

Lighting Up the Black Market:



How High Tobacco Duties Are Driving Illicit Trade in Europe

Dr. Christopher Snowdon

Head of Lifestyle Economics, Institute of Economic Affairs

16 July 2025

Summary

- There is a strong, statistically significant link between the size of the illicit cigarette market in Europe and both the price and affordability of legal cigarettes, largely driven by taxation.
- High cigarette taxes, particularly in Western Europe, have contributed to a growing black market, as both supply and demand for illicit tobacco rise with price.
- Both the relative affordability and the retail price are key drivers of illicit trade.
- Eastern European countries show weaker links between taxation and illicit sales due to lower absolute tax levels and limited cross-border price incentives.
- Geographical proximity to countries like Russia, Ukraine, and Belarus is no longer a major driver of illicit tobacco sales across Europe.
- Perceived corruption levels do not correlate with the size of the illicit market; in some cases, less corrupt countries have higher levels of illicit trade.
- The UK has seen a sharp drop in duty-paid tobacco sales with little corresponding decline in smoking prevalence, indicating a rise in black market use.
- Excessive taxation risks undermining revenue and fuelling organised crime, with Europe advised to avoid the violent outcomes seen in Australia's illicit tobacco trade.

TABLE OF CONTENTS	1
INTRODUCTION	3
THE EVIDENCE	3
CONCLUSION	9
REFERENCES	10

About the author

Dr. Christopher Snowden is the Head of Lifestyle Economics at the IEA. He has a degree in History from Lancaster University and a PhD in Economics from the University of Buckingham. He is the author of *Killjoys*, *The Art of Suppression*, *The Spirit Level Delusion*, and *Velvet Glove, Iron Fist*. His work focuses on lifestyle regulation and evidence-based policy-making. He has authored dozens of IEA publications including *Sock Puppets*, *Cheap as Chips*, *A Safer Bet*, and *You Do Not Exist*, and is the editor of the Nanny State Index.

Contact: csnowdon@iea.org.uk

About EPICENTER

EPICENTER, the European Policy Information Center, is an independent initiative of twelve leading think tanks from across Europe. It seeks to inform the European policy debate and promote the principles of a free society by bringing together the expertise of its members.

EPICENTER is formed by the Center for Political Studies (Denmark), Civil Development Forum (Poland), Fundalib (Spain), the Institut économique Molinari (France), the Institute of Economic Affairs (UK), the Institute of Economic and Social Studies (Slovakia), the Institute for Market Studies (Bulgaria), Istituto Bruno Leoni (Italy), KEFiM (Greece), the Lithuanian Free Market Institute, Prometheus (Germany), and Timbro (Sweden). Like its members, EPICENTER is politically independent and does not accept taxpayer funding.

Introduction

The drivers of black market sales of legal products are widely recognised. They include the affordability of the legal product, tax morale, weak government institutions, effective law enforcement, and excessive regulation or restricted availability of the legal product (Schneider and Williams 2013). All of these have been found to be factors in the sale of illicit tobacco, but to varying degrees in different jurisdictions at different times.

Public health campaigners who promote the use of heavy taxation to reduce consumption tend to downplay the price effect and focus on law enforcement and corruption. Some have even claimed that the ‘illicit trade is not directly related to tobacco prices’ (Joossens et al. 2014: e22). A similar claim was made in a European Commission report, which proposed a significant increase in the EU’s minimum cigarette tax in 2025. It claimed that:

[w]hile price levels may act to incentivise the illicit trade of tobacco products (ITTP) the main driver is not the relative levels of price or taxation, instead other drivers are at play such as the permeability of borders; the severity of sanctions for offenders; the geographic proximity to illegal production and/or distribution sites... In other words, there is no direct proportionality between tax levels and the level of illicit trade (European Commission 2025: 41).

But both economic theory and empirical evidence strongly suggest that high prices fuel black market sales by stimulating both supply and demand. Higher legal prices stimulate demand among smokers who struggle to afford tobacco from legitimate sources and stimulate supply by increasing the price that can be charged on the black market and, therefore the profit that can be earned. Affordability, rather than price, is usually seen as the key metric, and this is influenced by taxation (which typically accounts for 70–85 per cent of the price of cigarettes in Europe) and income levels. Although more difficult to quantify, tax morale – the willingness to pay taxes – can be eroded by high rates of duty if consumers believe the taxes are unfair or expect the revenue to be misspent.

