MODERN ECONOMIC STATISTICS FOR POLICY MAKERS

Paul Schreyer
OECD Deputy Chief Statistician

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The issues

Current international economic and policy environment

➢ **Low growth** in OECD countries for several years
➢ Slowing **productivity** growth

➢ Persistent **inequalities** in many countries
➢ Backlash against **globalisation**: many people feel left out
➢ **Digitalisation**: fears about future of jobs and income
➢ Concerns about the **environment**

Well-being increasingly at centre of policy discourse
Adoption of the SDGs

Do we get the measurement right ?: the statistical challenges

- Is the **productivity slowdown a reality** or a **statistical artefact**?

- Does **digitalisation** affect our capacity to measure production and real income?

- Does **globalisation** affect our capacity to measure national economic activity?

- Are **people left behind,** thus potentially creating political instability? Do we measure **disparities** well? And how to monitor **financial risks and vulnerabilities**?

- How can we grow while preserving the **environment**? How to measure **green growth**?

The Statistical Agenda

Which modern economic statistics to inform policies for

a more inclusive and (environmentally) sustainable growth ?

1. **Explaining Productivity : the impact of Digitalisation**
2. **Understanding Globalisation**
3. **Taking a Households' Perspective, looking at economic disparities**
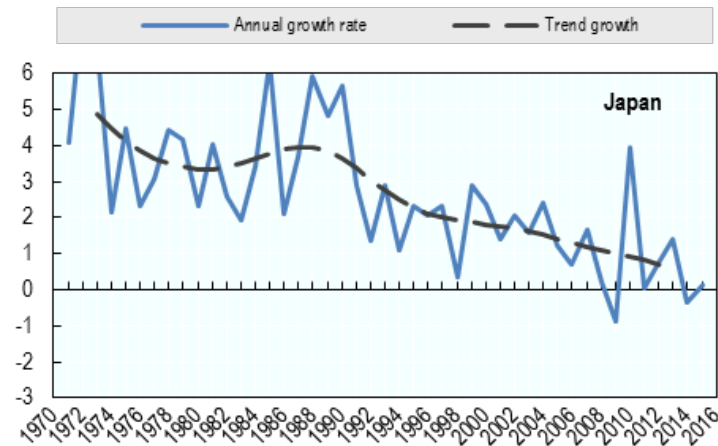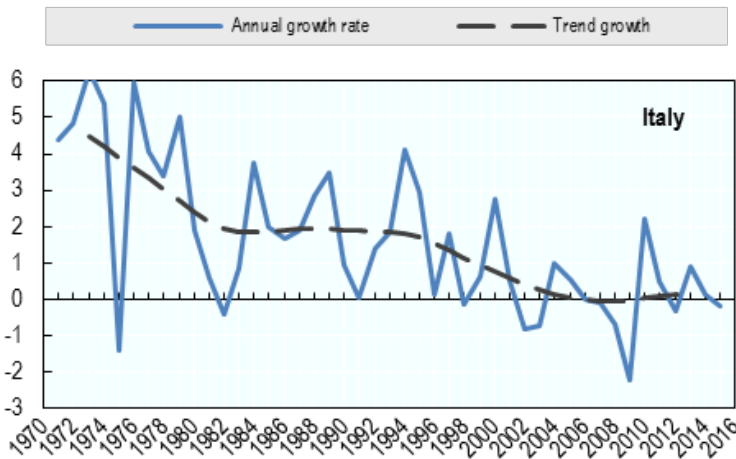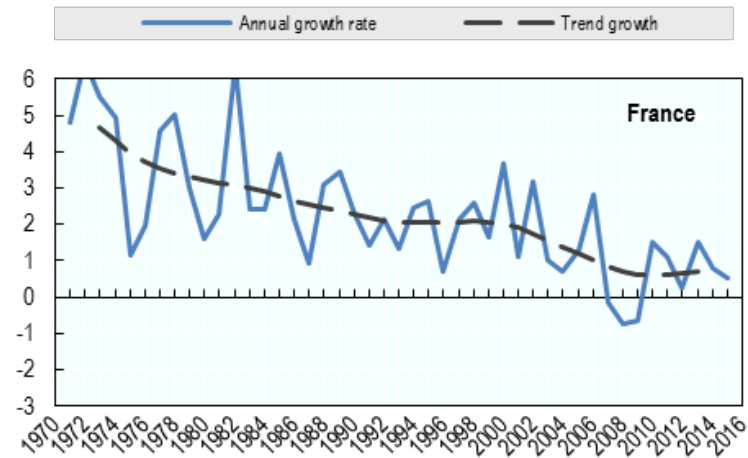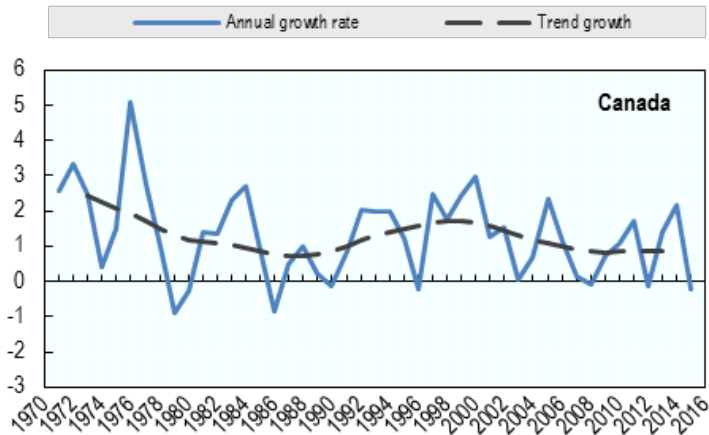4. **Pushing the Boundaries? Well-being and Sustainability**

