or less spend a little over half that amount, or 25.3 € per month on average on manufactured

cigarettes. Monthly spending on hand-rolled cigarettes is lower than for manufactured cigarettes, but respondents with household monthly incomes between 601 € and 900 € spend more on hand-rolled cigarettes than the other income groups, at 17.1 €.

Figure 7.4. Average monthly spending for hand-rolled cigarettes is relatively lower than for manufactured cigarettes, but respondents with household monthly incomes between 601 € and 900 € spend more on hand-rolled cigarettes than the other income groups (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)
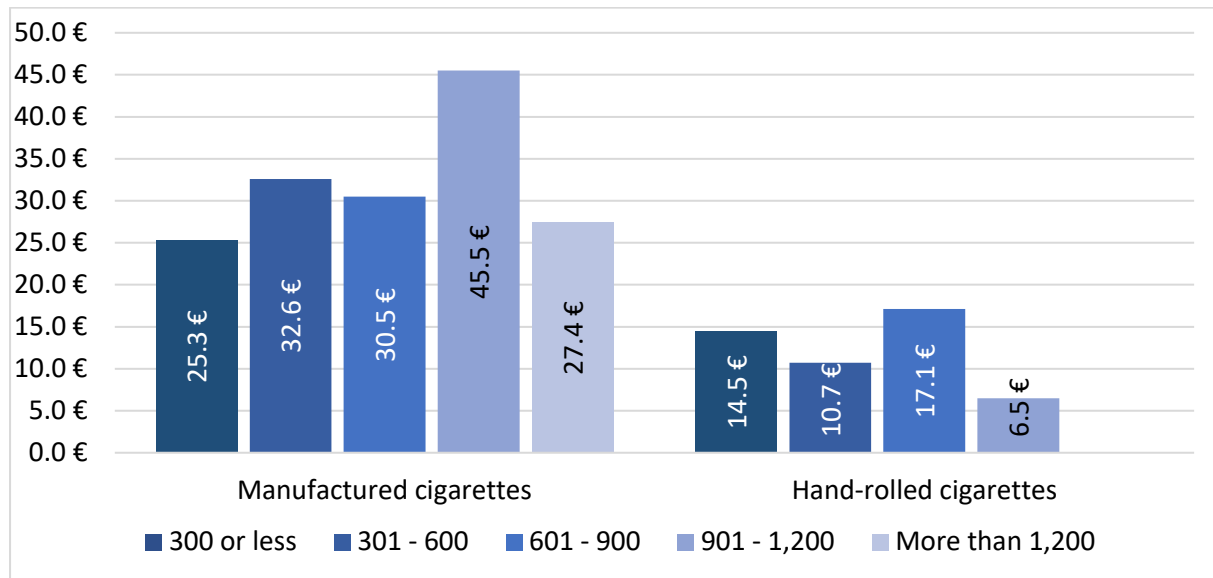
Source: Authors' calculations based on STC-SEE data for North Macedonia

These findings can contribute to the assumption that, as hand-rolled cigarettes are cheaper they may be the preferable option for smokers with lower income.

In addition to the average monthly costs for the two types of cigarettes, the average number of cigarettes smoked monthly is also part of the analysis. Figure 7.5 (Table B7.2 in Appendix B) presents the average number of cigarettes smoked per month, by cigarette type and by gender. It is interesting to note that, even though monthly expenses between manufactured and hand-rolled cigarettes are quite different, the difference between the number of cigarettes smoked is much smaller.

Figure 7.5. There is no significant difference between males and females in terms of the average number of cigarettes smoked per month (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)
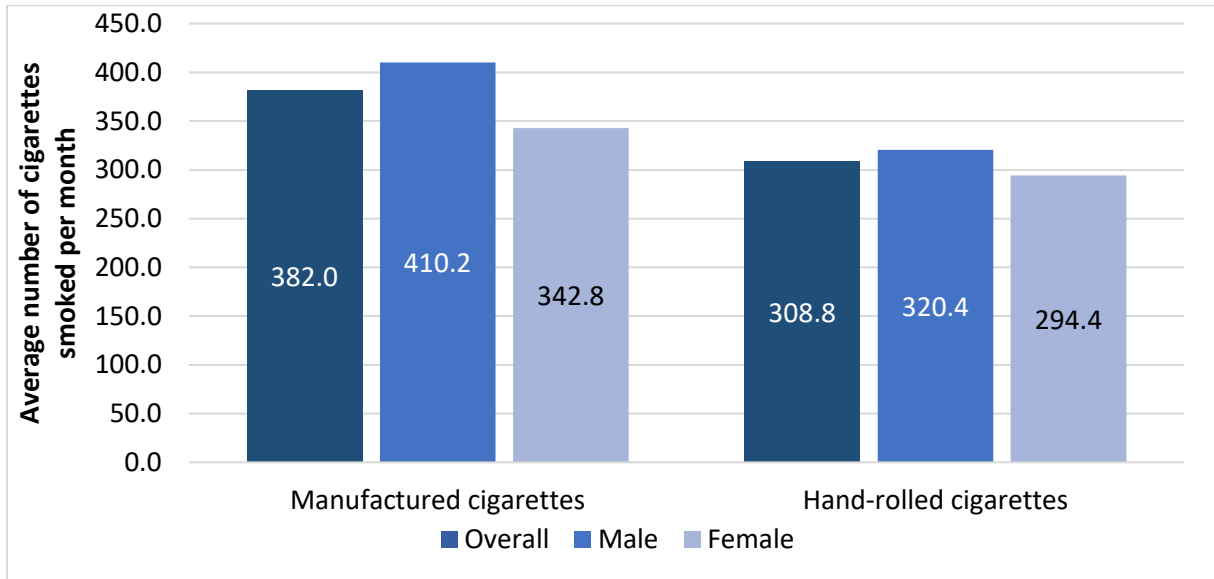
Source: Authors' calculations based on STC-SEE data for North Macedonia

In total, the average smoker of manufactured cigarettes in North Macedonia smokes, on average, 382.0 cigarettes per month, while a hand-rolled cigarette smoker smokes 308.8 cigarettes monthly. Men smoke 67.4 manufactured cigarettes more than women per month (or 2.2 cigarettes more per day). It is the same with hand-rolled cigarettes, where men smoke 26 more cigarettes than women per month, or 0.9 more cigarettes per day.

Figure 7.6. While there is no significant difference between age groups in terms of the average number of manufactured cigarettes smoked per month, smoking intensity of hand-rolled cigarettes is highest among smokers 25–34 years of age and the oldest smokers (n=448 for manufactured cigarettes, n=61 for hand-rolled cigarettes)
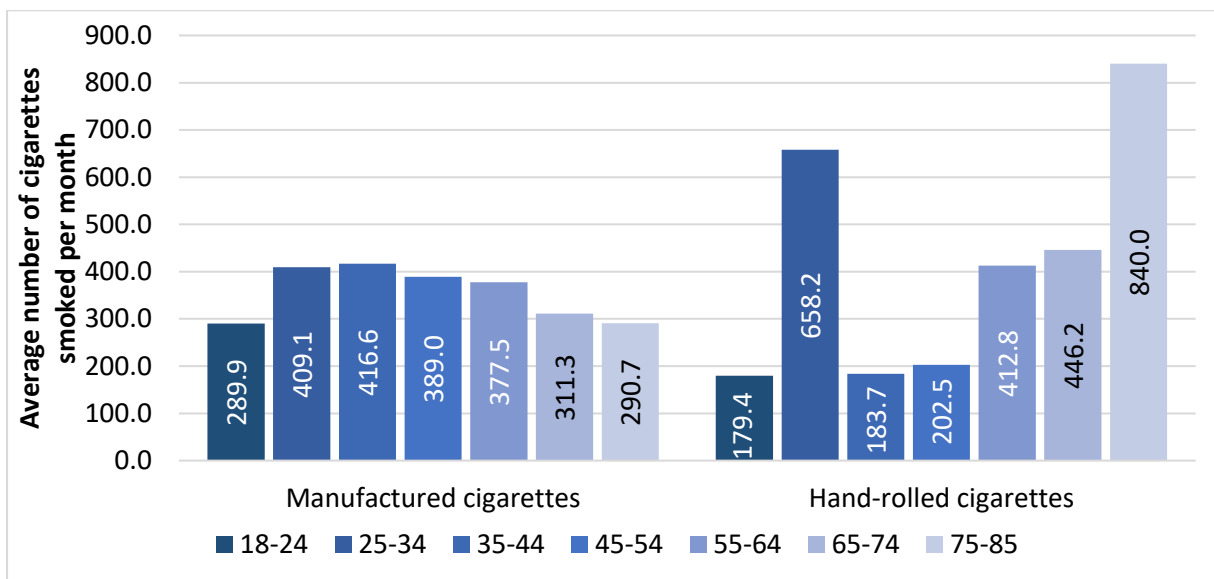
Source: Authors' calculations based on STC-SEE data for North Macedonia

According to age, the distribution of number of manufactured cigarettes smoked monthly is similar to the one for their expenses. Respondents aged 35–44 smoke more than other groups, at 416.6 cigarettes per month (or 13.9 cigarettes per day). After this, smoking intensity decreases as respondents get older.

The situation is different with hand-rolled cigarettes. Respondents aged 25–34 and the oldest respondents, aged 75–85, report the highest smoking intensity, smoking 658.2 cigarettes (21.9 cigarettes per day) and 840.0 cigarettes (28.0 cigarettes per day) per month on average, respectively. These were also the two age categories with the highest monthly expenses for hand-rolled cigarettes. Smokers in these age groups are heavy smokers of hand-rolled cigarettes, with much higher intensity than those who smoke manufactured cigarettes (Figure 7.6 and Table B7.2 in Appendix B).

Manufactured cigarettes are consumed at higher levels in rural areas (464.4 per month) than in urban areas (320.6 per month). Hand-rolled cigarettes are consumed almost equally in both urban (313.3 per month) and rural areas (304.0 per month). As a smoker's level of education increases, the number of manufactured cigarettes smoked per month decreases (from 425.1 to 325.1). Respondents with a primary or less education level smoke more hand-rolled cigarettes than other education categories (451.3 per month).

7.3. MOST-SMOKED CIGARETTE BRANDS AND PLACES OF PURCHASE

The most popular brand of manufactured cigarettes in North Macedonia is Rodeo, which is preferred by 26.3 percent of current smokers of manufactured cigarettes. It is also the cheapest brand in the market (1.40 €, or 85 MKD). It is interesting that Marlboro comes third, since it is one of the most expensive brands (priced between 1.90 € or 120 MKD and 2.40 € or 150 MKD). The data regarding brand preferences are presented in Figure 7.7 and Table B7.3 in Appendix B.

Figure 7.7. *Most smokers of manufactured cigarettes smoke Rodeo brand (n=448)*

Brand	Percentage
Classic	0.2%
Karelia	0.3%
OME	0.4%
Oriental	0.8%
Brand	0.9%
Camel	0.9%
Monte Carlo	1.2%
Other	1.3%
Davidoff	1.8%
LD	2.0%
Bond Street	2.4%
Lucky Strike	3.0%
Pall Mall	4.4%
Jade	4.5%
Chesterfield	6.6%
Boss	6.6%
Winston	6.7%
West	7.8%
Marlboro	8.2%
Rothmans	13.7%
Rodeo	26.3%
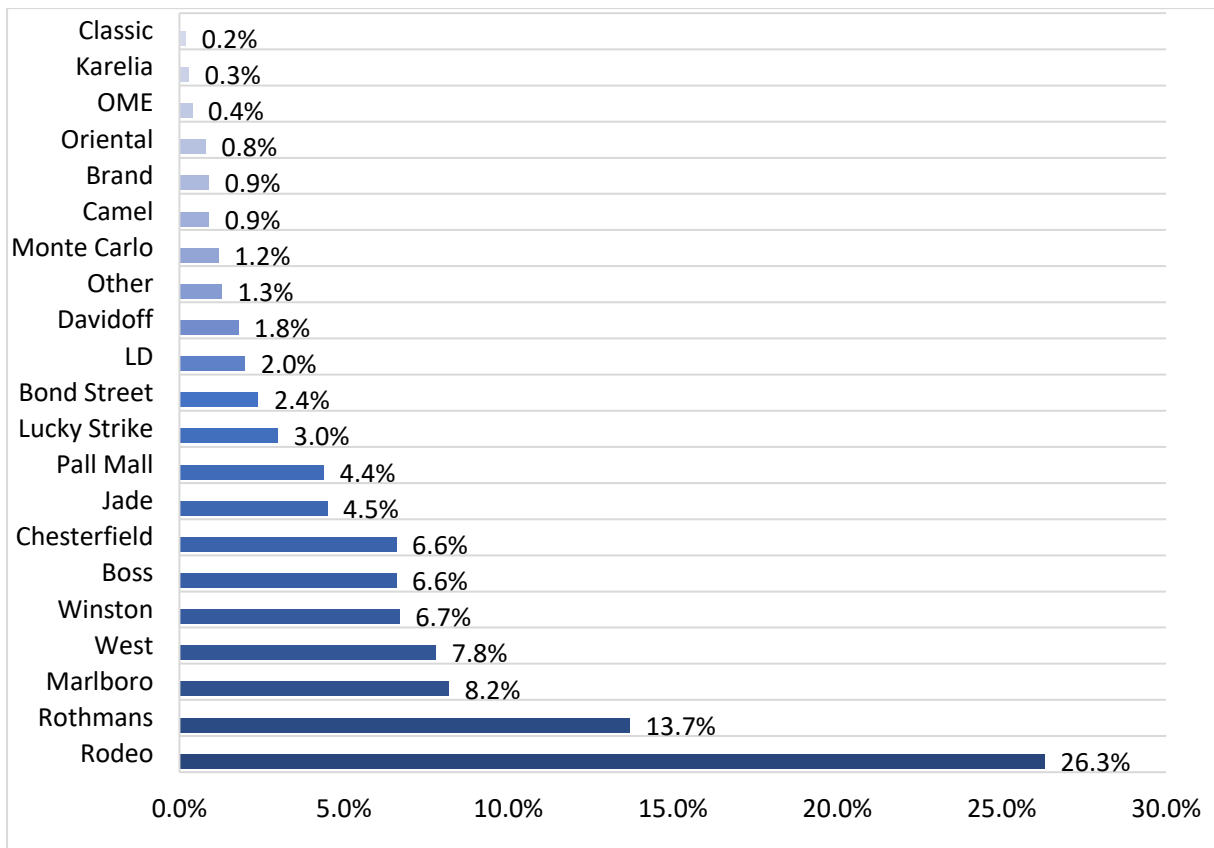
Source: Authors' calculations based on STC-SEE data for North Macedonia

CHAPTER 8: ATTITUDES, PERCEPTIONS, AND MEDIA

Smoking tobacco is a major risk factor for several diseases causing premature death and chronic illness, such as cancer and diseases of the lungs and the cardiovascular system. Smokers and non-smokers alike often do not fully comprehend the harms caused by smoking and exposure to SHS. It is essential to increase public awareness of the harms caused by smoking and to gather public support for tobacco control measures. This chapter describes survey findings on the knowledge and beliefs among adults in North Macedonia about the harms of smoking and SHS as well as measures for reducing tobacco consumption.

🎯 *Key findings*

1. *More than half of adults (58.1 percent) consider making smoking or sales of tobacco products illegal to be a useful strategy to reduce tobacco consumption.*

2. *Most adults consider cigarettes to be expensive (44.8 percent) or very expensive (38.2 percent).*

3. *With legislation prohibiting any type of advertising, only 4.8 percent of adults have noticed free samples of cigarettes as a tobacco promotion.*

8.1. ATTITUDES TOWARDS TOBACCO CONTROL POLICIES

Non-smoking policies and other tobacco control measures have been shown to be effective in reducing tobacco consumption. [30] A potentially important precondition for effective tobacco control policies is public support for such measures, particularly among smokers. Previous studies have found that never-smokers and former smokers are more supportive of non-smoking policies and tobacco control measures than current smokers.[31] Nevertheless, it is not surprising that different attitudes exist towards tobacco control policies and cigarette prices.

Most respondents to this survey consider cigarettes to be expensive (44.8 percent) or very expensive (38.2 percent). Therefore, 83.0 percent in total find cigarette prices to be high. While it appears that the general opinion is that cigarette prices are high, people continue to buy them. (Figure 8.1 and Table B8.1 in Appendix B).

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[30] Schumann, A., Ulrich, J., Thyrian, J.R., Ulbricht, S., Hapke, U., & Meyer, C. (2006). Attitudes towards smoking policies and tobacco control measures in relation to smoking status and smoking behaviour. *European Journal of Public Health, 16*(5), 513–519

[31] Laforge, R., Velicer, W.F., Levesque, D.A., Fava, J.L., Hill, D.J., Schofield, P.E., Fan, D., De Vries, H., Shisana, W.O., & Conner, M. (1998). Measuring support for tobacco control policy in selected areas of six countries. *Tobacco Control,* 7, 241–6.

Figure 8.1. Most adults (83.0 percent) consider cigarettes to be expensive (n=1,006)
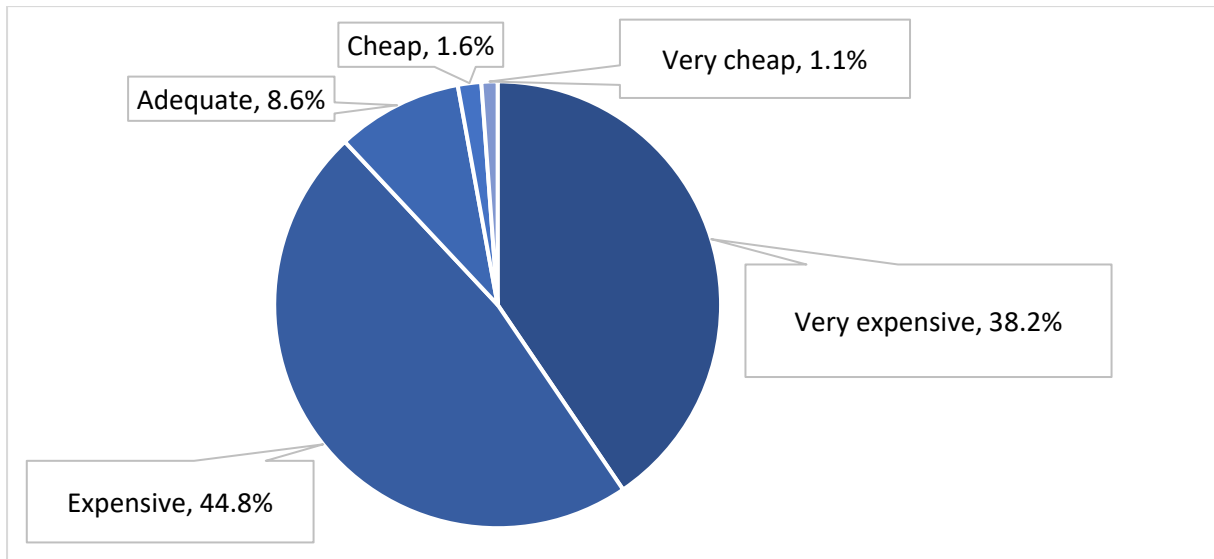
Source: Authors' calculations based on STC-SEE data for North Macedonia

8.2. ATTITUDES TOWARDS PRICE INCREASES

More than half of current smokers (56.9 percent) are strongly against a cigarette price increase of five percent. Only 19.5 percent of non-smokers share this view (Figure 8.2 and Table B8.2a in Appendix B).

Figure 8.2. More than half of current smokers are strongly against a price increase of five percent (n=1,006 for all adults, n=486 for current smokers, and n=520 for non-smokers)
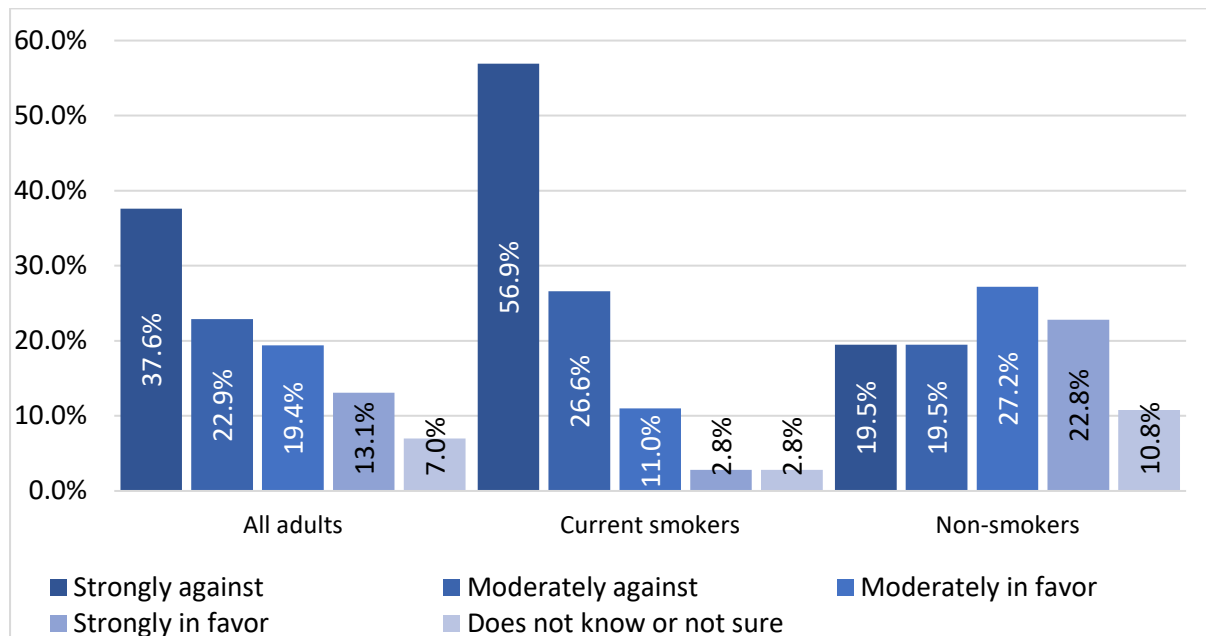
Source: Authors' calculations based on STC-SEE data for North Macedonia

A considerable majority of current smokers (75.6 percent) and 30.9 percent of non-smokers are strongly against a 20-percent price increase (Figure 8.3 and Table B8.2b in Appendix B).

