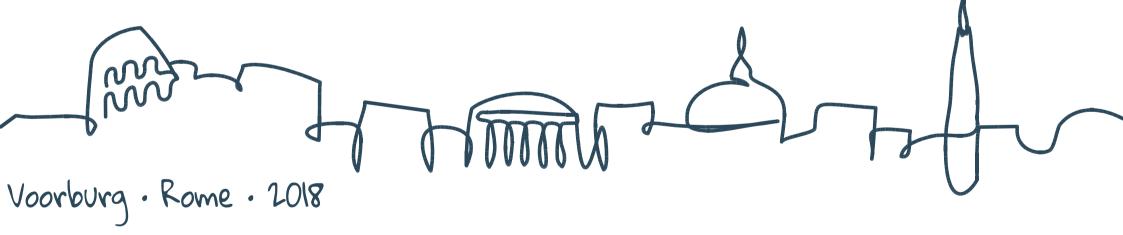


# Measuring export prices of services Cross-cutting topic

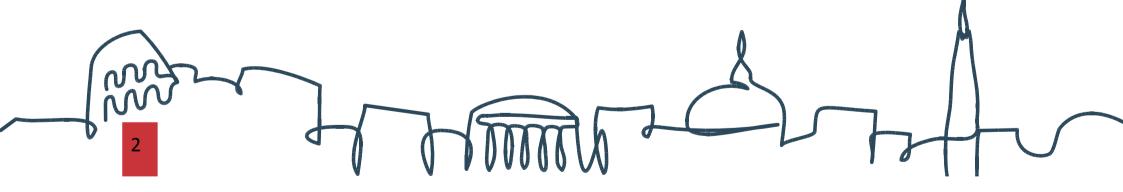
Yann LEURS, Frédéric OURADOU

**INSEE - France** 





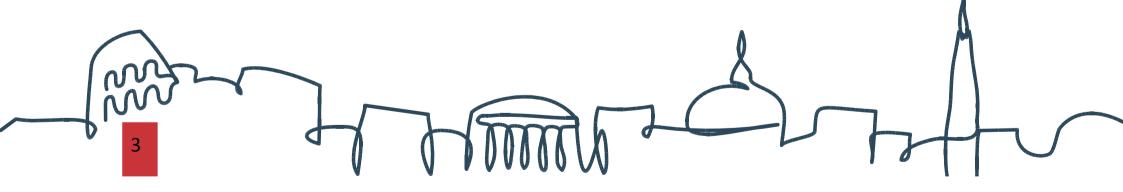
- ① General aspects of services exports
- 2 Collecting export prices as part of the SPPI survey: practical aspects
- 3 Export prices mechanisms
- ④ Collecting export prices for some particular industries
- (5) Conclusion; indices graphs





#### ① General aspects of services exports

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According to European system of accounts (ESA) 2010, "exports of services consist of all services rendered by residents to non-residents"

- O Exports include expenditure by non-residents in the domestic territory
- Exports exclude deliveries to non-residents by non-residents affiliates of resident enterprises (like sales by foreign affiliates of a multinational owned or controlled by residents)

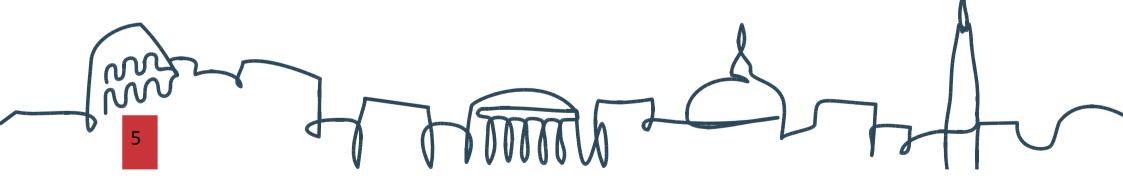




Importance of services exportations in the whole economy ○ 93.9 billion euros in 2015 in France (exports of merchant services excluding financial)

O Growth: 7.3% a year since 2000, from 2.0 to 4.2% of the GDP

O Increasing trade deficit: importations weigh 4,5% of the GDP





Most exporting services industries:

O 5020 Freight water transport (14.9 billion €)

