



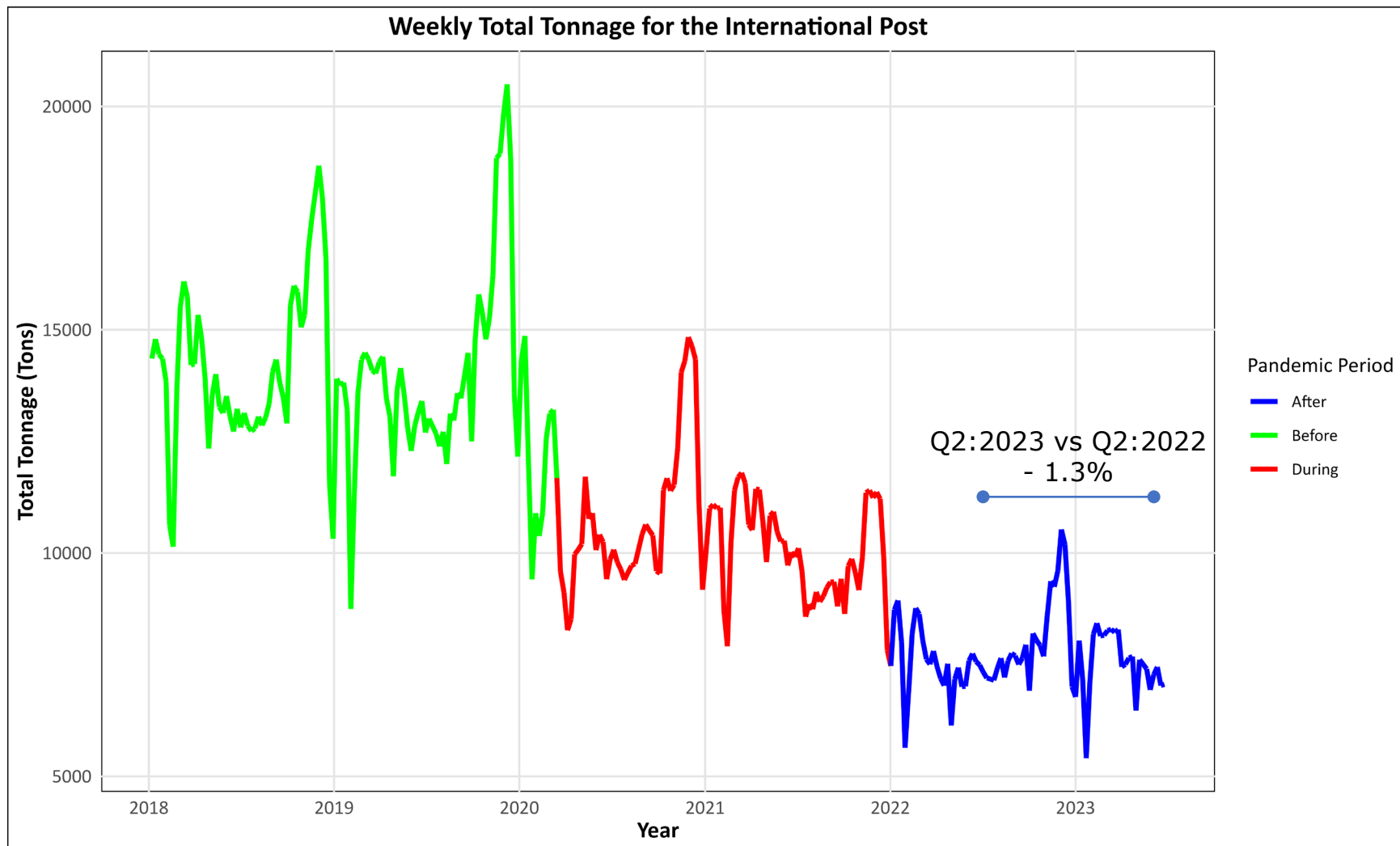
Trends and drivers of international postal volumes

Dr. José Anson, UPU KCTT

20th Königswinter Postal Seminar, 14th November 2023



Before and after COVID-19: international postal tonnage



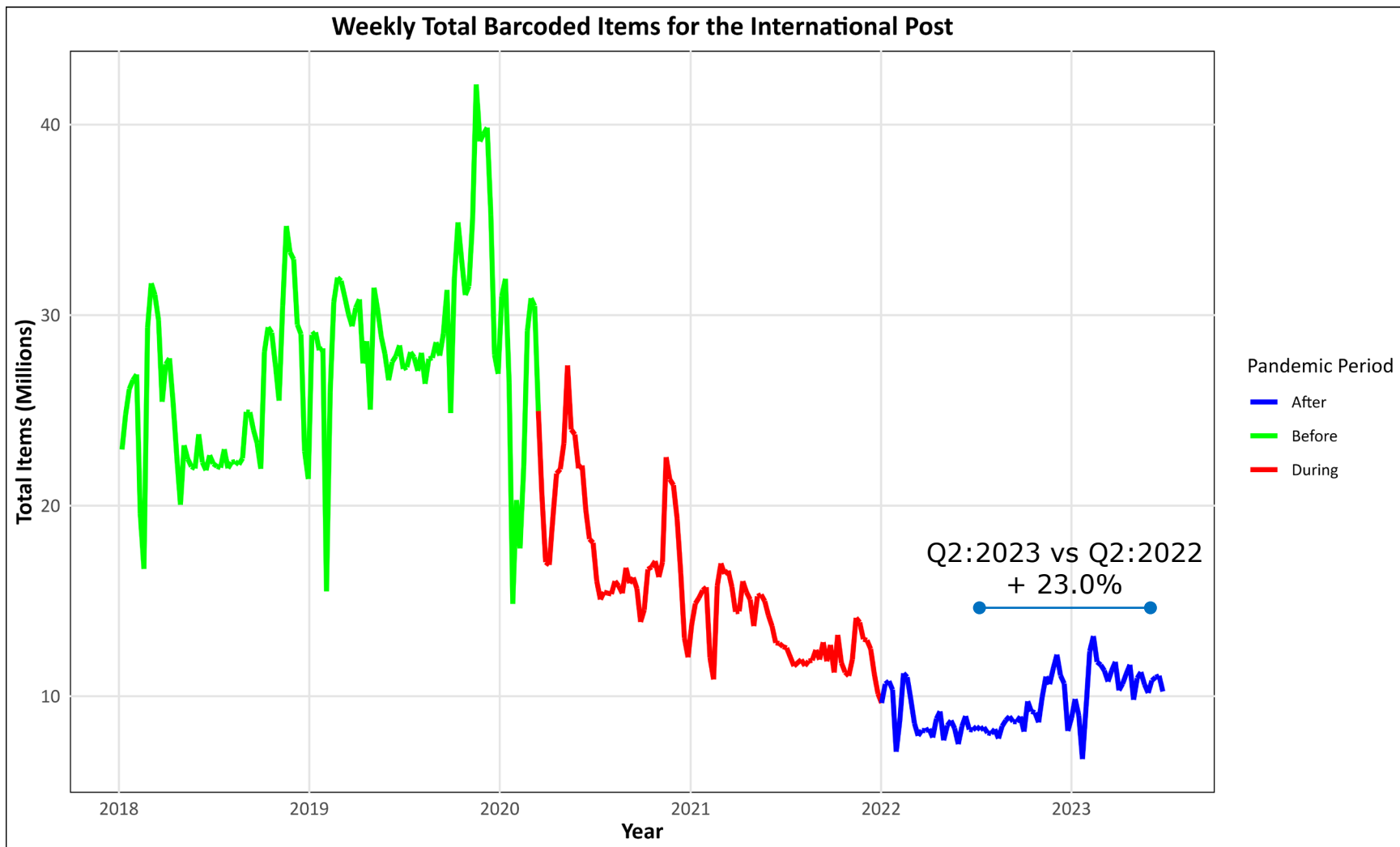
Q2:2023 vs Q2:2019
- **44.5%**

No strong post-pandemic recovery in total international postal tonnage yet.

What underlying **structural issues** might hinder a significant rebound in international postal volumes?



