

TEPAV Tobacco Control Policy Research Team¹

POLICY NOTE

Tobacco Taxation Policies and Affordability in Turkey²

Turkey presents an interesting case in tobacco control policies with its high prevalence rate despite the extensive price and non-price related policies enacted. Tobacco use, associated with many negative health consequences and addiction, has been categorized as a public health concern worldwide. To reduce adverse health effects and the consequent economic burden, countries implement tobacco control policies to curtail tobacco consumption. The policy toolbox contains various demand reduction measures and supply-side regulations. Although each nation has developed its own implementation tools, the tools can be broadly categorized as price and non-price measures. These measures are related to controlling different areas and aspects of tobacco use.

The World Health Organization (WHO), declared six main policy areas, abbreviated as MPOWER, as the key summary indicators of tobacco control policies. The policies are: Monitoring tobacco use and prevention policies (M), Protecting people from tobacco smoke (P), Offering help to quit tobacco use (O), Warning about the dangers of tobacco (W), Enforcing bans on tobacco advertising, promotion and sponsorship (E), and Raising taxes on tobacco (R). Raising taxes can be considered as a price measure while the others can be considered as non-price measures.

This note is related to the effect of taxes (the only price-related measure) on tobacco consumption in Turkey. Currently, the total tax burden on cigarettes is higher than that

¹ This note is prepared by the TEPAV Tobacco Control Policy Research Team.

² Disclosure: This study was funded with a grant from the Foundation for a Smoke-Free World, Inc. ("FSFW"), a US nonprofit 501(c)(3) private foundation. FSFW had no role in the planning or execution of this study, data analysis, or publication of results.

in the European Union (EU) countries, on average. Despite the high tax burden on tobacco products, people in Turkey continue to smoke. Although contradictory at first sight, the outcome is consistent with economic theory. Consumption decisions are based on market prices, not on taxes paid. They are also based on disposable income. Therefore, it is necessary to analyze the effect of tobacco taxes on consumption by taking the affordability of tobacco products into account.

This note is based on several data-based policy analyses that the TEPAV Tobacco Control Policy Research Team has conducted on tobacco consumption behavior in Turkey considering supply, demand, health, and policy aspects. In this note, we analyze the recent increase in smoking prevalence in Turkey and its relation to total tax burden and affordability up until the hikes in Special Consumption Tax (SCT) in January 2022.

Tax Policies and Affordability

Tobacco products are more heavily taxed than other good in many countries due to the link between tobacco consumption and various adverse health consequences to smokers themselves and to those around them.ⁱ Among the many tobacco control policy measures, taxation has been one of the central policies implemented in many countries.ⁱⁱ The harm induced by second-hand smoke and asymmetric health care cost of smokers on the public health system have been associated with market failures and negative externalities and internalities. These factors have traditionally been the primary economic rationale for taxing tobacco products more heavily than other goods.ⁱⁱⁱ Notably, excise taxes directly targeting tobacco products are implemented in numerous countries. These taxes can be applied as ad valorem taxes (as a percentage of price) and/or as specific taxes (fixed monetary amounts per quantity sold). While some countries impose excise taxes solely as specific or ad valorem, some countries such as Turkey adopt a mixed system consisting of both specific and ad valorem terms. In addition, in most countries, tobacco products are subject to a Value Added Tax (VAT), which is applied to almost all products and not only to tobacco products.^{iv}

Through the years, Turkey has changed its tobacco taxation policy several times. Currently, there are two main tax items on tobacco consumption: VAT and Special Consumption Tax (SCT), an excise tax including both ad valorem and specific components. First of all, it should be noted that cigarettes constitute an overwhelming 99.8 percent of the retail sales of the tobacco industry in Turkey.^v Accordingly, further analyses are conducted on cigarettes. Before 2002, cigarettes sold in Turkey were subject to a variety of taxes such as contribution to tobacco fund, defense industry fund, education fund, grazing ground fund, veterans fund, additional tax, and VAT.^{vi} In 2002, the Special Consumption Tax (SCT) was introduced as an excise tax targeting several goods, including tobacco products. From that year on, four tax components on tobacco products have been used in Turkey: (i) SCT 1- Specific excise tax in Turkish Lira (TL), (ii) SCT 2- Minimum specific excise tax in TL, (iii) SCT 3 - Ad valorem excise tax in percentage terms, and (iv) VAT in percentage terms. The VAT has always been applied in the same manner and at the same rate, but there have been changes in the rules about the application of the excise tax components. Appendix 1 presents the full regulation timeline of cigarette taxation, as well as the rates applied and implementation rules in Turkey after the introduction of SCT in 2002.

