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The Economic Cost of Counterfeiting in EU and the jointly ITU/BDT-EUIPO Research on Counterfeiting of ICT Devices

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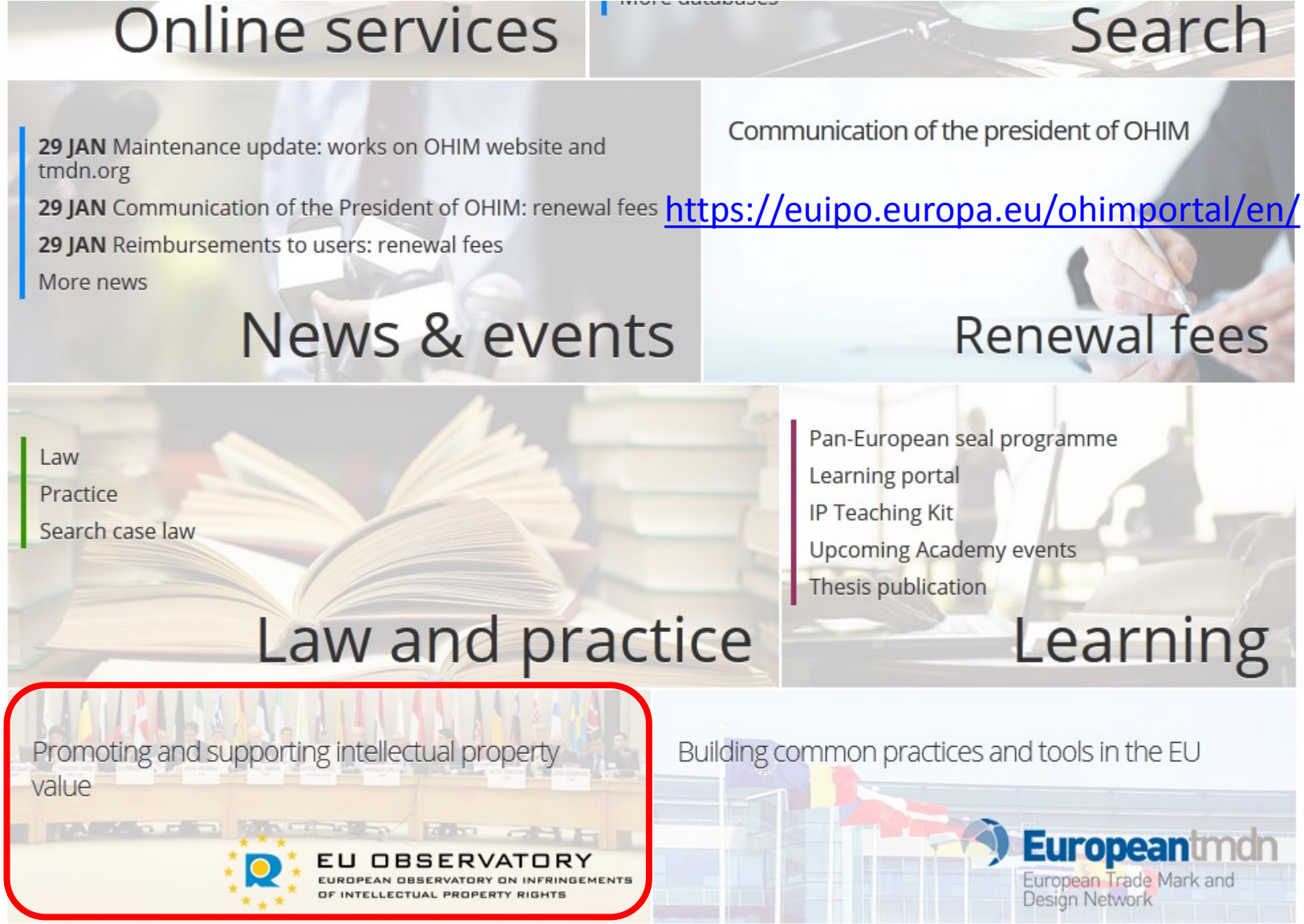

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Intellectual property studies

The European Observatory on Infringements of Intellectual Property Rights works to provide evidence-based data on the impact of intellectual property on the economy of the European Union (EU), as well as on its role and public perception. We are conducting a programme of socio-economic studies in order to meet these objectives.

Contribution of IPRs to the EU economy and to individual firms

This study made in two phases looks at the overall contribution made by IPR-intensive industries to the EU economy and the role of intellectual property rights (IPRs) for individual firms. IP-intensive industries account for 1 in 3 jobs and 39% of total economic activity (GDP) in the EU. Companies that register IPRs have a 29% higher revenue per employee, have a larger number of employees and pay wages that are on average 20% higher.

