How the Covid-19 crisis is impacting postal markets? – A new assessment one year later

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Agenda

1. **The impact of the pandemic on postal markets**

2. **Econometric analysis of the impact of the health crisis on mail and parcel volumes**

The impact of the pandemic on postal markets

Postal operators' overall revenues grew by 1.4% in 2020 despite the pandemic but the average profitability of operators was negative

Change in turnover and EBIT margin of 53 postal operators (in %. source: IPC)

- Change in turnover
- EBIT margin

Year	Change in turnover	EBIT margin
2018	3,8	1,8
2019	5,5	1,8
2020	1,4	-0,9

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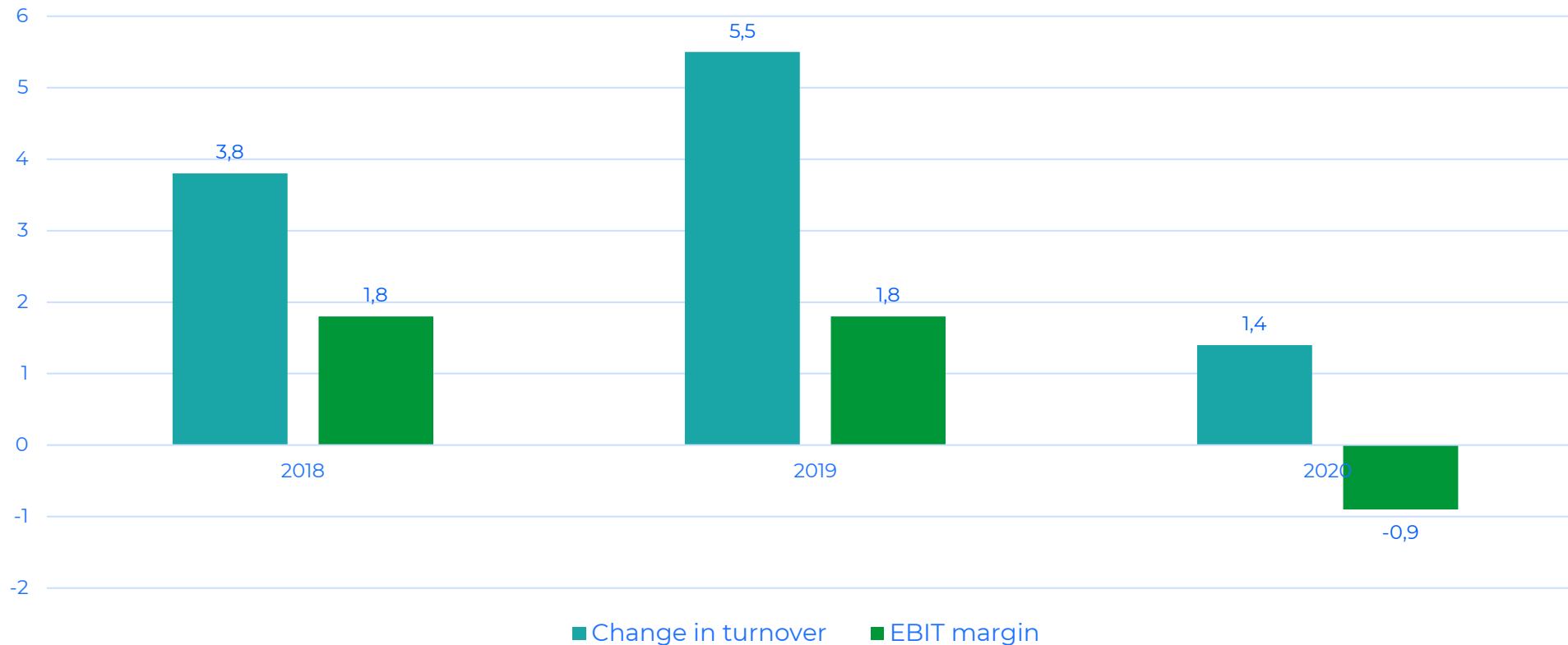
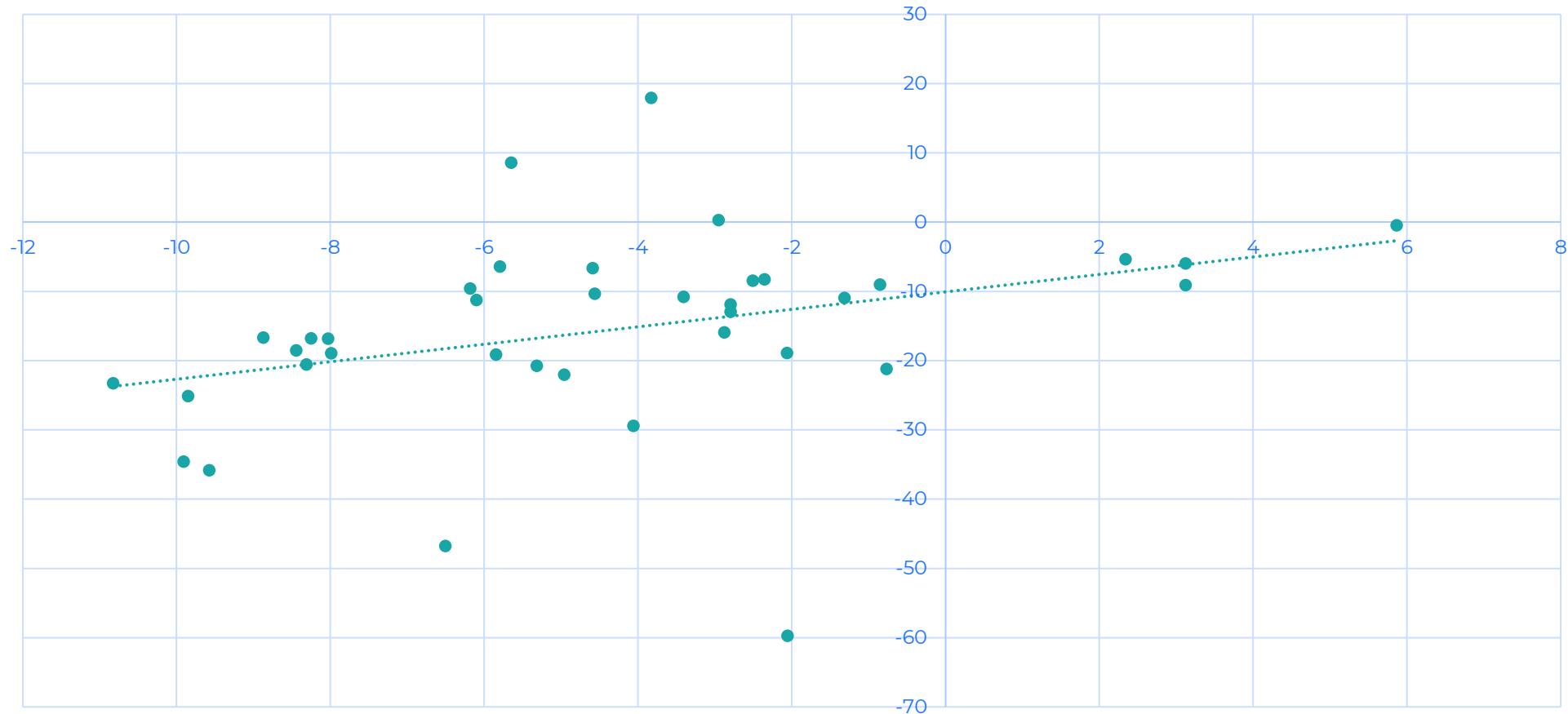# The decline in mail volumes accelerated due to the health crisis

- Operators' mail volumes decreased by an average of 15.9 percent in 2020 compared to 2019. In 2018 and 2019 mail volumes for all operators had decreased by 6.3 percent and 7.6 percent respectively. In 2020 the decline in mail volumes ranges from 0.5 percent for operator An Post to 59.8 percent for New Zealand Post.

