

ANALYSIS

The GDPR and International Trade

Evidence and implications for EU policy

Executive summary

This analysis summarises different effects that the GDPR has had on international trade. We find that data regulations can increase trust, which is positive for trade, and that the GDPR has influenced global data privacy standards. However, we also conclude that the GDPR has introduced negative effects on EU international trade and productivity – and thereby competitiveness. The GDPR has made cross-border data flows more difficult, created regulatory uncertainty and induced high compliance costs for companies.

Given those results, as well as the EU's declining share of world GDP and the growing role of digital trade, we propose that the GDPR is revised and that a more collaborative regulatory approach to data privacy is developed. A revision could improve the GDPR by streamlining enforcement, improving adequacy decisions and enhancing international cooperation on data privacy standards. It is our hope that this analysis can help balance strong data protection with improved EU economic competitiveness, ensuring that the GDPR remains fit for purpose in an evolving digital economy.

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This report is written by Hannes Berggren.

Valuable comments have been provided by Martina Ferracane, Erik van der Marel, Dan Svantesson, Isaac Ouro-Nimini Hansen, Karin Atthof, Anna Graneli, Heidi Lund and Per Altenberg.

1 Introduction

Building on the European Data Protection Directive (EDPD) from 1995, the General Data Protection Regulation (GDPR) was adopted in 2016 to develop data legislation and ensure a high level of privacy protection across the EU. The GDPR, which then came into force in 2018, enforces stringent protections within the EU and governs the transfer of personal data outside the EU. The regulation aims to empower individuals by strengthening their control over personal data and to streamline compliance for international businesses, fostering both trust and consistency in data privacy practices globally (European Commission, 2024a).

EU-wide rules, such as the GDPR, contribute to better harmonisation between member states, which is better for trade than having 27 different member state regulations. However, there is still some divergence in how EU member states implement the regulation. There are also potential downsides to the regulation. For example, the GDPR introduced several obligations for businesses that collect and process personal data, which on the one hand aim to strengthen individual rights to data protection, but on the other hand are sometimes costly (Prasad & Perez, 2020).

In some respects, cross-border data transfers have become more difficult since the imposition of the GDPR. For example, while the adequacy decisions that guide international data transfers under the GDPR have been around since the 1995 Data Protection Directive, they have recently become more complicated. These were initially brief and focused on commercial privacy under the 1995 European Data Protection Directive, but underwent a major shift after the Snowden revelations and the ensuing Schrems I & II verdicts, which invalidated US adequacy agreements and required scrutiny of foreign surveillance laws for compliance with EU standards (Christakis, 2024).

The European Commission (2024b) recently published its second report on the evaluation and review of the GDPR. This means that there is an opportunity for the EU and its member states to more closely examine some of the effects of this regulation and discuss how its application and functioning may be improved. The European Commission has, however, signalled that it does not foresee any significant changes to the GDPR resulting from the report (Hartmann, 2024).

Given the GDPR's extraterritorial reach and the implication that it has for the EU's international data flows, the international trade aspect of this regulation deserves further attention. Understanding how unilateral regulatory initiatives may impact digital trade is important, as it currently makes up a quarter of all global trade and will likely only become more important in the age of AI (OECD 2023; National Board of Trade 2025a). This is especially true for the EU, given that it is a world leader in digital trade and a significant share of its companies transfer data internationally (Digital Europe, 2020).

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¹ As required by article 97, GDPR.

Further examining the effects on international trade as a component of competetiveness is also merited given that the GDPR was specifically named in the Draghi (2024) report on EU competitiveness. In his report, Draghi concludes that the GDPR may undermine developments in the field of AI due to overlaps with other regulations and uneven enforcement across member states.

Moreover, since the GDPR's inception, the EU has continued to pursue a range of unilateral regulatory initiatives for the digital economy. This includes data and privacy regulation initiatives, which in combination have created a cumulative regulatory burden that may negatively impact international trade (Bruegel, 2024; Guinea & Du Roy, 2024; National Board of Trade, 2024d).

2 Purpose, scope and methodology

This analysis is a desk study that aims to summarise different effects that the GDPR has had on international trade. It also aims to explore if improvements could be made to the regulation to better facilitate international trade.

It is hard to unambiguously determine whether privacy protection entails a net "positive" or "negative" change in purely economic terms (Acquisti et al., 2016). On the one hand, regulations such as the GDPR could be trade-creating by correcting a market failure and improving consumer trust in markets (see e.g., Akerlof, 1970). It could also impact other countries' policies to align with those of the EU, thereby promoting the EU's ability to trade with those countries (Bradford, 2020). On the other hand, a unilateral approach to regulation can induce trade-distorting effects if it does not work well with trade partners' regulations or makes economic activity more complex than in comparable economies (Kox and Lejour, 2005; OECD, 2017). We aim to weigh in both sides of the argument into this analysis.

Since the analysis also aims to explore potential improvements to the GDPR, it is important to note the constitutional roots of this regulation. The right to privacy is a fundamental right protected by the Charter of Fundamental Rights of the European Union, and as such by EU law. Therefore, we explore potential recommendations on the assumption that while there may be some trade-offs between free data flows and data protection legislation, it should be possible to find a balance that ensures constitutionally mandated protection of personal data, while at the same time avoiding unnecessary restrictions to the cross-border flow of data (National Board of Trade, 2016).

3 The GDPR and international trade rules

The design of regulatory measures such as privacy regulations can have a significant impact on trade flows, but also on international trade policymaking. A key challenge in regulating the digital economy while preserving the ability to trade is the territorial dilemma. On the one hand, extraterritorial jurisdictional claims may be reasonable because if states do not extend their regulations (e.g. data protection regulations) to the conduct of foreign parties, they may fail to provide effective protection for their citizens' rights. On the other hand, wide extraterritorial jurisdictional claims appear unreasonable because it is not feasible for those engaging in global digital trade to adjust their conduct to the conflicting laws of all the countries in the world with which they come into contact. In other words, a widespread extraterritorial application of state law may well end up making it impossible to engage in cross-border trade (Czerniawski & Svantesson, 2024). The GDPR resides in this dilemma, because it includes extraterritorial reach and regulates a key component for digital trade, namely data (Svantesson, 2018).

