

# Digital Competitiveness of the European Union

#### Abstract

The success of new businesses in the EU is heavily reliant on regulated opportunities. This means that their business models are often centered around compliance rather than creativity. As a result, the digital services environment may become less dynamic in the EU as the focus shifts from innovation to meeting regulatory standards. This could potentially hinder the growth and development of new businesses in the digital market, as they may struggle to stand out amongst others that prioritize compliance over creativity. Moreover, the implementation of the Digital Markets Act (DMA), Digital Services Act (DSA) could impose substantial compliance and operational expenses on US digital service providers, potentially affecting the costs of digital services and the competitiveness of European firms. Additionally, the General Data Protection Regulation (GDPR) has resulted in reduced profits and sales for businesses, with compliance costs disproportionately affecting smaller and newer companies. The forthcoming AI Act and Data Act also present potential challenges for European businesses. It is imperative for European regulators to strike a balance between the necessity for robust regulation and the creation of an innovation-friendly environment in order to sustain competitiveness in the global digital market.

#### Introduction

Competitiveness built on two foundations:<sup>1</sup> First, improving competitiveness means growing the level of productivity in the economy. Second, competitiveness is about how firms and economies perform in an international context. The emphasis lies in attaining shared progress through open trade and acquiring knowledge from more developed economies.

Competitiveness can be developed by fostering competition and reducing regulations that hinder the growth of productive companies.<sup>2</sup> Europe's high degrees of regulatory restrictiveness is a problem – and it ripples through vast parts of the economy and reduces productivity.<sup>3</sup> There is a prevailing view that regulation primarily imposes costs on businesses, which is supported by business organizations linking regulatory costs to decreased competitiveness and productivity. Specific instance where the UK think tank Open Europe (OE) claimed that EU regulations cost the UK economy £33.3 billion annually, which were widely

 <sup>&</sup>lt;sup>1</sup> ECIPE OCCASIONAL PAPER • 06/2022, A Compass to Guide EU Policy in Support of Business Competitiveness By Fredrik Erixon, Oscar Guinea, Philipp Lamprecht, Vanika Sharma, Elena Sisto and Erik van der Marel
<sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ferracane, M. F., & van der Marel, E. (2020). Patterns of trade restrictiveness in online platforms: A first look. The World Economy, 43(11), 2932–2959.

cited by the Leave Campaign in the context of Brexit debates.<sup>4</sup> Europe's regulatory framework should be compared with global leaders and should aim to provide a more favourable environment for digital business development.<sup>5</sup> Europe's economic competitiveness and productivity growth have declined over recent decades, with its share of global GDP falling from 25% in 1990 to 17% in 2020, largely due to growth in Asia, particularly China. <sup>6</sup> European firms have also lagged behind US firms in growth and R&D investment.<sup>7</sup>

In June 2023, The Financial Times released an article titled "Europe has fallen behind America and the gap is growing" encapsulating the sentiment that "From technology to energy to capital markets and universities, the EU cannot compete with the US".<sup>8</sup> The article references a report by the European Council on Foreign Relations, underscoring this assessment: In 2008, the economic size of the EU exceeded that of the United States, amounting to \$16.2 trillion compared to America's \$14.7 trillion. However, by 2022, the US economy had expanded to \$25 trillion, while the combined economies of the EU and the UK had only reached \$19.8 trillion. Consequently, the US economy now surpasses the EU's by almost one-third and is more than 50% larger than the EU excluding the UK. According to the International Monetary Fund (IMF), the EU is expected to have a per-capita GDP of \$43K, which is approximately half of the US per-capita GDP of \$83K.<sup>9</sup>

This discussion paper aims to highlight the costs of a heavy legal approach to European integration and their negative impact on the competitiveness of the EU.

