How do Irish energy costs compare? A comparison of Irish and European energy costs

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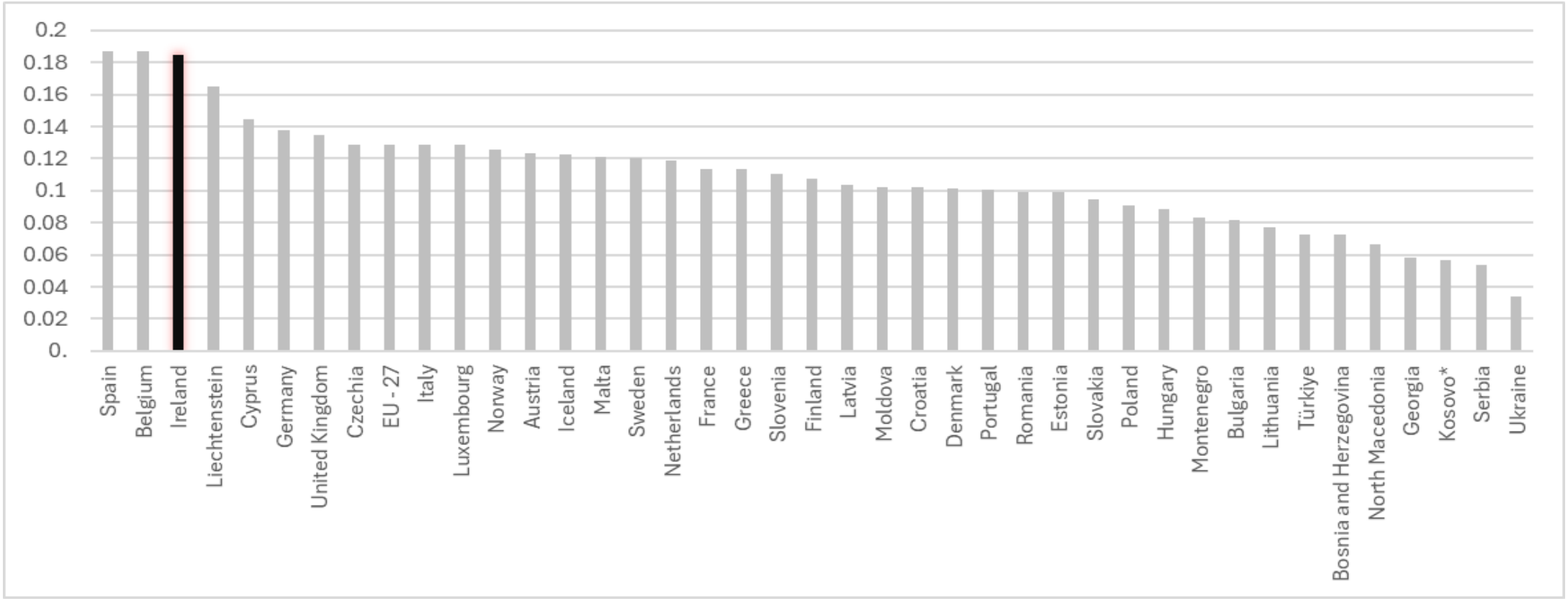
Overview

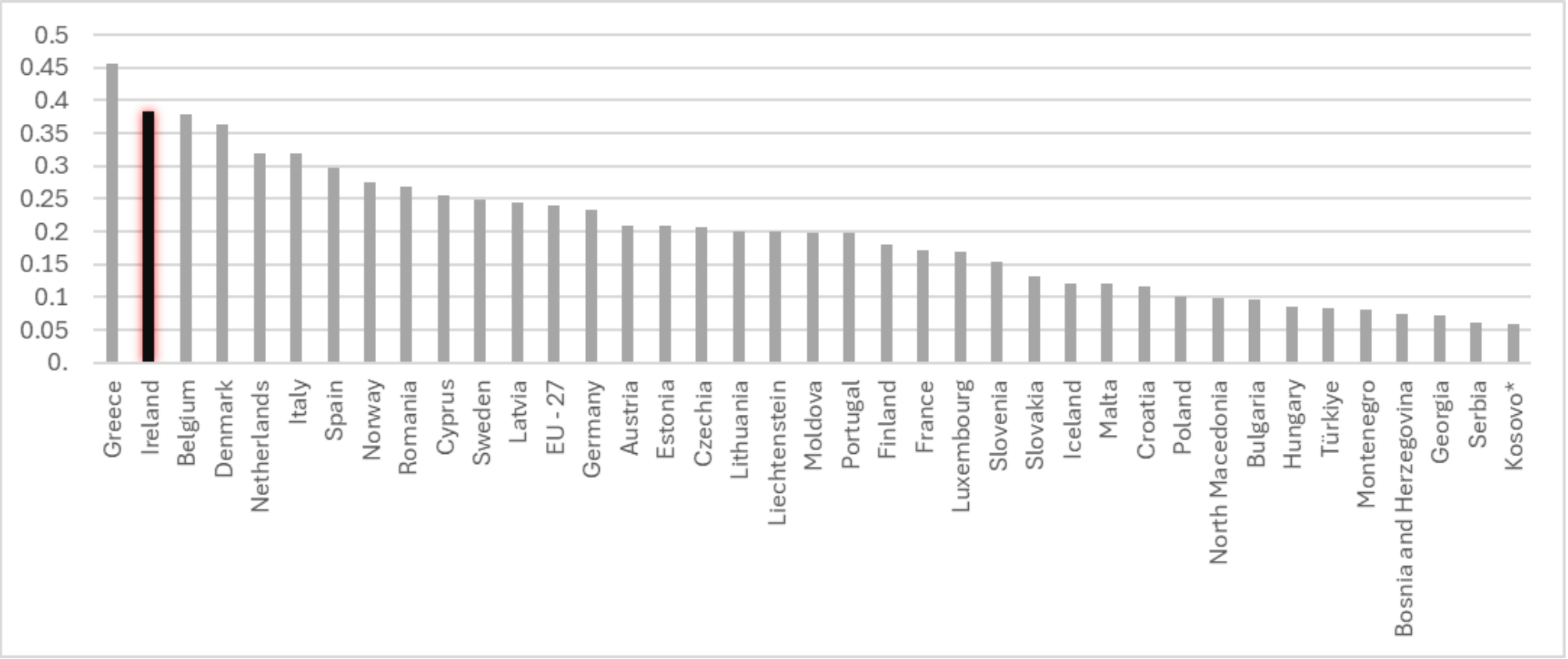
- Research focused on recent trends in European energy prices during the period 2018 to 2023.
- Descriptive analysis of price data, not causal.
- By H2 2023, Irish prices are the highest in nominal terms and 9th highest in real terms across comparison European countries.
- Cost of generation is **likely the largest contributory factor** driving high Irish prices in this period. Other countries have managed to diversify from gas generation yet Irish shares have remained relatively constant.