- Total mail segment revenue of all operators decreased by an average of 4.9% in 2020 (compared to 0.6% in 2018 and 1.2% in 2019)

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Parcel volumes have risen sharply particularly during periods when stores were closed

- As citizens were stranded in their homes and many retail businesses were forced to close global e-commerce revenue grew by 25% in 2020 compared to 2019. Parcel volumes carried by the sampled postal operators grew by an average of 15.3% in 2020 compared to only 4.9% in 2019.

- With the increase in delivery demands parcel segment revenue growth accelerated to 21% on average for all operators in 2020 (up from 7.1% in 2019). Postal operators' parcel segment revenue growth is driven by growth in parcel volumes as well as increased acquisitions of alternative operators (allowing incumbent postal operators to expand their markets).

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Relation between GDP variation and mail volumes variation

Relation between GDP variation and mail volumes variation in 2020 (in %)

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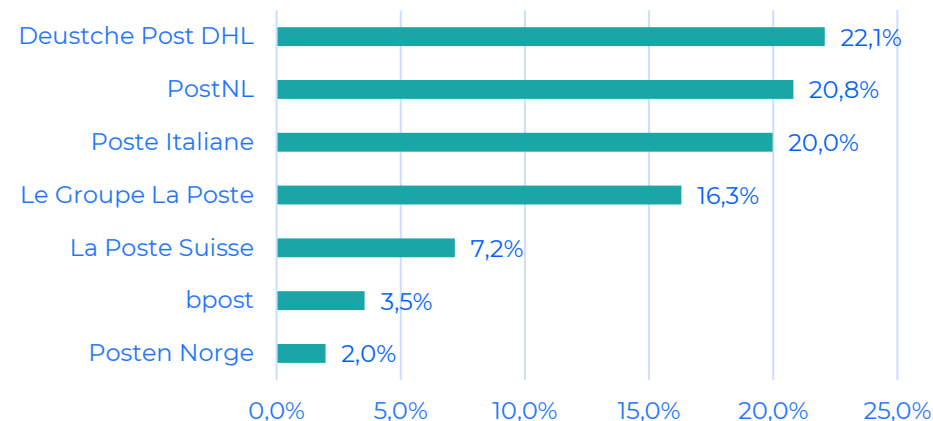
Postal operators' results in H1 2021

- As the global economy recovers. Total revenues for all operators reporting financial results for the first half of 2021 grew by an average of 10.4% and operating profitability as measured by EBIT margin reached 4.2% in the first half of 2021 according to IPC. On average for these operators up from 0.2% in the first half of 2020.

- Mail volumes for reporting operators increased by 2.5 percent while parcel volumes increased by 23 percent in the first half of 2021 compared to the first half of 2020.

Postal operators' results in H1 2021

- In the first half of 2021 postal operators benefited from the economic recovery.

- Operators have seen their revenues grow in the first half of 2021 albeit to varying degrees due in particular to an increase in mail volumes for some operators (or a moderate decrease in mail volumes for others) and still strong growth in the parcel business.

Change in postal operators' revenues between H1 2020 and H1 2021 (in %)

Operator	Change
Deustche Post DHL	22,1%
PostNL	20,8%
Poste Italiane	20,0%
Le Groupe La Poste	16,3%
La Poste Suisse	7,2%
bpost	3,5%
Posten Norge	2,0%

Postal operators' results in H1 2021

En M €		H1 2020	H1 2021	Variation (en %)
bpost	Mail	664	681.4	2.6%
	Parcel	1071.5	1117.5	4.3%
Deutsche Post DHL	Mail	3574	3518	-1.6%
	Parcel	11405	14957	31.1%
Le Groupe La Poste	Mail	5006	5875	17.4%
	Parcel	5990	7343	22.6%
Posten Norge	Mail	289	256	-11.3%
	Parcel	401	465	16.1%
PostNL	Mail	788	855	8.5%
	Parcel	930	1251	34.5%
Poste Italiane	Mail	924	1021	10.5%
	Parcel	473	704	48.8%

Table : Evolution of mail and parcel turnover of 6 postal operators

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Econometric analysis of the impact of the health crisis on mail and parcel volumes

Model for parcel volumes

- The data used in our econometric analysis are quarterly data for 3 countries (France, Germany and the United States).