The evidence

Several studies have shown that smokers are more likely to buy illicit cigarettes when tobacco prices/taxes are high (e.g. DeCicca et al. 2013; Fix et al. 2013). A study of tobacco duty in Europe found that a €1 per pack price increase was associated with a 5–12 percentage point increase in the share of the illicit market (Prieger and Kulick 2018). Another European study found that ‘[r]egions where cigarettes are less affordable ... have higher illicit consumption rates’ (Aziani et al. 2021: 774). A study by Calderoni et al. (2017: 280) concluded that the affordability of legal products has a ‘statistically significant and strongly positive impact on the illicit trade’. In California, tax morale has been found to be a much more important factor in smokers’ willingness to buy illicit tobacco than law enforcement (Prieger 2023).

In this paper, we use data from empty pack surveys, in which the origins of discarded cigarette packs are ascertained to determine whether the prevalence of contraband and counterfeit cigarettes in 28 countries (the EU plus the UK) correlates with the (un)affordability of cigarette taxes. The empty pack survey data comes from a 2024 KPMG report (KPMG 2024), while the affordability data — tax-adjusted for average incomes and indexed — comes from the 2025 Nanny State Index (Snowdon 2025). The tax data comes from the European Commission and (for the UK) HMRC. Examining cigarette taxes unadjusted for income reveals a strong and statistically significant association with illicit cigarette sales ($r = 0.68$, $p = 0.000069$) (Figure 1).