The current tax components on cigarettes in Turkey are as follows:

- **VAT:** Imposed on all cigarettes as 18 percent of the retail sales price (implying a 15.25 percent share of the retail price the consumer pays).
- **SCT1- Specific Excise Tax:** Implemented on all cigarettes. Unlike the VAT, it is charged as a fixed TL amount per package. Currently, it is 0.7150 TL per package.
- **SCT2- Minimum Specific Excise Tax or SCT3 - Ad Valorem Excise Tax:** SCT2 is charged as a fixed amount per stick. SCT3 is charged as a percent of the retail price. Currently, SCT2 is 0.7197 TL per stick, corresponding to 14.3940 TL for a pack of 20 sticks. SCT3 is implemented as 63 percent of the retail sales price. The tax charged is the higher of the two. A clarifying example is presented in Table 2. Let us suppose that we have two different cigarette brands: “Brand A” and “Brand B”, whose retail sales prices are 24 TL and 20 TL, respectively. Since SCT2 component is a fixed amount per stick, the relevant tax amount is 14.3940 TL per pack for both brands. The ad valorem excise tax (SCT3), 67 percent of the retail price, is 15.12 and 12.60 TL for the two brands, respectively. Since 15.12 is greater than 14.3940, the ad valorem component (SCT3) will be applied on “Brand A.” On the contrary, since 14.3940 is greater than 12.60, the minimum specific excise tax (SCT2) component will be applied on “Brand B.” As a result of the imposition of a specific tax (SCT1) on both brands regardless of the sales price and the conditional framework between SCT2 and SCT3, the tax burden (share of taxes in the retail price) on the two brands will be different.

Table 2 - An example to show the tax components on cigarettes with different prices in Turkey, as of January 3, 2022

Rates			
VAT	SCT1 - Specific Excise Tax, per package	SCT2 - Minimum Specific Excise Tax, per stick	SCT3 - Ad Valorem Excise Tax
15,25%	0,7150 TL	0,7197 TL	63%

Numeric Examples						
Brand	Retail Sale Price	VAT	SCT1	SCT2	SCT3	Total Tax Burden
A	24 TL	3,66 TL	0,7150 TL	14,394 TL	15,12 TL	81,23%
B	20 TL	3,05 TL	0,7150 TL	14,394 TL	12,60 TL	90,80%

Applied to both brands
The higher of the two amounts will be applied

Source: 8305 Özel Tüketim Vergisi Kanunu, T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, T.C. Gelir İdaresi Başkanlığı Mevzuat, Resmi Gazete, TURMOB, Verginet, TEPAV compilations and calculations
Note: Applied tax amounts are highlighted with light blue.

Before we delve into the total tax burden on cigarettes and affordability issues, we list the three takeaways from the cigarette taxation practice in Turkey:

- **Adjusting relative prices of different segment products:** The imposition of a minimum tax amount (via choosing the higher of SCT2 and SCT3), combined with the specific tax (SCT1) leads to a variation in the tax burden of different segments of cigarettes with different sales prices. The intended aim of such an approach is to regulate the gap in the sales prices between premium and low priced alternatives. Hence this approach enables interventions to limit the possible switching down

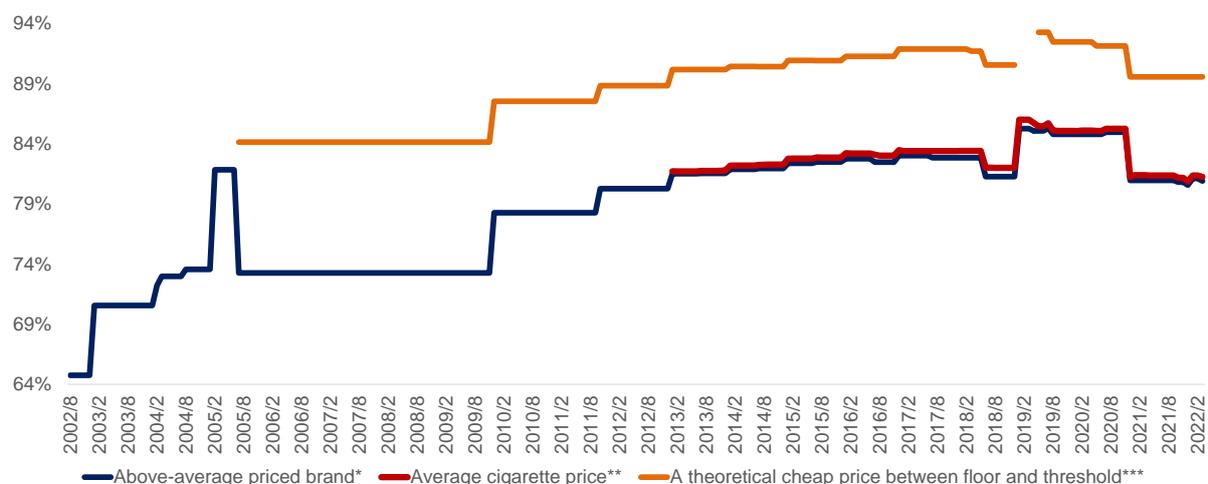
behavior of the consumers, from higher-priced cigarettes to lower-priced ones in response to a hike in taxes, and thus prices, instead of decreasing smoking or quitting.^{vii}