Figure 8.3. *More than three in four current smokers are strongly against a price increase of 20 percent (n=486)*
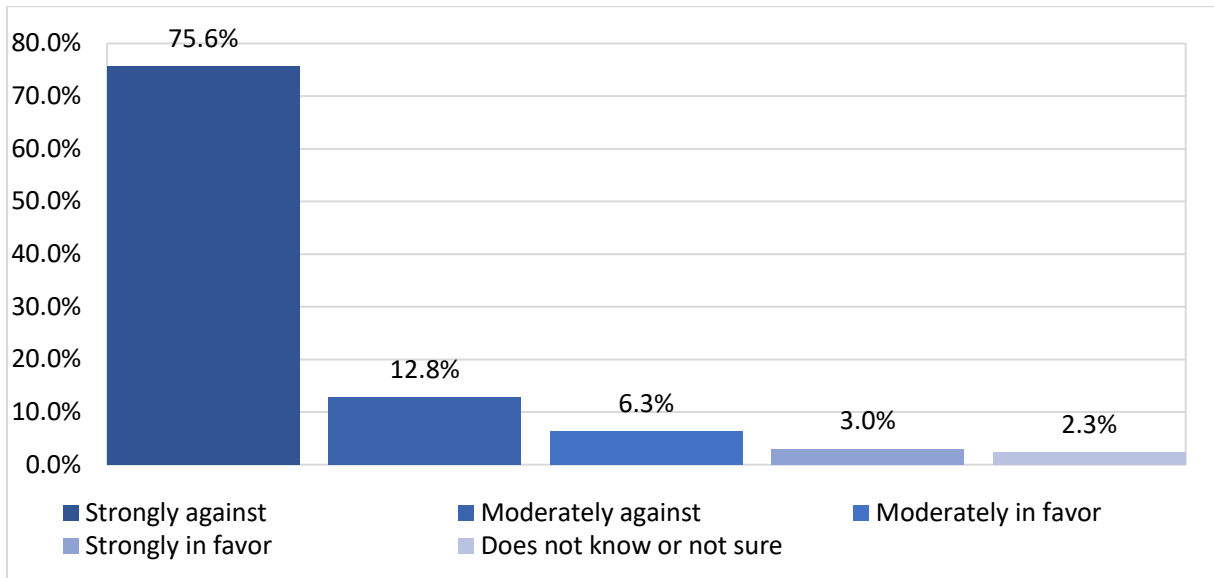
Source: Authors' calculations based on STC-SEE data for North Macedonia

Figure 8.4. *More than half (55.7 percent) of adults think that higher prices would be a useful policy to reduce tobacco use (n=1,006)*
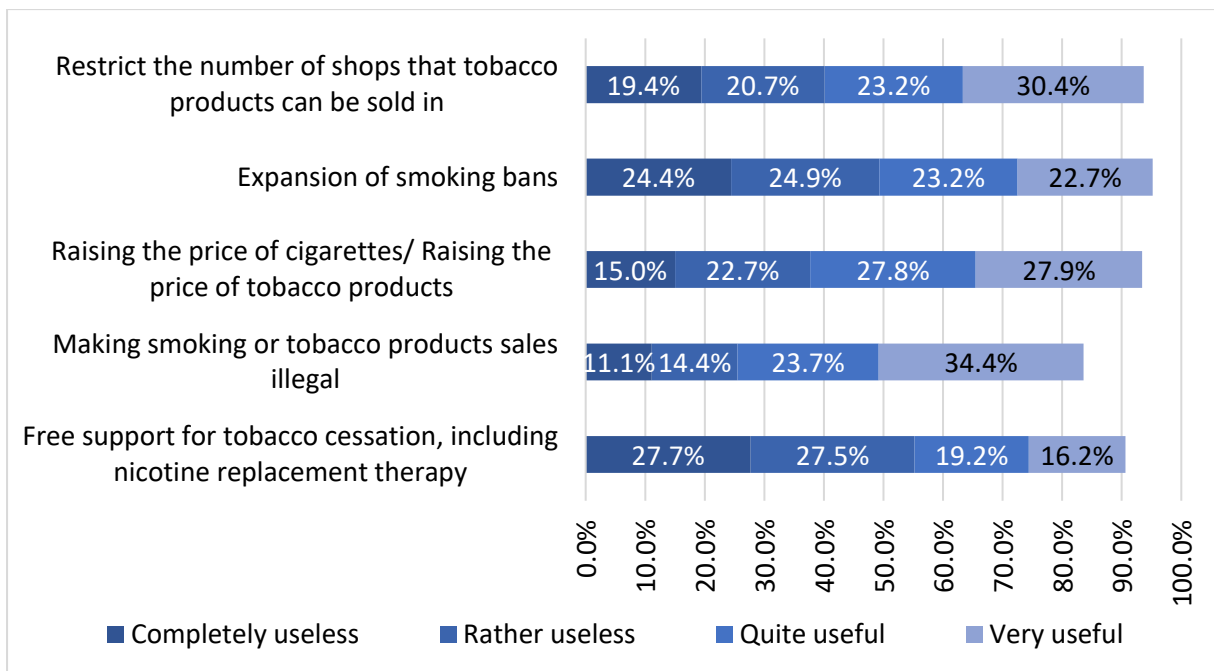
Source: Authors' calculations based on STC-SEE data for North Macedonia

There are a number of strategies that can be implemented to reduce tobacco consumption (Figure 8.4 and Table B8.3a). Adults in North Macedonia believe that making smoking or the sale of tobacco products illegal would be the best strategy (58.1 percent find it quite useful or very useful). The second most popular strategy is raising the price of tobacco products and cigarettes, as 55.7 percent of adults think this would be quite useful or very useful. Restricting the number of shops where tobacco products can be sold is the third most popular strategy,

with 53.6 percent of adults finding it quite useful or very useful. The least popular strategy is offering free support for tobacco cessation, including nicotine replacement therapy (27.7 percent find it completely useless, and 27.5 percent find it useless).

Attitudes towards different tobacco control strategies differ between smokers and non-smokers. Smokers believe that the most effective strategy would be making smoking or tobacco products sales illegal (26.4 percent find it quite useful, and 43.2 percent find it very useful) (Figure 8.5 and Table 8.3b in Appendix B). Raising the prices of cigarettes or tobacco products is also believed to be a useful strategy by smokers, as is expanding smoking bans and restricting the shops that can sell tobacco products. Free support for tobacco cessation and nicotine replacement therapy is once again found to be a less useful strategy (17.5 percent of smokers find it completely useless, and 28.2 percent find it useless).

Figure 8.5. *Adults consider free support for tobacco cessation, including nicotine replacement therapy, as the least useful strategy for reducing tobacco consumption (n=1,006)*
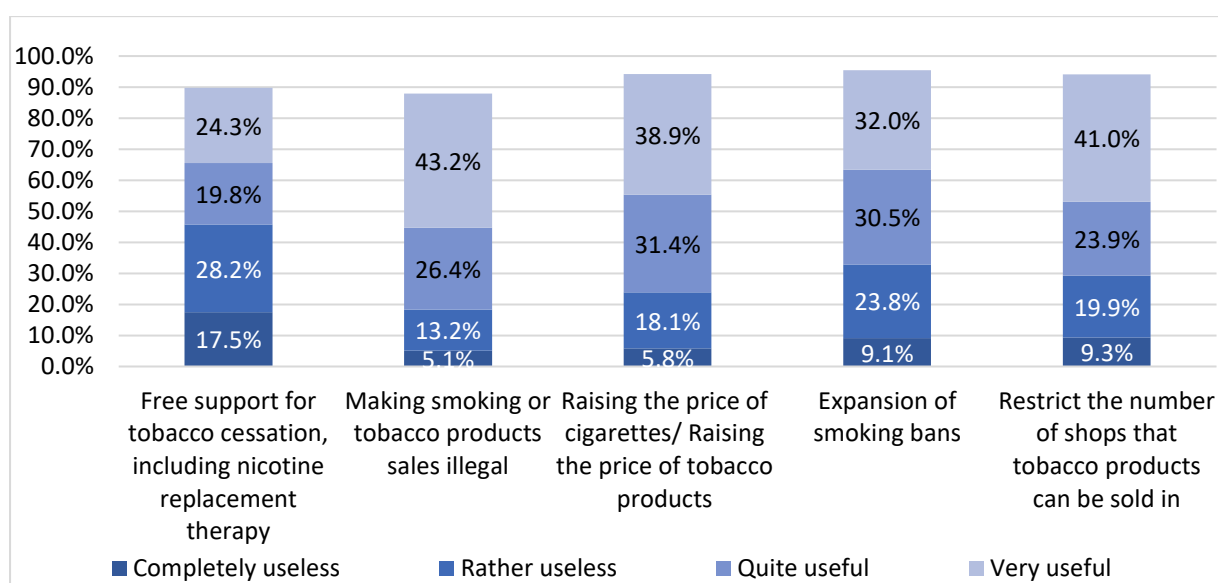
Source: Authors' calculations based on STC-SEE data for North Macedonia

With legislation prohibiting any type of advertising, there are no significant promotions that respondents to this survey have noticed in the past six months, other than special prices or discount offers on cigarettes. The results are presented in Figure 8.7, and detailed data can be found in Table B8.4 in Appendix B.

Figure 8.6. Most adults did not notice any tobacco promotions in the past six months (n=1,006)
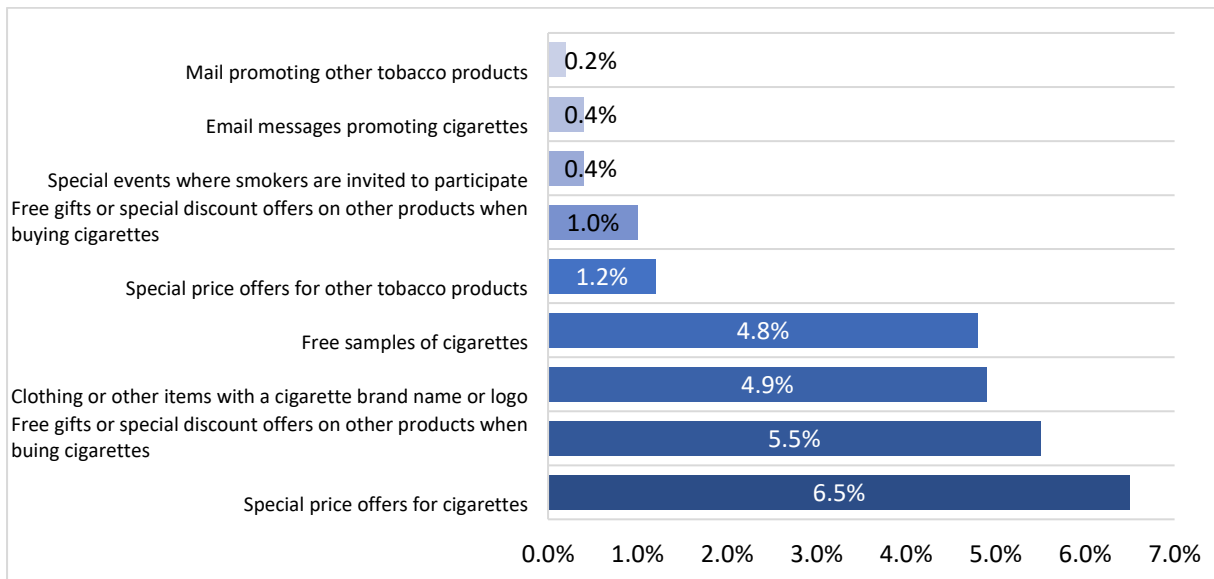
Source: Authors' calculations based on STC-SEE data for North Macedonia

CHAPTER 9: CONCLUSION AND RECOMMENDATIONS

North Macedonia is one of the 168 signatory countries to the WHO FCTC. As a result, a smoking ban was introduced in all public places, including bars and restaurants. Color pictorial health warnings on tobacco packages became mandatory in September 2009, following EU directive 2001/37/EC. Implementation of these legislative actions placed North Macedonia among one of the top countries in the Balkan region to implement such strict anti-smoking measures. North Macedonia also ratified the Protocol to Eliminate Illicit Trade in Tobacco Products on January 8, 2014, along with 53 other countries. These actions demonstrate the commitment of the country to fighting the illicit trade of tobacco and tobacco products as well as the broader tobacco epidemic, with the aim of decreasing the burdens that tobacco consumption imposes on the country's health and economy.

Despite this progress, the country still faces numerous challenges, starting with a very high smoking prevalence of 48.4 percent. Although the law prohibits smoking in public places, there is still high exposure to smoking in many public places, especially bars and nightclubs (73.6 percent) and restaurants (44.2). Slightly more than half of ever daily smokers began smoking between 18 and 24 years of age (51.3 percent). A relatively low percentage (19.3 percent) of all current smokers tried to quit in the past 12 months. The most important reasons cited for an attempt to quit smoking were increased knowledge of the harmful effects of smoking (36.0 percent), the high cost of cigarettes (31.6 percent), and illness (25.8 percent). Slightly less than half (44.0 percent) of current smokers who tried to quit did not manage to remain abstinent for more than one month.

The high prevalence of smoking can be easily related to the very low price of manufactured cigarettes (1.73 € per pack of 20 manufactured cigarettes). The average smoker of manufactured cigarettes smokes, on average, 382.0 cigarettes per month, and a smoker of hand-rolled tobacco smokes 308.8 cigarettes per month. Respondents to this survey believe that making smoking or the sale of tobacco products illegal would be the most useful strategy to reduce tobacco consumption.

Based on the results presented in this report, the following recommendations are offered to policymakers:

- **Increase the price of tobacco products by increasing the excise tax.** This measure has been one of the most effective measures to discourage youth from starting to smoke, to reduce existing tobacco use, and to save lives.[32] The average amount spent on a pack of 20 manufactured cigarettes is 1.73 €. This is approximately equal to the cost of one liter of milk plus one loaf of bread. Furthermore, the average monthly amount spent by current smokers (of manufactured cigarettes and hand-rolled cigarettes) is 27.6 €, while the average monthly net salary in North Macedonia is around 442 €.[33] Considering high smoking intensity and the share of cigarette expenditure of the average monthly net salary of only 6 percent suggests that cigarettes in North

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[32] *Preventing tobacco use among youth and young adults: A report of the Surgeon General*. (2012). National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health.
[33] State statistical office of the Republic of North Macedonia.

Macedonia are very affordable and can be easily bought by any average Macedonian because they do not consume a large part of their monthly net salary.

- **Raise awareness about the harmful health effects of tobacco consumption and introduce comprehensive tobacco control programs in order to reduce smoking among both youth and adults.** Almost half of Macedonian adults (48.4 percent) currently smoke either daily or less than daily. Moreover, most of the respondents are heavy smokers (44.4 percent), meaning they smoke more than 20 cigarettes daily on average. At the same time, only 19.3 percent of current smokers attempted to quit smoking in the past 12 months. The overall average period of smoking abstinence for those who do attempt to quit is only 1.7 months. Slightly less than half (44.0 percent) of current smokers who tried to quit did not remain abstinent for more than one month. Various age groups should be targeted differently, considering their different quit attempt rates and average duration of abstinence. The measures targeted toward younger smokers to keep them motivated to quit should include comprehensive campaigns on social media and debates organized in schools, colleges, and universities where peer pressure can be used to increase motivation. In addition, the harmful effects of tobacco should be introduced as a topic in education curriculum with lectures by medical doctors, starting with primary schools and especially in secondary schools. For older groups, the emphasis should be on the harmful health impacts of smoking, through medical consultations and organized public campaigns.

- **Develop effective smoking cessation services and make them accessible and affordable to all smokers.** Only 19.3 percent of current smokers attempted to quit smoking, and their average duration of abstinence was less than two months. Moreover, most current smokers smoked about the same number of cigarettes in the past as they do today (60.3 percent for manufactured cigarettes and 72.5 percent for hand-rolled cigarettes). A meaningful cessation strategy could involve: telephone counseling services run by medical professionals, including psychologists and doctors, who are trained to treat tobacco dependence, and community support groups where former smokers (quitters) and smokers can meet together and share their experiences and challenges with quitting. In addition, nicotine replacement therapy and medicines should be more actively promoted by general practitioners.

- **Apply evidence-based policy and coordinate the efforts of all relevant stakeholders.** Current tobacco control policy in North Macedonia is not based on empirical evidence but rather more on trial and error. Additionally, reducing the rate of tobacco use requires meaningful partnerships between all the stakeholders involved in the process of creating and implementing an effective tobacco control strategy. All major institutions should be involved, including the Ministry of Finance, Ministry of Health, Customs Administration, Institute for Public Health, and civil society groups. The survey results presented in this study detail important information about the extent of tobacco use and its impacts that can provide a foundation for effective state action.

APPENDIX A: SAMPLE DESIGN

Allocation of the sample by strata is proportional to the size of the stratum (number of persons aged 18–85 years). Post-stratification is done by gender, age, type of residence, geo-economic region, and education level. Table A3.1 includes the confidence intervals for the sample by percentage, while Table A3.2 provides information about the sample design.

Table A3.3 includes the number of respondents and sample points by districts: 11 in the eastern region, 10 in the southeastern region, 9 in the southwestern, 8 in Pelagonia, 9 in Polog, 6 in the southeastern, 17 in Skopje, and 9 in Vardar.

WEIGHTING

The sample weight is a statistical measurement linked to a data record for any survey respondent in population samples fully utilizing random selection methods to choose the sample. An individual sample weight is the inverse of the adjusted probability of obtaining the data for the respondent. In most cases this probability is simply the respondent's original selection probability based on the sample design.

The sampling frame was the latest census, with post-stratification calibration adjustment of weights to the known population. Variables used for calibration were regions, type of residence (urban/rural), age group, gender, and education level. Tables A3.4-A3.18 provide detailed weights.

Table A3.1. *Percentage of the sample that picks a possible answer for North Macedonia*

Total population (in milions)	Population 18-85 years of age (in milions)	Percentage of the sample that chooses a possible answer (95% CI)					
2.08	1.68	5 (3.7, 6.4)	10 (8.1, 1.9)	20 (17.5, 22.5)	30 (27.2, 32.8)	40 (40.0, 43.0)	50 (46.9, 53.1)
		60 (56.0, 63.0)	70 (67.2, 72.8)	80 (77.5, 82.5)	90 (88.1, 91.9)	95 (93.7, 96.4)	

Table A3.2. *Sample design by regions and type of residence*

Type of residence	Vardar	Eastern	South-western	South-eastern	Pelagonia	Polog	North-eastern	Skopje
Urban	66.7%	63.4%	53.1%	44.8%	66.1%	29.6%	57.5%	71.0%
Rural	33.3%	36.6%	46.9%	55.2%	33.9%	70.4%	42.5%	29.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table A3.3. Sample design by region, district, and type of residence

| Districts and Regions | Number of respondents | | |
| | Type of residence | | |
	Rural	Urban	Total
Berovo	4	4	8
Cesinovo	0	4	4
Delcevo	6	3	9
Karbinci	0	2	2
Kocani	14	5	19
Maked Kamenica	2	2	4
Pehcevo	2	1	3
Probistip	4	4	8
Stip	22	2	24
Vinica	5	5	10
Zrnovci	0	2	2
Total EASTERN	**59**	**34**	**93**
Bogdanci	3	1	4
Bosilovo	0	7	7
Dojran	0	2	2
Gevgelija	8	4	12
Konche	0	2	2
Novo Selo	0	6	6
Radovis	8	6	14
Strumica	18	10	28
Valandovo	2	4	6
Vasilevo	0	6	6
Total SOUTHEASTERN	**39**	**48**	**87**
Centar Zupa	0	3	3
Debar	9	2	11
Debarca	0	3	3
Drugovo	0	2	2
Kicevo	14	14	28
Makedonski Brod	2	2	4
Ohrid	21	7	28
Plasnica	0	2	2
Struga	17	19	36
Vevcani	0	1	1
Total SOUTHWESTERN	**63**	**55**	**118**
Bitola	38	10	48
Demir Hisar	1	4	5
Dolneni	0	7	7
Krivogastani	0	3	3
Krusevo	2	3	5
Mogila	0	3	3
Novaci	0	2	2
Prilep	35	4	39
Total PELAGONIA	**76**	**36**	**112**
Zelino	0	12	12

Districts and Regions	Number of respondents		
	Type of residence		
	Rural	Urban	Total
Bogovinje	0	14	14
Brvenica	0	8	8
Gostivar	18	22	40
Jegunovce	0	5	5
Mavrovo Rostuse	0	4	4
Tearce	0	11	11
Tetovo	27	17	44
Vrapciste	0	13	13
Total POLOG	**45**	**106**	**151**
Kratovo	4	1	5
Kriva Palanka	8	3	11
Kumanovo	38	15	53
Lipkovo	0	14	14
Rankovce	0	2	2
Stano Nagoricane	0	2	2
Total NORTHEASTERN	**50**	**37**	**87**
Aerodrom	35	1	36
Aracinovo	0	6	6
Butel	9	2	11
Cair	33	0	33
Centar	24	0	24
Cucer Sandevo	0	4	4
Gazi Baba	24	13	37
Gjorce Petrov	13	2	15
Ilinden	0	8	8
Karpos	28	1	29
Kisela Voda	25	4	29
Petrovec	0	4	4
Saraj	3	15	18
Sopiste	0	3	3
Studenicani	0	9	9
Suto Orizari	12	0	12
Zelenikovo	0	2	2
Total SKOPJE	**206**	**74**	**280**
Caska	0	4	4
Demir Kapija	1	1	2
Gradsko	0	2	2
Kavadarci	15	5	20
Lozovo	0	1	1
Negotino	7	3	10
Rosoman	0	2	2
Sveti Nikole	7	2	9
Veles	22	6	28
Total VARDAR	**52**	**26**	**78**
TOTAL	**590**	**416**	**1,006**

