

Monthly Report

Ukrainian refugees – from emergency to long-term strategy

Tobacco taxation in the Western Balkans: Aligning with Europe, fighting old challenges

Inflation and unemployment in Poland: Off the Phillips Curve

Latest trends in global monetary policy and financial markets



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Opinion Corner^{*}: Ukrainian refugees – from emergency to long-term strategy

BY MARYNA TVERDOSTUP

Three and a half years after the start of Russia's full-scale invasion of Ukraine, Europe is still living with the largest refugee movement since the Second World War. The first phase of the crisis was all about speed and compassion, with borders opened, communities mobilised and protection offered on an unprecedented scale. But that urgency is now behind us. What lies ahead is less visible but equally demanding: namely how to turn temporary arrangements into long-term strategies that work both for refugees and for the countries that host them.

According to UNHCR, more than 6 million Ukrainians remain abroad, most of them in Europe.¹ The EU's immediate response to the Ukrainian refugee crisis was remarkable. In March 2022 it activated the Temporary Protection Directive, giving Ukrainians immediate access to residence, work, education and healthcare. By avoiding the long and uncertain asylum procedures that usually define European migration policy, the EU showed how much can be achieved when political consensus is strong. This swift action also allowed many Ukrainians to enter the labour market quickly. Eurostat-based analyses indicate that employment rates among working-age Ukrainians are considerably higher than among other refugee groups that have arrived in the EU in recent years, ranging from around 11% in some countries to over 50% in others. This reflects both an effective policy framework and the determination of the Ukrainian refugees themselves.²

Yet this should not obscure the reality that many of the Ukrainian refugees are underemployed and many are working in jobs below their level of education or professional experience, with qualified nurses employed as assistants and engineers taking up low-skilled positions.³ Overqualification is a common feature of refugee integration everywhere, as displaced people often accept jobs below their skill level simply to secure an income and stability. In the case of Ukrainians, however, the scale of this is unusually large. Surveys show that nearly 70% of Ukrainian refugees hold a university degree or equivalent qualification, compared to roughly 30% of Syrian or Afghan refugees in Europe.⁴ The mismatch between education and employment helps explain why so many Ukrainians remain in positions that are well below their level of training, despite their relatively rapid entry into the host-country labour markets.

^{*} Disclaimer: The views expressed in the Opinion Corner section of the Monthly Report are exclusively those of the authors and do not necessarily represent the official view of wiiw.

¹ <https://www.unhcr.org/us/emergencies/ukraine-emergency>

² <https://assets.eurofound.europa.eu/f/279033/fe2e019347/ef23030en.pdf>

³ https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/01/what-we-know-about-the-skills-and-early-labour-market-outcomes-of-refugees-from-ukraine_e95955bf/c7e694aa-en.pdf

⁴ <https://www.german-economic-team.com/en/newsletter/a-survey-of-ukrainian-refugees>

The reasons for underemployment are varied. Childcare is often difficult to secure; recognition of qualifications can take years; and language barriers remain a daily obstacle. Public opinion, while still broadly supportive, is beginning to fray. Civil society initiatives and strong local engagement sustained a welcoming environment in the early stages; but housing shortages, crowded classrooms and competition in sections of the labour market are now increasingly creeping into the political debate. These pressures underline the fact that the challenge of integration is no longer about emergency reception, but about ensuring long-term sustainability.

POLAND AND GERMANY: TWO CONTRASTING EXPERIENCES

Behind the general trends lie very different national experiences. Poland illustrates both the magnitude of the challenge and the depth of solidarity. A million Ukrainians are still registered under temporary protection there – the largest number per capita in any EU country, according to UNHCR.⁵ For many, Poland was the natural first destination, shaped by geographical proximity, linguistic familiarity and existing family or community ties. Local authorities, non-governmental organisations and households bore much of the initial burden, offering accommodation and support on an unprecedented scale. Over time, however, that very scale has placed mounting pressure on housing, education and public services.

Poland's experience reflects the social and logistical pressures that come with large-scale reception. Meanwhile Germany's story highlights how a strong focus on labour-market integration can turn an emergency response into a more sustainable path forward. It now hosts nearly 1.2 million Ukrainians under temporary protection.⁶ Employment rates have risen steadily, as refugees have entered sectors that face acute labour shortages, such as healthcare, education and social services. In mid-2024, the employment rate of Ukrainian refugees was around 27%.⁷ Special language and training programmes have helped many to find work, though some barriers do remain: qualifications are not always recognised, and a sizeable share of the refugees are still working at below their skill level.

The lessons from Poland and Germany point in contrasting directions. Poland shows how crucial community mobilisation can be in the first months of displacement, but also how quickly local capacities can become overwhelmed without stronger European support. Germany shows that longer-term success depends less on emergency reception and more on building effective pathways into the labour market, with recognition of qualifications, vocational training and family support proving decisive. Taken together, these experiences suggest that solidarity and integration must go hand in hand: early generosity needs to be backed by sustained investment, if Europe is to turn temporary protection into lasting opportunity.

⁵ <https://data.unhcr.org/en/situations/ukraine/location/10781>

⁶ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Temporary_protection_for_persons_fleeing_Ukraine_-_monthly_statistics

⁷ <https://doku.iab.de/forschungsbericht/2024/fb1624en.pdf>

CHALLENGES AHEAD

Looking ahead, the greatest challenge is the uncertain horizon of return. Surveys suggest that most Ukrainians abroad still hope to go back home one day, but only a small proportion plan to do so in the near future.⁸ Families are caught between waiting for safe conditions in Ukraine and needing to build stable lives where they are now. At the same time, the support systems in host countries are under strain. What is manageable in the first year of a crisis becomes harder to sustain over time. Without clearer strategies, Ukrainians risk remaining in limbo – not fully integrated abroad, yet unable to return. This comes at a cost for both the refugees themselves and the societies that host them.

Europe now needs to move beyond the emergency response and think in terms of longer-term settlement, while still recognising that many Ukrainians will hope to return one day. This will require practical measures. Refugees need more rapid recognition of their qualifications and access to retraining, so that their skills are not wasted. Families, especially single mothers, need reliable childcare, so that they can work and build a stable life. Language courses and opportunities to connect with the local community are equally important, since they reduce isolation and help people participate more fully in society. Even for those who eventually do return to Ukraine, these skills and networks will be invaluable, strengthening the country's ties with the EU. At the same time, the Temporary Protection Directive has shown the value of collective action at the EU level; but it was never meant to be permanent. If the Union wants to avoid fragmented national approaches, it will need to coordinate funding and develop more consistent integration policies across the member states.

The initial response to the war showed Europe at its best, with governments and citizens mobilising quickly to help. The next stage will be more difficult, as maintaining that solidarity and turning it into policies that work over the long term may prove challenging. If done well, the Ukrainian refugee crisis could offer a shining example of how displacement can strengthen both the countries that host refugees and the refugee source countries themselves, once people eventually return. If handled poorly, the whole exercise could lead to fatigue, frustration and wasted potential. The guiding principle should be clear: plan as though many refugees will stay, but keep the door open for those who wish to go home. Such a balanced approach offers the best chance of turning a crisis into something that ultimately leaves both refugees and host societies stronger.

⁸ https://euaa.europa.eu/sites/default/files/publications/2025-09/2025_09_EUAA_Ad_hoc_Report_Ukraine_EN.pdf

Tobacco taxation in the Western Balkans: Aligning with Europe, fighting old challenges

BY KRISTIЈAN FIDANOVSKI, BILJANA JOVANOVIKJ AND NORA KUNGL

Tobacco use remains a major public health issue in the Western Balkans, where smoking prevalence is among the highest in Europe. This article reviews recent trends in tobacco taxation, cigarette affordability, illicit trade and the growth of heated tobacco products (HTPs) across the six Western Balkan countries (WB6). While progress has been made in aligning excise structures with EU regulation, tax levels in several countries remain below the current EU minimum and well short of the newly proposed threshold. At the same time, illicit trade in manufactured cigarettes has declined, creating scope for tougher fiscal measures. More ambitious taxation and regulation, particularly of HTPs, could advance public health while supporting the strained public finances of the Western Balkan countries.

INTRODUCTION

Tobacco use remains one of the leading preventable causes of death globally, claiming over 7m lives each year (WHO, 2025a) and contributing to economic losses through increased healthcare costs, lost productivity and premature mortality. In response, the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC), the first international treaty negotiated under WHO auspices, sets out evidence-based measures to reduce tobacco use and its health, social and economic consequences. To support countries in implementing the FCTC, the MPOWER package was introduced in 2008, outlining six key strategies: Monitor tobacco use; Protect people from tobacco smoke; Offer help to quit; Warn about the dangers; Enforce bans on advertising; and Raise taxes on tobacco products.

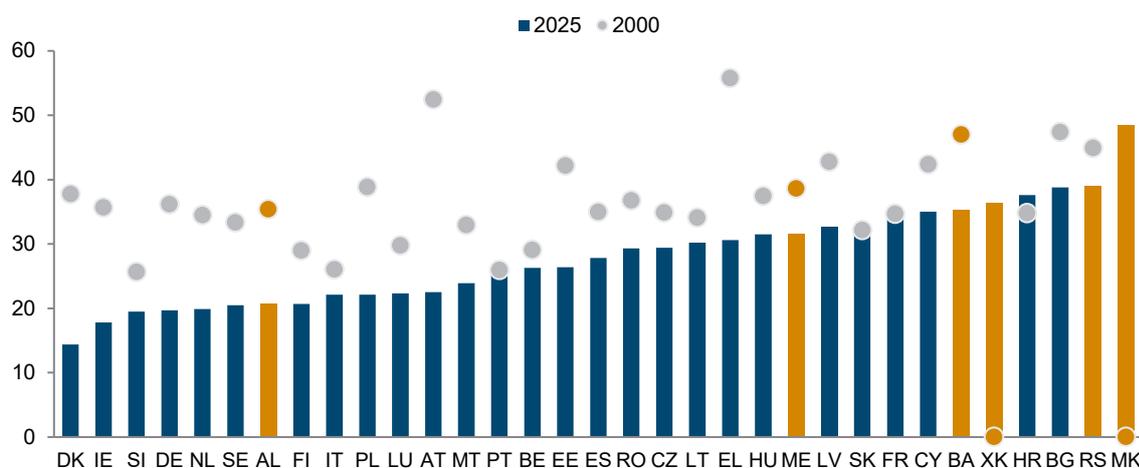
Tobacco taxation stands out as one of the 'best-buy' tobacco-control interventions, due to its well documented cost-effectiveness. By increasing retail prices, higher taxes reduce consumption, encourage quitting, deter initiation among young people and generate substantial government revenue. This measure is particularly relevant in the Western Balkans, where smoking prevalence remains among the highest in Europe, and where tobacco-related disease imposes a heavy health and economic burden. While all six countries of the region are party to the FCTC and have made varying degrees of progress on tax policy, differences in excise structures, rates and affordability trends highlight both the achievements and the remaining challenges in aligning with global best practices.

TOBACCO-USE PREVALENCE IN THE WESTERN BALKANS

All Western Balkan (WB) countries analysed in this article ratified the WHO FCTC during the mid-2000s.¹ Since then, they have all experienced a decline in smoking rates, although the pace of progress has varied considerably across those countries, which tend to lag behind their EU counterparts by at least a decade. Nevertheless, the most recent data and estimates indicate that the WB region continues to exhibit some of the highest tobacco-use prevalence rates in the world, underscoring a persistent and serious public health challenge.

According to WHO estimates and national surveys, current adult tobacco-use prevalence in many WB countries far exceeds the EU average of approximately 26%. The highest rate is to be found in North Macedonia (48.4%), followed by Serbia (39.0%), Kosovo (36.4%), Bosnia and Herzegovina (35.2%) and Montenegro (31.5%). In contrast, the prevalence rate in Albania is significantly lower (20.7%), largely thanks to the traditionally low prevalence among women, as female smoking is not widely accepted – especially in rural and conservative areas.

Figure 1 / Estimate of current tobacco-use prevalence among persons aged 15 years and upward, in 2000 and 2025 (%) (age-standardised rate)



Sources: World Health Organization (WHO) Global Health Observatory (GHO) database: The percentage of the population aged 15 years and over who currently use any tobacco product (smoked and/or smokeless tobacco) on a daily or non-daily basis; data for North Macedonia and Kosovo refer to prevalence of current tobacco smoking among adults (18+) in 2019 and are from the Survey on Tobacco Consumption in SEE Countries. For those two countries there is only one data point. The EU average is the unweighted average of the prevalence rates in EU countries.