- **An indirect regulation to set the minimum retail price:** With the implementation of SCT1, a fixed tax amount per package is charged regardless of the retail price of the cigarettes. In addition, the rule about choosing the higher of the SCT2 and SCT3 components generates a threshold price below which the SCT2 applies and above which the SCT3 applies. Such an approach indirectly sets a minimum price on cigarettes, assuming that the retail price will at least cover the tax. The minimum price can be calculated as follows, by assuming that the price is composed only of taxes: $(SCT1+SCT2*20)*(1+VAT)$. In January 2022, the taxation scheme yields a minimum price of 17.83 TL.
- **Non-regular policy changes:** Since some tax components are in fixed monetary terms rather than percentage terms, regular updates are needed in order to offset the effects of changes in prices, which can cause an erosion in the effectiveness of taxation in reducing consumption. For this reason, policy makers in Turkey revised legislation, allowing the specific components of SCT to be automatically adjusted twice a year in January and July according to the producer price index, starting from 2013.^{viii} However, these regular updates were not realized after 2017. Only some occasional adjustments were made. Moreover, no adjustment was made in 2017 (see Appendix 1 for the full timeline).

Turkey has been one of the countries with the highest tax burden on tobacco products.

In 1994, before the introduction of the SCT, the total tax burden on cigarette retail prices in Turkey was around 44 percent. In 2000 it went up to 77 percent.^{ix} With the introduction of the SCT framework in 2002, the total tax burden initially declined to 64 percent, after which it has been rising. Figure 1 illustrates how the tax burden depends on the retail price and how the burden has changed over time after the introduction of SCT. The tax burden on three different prices are shown in the figure: The average price; an above-average priced brand; and a hypothetical low price half way between the minimum price implied by the tax regime and the threshold price below which the SCT2 will apply. As stated above, the mixed tax regime adopted by Turkey implies that the tax burden on cigarettes depends on their retail prices, thereby imposing a differentiation of the tax burden across product segments. Currently, the total tax burden on an above-average priced cigarette is 81.2 percent. The overall tax burden on a cigarette with a hypothetical low price is much higher at 90.8 percent. As one of its tobacco control policies, WHO has suggested that taxes be set so that they account for at least 70 percent of the retail price of tobacco products.^x According to 2020 statistics, out of 195 countries, 55 have a total tax burden equivalent to more than 70 percent of their retail prices. Turkey has been listed among the top 10 countries in this list, with the highest tax burden so far.^{xi} In line with the most up-to-date information, the total tax burden on cigarettes in Turkey is higher than the 77.3 percent average in the EU countries. Yet, there are three EU countries—Finland (88.23 percent), Estonia (87.64 percent), and Bulgaria (85.27 percent) that have higher tax burden on cigarettes than Turkey.^{xii} ³

³ Until the end of the transition period, the United Kingdom (UK) is still subjected to the EU legislation. Therefore, UK is in the EU countries' list for the time being. Taxes on cigarettes in the EU per 20-cigarette pack, as of March 2019, are taken into consideration. The unit of analysis is the weighted average retail sale price.

Figure 1 - Total tax burden on differently priced cigarettes in Turkey after the introduction of the SCT, 2002 August – 2022 January⁴

Source: 8305 Özel Tüketim Vergisi Kanunu, T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, T.C. Gelir İdaresi Başkanlığı Mevzuat, TURMOB, Turkstat, Resmi Gazete, Verginet, online newspapers, TEPAV calculations

In Turkey, despite high taxes and increases in cigarette prices, cigarettes have not been expensive enough to offset the rise in the average income; therefore, cigarettes have become more affordable. As was emphasized above, even though the tax burden on cigarettes is high, consumption decisions are made based on the market prices of the products and the disposable income of consumers. To evaluate the effectiveness of taxation on curbing tobacco consumption, we turn our attention to a comparison of market prices (retail sales prices) of cigarettes and average income over the years (Figure 2).⁵

- **Change in real prices:** We consider two groups of cigarettes: above-average priced cigarettes and low-priced cigarettes (i.e. the hypothetical low price as explained above). We convert nominal prices of cigarettes to real prices by deflating them monthly; then, we take yearly averages. The time series for the prices of above-average priced group is for 2002 and later, as done in the earlier analyses; the time series for the low-priced group is for 2005 and later, determined by data availability. In each group, the real price is set to 1 in the initial year and a real price index is created by rescaling prices relative

⁴ Note: * For the period between 1994 and 2004, Turkstat presented the monthly prices of different commodities under the Consumer Price Index statistics. Camel (short and long), Maltepe (short and long), Marlboro (short and long), Parliament, Samsun (short and long), Tekel 2000, Bafra, Birinci, Bitlis, and Yeni Harman are the cigarette brands with monthly prices within this dataset. While some of these brands are not currently on the market, Camel, Marlboro, Parliament, and Tekel 2000 are still available for purchase. Among these brands, the current prices of Marlboro and Parliament are higher than the average cigarette prices announced by Turkstat. Between these two brands, the market share in terms of sold sticks is higher for Marlboro according to Euromonitor statistics. Accordingly, with its above-average price, availability of time-series information, and high market share, Marlboro (short) is considered as a representative above-average priced brand. The time series of above-average priced cigarettes starts from August 2002. After January 2005, the price data for Marlboro (short) is manually gathered via online searches on newspapers. Between August 2004 and June 2005, the amount of the specific minimum excise tax was tied to the share of oriental tobacco within the cigarettes, with a lower tax amount charged to cigarettes with a higher share of oriental tobacco. For the above-average price brand, the highest amounts of taxes were considered in the calculation of tax burdens for this period.

