This Policy Brief was developed by the South American Network on Applied Economics/Red Sur and presents the main findings and policy recommendations resulting from the background study for Mexico, developed by Ethos, Laboratorio de Políticas Públicas, within the UIC-Red Sur project "Tobacco taxes in Latin America", as part of the global project coordinated by The University of Illinois at Chicago's (UIC) Institute for Health Research and Policy and supported by the Bloomberg Initiative to Reduce Tobacco Use.
INTRODUCTION

This study analyzes the tobacco control policies that have been implemented in Mexico over time, focusing in particular on the effectiveness of tax policies in reducing cigarette consumption and the impact of smoking on public finances. To this end, it presents both the legislative measures and the actions taken since Mexico signed the Framework Convention on Tobacco Control. Despite these efforts, prevalence in Mexico remains high, since one of every five Mexicans over the age of 12 is in the habit of smoking. The different reasons include the increasing affordability of cigarettes, the serious shortcomings in the implementation of smoke-free spaces and in the eradication of tobacco advertising. Similarly, neither the graphic health warnings on tobacco packaging nor the anti-smoking campaigns have yet had the intended impact.

TOBACCO TAXATION STRUCTURE IN MEXICO

The costs generated by tobacco in the health sector are so high that the revenue from the Special Tax on Production and Services (IEPS) only covers half of them, excluding the activities that seek the prevention and elimination of tobacco consumption. A higher rate of tobacco tax would not only result in an incentive for people to smoke less, but it would also help reduce the burden of smoking on public finances. Taking account of the fact that the IEPS has an ad valorem and a specific component, failure to update the latter since 2013 has led to a significant loss in revenue, estimated at 1.889 billion pesos or more between 2013 and 2017, and the gradual erosion of the effectiveness of the tax in discouraging consumption.

Figure 1. Structure of the total final price of a pack of 20 cigarettes, including taxes

Source: Devised by the author - ETHOS.
The calculation of the IEPS on tobacco is based on the factory price or producer price, which already includes the profit. As shown in Figure 1, the final retail price of a pack of cigarettes ($52.10) is largely made up of the ad valorem IEPS, specific component IEPS and VAT. That is, taxes account for about 67% of the price. However, this percentage is still far from the 75% recommended by the WHO.

In regard to the evolution of the tax revenue from the IEPS on tobacco, Figure 2 shows that the revenue curve shows little variation over the years since the new legislation came into force. Among other reasons, this situation can be attributed to the failure to update the specific component, which prevents these revenues from growing, and some years it even causes them to decrease.

There are different reasons why the IEPS rate has not been modified, one of the main ones being that when it was passed, no mechanisms were included for periodic updates. Another cause is the different activities that the tobacco industry has engaged in – both lobbying and others – which seek to influence political decisions in order to prevent these changes. Similarly, the Tax Certainty Agreement (ACT) signed by the Executive on February 27, 2014, whereby it undertook not to modify the tax legislation from that day to November 30, 2018. However, other taxes were actually modified later on, such as the taxes on flavoured beverages and fuels contained in the IEPS Law.

Figure 2. Revenue from the IEPS on tobacco, 2010-2017 (million pesos)

Source: Prepared by ETHOS with information from the Tax Administration System (SAT). Note: The figure considers constant prices for 2017, considering the Consumer Price Indices reported by INEGI.

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1> Tax Administration System (SAT), available at: https://bit.ly/2s3Hgmo
2> An example of a mechanism of this kind is seen in section 17-A of the Federal Tax Code, which provides that “the contributions, uses, and returns by the federal treasury will be updated during and on account of changes in prices in the country” by using an update factor calculated through the National Consumer Price Index. Source: Federal Tax Code, House of Deputies, amendment of June 25, 2018, at https://bit.ly/2N5phWZ
3> To see how the tobacco industry has influenced public decision-making regarding tobacco control, the following texts are suggested: “CSOs as key agents in the public policy process. Case study: Tax increase in Mexico” by Erick Antonio Ochoa, and “Undue tobacco industry interference in tobacco control policies in Mexico” by Ángela Guerrero and Alejandro Madrazo Lajous. Both texts are included in the book Public Health and Smoking, volume I. Policies for tobacco control in Mexico, National Institute of Public Health, 2013, at https://bit.ly/2LnKqdf
4> Tax Certainty Agreement, available at: https://bit.ly/1cWA1Rz
RESEARCH FINDINGS

The study presents the results of a number of simulations in order to determine the best way to modify the IEPS and make it more effective. Five scenarios were defined for the simulation from 2018 to 2022. These scenarios represent different tax policy options that could be applied so that total taxes (ad valorem IEPS + specific IEPS + VAT) will gradually raise the final prices in such a way that consumption is discouraged and revenue increases. The five scenarios are:

**Base scenario.** The scheme established so far by the IEPS Law remains in force, with a specific tax of 35 cents and an ad valorem tax of 160% of the producer’s price.