Table A3.4. Weights: Vardar region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Vardar	Urban	Male	18-24	Primary or less	1.00000
2	Vardar	Urban	Male	18-24	Lower secondary	1.00000
3	Vardar	Urban	Male	18-24	Upper secondary	1.00000
4	Vardar	Urban	Male	18-24	Higher	1.00000
5	Vardar	Urban	Male	25-34	Primary or less	1.00000
6	Vardar	Urban	Male	25-34	Lower secondary	1.00000
7	Vardar	Urban	Male	25-34	Upper secondary	1.22127
8	Vardar	Urban	Male	25-34	Higher	0.77580
9	Vardar	Urban	Male	35-44	Primary or less	1.00000
10	Vardar	Urban	Male	35-44	Lower secondary	1.00000
11	Vardar	Urban	Male	35-44	Upper secondary	0.85051
12	Vardar	Urban	Male	35-44	Higher	0.51818
13	Vardar	Urban	Male	45-54	Primary or less	1.00000
14	Vardar	Urban	Male	45-54	Lower secondary	1.00000
15	Vardar	Urban	Male	45-54	Upper secondary	0.91404
16	Vardar	Urban	Male	45-54	Higher	0.51892
17	Vardar	Urban	Male	55-64	Primary or less	1.00000
18	Vardar	Urban	Male	55-64	Lower secondary	1.25521
19	Vardar	Urban	Male	55-64	Upper secondary	0.54619
20	Vardar	Urban	Male	55-64	Higher	0.29740
21	Vardar	Urban	Male	65+	Primary or less	1.00000
22	Vardar	Urban	Male	65+	Lower secondary	1.67545
23	Vardar	Urban	Male	65+	Upper secondary	0.69922
24	Vardar	Urban	Male	65+	Higher	0.39696
25	Vardar	Urban	Female	18-24	Primary or less	1.00000
26	Vardar	Urban	Female	18-24	Lower secondary	1.00000
27	Vardar	Urban	Female	18-24	Upper secondary	1.00000
28	Vardar	Urban	Female	18-24	Higher	0.76645
29	Vardar	Urban	Female	25-34	Primary or less	1.00000
30	Vardar	Urban	Female	25-34	Lower secondary	1.00000
31	Vardar	Urban	Female	25-34	Upper secondary	1.00000
32	Vardar	Urban	Female	25-34	Higher	0.78183
33	Vardar	Urban	Female	35-44	Primary or less	1.00000
34	Vardar	Urban	Female	35-44	Lower secondary	1.00000
35	Vardar	Urban	Female	35-44	Upper secondary	0.98323
36	Vardar	Urban	Female	35-44	Higher	0.58977
37	Vardar	Urban	Female	45-54	Primary or less	1.00000
38	Vardar	Urban	Female	45-54	Lower secondary	1.00000
39	Vardar	Urban	Female	45-54	Upper secondary	1.02399
40	Vardar	Urban	Female	45-54	Higher	1.00000
41	Vardar	Urban	Female	55-64	Primary or less	1.00000
42	Vardar	Urban	Female	55-64	Lower secondary	1.00000
43	Vardar	Urban	Female	55-64	Upper secondary	0.57960
44	Vardar	Urban	Female	55-64	Higher	0.37874
45	Vardar	Urban	Female	65+	Primary or less	0.91058
46	Vardar	Urban	Female	65+	Lower secondary	1.74865
47	Vardar	Urban	Female	65+	Upper secondary	0.70465
48	Vardar	Urban	Female	65+	Higher	0.45181

Table A3.5. Weights: Vardar region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Vardar	Rural	Male	18-24	Primary or less	1.00000
2	Vardar	Rural	Male	18-24	Lower secondary	1.00000
3	Vardar	Rural	Male	18-24	Upper secondary	1.00000
4	Vardar	Rural	Male	18-24	Higher	1.00000
5	Vardar	Rural	Male	25-34	Primary or less	1.00000
6	Vardar	Rural	Male	25-34	Lower secondary	1.00000
7	Vardar	Rural	Male	25-34	Upper secondary	1.50213
8	Vardar	Rural	Male	25-34	Higher	1.00000
9	Vardar	Rural	Male	35-44	Primary or less	1.00000
10	Vardar	Rural	Male	35-44	Lower secondary	2.40410
11	Vardar	Rural	Male	35-44	Upper secondary	1.00330
12	Vardar	Rural	Male	35-44	Higher	1.00000
13	Vardar	Rural	Male	45-54	Primary or less	1.24255
14	Vardar	Rural	Male	45-54	Lower secondary	1.05781
15	Vardar	Rural	Male	45-54	Upper secondary	1.00000
16	Vardar	Rural	Male	45-54	Higher	1.00000
17	Vardar	Rural	Male	55-64	Primary or less	1.00000
18	Vardar	Rural	Male	55-64	Lower secondary	1.72748
19	Vardar	Rural	Male	55-64	Upper secondary	0.64431
20	Vardar	Rural	Male	55-64	Higher	0.40929
21	Vardar	Rural	Male	65+	Primary or less	0.95954
22	Vardar	Rural	Male	65+	Lower secondary	2.06076
23	Vardar	Rural	Male	65+	Upper secondary	1.00000
24	Vardar	Rural	Male	65+	Higher	1.00000
25	Vardar	Rural	Female	18-24	Primary or less	1.00000
26	Vardar	Rural	Female	18-24	Lower secondary	1.00000
27	Vardar	Rural	Female	18-24	Upper secondary	1.00000
28	Vardar	Rural	Female	18-24	Higher	1.00000
29	Vardar	Rural	Female	25-34	Primary or less	1.83172
30	Vardar	Rural	Female	25-34	Lower secondary	1.00000
31	Vardar	Rural	Female	25-34	Upper secondary	1.75421
32	Vardar	Rural	Female	25-34	Higher	1.00000
33	Vardar	Rural	Female	35-44	Primary or less	1.22345
34	Vardar	Rural	Female	35-44	Lower secondary	1.00000
35	Vardar	Rural	Female	35-44	Upper secondary	1.27773
36	Vardar	Rural	Female	35-44	Higher	0.59132
37	Vardar	Rural	Female	45-54	Primary or less	1.40112
38	Vardar	Rural	Female	45-54	Lower secondary	1.00000
39	Vardar	Rural	Female	45-54	Upper secondary	1.34715
40	Vardar	Rural	Female	45-54	Higher	1.00000
41	Vardar	Rural	Female	55-64	Primary or less	0.96384
42	Vardar	Rural	Female	55-64	Lower secondary	1.00000
43	Vardar	Rural	Female	55-64	Upper secondary	0.82054
44	Vardar	Rural	Female	55-64	Higher	1.00000
45	Vardar	Rural	Female	65+	Primary or less	1.14979
46	Vardar	Rural	Female	65+	Lower secondary	2.34549
47	Vardar	Rural	Female	65+	Upper secondary	1.00000
48	Vardar	Rural	Female	65+	Higher	1.00000

Table A3.6. *Weights: Eastern region, urban residence*

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Eastern	Urban	Male	18-24	Lower secondary	3.06048
2	Eastern	Urban	Male	18-24	Upper secondary	1.00000
3	Eastern	Urban	Male	18-24	Higher	1.00000
4	Eastern	Urban	Male	25-34	Primary or less	1.00000
5	Eastern	Urban	Male	25-34	Lower secondary	2.87414
6	Eastern	Urban	Male	25-34	Upper secondary	1.19947
7	Eastern	Urban	Male	25-34	Higher	0.68097
8	Eastern	Urban	Male	35-44	Primary or less	1.00000
9	Eastern	Urban	Male	35-44	Lower secondary	1.00000
10	Eastern	Urban	Male	35-44	Upper secondary	0.83533
11	Eastern	Urban	Male	35-44	Higher	0.45483
12	Eastern	Urban	Male	45-54	Primary or less	0.99219
13	Eastern	Urban	Male	45-54	Lower secondary	2.02400
14	Eastern	Urban	Male	45-54	Upper secondary	1.00000
15	Eastern	Urban	Male	45-54	Higher	0.50966
16	Eastern	Urban	Male	55-64	Primary or less	0.67620
17	Eastern	Urban	Male	55-64	Lower secondary	1.23280
18	Eastern	Urban	Male	55-64	Upper secondary	0.51449
19	Eastern	Urban	Male	55-64	Higher	0.29209
20	Eastern	Urban	Male	65+	Primary or less	1.00000
21	Eastern	Urban	Male	65+	Lower secondary	1.00000
22	Eastern	Urban	Male	65+	Upper secondary	0.68673
23	Eastern	Urban	Male	65+	Higher	0.36330
24	Eastern	Urban	Female	18-24	Primary or less	1.00000
25	Eastern	Urban	Female	18-24	Lower secondary	1.00000
26	Eastern	Urban	Female	18-24	Upper secondary	1.00000
27	Eastern	Urban	Female	18-24	Higher	0.75276
28	Eastern	Urban	Female	25-34	Primary or less	1.00000
29	Eastern	Urban	Female	25-34	Lower secondary	1.00000
30	Eastern	Urban	Female	25-34	Upper secondary	1.24520
31	Eastern	Urban	Female	25-34	Higher	0.86723
32	Eastern	Urban	Female	35-44	Primary or less	1.00000
33	Eastern	Urban	Female	35-44	Lower secondary	1.00000
34	Eastern	Urban	Female	35-44	Upper secondary	0.90339
35	Eastern	Urban	Female	35-44	Higher	0.54154
36	Eastern	Urban	Female	45-54	Primary or less	1.03001
37	Eastern	Urban	Female	45-54	Lower secondary	1.00000
38	Eastern	Urban	Female	45-54	Upper secondary	0.87688
39	Eastern	Urban	Female	45-54	Higher	0.49783
40	Eastern	Urban	Female	55-64	Primary or less	0.66866
41	Eastern	Urban	Female	55-64	Lower secondary	1.39013
42	Eastern	Urban	Female	55-64	Upper secondary	0.60082
43	Eastern	Urban	Female	55-64	Higher	0.34110
44	Eastern	Urban	Female	65+	Primary or less	0.91812
45	Eastern	Urban	Female	65+	Lower secondary	1.00000
46	Eastern	Urban	Female	65+	Upper secondary	1.00000
47	Eastern	Urban	Female	65+	Higher	0.36172

Table A3.7. Weights: Eastern region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Eastern	Rural	Male	18-24	Primary or less	1.00000
2	Eastern	Rural	Male	18-24	Lower secondary	3.61405
3	Eastern	Rural	Male	18-24	Upper secondary	1.77883
4	Eastern	Rural	Male	18-24	Higher	1.00000
5	Eastern	Rural	Male	25-34	Primary or less	1.75369
6	Eastern	Rural	Male	25-34	Lower secondary	1.00000
7	Eastern	Rural	Male	25-34	Upper secondary	1.49297
8	Eastern	Rural	Male	25-34	Higher	0.84760
9	Eastern	Rural	Male	35-44	Primary or less	1.31063
10	Eastern	Rural	Male	35-44	Lower secondary	1.00000
11	Eastern	Rural	Male	35-44	Upper secondary	0.99718
12	Eastern	Rural	Male	35-44	Higher	0.56613
13	Eastern	Rural	Male	45-54	Primary or less	1.23497
14	Eastern	Rural	Male	45-54	Lower secondary	1.00000
15	Eastern	Rural	Male	45-54	Upper secondary	1.05136
16	Eastern	Rural	Male	45-54	Higher	1.00000
17	Eastern	Rural	Male	55-64	Primary or less	1.00000
18	Eastern	Rural	Male	55-64	Lower secondary	1.63082
19	Eastern	Rural	Male	55-64	Upper secondary	1.00000
20	Eastern	Rural	Male	55-64	Higher	0.36356
21	Eastern	Rural	Male	65+	Primary or less	0.89733
22	Eastern	Rural	Male	65+	Lower secondary	1.00000
23	Eastern	Rural	Male	65+	Upper secondary	0.85477
24	Eastern	Rural	Male	65+	Higher	1.00000
25	Eastern	Rural	Female	18-24	Primary or less	1.00000
26	Eastern	Rural	Female	18-24	Lower secondary	1.00000
27	Eastern	Rural	Female	18-24	Upper secondary	1.00000
28	Eastern	Rural	Female	18-24	Higher	1.14942
29	Eastern	Rural	Female	25-34	Primary or less	1.82055
30	Eastern	Rural	Female	25-34	Lower secondary	1.00000
31	Eastern	Rural	Female	25-34	Upper secondary	1.54988
32	Eastern	Rural	Female	25-34	Higher	1.00000
33	Eastern	Rural	Female	35-44	Primary or less	1.00000
34	Eastern	Rural	Female	35-44	Lower secondary	1.00000
35	Eastern	Rural	Female	35-44	Upper secondary	1.00000
36	Eastern	Rural	Female	35-44	Higher	0.58771
37	Eastern	Rural	Female	45-54	Primary or less	1.28205
38	Eastern	Rural	Female	45-54	Lower secondary	1.00000
39	Eastern	Rural	Female	45-54	Upper secondary	1.00000
40	Eastern	Rural	Female	45-54	Higher	0.61964
41	Eastern	Rural	Female	55-64	Primary or less	0.78088
42	Eastern	Rural	Female	55-64	Lower secondary	1.00000
43	Eastern	Rural	Female	55-64	Upper secondary	0.66479
44	Eastern	Rural	Female	55-64	Higher	0.37742
45	Eastern	Rural	Female	65+	Primary or less	1.14277
46	Eastern	Rural	Female	65+	Lower secondary	1.00000
47	Eastern	Rural	Female	65+	Upper secondary	1.00000
48	Eastern	Rural	Female	65+	Higher	1.00000

Table A3.8. Weights: Southwestern region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Southwestern	Urban	Male	18-24	Primary or less	1.00000
2	Southwestern	Urban	Male	18-24	Lower secondary	1.00000
3	Southwestern	Urban	Male	18-24	Upper secondary	1.00000
4	Southwestern	Urban	Male	18-24	Higher	0.72757
5	Southwestern	Urban	Male	25-34	Primary or less	1.41370
6	Southwestern	Urban	Male	25-34	Lower secondary	2.88386
7	Southwestern	Urban	Male	25-34	Upper secondary	1.00000
8	Southwestern	Urban	Male	25-34	Higher	0.68327
9	Southwestern	Urban	Male	35-44	Primary or less	0.94424
10	Southwestern	Urban	Male	35-44	Lower secondary	1.00000
11	Southwestern	Urban	Male	35-44	Upper secondary	0.80386
12	Southwestern	Urban	Male	35-44	Higher	1.00000
13	Southwestern	Urban	Male	45-54	Primary or less	1.05806
14	Southwestern	Urban	Male	45-54	Lower secondary	1.00000
15	Southwestern	Urban	Male	45-54	Upper secondary	0.90076
16	Southwestern	Urban	Male	45-54	Higher	1.00000
17	Southwestern	Urban	Male	55-64	Primary or less	0.60638
18	Southwestern	Urban	Male	55-64	Lower secondary	1.23697
19	Southwestern	Urban	Male	55-64	Upper secondary	0.51622
20	Southwestern	Urban	Male	55-64	Higher	0.29307
21	Southwestern	Urban	Male	65+	Primary or less	0.74673
22	Southwestern	Urban	Male	65+	Lower secondary	1.00000
23	Southwestern	Urban	Male	65+	Upper secondary	0.61582
24	Southwestern	Urban	Male	65+	Higher	0.36738
25	Southwestern	Urban	Female	18-24	Primary or less	1.91711
26	Southwestern	Urban	Female	18-24	Lower secondary	1.00000
27	Southwestern	Urban	Female	18-24	Upper secondary	1.00000
28	Southwestern	Urban	Female	18-24	Higher	0.75531
29	Southwestern	Urban	Female	25-34	Primary or less	1.00000
30	Southwestern	Urban	Female	25-34	Lower secondary	1.00000
31	Southwestern	Urban	Female	25-34	Upper secondary	1.45068
32	Southwestern	Urban	Female	25-34	Higher	0.87017
33	Southwestern	Urban	Female	35-44	Primary or less	1.20252
34	Southwestern	Urban	Female	35-44	Lower secondary	1.00000
35	Southwestern	Urban	Female	35-44	Upper secondary	1.02373
36	Southwestern	Urban	Female	35-44	Higher	0.47377
37	Southwestern	Urban	Female	45-54	Primary or less	1.16260
38	Southwestern	Urban	Female	45-54	Lower secondary	2.10826
39	Southwestern	Urban	Female	45-54	Upper secondary	1.07935
40	Southwestern	Urban	Female	45-54	Higher	0.61278
41	Southwestern	Urban	Female	55-64	Primary or less	1.00000
42	Southwestern	Urban	Female	55-64	Lower secondary	1.57531
43	Southwestern	Urban	Female	55-64	Upper secondary	0.53590
44	Southwestern	Urban	Female	55-64	Higher	1.00000
45	Southwestern	Urban	Female	65+	Primary or less	0.84475
46	Southwestern	Urban	Female	65+	Lower secondary	1.00000
47	Southwestern	Urban	Female	65+	Upper secondary	0.78426
48	Southwestern	Urban	Female	65+	Higher	1.00000

Table A3.9. Weights: Southwestern region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Southwestern	Rural	Male	18-24	Primary or less	1.00000
2	Southwestern	Rural	Male	18-24	Lower secondary	1.00000
3	Southwestern	Rural	Male	18-24	Upper secondary	1.34510
4	Southwestern	Rural	Male	18-24	Higher	0.85447
5	Southwestern	Rural	Male	25-34	Primary or less	1.57699
6	Southwestern	Rural	Male	25-34	Lower secondary	1.00000
7	Southwestern	Rural	Male	25-34	Upper secondary	1.26321
8	Southwestern	Rural	Male	25-34	Higher	0.80244
9	Southwestern	Rural	Male	35-44	Primary or less	1.05330
10	Southwestern	Rural	Male	35-44	Lower secondary	2.26214
11	Southwestern	Rural	Male	35-44	Upper secondary	0.84372
12	Southwestern	Rural	Male	35-44	Higher	0.52289
13	Southwestern	Rural	Male	45-54	Primary or less	1.04491
14	Southwestern	Rural	Male	45-54	Lower secondary	1.00000
15	Southwestern	Rural	Male	45-54	Upper secondary	0.88956
16	Southwestern	Rural	Male	45-54	Higher	1.00000
17	Southwestern	Rural	Male	55-64	Primary or less	0.63645
18	Southwestern	Rural	Male	55-64	Lower secondary	1.00000
19	Southwestern	Rural	Male	55-64	Upper secondary	0.57585
20	Southwestern	Rural	Male	55-64	Higher	0.34419
21	Southwestern	Rural	Male	65+	Primary or less	0.75923
22	Southwestern	Rural	Male	65+	Lower secondary	1.64605
23	Southwestern	Rural	Male	65+	Upper secondary	0.64636
24	Southwestern	Rural	Male	65+	Higher	1.00000
25	Southwestern	Rural	Female	18-24	Primary or less	1.00000
26	Southwestern	Rural	Female	18-24	Lower secondary	1.00000
27	Southwestern	Rural	Female	18-24	Upper secondary	1.71303
28	Southwestern	Rural	Female	18-24	Higher	0.97253
29	Southwestern	Rural	Female	25-34	Primary or less	1.00000
30	Southwestern	Rural	Female	25-34	Lower secondary	1.00000
31	Southwestern	Rural	Female	25-34	Upper secondary	1.31136
32	Southwestern	Rural	Female	25-34	Higher	0.91332
33	Southwestern	Rural	Female	35-44	Primary or less	1.00000
34	Southwestern	Rural	Female	35-44	Lower secondary	1.00000
35	Southwestern	Rural	Female	35-44	Upper secondary	0.87589
36	Southwestern	Rural	Female	35-44	Higher	1.00000
37	Southwestern	Rural	Female	45-54	Primary or less	1.00000
38	Southwestern	Rural	Female	45-54	Lower secondary	1.00000
39	Southwestern	Rural	Female	45-54	Upper secondary	1.13288
40	Southwestern	Rural	Female	45-54	Higher	1.00000
41	Southwestern	Rural	Female	55-64	Primary or less	0.78517
42	Southwestern	Rural	Female	55-64	Lower secondary	1.00000
43	Southwestern	Rural	Female	55-64	Upper secondary	1.00000
44	Southwestern	Rural	Female	55-64	Higher	1.00000
45	Southwestern	Rural	Female	65+	Primary or less	0.96691
46	Southwestern	Rural	Female	65+	Lower secondary	1.00000
47	Southwestern	Rural	Female	65+	Upper secondary	1.00000
48	Southwestern	Rural	Female	65+	Higher	1.00000

Table A3.10. Weights: Southeastern region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Southeastern	Urban	Male	18-24	Lower secondary	1.00000
2	Southeastern	Urban	Male	18-24	Upper secondary	1.37453
3	Southeastern	Urban	Male	18-24	Higher	0.87316
4	Southeastern	Urban	Male	25-34	Primary or less	1.69659
5	Southeastern	Urban	Male	25-34	Lower secondary	1.00000
6	Southeastern	Urban	Male	25-34	Upper secondary	1.29084
7	Southeastern	Urban	Male	25-34	Higher	0.77887
8	Southeastern	Urban	Male	35-44	Primary or less	1.09599
9	Southeastern	Urban	Male	35-44	Lower secondary	1.00000
10	Southeastern	Urban	Male	35-44	Upper secondary	1.00000
11	Southeastern	Urban	Male	35-44	Higher	1.00000
12	Southeastern	Urban	Male	45-54	Primary or less	1.00000
13	Southeastern	Urban	Male	45-54	Lower secondary	2.17818
14	Southeastern	Urban	Male	45-54	Upper secondary	1.00000
15	Southeastern	Urban	Male	45-54	Higher	0.51608
16	Southeastern	Urban	Male	55-64	Primary or less	0.65037
17	Southeastern	Urban	Male	55-64	Lower secondary	1.00000
18	Southeastern	Urban	Male	55-64	Upper secondary	0.58845
19	Southeastern	Urban	Male	55-64	Higher	1.00000
20	Southeastern	Urban	Male	65+	Primary or less	1.00000
21	Southeastern	Urban	Male	65+	Lower secondary	1.58267
22	Southeastern	Urban	Male	65+	Upper secondary	0.66050
23	Southeastern	Urban	Male	65+	Higher	0.41958
24	Southeastern	Urban	Female	18-24	Primary or less	1.00000
25	Southeastern	Urban	Female	18-24	Lower secondary	1.00000
26	Southeastern	Urban	Female	18-24	Upper secondary	1.75050
27	Southeastern	Urban	Female	18-24	Higher	1.00000
28	Southeastern	Urban	Female	25-34	Primary or less	1.57407
29	Southeastern	Urban	Female	25-34	Lower secondary	3.21101
30	Southeastern	Urban	Female	25-34	Upper secondary	1.50746
31	Southeastern	Urban	Female	25-34	Higher	0.85582
32	Southeastern	Urban	Female	35-44	Primary or less	1.00000
33	Southeastern	Urban	Female	35-44	Lower secondary	2.14470
34	Southeastern	Urban	Female	35-44	Upper secondary	0.89505
35	Southeastern	Urban	Female	35-44	Higher	0.50814
36	Southeastern	Urban	Female	45-54	Primary or less	1.00000
37	Southeastern	Urban	Female	45-54	Lower secondary	2.26122
38	Southeastern	Urban	Female	45-54	Upper secondary	0.94368
39	Southeastern	Urban	Female	45-54	Higher	1.00000
40	Southeastern	Urban	Female	55-64	Primary or less	0.82826
41	Southeastern	Urban	Female	55-64	Lower secondary	1.37729
42	Southeastern	Urban	Female	55-64	Upper secondary	1.00000
43	Southeastern	Urban	Female	55-64	Higher	1.00000
44	Southeastern	Urban	Female	65+	Primary or less	0.80542
45	Southeastern	Urban	Female	65+	Lower secondary	1.00000
46	Southeastern	Urban	Female	65+	Upper secondary	1.00000
47	Southeastern	Urban	Female	65+	Higher	1.00000