The statistical agenda (1) : Explaining productivity

Pervasive long-term slowing of labour productivity growth in OECD countries
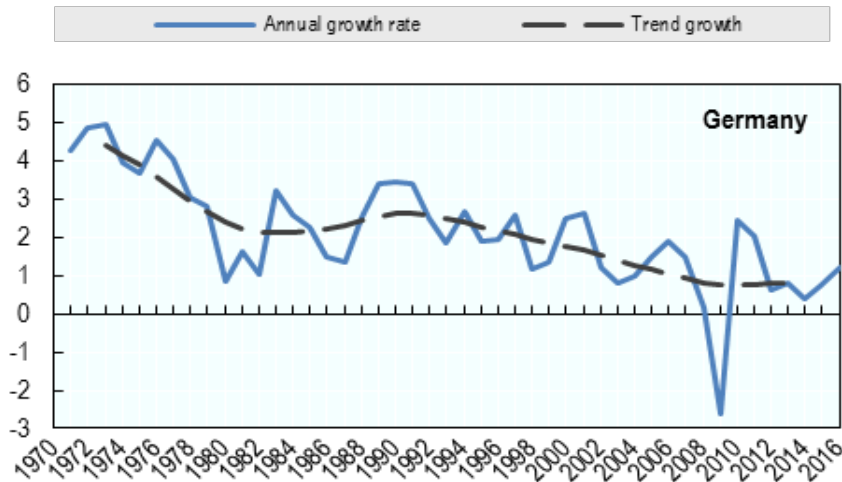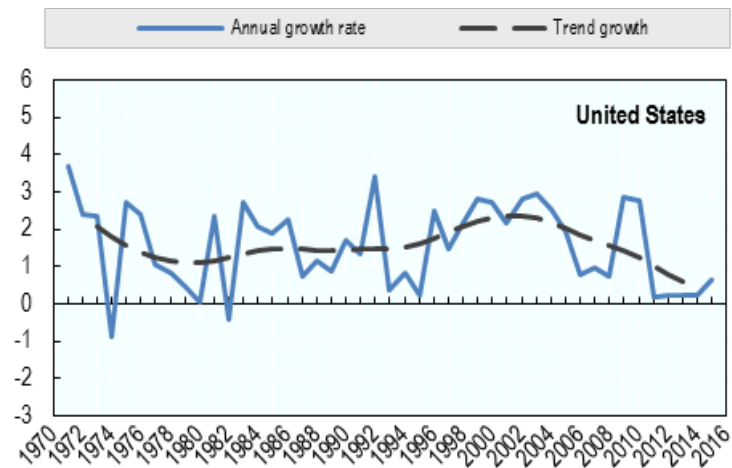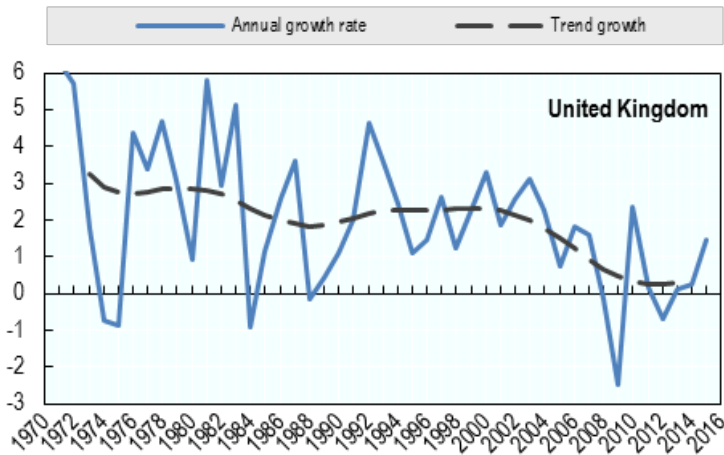
Total economy, average annual rates of change in %

Pervasive long-term slowing of labour productivity growth in OECD countries…

Total economy, average annual rates of change in %

Some explanations

- **Shortage of ideas** (Gordon)
- **Break-down of the diffusion machine** and **inequality** (OECD)
- A **business cycle** effect

- A great deal is happening in the **digital economy** (Brynjolfsson/McAffee)
  - but **takes time** to materialise
  - And some or much of it is not picked up by GDP and productivity figures - **the mis-measurement hypothesis**

Weaker *diffusion* of frontier productivity

Labour productivity, average of 24 countries
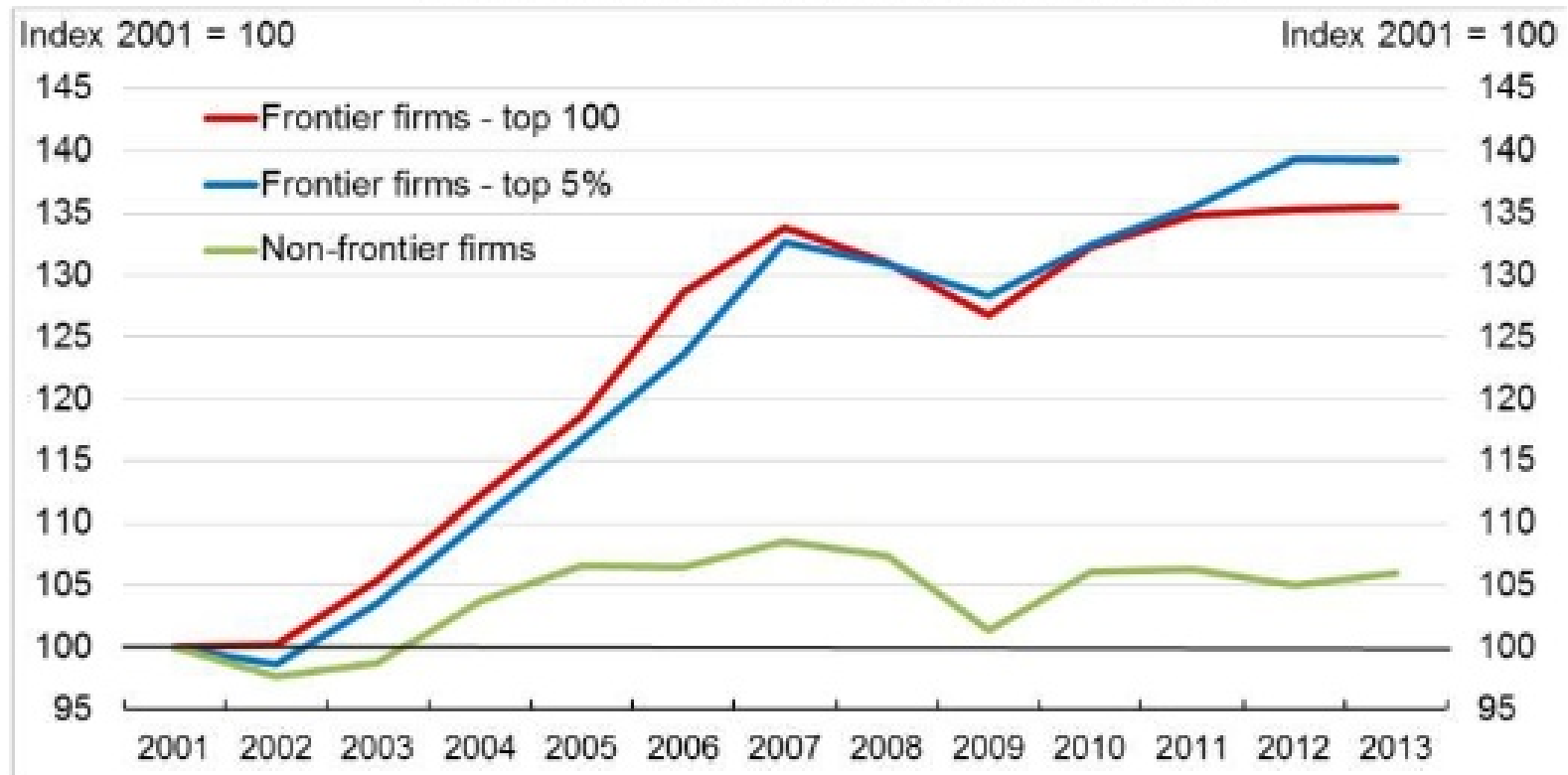
Source: OECD Economic Outlook June 2016; see also Andrews, Criscuolo and Gal 2016; Brookings [Working Paper](#)

Productivity-Inequality Nexus
Growing dispersion in productivity between frontier and lagging firms also observed in wages

Index (2001=100)

