



UNITED NATIONS  
DEPARTMENT OF ECONOMIC  
AND SOCIAL AFFAIRS  
STATISTICS DIVISION



ANDEAN COMMUNITY  
GENERAL SECRETARIAT



UNITED NATIONS  
ECONOMIC COMMISSION FOR  
LATIN AMERICA AND THE  
CARIBBEAN

**Regional Workshop on Country Practices in Compilation of  
International Merchandise Trade Statistics, 7-11 May 2007, Lima**

**Agenda item No. 17:** Calculation of Trade Indicators

**Presentation**

**Language:** Spanish

## SISTEMA INTEGRADO DE COMERCIO EXTERIOR

Presentation by

*Andean Community (CAN)*





## Agenda item 19 (a): Globalization and the OECD Trade Indicators Project TIP

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### Introductory remarks: Globalization...

- ...means (amongst other things) that almost everything becomes more interconnected and, hence, more difficult to analyse and to measure
- ...puts statistical measurement frameworks at considerable stress (they measure sometimes the wrong things and refer to “national” concepts which need to be linked to international processes)
- ...means that trade is one, but just one, of its visible expressions
- We have difficulties to statistically correctly allocate the components of the new paradigm of economic processes

## OECD took on board a great challenge:

- OECD is the recognized analytical hub of international globalization analysis and “sherpa” of G8 summits
- The new Secretary General, Angel Gurría, has put globalization as top priority on OECD’s agenda
- OECD’s 30 member countries’ membership will expand rapidly to facilitate global analysis
- Candidates (there are over 20!) include:
  - Latin American countries
  - EU countries not OECD members so far
  - Perhaps Russia, Israel, South Africa, and other BRICS”

## Coming to Trade Statistics and the TIP now:

- Excellent news: OECD’s Trade Statistics will be raised to the rank of “Working Party” activity in June 2007 – at par with National Accounts and Short-Term Economic Statistics – this is a very important event in OECD’s “pecking order”
- This is in recognition of and following recommendations made of a number of factors which have been identified during the Trade Statistics Quality Reviews of OECD



## The OECD Trade Indicators

- **Genesis: we have a wealth of trade data – why not making consistent and analytically pertinent use of it for the benefit of governments, academia, civil society?**
- **Roundtable Expert Group, composed of OECD analysts and statisticians and external experts, set up framework and measurement standards**
- **Incremental implementation (which continues)**
- **One of the most popular OECD datasets accessed by external users**
- **Extremely positive feedback**



## The quality framework: TIP data has to be...

- **Relevant**
- **Accurate**
- **Credible**
- **Timely**
- **Accessible**
- **Interpretable**
- **Coherent**



## Recent achievements

- Methodological framework for the current indicators finalised
- Multidimensional OECD Trade Indicators database(s) installed in OECD Warehouse:
  - *Macro* Trade Indicators (aggregated level)
  - *Micro* Trade Indicators (detailed level)
- General public access via OECD.STAT

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## Recent achievements (cont'd)

- The Macro Trade Indicators are available both *at current and constant prices*, the Micro Trade Indicators at *current prices only*
- Several key macro indicators have been included in the 'Economic Globalisation' chapter of the OECD Factbook 2006, and several indicators were included in the 'Aspects of trade globalisation' chapter of the OECD Economic Globalisation Indicators (EGI) publication