- All variables in index form, 2015=base 100

- The general form of models we consider is as follows to explain the impact of the health crisis on parcel volumes is :

$$\text{Ln } VOL_t = \alpha + \beta_1 Ln\ GDP_t + \beta_2 Cov_t * LnGDP_t + \delta_1 Ln\ Ecom_t + \delta_2 Cov_t * Ln\ Ecom_t + \theta_1 Q_{1t} + \theta_2 Q_{2t} + \theta_3 Q_{3t} + \varepsilon_{it}$$

- VOL: parcel volumes

- GDP: GDP per capita

- $Ecom$: retail e-commerce sales

- Cov: dichotomous variable equal to 1 from 2020Q1 (Covid-19 period) and zero otherwise

- Q1, Q2, Q3 : dummies for quarters

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Parcel volume index from 2015q1 (2015=base 100)
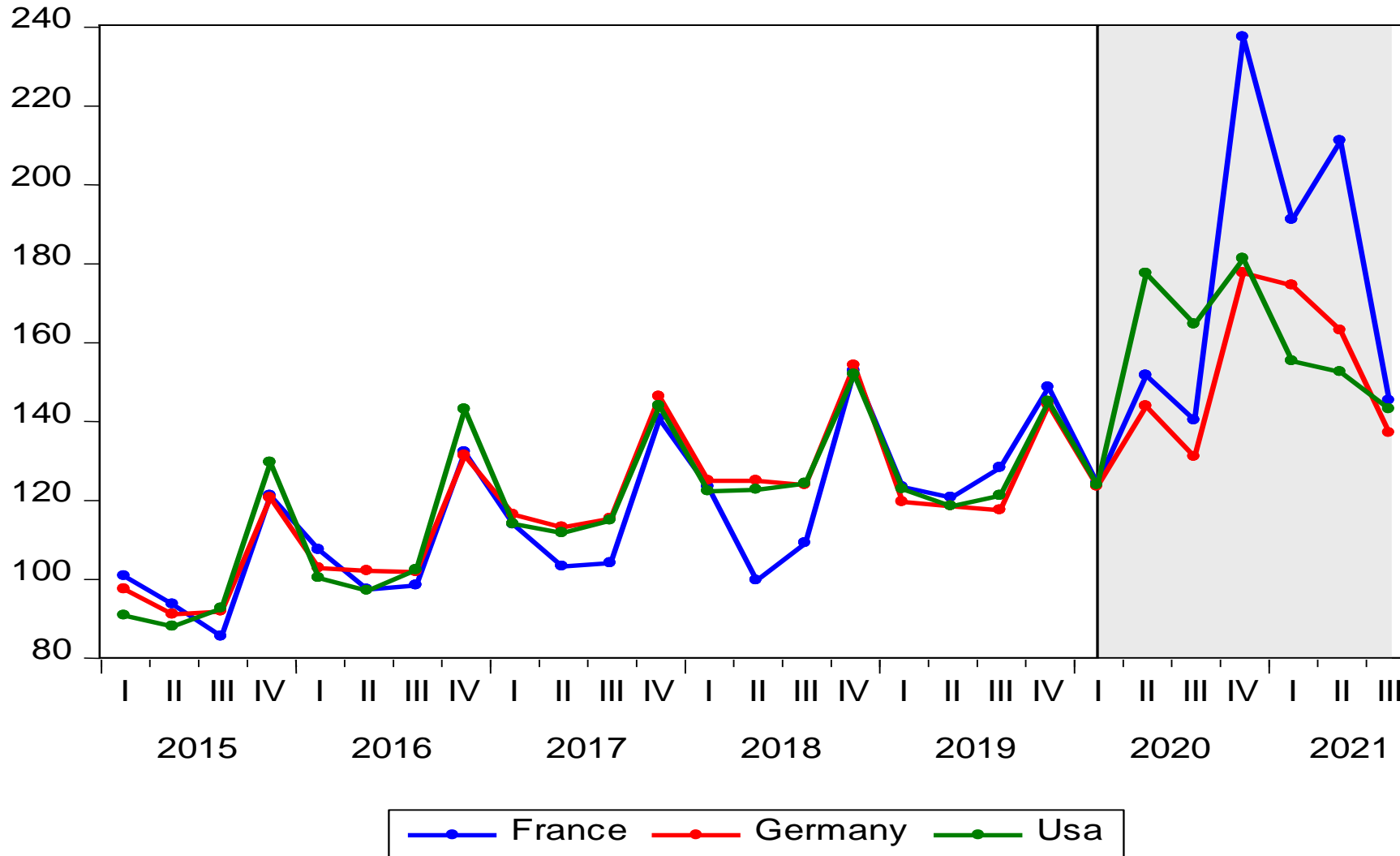
Model for mail volumes