Legend:
- Real compensation per worker at the global frontier
- Real compensation per worker of remaining firms
- Labour productivity at the global frontier
- Labour productivity of remaining firms
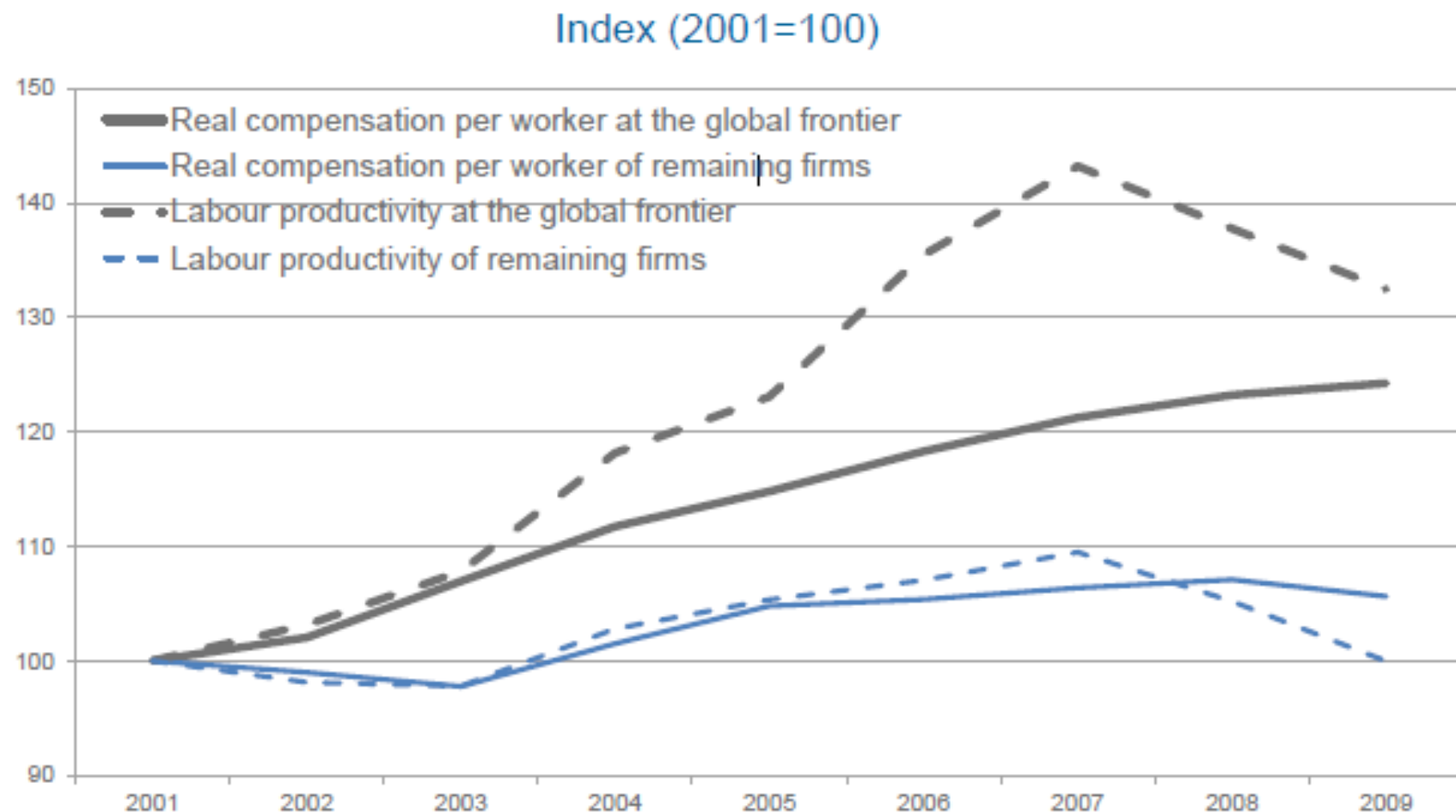
Source: OECD estimations based on ORBIS data, preliminary results.

Exploring the decline in productivity: what's needed ?

- **Industry level**: detailed and updated information
  - To assess developments at sectoral level
- **Firm level**: detailed micro firm-level data
  - To assess developments by firm characteristics

- **Linked employer-employee data**
  - To assess relationship between wage and productivity dispersion

- **Addressing the mis-measurement hypothesis** ($\rightarrow$ presentation Session 2)

The statistical agenda (2) : Understanding globalisation

Understanding globalisation

- Continuing **international fragmentation of production** processes

- **Optimisation of global tax burden** through:
  - Transfer pricing
  - Channelling funds through Special Purpose Entities
  - Allocation of costs related to corporate services between countries
  - Use of IPPs to record economic ownership of intangibles in tax-friendly environment

Biggest measurement issues:
  - Capturing Global Value Chains
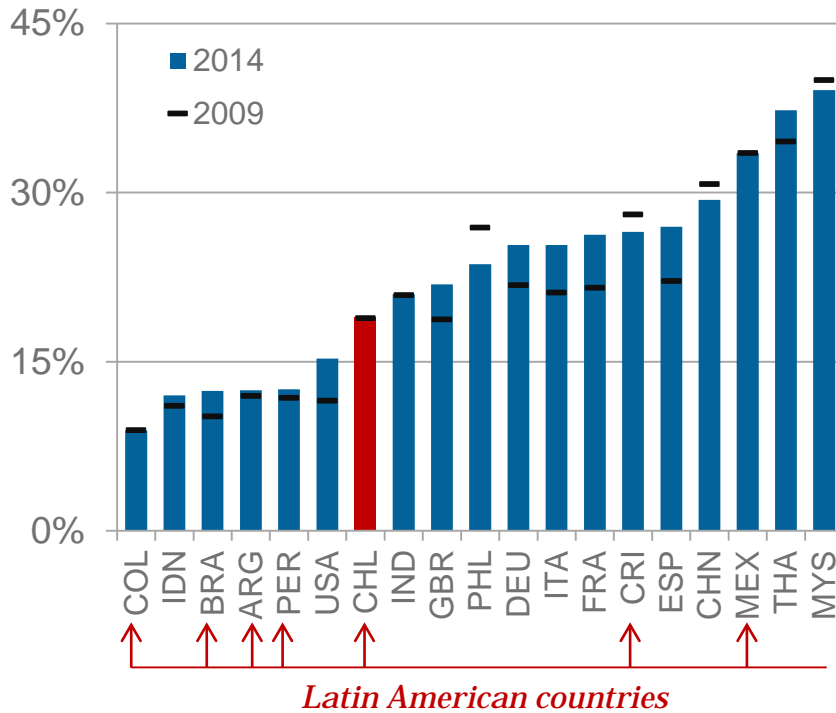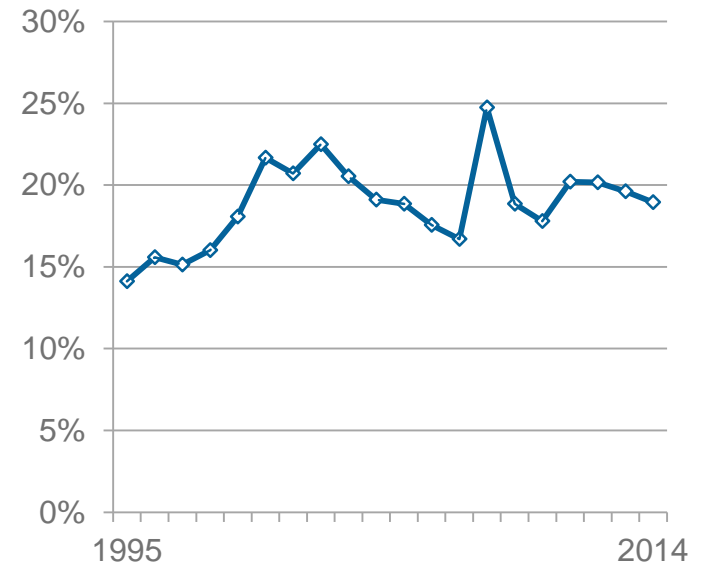 - Where Globalisation meets Digitalisation: Cross border flows of intangibles

