

A euro accession bonus

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Euro accession is associated with lower inflation, faster income convergence and stronger euro-area exports

- 7 economies joined EU in 2004, then the euro: Slovenia, Cyprus, Malta, Slovak R., Estonia, Latvia, Lithuania
- For each economy, compare inflation, income pc, exports, investment with a weighted average of economies that are or could become eligible to join the euro (and where data are fully available)
- Compare paths from euro adoption through year 5
- Placebo: Czechia, Hungary, Poland averaging all 7 accession dates: distinguishing euro adoption from any delayed effects of EU accession
- Separately, look at single-market comparators only (incl Switzerland)
- Also global pool of 80 comparator economies outside single market (max weight 15%)

Mean gap in years 0–5	
Inflation (pp)	−0.34
Income vs Germany (pp)	+5.15
Euro-area exports (index points)	+9.20
Fixed investment (pp of GDP)	None
Inward FDI (pp of GDP)	None

Country	Euro entry
Slovenia	1 Jan 2007
Cyprus	1 Jan 2008
Malta	1 Jan 2008
Slovak R.	1 Jan 2009
Estonia	1 Jan 2011
Latvia	1 Jan 2014
Lithuania	1 Jan 2015

Summary

- Economies that entered the euro experienced subsequent declines in inflation relative to a plausible counterfactual
- Gains in terms of per capita income, in particular for lower-income and small open economies
- An increase in exports, in particular to other economies using the euro
- Placebo exercises and robustness checks suggest major part of these effects goes beyond what could be attributed to the delayed effects of the earlier accession to the EU and the associated economic integration and institution building
- The euro can be an effective tool that reinforces macroeconomic stability and lowers financial and trade frictions reinforcinig the benefits associated with supply chain integration and credible macroeconomic policies
- Yet not a substitute for structural reform – a point reinforced by the absence of positive association with investment or FDI

Euro adoption can lower currency risk and trade costs, but earlier evidence is mixed

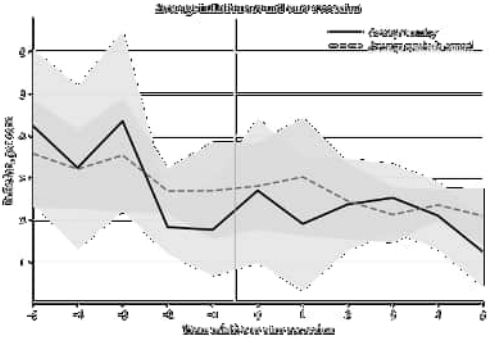
- A common currency removes exchange-rate risk and lowers cross-border transaction costs (Micco et al., 2003; Saia, 2017)
- It can strengthen policy credibility but removes exchange-rate flexibility (Mundell, 1961; Mongelli, 2002)
- The euro is adopted after years of EU integration and accession reforms – challenge of netting out EU accession effects (Chupilkin et al., 2025)
- Earlier estimates of trade and growth effects differ across countries and methods (Puzzello and Gomis-Porqueras, 2018; Gabriel and Pessoa, 2024)

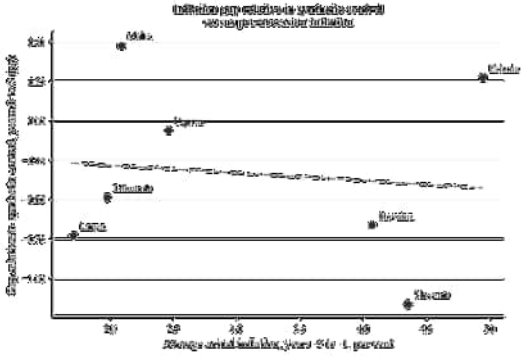
Synthetic controls (Abadie et al., 2010) compare each adopter with a weighted mix of other economies

- Match the full earlier outcome path, its first and last values, averages in each half of pre-treatment window, and values in years -1 and -2. Also match average nominal GDP, nominal GDP pc, PPP-adjusted real GDP pc, real GDP pc growth
- Compare paths after accession: actual vs synthetic outcomes measures the estimated effect
- Main pool of comparator economies: Eligible or could become eligible to join euro, with complete data
- Single-market pool: Single-market comparators, Switzerland
- 80 global comparators outside the single market
- Outcomes: inflation, income relative to Germany, exports (by destination), fixed gross capital formation (investment), inward FDI
- Method does not naturally produce standard errors, other than based on averages of several economies assuming iid draws

Euro accession is associated with lower inflation, with the effect predating euro adoption by 1-2 years