Before and after COVID-19: international postal items



Source: UPU Postal Big Data and UPU KCTT modelling and calculations

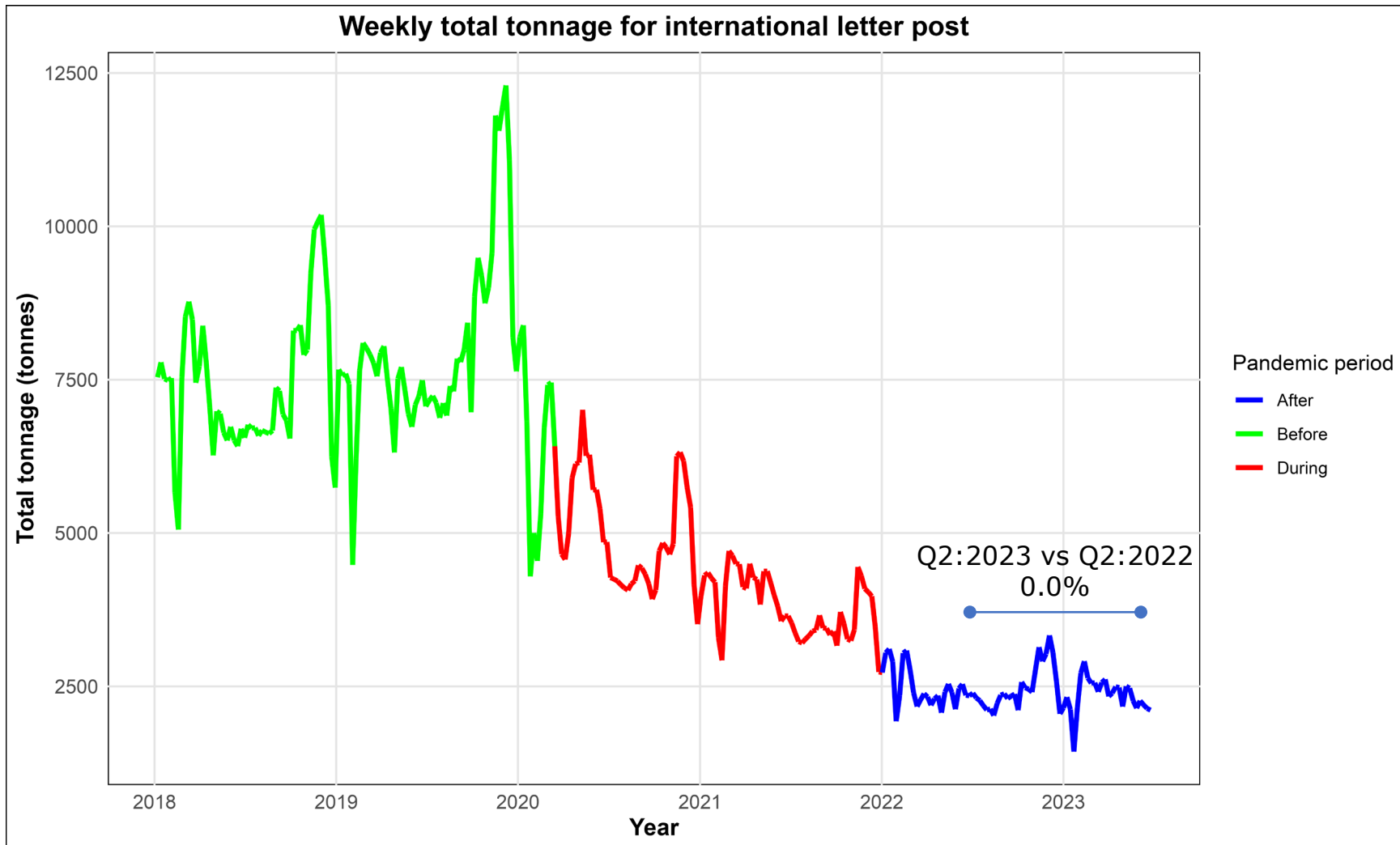
Q2:2023 vs Q2:2019
- **62.0%**

No strong post-pandemic recovery in total number of international postal items, although the beginning of a slight recovery can be observed in 2023.

Lightweight items experienced the **greatest impact** from the 2020–2022 disruptions.



Before and after COVID-19: international letter post tonnage



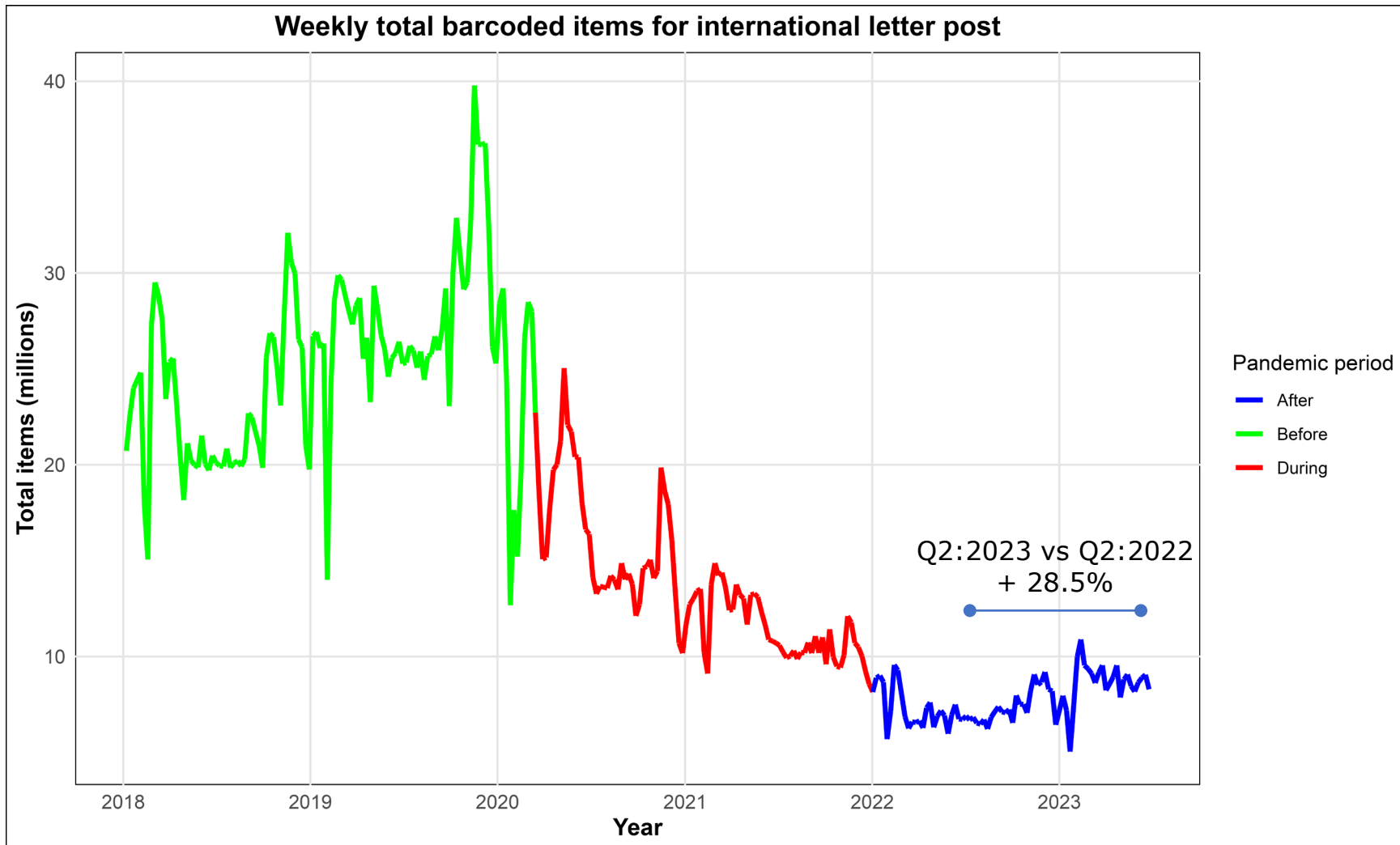
Q2:2023 vs Q2:2019
- **68.1%**

No strong post-pandemic recovery in international letter-post tonnage.

The **largest tonnage decline** across the three main mail classes U, C and E: specific structural issues undermining traffic recovery after COVID-19?