Dissecting GVCs, example Chile (1)

Chile's integration in GVCs has grown moderately since 1995, but has slowed down in recent years
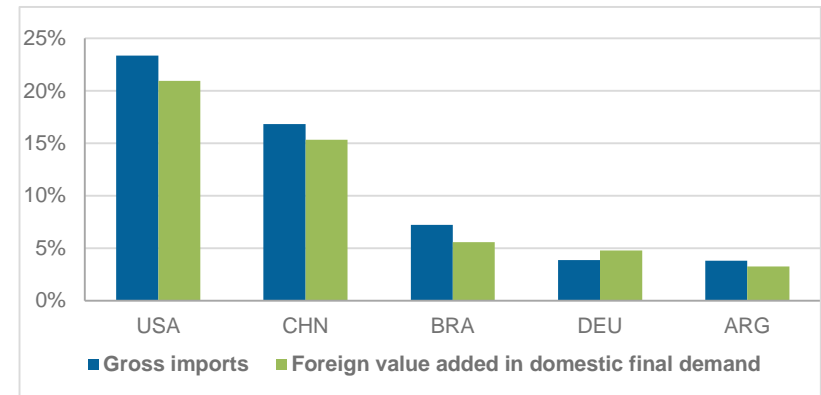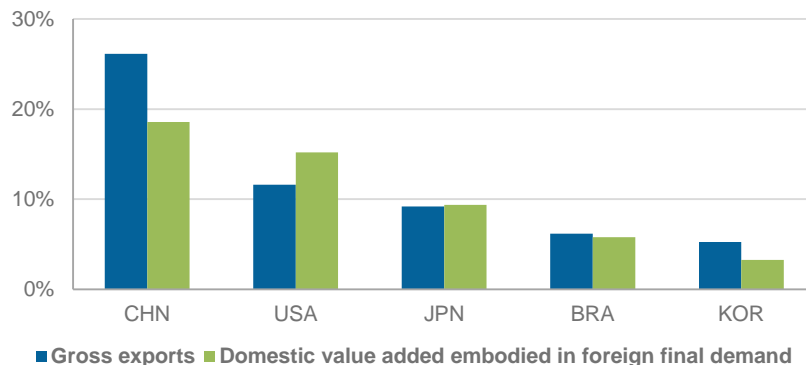

Foreign value added in exports, selected countries

Foreign value added in exports, Chile 1995-2014

Latin American countries

Source: OECD Nowcast TiVA database, http://www.oecd.org/std/its/tiva-nowcast.htm

Dissecting GVCs, example Chile (2)

- **US is a more important export market** than apparent in gross trade figures, while **China is much less important**: 15% of Chilean exported value added ends up in American final demand.

Legend (left chart): ■ Gross exports ■ Domestic value added embodied in foreign final demand

Legend (right chart): ■ Gross imports ■ Foreign value added in domestic final demand

- **Chile's exported value added has a very low services orientation**, mainly due to the very low services content of basic metals and mining industries. The services content of other manufacturing exports is on par with that of OECD countries.

Source: OECD Nowcast TiVA database, http://www.oecd.org/std/its/tiva-nowcast.htm

Cross-border flows of intangibles: the basic discussion and statistical needs

- Are quickly moving intangibles reflective of a **new economic reality (industry 4.0)**, correctly picked up in our GDP concept?

- Does the current **accounting framework** deserve a review?

- Either way, an **improved information base** is necessary:
  - Distinguish **activities of MNEs** from (other) nationally operating enterprises
  - **Information exchange between NSOs**, early warning systems
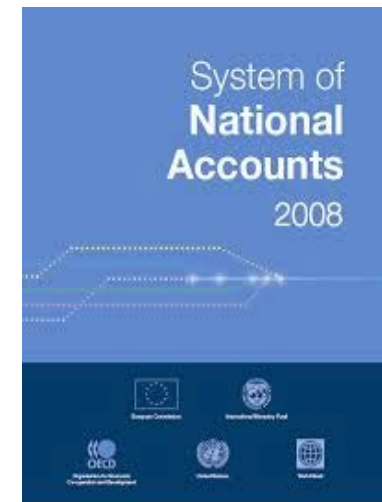
Globalisation is also about the movement of persons…

The foreign-born as a percentage of the total population in OECD countries, 2000 and 2014

◇ 2000   ▢ 2014

Source: OECD International Migration Database.
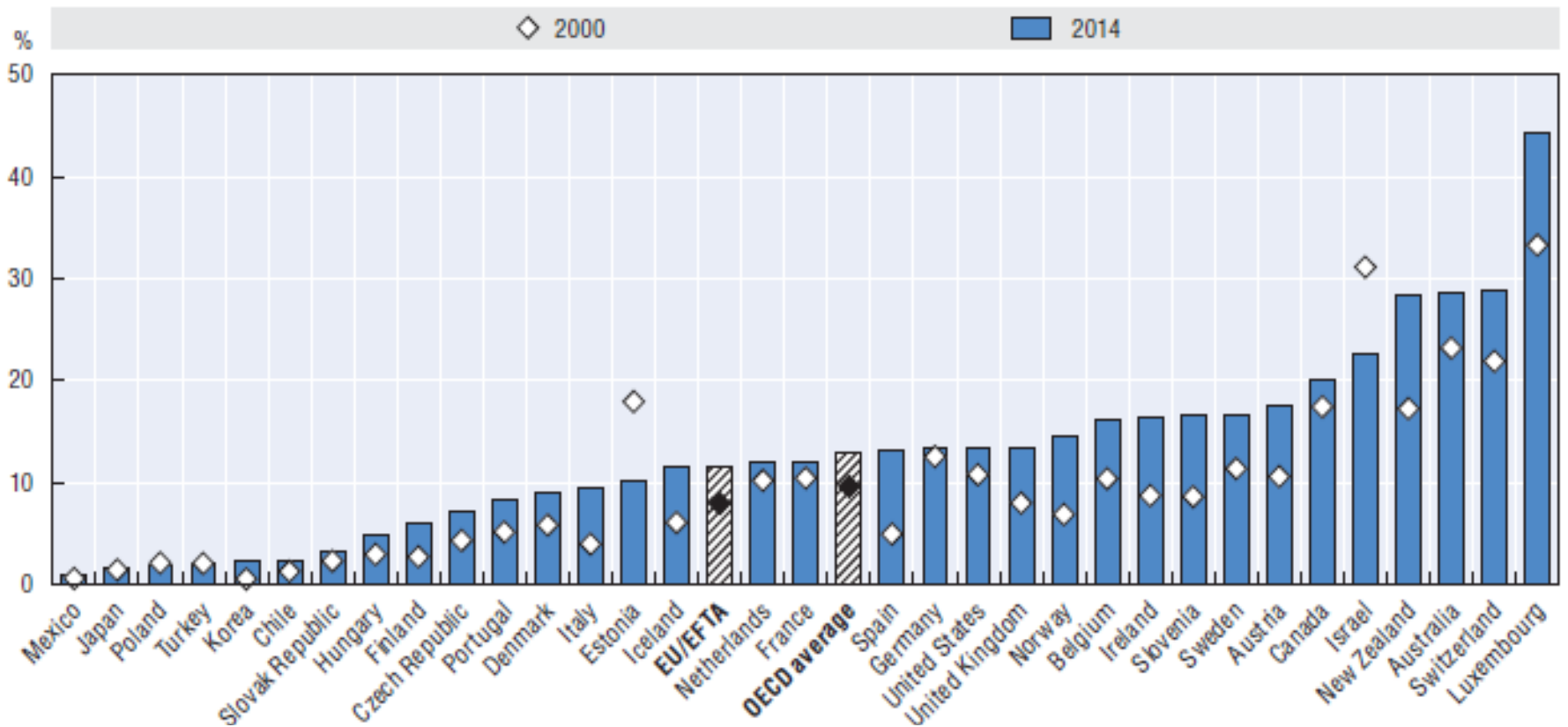
…and data is scarce