Quantification of IPR infringement

The Quantification of Intellectual Property Rights (IPR) infringement study, composed of several sectorial studies, aims to evaluate the economic impact of IPR infringement in the European Union, in order to support policy-making with objective and reliable data. This series of sectorial studies cover several industry sectors whose products are known or thought to be subject of counterfeiting.

The European citizens and intellectual property study

This study looks at overall contribution made by IP intensive industries to the EU economy, in terms of Gross Domestic Product, employment, wages and trade.

- 96% of Europeans agree that protecting IP is important
- 86% agree that protecting IP contributes to improving the quality of products and services
- 69% value IP because it contributes to the creation of jobs and economic well-being

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A complete picture of the economic impact of counterfeiting and piracy

Following the publication of two major studies on the contribution to economic performance and employment of intellectual property rights intensive industries and citizens' perceptions of IP in the European Union, the importance of intellectual property to society has become more and more apparent. The increasing importance of IP and IP rights in the modern economy also means that the opportunities for infringement and the potential damage to the economy both are greater. At the Observatory we are working to offer a complete picture of this phenomenon by assessing the economic impact of counterfeiting and piracy in different sectors and geographical areas.

Joint EUIPO/OECD reports

In collaboration with the Organisation for Economic Co-operation and Development (OECD) , the Observatory has developed two studies.

- Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact
- Infringement of Protected Geographical Indications for wine, spirits, agricultural products and foodstuffs in the European Union

Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact is based on data supplied by the World Customs Organization, the European Commission's Taxation and Customs Union Directorate General and the United States Customs and Border Protection to give an accurate picture of the global economic impact of counterfeiting and goods piracy in international trade. This joint study uses data from almost half a million customs seizures across the world over the period 2011-2013.

A Report on Infringement of Protected Geographical Indications for Wine, Spirits, Agricultural Products and Foodstuffs in the European Union completes the joint EUIPO/OECD report. The main objective of this study is to assess the size and value of the EU GI product market and the proportion of products in that market that infringe GIs protected in the EU. The impact of these infringements on EU consumers was also estimated, with a loss evaluated at up to EUR 2.3 billion.

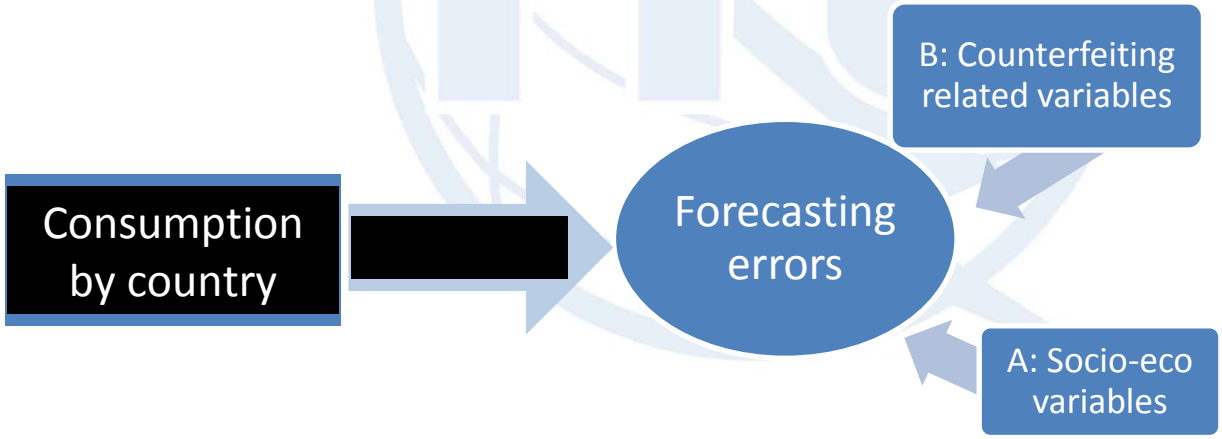
Impact of counterfeiting and piracy: Sectorial studies

- 1st study - Cosmetics and personal care sector
- 2nd study - Clothing, footwear and accessories sector
- 3rd study - Sports goods sector
- 4th study - Toys and games sector
- 5th study - Jewellery and watches sector
- 6th study - Handbags and luggage sector
- 7th study - Recorded music industry