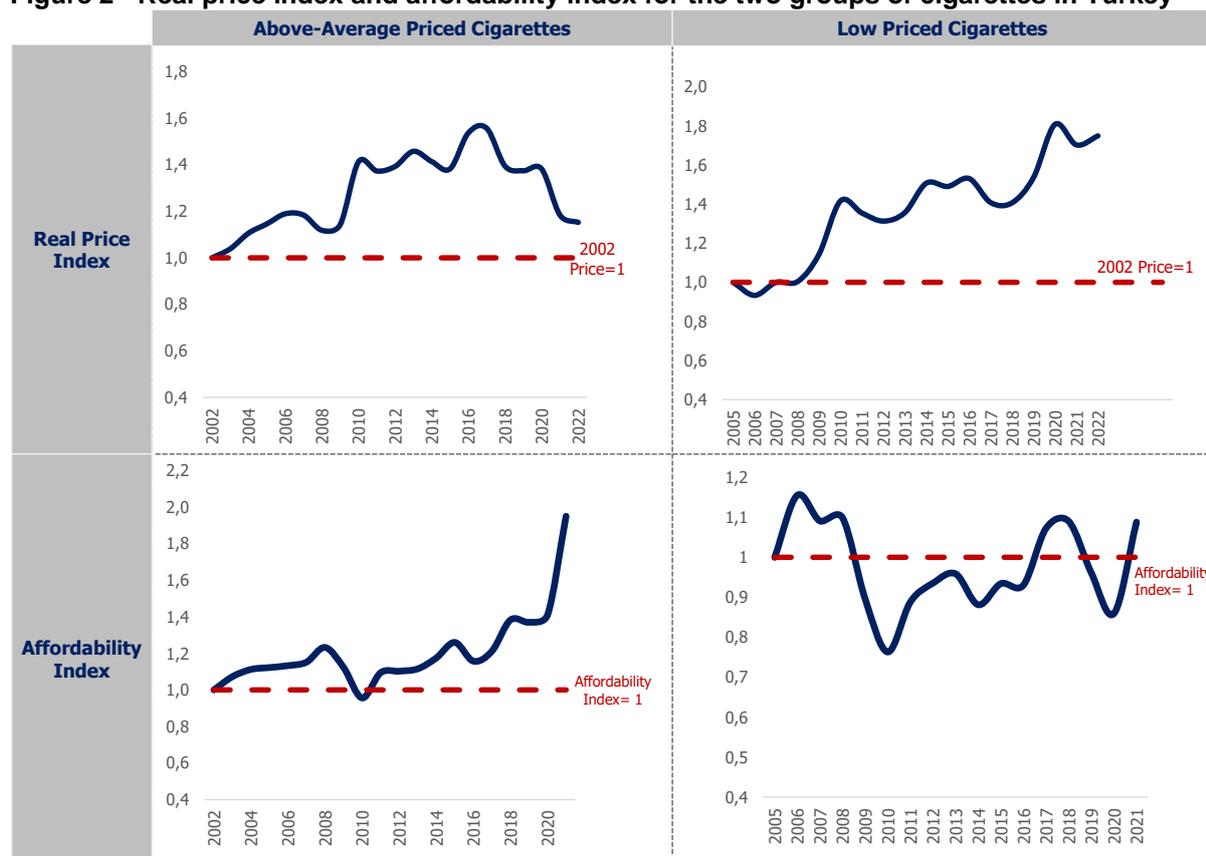
** Turkstat data for average cigarette prices are available after January 2013.

*** The hypothetical low price is defined in the text. The time series of hypothetical low priced cigarettes starts in July 2005 because of data limitations. Since "Minimum Specific Tax" was not employed between January 2019 and April 2019, the threshold price (hence the hypothetical low price) is not calculated for this period.

⁵ For the purposes of this evaluation, the product with the longest time-series price data is chosen in the analyses.

to initial year prices. As seen in Figure 2, the real price index has increased in Turkey in both groups, although more steeply in low priced cigarettes. Therefore, we can say that cigarettes are more expensive today than they were in the early 2000s in general.

