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**Italian international trade in services by mode of  
supply**

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- Italian NSI takes part of Eurostat's MoS Task Force begun in 2017 with the endorsement of Eurostat's International Trade in Services Statistics Working Group.
  - During 2019, INSI has implemented the first Italian MoS estimates through Eurostat Grant Agreement "ITSS by Modes of Supply (Sub-Area B.2)". The reference year was 2015.
  - INSI produced the MoS data improving Eurostat Mos Model based on MSITS through Italian specific sources and methods.
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The purpose of the Italian action was to practise the possibility to estimate the 4 modes of supply with the available data of International Trade in Services Statistics (ITSS), Foreign Affiliates Statistics (FATS) and other Italian data sources such as Structural Business Statistics (SBS), Tourism Satellite Accounts (TSA) and Supply-Use tables (SUT).

Concerning to the two main sources for estimating MoS , ITSS for modes 1,2 e 4 and FATS for mode 3, we followed this steps

- Recognition of main sources: ITSS and FATS (Inward / Outward) in terms of classification, variables and geographical distribution;
- Data extraction according to the classifications adopted and by geographical distribution (Rest of the world, Intra UE28 and extraUE28);
- Reclassification of FATS according to the Eurostat proposed matrix conversion NACE to EBOPS;

- The ITSS source is used to estimate the methods 1,2 and 4.
- The starting data base was taken from the Italian Balance of Payments (BoP) data on credit/debit disseminated by the Bank of Italy for the year 2015 in millions of euros.
- Were made the aggregations for the geographical areas belonging countries to the EU and non-EU countries
- The Italian ITSS data have been divided between modes 1, 2 and 4 using Eurostat ITSS distribution by MoS .The percentages have been applied to the lowest possible levels of Italian BoP items.

# Modelling modes 1,2 and 4

level	BOP Item	BOP sub-item	Bop item name	Mode type	Mode 1 (%)	Mode 2 (%)	Mode 3 (ITSS)	Mode 4 (%)
1	S	S	Services:					
2	SA	SA	Manufacturing services on physical inputs owned by oth	2		100		
2	SB	SB	Maintenance and repair services n.i.e.	2		100		
2	SC	SC	Transport	1;2				
3	SC	SC1	Sea transport	1;2				
4	SC	SC11	Sea transport; Passenger	1	100			
4	SC	SC12	Sea transport; Freight	1	100			
4	SC	SC13	Sea transport; Other than passenger and freight	2		100		
3	SC	SC2	Air transport	1;2				
4	SC	SC21	Air transport; Passenger	1	100			
4	SC	SC22	Air transport; Freight	1	100			
4	SC	SC23	Air transport; Other than passenger and freight	2		100		
3	SC	SC3	Other modes of transport	1;2				
4	SC	SC31	Other modes of transport; Passenger	1	100			
4	SC	SC32	Other modes of transport; Freight	1	100			
4	SC	SC33	Other modes of transport; Other than passenger and fre	2		100		
4	SC	SC3E	Pipeline transport	1	100			
4	SC	SC3F	Electricity transmission	1	100			
4	SC	SC3G	Other supporting and auxiliary transport services	2		100		
3	SC	SC4	Postal and courier services	1	100			
2	SD	SD	Travel	2		100		
2	SE	SE	Construction	3;4			10	90
2	SF	SF	Insurance and pension services	1	100			
2	SG	SG	Financial services	1	100			
2	SH	SH	Charges for the use of intellectual property n.i.e.	1	100			
2	SI	SI	Telecommunications, computer, and information servic	1;4				
3	SI	SI1	Telecommunications services	1	100			
3	SI	SI2	Computer services	1;4	50			50
3	SI	SI3	Information services	1	100			
2	SJ	SJ	Other business services	1;4				
3	SJ	SJ1	Research and development services	1;4	75			25
3	SJ	SJ2	Professional and management consulting services	1;4	75			25
3	SJ	SJ3	Technical, trade-related, and other business services					
5	SJ	SJ311	Architectural services	1;4	75			25
5	SJ	SJ312	Engineering services	1;4	75			25
5	SJ	SJ313	Scientific and other technical services	1;4	75			25
4	SJ	SJ32	Waste treatment and de-pollution, agricultural and mining services					
5	SJ	SJ321	Waste treatment and de-pollution	2;4		75		25
5	SJ	SJ322	Services incidental to agriculture, forestry and fishing	4				100
5	SJ	SJ323	Services incidental to mining, and oil and gas extraction	4				100
4	SJ	SJ33	Operating leasing services	1	100			
4	SJ	SJ34	Trade-related services	1	100			
4	SJ	SJ35	Other business services n.i.e.	1;4	75			25
5	SJ	SJ35Z	Other business services n.i.e.; Of which: Employment s	1;4	75			25
2	SK	SK	Personal, cultural, and recreational services	1;4	75			25

