

DEMAND FOR TOBACCO PRODUCTS IN NORTH MACEDONIA

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ABSTRACT

Tobacco use in North Macedonia represents a critical public health issue, with one of the highest global smoking prevalence rates at 48.4%. A significant portion of smokers (51.3%) begin smoking between 18 and 24 years, and 44.4% consume over 20 cigarettes daily. Smoking contributes substantially to mortality, with 170.17 deaths per 100,000 people attributed to smoking in 2019. North Macedonia's low cigarette prices and minimal illicit tobacco trade create significant potential for effective tobacco tax policy improvements. Smoking, a major risk factor for non-communicable diseases (NCDs) such as cardiovascular diseases and cancers, underscores the need for comprehensive tobacco control measures to reduce premature mortality and enhance mental health. This study examines tobacco demand in North Macedonia, analyzing consumption patterns, trends, and product types. It underscores the importance of understanding the socio-economic, cultural, and policy dimensions driving tobacco use. The methodology involves a multi-resource desk research approach, drawing on academic literature, government reports, and data from international organizations to provide a comprehensive overview of tobacco demand. Key findings reveal a high smoking prevalence with a slight decline over recent years. Economic factors, especially cigarette prices, significantly influence smoking rates. While the average number of cigarettes smoked per day remains high, there is evidence of reduced smoking prevalence among youth, attributed to increased health awareness and preventive measures. Despite legal restrictions, smoking remains socially accepted, complicating public health efforts.

The paper highlights the urgent need for enhanced tobacco control policies, including increased taxes, stricter smoking bans, and targeted interventions to reduce smoking rates, particularly among vulnerable populations. These measures, combined with continuous monitoring and research, are crucial for achieving significant public health improvements and aligning with Sustainable Development Goals.

Keywords: *Tobacco use, North Macedonia, Smoking prevalence, Tobacco tax policy, Smoking patterns, Tobacco consumption trends.*

JEL Classification: *I12, I18, D12, C83.*

1. INTRODUCTION

Tobacco use remains a significant public health crisis in North Macedonia, with a smoking prevalence among the highest globally (48,4%) (Mijovic Spasova and Mijovic Hristovska, 2018). Around half of smokers (51.3%) began to smoke very early in life, between 18 and 24 years of age. Smoking intensity is also very high: 44.4% of current smokers consume more than 20 cigarettes a day. In 2019, in North Macedonia, 170.17 deaths per 100,000 people were attributed to smoking, and the risk from tobacco increased by 2.4% between 2009 and 2019. This widespread addiction translates to a devastating burden of disease, healthcare costs, and lost productivity. Understanding the factors driving this high demand for tobacco products is crucial for designing effective strategies to reduce its consumption and improve public health outcomes.

North Macedonia has both a high smoking prevalence and the region's lowest cigarette prices. In addition, North Macedonia has the most affordable cigarettes in the region, with 2.55% of the average GDP per capita required to purchase 2,000 cigarettes. The estimation of the illicit market in manufactured and hand-rolled tobacco in North Macedonia is also very low at 1.9% - the lowest level of all countries in the region. Therefore, there is significant space for tobacco tax policy improvement.

Tobacco consumption is a major risk factor for non-communicable diseases (NCDs), including cardiovascular diseases and cancers. High smoking rates contribute to premature mortality. Implementing effective tobacco control measures can significantly contribute to reducing premature deaths from NCDs. While not directly related to tobacco use, mental health and well-being are influenced by various factors. Smoking, often linked to mental health challenges, can indirectly impact the suicide mortality rate. Comprehensive tobacco control measures can contribute to overall mental health improvement.

By addressing tobacco-related challenges, North Macedonia can play a pivotal role in achieving a healthier population and progress towards the Sustainable Development Goals.

The paper delves into the demand for tobacco products in North Macedonia, exploring consumption patterns, analyzing trends, and types of products consumed.

As a small yet significant player in the global tobacco landscape, North Macedonia occupies a pivotal position, both as a producer and consumer of tobacco products. With a rich history deeply intertwined with tobacco cultivation and manufacturing, the nation grapples with the dual challenges of promoting economic development while safeguarding public health. Against this backdrop, understanding the drivers of tobacco demand assumes paramount importance, serving as a cornerstone for evidence-based policymaking and targeted interventions aimed at curbing tobacco use and its associated harms.

