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# **A Novel Tobacco Market Diversification:**

*Unsmoking Rich Countries*

*while Smoking Low-and-Middle Income Countries*

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**Working Paper**

## ABSTRACT

In this working paper, an exploration of available data and information is conducted and findings presented, to support the view that the dichotomous business model and related harm reduction narrative promoted nowadays by the tobacco industry, merits scrutiny by the international community. The promotion of e-cigarettes as welfare enhancing in rich countries, particularly because they are posited to help adult smokers quit, tends to obfuscate a dire reality. The same tobacco industry that promotes (e-cigarettes as harm reduction in rich countries, derives the bulk of its profits by selling cigarettes in lower income countries.

While the cultural dominance of cigarettes, a deadly product, has waned and consumption has fallen significantly in the United States and other high-income countries over the past decades due to the adoption of stringent regulatory and tax measures, and growing awareness of the population about the health risks of tobacco use, the tobacco industry remains securely positioned by expanding into new markets in emerging economies to promote the use of cigarettes.

The issue is troubling because the tobacco industry, by promoting the use of cigarettes in lower income countries, new generations of consumers will become addicted to cigarettes, as happened in the past in rich countries. Now 80 percent of the world's smokers live in lower income countries, and a growing toll of tobacco attributable diseases, premature death, and direct and indirect economic costs, stand to hamper the development prospects of these countries, particularly after the COVID-19 pandemic, the most the most significant global public health and economic crisis in almost a century.

The question posed in one of the books by Stanford University Emeritus Professor, Victor Fuchs, "*Who Shall Live?*", to explain the socio-economic correlates of health, applies in this context. It can help us grasp how the global commercialization and use of tobacco products contributes to health disparities in countries across the world.

**April 27, 2022**

### ***About the Author:***

Patricio V. Marquez is a former World Bank Group (WBG) Lead Public Health Specialist. He retired in August 2019 after 32 years of service. He worked in over 80 countries across the world, and led over the 2014-2019 the WBG Global Tobacco Control Program.

Since March 2020, he has returned to the WBG as Consultant to support the preparation and implementation of the US\$26 billion COVID-19 Global Emergency Response Program in the health sector. He is a Senior Associate at the Johns Hopkins University Bloomberg School of Public Health, and serves as a Pledge Champion at the Tobacco Free Portfolios Foundation. In November 2021, he was elected to serve as a governing member of the Charles Darwin Foundation for the Galapagos Islands. Until recently, he was a member of the External Advisory Board of the University of Washington Global Mental Health Program, and citiesRISE, a global platform committed to transforming the state of mental health policy and practice in cities and beyond. He is originally from Cuenca, Ecuador.

***“Cigarettes are among the most addictive substances of abuse and by far the most deadly.”***

***Thomas C. Shelling, 2005 Nobel Prize winner in Economics***

### ***Introduction***

In the past few years, there has been heated discussion and back-and-forth exchanges about the validity of the claims by the tobacco industry that it wants to “*unsmoke the world*”.<sup>1</sup> As some observers have noted, there is a lot of skepticism about this claim given the long track record of the tobacco industry---richly described and masterfully assessed in books such as “*The Cigarette Century*”<sup>2</sup>, and vividly conveyed in the Oscar-winning film by Michael Mann, “*The Insider*”<sup>3</sup>, with the great actors Al Pacino, Russell Crowe, and Christopher Plummer, in the lead roles.

So, the question to be addressed is: where do we stand on this issue? Should the global public health community accept the claim that things are changing this time and that new harm reduction products, by replacing cigarettes, will help reduce addiction, health risks, tobacco-attributable diseases, and premature deaths? Or should we carefully assess the tobacco industry market diversification that is underpinning these claims?

### ***Objective of this Working Paper***

In this working paper, an exploration of available data and information is conducted and findings presented, to address these questions, and to help make the case that the promotion of e-cigarettes, as welfare enhancing in rich countries, tends to obfuscate a dire reality. **The same tobacco industry that promotes these new products as harm reduction for smokers in rich countries, derives the bulk of its profits by selling cigarettes in lower income countries.**

The question posed in one of the books by **Stanford University Emeritus Professor, Victor Fuchs, “*Who Shall Live?*”**,<sup>4</sup> to explain the socio-economic correlates of health, applies in this context. It can help us understand how the global commercialization and use of tobacco products contributes to health disparities in countries across the world.

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<sup>1</sup> Philip Morris International. “It’s Time to Unsmoke: Why NOW is the Time to Act”. Accessed at: <https://www.pmi.com/our-initiatives/itstime/its-time-to-unsmoke---why-now>

<sup>2</sup> Brandt, AM. 2007. “*The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America.*” New York: Basic Books.

<sup>3</sup> “*The Insider.*” A 1999 Film, <https://www.imdb.com/title/tt0140352/awards>  
. <https://www.imdb.com/title/tt0140352/>

<sup>4</sup> Fuchs, V. 1974. “*Who Shall Live? Health, Economics, and Social Choice.*”. Basic Books, Inc.

## **I. Moving from Financial Returns to Economic Costs**

Profits are an essential signaling mechanism to guide investment decisions. Return on investment and related financial accounting ratios have been widely used over the years as key measures of business profitability.<sup>5</sup> Using these measures, as described above, the financial returns generated by the tobacco industry might appear to be impressive from profit-oriented perspective. **But, if external economies or diseconomies such as the health costs of tobacco use are taken into account, one can see that the tobacco industry generates net losses to society as a whole.** To obtain such an indication, one would also need to consider the valuation of the costs of the externalities (e.g., loss of lives, foregone income over a lifetime due to premature death, cost of medical care to treat tobacco-attributable diseases) to determine the economic merit of an industry or an investment project from a society's viewpoint.<sup>6</sup>

***In the case of the tobacco industry this distinction is critical.*** In 2021, the global tobacco market size was valued at US\$ 849.9 billion in 2021,<sup>7</sup> due in large measure to a growing number of smokers in developing regions. ***While the industry has historically generated financial returns to investors, smoking, including second-hand, kills more than 8 million people a year.***<sup>8</sup> To illustrate the enormity of lives lost from tobacco related illnesses, tragically about 6.2 million COVID-19 deaths to date have been recorded since the beginning of the pandemic in 2020.

Among risk factors, tobacco use is one of the most clearly damaging to health.<sup>9</sup> As it will be discussed below, smoking contributes to a variety of non-communicable diseases, including cancer, heart disease, stroke, chronic respiratory diseases, and diabetes. The greatest health risks occur in countries where smoking is pervasive and where smokers consume a large quantity of cigarettes

## **II. Is the Tobacco Profit-Making Story Unraveling?**

Although the profit-making story of the tobacco industry has been disrupted in recent years, the findings of a study produced for Credit Suisse in 2015<sup>10</sup>, showed that the tobacco industry was the best equity market performer for over a century (1900-2015 period). Figure 1 shows the performance of the 15 industries in the United States (US) for which the study had data back to 1900. A dollar invested in the US market at start-1900 would have grown, with dividends reinvested, to US\$38,255 by end 2014, representing an annualized return of 9.6 percent. The best performer, the tobacco industry, gave an

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<sup>5</sup> J. Christian Duvigneau, JC, Prasadhttps, RN. 1984. "Guidelines for Calculating Financial and Economic Rates of Return for DFC Projects." World Bank Technical Paper Number 33. Washington, D.C.: World Bank. Accessed at: <https://documents1.worldbank.org/curated/en/567991468782148724/pdf/Guidelines-for-calculating-financial-and-economic-rates-of-return-for-DFC-projects.pdf>

<sup>6</sup> Ali, F. 1990. "Public Investment Criteria: Financial and Economic Internal Rates of Return." Project Evaluation Division, Economics and Development Resource Center, Asian Development Bank. Accessed at: <https://www.adb.org/sites/default/files/publication/28162/rs50.pdf>

<sup>7</sup> Market Analysis Report. 2022. "Tobacco Market Size, Share & Trends Analysis Report By Product (Smokeless, Cigarettes, Cigars & Cigarillos, Next-Generation Products, Waterpipes), By Distribution Channel (Online, Offline), By Region, And Segment Forecasts, 2022 – 2030". Report ID: GVR-2-68038-412-3, April 2022. Accessed at: <https://www.grandviewresearch.com/industry-analysis/tobacco-market>

<sup>8</sup> IHME. "Smoking and Tobacco". Accessed at: <https://www.healthdata.org/smoking-tobacco#:~:text=Smoking%20and%20Tobacco%20%7C%20Institute%20for%20Health%20Metrics,heart%20disease%2C%20stroke%2C%20chronic%20respiratory%20diseases%2C%20and%20diabetes.>

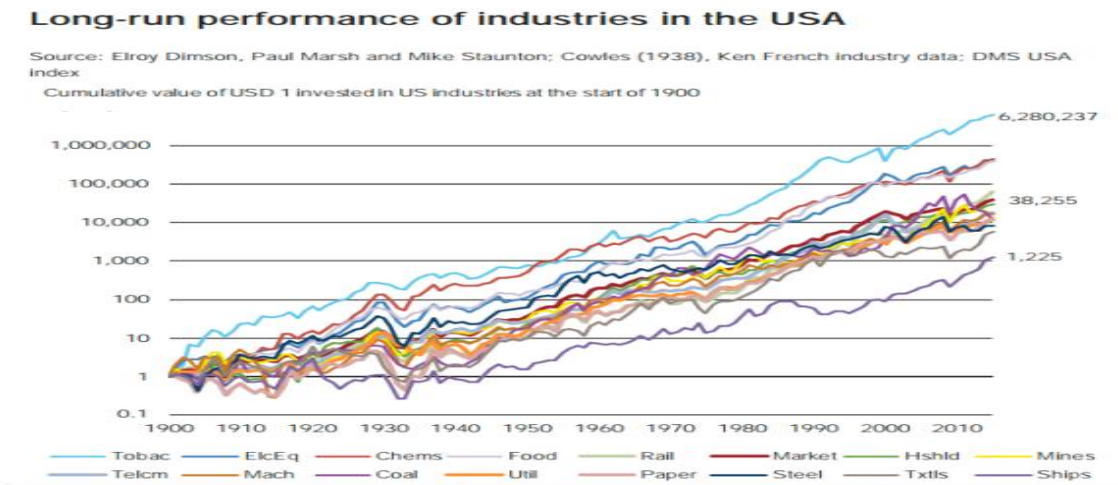
<sup>9</sup> GBD 2019 Tobacco Collaborators. 2021. "Tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019". *Lancet* 397:10292, P2337-2360. DOI:<https://doi.org/10.1016/S0140-6736>. Accessed at: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01169-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01169-7/fulltext)

<sup>10</sup> Credit Suisse Research Institute. 2015. "Credit Suisse Global Investment Returns Sourcebook 2015." Zurich, Switzerland.

Also, see: Dimson, E, Marsh, P, and Staunton, M. 2002. "Triumph of the Optimists: 101 Years of Global Investment Returns." Princeton, NJ: Princeton University Press, and Fabozzi, F, Ma, KC, Oliphant, B. 2008. "Sin stock returns." *Journal of Portfolio Management* Fall, 82 – 94.

annualized return of 14.6 percent, and a terminal value of US\$6.2 million, over 5,000 times as much as from shipbuilding and shipping, representing an annualized return of 6.4 percent.

Figure 1:

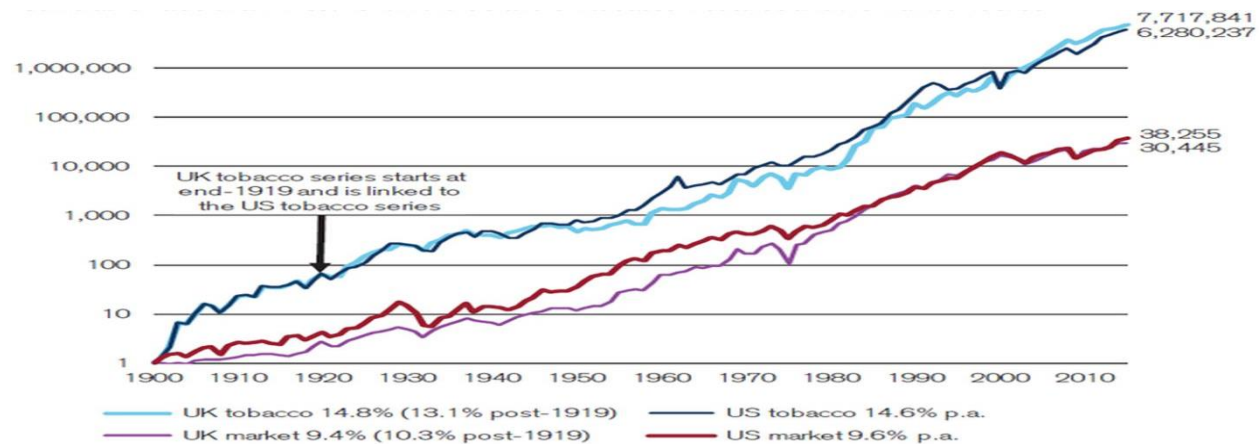


Source: Elroy Dimson, Paul Marsh and Mike Staunton, Credit Swiss, 2015.

