

The background of the entire page is a photograph of several European Union flags waving in front of a modern glass and steel building. The flags are blue with twelve yellow stars arranged in a circle. The building has a curved facade with many windows. The lighting suggests it's daytime, possibly late afternoon or early morning, as the sky is bright but not fully white.

**ECIPE**

EUROPEAN CENTRE  
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POLITICAL ECONOMY

# The Benefits of Intellectual Property Rights in EU Free Trade Agreements

## EXECUTIVE SUMMARY

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## KEY TAKEAWAYS

### ***Key Takeaway 1: What are Intellectual Property Rights and why do they matter?***

Intellectual Property gives the creator (e.g. an artist, a company doing R&D, indigenous peoples, a creative studio) an exclusive right over the commercial use of that intellectual creation for a certain period of time. *IP motivates people/companies to invest in innovation by providing the opportunity to recoup the investments made.* By motivating such new discoveries, innovations and other immaterial creations, IP directly leads to progress that is beneficial for society as a whole.

### ***Key Takeaway 2: The economy-wide relevance of IP-intensive industries***

IP-intensive industries constitute *44.8 percent of EU GDP* and generate 38.9 percent of total EU employment. *Wages are 47 percent higher* on average in IP-intensive industries compared to non-IP-intensive industries. They are responsible for *68% of total EU exports* and they *drive investments in the EU economy* (51% of all investments occur in a set of IP-intensive industries).

### ***Key Takeaway 3: EU trade agreements: strong on niche types of IP but weaker on the broad IP types***

*EU FTAs are particularly strong in some niche types of IP (e.g. geographical indications), but less so in the broad types of IP of patents and trademarks*, while the latter matter most economically. The EU did not copy the equivalents of EU law into its FTAs and there is much less focus on patents and trademarks in EU FTAs compared to US FTAs.

### ***Key Takeaway 4: 55% of EU exports (of which 60% is IP intensive) are not covered by an FTA***

Because of the EU's bilateral FTA strategy, the share of EU exports covered by FTAs rose to 45% in 2018 and IP-intensive trade covered by FTAs grew fast. However, *55% of all EU exports are not covered by bilateral FTAs and 60% of these exports are IP-intensive*. They do not have FTA IP protection which could be an issue for trade with countries where IP systems (including enforcement) are weaker.

### ***Key Takeaway 5: The EU IP score and EU's global share of IP-intensive exports declined***

From 2009 to 2018, *the EU IP score has declined vis-à-vis the US, China, Japan and Switzerland*.<sup>1</sup> The global share of EU IP-intensive exports is also eroding gradually. The fact that the decline in IP-intensive export shares is gradual is likely due to the long-term nature of R&D, which also means this trend cannot easily be turned around once it happens.

<sup>1</sup> EUIPO measure of the strength of an IP framework

***Key Takeaway 6: Sector-specific relevance of IP-intensive industries.***

- Most *value-added* for the EU economy is created by machinery (€232bn), motor vehicles (€206bn), and architecture & engineering (€158bn).
- Pharmaceuticals (€161k), telecoms (€156k), chemicals (€107k), transport equipment (€88k) and motor vehicles (€81k) create the most *productive and highest value-added jobs*. These sectors are 2-3 times as productive as non-IP-intensive industries (€51k).
- Machinery (€240 bn), motor vehicles (€169 bn), chemicals (€161 bn) and pharmaceuticals (€135bn) contribute *most to EU exports*. IP-intensive sectors export 68% of all EU exports.
- Telecom (€44k per person), motor vehicles (€39k p.p.), machinery (€22k p.p.) and electrical equipment (€13k p.p.) create *most investments per capita in the EU* in 2019.

***Key Takeaway 7: Strengthening IP in EU FTAs has a significant positive economic and societal effect for the EU and EU Member States***

Stronger IP provisions in EU FTAs matter: they create a level playing field, improve market access, reduce trade costs for IP-intensive products, and create predictability for long-term investments. *Stronger IP provisions in EU FTAs lead – each year – to higher EU GDP (€63bn), more EU exports (€74bn), higher investments in the EU (€17bn) and higher wages for EU citizens (€245 per EU family of 4).* Every EU Member State benefits. All 27 EU Member States participate in these gains.

***Key Takeaway 8: Strengthening IP in EU FTAs also has positive sectoral effects in the EU and in EU Member States***

The EU IP-intensive sectors that would *increase exports* most in case of stronger IP provisions in EU FTAs are: machinery (+4.0%), transport equipment (+3.4%) and electronics (+3.2%). In terms of production, transport equipment (+6.3%), machinery (+2.3%), electronics (+2.2%), electrical equipment (+2.0%) and pharmaceuticals (+2.0) would *increase production in the EU*.

***Key Takeaway 9: Patents and trademarks matter most for IP-intensive EU exports***

The *largest positive impact on exports comes from patent and patent-related provisions*, followed by the effects of trademarks. For EU FTAs, however, the patent and trademark provisions have a weaker trade-enhancing effect compared to other FTAs due to EU FTA patent and trademark provisions being weaker than those in other FTAs. By strengthening these provisions a *stronger export performance and more export-oriented jobs in EU Member States would result*.

***Key Takeaway 10: IP and the EU industrial strategy: an opportunity for EU IP-intensive industries***

The biggest gains in economic activity are created when new innovations such as digital technologies, new machines, innovative medicines, and green technologies *are also broadly adopted*. IP provisions in EU FTAs can meaningfully contribute to EU strategic resilience by promoting innovation in the EU, driving the digital transformation, green technology development and R&D into innovative medicines, especially if done in parallel to a strong regulatory framework and deepening of the EU Single Market.

***Key Takeaway 11: IP in the EU pharmaceutical strategy: the EU at a crossroads***

The EU has lost ground in terms of pharmaceutical innovation – the most R&D intensive industrial sector – since 1990. The EU Pharmaceutical Strategy has the potential to turn this trend around, but in spite of some positive IP elements in the strategy, it looks like this may not happen, mainly because it could introduce conditionalities on IP and incentives. This is the opposite of what the EU's global trading partners are doing and *could undermine the positive effect of strong IP provisions in EU FTAs*.