- Inflation averages 0.34 pp below the synthetic control in the accession year and five subsequent years
- Effect visible already 1-2 years prior – accession is typically officially confirmed around 8 months before the conversion date
- Contrary to a belief – wide-spread among consumers – that switching to the euro raises prices (eg Lunn and Duffy, 2015)

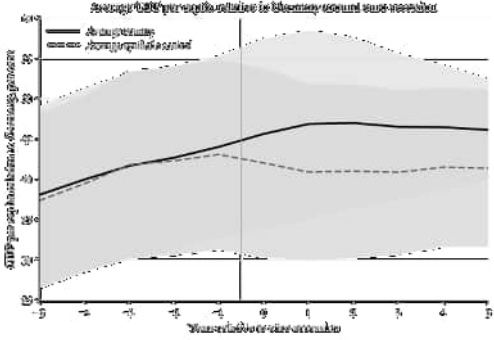


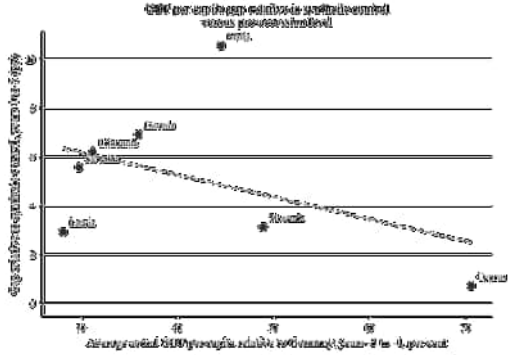


Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Euro accession was associated with faster income convergence (+5.2 pp of Germany's income on average in years 0-5)

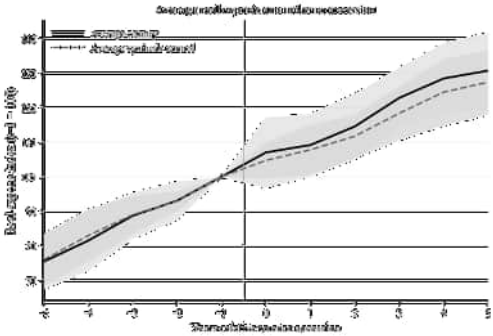
- Effects appear to be largest in small open economies (Malta, Estonia and Lithuania)

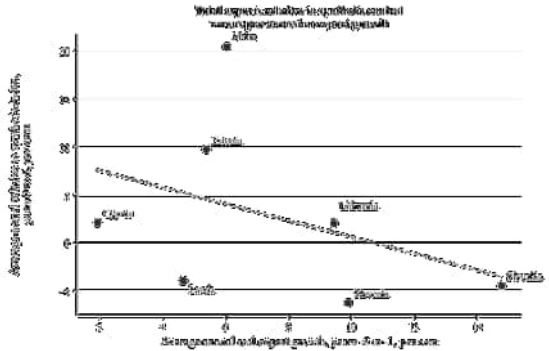




Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Total exports in real terms are 2.6% above the synthetic control in year five

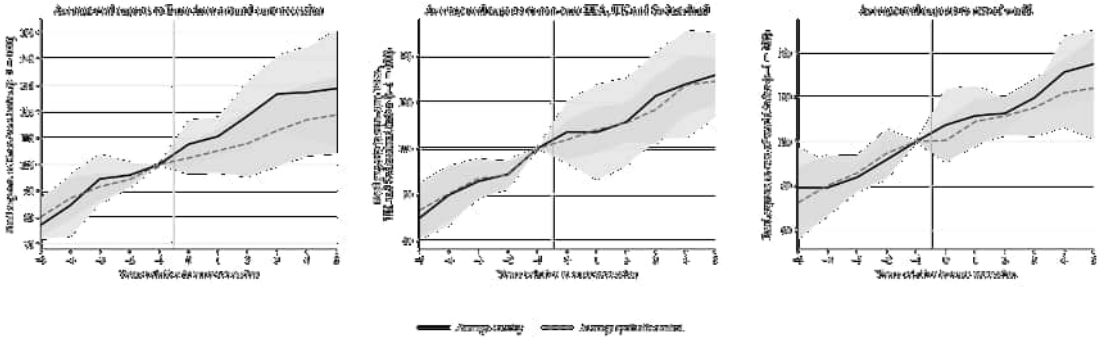




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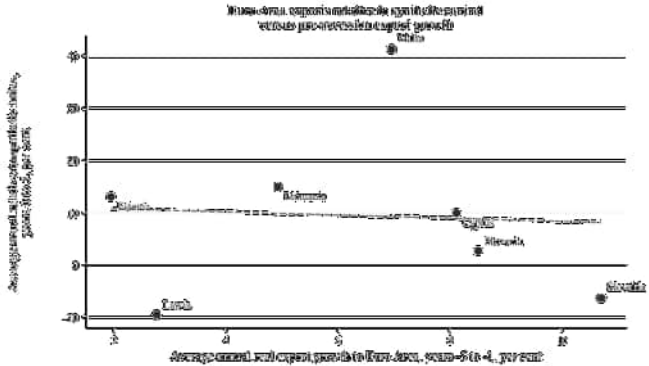
The largest effect observed for exports to other euro-area economies, smaller positive effects for exports to the rest of the world (and the rest of the single market)