Overall trends

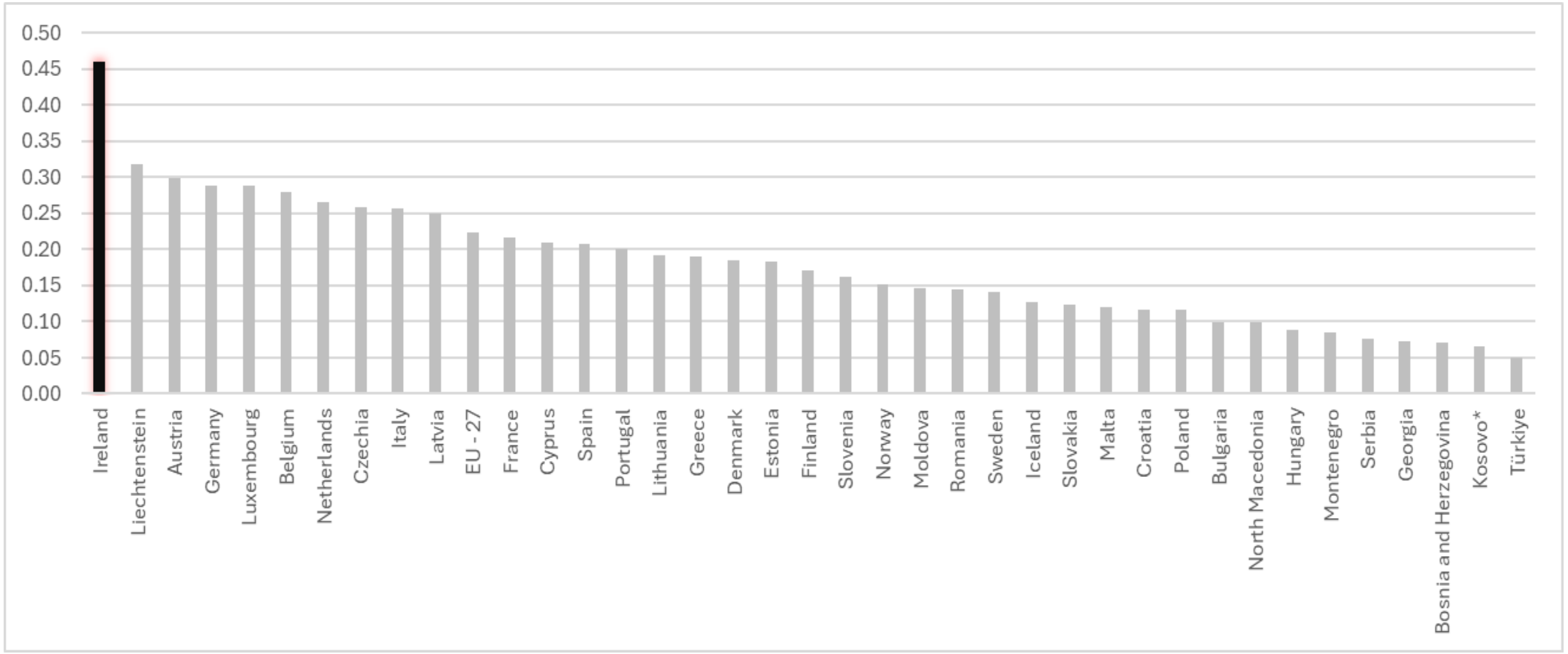
Average domestic electricity prices in nominal terms (€/kWh) (excluding all taxes & levies) in EU Member States and associated countries in H1 2018



Average domestic electricity prices in nominal terms (€/kWh) (excluding all taxes & levies) in EU Member States and associated countries in H2 2022



Average domestic electricity prices in nominal terms (€/kWh) (excluding all taxes & levies) in EU Member States and associated countries in H2 2023