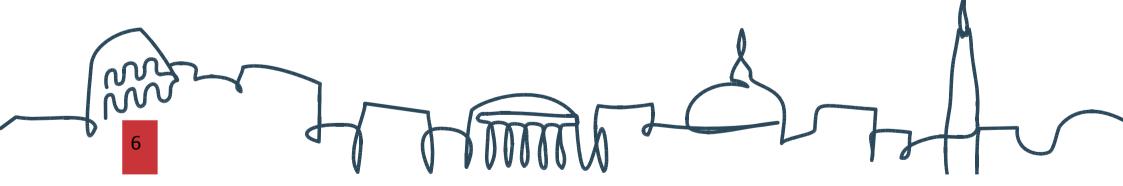
O 8299 Other business support service activities n.e.c. (14.2 billion €)

O 7740 Leasing of intellectual property and similar products, except copyrighted works (10.1 billion €)

○ 7022 Business and other management consultancy activities (9.2 billion €)

O 7112 Engineering activities and related technical consultancy (6.8 billion €)

O 4941 Freight transport by road (4.7 billion €)





Most exporting services industries:

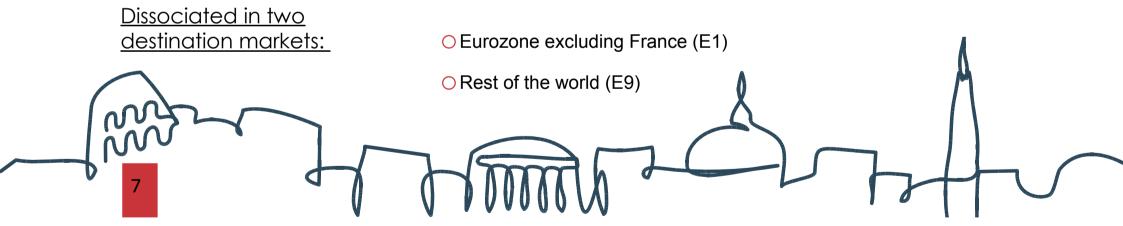
O 6202 Computer consultancy activities (4.4 billion €)

O 5110 Passenger air transport (4.1 billion €)

O 7311 Advertising agencies (3.6 billion €)

O 6120 Wireless telecommunications activities (2.6 billion €)

Both business and households export prices





Purposes and dissemination

- STS regulation: « the output price variable covers services delivered to customers that are enterprises or persons representing enterprises », that is to say BtoB
- Future STS/FRIBS regulation: BtoAll
- A way to go from BtoB to BtoAll is to collect BtoC and BtoX
  - BtoC: a CPI could be used as a proxy
  - Survey could be (only) extended to BtoE

O A difficulty:

• For STS, BtoX should be assessed at basic price

But in national accounts, exports should be assessed at purchasers
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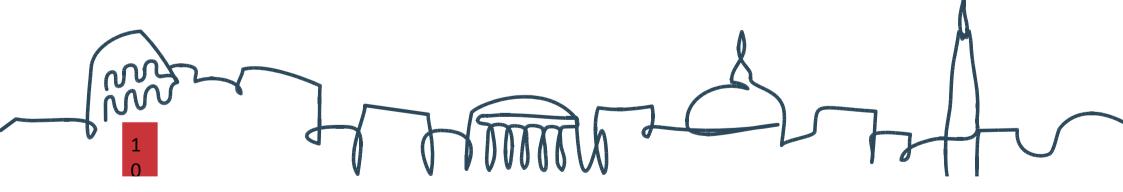
The weights for BtoX

### ○ The French methodology

Turnover by industry (k€) 5811Z	150 000					
5812Z	20 000					
5813Z	30 000					
5814Z	10 000					
5819Z	10 000	<				
	10 000					
		5811Z	Household	Enterprise	Total	
Household	20%	France	15 000	60 000	75 000	
Enterprise	80%	European Union	9 000	36 000	45 000	
Total turnover	100%	Outside European Union Total turnover	6 000 30 000	24 000 120 000	30 000 150 000	
		Total turnover	30 000	120 000	150 000	
France	50%	-	ѫ			
European Union	30%					
Outside European Union	20%					
Total turnover	100%	DtoV	woighto			
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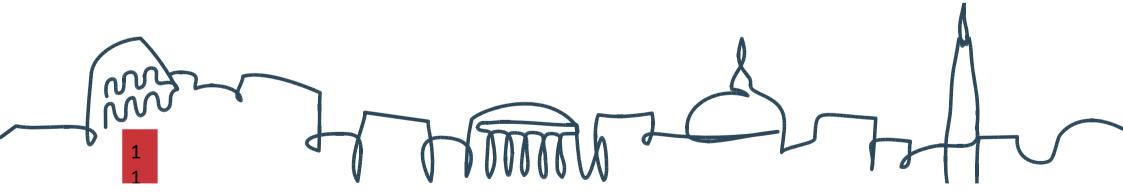