- The general form of models we consider is as follows to explain the impact of the health crisis on mail volumes is :

$$\text{Ln } VOL_t = \alpha + \beta_1 Ln\ GDP_t + \beta_2 Cov_t * Ln\ GDP_t + \delta_1 t + \delta_2 t * Cov_t + \theta_1 Q_{1t} + \theta_2 Q_{2t} + \theta_3 Q_{3t} + \varepsilon_{it}$$

All variables in index form, 2015=base 100

- VOL: mail volumes

- GDP: GDP per capita

- t : time trend variable

Mail volume index from 2015q1 (2015=base 100)
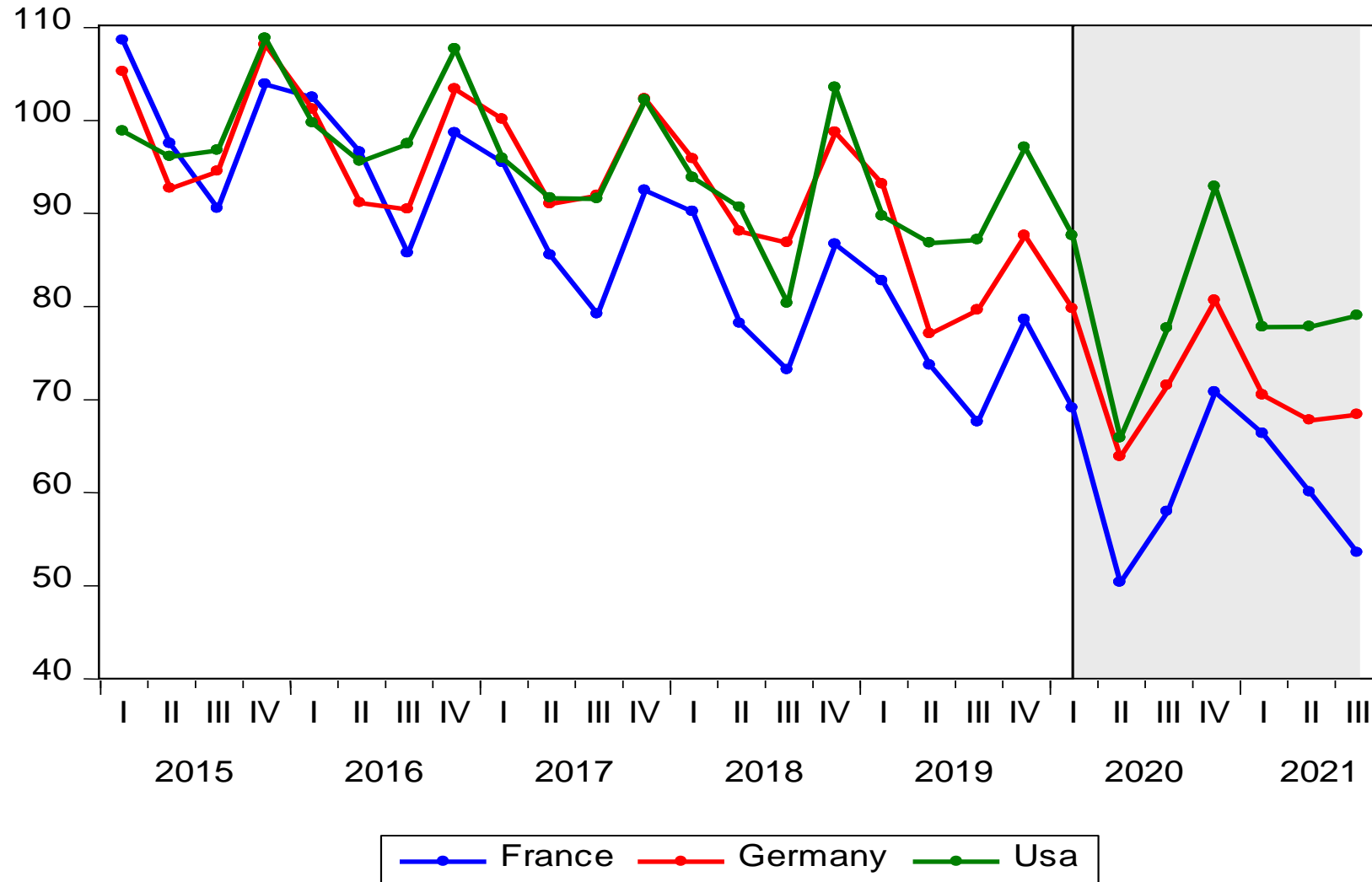
Estimation results