A similar pattern emerges when we examine smoking prevalence by gender, with WB countries ranking among the highest in Europe for both men and women. The prevalence rate among men is close to (or even above) 40% in nearly all countries of the region – in 2019 the male smoking rates stood at 48.9% and 48.4% in Kosovo and North Macedonia, respectively, and in 2025 are estimated to be 39.9% in Bosnia and Herzegovina and 38.9% in Serbia. While female smoking rates are generally lower, they too remain notably higher than the EU average. In countries like Serbia (39.2%) and North Macedonia

¹ Albania ratified the WHO FCTC on 26 April 2006, Bosnia and Herzegovina on 10 July 2009, Montenegro on 23 October 2006, North Macedonia on 30 June 2006, and Serbia on 8 February 2006. Kosovo has not ratified the FCTC, as it is not a party to the Convention.

(39%), the prevalence among women significantly exceeds the regional norm, indicating a broad-based public health issue.

Figure 2 / Estimate of current tobacco-use prevalence among persons aged 15 years and upward, in 2025, by gender (%) (age-standardised rate)



Source: World Health Organization (WHO) Global Health Observatory (GHO) database; data for North Macedonia and Kosovo refer to prevalence of current tobacco smoking among adults (18+) in 2019 and are from the Survey on Tobacco Consumption in SEE Countries.

Recent surveys also reveal relatively high youth smoking prevalence in the WB countries (or regions of those countries).² For example, Montenegro reported a prevalence rate of 9.9% in 2018, while slightly higher rates were observed in North Macedonia (12.4% in 2016) and Republika Srpska³ (11.8% in 2018). More concerning figures were recorded in Albania (15.3% in 2017) and Serbia (16.2% in 2017), with the highest rate observed in the Federation of Bosnia and Herzegovina, where prevalence reached 24.4% in 2018. For comparison, WHO estimated the average tobacco-use prevalence among adolescents aged 13-15 in the Europe region at 10.8% in 2022.⁴ Despite considerable variation across

² Data are taken from the latest Global Youth Tobacco Survey (GYTS) for each country available on the World Health Organization website (<https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-youth-tobacco-survey>). It refers to the rate of current tobacco use among students aged 13-15.

³ The most recent GYTS survey for Bosnia and Herzegovina was conducted separately for Republika Srpska (in 2018) and for the Federation of Bosnia and Herzegovina (in 2019).

⁴ The WHO Europe region includes European countries and countries in the Commonwealth of Independent States (CIS).

the WB countries, youth smoking rates in the region remain elevated – often exceeding the European average – underscoring the urgent need for targeted and sustained tobacco-control policies.

In summary, the Western Balkan region has made some progress on tobacco control, albeit at a relatively slow pace. Persistently high tobacco-use prevalence continues to generate major public health and economic costs in the region, highlighting the urgent need for more ambitious policy responses.

TOBACCO TAXATION AND EU ALIGNMENT

The WB6, all of which are EU candidate or potential candidate countries, are engaged in a constant process of aligning their excise tax systems with EU standards, as part of the accession process. EU legislation in this area is set by the Tobacco Taxation Directive (TTD), adopted in 2011. The directive harmonised the definitions of all major tobacco product categories, adjusted the structure of cigarette taxation to require both specific and ad valorem components, and set minimum excise levels across product types.⁵ An update is now on the table: when adopted, this will mark the first major revision of EU tobacco taxation rules in over a decade and could have significant implications for the WB6.

Four of the six WB countries apply a mixed excise system (consisting of a specific and an ad valorem excise tax) with a minimum excise tax set for cigarettes. For other tobacco products, most of them apply only specific excise duties.⁶ Albania and Kosovo rely solely on a specific excise tax for cigarettes as well. Serbia, Montenegro and North Macedonia also follow the general recommendations for greater reliance to be placed on specific excise taxes within the mixed excise system. Bosnia and Herzegovina still relies more heavily on ad valorem taxation. The latest increase in specific excise taxes came in 2019, but the minimum excise duty has been repeatedly increased since then. This has had an effect that resembles the situation when there is a higher share of specific taxation, by limiting price gaps and preventing very cheap products from dominating the market.

Table 1 / Excise taxes applicable to cigarettes as of August 2025 (in EUR) and tax share in 2024 (%)

	Specific excise (per 1,000 sticks)	Ad valorem excise (%)	Minimum excise (per 1,000 sticks)	Tax share in 2024 (%)
Albania	76.13	-	-	66.7
Bosnia and Herzegovina	42.18	42.00	91.52	81.9
Kosovo	55.00	-	-	51.4
Montenegro	53.50	24.50	91.50	75.4
North Macedonia	60.33	9.00	63.58	77.8
Serbia	43.90	33.00	100.37	77.3

Source: Excise tax rates as in Figure 3. Tax shares: WHO (2025a). Tax share is the share of total taxes in the retail price of a pack of 20 of the most popular brand of cigarettes in 2024. For Kosovo, the estimate is based on the retail price of a pack of Marlboro cigarettes and the most recent data on VAT and tobacco excise rates.

⁵ The same holds true for aligning other (non-price) tobacco-control policies with the EU Tobacco Products Directive (TPD) which was adopted in 2014. These policies do not fall within the scope of this article.

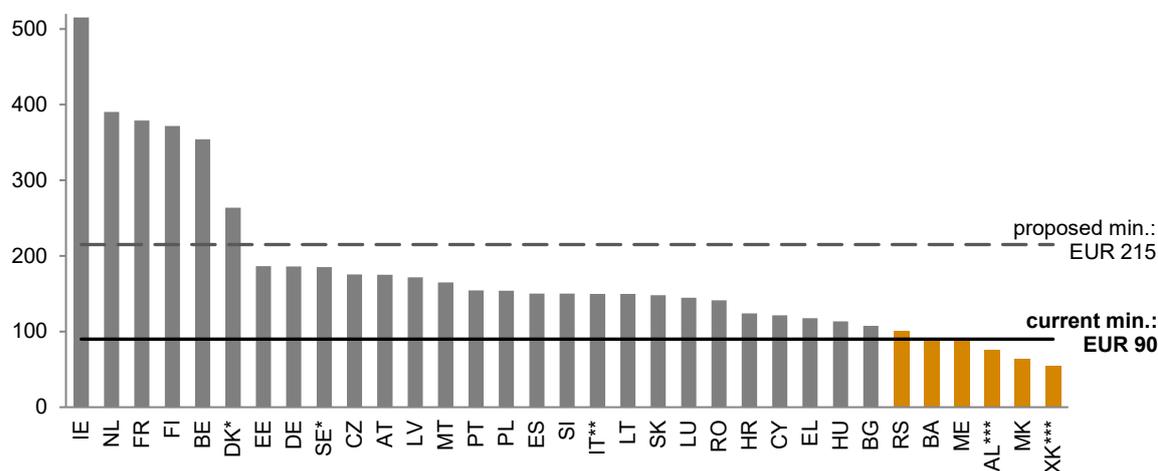
⁶ Bosnia and Herzegovina applies ad valorem excises on cigars and cigarillos, and Serbia on raw tobacco.

Table 1 summarises the excise tax systems and rates applicable to cigarettes as of August 2025, highlighting the above differences across tax systems, as well as the tax shares in 2024. With respect to the tax shares, the WHO recommends, as a benchmark of best practice, that total tobacco taxes should constitute at least 75% of the retail price of a pack of 20 cigarettes of the most popular brand. Among the WB6 countries, this benchmark is generally met, with the exceptions of Albania and Kosovo (see the last column of Table 1).

Figure 3 shows the level of minimum excise duty across the EU and WB countries. As of mid-2025, three of the six countries – Serbia, Bosnia and Herzegovina, and Montenegro – had reached the minimum excise set by the EU TTD (EUR 90/1,000 sticks). The others still have a long way to go: while Albania would need to increase its tobacco excise tax by 17.5%, North Macedonia and Kosovo would need even larger hikes of 50% and 64%, respectively. In addition, the TTD requires a mixed excise system, meaning that Albania and Kosovo would also need to introduce an ad valorem component.

Importantly, the current minimum excise tax of EUR 90/1,000 sticks is already outdated, as the European Commission is in the process of revising the TTD. In its impact assessment, three scenarios were considered, with the final proposal recommending the highest option of EUR 215 per 1,000 cigarettes (European Commission, 2025). This rate would serve as an EU-wide base, adjusted for member states according to their purchasing power parity. While this adjustment would bring the required levels to somewhat below EUR 215 in the WB6, the new threshold would still imply increases well beyond those mandated under the existing directive.

Figure 3 / Minimum excise duty in EUR per 1,000 cigarette sticks, as of August 2025



Notes:

*DK, SE: No minimum excise tax is defined, total excise duty is calculated for the weighted average price in the previous year.

**IT: The minimum tax applies for the sum of excise taxes and VAT; the minimum excise is calculated by deducting VAT at the weighted average price.

***AL, XK: The excise tax consists of only a specific excise; this rate is shown in the figure.

The horizontal lines represent the EU Tobacco Taxation Directive's current and proposed minimum excise tax levels.

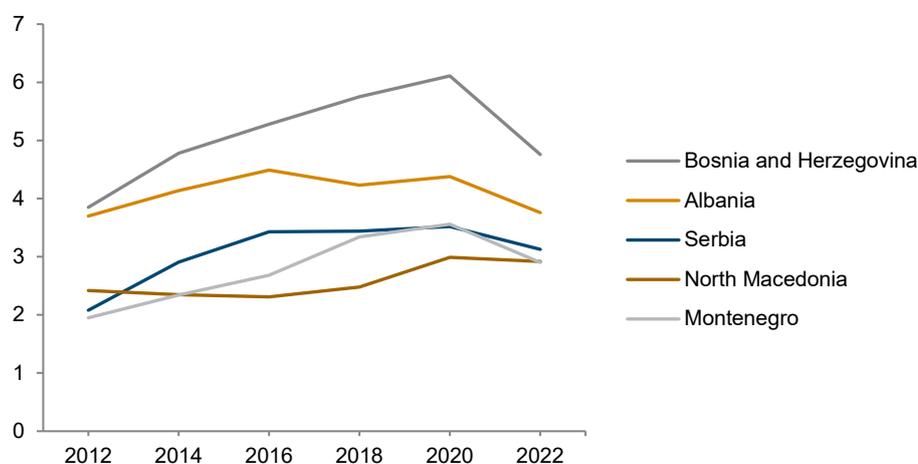
Sources: EU: European Commission, Taxes in Europe Database, situation on 1.7.2025 – updated for RO with recent changes; RS: Ministry of Finance, Tobacco Administration, minimum excise rate valid from 2.8.2025; BA: Indirect Taxation Authority; ME: Law on Excise Duty, dated 1.10.2024; AL: Fiscal Legislation Bulletin, Ministry of Finance, General Directorate of Tax Policies; MK: Amendments to the Law on Excise (Official Gazette No. 2023/209); XK: Government Decision No. 03/18, dated 29.7.2020. Exchange rates as of January 2025.

TRENDS IN CIGARETTE AFFORDABILITY

Over the past decade, large increases in excise tax (which in some cases has more than doubled) have translated into higher retail prices for tobacco products in the Western Balkan countries. For example, in Montenegro between 2017 and 2024, the excise on cigarettes rose by 73%, pushing the average retail price up by 24%.⁷ Despite these increases, prices remain well below the EU average. More importantly, after years of declining affordability, since 2020 cigarettes have become increasingly affordable, as income growth has in many cases outpaced price growth.

Figure 4 shows the affordability of cigarettes between 2012 and 2022 for five of the WB countries (Kosovo excluded). One can see that until 2020, affordability generally declined. In 2022, however, the trend reversed, with the share of GDP per capita needed to buy 100 packs of cigarettes falling by an average of 0.6 percentage points. The sole exception is North Macedonia, where affordability remained relatively unchanged in the period 2020-2022 – yet it still had the most affordable cigarettes, on a par with Montenegro. In Albania, affordability returned to its 2012 level, with 3.7-3.8% of GDP per capita needed to buy 100 packs of cigarettes. And while Bosnia and Herzegovina had achieved the most progress in reducing affordability by 2020, the reversal in 2022 was so large that cigarettes became more affordable than in 2014.

Figure 4 / Trends in the affordability of the most popular cigarette brand (%)



Note: Affordability is measured by the percentage of GDP per capita required to purchase 2,000 cigarettes of the most popular brand.

Source: World Health Organization (WHO) Global Health Observatory (GHO) database.