Using industry indices, the Credit Suisse report estimated **the outperformance of tobacco stocks over a complete 115-year period in different countries**. As shown in Figure 2, for example, tobacco companies beat the overall equity market by an annualized 4.5 percent in the US and by 2.6 percent in the UK (over the slightly shorter 85-year period of 1920–2014).

Figure 2:

**Cumulative returns on tobacco and on equities, 1900–2014** (Currencies are nominal USD and nominal GBP. Cumulative value of an investment in the US and UK tobacco industries and the market indexes)



Source: Elroy Dimson, Paul Marsh and Mike Staunton, Credit Swiss, 2015.

**However, in recent years, the performance of the tobacco industry has been impacted by a significant decline in tobacco consumption in developed and wealthy countries worldwide.** In large measure, this development has been the result of the adoption by governments of stringent regulatory and taxation

policies, as well as higher awareness among the population of the health risks associated with smoking. In the United States, for example, as reported by the US Federal Trade Commission (FTC), the tobacco industry has been experiencing an annual downward trend in sales since 2000, when sales volume to wholesalers and retailers was at 413.9 billion cigarettes, before dropping 202.9 billion in 2019.<sup>11</sup> Also, the US FTC data show smokeless tobacco sales decreased from 128.4 million pounds in 2018 to 126.0 million pounds in 2019.

**As it will be discussed in the next sections of this paper, to maintain demand in higher income countries, the tobacco industry has introduced new products that are promoted to be less harmful than cigarettes. However, cigarettes, still captured the majority share of the market in 2021, accounting for nearly 86 percent of the overall revenue.**<sup>12</sup> The demand has been sustained by the growing number of smokers in lower- and middle-income countries, which are targets of intensive tobacco industry interference and marketing, posing a significant health risk to the population that adds to the disease burden in these countries.<sup>13</sup>

### ***III. The Human Toll of Tobacco-Attributable Diseases, Premature Death, and Disability***

**The scientific evidence accumulated over the past five decades is clear: tobacco users pay with their health.** The landmark Surgeon General's Report on Smoking and Health, issued in 1964 by US Surgeon General Dr. Luther Terry,<sup>14</sup> first drew wide public attention to the evidence linking smoking and ill health, including lung cancer and heart disease. Since then, a vast, rigorous body of evidence has accumulated, showing that tobacco use imposes an unparalleled health and economic burden across countries, hindering development gains worldwide.<sup>15 16</sup>

**Nicotine, a chemical in tobacco, underlies tobacco addiction and influences tobacco use patterns.**<sup>17</sup> Nicotine: (1) is a highly addictive stimulant that at high levels produces acute toxicity; (2) activates multiple biological pathways through which smoking increases risk for disease; (3) adversely affects maternal and fetal health during pregnancy, contributing to adverse outcomes such as preterm delivery and stillbirth, as well as congenital malformations (e.g., cleft lips or palates); and (4) during fetal development and adolescence has lasting adverse consequences for brain development. Nicotine addiction is so powerful

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<sup>11</sup> US Federal Trade Commission. "FTC Releases Reports on Cigarette and Smokeless Tobacco Sales and Marketing Expenditures for 2019". Accessed at: <https://www.ftc.gov/news-events/news/press-releases/2021/03/ftc-releases-reports-cigarette-smokeless-tobacco-sales-marketing-expenditures-2019>

<sup>12</sup> Market Analysis Report. 2022. "Tobacco Market Size, Share & Trends Analysis Report By Product (Smokeless, Cigarettes, Cigars & Cigarillos, Next-Generation Products, Waterpipes), By Distribution Channel (Online, Offline), By Region, And Segment Forecasts, 2022 – 2030". Report ID: GVR-2-68038-412-3, April 2022. Accessed at: <https://www.grandviewresearch.com/industry-analysis/tobacco-market>

<sup>13</sup> WHO. "WHO global report on trends in prevalence of tobacco smoking 2000–2025, second edition". Geneva: World Health Organization; 2018. Accessed at: <https://www.who.int/publications/i/item/who-global-report-on-trends-in-prevalence-of-tobacco-use-2000-2025-third-edition>

<sup>14</sup> U.S. Department of Health, Education, and Welfare. 1964. Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. Washington: U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control, 1964. PHS Publication No. 1103. U.S. Department of Health, Education, and Welfare, and Available at: <https://profiles.nlm.nih.gov/NN/B/C/FT/ /nncbft.pdf>

<sup>15</sup> Marquez, PV, Moreno-Dodson, B, eds. 2017. "Tobacco Tax Reform at the Crossroads of Health and Development." Washington, D.C.: World Bank Group. Accessed at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/491661505803109617/main-report>

<sup>16</sup> U.S. National Cancer Institute and World Health Organization. 2016. "The Economics of Tobacco and Tobacco Control." National Cancer Institute Tobacco Control Monograph 21. NIH Publication No. 16-CA-8029A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, CH: World Health Organization; 2016. This monograph and its supplemental materials may be found electronically at <http://cancercontrol.cancer.gov/brp/tcrb/monographs/21/index.html>

<sup>17</sup> Benowitz NL, Hukkanen J, Jacob P 3rd. 2009. "Nicotine chemistry, metabolism, kinetics and biomarkers". *Handb Exp Pharmacol* 192:29-60. doi:10.1007/978-3-540-69248-5\_2

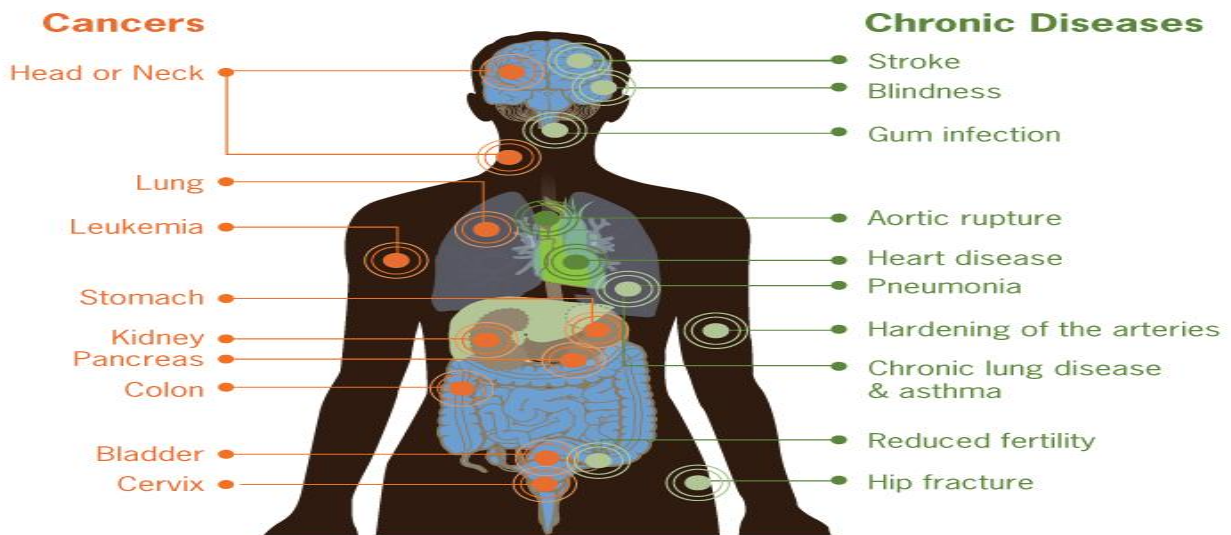
that some people spend money on cigarettes instead of other necessities such as food and shelter—putting themselves and their households at risk.

**Tar**, the resinous, partially combusted particulate matter produced by the burning of tobacco, is toxic and damages the smoker’s lungs over time. **Carbon monoxide**, a colorless, odorless gas produced from the incomplete burning of tobacco, accumulates indoors and reduces the oxygen-carrying capacity of the blood.

**As shown in Figure 3, cigarette smoking is causally linked to diseases of nearly all organs of the body.**<sup>18</sup>

The evidence is sufficient to conclude that the risk of developing lung cancer from cigarette smoking has actually increased since the 1950s, due to changes in the design and composition of cigarettes. There is also evidence for a causal relationship between smoking and other types of cancer, including liver, colorectal, and prostate cancers. Smoking or chewing tobacco can immediately raise blood pressure, albeit temporarily, as the chemicals in tobacco can damage the lining of artery walls, causing arteries to narrow, increasing blood pressure. Secondhand smoke can increase blood pressure, as well. Smoking is the dominant cause of chronic obstructive pulmonary disease (COPD), including emphysema and chronic bronchitis. Smoking also increases the risk of tuberculosis. Research continues to identify diseases caused or exacerbated by smoking, including such common diseases as diabetes. Scientists now know that the risk of developing diabetes is 30–40 percent higher for active smokers than nonsmokers.

**Figure 3: Risks from Smoking: Smoking can damage every part of the body**



Source: US CDC <https://www.cdc.gov/tobacco/infographics/health-effects/index.htm>

<sup>18</sup> US Department of Health and Human Services. 2014. “The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General”. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

The results from a 50-year study shows that **half to two thirds of all lifelong cigarette smokers will be eventually killed by their habit.**<sup>19</sup> **Smokers who begin early in adult life and do not stop smoking face a three-fold higher risk of early death compared to otherwise similar non-smokers, resulting in a loss, on average, of at least one decade of life.**<sup>20</sup>

**Cigarette smoking is one of the leading causes of preventable death. Both active smoking and exposure to secondhand smoke cause disease and kill prematurely.** Globally in 2019<sup>21</sup>, smoking tobacco use accounted for about 8 million deaths and 200 million disability-adjusted life-years, and was the leading risk factor for death among males (20.2 percent of male deaths). An estimated 6.68 million [86.9 percent] of 7.69 million deaths attributable to smoking tobacco use were among current smokers.

There is sufficient evidence<sup>22</sup> that smoking is also a risk factor for COVID-19, with smokers having 1.91 times the odds of progression in COVID-19 severity compared to non-smokers. This finding is reinforced by another review showing that infection was associated with substantially higher severity and mortality rates in patients with chronic obstructive pulmonary disease (COPD) and among current smokers. A higher prevalence of smoking among men, often resulting in compromised lung function, may help explain their higher COVID-19 fatality rate. Tobacco use also contributes to the onset of co-occurring conditions such as cardiovascular diseases, lung cancer, COPD, and diabetes. These are more prevalent among males and also increase the risk of disease severity and death among COVID-19 patients.

**There is substantial concern around the world about growing inequality.** As discussed by Furman<sup>23</sup>, recently a number of scholars have advanced the stark and troubling thesis that the US is witnessing a dramatic increase not just in income inequality but also inequality in how long people live. As shown in Figure 4, while age-adjusted death rates in have fallen sharply over past decades, the gap in life expectancy between higher income individuals and lower income individuals has grown substantially. Differing trends in smoking rates by income are likely one important factor driving differences in the evolution of mortality rates for the young and old by income. The share of the population 50 and older below the poverty line that has ever smoked has grown over the last twenty-five years while the share of the population 50 and older above the poverty line that has ever smoked has decreased.

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<sup>19</sup> Doll, R et al. 2004. "Mortality in relation to smoking: 50 years' observations on male British doctors". *BMJ* 328:1519-0.

<sup>20</sup> Jha, P, Peto, R. 2014. "Global Effects of Smoking, of Quitting, and of Taxing Tobacco". *N Engl J Med* 370:60–68. Available at: <http://www.nejm.org/doi/full/10.1056/NEJMra1308383#t=article>

<sup>21</sup> GBD 2019 Tobacco Collaborators. 2021. "Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019." *Lancet* 397: 2337–60. [https://doi.org/10.1016/S0140-6736\(21\)01169-7](https://doi.org/10.1016/S0140-6736(21)01169-7)

<sup>22</sup> Marquez, PV. 2020. "Tobacco use and coronavirus (COVID-19): A deadly but preventable association." World Bank Group Investing in Health, May 20, 2020. Accessed at: <https://blogs.worldbank.org/voices/tobacco-use-and-coronavirus-covid-19-deadly-preventable-association>

<sup>23</sup> Furman, J. 2016. "Policy, Politics, and the Tripling of Federal Tobacco Taxes in the United States to Deter People from Smoking, Save Lives, and Mobilize Revenue over the last 30 years. Six Lessons from the U.S. Experience with Tobacco Taxes." Presentation at World Bank Conference: "Winning the Tax Wars: Global Solutions for Developing Countries".



**Figure 5: Global economic loss totals**



Source: Goodchild M., Nargis N., Tursan d’Espaignet, E. 2017. “Global economic cost of smoking-attributable diseases.” *Tob Control* 2017;0:1–7. doi:10.1136/tobaccocontrol-2016-053305.

