



Digital intermediation platforms (DIPs)

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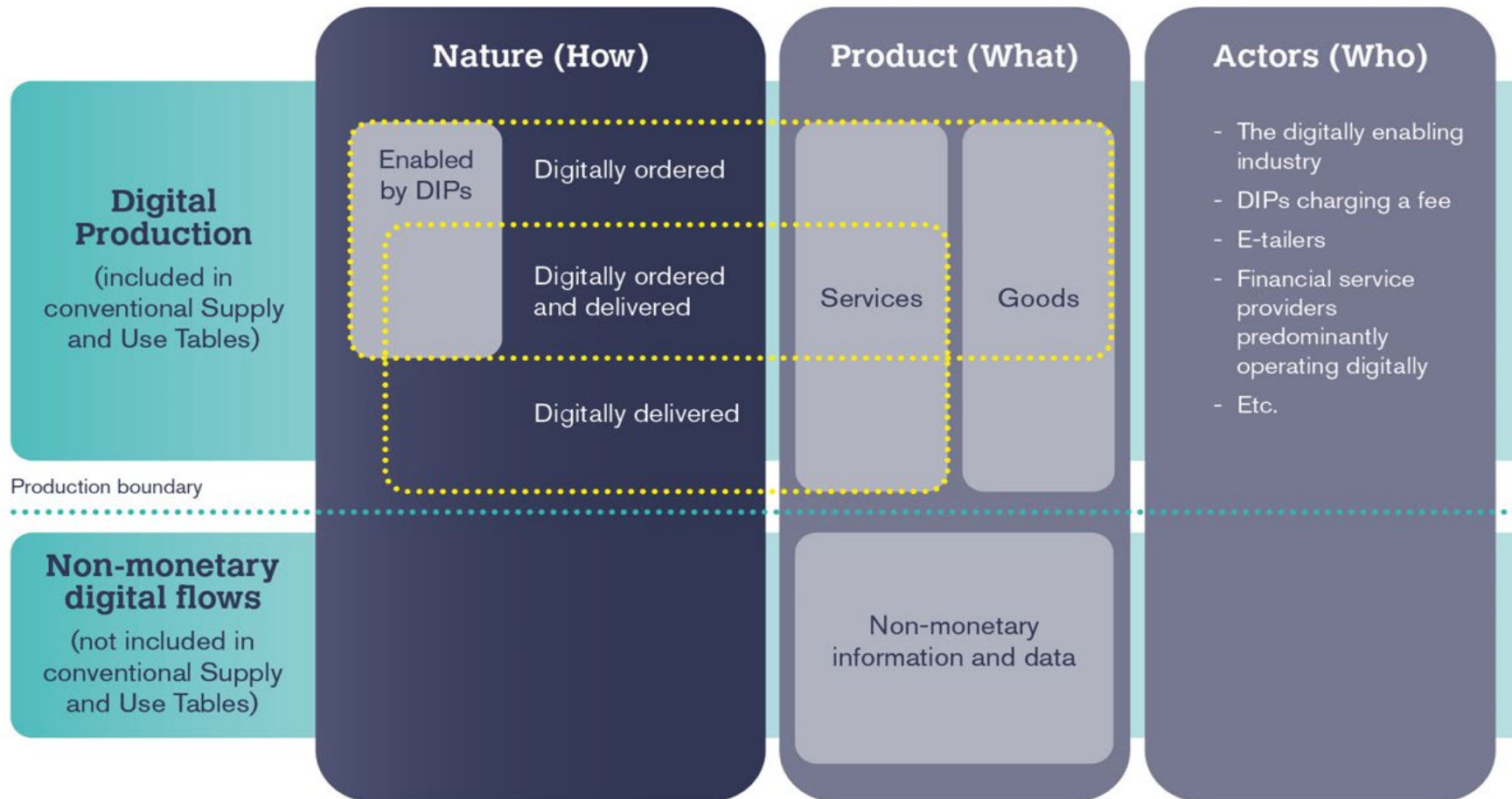
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Role of digital intermediation in Digital SUTs

Set-up of the framework



1. DIPs = Digital Intermediation Platforms.
2. There are currently seven new digital industries; the last column shows examples. The full list are: The digitally enabling industry, DIPs charging a fee, Data- and advertising-driven digital platforms, Producers dependent on DIPs, E-tailers, Financial service providers predominantly operating digitally, and Other producers only operating digitally .

