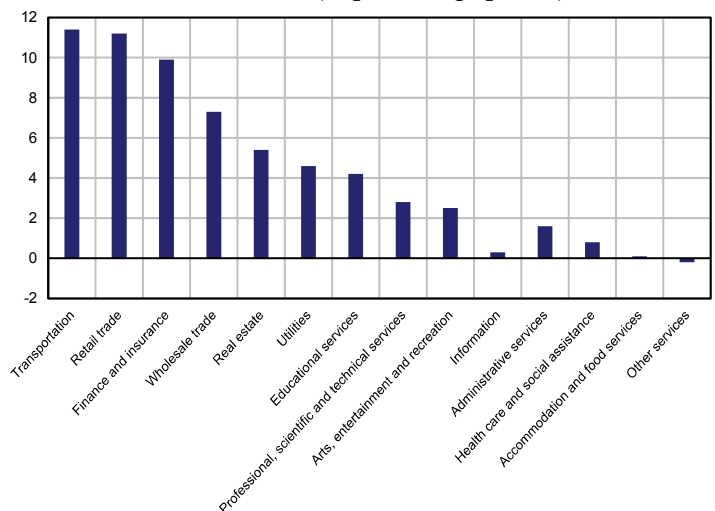


## Competition and market concentration in the United States

- In most sectors, market concentration in the United States has been on the rise for the past two decades. Major companies have a larger market share than before, fuelling a renewed antitrust debate.
- This increase may be attributed to several phenomena, but it is difficult to disentangle their respective contributions. Reallocating production to highly productive and profitable companies (the so-called "superstars") has resulted in both productivity gains and increased concentration. The increase in concentration and profits in the US could also be the result of an overall fall-off in the intensity of competition due to weaker competition policies or higher barriers to entry, which may have been facilitated by digital technologies.
- Increased concentration may have a negative impact on corporate investment. Its effect on real wages is less certain: on the one hand, an increase in firms' market power may result in higher prices or lower negotiated wages, but on the other, firms that generate profits may also sometimes share some of them with their employees.
- These developments contribute to increasing income inequality in the US. Indeed, higher profits mean a transfer of wealth from consumers to capital owners, who are on average better off. Moreover, since productivity and wage gaps between companies contribute significantly to aggregate wage inequality, sharp growth in a small number of highly-productive companies can increase inequality, even in the absence of competition issues.
- These phenomena have not yet been clearly identified in Europe, where concentration has remained stable overall. Although certain measurements appear to indicate an increase in profits in Europe, the literature is more divided with respect to this.

**Change in Market Concentration by sector in the US between 1997 and 2012 (in percentage points)**



Source: Census Bureau, DG Trésor calculations.

How to read this chart: Concentration is measured by the sales share of the 50 largest firms in each sector.