***Key Takeaway 12: IP effective against counterfeit goods***

Counterfeiting is a violation of IP. Strong IP provisions (e.g. trademarks, patents, copyrights) that are enforced jointly by companies and governments (e.g. an EU-wide food fraud risk management system, the EU falsified medicines directive) are one of the most efficient ways to *combat counterfeiting and piracy and reducing their negative economic, environmental, health and societal impact*.

***Key Takeaway 13: IP and biodiversity***

The EU-ANDEAN FTA contains most IP provisions on the protection of 'traditional knowledge and genetic resources'. IP helps to *combat the overexploitation of natural resources*, supporting the lives and livelihoods of indigenous and local communities and allowing these communities to capture larger shares of the economic benefits, while focusing on preserving the planet for future generations.

***Key Takeaway 14: IP and SMEs***

The *protection granted from IP is vital for small- and medium-sized enterprises (SMEs)*. Many SMEs fail to consider their IP in early stages of development and overlook that it is one of their most valuable assets. Stronger IP provisions in EU FTAs, linked to SME chapters, could help SMEs overcome the export hurdle as more predictability and certainty are provided and investments protected. Stronger FTA enforcement too is especially beneficial for SMEs who do not have the resources for legal battles to protect their (intellectual) property.

## KEY POLICY RECOMMENDATIONS

### ***Key Policy Recommendation 1: Stronger IP provisions in EU FTAs***

*The EU should strengthen IP provisions in EU FTAs to the level of protection provided for in EU law, especially, but not only, with developed countries (e.g. Australia, New Zealand, Chile). The EU has the opportunity to deepen FTAs and strengthen IP after several years when FTAs are ‘upgraded’ to the benefit of EU Member States’ and trading partner economies. Mirroring the EU IP system in EU FTAs was the ambition in 2006 of the ‘Global Europe’ strategy. If the EU would refocus on this objective in 2021, the EU economy and its citizens would benefit in various ways: economically (e.g. higher levels of welfare, investments and exports), socially (e.g. higher wages, more high-quality export jobs), environmentally (e.g. support for biodiversity, green technologies), and in terms of recapturing part of the EU’s former global leadership in innovation, and via stronger resilience for the EU economy.*

### ***Key Policy Recommendation 2: Strengthen patent and trademark provisions in EU FTAs especially***

The EU is already including strong provisions in its FTAs for geographical indications (GIs), plant variety rights (PVRs) and – depending on the trade partners – traditional knowledge. *But the EU should include stronger provisions on two large types of IP: trademarks and patents.* For these two types, the EU should agree provisions in line with those provided for in EU law. Currently, EU FTAs are weaker in these two types of IP than other FTAs, notably US FTAs, while these two types of IP are among the most important for the EU and EU Member State economies. The current levels of trademark and patent protection constitute the largest untapped potential of EU FTAs. The EU should lift the level of patent and trademark protection to what is already done on GIs. On trademarks, the EU could include provisions in its FTAs that would allow for the refusal or invalidation of a trademark on the grounds of bad faith, in order to disincentivise bad faith registrations by local companies infringing foreign trademarks. On patents, the EU could agree on EU-levels of RDP and SPC provisions in its FTAs.

### ***Key Policy Recommendation 3: Strengthen the enforcement of FTAs***

*The EU should strengthen IP in EU FTAs via more emphasis on enforcement of its FTAs, including for IP provisions.* The appointment of the Chief Trade Enforcement Officer (CTEO) in 2020 and the entering into force new trade enforcement rules in February 2021<sup>2</sup> are important. In addition, the EU should continue its bi-annual reporting on IP frameworks in third countries, the use of bilateral IP forums to strengthen IP frameworks in third countries, and use the Access2Markets Database to collect and follow IP-related market access barriers. In addition, trading partners should not be allowed to circumvent FTA provisions by adopting mitigating domestic policies that undo the effect of the FTA after the FTA has been applied.

<sup>2</sup> European Commission (2021) “Strong EU trade enforcement rules enter into force”; URL: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_601](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_601)

Also, the EU should actively check how the FTA (and its IP provisions) are embedded in national laws of the partner countries, taking likely implementation and enforcement already into account when (re)negotiating an FTA, and the scope of dispute settlement provisions in EU FTAs should as a standard include trade-related disputes arising from the violation of IP. This will strengthen global IP enforcement and – for example – help address the common challenge of counterfeit / fake goods that have significant negative economic, environmental, health and reputational effects.

***Key Policy Recommendation 4: Strengthen the wording of IP provisions in EU FTAs***

Effectiveness of IP provisions in EU FTAs does not only depend on more or longer protections (e.g. years of copyrights, patent term restoration or trademarks), but *also on the detailed ways of wording provisions in EU FTAs*. One way to strengthen IP in EU FTAs would be for the European Commission to engage in a dialogue with IP-intensive industries to discuss how provisions are applied / work in practice and how they could be reformulated to become more effective in protecting and enforcing IP on the ground.

***Key Policy Recommendation 5: Link IP in FTAs more directly to EU strategic objectives***

The EU should add a requirement in its impact assessment work around EU FTAs to explore the effects of strong IP provisions in EU FTAs on achieving EU core policy objectives, especially in combination with the trade enhancing effects of the FTA. For example, how can IP strengthen the EU's Green Deal, the Digital Transformation, support economic development of the poorest nations in the world, or increase EU strategic resilience against future pandemics? And what flanking measures could be agreed upon with the EU's trading partners to allow the IP framework to best support these policy objectives.

***Key Policy Recommendation 6: Make IP work better for SMEs***

With IP generating substantial benefits for SMEs in Europe, there is not only a need to *strengthen IP provisions in EU FTAs overall with a focus on benefiting SMEs, also a clear link to SME chapters in EU FTAs needs to be made* and the FTAs need to be flanked by a stronger interaction between IP offices, SME support institutions, business associations, national, regional and local governments and other relevant actors to first identify the IP needs of entrepreneurs and remove barriers to a more effective use of the IP system.

