Competition in the digital age

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Digital technologies have the potential to bring huge benefits in terms of productivity, jobs and ultimately living standards. At the same time, consumers will gain access to new, innovative, and cheaper products. However, for digitalisation to bring benefits to all firms and citizens, we need a healthy competitive environment, which encourages and diffuses innovation, and helps bring the gains from technology to people.

There is a growing debate in the media and among policymakers about how competition is functioning in digital markets, with a focus on market power, concentration and data protection, among other concerns. The OECD's analysis is beginning to shed light on this important issue, and develop policy options to harness the benefits of digitalisation.

To start with, let's recall what makes digital markets unique and shapes the business models and competitive dynamics in digital sectors. These characteristics include:

- **Substantial network effects** in platform markets, meaning that as the number of users grows, the value of a platform to users increases.

- **Low variable costs and high fixed costs,** meaning that there are significant economies of scale and scope in digital markets.
- **Data from users playing an increasingly important role** as an input and competitive asset. New firms may find that data constitutes a substantial barrier to entry in digital markets, and consumers may not be fully aware of the data collected when they use online services.

These characteristics can result in a small number of firms holding very high market shares and potentially dominant positions in some digital markets.

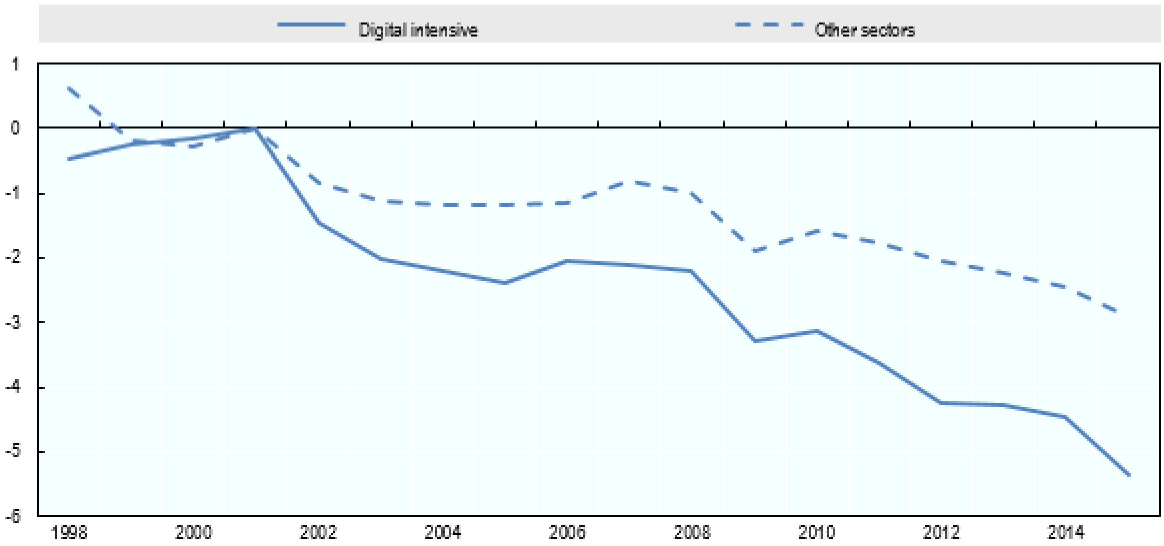
However, it is important to recognise that a firm having a large share of a given market is not automatically a cause for concern. In fact, it may simply be the reward for having the most innovative ideas, or attracting the highest number of users to increase the usefulness of a digital platform. As long as the large market share is not defended through anticompetitive conduct, and the market is accessible enough for new entrants, the market can function well.

However, there are some signs that markets are becoming less dynamic than before

- First, the OECD and others have found that mark-ups (defined as the ratio of unit price over marginal cost) charged by firms are increasing. This could be an indicator that competitive intensity is weaker than before.

- Second, there is evidence that fewer start-ups are being created, particularly in the digital sector, which also has implications for the entrenchment of large firms, as shown in Figure 1 below.