Source: IMF, OECD, UNCTAD, WTO adapted.



Digital intermediation in Digital SUTs

- Digital intermediation is reflected in three ways:
 - Dimension 1: Nature of the transaction
 - It is distinguished which part of the digitally ordered amounts are [via resident and non-resident platforms](#)
 - Dimension 2: Products
 - [Digital intermediation services](#) (DIS) are distinguished as a separate digital product class
 - Dimension 3: Digital industries
 - [Digital intermediation platforms](#) (DIPs) are distinguished as a separate digital industry



Digital intermediation platforms



Digital Intermediation Platforms (1)

- DIPs are businesses that **operate online interfaces** that facilitate, **for a fee**, the direct interaction between **multiple buyers and multiple sellers**, without the platform taking **economic ownership** of the goods or rendering the services that are being sold/intermediated
- Distinguishing factors:
 - The **charging of a fee** for facilitating a transaction (in SNA sense)
 - **Multiple buyers and sellers**
 - **Absence of economic ownership** of the product by business facilitating the transaction
- Online platforms that do not facilitate an interaction that creates value added generate revenue via other means, e.g., via selling advertising space or analysis based on the data they produce from the interactions on the platform
- These platforms are included in category 3. Data- and advertising-driven digital platforms



Digital Intermediation Platforms (2)

The following are **excluded** from definition of DIPs:

- Platforms where there are **not multiple sellers**
 - **Media sharing platforms** facilitate the sharing of cultural content between two or more groups for a fee or free of charge
 - **Recreational platforms** allow one or more individuals to engage in recreational activities including gaming and gambling
- Platforms that **do not facilitate transactions**
 - **Social media platforms** disseminate information for free to a selected group of members.
 - **Funding platforms** allow people to raise money for business projects or specific causes
 - **Financial digital intermediation platforms** facilitate peer-to-peer lending
 - **Dating apps** and platforms that bring people together with shared interest
- Marketplaces that **don't charge a fee**



Digital Intermediation Platforms (3)

- Examples of DIPs include:
 - Marketplace platforms that bring together buyers and sellers to trade goods and services
 - Platforms facilitating (short term) accommodation, B2C and C2C
 - Platforms facilitating ride-hailing similar to taxi services, B2C and C2C
 - Ticket selling platforms
 - Platforms facilitating sharing of household assets such as car-sharing
 - Platforms that intermediate electronic content (without taking economic ownership of the IPPs they distribute), such as app stores
- All institutional sectors in the economy can use DIPs in transactions in goods and services
- Non-financial corporations and the household sector in particular use DIPs both as buyers and sellers