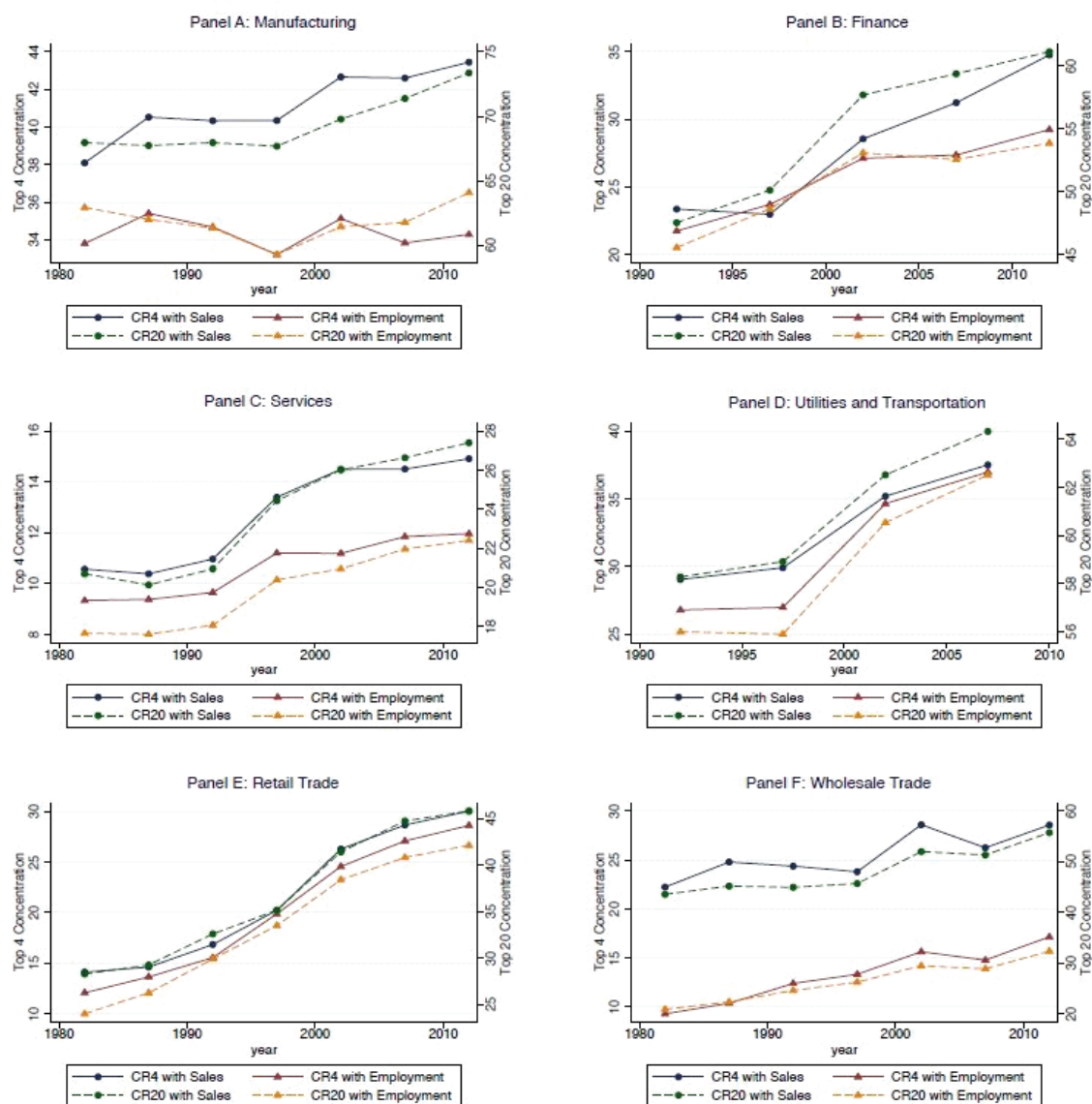
# 1. In most sectors in the United States, concentration has increased

There is agreement in the empirical literature as to the increase in concentration<sup>1</sup> in the United States, which can be seen both in high-growth sectors, such as digital technology, and in traditional sectors.

Taking a sector-based approach to Economic Census data, Barkai<sup>2</sup> (2017) estimates that the share of sales by the 4, 8, 20 and 50 largest companies in each 6-digit sector (750 sectors in total) increased significantly between 1997 and

2012 (see graph above). Autor *et al.*<sup>3</sup> (2017), using the same data, measure concentration by sales and employment share of the four and twenty largest companies, as well as using the Herfindahl-Hirschman (HH) index within each 4-digit sector (311 sectors in all, see Chart 1). They highlight an increase in concentration since the 1980s, more pronounced in terms of market share than of employment share.

**Chart 1: Concentration in the United States**



Source: Autor *et al.* (2017).

Note: Concentration is measured by firm sales and employment shares of the 4 (CR4) and 20 (CR20) largest firms for each 4-digit sector (311 sectors).

- (1) It can be measured across the economy or at a detailed sectoral level. The more detailed the sector, the closer it comes to the concept of a "market", which is useful in competitive analysis. Standard measures include the share of the 4, 10, 20 or 50 largest companies in a given sector in terms of revenue, value added, employment, and capitalisation; the higher the Herfindahl-Hirschman Index (HH) - the sum of the squares of companies' market shares - the greater the concentration.
- (2) Barkai S. (2017), "Declining Labor and Capital Shares", Mimeo, University of Chicago.
- (3) Autor D., Dorn D., Katz L., Patterson C. and J. Van Reenen (2017), "The Fall of the Labor Share and the Rise of Superstar Firms", *NBER Working Paper* No. 23396.