Sample of firms and services

<u>The sampling is</u> <u>determined at two</u> <u>different levels: first, firms</u> <u>and secondly, service</u> <u>products.</u>

- For firms, the sampling is the result of a two-step process:
  - first, a statistical "cut-off" sampling; although there is no specific sample or sub-sample for BtoX, we can choose, at this step, to increase the number of firms in the sample, in order to guarantee a minimal coverage rate for BtoX
  - secondly, a "well-informed choice" method, that tries to determine firms that would be forgotten with the first process: Internet researches
  - meetings with one or several industry federation of employers; exports issues are highlighted and the leading exporting firms identified.





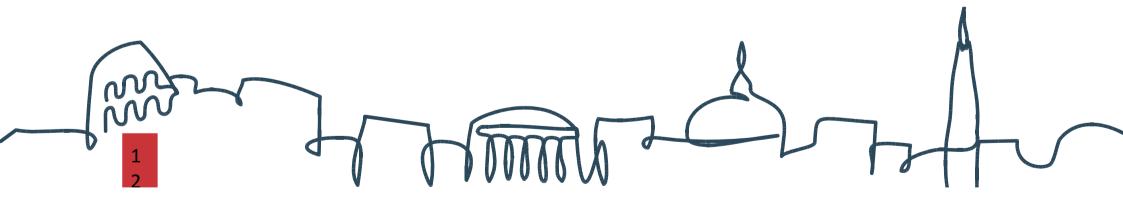
<u>Sample of firms and</u> <u>services</u>

<u>The sampling is</u> <u>determined at two</u> <u>different levels: first, firms</u> <u>and secondly, service</u> <u>products.</u>

- Once the sampling of firms is complete, the updating of the services whose prices are followed can begin.
  - Each firm's questionnaire is customized, reflecting the specific range of services it provides
  - Field surveyors select price indicators that can reflect the realizations of the firms (representative products).

O Export activities are reported as precisely as domestic activities.

O Exported services are requested in the questionnaire as soon as export weight is significant.



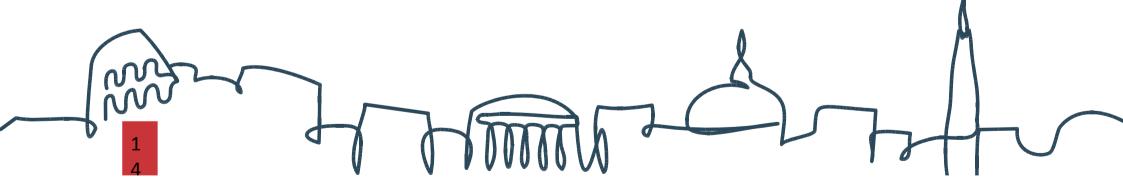


Export prices by duplication of national prices or indices

- When services are delivered on the French territory, and considered as export because they are sold to non-residents, prices for foreigners and for national customers are equal
  - For instance: accommodation, food and beverage service activities, passenger transport activities
- OWhen specific weights for BtoX can be picked up
  - Only one representative product for BtoB/BtoX firms or for BtoB/BtoC households
- O When specific weights for BtoX cannot be picked up
  - Can BtoX index be duplicated from BtoB or BtoC?
  - For instance: 4932 Taxi operation : BtoX = BtoC = CPI



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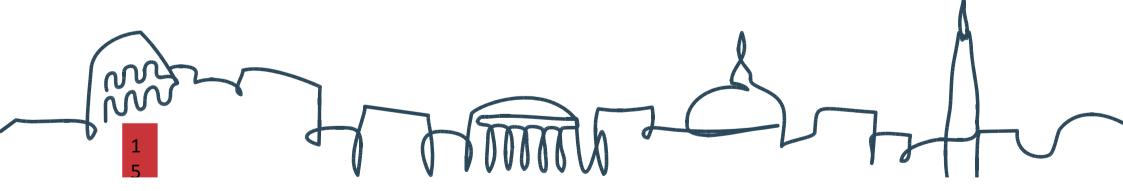