## Competition

Center for Strategic and International Studies argues<sup>10</sup> that

- The US tends to embrace market dominance when it leads to consumer advantages in terms of efficiency and cost reduction, whereas Europe prioritizes safeguarding potential competitors, even if market leaders have excelled in outperforming competitors and garnering consumer loyalty through innovation and strategic acquisitions.
- Limiting the expansion of technology firms may curtail European consumers' ability to connect with broader networks, potentially reducing the range of options and convenience available to them.
- The R&D efforts of major corporations have the potential to provide financial support and encourage innovation within smaller firms, as well as to sustain broader networks of businesses (such as European app developers and online merchants). Additionally,

 <sup>&</sup>lt;sup>4</sup> FOOKS G, MILLS T. The Tolerable Cost of European Union Regulation: Leaving the EU and the Market for Politically Convenient Facts. *Journal of Social Policy*. 2017;46(4):719-743. doi:10.1017/S0047279417000526
<sup>5</sup> ECIPE OCCASIONAL PAPER • 06/2022, A Compass to Guide EU Policy in Support of Business Competitiveness By Fredrik Erixon, Oscar Guinea, Philipp Lamprecht, Vanika Sharma, Elena Sisto and Erik van der Marel
<sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> https://www.ft.com/content/80ace07f-3acb-40cb-9960-8bb4a44fd8d9

<sup>&</sup>lt;sup>9</sup> https://www.imf.org/en/Publications/WEO

<sup>&</sup>lt;sup>10</sup> Kati Suominen: Europe's Competition Policy Challenges to Technology Companies, Center for Strategic and International Studies (CSIS), Kati Suominen, October 2020

through mergers, these activities can enhance the efficiency of R&D and bring its advantages under the direct control of the merging entities.

Consumers and small enterprises frequently gain advantages from extensive networks as a result of standardization and the impact of networks, enabling them to efficiently access broader customer bases.

The DMA is criticized<sup>11</sup> for potentially distorting competitive conditions by imposing stricter requirements on digital services and for not considering similar self-preferencing practices common in other sectors, such as grocery stores promoting private-label products. Allegedly, consumers often prefer fewer, well-selected options rather than an overwhelming array of choices, and that platforms use consumer data to tailor these options, which should not be restricted if it aligns with consumer preferences. Despite the existence of alternatives like DuckDuckGo, consumers overwhelmingly choose services like Google's search engine, which practices self-preferencing.

The objective of DMA is to safeguard smaller European entities from the dominant market influence of digital platform giants. However, Apple has introduced a set of regulations that significantly undermines this objective.<sup>12</sup>

## **Digital economy**

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The EU stands out for regulating earlier than other major economies and for implementing stricter and less predictable rules.<sup>13</sup> These regulations also introduce new costs and complexities for businesses, potentially hindering innovation and the ability of European companies to compete globally with emerging technologies.<sup>14</sup> The regulatory burden in Europe is heavier than in other advanced market-economy democracies, implying a need to balance regulatory objectives with the pursuit of digital competitiveness.<sup>15</sup>

Digital regulations should be streamlined to avoid burdening businesses and hindering the development of new digital technologies, thereby maintaining competitiveness and fostering growth.<sup>16</sup>

The DMA and DSA could impose \$22 billion to \$50 billion in compliance and operational costs on US digital service providers, representing 8 to 17% of their EU revenues.<sup>17</sup> As a result, European businesses could face increased technology expenditures, estimated at €43 billion to €71 billion per year, potentially impacting 0.3% of EU GDP.<sup>18</sup> The DMA and DSA when targeting US firms, potentially aiding the growth of Chinese tech companies' market share in

<sup>&</sup>lt;sup>11</sup> https://www.llri.lt/wp-content/uploads/2023/07/Policy-brief-DMA-ENG.pdf

<sup>&</sup>lt;sup>12</sup> https://aifray.com/ai-acts-flaws-create-legal-uncertainty-mep-doubts-if-europe-even-wants-to-survive-inthe-digital-world/

<sup>&</sup>lt;sup>13</sup> ECIPE OCCASIONAL PAPER • 06/2022, A Compass to Guide EU Policy in Support of Business Competitiveness By Fredrik Erixon, Oscar Guinea, Philipp Lamprecht, Vanika Sharma, Elena Sisto and Erik van der Marel <sup>14</sup> Ibid. 54.

<sup>&</sup>lt;sup>15</sup> Ibid. <sup>16</sup> Ibid.

<sup>&</sup>lt;sup>17</sup> Kati Suominen: Implications of the European Union's Digital Regulations on U.S. and EU Economic and Strategic Interests, Center for Strategic and International Studies, 2022

<sup>&</sup>lt;sup>18</sup> Ibid.

Europe. The risk of European businesses turning to Chinese firms for their digital services needs, which could lead to higher costs, lower quality, and national security concerns.

