The fragmentation of the European Digital Single Market

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Roundtable on The Digital Economy Amid Rising International Tensions

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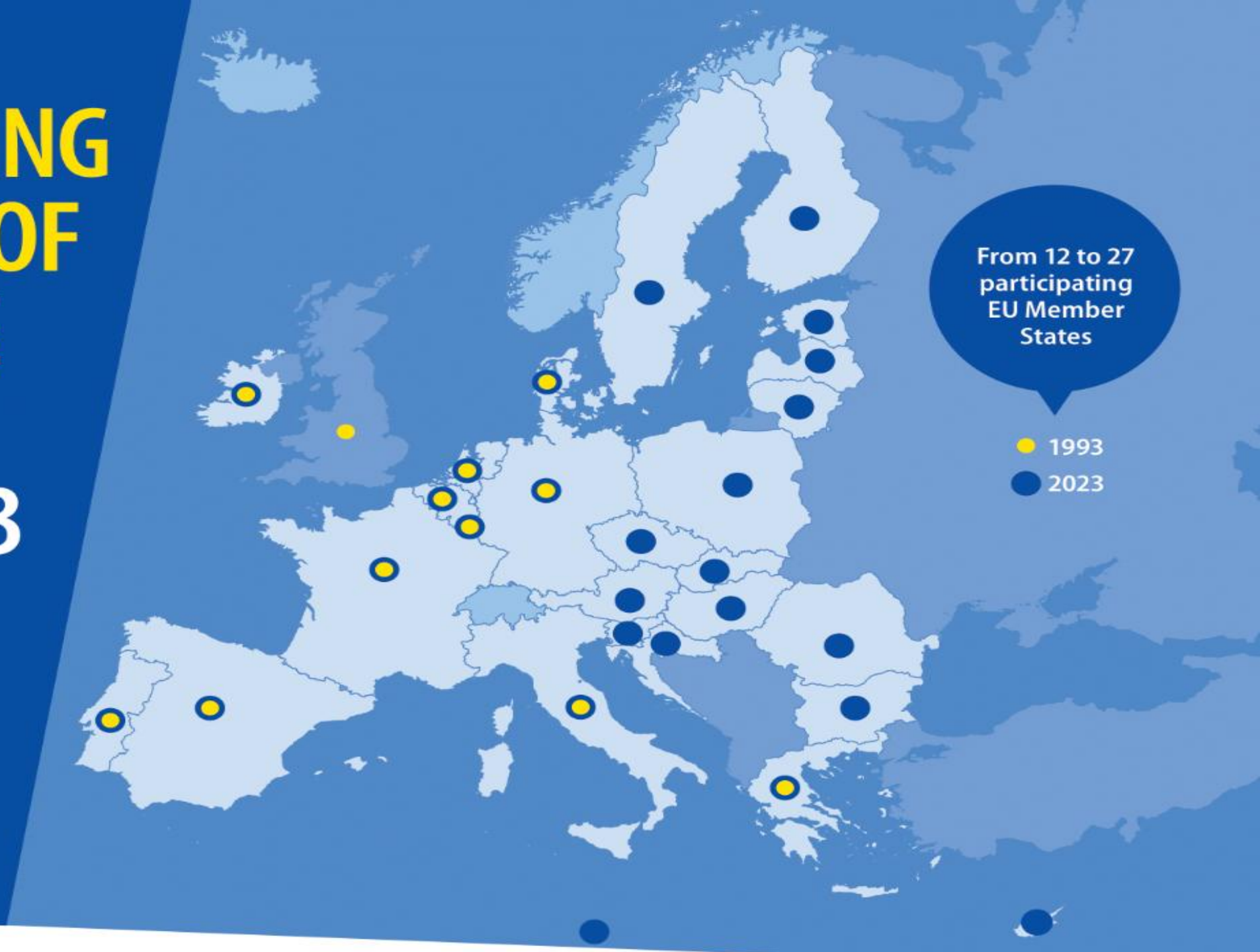
CELEBRATING 30 YEARS OF EU SINGLE MARKET 1993-2023

The EU in key figures



Market integration: definition

Definition: Cournot almost 200 years ago:

"*An entire territory of which the parts are so united by the relations of unrestricted commerce that prices take the same level throughout with ease and rapidity*").

