Global trends in GDP and Agriculture Value Added (1970-2013)

April 2015

Global Overview

Global Gross Domestic Product (GDP) reached \$75 trillion US dollars (USD) in 2013, 22 times its 1970 level of \$3.4 trillion. Adjusting for inflation, real GDP increased 3.6 times, from \$15.6 trillion to \$56 trillion, in 2005 constant USD. Real GDP grew at a global annual average of 3.0%, led by Asia (6.1%), Africa (3.5%), and Latin America (3.4%). It grew more slowly in developed regions: North America (2.9%), Europe (2.2%), and Other Developed Countries (2.7%), which consist of Australia, Japan and New Zealand.

200 Northern America 180 Europe 160 Other Developed* Asia & Pacific 140 Latin America & Caribbean 2005 USD (billions) 120 Africa 100 80 60 40 20 0 19370 19371 19373 19373 19373 19373 19383

Chart 1: GDP by region, constant 2005 USD (billions), 1970-2013

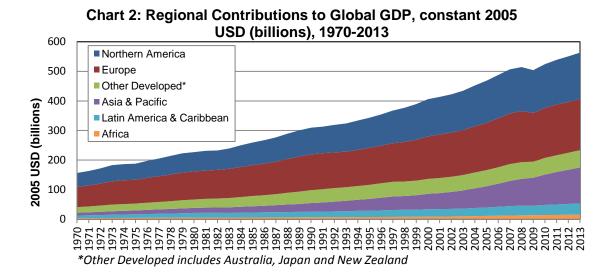
Table 1: GDP growth rate, annual average (based on constant 2005 prices)

	1971-	1981-	1991-	2001-	2011-	1971-
	1980	1990	2000	2010	2013	2013
Northern America	3.3%	3.3%	3.4%	1.7%	2.1%	2.9%
Europe	3.4%	2.4%	1.8%	1.6%	0.7%	2.2%
Other Developed*	4.2%	4.4%	1.4%	1.1%	1.2%	2.7%
Asia & Pacific	6.0%	5.7%	5.9%	7.0%	5.9%	6.1%
Latin America & Caribbean	6.0%	1.5%	3.2%	3.1%	3.2%	3.4%
Africa	4.1%	2.3%	2.4%	5.3%	3.1%	3.5%
Global	3.8%	3.2%	2.8%	2.6%	2.4%	3.0%

^{*}Other Developed includes Australia, Japan and New Zealand

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Although the three developed regions contributed to over half of global GDP from 1970 to 2013, their share shrank from 86.0% to 68.9% in 2013. By contrast, Asia and the Pacific share more than tripled from 6.1% to 21.6%, driven by population and productivity growth, the latter spurred by increases in investment.



Adjusting for population, real per capita GDP almost doubled from \$4,260 to \$7,896, driven largely by the 6-fold increase from \$486 to \$2,932 in Asia and the Pacific. Africa saw the smallest increase of less than 50%, with real per capital GDP rising from \$978 to \$1,402 (Table 2).

Table 2: Real Per Capita GDP, 2005 Constant US dollars

	1970	1980	1990	2000	2010	2011	2012	2013
Northern America	\$20,476	\$25,593	\$31,926	\$39,915	\$42,833	\$43,186	\$43,802	\$44,386
Europe	\$9,699	\$12,645	\$16,726	\$19,747	\$22,790	\$23,193	\$23,151	\$23,192
Other Developed*	\$15,748	\$21,251	\$30,657	\$33,904	\$36,594	\$36,599	\$37,143	\$37,744
Asia & Pacific	\$486	\$695	\$956	\$1,459	\$2,550	\$2,699	\$2,809	\$2,932
Latin America & Caribbean	\$3,087	\$4,359	\$4,139	\$4,793	\$5,739	\$5,912	\$6,015	\$6,099
Africa	\$978	\$1,114	\$1,061	\$1,050	\$1,377	\$1,356	\$1,390	\$1,402
Global	\$4,260	\$5,118	\$5,826	\$6,655	\$7,612	\$7,733	\$7,809	\$7,896

^{*}Other Developed includes Australia, Japan and New Zealand

Investment drives real per capita GDP growth

Investment in capital, measured by Gross Fixed Capital Formation (GFCF), was a key driver of GDP growth, rising from \$3.6 trillion (2005 USD) to \$13.2 trillion in the 44 years. The investment ratio, which measures spending on GFCF as a proportion of GDP, remained relatively stable at around 23% throughout the period.

Asia and the Pacific saw the highest increases in investment, with GFCF rising from \$0.2 trillion to \$4.2, and the investment ratio almost doubling from 17.9% to 34.5%. The investment intensity saw this region's contribution to global GFCF rise from 4.8% to

31.9%. In contrast, the investment ratio fell in all other regions, except Northern America (Table 3).