***Key Policy Recommendation 7: Support partner countries to enforce IP better***

Very often, implementation and enforcement of IP in trading partner countries is weak and not up to the level of implementation and enforcement in the EU. This is not always bad will, but also simply the result of weaker systems and structures, lack of budgets, and lack of understanding of IP. We therefore recommend the EU to think of flanking capacity building projects in the area of IP – especially in case of FTAs with developing countries. These capacity building projects could focus on: 1) Helping trade partners to set-up



specialised IP courts and train judges that will strengthen domestic IP enforcement; 2) Support partner countries to be clear on what has to happen with seized counterfeit goods: create ample storage space for detention of seized products and budgets for destruction of these counterfeit goods; 3) Awareness raising on what IP is and what IP enforcement entails.

***Key Policy Recommendation 8: Extend the global coverage of EU FTAs***

Ideally, each country would have its own strong domestic IP system to support innovation and R&D and protect creators from illegal use of ones' IP. This is vital for IP-intensive industries first and foremost, but also for the EU, because if EU company's IP rights are violated in a third country, the negative consequences are also born by the EU where the investment costs were made and where falsified goods could enter. Parallel to deepening IP in EU FTAs, *the EU should consider expanding the bilateral coverage of EU FTAs with strong IP provisions* with Australia, New Zealand, Indonesia, Chile, but also – more challenging – with key trade partners like China and Russia where domestic IP systems are much weaker and an FTA would add much-needed legal certainty for industry. Also an understanding with the US, where EU and US could together set a global example of strong IP provisions driving R&D and innovation, should be considered.

***Key Policy Recommendation 9: Explain the benefits of IP better***

Because they are important, but also conceptually difficult to understand, the EU – together with EU IP-intensive industries – *should explain more about what IP is, how they work, and why it is important for the EU to have a strong IP framework*. Especially the use of concrete examples in illustrating IP is important. One way would be to add more information to the “Report on the protection and enforcement of Intellectual property rights in third countries”. Another way would be to explain the quid pro quo inherent in certain IP rights. For example, patents will not be granted unless the patent application contains sufficient detail concerning the invention, permitting further research. Similarly, regulatory data protection (RDP) for innovative medicines protects marketing authorisation dossiers which in turn leads to more transparency. That transparency forms the basis for future generic and biosimilar products.

***Key Policy Recommendation 10: IP provisions in EU FTAs matter for EU Member States***

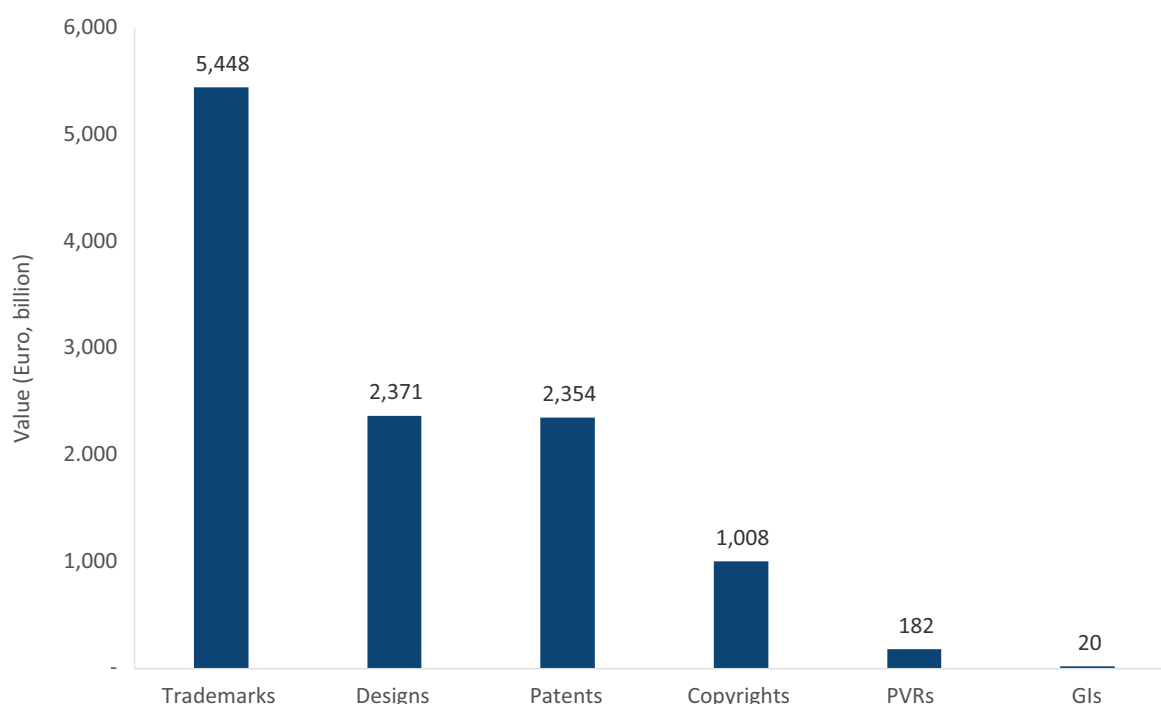
Working on stronger IP provisions in EU FTAs is not only a role for the European Commission or the negotiators. Industry has an important role to play by highlighting the actual effects and benefits of IP provisions in EU FTAs and share these broadly, including illustrative examples. IP-intensive industries should invest into reporting and be transparent about the relevance of different IP provisions for them. This also applies to *making clear to EU Member States what the specific Member State benefits of stronger IP in EU FTAs* are in terms of production, exports, jobs and wages – and for what types of IP and IP-intensive industries these effects are most pronounced.



## EXECUTIVE SUMMARY

### *Intellectual Property is everywhere*

Intellectual Property is all around us. An intellectual creation can be a song, a design, a movie, a new plant variety, a new drug, a new technology, food, a website domain name, traditional ecological knowledge, or an innovative new production process. What IP does is to give the creators (e.g. an artist, an R&D company, an inventor, indigenous peoples) an exclusive right over the commercial use of that intellectual creation for a certain period of time. Thus IP motivates people and companies to invest in innovation, leading to economic development and progress. Figure 1 shows the main types of IP ranked by economic relevance for the EU: trademarks cover an economic value of €5.4 trillion, followed by design (€2.4 trn) and patents (€2.4 trn).

