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The Measurement of Online Platforms

Maarten Van Rossum

Nico Heerschap

One of the trends which emerged from the digitalisation of the economy in the last ten years are the so-called digital or online platforms. These online platforms function as intermediaries between demand and supply of products, services and/or information (transaction platforms). Online platforms can be seen as digital and socio-economic structures or eco-systems for multi-sided social interactions and market transactions, strongly driven by collected data, cloud computing and algorithms. Usually, these online platforms do not own the products, services and/or information, which are traded. In a somewhat different form online platforms are also seen as digital structures and shared techniques and rules, that allow (different) suppliers to develop (different) applications for (different) end users (innovation platforms).

Often cited examples of online platforms are Airbnb, Ebay, Uber, Facebook, Youtube and Microsoft PowerApps. However, online platforms come in all kinds of shapes and sizes and are diverse in function and structure. They occur in more and more domains of society and economy. Whether it is about buying products, hiring services, booking a hotel, ordering a meal, looking for a notary or the collaborating between (competing) companies, you will increasingly find online platforms.

The general view is that these online platforms will change the nature in which we interact, socialize and work, as well as the way the economy is structured, resulting in new business models, a different way of creating value, a shift in market power and who gets the benefits. The first part of the paper will deal with the definition of the term online platform and related phenomena, such as the digital economy, sharing economy and gig-economy. There are different definitions in circulation. This part of the paper also looks at the major characteristics of online platforms and their drivers. The second part of the paper will focus on the variables to be measured. Partly this will be standard economic variables, otherwise a comparison with the 'old economy' cannot be made. On the other hand new variables are interesting as well, otherwise the main issues of online platforms cannot be described. This includes the use of data, algorithms and review systems. In the final part of the paper some results of surveys that were carried out by Statistics Netherlands on online platforms will be presented. For example, Statistics Netherlands will carry out a survey among a small population of online platforms that were initially scraped from the internet.

### References

- Commission of the European Parliament (2016). Online platforms and the digital single

market: opportunities and challenges for Europe;

- Heerschap, N., Pouw, N. and Atmé, C. (2019). Measuring online platforms. Centraal Bureau voor de Statistiek (CBS);

- Joint Research Centre (2017). The competitive landscape of online platforms. European Commission;

- OECD (2019). An introduction to online platforms and their role in the digital transformation. OECD publishing;

- Weel, B. ter, Werff, S. van der, Bennaars, H., Scholte, R., Fijnje, J., Westerveld, M. and Mertens, T. (2018). The rise and growth of the gig economy in the Netherlands. SEO Amsterdam Economics;

- Office for National Statistics (2017). The feasibility of measuring the sharing economy. ONS;