

STRUCTURAL INDICATORS. Methodological notes		
<p><i>I GDP per capita and components.</i></p> <p><i>This section presents GDP per capita at current and constant prices, as well as the decomposition of the latter into employment rate, labour productivity and ratio of working-age population to total population.</i></p>		
INDICATOR	OBSERVATIONS	SOURCE
GDP per capita in current euro	GDP at current prices and purchasing power parities (PPPs) of the EU 27 per head of population. The population is obtained from the National Accounts. Series compiled using EUROSTAT figures from 1995 chained back to the growth rates of the series provided by the European Commission.	Annual Macroeconomic Database (AMECO) and EUROSTAT.
GDP per capita in constant euro	GDP at current prices and purchasing power parities (PPPs) of 2005 per head of population.	AMECO and EUROSTAT
Population 15-64/Total population	Ratio of working-age population to total population. Series obtained from labour force surveys.	AMECO and EUROSTAT
Employment rate	Ratio of persons aged 15 to 74 employed to the working-age population. Series obtained from labour force surveys.	AMECO and EUROSTAT
Labour productivity	Output per person employed. Calculated as GDP at constant prices and PPPs of 2005 divided by the number of persons employed according to the National Accounts.	AMECO and EUROSTAT

STRUCTURAL INDICATORS. Methodological notes (cont'd)		
<p><i>II. Total factor productivity and capital stock</i></p> <p><i>This section includes the two main components of labour productivity: the capital/labour ratio and total factor productivity (TFP) as proxied by the Solow residual. Also included a disaggregation of total capital stock into productive, public and residential capital stocks and two additional indicators of two variables regarded in the recent literature as important in determining the growth of total factor productivity: the stock of human capital and the stock of technological capital.</i></p>		
INDICATOR	OBSERVATIONS	SOURCE
Total factor productivity	The growth rate of this variable is proxied by the differential between the growth of real output (GDP) and the growth of primary inputs (capital and labour) weighted by their share of total income. This indicator is expressed in the form of an index with 1995=100	AMECO.
Capital stock per person employed	Ratio of total capital stock (including residential capital stock) to the number of employed according to the National Accounts. The total capital stock is net capital and is obtained by the perpetual inventory method based on the flows of gross fixed capital formation (GFCF) and of consumption of fixed capital (CFC), both in constant euro. The initial condition assumption is a capital/GDP ratio of 3 in 1960. Expressed in 2005 prices	AMECO.
Productive capital stock per person employed	The productive capital stock is calculated as the sum of public capital stock and private productive capital stock. The employment series is obtained from the National Accounts. (See Núñez and Pérez "Estimación de los stocks de capital productivo y residencial para España y la UE", Boletín Económico, Banco de España, october 2002)	Banco de España based on AMECO data.
Private productive capital stock per person employed	The capital stock is obtained by the perpetual inventory method, using private productive GFCF in constant euro as the flow. The assumptions made are initial conditions compatible with the total capital stock and with other stock and a depreciation rate of 8.5%.	Banco de España based on AMECO data.
Public capital stock per inhabitant	The capital stock is obtained by the perpetual inventory method, using public GFCF as the flow. The assumptions made are initial conditions compatible with the total capital stock and with other stock and a depreciation rate of 3.5%.	Banco de España based on AMECO data.

STRUCTURAL INDICATORS. Methodological notes (cont'd 2)		
<i>II. Total factor productivity and capital stock (cont'd)</i>		
INDICATOR	OBSERVATIONS	SOURCE
Residential capital stock per inhabitant	The capital stock is obtained by the perpetual inventory method, using residential GFCF as the flow. The assumptions made are initial conditions compatible with the total capital stock and with other stock and a depreciation rate of 2%.	Banco de España based on AMECO data.
Ratio of technological capital stock to GDP	Obtained by aggregating the flow of R+D spending by the economy. A depreciation rate of 15% is used. The deflator used is the GFCF in capital goods deflator. (See Puente and Pérez "Las series de stock de capital humano y tecnológico en los indicadores de convergencia real", Boletín Económico, Banco de España, december 2004)	Banco de España based on Eurostat data.
Human capital stock	This indicator can be interpreted as the equivalent percentage of the population of working age with a tertiary education. (See Puente and Pérez "Las series de stock de capital humano y tecnológico en los indicadores de convergencia real", Boletín Económico, Banco de España, december 2004)	Banco de España based on Eurostat data.
Quality-adjusted human capital stock	This indicator adjusts the previous human capital stock taking into account the relative quality of the education system in relation to the EU15. To make this adjustment the results of the OECD PISA (Programme for international student assessment) and public spending per student are taken into account.	Banco de España.