**FIGURE 1: ECONOMIC RELEVANCE OF EACH TYPE OF IP (2014-2016, EUIPO)**

Source: EUIPO (2019)

Based on a careful comparison of EUIPO (2019), Eurostat (2019) and JRC (2018) we identified the following sectors as IP-intensive: pharmaceuticals, telecom, chemicals, transport equipment, motor vehicles, electronics, machinery, electrical equipment, IT services, scientific R&D, other manufacturing, architecture & engineering.

### *Intellectual Property Rights are increasingly economically and societally relevant*

IP are increasingly important for knowledge-intensive economies, because of four reasons:

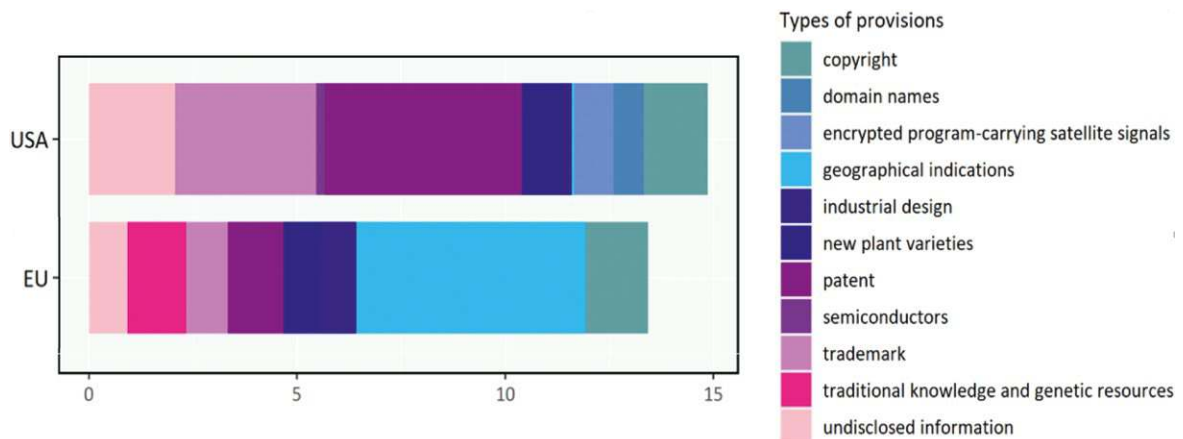
- First, IP motivates people and companies to invest in new discoveries, innovations and other immaterial creations by allowing them to earn back the investments made. As such, IP is directly linked to progress and are beneficial for society as a whole.
- Second, IP drives up levels of investment and productivity and in doing so assist in the modernisation of economies, while facilitating international trade.
- Third, IP creates incentives to get private market players to take commercial risks and focus investments and R&D on societal needs. In this way, IP is necessary for the progress of society, for example, in large technology-driven transitions like the EU's Digital Transformation and the Green Deal, and also to incentivise research into rare diseases as is the case with the Orphan Medicinal Products regulation.
- Fourth, IP is becoming more important year after year, because of specialisation, global production fragmentation, because IP allows contributors who provide only a part of a new product to delimit their specific contributions, fostering cooperation in support of innovation.

The economic relevance of IP-intensive industries for the EU economy is significant and increasing hand-in-hand with ongoing specialisation, global production fragmentation and servification of production (as recognised by the 2021 EU Trade Strategy).<sup>1</sup> IP-intensive industries (Figure 3):

- Constitute 44.8 percent of EU GDP and generate 38.9 percent of total EU employment.
- Contribute to the EU economy with value-added (e.g. machinery €232bn, motor vehicles €206bn).
- Offer wages that are 47% higher than non-IP-intensive industries (patent-intensive industry wages are even 72 percent higher) because they have the highest levels of labour productivity.
- Are responsible for 68% of total EU exports (excluding intra-EU trade), especially machinery (€280 billion), motor vehicles (€169 billion), chemicals (€161 billion), and pharmaceuticals (€135 billion).
- Spur investments in the EU economy: 51% of all investments occur in IP-intensive industries. The highest investments per employee ratios occur in telecom, motor vehicles, and machinery.
- Are driving SME R&D potential in architecture and engineering, chemicals, electrical equipment electronics, and IT services.
- Support the modernisation of the EU economy and help strengthen its economic resilience.

*EU trade agreements are strong on niche types of IP and weaker on broader types of IP*

FIGURE 2: TYPES OF NOVEL PROVISIONS IN EU AND US FTAS



Source: DESTA (2020)

The EU’s bilateral trade policy network covers 77 partner countries via 45 (regional) FTAs that have been applied.<sup>2</sup> The EU has started to include more novel provisions in its FTAs since the ‘Global Europe’ strategy of 2006. We find that EU FTAs are particularly strong on