- **Flows and stocks of migrants**

- **Data on migrants in economic and social statistics**

International Forum on
Migration Statistics 2018

15-16 January 2018
OECD Conference Centre, Paris

Globalisation: what's needed?

- **Granular SuTs for TiVA – heterogeneity of firms**
  - Trade by enterprise characteristics

- **MNEs and their activities**
  - Group as a statistical unit? Cooperation between NSOs
  - Better information on foreign exposures and Globally Systemically Important Financial Institutions
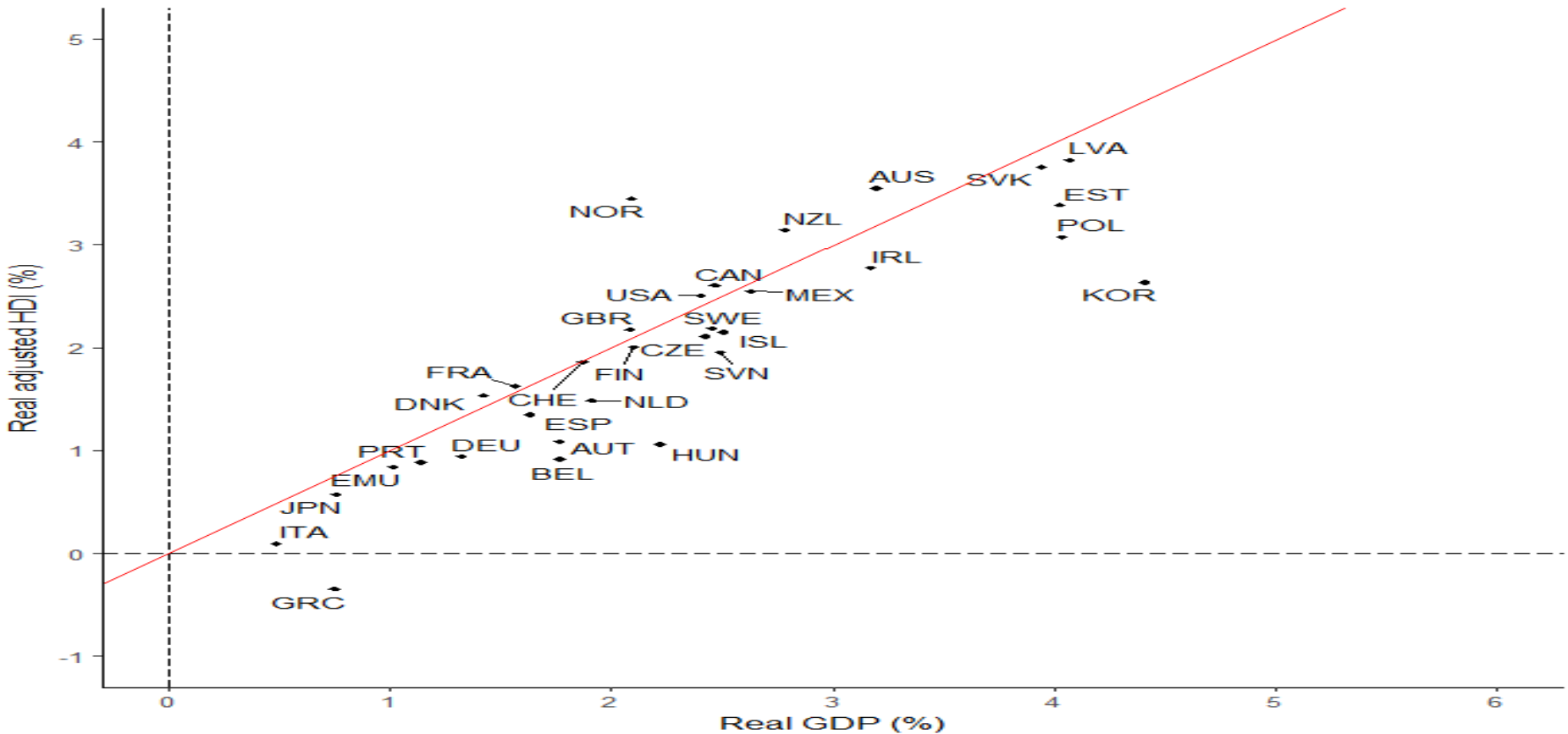
- **Migration-related data**

The statistical agenda (3) :
Taking a households' perspective, looking at economic disparities

Real GDP grew faster than real household adjusted disposable income


Average annual growth rate 1996 - 2015

Data are based on 1996-2015, with the following exceptions: 1996-2014 for Japan, Korea, and the United States; 1999-2013 for New Zealand ; 2000-2014 for Ireland; 2000-2015 for Spain; 2001-2014 for Iceland; and 2004-2013 for Mexico.