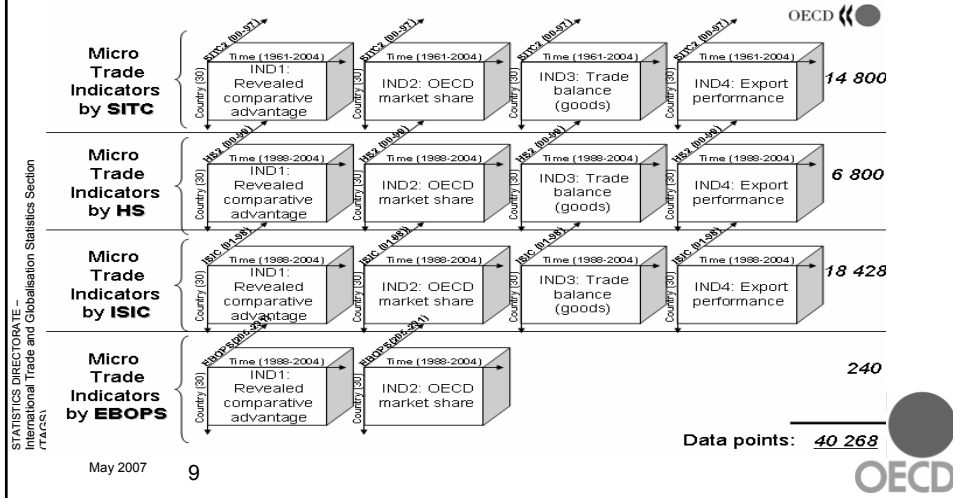
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# How does this look like at present?

- Micro Trade Indicators: 14 data cubes and more in 2007 (ICT etc.)



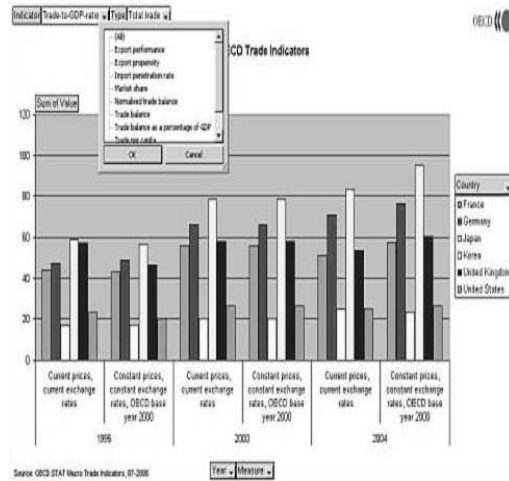
## TIP structure in OECD.Stat \_ Macro indicators

Table 1: Macro Trade Indicators

- Indicator
  - 1: Trade-to-GDP-ratio (total trade)
    - 2: Trade-to-GDP-ratio (trade of goods)
    - 3: Trade-to-GDP-ratio (trade of services)
  - 4: Trade balance in goods and services as a percentage of GDP
    - 5: Trade balance in goods as a percentage of GDP
    - 6: Trade balance in services as a percentage of GDP
  - 7: Import penetration rates of goods and services
    - 8: Import penetration rates for goods
    - 9: Import penetration rates for services
  - 10: Export propensity for goods and services
    - 11: Export propensity for goods
    - 12: Export propensity for services
  - 13: Trade per capita for goods and services
    - 14: Trade per capita for goods
    - 15: Trade per capita for services
  - 16: Export performance (exports of goods and services)
    - 17: Export performance (exports of goods)
    - 18: Export performance (exports of services)
  - 19: Trade balance (goods and services)
    - 20: Trade balance (goods)
    - 21: Trade balance (services)
  - 22: Normalised trade balance (goods and services)
    - 23: Normalised trade balance (goods)
    - 24: Normalised trade balance (services)
  - 25: Market share (goods and services)
    - 26: Market share (goods)
    - 27: Market share (services)
  - 28: Herfindahl index of geographical concentration (trade of goods)

## TIP Pivot charts online

- Customisable pivot charts for the Macro Trade Indicators have been provided for download and individual country profile charts (based on the macro trade indicators)
- These can be downloaded from the publicly available *International Trade and Balance of Payments* Statistics website.