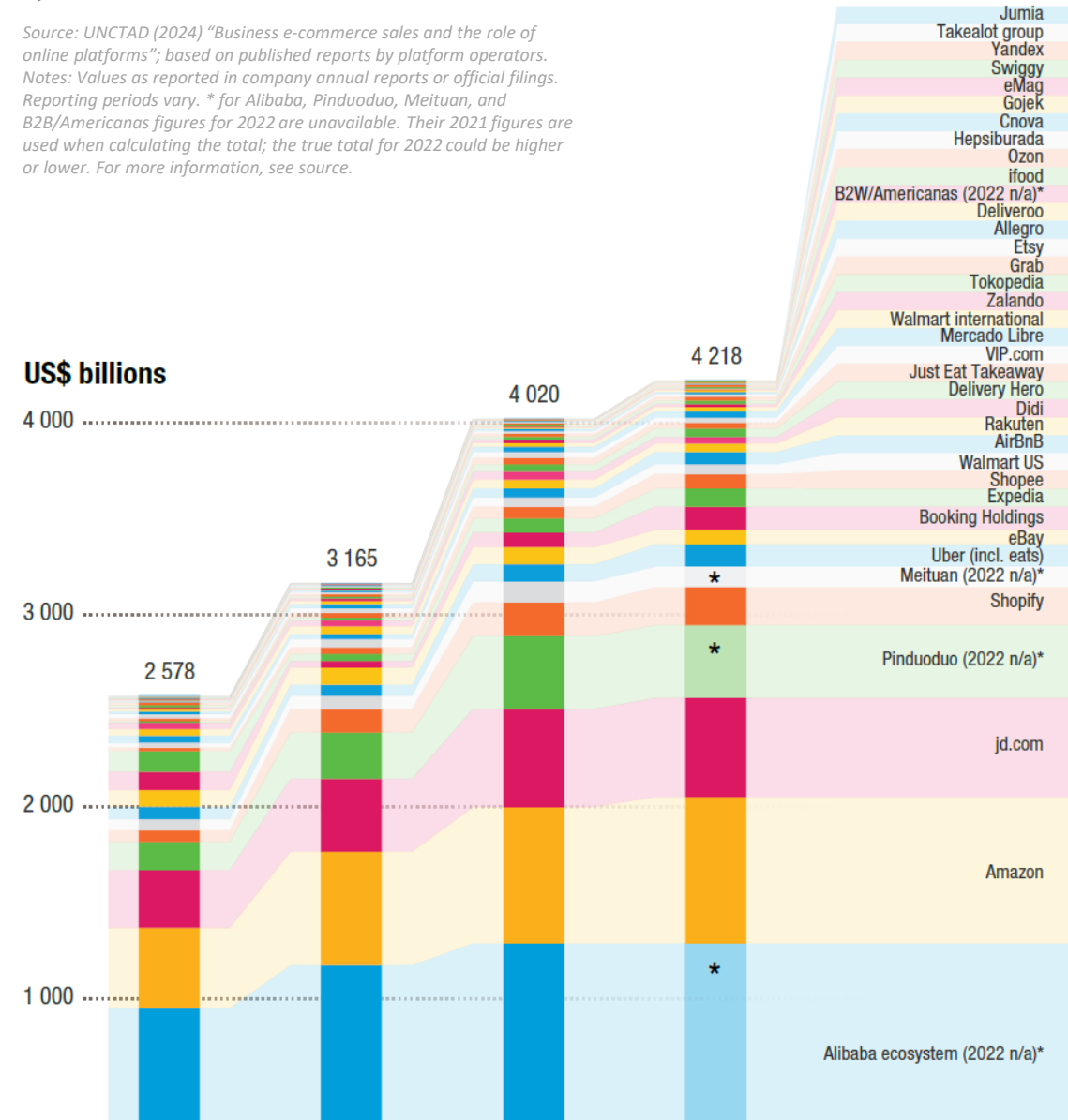
Digital intermediary platforms (4)

- Sales through online platforms are **booming**
- The platform landscape is **dominated** by a small number of platforms
 - 6 platforms facilitate over \$100bn of transactions in 2021
 - Together they account for 80% of the total transaction value
 - 4 out of these 6 are **Chinese**
- It is crucial to obtain **high quality information** from these DIPs
 - Please note that 3 out of the 3 Chinese DIPs did not publish their transaction value for 2022

Transactions through digital intermediation platforms, 2019–2022

Gross Merchandise Value of goods / Gross Transaction Value of services reported by DIP operators

Source: UNCTAD (2024) "Business e-commerce sales and the role of online platforms"; based on published reports by platform operators. Notes: Values as reported in company annual reports or official filings. Reporting periods vary. * for Alibaba, Pinduoduo, Meituan, and B2B/Americanas figures for 2022 are unavailable. Their 2021 figures are used when calculating the total; the true total for 2022 could be higher or lower. For more information, see source.





Digital intermediation services



Products - Digital Intermediation Services (1)

