

# IPR and firm performance in the EU

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# Intellectual property rights and firm performance in the European Union



## Intellectual property rights and firm performance in the European Union

Firm-level analysis report, February 2021

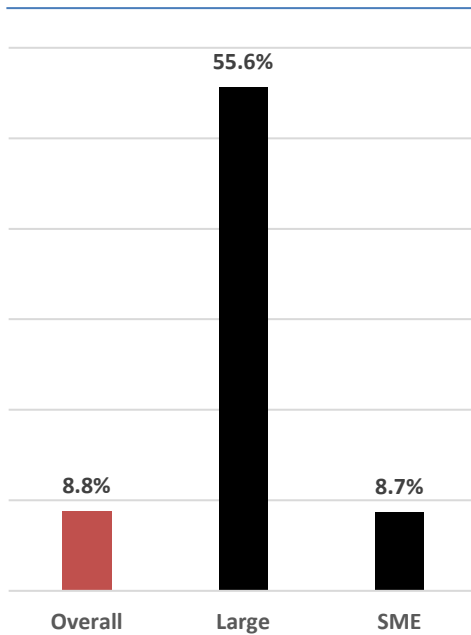


## Purpose and methodology of the study

- Study analyses the relationship between **IPR ownership** and the **economic performance of European firms**
  - Focus on **registered IPRs** at the national and European levels
  - Focus on productivity (**revenue per employee**) as main measure of performance
  - The study covers all **27 EU countries and the UK**
- Descriptive **statistics and econometric analysis** of a large matched sample of EU firms and IPRs
  - Random panel of more than **127 000 companies** over 13 years (2007-2019)
  - Stratification by **firm size (micro, small, medium and large)** based on turnover and employment criteria
  - Financial data retrieved from Bureau van Dijk ORBIS database
  - IPR data retrieved from EPO PATSTAT, the EUIPO register, TMView and DesignView

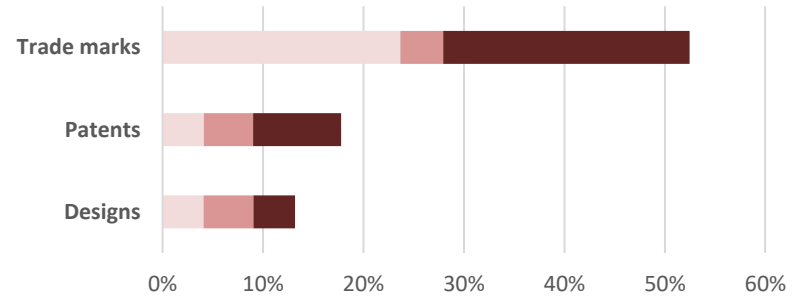
## IPR ownership patterns in small and large firms