Recent research confirms that this trend is continuing. The recent inflationary period has led to a decline in the real price of tobacco products (e.g. Gligorić et al., 2025); and coupled with substantial income growth in the region, affordability has further increased in recent years (e.g. Gligorić et al., 2025; Čizmović et al., 2024b).

⁷ <https://www.bloomberg.org/press/bloomberg-philanthropies-recognizes-governments-and-ngos-in-six-countries-for-exceptional-efforts-to-combat-tobacco-use/>

ILLICIT TRADE: DECLINING RISKS AND SCOPE FOR FURTHER TAX INCREASES

At first glance, as with all consumer products, tobacco has its own Laffer curve: ill-designed excise increases risk feeding into illicit trade, which can negate some of the fiscal and health gains from tax reform. However, the literature unambiguously shows that illicit trade trends are primarily driven by the quality of enforcement of tobacco regulations, rather than price movements. Thus, while the state of the black market should not be ignored when designing tobacco taxes, its significance must not be overstated: as a rule of thumb, countries with illicit trade of 10% or less are generally considered successful in curbing illicit trade and thus tend to have more leeway as they contemplate tobacco tax increases.

Estimates of the size of the illicit tobacco market can be derived through methods as diverse as collecting discarded packs (to check their tax stamp and/or health warning language) and point-of-sale controls, ideally deployed in combination. Generally, illicit trade accounts for a small minority of sales of manufactured cigarettes, but a large (sometimes even majority) share of sales of hand-rolled tobacco (Joossens et al., 2012), although the market share of the latter type of products is typically well down in single digits. A key driver of illicit sales is cross-border smuggling, especially in countries with weaker border-control capacities and a large cross-border differential in tobacco prices. The share of illicit sales among all sales is typically (slightly) higher than the share of smokers purchasing illicit products, as these users tend to smoke more (Prekazi and Pula, 2021).

In the Western Balkans, illicit trade in manufactured cigarettes is non-negligible, yet generally (far) below the 10% benchmark, thus not constituting a major obstacle to tobacco taxation. In 2019, of the six countries, only Bosnia and Herzegovina and Montenegro recorded a share in excess of 10%. The general trend over time has been towards a tougher crackdown on the illicit market and lower rates of illicit trade, with three of the WB6 countries (Montenegro, North Macedonia and Serbia) having signed the WHO's Protocol to Eliminate Illicit Trade in Tobacco Products as of 2025 (WHO, 2025b).

Table 2 / Most recent estimates of the share of illicit purchases of tobacco products

	Manufactured cigarettes (MCs)	Hand-rolled tobacco
Albania	5.2%	69.2%
Bosnia and Herzegovina	18.6%	93.3%
Kosovo	4.3%	79.3%*
Montenegro	21.4%	100%*
North Macedonia	1.9%	86.7%
Serbia	2.6%	90.7%

Note: 2022 for Montenegro, 2019 for all other countries. *These estimates have limited reliability due to the small sample size. Source: Tobacconomics (2023) for MCs in Montenegro; Vladislavljevic et al. (2022) for all other rates.

While Montenegro remains the country with the biggest illicit tobacco trade in the region, it is also a world-renowned top performer in terms of the trend over time, with a remarkable drop of about two thirds in the illicit purchase of MCs over just a few years. Crucially, this drop occurred at a time of substantial tax increases, further strengthening the consensus that illicit trade is not driven primarily by price movements. Instead, Montenegro's positive outcome can largely be attributed to enforcement improvements, such as banning the storage of tobacco products in the Port of Bar free-trade zone and

increased surveillance of the Novi Duvanski Kombinat Podgorica free-trade zone since 2022 (Tobacconomics, 2023). Bosnia and Herzegovina is the only other country with a double-digit share of illicit trade for MCs, but recent estimates indicate a drop to single digits (Gligorić and Borović, 2025).

The remaining four WB countries have illicit sales well down into single digits and generally exhibit a downward trend over time, mostly due to more rigorous enforcement. However, sales of hand-rolled tobacco remain mostly illicit, with more modest declines over time and a generally growing market share, due to the rising price of cigarettes. Another concerning feature (but also some low-hanging fruit for policy makers) is the persistence of illicit purchases (mostly of hand-rolled tobacco) at legal points of sale, especially in Kosovo, where these account for 68.9% of illicit purchases.

HEATED TOBACCO PRODUCTS: EMERGING TRENDS AND POLICY GAPS

The increasing prevalence of HTPs represents an important development both across Europe and within the WB6 countries. In 2023, sales of HTPs topped EUR 12bn in the EU, more than double the figure for 2020 and nearly eight times the level of 2018, corresponding to approximately 8% of the total tobacco market (European Commission, 2025). Since entering Western Balkan markets around 2017, HTPs have gained notable market share, rising from 1.38% in 2018 to 5.56% in 2023 in Serbia (Vukmirović et al., 2024), and from 3.2% to 10.8% between 2020 and 2023 in Montenegro (Čizmović et al., 2024a).

HTPs are novel products that, unlike manufactured cigarettes, heat the tobacco rather than burning it, typically using an electronic device (WHO, 2018). Though they are marketed as a potentially reduced-risk alternative to traditional smoking, WHO emphasises that HTPs pose a considerable health risk as well, and should be subject to stringent regulatory measures, especially as they often complement – rather than replace – traditional tobacco use.

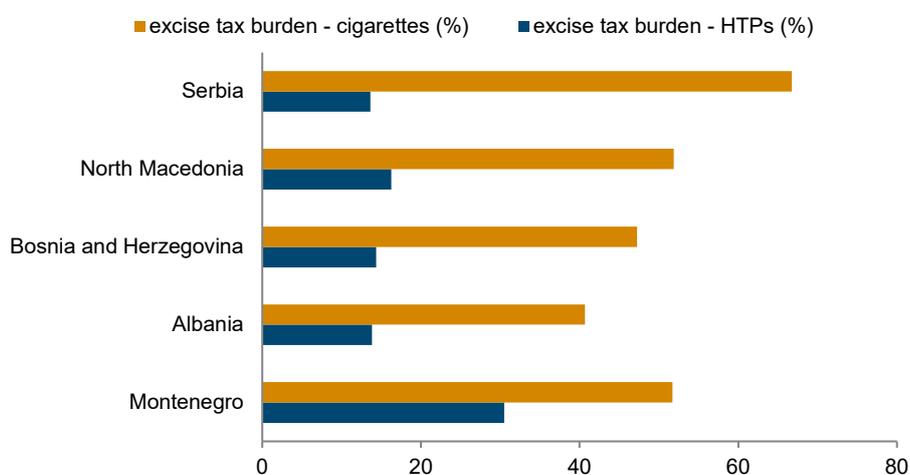
As regards the taxation of HTPs, the current (and now outdated) TTD does not regulate them, as they were not even on the market when the TTD was first adopted, back in 2011. Initially, the WB6 taxed HTPs under broad categories such as ‘other smoking tobacco’, which remains the case in Bosnia and Herzegovina. Over time, the other countries introduced separate, weight-based tax categories for HTPs, enabling significant excise increases on these products. Montenegro, for instance, redefined HTP taxation in 2020, and by 2024 had set the per-kilogram excise tax at more than double the per-1,000 stick minimum excise for cigarettes (EUR 190/kg versus EUR 90/1,000 sticks). More recently, Serbia narrowed the gap by raising the share of HTP excise duty from 40% of the cigarettes’ minimum excise in 2020 to 100% in 2025.

The proposed TTD update would introduce minimum excise rates for HTPs, bringing them within the same harmonised tax framework as conventional tobacco products. For HTPs, member states could choose to apply the tax based on sticks or weight at an EU minimum of either EUR 108 per 1,000 sticks or EUR 155 per kilogram of tobacco. While this would narrow some of the existing gap with the tax rates on cigarettes, a substantial difference would still remain. Relative to the nominally comparable per-stick rates, the difference is almost 100% when compared to the EUR 215 proposed for 1,000 cigarettes, and becomes even larger when the per-kilogram alternative is applied. Since a heated tobacco stick tends to contain only about 0.3 grams of tobacco (CTFK, 2021), EUR 155 per kilogram translates to just

EUR 46.50 per 1,000 HTP sticks – far below the per-stick minimum of EUR 108, and even further from the minimum for cigarettes.

For the five WB countries (except Kosovo), Figure 5 shows the scale of the difference between the excise tax burden on cigarettes and on HTPs in 2023, based on Čizmović et al. (2024a). One can see that the gap is substantial across all five countries, being widest in Serbia and narrowest in Montenegro. While – as discussed above – further increases in the taxation of HTPs have been implemented since 2023, substantial gaps still persist.

Figure 5 / Excise tax burden on HTPs and cigarettes in 2023



Source: Čizmović (2024a).

The regulatory environment for HTP use also tends to be more lax than for traditional cigarettes, reflecting weaker non-price policies, such as restrictions on use in indoor public spaces. For instance, in Montenegro cigarette smoking is prohibited, whereas HTP use is permitted in confined workplaces and in public spaces (Čizmović et al., 2024a). In North Macedonia, the unrestricted use of HTPs in public places is among the main factors driving consumer preference for these products over cigarettes (Analytica, 2024). The situation is similar across the remainder of the region. This, combined with the widespread perception of HTPs as a 'healthier alternative', contributes to increased initiation, dual use⁸ and substitution.

Taken together with the already high prevalence of cigarette use in the region, these trends highlight a clear need for stronger taxation policies targeted at equalising the tax rates between HTPs and cigarettes – paired with stricter regulatory measures, particularly the enforcement of comprehensive smoke-free laws that focus on HTPs.

⁸ For instance, in Montenegro about a third of HTP users also use manufactured cigarettes.

CONCLUSION: TOWARD STRONGER AND MORE COMPREHENSIVE TOBACCO TAXATION

The West Balkan countries stand to benefit from more ambitious and comprehensive tobacco taxation in a number of ways.

First, persistently high prevalence rates suggest that any shift in societal norms away from smoking is insufficient to reduce tobacco consumption and the associated health damage, making tobacco-control measures (and price-related policies in particular) indispensable.

Second, the Western Balkans are facing enormous demographic challenges, with high levels of emigration, coupled with low birth rates, resulting in ageing populations. The difficulties inherent in sustaining increased demand for healthcare in the midst of growing fiscal constraints create an additional imperative for more effective tobacco control.

Third, in addition to unfavourable demographics, the fiscal space in the region is constrained by high levels of accumulated public debt and the associated debt servicing requirements. The demands of the twin (digital and green) transition, as well as recent rises in defence spending, place additional pressure on already fragile public finances. One way of financing these needs is through taxation – and given its widespread usage, tobacco tops the list of products with the biggest revenue-boosting potential.

Overall, governments in WB would be well advised to upgrade their tobacco taxation and control strategies, providing they simultaneously persist with their increasingly successful efforts to curb the illicit trade. Substantial policy space remains for such action, as several countries of the region still apply excise rates below the current EU minimum, while all fall significantly short of the newly proposed minimum. The upcoming increase in the EU minimum excise rate highlights the importance of keeping WB6 tax systems prepared for further alignment with evolving EU standards.

REFERENCES

- Analytica (2024). HTP and e-cigarette use in North Macedonia – an exploratory study, available at: <https://www.analyticamk.org/en/projects/quantitative-analysis-of-heated-tobacco-usage-patterns-and-impacts-in-north-macedonia>
- Campaign for Tobacco Free Kids (CTFK) (2021). Heated Tobacco Products Tax Gap Map – Methodology, available at: <https://www.tobaccofreekids.org/what-we-do/global/taxation-price/tax-gap-methodology>
- Čizmović, M., Ivanović, I., Vlahović, A. & Kovačević, M. (2024a). Heated tobacco products use in Montenegro. Economics for Health Working Paper No. 24/12/1, Institute for Socio-Economic Analysis, Podgorica, available at: <https://www.economicsforhealth.org/research/heated-tobacco-products-use-in-montenegro-working-paper-series/>
- Čizmović, M., Vlahović, A., Ivanović, I. & Kovačević, M. (2024b). Cigarette affordability in Montenegro. Economics for Health Working Paper No. 24/12/2, Institute for Socio-Economic Analysis, Podgorica, available at: <https://www.economicsforhealth.org/research/cigarette-affordability-in-montenegro-working-paper-series/>
- European Commission (2025). Commission Staff Working Document – Executive Summary of the Impact Assessment Report Accompanying the Proposal for a Council Directive on the structure and rates of excise duty applied to tobacco and tobacco related products (recast) [SWD(2025) 561 final]. EUR-Lex. CELEX: 52025SC0561.