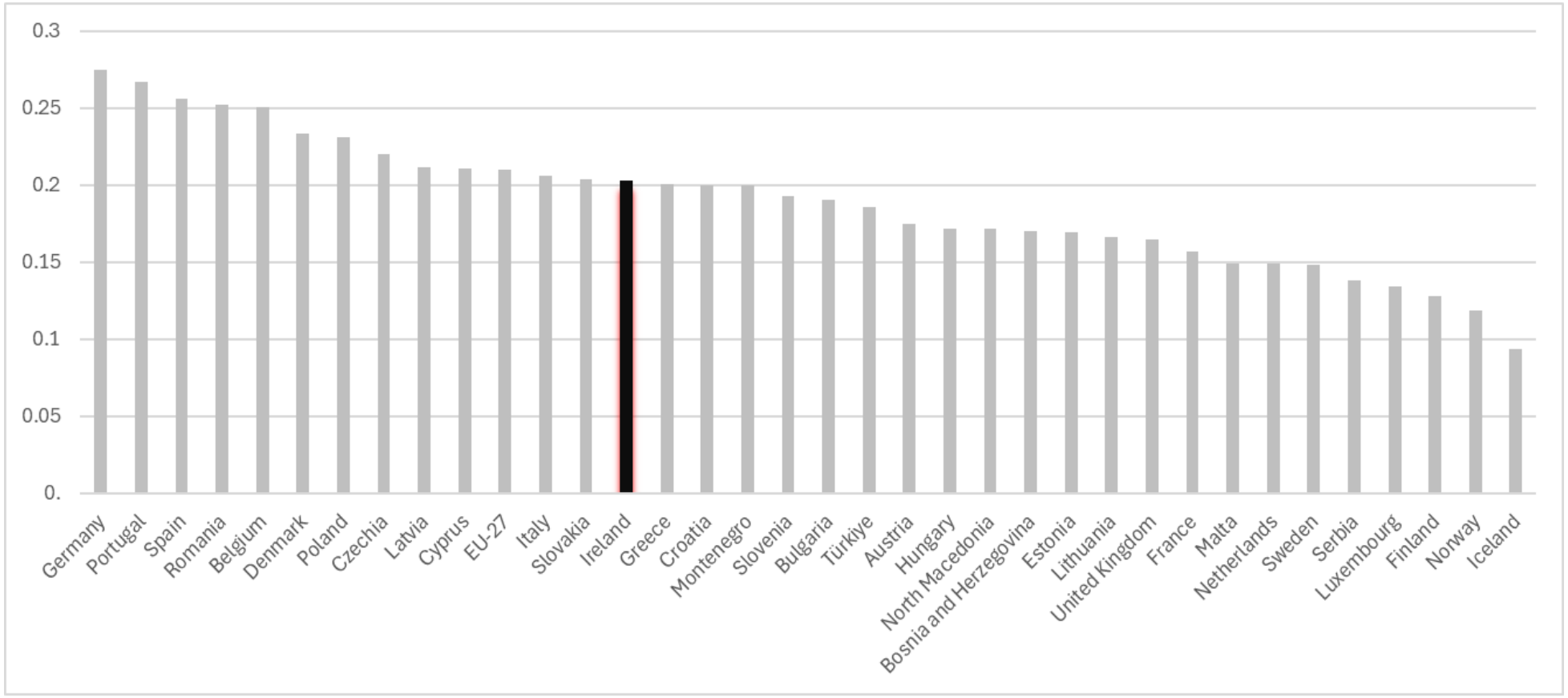


General trends: nominal terms (excluding taxes and levies)