- It has been acknowledged that mode 3 is becoming more important: "Services suppliers may choose to set up affiliates as a means of selling their services in foreign markets as an alternative or complement to exporting through other modes. On the grounds that such sales/output may, to a certain extent, substitute for cross-border exports, MSITS 2010 chooses to view domestic sales/output of foreign affiliates as the primary statistical indicator of Mode 3." (MSITS paragraph 5.64).
- Mode 3 (FATS data) was integrated to the ITSS services items by using a correspondence table from NACE (activity based classification) to EBOPS (product based classification). The correspondence table assigns the NACE activity code to the most probable ITSS service code(s).
- To estimate mode 3, the variable is the turnover/sales of the foreign affiliates but only the **local sales** represent the delivery of output within host economies (MSITS paragraph 4.49).

## *Domestic (local) vs foreign turnover in modelling mode 3*

- In **Italian outward FATS**, the turnover is split into three components: the turnover on the local market (variable that affects for mode 3), the turnover on the market of origin of the affiliate and that on the other third markets. The turnover that falls within the country of origin is excluded because this part is already captured by ITSS. Therefore, for the outward FATS data we could use directly outward local turnover to estimate export mode 3.
  - In **Italian inward FATS**, all Structural Business Statistics (SBS) variables are available but the turnover/production is not broken down on the customer's residence.
  - To obtain domestic turnover for inwards FATS we estimated local turnover from SBS data, in particular we merged inward FATS data with from SBS large companies data.
  - Italian method is based on micro-data linking (MDL) techniques.
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# Main Italian improvements to Eurostat Mos Model (follows)

## *Distribution services*

- **into Mode 3:** Distribution services are included in FATS statistics (production value of the wholesalers and retailer, NACE G) and have been incorporated in the Italian MOS estimation into Mode 3.
  - As a result in order to estimate distribution services in Mode 3, we used the **production value** from Italian inward FATS as recommended by MSITS 2010, as it is an available variable in Inward FATS statistics and is also considered a superior measure of activity for most purposes (MSITS 2010, paragraph 5.65).
  - However, in Italian outward FATS, the production value is not available therefore this is estimated from the inward FATS as a ratio of production and turnover. In 2015, the Italian ratio for inward was 30 % for EU and 28 % for Extra EU.
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# Main Italian improvements to Eurostat Mos Model (follows)

## *Distribution services*

- **into mode 1:** For the estimation of the distribution margins on exports, we used the Italian Supply-Use framework for 2015. In particular we used directly the Trade table margins (TTM) existing but not available in the public database.
  - In 2015, the value of the margins on the Italian exports of goods was 27% of mode 1. No data are available for the share of import arranged by foreign wholesalers so we have adopted the same share of distribution margins on export.
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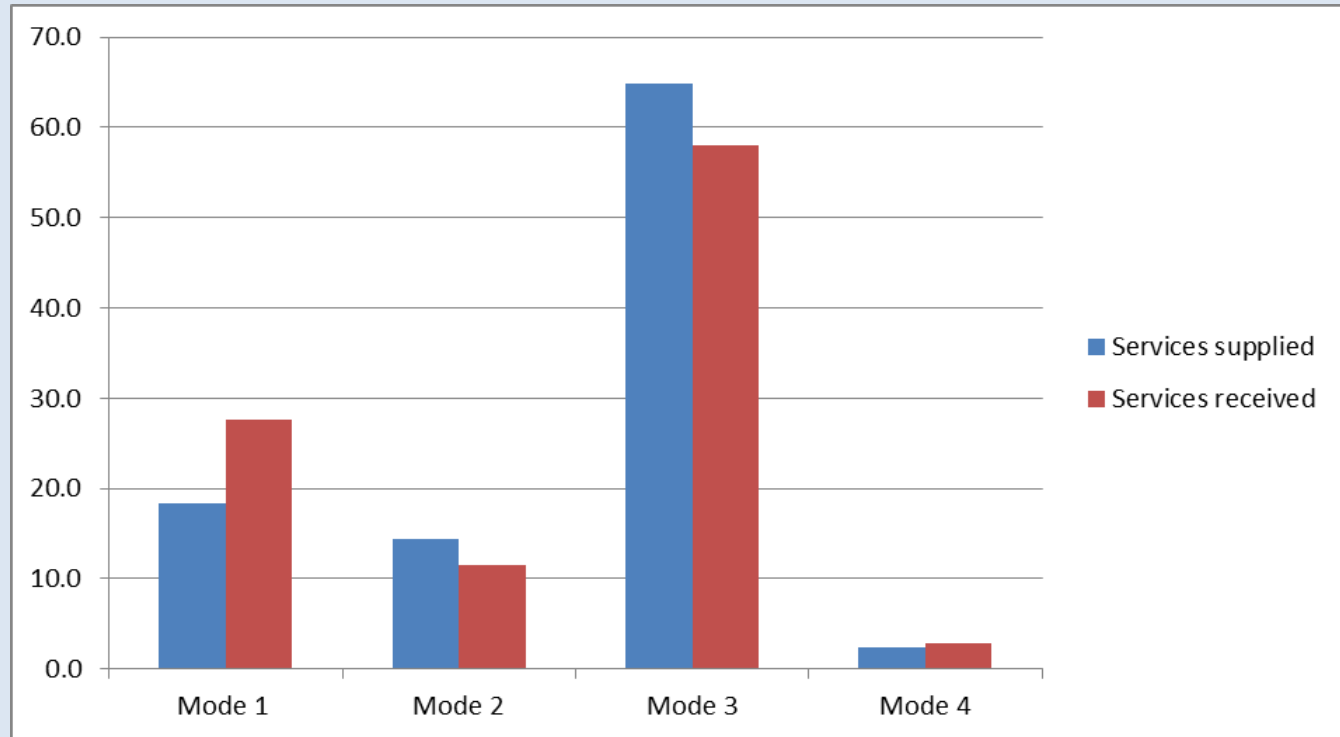
## Main Italian improvements to Eurostat Mos Model (follows)