Gligorić, D., & Borović, Z. (2025). *Size and characteristics of tobacco tax evasion in Bosnia and Herzegovina* [Conference presentation, June 26-27]. Economics for Health Regional Think Tank Meeting, Dublin, Ireland.

Gligorić, D., Borović, Z., Vidović, N. & Ritan, V. (2025). Cigarette consumption and affordability in Bosnia and Herzegovina, 2010–2023. Economics for Health Working Paper No. 25/4/1, University of Banja Luka, available at: www.economicsforhealth.org/research/cigarette-consumption-and-affordability-in-bosnia-and-herzegovina-2010-2023-working-paper-series/

Joossens, L., Lugo, A., La Vecchia, C. et al. (2012). Illicit cigarettes and hand-rolled tobacco in 18 European countries: A cross-sectional survey. *Tobacco Control*, 23, available at: <https://doi.org/10.1136/tobaccocontrol-2012-050644>.

Prekazi, B., Pula, E. (2021). *Size and characteristics of the illicit tobacco market in Kosovo*. Democracy Plus. Prishtina, Kosovo.

Tobacconomics (2023). *The Illicit Cigarette Market in Montenegro*. Tobacconomics Research Report, Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois, Chicago, available at: <https://www.tobacconomics.org/research/the-illicit-cigarette-market-in-montenegro/>

Vladislavljević, M., Zubović, J., Jovanović, O. et al. (2022). Tobacco tax evasion in Western Balkan countries: Tax evasion prevalence and evasion determinants. *Tobacco Control*, 31, pp. 80-87.

Vukmirović, V., Jovanović, O. and Zubović, J. (2024). Landscape study – Serbia. Unpublished manuscript.

World Health Organization (2018). Heated tobacco products (HTPs): Information sheet, available at: <https://www.who.int/publications/i/item/WHO-NMH-PND-17.6>

World Health Organization (2025a). *WHO Report on the Global Tobacco Epidemic, 2025: Warning about the dangers of tobacco*, available at: <https://www.who.int/publications/i/item/9789240112063>

World Health Organization (2025b). Framework Convention on Tobacco Control. Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products, available at: <https://fctc.who.int/protocol/parties>

Inflation and unemployment in Poland: Off the Phillips Curve

BY LEON PODKAMINER¹

Phillips Curves, which show the correlation between the rate of inflation and the rate of unemployment on a scatter plot, often suggest a trade-off between the two. Data for Poland that run from Q1 2001 through Q4 2024 may also suggest the existence of a downward-sloping Phillips Curve. But a closer look at the data indicates the absence of any such trade-off. Instead, one detects asymmetry of causation. While changing inflation rates do indeed affect unemployment, the opposite is not the case: changing unemployment rates do not affect inflation. Moreover, the relationship between inflation and unemployment is found to be positive, unlike in the usual interpretations of Phillips Curves.

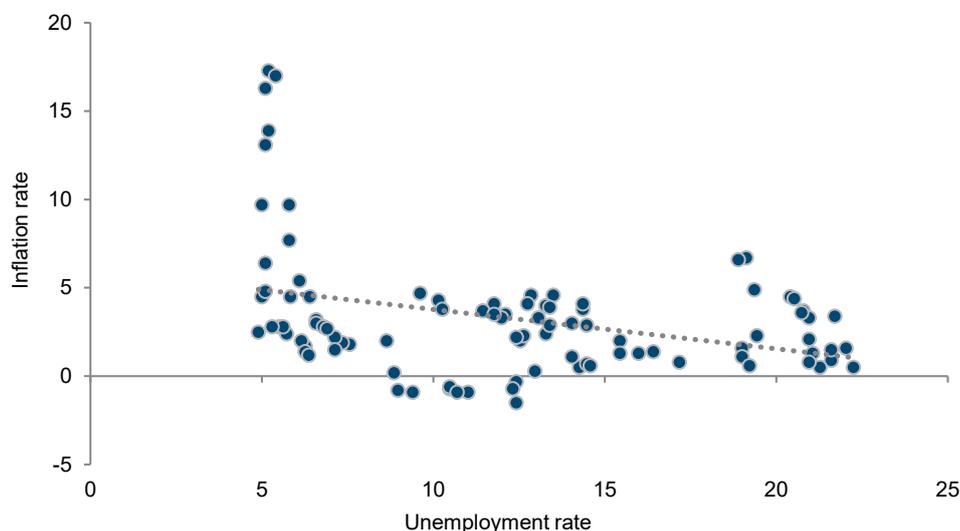
For nearly 60 years, the Phillips Curve has been one of the commonest concepts referred to in academic macroeconomics. The concept emerged when some statistically minded economists inspected scatter plots showing the rates of unemployment vs the rates of wage growth in a country (the rate of wage growth was often replaced by the inflation rate). The data contained in these scatter plots typically stretch over longer periods. The first such widely known scatter plot, developed by Phillips (1958), contained the annual data for Great Britain from 1861 to 1957. Ever since, scatter plots of that type have been the focus of innumerable pieces of empirical research and have given rise to a large amount of important macroeconomic theorising.

Typically, the data in question exhibit negative correlation. Lower unemployment rates tend to be associated with a higher inflation rate, as exemplified by Figure 1 for the case of Poland. The correlation coefficient for the data in Figure 1 is -0.3431.

There has been a tendency to view observed scatter plots as expressions of an unknown functional relationship linking (inversely) unemployment with inflation. This is the origin of the Phillips Curve concept. Numerical parameters of that relationship (e.g. its slope) can be determined by 'econometric fitting'. It might be tempting to propose the use of econometrically specified Phillips Curves to assess (or predict) the inflation rate, given the unemployment rate (or vice versa). However, that whole exercise would be essentially unproductive, even if the specified curve did satisfactorily fit the actual scatter plots (which happens fairly infrequently). The errors that would ensue in the event of the Phillips Curve being used in such a manner would tend to be large. The correlations seen in the original scatter plots do not imply the actual existence of a functional correspondence linking inflation to unemployment with reasonable precision.

¹ National Bank of Poland and the Nicolaus Copernicus Superior School.

Figure 1 / Quarterly rates of inflation and unemployment in Poland from Q1 2001 through Q4 2024, in %



Note: The inflation rate is in year-on-year terms, the unemployment rate is registered unemployment averaged for the respective quarter. Unemployment rates in Figure 1 (and in further calculations) are based on data reported by Statistics Poland.

Source: Narodowy Bank Polski and Statistics Poland.

The practical difficulties with simple Phillips Curves have not discredited the concept itself. On the contrary, the difficulties have provided impetus to the consideration of various speculatively reasoned ('micro-founded') modifications of the concept. In effect, simple Phillips Curves are being 'augmented' to allow for expectations, stickiness, uncertainties, shocks, intertemporal substitution effects, hysteresis, cyclicity, levels of credibility of the public authorities, etc. The modifications proposed constitute essential components of the diverse sub-schools of contemporary mainstream – i.e. 'micro-founded' – macroeconomics. The formulae that fill the pages of the mainstream's learned economic journals (and which entail highly speculative reasoning) are then inserted, as 'modified Phillips Curves', into general macro theories (e.g. dynamic stochastic general equilibrium (DSGE) models). Eventually, the basic idea is maintained, according to which a higher unemployment rate corresponds – all things being equal – to lower inflation. This is another way of claiming the real existence of a (short-run) trade-off between inflation and unemployment.

The role of unemployment as a determinant of inflation was central to the notion of the 'Non-Accelerating Inflation Rate of Unemployment', or NAIRU (Phelps, 1967; Friedman, 1968). According to this idea, under certain institutional conditions there is always one unemployment rate at which the inflation rate is constant. With an unemployment rate lower than this 'natural rate', inflation is believed to accelerate constantly, whereas with a higher unemployment rate it should slow down constantly. However, econometric estimation of the NAIRU's magnitude, which has been undertaken countless times, has not come up with universally accepted results (cf. Stirati, 2025), and more recently the NAIRU concept itself has fallen out of favour – even among the mainstream's representatives (Blanchard, 2018).

Nonetheless, the idea lives on that inflation can be controlled by somehow manipulating the level of unemployment. Quite recently, Larry Summers claimed that ‘We need five years of unemployment above 5% to contain inflation—in other words, we need two years of 7.5% unemployment or five years of 6% unemployment or one year of 10% unemployment’ (cf. Mellor, 2022). Summers’ suggestions turned out to be completely misguided: in the meantime, US inflation has fallen quickly, without any noticeable increase in the unemployment rate.

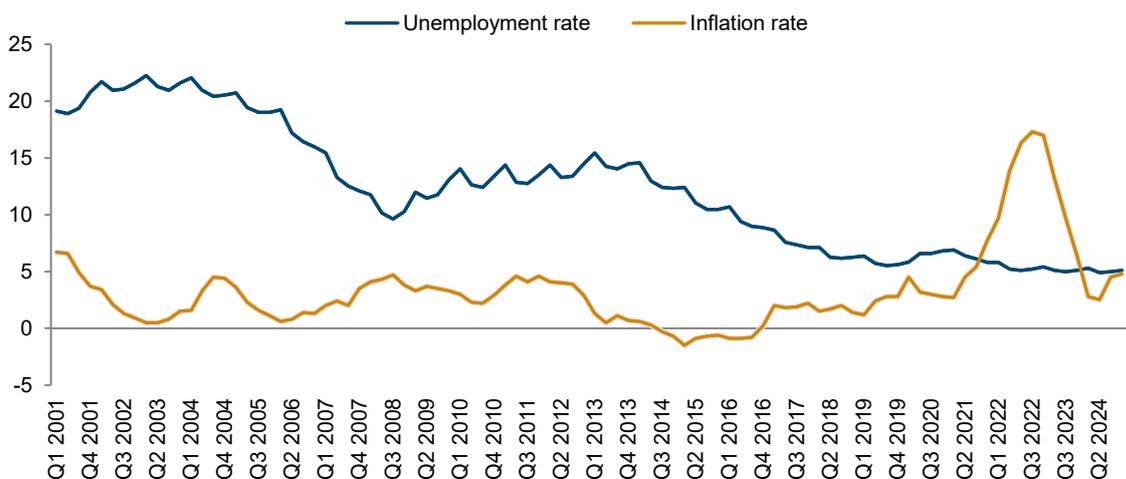
This article examines the relationship between Poland’s recent quarterly rates of inflation and unemployment. First of all, we show that the data in Figure 1 split temporally into three distinct sets that need to be treated separately. The treatment then applied boils down to checking the presence of Granger non-causality between inflation and unemployment.

THE THREE DISTINCT SUBPERIODS

The period Q1 2001 to Q4 2024 can be split into three subperiods. Of these, the two ‘extreme’ ones (the initial and the final) saw the economy functioning in quite atypical circumstances, so far as unemployment and inflation are concerned. The economy operated in conditions that were reasonably free of major extraneous interference only in the middle subperiod, which extended from Q3 2008 through Q1 2020 (47 quarters).

The first ‘extreme’ subperiod lasted from Q1 2001 through Q2 2008 (30 quarters). Most (though not all) of the data points for this subperiod are located in the ellipse on the right-hand side of Figure 3. At the beginning of the subperiod, the unemployment rate was very high (over 20%). Thereafter, it fell rapidly: from 22% in Q2 2004 down to 9.6% in Q3 2008. That phenomenal reduction in unemployment had no inflationary effect.

Figure 2 / Rates of unemployment and inflation, Q1 2001 through Q4 2024, in %

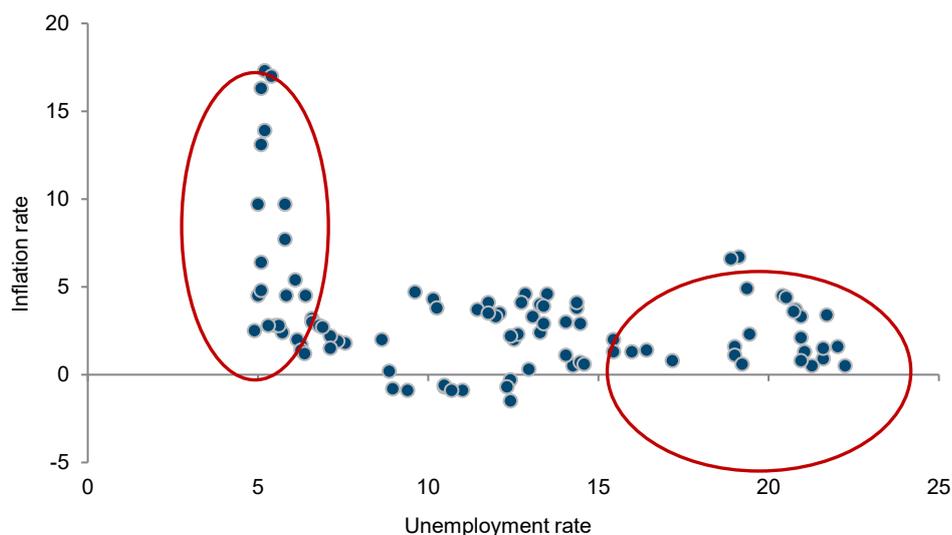


Source: Narodowy Bank Polski and Statistics Poland.

