

WP 5 Satellite accounts: socio-economic indicators

Work package number	WP 5			Start date or starting events:	Month 1		
Work package title	Satellite accounts: socio-economic indicators						
Activity Type							
Beneficiary number	1	3	7				
Person-months per beneficiary	15	8	7				

Objectives

To provide accounts of socio-economic indicators that will match the inter-country database developed in WP3. For each country, it will contain various indicators of employment, including hours worked by various types of skill and associated wage cost; various type of investment (including tangible and intangible assets) and shares of (affiliates of) foreign firms in total sales and investment. The data will match the industry-level detail of the WIOD-database.

Description of work

Task 5.1: Update of the EU KLEMS database and extension of its coverage to WIOD countries not covered in EU KLEMS (partners involved are 1 and 7).

Steps to be taken are:

1. The update of the EU KLEMS database, the construction of which was funded under the 6th framework program (see www.euklems.com). This database, grounded in national accounts statistics, provides industry-level measures of output, inputs and productivity for the European Union countries, Japan, Australia, Canada, South Korea and the US, covering the period 1970-2005. In particular it contains detailed industry-level measures of output, capital (K), labor (L), energy (E), material (M) and services (S) inputs. Labor input is measured through hours worked and wages by various types of labor (including low/medium/high skilled) and capital input includes investment in three ICT-assets (including software) and five non-ICT assets. These data have been collected through the EU KLEMS consortium, led by the Groningen Growth and Development Centre at RUG (beneficiary 1).
2. Comparable databases need to be built for countries not covered in the EU KLEMS project. The major challenge will be to develop comparable statistics for China and India. Currently research projects to establish KLEM-type databases are going on within the framework of the World KLEMS project under aegis of Dale Jorgenson (Harvard), Bart van Ark (TCBE) and Marcel Timmer (RUG), building on prior experience in the ICPA-project in which Timmer also participated. This includes cooperation with Ren Ruoan (Beihang University), Jing Cao (Tsinghua University) and the China National Bureau of Statistics. A similar project is currently starting in India through the Indian Council of Research in International Economic Relations (ICRIER) in Delhi. Co-operation will also be established with the UN ECLAC in Santiago, who organized a workshop on KLEMS in March 2007, and are planning a project proposal to follow up with a range of KLEMS estimates, including Brazil and Mexico. This task will elaborate and integrate the envisaged results of these projects. The prospects for getting detailed industry-level for the other countries are more uncertain. Most likely the industry-level detail will differ over the proposed variables, with more detail in output and employment measures and less in capital. This will depend on available statistics from the national statistical institutes.

Task 5.2: Construction of harmonized indicators of intangible investment (this task will be carried out by partner 7)

3. In addition to investment in software, which is already covered through the KLEMS database, two other major areas of intangible investment will be included: innovative property (mainly scientific and non-scientific R&D) and firm competencies (company spending on reputation, human and organizational capital). These statistics are collected under a proposed FP7 project called Competitiveness, Innovation and Intangible Investment in Europe (COINVEST) for European countries and the US. As Bart van Ark (TCBE) is the deputy co-ordinator of this project, this database can be consistently integrated in the WIOD-database. TCBE will be responsible to extend this to cover as many other WIOD countries as possible, in particular China and India. In first instance measures on intangibles will cover the market economy of the countries. We will evaluate the possibility of a breakdown into manufacturing and services or even more industry-detail, depending on data availability (e.g. for scientific R&D more industry detail is feasible through the OECD R&D database).

Task 5.3: Construction of Foreign Direct Investment indicators (this task will mainly be done by partner 3)

4. Increasing Foreign Direct Investment is an important component of globalization not captured by the trade statistics to be constructed in WP2. The indicators will be mainly based on the OECD's Activities of Foreign Affiliates (AFA) and Foreign Affiliates Trade in Services (FATS) databases, which present detailed data on the performance of foreign affiliates in the manufacturing and services industry of OECD countries (inward and outward investment). The data indicate the increasing importance of foreign affiliates in the economies of host countries, particularly in production, employment, value added, research and development, imports and exports for more than 20 OECD countries.

Deliverables

D5.1 (month of delivery: 12): Update of EU KLEMS database

D5.2 (month of delivery: 12): Preliminary KLEMS database for WIOD countries not covered in EU KLEMS

D5.3 (month of delivery: 24): Intangibles investment indicators by broad sector for WIOD countries

D5.4 (month of delivery: 18): Foreign affiliates' indicators by broad sector for WIOD countries.

D5.5 (month of delivery: 36): Final satellite account: socio-economic indicators