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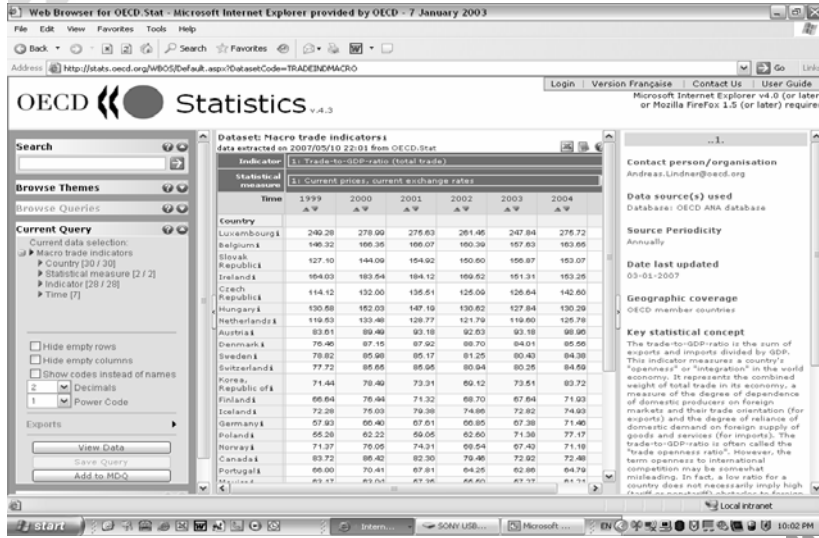
## But caution: Even simple indicators may give rise to different measurement!

- **Trade-to-GDP-ratio**
- *Definition:* The most frequently used indicator of the importance of international transactions relative to domestic transactions is the trade-to-GDP ratio, which is the **sum of exports and imports of goods divided by GDP**. International trade tends to be more important for countries that are small (in terms of size or population) and surrounded by neighbouring countries with open trade regimes than for large, relatively self-sufficient countries or those that are geographically isolated and thus penalised by high transport costs. Other factors also play a role and help explain differences in trade-to-GDP ratios across countries, such as history, culture, (trade) policy, the structure of the economy (especially the weight of non-tradable services in GDP), re-exports and the presence of multinational firms (intra-firm trade).
- TIP is consistent in its measurement with IMF, WTO and general practice in countries
- However, OECD's *Economic Globalisation Indicators* advocate the average of both imports and exports

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## Trade-to-GDP in TIP OECD.Stat

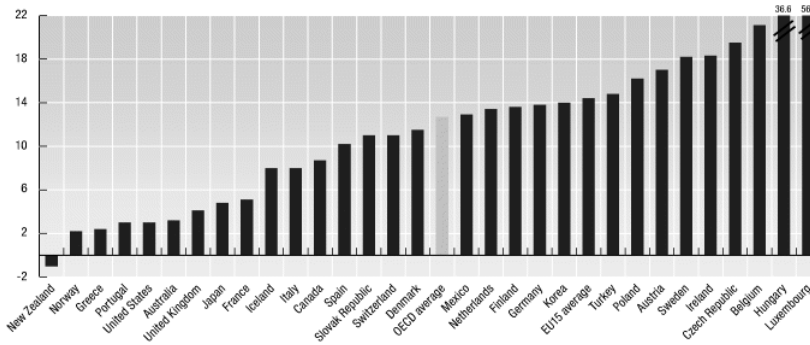


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## Trade to GDP ratios :Difference between 2005 and 1992 ratios in percentage points



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## Another example: also country rankings can be misleading

- Generally useful and conveys clear message
- But caution before drawing quick conclusions
- For instance, the following 3 slides show
  - Germany is net **goods** exports champion
  - The United States are net **services** exports champion
  - A new concept, the “normalized trade balance” used in TIP, helps to illustrate unbiased trade performance across time, countries and sectors. The removal of a country’s weight allows a better appreciation of smaller countries’ trade performances