Table 3: Annual average Investment Ratio (GFCF share of GDP), by region

Annual average investment ratios	1970- 1979	1980- 1989	1990- 1999	2000- 2009	2010- 2013	1970- 2013
Northern America	0.18	0.19	0.19	0.22	0.22	0.19
Europe	0.25	0.23	0.21	0.21	0.21	0.22
Other Developed*	0.27	0.25	0.27	0.23	0.23	0.25
Asia & Pacific	0.21	0.24	0.27	0.29	0.27	0.26
Latin America & Caribbean	0.23	0.20	0.19	0.19	0.18	0.20
Africa	0.22	0.21	0.16	0.18	0.16	0.19
Global	0.23	0.22	0.22	0.23	0.22	0.22

^{*}Other Developed includes Australia, Japan and New Zealand

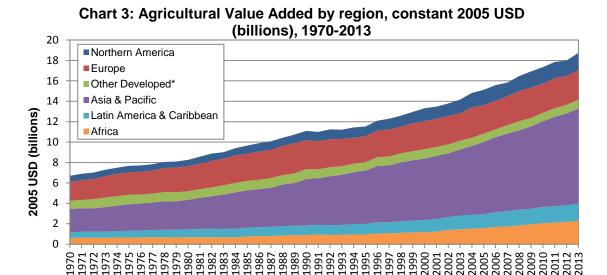
The investment ratio in Africa lagged behind all regions with even a relative decrease in the late 20th century. The investment ratios in Latin America and the Caribbean and in Europe also present downward trends. Northern America on the contrary saw its investment ratio rise from 0.18 in the 1970s to 0.22 at the beginning of the 21st century.

The declining contribution of Agriculture, Forestry and Fisheries

Between 1970 and 2013, real global value-added in the Agriculture, Forestry and Fisheries (AFF) sector rose from \$0.7 trillion to \$1.9 trillion, though the sector's contribution to real GDP fell from 4.3% to 3.3%. These measures, however, ignore the crucial role of the sector in the agro-industry value-chain, natural resource use, environmental impacts, and food security.

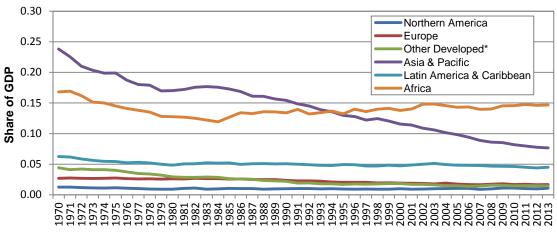
In 1970, the main contributors to global agriculture value added were Asia and the Pacific (34.0%) and Europe (27.5%). The Other Developed region closed the leading trio with a contribution of 12.4% to the global AFF value added. By 2013, Asia and the Pacific contributed 49.8% of the sector's global value added, while the shares for Europe and the Other Developed region fell significantly to 15.5% and 4.6%, respectively.

The global contributions of the other three regions remained stable or increased slightly from 1970 to 2013. Africa's contribution rose from 9.0% to 12.1%, Latin America and the Caribbean's rose from 8.3% to 9.0%, and North America's remained around 9% with year-to-year fluctuations including a decline to 7% or less in the late 1970s to mid 1980s.



*Other Developed includes Australia, Japan and New Zealand

Chart 4: Agricultural Value Added share of GDP by region (constant 2005 USD), 1970-2013



*Other Developed includes Australia, Japan and New Zealand

Despite the increasing contribution of Asia and the Pacific to Global AFF value-added, this sector's economic share shrank 23.8% in 1970 to 7.7% in 2013. This highlights, in part, the higher growth in other sectors of the region's economy. It may also reflect that this region had higher investment ratios not just in the overall economy, but also in the AFF sector. This will be explored further in FAO investment datasets currently under development.

Technical background

Gross Domestic Product (GDP), the most frequently quoted indicator of economic performance, is a comprehensive measure of the total gross value added generated within an economy over a specific time period. Real per capita GDP may, however, be a more a relevant indicator for cross-country comparisons in the context of economic development, given that it takes into account differences in population size, and can highlight to what extent growth in the economy tends to translate into an increase in productivity.

Gross fixed capital formation (GFCF) captures the net additions (acquisitions less disposals) to the stock of fixed capital assets such as machinery, transport equipment, infrastructures and buildings within an economy. It is a useful indicator to identify and monitor developments in investment trends over time, particularly as capital accumulation is a growth enhancing phenomenon as it increases the productive capacity of an economy, making large-scale production possible and promoting a greater degree of specialization. Differences in the investment ratios (measured by the GFCF share in Gross Domestic Product) across countries can explain differences in growth, and according to endogenous growth theory, can mirror different levels of economic development and catching-up processes.

Definitions and Acknowledgements

FAO's Global trends in Agricultural Investments measure the Gross Domestic Product (GDP), associated to two important components: the extent of the Gross Fixed Capital Formation (GFCF) and the Agricultural Value Added. The GDP per capita value is also provided.

Data are available both in Local currency and in US dollars, as well as in current prices and in constant 2005 prices.

It is important to point out that the data on Agricultural Value Added refer to the industry including agriculture, forestry and fishing, according to the International Standard Industrial Classification of All Economic Activities (*ISIC*).

The dataset coverage is global and includes more than 200 countries and territories. It consists of a complete and consistent set of time series of all UN Members States and other territories in the world for which National Accounts information is available. Data are available at national, sub-regional (e.g. South America) an regional (e.g. Americas) geographical scale.

The dataset covers more than forty years, from 1970 onward. The time frequency is annual.

The sources of Global trends in Agricultural Investments is the National Accounts Estimates of Main Aggregates of the United Nations Statistics Division (UNSD). Its contents are based on the official data reported to UNSD through the annual National Accounts Questionnaire,

supplemented with data estimates for any years and countries with incomplete or inconsistent information.

In order to better understand the structural changes and trends over time in different countries, sub-regions or regions, the dataset also provides important indicators. These are the *Investment Ratio of Gross Fixed Capital Formation as a share of GDP* and the *Agricultural Value-Added as a share of GDP*. These ratios are calculated in USD and are available both in current and in constant 2005 prices.

Contact information

For more information, or to require about concepts, methods or data quality, contact the Macroeconomics Statistics Team of FAO's Statistics Division (Macrostats@fao.org).