Widening income inequality in OECD countries…
Growth in real disposable income

Legend: Bottom 10% · Bottom 40% · Middle 50-90% · Top 10%
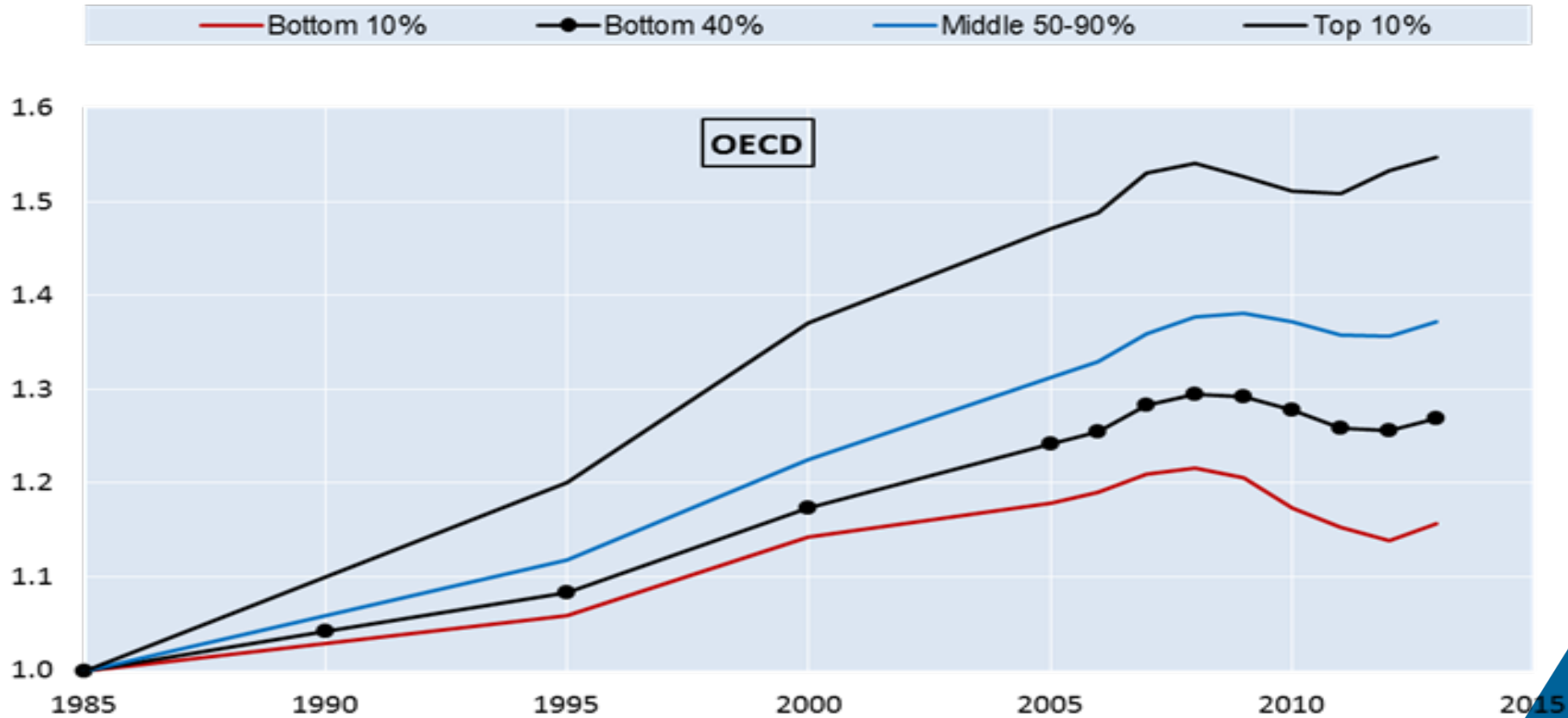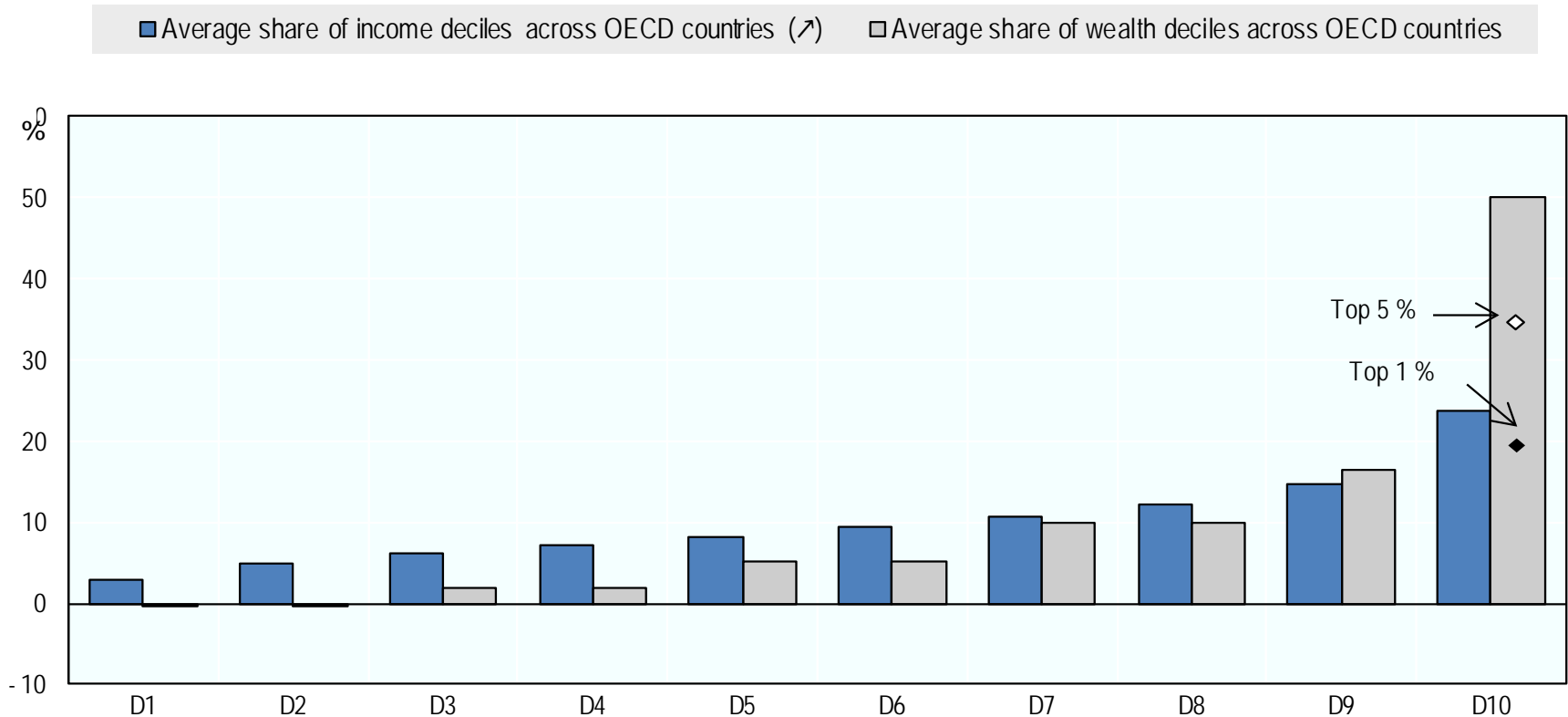
Source: Unweighted average over 17 countries ; OECD Income Distribution Database

Wealth disparities are larger than income disparities

Distributions of household disposable income and net wealth across deciles

Average of 18 OECD countries, 2010 or latest available year

Sources: OECD Wealth Distribution Database and OECD Income Distribution Database.