Share of IPR owners

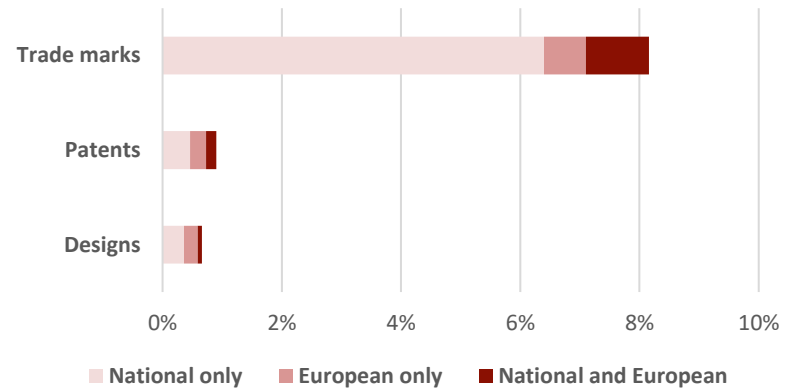


*N = 106 958*

Large firms



SMEs



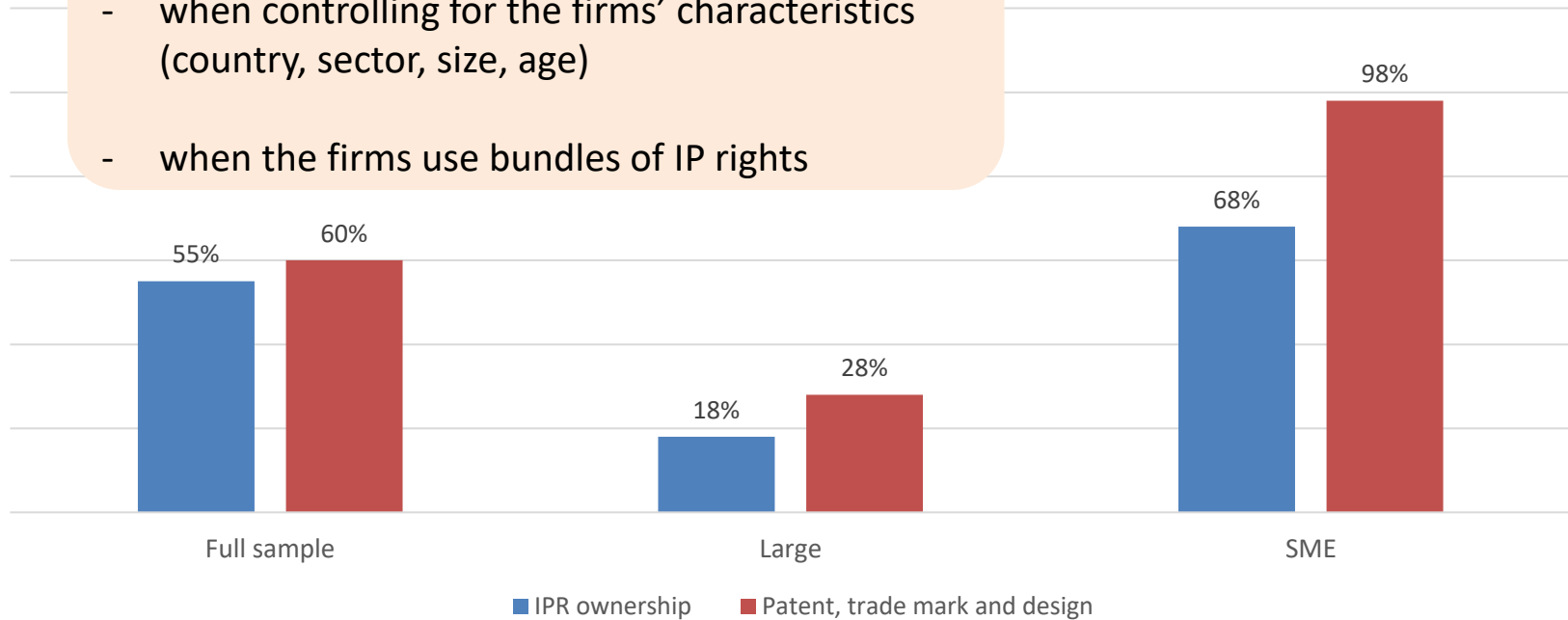
## Main financial and firm variables of IPR owners (2007-2019)

		Number of employees	Revenue per employee (EUR '000/year)	Wages per employee (EUR '000/year)
<b>Non-IPR owners</b>		5.1	148.6	29.8
<b>IPR owners</b>	<b>Any IPRs</b>	13.5	178.6	35.6
	% difference compared with non-owners	163.8%	20.2%	19.3%
	<b>Patent owners</b>	28.7	202.4	45.5
	% difference compared with non-owners	460.1%	36.3%	52.6%
	<b>Trade mark owners</b>	13.5	179.6	35.0
	% difference compared with non-owners	164.3%	20.9%	17.4%
	<b>Design owners</b>	29.1	196.3	38.7
	% difference compared with non-owners	467.9%	32.2%	29.7%

## Econometric analysis: IPR premiums by firm size

The performance premiums increase:

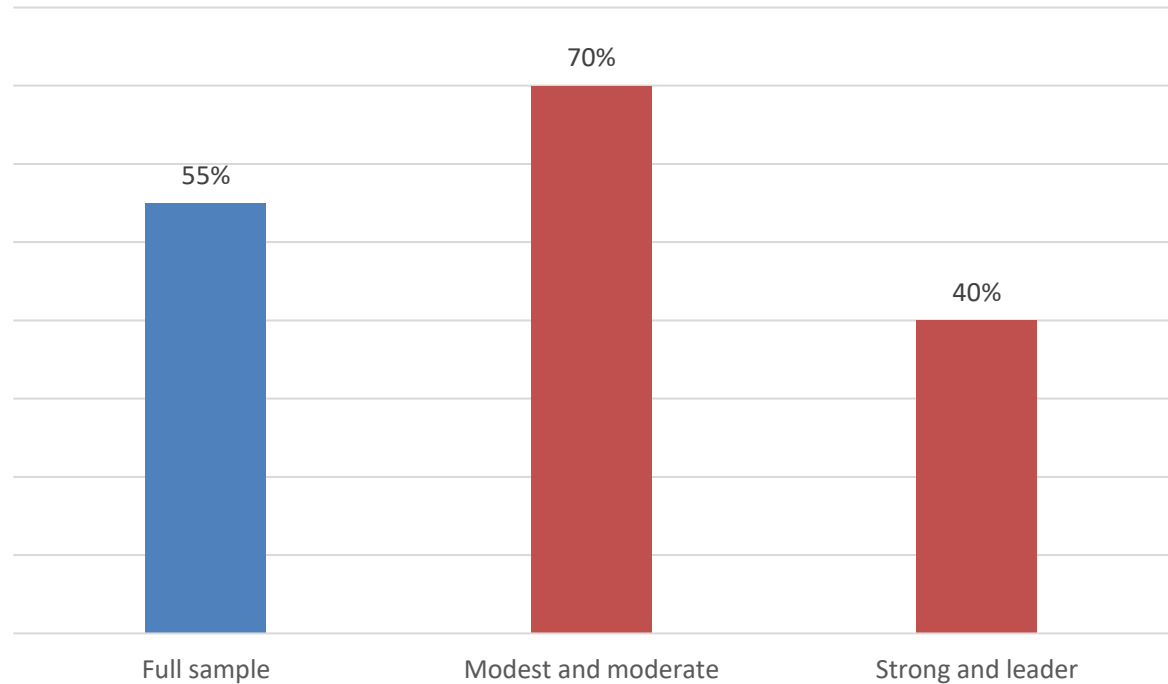
- when controlling for the firms' characteristics (country, sector, size, age)
- when the firms use bundles of IP rights



## IPR premium and EU countries' innovation performance

Based on the ranking of countries innovation performance in the EU Innovation Scoreboard.

Firms in countries that are modest or moderate innovators benefit from a significantly higher IPR premium.



# Summary

- About **10% of firms in the EU own IPRs (8.7% of SMEs)**
  - EU firms use **trade marks** much more frequently than patents or designs
  - **Large companies** own (European) IP rights much more frequently
  - The share of IPR-owners varies between **sectors** and countries
- Evidence points to a **stronger performance of IPR-owners**
  - **+20.2% on average** for EU firms
  - The premium is even higher (+55%) when controlling for firms characteristics, **especially for SMEs (+68%)**
  - IPR premium increases when different types of IP rights are bundled