### *Exclusion of goods from Travel and distribution services into Mode 2*

- The Italian approach to remove the goods included in travel is reached from the Italian Tourism Satellite Accounts.
  - In Italy, the data on international shopping expenditure is based on frontier survey run from the Bank of Italy. The survey collects, through face-to-face interviews, the breakdown of the expenditure abroad, including the distinction between goods and services.
  - The share of goods on the total value of travel exports (or imports) is calculated directly from Italian BoP. It is possible to estimate the distribution services value on the goods acquired through TSA data (Table 6) and to leave this part into mode 2 that represents services activity deriving from shopping.
  - In Italy, shopping expenses net of retail trade margins on inbound expenditure was 17% while the retail trade margins, that is left into mode 2, was 15% of shopping value in 2015. Same adjustments to account for retail trade margins are applied on export/import shopping by geographical area.
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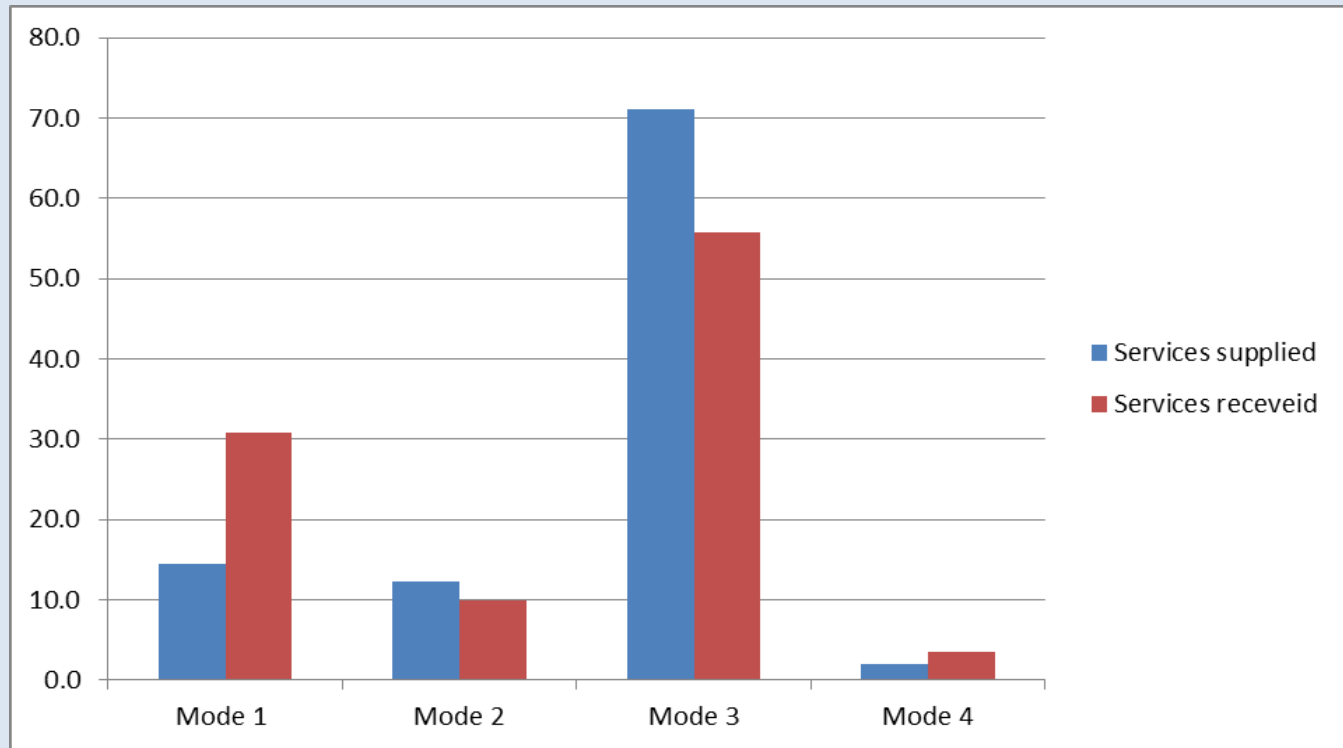
# Italian international trade in services by mode of supply