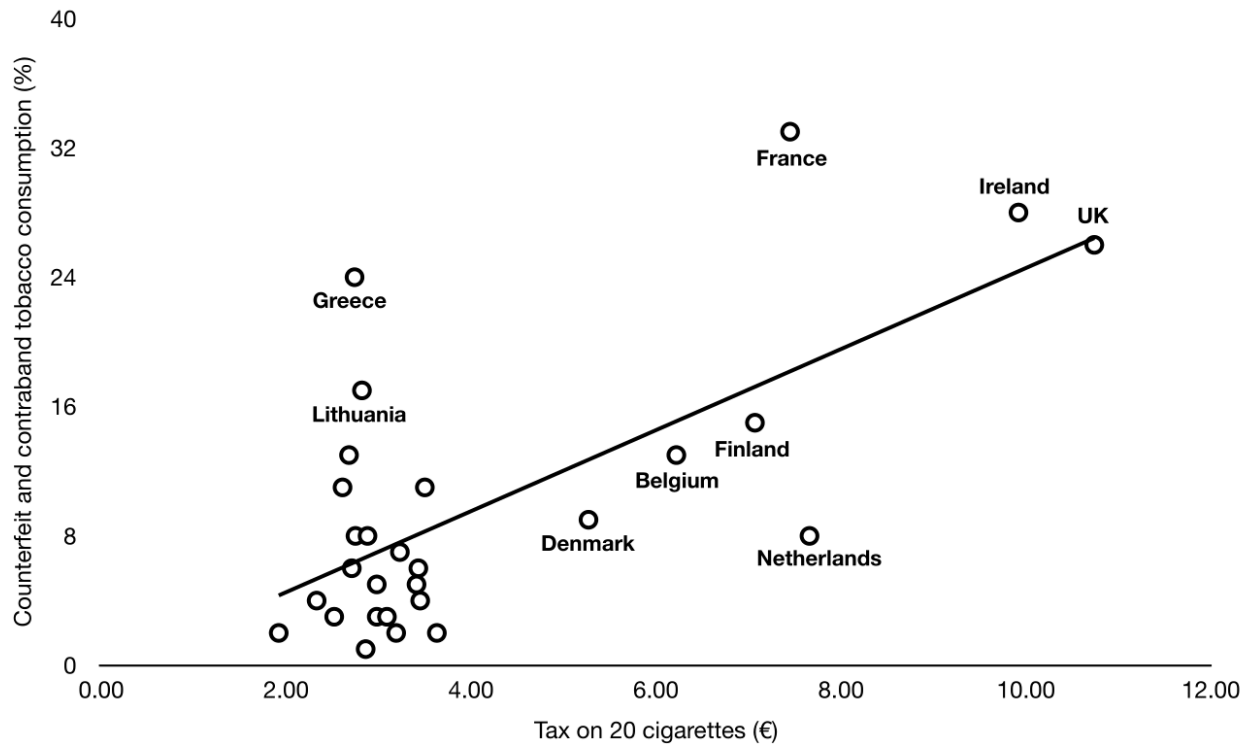


Figure 1: Cigarette taxes/illicit cigarette market share

Applying the unaffordability index to the data in Figure 2 reveals a somewhat weaker but still statistically significant association ($p < 0.05$) with black market cigarette sales ($r = 0.45$, $p = 0.016433$). Interestingly, the association is weakened by the relatively low levels of illicit sales in several Eastern European countries: Romania, Bulgaria, Slovakia, Hungary, and Croatia. Although tobacco duty in these countries is high after adjusting for income, it is low in absolute terms. Cigarette taxes in these countries were less than €3 per pack in 2024, well below the EU average of €3.90 and less than half the rate that prevails in countries such as France and the UK. Since the tax (and therefore the price) on cigarettes in Eastern Europe does not vary greatly, and the prices in other EU countries are higher, there is less incentive for cross-border shopping within the EU. Moreover, the lower prices mean there is less profit available for smugglers (since the black market must always undercut the legal market to survive).