To explain this miraculous development, one must invoke the fact that Poland's accession to the European Union (May 2004) initiated a massive temporary migration to Western Europe. Although the data on this migration are quite patchy, some facts seem fairly certain.² The migratory boom ended in 2008, apparently under the impact of the recession that engulfed the West following the outbreak of the global financial and economic crisis (as the demand for labour plummeted). From mid-2008, the unemployment rate in Poland rose to higher levels again (yet short of the 15% mark), before starting a more pronounced, albeit slow-paced, decline (Figure 2).

The third subperiod extended from Q2 2020 through Q4 2024 (19 quarters). These were turbulent times, first with the effects of the COVID-19 pandemic, then the Ukraine war and sky-rocketing prices for imported (and domestic) food and energy. Data points for the period starting Q2 2020 are all located in a narrow vertical ellipse on the left-hand side of Figure 3. The unemployment rate during this critical period was low (5.7% on average) and fairly constant (its standard deviation was a mere 0.7%). But the average inflation rate was very high (7.8%) and volatile: its standard deviation reached 5.3%.

Figure 3 / Quarterly rates of inflation and unemployment, singling out two 'extreme' subperiods, in %



Source: Narodowy Bank Polski and Statistics Poland.

The verticality of the scatter plot for that subperiod may suggest that a 5-6% unemployment rate was a sort of NAIRU for the Polish economy. But that would be incorrect, if only because after peaking at 17.3% in Q4 2022, inflation then fell, reaching 2.5% in Q2 2024. That disinflation had nothing to do with the unemployment rate, which actually fell during that time from 6.6% to 4.9%. The consistently low rate of unemployment under quite dramatic changes in inflation (a sharp rise followed by a strong decline) may be explained, in part at least, by extraordinary government actions to 'shield' the economy during the COVID years (and afterwards). Specifically, huge sums were spent on subsidies to support firms that

² According to Statistics Poland (GUS, 2020, Tables 9 and 10), the 2002 population census showed about 790,000 Poles staying abroad for three months or more. By the end of 2004, the number of temporary migrants was estimated at 1 million, followed by 1.45 million the next year. A rough estimate for 2006 was 2 million. The increase in the number of temporary migrants was roughly twice the level of the decline in the number of registered unemployed.

suffered during the shutdowns. Those firms qualifying for the subsidies were required to maintain their pre-crisis levels of employment.

Evidently, the scatter plot in Figure 1, which displays negative correlation (-0.3431), suggests the existence of a downward-sloping Phillips Curve only because it includes data for the third ('extreme') subperiod from Q2 2020 through Q4 2024. For the second subperiod (Q3 2008-Q1 2020), the correlation between the unemployment rate and the inflation rate is close to zero (and positive: +0.0384); and for the period consisting of the first and the second subperiods, it is also positive (+0.1163), implying an *upward*-sloping Phillips Curve.

Clearly, under reasonably 'normal' circumstances inflation is not sensitive to unemployment, and there is little point in suggesting the real existence of a downward-sloping Phillips Curve. The same applies to the presumed existence of an inflation–unemployment trade-off.³

PATTERNS OF GRANGER NON-CAUSALITY

This section reports the results of the Granger non-causality tests conducted for each of the three subperiods. Table 2 gives p-values for the hypotheses (specified in the first column). The p-values were derived from bi-variate vector autoregressive (VAR) models that satisfy the usual conditions: stability and absence of serial correlation, with the number of lags selected by the Akaike information criterion (AIC).

'Plain' VARs require stationarity of the variables considered. The derivation of the p-values in question, when one variable (or both) is non-stationary, requires the examination of auxiliary VARs. For this reason, it is essential to check the orders of integration of the series in question. These are reported in Table 1.

Table 1 / The orders of integration of the rates of inflation and unemployment series

	Q1 2001-Q2 2008	Q3 2008-Q1 2020	Q2 2020-Q4 2024
Inflation rate (INF)	0	1	1
Unemployment rate (U)	2	1	1

Source: Own calculations based on the standard ADF unit roots test statistics.

Table 2 does not report the p-values for testing the non-causality between the *levels* of the rates of unemployment and inflation (U and INF). The auxiliary VARs for the levels turned out not well behaved (unstable and/or displaying serial autocorrelation), which does not warrant statistical inference. Similarly, nothing can be said about the Granger causality between D(U) and D(INF) or D(U) and INF for the first period (Q1 2001-Q2 2008).

³ The ongoing 'flattening' of Phillips Curves challenges the received intuitions about the inflation-unemployment trade-off. As such it prompts research to embed the 'flattening' into the canonical ('micro-founded') mainstream models. That research has yet to yield fruit. Galí and Gambetti (2019, p. 12) summed up their own travails on the subject thus: 'We draw two main conclusions from our findings. Firstly, we confirm the existence of a growing disconnect between wage inflation and unemployment. Secondly, more research is needed in order to understand the nature of that phenomenon.'

Table 2 / p-values for the Granger non-causality tests

	Q3 2008-Q1 2020	Q2 2020-Q4 2024
D(U) does not Granger-cause D(INF)	0.8623	0.6129
D(INF) does not Granger-cause D(U)	0.0412	0.6987
D(U) does not Granger-cause INF	0.8762*	0.1097*
INF does not Granger-cause D(U)	0.0007*	0.3022*

Note: D(U) is the quarterly increase in the rate of unemployment and D(INF) is the quarterly increase in the inflation rate. The asterisked values were derived from auxiliary VARs (as prescribed by Toda and Yamamoto (1995)).

Source: Own calculations.

For the third subperiod (Q2 2020-Q4 2024), the tests indicate the absence of any Granger causality. The hypothesis that D(U) does not cause D(INF) is not rejected, and nor is the hypothesis that D(INF) does not cause D(U). The same applies to the pair D(U) and INF. There is no causality running from one item to the other.

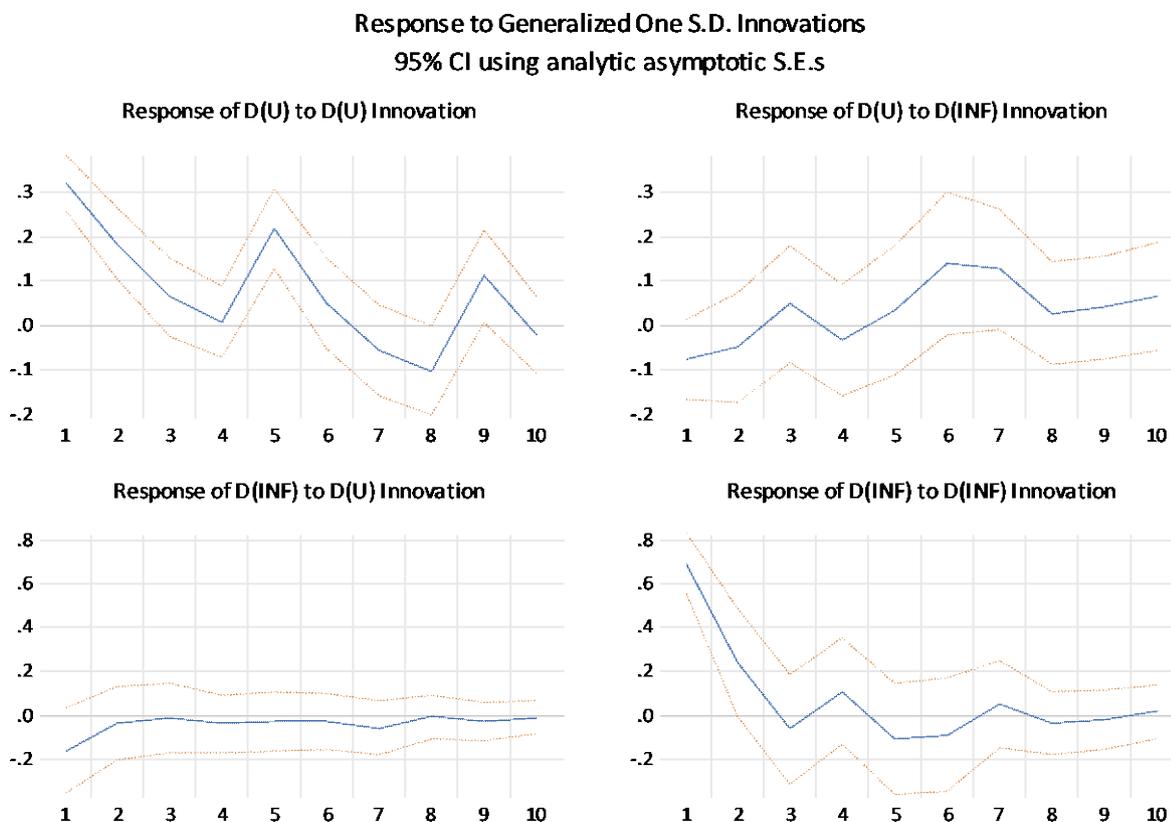
However, the tests for the second subperiod (Q3 2008-Q1 2020) reject the hypothesis that D(INF) does not cause D(U), though they do not reject the absence of causality running in the opposite direction. In other words, lagged increments in the inflation rate (D(INF)) improve the prediction of increments in the unemployment rate (D(U)). But the lagged increments in the unemployment rate (D(U)) do *not* improve the prediction of increments in the inflation rate (D(INF)).

The inflation level (INF) appears to Granger-cause the increment in the unemployment rate (D(U)), while the increment in the unemployment rate (D(U)) does *not* Granger-cause the inflation level (INF).

Figure 4 shows the dynamics of responses to one-off 'innovations' (or 'shocks') perturbing D(U) or D(INF).

The bottom left-hand panel in Figure 4 clearly demonstrates the lack of sensitivity of the increments of inflation rate (D(INF)) to a one-off 'innovation' that affects the increment in the rate of unemployment (D(U)).

The upper right-hand panel in Figure 4 shows that a one-off 'innovation' affecting the increment in the inflation rate (D(INF)) has significant consequences for increments in the unemployment rate. Interestingly, D(U) initially declines following a (positive) 'innovation' to D(INF). But after two quarters this effect peters out. Later, after another three quarters, one should expect sustained positive effects on D(U). The immediate negative response of D(U) to an inflation 'shock' D(INF) is easy to explain. But why, after some time has elapsed, should higher inflation drive higher growth in unemployment? Perhaps, to answer this question, one would have to consider responses (latent in our considerations) by economic policy to inflationary 'innovations'. Monetary and fiscal authorities responding to inflationary 'shocks' with measures that restrict consumer demand may 'inadvertently' generate additional unemployment.

Figure 4 / Responses to ‘innovations’ in D(INF) and D(U) for the subperiod Q3 2008-Q1 2020

Source: Own calculations using e-views 13 econometric package.

CONCLUDING REMARKS

The scatter plot of data on inflation vs unemployment may strongly suggest the existence of a downward-sloping ‘Phillips Curve’ in Poland. But, as shown by our analysis, the scatter plot considered may consist of clearly separated subsets of data that correspond to radically different subperiods, with vastly different relationships between inflation and unemployment. The impression that there is an inverse relationship generally linking the unemployment and inflation rates may emerge because the data for different subperiods are mixed together without due attention to different features of separate subperiods. The curve itself and the implied trade-off would appear to be figments of the imagination.

The unreality of the ‘Phillips Curve’ (at least with respect to the data for Poland) does not preclude econometric treatment of the data in question – at any rate for separate subperiods. The analysis conducted for the second subperiod, which extends from the global financial crisis to COVID (and which happened to be reasonably free of major disturbances), suggests two tentative conclusions:

- › There is an **asymmetry** of causation: inflation Granger-causes the unemployment rate, but the unemployment rate does not Granger-cause inflation.
- › The relationship between inflation and unemployment is **positive**, which runs counter to the classical thinking about the Phillips Curve.