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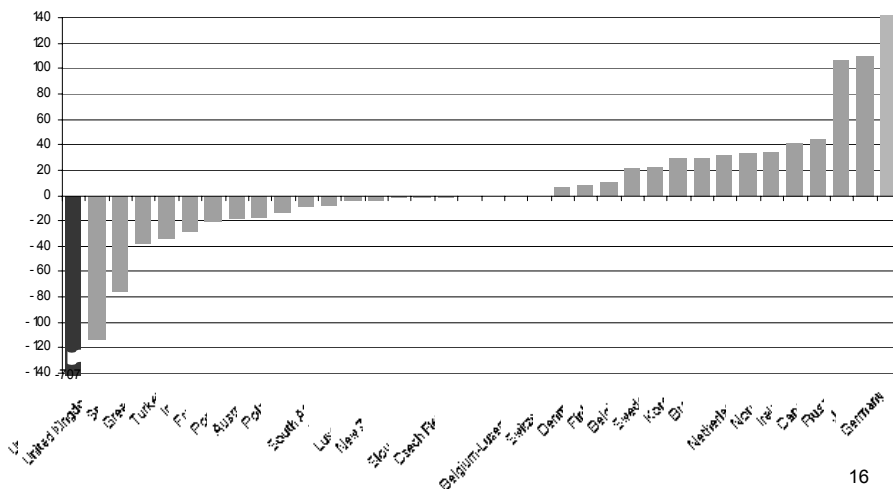