Before and after COVID-19: international letter post items



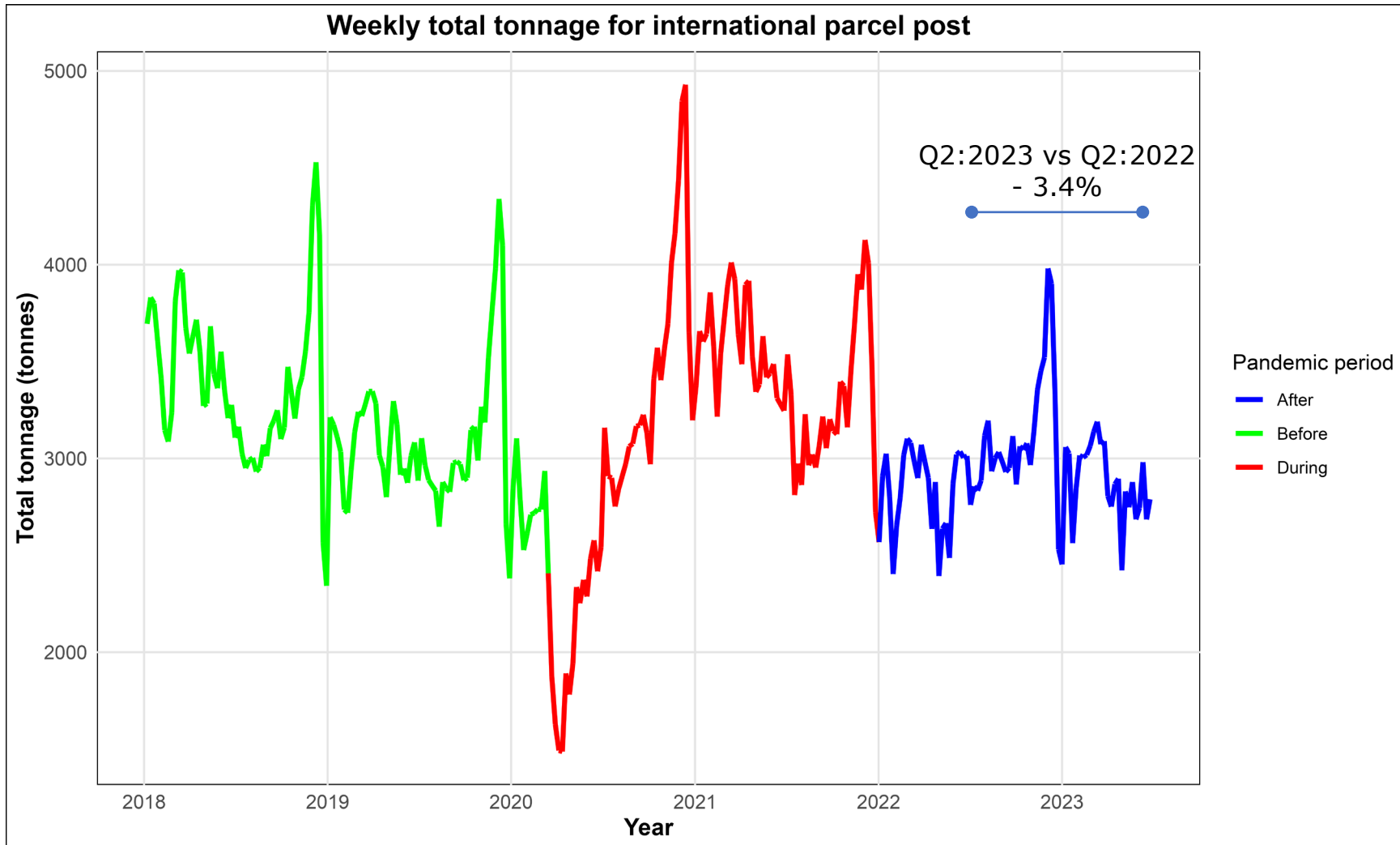
Q2:2023 vs Q2:2019
- **67.1%**

No strong post-pandemic recovery in the total number of international letter-post items.

Items experienced a **slight rebound in H1:2023** compared to H1:2022. Could this signal a **more robust recovery in H2:2023?**



Before and after COVID-19: international parcel post tonnage



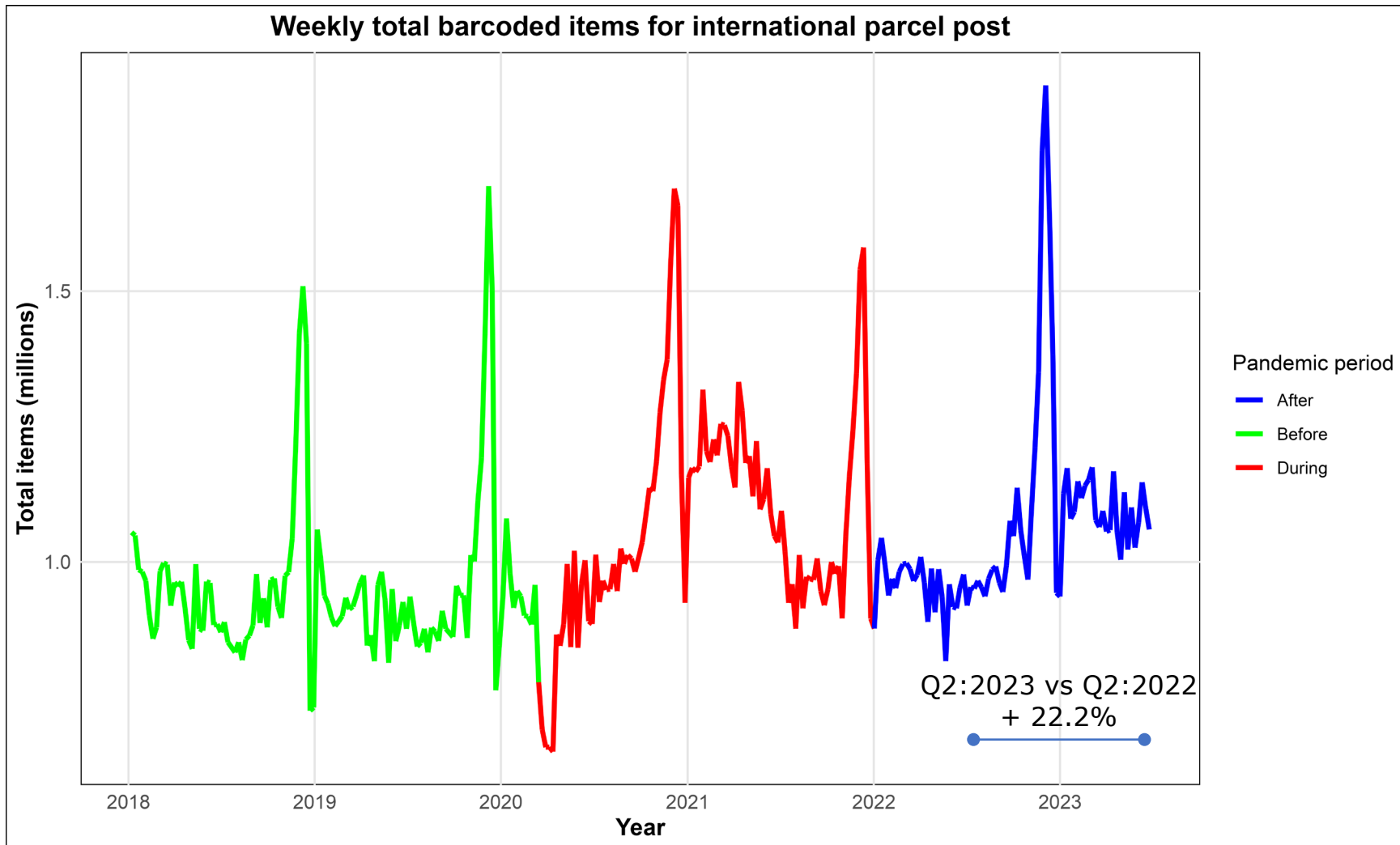
Q2:2023 vs Q2:2019
- **8.2%**

Almost back to pre-pandemic international parcel post tonnage.

This mail class now holds the **largest share** of total international postal tonnage in H1:2023. But **why is international parcel post the most resilient** of all mail classes?