REFERENCES

- Blanchard, O.J. (2018). Should we reject the natural rate hypothesis? *Journal of Economic Perspectives*, 32(1), 97–120.
- Friedman, M. (1968). The role of monetary policy. *American Economic Review*, 58(1), 1–17.
- Galí, J. & Gambetti, L. (2019). Has the US wage Phillips Curve flattened? A semi-structural exploration. NBER Working Paper No. 25476, NBER, Cambridge, MA.
- Mellor, S. (2022). 5 years at 6% unemployment or 1 year at 10%: that's what Larry Summers says we'll need to defeat inflation, *Fortune*, 21 June, available at <https://fortune.com/2022/06/21/larry-summers-calls-for-high-unemployment-to-curb-inflation/>
- Phelps, E. (1967). Phillips Curves, expectations of inflation and optimal unemployment over time. *Economica*, 34(135), 254–281.
- Phillips, A.W. (1958). The relation between unemployment and the rate of change of money wages in the United Kingdom, 1961–1957. *Economica*, 25(100), 283–299.
- Statistics Poland (GUS) (2020). Sytuacja demograficzna Polski do 2019 r. Migracje zagraniczne ludności w latach 2000–2019 [Demographic situation in Poland up to 2019, International migration of population in 2000–2019].
- Stirati, A. (2025). Beyond the NAIRU. *Review of Keynesian Economics*, 13(1), 1–20.
- Toda, H.Y. & Yamamoto, Y. (1995). Statistical inference in vector autoregressions with possibly integrated processes. *Journal of Econometrics*, 66(1–2), 225–250.

Latest trends in global monetary policy and financial markets

BY BILJANA JOVANOVIKJ¹

Global monetary policy has entered a cautious easing phase as uncertainty increased significantly amid trade tensions, supply-chain risks and softer global demand. In recent months, major central banks have diverged in their responses: the US Fed and the Bank of Canada have cut policy rates, while others have paused, reflecting country-specific inflation risks and external vulnerabilities. Markets now expect a slower pace of easing, with additional cuts pushed into late 2025 and 2026 – except in Japan, where policy normalisation is expected to advance gradually.

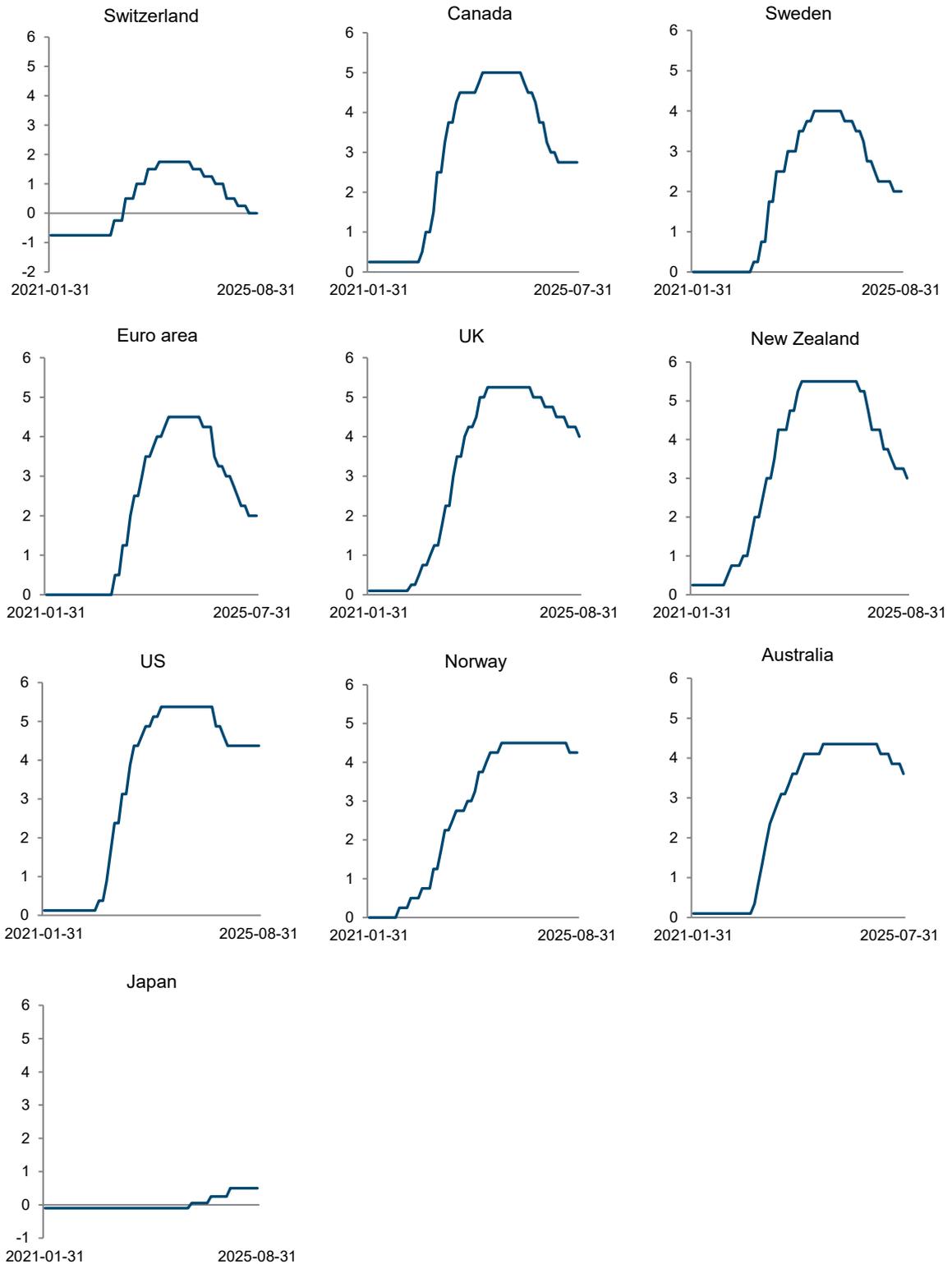
Late 2023 through much of 2024 saw a gradual shift toward monetary easing in many advanced economies, as inflation moderated from its peaks and growth momentum slowed. However, uncertainty increased significantly in early 2025 amid trade tensions, supply-chain risks and softer global demand. In recent months, central banks have diverged in their responses: at their latest meetings, the US Federal Reserve (Fed) and the Bank of Canada (BoC) have cut policy rates, whereas the European Central Bank (ECB), the Swiss National Bank (SNB), the Bank of England (BoE) and the Bank of Japan (BoJ) have held steady, citing elevated global uncertainty and/or persistent above-target inflation. Markets now expect a slower pace of easing, with additional cuts pushed into late 2025 and 2026 – except in Japan, where policy normalisation is expected to advance gradually. With policy rates in several economies approaching their estimated neutral levels, the scope for aggressive easing is narrowing, suggesting a more cautious and data-dependent stance in the future.²

Yield curves in many advanced economies remain flat or mildly inverted across short-to-medium maturities –especially in the US, where two-year yields are elevated relative to longer-dated maturities, keeping spreads very compressed. Market sentiment remains cautious, reflecting persistent short-term risks and uncertainty about the timing and magnitude of monetary easing. We expect these yield-curve shapes to persist in the near term, with only modest steepening toward the end of 2025 or into 2026 as rate cuts become more clearly anticipated and external pressures ease.

At its September meeting, **the ECB** maintained the interest rates on the deposit facility, the main refinancing operations and the marginal lending facility unchanged at 2.00%, 2.15% and 2.40%, respectively, on the grounds that inflation projections are broadly in line with its 2% target. Resilient growth momentum in the euro area has also given the ECB additional space to pause and evaluate the transmission of past rate cuts, before considering further action. Despite expectations that the ECB policy rate will remain broadly unchanged, markets are currently pricing in higher risk premia, likely reflecting fiscal pressures, their potential adverse impact on financial conditions and the potential for renewed inflationary pressures.

¹ The text of this article was finalised on 14 October 2025.

² <https://www.ft.com/content/da2e486e-fb10-4dd8-9cfc-77a44e6f3830>

Figure 1 / Monetary policy rates in major economies

Source: Bank for International Settlements (2025), Central bank policy rates, BIS WS_CBPOL 1.0 (data set), <https://data.bis.org/topics/CBPOL/data> (accessed on 28 September 2025).

As largely anticipated, **the Fed** cut its policy rate in September, lowering the federal funds target range to 4.00-4.25%, citing signs of labour-market cooling and rising downside risks to employment. According to the Fed's updated economic projections, most policy makers anticipate additional rate cuts before the end of the year. Beyond 2025, policy makers and markets now project a gradual easing path, with policy rates falling into the mid-3% range by 2026.

At its September meeting, **the BoC** reduced its policy rate by 25 basis points (bps) to 2.5%, in response to softening economic activity and clear signs of labour-market cooling. BoC officials reiterated that future cuts will be contingent on further declines in inflation and continued slack in employment.

In September 2025, **the BoE** kept its bank rate unchanged at 4%, citing still-elevated inflation and robust, though gradually easing, wage growth. The decision highlights the BoE's cautious stance, seeking to balance the need to anchor inflation expectations with emerging signs of labour-market softening. Market expectations now point to a more protracted easing cycle, with the next rate cuts largely anticipated to begin in early 2026.

The SNB decided to keep its policy rate unchanged at 0% at its September meeting. The bank also emphasised that it stands ready to intervene in the foreign exchange market, if necessary. While negative interest rates remain formally an option, the SNB has indicated that the threshold for reintroducing them is high, given their potentially adverse effects on savers and pension funds.

Despite the rise in inflation, at the last monetary policy meeting in September **the BoJ** maintained its policy rate at 0.5%, reflecting the bank's cautious stance in view of potential downside risks from global trade tensions and their impact on the domestic economy. Nevertheless, the bank emphasised its commitment to a gradual normalisation of monetary policy, together with a simplification of the policy framework and reduced reliance on the unconventional measures used in the past.

Although the peak of inflation and monetary tightening is behind us, credit and interest rate risks remain elevated across the major advanced economies. US and euro area lending surveys still report tight credit and weak loan demand, with commercial real estate and maturing corporate debt posing key vulnerabilities.³ The impact of high borrowing costs is unfolding gradually, raising the risk of delayed stress in bank and non-bank credit portfolios. While some easing of credit conditions is expected as monetary policy loosens, refinancing pressures and sector-specific risks – particularly in commercial real estate – are likely to keep financial stability concerns elevated.

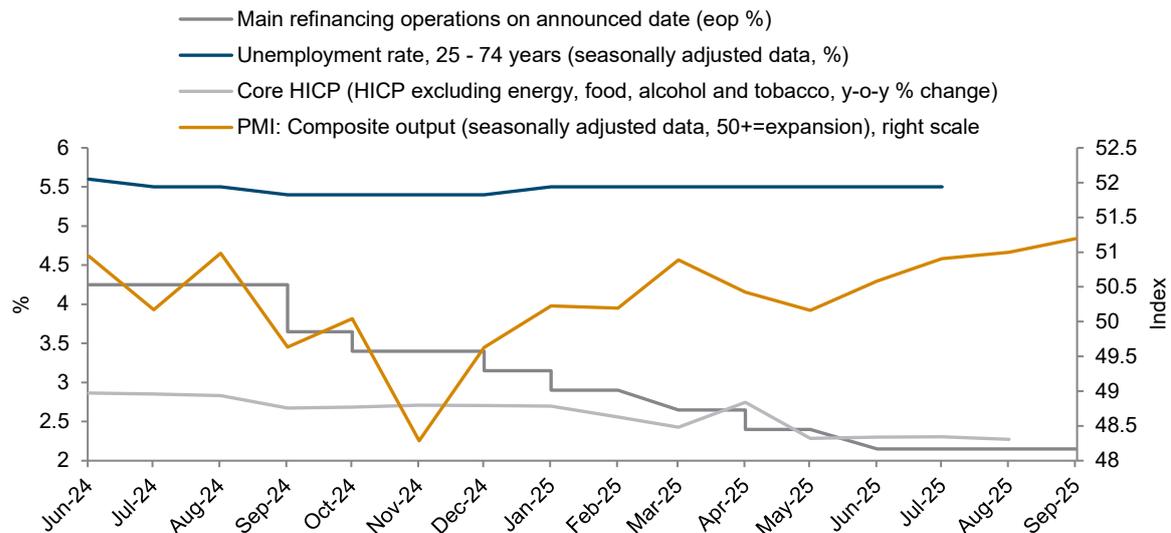
³ <https://www.federalreserve.gov/data/sloos/sloos-202507.htm>;
https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2025q2~caacd3537b.en.html

EURO AREA

Latest communication and projections

The ECB cut its policy rate by 25 basis points in June, but chose to keep rates unchanged at its September meeting, maintaining the interest rates on the deposit facility, the main refinancing operations and the marginal lending facility unchanged at 2.00%, 2.15% and 2.40%, respectively.⁴ The decision reflects the Governing Council's view that inflation is broadly contained and converging on the 2% medium-term target, with the latest projections pointing to an average inflation of 2.1% in 2025. Growth momentum remains slightly stronger than previously expected, though global trade tensions and policy uncertainty continue to pose downside risks. With inflation expectations anchored and inflation on target, it is highly unlikely that the ECB will make any significant downward adjustment in the short term, though policy discussions on the future rate path are expected to intensify in late autumn.⁵ Despite stable macroeconomic conditions, the Euribor forward curve exhibits a modest upward slope, reflecting market concerns about potential fiscal pressures stemming from increased defence spending and the consequent risk of inflation target overshooting.⁶

Figure 2 / Euro area inflation and economic activity



Source: ECB, S&P Global, Eurostat, Eurostat/Haver.