Table A3.11. Weights: Southeastern region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Southeastern	Rural	Male	18-24	Lower secondary	2.56559
2	Southeastern	Rural	Male	18-24	Upper secondary	1.00000
3	Southeastern	Rural	Male	18-24	Higher	0.60786
4	Southeastern	Rural	Male	25-34	Primary or less	1.21927
5	Southeastern	Rural	Male	25-34	Lower secondary	1.00000
6	Southeastern	Rural	Male	25-34	Upper secondary	1.00551
7	Southeastern	Rural	Male	25-34	Higher	0.57085
8	Southeastern	Rural	Male	35-44	Primary or less	0.78889
9	Southeastern	Rural	Male	35-44	Lower secondary	1.00000
10	Southeastern	Rural	Male	35-44	Upper secondary	0.67160
11	Southeastern	Rural	Male	35-44	Higher	1.00000
12	Southeastern	Rural	Male	45-54	Primary or less	0.88398
13	Southeastern	Rural	Male	45-54	Lower secondary	1.00000
14	Southeastern	Rural	Male	45-54	Upper secondary	0.75256
15	Southeastern	Rural	Male	45-54	Higher	1.00000
16	Southeastern	Rural	Male	55-64	Primary or less	0.53843
17	Southeastern	Rural	Male	55-64	Lower secondary	1.00000
18	Southeastern	Rural	Male	55-64	Upper secondary	0.46674
19	Southeastern	Rural	Male	55-64	Higher	1.00000
20	Southeastern	Rural	Male	65+	Primary or less	0.60435
21	Southeastern	Rural	Male	65+	Lower secondary	1.23283
22	Southeastern	Rural	Male	65+	Upper secondary	0.57569
23	Southeastern	Rural	Male	65+	Higher	0.32683
24	Southeastern	Rural	Female	18-24	Primary or less	1.00000
25	Southeastern	Rural	Female	18-24	Lower secondary	1.00000
26	Southeastern	Rural	Female	18-24	Upper secondary	1.36357
27	Southeastern	Rural	Female	18-24	Higher	1.00000
28	Southeastern	Rural	Female	25-34	Primary or less	1.00000
29	Southeastern	Rural	Female	25-34	Lower secondary	1.00000
30	Southeastern	Rural	Female	25-34	Upper secondary	1.04384
31	Southeastern	Rural	Female	25-34	Higher	1.00000
32	Southeastern	Rural	Female	35-44	Primary or less	0.81896
33	Southeastern	Rural	Female	35-44	Lower secondary	1.00000
34	Southeastern	Rural	Female	35-44	Upper secondary	0.78430
35	Southeastern	Rural	Female	35-44	Higher	0.44527
36	Southeastern	Rural	Female	45-54	Primary or less	1.00000
37	Southeastern	Rural	Female	45-54	Lower secondary	1.00000
38	Southeastern	Rural	Female	45-54	Upper secondary	0.82691
39	Southeastern	Rural	Female	45-54	Higher	1.00000
40	Southeastern	Rural	Female	55-64	Primary or less	0.59162
41	Southeastern	Rural	Female	55-64	Lower secondary	1.00000
42	Southeastern	Rural	Female	55-64	Upper secondary	1.00000
43	Southeastern	Rural	Female	55-64	Higher	1.00000
44	Southeastern	Rural	Female	65+	Primary or less	0.76965
45	Southeastern	Rural	Female	65+	Lower secondary	1.00000
46	Southeastern	Rural	Female	65+	Upper secondary	0.53411
47	Southeastern	Rural	Female	65+	Higher	1.00000

Table A3.12. Weights: Pelagonia region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Pelagonia	Urban	Male	18-24	Lower secondary	1.00000
2	Pelagonia	Urban	Male	18-24	Upper secondary	1.41975
3	Pelagonia	Urban	Male	18-24	Higher	1.00000
4	Pelagonia	Urban	Male	25-34	Primary or less	1.00000
5	Pelagonia	Urban	Male	25-34	Lower secondary	1.00000
6	Pelagonia	Urban	Male	25-34	Upper secondary	1.00000
7	Pelagonia	Urban	Male	25-34	Higher	0.75695
8	Pelagonia	Urban	Male	35-44	Primary or less	1.00000
9	Pelagonia	Urban	Male	35-44	Lower secondary	1.90710
10	Pelagonia	Urban	Male	35-44	Upper secondary	0.84587
11	Pelagonia	Urban	Male	35-44	Higher	0.50558
12	Pelagonia	Urban	Male	45-54	Primary or less	1.00000
13	Pelagonia	Urban	Male	45-54	Lower secondary	1.00000
14	Pelagonia	Urban	Male	45-54	Upper secondary	0.89183
15	Pelagonia	Urban	Male	45-54	Higher	0.53305
16	Pelagonia	Urban	Male	55-64	Primary or less	0.67177
17	Pelagonia	Urban	Male	55-64	Lower secondary	1.37036
18	Pelagonia	Urban	Male	55-64	Upper secondary	0.55794
19	Pelagonia	Urban	Male	55-64	Higher	0.31402
20	Pelagonia	Urban	Male	65+	Primary or less	0.80137
21	Pelagonia	Urban	Male	65+	Lower secondary	1.55274
22	Pelagonia	Urban	Male	65+	Upper secondary	0.68223
23	Pelagonia	Urban	Male	65+	Higher	0.38732
24	Pelagonia	Urban	Female	18-24	Primary or less	1.00000
25	Pelagonia	Urban	Female	18-24	Lower secondary	1.00000
26	Pelagonia	Urban	Female	18-24	Upper secondary	1.48178
27	Pelagonia	Urban	Female	18-24	Higher	0.84124
28	Pelagonia	Urban	Female	25-34	Primary or less	1.00000
29	Pelagonia	Urban	Female	25-34	Lower secondary	1.00000
30	Pelagonia	Urban	Female	25-34	Upper secondary	1.23702
31	Pelagonia	Urban	Female	25-34	Higher	1.00000
32	Pelagonia	Urban	Female	35-44	Primary or less	1.00000
33	Pelagonia	Urban	Female	35-44	Lower secondary	1.00000
34	Pelagonia	Urban	Female	35-44	Upper secondary	1.01359
35	Pelagonia	Urban	Female	35-44	Higher	1.00000
36	Pelagonia	Urban	Female	45-54	Primary or less	1.00000
37	Pelagonia	Urban	Female	45-54	Lower secondary	1.00000
38	Pelagonia	Urban	Female	45-54	Upper secondary	0.99910
39	Pelagonia	Urban	Female	45-54	Higher	0.54830
40	Pelagonia	Urban	Female	55-64	Primary or less	0.76458
41	Pelagonia	Urban	Female	55-64	Lower secondary	1.27140
42	Pelagonia	Urban	Female	55-64	Upper secondary	0.57634
43	Pelagonia	Urban	Female	55-64	Higher	0.35494
44	Pelagonia	Urban	Female	65+	Primary or less	0.86327
45	Pelagonia	Urban	Female	65+	Lower secondary	1.86061
46	Pelagonia	Urban	Female	65+	Upper secondary	0.73493
47	Pelagonia	Urban	Female	65+	Higher	0.44083

Table A3.13. Weights: Pelagonia region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Pelagonia	Rural	Male	18-24	Lower secondary	1.00000
2	Pelagonia	Rural	Male	18-24	Upper secondary	1.96367
3	Pelagonia	Rural	Male	18-24	Higher	1.00000
4	Pelagonia	Rural	Male	25-34	Primary or less	1.00000
5	Pelagonia	Rural	Male	25-34	Lower secondary	3.61405
6	Pelagonia	Rural	Male	25-34	Upper secondary	1.84411
7	Pelagonia	Rural	Male	25-34	Higher	1.00000
8	Pelagonia	Rural	Male	35-44	Primary or less	1.00000
9	Pelagonia	Rural	Male	35-44	Lower secondary	1.00000
10	Pelagonia	Rural	Male	35-44	Upper secondary	1.23172
11	Pelagonia	Rural	Male	35-44	Higher	0.62496
12	Pelagonia	Rural	Male	45-54	Primary or less	1.00000
13	Pelagonia	Rural	Male	45-54	Lower secondary	2.78104
14	Pelagonia	Rural	Male	45-54	Upper secondary	1.16061
15	Pelagonia	Rural	Male	45-54	Higher	1.00000
16	Pelagonia	Rural	Male	55-64	Primary or less	0.92913
17	Pelagonia	Rural	Male	55-64	Lower secondary	1.80029
18	Pelagonia	Rural	Male	55-64	Upper secondary	0.70692
19	Pelagonia	Rural	Male	55-64	Higher	0.44907
20	Pelagonia	Rural	Male	65+	Primary or less	1.10838
21	Pelagonia	Rural	Male	65+	Lower secondary	1.00000
22	Pelagonia	Rural	Male	65+	Upper secondary	0.94359
23	Pelagonia	Rural	Male	65+	Higher	1.00000
24	Pelagonia	Rural	Female	18-24	Primary or less	1.00000
25	Pelagonia	Rural	Female	18-24	Lower secondary	1.00000
26	Pelagonia	Rural	Female	18-24	Upper secondary	2.04946
27	Pelagonia	Rural	Female	18-24	Higher	1.00000
28	Pelagonia	Rural	Female	25-34	Primary or less	2.46546
29	Pelagonia	Rural	Female	25-34	Lower secondary	1.00000
30	Pelagonia	Rural	Female	25-34	Upper secondary	2.09891
31	Pelagonia	Rural	Female	25-34	Higher	1.00000
32	Pelagonia	Rural	Female	35-44	Primary or less	1.64673
33	Pelagonia	Rural	Female	35-44	Lower secondary	1.00000
34	Pelagonia	Rural	Female	35-44	Upper secondary	1.28553
35	Pelagonia	Rural	Female	35-44	Higher	0.79590
36	Pelagonia	Rural	Female	45-54	Primary or less	1.41527
37	Pelagonia	Rural	Female	45-54	Lower secondary	1.00000
38	Pelagonia	Rural	Female	45-54	Upper secondary	1.00000
39	Pelagonia	Rural	Female	45-54	Higher	0.83914
40	Pelagonia	Rural	Female	55-64	Primary or less	1.05750
41	Pelagonia	Rural	Female	55-64	Lower secondary	1.00000
42	Pelagonia	Rural	Female	55-64	Upper secondary	0.90028
43	Pelagonia	Rural	Female	55-64	Higher	1.00000
44	Pelagonia	Rural	Female	65+	Primary or less	1.26152
45	Pelagonia	Rural	Female	65+	Lower secondary	1.00000
46	Pelagonia	Rural	Female	65+	Upper secondary	0.87545
47	Pelagonia	Rural	Female	65+	Higher	1.00000

Table A3.14. Weights: Polog region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Polog	Urban	Male	18-24	Lower secondary	1.00000
2	Polog	Urban	Male	18-24	Upper secondary	3.32525
3	Polog	Urban	Male	18-24	Higher	1.00000
4	Polog	Urban	Male	25-34	Primary or less	1.00000
5	Polog	Urban	Male	25-34	Lower secondary	1.00000
6	Polog	Urban	Male	25-34	Upper secondary	3.12279
7	Polog	Urban	Male	25-34	Higher	1.65206
8	Polog	Urban	Male	35-44	Primary or less	2.18962
9	Polog	Urban	Male	35-44	Lower secondary	1.00000
10	Polog	Urban	Male	35-44	Upper secondary	1.94361
11	Polog	Urban	Male	35-44	Higher	1.18415
12	Polog	Urban	Male	45-54	Primary or less	1.00000
13	Polog	Urban	Male	45-54	Lower secondary	1.00000
14	Polog	Urban	Male	45-54	Upper secondary	2.08878
15	Polog	Urban	Male	45-54	Higher	1.11579
16	Polog	Urban	Male	55-64	Primary or less	1.00000
17	Polog	Urban	Male	55-64	Lower secondary	1.00000
18	Polog	Urban	Male	55-64	Upper secondary	1.21670
19	Polog	Urban	Male	55-64	Higher	0.72230
20	Polog	Urban	Male	65+	Primary or less	1.87691
21	Polog	Urban	Male	65+	Lower secondary	1.00000
22	Polog	Urban	Male	65+	Upper secondary	1.59787
23	Polog	Urban	Male	65+	Higher	0.90715
24	Polog	Urban	Female	18-24	Primary or less	3.61405
25	Polog	Urban	Female	18-24	Lower secondary	1.00000
26	Polog	Urban	Female	18-24	Upper secondary	3.61405
27	Polog	Urban	Female	18-24	Higher	2.14867
28	Polog	Urban	Female	25-34	Primary or less	3.61405
29	Polog	Urban	Female	25-34	Lower secondary	1.00000
30	Polog	Urban	Female	25-34	Upper secondary	2.89727
31	Polog	Urban	Female	25-34	Higher	1.64486
32	Polog	Urban	Female	35-44	Primary or less	1.00000
33	Polog	Urban	Female	35-44	Lower secondary	1.00000
34	Polog	Urban	Female	35-44	Upper secondary	1.00000
35	Polog	Urban	Female	35-44	Higher	1.34776
36	Polog	Urban	Female	45-54	Primary or less	2.94004
37	Polog	Urban	Female	45-54	Lower secondary	1.00000
38	Polog	Urban	Female	45-54	Upper secondary	1.00000
39	Polog	Urban	Female	45-54	Higher	1.15832
40	Polog	Urban	Female	55-64	Primary or less	1.00000
41	Polog	Urban	Female	55-64	Lower secondary	1.00000
42	Polog	Urban	Female	55-64	Upper secondary	1.00000
43	Polog	Urban	Female	55-64	Higher	0.70553
44	Polog	Urban	Female	65+	Primary or less	1.00000
45	Polog	Urban	Female	65+	Lower secondary	1.00000
46	Polog	Urban	Female	65+	Upper secondary	1.00000
47	Polog	Urban	Female	65+	Higher	1.00000

Table A3.15. Weights: Northeastern region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Northeastern	Urban	Male	18-24	Lower secondary	1.00000
2	Northeastern	Urban	Male	18-24	Upper secondary	1.36483
3	Northeastern	Urban	Male	18-24	Higher	1.00000
4	Northeastern	Urban	Male	25-34	Primary or less	1.34555
5	Northeastern	Urban	Male	25-34	Lower secondary	1.00000
6	Northeastern	Urban	Male	25-34	Upper secondary	1.00000
7	Northeastern	Urban	Male	25-34	Higher	0.65033
8	Northeastern	Urban	Male	35-44	Primary or less	1.00000
9	Northeastern	Urban	Male	35-44	Lower secondary	1.00000
10	Northeastern	Urban	Male	35-44	Upper secondary	1.00000
11	Northeastern	Urban	Male	35-44	Higher	0.48603
12	Northeastern	Urban	Male	45-54	Primary or less	0.94755
13	Northeastern	Urban	Male	45-54	Lower secondary	1.00000
14	Northeastern	Urban	Male	45-54	Upper secondary	0.80667
15	Northeastern	Urban	Male	45-54	Higher	0.51243
16	Northeastern	Urban	Male	55-64	Primary or less	0.64578
17	Northeastern	Urban	Male	55-64	Lower secondary	1.31735
18	Northeastern	Urban	Male	55-64	Upper secondary	0.54977
19	Northeastern	Urban	Male	55-64	Higher	0.31212
20	Northeastern	Urban	Male	65+	Primary or less	1.00000
21	Northeastern	Urban	Male	65+	Lower secondary	1.57150
22	Northeastern	Urban	Male	65+	Upper secondary	1.00000
23	Northeastern	Urban	Male	65+	Higher	0.37234
24	Northeastern	Urban	Female	18-24	Primary or less	1.82469
25	Northeastern	Urban	Female	18-24	Lower secondary	1.00000
26	Northeastern	Urban	Female	18-24	Upper secondary	1.42446
27	Northeastern	Urban	Female	18-24	Higher	1.00000
28	Northeastern	Urban	Female	25-34	Primary or less	1.00000
29	Northeastern	Urban	Female	25-34	Lower secondary	1.00000
30	Northeastern	Urban	Female	25-34	Upper secondary	1.33773
31	Northeastern	Urban	Female	25-34	Higher	0.75947
32	Northeastern	Urban	Female	35-44	Primary or less	1.00000
33	Northeastern	Urban	Female	35-44	Lower secondary	2.33480
34	Northeastern	Urban	Female	35-44	Upper secondary	0.94914
35	Northeastern	Urban	Female	35-44	Higher	0.55318
36	Northeastern	Urban	Female	45-54	Primary or less	0.98367
37	Northeastern	Urban	Female	45-54	Lower secondary	2.46165
38	Northeastern	Urban	Female	45-54	Upper secondary	1.00000
39	Northeastern	Urban	Female	45-54	Higher	0.53482
40	Northeastern	Urban	Female	55-64	Primary or less	0.59915
41	Northeastern	Urban	Female	55-64	Lower secondary	1.22222
42	Northeastern	Urban	Female	55-64	Upper secondary	0.57379
43	Northeastern	Urban	Female	55-64	Higher	0.35525
44	Northeastern	Urban	Female	65+	Primary or less	0.85743
45	Northeastern	Urban	Female	65+	Lower secondary	1.00000
46	Northeastern	Urban	Female	65+	Upper secondary	0.74645
47	Northeastern	Urban	Female	65+	Higher	1.00000

Table A3.16. Weights: Northeastern region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Northeastern	Rural	Male	18-24	Primary or less	1.00000
2	Northeastern	Rural	Male	18-24	Lower secondary	1.00000
3	Northeastern	Rural	Male	18-24	Upper secondary	1.41008
4	Northeastern	Rural	Male	18-24	Higher	1.00000
5	Northeastern	Rural	Male	25-34	Primary or less	1.00000
6	Northeastern	Rural	Male	25-34	Lower secondary	1.00000
7	Northeastern	Rural	Male	25-34	Upper secondary	1.32422
8	Northeastern	Rural	Male	25-34	Higher	1.00000
9	Northeastern	Rural	Male	35-44	Primary or less	0.92851
10	Northeastern	Rural	Male	35-44	Lower secondary	1.00000
11	Northeastern	Rural	Male	35-44	Upper secondary	0.84011
12	Northeastern	Rural	Male	35-44	Higher	1.00000
13	Northeastern	Rural	Male	45-54	Primary or less	0.97896
14	Northeastern	Rural	Male	45-54	Lower secondary	1.00000
15	Northeastern	Rural	Male	45-54	Upper secondary	0.88575
16	Northeastern	Rural	Male	45-54	Higher	1.00000
17	Northeastern	Rural	Male	55-64	Primary or less	1.00000
18	Northeastern	Rural	Male	55-64	Lower secondary	1.36102
19	Northeastern	Rural	Male	55-64	Upper secondary	0.56800
20	Northeastern	Rural	Male	55-64	Higher	1.00000
21	Northeastern	Rural	Male	65+	Primary or less	0.75599
22	Northeastern	Rural	Male	65+	Lower secondary	1.00000
23	Northeastern	Rural	Male	65+	Upper secondary	1.00000
24	Northeastern	Rural	Male	65+	Higher	1.00000
25	Northeastern	Rural	Female	18-24	Primary or less	1.88518
26	Northeastern	Rural	Female	18-24	Lower secondary	1.00000
27	Northeastern	Rural	Female	18-24	Upper secondary	1.00000
28	Northeastern	Rural	Female	18-24	Higher	0.91115
29	Northeastern	Rural	Female	25-34	Primary or less	1.00000
30	Northeastern	Rural	Female	25-34	Lower secondary	1.00000
31	Northeastern	Rural	Female	25-34	Upper secondary	1.22859
32	Northeastern	Rural	Female	25-34	Higher	0.69751
33	Northeastern	Rural	Female	35-44	Primary or less	1.00000
34	Northeastern	Rural	Female	35-44	Lower secondary	1.00000
35	Northeastern	Rural	Female	35-44	Upper secondary	1.00668
36	Northeastern	Rural	Female	35-44	Higher	0.57152
37	Northeastern	Rural	Female	45-54	Primary or less	1.11399
38	Northeastern	Rural	Female	45-54	Lower secondary	1.00000
39	Northeastern	Rural	Female	45-54	Upper secondary	1.06138
40	Northeastern	Rural	Female	45-54	Higher	1.00000
41	Northeastern	Rural	Female	55-64	Primary or less	0.75937
42	Northeastern	Rural	Female	55-64	Lower secondary	1.26273
43	Northeastern	Rural	Female	55-64	Upper secondary	1.00000
44	Northeastern	Rural	Female	55-64	Higher	1.00000
45	Northeastern	Rural	Female	65+	Primary or less	0.90588
46	Northeastern	Rural	Female	65+	Lower secondary	1.00000
47	Northeastern	Rural	Female	65+	Upper secondary	1.00000
48	Northeastern	Rural	Female	65+	Higher	1.00000