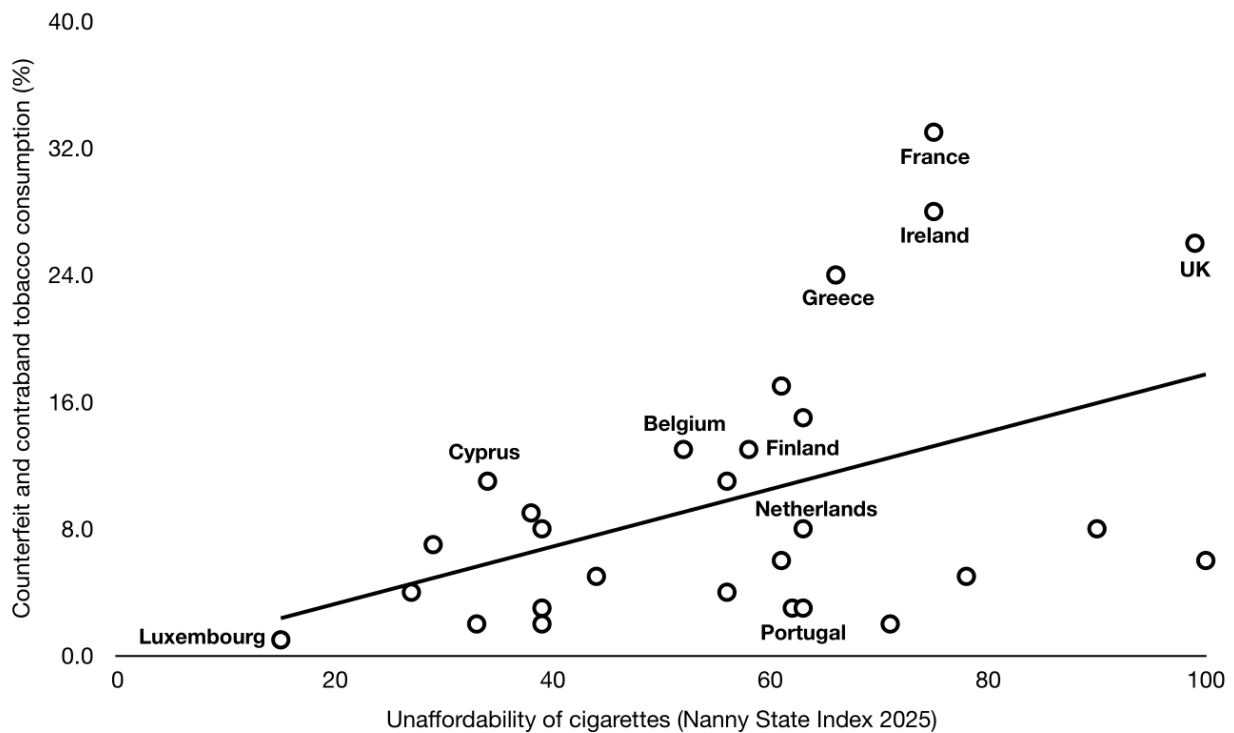


Figure 2: Cigarette unaffordability/illicit cigarette market share

A rigorous study of 247 regions in the EU found that the two biggest determinants of illicit cigarette sales were proximity to countries with a large flow of illicit tobacco and affordability (Aziani et al. 2021). The study, which utilised data from 2007 to 2013, found that countries bordering Belarus, Ukraine, and Russia had large black markets for tobacco. This makes intuitive sense, but the market share of illicit tobacco in the Baltic countries remains high (11–17 per cent), but it has fallen since 2010. According to KPMG’s empty pack surveys, the black market for tobacco has shrunk in Romania and Poland since 2010, although it has grown in Slovakia and Hungary. Since 2019, the illicit trade has halved from 12 to 6 per cent in Romania. Romania has now become a major source of non-duty-paid tobacco entering Germany, France, the UK, and Ireland, much of which is legal cross-border sales (KPMG 2024: 180). The European Commission hopes to clamp down on sales of this kind by increasing the minimum excise tax charged under the Tobacco Excise Directive, but this would likely increase Romanian consumption of illicit tobacco by making the legal product less affordable.

The reduction in illicit tobacco coming into Eastern European countries from Russia and Ukraine may be due, in part, to disruptions to supply chains caused firstly by the pandemic and secondly by the Russia–Ukraine war (and the resulting sanctions on Russia). It is too early to say whether this change in the dynamics of the illicit market in Eastern Europe is temporary. Low rates of illicit consumption in Romania and Bulgaria, where cigarette taxes are low in absolute terms, should certainly not be taken for granted.

It is clear that both the affordability of cigarettes and the (unadjusted) retail price of cigarettes, both of which are largely dictated by taxation, are major determinants of illicit cigarette sales. The recent growth in the black market has been largely concentrated in Western Europe, where taxes are highest. Figure 3, which excludes Eastern Europe, shows a very large and statistically significant relationship between the (un)affordability of cigarette taxes and the size of the black market ($r = 0.79$, $p = 0.000163$). The share of the tobacco market that is counterfeit or contraband has more than

doubled in France and the UK since 2010; it has quadrupled in Greece and has grown by 45 per cent in Ireland.¹