Before and after COVID-19: international parcel post items



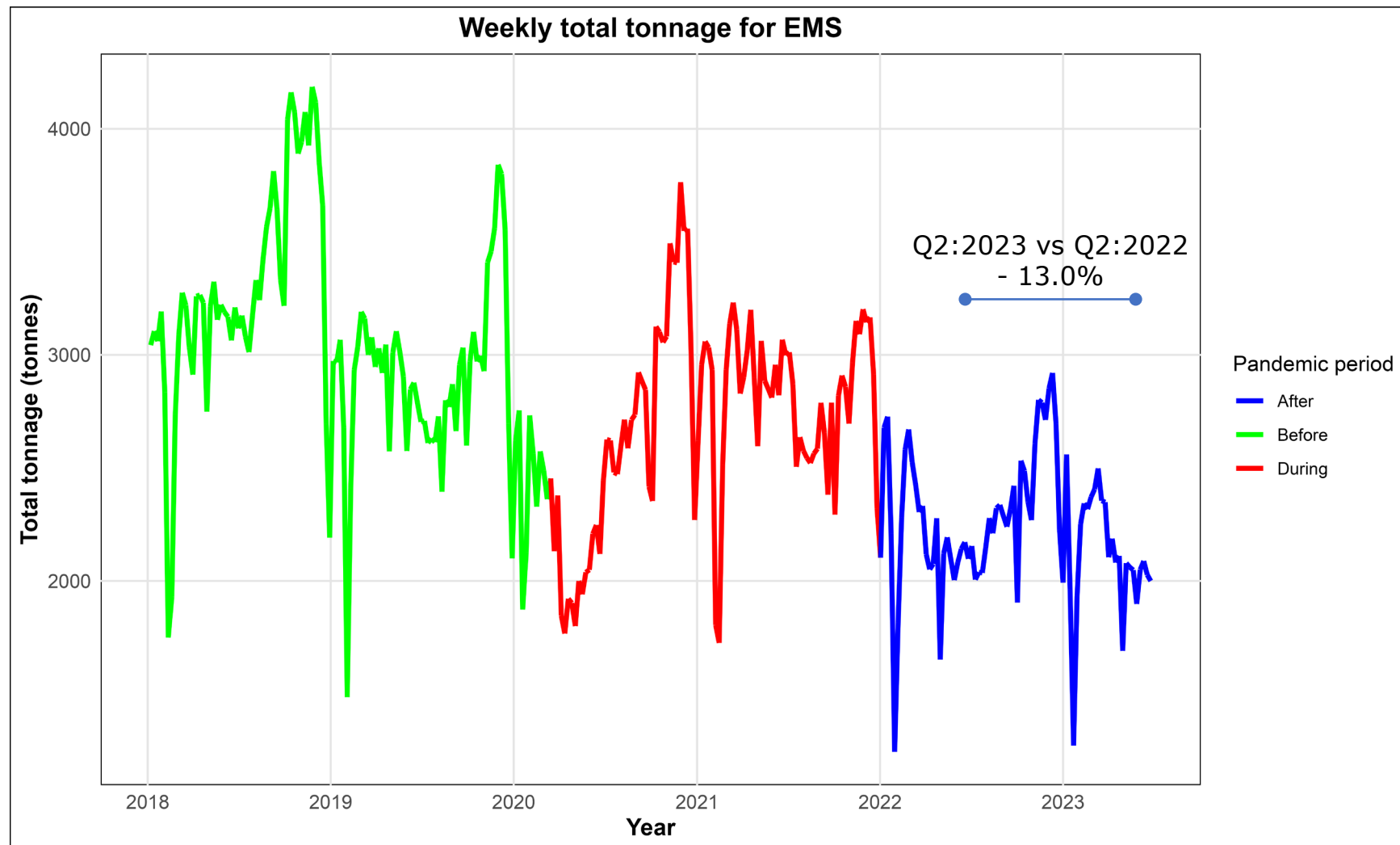
Q2:2023 vs Q2:2019
+ 19.9%

Strong post-pandemic recovery in international parcel post volumes, yet still relatively small share of total international postal items.

What distinguishes international parcel post from other mail classes, making it more resilient to the 2020–2022 disruptions?



Before and after COVID-19: international EMS tonnage



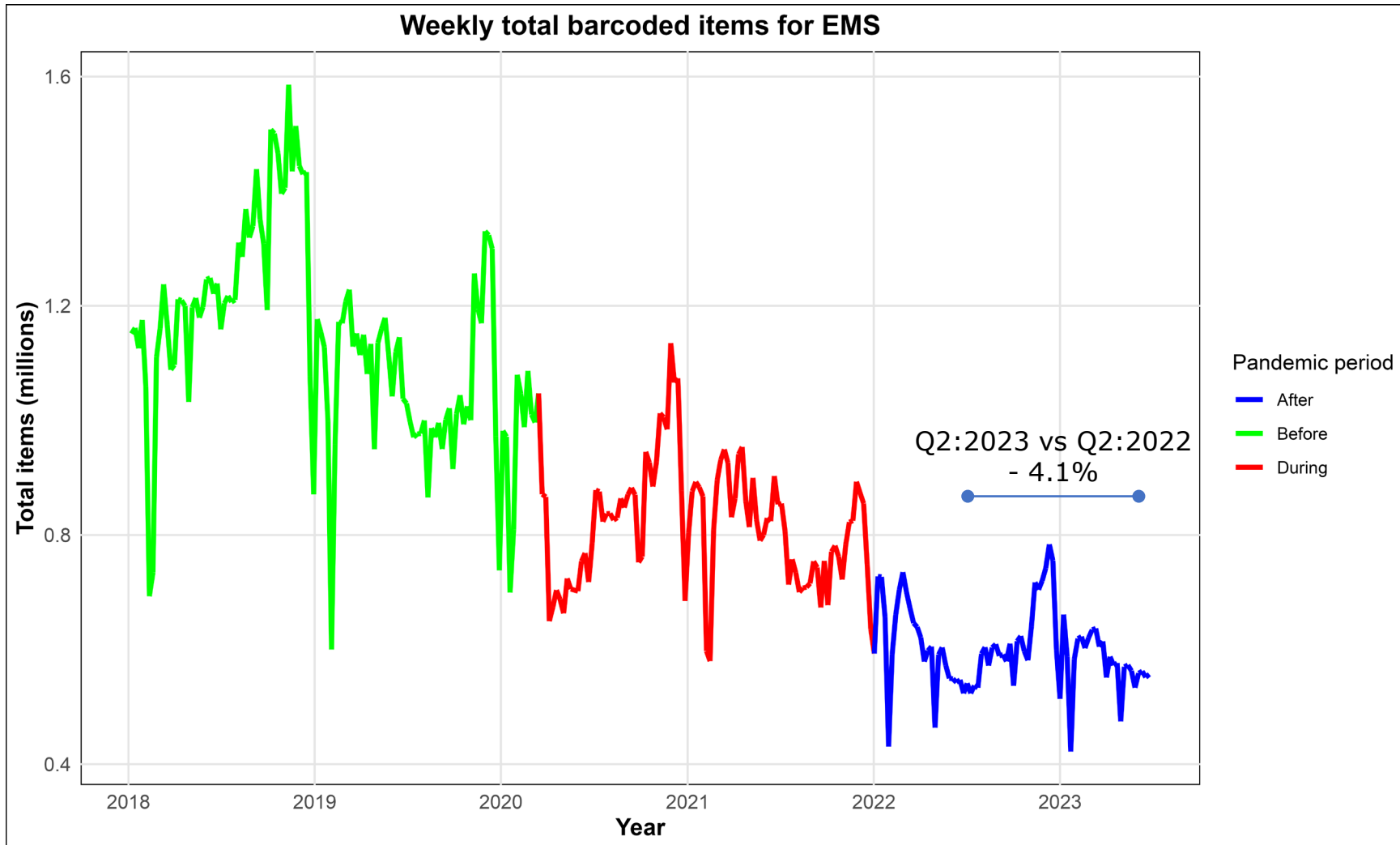
Q2:2023 vs Q2:2019
- **29.3%**

No strong post-pandemic recovery in international EMS tonnage.

Premium services such as EMS may be the **most affected by recent macroeconomic headwinds** (e.g. global inflationary pressure), but other structural problems are probably also playing a role.



Before and after COVID-19: international EMS items



Q2:2023 vs Q2:2019
- 49.3%

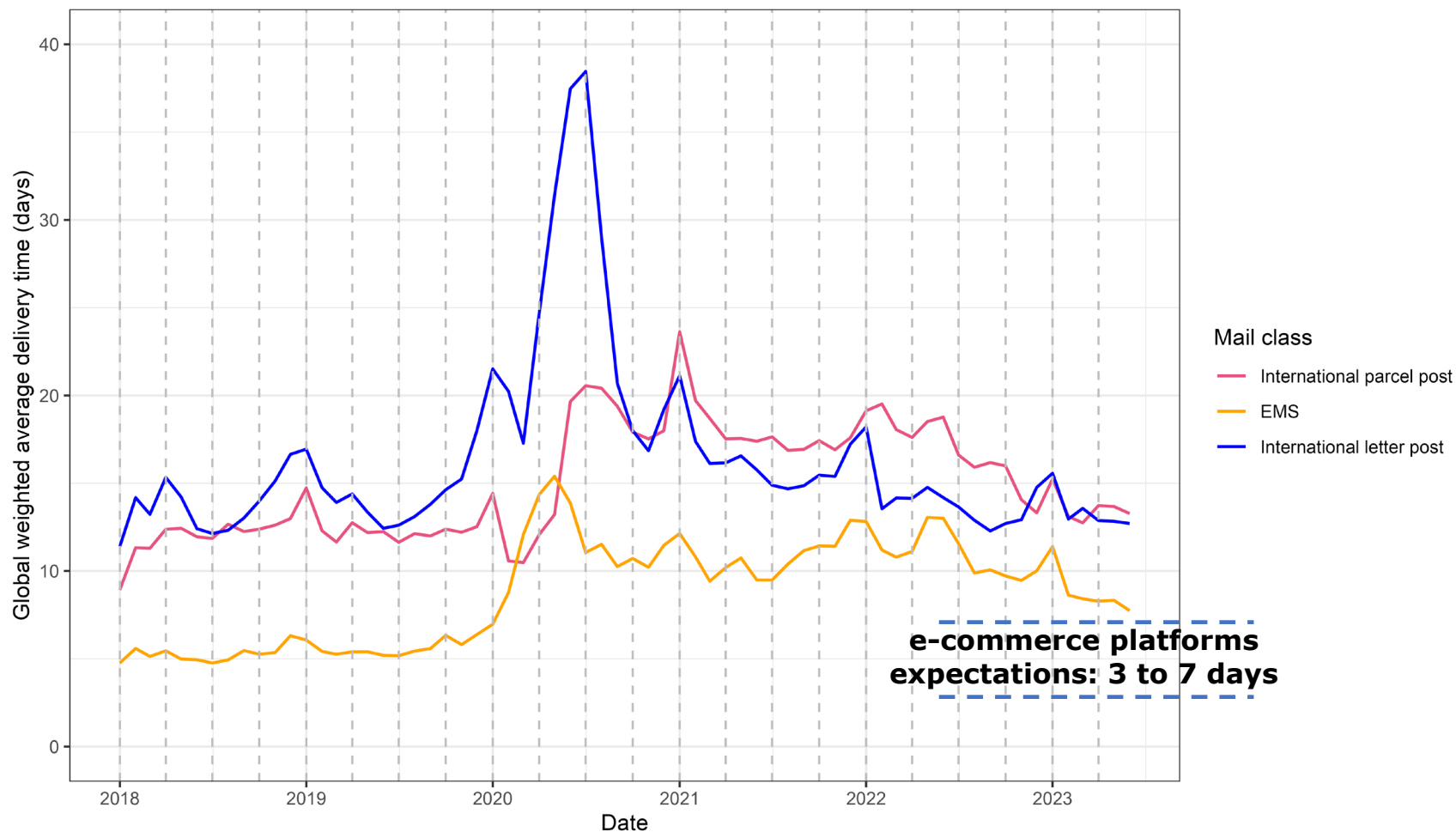
The lack of strong post-pandemic recovery **even more striking for the total number of EMS items.**

Situation further deteriorated in H1:2023 compared to H1:2022. It's imperative for EMS to **identify new avenues for volume growth** and address any structural impediments.