Table A3.17. Weights: Skopje region, urban residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Skopje	Urban	Male	18-24	Lower secondary	2.94687
2	Skopje	Urban	Male	18-24	Upper secondary	1.33090
3	Skopje	Urban	Male	18-24	Higher	0.72799
4	Skopje	Urban	Male	25-34	Primary or less	1.00000
5	Skopje	Urban	Male	25-34	Lower secondary	1.00000
6	Skopje	Urban	Male	25-34	Upper secondary	1.20422
7	Skopje	Urban	Male	25-34	Higher	0.68096
8	Skopje	Urban	Male	35-44	Primary or less	0.90612
9	Skopje	Urban	Male	35-44	Lower secondary	1.92730
10	Skopje	Urban	Male	35-44	Upper secondary	0.79633
11	Skopje	Urban	Male	35-44	Higher	0.46545
12	Skopje	Urban	Male	45-54	Primary or less	0.95535
13	Skopje	Urban	Male	45-54	Lower secondary	1.94886
14	Skopje	Urban	Male	45-54	Upper secondary	1.00000
15	Skopje	Urban	Male	45-54	Higher	0.47797
16	Skopje	Urban	Male	55-64	Primary or less	0.58190
17	Skopje	Urban	Male	55-64	Lower secondary	1.26158
18	Skopje	Urban	Male	55-64	Upper secondary	0.51360
19	Skopje	Urban	Male	55-64	Higher	0.30436
20	Skopje	Urban	Male	65+	Primary or less	0.76164
21	Skopje	Urban	Male	65+	Lower secondary	1.58445
22	Skopje	Urban	Male	65+	Upper secondary	0.66124
23	Skopje	Urban	Male	65+	Higher	0.35877
24	Skopje	Urban	Female	18-24	Primary or less	1.83972
25	Skopje	Urban	Female	18-24	Lower secondary	1.00000
26	Skopje	Urban	Female	18-24	Upper secondary	1.46427
27	Skopje	Urban	Female	18-24	Higher	0.88918
28	Skopje	Urban	Female	25-34	Primary or less	1.58429
29	Skopje	Urban	Female	25-34	Lower secondary	3.52441
30	Skopje	Urban	Female	25-34	Upper secondary	1.47085
31	Skopje	Urban	Female	25-34	Higher	0.76572
32	Skopje	Urban	Female	35-44	Primary or less	1.15397
33	Skopje	Urban	Female	35-44	Lower secondary	2.15862
34	Skopje	Urban	Female	35-44	Upper secondary	0.90086
35	Skopje	Urban	Female	35-44	Higher	0.48006
36	Skopje	Urban	Female	45-54	Primary or less	1.07727
37	Skopje	Urban	Female	45-54	Lower secondary	2.48192
38	Skopje	Urban	Female	45-54	Upper secondary	0.84432
39	Skopje	Urban	Female	45-54	Higher	0.52067
40	Skopje	Urban	Female	55-64	Primary or less	0.74106
41	Skopje	Urban	Female	55-64	Lower secondary	1.23229
42	Skopje	Urban	Female	55-64	Upper secondary	0.55446
43	Skopje	Urban	Female	55-64	Higher	0.31567
44	Skopje	Urban	Female	65+	Primary or less	0.88403
45	Skopje	Urban	Female	65+	Lower secondary	1.00000
46	Skopje	Urban	Female	65+	Upper secondary	0.69013
47	Skopje	Urban	Female	65+	Higher	0.37832

Table A3.18. Weights: Skopje region, rural residence

No.	Geo-economic region	Type of residence	Gender	Age	Education level	Weight
1	Skopje	Rural	Male	18-24	Lower secondary	1.00000
2	Skopje	Rural	Male	18-24	Upper secondary	2.49486
3	Skopje	Rural	Male	18-24	Higher	1.26586
4	Skopje	Rural	Male	25-34	Primary or less	2.61408
5	Skopje	Rural	Male	25-34	Lower secondary	3.61405
6	Skopje	Rural	Male	25-34	Upper secondary	2.34296
7	Skopje	Rural	Male	25-34	Higher	1.28650
8	Skopje	Rural	Male	35-44	Primary or less	1.77786
9	Skopje	Rural	Male	35-44	Lower secondary	3.48761
10	Skopje	Rural	Male	35-44	Upper secondary	1.56491
11	Skopje	Rural	Male	35-44	Higher	0.79401
12	Skopje	Rural	Male	45-54	Primary or less	1.84086
13	Skopje	Rural	Male	45-54	Lower secondary	3.53333
14	Skopje	Rural	Male	45-54	Upper secondary	1.47457
15	Skopje	Rural	Male	45-54	Higher	0.83715
16	Skopje	Rural	Male	55-64	Primary or less	1.18046
17	Skopje	Rural	Male	55-64	Lower secondary	2.15212
18	Skopje	Rural	Male	55-64	Upper secondary	1.00000
19	Skopje	Rural	Male	55-64	Higher	1.00000
20	Skopje	Rural	Male	65+	Primary or less	1.38087
21	Skopje	Rural	Male	65+	Lower secondary	2.87265
22	Skopje	Rural	Male	65+	Upper secondary	1.19884
23	Skopje	Rural	Male	65+	Higher	0.60828
24	Skopje	Rural	Female	18-24	Primary or less	1.00000
25	Skopje	Rural	Female	18-24	Lower secondary	1.00000
26	Skopje	Rural	Female	18-24	Upper secondary	2.83957
27	Skopje	Rural	Female	18-24	Higher	1.61210
28	Skopje	Rural	Female	25-34	Primary or less	1.00000
29	Skopje	Rural	Female	25-34	Lower secondary	1.00000
30	Skopje	Rural	Female	25-34	Upper secondary	2.66668
31	Skopje	Rural	Female	25-34	Higher	1.51395
32	Skopje	Rural	Female	35-44	Primary or less	1.00000
33	Skopje	Rural	Female	35-44	Lower secondary	3.47902
34	Skopje	Rural	Female	35-44	Upper secondary	1.78113
35	Skopje	Rural	Female	35-44	Higher	0.87853
36	Skopje	Rural	Female	45-54	Primary or less	2.06229
37	Skopje	Rural	Female	45-54	Lower secondary	3.61405
38	Skopje	Rural	Female	45-54	Upper secondary	1.87790
39	Skopje	Rural	Female	45-54	Higher	0.86907
40	Skopje	Rural	Female	55-64	Primary or less	1.23204
41	Skopje	Rural	Female	55-64	Lower secondary	2.74079
42	Skopje	Rural	Female	55-64	Upper secondary	0.93239
43	Skopje	Rural	Female	55-64	Higher	1.00000
44	Skopje	Rural	Female	65+	Primary or less	1.60278
45	Skopje	Rural	Female	65+	Lower secondary	1.00000
46	Skopje	Rural	Female	65+	Upper secondary	1.11227
47	Skopje	Rural	Female	65+	Higher	1.00000

Table A3.19. *Percentage distribution of adults, by selected demographic characteristics*

Demographic characteristics	Weighted		Unweighted number of adults
	Percentage (95% CI)	Number of adults	
Overall	**100**	**1,006**	
Gender			
Male	49.7 (46.0, 53.3)	499.646	507
Female	50.3 (46.7, 54.0)	506.354	499
Age			
18-24	13.6 (11.0, 16.8)	136.960	87
25-34	19.8 (16.8, 23.1)	198.977	152
35-44	18.5 (15.9, 21.3)	185.613	195
45-54	17.9 (15.2, 20.9)	179.700	170
55-64	15.2 (13.1, 17.6)	153.038	219
65-74	12.4 (10.4, 14.6)	124.326	153
75-85	2.7 (1.9, 4.0)	27.387	30
Type of residence			
Urban	55.5 (51.8, 59.2	558.651	599
Rural	44.5 (40.8, 48.2)	447.349	407
Education level			
Primary or less	27.9 (24.9, 31.2)	281.095	269
Lower secondary	17.9 (14.7, 21.6)	179.663	88
Upper secondary	36.1 (32.7, 39.6)	363.403	347
Higher	18.1 (15.9, 20.4)	181.839	302

Notes: Sample size: 1,006

APPENDIX B: TABLES

Table B4.1. Percentage distribution of adults, by smoking status and selected demographic characteristics

Demographic characteristics	Current, daily smokers	Current, less than daily smokers	Former, daily	Former, less than daily	Tried several times, never used continually	Tried once	Never tried
	Percentage (95% CI)						
Overall	**43.0 (39.5, 46.5)**	**5.4 (4.1, 7.1)**	**8.2 (6.6, 10.2)**	**2.4 (1.5, 3.8)**	**6.1 (4.6, 8.1)**	**4.9 (3.5, 6.7)**	**29.9 (26.5, 33.5)**
Gender							
Male	50.6 (45.5, 55.8)	7.3 (5.1, 10.1)	11.3 (8.6, 14.6)	3.2 (1.8, 5.8)	4.5 (2.9, 7.0)	2.8 (1.7, 4.8)	20.3 (16.2, 25.1)
Female	35.4 (30.9, 40.2)	3.6 (2.2, 5.7)	5.3 (3.6, 7.6)	1.7 (0.9, 3.2)	7.7 (5.3, 11.1)	6.8 (4.6, 10.0)	39.4 (34.4, 44.6)
Age							
18-24	22.8 (14.7, 33.5)	6.2 (2.5, 14.3)	3.0 (1.0, 9.0)	-	6.7 (3.0, 14.1)	9.9 (5.1, 18.3)	51.5 (40.0, 62.8)
25-34	47.4 (38.6, 56.2)	7.0 (3.6, 13.1)	1.9 (0.7, 5.2)	1.6 (0.2, 10.3)	9.3 (5.2, 16.0)	5.0 (2.3, 10.3)	27.9 (20.4, 36.8)
35-44	46.1 (38.2, 54.2)	5.5 (3.2, 9.3)	6.0 (3.0, 11.5)	2.7 (1.1, 6.4)	7.6 (4.3, 13.1)	2.9 (1.2, 6.4)	29.3 (22.3, 37.5)
45-54	60.1 (51.3, 68.4)	3.4 (1.5, 7.6)	5.8 (3.2, 10.2)	1.3 (0.4, 4.4)	4.9 (2.0, 11.3)	2.8 (0.9, 8.4)	21.8 (15.2, 30.1)
55-64	46.6 (39.1, 54.2)	8.1 (5.0, 13)	15.4 (10.7, 21.8)	3.4 (1.5, 7.5)	3.4 (1.8, 6.4)	4.1 (2.0, 8.3)	18.9 (13.4, 26.0)
65-74	32.4 (24.9, 40.9)	2.3 (0.9, 5.9)	19.8 (13.3, 28.4)	4.6 (2.0, 10.2)	3.7 (1.3, 10.2)	5.5 (2.5, 11.9)	31.1 (23.1, 40.3)
75-85	6.5 (2.0, 19.1)	1.3 (0.2, 8.7)	19.0 (7.6, 40.0)	10.9 (2.7, 35.2)	4.8 (1.2, 17.4)	7.3 (1.8, 25.6)	50.2 (31.8, 68.6)
Type of residence							
Urban	42.6 (38.1, 47.2)	6.5 (4.6, 9.2)	9.9 (7.7, 12.8)	2.8 (1.5, 4.9)	4.6 (2.8, 7.5)	4.2 (2.7, 6.5)	29.2 (24.9, 33.9)
Rural	43.5 (37.9, 49.2)	4.0 (2.4, 6.4)	6.1 (4.0, 9.2)	2.0 (1.0, 4.0)	8.0 (5.6, 11.3)	5.7 (3.6, 8.8)	30.8 (25.7, 36.5)
Education level							
Primary or less	37.2 (31.2, 43.6)	6.6 (4.2, 10.4)	7.3 (4.8, 11.0)	3.2 (1.6, 6.2)	7.2 (4.1, 12.6)	5.2 (2.9, 9.1)	33.0 (26.7, 39.9)
Lower secondary	58.6 (47.5, 68.9)	5.3 (2.1, 13)	11.5 (6.4, 19.6)	1.0 (0.1, 6.5)	0.9 (0.1, 6.2)	3.4 (1.1, 10.2)	19.4 (11.9, 30.0)
Upper secondary	40.2 (34.8, 45.8)	3.9 (2.4, 6.4)	7.8 (5.5, 11.0)	2.9 (1.3, 6.3)	7.6 (5.0, 11.4)	4.8 (2.8, 8.3)	32.7 (27.1, 38.8)
Higher	42.1 (36.1, 48.3)	6.5 (4.0, 10.3)	7.4 (5.0, 10.9)	1.6 (0.8, 3.4)	6.6 (4.1, 10.5)	5.8 (3.4, 9.7)	30.0 (24.1, 36.5)
Household income (€/month)							
300 or less	45.6 (37.8, 53.6)	10.9 (7.0, 16.5)	8.9 (5.5, 14.3)	4.5 (2.2, 9.0)	8.6 (4.8, 14.9)	2.7 (1.1, 6.4)	18.8 (13.6, 25.6)

Demographic characteristics	Current, daily smokers	Current, less than daily smokers	Former, daily	Former, less than daily	Tried several times, never used continually	Tried once	Never tried
	Percentage (95% CI)						
301 – 600	45.9 (40.0, 51.8)	4.1 (2.5, 6.5)	9.6 (6.7, 13.5)	2.8 (1.3, 5.9)	4.5 (2.6, 7.9)	5.3 (3.2, 8.7)	27.6 (22.3, 33.7)
601 – 900	44.2 (35.5, 53.2)	5.0 (2.2, 10.8)	9.2 (5.6, 14.7)	1.2 (0.2, 8.2)	6.3 (3.1, 12.2)	2.8 (1.1, 7.0)	31.3 (23.1, 40.9)
901 - 1,200	68.2 (47.5, 83.5)		4.5 (1.0, 17.8)	1.5 (0.2, 10.3)	10.7 (3.1, 31.4)	5.2 (1.2, 19.8)	9.9 (2.7, 30.2)
More than 1,200	48.9 (18.1, 80.6)	14.5 (2.0, 58.5)	3.6 (0.5, 23.5)	-	19.3 (4.0, 58.0)	-	13.7 (3.5, 40.6)
Does not know	36.8 (26.5, 48.6)	4.4 (1.0, 17.7)	4.1 (1.4, 11.3)	-	4.9 (1.9, 11.9)	13.3 (6.9,	36.5 (25.1, 49.6)
Refused to answer	31.2 (23.3, 40.3)	2.8 (1.3, 5.9)	6.9 (3.9, 12.0)	1.6 (0.6, 4.3)	5.6 (2.6, 11.7)	3.7 (1.4, 9.3)	48.2 (38.9, 57.6)

Notes: Sample size: 1,006

Table B4.2. *Percentage distribution of current tobacco users, by type of tobacco product used*

	Distribution by type of tobacco products used (total = 100%)			
	"Classic tobacco" smoking products	Electronic cigarettes that produce a vapor from a liquid	Heated tobacco products	Smokeless tobacco
	Percentage (95% CI)			
Overall	97.5 (95.5, 98.6)	1.2 (0.5, 3.0)	0	0.3 (0.1, 0.9)

Notes: Sample size: 486

Table B4.3. *Percentage distribution of current smokers of "classic" tobacco products, by type of tobacco product*

Distribution by type of tobacco products used (total = 100%)				
Manufactured cigarettes	Hand-rolled cigarettes	Pipes full of tobacco	Cigars and cigarillos	Water pipe with tobacco
Percentage (95% CI)				
92.0 (88.7, 94.4)	12.5 (9.5, 16.4)	0.1 (0.0, 0.9)	0.1 (0.0, 0.9)	0.6 (0.2, 2.0)

Notes: Sample size: 486

Current smokers of manufactured cigarettes = 448; current smokers of hand-rolled cigarettes = 61, other categories are less than 1. Difference of 23 respondents (486 – (448+61)) is due to respondents that answered as current users of both manufactured and hand-rolled cigarettes).

Figure B4.1. *Graphical presentation of "classic" tobacco users, by type of products*
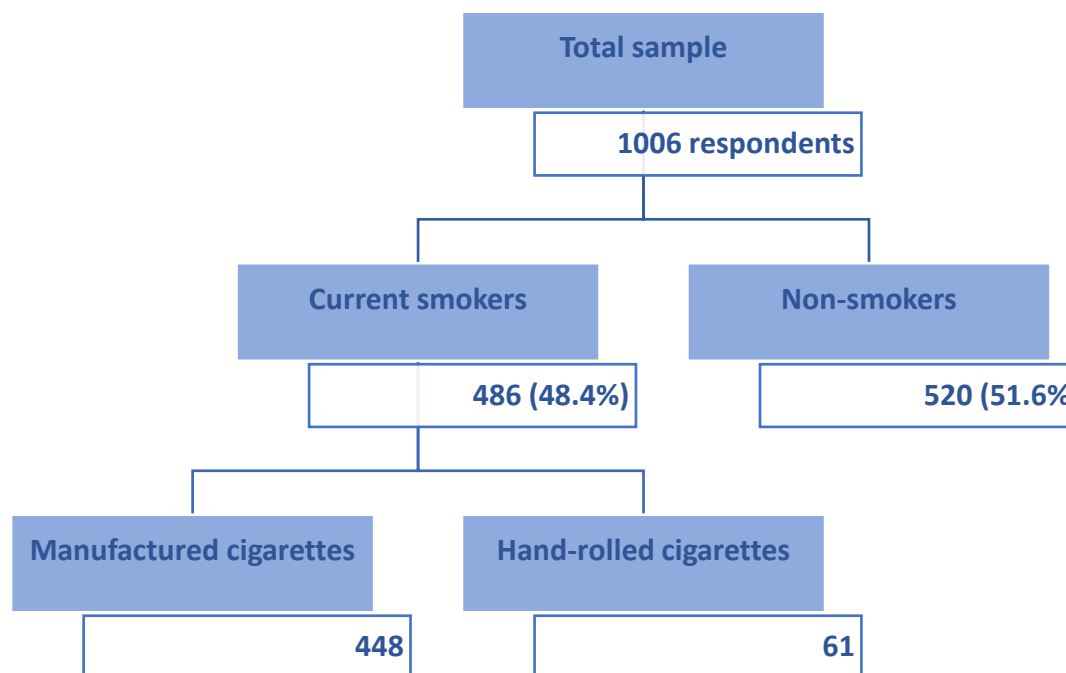
Table B4.4a. Percentage distribution of current daily smokers, by average number of cigarettes* smoked per day and selected demographic characteristics

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	**10-20**	**More than 20**
	Percentage (95% CI)		
Overall	**33.9 (29.2, 38.8)**	**21.7 (17.8, 26.3)**	**44.4 (39.0, 49.9)**
Gender			
Male	32.1 (26.0, 38.9)	16.6 (11.9, 22.7)	51.3 (43.9, 58.5)
Female	36.4 (29.5, 43.8)	29.0 (22.6, 36.4)	34.7 (27.1, 43.1)
Age			
18-24	52.1 (30.0, 73.5)	9.5 (2.5, 30.1)	38.4 (19.1, 62.2)
25-34	27.7 (18.6, 39.1)	24.7 (15.6, 36.9)	47.6 (35.1, 60.3)
35-44	31.9 (22.5, 43.1)	12.9 (7.2, 22.2)	55.2 (43.5, 66.3)
45-54	35.6 (26.1, 46.4)	21.6 (13.8, 32.1)	42.8 (31.4, 54.9)
55-64	32.4 (23.5, 42.9)	27.3 (18.5, 38.2)	40.3 (29.9, 51.7)
65-74	34.5 (22.7, 48.5)	34.6 (22.4, 49.2)	31.0 (19.4, 45.5)
75-85	71.3 (18.1, 96.6)	-	28.7 (3.4, 81.9)
Type of residence			
Urban	43.5 (37.1, 50.2)	22.2 (17,0, 28.4)	34.3 (28,0, 41.2)
Rural	22.1 (16.5, 29,0)	21.2 (15.4, 28.5)	56.7 (48.3, 64.7)
Education level			
Primary or less	30.1 (22.0, 39.6)	21.3 (14.4, 30.5)	48.6 (38.8, 58.5)
Lower secondary	19.9 (10.9, 33.4)	21.0 (12.0, 34.0)	59.2 (44.6, 72.2)
Upper secondary	40.2 (32.5, 48.4)	21.3 (15.4, 28.6)	38.5 (30.6, 47.0)
Higher	46.3 (37.5, 55.3)	24.3 (16.7, 33.9)	29.4 (21.8, 38.4)
Household income (€/month)			
300 or less	36.8 (26.6, 48.4)	26.5 (17.1, 38.7)	36.6 (25.5, 49.4)
301 - 600	29.0 (22.2, 36.9)	22.6 (16.5, 30.2)	48.4 (39.7, 57.1)
601 - 900	33.4 (22.9, 45.9)	20.0 (11.3, 32.9)	46.5 (33.8, 59.7)

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	10-20	More than 20
	Percentage (95% CI)		
901 - 1,200	30.6 (13.2, 56.1)	32.0 (13.5, 58.8)	37.4 (14.4, 67.9)
More than 1,200	63.6 (17.9, 93.3)	-	36.4 (6.7, 82.1)
Does not know	25.6 (13.2, 43.8)	16.4 (7.5, 32.1)	58.0 (40.7, 73.6)
Refused to answer	48.3 (33.0, 64.0)	14.4 (7.3, 26.2)	37.3 (21.8, 55.9)

Notes: Sample size: 431 (refers to sample size of daily cigarette smokers)

*Cigarettes include both manufactured and hand-rolled cigarettes.