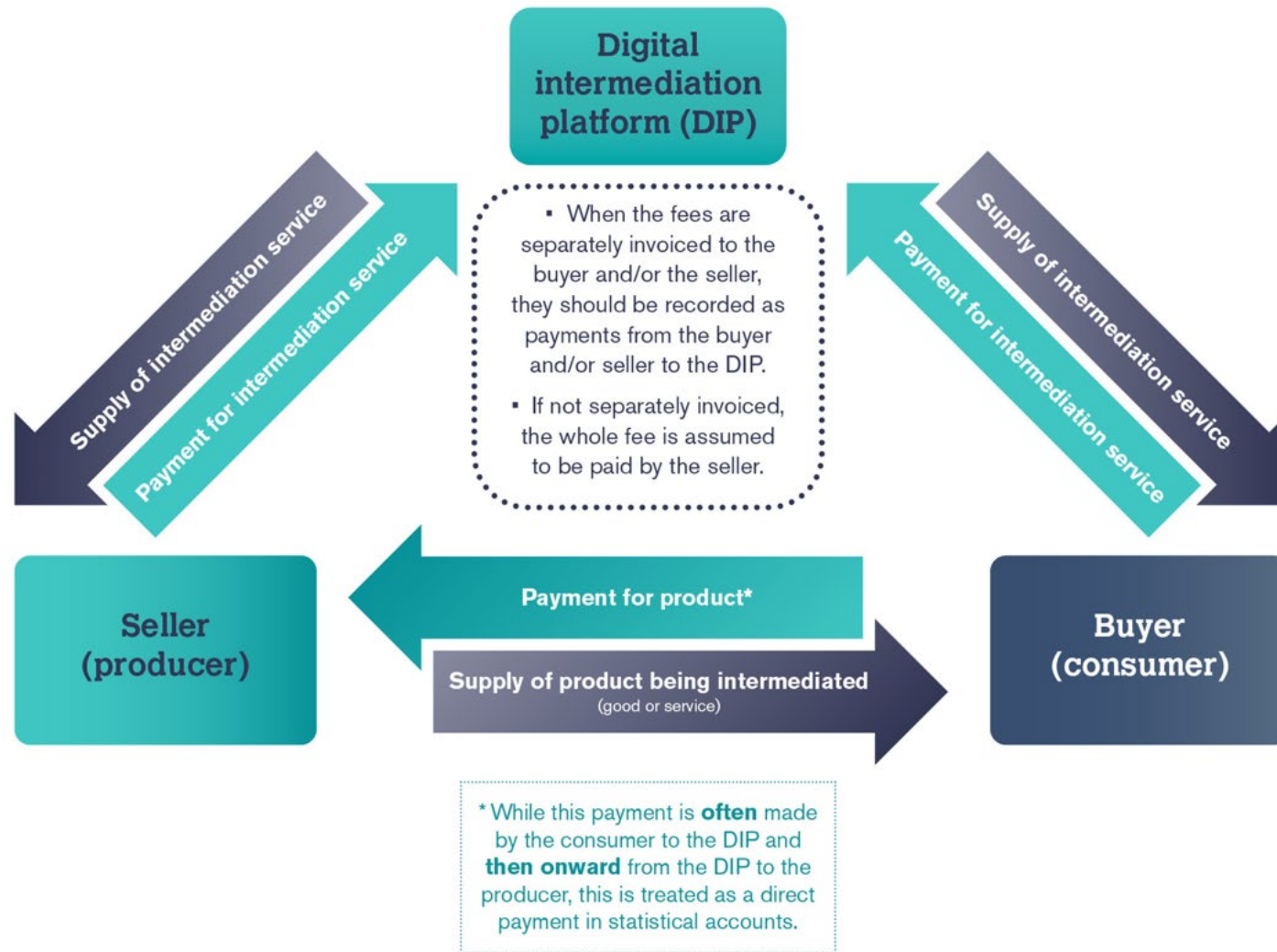
- DIPs produce **digital intermediation services** (DIS), i.e., the online intermediation services to facilitate transactions between multiple buyers and multiple sellers in exchange for a fee
- DIS is a **product in itself** and not a margin added on top of value of underlying product
- ISIC Rev 5: A number of groups and classes were created exclusively for intermediation services, placed within the respective divisions
 - 4790 Intermediation service activities for retail sale
 - 5540 Intermediation service activities for accommodation
 - ...
- Within the Digital SUT framework, all DIPs are contained within a single industry column and the product they produce, the DIS, is contained within a single product row



Products - Digital Intermediation Services (2)

- In almost all cases, the DIS is consumed as **intermediate consumption** as the entity selling the good or service is usually responsible for the full fee
- However, in some cases, a part of the fee is separately invoiced to the consumer
- In those cases, this portion is considered as **household consumption**
- **Explicit fees** should be recorded as a payment to the DIP for the intermediation services, from the buyer and/or the seller
- **Implicit fees** need to be imputed
- When it is not possible to establish who pays the fee, it is assumed that the intermediation fees are entirely incurred by the seller

Digital intermediation in action



Example: Taxi service intermediated by a DIP

An app is used to match the customer with a driver and possibly also to manage the payment.