- **Change in income:** To evaluate affordability, we calculate the number of cigarettes that can be purchased by Gross Domestic Product (GDP) per capita in a given year. To create an affordability index, we set the number in the initial year to 1 and rescale the number of cigarettes in different years relative to the number in the initial year. We find that above-average priced cigarettes are more affordable in each year, except for 2010. For instance, a person whose income is equal to GDP per capita can purchase 2,385 and 4,652 packs of above-average priced cigarettes in 2002 and 2021, respectively (corresponding to a sizable increase in the affordability index from 1 to 1.95). The pattern in the affordability of low-priced cigarettes is different. Comparing 2005 to 2021, affordability has somewhat increased, since 5,705 and 6,209 packs of low-priced cigarettes can be purchased by GDP per capita in these two years (corresponding to a small increase in the affordability index from 1 to 1.09). In years 2009-2017, the affordability index for this group varied between 0.96 and 1.07. Clearly, despite the high tax burden on these products (higher than 90 percent of the retail price), there was no significant long-term decline in the affordability of low-priced cigarettes in Turkey. To sum up, despite the high tax burden and the continual increase in excises, above-average priced cigarettes have become more affordable overall and the affordability of low-priced cigarettes has not changed much since 2005.
- ➔ Combining these two findings on retail prices of cigarettes and income, it is crystal clear that cigarettes, despite the imposition of high taxes, have not been expensive enough to reduce their affordability in Turkey.

Figure 2 - Real price index and affordability index for the two groups of cigarettes in Turkey

Source: T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, 8305 Özel Tüketim Vergisi Kanunu, T.C. Gelir İdaresi Başkanlığı Mevzuat, Resmi Gazete, Verginet, TURMOB, Turkstat, online newspapers, Euromonitor, TEPAV calculations

Note: * The time series of above-average priced cigarettes starts from August 2002, as in the previous analyses. The time series of 2005 cheap segment cigarette prices starts in July 2005 because of data limitations. Also, 2020 covers the period until June.

Conclusion

As part of the Sustainable Development Goals (SDGs), tobacco control policies are employed worldwide to restrict the adverse health consequences, addiction, and follow-up market externalities of tobacco products.^{xiii} In particular, one of the SDG targets is a 30 percent relative reduction in the prevalence of current tobacco use in persons aged 15 or over between 2010 and 2025.^{xiv} Far from achieving a decline to meet the SDG target, Turkey experienced a 2.6 percentage point increase in its adult daily smoking prevalence rate between 2010 and 2019.

Despite the fact that Turkey enacted all tobacco control measures as pointed out by WHO, and had an overwhelming performance in adopting all MPOWER measures, the rise in prevalence rate indicates a need for a new approach to combat the tobacco pandemic. In this particular note, we have focused on taxes and, consequently, affordability aspects. Even though policy research conducted worldwide has clearly demonstrated the effectiveness of higher tobacco product taxes and prices in reducing tobacco use, the current situation in Turkey requires a new angle to design effective policies.^{xv} In particular, even though the tax burden and real cigarette prices have been increasing, because of the increase in average income, cigarettes has become less expensive in Turkey relative to average income. Since retail prices and affordability of tobacco products are the main determinants of consumer behavior, rather than the tax burden on cigarettes per se, the affordability of cigarettes should be one of the leading

indicators to monitor. Clearly, focusing only on taxes and prices in formulating Turkey's tobacco control policies will not be sufficient.

These findings further reveal the need for a revision of the current automatic-adjustment mechanism in specific taxes to cover the increases in income, and not just inflation.^{xvi} Yet, even the automatic updating mechanism for inflationary pressures have been interfered with in the last couple of years.^{xvii} This reminds us that tobacco control policies require a multi-objective policy setup considering that it crosscuts multiple policy areas. For instance, in the case of tax policies, the other constraints/considerations in policy design are: (i) capability of tobacco consumption in generating sizeable tax revenue, (ii) inflationary pressures of tax increases, and (iii) threat of a demand shift to contraband products. In that sense, when other aspects of this complex problem are taken into account, taxes should not be used as the only policy tool. Accordingly, we will continue to share our data-based policy analyses on other components of the tobacco control policy toolbox to contribute to the policy-making process in the future.

Appendix 1 - Regulation timeline of the cigarette* taxation in Turkey after 2002 with the Special Consumption Tax (SCT)