In some specific markets, microeconomic studies also reveal an increase in concentration (see CEA<sup>4</sup>, 2016: agriculture, agri-food, hospitals, communication networks, rail transport). However, Froeb and Werden<sup>5</sup> (2018) point out that concentration in some markets has not increased when measured at local level (banks and air transport),

although it has increased when measured using more aggregate indicators.

At global level, concentration is thought to have increased until the 2000s. Since then, the arrival of new Chinese companies capable of competing with large established Western companies probably slowed this trend.<sup>6</sup>

## 2. The increase in concentration can be attributed to several phenomena

The increase in concentration cannot be directly seen as an indicator of a decline in competitive intensity (see Box 1). It can also result from high productivity growth in a small number of firms or from increasing economies of scale in connection with technological innovations.<sup>7</sup> Depending on these different possible causes, however, the implications for economic policy vary. Weakening competition would justify tightening competition policy to limit concentration. Conversely, seeking to oppose concentration arising from

strong growth of highly productive firms or economies of scale in connection with new technologies seems ineffective and could slow technological progress.

To better understand the rise in concentration, we must also examine changes in complementary indices such as markups (see Box 2) on the one hand, and the implementation of competition policy on the other.

### Box 1 : Concentration is an imperfect indicator of competitive intensity and is not easily interpretable at macroeconomic level

Market share concentration measures the structure of a market. It is used by competition authorities to assess the competitive intensity of a given market, but cautiously, since it is imperfect and its relationship to competition is ambiguous. According to the collusion hypothesis, concentration increases profits because the monopolist or oligopolists possess, either individually or collectively, the market power to charge higher prices than would be possible in a situation of pure and perfect competition (Bain,<sup>a</sup> 1951). On the contrary, according to the efficient structure theory, the most productive firms manage to increase their market share (Demsetz,<sup>b</sup> 1974). In all cases, competitive intensity also depends on factors other than market structure. These include contestability (Baumol,<sup>c</sup> 1982), the presence of barriers to entry such as sunk costs (Sutton,<sup>d</sup>1991) and the legal and regulatory environment.

Moreover, identifying the size of the relevant markets within the meaning of the competitive analysis is not a simple matter, either from the point of view of the product in question or the geographical dimension, which reflects the territory in which the companies actually compete to sell it. In some cases, the concentration measured at sector level may be too aggregated to properly reflect market structures (Froeb and Werden, 2018 and Shapiro,<sup>e</sup> 2018). Conversely, in a context of increasing market size due to globalisation and growth in digital technology, an increase in local concentration may not reflect a decrease in the intensity of competition, but simply the fact that the relevant markets are broader (see Valletti,<sup>f</sup> 2018).

a. Bain J. S. (1951), "Relation of Profit Rate to Industry Concentration", *Quarterly Journal of Economics*, Vol. 65, pp. 293-324.

b. Demsetz H. (1974), "Two Systems of Belief about Monopoly", in Goldschmid H.J., Mann H.M. and J.F. Weston, *Industrial Concentration: The New Learning*, 1974, pp. 164-184.

c. Baumol W. J., Panzar J. C. and R.D. Willig (1982), "Contestable Markets and the Theory of Industry Structure".

d. Sutton J. (1991), *Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration*, MIT Press.

e. Shapiro C. (2018), "Antitrust in a Time of Populism", *International Journal of Industrial Organization*.

f. Valletti T. (2018), "Concentration Trends in Europe", European Commission (slide presentation).

(4) Council of Economic Advisers Issue Brief (2016), "Benefits of Competition and Indicators of Market Power".

(5) Froeb L. M. and G. J. Werden (2018), "Don't panic: a guide to claims of increasing concentration", *Antitrust Magazine*, in preparation.

(6) UNCTAD (2017) "Market Power and Inequality: the revenge of the rentiers"; Freund C. and D. Sidhu (2017) "Global Competition and the Rise of China", Peterson Institute for International Economics working paper.

(7) OECD Economic Outlook, November 2018.