Table B4.4b. *Percentage distribution of current daily smokers, by average number of manufactured cigarettes smoked per day and selected demographic characteristics*

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	10-20	More than 20
	Percentage (95% CI)		
Overall	**35.5 (30.7, 40.5)**	**21.5 (17.6, 26.1)**	**43.0 (37.5, 48.6)**
Gender			
Male	33.6 (27.3, 40.5)	17.2 (12.4, 23.3)	49.3 (41.8, 56.7)
Female	38.1 (30.9, 45.7)	27.6 (21.4, 34.9)	34.3 (26.7, 42.8)
Age			
18-24	58.9 (35.0, 79.3)	4.0 (0.9, 15.4)	37.1 (17.6, 62.0)
25-34	29.1 (19.8, 40.6)	23.3 (14.5, 35.5)	47.6 (35.1, 60.3)
35-44	32.7 (23.1, 43.9)	12.8 (7.1, 22.1)	54.5 (42.8, 65.7)
45-54	36.9 (27.1, 48.0)	20.4 (12.9, 30.7)	42.7 (31.2, 55.0)
55-64	32.9 (23.7, 43.6)	32.0 (22.4, 43.4)	35.0 (24.9, 46.8)
65-74	38.3 (25.4, 53.0)	34.3 (22.1, 49.1)	27.4 (16.2, 42.4)
75-85	100.0 (100.0, 100.0)	-	-
Type of residence			
Urban	44.5 (37.9, 51.2)	23.2 (18.0, 29.5)	32.3 (26.0, 39.3)
Rural	24.2 (18.2, 31.5)	19.4 (13.8, 26.5)	56.4 (47.8, 64.5)
Education level			
Primary or less	33.6 (24.8, 43.7)	20.4 (13.6, 29.6)	46.0 (35.9, 56.4)
Lower secondary	19.3 (10.6, 32.6)	22.5 (13.1, 35.8)	58.2 (43.6, 71.5)
Upper secondary	43.1 (35.1, 51.4)	19.8 (14.3, 26.7)	37.2 (29.4, 45.7)
Higher	45.4 (36.6, 54.5)	25.1 (17.4, 34.8)	29.5 (21.8, 38.6)
Household income (€/month)			
300 or less	39.3 (28.5, 51.4)	25.6 (16.2, 38.0)	35.1 (23.8, 48.3)
301 – 600	30.1 (23.1, 38.0)	23.4 (17.2, 31.0)	46.5 (37.8, 55.5)
601 – 900	33.8 (23.2, 46.4)	20.2 (11.5, 33.3)	46.0 (33.2, 59.3)

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	10-20	More than 20
	Percentage (95% CI)		
901 - 1,200	30.6 (13.2, 56.1)	32.0 (13.5, 58.8)	37.4 (14.4, 67.9)
More than 1,200	63.6 (17.9, 93.3)	-	36.4 (6.7, 82.1)
Does not know	33.8 (19.3, 52.1)	12.1 (5.3, 25.3)	54.1 (37.1, 70.3)
Refused to answer	47.7 (32.4, 63.5)	14.5 (7.4, 26.5)	37.7 (22.1, 56.4)

Notes: Sample size: 421 (refers to sample size of daily users of manufactured cigarettes)

Table B4.4c. *Percentage distribution of current daily smokers, by average number of hand-rolled cigarettes smoked per day and selected demographic characteristics*

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	10-20	More than 20
	Percentage (95% CI)		
Overall	**56.4 (40.9, 70.8)**	**16.2 (7.6, 31.4)**	**27.3 (16.4, 41.9)**
Gender			
Male	54.5 (34.3, 73.4)	16.3 (5.7, 38.6)	29.2 (15.2, 48.7)
Female	58.6 (35.2, 78.6)	16.2 (5.2, 40.4)	25.2 (10.7, 48.8)
Age			
18-24	54.5 (13.6, 90.1)	45.5 (9.9, 86.4)	-
25-34		45.4 (4.9, 93.0)	54.6 (7.0, 95.1)
35-44	85.0 (53.2, 96.6)		15.0 (3.4, 46.8)
45-54	78.7 (40.1, 95.3)	13.6 (1.8, 57.3)	7.7 (1.0, 41.2)
55-64	37.2 (17.0, 63.1)	22.0 (7.1, 51.1)	40.9 (18.6, 67.7)
65-74	35.3 (11.0, 70.6)	-	64.7 (29.4, 89.0)
75-85	-	-	100.0 (100.0, 100.0)
Type of residence			
Urban	63.9 (43.4, 80.3)	8.9 (2.7, 25.1)	27.3 (13.0, 48.6)
Rural	48.3 (25.5, 71.8)	24.3 (9.3, 50.3)	27.4 (13.1, 48.6)
Education level			
Primary or less	31.1 (12.6, 58.5)	15.8 (3.5, 49.0)	53.1 (28.2, 76.6)
Lower secondary	73.7 (44.6, 90.7)	6.2 (0.8, 34.3)	20.1 (6.1, 49.3)
Upper secondary	51.4 (25.4, 76.7)	33.8 (12.2, 65.3)	14.8 (4.3, 40.5)
Higher	75.4 (43.8, 92.3)	12.0 (2.9, 38.3)	12.7 (1.8, 52.9)
Household income (€/month)			
300 or less	68.6 (42.7, 86.5)	9.9 (1.8, 39.9)	21.5 (8.5, 44.9)
301 – 600	51.2 (29.8, 72.2)	21.2 (8.1, 45.0)	27.6 (12.7, 50.0)
601 – 900	-	-	100.0 (100.0, 100.0)

Demographic characteristics	Average number of cigarettes smoked daily		
	Fewer than 10	10-20	More than 20
	Percentage (95% CI)		
901 - 1,200	100.0 (100.0, 100.0)	-	-
More than 1,200	-	-	-
Does not know	45.8 (11.2, 85.0)	30.4 (4.5, 80.2)	23.9 (4.8, 66.1)
Refused to answer	36.5 (4.7, 87.0)	-	63.5 (13.0, 95.3)

Notes: Sample size: 53 (refers to sample size of daily users of hand-rolled cigarettes)

Table B4.5. Percentage distribution of ever daily smokers, by age at smoking initiation and selected demographic characteristics

Demographic characteristics	Age at smoking initiation (years)						
	Below 12	13-15	16-17	18-24	25-34	35-44	45+
	Percentage (95% CI)						
Overall	0.9 (0.3, 3.2)	10.0 (7.5, 13.2)	19.2 (15.7, 23.2)	51.3 (46.4, 56.2)	12.3 (9.6, 15.6)	1.5 (0.8, 2.7)	0.8 (0.4, 1.7)
Gender							
Male	1.5 (0.4, 5.2)	11.6 (8.3, 15.9)	20.4 (15.7, 26.0)	49.5 (43.0, 56.0)	10.3 (7.0, 14.9)	1.0 (0.4, 2.7)	0.7 (0.3, 1.6)
Female	-	7.6 (4.4, 13.0)	17.4 (12.8, 23.4)	54.0 (46.7, 61.1)	15.3 (11.2,	2.2 (1.0, 4.7)	1.0 (0.3, 3.2)
Age							
18-24	-	6.5 (1.5, 23.5)	48.8 (28.6, 69.4)	44.7 (25.1, 66.1)	-	-	-
25-34	-	14 (7.6, 24.3)	21.6 (13.6, 32.7)	59.7 (47.5, 70.8)	3.4 (1.0, 10.5)	-	-
35-44	0.5 (0.1, 3.5)	7.8 (3.6, 16.2)	24.4 (16.3, 35)	52.1 (41.0, 63.0)	8.3 (4.6, 14.5)	2.1 (0.7, 6.7)	-
45-54	3.2 (0.7, 13.5)	10.4 (5.7, 18.0)	15.0 (9.4, 23.1)	57.0 (46.4, 66.9)	10.5 (6, 17.9)	0.8 (0.1, 5.5)	-
55-64	0.5 (0.1, 3.2)	9.9 (5.6, 17.1)	11.8 (7.2, 18.8)	44.2 (34.9, 53.9)	21.8 (14.5,	1.6 (0.5, 4.8)	1.9 (0.7, 5.3)
65-74	-	8.1 (3.4, 18.0)	9.8 (5.0, 18.4)	42.4 (31.3, 54.2)	26.8 (16.9,	4.7 (1.7, 11.9)	3.6 (1.3, 9.5)
75-85	-	14.6 (3.2, 46.7)	22.5 (3.4, 70.9)	40.2 (13.2, 74.8)	22.7 (3.4, 71.1)	-	-
Type of residence							
Urban	0.3 (0.0, 2.3)	9.1 (6.1, 13.3)	22.6 (17.8, 28.4)	47.1 (41.1, 53.2)	13.6 (10.2,	1.8 (0.9, 3.7)	1.0 (0.4, 2.5)
Rural	1.7 (0.4, 7.3)	11.2 (7.4, 16.6)	14.6 (10.4, 20.3)	56.9 (49.1, 64.5)	10.6 (6.7, 16.5)	0.9 (0.3, 3.1)	0.5 (0.2, 1.6)
Education level							
Primary or less	0.8 (0.1, 5.3)	15.3 (9.8, 23.1)	23.1 (16.1, 32.0)	40.9 (32.4, 50.1)	13.4 (8.4, 20.8)	2.2 (0.8, 5.9)	2 (0.7, 5.4)
Lower secondary	2.2 (0.3, 14.1)	7.2 (3.1, 15.6)	12.5 (6.1, 23.8)	63.9 (50.8, 75.2)	14.3 (7.8, 24.9)	-	-
Upper secondary	0.2 (0.0, 1.8)	10.7 (6.7, 16.8)	21.7 (16.2, 28.5)	45.6 (38.2, 53.2)	10.1 (6.8, 14.9)	2.5 (1.1, 5.5)	0.5 (0.1, 2.2)
Higher	0.5 (0.1, 3.7)	5.3 (2.8, 9.7)	18.3 (12.8, 25.4)	59.3 (51.0, 67.1)	12.2 (7.9, 18.3)	0.5 (0.1, 3.5)	0.7 (0.2, 3.0)
Household income (€/month)							
300 or less	3.4 (0.7, 14.2)	12.1 (6.7, 20.6)	21.4 (13.7, 32.0)	44.3 (33.7, 55.4)	14.8 (9.2, 23.1)	0.6 (0.1, 4.1)	2.2 (0.8, 5.9)
301 – 600	0.2 (0.0, 1.6)	8.3 (5.0, 13.6)	16.9 (12.1, 23.1)	53.0 (45.1, 60.6)	13.7 (9.2, 20.0)	1.6 (0.7, 4.0)	0.7 (0.2, 2.3)
601 – 900	-	9.1 (3.9, 19.7)	15.9 (9.4, 25.6)	53.8 (42.1, 65.1)	11.3 (5.9, 20.8)	1.8 (0.4, 7.2)	0.4 (0.0, 2.6)
901 - 1,200	-	-	14.8 (4.5, 39.1)	79.1 (55.3, 92.0)	6.1 (1.4, 23.5)	-	-

Demographic characteristics	Age at smoking initiation (years)						
	Below 12	13-15	16-17	18-24	25-34	35-44	45+
	Percentage (95% CI)						
More than 1,200	-	-	63.0 (19.7, 92.2)	30.2 (6.1, 74.3)	6.9 (0.7, 42.1)	-	-
Does not know	1.1 (0.2, 7.8)	14.9 (5.9, 33.0)	34.2 (20.8, 50.7)	32.5 (19.1, 49.5)	10.7 (4.6, 23.0)	-	-
Refused to answer		14.0 (7.7, 24.1)	14.8 (8.1, 25.5)	60.0 (46.5, 72.1)	7.7 (3.3, 17.1)	3.5 (1.1, 10.9)	-

Notes: Sample size: 514 (ever daily smokers)

Table B5.1. *Percentage distribution of current smokers who attempted to quit smoking in the past 12 months, by selected demographic characteristics*

Demographic characteristics	Percentage (95% CI)
Overall	**19.3 (15.5, 23.8)**
Gender	
Male	20.8 (15.6, 27.1)
Female	17.1 (12.0, 23.7)
Age	
18-24	41.0 (22.8, 62.0)
25-34	32.1 (21.8, 44.5)
35-44	18.2 (11.4, 27.7)
45-54	8.6 (4.5, 15.8)
55-64	11.6 (6.8, 19.1)
65-74	14.1 (6.9, 26.5)
75-85	-
Type of residence	
Urban	18.0 (13.2, 23.9)
Rural	21.0 (15.1, 28.4)
Education level	
Primary or less	19.0 (12.3, 28.2)
Lower secondary	18.3 (9.5, 32.5)
Upper secondary	22.0 (16.0, 29.5)
Higher	16.0 (10.9, 22.8)
Household income (€/month)	
300 or less	16.8 (9.7, 27.7)
301 - 600	21.0 (14.6, 29.4)
601 - 900	15.0 (8.1, 26.1)
901 - 1,200	1.8 (0.2, 12.6)
More than 1,200	-
Does not know	36.1 (21.8, 53.5)
Refused to answer	20.3 (11.8, 32.8)

Notes: Sample size: 486 (all current smokers)

Table B5.2. Percentage distribution of current smokers who attempted to quit smoking in the past 12 months, by reasons for attempting to quit

Reasons for trying to quit smoking	Percentage (95% CI)
Cigarettes became too expensive	31.6 (21.0, 44.6)
Other economic reasons	16.0 (9.3, 26.2)
Illness	25.8 (16.5, 37.9)
Physician/health care provider's advice	18.7 (70.6, 88.8)
Increased knowledge of harmful effects of smoking	36.0 (25.6, 47.9)
Smoke-free legislation	3.7 (1.3, 10.0)
Pregnancy/birth of a child	1.6 (0.4, 6.2)
Pressure to quit by partner/relatives	16.3 (8.3, 29.6)
Employer precluding hiring smokers	1.7 (0.4, 6.5)
Refused to answer	2.4 (0.6, 9.2)

Notes: Sample size: 94 (respondents who tried to quit tobacco in the last 12 months); The questionnaire also included questions about the methods of cessation the respondents used, but there were no answers to those questions.

Table B5.3. Average duration of smoking abstinence in current smokers who tried quitting in the past 12 months, by selected demographic characteristics

Demographic characteristics	Average period of smoking abstinence (in months)
	Mean (95% CI)
Overall	**1.7 (1.1, 2.3)**
Gender	
Male	1.7 (0.9, 2.5)
Female	1.6 (0.3, 3.0)
Age	
18-24	1.1 (0.2, 2.0)
25-34	1.5 (0.5, 2.6)
35-44	1.3 (0.4, 2.1)
45-54	4.4 (1.7, 7.0)
55-64	1.4 (-0.1, 3.4)
65-74	-
75-85	-
Type of residence	
Urban	1.7 (0.8, 2.6)
Rural	1.6 (0.6, 2.7)
Education level	
Primary or less	1.0 (0.3, 1.8)
Lower secondary	1.6 (-0.3, 3.4)
Upper secondary	2.1 (0.8, 3.3)
Higher	2.0 (-0.3, 4.3)
Household income (€/month)	
300 or less	0.0 (0.1, 1.9)
301 - 600	1.4 (0.5, 2.2)

Demographic characteristics	Average period of smoking abstinence (in months)
	Mean (95% CI)
601 - 900	1.4 (0.1, 2.7)
901 - 1,200	-
More than 1,200	-
Does not know	2.7 (0.6, 4.8)
Refused to answer	3.5 (-0.9, 7.9)

Notes: Sample size: 94 (respondents who tried to quit tobacco in the last 12 months, only 61 answers provided)

Table B5.4. *Percentage distribution of current smokers who tried to quit in the past 12 months, by duration of smoking abstinence and selected demographic characteristics*

Demographic characteristics	Number of months without smoking			
	Less than 1 month	Between 1-3	Between 3-6	More than 6
	Percentage (95% CI)			
Overall	**44.0 (29.8, 59.3)**	**31.4 (18.8, 47.4)**	**15.4 (8.0, 27.6)**	**9.2 (3.6, 21.7)**
Gender				
Male	44.7 (26.9, 64.0)	29.0 (14.5, 49.7)	15.7 (7.0, 31.5)	10.6 (3.5, 27.6)
Female	42.7 (22.4, 65.8)	36.2 (16.8, 61.6)	14.8 (4.6, 38.3)	6.3 (0.9, 33.7)
Age				
18-24	38.9 (8.3, 81.7)	38.9 (9.3, 79.9)	22.2 (4.7, 62.4)	-
25-34	51.6 (28.0, 74.5)	33.5 (14.4, 60.0)	7.3 (1.5, 28.2)	7.7 (1.8, 27.9)
35-44	46.1 (20.4, 74.1)	29.2 (8.6, 64.2)	24.7 (7.9, 55.8)	-
45-54	16.3 (2.2, 63.1)	26.1 (6.9, 62.9)	-	57.6(21.2, 87.2)
55-64	50.6 (18.3, 82.4)	18.5 (2.6, 65.6)	30.8 (7.0, 72.6)	-
65-74	42.9 (9.5, 84.4)	26.1 (3.5, 77.7)	30.9 (4.4, 81.4)	-
75-85				
Type of residence				
Urban	43.2 (24.2, 64.5)	23.1 (10.2, 44.4)	24.3 (11.1,	9.3 (2.0, 34.0)
Rural	44.7 (25.1, 66.1)	38.4 (19.8, 61.1)	7.8 (2.6, 21.0)	9.1 (2.7, 26.2)
Education level				
Primary or less	49.5 (22.8, 76.5)	32.7 (10.8, 66.2)	17.7 (5.4, 45.0)	-
Lower	53.2 (15.5, 87.6)	21.0 (2.8, 71.1)	9.7 (1.2, 49.4)	16.0 (2.0, 63.6)
Upper	36.1 (19.9, 56.1)	34.4 (17.4, 56.6)	18.4 (7.4, 39.0)	11.1 (3.4, 30.6)
Higher	46.8 (20.5, 7.05)	35.1 (13.2, 65.8)	7.7 (1.0, 39.6)	10.4 (1.4, 47.7)
Household income (€/month)				
300 or less	36.8 (9.0, 77.4)	51.8 (17.6, 84.4)	11.4 (1.5, 52.4)	-
301 - 600	47.1 (26.2, 69.2)	36.8 (17.9, 61.0)	5.6 (1.3, 20.4)	10.5 (2.8, 32.2)
601 - 900	51.2 (14.9, 86.2)	15.8 (2.0, 62.9)	33.0 (6.7, 77.2)	-
901 - 1,200	-	-	-	-
More than 1,200	-	-	-	-
Does not know	41.0 (15.2, 72.9)	-	46.5 (18.5,	12.5 (1.7, 53.4)
Refused to	39.1 (9.5, 79.7)	29.7 (7.9, 67.5)	8.8 (1.1, 45.5)	22.4 (3.2, 71.5)

Notes: Sample size: 94 (respondents who tried to quit tobacco in the last 12 months, only 61 answers provided)

Table B5.5. *Quit ratio, by selected demographic characteristics*

Demographic characteristics	Quit ratio
	Percentage (95% CI)
Overall	**18.1 (14.9, 21.7)**
Gender	
Male	20.0 (15.8, 25.0)
Female	15.1 (10.9, 20.4)
Age	
18-24	9.4 (3.0, 25.8)
25-34	6.1 (2.2, 15.8)
35-44	14.4 (8.5, 23.4)
45-54	10.0 (5.9, 16.6)
55-64	25.6 (18.6, 34.1)
65-74	41.3 (30.5, 52.9)
75-85	79.4 (51.3, 93.3)
Type of residence	
Urban	20.5 (16.4, 25.4)
Rural	14.6 (10.3, 20.4)
Education level	
Primary or less	19.3 (13.8, 26.5)
Lower secondary	16.3 (9.4, 26.7)
Upper secondary	19.6 (14.3, 26.1)
Higher	15.7 (11.1, 21.7)
Household income (€/month)	
300 or less	19.2 (13.0, 27.4)
301 - 600	19.9 (14.6, 26.5)
601 - 900	17.4 (10.8, 27.0)
901 - 1,200	8.0 (2.3, 24.7)
More than 1,200	5.4 (0.6, 34.1)
Does not know	9.1 (3.1, 23.4)
Refused to answer	20.0 (12.2, 31.0)

Notes: Sample size: 594 (ever smokers = current daily + current less than daily + former daily + former less than daily smokers)

Quit ratio = (former daily and former less than daily smokers) / (current daily + current less than daily + former daily + former less than daily smokers)

Table B5.6. *Percentage distribution of current smokers of manufactured and hand-rolled cigarettes, by smoking intensity today versus in the past and selected demographic characteristics*

Demographic characteristics	How much have you smoked in the past?					
	Manufactured cigarettes			Hand-rolled cigarettes		
	More than now	About the same amount as now	Less than now	More than now	About the same amount as now	Less than now
	Percentage (95% CI)					
Overall	**12.7 (9.7, 16.5)**	**60.3 (55.1, 65.3)**	**27.0 (22.6, 31.9)**	**19.1 (8.8, 36.7)**	**72.5 (56.2, 84.5)**	**8.4 (3.7, 17.6)**
Gender						
Male	14.0 (10.1, 18.9)	58.2 (51.1, 65.0)	27.9 (21.9, 34.8)	11.5 (3.5, 31.8)	83.9 (65.1, 93.6)	4.7 (1.4, 14.1)
Female	10.9 (6.6, 17.4)	63.4 (55.7, 70.4)	25.8 (19.7, 32.9)	27.5 (10.3, 55.7)	60.1 (35.8, 80.2)	12.4 (4.4, 30.5)
Age						
18-24	4.9 (1.2, 18.1)	80.8 (63.6, 91.0)	14.3 (6.0, 30.5)	-	100.0 (100.0, 100.0)	-
25-34	13.1 (6.4, 25.0)	62.3 (5.0, 73.2)	24.6 (16.0, 35.9)	54.6 (6.9, 95.1)	45.4 (4.9, 93.1)	-
35-44	15.1 (8.8, 24.6)	54.7 (43.2, 65.7)	30.2 (20.5, 42.1)	28.5 (8.0, 64.6)	63.4 (30.2, 87.4)	8.0 (1.1, 41.4)
45-54	5.9 (2.8, 11.9)	58.1 (46.7, 68.7)	36.0 (25.8, 47.6)	24.8 (3.9, 72.9)	75.2 (27.1, 96.1)	-
55-64	15.4 (8.8, 25.7)	58.7 (47.5, 69.1)	25.9 (17.3, 36.8)	17.2 (6.5, 38.6)	62.8 (38.0, 82.3)	20.0 (6.4, 47.7)
65-74	25.4 (15.2, 39.4)	60.9 (46.5, 73.6)	13.7 (6.9, 25.3)	4.2 (0.5, 26.5)	78.8 (49.7, 93.3)	17.0 (4.7, 45.8)
75-85	78.4 (24.2, 97.6)	-	21.6 (2.4, 75.8)	-	100.0 (100.0, 100.0)	-
Type of residence						
Urban	13.1 (9.1, 18.5)	60.5 (53.8, 66.7)	26.5 (21.2, 32.6)	23.0 (10.4, 43.6)	70.2 (49.7, 84.9)	6.8 (1.7, 23.8)
Rural	12.2 (8.1, 17.9)	60.1 (51.6, 68.1)	27.7 (20.6, 36.1)	15.2 (3.0, 51.0)	74.9 (47.2, 90.9)	9.9 (3.7, 24.0)
Education level						
Primary or less	12.0 (7.5, 18.8)	66.7 (57.2, 75.1)	21.2 (14.3, 30.3)	16.1 (4.6, 43.1)	78.5 (53.4, 92.1)	5.4 (1.3, 20.1)
Lower secondary	13.4 (5.8, 27.7)	64.3 (48.1, 77.8)	22.3 (11.6, 38.6)	26.8 (6.9, 64.6)	66.9 (32.6, 89.4)	6.3 (0.8, 34.7)
Upper secondary	14.4 (9.9, 20.6)	55.9 (47.9, 63.6)	29.6 (22.9, 37.4)	6.0 (0.8, 33.3)	80.1 (54.4, 93.1)	13.9 (4.0, 38.1)
Higher	9.5 (5.6, 15.7)	55.3 (46.3, 63.9)	35.2 (26.9, 44.5)	32.3 (13.4, 59.4)	55.5 (29.8, 78.5)	12.3 (3.0, 38.9)
Household income (€/month)						
300 or less	12.6 (6.9, 21.7)	69.3 (57.9, 78.7)	18.1 (10.9, 28.6)	17.5 (3.2, 58.0)	76.7 (42.6, 93.6)	5.8 (1.7, 18.1)
301 - 600	13.7 (8.6, 21.0)	55.2 (46.5, 63.6)	31.1 (23.6, 39.8)	19.1 (7.7, 40.0)	70.6 (49.0, 85.6)	10.4 (3.1, 29.7)