Implementation Start Date	Excise Duties (Special Consumption Tax)			
	Both are applied		The higher one is applied	
	VAT, % (**)	Specific Excise, TL, Per Package	Minimum Specific Excise, TL, Per Stick	Ad Valorem Excise, %
August 2002 ^{xviii}	15.25			49.50
January 2003 ^{xix}	15.25			55.30
February 2004 ^{xx}	15.25	0.025, 0.050, 0.080 (***)		55.30
August 2004 ^{xxi}	15.25	0.350, 0.450, 0.600, 1.000 (***)		28.00
August 2004 ^{xxii}	15.25	0.350, 0.535, 1.000 (***)		28.00
January 2005 ^{xxiii}	15.25	0.350, 0.534, 1.000 (***)		28.00
February 2005 ^{xxiv}	15.25	0.376, 0.800, 1.350 (***)		28.00
July 2005 ^{xxv}	15.25		0.0600	58.00
March 2006 ^{xxvi}	15.25		0.0600	58.00
February 2007 ^{xxvii}	15.25		0.0700	58.00
November 2007 ^{xxviii}	15.25		0.0750	58.00
January 2008 ^{xxix}	15.25		0.0775	58.00
July 2008 ^{xxx}	15.25		0.0775	58.00
June 2009 ^{xxxi}	15.25		0.1025	58.00
December 2009 ^{xxxii}	15.25		0.1325	63.00
February 2011 ^{xxxiii}	15.25		0.1325	63.00
October 2011 ^{xxxiv}	15.25		0.1450	69.00
October 2011 ^{xxxv}	15.25		0.1450	65.00
January 2013 ^{xxxvi}	15.25	0.0900	0.1575	65.25
July 2013 ^{xxxvii}	15.25	0.0922	0.1613	65.25
January 2014 ^{xxxviii}	15.25	0.1300	0.1875	65.25
July 2014 ^{xxxix}	15.25	0.1366	0.1971	65.25
January 2015 ^{xl}	15.25	0.1866	0.1971	65.25
July 2015 ^{xli}	15.25	0.1968	0.2103	65.25
January 2016 ^{xlii}	15.25	0.2468	0.2210	65.25
July 2016 ^{xliii}	15.25	0.2546	0.2280	65.25
December 2016 ^{xliiv}	15.25	0.3246	0.2280	65.25
March 2018 ^{xliv}	15.25	0.3246	0.2429	65.25
June 2018 ^{xlvi}	15.25	0.4200	0.2800	63.00
January 2019 ^{xlvii}	15.25	0.4200	-	67.00
May 2019 ^{xlviii}	15.25	0.4200	0.2679	67.00
July 2019 ^{xlvi}	15.25	0.4539	0.2895	67.00
August 2019 ^l	15.25	0.4539	0.3899	67.00
May 2020 ^{li}	15.25	0.4539	0.4569	67.00
July 2020 ^{lii}	15.25	0.4851	0.4883	67.00
December 2020 ^{liii}	15.25	0.4851	0.4883	63.00
January 2022 ^{liv}	15.25	0.7150	0.7197	63.00

Source: 8305 Özel Tüketim Vergisi Kanunu, T.C. Cumhurbaşkanlığı Mevzuat Bilgi Sistemi, T.C. Gelir İdaresi Başkanlığı Mevzuat, Resmi Gazete, TURMOB, Verginet, TEPAV compilations

Note: * 2401.20 coded item according to HS classification under the SCT legislation (III)-B list is shared.

** The actual VAT rate is 18 percent; here the share of VAT in the retail price is expressed.

*** For these specific years, even though the applied tax is referred to as "Minimum Specific Excise" in the regulation and it was initially announced per stick, the implementation rule was different from the current "Minimum Specific Excise" rate. In particular, "Minimum Specific Excise" between February 2004 and February 2015 was charged on all cigarettes, as today's "Specific Excise". To follow the current terminology, "Minimum Specific Excise" taxes between February 2004 and February 2005 are reported under the column titled "Specific Excise" in the table.

*** These specific excises were applied according to different criteria over time. In the regulation in February 2004, the tax amount was based on the retail price. In August 2004, January 2005, and February 2005, the amount was based on the share of oriental tobacco