## 2.1 An increase in markups could be the result of reduced competition

Estimates in the United States, although they differ as to the levels reached, all show a historical increase in markups

since the 1980s,<sup>8</sup> associated with a decrease in the share of labour in value added (see Table 1).<sup>9</sup> Studies using firm-level data suggest that the increase in markups is greater at the top of the distribution.

### Box 2 : Measuring markups

Markups measure companies' margins, and indirectly gauge the level of competitive intensity. A markup is generally defined as the difference between the selling price and the cost, expressed as a percentage of the cost. The rate of profit corresponds to the same difference, but in relation to the price. Different markup measures exist, depending on the costs taken into consideration. Marginal markup measures the difference between the selling price and the marginal cost. It is also possible to define an average markup, which is the difference between the price and the average cost. These quantities are not directly observable in the data and must be estimated. Markup or profit rates can be defined in different ways:

- a) A net margin rate (often incorrectly called Lerner's index), which corresponds to the net operating income as a percentage of turnover. It does not take into account variations in the cost of capital and capital intensity between firms and sectors.
- b) A profit rate adjusted for the user cost of capital, as proposed by Gutierrez<sup>a</sup> (2017), after Caballero *et al.*<sup>b</sup> (2017).
- c) A more theoretical approach based on a production function, using company data, as proposed by De Loecker and Warzynski<sup>c</sup> (2012), then adopted by De Loecker and Eeckhout<sup>d</sup> (2017). It can take into account production costs alone, or all of a company's expenses (production costs and various general and administrative costs, such as advertising).
- d) An approach that factors in both technological progress and variations in capital intensity, according to Roeger (1995). This method has been applied on French data by DG Trésor.<sup>e</sup>

These indicators differ in their estimates of markup level, but the variations are conceptually similar and the results depend mainly on the dataset selected. It should also be pointed out that high markups are not necessarily linked to a competition problem.

- a. Gutierrez G. (2017), "Investigating Global Labor and Profit Shares", Mimeo.
- b. Caballero R. J., Farhi E. and P.-O. Gourinchas (2017), "Rents, Technical Change, and Risk Premia: Accounting for Secular Trends in Interest Rates, Returns on Capital, Earning Yields, and Factor Shares", *NBER Working Paper* No. 23127.
- c. De Loecker J. and F. Warzynski (2012), "Markups and Firm-Level Export Status", *American Economic Review*, vol. 102, No. 6.
- d. De Loecker J. and J. Eeckhout (2017), "The Rise of Market Power and the Macroeconomic Implications", *NBER Working Paper* No. 23687.
- e. Bouis R. (2007), "Quels secteurs réformer pour favoriser l'emploi et la croissance", *DGTPE Working Paper* No. 2007/13.

**Table 1: Variation of markups in the United States (in points)**

Method	Author	1980-2015*	2000-2015*
a) Net margin rate	Gutierrez (2017)	+0	+1
b) Profit adjusted for the cost of capital	Barkai <sup>a</sup> (2017)	+14 (depuis 1985)	+10
	Gutierrez (2017)	+5	+2
c) Production function (with production costs only)	Gutierrez (2017)	+20	+5
	De Loecker and Eeckhout (2017)	+49	+27
	Diez <i>et al.</i> (2018)	+50	+30
c bis) Production function (with production costs only)	Gutierrez (2017)	+5	+2
	Traina (2018)	+7	+4
d) Factoring in technological progress and variations in capital intensity	Hall (2018)	+26 (since 1988)	

a. Measured as a share of profit in value added.

\* Source : Articles and calculations by DG Trésor based on readings of charts.

Barkai (2017), *op. cit.*; Gutierrez (2017), *op. cit.*; De Loecker and Eeckhout (2017), *op. cit.*; Diez F., D. Leigh and S. Tambunlertchai (2018), "Global Market Power and its Macroeconomic Implications", *IMF Working Paper* 18/137; Hall R. (2018), "New Evidence on the Markup of Prices Over Marginal Costs and the Role of Mega-Firms in the US Economy", *NBER Working Paper* No. 24574; Traina, J. (2018), "Is Aggregate Market Power Increasing? Production Trends Using Financial Statements", University of Chicago, *New Working Paper Series* No. 17.

(8) In particular, the dramatic increase in markups highlighted by De Loecker and Eeckhout (2017) seems high in comparison with the rest of the literature. The choice of whether or not to factor in part of the fixed costs when measuring markup thus appears crucial.