Zooming out, the EU, the US and China constitute what can be described as three distinct data realms – or digital empires – with different approaches to data governance (see Table 1). As a result, they have fostered a new digital divide between themselves, on the one hand, as individual rule-makers and other countries, on the other hand, as rule-takers. This situation presents the WTO with both a challenge and an opportunity. The three data realms could undermine the ability of the WTO to govern trade in data flows, but it also creates pressure for the different data realms to use WTO mechanisms and find common ground among their approaches (Aaronson & LeBlond, 2018; Bradford, 2023). Currently, global rules specifically targeting digital trade are scarce, one notable exception being a recently negotiated text for a plurilateral e-commerce deal in the WTO. However, that agreement is yet to take legal effect, and the topic of cross-border data flows was excluded during its negotiation (National Board of Trade, 2024c).

Table 1. Three models of data transfer governance²

| Data model | Cross-border transfers | Data realm /digital empire |
|-----------------------|--|-------------------------------|
| Open | Self-certification, self-assessment schemes, ex-post accountability, trade agreements and plurilateral/bilateral arrangements as only means to regulate data transfers. | United States |
| Conditional | Conditions to be fulfilled ex-ante, including adequacy of the recipient country, binding corporate rules (BCR), standard contract clauses (SCCs), data subject consent and codes of conduct, among others. | European Union (EU) |
| Controlled /closed | Strict conditions including bans to transfer data cross borders, local processing requirements, ad hoc government authorisation for data transfers, infrastructure requirements, ex-ante security assessments. | China |

The table builds on Ferracane & Van der Marel (2025), Aaronson & LeBlond (2018) and Bradford (2023)

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The General Agreement on Trade in Services (GATS) does not address digital trade specifically, but it has been deemed to apply equally to trade in services, regardless of whether services are delivered digitally or not. As such, the GATS is currently the most relevant multilateral trade agreement for this analysis. The GATS affirms the right of parties to pursue national policy goals and implement domestic measures that comply with GATS commitments. If a country's domestic measures violate GATS commitments, they may be justified under the general exceptions in Article XIV. These exceptions apply across all sectors covered by the GATS. Protecting individual privacy in the handling of personal data is specifically mentioned as a policy objective.

At the core of this exception is the *necessity test*, which requires a balancing of factors. First, the measure must support the enforcement of domestic laws aimed at a public policy objective that aligns with GATS provisions. Second, the measure's restrictive impact on international trade in services is assessed – the less restrictive and the more effective a measure is in achieving public interest goals, the more likely it is to pass the necessity test (Yakovleva & Irion, 2020).

The GDPR, which would fall under the right to regulate, is designed to prohibit personal data flows to countries deemed to have inadequate personal data protection standards. As such, personal data can be transferred without any further safeguards to countries that have received a formal finding from the EU of an adequate level of protection. In the absence of an adequacy finding, the GDPR also provides some alternative transfer mechanisms, which harness private law to incorporate appropriate safeguards in connection with a personal data transfer.

There is no WTO case law on the exception for protection of the privacy of individuals in relation to the processing and dissemination of personal data. However, scholars have claimed that the EU's data protection framework and its mechanism for personal data transfers may not meet the non-discrimination commitment and could fail to meet the requirements to be granted exceptions under the GATS if challenged in the WTO (Yakovleva & Irion, 2016; Yakovleva & Irion, 2020). The EU, some claim, may have gone further than necessary in comparison to other countries' data protection schemes, such as Canada's, or in relation to internationally recognised standards, such the OECD Privacy Guidelines and the APEC Privacy Framework (Yakovleva & Irion, 2016; Yakovleva & Irion, 2020; Naef 2023; Burri & Kugler, 2024).

In absence of a dedicated global trade agreement that addresses existing regulatory divergence and enables free data flows, there are some avenues to facilitate cross-border data flows. For example, international standards and privacy-enhancing technologies, such as encryption, can help to a certain extent (OECD, 2021). Moreover, there are some international initiatives that attempt to improve cross-border data flows by improving the interoperability of privacy regulations. One example is the APEC Cross-Border Privacy Rules (CBPR), which is a voluntary, principles-based framework that facilitates cross-border data flows among Asia-Pacific economies by ensuring that businesses comply with key privacy standards, such as transparency, accountability and security. Another example is the concept of Data Free Flow with Trust (DFFT), introduced by former Japanese Prime Minister Shinzo Abe. DFFT

emphasises creating legal certainty and trust through good governance, rules and protections for data to promote its free flow. Since its introduction, DFFT has been adopted by the G7, endorsed by the G20 in the 2019 Osaka Declaration and advanced by the OECD's 2022 Ministerial Declaration on government access to data. The G7 has also supported Japan's proposal for an institutional arrangement for partnership (IAP) to operationalise DFFT, addressing issues like trusted government data access, regulatory cooperation and data localisation (Christakis, 2024).

4 How has the GDPR impacted international trade?

Ferracane and Van der Marel (2021) conclude that, in general, policies that regulate international movement of data impact primarily international trade in services, not least imports. Policies that target the use of data, meanwhile, have a larger impact on productivity (Ferracane et al, 2020). They argue that this is because in many countries, the majority of value added created by data and digital services is primarily employed domestically before being exported indirectly. In other words, most data and data-related services are used as an input in other goods and services domestically and only then exported as an embedded item by other sectors.

Since the GDPR regulates both the use and international movement of data, it is likely to have an impact on EU trade both by I) impacting productivity/competitiveness (e.g. through compliance burden) and by II) impacting cross-border data flows (e.g. by limiting the flow of data).