Two-stages model

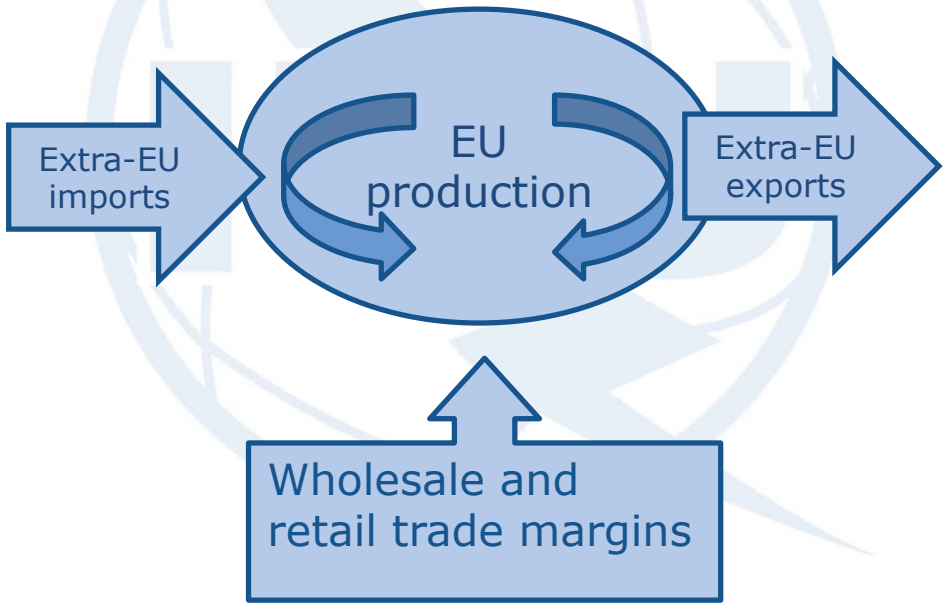
2. Forecasting errors are analysed using as explanatory economic and counterfeiting-related variables

1. Consumption forecasting model at country level (ARIMA)



1st stage: Consumption in EU

Production + Imports – Exports + Trade margins



1st stage: forecasting errors

$$q_{it}^{*} = \frac{\hat{Y}_{it} - Y_{it}}{Y_{it}}$$

Y_{it} is consumption in country i and year t in euros

$\hat{Y}_{it}$ is Y_{it} forecast based on a univariate ARIMA model with data until t-1

The **relative forecasting error** q_{it}^{*} measures the extent to which the forecasting model has estimated a higher or lower value than the actual value, as a share of consumption