- Euro-area exports average 9.2 index points above the control in years 0–5 (+8.4% in year 5)
- Consistent with euro adoption lowering currency risk and transaction costs for cross-border trade, this mechanism is particularly valuable for small open economies



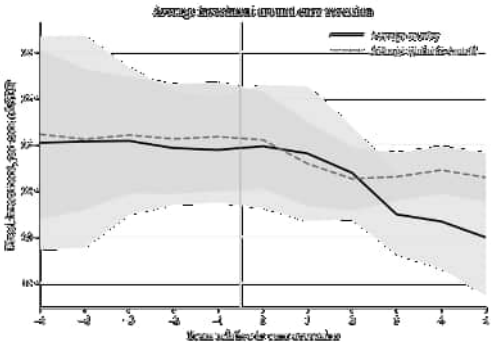
Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

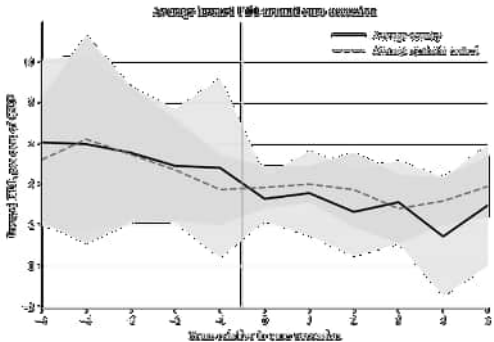
Malta, Lithuania and Estonia saw the largest estimated gains in euro area exports



Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

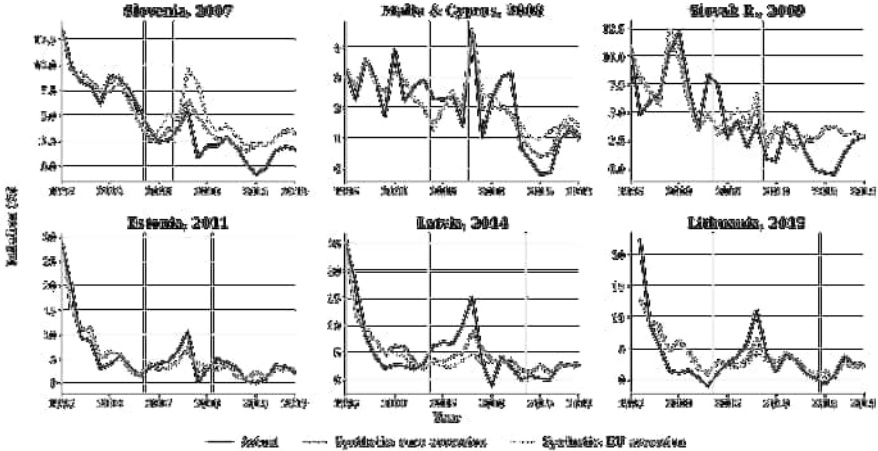
No effects on investment (gross fixed capital formation) or inward FDI: If anything, averages are below those of synthetic controls





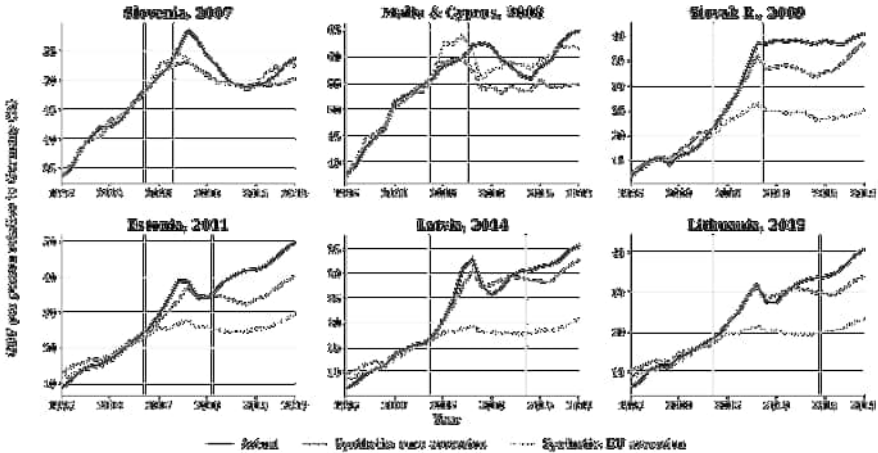
Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Country inflation paths with respect to the EU and euro accession dates