Parcels

Variable	France Coeff.	Std. Error	Germany Coeff.	Std. Error	USA Coeff.	Std. Error
Ln(GDP)	0.8500	0.2984	1.6347	0.3950	1.1284*	1.4619
Cov*Ln(GDP)	-1.0873	0.2475	-0.5672	0.1566	-0.5734*	0.3252
Ln(Ecom)	0.2096	0.0666	0.4646	0.0691	0.5161	0.1338
Cov*Ln(Ecom)	1.0403	0.2241	0.5185	0.1457	0.5320*	0.2981
Q1	-0.0980	0.0147	-0.0574	0.0177	0.0180*	0.0641
Q2	-0.1730	0.0301	-0.0916	0.0207	-0.0389*	0.0387
Q3	-0.1887	0.0309	-0.1227	0.0203	-0.0363*	0.0356
Const	-0.0827*	1.2202	-4.9689	1.5394	-3.0062*	6.2642
R2	0.9384		0.9682		0.8688	
Observation period	2009q1-2021q3		2006q1-2021q3		2002q1-2021q3	

* : non significant at level 10%

Estimation results

Mail

| Variable	France		Germany		USA	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
Ln(GDP)	0.4773*	0.5439	0.5344	0.2710	1.9860	0.2347
Q1	0.0306	0.0171	-0.0349	0.0143	-0.0032*	0.0139
Q2	-0.0761	0.0130	-0.1389	0.0147	-0.0765	0.0108
Q3	-0.1354	0.0206	-0.1392	0.0096	-0.0715	0.0158
Ln(GDP)*Cov	0.1155*	0.1006	0.0215*	0.0439	0.2175	0.0440
Const	3.3305*	2.4700	2.5229	1.2180	-3.7444	1.0567
t*Cov	-0.0083*	0.0056	-0.0040*	0.0035	-0.0126	0.0025
t	-0.0146	0.0011	-0.0083	0.0012	-0.0123	0.0006
R2	0.9829		0.9644		0.9633	
Observation period	2007q1-2021q3		2006q1-2021q3		2002q1-2021q3	