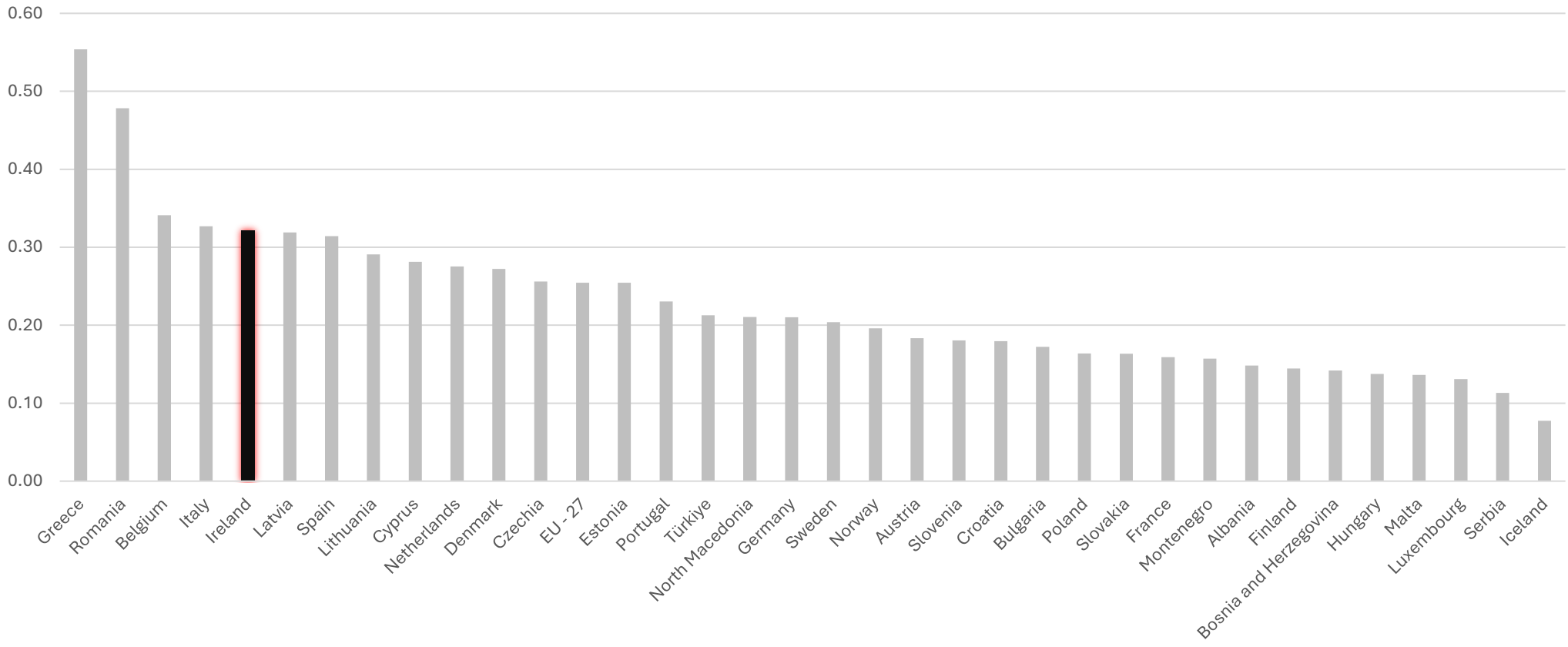
- In these terms, Ireland is consistently among the countries with the highest electricity prices in Europe.
- H2 2023 : Average EU electricity prices 73% higher than those observed in H1 2018. Irish prices 148% higher.
- Unlike Ireland, countries with high 2022 and H1 2023 prices see prices converge back towards the EU-27 average by H2 2023.
- ***Dual effect*** : Irish prices both high prior to crises and high price growth between 2018 – 2023.

Effect of general price levels by country

Average domestic electricity prices (in PPS) in EU Member States and associated countries in H1 2018



Average domestic electricity prices (in PPS) in EU Member States and associated countries in H2 2022



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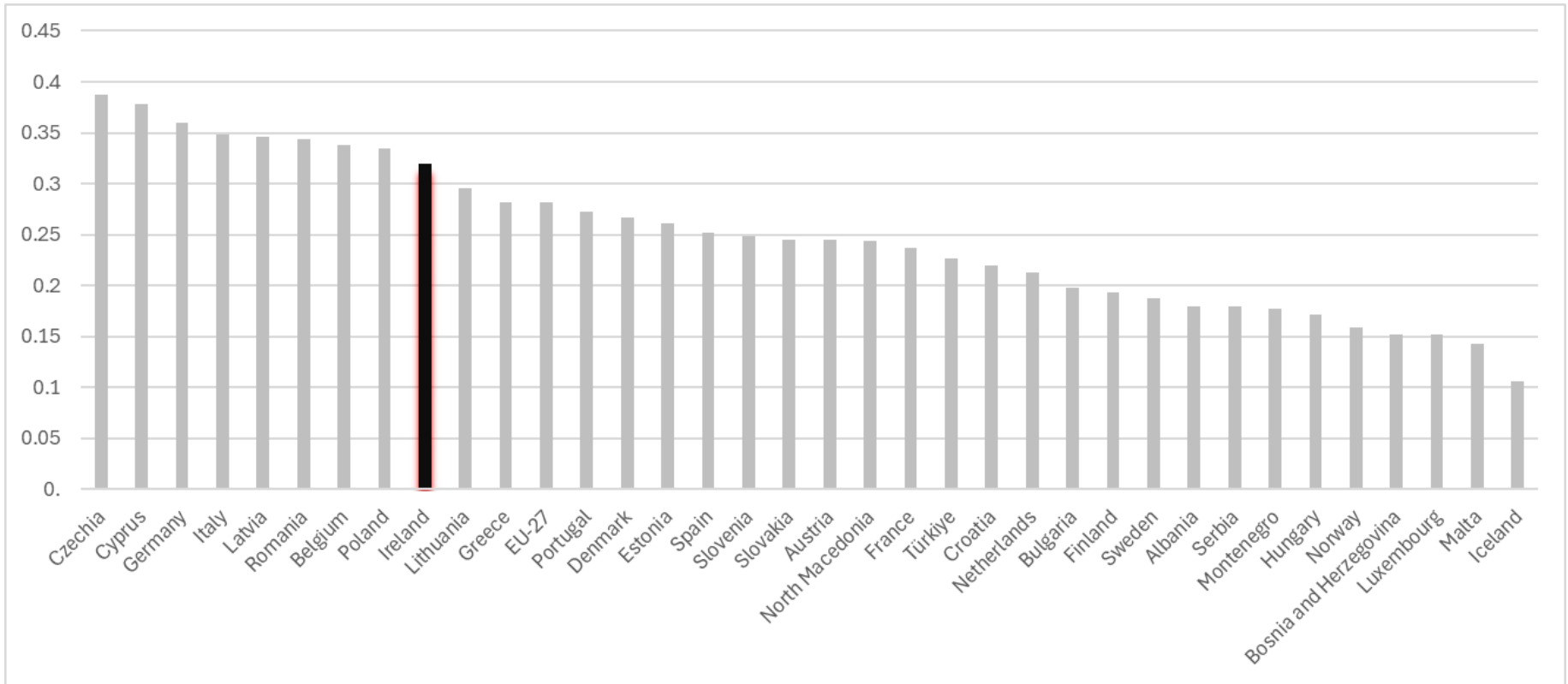
Average domestic electricity prices (in PPS) in EU Member States and associated countries in H2 2023



General trends: real terms (excluding taxes and levies)

- Comparing prices in real terms to nominal prices, much of Ireland's high costs may be attributable to general cost levels in the Irish economy.