Regional variation in GDP per capita as a % of national average, 2013 (TL2)

● Minimum   ○ Country average = 100   ● Maximum
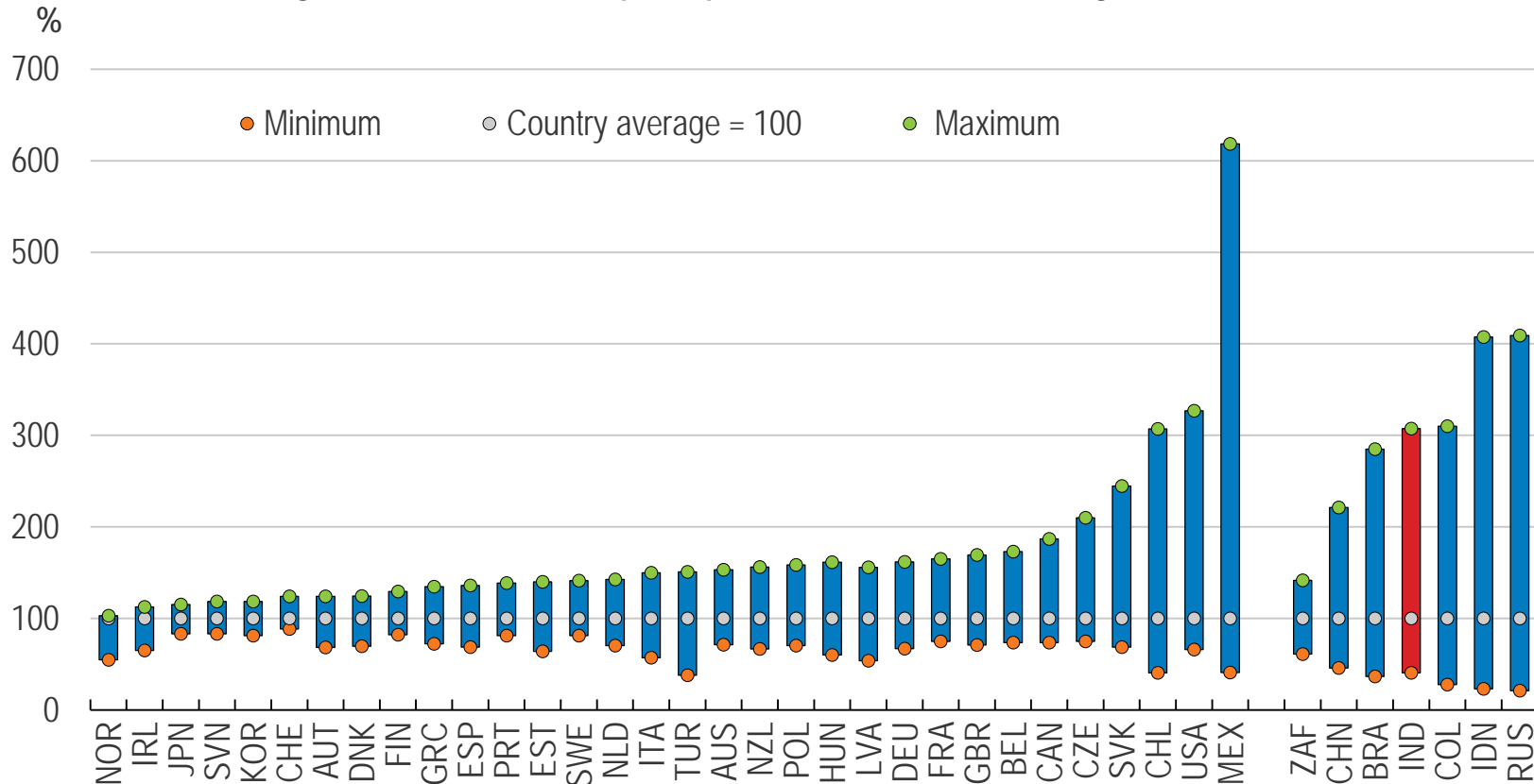
Note: Regions in OECD member countries have been classified according to two territorial levels to facilitate international comparability.
The territorial level 2 (TL2) consists of macro-regions, states in the case of India.
Source: OECD Regional Statistics database.

Unpaid household activities

Truly important activities but, by convention and for good reasons, outside GDP:

- Cooking
- Child care
- Care for elderly
- Care for mentally and physically ill family members
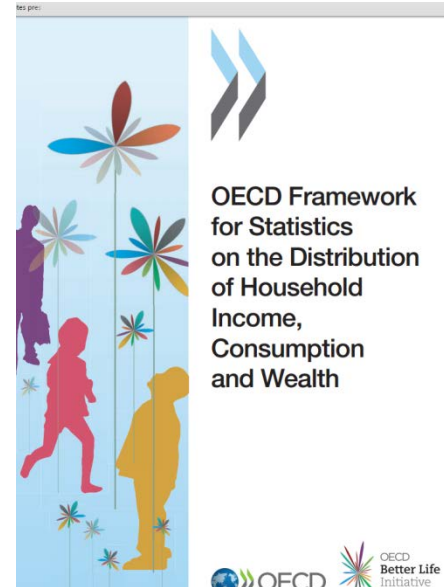- Maintenance of shelter
- ....

CAREGIVING

More than

15 MILLION

Americans provide unpaid care for people with Alzheimer's disease and other dementias.

2016 ALZHEIMER'S DISEASE FACTS AND FIGURES

Household perspective: what is needed? (1)

- Further **improvement of micro-data :**
  - Consistency between data on income, consumption and wealth (e.g. to analyse who are the materially deprived?)
  - Better data to capture the bottom-end of the distribution
  - More and more up-to-date data on wealth

- Access to and use of **administrative data**
  - e.g. tax records to better capture the top-end of the distribution

- **Linking different micro datasets**
  - To analyse joint distributions

- Increased use of **geo-spatial data**
  - To analyse spatial inequalities

OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth

OECD

OECD Better Life Initiative

Household perspective: what is needed? (2)

- Financial vulnerabilities: need for **fully-fledged institutional sector accounts**, up to and including **balance sheets**, on a quarterly basis (part of G20 Data Gaps Initiative)

- **Real estate prices**

- **Time use surveys – THE ingredient** to measure time spent on household production
  - A vital input also for **gender-related questions**
 - Need to improve the **quality and frequency** of data from time use surveys

The statistical agenda (4) :
# Pushing the boundaries: well-being and environmental sustainability

Well-being

- Need to **go beyond GDP** and material conditions
  - Recognize that **GDP is** first and foremost **an indicator of economic activity, not of** welfare or **well-being**