In other words,

- The equilibrium level of prices must be equal (the law of one price) and
- Prices must return easily and quickly to this level after any shock.
  - Necessary but not sufficient; testing with different statistical tools

Market integration: testing

Apparently simple: what can be easier than comparing prices of the same good in two different locations at the same time?

However, results are likely to be seriously misleading:

- If the two locations trade
  - The law would almost always be violated, even for perfectly homogeneous goods.
  - The price differential in any given time would be at least equal to transaction costs
- If the two locations do not trade
  - The difference may move randomly or be determined by trading with a third market

Market integration: relaxing conditions

Define a market as integrated if

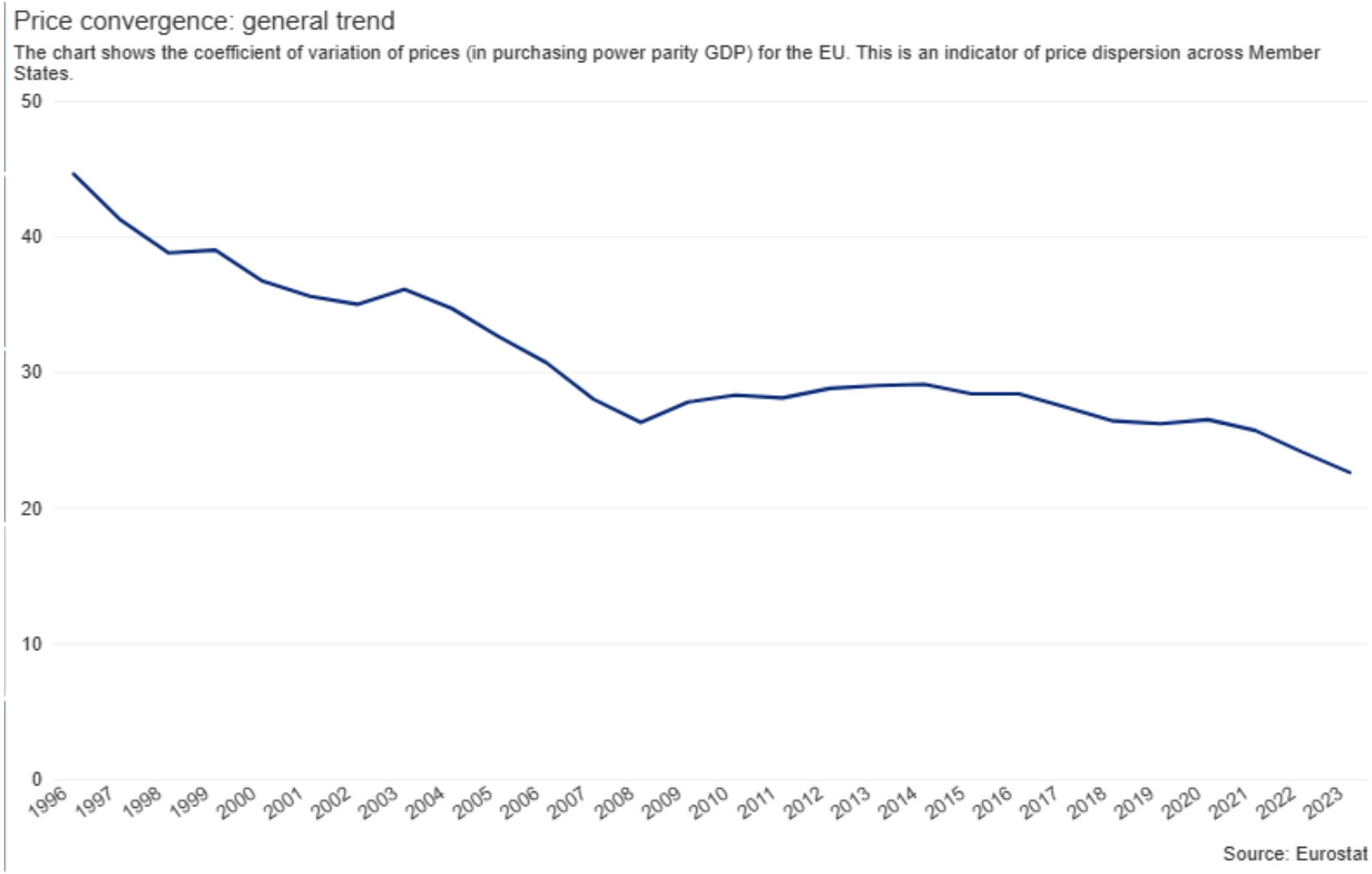
- Violations are small or,
- The price gap is equal to transaction costs or,
- The price gap between two locations shrinks (price convergence).