**Inflation scenario (1).** Proposes an adjustment of the specific component for inflation without making any further changes to the IEPS Law on tobacco.

**Conservative scenario A (2).** Proposes gradual 25-cent increases in the specific component each year to reach $1.35 pesos per cigarette.

**Conservative scenario B (3).** Proposes gradual 35-percentage-point increases in the ad valorem component to reach 300% of the producer price.

**WHO scenario (4).** Proposes gradual increases in both components of the IEPS on tobacco, so that in 2022 the ad valorem component will be 260% of the producer price and the specific component will be 80 cents per cigarette.

**International price scenario (5).** According to the WHO, the average price of cigarette packs varies according to the country’s level of income. This fifth scenario seeks to offset the lag of the IEPS in recent years by equating the local prices of packs with those in high-income economies.

<table>
<thead>
<tr>
<th>Variable/Scenario</th>
<th>Base</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad valorem IEPS as of 2022</td>
<td>160%</td>
<td>160%</td>
<td>160%</td>
<td>240%</td>
<td>260%</td>
<td>240%</td>
</tr>
<tr>
<td>Specific component IEPS as of 2022 (nominal pesos)</td>
<td>0.35</td>
<td>0.40</td>
<td>1.35</td>
<td>0.35</td>
<td>0.80</td>
<td>2.35</td>
</tr>
<tr>
<td>Total tax (VAT + ad valorem IEPS + specific IEPS) as % of final price</td>
<td>66.3%</td>
<td>66.9%</td>
<td>74.0%</td>
<td>71.5%</td>
<td>75.0%</td>
<td>79.8%</td>
</tr>
<tr>
<td>Change in the number of consumed packs (millions compared to 2018)</td>
<td>+16.2</td>
<td>+3.3</td>
<td>-229.0</td>
<td>-129.4</td>
<td>-176.2</td>
<td>-620.0</td>
</tr>
<tr>
<td>Change in the number of consumers compared to 2018 (millions)</td>
<td>+0.4</td>
<td>+0.3</td>
<td>-1.2</td>
<td>-0.5</td>
<td>-1.4</td>
<td>-3.6</td>
</tr>
<tr>
<td>Change in consumed packs per individual compared to 2018</td>
<td>-0.8</td>
<td>-1.1</td>
<td>-8.3</td>
<td>-5.1</td>
<td>-10.4</td>
<td>-23.7</td>
</tr>
<tr>
<td>Percentage change in the actual price compared to 2018</td>
<td>-2.3%</td>
<td>0%</td>
<td>+40.6%</td>
<td>+23.2%</td>
<td>+48.9%</td>
<td>+108.9%</td>
</tr>
<tr>
<td>Percentage change in IEPS revenue compared to 2018</td>
<td>-2.2%</td>
<td>+0.2%</td>
<td>+55.4%</td>
<td>+21.6%</td>
<td>+57.8%</td>
<td>+44.7%</td>
</tr>
</tbody>
</table>

Source: Ethos Public Policy Laboratory

The results indicate that gradual increases in the specific component would help to reduce the consumption of packs and consumption per individual. In addition, the proposed increase would also raise actual IEPS revenue. In this regard, it is important to mention that an increase in the specific component has to occur at levels above inflation if consumption levels are to really change. On the other hand, gradual increases in the ad valorem component would also achieve the intended effect. However, there are market

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5> The following assumptions are used: annual inflation at 3.56%, according to figures from the Ministry of Finance and Public Credit; 17,624,926 smokers aged between 12 and 65 for 2018, according to the National Institute of Statistics and Geography; an elasticity of demand at -0.36 and income at 0.22 according to the CIAD; an average annual revenue growth of 1.1% in real terms as reported by the National Council for the Assessment of Social Development Policy; an average pack containing 20 cigarettes; the wholesale (or producer) price for the year 2018 at $12.91 pesos and increasing annually with inflation; and a total of 1,399 million packs consumed in Mexico according to the InterAmerican Heart Foundation (FIC) Mexico.