Demographic characteristics	How much have you smoked in the past?					
	Manufactured cigarettes			Hand-rolled cigarettes		
	More than now	About the same amount as now	Less than now	More than now	About the same amount as now	Less than now
	Percentage (95% CI)					
601 - 900	19.4 (11.4, 30.9)	56.0 (43.4, 67.9)	24.6 (15.3, 37.1)	-	100.0 (100.0, 100.0)	-
901 - 1,200	10.2 (2.9, 30.6)	44.8 (21.5, 70.6)	45.0 (20.1, 72.7)	-	-	100.0 (100.0, 100.0)
More than 1,200	17.9 (3.3, 58.5)	82.1 (41.5, 96.7)	-	-	-	-
Does not know	7.0 (1.7, 24.1)	50.9 (33.0, 68.5)	42.2 (25.8, 60.5)	-	90.3 (50.3, 98.8)	9.7 (1.2, 49.7)
Refused to answer	5.9 (2.1, 15.8)	72.7 (59.4, 82.8)	21.4 (12.7, 33.7)	75.3 (18.6, 97.6)	24.7 (2.4, 81.4)	-

Notes: Sample size: 448 for current manufactured cigarettes; 61 for current hand-rolled cigarettes

Table B5.7. Percentage distribution of current smokers who smoke less today, by reasons for reduced smoking intensity

Reasons for smoking less today	Manufactured cigarettes	Hand-rolled cigarettes
	Percentage (95% CI)	
Price increase	20.1 (11.1, 33.5)	68.7 (30.4, 91.6)
Health reasons	67.7 (53.7, 79.1)	31.3 (8.4, 69.6)
Adoption of tobacco control policies	12.2 (6.0, 23.0)	-

Notes: Sample size: 56 current manufactured cigarettes smokers and 11 current hand-rolled cigarettes smokers who smoke less today

Table B6.1 Percentage distribution of adults, by smoking policy in home environment

Is smoking allowed at home?	All adults	Current smokers	Non-smokers
	Percentage (95% CI)		
Yes, in all rooms	11.8 (9.6, 14.4)	16.6 (13.1, 20.8)	7.3 (5.0, 10.6)
Yes, in all rooms except in bedroom and children's rooms	8.7 (6.8, 10.9)	12.4 (9.3, 16.2)	5.2 (3.4, 7.9)
Yes, only in one room	19.9 (17.2, 22.9)	24.0 (19.9, 28.5)	16.1 (12.8, 20.2)
Yes, but only on the terrace/outside	31.6 (28.4, 35.0)	35.2 (30.6, 40.1)	28.3 (23.8, 33.2)
No	27.9 (24.7, 31.3)	11.9 (8.9, 15.7)	42.9 (37.8, 48.1)

Notes: Sample size: 1,006

Table B6.2. *Percentage distribution of adults who are exposed to tobacco smoke at home, by smoking status and selected demographic characteristics*

Are you exposed to tobacco smoke at home?	Non-smokers		Smokers	
	Yes	**No**	**Yes**	**No**
	Percentage (95% CI)			
Overall	**24.3 (19.2, 30.3)**	**72.2 (65.9, 77.7)**	**52.6 (47.3, 57.9)**	**46.0 (40.8, 51.4)**
Gender				
Male	24.7 (17.1, 34.4)	74.0 (64.3, 81.9)	49.2 (42.1, 56.4)	48.8 (41.6, 56.0)
Female	24.1 (17.6, 32.1)	71.0 (62.5, 78.3)	57.5 (49.6, 65.0)	42.2 (34.6, 50.1)
Age				
18-24	27.1 (15.3, 43.2)	62.1 (45.2, 76.5)	44.2 (25.7, 64.5)	55.8 (35.5, 74.3)
25-34	14.4 (5.1, 34.4)	81.4 (62.3, 92.0)	57.0 (44.0, 69.2)	41.5 (29.4, 54.7)
35-44	34.3 (21.4, 50.0)	64.2 (48.5, 77.3)	55.4 (43.5, 66.7)	44.6 (33.3, 56.5)
45-54	19.4 (10.0, 34.1)	80.6 (65.9, 90.0)	56.3 (44.9, 67.1)	42.2 (31.6, 53.6)
55-64	29.8 (17.7, 45.6)	70.2 (54.4, 82.3)	45.7 (35.5, 56.3)	52.2 (41.6, 62.5)
65-74	22.0 (11.9, 37.1)	76.6 (61.6, 87.1)	49.8 (35.8, 63.8)	48.6 (34.7, 62.6)
75-85	19.5 (4.6, 54.8)	80.5 (45.2, 95.4)	35.6 (5.4, 84.4)	40.4 (8.4, 83.4)
Type of residence				
Urban	22.7 (16.4, 30.5)	75.4 (67.3, 82.0)	47.2 (40.7, 53.9)	51.3 (44.6, 57.9)
Rural	26.4 (18.5, 36.2)	68.0 (57.8, 76.8)	59.7 (50.8, 68.0)	39.2 (31.0, 48.1)
Education level				
Primary or less	24.3 (15.3, 36.3)	75.1 (63.1, 84.2)	53.7 (43.9, 63.3)	45.2 (35.7, 55.1)
Lower secondary	19.3 (7.1, 42.8)	80.7 (57.2, 92.9)	51.6 (37.2, 65.7)	48.4 (34.3, 62.8)
Upper secondary	29.7 (21.2, 39.9)	62.8 (52.1, 72.4)	54.7 (46.6, 62.7)	43.0 (35.2, 51.2)
Higher	15.5 (9.0, 25.3)	83.0 (72.9, 89.9)	48.7 (39.7, 57.7)	49.5 (40.5, 58.5)
Household income (€/month)				
300 or less	33.5 (19.7, 50.8)	66.5 (49.2, 80.3)	50.4 (39.5, 61.2)	45.4 (34.8, 56.5)
301 - 600	32.8 (23.1, 44.2)	65.6 (54.0, 75.5)	55.5 (46.7, 64.0)	44.2 (35.7, 53.0)
601 - 900	18.4 (9.2, 33.4)	81.6 (66.6, 90.8)	53.7 (40.6, 66.2)	46.3 (33.8, 59.4)
901 - 1,200	-	100.0 (100.0,	59.2 (33.0, 81.0)	40.8 (19.0, 67.0)
More than 1,200	-	100.0 (100.0,	23.2 (3.7, 70.2)	76.8 (29.8, 96.3)
Does not know	27.3 (13.9, 46.6)	65.8 (46.5, 81.0)	57.0 (38.5, 73.8)	43.0 (26.2, 61.5)
Refused to answer	10.3 (4.7, 20.9)	81.0 (66.8, 90.0)	45.6 (30.8, 61.3)	53.2 (37.6, 68.2)

Notes: Sample size: 1,006

Table B6.3. *Percentage distribution of adults who are exposed to tobacco smoke in various public places, by selected demographic characteristics*

Demographic characteristics	Did anyone smoke inside these places?					
	Government buildings or offices	Health care facilities	Restaurants	Bars or nightclubs	Public transportation	Universities or schools
	Percentage (95% CI)					
Overall	**12.6 (8.5, 18.3)**	**4.8 (3.2, 7.1)**	**44.2 (39.3, 49.2)**	**73.6 (66.0, 80.0)**	**8.5 (6.3, 11.6)**	**9.4 (6.0, 14.5)**
Gender						
Male	10.1 (5.6, 17.4)	2.2 (1.0, 4.7)	43.8 (37.0, 50.7)	76.2 (66.6, 83.7)	12.8 (8.9, 18.1)	8.4 (4.2, 16.2)
Female	15.9 (9.2, 25.9)	6.8 (4.3, 10.6)	44.7 (37.6, 52.1)	69.2 (55.9, 80.0)	4.3 (2.4, 7.7)	10.0 (5.6, 17.4)
Age						
18-24	20.2 (5.6, 51.6)	7.6 (2.2, 23.3)	53.9 (39.0, 68.0)	83.8 (69.4, 92.2)	8.0 (2.9, 20.0)	13.4 (6.5, 25.5)
25-34	9.8 (3.4, 25.3)	7.6 (3.3, 16.7)	42.5 (32.2, 53.5)	66.0 (51.4, 78)	5.7 (2.2, 13.7)	9.8 (4.3, 21.0)
35-44	13.2 (6.0, 26.5)	2.9 (1.0, 7.8)	39.8 (30.3, 50.1)	71.4 (55.2, 83.4)	10.5 (5.1, 20.3)	4.4 (1.4, 13.3)
45-54	12.6 (5.1, 28.1)	4.5 (1.5, 13.2)	45.2 (33.9, 57.1)	63.6 (35.1, 85.0)	8.9 (4.6, 16.7)	5.9 (1.8, 17.5)
55-64	11.4 (5.2, 23.3)	4.3 (2.0, 9.2)	39.5 (29.4, 50.5)	81.1 (47.5, 95.3)	8.4 (4.5, 15.2)	10.9 (2.6, 35.5)
65-74	13.1 (3.8, 36.6)	4.2 (1.3, 12.4)	47.5 (30.9, 64.5)	88.1 (46.7, 98.4)	11.5 (5.0, 24.4)	-
75-85	-	3.8 (0.5, 22.8)	44.6 (11.1, 83.9)	-	5.8 (0.8, 32.5)	-
Type of residence						
Urban	15.4 (9.9, 23)	3.6 (2.0, 6.3)	44.3 (38.2, 50.7)	72.4 (62.0, 80.9)	10.5 (7.2, 15.2)	11.0 (6.7, 17.5)
Rural	7.4 (3.0, 17.3)	6.3 (3.7, 10.7)	44.0 (36.0, 52.3)	75.0 (62.9, 84.1)	6.2 (3.6, 10.7)	7.0 (2.6, 17.7)
Education level						
Primary or less	4.8 (0.7, 27.5)	5.7 (2.9, 11.0)	51.3 (38.7, 63.8)	86.1 (63.8, 95.6)	15.6 (10.2, 23.2)	4.0 (0.9, 15.1)
Lower secondary	-	-	35.4 (21.2, 52.6)	67.3 (37.5, 87.6)	1.6 (0.2, 10.8)	-
Upper secondary	11.4 (5.6, 21.8)	4.2 (1.8, 9.4)	40.6 (33.4, 48.3)	67.7 (56.1, 77.4)	7.7 (4.4, 13.3)	10.7 (5.3, 20.4)
Higher	22.5 (14.3, 33.5)	8.7 (4.9, 15.2)	51.2 (43.7, 58.6)	80.5 (70.6, 87.6)	6.2 (2.9, 12.8)	14.4 (8.1, 24.4)
Household income (€/month)						
300 or less	3.5 (0.8, 13.8)	5.7 (2.5, 12.6)	45.1 (32.3, 58.5)	71.9 (43.8, 89.4)	16.9 (10.7, 25.6)	4.8 (1.1, 18.0)
301 - 600	15.9 (8.9, 26.8)	4.1 (2.0, 8.5)	40.7 (33.0, 48.9)	75.8 (63.0, 85.2)	6.0 (3.5, 10.2)	4.4 (1.5, 12.3)

Demographic characteristics	Did anyone smoke inside these places?					
	Government buildings or offices	Health care facilities	Restaurants	Bars or nightclubs	Public transportation	Universities or schools
	Percentage (95% CI)					
601 - 900	12.6 (5.5, 26.2)	5.3 (2.1, 12.7)	36.6 (27.2, 47.2)	62.9 (45.5, 77.5)	8.3 (3.3, 19.7)	19.5 (9.3, 36.3)
901 - 1,200	28.6 (7.3, 66.9)	10.7 (1.5, 48.3)	38.9 (20.3, 61.4)	48.9 (19.6, 79.0)	-	-
More than 1,200	39.0 (5.2, 88.1)	11.6 (1.4, 54.2)	41.4 (14.7, 74.4)	63.1 (12.9, 95.2)	-	-
Does not know	-	4.4 (1.1, 16.7)	56.9 (39.4, 72.9)	81.3 (57.5, 93.3)	-	5.7 (1.3, 21.1)
Refused to answer	10.0 (3.4, 26.1)	3.5 (1.2, 9.8)	57.1 (43.1, 70.1)	81.2 (56.7, 93.4)	8.6 (3.1, 21.6)	19.6 (8.6, 38.9)

Notes: Sample size: 1,006

Table B6.4. *Percentage distribution of current smokers who were told that their smoking bothers other people*

How often have you been told that your smoking bothers other people?	Percentage (95% CI)
Never	12.7 (9.8, 16.3)
Once	4.6 (3.0, 7.0)
A few times	37.8 (33, 42.9)
Many times	41.8 (37, 46.8)
Does not know	2.8 (1.7, 4.7)
Refused to answer	0.2 (0.0, 0.9)

Notes: Sample size: 486

Table B7.1a. *Average amount spent on 20 manufactured cigarettes*

Overall	Average amount spent on 20 manufactured cigarettes (in €)
	Mean (95% CI)
	1.73 (1.57, 1.90)

Notes: Sample size:448 (current smokers)

Table B7.1b. *Average amount spent on 20 hand-rolled cigarettes*

Overall	Average amount spent on 20 hand-rolled cigarettes (in €)
	Mean (95% CI)
	0.94 (0.72, 1.16)

Notes: Sample size: 61 (current smokers)

Table B7.2. *Average expenditure per month on manufactured and hand-rolled cigarettes and average number of consumed cigarettes among current adult smokers, by selected demographic characteristics*

Demographic characteristics	Average monthly spending on manufactured cigarettes (in €)	Average number of manufactured cigarettes smoked per month	Average monthly spending on hand-rolled cigarettes (in €)	Average number of hand-rolled cigarettes smoked per month
	Mean (95% CI)			
Overall	**30.68 (28.02, 33.35)**	**382.0 (354.8, 409.2)**	**13.29 (10.69, 15.89)**	**308.8 (230.6, 387.1)**
Gender				
Male	34.1 (30.14, 38.07)	410.2 (373.1, 447.3)	14.58 (11.42, 17.74)	320.4 (218, 422.8)
Female	25.80 (22.86, 28.74)	342.8 (302.6, 382.9)	11.55 (7.88, 15.23)	294.4 (172, 416.7)
Age				
18-24	25.59 (17.26, 33.92)	289.9 (177.1, 402.7)	12.90 (2.57, 23.22)	179.4 (54.9, 303.8)
25-34	31.74 (27.38, 36.11)	409.1 (354.1, 464.0)	16.28 (16.28, 16.28)	658.2 (377.1, 939.3)
35-44	32.09 (27.36, 36.83)	416.6 (361.2, 471.9)	13.92 (9.61, 18.22)	183.7 (39.1, 328.2)
45-54	35.01 (26.84, 43.17)	389.0 (319.6, 458.5)	13.38 (6.25, 20.52)	202.5 (85.2, 319.8)
55-64	27.31 (23.12, 31.49)	377.5 (321.3, 433.7)	13.01 (10.41, 15.62)	412.8 (267.2, 558.5)
65-74	23.86 (18.22, 29.50)	311.3 (243.2, 379.3)	12.26 (8.60, 15.92)	446.2 (240.0, 652.4)
75-85	22.80 (10.31, 35.30)	290.7 (183.0, 398.5)	16.28 (16.28, 16.28)	840.0 (840.0, 840.0)
Type of residence				
Urban	26.06 (22.95, 29.16)	320.6 (289.4, 351.9)	13.88 (11.23, 16.52)	313.4 (198.6, 428.3)
Rural	36.84 (32.56, 41.13)	464.4 (421.6, 507.2)	12.66 (8.28, 17.05)	304.0 (191.4, 416.7)
Education level				
Primary or less	32.23 (27.60, 36.85)	425.1 (364.2, 486.1)	15.89 (12.49, 19.29)	451.3 (301.3, 601.3)
Lower secondary	34.08 (25.94, 42.22)	406.3 (336.3, 476.2)	9.85 (5.31, 14.39)	198.8 (85.1, 312.6)
Upper secondary	29.86 (25.78, 33.93)	367.4 (324.9, 409.8)	15.03 (9.41, 20.65)	325.3 (185.0, 465.6)
Higher	26.26 (22.44, 30.09)	325.1 (278.8, 371.4)	14.12 (10.17, 18.06)	266.3 (116.8, 415.7)
Household income (€/month)				
300 or less	25.34 (21.08, 29.61)	334.7 (285.2, 384.2)	14.52 (9.40, 19.64)	267.0 (143.2, 390.8)
301 - 600	32.63 (28.71, 36.55)	423.8 (376.3, 471.2)	10.72 (7.98, 13.46)	292.2 (196.9, 387.4)

Demographic characteristics	Average monthly spending on manufactured cigarettes (in €)	Average number of manufactured cigarettes smoked per month	Average monthly spending on hand-rolled cigarettes (in €)	Average number of hand-rolled cigarettes smoked per month
	Mean (95% CI)			
601 - 900	30.47 (25.19, 35.74)	391.8 (326.3, 457.4)	17.1 (14.03, 20.17)	832.6 (338.2, 1327)
901 - 1,200	45.52 (16.14, 74.89)	369.9 (240.0, 499.7)	6.52 (6.52, 6.52)	76.0 (76.0, 76.0)
More than 1,200	27.41 (17.62, 37.20)	220.3 (30.7, 409.8)	-	-
Does not know	37.84 (24.99, 50.69)	441.0 (314.3, 567.7)	20.61 (14.02, 27.21)	303.6 (78.6, 528.5)
Refused to answer	25.85 (20.07, 31.63)	323.4 (249.4, 397.4)	15.87 (14.9, 16.85)	564.2 (125.7, 1002.7)

Notes: Sample size: 448 current smokers of manufactured and 61 current smokers of hand-rolled cigarettes

Table B7.3. *Percentage distribution of current manufactured cigarette smokers, by last brand purchased*

Brand	Percentage distribution by last brand
	Percentage (95% CI)
Rodeo	26.3 (21.9, 31.1)
Rothmans	13.7 (10.2, 18.1)
Marlboro	8.2 (5.7, 11.8)
West	7.8 (5.3, 11.4)
Winston	6.7 (4.3, 10.4)
Boss	6.6 (4.4, 9.8)
Chesterfield	6.6 (4.7, 9.3)
Jade	4.5 (2.7, 7.4)
Pall Mall	4.4 (2.8, 6.9)
Lucky Strike	3.0 (1.7, 5.1)
Bond Street	2.4 (1.1, 5.2)
LD	2.0 (1.1, 3.6)
Davidoff	1.8 (0.9, 3.4)
Other	1.3 (0.6, 2.9)
Monte Carlo	1.2 (0.5, 2.9)
Camel	0.9 (0.3, 2.8)
Brand	0.9 (0.3, 2.2)
Oriental	0.8 (0.3, 2.3)
OME	0.4 (0.1, 1.8)
Karelia	0.3 (0.1, 1.2)
Classic	0.2 (0.0, 1.2)

Notes: Sample size: 448

Table B7.4a. *Percentage distribution of current smokers of manufactured cigarettes, by the place of last purchase and selected demographic characteristics*

Demographic characteristics	Last purchase of manufactured cigarettes by current smokers					
	Manufactured cigarettes					
	In grocery stores	In specialized tobacco shops	In other countries	In duty-free shops	On the street, in the open-air market	In cafés/ Restaurants/ Clubs
	Percentage (95% CI)					
Overall	**96.6 (94.5,97.9)**	**0.9 (0.4, 2.2)**	**0.4 (0.1, 1.5)**	**0.8 (0.3, 2.0)**	**1.2 (0.5, 2.9)**	**0.1 (0.0, 1.0)**
Gender						
Male	96.5 (93.5, 98.1)	1.3 (0.5, 3.4)	0.6 (0.2, 2.5)	-	1.3 (0.4, 4.1)	0.2 (0.0, 1.8)
Female	96.7 (93.1, 98.4)	0.4 (0.1, 2.8)	-	1.9 (0.7, 4.9)	1.0 (0.3, 4.2)	-
Age						
18-24	98.2 (88.1, 99.8)	1.8 (0.2, 11.9)	-	-	-	-
25-34	98.1 (92.5, 99.6)	0.7 (0.1, 4.8)	-	1.2 (0.2, 7.9)	-	-
35-44	95.8 (90.0, 98.3)	-	-	2.2 (0.7, 6.9)	2.0 (0.5, 7.7)	-
45-54	98.2 (93.2, 99.6)	-	0.8 (0.1, 5.7)	-	0.9 (0.1, 6.4)	-
55-64	95.6 (87.7, 98.5)	2.4 (0.5, 10.2)	-	0.4 (0.1, 2.9)	1.5 (0.2, 10.1)	-
65-74	88.5 (73.5, 95.5)	3.2 (0.7, 13.1)	2.2 (0.3, 14.2)	-	4.2 (0.6, 24.4)	1.9 (0.3, 12.3)
75-85	100 (100, 100)					
Type of residence						
Urban	97.0 (93.9, 98.5)	0.9 (0.3, 3.2)	-	0.4 (0.1, 2.0)	1.7 (0.6, 4.5)	-
Rural	96.0 (92.5, 97.9)	1.0 (0.3, 3.1)	0.9 (0.2, 3.4)	1.2 (0.3, 4.1)	0.6 (0.1, 4.0)	0.3 (0.0, 2.4)
Education level						
Primary or less	95.3 (89.8, 97.9)	1.2 (0.3, 4.7)	0.7 (0.1, 4.8)	-	2.8 (0.9, 8.3)	-
Lower secondary	97.2 (89.3, 99.3)	1.3 (0.2, 8.7)	-	-	1.5 (0.2, 10.1)	-
Upper secondary	96.7 (92.7, 98.5)		0.6 (0.1, 4)	1.8 (0.6, 5.6)	0.5 (0.1, 3.6)	0.4 (0.1, 3.0)
Higher	97.1 (93.0, 98.9)	2.0 (0.6, 6.4)	-	0.8 (0.2, 3.3)	-	-
Household income (€/month)						