Percentage of Modes of supply in year 2015 - World



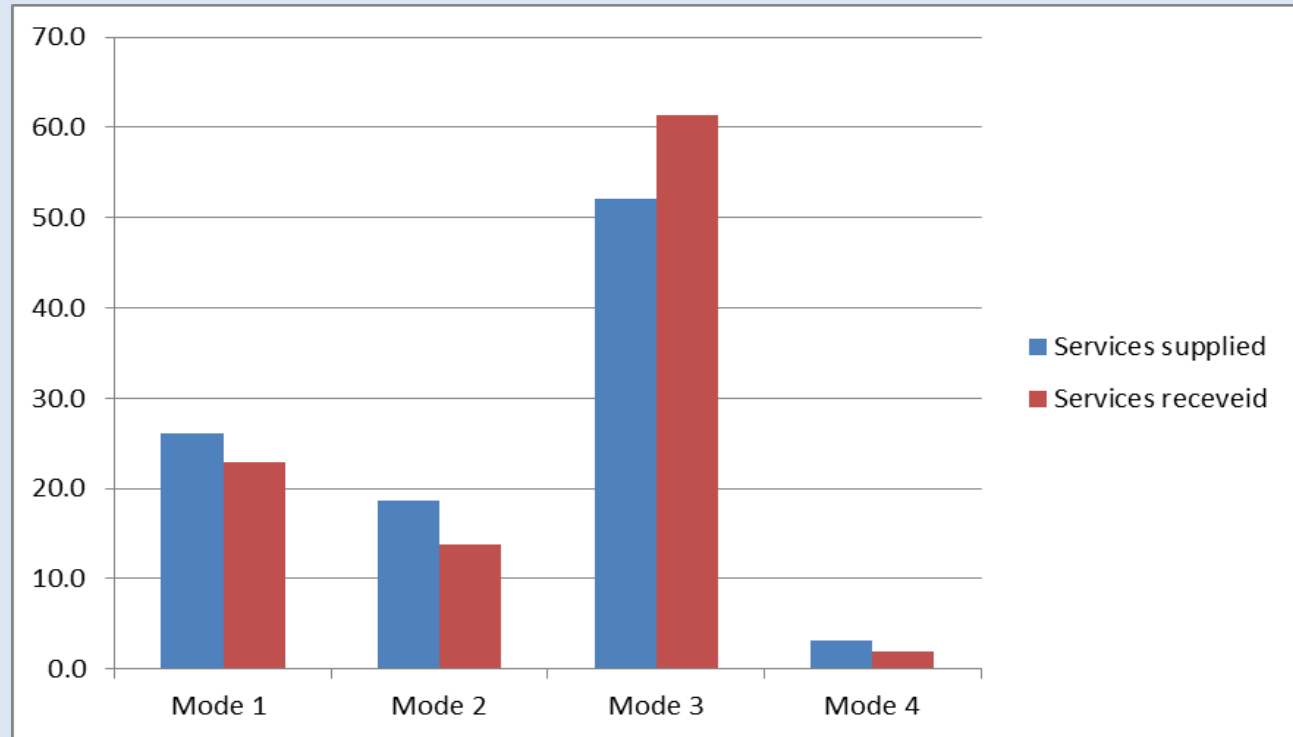
# Italian international trade in services by mode of supply

Percentage of Modes of supply in year 2015 - EU



# Italian international trade in services by mode of supply

Percentage of Modes of supply in year 2015 – extra EU



## Modelling mode 3:

- ***Domestic (local) vs foreign turnover :***
    - a) for export, we used local turnover from Italian outwards FATS.
    - b) for import, we estimated local turnover from SBS data merging inward FATS data with from SBS large companies data.
  - ***Distribution services:*** we used the production value from Italian inward FATS and the ratio between production and turnover, calculated by IFATS, is used for outward FATS.
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## Modelling modes 1,2:

- *Distribution services*: we used directly the Trade table margins (TTM) in the Italian Supply-Use framework.
- *Exclusion of goods from Travel and distribution services*: we used Italian Tourism Satellite Accounts 2015.

*The Italian project has also tried to resolve other issues related to other estimates (i.e. Manufacturing services) and about this more details are available in the paper.*

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**Thanks for your kind attention**

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