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Exchange rate variations

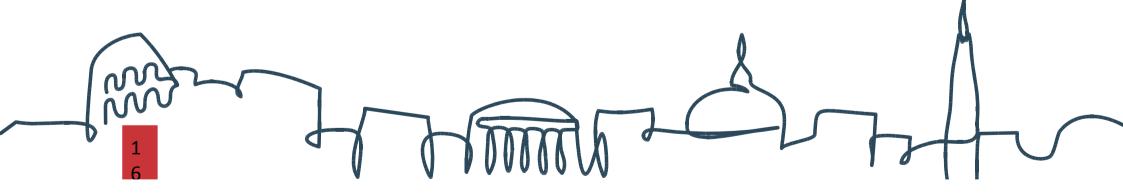
- Export prices can be directly affected by currency fluctuations, when the export services revenue is known to be received by the producer in the foreign currency (it is up to him to take on the exchange cost)
- O The producer price is not directly affected by exchange rate variations when the transaction is explicitly charged in euros to the customer
- ... but it may be affected indirectly if the producer adjusts its own price to avoid the resultant cost fluctuation for the customer





transfer prices

- Intra-group exports; O When a legal unit of a multinational group sells a good or a service to another legal unit of the same group, the transaction is called "intra-group transaction" and the price of the transaction is called a "transfer price".
  - O Should transfer prices be taken into account into SPPI?
    - To analyse price changes: transfer prices are quite dubious
    - For escalating contracts: no (but in general, BtoB indices are prefered for this use)





transfer prices

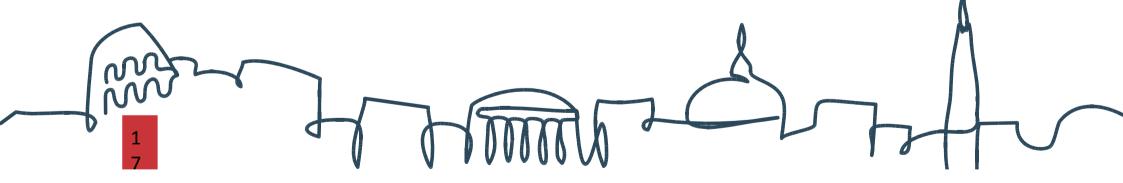
- Intra-group exports; O Should transfer prices be taken into account into SPPI?
  - For national accounts

"Replacing book values (transfer prices) with market-value equivalents is desirable in principle, when the distortions are large and when availability of data (such as adjustments by customs or tax officials or from partner economies) makes it feasible to do so". (SNA, 3.132)

In practice, intra-group transactions can not be identified in balance of payments data. Exports are assessed with transfer prices.

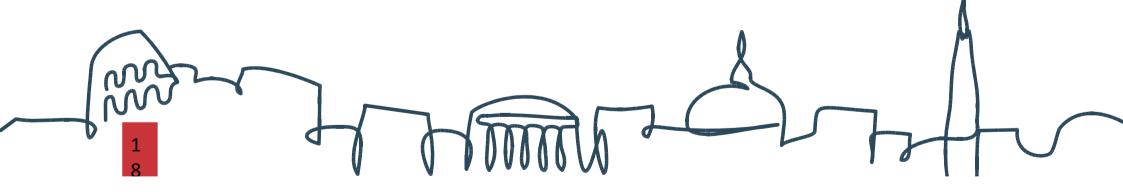
SPPI should also be assessed with transfer prices.

○ Conclusion: not clear





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Freight transportation

○ Following ESA 2010 rules to determine BtoX:

Exported goods   BtoX   BtoX     Imported goods   If valued FOB   BtoX   Imported goods     If valued CIF   BtoX   BtoX   Importation     Transportation   BtoB in case of transportation on behalf of residents			Domestic territory	Territory in-between	Territory of the "third party" country
If valued CIF BtoX BtoX   Transportation BtoB in case of transportation on behalf of residents	Exported goods			BtoX	BtoX
Transportation     BtoB in case of transportation on behalf of residents	Imported goods	If valued FOB	BtoX		
		If valued CIF	BtoX	BtoX	
	without import nor		BtoB in case of transportation on behalf of residents BtoX in case of transportation on behalf of non-residents		



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2018

24 | 28 SEPTEMBER Freight transportation

O In practice, the carrier does not always know if the goods transported are imported, exported, or neither; the information always available is the territory of departure and the territory of arrival, and the nationality of the purchaser of the transportation service.