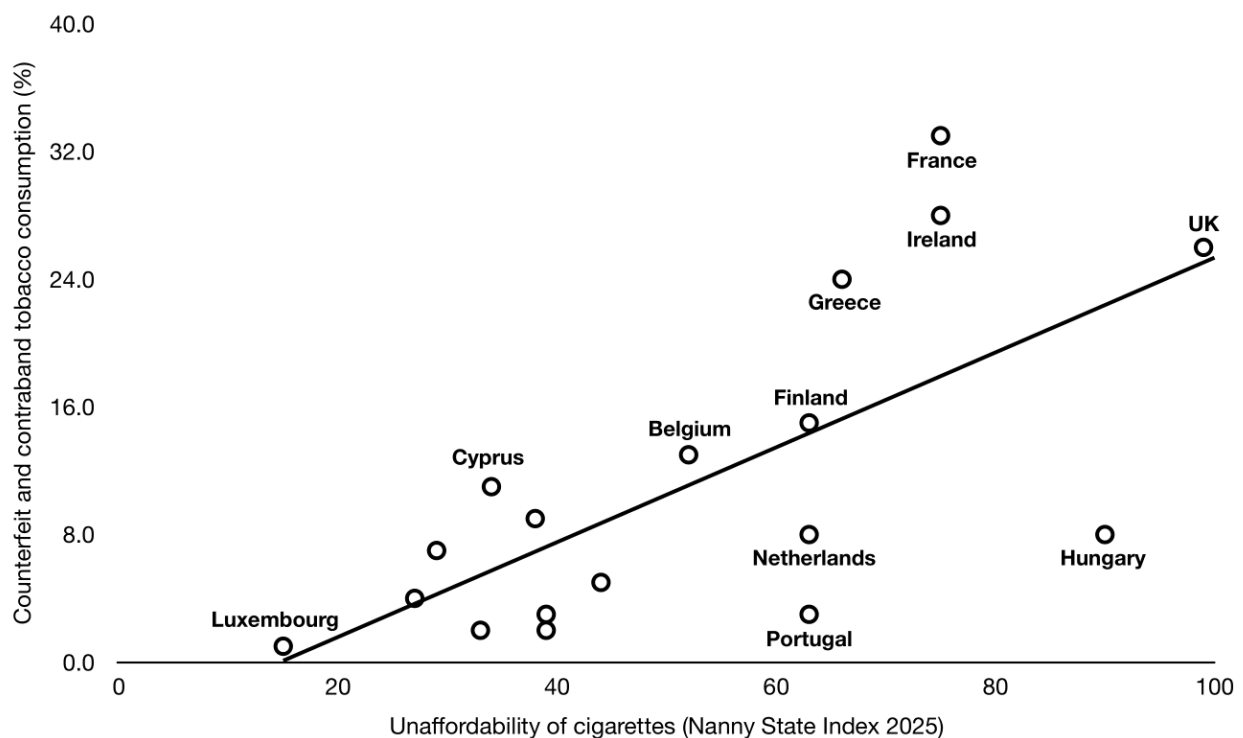


Figure 3: Cigarette unaffordability/illicit cigarette market share (excluding Eastern Europe)

We observe a similar relationship when examining average cigarette prices. As might be expected, there is an extremely strong relationship between the rate of cigarette taxation and the price of cigarettes ($r = 0.96$, $p = 0.0001$). As shown in Figure 4, the price of cigarettes is largely dictated by the rate of duty.

¹ Remarkably, the European Commission (2025: 41) presents Ireland as a success story, saying: 'Evidence from Ireland, which is the Member State with the highest tobacco taxes and prices in the EU, has shown that sustained tax and price increases can coexist with a general downward trend in the use of illicit tobacco products.'