The objectives of this paper extend beyond mere data aggregation and statistical analyses. Rather, the paper aims to engender a nuanced understanding of tobacco demand that encompasses the diverse realities and lived experiences of North Macedonia. Through a synthesis of existing literature, empirical research, and descriptive statistics analysis, this study endeavors to offer actionable insights that can inform policy discourse, catalyze transformative change, and advance the public health agenda in North Macedonia.

The country ratified the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in 2006, which introduced a general ban on smoking in public places but has become less restrictive on smoking bans in public places, contributing to exposure in bars and restaurants. The WHO FCTC recommends comprehensive bans on smoking in enclosed public spaces to protect non-smokers from exposure to secondhand smoke. This includes places such as bars, restaurants, and nightclubs. The aim is to create a smoke-free environment to reduce the health risks associated with passive smoking. Implementation Challenges in North Macedonia: Less Restrictive Bans: The information suggests that the smoking bans in North Macedonia have become less restrictive over time, particularly in places

like bars and restaurants. This has led to a significant proportion of adults being exposed to tobacco smoke in these venues.

2. LITERATURE REVIEW

The demand for tobacco and tobacco products has been a focal point of research globally, with scholars delving into various facets of this complex phenomenon. Within the Macedonian context, understanding tobacco demand requires a nuanced exploration of socio-economic, cultural, and policy dimensions. This literature review synthesizes key findings from seminal studies and scholarly works that have contributed to our understanding of tobacco demand in North Macedonia.

Chaloupka (1991) conducted a seminal study on the demand for cigarettes and tobacco products, emphasizing the role of price elasticity in shaping consumption patterns. This foundational research underscored the significance of economic factors in influencing tobacco demand and laid the groundwork for subsequent inquiries into the efficacy of taxation policies and price interventions.

Building on Chaloupka's work, Blecher (2008) investigated the impact of tobacco advertising bans on consumption in developing countries, providing valuable insights into the effectiveness of regulatory measures in curbing demand. His findings highlighted the pivotal role of marketing restrictions in deterring tobacco use, particularly among vulnerable populations.

Fong *et al.* (2006) developed a comprehensive framework for evaluating tobacco control policies through the International Tobacco Control (ITC) Policy Evaluation Project. Their research offered a robust methodology for assessing the effectiveness of various policy interventions, ranging from taxation to smoke-free legislation, in reducing tobacco demand and prevalence.

Siahpush (2003) conducted a seminal study on the socio-economic determinants of smoking cessation, identifying income, education, and social factors as critical predictors of tobacco use behaviors. His findings underscored the importance of addressing socio-economic disparities in tobacco control efforts and tailoring interventions to target high-risk populations.

Huang *et al.* (2018) examined the impact of federal and state cigarette taxes on smoking behaviors, providing empirical evidence for the effectiveness of tax policies in reducing tobacco consumption. Their research demonstrated the utility of fiscal measures in curbing demand and highlighted the role of government intervention in promoting public health objectives.

While these studies offer valuable insights into global trends and dynamics in tobacco demand, a noticeable dearth of research specific to North Macedonia persists. Localized studies examining the socio-economic, cultural, and policy determinants of tobacco consumption are scarce, highlighting the need for contextually relevant research in this area. By addressing this gap, this study aims to contribute to the evidence base informing tobacco control strategies and public health initiatives in North Macedonia.

3. METHODOLOGY

A multi-resource desk research method is employed for this report. This methodology involves the systematic collection and analysis of existing data, literature, reports, and other relevant information from secondary sources. Utilizing secondary data sources allows for a comprehensive investigation of the topic without the need for primary data collection.

The research questions guiding this paper are clearly defined, enabling focused inquiry into specific aspects of tobacco demand in North Macedonia. This structured approach ensures that the information gathered is relevant and aligned with the objectives of the report.

To conduct the literature review, a thorough examination of academic journals, conference papers, reports, and books pertaining to tobacco demand was undertaken. Online databases such as Tobacconomics, Tobaccotaxation, University of Illinois Chicago, Studies from Analytica think tank, Tobacco Control journal, PubMed, Google Scholar, and Scopus were accessed to access a diverse range of scientific literature on the subject.

Furthermore, reports and publications from government bodies, including the Ministry of Health, the Ministry of Finance, the Customs Administration, and the State Statistical Office of North Macedonia, were analyzed. These governmental sources provide valuable data on tobacco consumption rates, policies, and initiatives implemented at the national level.

International organizations such as the World Health Organization (WHO) and the World Bank were also consulted for their reports and publications related to global tobacco control efforts, best practices, and data on tobacco use. These sources offer insights into broader trends and initiatives in tobacco control that may inform the Macedonian context.