* : non significant at level 10%

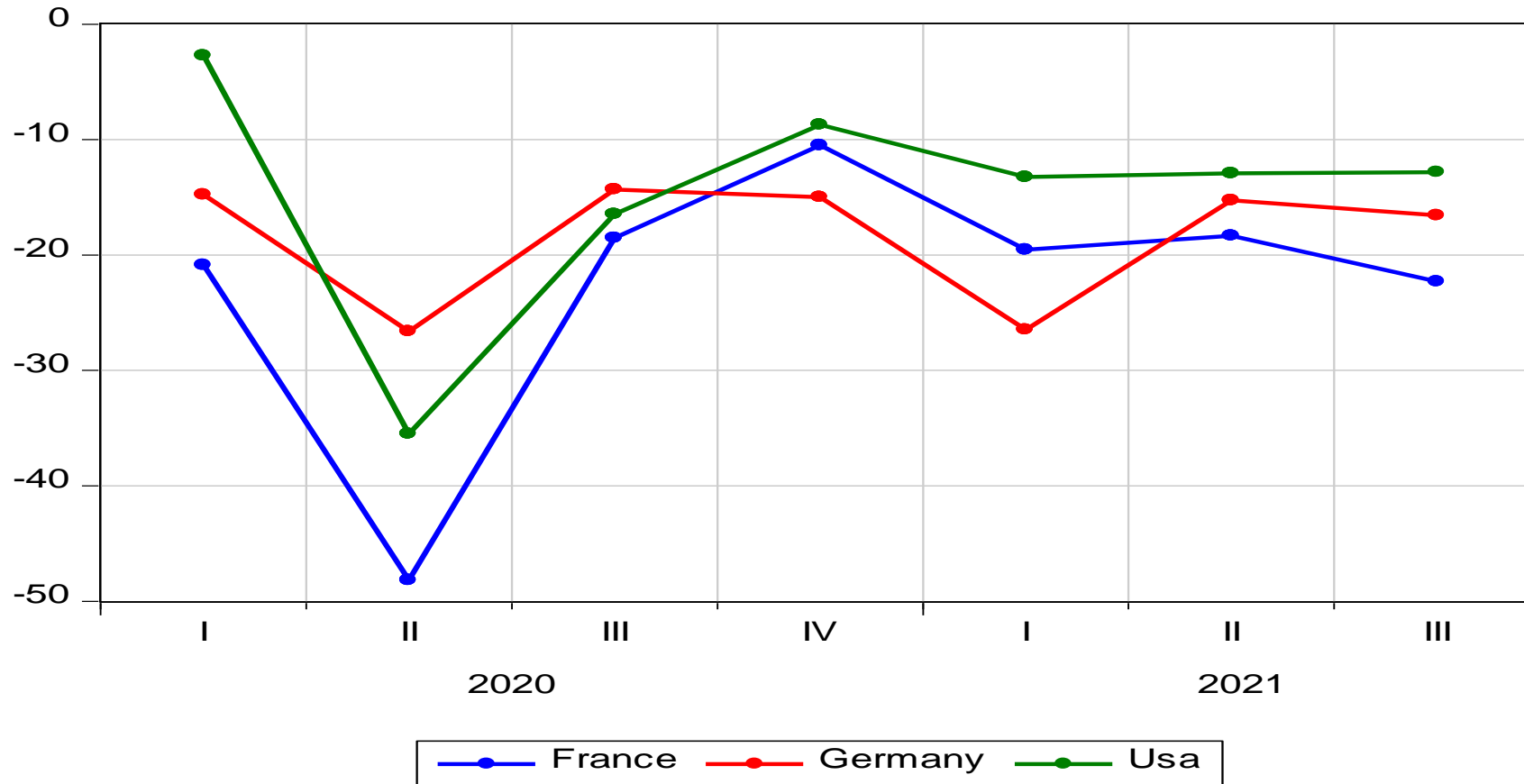LA POSTE GROUPE

And if no Covid ?