End Note / References

- ⁱ Petit, Patrick, and Janos Nagy. "How to Design and Enforce Tobacco Excises?" International Monetary Fund, October 2016.
<https://www.imf.org/external/pubs/ft/howtonotes/2016/howtonote1603.pdf>.
- ⁱⁱ "WHO Technical Manual on Tobacco Tax Administration." World Health Organization, 2011.
https://apps.who.int/iris/bitstream/handle/10665/44316/9789241563994_eng.pdf?sequence=1.
- ⁱⁱⁱ Ibid.
- ^{iv} Ibid.
- ^v "International Passport Statistics." Euromonitor, July 16, 2019. TEPAV calculations
- ^{vi} Önder, Zeynep. "The Economics of Tobacco in Turkey". Washington, DC: World Bank. 2002.
<http://documents.worldbank.org/curated/en/957951468110978956/The-economics-of-tobacco-in-Turkey-new-evidence-and-demand-estimates>.
- ^{vii} "WHO Technical Manual on Tobacco Tax Administration." World Health Organization, 2011.
https://apps.who.int/iris/bitstream/handle/10665/44316/9789241563994_eng.pdf?sequence=1.
- ^{viii} "6322 Sayılı Amme Alacaklarının Tahsil Usulü Hakkında Kanun İle Bazı Kanunlarda Değişiklik Yapılmasına Dair Kanun Madde 30." TBMM Mevzuat Bilgi Sistemi. Accessed June 27, 2020.
<https://mevzuat.tbmm.gov.tr/mevzuat/faces/maddedetaylari?psira=112604>.
- ^{ix} Önder, Zeynep. "The Economics of Tobacco in Turkey". Washington, DC: World Bank. 2002.
<http://documents.worldbank.org/curated/en/957951468110978956/The-economics-of-tobacco-in-Turkey-new-evidence-and-demand-estimates>.
- ^x "WHO Technical Manual on Tobacco Tax Administration." World Health Organization, 2011.
https://apps.who.int/iris/bitstream/handle/10665/44316/9789241563994_eng.pdf?sequence=1.
- ^{xi} "WHO Report on the Global Tobacco Epidemic 2021." Geneva: WHO. 2019, TEPAV calculations
<https://www.who.int/teams/health-promotion/tobacco-control/global-tobacco-report-2021>.
- ^{xii} Asen, Elke. "Cigarette Taxes in Europe." Tax Foundation, August 22, 2019.
<https://taxfoundation.org/cigarette-tax-europe-2019/>.
- ^{xiii} "Tobacco Control & the Sustainable Development Goals." WHO Europe. Accessed June 27, 2020.
https://www.euro.who.int/_data/assets/pdf_file/0020/340193/TOBACCO-CONTROL-AND-THE-SUSTAINABLE-DEVELOPMENT-GOALS_Edited.pdf.
- ^{xiv} Aungkulanon, Suchunya, Siriwan Pitayangsarit, Kanitta Bundhamcharoen, Chutima Akaleephan, Virasakdi Chongsuvivatwong, Ratsida Phoncharoen, and Viroj Tangcharoensathien. "Smoking Prevalence and Attributable Deaths in Thailand: Predicting Outcomes of Different Tobacco Control Interventions." *BMC Public Health*, July 23, 2019.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6651958/>.
- ^{xv} "WHO Technical Manual on Tobacco Tax Administration." World Health Organization, 2011.
https://apps.who.int/iris/bitstream/handle/10665/44316/9789241563994_eng.pdf?sequence=1.
- ^{xvi} Ibid.
- ^{xvii} Karanfil, Neşe. "Sigaraya Zam Yok, İçkiye Var." *Hürriyet*, October 31, 2017.
<https://www.hurriyet.com.tr/ekonomi/sigaraya-zam-yok-ickiye-var-40628125>.
- ^{xviii} "Official Gazette", *Republic of Turkey*. 12 June 2002.
<https://www.resmigazete.gov.tr/eskiler/2002/06/20020612.htm#1>.
- ^{xix} "Official Gazette", *Republic of Turkey*. 8 January 2003.
<https://www.resmigazete.gov.tr/eskiler/2003/01/20030108M1.htm>.
- ^{xx} "Official Gazette", *Republic of Turkey*. 27 February 2004.
<https://www.resmigazete.gov.tr/eskiler/2004/02/20040227.htm#1>.
- ^{xxi} "Official Gazette", *Republic of Turkey*. 10 August 2004.
<https://www.resmigazete.gov.tr/eskiler/2004/08/20040810.htm#2>.

- xxii "Official Gazette", Republic of Turkey. 29 August 2004. <https://www.resmigazete.gov.tr/eskiler/2004/08/20040829M1.htm>.
- xxiii "Official Gazette", Republic of Turkey. 27 January 2005. <https://www.resmigazete.gov.tr/eskiler/2005/01/20050127-4.htm>.
- xxiv "Official Gazette", Republic of Turkey. 1 February 2005. <https://www.resmigazete.gov.tr/eskiler/2005/02/20050201-1.htm>.
- xxv "Official Gazette", Republic of Turkey. 28 July 2005. <https://www.resmigazete.gov.tr/eskiler/2005/07/20050728-1.htm>.
- xxvi "Official Gazette", Republic of Turkey. 8 April 2006. <https://www.resmigazete.gov.tr/eskiler/2006/04/20060408-1.htm>.
- xxvii "Official Gazette", Republic of Turkey. 17 February 2007. <https://www.resmigazete.gov.tr/eskiler/2007/02/20070217-6.htm>.
- xxviii "Official Gazette", Republic of Turkey. 2 November 2007. <https://www.resmigazete.gov.tr/eskiler/2007/11/20071102-4.htm>.
- xxix "Official Gazette", Republic of Turkey. 24 January 2008. <https://www.resmigazete.gov.tr/eskiler/2008/01/20080124-2.htm>.
- xxx "Official Gazette", Republic of Turkey. 2 July 2008. <https://www.resmigazete.gov.tr/eskiler/2008/07/20080702-3.htm>.
- xxxi "Official Gazette", Republic of Turkey. 16 June 2009. <https://www.resmigazete.gov.tr/eskiler/2009/06/20090616M1-1.htm>.
- xxxii "Official Gazette", Republic of Turkey. 31 December 2009. <https://www.resmigazete.gov.tr/eskiler/2009/12/20091231-3.htm>.
- xxxiii "Official Gazette", Republic of Turkey. 25 February 2011. <https://www.resmigazete.gov.tr/eskiler/2011/02/20110225M2-1.htm>.
- xxxiv "Official Gazette", Republic of Turkey. 13 October 2011. <https://www.resmigazete.gov.tr/eskiler/2011/10/20111013-1-1.htm>.
- xxxv "Official Gazette", Republic of Turkey. 26 October 2011. <https://www.resmigazete.gov.tr/eskiler/2011/10/20111026-10.htm>.
- xxxvi "Official Gazette", Republic of Turkey. 1 January 2013. <https://www.resmigazete.gov.tr/eskiler/2013/01/20130101-1-1.pdf>.
- xxxvii "Alkollü İçkiler ve Tütün Mamullerinde ÜFE Oranında ÖTV Artışı Yapıldı." Verginet. Deloitte, July 12, 2013. <https://www.verginet.net/dtt/11/Vergi-Sirkuleri-2013-84.aspx>.
- xxxviii "Official Gazette", Republic of Turkey. 1 January 2014. <https://www.resmigazete.gov.tr/eskiler/2014/01/20140101-2.htm>.
- xxxix "ÖTV Oranları." TÜRMOB, July 1, 2014. <https://turmob.org.tr/ekutuphane/detailPdf/d8cb2710-388f-4116-8b51-2ac51c0d86f7/>.
- xl "Official Gazette", Republic of Turkey. 1 January 2015. <https://www.resmigazete.gov.tr/eskiler/2015/01/20150101-7-1.pdf>.
- xli "ÖTV Oranları." TÜRMOB, July 8, 2015. <https://turmob.org.tr/ekutuphane/detailPdf/ee9a0723-b7de-46a9-8cc9-f132a5a22719/>.
- xlii "Official Gazette", Republic of Turkey. 1 January 2016. <https://www.resmigazete.gov.tr/eskiler/2016/01/20160101-4.pdf>.
- xliiii "ÖTV Oranları." TÜRMOB, July 4, 2016. <https://turmob.org.tr/ekutuphane/detailPdf/c5e3b185-63b0-467a-b52e-275ca2b90f38/>.
- xliv "Official Gazette", Republic of Turkey. 1 December 2016. <https://www.resmigazete.gov.tr/eskiler/2016/12/20161201-1.pdf>.
- xlv "Official Gazette", Republic of Turkey. 27 March 2018. <https://www.resmigazete.gov.tr/eskiler/2018/03/20180327M3-1.pdf>.