The ECB has maintained its stance on minimum reserve requirements, with remuneration on minimum reserves remaining at 0% since July 2023.⁷ Against the backdrop of a gradual shift toward monetary easing, the rationale for altering reserve requirements has further diminished.

⁴ <https://www.ecb.europa.eu/press/pr/date/2025/html/ecb.mp250911~6afb7a9490.en.html>

⁵ <https://www.reuters.com/business/finance/ecbs-schnabel-calls-steady-rates-economy-holds-up-face-tariffs-2025-09-02>

⁶ <https://www.reuters.com/world/europe/investors-set-reignite-yield-curve-steepening-if-fiscal-worries-worsen-2025-10-08/>

⁷ <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.pr230727~7206e9aa48.en.html>

In line with its March 2024 announcements,⁸ the ECB continues to promote the revitalisation of the interbank lending market to serve as the primary channel for liquidity provision, marking a gradual shift away from the quantitative easing environment established after the 2008-2009 financial crisis. To support this transition, the ECB has allowed the asset purchase programme (APP) and pandemic emergency purchase programme (PEPP) portfolios to run off at a measured and predictable pace, with no new reinvestments – consistent with its latest economic bulletins. Additionally, with effect from 18 September 2024, the spread between the deposit facility rate and the main refinancing operations rate was narrowed from 50 to 15 basis points, and between the deposit and marginal lending facility from 75 to 40bps,⁹ enhancing the attractiveness of interbank funding over central bank borrowing.

wiiw forecast

With inflation stabilising at close to the ECB's medium-term target, we expect no further changes in the policy rate. Despite current market concerns, we assume that the elevated risk premium reflected in the forward curve is temporary. As these short-term risks dissipate, so market rates are projected to gradually converge toward their historical averages.

Table 1 / EUR rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate (main refinancing operations)	3.8	4.1	2.4	2.2	2.2	2.2	2.2	2.2
Policy rate (lending rate)	4.1	4.4	2.7	2.4	2.4	2.4	2.4	2.4
Policy rate (deposit rate)	3.3	3.7	2.3	2.0	2.0	2.0	2.0	2.0
3m	0.5	3.5	2.1	2.0	2.1	2.1	2.1	2.1
2yr IRS	1.4	2.6	1.9	2.2	2.2	2.3	2.3	2.3
10yr IRS	1.8	2.4	2.5	2.7	2.8	2.7	2.7	2.6

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

Source: wiiw.

US

Latest communication and projections

Despite the persistent geopolitical tension, US economic activity has shown resilience, with GDP rebounding in the second quarter of 2025 following a contraction in the first quarter. However, the labour market is showing clearer signs of cooling. In August, payrolls increased by just 22,000 – well below expectations – pushing the unemployment rate to 4.3%, its highest level in four years,¹⁰ and weighing on consumer confidence. Inflation remains above target, and inflationary expectations are still elevated, underscoring the challenge of balancing price stability with full employment.

Against this backdrop, at the September meeting the Fed cut its policy rate by 25 basis points, lowering the federal funds target range to 4.00-4.25%.¹¹ The decision signalled a shift toward supporting labour-

⁸ <https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.pr240313~807e240020.en.html>

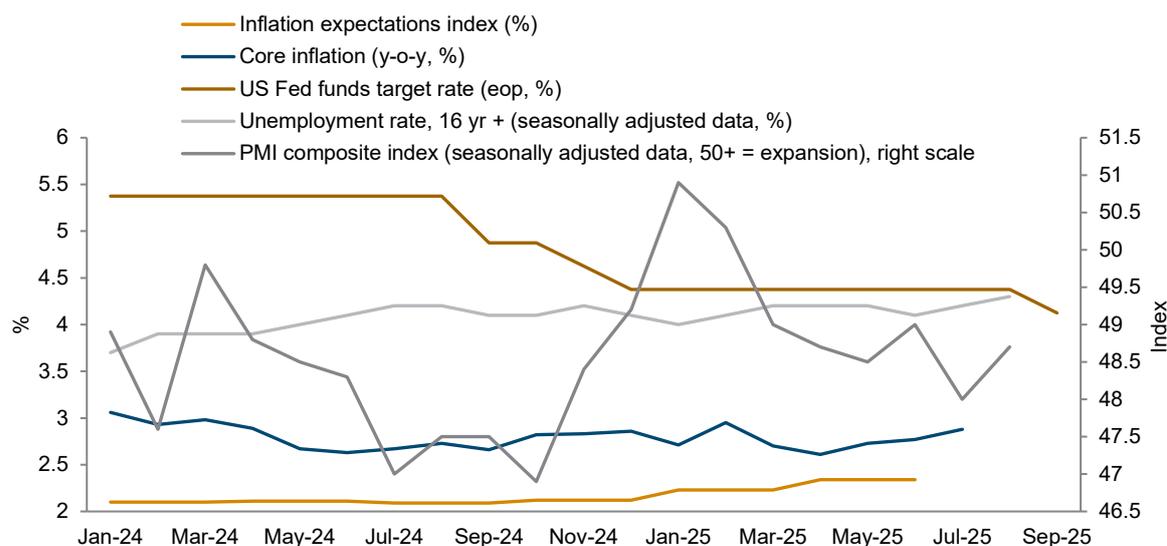
⁹ <https://www.ecb.europa.eu/press/pr/date/2024/html/ecb.pr240313~807e240020.en.html>

¹⁰ <https://www.politico.com/news/2025/09/05/trumps-job-market-struggling-fed-rate-cut-00546137>

¹¹ <https://www.federalreserve.gov/newsevents/pressreleases/monetary20250917a.htm>

market conditions, while acknowledging that tariff-related price pressures are easing only gradually. Chairman Powell reiterated that policy remains data-dependent, and that further easing will proceed cautiously to avoid resurgent inflation. Financial markets largely anticipated the move and are continuing to price in one additional 25bps cut in December, followed by a more sustained easing cycle in 2026.¹² This reflects mounting concern that delayed action could further weaken the labour market, even as upside inflation risks remain.

Figure 3 / US inflation and economic activity



Source: Institute for Supply Management (ISM), Federal Reserve Board (FRB), Bureau of Economic Analysis (BEA), Bureau of Labour Statistics (BLS)/Haver Analytics.

wiiw forecast

With unemployment rising and job creation slowing, risks to the economy are becoming more prominent, even as inflation remains above target. Against this backdrop, our baseline assumes that the Fed will implement one additional 25bps cut before the end of 2025. Over the longer term, we expect a gradual return to price stability, with the policy rate converging toward its neutral range of around 3% by the end of 2027.

Table 2 / USD rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate	5.2	5.3	4.4	3.7	3.0	2.7	2.6	2.6
3m	2.4	5.0	4.1	3.4	2.9	2.6	2.5	2.5
2yr IRS	3.2	4.2	3.6	3.1	3.0	2.8	2.6	2.6
10yr IRS	2.8	3.8	3.8	3.6	3.5	3.4	3.3	3.3

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

Source: wiiw.

¹² <https://www.reuters.com/business/bofa-expects-fed-deliver-two-cuts-this-year-after-soft-jobs-report-2025-09-05/>

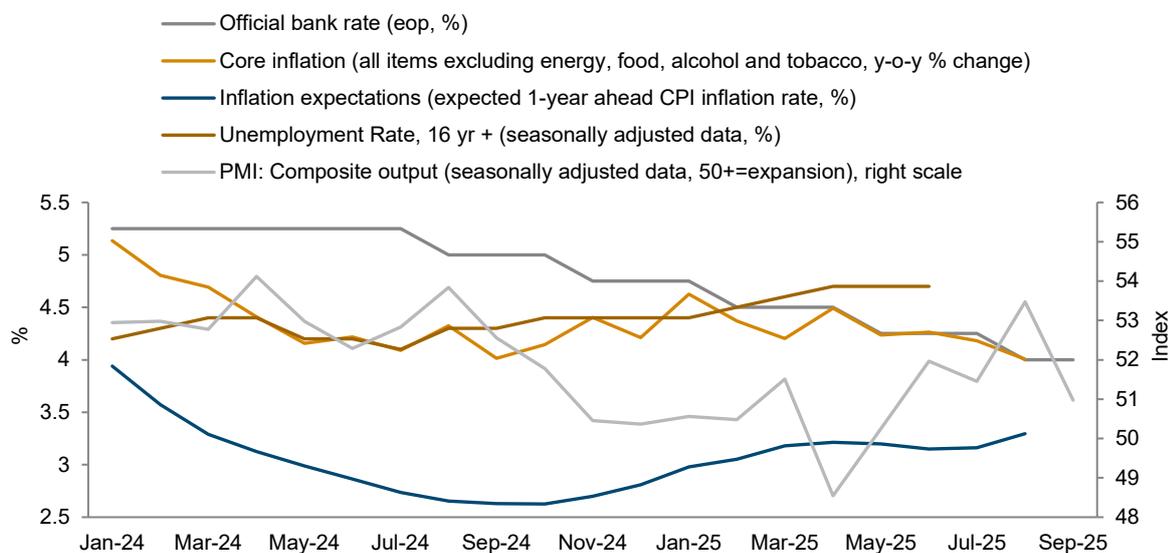
UK

Latest communication and projections

Since May 2025, the BoE has delivered two rate cuts totalling 50 basis points, bringing the bank rate to 4.00% – its lowest level in more than two years.¹³ At the September 2025 meeting, the bank kept the rate unchanged, reflecting concerns about still-elevated inflation and only gradual easing in wage growth.¹⁴ In a complementary move, the BoE slowed the pace of quantitative tightening (QT), reducing planned gilt sales from £100bn to £70bn over the next 12 months and shifting them toward shorter maturities, in order to alleviate pressure on long-dated yields. This approach underscores the BoE's effort to balance price stability with growth, maintaining restrictive rates to guide inflation back to target, while adjusting QT to preserve orderly market functioning.

Looking ahead, policy makers have signalled that additional rate cuts will be gradual and data-dependent, contingent on further evidence of disinflation and sustained labour-market cooling. This stance is consistent with financial market expectations, which anticipate a slow but continued easing cycle into 2026.¹⁵

Figure 4 / UK inflation and economic activity



Source: BoE, Office for National Statistics (ONS), S&P Global /Haver Analytics.

¹³ <https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2025/august-2025>

¹⁴ <https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2025/september-2025>

¹⁵ <https://www.reuters.com/world/uk/hsbc-deutsche-bank-push-back-boe-rate-cut-forecasts-inflation-clouds-outlook-2025-09-08/>, <https://www.reuters.com/world/uk/boes-bailey-says-markets-have-grasped-message-less-certain-rate-cuts-2025-09-03/>

wiiw forecast

Following the two rate cuts implemented since our latest forecast and in line with market expectations, we do not expect the BoE to change the policy rate before the end of the year; this will be followed by a sequence of four additional 25bps cuts throughout 2026. As inflation stabilises around the target, we project a continued gradual easing, with the policy rate reaching 2.5% by 2028.

Table 3 / GBP rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate	4.7	5.1	4.3	3.6	2.8	2.5	2.5	2.5
3m	1.7	5.0	4.1	3.3	2.5	1.8	1.6	1.6
2yr IRS	2.8	4.3	3.8	3.2	2.7	2.3	2.1	2.1
10yr IRS	4.0	4.1	4.6	4.4	3.9	3.5	3.5	3.5

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

Source: wiiw.