While the hazards of smoking accumulate slowly, cessation is effective quickly, helping to reduce tobacco-related mortality, and more importantly, inequality of mortality. People who quit by age 40 get back nearly the full decade of life that they would have lost from continued smoking.<sup>28</sup> Cessation is now common among adults in high-income countries. For example, in Canada there are now over one million more ex-smokers than just a decade ago. However, due in large part to the marketing and pricing strategies of the tobacco industry, cessation remains a major public health challenge in most LMICs, where more than 80 percent of smokers live.<sup>29</sup>

#### ***V. The Emergence of E-Cigarettes***

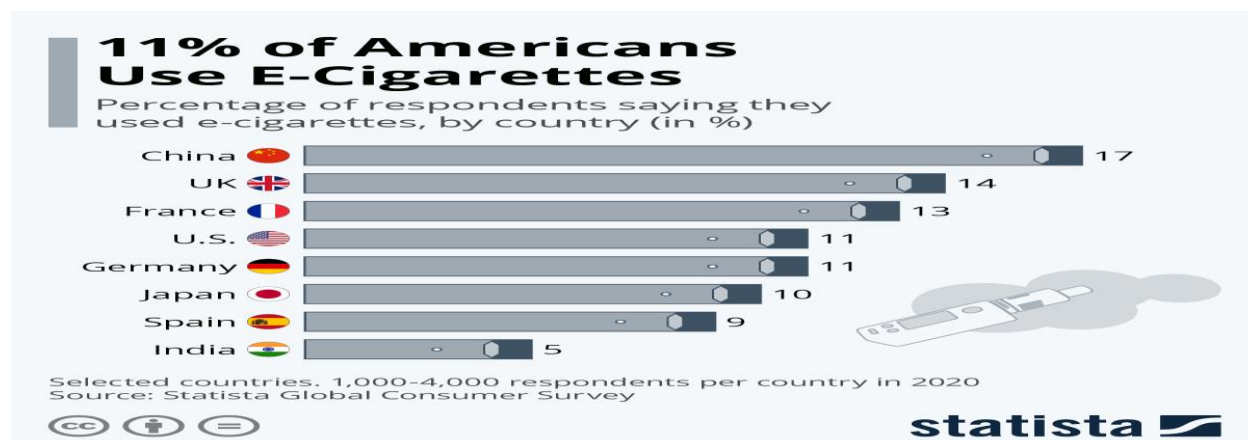
Beyond conventional cigarettes, the tobacco offering, as part of the industry diversification drive, includes now novel products like heated tobacco products (HTPs), and electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDs), commonly referred to as e-cigarettes.<sup>30</sup> Figure 6 shows the percentage of survey respondents who report using e-cigarettes in a sample of countries.

<sup>28</sup> Jha, P, Peto, R. 2014. “Global Effects of Smoking, of Quitting, and of Taxing Tobacco”. *N Engl J Med* 370:60–68. Available at: <http://www.nejm.org/doi/full/10.1056/NEJMr1308383#t=article>

<sup>29</sup> Jha, P., Marquez, P.V., and Dutta, S. 2017. “Tripling Tobacco Taxes: Key for Achieving the UN Sustainable Development Goals by 2030.” *The World Bank Blogs*, January 24, 2017. Available at: <http://blogs.worldbank.org/health/role-excise-tax-meeting-sdg>

<sup>30</sup> Marquez, PV, Krasovsky, K, Andreeva, T. 2018. “E-Cigarettes : Use and Taxation.” WBG Global Tobacco Control Program Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/356561555100066200/E-Cigarettes-Use-and-Taxation>

Figure 6:



In recent years, policy discussions at the global level on whether e-cigarettes and other smoke-free nicotine delivery systems should be classified as tobacco products, and hence be regulated in the same way as cigarettes, have acquired great importance because their production is at the core of new diversified business plans of tobacco companies alongside the production and marketing of cigarettes.

While the e-cigarette, a battery-powder device that heats a liquid containing nicotine into a vapor that is inhaled like a cigarette, is being touted as a harm reduction technological innovation to protect smokers from the ill effects of cigarettes, which continue to be marketed globally, we must ask: Is there strong scientific evidence that justifies this claim and exempts e-cigarettes from being regulated as another tobacco product?

**E-cigarettes are often promoted as “reduced risk” and “smoke-free” consumer products, when their emissions typically contain toxic substances that are harmful to users, and non-users who are exposed to the aerosols second-hand.**<sup>31</sup> Some manufacturers talk about e-cigarettes and HTPs together, thereby confusing potential consumers, and making it difficult to tell the difference between a tobacco and a nontobacco product.

A review published in the *New England Journal of Medicine* concluded that “*At present, it is not possible to reach a consensus on the safety of e-cigarettes except perhaps to say that they may be safer than conventional cigarettes but are also likely to pose risks to health that are not present when neither product is used.*”<sup>32</sup>

The results of a comprehensive review of available evidence done by US Surgeon General in 2016<sup>33</sup>, went further by concluding that tobacco use among youth and young adults in any form, including e-cigarettes, is not safe, and that in recent years, e-cigarette use by youth and young adults has increased at an alarming rate, becoming the most commonly used tobacco product among youth in the United States. **The report also warned that since e-cigarettes are tobacco products that deliver nicotine, which is a highly**

<sup>31</sup> WHO Europe. “The secret’s out: the tobacco industry targets a new generation.” Accessed at: <https://www.euro.who.int/en/health-topics/disease-prevention/tobacco/news/news/2020/5/the-secrets-out-the-tobacco-industry-targets-a-new-generation>

<sup>32</sup> Dinakar, C, O’Connor, GT. 2016. “The Health Effects of Electronic Cigarettes.” *N Engl J Med* 375:1372-1381  
DOI: 10.1056/NEJMra1502466.

<sup>33</sup> U.S. Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.

**addictive and toxic substance, they may pose the risk that many of today's youth who are using e-cigarettes could become tomorrow's cigarette smokers to continue to feed their nicotine addiction.** Moreover, nicotine exposure can harm brain development in ways that may affect the neurological development and mental health of children and adolescents. A recent study, based on a nationally representative of US adults, that reported prevalence of prediabetes, found a positive association between both former and current e-cigarette use and the risk of prediabetes. These findings may guide researchers, healthcare providers, and regulators about the risk of prediabetes among e-cigarette users, particularly among young adults<sup>34</sup>.

The promotional strategies of e-cigarettes are particularly effective in targeting children and adolescents, and have the potential to both drive long-term use of addictive and harmful nicotine products under the guise of being a healthier alternative, and to sustain nicotine addiction in youth globally. Protecting young people from these products – the theme of World No Tobacco Day 2020 – is an urgent matter for public health.<sup>35</sup>

## ***VI. Regulation and Taxation to Address the Tobacco Use Challenge***

**Following the US Surgeon General's landmark 1964 report on smoking and health, governments employed many strategies to reduce the smoking rate.** Regulating tobacco consumption using excise taxation, restrictions on smoking in public places, and restrictions on youth access and sale of tobacco products is now a widely-accepted policy action to prevent its harmful health effects.

**Since the World Health Organization's Framework Convention on Tobacco Control (WHO's FCTC) was adopted in 2003 and came into force in 2005, over 180 countries have become Parties to the accord.** The FCTC covers nearly 90 percent of the world's population. Over the past decade, progress has been made in expanding the coverage of the FCTC's supply- and demand-reduction tobacco control measures.<sup>36</sup> More than half the world's countries, accounting for 40 percent of the total global population, have implemented at least one tobacco control policy measure supported under WHO's MPOWER technical assistance package. MPOWER includes the six most important and effective tobacco control policies: raising taxes and prices; banning advertising, promotion, and sponsorship; protecting people from secondhand smoke; warning everyone about the dangers of tobacco; offering help to people who want to quit; and carefully monitoring the epidemic and prevention policies. These policy actions are proven to reduce tobacco use.<sup>37</sup> A recent study shows that the accelerated implementation of all key FCTC demand-reduction measures since 2005 was significantly associated with a decrease in smoking prevalence in all 126 countries studied: from 24.7 percent in 2005 to 22.1 percent in 2015, an average decrease in prevalence of 2.55 percentage points.<sup>38</sup> However, despite the progress observed in many countries, much more needs to be done to control this health scourge. This observation is particularly important when taking into account that the global trends in smoking-prevalence reduction mask important differences in

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<sup>34</sup> Zhang, Z, Jiao, Z, Blaha, MJ. 2022. "The Association Between E-Cigarette Use and Prediabetes: Results From the Behavioral Risk Factor Surveillance System, 2016–2018." *American Journal of Preventive Medicine* DOI:<https://doi.org/10.1016/j.amepre.2021.12.009>. Accessed at: [https://www.ajpmonline.org/article/S0749-3797\(22\)00024-1/fulltext](https://www.ajpmonline.org/article/S0749-3797(22)00024-1/fulltext)

<sup>35</sup> Marquez, PV. 2017. "Regulating and taxing e-cigarettes is the right thing to do." *World Bank Group Blogs*, December 7. <http://blogs.worldbank.org/health/regulating-and-taxing-e-cigarettes-right-thing-do>

<sup>36</sup> World Health Organization (WHO). 2003. "WHO framework convention on tobacco control." [http://www.who.int/fctc/text\\_download/en/](http://www.who.int/fctc/text_download/en/).

<sup>37</sup> World Health Organization (WHO). 2008. "WHO Report on the Global Tobacco Epidemic, 2008: the MPOWER package." Geneva: WHO.

<sup>38</sup> Gravely, S., Giovino, G.A., Craig, L., Commar, A., Tursan D'Espaignet, E., Schotte, K., Fong, G.T. 2017. "Implementation of key demand-reduction measures of the WHO Framework convention on Tobacco Control and change in smoking prevalence in 126 countries: an association study." *Lancet Public Health* 2017;2: e166–74. Published Online March 21, 2017 [http://dx.doi.org/10.1016/S2468-2667\(17\)30045-2](http://dx.doi.org/10.1016/S2468-2667(17)30045-2)

countries, such as rising smoking rates among youth and women in some urban areas of Latin America and Eastern Europe, or the marked change in South Asia from consuming local “bidis” (small, generally untaxed cigarettes) to cigarettes.<sup>39</sup>

**The ruling by the US Federal District Court that ordered the country’s four largest cigarette makers to make “corrective statements” to inform the public about the harms of cigarettes**, including light and low-tar cigarettes, which began on November 26, 2017 for one year, using prime-time television commercials and full-page ads in newspapers<sup>40</sup>, only confirms what is already known on the basis of accumulated evidence over the past half century: the manipulation of cigarette design and composition to ensure optimum nicotine delivery have led to addiction, ill health, and premature mortality and disability among smokers and among those exposed to secondhand smoke. A recent decision by the Vatican to ban duty-free cigarette sales<sup>41</sup> is a good example of how societal attitude towards tobacco use has changed: a sovereign state is willing to forego revenue from products that clearly harm people's health.

In April 2021, the US FDA announced its intent to take significant action toward dramatically reducing tobacco-related disease and death in the US. **To this end, the process of approval to advance two proposed tobacco product standards is on track – one prohibiting menthol as a characterizing flavor in cigarettes and another prohibiting all characterizing flavors (including menthol) in cigars—**<sup>42</sup>

**The regulatory response to e-cigarettes in the United States and the European Union (EU)<sup>43</sup> is clear in signaling the potential health risks of e-cigarettes.** E-cigarettes, as other cigarette products, now fall under the regulatory jurisdiction of the US Food and Drug Administration.<sup>44</sup> This is in accordance with the US Surgeon General Report recommendations that comprehensive tobacco control and prevention strategies for youth and young adults should address all tobacco products, including e-cigarettes, and that further reductions in tobacco use and initiation among youth and young adults are achievable by regulating the manufacturing, distribution, marketing, and sales of all tobacco products—including e-cigarettes.

**In May 2017, the EU's Court of Justice cleared new legislation that also puts e-cigarettes under similar regulatory pressures as traditional cigarettes, including a broad ban on advertising and other promotional activity.**<sup>45</sup> The EU's updated Tobacco Products Directive, which brings e-cigarettes under this strict regulatory umbrella for the first time, was drafted a couple of years ago, but it was challenged by

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<sup>39</sup> Mishra S, Joseph R.A, Gupta P.C., et al. 2016. “Trends in bidi and cigarette smoking in India from 1998 to 2015, by age, gender and education.” *BMJ Global Health* 1:e000005. doi:10.1136/bmjgh-2015-000005.