- Well-being is a **multidimensional** phenomenon
  - Both material and quality of life dimensions
- **OECD well-being framework** (How's Life?) includes 11 dimensions, in line with 2030 SDGs Agenda
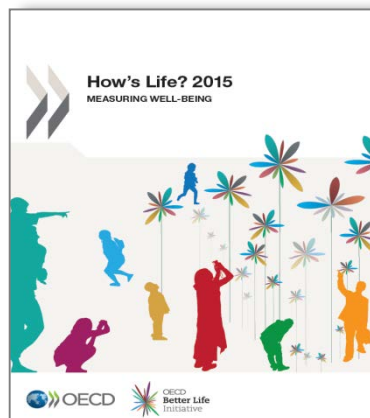
The OECD well-being framework
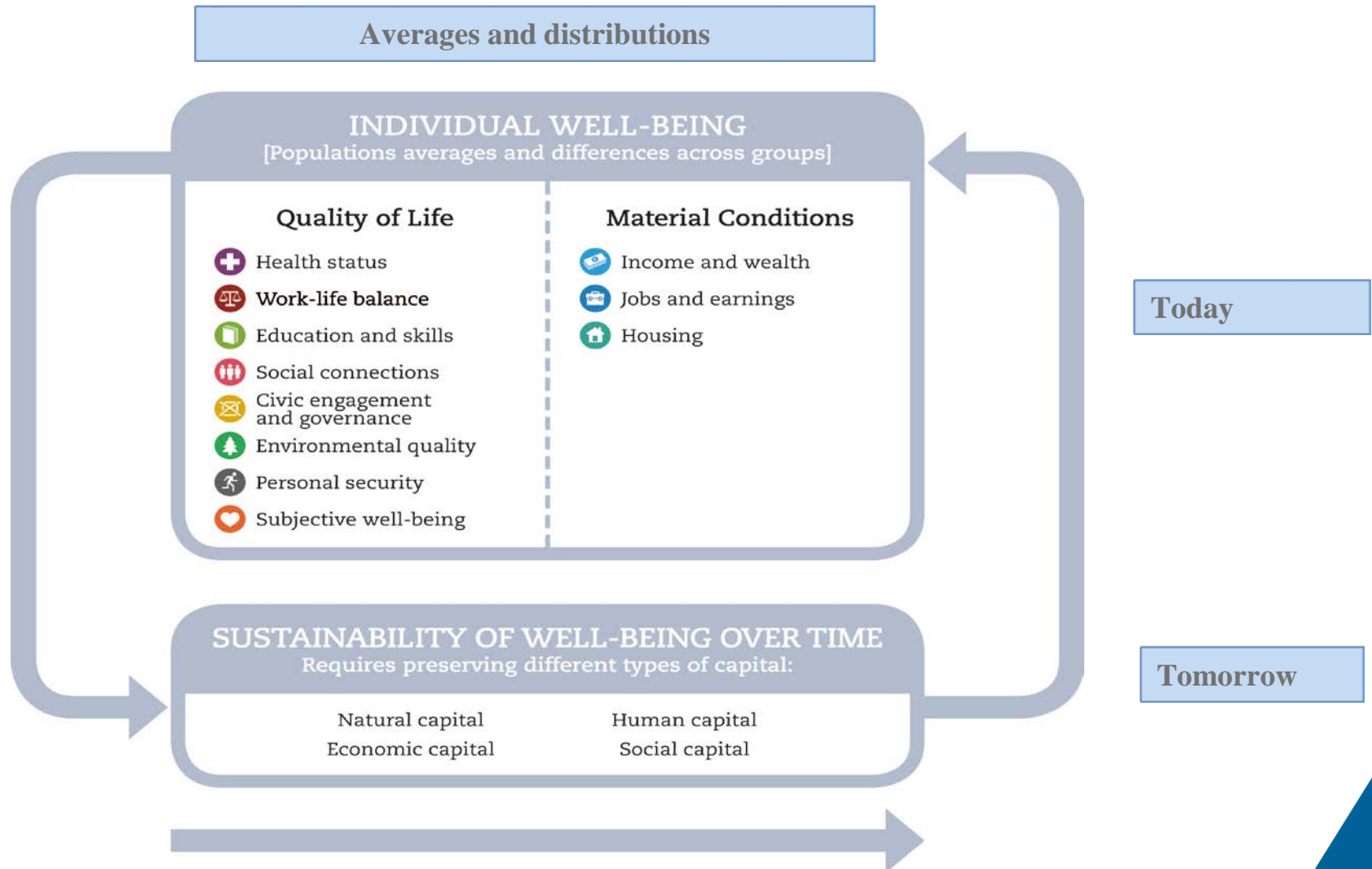
Well-being versus GDP : what's needed?

- Need to use and develop **complementary indicators** that capture various dimensions of quality of life and their distribution

- Importance of **granularity** (i.e. disaggregation by population groups) and **timeliness** (to inform on people's conditions in real time)

- Develop **satellite accounts for some well-being dimensions** (e.g. education; health; unpaid household services); and **micro-macro linkages**

- **Harness new sources of (big) data** (following strict protocols and standards to ensure quality)

Environment: how Green is our Growth?

- **OECD measurement work includes**:
  - Environmental and Resource Productivity
  - Maintaining the Natural Asset Base
  - Economic Opportunities

- **Based on the System of Environmental-Economic Accounting (SEEA)**
  - A framework for measuring interactions between the environment and the economy
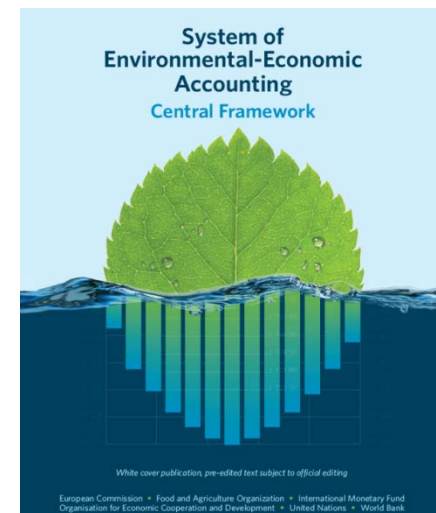
Assessing economic/environmental sustainability : what's needed ?

- Speed up implementation of SEEA **at industry level**

- Better **physical and monetary estimates** for environmental assets, depletion and deterioration

- Further work on **ecosystems accounting**

- More and better **use cases** of **SEEA**

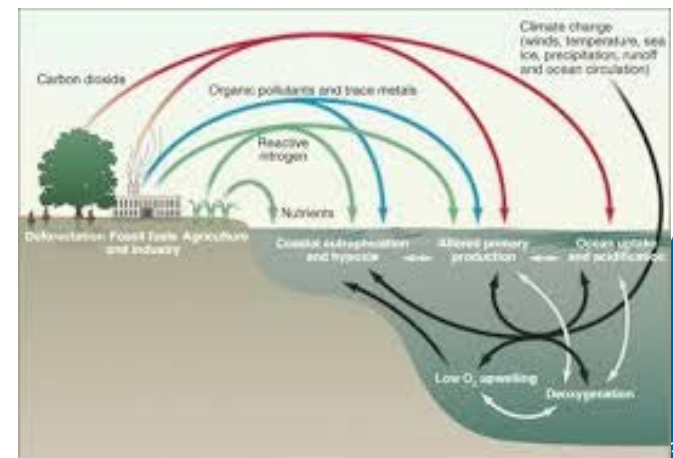# Trade off between measurability and importance for the environment

- ## Environmental assets
  - Mineral and energy res.
  - Land
  - Soil
  - Timber
  - Aquatic resources
  - Water

- ## Ecosystems
  - Atmosphere
  - Oceans
  - Forests

Conclusions:
How to move forward?

How to advance the Statistical Agenda in the years ahead

Case in point:

1. Some new economic and social realities may require **new measurement concepts**

   Measures of **well-being, sustainability, GVCs, digital economy?**

2. But *not everything that's new is good and not everything that's good is new* – often established approaches just require **new emphasis** and empirical support

   Household-related measures, inequality and poverty

   Digital economy?

3. **Implementing** what should have been long ago

   Full SNA **balance sheets**

How to advance the Statistical Agenda in the years ahead

Case in point:

4. Measurement efforts **beyond established boundaries** for analyses

   SEEA, **human capital, unpaid housework**

5. Embrace **smart data** where useful and **integrate and link data** from different sources for more **granular** and more **timely** policy uses

   Geospatial data
   Full use of **administrative records**
   Data from **social media**
   Integrate survey data and administrative records
   Link trade and business statistics; TiVA and jobs

A final word…

➢ **Sir Anthony Atkinson's** Fourth Angus Maddison Development Lecture, "**On Data, Development, and Distribution**" at the OECD on 7 October 2014

➢ *If you look through a keyhole, you only get a very partial perspective on what goes on inside the house. It's the same with statistics; the best we can do is to cross several perspectives to know more of what is going on inside the house.*

Thank you for your attention!
Paul.Schreyer@oecd.org