Two-stages model

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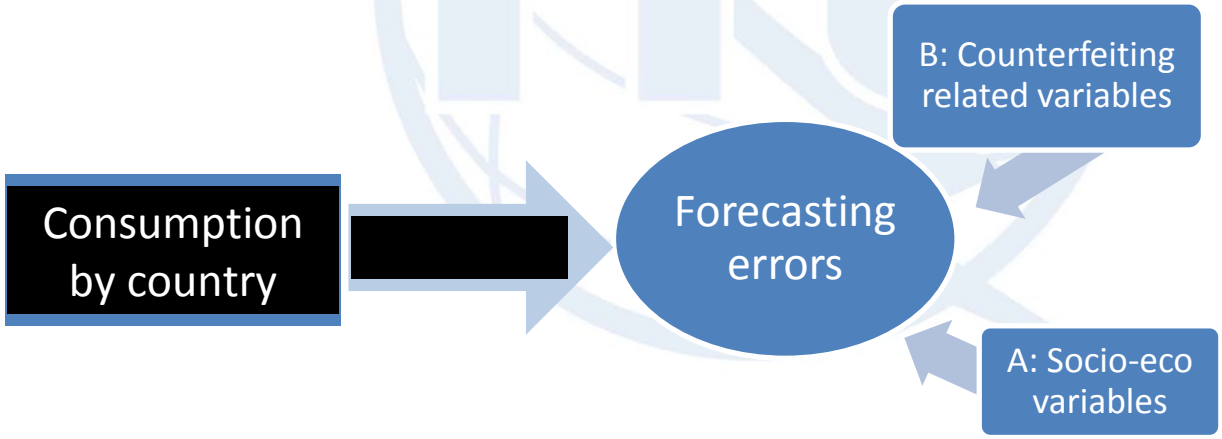
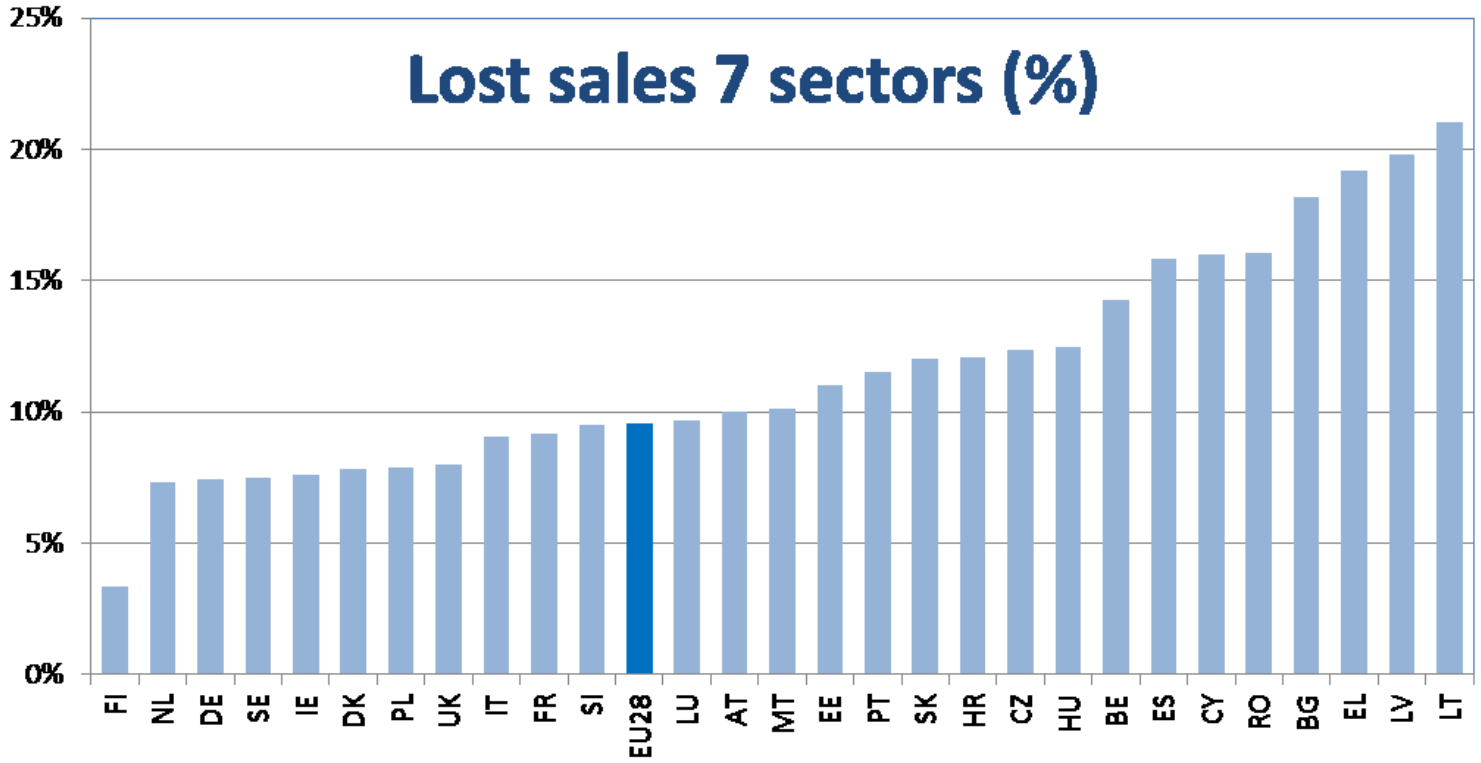