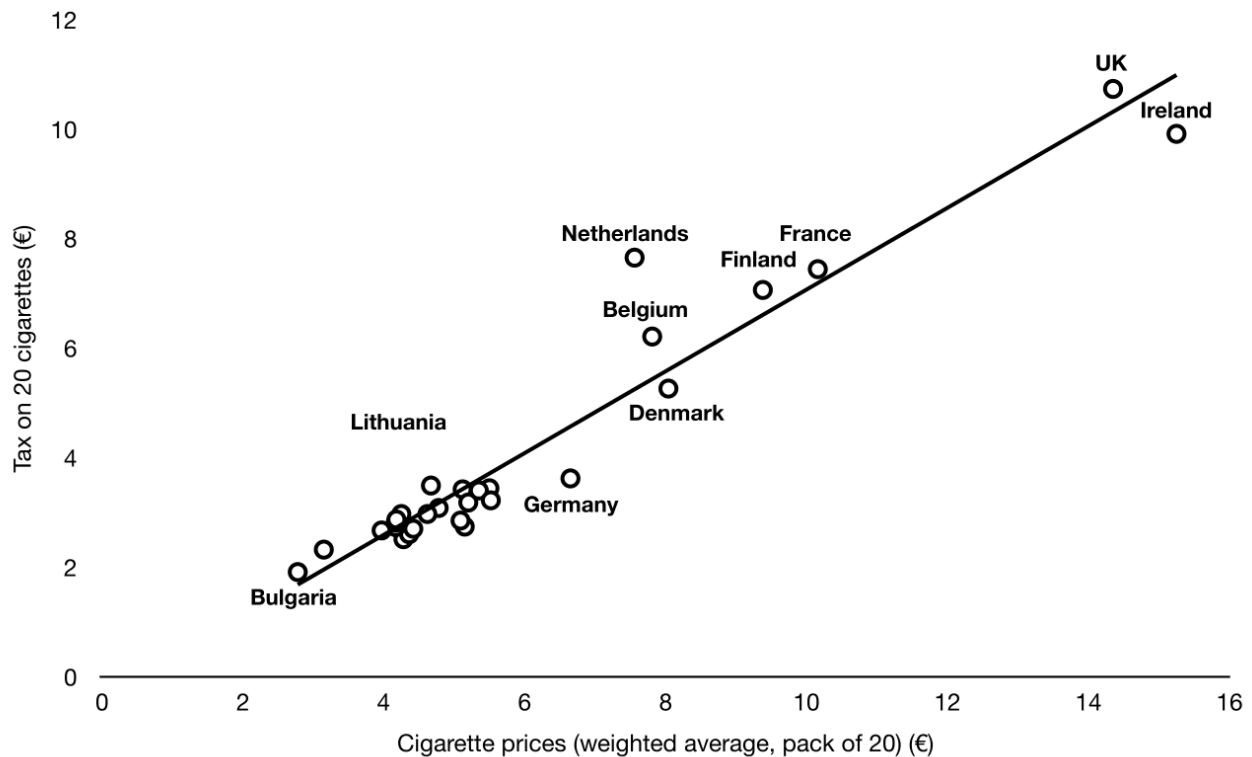


Figure 4: Relationship between cigarette duty and cigarette prices

We have already seen that the size of the black market is related to the cigarette duty, and so it is no surprise that the size of the black market is also related to the average weighted price of cigarettes (Figure 5). In sum, both the price of cigarettes and the tax on cigarettes are major determinants of black market tobacco sales. The (un)affordability of legal cigarettes is also a factor, although to a slightly lesser extent. The relationship is strongest in Western Europe, where cigarette taxes tend to be the highest. The coefficient of determination (r^2) in both Figure 3 and Figure 5 suggests that prices explain 47 per cent of the variation ($r^2 = 0.4716$ and 0.4671 , respectively).