○ Grid used in practice to determine BtoX:

		Assumed nature of goods transported	Indicator
	Inland, mainland to Corsica, mainland to overseas departments	Not imported nor exported	BtoB in case of transportation on behalf of residents BtoX in case of transportation on behalf of
	Corsica or overseas departments to mainland		non-residents
Non Non	France to another country	Exported	BtoX
	Another country to France	Imported	BtoX
0		VV	

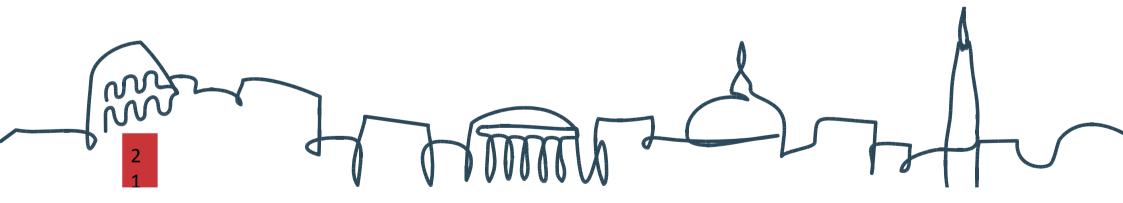


Passenger air transportation

 Exports of services consist of all services rendered by residents to non-residents

Ο			Resident	Non-resident
Ŭ	French company	Departure from France	National	Export
		Departure from abroad	National	Export
	Foreign company	Departure from France	Import	
		Departure from abroad	Import	

OStatistics for flights that take off from France are gathered by DGAC. Statistics for other fllights are not gathered.





<u>Accomodation</u>

- Export transactions are formed by:
  - the expenditure of non-residents tourists and business travelers for their accommodation in the domestic territory
  - prepaid reservations (for instance: made on websites) by non-residents before their arrival in the country
- O Different seasonality between BtoB and BtoC prices
  - Distinct services for "export to business" and "export to households" have to be followed
  - However, the information of the customer's origin may not systematically be available from hotels accounting.



Postal services

- Exports of postal services correspond to cross-border post entering the domestic territory (once entering the country, cross-border post is distributed on behalf of foreign postal services by the domestic postal service)
- O The charges, called "terminal dues", are regulated by international agreements regularly adopted by the Universal Postal Union (UPU)
- O Up to now, we have used a "BtoB+BtoC" proxy for assessing these terminal dues
- O A real BtoX index will probably be needed to take into account new recommendations from the UPU or specific agreements between national postal services



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2018

SEPTEMBER **Telecommunications** 

O Three different kinds of exports, from the national accounts point of view:

O when a non-resident foreigner subscribes to an IT service (for instance buy a prepaid card) in France

O international calls entering: a French operator handles the end of calls (interconnection service),

O "roaming in" charges: fees charged to non-residents calling their country of origin during their staying

O Strong impact of international regulations and agreements, ex: roaming in extra charges abolished in June 2017 in the E.U.)



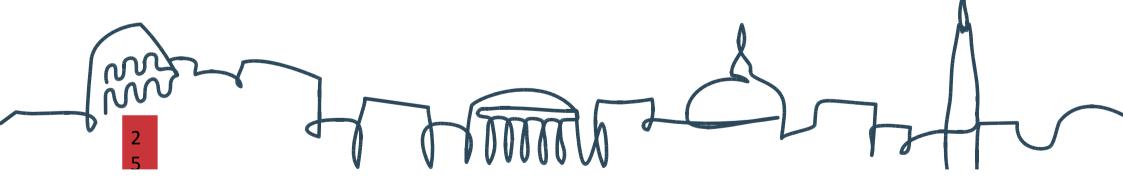
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○ Use of custom data to identify exports?

○ Only for physical publishing

O The goods crossing the national frontiers can correspond to "printing and reproduction" manufacturing activities rather than publishing activities.