STRUCTURAL INDICATORS. Methodological notes (cont'd 3)*III. Other indicators*

This third group contains certain indicators that influence the stocks of physical, technological and human capital described in the previous section. These variables include R&D expenditure, use of patents, gross fixed capital formation, public expenditure on education and venture capital investment. Also included are some social spending indicators, which seek to present information on the distribution of economic well-being, the unemployment rate and the dependency ratio.

INDICATOR	OBSERVATIONS	SOURCE
R&D expenditure	Sum of public and private R&D expenditure as a percentage of current GDP.	Eurostat. Structural Indicators.
Public R&D expenditure	R&D expenditure by general government as a percentage of current GDP.	Eurostat .
Private R&D expenditure	Sum of R&D expenditure by firms, universities and private non-profit firms as a percentage of current GDP.	Eurostat.
Patent applications to the EPO	Patent applications to the European Patent Office (EPO) per million inhabitants	Eurostat. Structural Indicators.
Venture capital investment	El Venture capital is defined as the stock of resources used to finance firms having difficulty in gaining access to other sources of financing during their early or expansion stage. This indicator is expressed as a percentage of current GDP.	Eurostat. Structural Indicators.
Gross fixed capital formation	Total flow of gross fixed capital formation in the economy in constant euro as a percentage of constant GDP.	AMECO.
Private productive GFCF/GDP	The flow of private productive gross fixed capital formation in constant euro is calculated as total GFCF minus residential GFCF minus public GFCF. All the series included in this indicator are expressed in constant euro. (See Núñez and Pérez "Estimación de los stocks de capital productivo y residencial para España y la UE", Boletín Económico, Banco de España, october 2002)	Banco de España from AMECO data.
Public GFCF/GDP	To obtain the public GFCF used in this indicator, a deflator that combines the capital goods and other construction deflators is applied to public GFCF in current euro. GDP is expressed in constant euro.	Banco de España from Ameco data.

STRUCTURAL INDICATORS. Methodological notes (cont'd 4)		
<i>III. Other indicators (cont'd)</i>		
INDICATOR	OBSERVATIONS	SOURCE
Residential GFCF/GDP	Residential GFCF in constant euro is calculated as the investment in housing plus a certain portion of the investment in other products. GDP is expressed in constant euro.	Banco de España from AMECO data.
Non-residential construction/GDP	Non-residential construction GFCF in constant euro is calculated as investment in other construction plus a certain portion of the investment in other products. This indicator includes, among other items, all the investment in infrastructure by the whole economy. GDP is expressed in constant euro.	Banco de España from AMECO data.
Public expenditure on education/ population of age 16-64	Series obtained from Eurostat structural indicators and from OECD series (expressed as a percentage of GDP). The indicator obtained is redefined in terms of population and expressed in real terms using the public consumption deflator and in PPS of the last year represented in the tables for the GDP. It includes direct public expenditure at all educational levels and transfers of funds to households and firms.	Banco de España from Eurostat and OECD data.

STRUCTURAL INDICATORS. Methodological notes (cont'd 5)		
<i>III. Other indicators (cont'd)</i>		
INDICATOR	OBSERVATIONS	SOURCE
Life-long learning	Series obtained from the Eurostat structural indicators. It reflects the proportion of people aged 25-64 who have received some type of training in the four weeks prior to the Labour Force Survey.	EUROSTAT. Structural Indicators.
Higher studies	This indicator represents the proportion of people aged 25-39 who have completed higher studies.	EUROSTAT.
Social protection expenditure per inhabitant	Sum of spending on health care, social security and housing. The indicator and its components are presented in real terms using the public consumption deflator and in PPS of the last year represented in the tables for the GDP. The population used is that estimated in the National Accounts. It includes interventions by public or private bodies aimed at lightening the burden placed on households and individuals by certain risks or needs, called "functions", provided that there is no simultaneous and reciprocal consideration paid by the beneficiary.	Banco de España a based on the ESSPROS (European System of Integrated Social Protection Statistics) database.
Health care expenditure per inhabitant	Includes expenditure on the sickness-health care function (temporary disability and benefits in kind.)	Banco de España a based on the ESSPROS database.
Social benefits per inhabitant	Includes the household-children function income maintenance during maternity, family allowance per dependent child and other money or in-kind benefits), the disability function (disability pension and other money or in-kind benefits), the survivors function and the old-age function (retirement pensions and other benefits.)	Banco de España a based on the ESSPROS database.
Housing expenditure per inhabitant	Includes the housing function, which comprises social and other housing rental assistance and house purchase assistance.	Banco de España a based on the ESSPROS database.
Unemployment	The unemployed as a percentage of the labour force, both series being obtained from labour force surveys.	EUROSTAT.
Dependency ratio	People aged over 65 in proportion to the labour force.	EUROSTAT.