First key structural issue: end-to-end delivery times

Global evolution of weighted average delivery time (in days) over time (bi-weekly basis)



End-to-end elapsed delivery times **almost back to pre-pandemic levels for international letter post and parcel post:** around 13 days

Not back to pre-pandemic delivery performance for EMS: around 8 days in H1:2023 compared to 5 days in H1:2019.

Smallest difference between EMS and other mail classes.

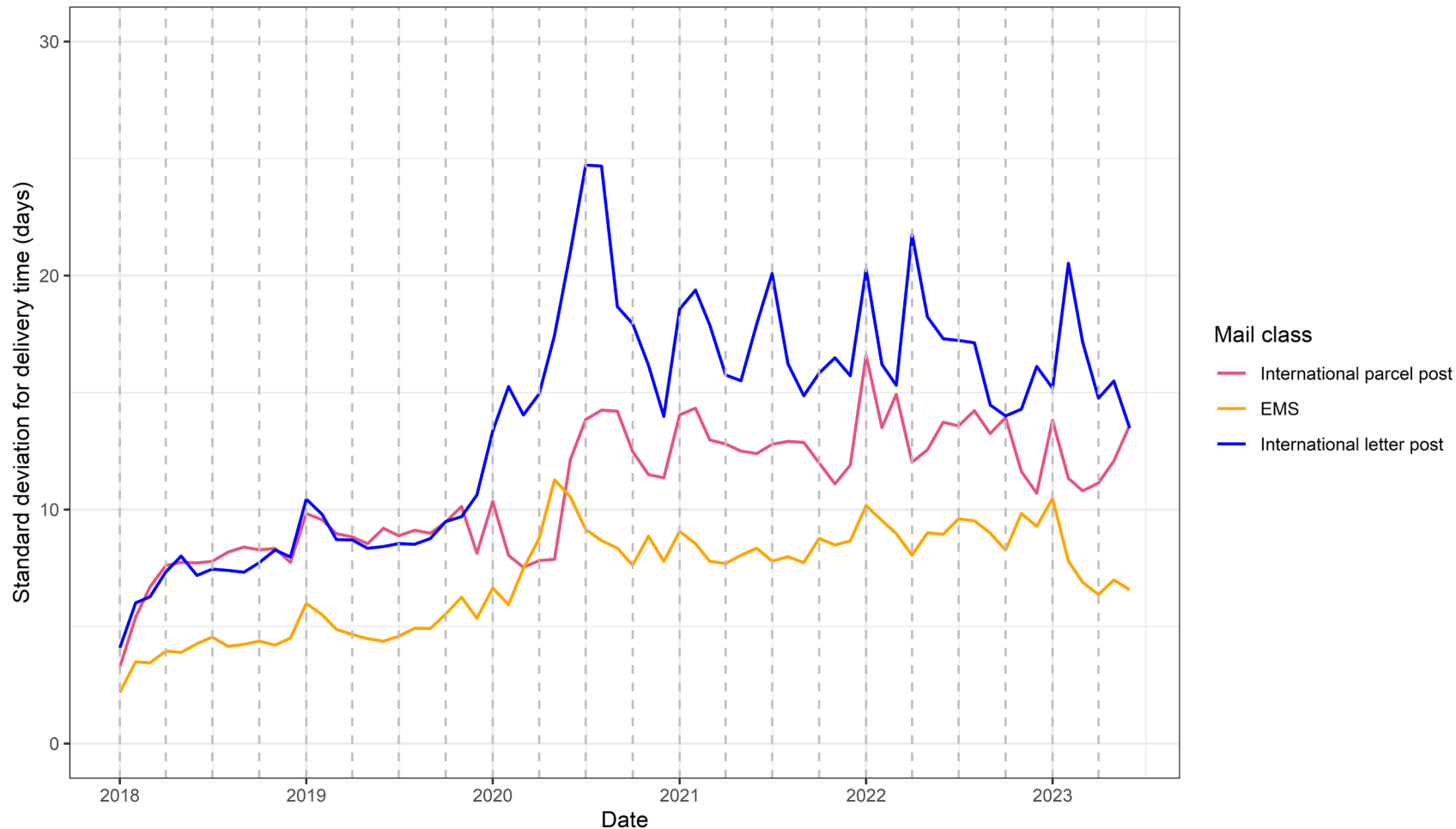
Source: UPU Postal Big Data and UPU KCTT modelling and calculations

Note: End-to-end elapsed delivery time (difference between event A and first delivery attempt, i.e. $\min(\text{event H}, \text{event I})$), shipper's view without removing time in customs or weekends



Second key structural issue: international delivery reliability

Evolution of the variation of delivery times (in days) over time (bi-weekly basis)



Post-pandemic reliability challenge.

End-to-end **delivery times predictability not at pre-pandemic levels:**

± 13 days for letter and parcel post; ± 7 days for EMS (Q2:2023).

COVID-19 **outbreak most impacted letter post** predictability.

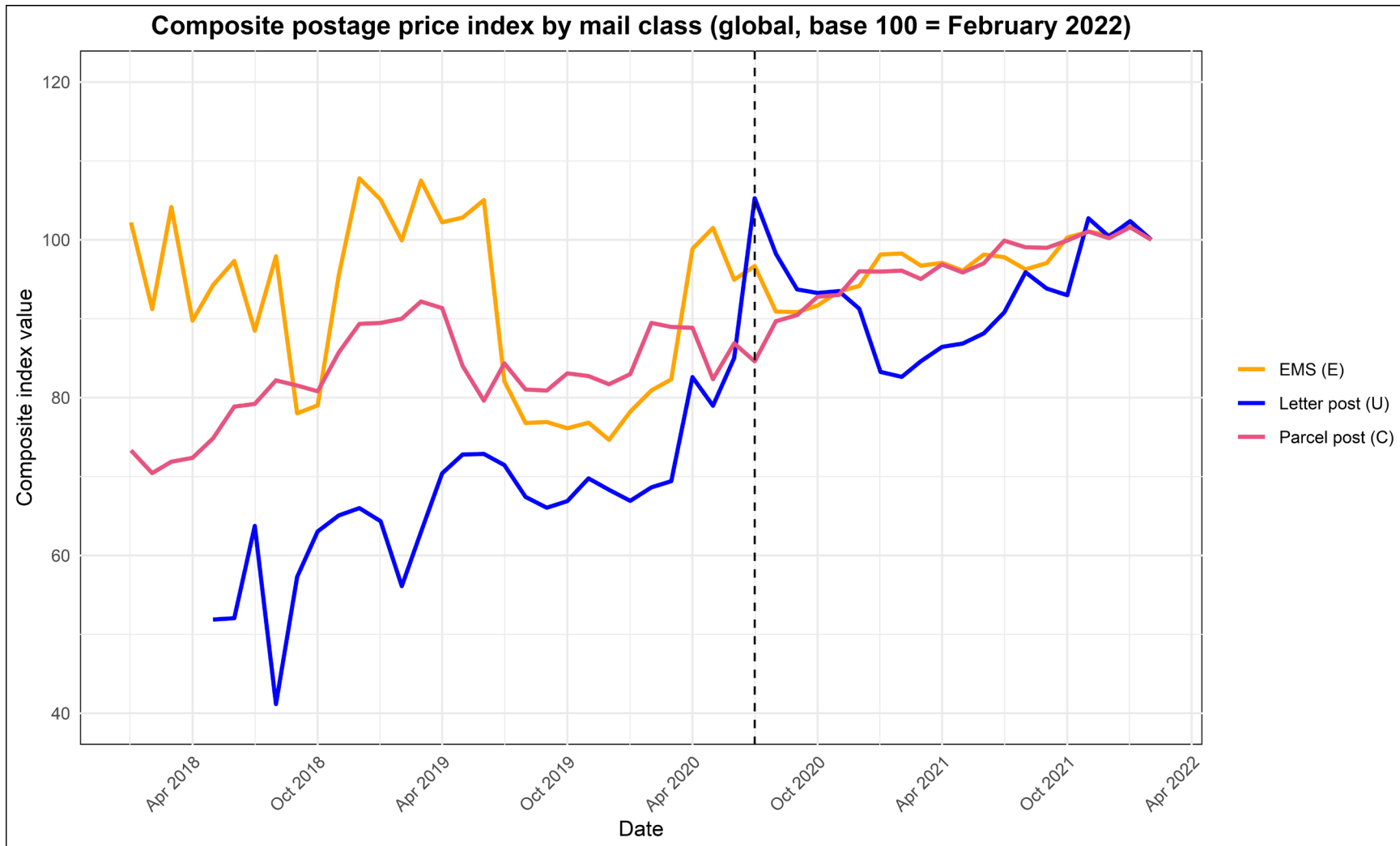
What's preventing return to the pre-pandemic performance?

