



EUROSTAT QUALITY PROFILE

Indicator (definition)	High-tech exports Exports of high technology products as a share of total exports.
Eurostat Unit	F4, Education, Science and Culture statistics
Other Commission DGs	DG ECFIN; DG RTD
European Statistical System Working Group (WG)	Statistics on Science, Technology and Innovation
Date	22 May 2007

1. Overall assessment of accuracy and comparability (Description of quality grades under the following link: http://circa.europa.eu/Public/irc/dsis/structind/library?l=/general_information/quality_profiles/annex_enpdf/EN_1.0_&a=d)

A
 B
 C
 Indicator to be developed

Data is collected from reliable sources applying high standards with regard to the methodology. Shortcomings with regard to the comparability across countries are assessed and well documented.

2. Objective and relevance of the indicator:

The indicator measures the technological competitiveness of the EU i.e. the ability to commercialise the results of research and development (R&D) and innovation in the international markets. It also reflects product specialisation by country.

Creating, exploiting and commercialising new technologies is vital for the competitiveness of a country in the modern economy. This is because high technology sectors are key drivers for economic growth, productivity and welfare, and are generally a source of high value added and well-paid employment.

The Brussels European Council (2003) stressed the role of public-private partnerships in the research area as a key factor in developing new technologies and enabling the European high-tech industry to compete at the global level.

The OECD and Eurostat currently identify nine high technology products: Aerospace; Computers and Office Machinery; Electronics-telecommunications; Pharmaceuticals; Scientific Instruments; Electrical machinery; Chemistry; Non-electric machinery and Armament.

Restriction of the indicator's relevance and other characteristics which may lead to restrictions in using it in monitoring and reporting

The fact that this indicator reflects the specialisation of a country in certain economic sectors hampers to some degree a clear normative interpretation in a policy context. This indicator should also be seen together with the data on foreign direct investments.

3. Data availability: details

(t ₁ : earliest reference year available; t ₂ : latest reference year available in May 2007)				
	EU Member States	ACC/CC	USA and Japan	EFTA ¹
t ₁	1993: EU-15 (excl LU) 1999: EU-25	1999: TR 2002: HR	1993	1993
t ₂	2004	2004 MK no data	2004	2004

¹ While being a member of the EFTA, Liechtenstein has complete or partial exemptions from several statistical requirements due to its size. Thus, Liechtenstein is excluded from this overview as most of the data for structural indicators are missing.

Comments (including information on time series): The data based on national concepts is available for the majority of countries from 1988 onwards. Harmonised data based on the Community concept is available from 1995 (EU-15) and 1999 (EU-25). There can be methodological differences between the two concepts, which seriously affect the comparison of the data. Yearly data based on the national concept is available for Croatia.

4. Overall accuracy

High

Accuracy is considered to be high. The statistical information is mainly provided by the traders on the basis of customs (extra-EU) and Intrastat (intra-EU) declarations. Adjustments are applied by the Member States to compensate for the impact of the thresholds applied exempting the information providers from statistical formalities, as well as, to take into account the late or non response of the providers. These adjustments may have an influence on the accuracy. Both Member States and Eurostat regularly apply various control methods in order to check the quality of data.

Restricted

(sources, errors,

methodology, etc.)

5. Comparability across countries

High

Restricted

Comparability in foreign trade statistics is in general high across countries, despite smaller differences in definitions that are used either in the Member States or by its main partners.

Comparability between EU external trade statistics and those of its main partners

There can be differences in the methods used by the European Union and those adopted by its trading partners in the rest of the world: in terms of trade coverage, these include the choice of partner country, the value of transactions, etc. The European Union bases its foreign trade statistics on the 'special trade' system, while the USA, Japan and Canada, for example, apply the 'general trade' system. The main difference between special and general trade is linked to the inclusion or not of the trade involving Customs warehouse.

Data stemming from COMTRADE (UN Statistical Office's database-trade data for the third countries) is less harmonised at international level, although several improvements have already been implemented, like the use of the Harmonised Commodity Description and Coding System (HS) by more than 150 countries. Moreover, the United Nations publishes a handbook of methodological recommendations for compiling external trade statistics.

These methodological differences can give rise to considerable statistical discrepancies. Eurostat regularly performs a reconciliation of the EU trade statistics and those of its main trading partners (e.g. USA, Canada and Japan), in order to measure and explain the discrepancies.

Comparability between Community concept and national concept

Community legislation serves as a basis for compiling the extra- and intra-Community trade statistics published by Eurostat and the Member States. However, Community statistics, which cover the European Union as a whole, and the statistics compiled by the Member States, which are concerned with the national dimension, are not always directly comparable. There can be methodological differences, which make precise comparison of these statistics difficult.

The principal differences are as follows:

- Treatment of goods in transit

Some Member States, particularly Belgium, the Netherlands and Austria, do not record in their national figures goods, which they consider to be 'in transit'. This involves, firstly, imports from non-member countries

which are cleared in these Member States before being dispatched to other Member States and, secondly, goods from other Member States which are immediately re-exported to non-member countries. But, these flows are included in the Community statistics. Actually, these goods are normally recorded under intra- or extra-EU trade, as appropriate. This phenomenon is sometimes referred to as the 'Rotterdam effect'.

- Other differences

Other methodological differences can cause discrepancies between national and Community statistics (examples: classification at national level as 'general trade' rather than 'special trade', or not recording repairs on the grounds that they are services). In theory, Intra-EU trade statistics based upon Community concept should be fully comparable. However, since the Intrastat system came into operation, bilateral comparisons have revealed major and persistent discrepancies in the various Member States' intra-Community trade statistics. Therefore, continuous efforts are undertaken to investigate those differences and to reduce or eliminate them over time.

6. Comparability over time

- | | | |
|------------|-------------------------------------|--|
| High | <input checked="" type="checkbox"/> | Methodological differences between the National concept and the Community concept affect the comparability before 1995. The data based on the Community concept from 1995 onwards is comparable. |
| Restricted | <input type="checkbox"/> | |

7. Development perspective for improving the quality of this indicator (including as far as possible an indication of the burden on Member States and respondents.)

Further mirror statistics comparison to reduce asymmetries

8. Contribution to quality of the set/potential to qualify for an integrated policy analysis

Relevant European legislation:

Council Regulation (EEC) 638/2004 of 31 March 2004

Council Regulation (EC) 1172/95 of 22 May 1995

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