(9) Stephan G. (2018), "The shift in US wage share", *Trésor-Economics* No. 216.

The sectors most affected by the increase in markups in the US depend on the measure considered, but at any rate the increase appears to be more widespread than the digital sector alone. According to Gutierrez (2017), the increase concerns all sectors in the United States.

Less effective competition policy may have contributed to higher concentration and profits. Grullon *et al.*<sup>10</sup> (2016) point out that the merger movement occurred in parallel with the weakening of antitrust actions in the 2000s and the reform of the M&A guidelines. The number of cases under Section 2 of the Sherman Act (which deals with abuse of dominant position) thus fell from an average of 15.7 cases per year during the period 1970-1999 to an average of 2.8 cases per year from 2000 to 2014. Gutierrez and Philippon<sup>11</sup> (2018) model this phenomenon and explain the increase in concentration and profits in the United States by a decrease in competition law enforcement, as the American authorities were "captured", according to the authors, by an increase in lobbying expenditure. Mergers and acquisitions, which are increasingly permitted, have thus contributed to increasing concentration and markups in the United States. Blonigen and Pierce<sup>12</sup> (2016) estimate that in US industry between 1997 and 2007, M&A transactions led to an increase in the average markups of acquired companies, without any increase in productivity.

In addition, a spate of recent work suggests an increase in common ownership. Fichtner *et al.* (2017) estimate that the three largest passive investment funds (BlackRock, Vanguard and State Street) taken together are the largest shareholders of 88% of all S&P 500 companies, which account for 82% of the S&P 500's capitalisation. Common ownership can in theory lead to anti-competitive behaviour, by reducing unilateral incentives to compete and even by encouraging collusion. This type of ownership may also have contributed to higher prices (see Azar *et al.*<sup>13</sup> (2018) in the US air transport sector).

## 2.2 The hypothesis of reallocation to "superstar" firms

Some research suggests that increased concentration and profits are driven by firms with high productivity gains. Autor *et al.* (2017) see the upward trend in concentration and markups (mirroring the decline in the share of wages in value added) as the result of technological forward momentum, particularly the growth of "superstar" firms that are more productive, more capital-intensive, more profitable and larger. The sectors with the highest growth in concentration are those where the dissemination of technological progress (measured by patent citations) has fallen off, suggesting a problem of knowledge transfer between companies. Similarly, for Kehrig and Vincent<sup>14</sup> (2017), reallocation to existing firms (excluding entrances and exits) with a low wage share was the primary factor in reducing the share of wages in value added.

However, reallocation to the most productive firms may have been limited to the 1990s: Gutiérrez and Philippon<sup>15</sup> (2017a) see a positive correlation between aggregate factor productivity and concentration only prior to 2002, with the relationship reversing since.<sup>16</sup>

## 2.3 The role of digital technologies

The digital sector is particularly conducive to concentration. Given the economies of scale that networks represent, the sector naturally has few stakeholders (these are often "winner-takes-all" markets). This can be seen in new markets, such as online search engines (Google) or social media (Facebook), but also in more traditional downstream business segments. For example, computer platforms have enabled Amazon to dominate the e-commerce market.

Over and beyond the digital sector, digital technologies have heightened concentration and raised profits in other economic sectors. Bessen<sup>17</sup> (2017) partly attributes the increase in concentration in the United States to the success of IT systems. According to his estimates, sectors that are the most intensive in proprietary computer systems

(10) Grullon G., Larkin Y. and R. Michaely (2016), "Are US Industries Becoming More Concentrated?", Mimeo.

(11) Gutierrez G. and T. Philippon (2018), "How EU markets became more competitive than US markets: a study of institutional drift", *NBER Working Paper* No. 24700.

(12) Blonigen B. and J. Pierce (2016), "Evidence for the effects of mergers on market power and efficiency", *NBER Working Paper* No. 22750.

(13) Azar J., Schmalz M. and I. Tecu (2018), "Anti-competitive effects of common ownership", *The Journal of Finance*, vol. 73, No. 4.