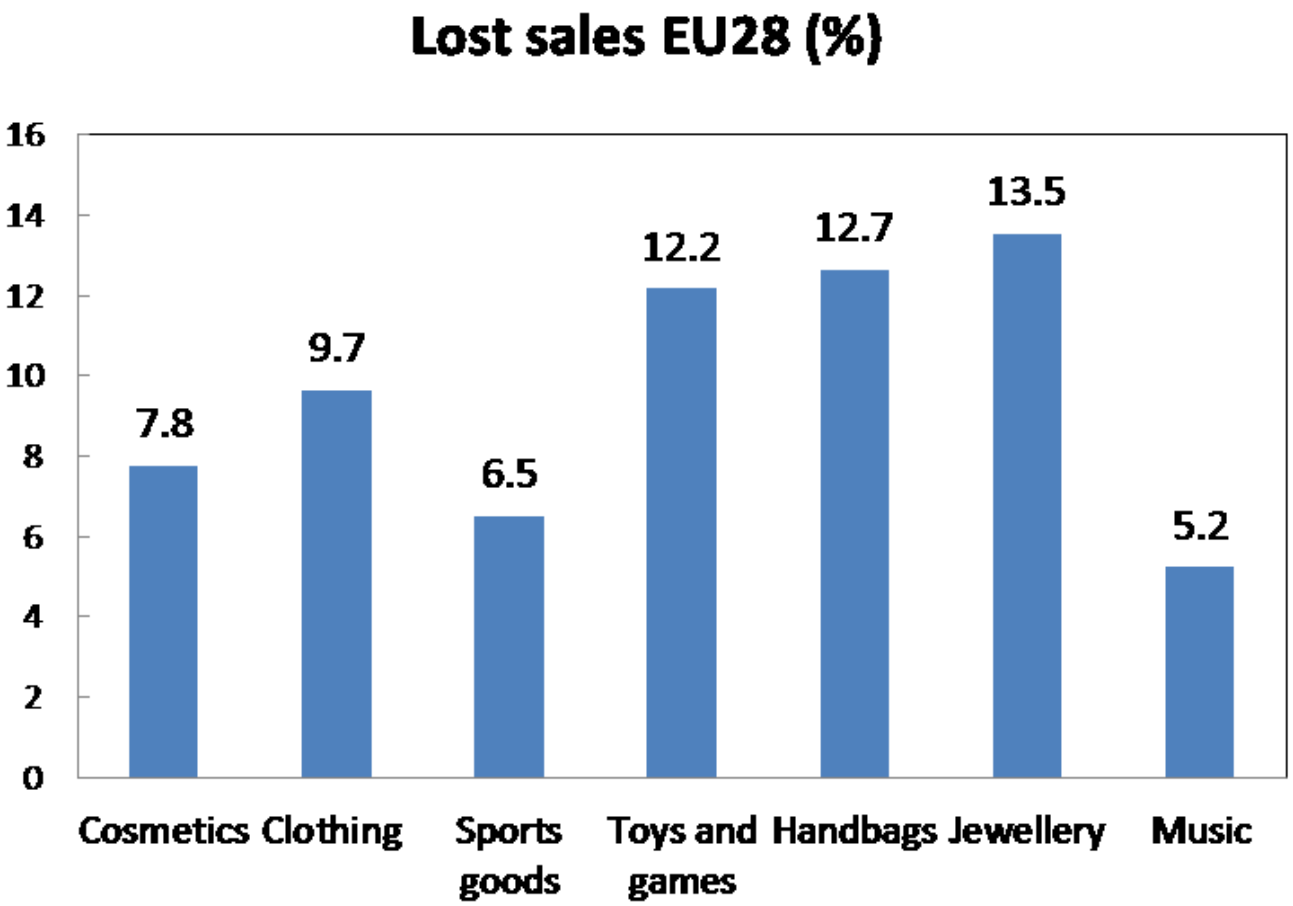
2nd stage: data requirements

- **Economic-related** explanatory variables, such as:
  - GDP or per capita income
  - GDP growth
  - Prices
  - Exchange rate of euro vs other EU currencies
- **Counterfeiting-related** variables, such as:
  - Income distribution (population in risk of poverty, Gini index)
  - Tolerance/purchase of counterfeit goods, as reflected in the IP Perception study or Eurobarometer (EB)
  - Attitudes with corruption (EB), Worldwide Governance Indicators from WB…