4.1 The effect of the GDPR on EU productivity

We begin by examining the first channel: how the GDPR has impacted EU companies' productivity and thereby their international competitiveness. Bradford (2024) has argued that regulation may not harm innovation as much as some believe. Instead, strict privacy rules can enhance consumer trust and thereby remove a barrier to digital trade. For example, the OECD and WTO (2025) argue that if all economies removed their data flow regulation, trade costs would fall, but so too would trust. Overall, they estimate global GDP would fall by nearly 1 per cent and global exports by just over 2 per cent. It can also be noted that while the EU lacks tech companies of the size that can be found in the US, it is a world-leader in digital services exports (European Parliament, 2024).

However, Svantesson (2018) claims that the GDPR is contributing to a high level of hyper-regulation. This is due to a combination of factors, where the GDPR is activated already at a low degree of contact (meaning that minimal interactions with a jurisdiction subject individuals or entities to the EU's laws and courts) and is a law that includes provisions requiring active steps for legal compliance. This is in line with industry reports, which have identified regulatory complexity and high compliance costs of the GDPR (see, e.g. CIPL, 2024; Digital Europe, 2024b; Global Data Alliance, 2024). In general, increased regulatory complexity harms economic activity, for example, by reducing employment rates, sector-level investment and value added (Coffey et al, 2020; Banco de Espana, 2023).

The GDPR has also been found to hurt firm performance by imposing costs, decreasing revenue and thereby hurting profitability (Johnson, 2022). For example, Koski and Valmari (2020) conclude that the costs of the GDPR during the first year of its implementation were substantial, at least for some European companies. On average, they find, the profit margins of data-intensive firms in the EU increased by approximately 1.7 to 3.4 percentage points less than the profit margins of US counterparts. They also find that this effect was larger for data-intensive SMEs. Similarly, Frey and Presidente (2024) find that that the GDPR harmed profitability

with technology firms experiencing a 2.1 percent decline in profits in general, with a higher burden for smaller firms.

Moreover, venture funding and investment (especially foreign investment) for technology firms fell when the GDPR was imposed. In some cases, the GDPR both accelerated market exit and slowed entry (Jia et al 2020; Jia et al 2021). Moreover, Demirer et al (2024) find that the GDPR has reduced EU companies' data storage and processing, both of which are important and will likely become even more important in the age of AI (National Board of Trade, 2025a). The regulation has also been found to reduce certain economic activities of importance to the digital economy over the past decade. For example, Goldberg et al. (2024) find a negative effect on website page views and website revenue, while Janssen et al. (2022) find similar negative effects for apps.

4.2 The effect of the GDPR on cross-border data flows

Moving on to the second channel, the GDPR's impact on international trade also depends on how restrictive it is for cross-border data flows. In this regard, it is worth to begin by pointing out that the GDPR is used by Bradford (2020) as an example of the 'Brussels effect'. The Brussels effect indicates that the EU has a regulatory capacity and market power that allows it to set standards for the rest of the world, for example, in data protection. Indeed, the GDPR could be argued to have become a benchmark regulation in both a de facto and a de jure meaning. The de facto effect implies that companies across the world apply the GDPR as a standard in order to ensure access to the EU market of 450 million consumers with a relatively strong purchasing power. The de jure effect means that several countries have adopted GDPR-like regulations since its adoption. For example, Greenleaf (2023) reports that more than 160 countries have a data privacy law in place today.

It has also been noted that the GDPR's impact on other countries' privacy protection includes some large economies. For example, Canada's data privacy law is similar to the GDPR. Moreover, since Brexit, the UK has prioritised meeting the requirements to receive an adequacy decision (Horseman, 2024). It has also been argued that the lack of flexibility in the EU's privacy framework for data transfers may have enhanced the EU's bargaining power when negotiating with the US over data transfers. This is because there was generally an understanding on the US side that European negotiators had to achieve an agreement that would withstand the scrutiny of European courts (Farrell & Newman, 2019). This is in line with another conclusion of Bradford (2023), that the EU's 'data empire' model is likely more robust than the US or the Chinese model.

It could also be noted that the 1995 European Data Privacy Directive (EDPD), the GDPR's predecessor, introduced provisions on cross-border data transfers between the EU and non-EU countries as an anti-circumvention measure, rather than as a measure that was protectionist in nature (Newman, 2020; Allen, 2024). Similarly, the GDPR has a toolkit which enables international transfers under certain conditions, such as adequacy decisions, an example of which is the EU-US Data Privacy Framework (DPF).

Many other countries have adopted a conditional approach to data flows, especially in recent years. Chander and Schwartz (2023) note that more than sixty countries outside the European Union now have data laws that permit or require adequacy reviews of foreign jurisdictions before allowing international transfers of personal data from their borders. According to an IAPP (2023) infographic, 74 jurisdictions vest powers in either a data privacy regulator or government authority to designate jurisdictions that have adequate data privacy standards. Today, more than half of the world's countries may have moved towards a framework that conditions data flows in and out of the country (Ferracane & Van der Marel, 2025).

However, the core test for deciding on the permissibility of global data exchanges is currently applied in a non-uniform fashion, with negative results for cross-border data flows. Moreover, some of the countries that have adopted an 'adequacy model' are known for having surveillance laws that are far-reaching and vastly different from European standards (Christakis, 2024). As such, the spread of an adequacy model has not necessarily been fruitful for international trade. Taking into consideration the fact that the 'adequacy model' is based on unilateral decisions, we would theoretically need several thousand unilateral adequacy decisions to enable the free flow of data with trust (Christakis, 2024). Instead, the metric of concern is to what extent the EU's regulatory clout or inspiration has translated into facilitating trade with other countries. Empirical evidence of the GDPR's impact on international trade flows shows mixed results.