## IPR and firm growth

# High-growth firms and intellectual property rights

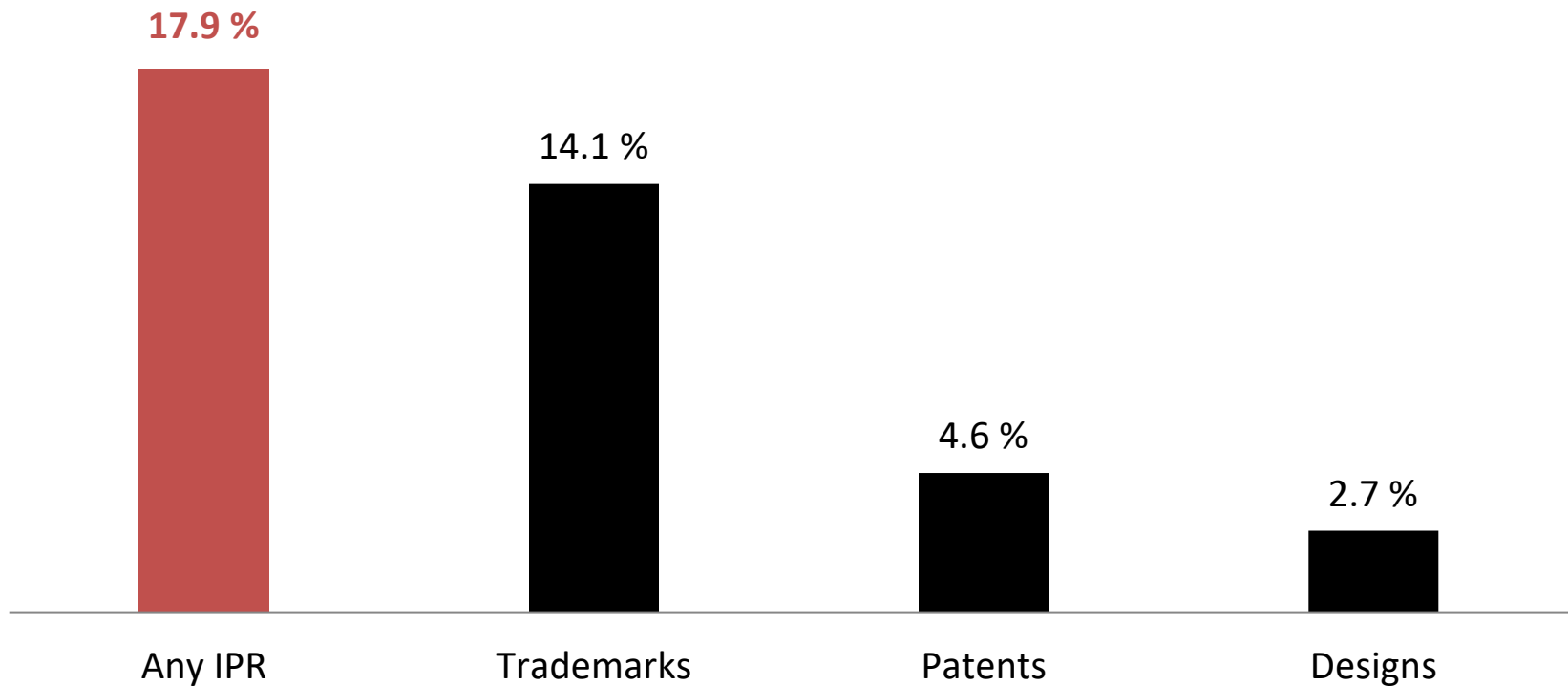


## High Growth Firms (HGF)

- SMEs with a **3 year-average growth rate** of at **least 20 %\***
  - 179 060 HGF in the EU-28 in 2016  
(EC, 2018)
- **International** growth typically driven by innovation and **intellectual assets**
- Focus on 64 998 European SMEs in **manufacturing industries**
- Observe the filings of **registered IPRs** (patents, trade marks, design rights) during a 3-year period
- Assess **likelihood of high growth** during subsequent years

\* Definition used in this study; official EC definition is 10%.

## Frequency of IPR use by European SMEs in the sample



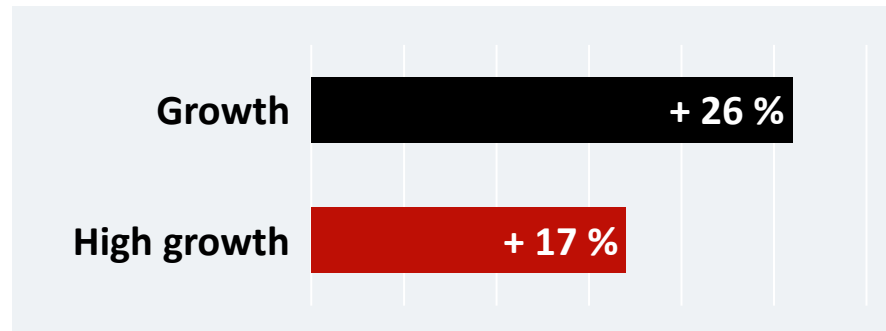
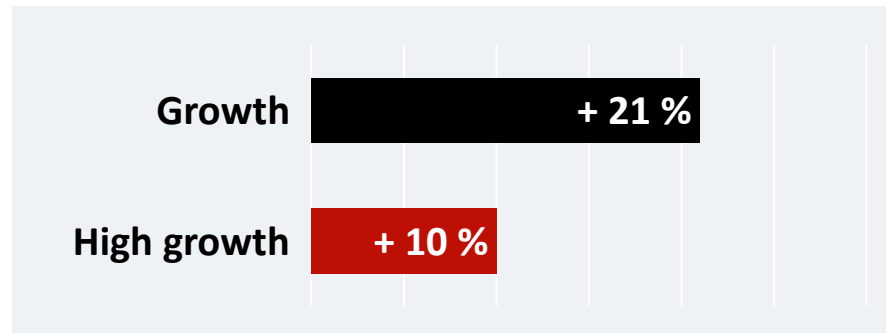
# SMEs with prior IPR activities are more likely to grow than other SMEs