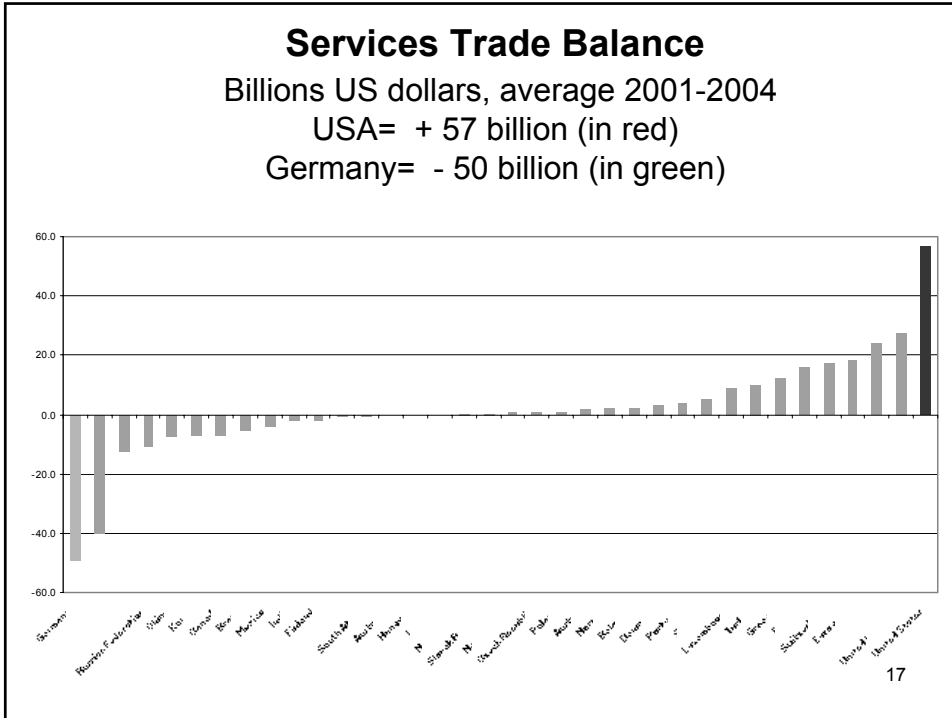
## Merchandise Trade Balance

Billions US dollars, 2004

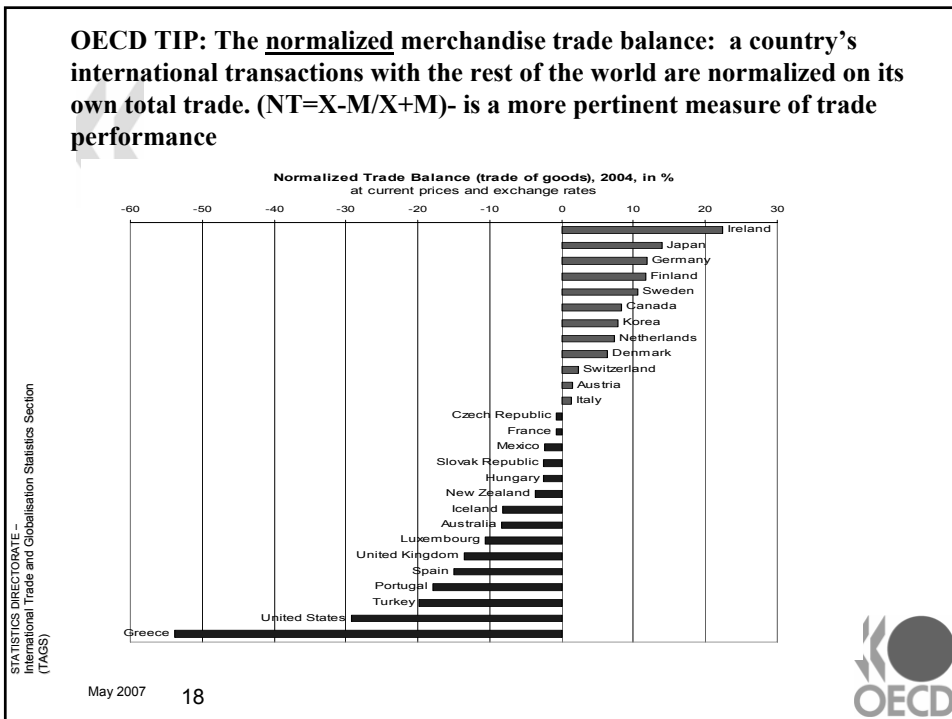
USA= - 707 billion (in red)


Germany= + 193 billion (in green)





**OECD TIP: The normalized merchandise trade balance: a country's international transactions with the rest of the world are normalized on its own total trade.  $(NT=X-M/X+M)$ - is a more pertinent measure of trade performance**





## Perception and reality: Export champion Germany: some globalisation facts Years 1991 and 2004 (Source BDI)

- Share of industry in economic value added declined from 25% to 21%
- Vertical integration declined from 39% to 34%
- Foreign share of intermediate inputs increased from 20% to 26%
- Import content of exports increased from 26% to 42%

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## Germany in international competition

- German economic trends
  - Germany's industrial production base is declining
  - "Made in Germany" is no longer originally produced in Germany
  - Transformation from a production site into a commercial hub

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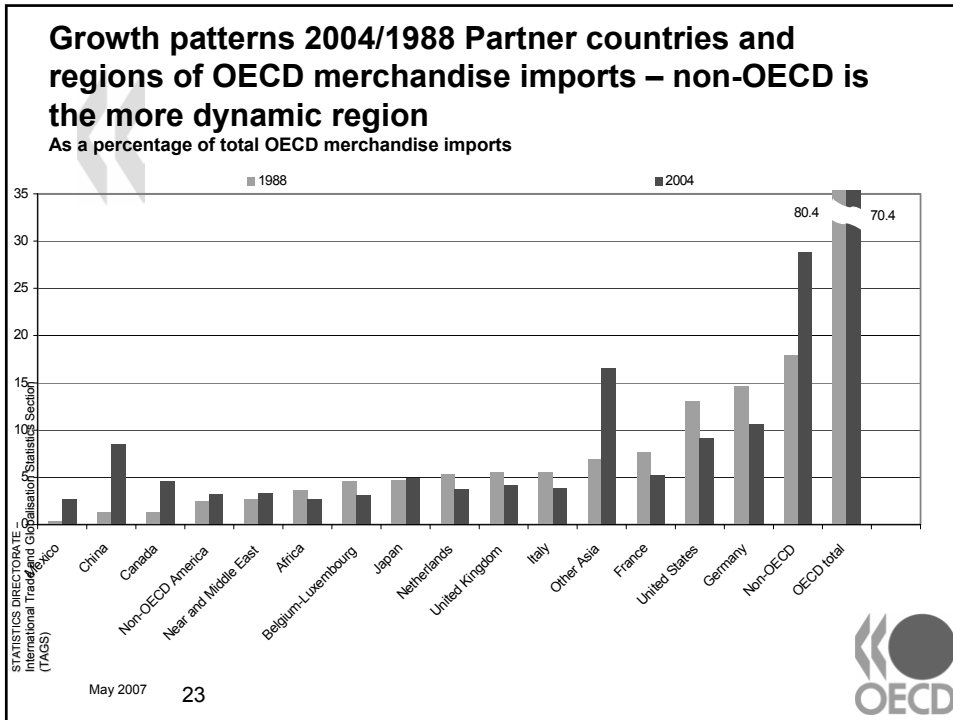
## Germany in international competition