SWITZERLAND

Latest communication and projections

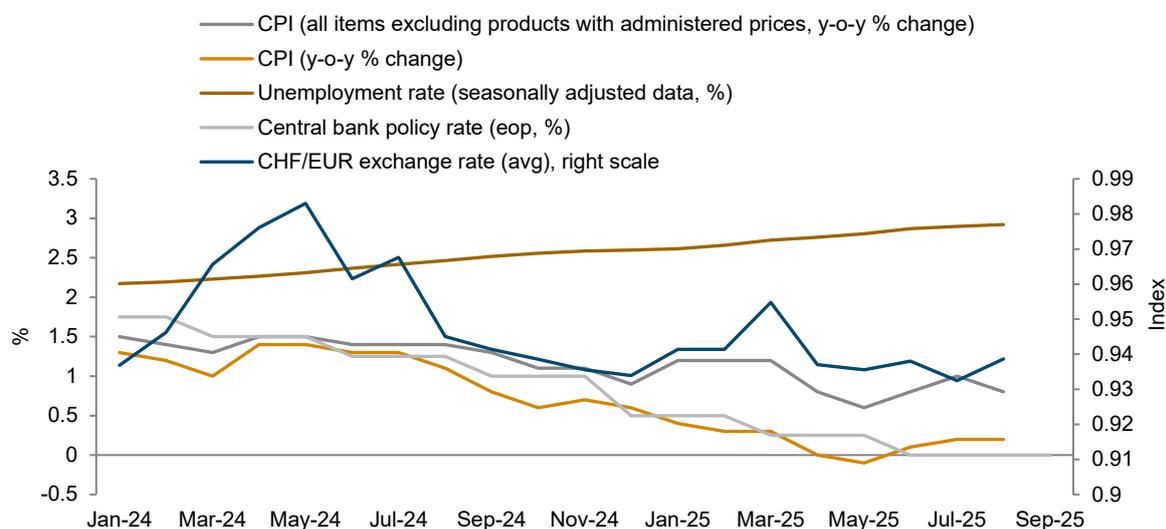
After reducing its policy rate to 0% in June, the SNB kept the rate unchanged at its September meeting.¹⁶ Inflationary pressures remain subdued, with the bank projecting that consumer price inflation will average around 0.2% in 2025. Economic growth stayed positive in the second quarter, though very modest. The significantly higher US tariffs introduced in August have further weighed on Switzerland's outlook by dampening export prospects and heightening external uncertainty. At the same time, unemployment has edged higher in recent months. The bank has also reiterated its readiness to intervene on the foreign exchange market if necessary, signalling its determination to counter excessive currency appreciation, which could potentially undermine price stability and growth.

Looking ahead, with interest rates at zero and limited monetary room for manoeuvre, the markets overwhelmingly expect the SNB to maintain its policy rate at 0% for the remainder of 2025.¹⁷ While negative interest rates remain formally an option, the central bank has indicated that the threshold for reintroducing them is high, noting their potentially adverse effects on savers and pension funds.¹⁸

¹⁶ https://www.snb.ch/en/publications/communication/press-releases-restricted/pre_20250925

¹⁷ <https://www.reuters.com/business/finance/swiss-national-bank-chief-sees-high-bar-negative-rates-migros-magazin-2025-09-08/>

¹⁸ <https://www.reuters.com/business/finance/swiss-national-bank-chief-sees-high-bar-negative-rates-migros-magazin-2025-09-08/>

Figure 5 / Switzerland inflation and economic activity

Source: Swiss Federal Statistical Office (SFSO), ECB, SNB/Haver.

wiiw forecast

We do not anticipate any additional reduction for the remainder of 2025. Instead, we expect the SNB to hold rates steady and, if further stimulus is required, to rely primarily on alternative instruments to counter excessive franc appreciation and support price stability. In our baseline, the policy rate remains at 0% through 2025, with a gradual normalisation anticipated over the medium term as inflation moves toward the target and external risks recede.

Table 4 / CHF rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate	1.5	1.3	0.2	0.1	0.4	0.6	0.8	0.8
3m	0.0	1.1	0.1	0.1	0.3	0.6	0.7	0.7
2yr IRS	0.7	0.8	0.0	0.1	0.3	0.6	0.7	0.7
10yr IRS	1.4	0.9	0.5	0.4	0.5	0.8	0.9	0.9

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

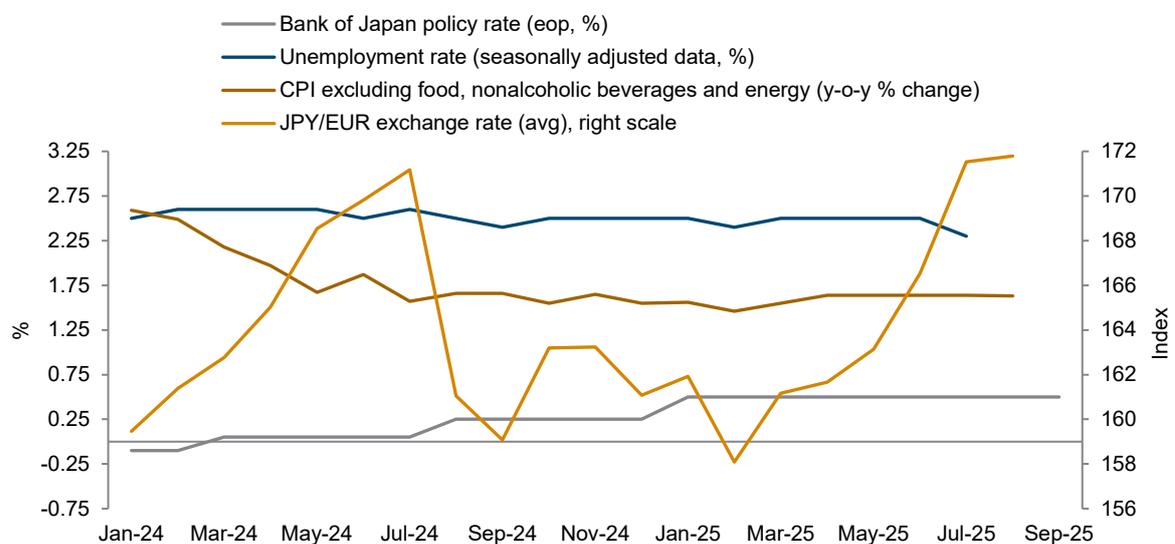
Source: wiiw.

JAPAN

Latest communication and projections

In 2024, the BoJ began normalising policy after 30 months of sustained inflation, ending yield curve control, halting the purchase of exchange traded funds (ETFs) and real estate investment trusts (REITs), and delivering its first rate hike since 2007. The tightening continued into early 2025, with the policy rate raised to 0.5% in January to counter persistent inflation and wage growth.

Figure 6 / Japan inflation and economic activity



Source: BoJ, ECB, Ministry of Internal Affairs and Communications (MIC)/Haver.

At its September 2025 meeting, the BoJ kept the key policy rate unchanged at 0.5%, citing elevated global uncertainty stemming from trade tensions, US tariffs, and their potential impact on growth and prices. As widely expected, the BoJ also announced the gradual sale of its large holdings of ETFs and REITs – a significant step toward exiting its unconventional monetary policy framework. This balance-sheet adjustment reflects the BoJ's confidence that inflation will stay sustainably above 2% and that markets can absorb the change, enabling policy normalisation without putting undue upward pressure on borrowing costs.

The BoJ's policy stance remains deliberately gradual, balancing the need to anchor inflation expectations against risks to corporate profitability from cost pressures, rising long-term yields and concerns over public debt sustainability. Global uncertainty, particularly trade-related risks and soft external demand, pose a significant downside risk and could delay further rate hikes. Nonetheless, the BoJ has signalled its readiness to tighten policy further if inflation and wage dynamics evolve in line with its projections.¹⁹

¹⁹ https://www.boj.or.jp/en/mopo/mpmdeci/mpr_2025/k250919a.pdf

wiiw forecast

Our forecast remains unchanged from the spring projections, aligning with the BoJ's stated objective of gradual monetary policy normalisation. We expect the policy rate to average 0.5% in 2025, before gradually rising and stabilising at around 1% in the following years.

Table 5 / JPY rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate	-0.1	0.1	0.5	0.8	1.1	1.2	1.2	1.2
3m	0.0	0.2	0.5	0.8	1.1	1.2	1.2	1.2
2yr IRS	0.0	0.3	0.8	1.1	1.4	1.5	1.5	1.5
10yr IRS	0.4	0.9	1.3	1.6	1.8	1.9	1.9	1.9

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

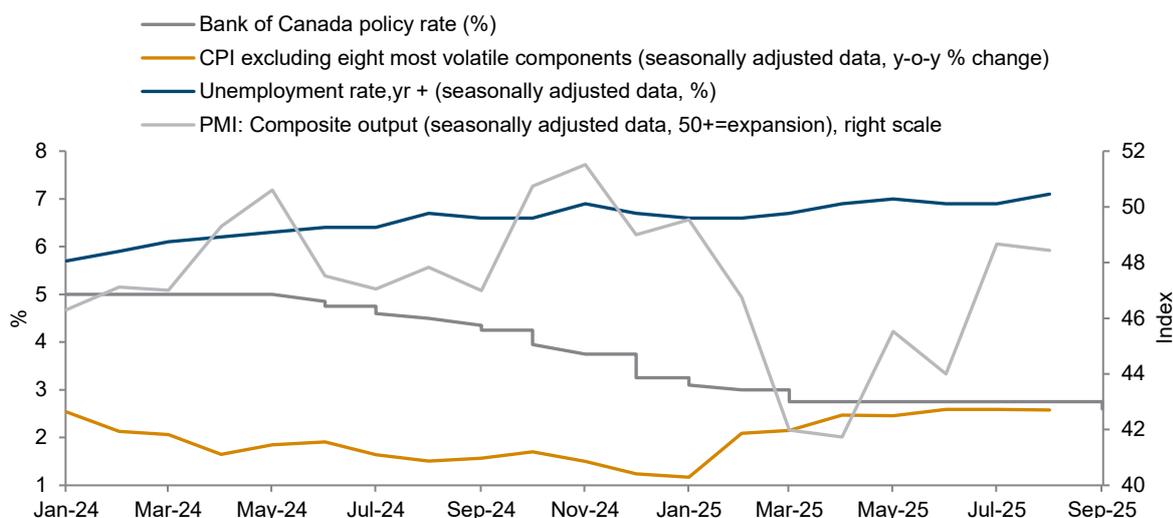
Source: wiiw.

CANADA

Latest communication and projections

The BoC cut its policy rate by 25bps to 2.50% at its September 2025 meeting, citing weaker economic activity in the second quarter and a softening labour market.²⁰ The downside risks to domestic growth remain elevated, reflecting the fact that tariffs and trade uncertainty are weighing on exports and investment, as well as the likelihood of subdued household spending amid slower population growth and labour-market weakness. The inflation dynamics remain mixed: headline inflation has edged closer to the 2% target, but core measures remain above target, suggesting that underlying price pressures persist.

Figure 7 / Canada inflation and economic activity



Source: Bank of Canada, Statistics Canada, S&P Global/Haver Analytics.

²⁰ <https://www.bankofcanada.ca/2025/09/fad-press-release-2025-09-17/>

This mix of persistent core inflation and economic softening has reinforced the BoC's cautious stance. Governor Macklem has stated that the bank is ready to act further if conditions worsen, but it is 'proceeding one meeting at a time'.²¹ Market pricing indicates a relatively high probability of another cut by year-end, contingent on further disinflation and labour-market deterioration.²²

wiiw forecast

We expect the BoC to proceed cautiously, delivering a single 25bps rate cut by the end of 2025. Thereafter, we anticipate continuation of the easing cycle in 2026, with the policy rate gradually declining to around 1.5% by 2027, as inflation pressures subside.

Table 6 / CAD rate forecasts, annual average

	2023	2024	2025	2026	2027	2028	2029	2030
Policy rate	4.7	4.5	2.7	2.1	1.6	1.5	1.5	1.5
3m	2.7	4.3	2.7	1.8	1.1	1.0	1.0	1.0
2yr	3.5	4.0	2.8	2.0	1.4	1.3	1.3	1.3
10yr	3.3	3.6	3.2	3.0	2.9	2.8	2.8	2.8

Note: Numbers are rounded to one decimal place. Historical data and forecasts as of 25 September 2025.

Source: wiiw.

²¹ <https://www.reuters.com/world/americas/bank-canada-cuts-rates-25-says-ready-cut-again-if-risks-rise-2025-09-17/>

²² <https://www.reuters.com/world/americas/bank-canada-cut-rates-september-17-least-one-more-follow-this-year-2025-09-12/>

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