Source: UPU Postal Big Data and UPU KCTT modelling and calculations

Note: End-to-end elapsed delivery time (difference between event A and first delivery attempt, i.e. $\min(\text{event H}, \text{event I})$), shipper's view without removing time in customs or weekends



Third key structural issue: international postal pricing



International letter-post postage prices increased by almost 100% between May 2018 and Feb 2022. Maximum in Jul 2021 coinciding with new US self-declared TD rates.

Parcel post rates increased **by 35% only** since Jan 2018.

EMS prices up by 33% between Dec 2019 and Feb 2022.

Source: UPU Postal Big Data and UPU KCTT modelling and calculations
Note: 1.8 billion actual postage prices analyzed in ITMATT messages



Fourth key structural issue: “TD to prices” pass-through



Use case: **pass-through analysis of the US self-declared TD rates.**

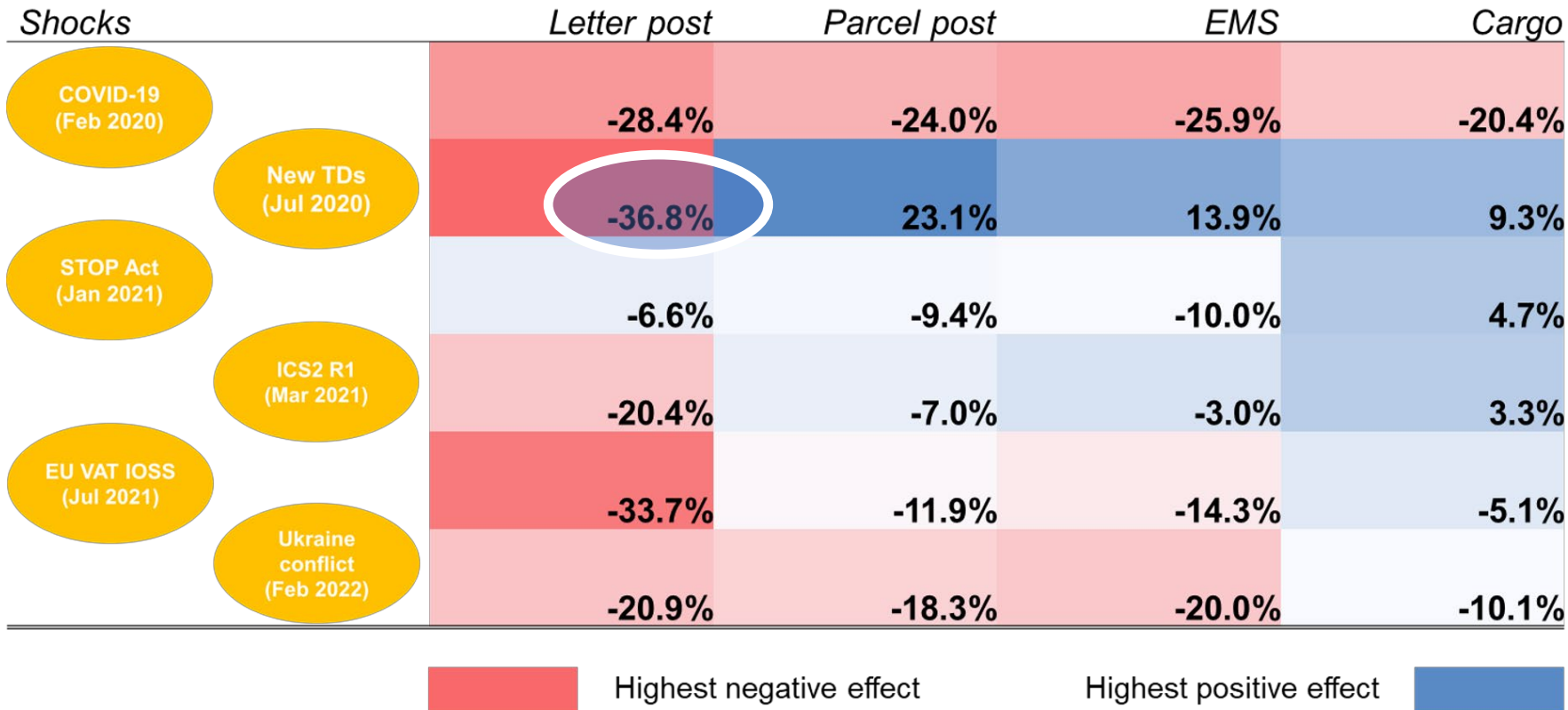
One would have **expected price increases to be limited to flows from G3 to G1.**

Reality: **price increases observed from G1 to G1, from G1 to G3, from G1 to G4, from G3 to G1, from G4 to G3 and from G4 to G4.**



Consistency with econometrics: impacts far beyond COVID-19

Average marginal effects on international volumes



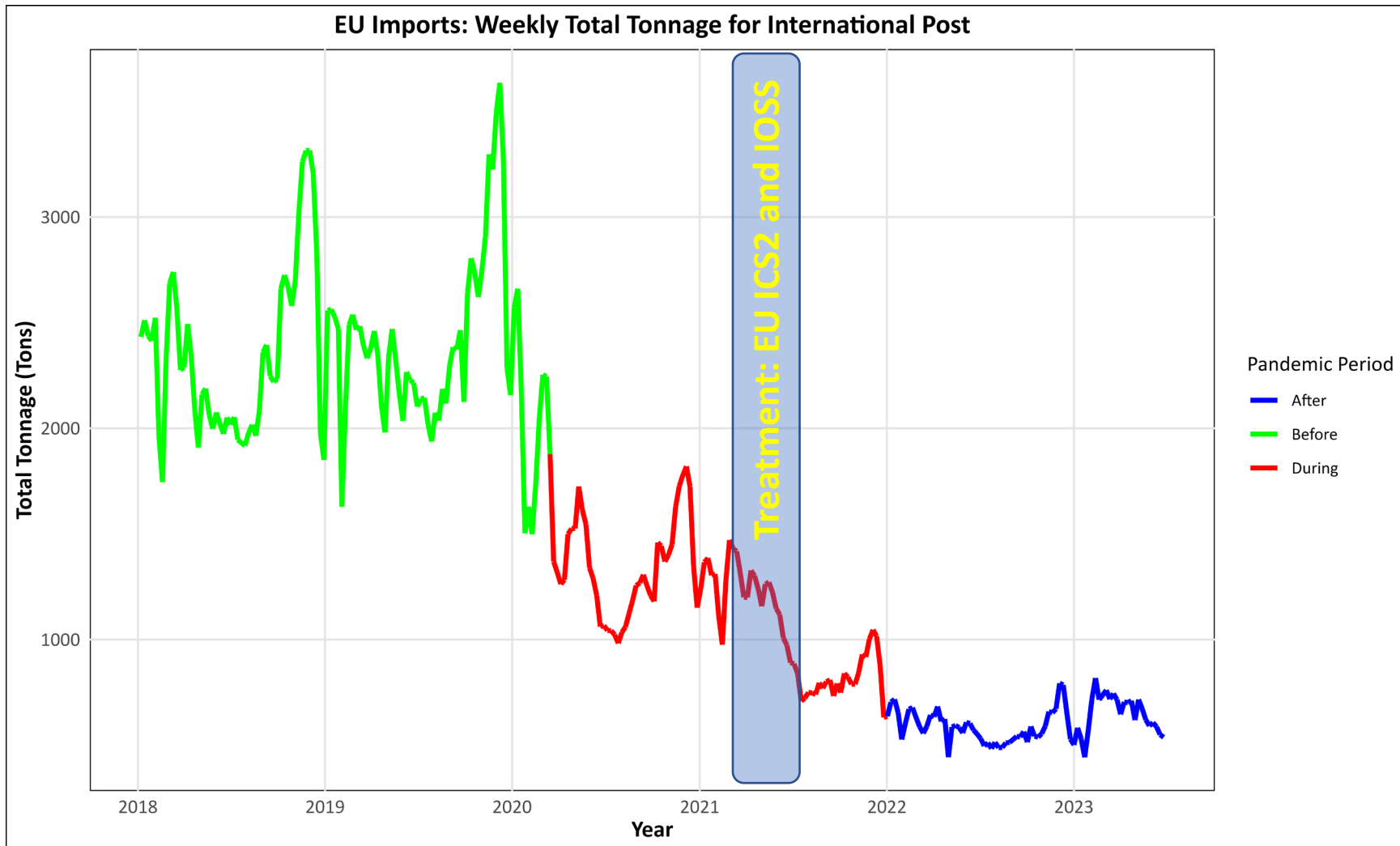
Once controlled for all shocks, **change in TD regime in July 2020** was having the **largest single negative marginal impact of all factors** under consideration.