Ferracane and Van der Marel (2024) show that the implementation of a comprehensive data protection law for domestic data *processing* (such as the EU's approach to processing) is positively correlated with trade in digital services. However, it should be noted that sharing an open data model (e.g. the US approach) for cross-border data *transfers* is positively associated with trade in digital services, while it is negative for the conditional EU model. A controlled/closed model (e.g. China's model) also shows a negative correlation with trade in digital services, but only when a comprehensive data protection law is in place. It therefore seems that provisions that aim to create "trust" by imposing stricter rules on the domestic processing of personal data are conducive to trade in digital services if combined with an open regime for cross-border transfers of data. These results point to the fact that the GDPR increases digital services trade with countries that choose to utilise a similar model of privacy regulation through streamlined domestic data processing, but produces a worse result with regard to its data transfer mechanism.

A study commissioned by Digital Europe (2021) has estimated that the EU could be missing out on around €2 trillion worth of growth and €280 billion worth of exports by the end of the Digital Decade (in 2030) due to suboptimal data flow regimes. While the difference between the positive and negative scenarios in their study does not entirely depend on the GDPR, one important part of the estimation relies on whether the EU succeeds in ensuring an efficient GDPR transfer mechanism or not. In general, the study estimates that in the negative scenario, effects of the EU's own policy on data transfers, under the GDPR and as part of the data strategy, would outweigh those of restrictive measures taken by major trading partners.

The process of transferring data outside of the EU is still described as cumbersome and costly by industry. For example, Digital Europe (2024a) points to a 'legal maze of data transfers', with overlapping data legislation hampering the EU's international data flows. Moreover, the Global Data Alliance (2024) states that the process that determines whether a country is adequate remains too time-consuming and should be accelerated. This is illustrated by the fact that the EU has finalised only 16 adequacy decisions, including for commercial transfers to the US through the EU-US Data Privacy Framework. Excluding territories that are European microstates already closely aligned with the EU, member states of the EEA or overseas dependencies of current or former EU member states, the number of jurisdictions with an adequacy decision drops to eight, out of the hundreds in the world (National Board of Trade, 2025b).

Moreover, Digital Europe (2024a) has argued that much of the discussion about further restricting data transfers is directed not at totalitarian regimes but at the US, the EU's largest trade and investment partner. For instance, the Court of Justice of the European Union (CJEU) invalidated the EU-US Privacy Shield on the grounds that US surveillance authorities could access the personal data of EU citizens held in the US. This invalidation affected all companies transferring personal data to the US through the Privacy Shield – regardless of whether European personal data held by such companies had ever been accessed by US surveillance authorities. The invalidation thus applied even to the transfer of data by companies that was unlikely to be accessed by surveillance authorities and that may have been of low risk even if it were to be breached (Allen, 2024).

As shown by the Schrems I and Schrems II decisions, the EU's unilateral adequacy decisions can be swiftly invalidated by the CJEU at the EU level and are, as such, a source of legal uncertainty (Christakis, 2024). Such uncertainty generally hampers international trade. For example, EU companies have noted uncertainty about the possibility of importing US digital services, such as cloud services. This naturally impacts the import side of EU trade, but we have also shown that it can hamper the export side, since companies using cloud services tend to export more (National Board of Trade, 2024a). Ferracane et al. (2025a) find that countries that were granted EU adequacy exhibit an increase in digital trade of between 8 and 18 per cent (depending on the estimation approaches). They also find that this is mostly driven by the EU granting adequacy to the US – reflecting the importance of such an adequacy decision – and, conversely, the cost for EU digital trade when it is interrupted.

This uncertainty continues to be present among EU firms. For example, the data rights activist group NOYB (2024), founded by Max Schrems of the Schrems I & II verdicts, has argued that the existing Transatlantic Data Privacy Framework "was built on sand" and that it may be in jeopardy following recent actions by the Trump administration. That is because the Trump administration has taken actions that rendered the Privacy and Civil Liberties Oversight Board (PCLOB), the main US oversight authority for these laws, inoperative after removing members so that the number of appointed members fell below the required threshold.

Moreover, there has recently been an increase in calls for stringent data localisation measures in the EU, propelled partly by the Schrems II verdict and subsequent guidance from the European Data Protection Board and decisions from data protection authorities, which have advocated for a 'zero risk' approach (Christakis, 2024). Relatedly, the GDPR is subject to different interpretations and enforcement across member states. As such, it is, to a certain extent, still struggling to shape privacy practices even within EU borders (CIPL, 2024).

Apart from adequacy decisions, the GDPR enables international data transfers through Standard Contractual Clauses (SCCs), through which organisations can transfer data to countries whose regimes are not recognised as essentially equivalent to that of the EU. In a recent survey, Digital Europe (2020) found that 85 per cent of all EU-based companies transfer data outside of Europe using standard-contractual clauses (SCCs), while a little more than five per cent use other transfer mechanisms authorised under the GDPR, such as binding corporate rules (BCRs).

Both SCCs and BCRs have deficiencies reported by industry. The Global Data Alliance (2024) report that binding corporate rules (BCRs) are a tool of significant importance for companies, but their review and adoption processes are burdensome and lengthy for both companies and data protection authorities (DPAs). In the case of SCCs, the GDPR is reported to place an undue burden on companies to apply strong safeguards so that data is protected at high levels wherever it travels. While SCCs were updated a few years ago, insufficiencies and areas of uncertainty have been reported to remain with respect to transfer impact assessments. For example, SCCs require that the exporter/importer carry out an in-depth study of the legal framework of the territory where the importer is located. This triggers increased efforts in external resources to examine foreign legislation, and CIPL (2024) has reported that organisations are describing internal 'data transfer fatigue' caused by the extensive bureaucratic tasks associated with such processes. This is likely true especially for small and medium sized importers, who may not have the resources to undertake such an obligation.