xlvi “Official Gazette”, Republic of Turkey. 30 June 2018.

<https://www.resmigazete.gov.tr/eskiler/2018/06/20180630-13.pdf>.

xlvii “Official Gazette”, Republic of Turkey. 5 January 2019.

<https://www.resmigazete.gov.tr/eskiler/2019/01/20190105-8.pdf>.

xlviii “Official Gazette”, Republic of Turkey. 1 May 2019.

<https://www.resmigazete.gov.tr/eskiler/2019/05/20190501-1.pdf>.

xliv “(III) Sayılı Liste [4760 Sayılı Özel Tüketim Vergisi Kanununun (12/3) Maddesi Uyarınca Güncellenen Liste].” Gelir İdaresi Başkanlığı, March 2, 2019.

https://www.gib.gov.tr/fileadmin/mevzuatek/otv_oranlari_tum/03_07_2019_III_sayili_liste.pdf.

l “Official Gazette”, Republic of Turkey. 15 August 2019.

<https://www.resmigazete.gov.tr/eskiler/2019/08/20190815-16.pdf>.

li “Official Gazette”, Republic of Turkey. 13 May 2020.

<https://www.resmigazete.gov.tr/eskiler/2020/05/20200513-16.pdf>.

lii “Official Gazette”, Republic of Turkey. 15 July

2020. [https://www.pwc.com.tr/tr/hizmetlerimiz/vergi/dolayli-vergi/bultenler/kdv-otv-](https://www.pwc.com.tr/tr/hizmetlerimiz/vergi/dolayli-vergi/bultenler/kdv-otv-bultenleri/2020/alkollu-icecekler-ve-tutun-mamullerinde-uygulanan-maktu-otv-tutarlar%C4%B1nda-ufe-artisi.html)

[bultenleri/2020/alkollu-icecekler-ve-tutun-mamullerinde-uygulanan-maktu-otv-tutarlar%C4%B1nda-ufe-artisi.html](https://www.pwc.com.tr/tr/hizmetlerimiz/vergi/dolayli-vergi/bultenler/kdv-otv-bultenleri/2020/alkollu-icecekler-ve-tutun-mamullerinde-uygulanan-maktu-otv-tutarlar%C4%B1nda-ufe-artisi.html)

liiii “Official Gazette”, Republic of Turkey. 25 December 2020.

<https://www.resmigazete.gov.tr/eskiler/2020/12/20201225-1.pdf>

liv 4760 Sayılı Özel Tüketim Vergisi Kanununa Ekli (IV) Sayılı Listede Yer Alan Bazı Malların Özel Tüketim Vergisi Oranlarına Esas Özel Tüketim Vergisi Matrahlarının Yeniden Tespiti Hakkında Karar

https://www.gib.gov.tr/fileadmin/mevzuatek/otv_oranlari_tum/03012022_III_sayili_liste.pdf