Models used to simulate a « no Covid » situation

From 2020: GDP and Ecom assumed to evolve at the same rate as between 2018 and 2019

Parcels : difference « observed *vs* no Covid » in %
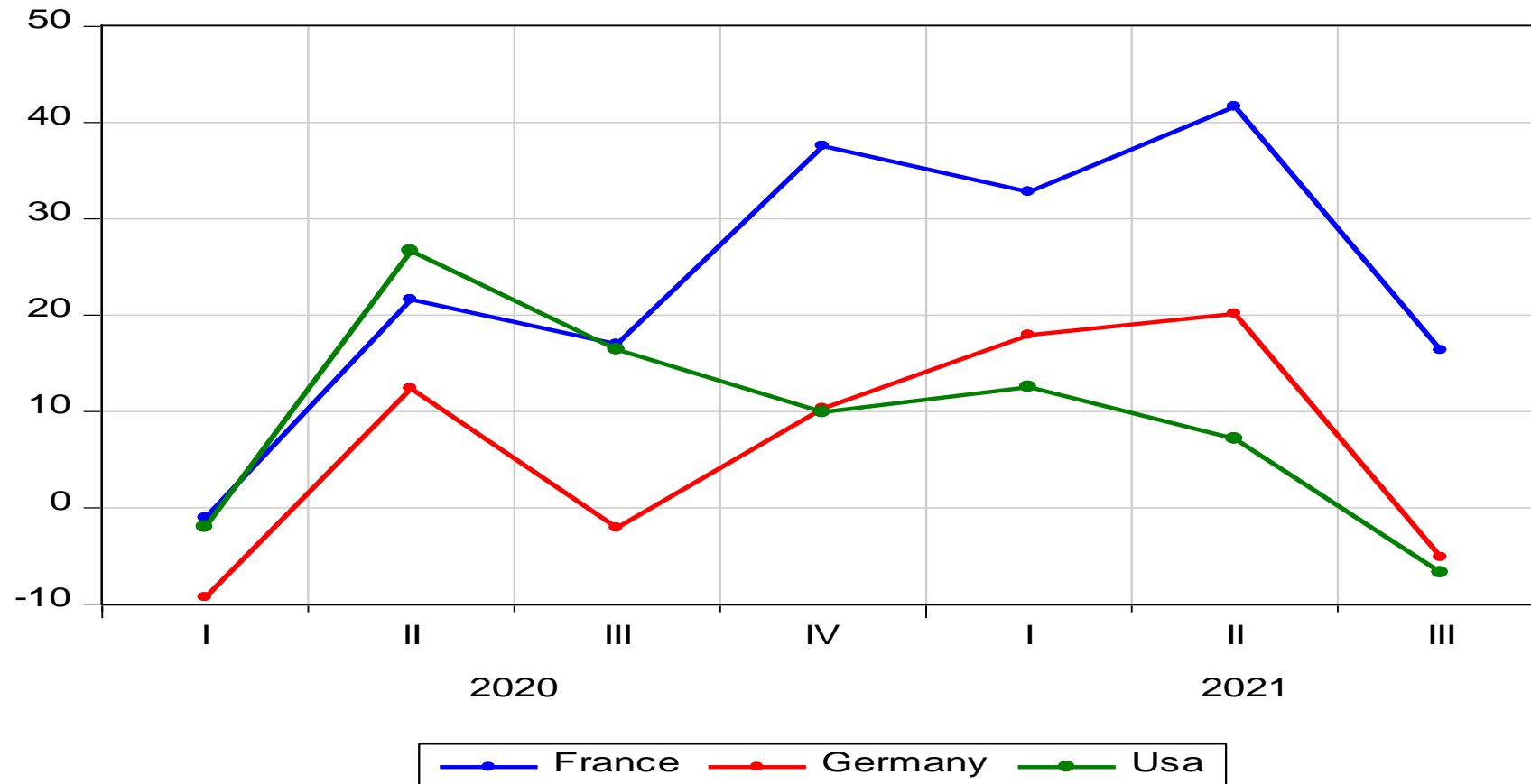
Mail : difference « observed *vs* no Covid » in %

Thanks for your attention

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