Why is measurement of digital trade needed?

Digital technologies have made it easier to engage in trade, co-ordinate global value chains (GVCs), and diffuse ideas, thereby changing how firms organise international trade, what they sell and to whom. This has led to more numerous and complex international trade transactions involving combinations of goods, services and data crossing different borders. Today, international trade needs to be quicker and more reliable than ever before to meet growing demand for just-in-time delivery and "on demand" access to goods and services.

Although digital-related transactions have existed for many years, exponential increases in scale and the emergence of new and disruptive players have transformed production processes and industries, including many that were previously mostly unaffected by globalisation. Relatively young companies, such as Netflix and Spotify, have quickly scaled using digital channels to deliver entertainment services globally. However, despite growing attention to "digital trade", little internationally comparable information on its size, nature and evolution currently exists. This inhibits a full understanding of the resulting policy challenges.

What are the challenges?

One impact of digitalisation has been an increase in small parcel trade. As the value of parcels often falls below the *de-minimis* thresholds adopted by customs authorities, there is a concern – albeit one that recognises that the impact on overall values of trade is likely to be marginal – that small parcel trade may not be fully captured in official statistics. Significant improvements already underway in customs clearance procedures and tracking systems in many countries will help to establish whether there is systematic underestimation.

More significant challenges exist in the area of (digitally delivered) trade in services, particularly to households. Many European economies are now beginning to use VAT returns from firms to improve on current measurement. These approaches typically lead to upward revisions at the product level. For example, households import 6% and 30%, respectively, of total imports of computer services and audio-visual products in Denmark, but the overall impact remains small, amounting to revisions of less than 0.4% of total imports.[1]

Ensuring that cross-border flows of intellectual property-related services align with core accounting concepts remains a significant challenge. Even when mismeasurement is not an issue, there remain challenges around interpretation[2], as was illustrated by the 26% upward revision to Irish GDP in 2015 (OECD, 2016). The broader issue of measuring intra-firm trade is exacerbated by large non-monetary data flows and delivery of services via affiliates abroad, which are also difficult to capture.

Notwithstanding these issues, a key problem for the development of statistics on digital trade is that current statistical classification systems do not routinely delineate digitally ordered or delivered trade flows from those that are not. In other words, it is hard to identify digital trade through the prism of current classifications.

To address these challenges, countries are exploring new data sources, such as credit card information, and developing projects linking business register data with customs data to provide information on the size of imports and exports by e-tailers (classified as NACE 47.91), or linking other sources. They are also exploring the scope for adding new questions to existing surveys. Costa Rica, with support from UCTAD, recently developed estimates of digitally delivered services using this approach. However, resource constraints and pressure to reduce respondent burden present a challenge in many countries.

Other challenges relate to when, how and by whom trade flows should be recorded. Digital intermediary platforms, which facilitate transactions for a fee, do so without ever taking ownership of the products involved. The identification of these platforms in business registers, their classification in terms of the actual services they provide, and the treatment of the transactions they facilitate – including which parts should actually recorded as being cross-border, and with which partner country – pose significant conceptual and empirical challenges.

Finally, current frameworks also struggle to identify the take-up of digital tools and technologies to engage in trade. OECD's Statistics and Data Directorate Informal Advisory Group on Measuring GDP in a Digitalising Economy is conducting work to address this need (see also page 2.11).

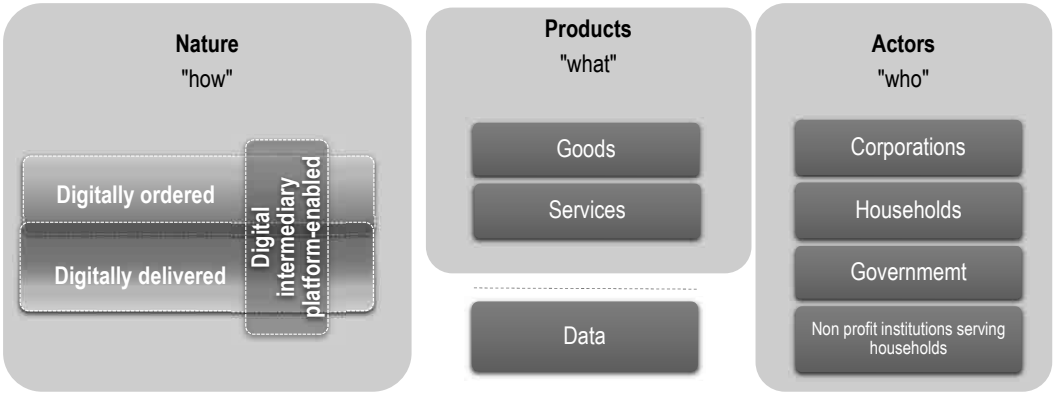
Options for international action

Efforts to better measure and identify digital trade follow a conceptual framework that defines digital trade as all international trade flows that are either digitally ordered, digital-intermediary platform-enabled or digitally delivered. The framework follows existing international statistical standards and classifications relevant for trade (BPM6 and EBOPS,

1. Burman and Sølvsten Khalili (2018), 'Measuring import of Digitally Enabled Services to Private consumers', Statistics Denmark.
2. http://www.oecd.org/iaos2018/programme/IAOS-OECD2018_Schreyer-vandeVen-Ahmad.pdf

IMTS and Harmonised System) and also capitalises on existing statistical definitions for e-commerce (OECD, 2011), OECD classifications of ICT goods and services, and definitions of ICT-enabled transactions developed by the TGServ Group).

Conceptual measurement framework for digital trade



Note: "Data" reflects only those cross-border data flows that do not entail a monetary transaction but do support one.
Source: Adapted from OECD (2017).

Among the key aspects of the work going forward is the development of a Handbook on Measuring Digital trade, co-ordinated by the OECD and WTO-led inter-agency Task Force on International Trade Statistics (TFITS). This taskforce brings together representatives from international agencies (OECD, UNCTAD, WTO, IMF, EUROSTAT, UN and the World Bank Group) plus more than 25 countries including Brazil, China, India, Indonesia, the Russian Federation, South Africa and Thailand, in addition to many OECD member states.

The Handbook builds on two OECD-IMF stocktaking exercises involving more than 70 countries (statistical offices and central banks) and numerous discussions across various fora in recent years, including at the OECD Working Party on Trade in Goods and Services, IMF BOPCOM and the Eurostat Working Group on Balance of Payments Statistics.

The first release of the Handbook, designed to be a living document, will be made available on-line in the first quarter of 2019. It will consist of five substantive chapters presenting:

1. A definition of digital trade - and a conceptual framework that provides recommendations on how transactions should be recorded (in particular those relating to digital intermediary platforms);
2. Best practice on measuring cross-border digitally ordered goods and services, with a focus on the sectors involved and the nature of the transactions (which services and whether they are cross-border or not);
3. Best practice on identifying digital intermediary platforms, with recommendations on the recording of related flows and, in particular, recommendations on the recording of transactions of non-resident platforms intermediating the provision of goods and services by domestic suppliers to domestic consumers;
4. Best practice on measuring digitally delivered services; and
5. Recommendations for estimating trade in digital goods and trade in digital services, building on existing and proposed classifications of goods and services, and using existing trade related product classifications.

The Handbook will deliver on the G20 mandate (G20, 2017) to develop a definition and typology of digital trade, highlight gaps in measuring and mapping digital trade, identify potential biases in international trade statistics, and, based upon emerging national statistical practices, provide recommendations on data sources and accounting standards.

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