4.3 The GDPR and the future of the Brussels effect

Finally, the GDPR's relation to the Brussels effect merits consideration of some forward-looking aspects of this effect. In some cases where the GDPR has been deemed to be influential, it seems it may have been the EU's economic weight (market power), rather than the merits of its privacy policy design, that underpinned the influence. It is not necessarily clear that the GDPR is universally regarded as a gold standard that those outside the EU have sought to emulate, given that certain aspects of the GDPR have been deliberately excluded by both companies and countries (Johnson, 2022; Bradford, 2023; Allen, 2024).

Allen (2024) notes that there is even a possibility that countries could be forced to make trade-offs between ensuring free data flows with the EU and with other competing countries or networks of countries. For example, Ferracane et al. (2025b) have found that African countries following the US-inspired open model experience

higher trade volumes with other African trade partners, while the widespread adoption of the EU-inspired conditional model negatively impacts intra-African digital trade.

Over time, the EU's share of the global economy has decreased – a process that is likely to continue as more low- and middle-income countries become richer. With this development, the relative market power underlying the Brussels effect will continue to wane over time. However, this decrease in power could likely be mitigated if the EU strengthens its single market, for example, by improving conditions for digital trade.

However, all other things being equal, it appears logical that the EU's digital trade performance will increasingly depend on its ability to converge with other countries on digital policies, at least partly by being more willing to compromise. The OECD and WTO (2025) note that more global solutions that balance free data flows with trust are likely to deliver better economic outcomes for countries at all levels of development. The WTO (2024) has estimated that global GDP could rise by nearly two per cent under a scenario where countries better coordinate their data policies. It is important to note that the economic wins that stem from convergence usually require flexibility from all countries. International initiatives like the DFFT can help build trust, but their impact is sometimes weakened by their non-binding nature. In addition, complementary binding agreements, such as the projected EU-US e-evidence agreement, could help to balance data access with human rights, but these remain few in number today and are primarily focused on law enforcement access (Christakis, 2024).

Finally, Terzis and Van Hoboken (2024) argue that the Brussels effect now drives EU policymakers to prioritise being the first to regulate emerging digital domains, cementing the role as the global standard-setter. As such, the authors claim, the phenomenon now operates independently of factors such as societal demand or legislative timing and, to a certain extent, establishing universal standards has become a central EU goal in itself. If true, this stance may continue driving some of the costs of international trade that have been outlined in this section.

5 Conclusion and policy recommendations

The GDPR is a landmark regulation that protects the fundamental rights of EU citizens, reflecting the rights-based approach to data privacy prioritised by the European Union. It is an example of a data flow regulation which, in general, can improve trust and thereby positively impact international trade. Moreover, the regulation has, to a certain extent, set the global tone for privacy regulation in a manner that is coloured by EU priorities. The GDPR is therefore an example of the Brussels effect, which describes the EU's ability to set global rules with the help of its market power and institutional capacity. At the same time, the regulation has had negative effects on the EU's international trade and productivity. For example, it has made cross-border data flows more difficult, created regulatory uncertainty and induced high compliance costs for companies.

In other words, with the GDPR, the EU appears to a certain extent to have gained international regulatory influence over data protection at the cost of growth in trade and productivity – and thereby competitiveness. In that regard, the GDPR's Brussels effect has a defect.

With global economic development, the EU's share of global GDP is decreasing and, as such, the market power-side of the Brussels effect will logically be reduced over time. Therefore, the EU would likely benefit from a more collaborative approach to regulation, where internationally agreed standards guide policymaking for areas with cross-border impacts, such as data privacy. This conclusion is important and urgent to discuss within the EU, because since the inception of the GDPR, the European Union has adopted a range of other unilateral digital regulations that could also harm trade and productivity.

Therefore, we suggest that in the future, the European Commission's **reports on the GDPR better account for its effect on international trade**, for example, with the help of a data flow test³ and quantitative estimations on the cost of unilateral standard-setting.

Moreover, we propose that the GDPR is revised. We believe that several aspects of the regulation could be improved to strengthen EU trade and competitiveness, while maintaining robust privacy protection. One option is to initiate a GDPR revision at the launch of the digital package foreseen towards the end of 2025 in accordance with the European Commission's current work programme.

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³ See, e.g. National Board of Trade (2023).

Finally, we summarise a few ideas for how the GDPR could be improved in a revision. It is our hope that these initial recommendations⁴ can help the European Commission take the first steps towards improving the GDPR's effect on international trade and productivity – and thereby competitiveness.

- Streamline implementation and harmonise guidance across the EU. The European Commission and the EDPB should enhance consistency in GDPR enforcement by fostering a risk-based approach across all data protection authorities (DPAs), as opposed to a 'zero-risk' approach. The Commission should promote clear, harmonised interpretations that balance compliance and practical application, thereby providing clarity, predictability and facilitating compliance for the many firms that transfer data across borders.
- Enhance international data transfer mechanisms. The European Commission and the EDPB should simplify, enhance transparency and guidance, and improve the objectivity for transfer mechanisms such as CBRs, SCCs and adequacy decisions. This work could include developing appropriate GDPR certifications and codes of conduct that can serve as transfer tools that can become interoperable with global standards. It could mean improving flexibility in adequacy decisions by introducing a more tiered approach, enabling gradual compliance for non-EU countries. The EU should also adopt a comprehensive, proactive and time-sensitive strategy for additional adequacy determinations to forward the EU's digital trade ambitions. It should also better support the EU's development strategies, meaning extending more adequacy decisions to developing countries and EU neighbours/potential EU enlargement countries.
- Prioritise collaboration on data privacy standards. The European Commission should continue to advocate for frameworks such as the DFFT, which may help enable mutual regulatory approaches and ensure lawful and transparent access to data for security purposes without hampering trade. At the same time, it should increase efforts to align the GDPR with global standards, such as the CBPR, and evaluate where greater flexibility could facilitate progress in the DFFT discussions. The Commission should also evaluate how the GDPR could better take account of privacy-enhancing technologies with the aim of simplifying international data flows and digital trade.