Reputable websites and online platforms dedicated to tobacco control, public health, and research were scrutinized for relevant research articles, policy briefs, and statistics pertaining to tobacco demand. Data from these sources were analyzed, and themes were identified to synthesize findings effectively. The information is organized in a structured manner to address the research questions and provide a coherent overview of tobacco demand in North Macedonia.

By employing the desk research method using a variety of resources, this report aims to offer a comprehensive overview of existing knowledge and insights regarding tobacco demand in North Macedonia. This approach enables the synthesis of information from multiple sources, facilitating a deeper understanding of the subject matter.

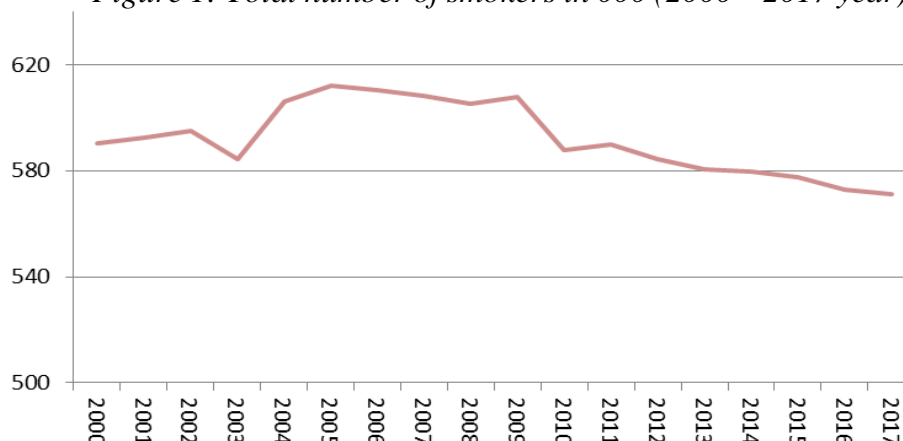
It is important to acknowledge the limitations of this methodology, particularly in terms of the availability, accuracy, and timeliness of the data obtained from secondary sources. Therefore, efforts were made to utilize information from reliable and up-to-date sources to maintain the credibility of the research findings.

4. DEMAND FOR TOBACCO PRODUCTS IN NORTH MACEDONIA

4.1. Prevalence of smoking

The prevalence of smoking in North Macedonia has exhibited a gradual decline over recent years. As of 2017, data indicates that there were approximately 571,000 smokers in the country. Of the total number of smokers in North Macedonia, 304,000 were men and 267,000 were women (refer to Figure 1).

Figure 1: Total number of smokers in 000 (2000 – 2017 year)

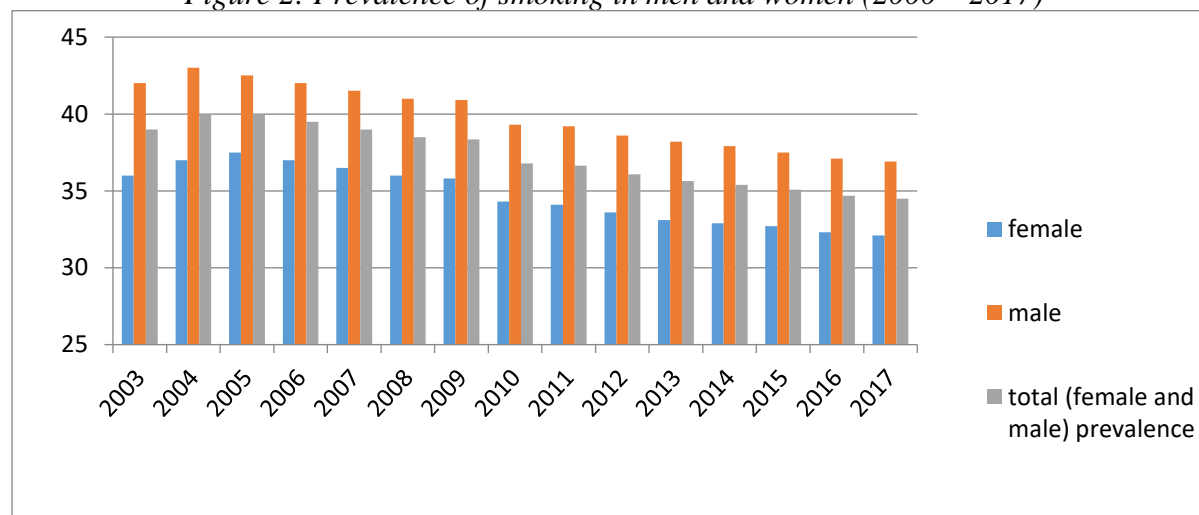


(Source: Calculations on the author upon the basis of data from the Institute for Publicly Health on North Macedonia, estimates on WHO, and estimates on IMEX DATA LLC Skopje)