Overall, the EU's digital regulations are likely to have significant implications for US digital service providers' European customers, potentially affecting the costs of digital services and the competitiveness of European firms. This is significant as European businesses heavily rely on digital technologies for their operations and productivity, with over 90% of firms using major US digital services. Over half of the firms allocate more than 10% of their revenues on US digital services by about 5% (which translates to an additional €71 billion mentioned above, or 0.3% of the EU's GDP).<sup>20</sup> Notably, European SMEs would bear nearly half of this burden, potentially affecting around 40,000 jobs.<sup>21</sup> The increased costs of complying with the DMA and DSA could further disadvantage European businesses, exacerbating existing disparities in growth, returns, and R&D investments. This could also negatively impact the export competitiveness of European firms that rely on US digital services.

## GDPR

Despite its international impact, the GDPR has led to a decline in business profits by 8.1% and sales by 2.2%, as reported by the Oxford Martin School.<sup>22</sup> Survey data indicates that compliance with the GDPR has been costly for firms. Estimates suggest that Fortune 500 companies may have spent \$7.8 billion on compliance, with a majority of small and mid-sized organizations spending over \$100,000.<sup>23</sup>

GDPR may disproportionately impact competition by favoring larger, established firms.<sup>24</sup> This could occur because larger firms might find it easier to comply with regulations due to economies of scale or because consumers are more likely to consent to data sharing with them.

Martin et al. found that while the GDPR encouraged privacy-focused innovation and the development of regulation-compliant technologies, it also caused some startups to discontinue products, deterred entrepreneurs, and restricted access to data crucial for AI development.<sup>25</sup>

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> <u>https://www.oxfordmartin.ox.ac.uk/downloads/Privacy-Regulation-and-Firm-Performance-Giorgio-WP-Upload-2022-1.pdf</u>

<sup>&</sup>lt;sup>23</sup> International Association of Privacy Professionals (2017). Global 500 companies to spend \$7.8b on GDPR compliance. <u>https://iapp.org</u>

<sup>&</sup>lt;sup>24</sup> Lessons from the GDPR and Beyond Garrett Johnson NBER Working Paper No. 30705 December 2022 JEL No. K2,L51

<sup>&</sup>lt;sup>25</sup> Martin, N., Matt, C., Niebel, C., & Blind, K. (2019). How data protection regulation affects startup innovation. Information Systems Frontiers, 21(6), 1307–1324.

Blind et al. used a survey of German firms to show that a significant percentage of firms believe that data protection regulation impedes innovation, with a smaller fraction reporting the opposite.<sup>26</sup>

Investigating the influence of the GDPR on innovation in the EU presents a multifaceted scenario. Some contend that the GDPR has stimulated innovation by mandating firms to enhance their data management procedures and allocate resources to privacy measures, indicating that robust privacy regulations can in fact establish more defined guidelines that are advantageous to both major corporations and smaller enterprises.<sup>27</sup> This viewpoint is bolstered by the idea that adherence to the GDPR can yield competitive benefits by safeguarding individuals from unjust and privacy-infringing practices, prompting companies to partake in data protection investments that can ultimately nurture innovation within a transparent regulatory framework. However, there is also evidence indicating substantial obstacles and possible adverse effects on creativity, particularly for new businesses and small to medium-sized enterprises. The GDPR has resulted in decreased competitiveness in the digital advertising industry, causing smaller entities to experience a decline in market penetration and a reduction in the total number of advertising vendors in the EU. This stands in opposition to the situation in the US, where there has been a rise in the number of advertising vendors, suggesting that the regulatory influence may unintentionally benefit well-established corporations at the expense of smaller, more inventive enterprises.<sup>28</sup> Furthermore, the GDPR has not notably bolstered consumer confidence in the digital marketplace, with a substantial number of Europeans perceiving that they lack authority over their personal data on the internet.<sup>29</sup>

In summary, although the GDPR offers potential for advancements in data protection and privacy measures, its intricacy and the accompanying expenses related to compliance present notable obstacles, especially for small enterprises and newly established businesses. Striking a balance between the imperative for robust data protection and the promotion of an innovation-friendly atmosphere continues to be a crucial challenge for both policymakers and businesses.