- Internationalization strategies
  - Cost reduction / rationalization
  - Relocation
  - Reorganization of the value chain
  - Complementary production



## Bazaar economy: Statistical evidence and indications

- industrial share in the economic value added:  
1991: 25 %      ↓      2004: 21 %
- vertical integration  
1991: 39 %      ↓      2004: 34 %
- foreign share of intermediate inputs  
1995: 20 %      ↑      2000: 26 %
- import share of exports  
1991: 26 %      ↑      2005: 42 %
  - » engineering: 30.9 %
  - » chemical industry: 51.7%
  - » automotive industry: 37.0 %



- ## So, both global structure and composition of trade flows are changing
- Dynamic economies modify global trade pattern
  - New players emerge and solidify their market penetration (e.g. China)
  - The role played by Information and Communication Technologies (ICT) considerably increased in recent years in merchandise trade
  - The increasing import content of exports also mirrors globalisation
  - Some hard facts:
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## Current definition for the ICT sector by OECD:

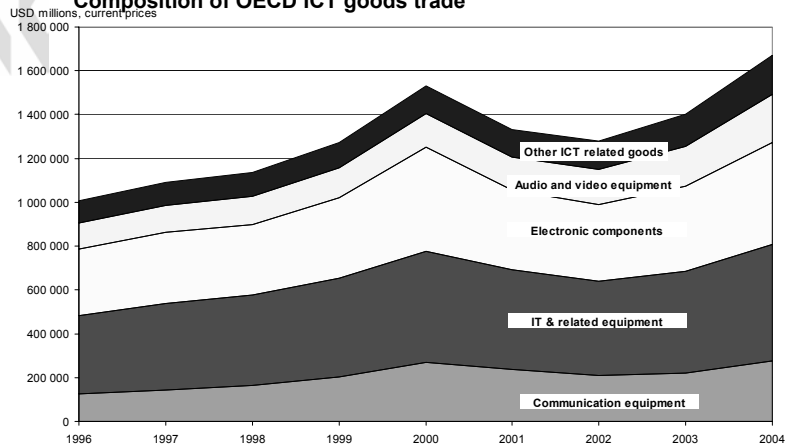
ICT goods broad categories  
based on six-digit HS categories