In 2017 the smoking prevalence rate was estimated at around 35%. Smoking prevalence has seen a moderate decline in both women and men. The reasons behind this trend might be rising cigarette prices (Figure 3), as well as improved education and health awareness about the negative effects of smoking on people's health. Despite this decrease, North Macedonia remains among the countries with the highest prevalence of smoking globally, as well as in terms of the total number of cigarettes smoked per day per smoker. The prevalence of smoking in men was higher and amounted to 37%, and lower in women and was 32%.

Until 2017, we can present the prevalence of tobacco use in North Macedonia due to available data. However, a gap of two years exists without any recorded data on tobacco prevalence. In 2019, a nationally representative survey provided crucial insights, indicating a prevalence rate of 48.4% (Mijovic Hristovska *et al.*, 2020). This marked a notable increase compared to previous years. Subsequently, in 2022, another national representative survey yielded a prevalence rate of 45.4% (WHO, 2023), showcasing a slight decline in tobacco use compared to the 2019 figures. These figures underscore the importance of periodic data collection to track changes in tobacco prevalence over time and inform targeted interventions and policy measures aimed at reducing tobacco consumption in North Macedonia.

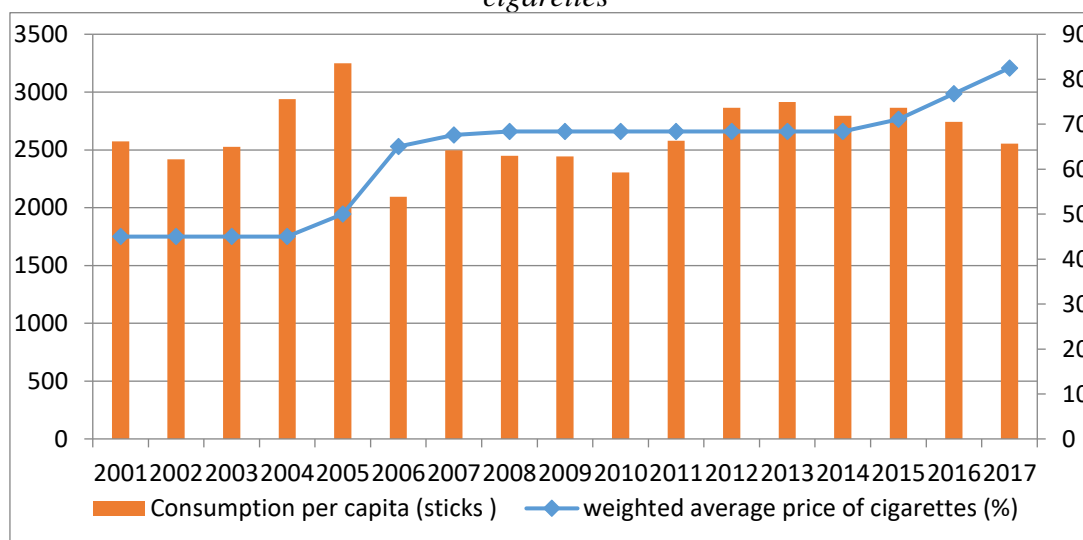
Figure 2: Prevalence of smoking in men and women (2000 – 2017)



(Source: Author's calculations based on data from the Public Health Institute of North Macedonia, WHO estimates and IMEX DATA DOOEL Skopje estimates, Global Journal of Medicine and Public Health; <http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf>; <http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf>)

Figure 3 explains the inverse relation between the consumption of cigarettes and the price of cigarettes. This relation might lead to one of the possible reasons for the decline in consumption of cigarettes (and by that in smoking prevalence) over the years. Namely, from the figure we can see the overview of cigarette consumption per capita alongside the weighted average price of cigarettes in North Macedonia spanning from 2001 to 2017. The orange bars depict the consumption of cigarettes per capita, while the blue line represents the weighted average price of cigarettes.