# Al Act

The AI Act did not exhibit a significant level of ambition akin to that of the DMA, and it is difficult to envision how any form of AI regulation could have supported AI innovators in the EU in their interactions with major cloud providers in the US.<sup>30</sup>

Martin et al. discovered that, although the GDPR stimulated innovation with a focus on privacy and the creation of technologies in compliance with regulations, it also led to limited the

<sup>&</sup>lt;sup>26</sup> Blind, K., Niebel, C., & Rammer, C. (2022). The impact of the EU General Data Protection Regulation on innovation in firms. ZEW Discussion Paper

<sup>&</sup>lt;sup>27</sup> <u>https://cdt.org/insights/the-gdprs-impact-on-innovation-should-not-be-overstated/</u>

<sup>&</sup>lt;sup>28</sup> <u>https://datainnovation.org/2019/06/what-the-evidence-shows-about-the-impact-of-the-gdpr-after-one-year/</u>

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> <u>https://aifray.com/ai-acts-flaws-create-legal-uncertainty-mep-doubts-if-europe-even-wants-to-survive-in-the-digital-world/</u>

availability of essential data for the advancement of AI.<sup>31</sup> According to the Commission's impact assessment,<sup>32</sup> the AI Act will add 17% in overhead costs to all spending on AI, and the AI Act will cost the European economy over €30 billion by 2025. Setting up an entirely new Quality Management System (QMS) could cost between €193,000-€330,000 with an additional estimated €71,400 for annual maintenance.<sup>33</sup> For SMEs in particular, these are indeed relevant costs.<sup>34</sup>

## Data Act

BusinessEurope and the Mechanical Engineering Industry Association argue for preserving contractual freedom and voluntary data sharing between businesses, stressing the importance of maintaining competitiveness and protecting core business know-how.<sup>35</sup> Over the coming decades, harnessing the value of data will be crucial to Europe's competitiveness.<sup>36</sup>

According to a 2020 survey conducted by the EU, it was revealed that 40% of European enterprises exhibit a significantly lower level of digital intensity compared to their counterparts in the US.<sup>37</sup> Due to the Data Act other platforms could potentially arise in the EU market, they would inherently depend on the regulated entitlement to acquire ported data.<sup>38</sup> Consequently, the resulting business models, centered on compliance rather than creativity, would contribute to a less dynamic digital services environment.

## Conclusion

The impact of additional digital expenses on the economic growth of the EU cannot be ignored by European regulators. Any increase in the costs associated with regulatory compliance will only add to the already existing challenges faced by European businesses, such as inadequate investment in new technologies and higher operational expenses compared to their counterparts in the US and Asia. This could potentially put European enterprises at a disadvantage and hinder their growth. Furthermore, the heavy reliance on regulated opportunities for new businesses in the EU means that their focus is often on compliance rather than innovation. This could lead to a less dynamic digital services environment in the EU, where creativity takes a backseat to meeting regulatory standards. This may impede the development and success of new businesses in the digital market, as they may struggle to differentiate themselves in a sea of compliant businesses.

<sup>&</sup>lt;sup>31</sup> Martin, N., Matt, C., Niebel, C., & Blind, K. (2019). How data protection regulation affects startup innovation. Information Systems Frontiers, 21(6), 1307–1324

<sup>&</sup>lt;sup>32</sup> <u>https://www.ceps.eu/clarifying-the-costs-for-the-eus-ai-act/#\_ftn1</u>

<sup>&</sup>lt;sup>33</sup> <u>https://www.ceps.eu/clarifying-the-costs-for-the-eus-ai-act/#</u> ftn2

<sup>&</sup>lt;sup>34</sup> <u>https://www.ceps.eu/clarifying-the-costs-for-the-eus-ai-act/#\_ftn1</u>

<sup>&</sup>lt;sup>35</sup> <u>https://www.businesseurope.eu/publications/proposal-data-act-businesseurope-position-paper</u>

<sup>&</sup>lt;sup>36</sup> <u>https://www.digitaleurope.org/news/joint-statement-on-the-data-act-by-digitaleurope-and-the-european-round-table-for-industry/</u>

<sup>&</sup>lt;sup>37</sup> https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20211029-1

<sup>&</sup>lt;sup>38</sup> Meredith Broadbent: The EU Data Act The Long Arm of European Tech Regulation Continues, Center for Strategic and International Studies June 2023

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