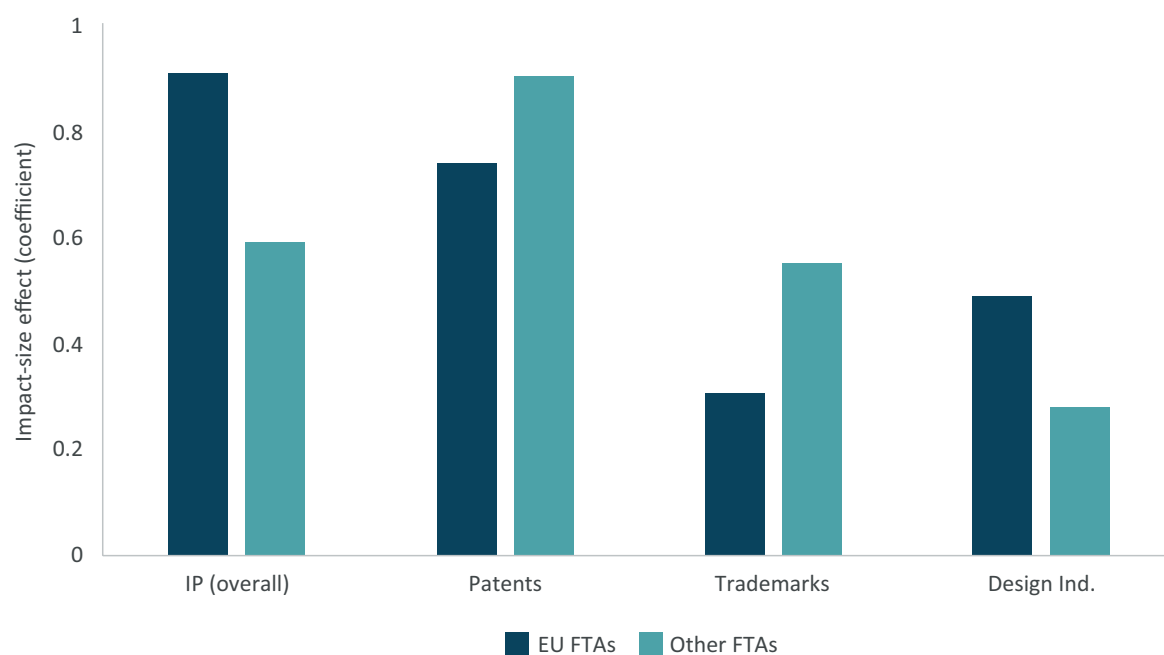
<sup>1</sup> European Commission (2021) “Open, sustainable and assertive EU trade policy”, 18 February 2021. URL: [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_644](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_644) [accessed 1 May 2021].

<sup>2</sup> DG Trade website “EU trade agreements: delivering for Europe’s business”, November 2020, <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2211> [accessed 12 November 2020]

niche types of IP but weaker on broad types of IP. Strong IP provisions allow the EU to be a global rule-maker. For example, via its bilateral trade network, the EU has built a strong network of countries who recognise and uphold the system of geographical indications (GIs), in spite of strong resistance to the system from other global trade partners. The picture is different for provisions for the larger types of IP: trademarks and patents. For these types of IP, the EU did not copy the equivalents of EU law into its FTAs, with very few exceptions.<sup>3</sup> A comparison with US FTAs also shows this (Figure 2).

Figure 3 shows that when the IP-specific effects of EU FTAs are compared to all Other FTAs, EU FTAs have a weaker trade-enhancing effect for patent and trademark provisions that is the case for FTAs in other countries. This suggests a clear area of policy focus to reduce the untapped potential in EU FTAs.

**FIGURE 3: IMPACT EFFECTS PER TYPE OF IP ON IP-INTENSIVE EXPORTS (2005–2015)**



Source: OECD (2019) and DESTA (2020)

### *The broad types of IP constitute the EU FTAs' largest untapped potential*

Economically, the conclusion that EU FTAs are stronger in niche types of IP and weaker on the broader types matters for two reasons:

- Stronger patent and trademark provisions apply to much larger parts of the EU economy (i.e. to many sectors and industries) than niche types of IP as shown in Figures 1. When we compare

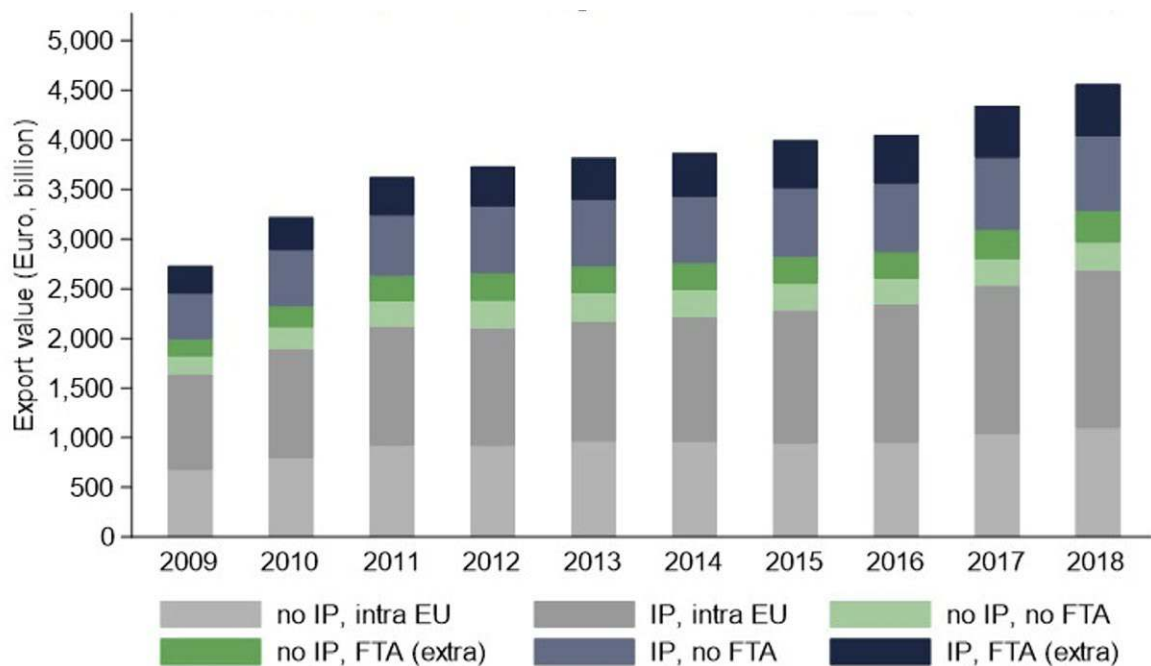
<sup>3</sup> The EU-Ukraine FTA (2016) is the only EU FTA that contains a provision that explicitly sets the term of protection for trademarks, at 10 years. Also, some provisions of the EU-Canada (CETA) agreement – notably Article 20.27 on sui generis protection of pharmaceuticals – closely mirror provisions of Regulation 469/2009.

the economic importance of each type of IP with the provisions per type of IP. GIs are clearly the strong suit of EU FTAs, but the number of provisions on patents and trademarks is very low, also in comparison to the US. Therefore: strengthening patent- and trademark-related IP provisions covered by EU law will have a very large positive economic impact.