Figure 3: Consumption of cigarettes per capita (sticks) and Weighted average price of cigarettes

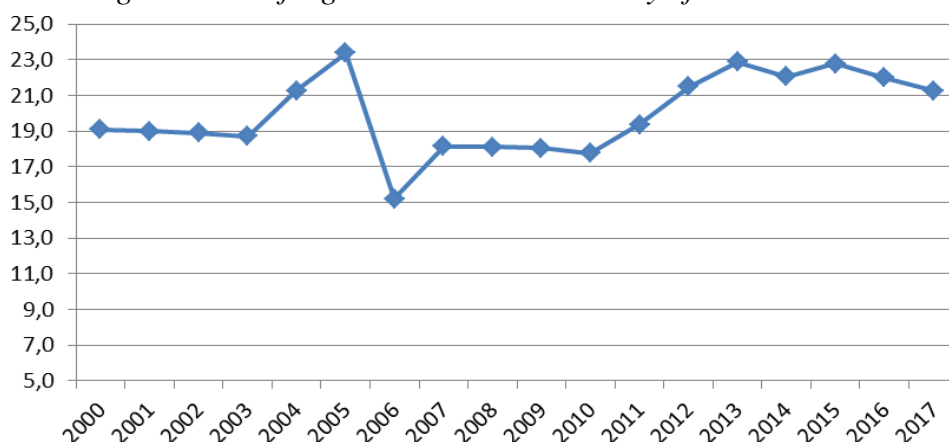


(Source: Author's calculations based on data from the Customs Administration of North Macedonia and State Statistical Office of North Macedonia)

Across the observed period, there is a fluctuating trend in cigarette consumption per capita, with an upward trend in some years and while decreasing trend in other years. The weighted average price of cigarettes demonstrates fluctuations but generally exhibits an upward trajectory.

The connection of these two variables suggests a potential inverse relationship between cigarette prices and consumption. As the price of cigarettes rises, there may be a corresponding decrease in consumption, while decreases in prices could lead to increased consumption. This pattern aligns with economic theory, which posits that higher prices typically deter consumption, especially for goods with discretionary or harmful attributes. This figure underscores the interplay between pricing policies and smoking behavior, highlighting the potential efficacy of price interventions in curbing cigarette consumption. It provides valuable insights for policymakers and public health advocates seeking to implement evidence-based strategies aimed at reducing tobacco use and its associated health risks in North Macedonia.

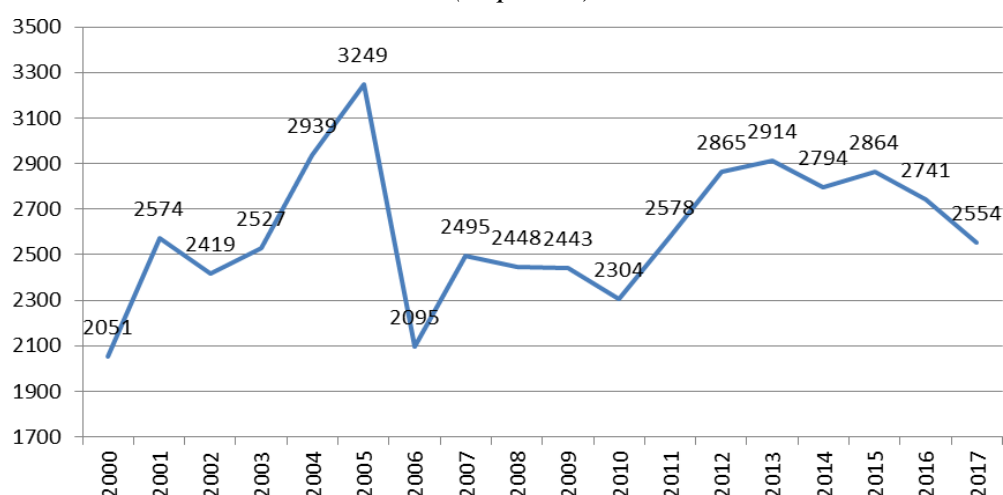
Figure 4: Average number of cigarettes smoked out daily after a smoker 2000–2017 year



(Source: Calculations on the author upon the basis of data from Institute for Public Health on North Macedonia, WHO estimates and IMEX DATA LLC estimates Skopje, *Global Journal of Medicine and Public Health*; <http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf>; <http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf>)

While the prevalence of smoking continues to decline, the average number of cigarettes smoked per day per smoker remains fairly stable (Figure 4). In 2017, the average smoker in North Macedonia smoked 21.3 cigarettes per day.¹ The trend in Figure 4 matches the trend in cigarettes sold (Figure 5), showing the same large decline in cigarettes smoked per smoker per day in 2006. This is due to the drastic increase in the price of cigarettes in January 2006; hence the big drop in the number of cigarettes sold at the end of 2006.