Eco-systemic effects generated by changes in TD rates.

Source: UPU KCTT econometric modelling (Arellano-Bond dynamic panel data) and calculations for the 2018-2022 period (more than 5,000 bilateral flows on a monthly basis)



Fifth key structural issue: EU-27 inbound post-EAD & VAT



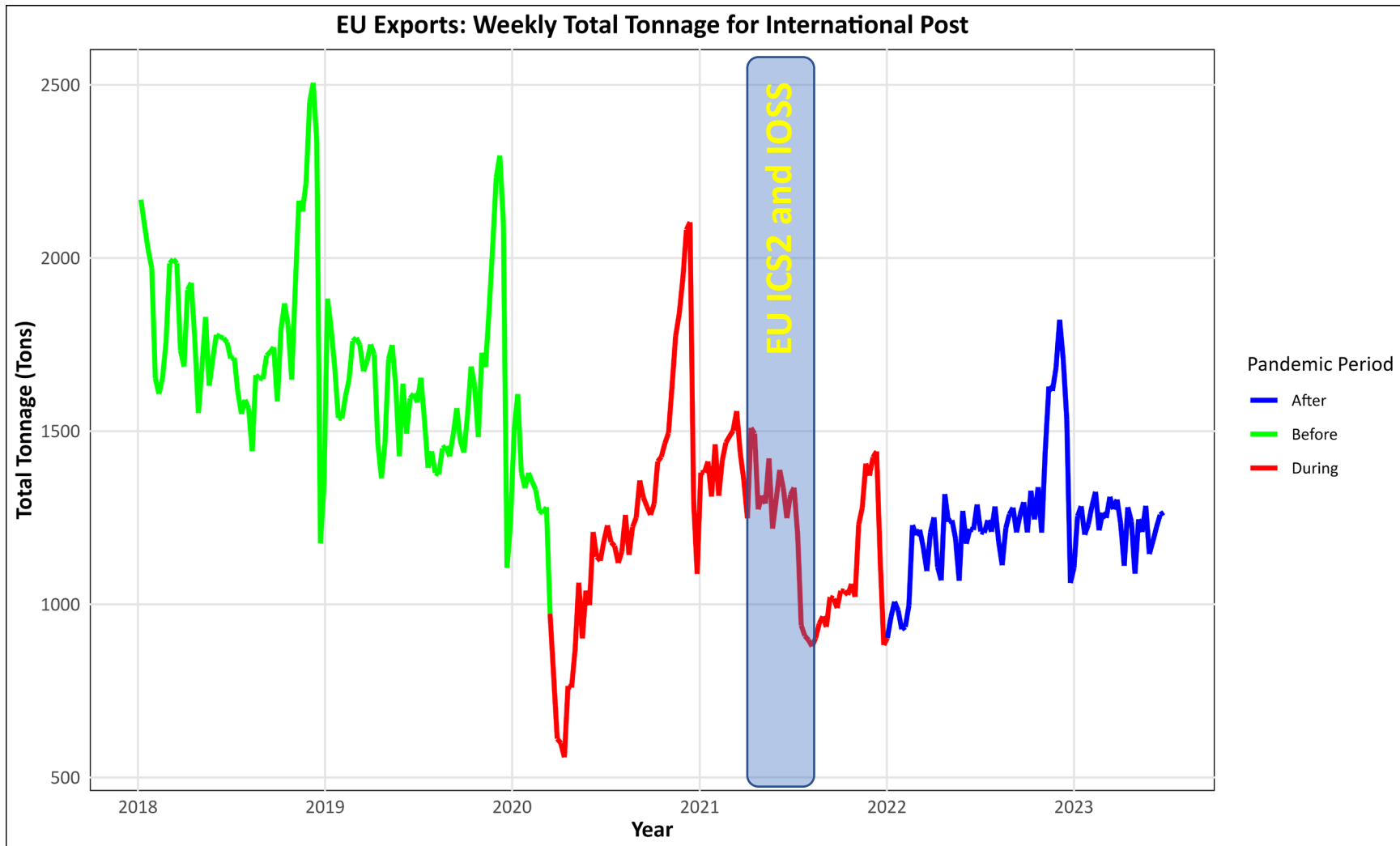
Q2:2023 vs Q2:2019
- **71.5%**

No strong post-pandemic recovery in EU-27 international postal inbound volumes.

The impacts of the introduction of new EU-27 border security regulations – **ICS2 R1** – and VAT taxation – **IOSS** – regime **on e-commerce imports were negative.**



Sixth key structural issue: EU-27 outbound post-EAD & VAT



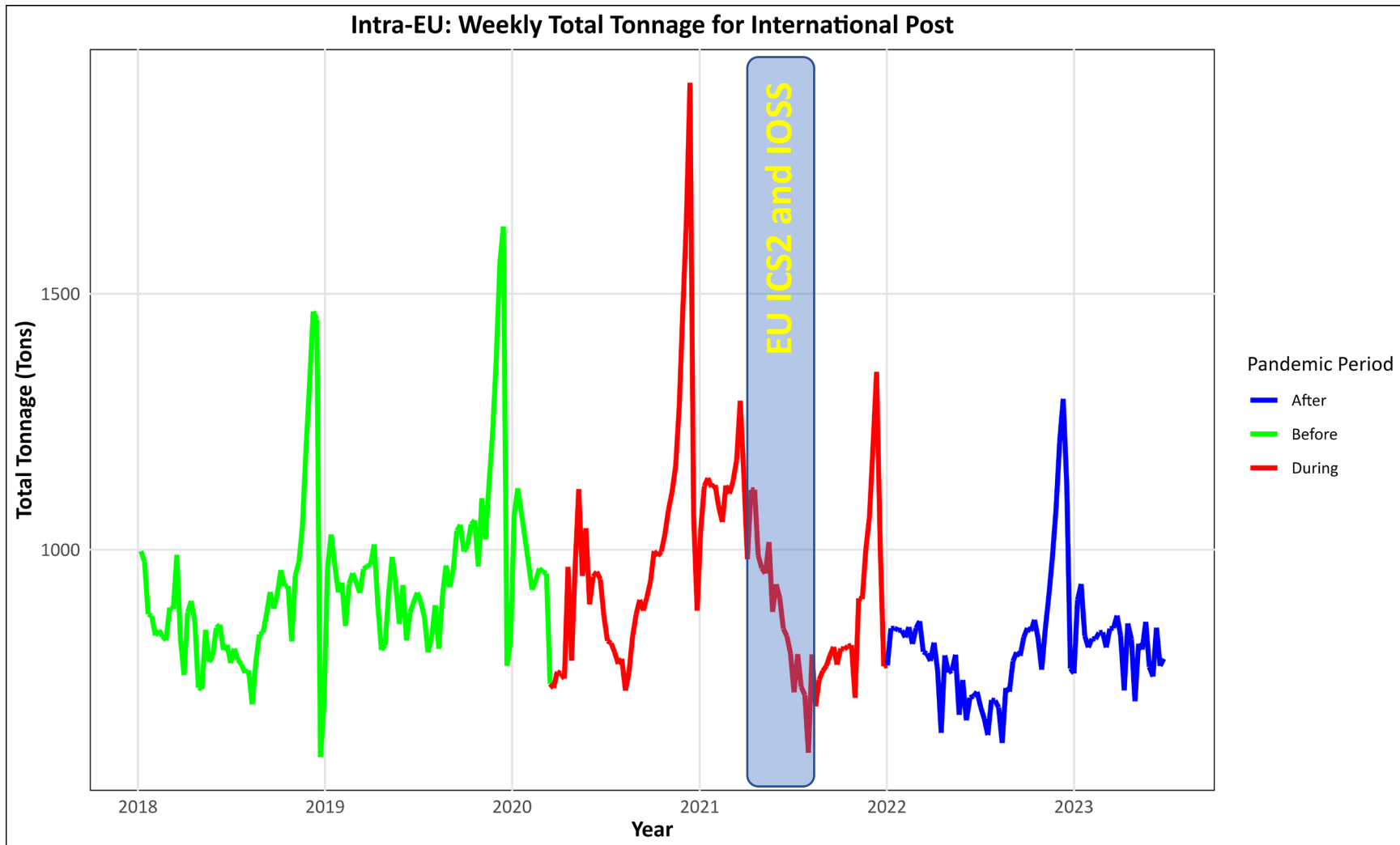
Q2:2023 vs Q2:2019
- **22.9%**

No strong post-pandemic recovery in EU-27 international postal outbound volumes.