(14) Kehrig M. and N. Vincent (2017), "Growing Productivity without Growing Wages: The Micro-Level Anatomy of the Aggregate Labor Share Decline", *ERID Working Paper* No. 244.

(15) Gutierrez G. and T. Philippon (2017a), "Declining Competition and Investment in the U.S.", *NBER Working Paper* No. 23583.

(16) *OCDE Economic Outlook* (2018).

(17) Bessen J., "Information technology and industry concentration", Boston Univ. School of Law, *Law and Economics Research Paper* No. 17-41.

(measured by the intensity of internal company software development) are more concentrated with more productive companies. In the end, Bessen primarily attributes the increase in companies' margin rates to the increase in the

use of proprietary computer systems. In addition, technological entry barriers can lead to anti-competitive behaviour (see Trésor-Economics No. 193).<sup>18</sup>

### 3. Problems raised by the increase in concentration and profits

#### 3.1 Firms invest less in sectors where concentration has increased

In the US, increased concentration and markups could lead to an investment deficit and an increase in corporate savings. Gutierrez and Philippon<sup>19</sup> (2016) show that since the 2000s, investment in the US has been low despite a high Tobin's  $q$ .<sup>20</sup> They show that the more concentrated sectors with concentrated share ownership invest less and have a higher intensity of share buybacks, all other things being equal. The type of ownership could also play a role in this investment gap. In a later paper<sup>21</sup> (2018b), the authors thus posit a causal link between institutional ownership and the decline in investment, transmitted by the share buyback mechanism.

This observation, even though it is still debated in the literature, could be linked to a competition deficit. The literature generally spotlights the complex relationship between competitive intensity and innovation, which differs across sectors, market structures and regulatory environments.<sup>22</sup> Overall, an increase in the intensity of competition is more likely linked to an increase in incentives to innovate, and ultimately increases innovation provided that innovative companies can make their investment profitable – which is possible through intellectual property protection, for example. In contrast, a decrease in competitive intensity could reduce incentives to innovate.

#### 3.2 Higher concentration and markups increase inequality

Rising profits and corporate concentration have no clear effect on wages. On the one hand, a concentration of employers could strengthen their wage-setting power. Azar

*et al.*<sup>23</sup> (2017) believe that the concentration of companies as employers (Herfindahl-Hirschman index of job offers or job applications published on a site) reduces the average wage (published by employers), suggesting an increase in the market power of companies on the labour market (monopsony). Over a longer period (1977-2009), by limiting the analysis to the manufacturing industry, Benmelech *et al.*<sup>24</sup> (2018) confirm this. They believe that in the 2000s, the change in employer concentration at the local level has reduced the average wage level, and indicate that concentration reduces wages even more when union density is low. On the other hand, studies of deregulation episodes suggest that companies and workers share rents, so that higher profits can support wages (Cette *et al.*,<sup>25</sup> 2018).

However, an increase in markups focused on an outlying set of companies could help increase income inequality. By increasing corporate profits, this increase could benefit capital owners, while upward pressure on prices could penalise consumers, who are less well-off on average.

In addition, high productivity gains in a small number of firms increases inequality, since productivity and wage gaps between firms are a key determinant of wage inequality. Barth *et al.*<sup>26</sup> (2014) estimate that wage inequality between establishments accounts for two-thirds of the increase in the variance of individual wage income. Song *et al.*<sup>27</sup> (2015) obtain the same result at corporate level. Thus, the intra-company gap between the median wage and the highest wage does not explain the change in aggregate wage inequality. Baker and Salop<sup>28</sup> (2015) thus identify competition policy as one possible lever for reducing inequality.

(18) Rabier L. (2017), "Patents and Technical Standardisation: how to balance Competition and Innovation?", *Trésor-Economics* No. 193.

(19) Gutierrez G. and T. Philippon (2016), "Investment less growth: An empirical investigation", *NBER Working Paper* No. 22897.

(20) Ratio of a company's market value to the value of the replacement cost of fixed capital.

(21) Gutierrez G. and T. Philippon (2018), "Ownership, Governance and Investment", *AEA Papers and Proceedings*, Vol. 108.

(22) In particular, see Crespi G. and P. Patel (2008), "Innovation and competition: Differences across sectors", *Paper prepared for Innovation Watch/ Systematic project funded by the European Commission*.