Figure 6: Annual consumption of cigarettes after head-on resident 2000 –2017 year (in pieces)



(Source: State Statistical Office (method on estimated consumption))

Figure 5 shows that annual cigarette consumption per capita between 2000 and 2017 oscillated around a moderately increasing trend. In 2006, a significant decrease in the annual consumption of cigarettes per capita was observed, which followed an average increase in the prices of tobacco products of 21.6%, an increase in the cigarette excise tax of 10%, and the introduction of a new fee of 0, 15 denars per piece for each manufactured or imported tobacco cigarette (i.e. 3 denars per box) (National Bank of Republic of Macedonia, 2006). As a consequence of the large increase in the price of cigarettes, at the end of 2006, a large drop in the annual consumption of cigarettes per capita was observed.

The increasing trend between 2010 and 2017 can be explained by increased cross-border purchases of cigarettes by tourists from neighboring countries, especially Greece, Bulgaria, and Kosovo with significantly higher cigarette prices. This coincides with EU regulations - Common Agricultural Policy - CAP (Common Agricultural Policy - CAP). Between 2007 and 2013, there were major changes in the EU's tobacco production policy, which led to a sharp decline in tobacco production in all member states, especially in neighboring Greece and Bulgaria (European Commission, 2023).

4.2. Minimum smoking age

According to Article 5 of the Law on Protection from Smoking, the legal age for smoking in North Macedonia is 18 years. As is the case in other countries, the Government of the Republic of North Macedonia has adopted laws and measures to prevent the sale of tobacco products to minors (below 18 years of age). Taking this into consideration,

¹ Author's calculations based on data from the Public Health Institute of North Macedonia, WHO estimates and IMEX DATA DOOEL Skopje estimates, Global Journal of Medicine and Public Health; <http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf>; <http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf>

vending machines for tobacco products are strictly prohibited in North Macedonia. Online retail of tobacco products is not prohibited per se but is subject to strict legislation, which regulates and prohibits sales to minors. Article 9 of the Law on Protection from Smoking states that legal entities and people who are found to violate the law will face fines penalties between 2,000 and 4,500 euros. Each parent or guardian of the minor will also be fined from 500 to 1,000 euros. These penalties apply to several violations of the law, including the sale of tobacco products to minors.

4.3. Youth smoking prevalence

The smoking prevalence among young people in North Macedonia is especially worrying (Institute of Public Health, 2016a). The most vulnerable population is between 13 and 17 years. North Macedonia has taken some measures to address this problem in the past, though so far they have had limited success. National sponsored campaigns were conducted to inform the public and prevent youth from initiating smoking, as well as to reduce the youth smoking prevalence. Some of the measures conducted in the past were undertaken by the governmental body, Agency for Youth and Sports, which has encouraged young people to accept healthy lifestyles and participate in sports. Hence, there was a trend of increase in the focus on health and well-being from the side of the younger generations who tend to lead a healthier lifestyle. According to the Agency, health consciousness about the negative effects of smoking among young people in North Macedonia in the past years has increased.

In North Macedonia, there are three series of research conducted among youth: the European School Survey Project on Alcohol and Other Drugs – ESPAD, Health Behavior School Children Study – HBSC, and the Global Youth Tobacco Survey - GYTS. So far, in North Macedonia, the ESPAD research has been carried out four times: 1999, 2008, 2012 (just on the territory of the city of Skopje), and 2015 year (Institute of Public Health, 2016b).

According to ESPAD from 2008 year, smoking among youth in North Macedonia is widespread. About 43% of minors, aged 16 years and less smoked at least once in their life, while about 13% smoked at least one cigarette daily. The 2008 “Global School-Based Student Health Survey” showed that 14% of minors aged 12 to 16 were smoking at least once in the last calendar month. The study also indicated an encouraging trend regarding tobacco exposure among young people, where 67% of young people were exposed to tobacco smoke in public places in 2008, which was significantly lower when compared to 2002. According to the ESPAD study (Institute of Public Health, 2016b). In 2015, the percentage of minors who have smoked at least once in their lifetime dropped to 38.4%, while those who answered that smoked one or two times in their lifetime was 14.7%. According to this study, most young people start smoking at the age of 15. In comparison with previous years, the number of young people using cigarettes is decreasing. The prevalence of smoking declined from 57.6% in 1999 to 38.4% in 2015 year. According to the latest Global Youth Tobacco Survey (GYTS) conducted in 2016, around 12.4 percent of students (14.6 percent of boys and 9.8 percent of girls) use tobacco products.