<sup>40</sup> Maheshwari, S. 2017. “Why Tobacco Companies Are Paying to Tell You Smoking Kills”. *The New York Times*, November 24, 2017. Accessed at: <https://www.nytimes.com/2017/11/24/business/media/tobacco-companies-ads.html>

<sup>41</sup> BBC. 2017. “Holy smoke: Vatican bans duty-free cigarette sales.” Accessed at: <https://www.bbc.com/news/world-europe-41933527>

<sup>42</sup> US FDA. 2022. “FDA on Track to Take Actions to Address Tobacco-Related Health Disparities.” Accessed at: <https://www.fda.gov/news-events/fda-voices/fda-track-take-actions-address-tobacco-related-health-disparities>

<sup>43</sup> Opiel, P, Geller, M. 2016. “EU's highest court upholds restrictive new law on cigarettes.” *Reuters*, May 4, 2016. Accessed at: <https://www.reuters.com/article/us-eu-court-tobacco/eus-highest-court-upholds-restrictive-new-law-on-cigarettes-idUSKCN0XVOMB>

<sup>44</sup> FDA. “How FDA is Regulating E-Cigarettes.” Accessed at: <https://www.fda.gov/news-events/fda-voices/how-fda-regulating-e-cigarettes>

<sup>45</sup> Court of Justice of the European Union. 2016. “The new EU directive on tobacco products is valid.” PRESS RELEASE No 48/16, Luxembourg, 4 May 2016. Accessed at: <https://curia.europa.eu/jcms/upload/docs/application/pdf/2016-05/cp160048en.pdf>

several important players in the tobacco industry since the Directive bans menthol flavorings and imposes other restrictions, as well as the parent company of major UK e-cig retailer.<sup>46</sup>

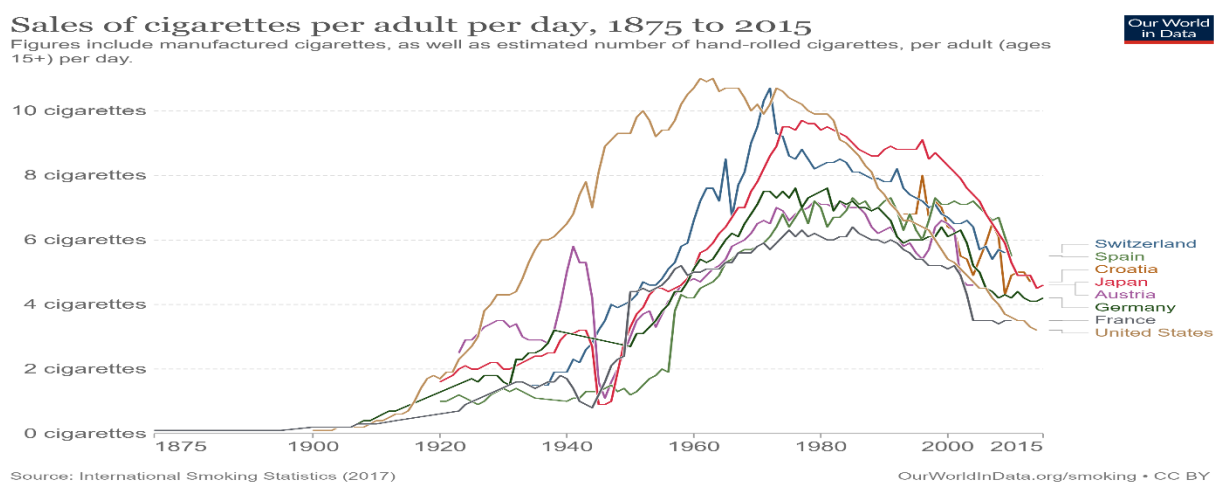
The **WHO and the Secretariat of the FCTC** have also adopted clear position in recommending that countries treat and regulate e-cigarettes no differently than other tobacco products<sup>47</sup>.

Apart from stringent regulations in the high-income countries, higher levels of education along with rising awareness about health concerns related to tobacco consumption such as different types of cancers, cardiovascular diseases, pulmonary diseases, COVID-19 and pre-existing conditions, further hampered the growth of the tobacco market.

### ***VII. Impact of Tobacco Control Measures***

**Anti-smoking measures, both regulatory and fiscal, have succeeded over the past decades in reducing the average number of cigarettes sold per adult per day across many of today’s high-income countries, including the United States and in Western Europe.** As shown in Figure 7, these countries followed a very similar trajectory: a steep rise in cigarette consumption during the early-to-mid 1900s; peaking from the mid-to-latter half of the century; before entering into a steep decline in the decades which followed. The rise-peak-fall pathway took around a century in all cases, and the long trajectory has had major health impacts for the populations of rich countries today.

**Figure 7:**



As documented in a study published in the Lancet<sup>48</sup>, although prevalence of smoking globally has decreased significantly since 1990 among both males (27.5 percent reduction) and females (37.7 percent reduction) aged 15 years and older, population growth has led to a significant increase in the total number

<sup>46</sup> Rigg, J. 2016. "EU court upholds new rules that ban e-cigarette advertising". Engadget, May 5, 2016. Accessed at: <https://www.engadget.com/2016-05-05-eu-e-cigarette-regulations.html>

<sup>47</sup> Fleck, F. 2014. "Countries vindicate cautious stance on e-cigarettes". Bull World Health Organ 92:856–857 | doi: <http://dx.doi.org/10.2471/BLT.14.031214>.

<sup>48</sup> GBD 2019 Tobacco Collaborators. 2021. "Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019." Lancet 397: 2337–60. [https://doi.org/10.1016/S0140-6736\(21\)01169-7](https://doi.org/10.1016/S0140-6736(21)01169-7)

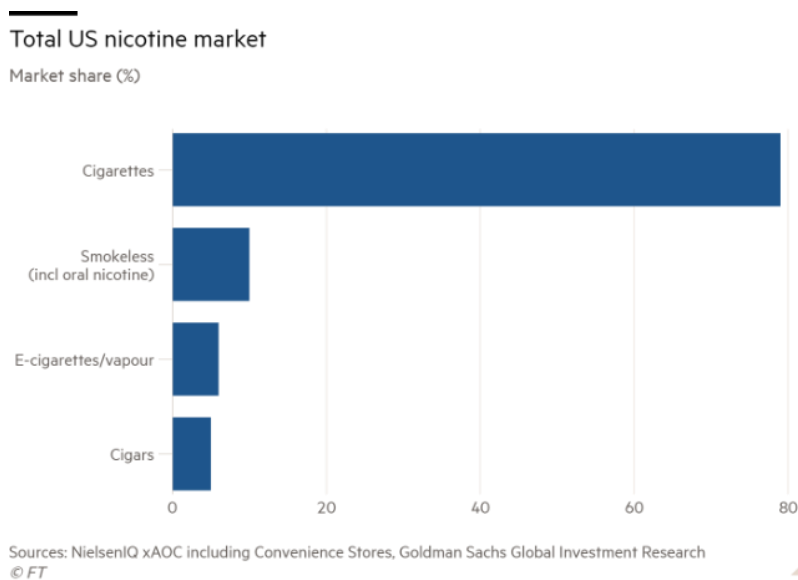
of smokers from 0.99 billion in 1990. In 2019, 1.14 billion individuals were current smokers, who consumed 7.41 trillion cigarette-equivalents of tobacco in that year.

**Even in high-income countries, such as the US, the observed decline obscures vast differences in the population.** That is, while over the last 55 years, adult smoking rates have declined from 43 to 14 percent (this still translates to a high estimated absolute figure of 34.1 million adult smokers in the United States, nearly 20 million of whom smoke menthol cigarettes), progress has not been experienced by everyone equally. Data from multiple national studies<sup>49</sup> show that:

- In the U.S., it is estimated that there are nearly 18.6 million current smokers of menthol cigarettes. But use of menthol cigarettes among smokers is not uniform: Nearly 85 percent of all non-Hispanic Black smokers consume menthol cigarettes, compared to 30 percent of non-Hispanic white smokers who use menthols.
- Among youth, from 2011 to 2018, declines in menthol cigarette use were observed among non-Hispanic white youth but not among non-Hispanic Black or Hispanic youth.
- In 2020, non-Hispanic Black high school students reported past 30-day cigar smoking at levels twice as high as their non-Hispanic white counterparts.

Another aspect that needs to be highlighted, as shown in Figure 8, is that despite the declines in smoking rates, cigarettes are still the lion’s share of the US Nicotine market, continuing to pose significant health risks.

**Figure 8:**



<sup>49</sup> US FDA. 2022. “FDA on Track to Take Actions to Address Tobacco-Related Health Disparities.” Accessed at: <https://www.fda.gov/news-events/fda-voices/fda-track-take-actions-address-tobacco-related-health-disparities>

**Tobacco use among youth is rapidly increasing in many countries globally as well, with some seeing higher rates in youth than in adults.** For example, in the WHO European Region,<sup>50</sup> 1 in 7 boys and 1 in 8 girls aged 13–15 use some form of tobacco, with a total of 4.1 million in this age group being tobacco users. Also, using available data from the Global Youth Tobacco Survey (GYTS) and the Health Behavior in School aged Children (HBSC) survey, WHO estimates that 500 000 (1.5%) of the European Region’s population aged 13–15 use smokeless tobacco products.

### **VIII. The Secret of the Long Survival of the Tobacco Industry**

In spite of the billions of dollars in lawsuits, public health campaigns, heavy restrictions on advertising, regulations, and tax hikes, the tobacco industry has proved resilient.

**So, what is the secret? What are the factors that explain the survival of an industry that has created and prolonged an enormous man-made pandemic?**

#### **(1) Low cost of manufacturing cigarettes, a highly addictive product, which allows for big margins.**

At one level, it is the simple fact that **cigarettes are cheap to make**, particularly due to mechanization. It is estimated that on average it costs the industry about **24 cents** to manufacture one pack of cigarettes,<sup>51</sup> while the average pack of cigarettes costs around **seven dollars** in the US, although it can cost more or less than that depending on state tax along with the federal tax (the federal tax is just over one dollar per 20 pack of cigarettes, and some states, such as New York and Connecticut, take in US\$ 4.35 per pack of cigarettes, and those with lower tax rates, such as Georgia, take just 37 cents per pack).<sup>52</sup> **This means that the tobacco industry is making several dollars profit and up-charging the consumer exponentially--because of heavy taxation and shipping and handling costs smokers pay a lot more to feed their addiction.**

**Cigarettes are also highly addictive to its consumers, and customers also tend to be loyal to their brands.** By making people addicted when they are young, the chances are that they will continue to consume cigarettes until they give up or die.

**Hence, the combination of low manufacturing costs and addiction that create a captive market has allowed for big margins in the tobacco industry, and hence for good rewards to investors<sup>53</sup>.**

#### **(2) Political Influence.** Another factor is the **political influence of the tobacco industry.** As detailed in Sarah Milov’s book “The Cigarette”<sup>54</sup>, the tobacco industry, as a quintessential American product, **flourished with the help of the state.** After the Great Depression, for example, public

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<sup>50</sup> WHO EURO. 2022. “Prevalence of Tobacco and E-cigarette use in Young People in the WHO European Region”. Copenhagen: World Health Organization Regional Office for Europe. Accessed at:

[https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/528954/03-prevalence-youth-2022-eng.pdf#:~:text=Worldwide%2C%20more%20than%2038%20million%20young%20people%20aged,is%2013.8%25%2C%20which%20is%20equiv alent%20to%202.3%20million.](https://www.euro.who.int/__data/assets/pdf_file/0006/528954/03-prevalence-youth-2022-eng.pdf#:~:text=Worldwide%2C%20more%20than%2038%20million%20young%20people%20aged,is%2013.8%25%2C%20which%20is%20equiv alent%20to%202.3%20million.)

<sup>51</sup> Tobacco Free Life. Accessed at: <https://tobaccofreelife.org/why-quit-smoking/cost-smoking/>

<sup>52</sup> Patrick, D. 2021. “How Much Does a Pack Of Cigarettes Cost?” Saucey, February 4, 2021. Accessed at:

<https://blog.saucey.com/how-much-does-a-pack-of-cigarettes-cost/#:~:text=As%20we%20mentioned%2C%20the%20average%20cost%20of%20a,and%20includes%2010%20packs%20containing%2020%20ci garettes%20each.>

<sup>53</sup> Delves Broughton, P. 2016. “Canny marketing makes cigarettes hot property.” Financial Times, September 17/18, 2016.

<sup>54</sup> Milov, S. 2019. “The Cigarette. A Political History.” Cambridge, Massachusetts: Harvard University Press.

officials and organized tobacco farmers in the US worked together to ensure that the government action was more often deployed to promote tobacco than to protect the public. She explains that throughout the twentieth century, cigarettes were central to US political institutions, and the government, even after the publication in 1964 of the landmark report by the US Surgeon General on smoking and health, played an active role in shoring up the cigarette economy:

- Soldier's rations helped to popularize the cigarette in wartime
- Surplus export programs boosted farmers' incomes and global cigarette consumption
- Generous price support systems stabilized the agricultural economy of the Southeast until 2004—long after the surgeon general had proclaimed the cigarette lethal.