Two elements need to be disentangled:

- supply of goods or services (transaction between the seller and the buyer)
- provision of intermediation services (transaction between the DIP and both the seller and the buyer)

DIPs are remunerated for providing DIS through fees received from the buyer, seller/producer, or both.

Correctly identifying and attributing fees is crucial to understand the role of the DIP.

Estimating the value of intermediation fees

What is paid by the buyer



what the seller receives



value of digital intermediation services

This information may not be available

- Compilers may need to estimate the intermediation fee separately, for instance based on reports by DIPs operating in the reporting economy
- In the case of payment by cash on delivery direct to the seller, the amount received may include an amount for the intermediation fee which is ultimately transferred to the DIP.

As a general rule the main transaction (for the intermediated product) between the buyer and the seller should reflect

the full value that the buyer pays less the fee paid by the buyer to the DIP (if any)



value of the good or service being intermediated



intermediation fee paid by the seller to the DIP



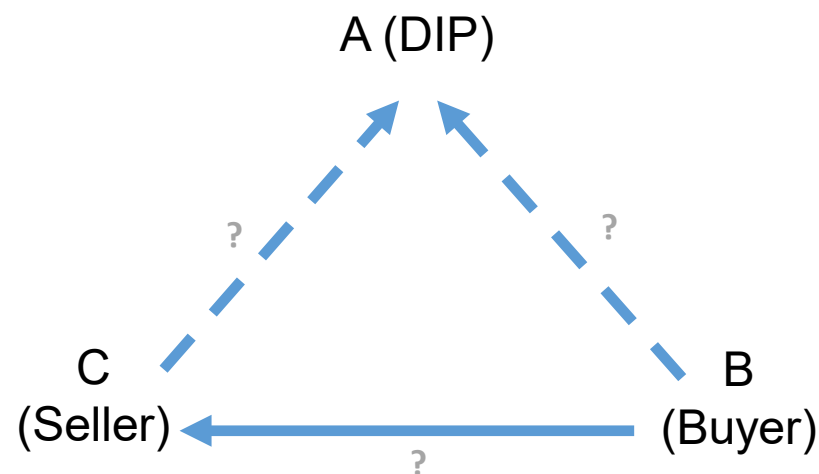
Example

A consumer (the buyer) in country B purchases sportswear from a seller in country C. The transaction is intermediated by a DIP in country A.

The buyer pays 100 for a good, of which 12 is a fee paid to the DIP.

The DIP also charges a fee of 7 to the producer for the intermediation services it provides.

What would the payments look like?





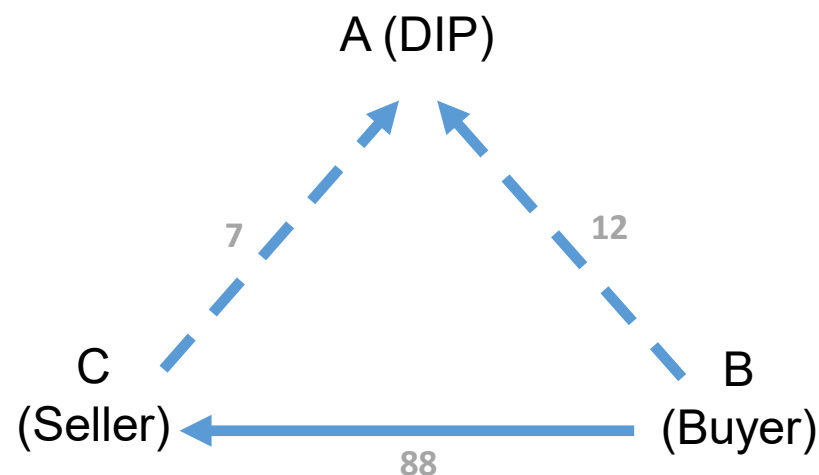
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Data collection



Obtaining data on DIPs (1)

- The first step is to **identify DIPs in the economy**
- This may be done by including a scoping question as part of a **standard business survey** or **ICT survey**

Q1: Does your business earn income from providing digital intermediation services? Yes No

(If No, skip to next question)

Services that are earned from operating a digital intermediation platform, which is an online interface that facilitates, for a fee, the direct interaction between multiple buyers and multiple sellers. The platform does not take economic ownership of the goods, nor does it provide the services that are being sold. Report fees and commissions only, not the value of goods or services sold on the platform.