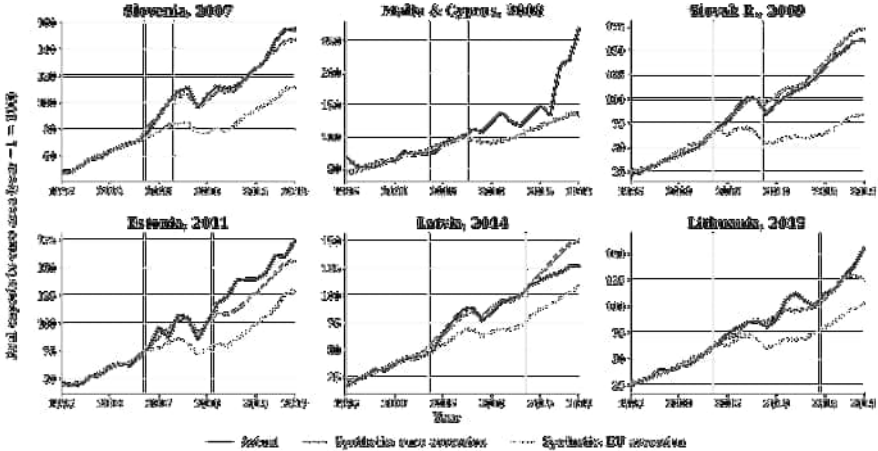
Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Country income paths: Income convergence already under way following EU accession



Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

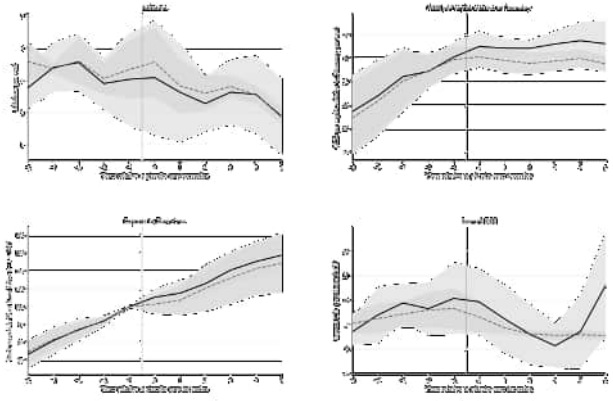
Country export paths: export gains following EU accession



Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Placebo estimates for Czechia, Hungary, Poland using plausible accession dates: Similar effects on income, inflation, euro-area exports but smaller in magnitude

- Assign each of Czechia, Hungary and Poland placebo dates of 2007, 2008, 2008, 2009, 2011, 2014, 2015
- Some of the effect may be delayed EU accession effect but major part of the euro accession bonus appears to be distinct

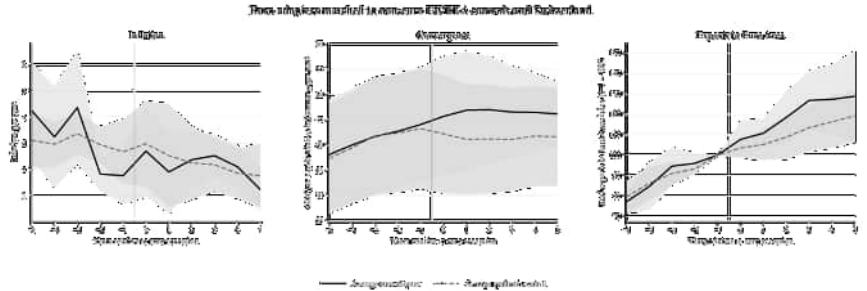


Mean gap, years 0–5

Outcome	Placebo	Adopters
Inflation (pp)	−0.20	−0.34
Income relative to Germany (pp)	1.32	5.15
Euro-area exports (index points)	3.87	9.20
Inward FDI (pp of GDP)	2.27	−0.74

Alternative donor pools

- Limit potentially eligible economies to single-market members (incl. Switzerland). Smaller pool versus sharper focus on EU vs euro effects
- Donor pools are small. Complementary estimates based on a global donor pool of 80 economies outside the single market with data for all variables



Source: authors' calculations based on IMF WEO, IMF IMTS, and World Bank WDI data.