In this context, increasing tobacco taxes, restricting access to tobacco products, and implementing comprehensive tobacco control policies are crucial strategies for preventing smoking and reducing youth smoking rates. Empirical evidence indicates that higher prices and various non-price tobacco policies can discourage smoking initiation among young people (Merkaj et al., 2022 and Tauras et al., 2001). However, some studies have found inconclusive or weak evidence regarding the impact of prices and taxes on youth smoking initiation (DeCicca et al., 2008, DeCicca et al., 2002, Douglas, 1998 and Douglas & Hariharan, 1994).

Additionally, young people are more likely to start smoking if they are influenced by social factors such as peer pressure and positive attitudes toward smoking. Other factors that can increase the likelihood of youth smoking onset include low socioeconomic status, parental smoking, and exposure to pro-smoking advertising.

4.4. Social acceptance of smoking

In general, the level of social acceptance of smoking in North Macedonia is quite high, having in mind the tradition of tobacco growing country. However, in recent years there has been a trend of changing the lifestyle and increased public consciousness and focus on health and well-being, contributing to a decrease in the consumption of cigarettes per capita (from 3249 in 2005 to 2554 in 2017) (State Statistical Office, 2018.) and decrease in the number of cigarettes sold (from 5225 in 2005 to 4290 in 2017) but a very slight decrease in the smoking prevalence (from 40% in 2005 to 34.5 in 2017).

One of the facts confirming the social acceptance of smoking is the change of the Law on Protection from Smoking in 2018. Namely, the government amended the Law and relaxed the smoking ban, allowing smoking in determined places for smoking and open terraces (Sloboden Pecat, 2018). The move was welcomed by the majority of smokers and the HoReCa sector (hotels, restaurants, cafeterias) (OhridNet, n.d.).

5. SOUTH-EAST EUROPEAN COUNTRIES DEMAND FOR TOBACCO PRODUCTS

The Southeastern Europe (SEE) region is characterized by high tobacco consumption and low cigarette prices (Zubović & Vladislavljević, 2019). According to STC-SEE data (2019), smoking prevalence in the SEE region is very high at 37.6%, which is about nine percentage points higher than the European average of around 29%. Smoking prevalence varies significantly among the countries, ranging from 24.7% in Albania to 48.9% in North Macedonia. Manufactured cigarettes are the most commonly smoked product, with 32.8% of the adult population using them, while roll-your-own tobacco (RYO) is much less prevalent, at 6.3%. Other tobacco products have negligible prevalence (less than 0.5%). On average, MC users smoke 16.5 cigarettes per day, while RYO users smoke 14.6 cigarettes per day.

At the same time, the average cost of a pack of manufactured cigarettes in this region is about €2.1, significantly lower than the European Union (EU) average of €4.91. High tobacco consumption imposes a significant economic burden on households, particularly in light of the poverty rates across these countries. Additionally, the negative health effects of tobacco consumption are long-lasting, with approximately half of smokers dying from tobacco-related diseases. Tobacco taxation is one of the most effective measures to reduce tobacco consumption (World Health Organization, 2018). The effectiveness of these measures relies on consumer responses to price increases. Lower tobacco use prevalence and intensity are associated with more smoking restrictions and support for tobacco price increases. These non-price factors independently and additionally contribute to reducing tobacco use prevalence and intensity.

In contrast to SEE countries, where smoke-filled establishments have largely diapered and smoking prevalence has significantly declined over the past two decades due to comprehensive public health initiatives, the SEE countries have witnessed a less pronounced decrease, influenced by both legal and cultural factors. Experts across the region acknowledge the urgent need for governments and stakeholders to intensify efforts in raising awareness about the hazards of smoking and aligning regional legislation with EU standards. Medical doctors from the Faculty of Medicine in North Macedonia (Zdravevska et al., 2020), emphasize the multifaceted nature of the smoking issue in North Macedonia and the broader SEE region. Factors such as a longstanding tradition of tobacco cultivation and consumption, coupled with

social acceptance of smoking, pose significant challenges. Additionally, limited health education, lack of proactive prevention programs, and insufficient access to supportive treatments further compound the complexity of addressing the smoking epidemic in the region. In addition to traditional tobacco products, during the last few years, new tobacco products have emerged, as heated tobacco and electronic cigarettes, slipping through the gaps of legislation and poorly enforced smoking bans. Available data indicate that smoking (of any tobacco product) remains a significant public health issue. Namely, Serbia, Bulgaria, North Macedonia, Bosnia and Herzegovina, and Montenegro lead not just in Europe but also globally in the number of smokers.