- The econometric evidence (Figure 3) based on the novel approach by Maskus and Ridley (2016) further shows that the trade-enhancing effect (and thus export-oriented job creation) of patent and trademark provisions are found to be the strongest.<sup>4</sup>
- Negotiations of Free Trade Agreement must not result in a lower level of protection as currently ensured by IP laws on patents and trademarks. Moreover, IP experts, business organisations as well as relevant stakeholders should be regularly involved.

### *EU IP-intensive exports and FTA coverage*

**FIGURE 4: TOTAL EXPORTS BY IP-INTENSITY AND FTA COVERAGE (2009 – 2018)**



Source: WITS

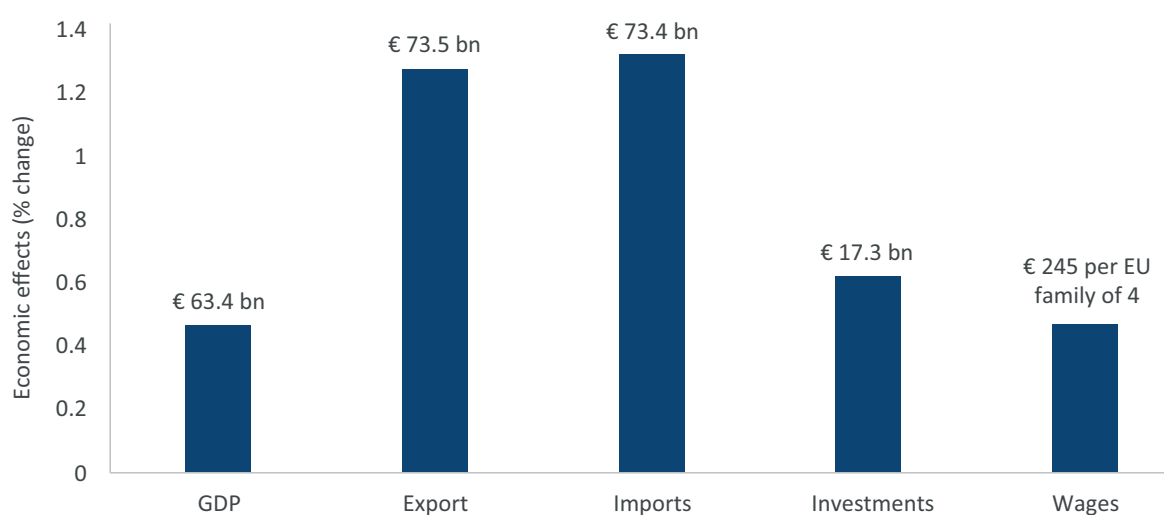
EU exports have risen steadily until 2019 and clearly the EU Internal Market continues to play a very significant role for EU Member States (grey bar parts in Figure 4). Because of the EU signing various FTAs (e.g. with Korea, Central America, ANDEAN, Canada, Singapore, Japan, Vietnam) the share of EU exports covered by FTAs went from 42% in 2009 to 45% in 2018, leaving 55% of EU exports not covered by bilateral FTAs, notably because of trade with the US, China and Russia.

<sup>4</sup> Maskus, K.E. and W. Ridley (2016) “Intellectual Property-Related Preferential Trade Agreements and the Composition of Trade”, RSCAS Working Papers 2016/35, European University Institute.

EU IP-intensive trade that was covered by EU FTAs has increased much faster than IP-intensive EU trade not covered by EU FTAs. This is evidence that FTAs help to give a boost to IP-intensive trade. IP-intensive exports constituted 68% of total EU exports in between 2009 and 2019 and over half of these exports happen without bilateral FTA IP protection. This may not be a large issue in countries where IP rights are also well protected and enforced (e.g. the US), but it could be an issue for various other countries (e.g. China, Russia) where the IP system (including enforcement) is much weaker, where quality standards are lower and where production of counterfeit products is a big problem.