6> According to the OECD, the purchasing power parity index in Mexico for 2017 was 9.23 PPP dollars per peso.
distortions in both cases: in the former, the number of cigarettes per pack decreases and, in the latter, there is a substitution effect with lower-quality brands. Therefore, increasing the specific and the ad valorem component of the IEPS in combination seems to be a more stable tax policy instrument in tobacco control, since it not only contributes to reaching the intended objectives in terms of revenue and consumption, but it also prevents the adoption of unintended consumption patterns. In this regard, it seems that this measure is the most efficient public policy for reducing smoking, increasing revenue and not generating distortions in the market.

ETHOS further concludes that due to the current budgetary architecture – where budget schemes do not distinguish between combatting tobacco and fighting other drugs – it is difficult to break down anti-smoking spending accurately and assessing how efficiently and effectively it meets the objectives.

**POLICY RECOMMENDATIONS**

One of the most important findings of ETHOS’s research is that if the aim is to prevent consumption levels from increasing or remaining stable and increase tax revenue, it is necessary for the tobacco tax to be periodically updated at a greater rate than inflation.

**Tax and budgetary recommendations**

1. **Linking the collection of tobacco taxes with the prevention, cessation and treatment of diseases caused by the consumption of this product.** In line with some of the best international practices, it is recommended that part of the resources collected through the tobacco tax be used to prevent, stop and treat smoking. However, because health costs may exceed the revenue, it is still necessary to continue allocating resources from the general public purse to this issue.

2. **Redesigning the budget structure related to tobacco control.** It is recommended that adequate indicators be produced and that it be clearly established how much is allocated to each of the tobacco control activities.

3. **Setting and sustaining a rate of the Special Tax on Production and Services (IEPS) higher than inflation.** It is recommended that the Executive propose the parameters that constitute this tax each year in such a way that they are consistent with the percentage of the tax in the final price of tobacco recommended by the WHO. In addition, these adjustments should be made at a level above inflation.

**Recommended non-tax measures**

1. **Designing a National Policy for Tobacco Control with broad participation of civil society, stakeholders and decision makers.** A specific national policy is needed which establishes the guidelines to be followed regarding tobacco, linking federal and local efforts and all the agencies involved.

2. **Improving health warnings on the pack.** This recommendation involves reviewing the current provisions in this regard, such as the General Law on Tobacco Control and the Agreement, where the pictograms and warnings included on the packs are specified, in order to make them a fundamental instrument for the prevention of smoking and fully comply with the provisions of the Framework Convention on Tobacco Control.

3. **Extending anti-smoking campaigns to the digital sector.** In addition to these campaigns being part of a comprehensive strategy to prevent smoking among different sectors of the population, it is recommended that their digital and social network presence be reinforced to improve their scope.

4. **Strengthening preventive measures against exposure to tobacco smoke.** It is essential that the current legislation be revised to promote 100% smoke-free spaces, in addition to strengthening the monitoring and punishment mechanisms in cases of non-compliance. In addition, all the federal entities of the country should be required to improve and strengthen their local laws in this regard.

5. **Improving institutional activities aimed at tobacco cessation.** It is recommended that the smoking cessation services provided by public institutions be extended and improved, so that more of the smoking population, regardless of age, socio-economic sector or location, can have access to them. These organizations should receive a suitable budget for these tasks throughout the national territory.

6. **Moving from vague legislation to specific tobacco control policies targeted to reduce consumption.** On the one hand, designing prevention activities close to the population, and on the other, establishing contact and providing professional support during the cessation process among those who are consumers already.
REFERENCES


This Policy Brief was produced based on the background study for Mexico “Accelerating effective tobacco taxes in Mexico: Tax policy and health costs”, developed within the project “Tobacco taxes in Latin America”.

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Within this global initiative, Red Sur led the regional research “Tobacco taxes in Latin America”, which mobilized seven research centers to study the different options for tobacco tax policies in Argentina, Brazil, Ecuador, Mexico and Peru.

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<td>Instituto Torcuato Di Tella (ITDT/Red Sur) Argentina</td>
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