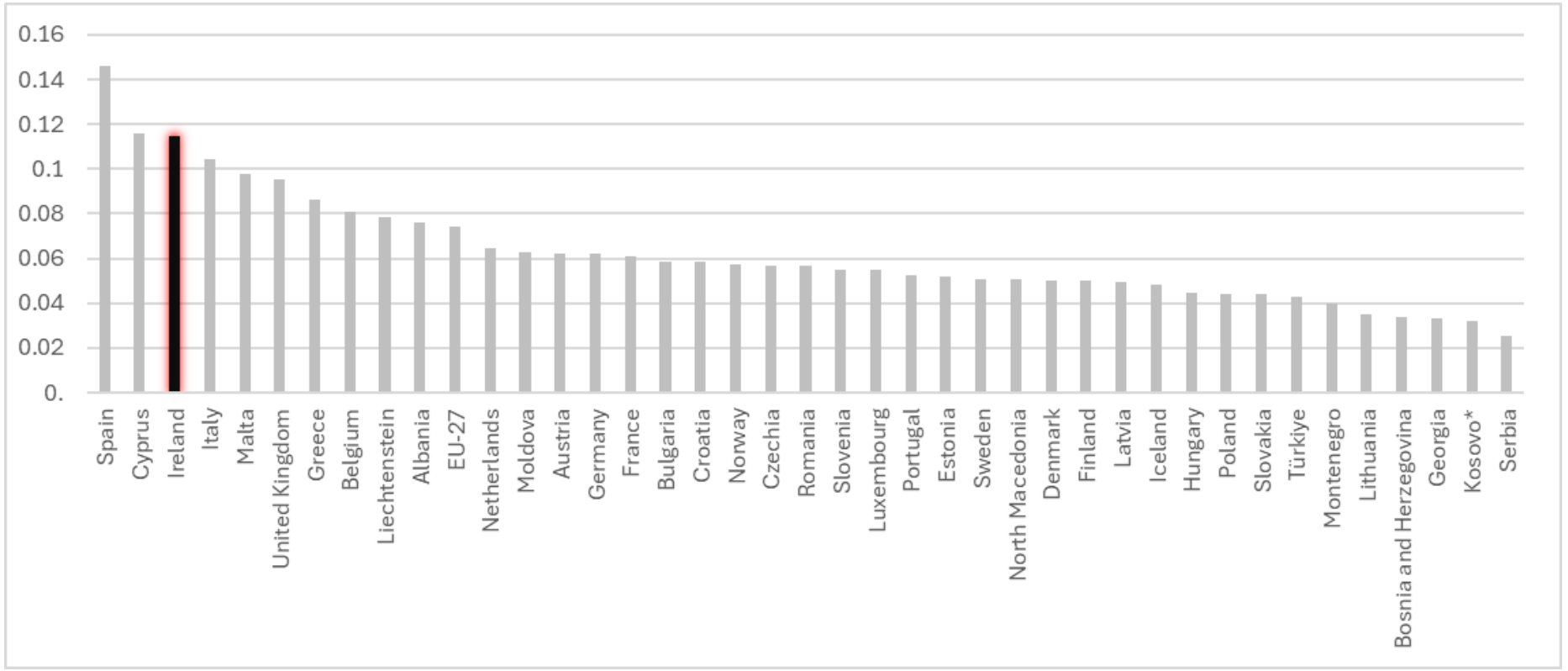
- As of H2 2023, Ireland has the 9th highest cost-adjusted electricity prices.

- Many of the countries with high cost-adjusted prices in H1 2018 also had high electricity prices in H2 2023.