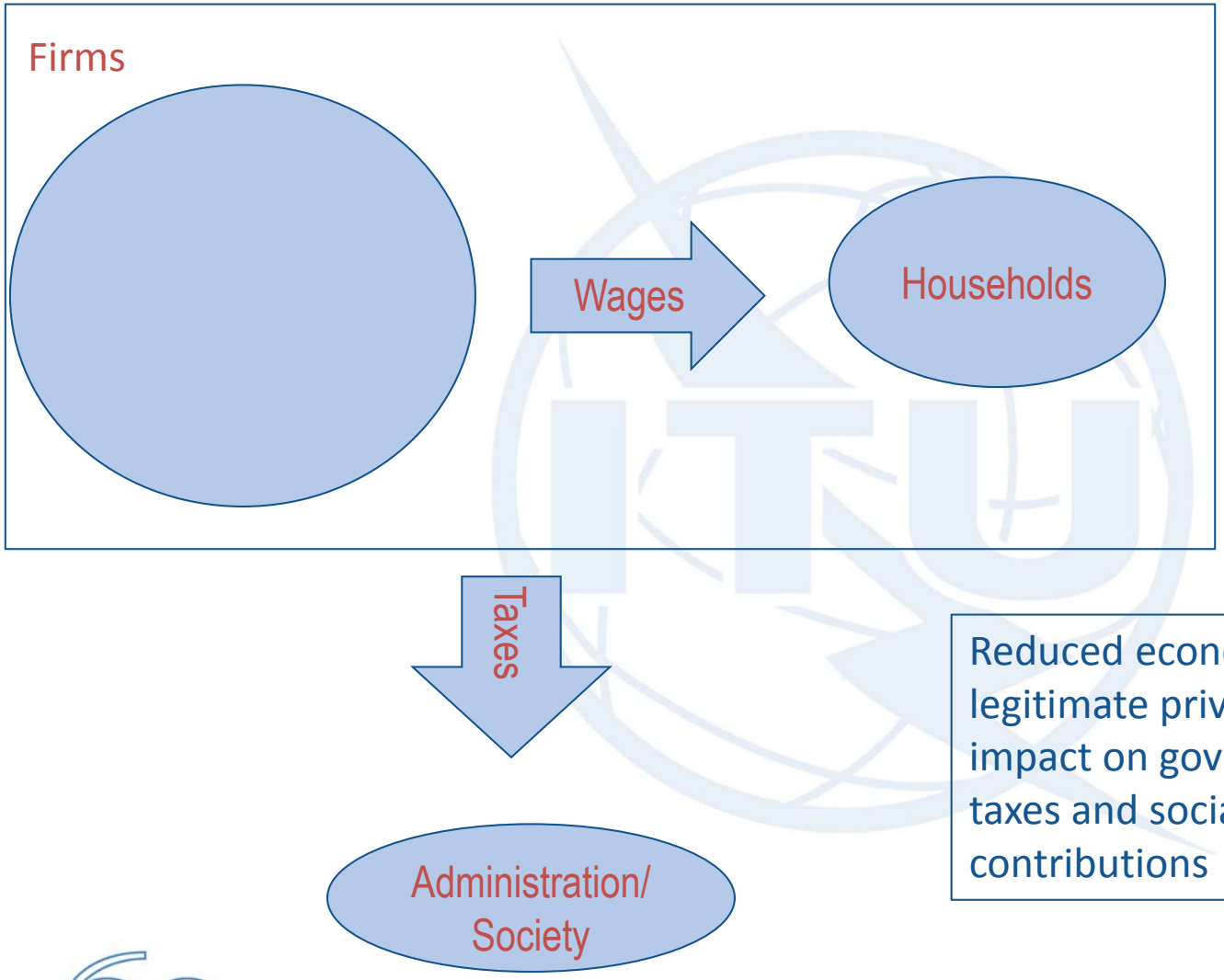
2nd stage: direct effects MS level



2nd stage: direct effects EU level



Indirect effects in the EU economy



Lost sales and employment by legitimate industry in the sectors analysed + impacts in other sectors providing inputs

Reduced economic actitivity in the legitimate private sector has an impact on government revenues: taxes and social security contributions

Quantification of IPR infringements

Cosmetics and personal care

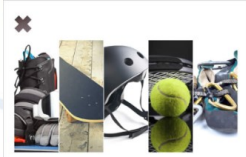
- Total sales lost: € 9.5 billion
- Total jobs lost: 80,000
- Government revenues lost: €1.7 billion

Clothing, accessories and footwear

- Total sales lost: € 43 billion
- Total jobs lost: 520,000
- Government revenues lost: €8.1 billion

Sports equipment manufacturing

- Total sales lost: € 850 million
- Total jobs lost: 5,800
- Government revenues lost: €150 million



Games and toys manufacturing

- Total sales lost: € 2.3 billion
- Total jobs lost: 13,200
- Government revenues lost: €370 million

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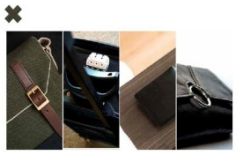
Quantification of IPR infringements

Jewellery and watches manufacturing

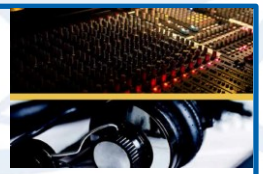
- Total sales lost: € 3.5 billion
- Total jobs lost: 28,500
- Government revenues lost: €600 million

Handbags and luggage manufacturing



- Total sales lost: € 3.2 billion
- Total jobs lost: 25,700
- Government revenues lost: €500 million

Recorded music



- Total sales lost : € 340 million
- Total jobs lost: 2,200
- Government revenues lost: €60 million

Total sales lost in the EU: **€63 billion**

Total jobs lost in the EU: **670,000 jobs**

Government revenues lost: **€12 billion**

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Quantification of IPR infringements

- Cosmetics €60B
- Medicines €288B
- Tobacco €64B
- Clothing and footwear €270B

- Vehicle parts €204mm

- Music €3.3B
- Smart phones

- Sports goods €8B
- Toys and games €11B
- Handbags and luggage €15B
- Jewellery and watches €15B
- Pesticides €12B
- Spirits €15B
- Wine €26B
- Computers €69B

€ 1.5 trillion in sales in EU !!!
+8 million jobs in EU!!!

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Global smartphone sales value by region 2013-2016

Smartphone sales value worldwide from 2013 to 2016 (in billion U.S. dollars), by region

Source: GfK

BDT Mandate

- WTDC Resolution 79 (Dubai 2014) “Role of telecommunications/information and communication technologies in combating and dealing with counterfeit telecommunication/information and communication devices”; and
- PP Resolution (Busan, 2014) on “Combating counterfeit telecommunication/ICT devices”.