(23) Azar J., I. Marinescu and M. Steinbaum (2017), "Labor market concentration", *NBER Working Paper* No. 24147.

(24) Benmelech E., Bergman N. et H. Kim (2018), "Strong employers and weak employees: how does employer concentration affect wages?", *NBER Working Paper* No. 24307.

(25) Cette G., Lopez J and J. Mairesse (2018), Rent Creation and Sharing: New Measures and Impacts on TFP, *NBER Working Paper* No. 24426.

(26) Barth E., Bryson A., Davis J. and R. Freeman (2014), "It's Where You Work: Increases in Earnings Dispersion across Establishments and Individuals in the U.S.", *NBER Working Paper* No. 20447.

(27) Song J., Price D., Guvenen F., Bloom N. and T. Wachter (2015), "Firming up Inequality", *NBER Working Paper* No. 21199.

(28) Baker and Salop (2015), "Antitrust, Competition Policy, and Inequality", Georgetown law faculty publication.

### 3.3 Proposed changes to competition law

Given the high levels of markups, the OECD<sup>29</sup> (2018) has recommended that competition authorities should more closely monitor shifts in concentration, profitability and markups at market level to identify possible problem cases. As regard US law, lower thresholds for triggering merger

controls has been proposed by Hovenkamp and Shapiro<sup>30</sup> (2018), as well as by Galston and Hendrickson<sup>31</sup> (2018). The latter also suggest lowering the costs of enforcing antitrust laws and shortening the time taken by courts to process cases, particularly in instances of abuse of dominant position.

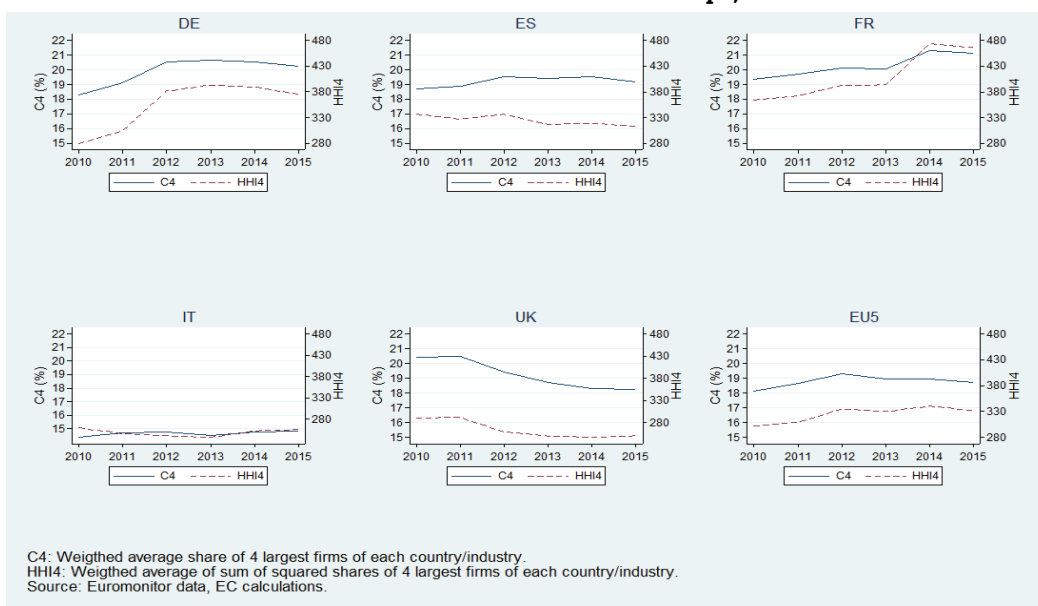
## 4. Europe differs from the United States in terms of concentration and competition trends

### 4.1 In Europe, corporate concentration has remained stable

In contrast to the US, in Europe, studies pointing to an increase in concentration are the subject of debate. Using Orbis data, Döttling *et al.*<sup>32</sup> (2017) estimate that the various concentration indicators have been stable or even falling in Europe since 1999. The European Commission, using different data, points up a slight increase in concentration between 2009 and 2012, followed by stability (see Chart 2). Finally, Veugelers<sup>33</sup> (2017), using data from European

Scoreboard companies, flags up a decline in the concentration of firms', employment and R&D spending since 2004. However, since 2012, this trend has been reversed in favour of the 1% of companies with the highest R&D expenditure. Guellec and Paunov<sup>34</sup> (2017) note that concentration is particularly high in ICT-intensive sectors. Assuming that concentration is the result of productivity gains (superstars), the absence of concentration in Europe could reflect a lack of these highly-productive companies.