Despite the tobacco control efforts over a number of decades, tobacco use continues to kill millions of people each year. The various control measures that have been introduced in many countries have helped to curtail that number as described above, but such restrictions have generally been vehemently opposed and actively undermined/bypassed by the tobacco industry, particularly in low-and middle-income countries.<sup>55 56</sup>

The growing popularity of e-cigarettes over the past decade is now also pitting tobacco-control interests squarely against each other, with on one side that has commanded the most widespread support is spousing the goal of reducing high rates of adolescent e-cigarette use (vaping) vis-à-vis those that advocate the goal of harnessing vaping's potential to help adult smokers quit.<sup>57</sup>

### **(3) Tobacco industry is an oligopoly dominated by a handful of players in international markets.**

This industry is dominated by a handful of players in the domestic market and international markets. Thus, the tobacco industry manages to make profits because product margins improve, even if the overall product volume sold decreases. Since the price competition in the oligopoly market structure can be ruinous, the different firms **compete with each other on the basis of non-price competition factors such as product differentiation, advertising and other marketing strategies**. The interdependence and the rivalry amongst the firms form the most distinguishing characteristic of the oligopoly market structure.<sup>58</sup>

Figure 9 shows the leading tobacco companies worldwide in 2020, based on net sales. Excluding China, where the market is monopolized by the state, **five major companies dominate the global tobacco trade** – Philip Morris International (PMI), British American Tobacco, Japan Tobacco, Imperial Brands and Altria (the former US assets of PMI). Between them in 2016, they shipped 2.27tn cigarettes, more than 300 for every man, woman and child on the planet, racking

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<sup>55</sup> Ulucanlar S, Fooks GJ, Gilmore AB. 2016. "The policy dystopia model: an interpretive analysis of tobacco industry political activity". *PLoS Medicine* 13(9):e1002125. doi:10.1371/journal.pmed.1002125

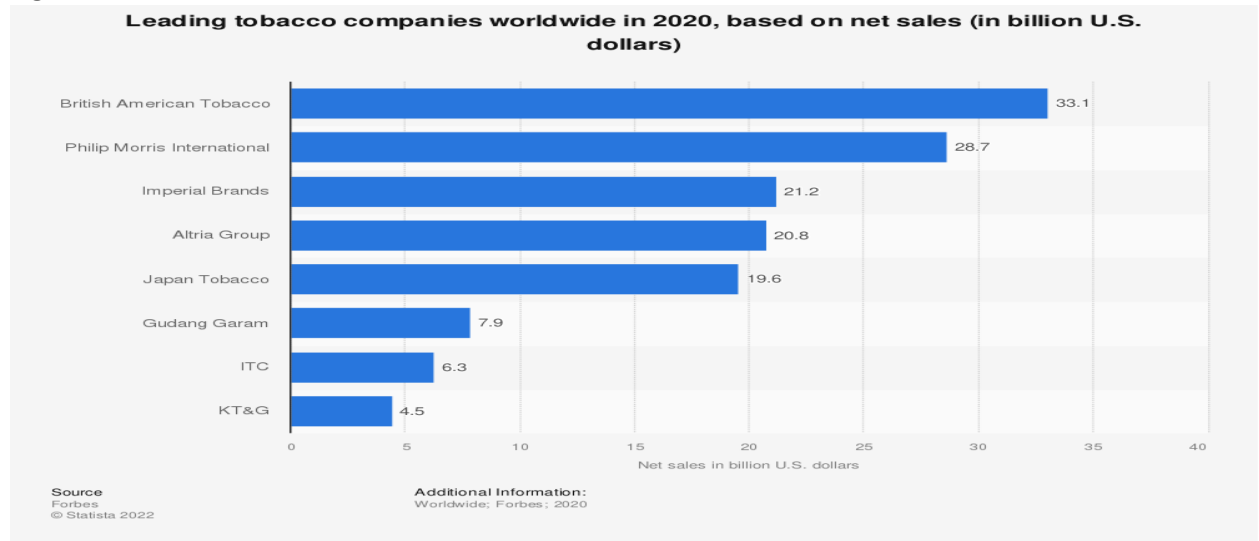
<sup>56</sup> Matthes BK, Lauber K, Zatoński M, et al. 2021. "Developing more detailed taxonomies of tobacco industry political activity in low-income and middle-income countries: qualitative evidence from eight countries". *BMJ Global Health* 6(3):e004096. doi:10.1136/bmjgh-2020-004096

<sup>57</sup> Friedman, AS, Warner, KE. 2022. "The E-Cigarette Flavor Debate — Promoting Adolescent and Adult Welfare". *N Engl J Med*, April 23, 2022. DOI: 10.1056/NEJMp2119107

<sup>58</sup> PhD Essay. "Analysis of Oligopoly Market Structure." Accessed at: <https://phdessay.com/analysis-of-oligopoly-market-structure/>

up combined sales of US\$150 billion. Their combined profits reached US\$35 billion, allowing investors in those companies to receive dividends of US\$19 billion.<sup>59</sup>

**Figure 9:**



Since the 1960s, US cigarette market concentration has increased primarily due to mergers and growth in the Marlboro brand.<sup>60</sup> The market has high entry barriers, due to advertising, brand proliferation and slotting allowance contracts, which were encouraged by government regulations. Through various consolidations, the US cigarette industry today is dominated by two major companies –Altria (formerly Philip Morris) and RAI (US subsidiary of BAT), with the remainder comprised of smaller firms (ITG Brands, Liggett Group, Vector Tobacco, and regional and discount firms). The anticompetitive structure has led to higher prices beyond those from government tax increases, consistent with tobacco control aims, but which has further enriched the major cigarette companies, increasing their ability to influence policies. With the increase in multiproduct use and the introduction of alternative nicotine delivery products, it will be especially important to consider the market structure of related markets and the role of the cigarette industry in shaping those markets through its ability to exercise market power.

**(4) Advertising and Marketing (or the “the economics of manipulation and deception”).** The invention of mass marketing led to cigarettes being emblazoned in advertising and film, deeply tied to modern notions of glamour and sex appeal. **As explained by Nobel Laureates in Economics, Prof. George A. Akerlof and Prof. Robert J. Shiller in a recent book,**<sup>61</sup> *“ever since Adam Smith, the central teaching in economics has been that free markets provides us with material well-being as if by an invisible hand. But markets harm as well as help us. As long as there*

<sup>59</sup> Davis, R. 2017. “How big tobacco has survived death and taxes.” The Guardian, July 12, 2017. Accessed at: <https://www.theguardian.com/world/2017/jul/11/how-big-tobacco-has-survived-death-and-taxes>

<sup>60</sup> Levy D, Chaloupka F, Lindblom EN, et al. 2019. “The US Cigarette Industry: An Economic and Marketing Perspective”. Tob Regul Sci. 2019;5(2):156-168. doi:10.18001/trs.5.2.7

<sup>61</sup> Akerlof, G.A., Shiller, R.J. 2015. “Phishing for Phools: The Economics of Manipulation and Deception”. New Jersey: Princeton University Press.

*is profit to be made, sellers will systematically exploit our psychological weaknesses and our ignorance through manipulation and deception. Humans think in terms of stories, and decisions are consequently determined by the stories we tell ourselves. Advertisers use this to their advantage by “graph[ing] their story” onto ours, and thereby influencing the decisions we make”—in this case to consume tobacco products.”*

Also, tobacco companies have long engaged in public relations campaigns to portray their corporation as changing, reformed in its ways, and now committed to being part of the solution, that often obfuscate the health consequences of tobacco use.<sup>62</sup>

**The experience of the US illustrates the important role of marketing in the tobacco industry.**<sup>63</sup> Cigarette advertising and promotional expenses totaled about US\$7.62 billion in 2019 in the US.<sup>64</sup>

**Manufacturers spent a total of US\$576.1 million on smokeless tobacco advertising and promotion during 2019**—a decrease from 2018.<sup>65</sup> Smokeless tobacco products include dry snuff, moist snuff, plug/twist, loose-leaf chewing tobacco, snus, and dissolvable products.

The following three categories totaled approximately US\$7.13 billion and accounted for 93.4 percent of all cigarette company marketing expenditures in 2019:

- Price discounts paid to retailers and wholesalers to reduce the price of cigarettes to consumers— about US\$5.7 billion. These price discounts reduce the cost of cigarettes to consumers.
- Promotional allowances paid to cigarette retailers, such as payments for stocking, shelving, displaying, and merchandising particular brands—US\$174.9 million.
- Promotional allowances paid to cigarette wholesalers, such as payments for volume rebates, incentive payments, value-added services, and promotions—US\$336.6 million.

**A number of electronic products, such as electronic cigarettes (e-cigarettes), electronic cigars (e-cigars), and electronic pipes (e-pipes), are on the market.** However, current information on spending for marketing and promotion of these products is currently not available. From 2014 through 2020, e-cigarette sales in the United States generally increased as product prices decreased. Total e-cigarette sales increased by 122.2 percent during this timeframe (i.e., from 7.7 million to 17.1 million units per 4-week interval). Despite overall sales growth, e-cigarettes sales fluctuated across time by product type. Specifically, during 2014-2019, sales of rechargeables, prefilled cartridges, and e-liquids grew relatively steadily over time. However, sales for

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<sup>62</sup> Jackler, RK. 2022. “Propaganda Crusades by Philip Morris International & Altria: “Smoke-Free Future” & “Moving Beyond Smoke” Campaigns” Stanford Medicine. Stanford Research into the Impact of Tobacco Advertising, March 2, 2022. Accessed at: Microsoft Word - PMI SFF White Paper 3-2-2022F .docx (stanford.edu)

<sup>63</sup> CDC. “Economic Trends in Tobacco.” Accessed at: [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/economics/econ\\_facts/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/index.htm)

<sup>64</sup> US Federal Trade Commission (FTC). 2021. “Cigarette Report for 2019”. Washington, D.C.: Federal Trade Commission.

<sup>65</sup> US Federal Trade Commission (FTC). 2021. “Federal Trade Smokeless Tobacco Report for 2019”. Washington, D.C.: Federal Trade Commission, 2021.

disposables increased sharply from 10.3 percent of total sales in August 2019 to 19.8 percent in May 2020.<sup>66</sup>

**For far too long, specific populations have been targeted and disproportionately impacted by tobacco use, especially when it comes to characterizing flavors that entice them to start and keep smoking. The marketing done by the tobacco industry in the United States, for example, targets specific vulnerable populations:<sup>67</sup>**

- Youth and Young Adults: Evidence shows that tobacco company advertising and promotion influences young people to start using tobacco.
- Adolescents who are exposed to cigarette advertising often find the ads appealing.
- Tobacco ads make smoking appear to be appealing, which can increase adolescents' desire to smoke.
- Women: Marketing toward women is dominated by themes of social desirability and independence, which are conveyed by advertisements featuring slim, attractive, and athletic models.
- Advertisement and promotion of certain tobacco products also appear to be targeted to members of racial/minority communities.

**(5) The tobacco industry has been gradually diversifying their businesses for a number of years, with the e-cigarette/vaping segment being the most prominent example.** The tobacco industry has also proved remarkably innovative not only in its marketing strategies but also in the promotion of a diversified line of products.<sup>68</sup> Figure 10 shows the US tobacco market size, by product. The diversification observed in the tobacco industry is no surprise, as companies plan for a business structure which can remain profitable, despite the decline in popularity of their primary product—in this case cigarettes in high-income markets.

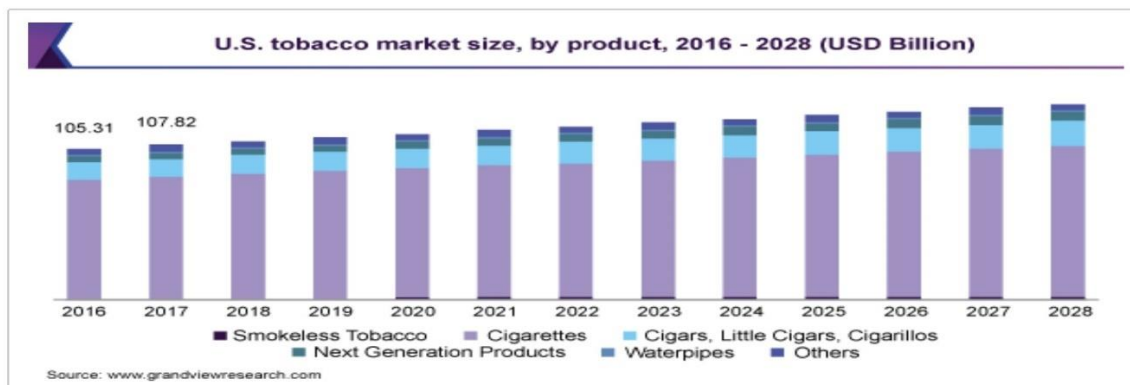
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<sup>66</sup> Ali FRM, Diaz MC, Vallone D, et al. 2020. "E-cigarette Unit Sales, by Product and Flavor Type – United States, 2014-2020." MMWR Morb Mortal Wkly Rep 2020;69:1313-1318. DOI: <http://dx.doi.org/10.15585/mmwr.mm6937e2>.

<sup>67</sup> CDC. "Tobacco Industry Marketing." Accessed at: [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/tobacco\\_industry/marketing/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/marketing/index.htm)

<sup>68</sup> Delves Broughton, P. 2016. "Canny marketing makes cigarettes hot property." Financial Times, September 17/18, 2016.

Figure 10:



Source: Grand View Research. 2021<sup>69</sup>

There are **direct-to-consumer marketing campaigns** (for example, promotion of menthol cigarettes at music festivals using air-conditioned trailer for smokers); **inexpensive LD cigarettes** (short for Liggett Ducat, the name of the original manufacturer) are being promoted in the market (for example, in North Carolina, the home of US tobacco, where prices are among the lowest, a pack of LD costs just over half the price of a pack of Marlboro); **chewing tobacco sales**; **the promotion of e-cigarettes**; and the industry has even ridden the **organic wave**—some products are described as “natural”, “additive free” and made with organic tobacco.