Increase in odds of growth with  
prior IPR use

= Innovation

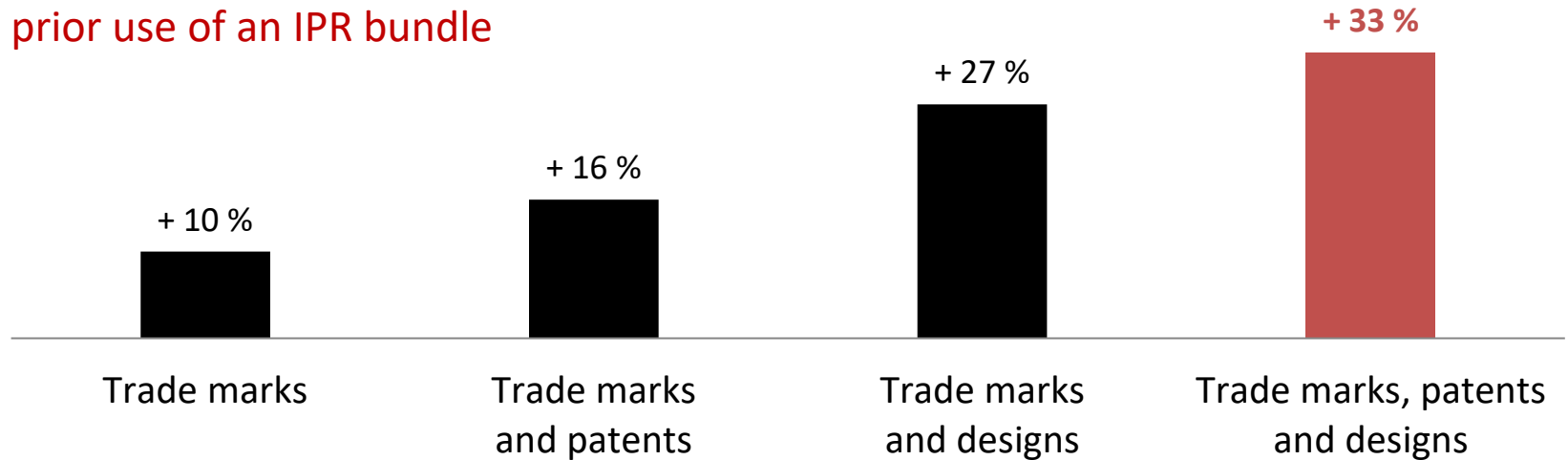
Increase in odds of growth with  
prior use of a European IPR

= Innovation + international



## SMEs that use bundles of trade marks, patents and designs are even more likely to achieve high growth

Increase in odds of high growth with  
prior use of an IPR bundle



**Bundles of different IPRs denote a variety of intellectual assets and the SME's ability to build a holistic IP strategy.**

## References

### **High growth firms and intellectual property rights: IPR profile of high-potential SMEs in Europe (2019):**

[https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document\\_library/observatory/documents/reports/2019\\_High-growth\\_firms\\_and\\_intellectual\\_property\\_rights/2019\\_High-growth\\_firms\\_and\\_intellectual\\_property\\_rights.pdf](https://euiipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_High-growth_firms_and_intellectual_property_rights/2019_High-growth_firms_and_intellectual_property_rights.pdf)

### **Intellectual property rights and firm performance in the European Union (2021):**

[https://euiipo.europa.eu/ohimportal/en/web/observatory/ip-contribution#ip-contribution\\_feb-2021](https://euiipo.europa.eu/ohimportal/en/web/observatory/ip-contribution#ip-contribution_feb-2021)



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Thank you