### *Macro-economic effects of strengthening and better enforcing IP in EU FTAs*

**FIGURE 5: ANNUAL MACRO-ECONOMIC EFFECTS OF STRONGER IP PROVISIONS IN EU FTAs FOR THE EU**



Source: GTAP10; author's calculations

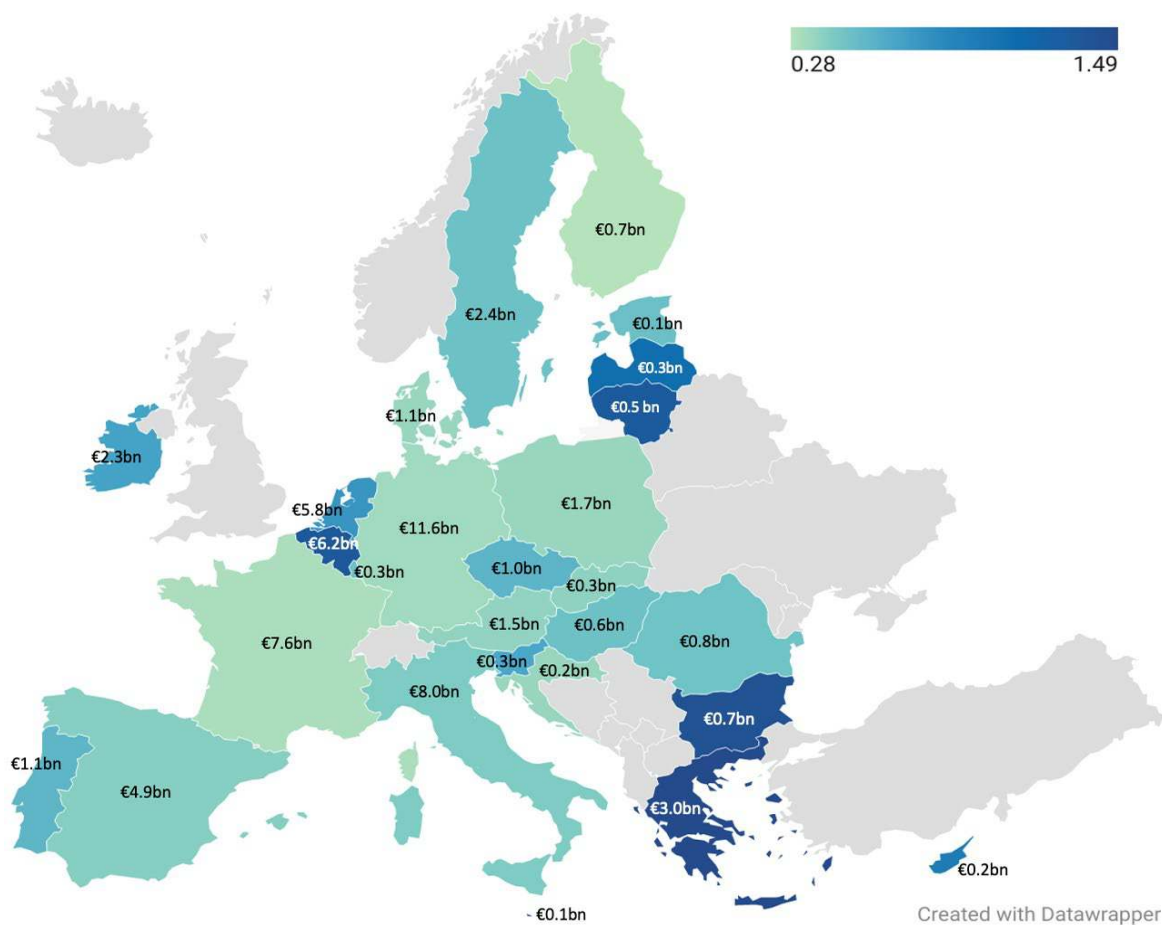
The econometric analysis shows that if the EU would include mere TRIPS provisions in its FTAs, the economic effects on exports and GDP are negligible, because the TRIPS agreement is the minimum standard on IP commitments for all WTO members. If the EU would strengthen its IP provisions in all EU FTAs (mostly coming from patent and trademark provisions) to the levels provided for in EU law and enforce them more rigorously, the evidence shows that this would make the EU a stronger innovation hub, strengthen global links and market access for IP-intensive exports, reduce trade costs for IP-intensive products, and have a significant positive economic impact each year in terms of GDP, exports, investments, jobs and wages for EU citizens (see Figure 5):

- EU GDP will increase by €63.4 billion each year (0.4%).
- EU exports will be €73.5 billion higher each year (1.3%) and imports €73.4 billion (1.3%)
- Investments in the EU will increase by €17.3 billion each year (0.6%).

- Because IP-intensive industries create higher levels of value added and create higher-quality, higher-paid jobs, wages in the EU will go up. An average EU-family of four would earn €245 more per year. This amounts to €23.6 billion annually in higher wages paid across the EU.

For all EU Member States, the effect of strengthening IP provisions in EU FTAs to the level of EU law and enforcing them more rigorously, is also positive (Figure 6).

**FIGURE 6: GDP EFFECTS OF STRONGER IP PROVISIONS IN EU FTAS FOR EU MEMBER STATES (% , VALUE EURO)**



Source: GTAP10; author’s calculations

The largest relative increases in GDP happen in Greece, Malta, Bulgaria, Belgium and Lithuania. The largest annual GDP increases in Euro-terms happen in Germany (€13.6 billion each year), Italy (€9.4 billion each year), France (€9.0 billion each year), Belgium (€7.5 billion each year) and The Netherlands (€6.9 billion each year). This happens because greater market size is associated with greater levels of IP-intensive exports. Even though the relative and absolute GDP effects differ across EU Member States, all EU Member States benefit significantly from stronger IP provisions in EU FTAs.



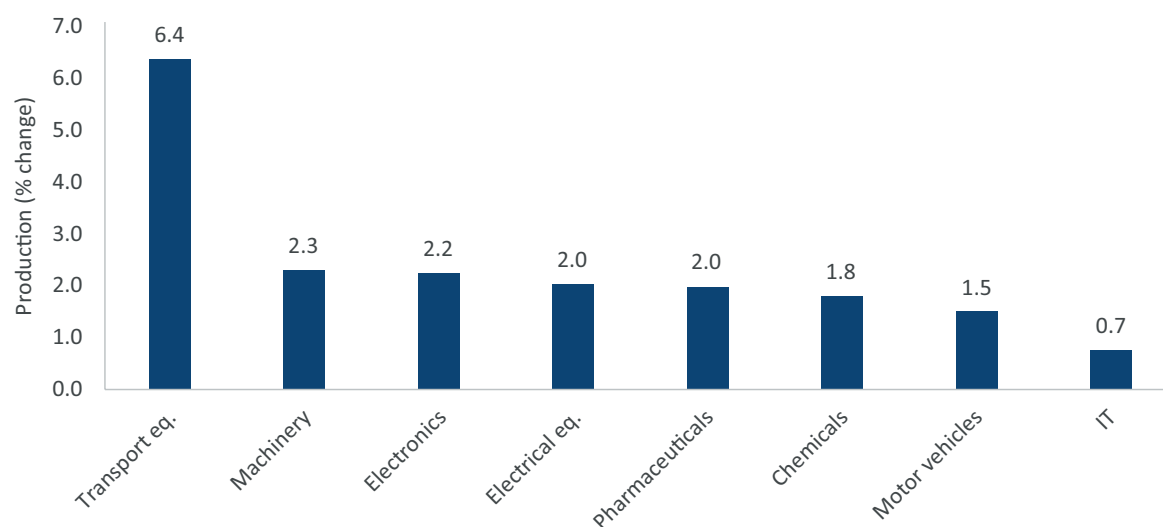
## *Sectoral effects of strengthening and better enforcing IP in EU FTAs*

The overall macro-economic effects of strengthening provisions and enforcement of IP in EU FTAs are positive for the EU economy. But they also support the individual sectors in the EU economy in terms of exports, production, and employment. This is one of the objectives of the EU's trade policy: to support better market access and a global level playing field for EU industry.