These are based on suggestions made by CIPL (2024), Digital Europe (2020; 2024b), Svantesson (2013), Global Data Alliance (2024) and Christakis (2024).

6 References

Aaronson, S. A., & LeBlond, P., 2018. Another Digital Divide: The Rise of Data Realms and Its Implications for the WTO. *Journal of International Economic Law*, 21(2), pp. 245–272. Available at:

https://ideas.repec.org/a/oup/jieclw/v21y2018i2p245-272..html

Abraham L. Newman, 2020. "Digital Policy-Making in the European Union", Oxford University Press.

Acquisti, A., Taylor, C., & Wagman, L., 2016. The Economics of Privacy. *Journal of Economic Literature*, 54(2), pp. 442–492. Available at: https://www.aeaweb.org/articles?id=10.1257/jel.54.2.442.

Akerlof, G., 1970. The Market for "Lemons": Quality Uncertainty and the Market Mechanism. Available at: https://www.jstor.org/stable/1879431

Allen, S., 2024. *The Geopolitics of Privacy Policy: Lessons and Implications for the EU*. Institute of International and European Affairs. Available at: https://www.ijea.com/images/uploads/resources/The Geopolitics of Privacy Policy

https://www.iiea.com/images/uploads/resources/The Geopolitics of Privacy Policy Lessons and Implications for the EU.pdf.

Banco de España, 2023. Sector-level economic effects of regulatory complexity: Evidence from Spain. Available at:

https://repositorio.bde.es/bitstream/123456789/29854/1/dt2312e.pdf.

Bradford, A., 2020. *The Brussels Effect: How the European Union Rules the World.* Oxford University Press.

Bradford, A., 2023. *Digital Empires: The Global Battle to Regulate Technology*. Oxford University Press.

Bradford, A., 2024. The False Choice Between Digital Regulation and Innovation. *Northwestern University Law Review*, 119(2), pp. 377–456. Available at: https://scholarlycommons.law.northwestern.edu/nulr/vol119/iss2/3/.

Bruegel, 2024. Overview of EU Legislation in the Digital Sector. Available at: https://www.bruegel.org/system/files/2024-06/Bruegel factsheet 2024 0.pdf.

Burri, M., & Kugler, K., 2024. Regulatory Autonomy in Digital Trade Agreements. *Journal of International Economic Law*, 27(3), pp. 397–423. Available at: https://academic.oup.com/jiel/article/27/3/397/7718688.

Centre for Information Policy Leadership (CIPL), 2024. The GDPR's First Six Years: Positive Impacts, Remaining Implementation Challenges, and Recommendations for Improvement. Available at:

https://www.informationpolicycentre.com/uploads/5/7/1/0/57104281/gdpr_six_years_on_cipl_may24.pdf.

Chander, A., & Schwartz, P. M., 2023. Privacy and/or Trade. *University of Chicago Law Review*, 90, pp. 49–135. Available at: https://ssrn.com/abstract=4038531.

Christakis, N. A., 2024. Data free flow with trust: current landscape, challenges and opportunities. *Journal of Cyber Policy*, 12(2), pp. 123–145. Available at: https://www.tandfonline.com/doi/epdf/10.1080/23738871.2024.2421838.

Coffey, B., McLaughlin, P. A., & Peretto, P., 2020. The Cumulative Cost of Regulations. *Journal of Economic Behavior & Organization*, 180, pp. 257–289. Available at:

https://www.sciencedirect.com/science/article/abs/pii/S1094202520300223.

Czerniawski, M., & Svantesson, D., 2024. Challenges to the Extraterritorial Enforcement of Data Privacy Law – EU Case Study. *Dataskyddet 50 år: Historia, aktuella problem och framtid*, pp. 127–154. Available at: https://www.lawpub.se/artikel/10.53292/bd1fa11c.f5b3afbe.

Demirer, M., Jiménez Hernández, D. J., Li, D., & Peng, S., 2024. Data, Privacy Laws and Firm Production: Evidence from the GDPR. *National Bureau of Economic Research* Working Paper No. 32146. Available at: https://www.nber.org/papers/w32146.

Digital Europe, 2020. *Schrems II Impact Survey Report*. Available at: https://www.digitaleurope.org/resources/schrems-ii-impact-survey-report/.

Digital Europe, 2021. *Data Flows and the Digital Decade*. Available at: https://www.digitaleurope.org/resources/data-flows-and-the-digital-decade/.

Digital Europe, 2024a. *Data Transfers in the Data Strategy: Understanding Myth and Reality*. Available at: https://www.digitaleurope.org/resources/data-transfers-in-the-data-strategy-understanding-myth-and-reality/.

Digital Europe, 2024b. *The GDPR Six Years In: From Harmonisation to Alignment*. Available at: https://www.digitaleurope.org/resources/the-gdpr-six-years-in-from-harmonisation-to-alignment/.

Draghi, 2024. The Future of European Competitiveness: A Competitiveness Strategy for Europe. Available at: https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead en

European Commission, 2024a. Data Protection: Rules for the Protection of Personal Data Inside and Outside the EU. Available at: https://commission.europa.eu/law/law-topic/data-protection en.

European Commission, 2024b. Second Report on the Application of the General Data Protection Regulation. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2024:357:FIN.

European Commission, 2024c. Commission Finds that EU Personal Data Flows Can Continue Safely Under New Agreement. Available at:

https://ec.europa.eu/commission/presscorner/detail/en/ip 24 161.

European Parliament, 2024. *The EU's Digital Trade Policy*. Available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/757615/EPRS_BRI(2024/757615_EN.pdf.

Farrell, H., & Newman, A. L., 2019. *Of Privacy and Power: The Transatlantic Struggle over Freedom and Security*. Princeton University Press. Available at: https://press.princeton.edu/books/hardcover/9780691183640/of-privacy-and-power.