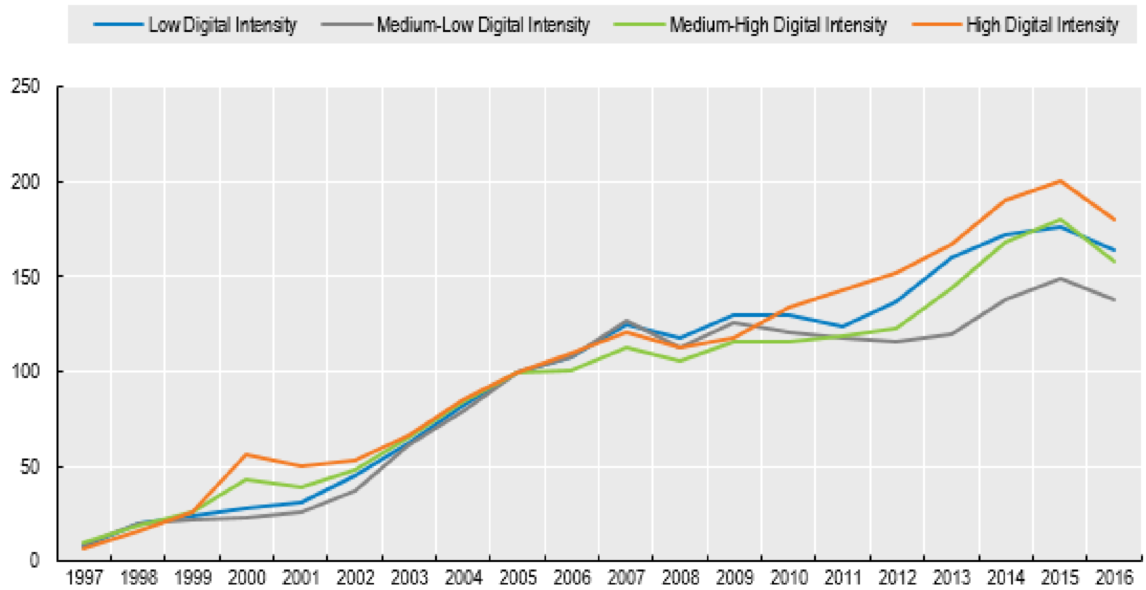
Figure 1: Falling firm entry rates



Source: Calvino and Criscuolo (2019) based on the OECD DynEmp3 database
Note: The figure reports average within-country-industry trends based on the year coefficients of regressions within country-sector, with and without interaction with the digital intensity dummy. Digital intensive sectors are reported with a blue line and other sectors with an orange line. The dependent variables is entry rates in panel. Each point represents cumulative change in percentage points since 2001.

- Third, there has been an acceleration of M&A activity that focuses on digital firms (see Figure 2 below). Many mergers can have broadly procompetitive benefits, for example in terms of innovation. But there is concern about transactions involving small start-ups that are not captured by competition authorities, and which may have anticompetitive effects.

Figure 2: Number of M&As per Year by Digital Intensity of the Target Firm



Note: The digital intensity of sectors is defined using the industry of the target firm and the STAN A38 global digital intensity indicator of 2013-15 constructed by (Calvino et al., 2017). The M&A data reflects the annual total number of acquisitions (i.e. result in a majority stake), purchasing minority stakes and issuing of new share capital involving target firms in the non-farm non-financial business sector (i.e. NACE rev.2 codes 10-82, excluding 64-66). Note M&A data has global coverage from 2003 onwards, statistics before that point should be interpreted cautiously.
Source: Zephyr M&A database

- Fourth, there are signs that the largest firms are earning an increasing share of revenues. While revenue concentration is not a very meaningful indicator of competition on its own, in combination with the other evidence above, it may suggest that something is changing about competitive dynamics in markets.

The OECD is working to understand the implications of these findings, especially the role of digitalisation. There is currently no single “smoking gun”, whether technological entry barriers, regulatory distortions to competition, or firm misconduct. A variety of factors may be at play.

In the meantime, policymakers can take

steps to address competition risks in digital markets.

First, there are opportunities to strengthen competition law enforcement. Agencies may need to adjust merger notification thresholds to ensure they capture potentially anticompetitive acquisitions of digital start-ups. They will also require vigilance in assessing merger harms associated with dynamic competition (i.e. effects on potential future competition) and innovation, as well as addressing potential abusive conduct by firms. Ex-post assessments of merger decisions can also help authorities review the analysis and tools used in past cases in order to draw lessons going forward. Authorities may also need additional tools to analyse and detect novel forms of firm misconduct, such as algorithmic collusion.

Second, we need to consider whether current legislative frameworks are themselves contributing to problems regarding digital competition. For example, the OECD is adapting its Competition Assessment Toolkit to assist policymakers in identifying regulatory barriers to competition in digital sectors. The adapted toolkit for digital markets will be released later this year.

Third, new policy solutions may be needed to protect and promote competition in digital markets, such as data portability measures. Such measures could potentially help innovative new firms overcome the barriers to entry associated with data, and empower consumers by reducing switching costs. New business models could emerge that involve paying consumers for their data, allowing them to share in the value generated by their online activities.

Consumer and data protection regulators can also address growing consumer concerns about digital firms while at the same time promoting competition. This can include clarifying the rights consumers have, and ensuring that they are given meaningful opportunities to exercise those rights through fair contracting standards and default options

Fourth, competition authorities can strengthen cooperation with international counterparts given the global scale of many digital businesses. Investigation and advocacy cooperation is also needed with consumer protection and data protection authorities, who may be dealing with overlapping concerns. The OECD has a range of resources for competition authorities on emerging digital competition issues, assessing their past decisions, and using non-enforcement tools.

More broadly, policymakers must ensure that the fundamentals are in place for new businesses to succeed, namely by ensuring the right skills mix in the economy, keeping administrative burdens to a minimum, and promoting broadband internet access.

OECD will be jointly hosting with the French Ministry of the Economy and Finance, and the French Autorité de la concurrence, a conference exploring many of these issues on June 3, 2019. The conference, Competition in the Digital Economy, will be webcast, and available to watch during and after the event here.

Further reading

Bajgar, M., et al. (2019), “Industry Concentration in Europe and North America”, *OECD Productivity Working Papers*, No. 18, OECD Publishing, Paris, https://doi.org/10.1787/2ff98246-en.

Calvino, F. and C. Criscuolo (2019), “Business dynamics and digitalisation”, *OECD Science, Technology and Industry Policy Papers,* No. 62, OECD Publishing, Paris, https://doi.org/10.1787/6e0b011a-en.

More resources on the digital economy, innovation and competition