Numerous regulatory and economic issues are key to coming to solutions for developing countries in relation to combatting counterfeit in the ICT Sector

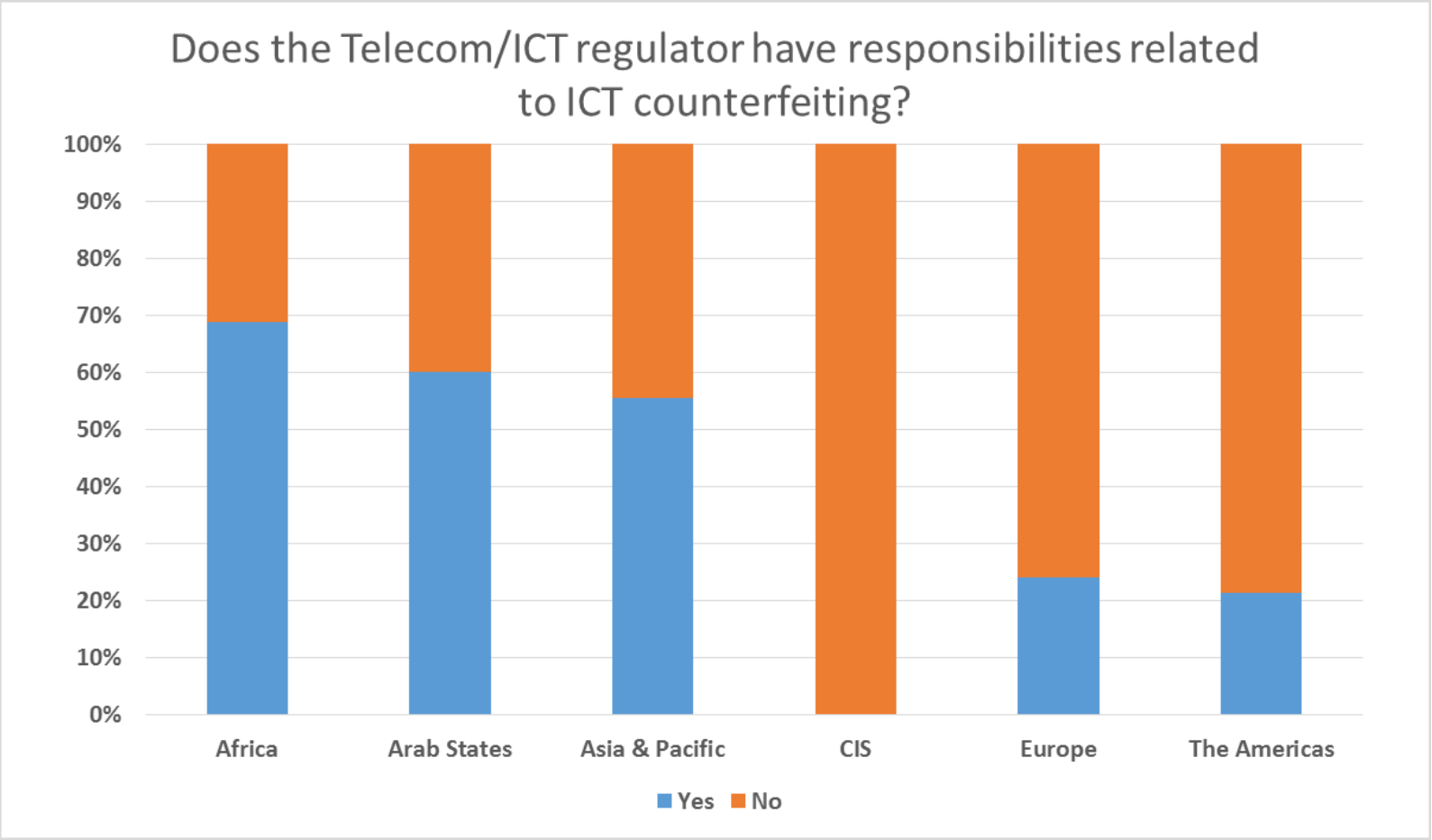
Joint research UEIPO and BDT

- To analyze the economic cost of intellectual property right (IPR) infringements in ICT devices
  - Data collection of time series
  - Data revision/analysis process
  - To replicate, if possible, the methodology and econometric model applied in other sectors/products by EUIPO
  - Analysis of results and presentation of results