Demographic characteristics	Last purchase of manufactured cigarettes by current smokers					
	Manufactured cigarettes					
	In grocery stores	In specialized tobacco shops	In other countries	In duty-free shops	On the street, in the open-air market	In cafés/ Restaurants/ Clubs
	Percentage (95% CI)					
300 or less	94.2 (87.4, 97.4)	1.2 (0.2, 8.4)	0.9 (0.1, 6.2)	-	3.1 (1.0, 9.1)	0.7 (0.1, 4.5)
301 - 600	97.9 (94.9, 99.1)	0.7 (0.2, 2.9)	0.5 (0.1, 3.2)	0.5 (0.1, 3.4)	0.5 (0.1, 3.4)	-
601 - 900	96.5 (90.5, 98.8)	1.9 (0.5, 7.7)	-	1.6 (0.3, 6.8)	-	-
901 - 1,200	97.8 (85.3, 99.7)	-	-	2.2 (0.3, 14.7)	-	-
More than 1,200	100.0 (100.0,	-	-	-	-	-
Does not know	94.1 (77.0, 98.7)	1.7 (0.2, 11.7)	-	-	4.2 (0.6, 24.5)	-
Refused to answer	97.7 (85.5, 99.7)	-	-	2.3 (0.3, 14.5)	-	-

Notes: Sample size: 448

Table B7.4b. *Percentage distribution of current smokers of hand-rolled cigarettes, by the place of last purchase and demographic characteristics*

Demographic characteristics	Last purchase of hand-rolled cigarettes by current smokers			
	Hand-rolled cigarettes			
	In grocery stores	In specialized tobacco shops	In other countries	On the street, in the open-air market
	Percentage (95% CI)			
Overall	**6.5 (2.5, 15.9)**	**6.0 (1.3, 24.0)**	**3.3 (0.5, 19.9)**	**84.2 (68.7, 92.9)**
Gender				
Male	3.2 (0.8, 12.3)	11.4 (2.5, 39.7)	6.3 (0.9, 33.4)	79.1 (54.4, 92.3)
Female	10.2 (3.1, 28.9)	-	-	89.8 (71.1, 96.9)
Age				
18-24	-	36.8 (5.7, 85.0)	-	63.2 (15.0, 94.3)
25-34	-	-	-	100 (100, 100)
35-44	-	7.3 (1.0, 39.0)	17 (2.5, 62.2)	75.7 (36.8, 94.3)
45-54	5.8 (0.7, 33.7)	-	-	94.2 (66.3, 99.3)
55-64	23.1 (8.2, 50.3)	-	-	76.9 (49.7, 91.8)
65-74	-	-	-	100 (100, 100)
75-85	-	-	-	100 (100, 100)
Type of residence				
Urban	9.1 (2.7, 26.3)	2.8 (0.4, 17.8)	6.6 (0.9, 34.3)	81.5 (60.5, 92.7)
Rural	3.9 (0.9, 15.5)	9.2 (1.3, 43.2)	-	86.9 (59.2, 96.8)
Education level				
Primary or less	3.8 (0.5, 23.2)	-	-	96.2 (76.8, 99.5)
Lower secondary	6.0 (0.8, 33.6)	12.6 (1.8, 53.6)	9.1 (1.2, 44.3)	72.3 (39.1, 91.4)
Upper secondary	13.4 (3.9, 37.0)	6.0 (0.8, 33.3)	-	80.6 (55.3, 93.4)
Higher	-	-	-	100 (100, 100)
Household income (€/month)				
300 or less	10.5 (3.0, 31.1)	-	-	89.5 (68.9, 97.0)
301 - 600	3.3 (0.4, 20.3)	10.0 (1.5, 45.4)	7.2 (1.0, 36.8)	79.6 (51.3, 93.5)

Demographic characteristics	Last purchase of hand-rolled cigarettes by current smokers			
	Hand-rolled cigarettes			
	In grocery stores	In specialized tobacco shops	In other countries	On the street, in the open-air market
	Percentage (95% CI)			
601 - 900	-	-	-	100 (100, 100)
901 - 1,200	-	-	-	100 (100, 100)
More than 1,200	9.7 (1.2, 49.7)	18.0 (2.3, 67.3)	-	72.3 (28.6, 94.4)
Does not know	-	-	-	100 (100, 100)
Refused to answer	-	-	-	100 (100, 100)

Notes: Sample size: 61

Table B7.5. *Percentage distribution of current smokers of manufactured cigarettes, by reaction to last price increase and selected demographic characteristics*

Demographic characteristics	Temporarily quit smoking	Consumed fewer cigarettes	Switched completely or partially to smokeless tobacco	Switched completely or partially to illegal or smuggled cigarettes	Switched completely or partially to hand-rolled cigarettes	Switched completely or partially to cheaper brands	Did not change smoking habit
	Percentage (95% CI)						
Overall	**2.8 (1.3, 5.7)**	**20.8 (16.0, 26.6)**	**0.3 (0.0, 1.9)**	**0.4 (0.1, 2.7)**	**3.1 (1.4, 7.0)**	**6.1 (3.7, 9.8)**	**66.9 (60.6, 72.7)**
Gender							
Male	4.1 (1.8, 9.1)	20.9 (14.6, 29.0)	0.5 (0.1, 3.4)	0.7 (0.1, 4.8)	3.5 (1.2, 9.4)	6.2 (3.2, 11.5)	64.9 (56.1, 72.9)
Female	1.1 (0.3, 4.8)	20.6 (13.9, 29.4)	-	-	2.7 (0.6, 10.5)	6.0 (2.8, 12.3)	69.5 (60.2, 77.4)
Age							
18-24	-	11.5 (3.3, 32.9)	-	-	-	0.4 (0.1, 2.9)	82.0 (56.9, 94.0)
25-34	0.9 (0.1, 6.0)	23.0 (12.7, 38.1)	-	1.6 (0.2, 10.4)	3.6 (0.9, 13.3)	6.5 (0.9, 35.3)	67.7 (53.3, 79.4)
35-44	0.7 (0.1, 4.9)	26.3 (15.6, 40.8)	1.3 (0.2, 8.6)	-	-	3.9 (1.1, 12.4)	62.5 (48.4, 74.8)
45-54	6.3 (2.2, 17.1)	10.8 (5.0, 21.7)	-	-	9.2 (3.3, 22.9)	9.4 (4.0, 20.5)	69.9 (56.1, 80.9)
55-64	1.1 (0.2, 7.5)	30.1 (19.2, 43.8)	-	-	-	3.7 (1.0, 13.6)	63.4 (49.3, 75.5)
65-74	10.8 (2.5, 35.9)	19.1 (9.0, 36.1)	-	-	-	8.1 (2.5, 22.8)	66.3 (46.9, 81.5)
75-85	-	-	-	-	-	7.5 (2.2, 22.7)	
Type of residence							
Urban	3.3 (1.3, 8.1)	23.8 (17.4, 31.8)	0.5 (0.1, 3.3)	-	3.3 (1.0, 9.9)	6.3 (3.5, 11.0)	63.2 (54.9, 70.7)
Rural	2.1 (0.6, 6.6)	16.7 (10.5, 25.7)	-	0.9 (0.1, 6.2)	2.9 (0.9, 9.1)	5.8 (2.5, 13.3)	71.9 (62.0, 80.1)
Education level							
Primary or less	1.3 (0.2, 8.7)	19.5 (12.2, 29.7)	-	1.5 (0.2, 10.0)	4.9 (1.5, 15)	5.9 (2.2, 14.7)	66.1 (54.6, 76.0)
Lower secondary	2.1 (0.3, 13.5)	28.8 (15.4, 47.2)	-	-	6.1 (1.5, 21.5)	5.7 (1.4, 20.2)	55.2 (37.4, 71.7)
Upper	4.5 (1.5, 12.6)	20.7 (13.9, 29.7)	0.8 (0.1, 5.8)	-	1.4 (0.2, 9.0)	6.8 (3.1, 14.2)	68.5 (58.5, 77.0)
Higher	2.8 (0.9, 8.5)	12.9 (7.5, 21.2)	-	-	-	5.6 (2.4, 12.4)	79.9 (70.7, 86.8)
Household income (€/month)							

Demographic characteristics	Temporarily quit smoking	Consumed fewer cigarettes	Switched completely or partially to smokeless tobacco	Switched completely or partially to illegal or smuggled cigarettes	Switched completely or partially to hand-rolled cigarettes	Switched completely or partially to cheaper brands	Did not change smoking habit
	Percentage (95% CI)						
300 or less	4.9 (1.7, 13.4)	21.8 (12.8, 34.5)	-	-	8.1 (2.6, 22.1)	1.3 (0.4, 3.8)	59.7 (46.0, 72.0)
301 – 600	0.4 (0.1, 3.1)	27.0 (18.1, 38.4)	-	1.0 (0.1, 7.1)	1.8 (0.4, 7.3)	3.0 (1.3, 6.4)	61.7 (50.4, 71.8)
601 – 900	1.0 (0.1, 6.9)	18.3 (9.8, 31.7)	1.8 (0.3, 11.8)	-	-	1.3 (0.5, 3.1)	73.5 (59.6, 83.9)
901 - 1,200	-	21.1 (6.1, 52.3)	-	-	-	-	78.9 (47.7, 93.9)
More than 1,200	-	-	-	-	-	-	100 (100, 100)
Does not know	17.6 (5.5, 44.2)	14.4 (5.3, 33.6)	-	-	-	-	68.0 (45.0, 84.6)
Refused to answer	-	7.6 (2.4, 21.8)	-	-	4.3 (0.6, 24.9)	0.5 (0.2, 1.7)	83.0 (66.7, 92.3)

Notes: Sample size: 448

Table B8.1. Percentage distribution of adults, by attitude towards manufactured cigarette prices and selected demographic characteristics

Demographic characteristics	Thinks that cigarette prices are:				
	Very expensive	**Expensive**	**Adequate**	**Cheap**	**Very cheap**
	Percentage (95% CI)				
Overall	**38.2 (34.9, 41.7)**	**44.8 (41.3, 48.5)**	**8.6 (6.7, 11.0)**	**1.6 (0.9, 2.8)**	**1.1 (0.6, 2.1)**
Gender					
Male	36.4 (31.7, 41.5)	46.8 (41.6, 52.0)	9.3 (6.5, 13.1)	2.6 (1.4, 5.0)	1.1 (0.4, 2.9)
Female	40.0 (35.2, 45.0)	43.0 (38.0, 48.1)	7.9 (5.5, 11.2)	0.5 (0.2, 1.7)	1.1 (0.5, 2.6)
Age					
18-24	35.9 (25.9, 47.2)	40.6 (29.6, 52.5)	14.0 (7.5, 24.7)	-	1.0 (0.1, 6.8)
25-34	38.8 (30.6, 47.6)	45.2 (36.5, 54.3)	10.1 (5.9, 16.9)	0.9 (0.1, 6.3)	0.4 (0.1, 2.6)
35-44	33.4 (26.3, 41.4)	47.3 (39.3, 55.4)	10.1 (5.8, 17.0)	1.3 (0.3, 5.4)	2.2 (0.7, 7.1)
45-54	42.7 (34.4, 51.5)	47.6 (38.9, 56.4)	6.5 (3.3, 12.6)		0.9 (0.2, 3.8)
55-64	41.6 (34.3, 49.3)	45.1 (37.7, 52.7)	4.6 (2.6, 8.1)	2.6 (0.9, 7.6)	1.0 (0.1, 6.9)
65-74	36.6 (28.5, 45.5)	45.5 (36.7, 54.6)	6.4 (3.4, 11.6)	4.2 (1.5, 11.0)	1.0 (0.3, 3.0)
75-85	38.5 (21.9, 58.3)	24.7 (12.1, 44.0)	6.8 (1.7, 24.2)	8.5 (2.2, 28.4)	2.5 (0.3, 15.9)
Type of residence					
Urban	37.3 (33, 41.8)	44.5 (39.9, 49.2)	8.8 (6.4, 11.9)	0.7 (0.3, 1.6)	2.0 (1.1, 3.8)
Rural	39.4 (34.1, 45.0)	45.2 (39.6, 51.0)	8.4 (5.5, 12.5)	2.7 (1.3, 5.4)	-
Education level					
Primary or less	45.4 (39.0, 51.9)	36.7 (30.6, 43.3)	8.3 (4.9, 13.9)	1.6 (0.6, 4.2)	-
Lower secondary	43.2 (32.8, 54.3)	46.3 (35.4, 57.5)	5.4 (2.0, 13.8)	2.2 (0.5, 8.4)	2.0 (0.5, 7.9)
Upper secondary	33.3 (28.0, 39.0)	49.8 (43.9, 55.6)	8.3 (5.5, 12.2)	1.8 (0.8, 4.3)	1.4 (0.6, 3.4)
Higher	32.3 (26.9, 38.2)	46.2 (40.0, 52.6)	13 (8.9, 18.4)	0.4 (0.1, 1.7)	1.4 (0.6, 3.4)
Household income (€/month)					
300 or less	43.8 (36.3, 51.5)	40.2 (32.7, 48.2)	6.3 (3.6, 10.9)	1.4 (0.3, 5.6)	1.4 (0.3, 5.9)
301 - 600	35.4 (30.0, 41.2)	45.0 (39.0, 51.1)	8.4 (5.4, 13)	3.1 (1.6, 6.0)	1.6 (0.7, 3.6)
601 - 900	26.0 (19.0, 34.5)	57.1 (48.0, 65.8)	12.3 (7.4, 19.7)	0.3 (0.0, 2.1)	1.8 (0.4, 7.0)

Demographic characteristics	Thinks that cigarette prices are:				
	Very expensive	Expensive	Adequate	Cheap	Very cheap
	Percentage (95% CI)				
901 - 1,200	13.7 (5.0, 32.1)	59.3 (38.2, 77.4)	25.9 (11.6, 48.3)	-	-
More than 1,200	11.5 (3.1, 34.4)	55.5 (22.9, 84.0)	18.6 (3.7, 57.9)	-	-
Does not know	44.0 (32.5, 56.2)	34.1 (23.5, 46.4)	14.3 (6.6, 28.2)	-	-
Refused to answer	50.1 (40.8, 59.3)	43.5 (34.5, 53.0)	2.1 (0.8, 5.6)	0.7 (0.1, 4.7)	-

Notes: Sample size: 1,006

Table B8.2a. *Percentage distribution of adults, by attitude towards a cigarette price increase of 5% and smoking status*

Would you be in favor or against an increase in the price of tobacco by 5%?	All adults	Current smokers	Non-smokers
	Percentage (95% CI)		
Strongly against	37.6 (34.2, 41.2)	56.9 (51.8, 61.8)	19.5 (15.9, 23.8)
Moderately against	22.9 (20.0, 26.1)	26.6 (22.3, 31.3)	19.5 (15.6, 24.1)
Moderately in favor	19.4 (16.6, 22.4)	11.0 (8.4, 14.2)	27.2 (22.8, 32.2)
Strongly in favor	13.1 (10.8, 15.9)	2.8 (1.6, 4.8)	22.8 (18.7, 27.6)
Does not know or not sure	7.0 (5.3, 9.0)	2.8 (1.4, 5.6)	10.8 (8.1, 14.3)

Notes: Sample size: 1,006 for all adults, 486 for current smokers, 520 for non-smokers

Table B8.2b. Percentage distribution of adults, by attitude towards a cigarette price increase of 20% and smoking status

Would you be in favor or against an increase in the price of tobacco by 20%?	All adults	Current smokers	Non-smokers
	Percentage (95% CI)		
Strongly against	52.5 (48.8, 56.1)	75.6 (71.1, 79.6)	30.9 (26.3, 35.8)
Moderately against	14.9 (12.5, 17.7)	12.8 (10.0, 16.2)	16.9 (13.3, 21.3)
Moderately in favor	12.9 (10.7, 15.4)	6.3 (4.4, 9.1)	19.0 (15.4, 23.3)
Strongly in favor	13.1 (10.8, 15.9)	3.0 (1.8, 5.1)	22.6 (18.5, 27.4)
Does not know or not sure	6.5 (4.9, 8.7)	2.3 (1, 5, 2.0)	10.5 (7.8, 14.1)

Notes: Sample size: 1,006 for all adults, 486 for current smokers, 520 for non-smokers

Table B8.3a. Percentage distribution of adults based on their opinion on different types of tobacco control strategies

Possible strategies for control and limit of tobacco use	To control and limit tobacco use, the government or the national political decisionmakers could adopt several strategies. How useful do you assess each one?				
	Percentage (95% CI)				
	Completely useless	Rather useless	Quite useful	Very useful	Does not know
Free support for tobacco cessation, including nicotine replacement therapy	27.7 (24.4, 31.1)	27.5 (24.4, 30.9)	19.2 (16.6, 22.2)	16.2 (13.8, 19.0)	9.3 (7.5, 11.5)
Making smoking or tobacco products sales illegal	11.1 (9.0, 13.8)	14.4 (12.1, 16.9)	23.7 (20.8, 26.9)	34.4 (34.9, 41.9)	12.4 (10.2, 15.0)
Raising the price of cigarettes/Raising the price of tobacco products	15.0 (12.5, 17.9)	22.7 (19.9, 25.8)	27.8 (24.6, 31.3)	27.9 (24.8, 31.2)	6.6 (5.0, 8.7)
Expansion of smoking bans	24.4 (21.3, 27.8)	24.9 (21.9, 28.1)	23.2 (20.2, 26.5)	22.7 (19.9, 25.7)	4.9 (3.5, 6.7)
Restrict the number of shops that tobacco products can be sold in	19.4 (16.6, 22.6)	20.7 (17.9, 23.9)	23.2 (20.3, 26.3)	30.4 (27.3, 33.8)	6.3 (4.8, 8.2)

Notes: Sample size: 1,006

Table B8.3b. *Percentage distribution of adults based on opinion on different types of tobacco control strategies, by smoking status*

Adoption of tobacco control strategies	Free support for tobacco cessation, including nicotine replacement therapy	Making smoking or tobacco products sales illegal	Raising the price of cigarettes/tobacco products	Expansion of smoking bans	Restrict the number of shops that tobacco products can be sold in
	Percentage (95% CI)				
Smokers					
Completely useless	17.5 (13.8, 22.0)	5.1 (3.2, 8.0)	5.8 (3.8, 8.7)	9.1 (6.6, 12.4)	9.3 (6.5, 13.0)
Rather useless	28.2 (24.0, 32.8)	13.2 (10.4, 16.6)	18.1 (14.9, 21.9)	23.8 (20.0, 28.1)	19.9 (16.2, 24.3)
Quite useful	19.8 (16.2, 24.0)	26.4 (22.3, 31.0)	31.4 (26.9, 36.4)	30.5 (25.9, 35.5)	23.9 (20.0, 28.3)
Very useful	24.3 (20.3, 28.9)	43.2 (38.3, 48.3)	38.9 (34.0, 44.0)	32.0 (27.6, 36.9)	41.0 (36.1, 46.0)
Non-smokers					
Completely useless	37.1 (32.2, 42.3)	16.8 (13.2, 21.3)	23.6 (19.4, 28.4)	38.8 (33.7, 4.04)	28.9 (24.3, 33.9)
Rather useless	26.9 (22.5, 31.9)	15.4 (12.1, 19.5)	27.0 (22.6, 31.8)	25.9 (21.6, 30.7)	21.5 (17.5, 26.1)
Quite useful	18.7 (15.1, 23.0)	21.2 (17.2, 25.8)	24.5 (20.2, 29.4)	16.4 (12.9, 20.7)	22.6 (18.5, 27.2)
Very useful	8.6 (6.4, 11.7)	33.8 (29.1, 38.8)	17.6 (14.2, 21.7)	13.9 (10.9, 17.4)	20.6 (16.8, 24.9)

Notes: Sample size: 1,006

Table B8.4. *Percentage of adults who have seen tobacco promotions during the last six months in various places*

Question regarding certain promotional activity	Yes Percentage (95% CI)
Thinking about the last six months, have you seen or heard about any events (sports, theatre, art, fashion, etc.) that are sponsored by or connected with either cigarette brands, e-cigarette brands, or tobacco companies?	1.0 (0.5, 1.7)
In the last six months, have you noticed (seen) any of the following types of tobacco promotions?	
Free samples of cigarettes?	4.8 (3.5, 6.6)
Special price offers for cigarettes?	6.5 (5.0, 8.4)
Special price offers for other tobacco products (hand-rolled, e-cig, heated tobacco, etc.)?	1.2 (0.7, 2.3)
Free gifts or special discount offers on other products when buying cigarettes (i.e., retailers' loyalty cards)?	5.5 (4.1, 7.3)
Free gifts or special discount offers on other products when buying other tobacco products (i.e., retailers' loyalty cards)?	1.0 (0.5, 1.8)
Clothing or other items with a cigarette brand name or logo?	4.9 (3.7, 6.5)
Special events where smokers are invited to participate, for example, excursions or extreme sports?	0.4 (0.1, 1.2)
Email messages promoting cigarettes?	0.4 (0.2, 1.0)
Mail promoting other tobacco products?	0.2 (0.1, 0.6)

Notes: Sample size: 1,006