But:

- Any threshold for small violations would be unavoidably arbitrary
- Computing all transaction costs is a challenging task (to say the least)
- Data availability complicates empirical testing

Solution: measure price convergence (coefficient of variation) across all locations in each time period.

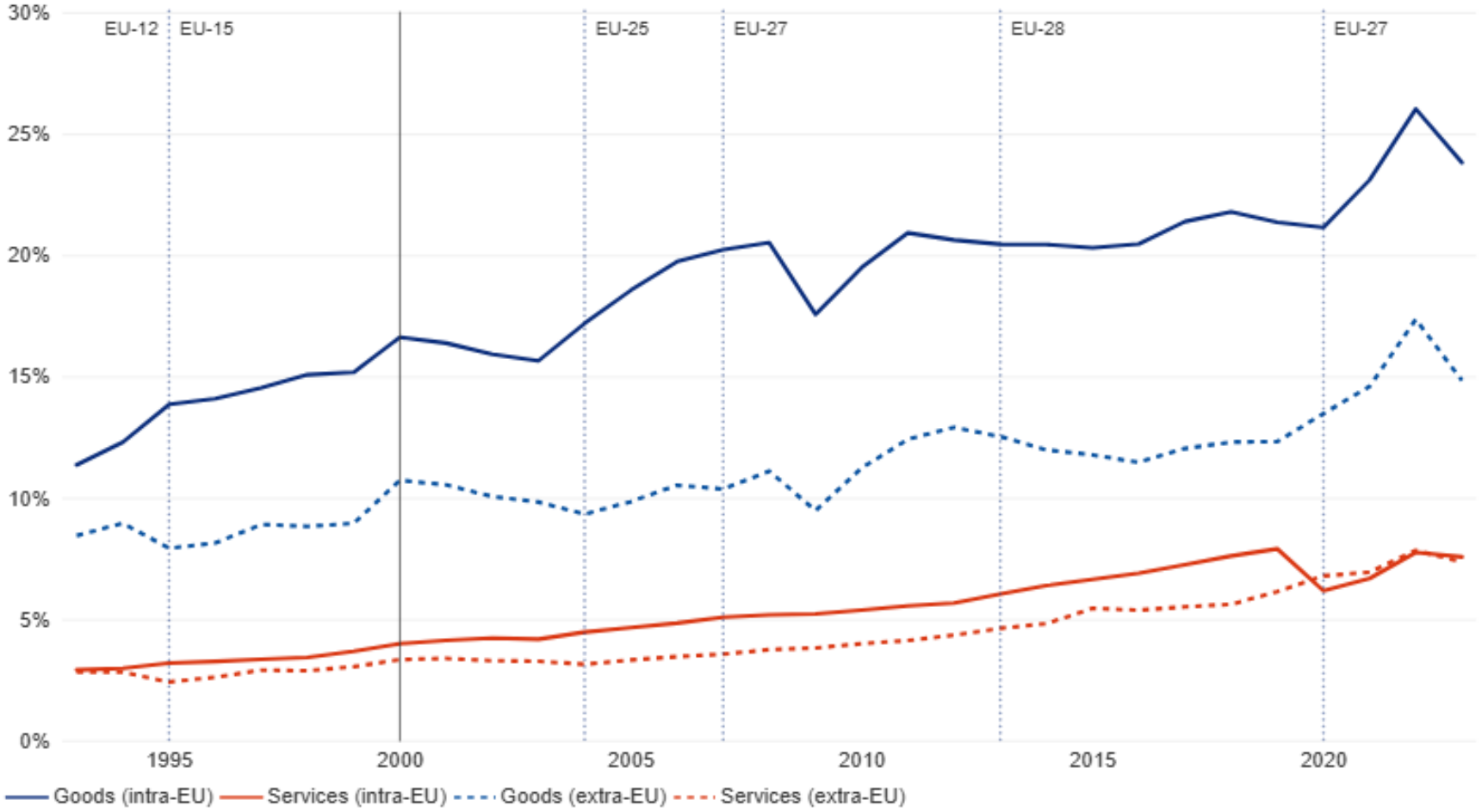
Market integration: evidence



Market integration: evidence

Integration in the single market and in the rest of the world: trade over GDP

The chart below shows the trend in the EU's trade flows in goods and services within the EU and with the rest of the world as a share of total EU GDP between 1993 and 2022.



Source: Eurostat [bop_c6_a, bop_its_deth, bop_its_det, bop_its6_det, COMEXT]

Traditional vs. digital markets

Are Digital Markets more integrated?

Traditional markets show varying degree of integration, as evident from:

- Sometimes large and persistent deviations from the LOP
- Varying speeds of convergence to the LOP

Online distribution or “e-commerce” creates the potential of increased arbitrage opportunities or market integration:

- Reduced search and shopping costs, but...
- Restrictive practices by manufacturers and retailers (geo-blocking, algorithmic pricing and recommendation)

(1) Drivers of cross-border e-commerce

Distance-related trade costs are greatly reduced compared to offline trade.

There is a strong increase in trade costs related to crossing linguistic borders.

The efficiency of online payments systems is an important driver for EU online trade.

Home bias is not significantly different in online markets compared to offline trade.

Gomez-Herrera et al. (2014), The drivers and impediments for cross-border e-commerce in the EU, Information Economics and Policy, 28 p. 83-96.

(2) Price convergence offline vs. online

Using rich data (at product level), document convergence to LOP for products sold both offline and online.

Both long-term price differences and speed of convergence are comparable for offline and online.

- This suggests local distribution costs are not responsible for price differences.
- Instead there is pricing to market.

Distance and common border play no role, common currency does