Ferracane, M. F., & van der Marel, E., 2020. <u>Do data policy restrictions impact the productivity performance of firms and industries?</u>, *Review of International Economics*, 28(3), pp. 676-722. Available at https://onlinelibrary.wiley.com/doi/abs/10.1111/roie.12467

Ferracane, M. F., & van der Marel, E., 2021. Do Data Policy Restrictions Inhibit Trade in Services? *Review of World Economics*, 157(4), pp. 727–776. Available at: https://ideas.repec.org/a/spr/weltar/v157y2021i4d10.1007 s10290-021-00417-2.html

Ferracane, M. F., & van der Marel, E., 2024. Regulating Personal Data: Data Models and Digital Services Trade. *Review of International Economics*, 33(1), pp. 243-264. Available at https://doi.org/10.1111/roie.12735

Ferracane, M. F., Hoekman, B. M., van der Marel, E., & Santi, F., 2025a. Digital Trade, Data Protection and EU Adequacy Club. CEPR Discussion Paper, Available at https://cepr.org/publications/dp19882

Ferracane, M.F., Gonzalés Ugarte, S., van der Marel, E., 2025b. The Brussels effect in Africa: is it beneficial for intra-regional trade in digital services?. Available at:

Brussels effect in Africa: is it beneficial for intra-regional trade in digital services? |

Journal of International Economic Law | Oxford Academic

Ferracane, M.F., & van der Marel, E. 2025. Governing personal data and trade in digital services. Available at:

https://onlinelibrary.wiley.com/doi/epdf/10.1111/roie.12735

Frey, C.B. & Presidente, G., 2024. "Privacy regulation and firm performance: Estimating the GDPR effect globally," Economic Inquiry, Western Economic Association International, vol. 62(3), pages 1074-1089, July.

Global Data Alliance, 2024. Response to the European Commission's Call for Evidence on the Second Application Report of the EU General Data Protection Regulation. Available at: https://globaldataalliance.org/wp-content/uploads/2024/02/02082024gdagdprrep.pdf.

Goldberg, S. G., Johnson, G. A., & Shriver, S. K., 2024. Regulating Privacy Online: An Economic Evaluation of the GDPR. Available at: https://ideas.repec.org/a/aea/aejpol/v16y2024i1p325-58.html

Greenleaf, G., 2023. Global Data Privacy Laws 2023: 162 National Laws and 20 Bills. *Privacy Laws & Business International Report*, Issue 181, pp. 1–4. Available at: https://ssrn.com/abstract=4426146.

Guinea, O. & du Roy, O., 2024. Rules Without End: EU's Reluctance to Let Go of Regulation. *ECIPE Blog*, August 8. Available at: https://ecipe.org/blog/rules-without-end-eu-regulation/.

Hartmann, T., 2024. European Commission Opposes Amending GDPR, Focusing on Enforcement Instead. *Euractiv*, August 8. Available at:

https://www.euractiv.com/section/data-privacy/news/european-commission-opposes-amending-gdpr-focusing-on-enforcement-instead/.

Horseman, C., 2024. Week in London: EU Data Adequacy, Energy, Elusive Industrial Strategy. *Borderlex*, October 17. Available at: https://borderlex.net/2024/10/17/week-in-london-eu-data-adequacy-energy-elusive-industrial-strategy/.

International Association of Privacy Professionals (IAPP), 2023. Global Adequacy Capabilities. Available at: https://iapp.org/resources/article/infographic-global-adequacy-capabilities/.

Janßen, R., Kesler, R., Kummer, M. E., & Waldfogel, J., 2022. GDPR and the Lost Generation of Innovative Apps. *National Bureau of Economic Research* Working Paper No. 30028. Available at: https://www.nber.org/papers/w30028.

Jia, J., Jin, G. Z., & Wagman, L. (2020). GDPR and the localness of venture investment. Available at SSRN 3436535.

Jia, J., Jin, G. Z., & Wagman, L. (2021). The short-run effects of the General Data Protection Regulation on technology venture investment. Marketing Science, 40(4), 661–684.

Johnson, G., 2022. Economic Research on Privacy Regulation: Lessons from the GDPR and Beyond. *National Bureau of Economic Research* Working Paper No. 30705. Available at:

https://www.nber.org/system/files/working_papers/w30705/w30705.pdf.

Koski, H. & Valmari, N. (2020). Short-term impacts of the GDPR on firm performance. ETLA Working Papers.

Kox, H. & Lejour, A. Regulatory heterogeneity as obstacle for international services trade. Available at: https://ideas.repec.org/p/cpb/discus/49.html

Naef, T., 2023. Data Protection without Data Protectionism: The Right to Protection of Personal Data and Data Transfers in EU Law and International Trade Law.

Springer International Publishing. Available at:

https://library.oapen.org/handle/20.500.12657/60776.

National Board of Trade, 2016. Data Flows: A Fifth Freedom for the Internal Market? Available at:

 $\underline{https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2016-och-aldre/publ-data-flows.pdf.}$

National Board of Trade (2023). A Data Flows Test for the Single Market.

National Board of Trade, 2024a. Cloud Services and Export Performance: Evidence and Implications for EU Policy. Available at:

https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2024/cloud-services-and-export-performance.pdf.

National Board of Trade, 2024b. Economic Security and Digital Trade: Time for an EU-US Digital Agreement. Available at:

https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2024/economic-security-and-digital-trade.pdf.

National Board of Trade, 2024c. Important but Modest Success as WTO E-Commerce Negotiations Are Finalised. Available at:

https://www.kommerskollegium.se/en/analyses-and-seminars/trade-policy-insights/important-but-modest-success-as-wto-e-commerce-negotiations-are-finalised/.

National Board of Trade, 2024d. The Cumulative Effect of EU Regulations on External Trade – From Free Movement to More Conditioned Trade. Available at: https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2024/cumulative-effect-regulations-external-trade.pdf.