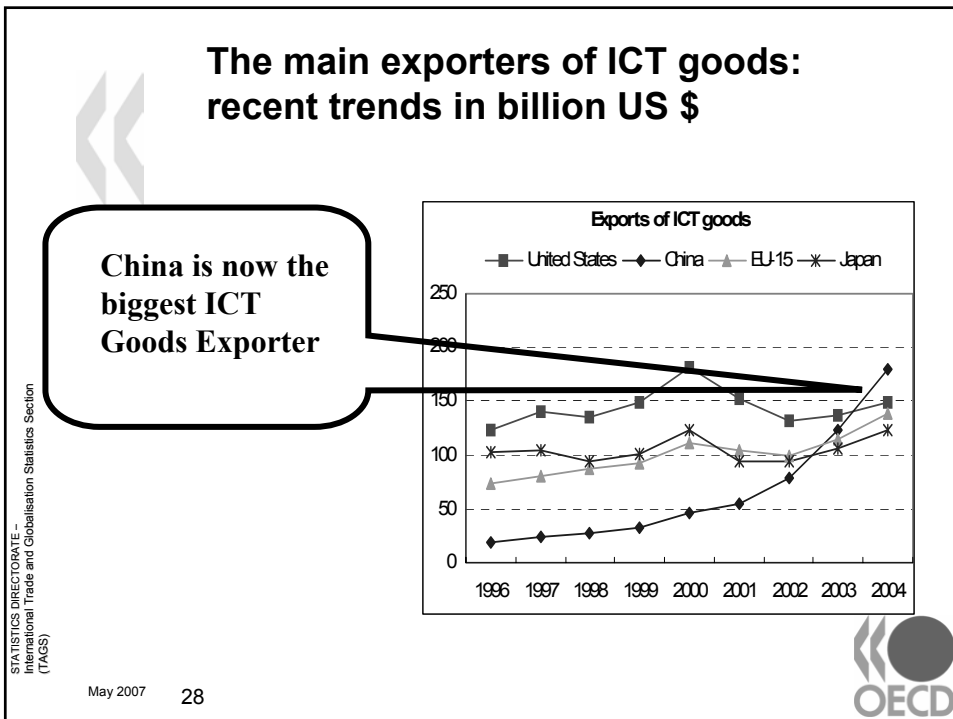
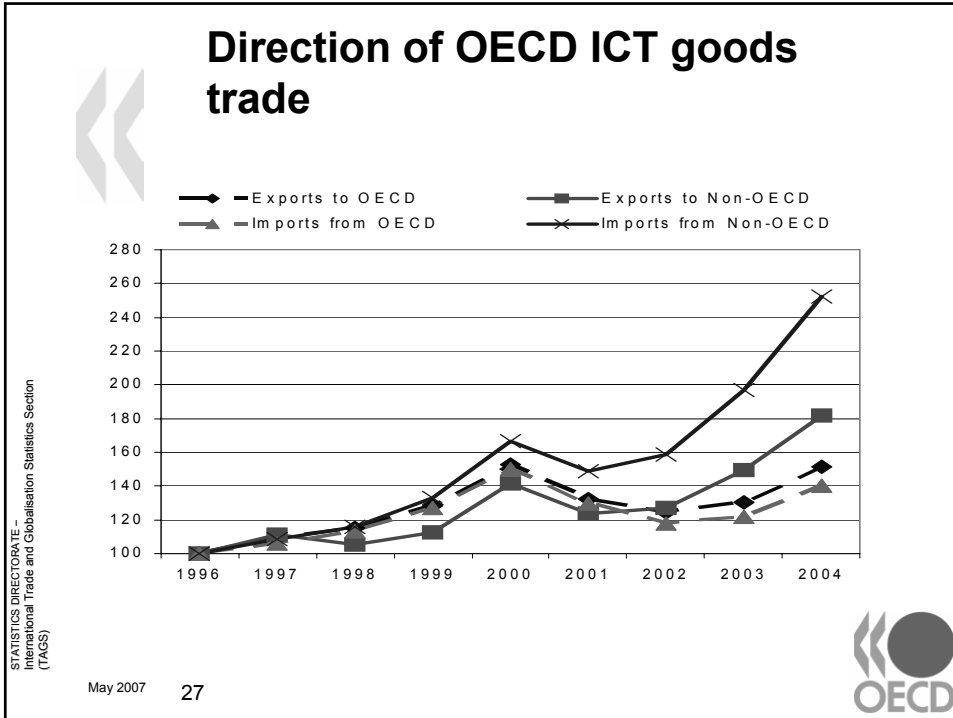


- telecommunications equipment
- computer and related equipment
- electronic components
- audio and video equipment
- other ICT goods