Euro accession: Estimates across comparator pools are similar. Single-market comparators yield a smaller inflation effect; global comparator yield a smaller income pc effect

Mean gaps in years 0–5

Outcome	Potentially eligible to join euro	Single market	Global	Placebo
Inflation (pp)	−0.34	−0.12	−0.66	−0.20
Income relative to Germany (pp)	5.15	4.93	2.35	1.32
Euro-area exports (index points)	9.20	8.86	7.83	3.87
Other single-market exports	1.92	2.62	−17.74	−14.28
Rest-of-world exports (index points)	5.90	9.56	−1.86	−4.10
Inward FDI (pp of GDP)	−0.74	−0.20	−2.33	2.27
Fixed investment (pp of GDP)	−1.00	−0.87	−3.47	−1.27
Donor economies	16	12	80	13

Source: Authors' calculations using IMF WEO, IMF IMTS and World Bank WDI.
Note: Actual-minus-synthetic gaps. Export gaps are index points. Adopter FDI excludes Cyprus and Malta. Placebos average Czechia, Hungary and Poland across seven accession dates.

Conclusion

- Economies that entered the euro experienced subsequent declines in inflation relative to a plausible counterfactual
- Gains in terms of per capita income, in particular for lower-income and small open economies
- An increase in exports, in particular to other economies using the euro
- Placebo exercises and robustness checks suggest major part of these effects goes beyond what could be attributed to the delayed effects of the earlier accession to the EU and the associated economic integration and institution building
- The euro can be an effective tool that reinforces macroeconomic stability and lowers financial and trade frictions reinforcinig the benefits associated with supply chain integration and credible macroeconomic policies
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Baseline and single-market comparator economies

Potentially eligible for euro membership (16)	Single-market comparators (12)
Albania	Bulgaria
Bulgaria	Croatia
Croatia	Czechia
Czechia	Denmark
Denmark	Hungary
Hungary	Iceland
Iceland	Norway
Moldova	Poland
Norway	Romania
Poland	Sweden
Romania	Switzerland
Sweden	United Kingdom
Switzerland	
Türkiye	
Ukraine	
United Kingdom	

Global pool of comparator economies

Global donor pool (80 economies)				
Albania	Canada	Hong Kong SAR, China	Moldova	Sierra Leone
Algeria	Central African Rep.	India	Mongolia	Singapore
Armenia	Chad	Indonesia	Morocco	Solomon Islands
Australia	Chile	Iran	New Zealand	South Korea
Azerbaijan	Colombia	Israel	Niger	Sudan
Bahamas	Costa Rica	Japan	Oman	Tajikistan
Bahrain	Côte d'Ivoire	Kazakhstan	Pakistan	Tanzania
Bangladesh	DR Congo	Kenya	Panama	Thailand
Belarus	Dominican Rep.	Kyrgyz R.	Paraguay	Togo
Belize	Ecuador	Lebanon	Peru	Tunisia
Benin	Egypt	Madagascar	Republic of Congo	Türkiye
Brazil	Gabon	Malaysia	Russia	USA
Brunei	Ghana	Mali	Rwanda	Uganda
Burkina Faso	Guatemala	Mauritania	Saudi Arabia	Ukraine
Cambodia	Guinea-Bissau	Mauritius	Senegal	Uzbekistan
Cameroon	Honduras	Mexico	Seychelles	Vietnam

Euro accession net of delayed EU effects

Average effects in years 0–5

Variable	Baseline estimate	Estimated effect net of delayed impact of EU acession		
		Mid-point	Min	Max
Inflation, pp	−0.34	−0.13	−0.12	−0.22
Income pc, pp of Germany's	5.2	4.4	3.8	4.9
Euro-area exports, index points	9.2	7.1	5.3	8.9
Rest-of-the-world exports, index points	5.9	9.8	5.9	10.0

Source: Authors' calculations using IMF WEO, IMF IMTS and World Bank WDI.
Note: The table reports plausible values of average effects of the euro accession net of the delayed effect of the earlier accession to the EU. The calculations look at the estimates obtained using single-market comparators and baseline estimates net of placebo effects.

Slovak R. compared with the other euro entrants

Average effects in years 0–5

Outcome	Slovak R.	Other six, mean
Inflation (pp)	−0.7	−0.3
GDP per capita relative to Germany (pp)	+5.6	+5.1
Exports to euro area (index points)	−6.7	+11.8

Source: Authors' calculations using IMF WEO, IMF IMTS and World Bank WDI.
Note: Average actual-minus-synthetic gaps in years 0–5, using the 16-donor baseline. Other six excludes Slovak R.