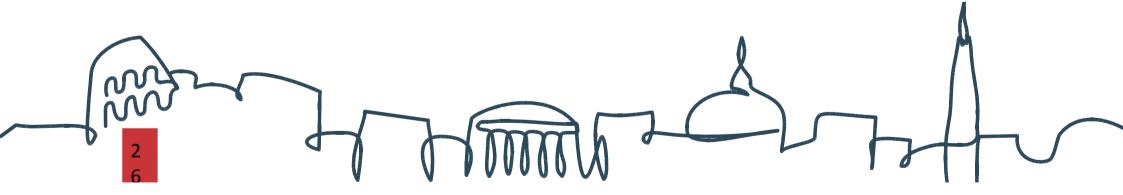
○ We have to focus on the transactions on royalties and license fees





Engineering services and other related consultancy

- Industry for which international movements of person abroad regularly occur
  - specialized mobile workers who can be sent abroad for missions in the framework of engineering projects
  - Europe-wide competition for engineering services, exempting companies from establishing affiliates in all countries.
- O Engineering exportations reinforced because of the recent drop in the public demand
- O Export prices seem to be more dynamic than domestic prices





Leasing of intellectual property and similar products  Royalties and license fees for patented entities, trademarks and brand names, franchise agreements

Value of intellectual capital, result of a R&D effort.

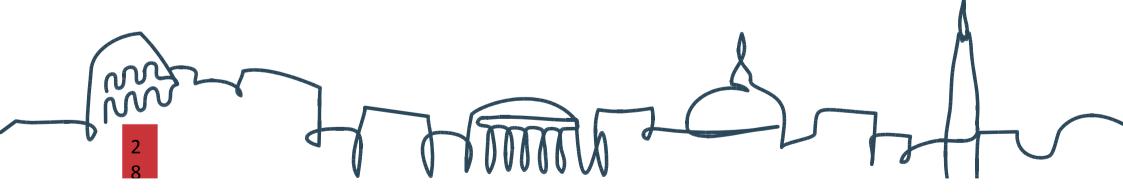
O License fees are very flat, but export price series may be not

series used for calculation = series1 \* series2 \* series3

- O Example of calculation: license service exported in country B for the use of a pharmaceutical formula, transaction in dollars:
  - series 1: fee (commission rate) for the use of a pharmaceutical formula
  - series 2: exchange rate, dollar to euro
  - series 3: pharmaceutical industry price production index in country B



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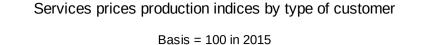


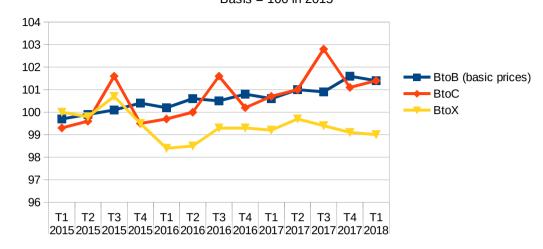


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### <u>The BtoX index level does</u> <u>not fall into line with BtoB</u> <u>and BtoC</u>





O The structure of exporting industries is not the same than the one of domestic industries,

the country of destination.

O The economic environment differs between domestic and global markets,

O Prices themselves can voluntarily be adjusted by enterprises according to

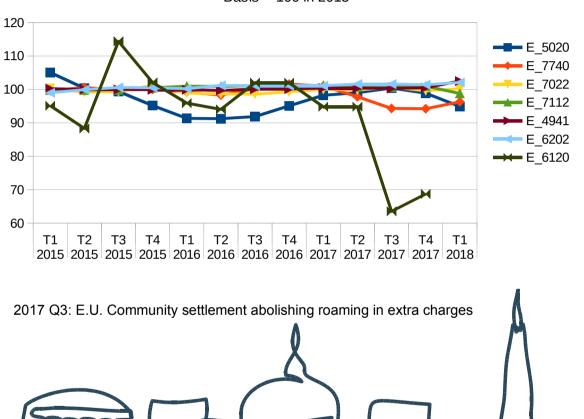


<u>At industry level</u>

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#### Export prices production indices



Basis = 100 in 2015



## Thanks for your attention

Insee www.insee.fr

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