National Board of Trade, 2025a. Trade Policy for the Age of AI – A Component to Strengthen EU Competitiveness. Available at:

https://www.kommerskollegium.se/en/analyses-and-seminars/publications/reports/2025/trade-policy-for-the-age-of-ai/.

National Board of Trade, 2025b. Navigating Cross-Border Data Flows and the GDPR – trade policy recommendations. Available at:

https://www.kommerskollegium.se/analyser-och-

seminarier/publikationer/rapporter/2025/navigating-cross-border-data-flows-and-the-gdpr/

NOYB – European Center for Digital Rights, 2024. US Cloud Soon Illegal? Trump Punches First Hole in EU-US Data Deal. Available at: https://noyb.eu/en/us-cloud-soon-illegal-trump-punches-first-hole-eu-us-data-deal.

Organisation for Economic Co-operation and Development (OECD), 2017. International Regulatory Cooperation and Trade. Available at: https://www.oecd.org/content/dam/oecd/en/publications/reports/2017/05/international-regulatory-co-operation-and-trade-glg7a8f2/9789264275942-en.pdf

Organisation for Economic Co-operation and Development (OECD), 2021. Mapping Commonalities in Regulatory Approaches to Cross-border Data Transfers. Available at: https://www.oecd.org/en/publications/mapping-commonalities-in-regulatory-approaches-to-cross-border-data-transfers ca9f974e-en.html

Organisation for Economic Co-operation and Development (OECD), 2023. Handbook on Measuring Digital Trade, Second Edition. Available at:

https://www.oecd.org/en/publications/handbook-on-measuring-digital-trade-second-edition_ac99e6d3-en.html.

Organisation for Economic Co-operation and Development (OECD), World Trade Organization (WTO). 2025. Economic Implications of Data Regulation: Balancing Openness and Trust. Available at:

https://www.wto.org/english/res e/booksp e/data regulation e.pdf

Prasad, A., & Pérez, D. R., 2020. The Effects of GDPR on the Digital Economy. *Informatization Policy Journal*, 27(3), pp. 3–18. Available at: https://regulatorystudies.columbian.gwu.edu/effects-gdpr-digital-economy.

Svantesson, D. J. B., 2013. A "layered approach" to the extraterritoriality of data privacy laws. *International Data Privacy Law*, 3(4), pp. 278–292. Available at: https://academic.oup.com/idpl/article-abstract/3/4/278/727233.

Svantesson, D. J. B., 2018. Are We Stuck in an Era of Jurisdictional Hyper-Regulation? *Scandinavian Studies in Law*, Volume 65, pp. 143–158. Available at: https://scandinavianlaw.se/pdf/65-9.pdf.

Terzis, P., & van Hoboken, J., 2024. A Brussels Affect. *Tech Policy Press*, June 18. Available at: https://www.techpolicy.press/a-brussels-affect/.

World Trade Organization, 2024. *World Trade Report 2024: Trade and Inclusiveness: How to Make Trade Work for All.* Available at: https://www.wto.org/english/res e/booksp e/wtr24 e/wtr24 e.pdf.

Yakovleva, S., & Irion, K., 2016. The Best of Both Worlds? Free Trade in Services, and EU Law on Privacy and Data Protection. *European Data Protection Law Review*, 2(2), pp. 191–208. Available at: https://ssrn.com/abstract=2877168.

Yakovleva, S., & Irion, K., 2020. Pitching Trade Against Privacy: Reconciling EU Governance of Personal Data Flows with External Trade. *International Data Privacy Law*, 10(3), pp. 201–219. Available at: https://academic.oup.com/idpl/article/10/3/201/5813832.

Sammanfattning på svenska

Summary in Swedish

Den här analysen sammanfattar olika effekter som GDPR har haft på internationell handel. Vi finner att dataskyddsregler kan öka förtroendet, vilket är positivt för internationell handel, och att GDPR har påverkat globala standarder för dataskydd. Vi drar dock också slutsatsen att GDPR har medfört negativa effekter på EU:s internationella handel och produktivitet – och därigenom på EU:s konkurrenskraft. GDPR har gjort gränsöverskridande dataflöden svårare, skapat regulatorisk osäkerhet och lett till höga efterlevnadskostnader för företag.

Med dessa resultat i åtanke, liksom EU:s minskande andel av världens BNP och den växande rollen digital handel spelar, föreslår vi att GDPR revideras och att en mer samarbetsinriktad regulatorisk metod för dataskydd utvecklas. En revision skulle kunna förbättra GDPR genom att effektivisera efterlevnaden, förbättra adekvansbeslut och stärka internationellt samarbete kring dataskyddsstandarder. Det är vår förhoppning att denna analys kan bidra till att balansera ett starkt dataskydd med förbättrad ekonomisk konkurrenskraft för EU, så att GDPR förblir ändamålsenlig för den framväxande digitala ekonomin.

The National Board of Trade Sweden is the government agency for international trade, the EU internal market and trade policy. Our mission is to facilitate free and open trade with transparent rules as well as free movement in the EU internal market.

Our goal is a well-functioning internal market, an external EU trade policy based on free trade and an open and strong multilateral trading system.

We provide the Swedish Government with analyses, reports and policy recommendations. We also participate in international meetings and negotiations.

The National Board of Trade, via SOLVIT, helps businesses and citizens encountering obstacles to free movement. We also host several networks with business organisations and authorities which aim to facilitate trade.

As an expert agency in trade policy issues, we also provide assistance to developing countries through trade-related development cooperation. One example is Open Trade Gate Sweden, a one-stop information centre assisting exporters from developing countries in their trade with Sweden and the EU.

Our analyses and reports aim to increase the knowledge on the importance of trade for the international economy and for the global sustainable development. Publications issued by the National Board of Trade only reflect the views of the Board.

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