BDT Actions would include

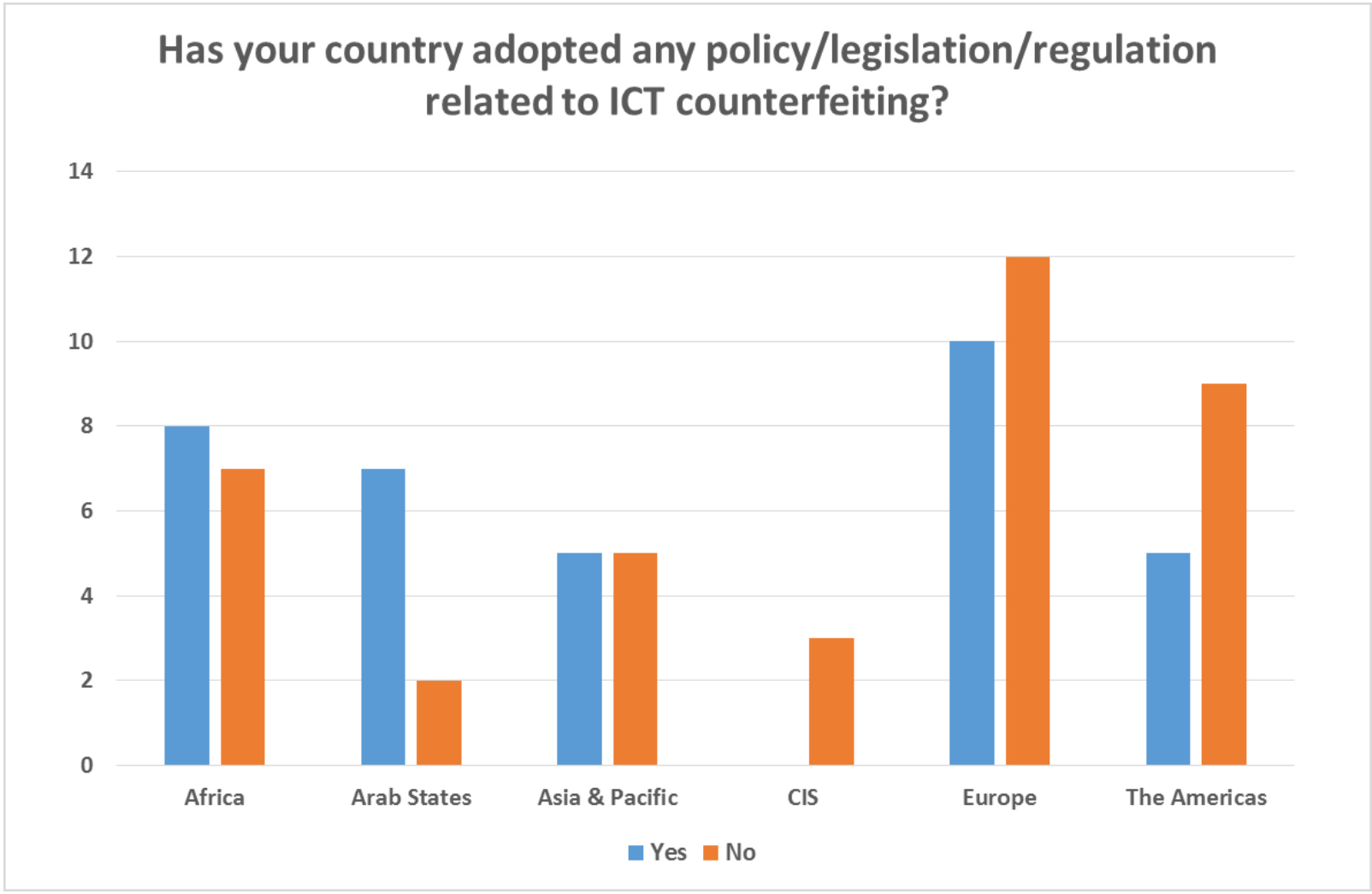
- Carry out research to provide baseline studies (including a study on Regulatory Aspects of Counterfeit), case studies and other tools;
- Develop policy and regulatory guidelines working together with stakeholders to combat counterfeit;
- Continue to collect data and information worldwide on the evolution of regulatory frameworks;
- Disseminate information through ITU Knowledge Exchange platforms on Counterfeiting;
- Organize Regional and Global meetings and discussion fora in 2017, involving Regulatory Associations, Regulators, Policy Makers and other stakeholders from across the sectors;
- Collaborate with Regulatory Associations to disseminate regulatory resources developed by ITU on counterfeit.

Some results on Counterfeiting from the ITU Regulatory Survey 2015



Source: ITU Regulatory Survey, 2015

e.g., fake mobile phones, smartphones, computers, any network or other computing equipment components.



Source: ITU Regulatory Survey, 2015

Thank you for your attention!