**Chart 2: Concentration trend in Europe, 2010-2015**



Source: Valletti, European Commission, using Euromonitor data.

Note: Concentration is expressed in terms of the share in firms sales by the four largest firms in each sector (C4) and by the Herfindahl–Hirschman index of the four largest companies in each sector (HHI4), as a weighted average for each country (Germany, Spain, France, Italy, United Kingdom, EU5).

(29) OECD (2018), "Market Concentration", DAF/COMP/WD(2018)46.

(30) Hovenkamp H. and C. Shapiro (2018), "Horizontal Mergers, Market Structure, and Burdens of Proof", *The Yale Law Journal*.

(31) Galston W. and C. Hendrickson (2018), "A policy at peace with itself: Antitrust remedies for our concentrated, uncompetitive economy", Brookings Institution Report.

(32) Döttling R., Gutierrez G. and T. Philippon (2017), "Is there an investment gap in advanced economies? If so, why?" ECB conference on investment and growth.

(33) Veugelers R. (2017), "An innovation deficit behind Europe's overall productivity slowdown?" ECB conference on investment and growth; "Are European firms falling behind in the global corporate research race?", *Policy Contribution Issue No. 6*, Bruegel Institute.

(34) Guellec D. and C. Paunov (2017), "Digital innovation and the distribution of income", *NBER Working Paper No. 23987*.

## 4.2 Recent competition developments in Europe are not clear-cut

As with concentration, there is no consensus on the increase in markups in Europe, and there is far less empirical research on this subject than in the United States. On the one hand, Calligaris *et al.*<sup>35</sup> (2017) estimate a 5% increase in markup (measure c in Box 4) in OECD countries since 2001. However, Gutierrez (2017), using aggregate European data (EU KLEMS), estimates that the share of profits excluding "normal" return on capital (measure b) was stable over the period 1988-2014 (excluding real estate) in Europe. Since 1988, profit share has reportedly increased only in certain sectors, including mining, hotels and restaurants, public services, and agriculture. The Bundesbank<sup>36</sup>(2017) suggests a stable or even a declining situation with respect to European corporate markups between 1996 and 2014, over and beyond cyclical effects (measure d). On the other hand, Diez *et al.*<sup>37</sup> (2018) show similar increases (+30%) in markups (measure c) for listed companies<sup>38</sup> in Europe and the United States since the 1990s (estimates

based on 19 sectors worldwide).

It is therefore possible that competition policy in Europe may be more effective than in the United States, without Europe being immune to difficulties. Gutierrez and Philippon (2018) thus believe that the supranational (European) level protected regulators from capture by companies, which contributed to a higher level of enforcement of competition law in Europe. In addition, European companies spend less on lobbying regulators. However, European competition authorities are concerned about a possible incorrect assessment of M&A transactions in Europe. These may have led to higher prices in Europe, according to Ormosi *et al.*<sup>39</sup> (2015), following a meta-analysis of the literature.

The negative consequences of an increase in concentration in the United States do not seem to be evident in Europe. In particular, in Europe, investment is in line with overall corporate profitability (Döttling *et al.*, 2017). In addition, the decline in the share of labour in value added appears to be less pronounced in Europe.

**Emma Hooper, Louise Rabier**

(35) "Digital and market transformation", OECD.

(36) Bundesbank, Monthly Report, "Mark-ups of firms in selected European countries", December 2017.

(37) Diez F., Leigh D. and S. Tambunlertchai (2018), "Global Market Power and its Macroeconomic Implications", *IMF Working Paper* 18/137.

(38) Thomson Reuters database.

(39) Ormosi P., Marluzzo F. and R. Havell (2015), "A review of merger decisions in the EU: What can we learn from ex-post evaluations?" Report submitted to the European Commission.

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