Some of the possible reasons for the high smoking rates in the SEE countries most probably are low prices of tobacco products, lack of smoking bans in closed public spaces in some countries, and lack of efficient implementation of existing laws. In Serbia, attempts to curb indoor smoking in bars and restaurants were undermined by pressure from the hospitality industry, allowing venues smaller than 80 square meters to choose their smoking policy. As a result, most allow smoking. Larger venues must have separate smoking sections, but what qualifies as “separate” is often loosely interpreted. Bosnia and Herzegovina has not enacted any indoor smoking bans. Despite efforts by NGOs and stakeholders, proposed legislation from 2018 has yet to become law (Đorđević, 2020).

The region's tobacco control measures are further weakened by loopholes in advertising restrictions and the aggressive marketing of new tobacco products. Cigarettes are prominently displayed at checkout counters, and tobacco companies frequently redesign packaging to exploit legal gaps. Heated tobacco products, like IQOS and Glo, are often marketed without restriction, with promotional samples freely distributed in bars. Montenegro is one of the countries in the SEE region with the highest level of illicit trade and estimates suggest the market share for illicit tobacco was 51% in 2019. This is contributing to the problem and is countering the efforts to curb consumption. In Montenegro, despite the government's 2018 law banning smoking in bars and restaurants, enforcement issues and the exclusion of heated tobacco products limit its effectiveness. Other regional countries face similar challenges. Bulgaria initially saw success with its 2012 indoor smoking ban but weakened enforcement led to a recovery in smoking rates. In addition, the lack of smoking cessation services and the affordability of tobacco are persistent issues. In North Macedonia, a general ban on smoking in public places, including restaurants and bars, came into effect on January 1, 2010. In early 2018, the Law on Protection was amended, and the smoking ban was weakened by allowing smoking in specially designated areas and open-air terraces. This certainly challenges the tobacco cessation policies.

Ultimately, the SEE region's struggle with smoking is exacerbated by a lack of political will and comprehensive government action. The absence of comprehensive and solid tobacco control measures and robust legal frameworks undermines their effectiveness.

6. CONCLUSION AND POLICY RECOMMENDATIONS

This paper's findings highlight the complexity of tobacco demand in North Macedonia, influenced by various factors such as consumption behavior patterns, economic considerations, social and cultural influences, health implications, and policy interventions. The prevalence of tobacco use remains a significant public health concern, with specific demographic groups and regional differences playing a role in consumption patterns.

Economic factors, especially the price, price elasticity of demand, and implementation of antismoking laws and measures have been identified as important determinants of tobacco consumption. Higher prices and taxes show the potential to reduce tobacco use and

demand, especially among vulnerable populations. In addition, the social and cultural context surrounding tobacco use, including peer influence and social norms, have been identified as influencing factors.

The health implications of tobacco consumption in North Macedonia are significant, with smoking-related diseases such as cardiovascular disorders and respiratory diseases imposing a significant burden on individuals and the health system. Further evaluation and monitoring of the effectiveness of these interventions is needed to measure their long-term impact on reducing tobacco demand.

This paper highlights the importance of evidence-based decision-making in the implementation of tobacco control strategies in North Macedonia. It serves as a valuable resource for policymakers, public health professionals, and researchers, providing insight into the specifics of cigarette consumption, economic factors, social impacts, health implications, and policy interventions related to tobacco demand.

Finally, it is essential to continue monitoring tobacco consumption trends, conduct additional research to address knowledge gaps, and implement targeted interventions to reduce tobacco demand in North Macedonia. By implementing comprehensive evidence-based strategies, it is possible to protect public health, reduce the burden of smoking-related diseases, and create a smoke-free environment for the population of North Macedonia.

Based on the research results, the policy recommendations are:

- To reduce smoking prevalence, the government should increase excises on all tobacco products. Higher excises would lead to higher prices and lower smoking prevalence. This measure is important and will prevent smokers from switching from expensive to a cheaper alternative and instead encourage them to quit tobacco altogether. Higher prices of all tobacco products will decrease smoking intensity.
- The government should combine price measures, such as increasing tobacco taxes, with non-price measures, such as stricter smoking restrictions, and bringing back the smoking ban in indoor places which have been proven to be highly effective in impacting the decrease of smoking rates.
- Raising awareness about the health harms of tobacco through comprehensive public and education campaigns that will likely help to decrease consumption and establish educative campaigns, especially targeting the youth.

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