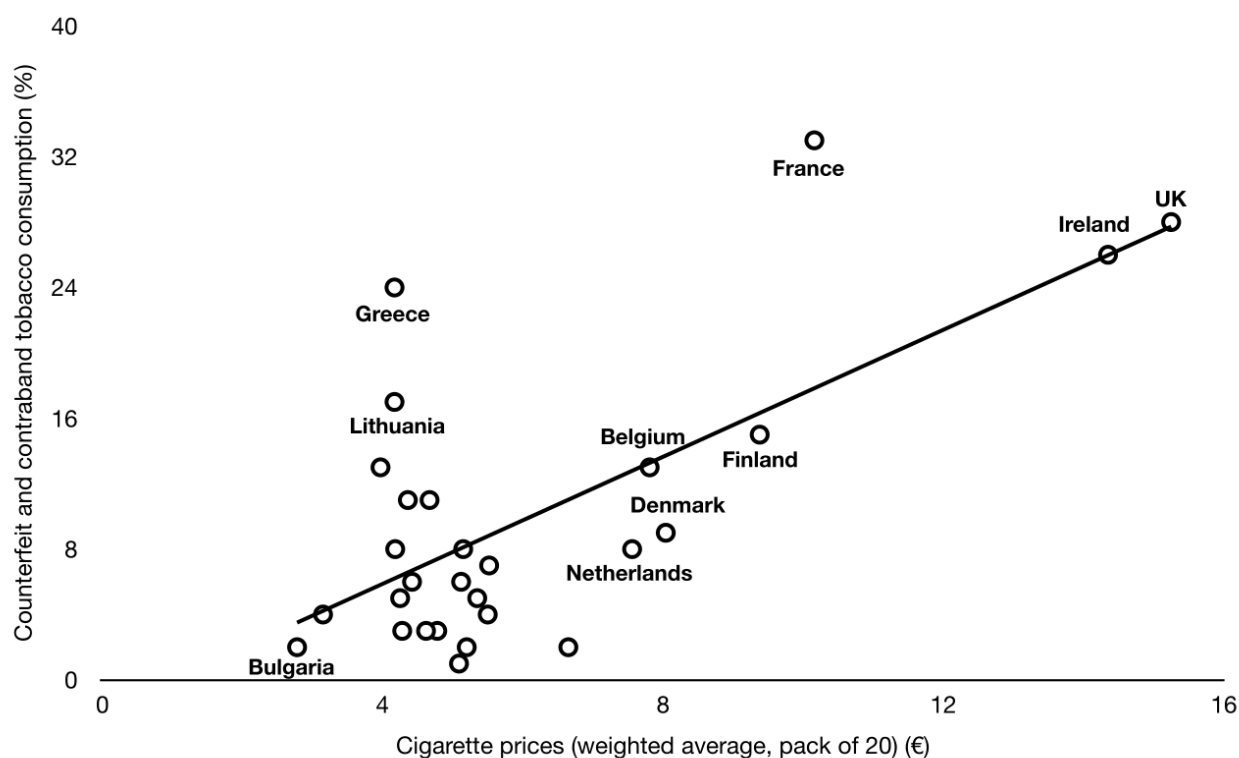


Figure 5: Cigarette prices/illicit cigarette market share

Some public health academics, while accepting that price and tax levels are 'important factors' in explaining the illicit tobacco trade, have argued that corruption is at least as important (Joossens et al. 2000: 403). The report from the European Commission (2025: 41) notes that: 'The World Health Organisation contends that weak governance has a greater influence on the scale of the illicit tobacco trade than price differentials.'

However, two large studies on Europe failed to find an association between perceived corruption and black market cigarette sales (Calderoni et al., 2017; Aziani et al., 2021). As Figure 6 shows, our data also show that there is no association. If anything, the tendency is in the opposite direction, with less corrupt countries having more illicit sales, although this association is not statistically significant ($r = 0.25$, $p = 0.129$).