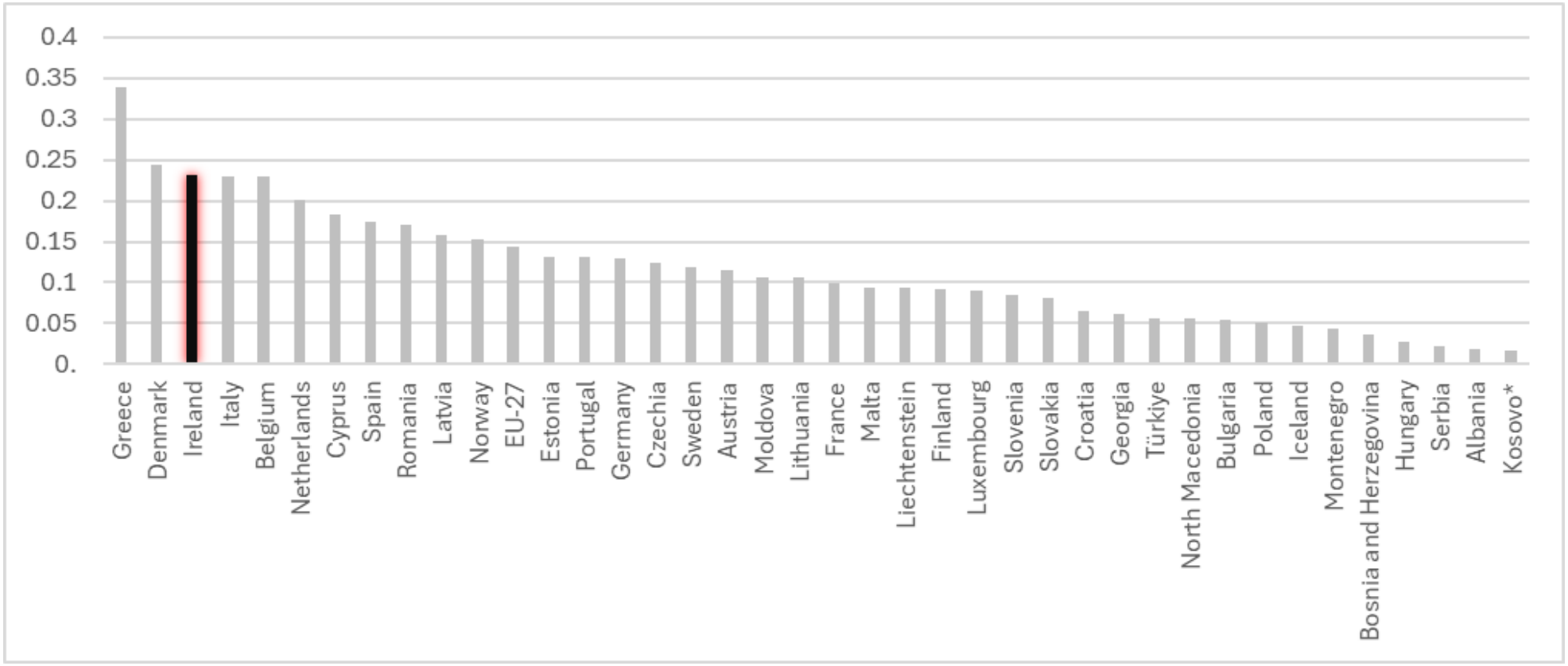
- Potentially some underlying structural factors contributing towards relatively high vs relatively low prices in each market.

Effect of changes in cost of generation

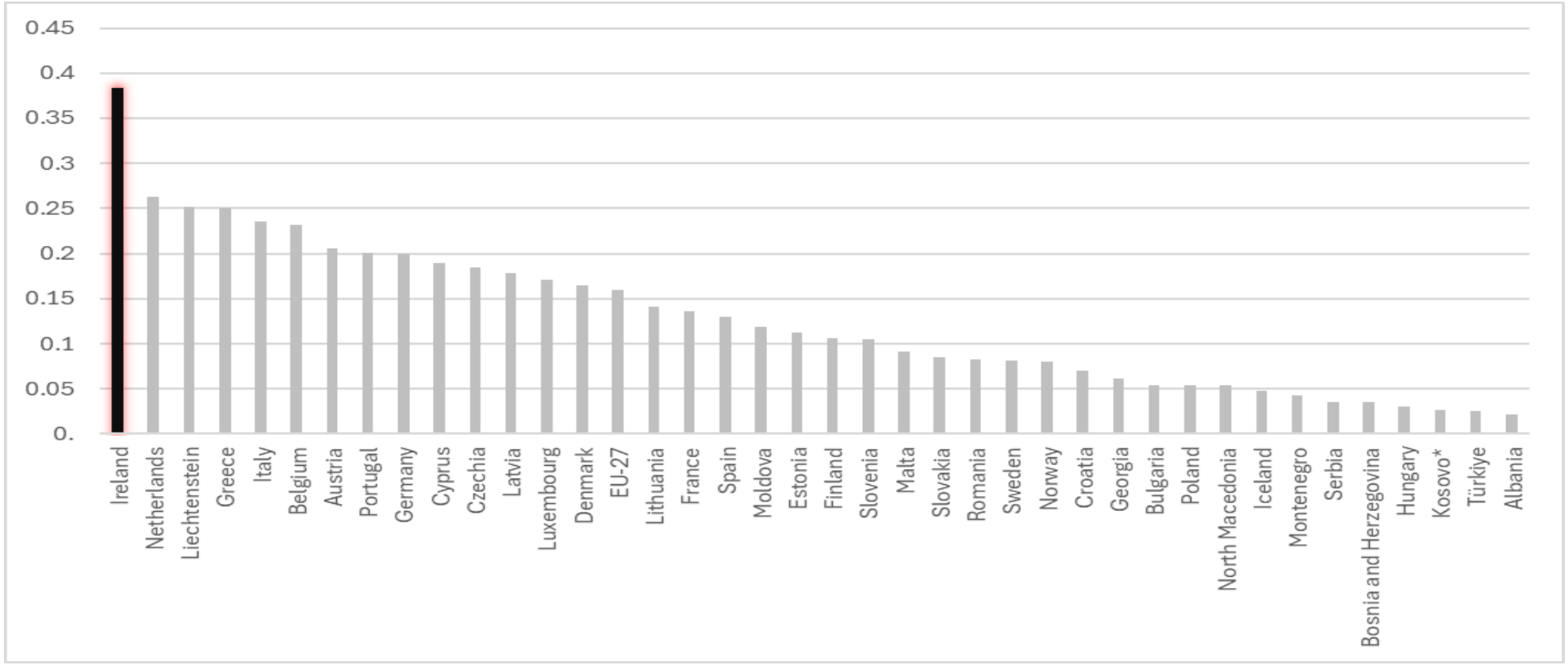
Average domestic energy & supply price component in nominal terms (€/kWh) in EU Member States and associated countries in 2018