Q1a: Report the value of sales of digital intermediation services (fees and commissions only)

Q1b: Report the value of sales of digital intermediation services to foreign persons (amount or %)

Q1c: Please state the types of product intermediated:

Goods Services Goods and Services

Q1d: Report the total value of goods and/or services intermediated



Obtaining data on DIPs (2)

- Another approach to detecting DIPs in the business register is to focus on the presence of [well-known DIP companies](#)
- An alternative is to use [webscraping](#) on the basis of keywords and phrases
 - Possible keywords: digital , platform, technology, app, buy and sell, marketplace, order, Ecommerce, gateway, channel, customers, internet, 'sell directly', 'online marketplace', 'mobile wallet'
 - Further research can then turn out whether the webscraped results indeed concern DIPs
 - They can then be highlighted as such in the business register



Obtaining data on DIP users

- It is important to identify main **companies** using DIPs to sell and/or buy goods and services
- Collect data on
 - 1) Value of **turnover sold** via DIPs
 - 2) Value of **inputs purchased** via DIPs
 - 3) The intermediation **fee**
 - 4) The proportion of these amounts that is **exported/imported**
- It may be too much to collect in a standard business survey, but could be included as module in the **ICT enterprise usage survey**
- It may be difficult to collect direct information from **households**, but information could be targeted (e.g., via ICT usage surveys) on:
 - 1) Value of **goods and services intermediated** via the platform, including a split between resident and non-resident
 - 2) Information on explicit **fees** paid to DIPs



Country examples



Measuring spending via platforms in Canada

The Canadian Internet Use Survey asks respondents to report on the purchases they made through certain categories of online platforms:

1. In the past 12 months, did you use ride services such as Uber, Lyft, etc.?
2. In the past 12 months, what was the total amount that you personally spent on these ride services in Canada?
3. In the past 12 months, did you use private accommodation services such as AirBnB, Flipkey, etc.?
4. In the past 12 months, what was the total amount that you personally spent on these private accommodation services in Canada?
5. In the past 12 months, what was the total amount that you personally spent on these private accommodation services outside of Canada?



Measuring use of platforms for tourism in Spain

Q1. What was the main type of accommodation used during the trip?

- 1) Hotels or
- 2) Similar establishments
- 3) Rented dwelling or
- 4) Rented room in private home
- 5) Rural tourism accommodation or
- 6) hostels
- 7) Camping or
- 8) cruise
- 9) Other rented accommodation
- 10) Non-rented accommodation

Q2. How did you book the main accommodation?

- 1) Directly with the service provider through its web or App
- 2) Directly with the service provider in person, by mail or by phone
- 3) In a travel agency or tour operator
- 4) Through a specialised web page

e.g. AirBnb, Homeaway, Booking, Homelidays, Niumba, Rentalia, Housetrip, Wimdu, Interhome, Friendly Rentals, etc.) only if Q1 was =3 or 4

- 5) Face-to-face
- 6) Don't know

Q3 Total spend on accommodation during the trip \$



Conclusions



Conclusions

- Digital intermediation is an **important aspect** of the digital economy
- For that reason, it is important to publish **high quality information** on the actors and their activities
- DIPs are online interfaces that facilitate, for a fee, the direct interaction between multiple buyers and multiple sellers, without the platform taking economic ownership of the goods or services that are being sold
- In almost all cases, the DIS is consumed as **intermediate consumption** as the entity selling the good or service is usually responsible for the full fee
- However, in some cases, a part of the fee is separately invoiced to the consumer in which case it has to be recorded as **household consumption**
- It is important to collect data both from the DIPs as well as from users of DIPs
- It has to be born in mind that it may concern large cross-border flows



THANK YOU

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