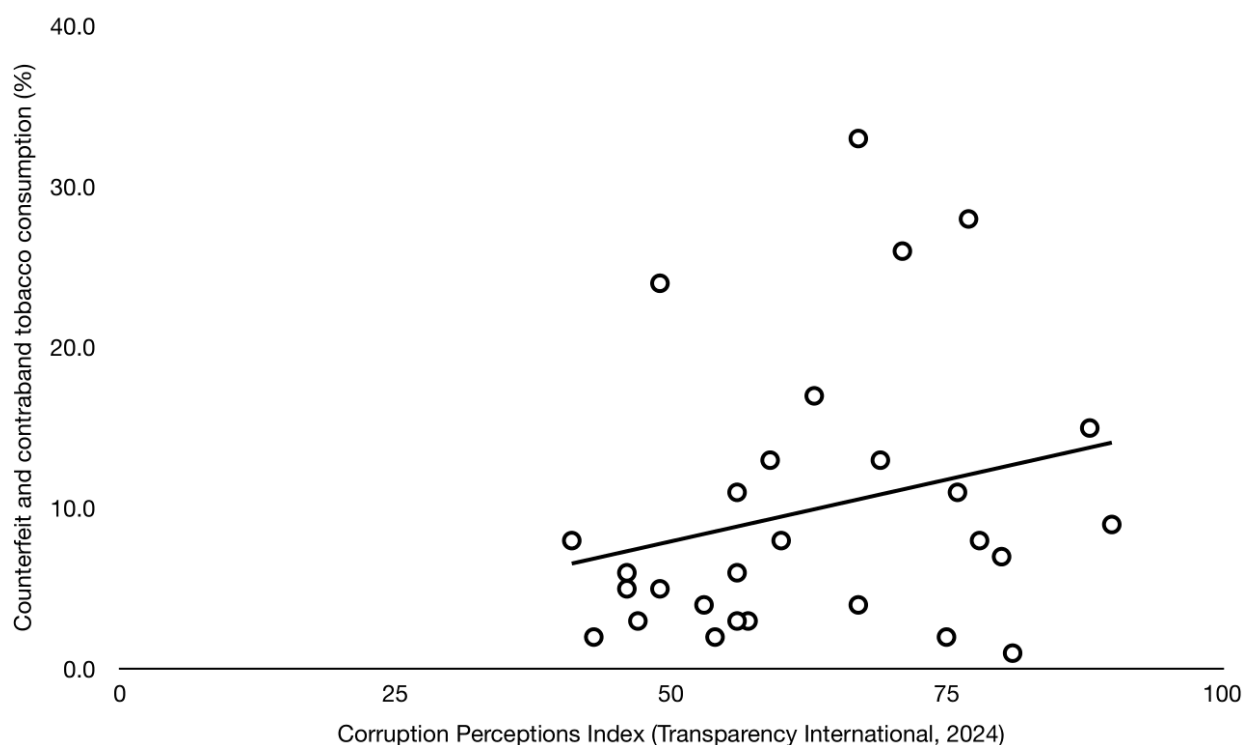


Figure 6: Perceived corruption and black market cigarette sales

Conclusion

For years, tobacco taxes appeared to offer a win–win for governments by raising revenue while plausibly reducing cigarette consumption. However, as tax rates have increased, especially in Western Europe, they have become a less reliable source of revenue and have encouraged criminal activity. In the UK, for example, there has been a sharp decline in tobacco duty revenues in recent years that has not been accompanied by a commensurate decline in smoking prevalence. The number of duty-paid cigarettes sold fell from 23.6 billion in 2021 to 13.2 billion in 2024, a decline of 44.4 per cent, while legal sales of hand-rolling tobacco declined by 47.6 per cent. In the same period, the number of smokers declined by just 0.5 percentage points, a relative decline of 5 per cent. Since the number of cigarettes consumed by smokers did not change between 2021 and 2024, it is clear that there was a huge rise in the sale of illicit tobacco.

Governments might tolerate a decline in tobacco duty revenue if it were due to lower smoking rates, but there is nothing to be gained from pushing smokers towards the black market. Europe has not yet experienced a full-scale ‘tobacco turf war’ as seen in Australia, where more than 200 tobacconists have been fire-bombed, and several people have been murdered. Violence is endemic in organised crime, and European politicians should be wary of adding fuel to the fire.

References

- Aziani, A., Calderoni, F. and Dugato, M. (2021) Explaining the consumption of illicit cigarettes. *Journal of Quantitative Criminology* 37: 751–89.
- Calderoni, F., Sugato, M., Aglietti, V., Aziani, A. and Rotondi, M. (2017) Price and non-price determinants of the illicit cigarette trade: Analysis at the subnational level in the EU. In *Dual Markets: Comparative Approaches to Regulation* (eds. E. U. Savona, M. A. R. Kleiman and F. Calderoni). Cham: Springer.
- DeCicca, P., Kenkel, D. and Liu, F. (2013) Excise tax avoidance: The case of state cigarette taxes. *Journal of Health Economics* 32(6): 1130–41.
- European Commission (2025) Commission staff working document impact assessment report accompanying the document 'proposal for a council directive on the structure and rates of excise duty applied to tobacco and tobacco related products (recast)'.
- Fix, B. V., Hyland, A., O'Connor, R. J., Cummings, K. M., Fong, G. T., Chaloupka, F. J. and Licht, A. S. (2013) A novel approach to estimating the prevalence of untaxed cigarettes in the USA: Findings from the 2009 and 2010 international tobacco control surveys. *Tobacco Control* 23(Supp. 1): i61–i66.
- Joossens, L., Chaloupka, F. J., Merriman, D., and Yürekli, A. (2000). Issues in the smuggling of tobacco products. In *Tobacco Control in Developing Countries* (eds. F. J. Chaloupka and P. Jha). Oxford: Oxford University.
- Joossens, L., Lugo, A., La Vecchia, C., Gilmore, A. B., Clancy, L. and Gallus, S. (2014) Illicit cigarettes and hand-rolled tobacco in 18 European countries: A cross-sectional survey. *Tobacco Control* 23(e1): e17–e23.
- KPMG (2024) Illicit cigarette consumption in Europe: Results for the calendar year 2023. https://www.pmi.com/resources/docs/default-source/itp/illicit-cigarette-consumption-in-europe_2023-results_final.pdf
- Prieger, J. E. and Kulick, J. (2018) Cigarette taxes and illicit trade in Europe. *Economic Inquiry* 56(3): 1706–23.
- Prieger, J. E. (2023) Tax noncompliance: The role of tax morale in smokers' behavior. *Contemporary Economic Policy* 41(4): 653–73.
- Snowdon, C. (2025) *The Nanny State Index '25*. Brussels: Epicenter.