### *Production effects*

As a consequence of stronger IP provisions in EU FTAs, production in the EU increases for key IP-intensive sectors because the IP provisions in EU FTAs give EU based companies and/or affiliates access to a more predictable global level playing field provided by the EU's trade network (see Figure 7). The largest relative gains accrue to transport equipment, machine, electronics and electrical equipment sectors. But also pharmaceutical, chemical and motor vehicle production in the EU will increase by around 2% pointing towards the fact that stronger IP in EU FTAs will lead to a higher degree of strategic resilience for the EU economy for these strategic sectors.

**FIGURE 7: SECTORAL PRODUCTION EFFECTS OF STRONGER IP PROVISIONS IN EU FTAS**



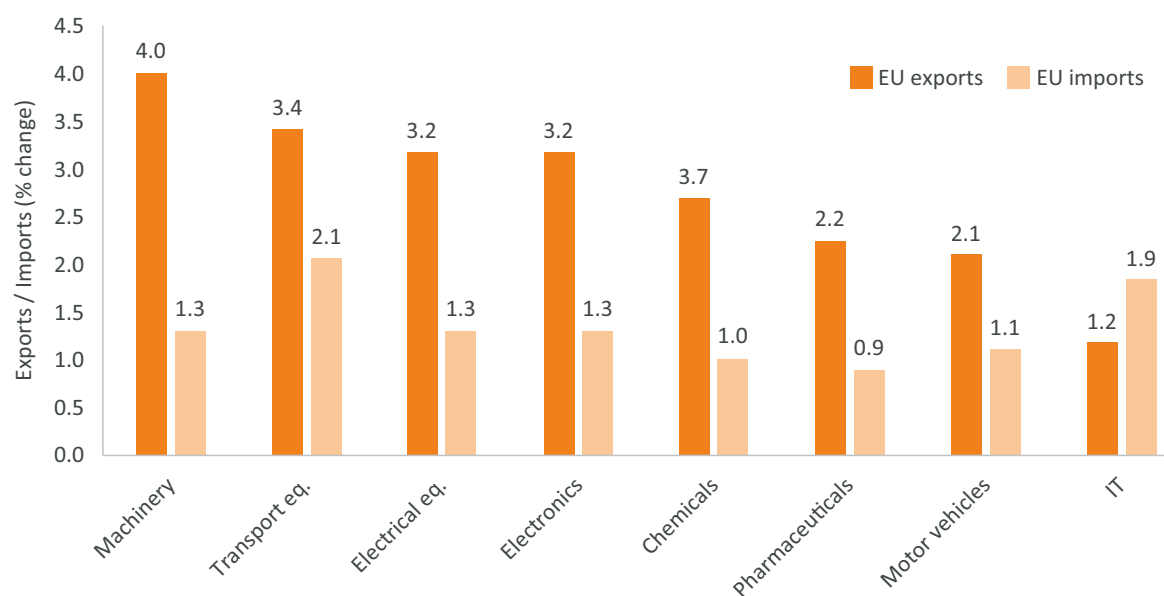
Source: GTAPI0; author's calculations

### *Trade effects*

Trade effects from stronger provisions in EU FTAs are positive and significant at sectoral levels (see Figure 8). Machinery, transport equipment, electrical equipment, electronics, chemicals and pharmaceuticals export grow between 2.5% and 4.0%. For most IP-intensive industries, exports grow faster than imports, which suggests the EU will improve its trade balance in IP-intensive goods. The IT sector also shows increasing exports, but also faster growing imports. The reason for this effect is that IT services are not only covered

by cross-border trade (the focus of the economic model) but also by Mode 3 commercial presence in-country and Mode 4 mobility of trained staff – that are expected to lead to underestimations of the impact of stronger IP in EU FTAs for the sector.

**FIGURE 8: SECTORAL TRADE EFFECTS OF STRONGER IP PROVISIONS IN EU FTAS**



Source: GTAPI10; author's calculations

### *Employment effects*

For the most important IP-intensive sectors, except for IT, we see that employment increases when the EU strengthens its IP provisions in EU FTAs. The most significant increases in employment occur in electronics, machinery and pharmaceuticals. These are also sectors with relatively high levels of labour productivity – implying that not just average jobs, but high-productivity, high-paying jobs are being created in the EU economy.

### *Policy implications of stronger IP in EU FTAs: EU policy priorities*

The economic effects stemming from stronger (content and enforced) IP provisions in EU FTAs are not just about EU external relations and the EU's competitive position globally. They also set in motion a causal chain of other effects that contribute to broader EU policy priorities:

- Stronger IP in EU FTAs contribute more EU production and more exports – these directly support the EU's industrial strategy that aims to increase the EU's strategic resilience in strategic sectors (e.g. pharmaceuticals, electronics, chemicals), not by reshoring the products of yesterday, but by making Europe more attractive for investments in R&D and the production of tomorrow's products and services. The economic benefits of better IP protection in EU FTAs are to a large degree achieved because it will be more attractive to produce EU origin products as exactly EU origin products will be better protected from piracy copying in EU FTA partner countries.
- Stronger IP in EU FTAs support the EU's knowledge-economy by strengthening R&D and innovation in the EU itself and in doing so support the Digital Transformation, Green Deal and other key transformational EU strategies. It also contributes to upgrading production lines, and shifting business models to more intangible production.
- Stronger IP in EU FTAs help to combat trade in counterfeit and pirated goods (e.g. food fraud, fake medicines, counterfeit sporting goods) reducing economic damage to EU industry, EU citizens' exposures to low quality and potentially dangerous products, and environmental hazard. IP is also a tool to reduce the risk of forced technology transfers.
- Stronger IP in EU FTAs – captured in a separate SME chapter – matter for SMEs who often fail to consider IP and its value in early stages of development and who do not fully apply its innovative power for growth.
- Stronger IP in EU FTAs – especially when combined with the multilateral trading system – even the level playing field and allow for more shoulders supporting R&D into new products and processes among the EU and its bilateral trade partners.



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