**Tobacco industry companies are also starting to venture into the pharmaceutical industry in their drive to diversify product lines.**<sup>70</sup> For example, Philip Morris International (PMI), the US-based company, purchased in 2021 the respiratory drug developer **OtiTopic**, that is currently working on Asprihale, a late-stage inhalable acetylsalicylic acid (ASA) treatment for acute myocardial infarction. Also, PMI acquired in 2021 **Vectura**, a pharmaceutical group manufacturing medical devices to treat COPD and whose technology allows more medicines to be inhaled.<sup>71</sup> Since that time key leaders including company directors and researchers have resigned from the company.

**(6) Another strategy which the leading tobacco industry companies have undertaken is pursuing growth for the cigarette industry in low-to-middle-income countries.** Since cigarette smoking has declined in the US and Western Europe, the demand for tobacco products has witnessed in recent decades a shift from high-income to low-and-middle-income regions (e.g., in Asia, Africa). This trend that has been facilitated by increasing population, rising income levels of the consumers, changing life styles, tastes, and aspirations in emerging economies, and lenient

<sup>69</sup> Grand View Research. 2021. “Tobacco Market Size, Share & Trends Analysis Report By Product (Smokeless, Cigarettes, Cigar & Cigarillos, Next Generation Products, Waterpipes), By Region, And Segment Forecasts, 2021 – 2028.” Report ID: GVR-2-68038-412-3. Accessed at: <https://www.grandviewresearch.com/industry-analysis/tobacco-market>

<sup>70</sup> Spinner, J. 2021. Outsourcing Pharmacom. “Philip Morris International (PMI).” Accessed at: <https://www.outsourcing-pharma.com/Article/2021/08/10/Philip-Morris-acquires-another-inhaled-drug-pharma-firm>

<sup>71</sup> Provan, S, Gray, A. 2021 “Marlboro maker Philip Morris strikes deal for UK inhaler group Vectura.” Financial Times, July 9, 2021. Accessed at: <https://www.ft.com/content/f0b669f3-8278-4ca9-a8ca-c54b3012d09d>

government regulations and low levels of tobacco taxes. Figure 11 shows the top countries with the biggest predicted increases in smoking rates.

**As such, the international exposure for the tobacco industry has helped offset lower demand and declining sales in high-income countries, enabling the industry to continue its earnings growth (Figure 11).** For example, since the launch of the “Unsmoke” campaign alone<sup>72</sup>, data reported by PMI for the Fourth-Quarter of 2021, cigarette and heated tobacco unit shipment volume went up by 4.2 percent (reflecting cigarette shipment volume up by 2.4 percent, and heated tobacco unit shipment volume up by 17.0 percent to 25.4 billion units.<sup>73</sup> PMI's cigarette shipment volume of different brands and in different countries accounted for the increase, such as:

- Marlboro, mainly driven by Mexico, PMI Duty Free, Russia and Turkey, partly offset by France, Japan and the Philippines;
- Chesterfield, primarily driven by Brazil, the Philippines and Russia, partly offset by Saudi Arabia;
- Parliament, mainly driven by Russia, Saudi Arabia and Turkey, partly offset by South Korea; and
- Sampoerna A in Indonesia, primarily driven by premium A Mild.

There are a number of countries where at least 40 percent of the population smokes, if not more. Regions with high smoking rates include South-East Asia and the Pacific islands and Europe, particularly the Balkan region, but also France, Germany, and Austria. The tobacco industry has benefited greatly from countries like China, India, Indonesia, and Vietnam where there are large populations of smokers. As incomes have been rising, smoking rates are increasing in Africa as well.<sup>74</sup> Even in the United States, with strong anti-smoking regulations, in 2019, nearly 14 of every 100 U.S. adults aged 18 years or older (14.0 percent) currently smoked cigarettes. This means an estimated 34.1 million adults in the United States currently smoke cigarettes, although current smoking has declined from 20.9 percent (nearly 21 of every 100 adults) in 2005 to 14.0 percent (14 of every 100 adults) in 2019.<sup>75</sup>

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<sup>72</sup> A major public relations initiative by PMI launched in 2019 called the “Year of Unsmoke,” part of its larger “Unsmoke Your World” campaign, emphasizes creating “a smoke-free future”.

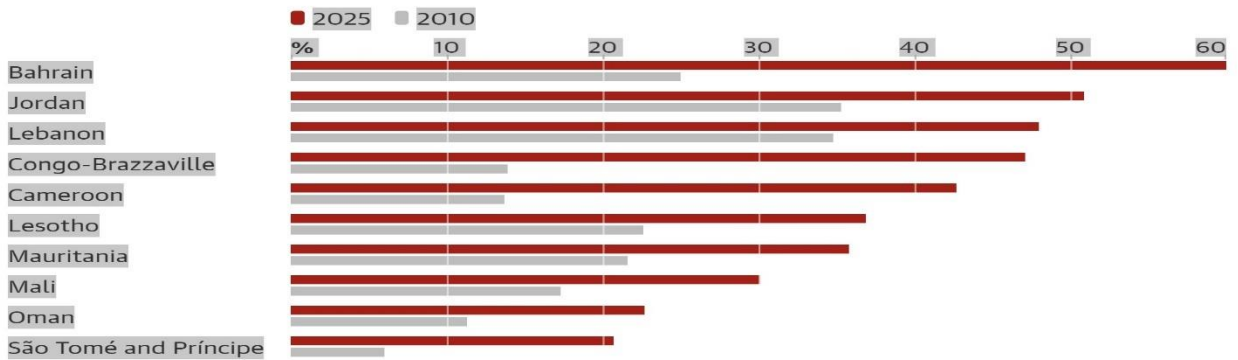
<sup>73</sup> Figures reported at: “Philip Morris International, INC. Reports 2021 Fourth-Quarter & Full-Year Results.” Accessed at: <https://philipmorrisinternational.gcs-web.com/static-files/8432d686-c0bf-4a27-86e9-ec5da3d7bc26>

<sup>74</sup> Marquez, PV, Farrington, JL. 2013. “The challenge of non-communicable diseases and road traffic injuries in Sub-Saharan Africa: an overview.” Washington D.C: World Bank Group.

<sup>75</sup> Cornelius ME, Wang TW, Jamal A, Loretan C, Neff L. 2020. “Tobacco Product Use Among Adults – United States, 2019”. Morbidity and Mortality Weekly Report, 2020. Volume 69(issue 46); pages 1736–1742.

Figure 11:

**The 10 countries with the biggest predicted increases in smoking rates are all in Africa and the Middle East**



Guardian graphic | Source: World Health Organisation

**Part of tobacco industry profitability is thanks to foreign operations, in countries where smoking is still common and widespread.** The population of currently smoking cigarettes in the US and other high-income countries, although declining due to the application of strong anti-tobacco use regulations and high tobacco taxes, is still significant.

**(IX) Snapshot of Recent Financial Performance of the Tobacco Industry**

The above discussion points out that the tobacco industry has enjoyed high profits because it sells very addictive products that cost little to make, require very little on-going R&D expenditures on their key products, and can sell their products at relatively high prices. The tobacco industry is also highly concentrated, lacking competitive market pressures that firms in other sectors regularly face.

As summarized in a recent article<sup>76</sup>, in 2018, the world’s six largest cigarette manufacturers made profits (before income taxes) of more than US\$55 billion.<sup>77</sup> That is more than the combined profits (US\$51 billion) of, for example, Coca-Cola, Pepsico, Nestle, Mondelez, FedEx, General Mills, Starbucks, Heineken, and Carlsberg, who collectively own many household brands with global appeal<sup>78</sup>.

<sup>76</sup> Branston J R. 2021. “Industry profits continue to drive the tobacco epidemic: A new endgame for tobacco control?”. Tobacco Prevention & Cessation 7(June):45. doi:10.18332/tpc/138232.

<sup>77</sup> See, as cited by Branston (2021):

Annual Report and Accounts 2019. Imperial Brands. <https://www.imperialbrandsplc.com/investors/annual-report-accounts-2020/annual-report-archive.html>

British American Tobacco. Building the Enterprise of the Future: Annual Report and Form 20-F 2019. 2020.

[https://www.bat.com/group/sites/UK\\_9D9KCY.nsf/vwPagesWebLive/DOAWWGJT/\\$file/BAT Annual Report and Form 20-F 2020.pdf](https://www.bat.com/group/sites/UK_9D9KCY.nsf/vwPagesWebLive/DOAWWGJT/$file/BAT%20Annual%20Report%20and%20Form%20F%202020.pdf)

Japan Tobacco Inc. Integrated Report 2019. 2020. <https://www.jti.com/sites/default/files/global-files/documents/jti-annual-reports/integrated-report-2019v.pdf>

Philip Morris International. Simply Amazing: Philip Morris International 2019 Annual Report. 2020. <https://philipmorrisinternational.gcs-web.com/static-files/b475ffd3-ee87-4b22-9724-181510d16b1a>

Altria Group inc. 2019 Annual Report. 2020. [https://s25.q4cdn.com/409251670/files/doc\\_financials/2019/ar/2019-Annual-Report.pdf](https://s25.q4cdn.com/409251670/files/doc_financials/2019/ar/2019-Annual-Report.pdf).

Lao Wu Technology. 2020. “The annual tax of China Tobacco Company exceeds trillions, why can't it make it into the world's top 500?”

<https://www.163.com/dy/article/FBLK8RF005313F6D.html>

<sup>78</sup> See, as cited by Branston (2021):

United States Security and Exchange Commission. The Coca Cola Company; Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. 2020. FORM 10-K; Commission File Number 001-02217. <https://investors.coca-colacompany.com/filings-reports/all-sec-filings/content/0000021344-20-000006/0000021344-20-000006.pdf>

Such massive profits, according to the article, are possible because the tobacco industry, **as global enterprises**, has very high profit margins on their sales across the world. For instance, in 2018 Imperial Brands reported a margin on global operating profits of 46 percent<sup>79</sup>, rising to 63 percent in the UK market (which actually increased to 71 percent in 2019)<sup>80</sup>. This means for every £100, that the company globally generated in revenue after paying excise taxes, £46 was profit. Such margins are phenomenal when compared to those earned by firms in other industries. For instance, the global comparator companies mentioned above generally have operating profit margins of around 15–16 percent, with the outliers earning a low of 6.5 percent (FedEx) and a high of 26.7 percent (Coca-Cola) (as cited before).

**(X) How Has the COVID-19 Pandemic Impacted the Profitability of the Tobacco Industry?**

While the leading players in the tobacco industry still managed to attain strong financial performances in 2020, the first year of the COVID-19 pandemic, their profitability was severely impacted in 2021.

BAT reported revenues of GBP32.5bn (US\$41.6bn) for the fiscal year ended September 2020, an increase of 3.1 percent over FY2019. Altria also reported revenues of US\$26.1bn for the fiscal year ended December 2020, an increase of 4.2 percent over FY2019.

**Data for 2021, however, shows that the tobacco industry was also significantly impacted by the severe global economic disruption caused by the pandemic.**<sup>81</sup> Box 1 provides a description of some key terms to understand the profitability of the tobacco industry during this period.

- **Gross Margin.** The tobacco industry it experienced a contraction in **gross profit** by -3.12 percent and revenue by -2.46 percent, while **gross margin** fell to 25.06 percent below **industry's average gross margin**. On the trailing twelve months basis **gross margin in 4 Q 2021** grew to 25.62 percent.<sup>82</sup> **Within the consumer non-cyclical sector five other industries have achieved higher gross margins. Gross margin total ranking has deteriorated compared to previous quarter from to 85.**
- **EBITDA Margin.** Knowing the EBITDA margin (earnings before interest, taxes, depreciation, and amortization) allows for a comparison of one company's real performance to others in its industry. The tobacco Industry experienced contraction in EBITDA by -11.04 percent and revenue by -2.46 percent, while EBITDA margins fell to 14.97 percent below the industry's average. On the trailing twelve months basis, EBITDA margins in 4Q 2021 fell to 16.42 percent. Within the consumer non-

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Pepsico. Creating More Smiles with Every Sip and Every Bite: Annual Report 2019. 2020. [https://www.pepsico.com/docs/album/annual-reports/pepsico-inc-2019-annual-report.pdf?sfvrsn=ea470b5\\_2](https://www.pepsico.com/docs/album/annual-reports/pepsico-inc-2019-annual-report.pdf?sfvrsn=ea470b5_2)

Nestle. Financial Statements 2019. 2020. <https://www.nestle.com/sites/default/files/2020-02/2019-financial-statements-en.pdf>

United States Security and Exchange Commission. Mondelez International; Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. 2020. FORM 10-K; Commission File Number 1-16483. [https://www.mondelezinternational.com/-/media/Mondelez/PDFs/MONDELEZ-INTERNATIONAL-INC\\_10K\\_2020.pdf](https://www.mondelezinternational.com/-/media/Mondelez/PDFs/MONDELEZ-INTERNATIONAL-INC_10K_2020.pdf)

FedEx Corporation. 2019 Annual Report. 2020. [https://s21.q4cdn.com/665674268/files/doc\\_financials/annual/2019/FedEx-Corporation-2019-Annual-Report.pdf](https://s21.q4cdn.com/665674268/files/doc_financials/annual/2019/FedEx-Corporation-2019-Annual-Report.pdf)

<sup>79</sup> Annual Report and Accounts 2019. Imperial Brands. <https://www.imperialbrandsplc.com/investors/annual-report-accounts-2020/annual-report-archive.html>

<sup>80</sup> Imperial Tobacco Limited. Annual Report and Financial Statements for the year ended 30 September 2019. Companies House. 2020. <https://find-and-update.company-information.service.gov.uk/company/01860181/filing-history>

<sup>81</sup> "Consumer Non Cyclical Sector. Tobacco Industry Profitability." Accessed at: [https://csimarket.com/industry/industry\\_Profitability.php?ind=508](https://csimarket.com/industry/industry_Profitability.php?ind=508)

<sup>82</sup> CSIMarket. "Tobacco Industry Profitability. Profitability Information & Trends." Accessed at: [https://csimarket.com/industry/industry\\_Profitability\\_Ratios.php?ind=508](https://csimarket.com/industry/industry_Profitability_Ratios.php?ind=508)

cyclical sector, two other industries have achieved higher EBITDA margins. EBITDA margin total ranking has deteriorated compared to previous quarter to 64.