Average domestic energy & supply price component in nominal terms (€/kWh) in EU Member States and associated countries in 2022



Average domestic energy & supply price component in nominal terms (€/kWh) in EU Member States and associated countries in 2023



Price Components : Energy & Supply

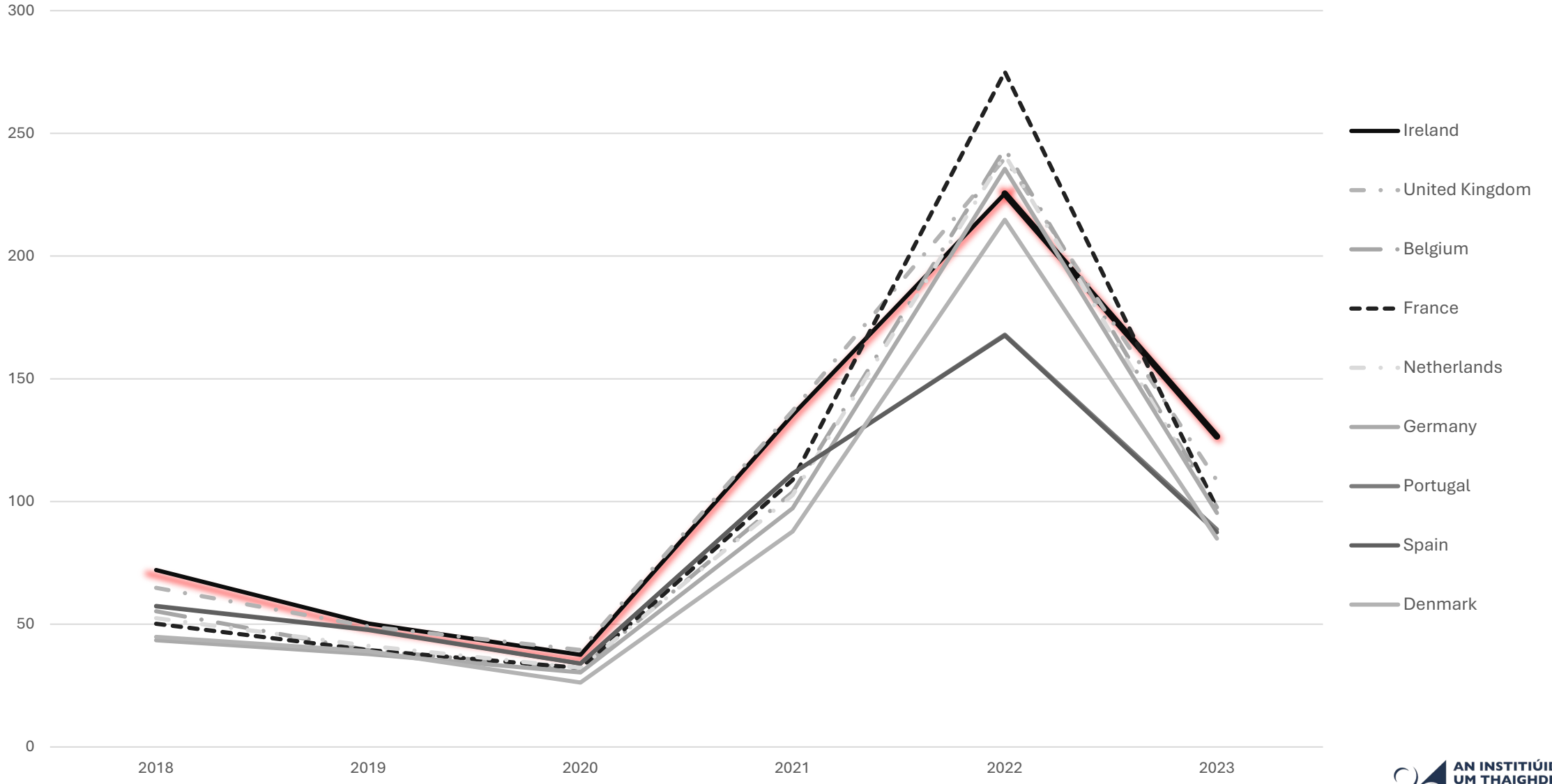
- Energy and supply component of electricity bills includes the cost of purchasing electricity on the wholesale market and supplier markup.

- EU-27 energy and supply costs have doubled for domestic consumers in the EU-27 in 2018 – 2023 period. Irish energy and supply costs have more than tripled.

- Other countries with high 2018 energy and supply costs have seen their costs fall back towards EU-27 average by 2023. Ireland has not.

Changes in ‘Energy and Supply’ costs driven by wholesale electricity prices ?