Duch-Brown et al. (2021), Are online markets more integrated than traditional markets? Evidence from consumer electronics. Journal of International Economics, 2021, 131, pp.103476.

(3) Removing geo-blocking

GB restricts consumers' access to online products/services based on location

Empirical analysis using website traffic as a proxy for trade

Impact of GBR: +4.7% cross-border visits (EU: +3.4%; Others: +7.1%)

Robustness: look at top websites. Tot: +**5.0**%; EU: +2.8%; Other: +7.6%

Most traffic goes to a few dominant domains (Ex: Amazon, Aliexpress, eBay dominate cross-border and domestic clicks)

Alaveras, G., Duch Brown, N. and Martens, B., Geo-blocking regulation: an assessment of its impact on the EU Digital Single Market, European Commission, 2020, JRC121480.

(4) Impact of further online market integration

Simulation accounting for substitution across distribution channels, cross-border arbitrage, and remaining shipping costs.

The ban on geoblocking could led to:

- Significant distributional effects, benefiting high-income consumers more than others
- Modest total EU welfare gains unless product choice expanded
- Total welfare benefits were substantial with potential for larger gains as e-commerce grows.

Duch-Brown, Néstor, Lukasz Grzybowski, André Romahn, and Frank Verboven. 2023. "Evaluating the Impact of Online Market Integration—Evidence from the EU Portable PC Market." American Economic Journal: Microeconomics 15 (4): 268–305.

DSM: rising tensions?

DSA/DMA:

- Role of big platforms (they drive online market integration)
- Systemic risks: trade off between fundamental rights and competitiveness

Data:

- Frictions in digital markets come from data flows restrictions.

AI:

- Agentic AI: AI-enhanced recommender systems (Amazon’s RUFUS)

Final remarks

Assessing market integration is a complex task

There is no (hard) evidence that online markets are more integrated than traditional markets

Further online integration may have important distributional effects, but high welfare gains based on “preference for variety”

Emerging risks may hinder the evolution of (cross-border) e-commerce as it is fundamentally driven by non-EU digital platforms

Thank you!