- **Operating Margin.** The tobacco industry also experienced contraction in **operating profit** by -12.97 percent and revenue by -2.46 percent, while **operating margin** fell to 13.83 percent below the industry's average operating margin. On the trailing twelve months basis operating margin in 4 Q 2021 fell to 15.31 percent. Within the **consumer non-cyclical sector** two other industries have achieved higher operating margins. **Operating margin total ranking has deteriorated compare to previous quarter to 53.**
- **Pre-Tax Margin.** In 2021, the tobacco industry experienced contraction in **pre-tax income** by -14.01 percent and **revenue** by -2.46 percent, while **pre-tax margin** fell to 12.81 percent below the industry's average. On the trailing twelve months basis pre-tax margin in 4 Q 2021 grew to 14.29 percent. Within consumer non-cyclical sector, two other industries have achieved higher pre-tax margins. Pre-tax margin total ranking has deteriorated compare to previous quarter to 46.
- **Net Margin.** The tobacco industry experienced contraction in **net profit** by -13.94 percent and revenue by -2.46 percent, while net margins fell to 10.17 percent below the industry's average margin. On the trailing twelve months basis, net margins in 4 Q 2021 grew to 11.15 percent. Within the consumer non-cyclical sector two other industries have achieved higher net margins. Net margin total ranking has deteriorated compared to previous quarter to 52.

### Box 1: Key Terms

#### What is Gross Profit?

Gross profit is the profit a company makes after deducting the costs associated with making and selling its products, or the costs associated with providing its services.

#### What is Gross Margin?

Gross margin is the difference between revenue and cost of goods sold, divided by revenue. Gross margin is expressed as a percentage. Generally, it is calculated as the selling price of an item, less the cost of goods sold (e. g. production or acquisition costs, not including indirect fixed costs like office expenses, rent, or administrative costs), then divided by the same selling price.

#### What is a non-consumer cyclical sector?

A non-consumer cyclical would be a company that sells to businesses, governments, or large organizations and which is also sensitive to the state of the economy.

#### What is the EBITDA margin?

It is a measure of a company's operating profit as a percentage of its revenue. The acronym EBITDA stands for **earnings before interest, taxes, depreciation, and amortization**. Knowing the EBITDA margin allows for a comparison of one company's real performance to others in its industry.

#### What Is Operating Profit?

A company's operating profit is its total earnings from its core business functions for a given period, excluding the deduction of interest and taxes. It also excludes any profits earned from ancillary investments, such as earnings from other businesses that a company has a part interest in. An operating loss occurs when core business income ends up being lower than expenses.

#### What Is Operating Margin?

The operating margin measures how much profit a company makes on a dollar of sales after paying for variable costs of production, such as wages and raw materials, but before paying interest or tax. It is calculated by dividing a company's operating income by its net sales. Higher ratios are generally better, illustrating the company is efficient in its operations and is good at turning sales into profits.

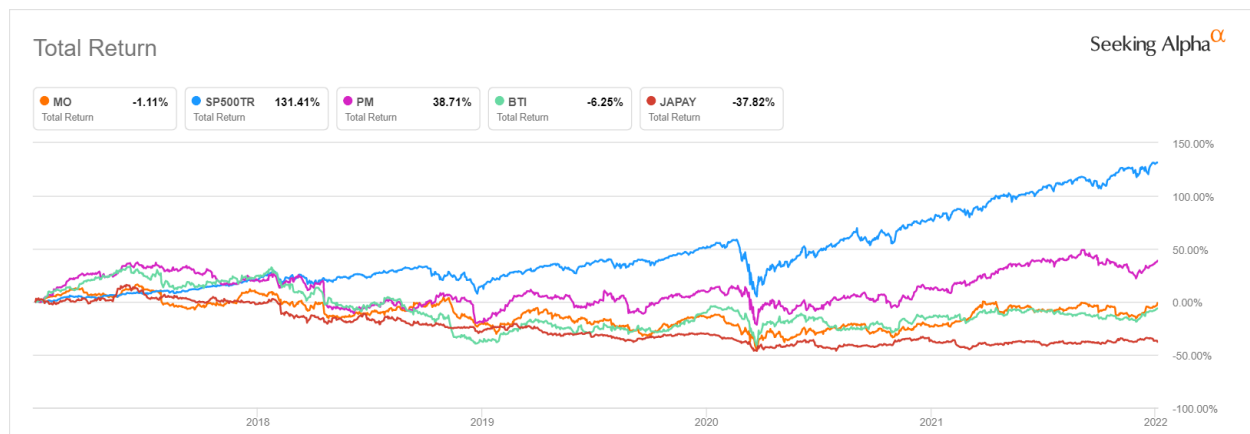
#### What Is Profit Margin?

Profit margin is one of the commonly used profitability ratios to gauge the degree to which a company or a business activity makes money. It represents what percentage of sales has turned into profits. Simply put, the percentage figure indicates how many cents of profit the business has generated for each dollar of sale. For instance, if a business reports that it achieved a 35 percent profit margin during the last quarter, it means that it had a net income of US\$0.35 for each dollar of sales generated.

**Revenue** is the value of all sales of goods and services recognized by a company in a period. **Pretax income**, sometimes described as pretax dollars, is the gross income before taxes. **Net Income** is income after deduction of all expenses and costs.

**Figure 12 shows the comparative total return (includes interest, capital gains, dividends, and distributions realized over a period) of Big Tobacco companies vs S&P500 companies for the past five years through early January 2022. With the exception of one company, the tobacco industry shows negative performance while the S&P500 companies were up over 130 percent.** Total return, when measuring performance, is the actual rate of return of an investment or a pool of investments over a given evaluation period. It accounts for two categories of return: income including interest paid by fixed-income investments, distributions, or dividends and capital appreciation, representing the change in the market price of an asset.

**Figure 12: Comparative Total Return (Big Tobacco companies vs S&P500 companies)**



**(XI) Are Product Diversification in High-Income Countries and New Cigarette Markets in Low-and Middle-Income Countries Enough to Maintain High Yields in the Tobacco Industry?**

While tobacco companies diversify their portfolios into e-cigarettes, the future of combustible smoking products is fast dwindling.

As noted in a recent market assessment,<sup>83</sup> however, **the fast declines of the tobacco industry core product - cigarettes, the lower margin business segment of the industry, are set to hurt the income potential** of some of the companies in this industry.

**Furthermore, this assessment considers that the current industry growth expectations are lofty and overall prospects for some tobacco industry companies are increasingly likely to underperform current top and bottom line projections over the upcoming years.** This because diversifying the traditional business model of the tobacco industry is proving more difficult than expected, resulting slower growth rates.

This, in turn, may be a short-lived situation as this segment of the tobacco industry is destined to be highly regulated by the US FDA and the European Commission to prevent addiction among the youth as well as to reduce health risks from vaping products that have been linked to serious lung issues among young people. Studies have indicated the use of vaping products may also have longer term cancer potential.

Indeed, as observed in a recent article,<sup>84</sup> a new law in the United State is set to take effect in April 2022 month that will see some vaping products that use synthetic nicotine pulled from the shelves if they fail to receive authorization from the Food and Drug Administration (FDA). US President Joe Biden signed a US\$1.5 trillion omnibus spending bill on March 15, 2022 that included a provision that amends the definition of a "tobacco product" in order to close a loophole for products containing lab-made synthetic nicotine. This spending bill amended the Federal Food, Drug, and Cosmetic Act (FDCA) to define a tobacco product as "any product made or derived from tobacco, or containing nicotine from any source, that is intended for human consumption."

<sup>83</sup> Seeking Alpha. 2021. "Philip Morris: Diversification Isn't Enough To Maintain 5% Yield." August 24, 2021. Accessed at: <https://seekingalpha.com/article/4451419-philip-morris-diversification-isnt-enough-to-maintain-5-percent-yield>

<sup>84</sup> Roche, D. 2022. "Is Joe Biden Banning Vapes? Nicotine Products Could Be Removed Under Law". Newsweek, News, April 12, 2022. Accessed at: <https://www.newsweek.com/joe-biden-banning-vapes-synthetic-nicotine-products-removed-law-1697131>

### **(XII) Who Owns Tobacco Industry Stocks?**

In a 2021 study,<sup>85</sup> which **compared the ownership characteristics of tobacco stocks with their peers in the same country and industry group**, it was found lower reported ownership for stocks in the tobacco industry, which suggests that anonymous investors are larger owners of these stocks. Compared to peer stocks, US and UK asset managers collectively overweight tobacco stocks, while norm-constrained investors such as sovereign wealth funds and pension funds underweight tobacco stocks.

**Passive managers have large stakes in tobacco stocks, which replicate the holdings of broad capitalization-weighted indices**, indicating that passive replication of ethically screened indices is still a niche. The study also identified some prominent active investors who take large positions in tobacco stocks.

### **(XIII) Where Do We Stand?**

As observed in a Financial Times article<sup>86</sup>, tobacco control campaigners question how much the tobacco industry's "transition narrative" should be trusted.

**The history of Big Tobacco provides ample evidence for skepticism, if not outright rejection.** While scientific studies demonstrated the negative harms of tobacco smoking, the tobacco industry engineered a decades-long, well-documented campaigns of scientific disinformation seeking to delay, disrupt, and suppress these studies. Using a massive archive of previously secret documents, Harvard University historian, Professor Allan Brandt, was able to assess and show in a detailed and illuminating book<sup>87</sup> how the industry pioneered these campaigns, through special interest lobbying and "deep pocket" largesse to sponsor questionable academic studies and elude regulation.

**Although the cultural dominance of the cigarette has waned and consumption has fallen dramatically in the US and other high-income countries over the past decade**, the warning in Professor Brandt's book is dire in signaling that the tobacco industry remains securely positioned to expand into new markets in emerging economies to promote the use of combustible cigarettes and addicting youth and a new generations of consumers, all the while adding product lines marketed as 'harm reduction' products in higher income regions.

While it is acknowledged that some tobacco industry companies promoted the use of 'lower-risk' alternatives to cigarettes, these alternative products are not harm free. Big Tobacco's new business model appears full of contradiction as the industry continues to heavily promote and sell combustible cigarettes in many low-and middle-income countries, where about 80 percent of the world's smokers now live,

While it is acknowledged that some tobacco industry companies have taken steps and are promoting the use of lower-risk alternatives to cigarettes, ***the new business model appears deeply flawed since the industry continues to heavily promote and sell traditional cigarettes in many low-and middle-income***

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<sup>85</sup> Blitz, D and Swinkels, L. 2021. "Who owns tobacco stocks?" May 7, 2021. Available at SSRN: <https://ssrn.com/abstract=3841450> or <http://dx.doi.org/10.2139/ssrn.3841450>

<sup>86</sup> Nilsson, P, Edgecliffe-Johnson, A. 2021. "Big Tobacco struggles to convince critics it can kick the cigarettes." Financial Times, July 16, 2021. Accessed at: <https://www.ft.com/content/880b281c-5d89-4770-8cb7-35722782bf76>

<sup>87</sup> Brandt, AM. 2007. "The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America." New York: Basic Books.

**countries, where about 80 percent of the world's smokers now live, tapping fast growing young populations, rising per capita incomes, weak governance systems, lax regulatory environments, and low tobacco taxation levels.**<sup>88 89 90 91</sup>

**The tobacco industry is an oligopoly dominated by a handful of players globally.** Cigarettes are cheap to make and highly addictive. Litigation and tax costs are passed onto customers, which allows for big margins. While this apparent shift in market strategy may help the tobacco industry sustain revenue growth in the short-term, as governments in low and middle-income countries, improve tobacco tax structures that increase tobacco tax rates, while implementing stronger tobacco control regulations, prices will be passed on to consumers. We have seen these tobacco control efforts negatively impact demand in the developed world, squeezing future profitability.

**The lessons from the past cannot be ignored.** The tobacco industry, still enjoys large profits, which not only serve as a strong incentive to maintain current markets, but provides Big Tobacco with the means to oppose new tobacco control measures in low-and middle-income countries. As a result, some tobacco companies are shifting away from 'alternative products' back to combustible cigarettes.