The impacts of the introduction of new EU-27 border security regulations – **ICS2 R1** – and VAT taxation – **IOSS** – regime **on e-commerce exports were also negative!**



Seventh key structural issue: Intra EU-27 post-EAD & VAT



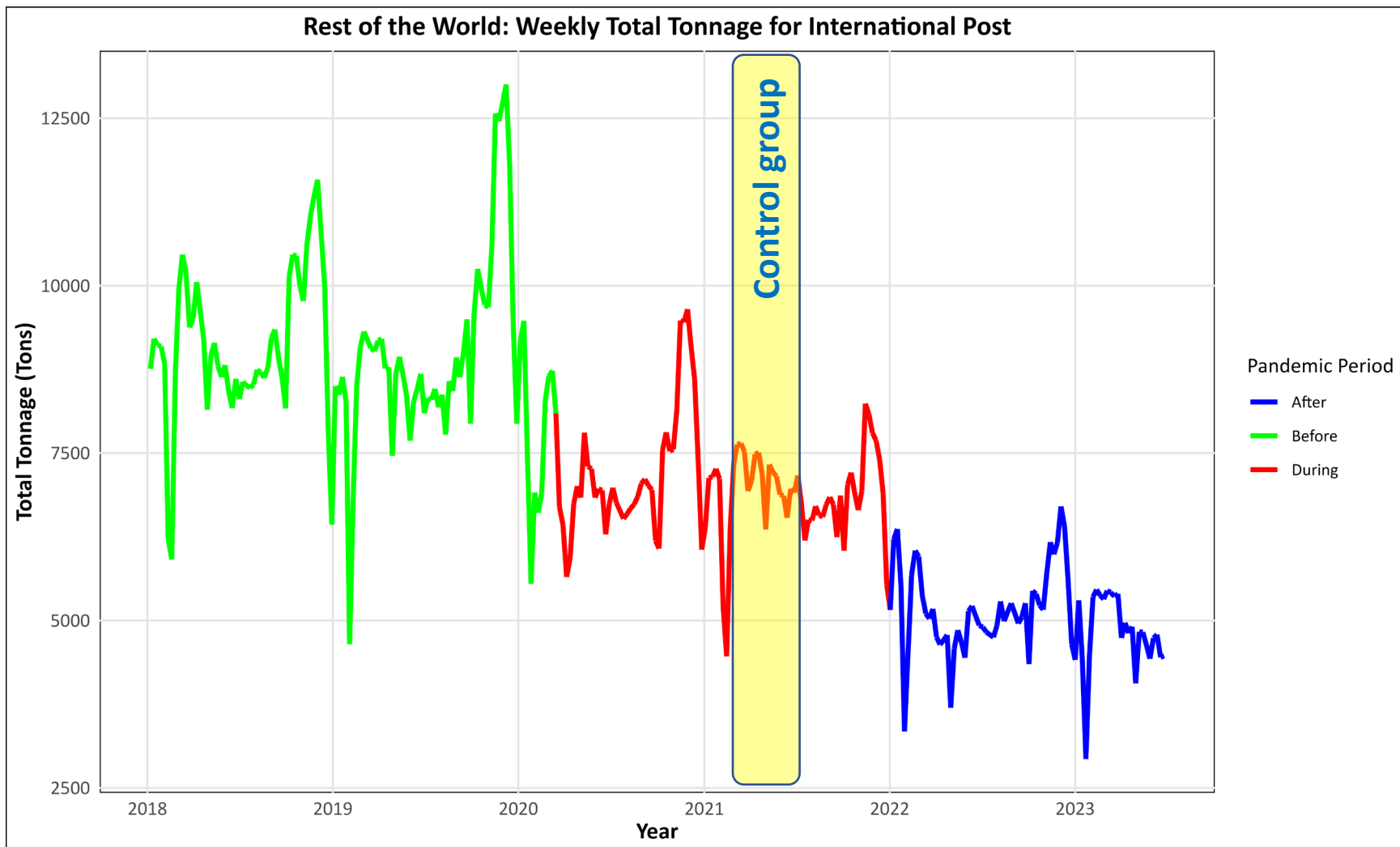
Q2:2023 vs Q2:2019
- **11.1%**

No strong post-pandemic recovery in intra-EU 27 postal volumes either!

The impacts of the introduction of new EU-27 border security regulations – **ICS2 R1** – and VAT taxation – **IOSS** – regime **on intra-European e-commerce were negative, too!**



Control group behaviour: RoW flows post-EU-27 EAD & VAT



Q2:2023 vs Q2:2019
- **44.9%**

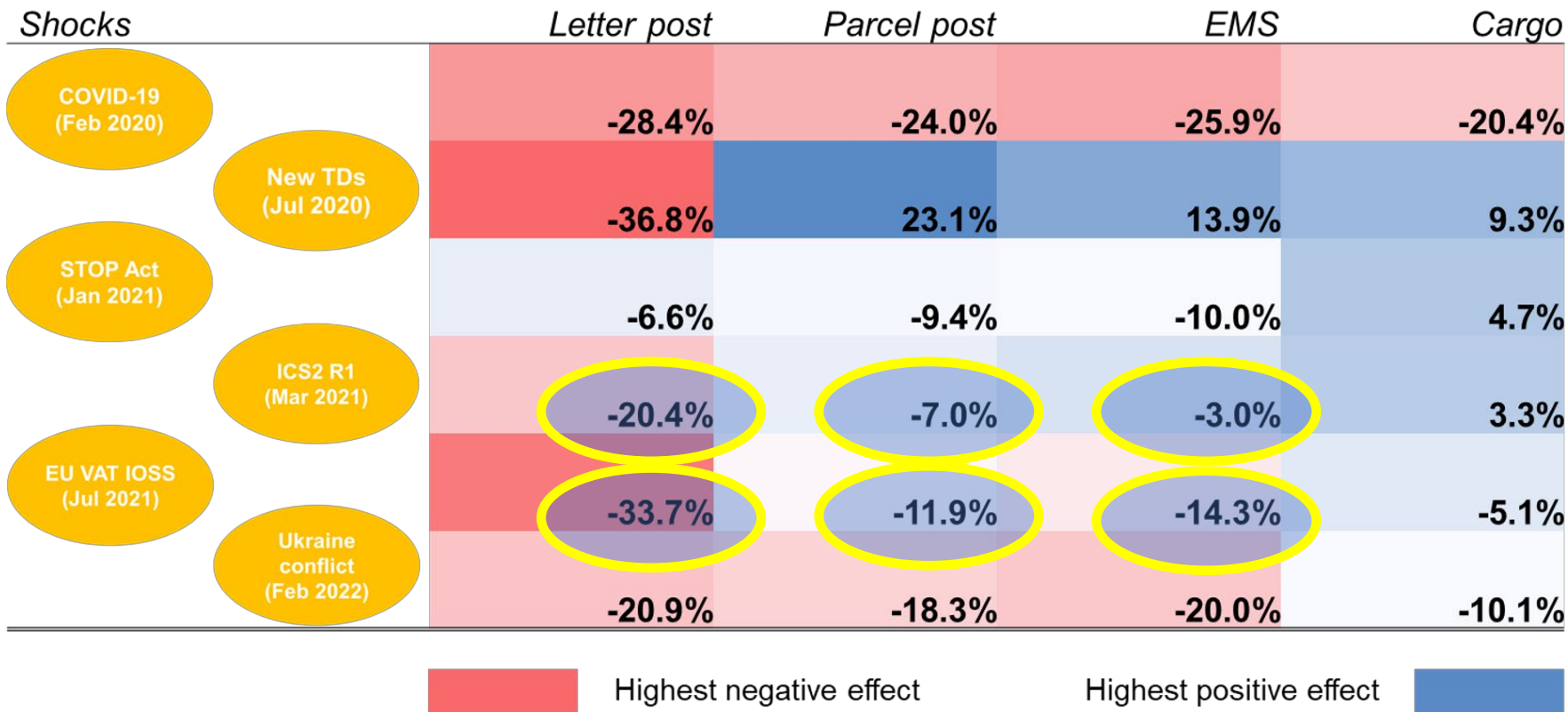
No strong post-pandemic recovery in international postal exchanges between the rest of the world.

The introduction of new EU-27 border security regulations – **ICS2 R1** – and VAT taxation – **IOSS** – regime had **no impact on postal exchanges in the rest of the world.**



Consistency with econometrics: impacts far beyond COVID-19

Average marginal effects



Beyond COVID-19 impact, **ICS2 R1 third most negative impact** and **EU VAT IOSS second most negative** marginal impact of all analyzed effects.

Eco-systemic effects at play again: platform economics effects.

At best a zero-sum game in the short term, likely undermining longer-term growth.

Source: UPU KCTT econometric modelling (Arellano-Bond dynamic panel data) and calculations for the 2018-2022 period (more than 5,000 bilateral flows on a monthly basis)



Impact of postal-related policies on predictability?

Evolution of the variation of delivery times (in days) over time (bi-weekly basis)



Source: UPU Postal Big Data and UPU KCTT modelling and calculations

Do international postal-related policies and regulations play a **pivotal role** here?

What **implications** will the rollout of ICS2 R2 and ICS3 bring?

Are postal and logistics entities **prepared** for future electronic advanced data frameworks and import taxation systems?

How many **MSMEs** might see their digital trade prospects **curtailed**?



More insights in the
“State of the Postal Sector 2023”:
report released on 5th October
at UPU Strategy Summit
during UPU 4th Extraordinary Congress
in Riyadh (Saudi Arabia).

<https://www.upu.int/en/Publications/2IPD/State-of-the-Postal-Sector-2023>

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