Wholesale electricity prices (€/MWh) in certain EU Member States and the UK from 2018–2023

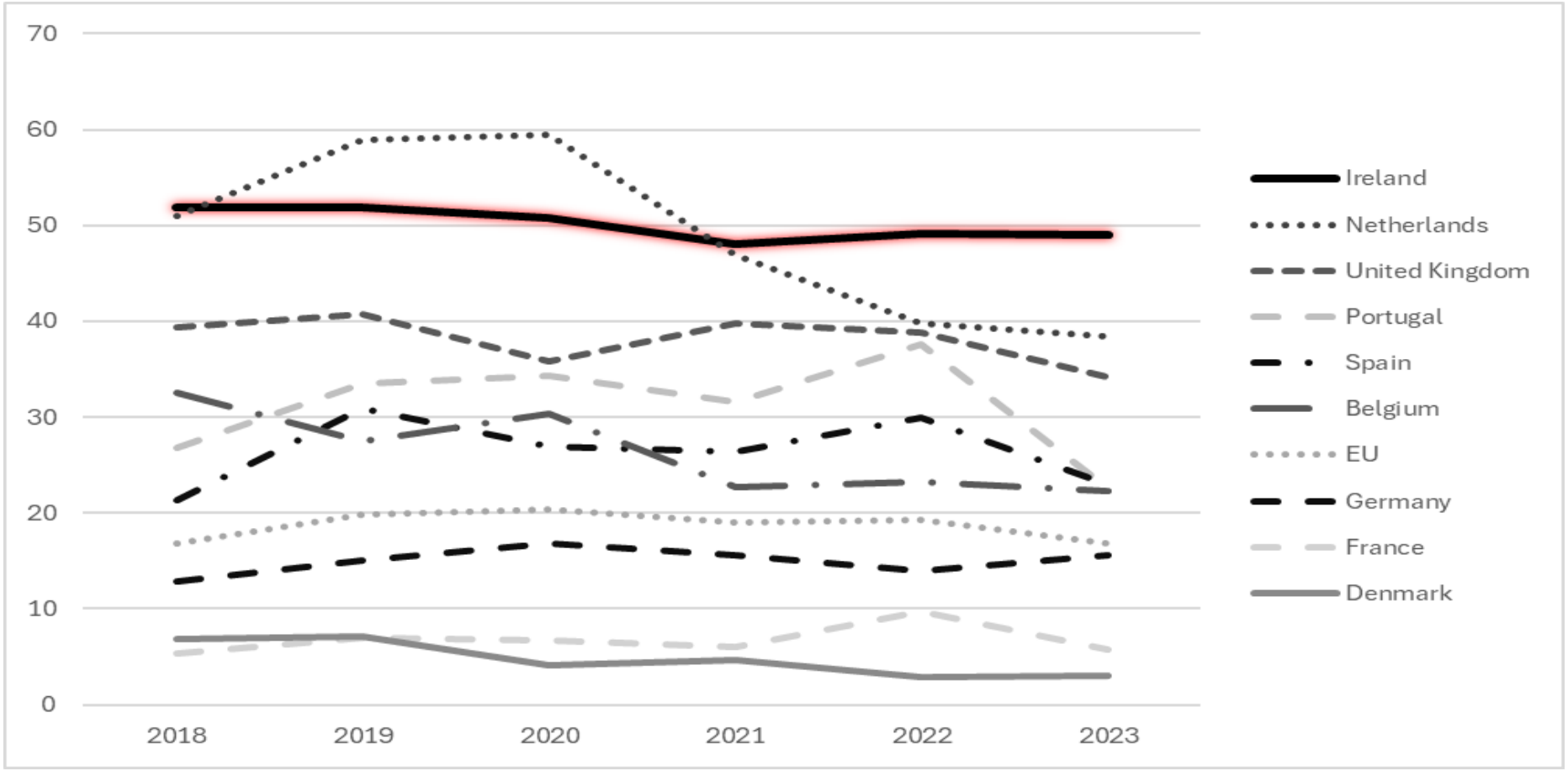


Trends in wholesale electricity prices

- Ireland among countries with higher wholesale prices, even prior to crisis. Ireland experienced a growth in energy prices commensurate with that observed in many other countries, with a slower decline in prices in 2023.
- Not clear why Irish wholesale prices among the higher end of the distribution and why high price levels persist in 2023.
- **One hypothesis** : high reliance on gas for generation

High gas generation shares and wholesale prices

Percentage share of gas in electricity generation in certain EU Member States and the UK from 2018 – 2023



Wholesale costs and gas prices

- Ireland consistently records the highest or near- highest share of natural gas in electricity generation between the 2018-2023 period.
- Many countries have demonstrated a greater diversification from natural gas in their fuel mix post-2022.
- General trend of diversification from gas amongst many European countries is an important finding and may explain the greater ability of these markets to see falling prices

Next steps : Cost passthrough analysis

Cost passthrough analysis

- Method : Statistical analysis of how changes in fuel costs translate to changes in wholesale electricity prices.
- Quantify impact for each country
- Does pass through changes in gas prices to a greater extent than other European countries ?
- Does passthrough remain for longer than others, explaining high prices ?

Summary

- Price of wholesale gas has been heavily affected by global events
- This has led to increasing wholesale electricity prices, particularly in areas with a heavy reliance on gas for electricity generation.
- Ireland more heavily reliant on gas than all other countries and thus likely more exposed to changes in these costs than other countries.
- Cost passthrough analysis will help prove/disprove the effects of high gas generation

Thank you

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