Faced with steadily declining cigarette sales, tobacco companies promote novel 'smoke-free' nicotine delivery systems, which are designed to sustain nicotine addiction among customers and recruit new users. Big Tobacco continues to aggressively market cigarettes and oppose public health policies to reduce smoking, further obfuscating the health consequences of tobacco use.<sup>92</sup>

#### ***(XIV) Is a Tobacco Endgame Possible?***

**Ending the tobacco use pandemic should be seen as a defining challenge in global public health post-COVID-19 pandemic.** Tobacco production and consumption are incompatible with the achievement of the Sustainable Development Goals (SDGs), negatively impacting 14 of the 17 SDGs.<sup>93</sup>

**The evidence presented in this note is clear in showing that tobacco use leads to addiction, and many adverse health effects, including negative reproductive health outcomes, cardiovascular diseases, chronic obstructive pulmonary disease, and the risk of numerous cancers.** Greatest health risks occur in countries where smoking is pervasive and where smokers consume a large quantity of cigarettes. Second-hand smoking also puts unsuspected family members and people at work and in other public venues at

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<sup>88</sup> World Bank. 1999. "Curbing the Epidemic: Governments and the Economics of Tobacco Control". Report 19638 (May). Development in Practice Series. Washington, DC: World Bank.

<sup>89</sup> Marquez, PV, Moreno-Dodson, B, eds. 2017. "Tobacco Tax Reform at the Crossroads of Health and Development." Washington, D.C.: World Bank Group. Accessed at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/491661505803109617/main-report>

<sup>90</sup> Dutta, S, Marquez, PV, et al. 2019. "Confronting Illicit Tobacco Trade : a Global Review of Country Experiences : Confronting Illicit Tobacco Trade : a Global Review of Country Experiences." WBG Global Tobacco Control Program Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/677451548260528135/Confronting-Illicit-Tobacco-Trade-a-Global-Review-of-Country-Experiences>

<sup>91</sup> Fuchs Tarlovsky, A, Marquez,PV, Dutta,S, Gonzalez Icaza, MF. 2019. "Is Tobacco Taxation Regressive? Evidence on Public Health, Domestic Resource Mobilization, and Equity Improvements." WBG Global Tobacco Control Program. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/893811554737147697/Is-Tobacco-Taxation-Regressive-Evidence-on-Public-Health-Domestic-Resource-Mobilization-and-Equity-Improvements>

<sup>92</sup> Jackler, R. 2022. "Propaganda Crusades by Philip Morris International & Altria: "Smoke-Free Future" & "Moving Beyond Smoke" Campaigns." Stanford University School of Medicine, Stanford Research Into The Impact of Tobacco Advertising (SRITA), February 16, 2022.

<sup>93</sup> Tobacco Free Portfolios. The toolkit. 12th ed. Tobacco Free Portfolios; 2020. Accessed June 15, 2021. <https://tobaccofreeportfolios.org/wp-content/uploads/2021/02/TFP-Toolkit-12th-Edition-January-28-2021-1.pdf>

risk of developing or making worse a wide range of health conditions. Tobacco use still is the largest cause of preventable disease and death in the world, killing more than an estimated 8 million people per year.

**Moving forward, building broad alliances are needed.** Country governments face sharp resistance to tax rate increases and other tobacco control measures from the tobacco industry. The industry is both financially powerful and politically astute. Tobacco industry advice to governments promotes the most ineffective interventions and seeks to undercut and weaken tax measures. To counter these pressures requires robust scientific and economic analysis, as well as multi-sectoral policy development. It also demands the mobilization of civil society and opinion leaders. Support from international partners is also required, particularly in low-income countries, to strengthen country capacity for lining up and coordinating all parts of government, while engaging a wide set of stakeholders outside of government.

Innovative, novel strategies,<sup>94</sup> must be supported and advanced to put the public interest first. The case must be made with corporate and individual investors, including pension funds and university endowments, to pursue tobacco-free portfolios, and prevent future damage to the health and well-being of people and protect the environment globally. Tobacco investments have increased potential for becoming ‘stranded assets’, if governments around the world discourage smoking further, and as we’ve seen in some countries already, prohibit it altogether, putting tobacco companies out of business. Considering the opportunity cost of capital, investors can still earn an equity premium without investing in tobacco stocks and risking reputational damage.<sup>95</sup>

**As noted by Hurley in a recent editorial<sup>96</sup>, finance sector actors wield enormous power worldwide with their investment, lending, and insurance decisions.** Pension funds alone held over US\$35 trillion in assets at the end of 2020. Globally, the insurance market generated total gross written premiums of US\$5.8 trillion in 2020, with 53% in non-life sectors. The decisions these investors make can help drive finance to SDGs-friendly economic activities and projects. Indeed, many finance sector actors have made public commitments to support the SDGs, as expressed by their participation in important international initiatives like the UN Global Compact, Global Investors for Sustainable Development (GISD), and the UN Principles for Responsible Investment (as well as more recently the Principles for Responsible Banking and Insurance). Interest in investing ‘responsibly’ and ‘sustainably’ has increased significantly over recent years. At the same time, there are many banks, pension funds, insurance providers and other finance sector actors continue to lend to, invest in, and insure tobacco companies, despite their promises to support the SDGs.

**The World Bank Group (WBG)<sup>97</sup>, a global development organization, one of the largest sources of funding and knowledge for developing countries, offers a good example to other international agencies**

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<sup>94</sup> McGreal, C. 2022. “Yale, Stanford and MIT’s fossil fuel investments are illegal, students say.” The Guardian, February 16, 2022. Accessed at: <https://www.theguardian.com/environment/2022/feb/16/us-universities-fossil-fuel-divestment-students-legal-complaint>

<sup>95</sup> Blitz, D and Swinkels, L. 2021. “Who owns tobacco stocks?” May 7, 2021. Available at SSRN: <https://ssrn.com/abstract=3841450> or <http://dx.doi.org/10.2139/ssrn.3841450>

<sup>96</sup> Hurley, G. 2022. “The COVID-19 pandemic has thrown the SDGs into reverse: The financial sector can play its part in the recovery by excluding tobacco.” *Tob. Prev. Cessation* 2021;7(August):59 <https://doi.org/10.18332/tpc/140786>

<sup>97</sup> The World Bank Group, a global development organization, is one of the largest sources of funding and knowledge for developing countries. It constitutes a unique global partnership of five institutions dedicated to end extreme poverty and promoting shared prosperity. With 189 member countries, over 16,000 staff from more than 170 countries, and over 120 offices worldwide, the Bank Group works with public and private sector partners, invests in projects across sectors, and uses data, research, and technology to develop solutions to the most urgent global challenges. The World Bank Group consists of five institutions: the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the International Centre for Settlement of Investment

**and private firms on how to confront the development threat posed by tobacco use.** The unambiguous Operational Directive 4.76 of 1999 mandates that the WBG does not lend directly to tobacco production, processing, or marketing; provide grants for investment in these activities; or guarantee investments, loans, or credits for these industries. WBG policy advice, technical assistance, and operations support tobacco tax increases to protect the population from health risks and to mobilize additional public revenue to aid in the post-pandemic recovery.

**The Tobacco-Free Finance Pledge<sup>98</sup>, a global initiative with a mission to inform, prioritize, and advance tobacco-free finance with the end goal being a world free from tobacco, is a promising and innovative approach to advance the global public health agenda benefiting millions of people.** The Pledge has been signed by over 185 investors globally, representing over US\$14 trillion in assets under management.

**More can be done to inform both institutional, passive investors, and active asset managers about the real economic cost of tobacco use globally. This realization would help reduce the attractiveness of the investing in the tobacco industry.** Changing the profit story of the tobacco industry therefore represent a game-changing possibility for tobacco control, as fully informed investors “voting with their feet” will move towards tobacco free investments avoiding an industry that harms its customers and leads to millions of premature deaths.

**Additionally, as discussed in a previous article<sup>99</sup>, excluding tobacco from investments by governments and financial institutions would also be complementary to achieving Net Zero environmental targets.** While the health effects of cigarette smoking are well documented, scant attention has been paid to the impact of tobacco production and use on the environment in terms of deforestation and soil degradation, climate change, the waste it produces, and pollution of waterways.

**The type of innovative approaches, such as the Tobacco-Free Finance Pledge, which complement the demand and supply provisions of the FCTC, are urgently needed to support the development of more resilient, healthy societies, post-COVID-19 pandemic.** Otherwise, the implications for the future are ominous: 100 million people died of smoking-related diseases in the 20th century; in the next 100 years, if decisive and effective action is not mounted by all stakeholders and shareholders, the number of preventable deaths due to tobacco-attributable diseases is estimated will grow to 1 billion during this century.

### **Conclusion**

In this working paper, a exploration of available data and information was conducted and findings presented, to support the view that the dichotomous business model and related harm reduction narrative promoted nowadays by the tobacco industry, merits scrutiny by the international community.

The issue is troubling because the industry, by promoting the use of cigarettes in lower income countries, will addict new generations of consumers to cigarettes, a deadly product, while at same time marketing e-cigarettes as harm reduction in the rich world. Now 80 percent of the world’s smokers live in lower

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Disputes (ICSID), and the Multilateral Investment Guarantee Agency (MIGA). IBRD and IDA together are known as the World Bank. The term World Bank Group refers collectively to all five of the institutions.

<sup>98</sup> TFP site. Accessed at: <https://tobaccofreeportfolios.org/>

<sup>99</sup> Marquez, PV. 2021. “To the COP26 Summit in Glasgow: Moving to “Tobacco-Free Finance” is Good for Public Health and the Environment.” Posted on November 3, 2021, Accessed at: <http://www.pvmarquez.com/cop26>

income countries, and a growing toll of tobacco attributable diseases, premature death, and direct and indirect economic costs, stand to hamper the development prospects of these countries, particularly after the COVID-19 pandemic, the most the most significant global public health and economic crisis in almost a century.

**Tobacco-free investment, therefore, should be seen as a way for investors to contribute to save millions of lives each decade, reduce poverty, and boost development investment needed for constructing a ‘new normal’ in the post-pandemic era.** Indeed, increasing “healthy life expectancy”<sup>100</sup> should be the main outcome of the health preparedness and building back better agendas going forward.

After all the excess mortality and truncated lives experienced during the COVID-19 pandemic, some of them linked to the interplay of the novel coronavirus and pre-existing health risks (e.g., tobacco use) and chronic diseases, some of them attributed to tobacco use, particularly among the elderly, supporting countries in the attainment of this outcome should be seen as a social and economic imperative for building less vulnerable and more resilient, inclusive, and prosperous societies.<sup>101</sup> **The goal should be centered in ‘keeping people healthy, both physically and mentally’ rather than just waiting to ‘treat the sick.’ After all, the well-being of people needs to be at the core of the development process.**

**In line with COP26 commitments, governments and private investors have an opportunity to agree to tobacco-free finance as a concrete, measurable contribution to achieving Net Zero.** More specifically, moving to tobacco-free finance supports the commitment of a coalition of 100 countries forged by the UK to ‘halt and reverse’ global deforestation by 2030. Shifting capital away from Big Tobacco has the potential to aid tobacco farmers by prompting a switch to the cultivation of environmentally-friendly alternative crops and/or develop other nonagricultural economic enterprises, thereby boosting household incomes, facilitating access to credit, developing supply and value chains of other locally-grown crops (e.g., fruits), and supporting the extension services and agricultural education for non-tobacco crops.

**By contributing to the change of human behaviors and environmental perturbations, such as land clearing for tobacco farming, tobacco-free finance will aid in rebalancing the environment-animal-public health interface.** This has the potential for preventing epidemics or pandemics of ‘newly emerging’ and ‘re-emerging’ infectious diseases of animal origin that can, as we have seen with COVID-19 and before with Ebola, Zika, MERS, and SARS, spread with impunity across national boundaries, causing economic and social havoc in their wake.

**There is no time to waste.** The COVID-19 pandemic has exposed the potential devastating impact of unattended public health, social, and environmental risks and their spillover effects in a fast-changing, interconnected world. The sobering experience bestowed upon all of us by the pandemic clearly illustrates the high price societies pay for inaction in dealing with global challenges, old and new. Tobacco use is a decades-old pandemic that needs to end once and for all across the world as an imperative to sustainable development.

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<sup>100</sup> Health-adjusted life expectancy (HALE) is the average number of years that a person can expect to live in full health—that is, not hampered by disabling illnesses or injuries.

<sup>101</sup> Marquez, PV. 2022. “On Marathons, Health, and Cities.” Posted on February 21, 2022. Accessed at: <http://www.pvmarquez.com/marathonshealthcities>

For many of us who have lost loved ones to tobacco-related diseases, preventing smoking and the use of e-cigarettes by young people is not only the right thing to do; more importantly, it represents the type of concerted global effort required to confront major societal risks that could undermine the development of healthy, productive, and more inclusive and equitable societies.<sup>102</sup>

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<sup>102</sup> Marquez, PV. 2021. "An ominous fact on World No Tobacco Day – 2021: Smoking kills more people than COVID-19." World Bank Group Investing in Health, May 30, 2021. Accessed at: <https://blogs.worldbank.org/health/ominous-fact-world-no-tobacco-day-2021-smoking-kills-more-people-covid-19>