## Some key facts and figures:

Composition of OECD ICT goods trade







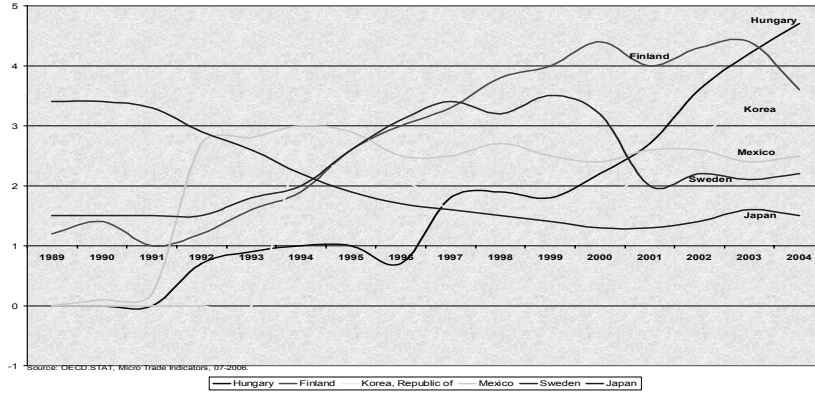


## From OECD Trade Indicators: Revealed comparative advantage - Telecommunications and sound recording

Revealed comparative advantage (by SITC)  
SITC76: Telecommunications & sound recording apparatus

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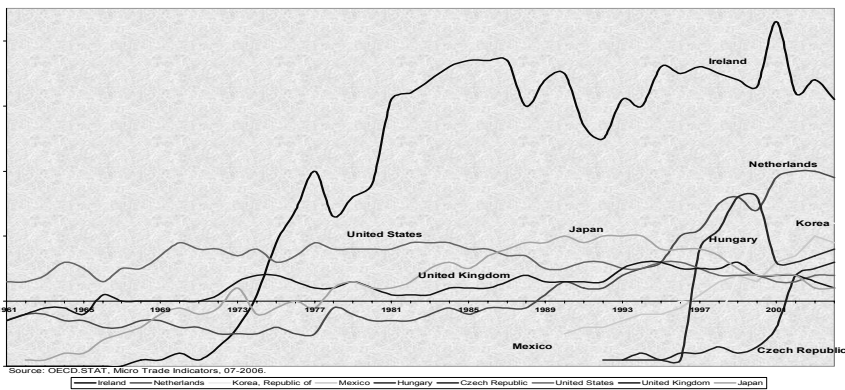


## From OECD Trade Indicators: Revealed comparative advantage: Office machines & automatic data processing equipment

Revealed comparative advantage (by SITC):  
SITC75: Office machines & automatic data processing equipment

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## A revolutionary concept: StatLink

- What is it?
- OECD's StatLink is an electronic publishing solution that enables links between publications, whether they are in print or e-book format, and the underlying data in MS Excel spreadsheets. StatLink uses the Digital Object Identifier technology (DOI) which is an emerging international standard for identifying published material on line.
- There are many benefits for both users and the organisation in using this technology.
- What it means for users...
- MS Excel downloads of figures used in tables that can be tailored for users' own needs.
- Access to the most up-to-date documents, data and graphs.
- Access to the underlying data of a table.
- Data spanning a longer time period than that available in a printed publication.
- All OECD data products are incrementally "equipped" with this great tool for researchers



## An example: the last OECD Statistical Factbook, issued last month

- TIP is integral part of it
- ... as are all other OECD databases
  1. In the Data Warehouse
  2. Obeying to general and implemented standards, such as
    3. SQL
    4. SDMX
    5. And the entire, standardized OECD data workflow (StatWorks, MetaStore, PubStat)



## Now you ask perhaps: what is in for me? Can I access all this?

- The answer is **YES**
- A quick tour:
- Simply “google” to “OECD”:
- [www.oecd.org](http://www.oecd.org)
- ...then on “statistics”
- ...all is under “International Trade and Balance of Payments”
- ...Country profiles, macro and micro trade indicators.. You can work with the data, export, dynamically rank etc.
- And more...



## Thank you for your attention!

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