



Macroeconomic statistics

Global Trends in GDP, Agriculture Value Added, and Food-Processing Value Added (1970-2017)

June 2019

Highlights

Between 1970 and 2017, global GDP increased 4-fold, while agriculture* GDP increased slightly over 3-fold, adjusted for inflation. As the share of the GDP for high-income regions in the global total fell, it rose over 3.5-fold in Asia and the Pacific, driven in part by the region's investment in physical capital. Asia and the Pacific's contribution to world agriculture rose from 41 cents of every dollar of agriculture GDP generated in 1970 to over 57 cents in 2017. Across all regions, agriculture grew more slowly than other sectors, and shrank as a percentage of global GDP.

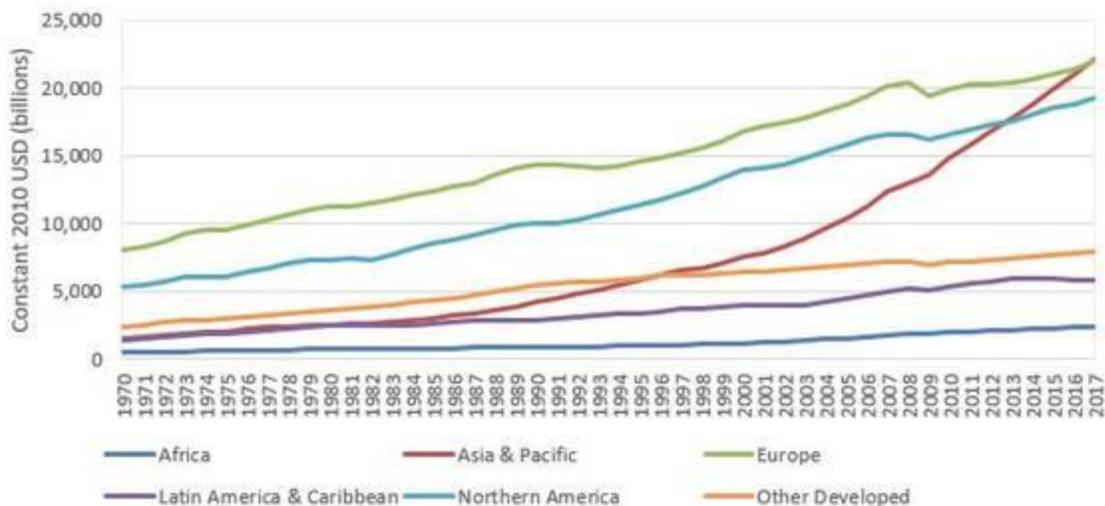
* The term "agriculture" includes forestry, and fishing and aquaculture, as per ISIC Rev. 4, A_01-03.

Global and regional overview

Real GDP increased 4-fold globally between 1970 and 2017, with increases highest in developing regions. Asia and the Pacific's contribution to global GDP rose over 3.5-fold in this period, while that of developed regions waned.

Global Gross Domestic Product (GDP) reached roughly \$80 trillion US dollars (USD) in 2017, 23 times its 1970 level of \$3.4 trillion. Adjusting for inflation, real GDP increased 4 times, from \$19 trillion to \$79.5 trillion, in 2010 constant USD. Real GDP grew at a global annual average of 3.1%, led by Asia (6%), Africa (3.5%), and Latin America (3.2%). It grew more slowly in developed regions: North America (2.8%), Europe (2.1%), and Other Developed Countries (2.6%), which consist of Australia, Japan and New Zealand.

Chart 1. GDP by region, constant 2010 US dollars (billions), 1970-2017



Source: United Nations Statistics Division and Food and Agriculture Organization

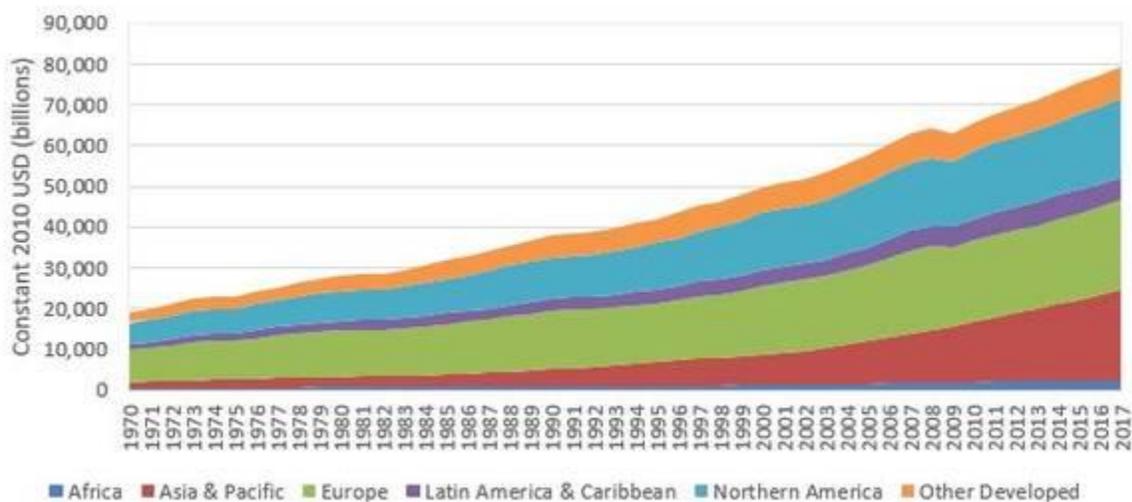
Table 1. Compound annual growth rate of GDP (based on constant 2010 prices), percentage

	1971-1980	1981-1990	1991-2000	2001-2010	2011-2017	1971-2017
Africa	4.12%	2.35%	2.50%	5.40%	2.88%	3.49%
Asia & Pacific	5.67%	5.34%	5.89%	7.00%	5.96%	5.97%
Europe	3.46%	2.47%	1.60%	1.72%	1.44%	2.18%
Latin America & Caribbean	6.17%	1.48%	3.07%	3.17%	1.38%	3.16%
Northern America	3.28%	3.27%	3.39%	1.76%	2.12%	2.80%
Other Developed	4.21%	4.29%	1.63%	1.10%	1.46%	2.61%
Global	3.9%	3.1%	2.8%	2.8%	2.76%	3.10%

Source: [United Nations Statistics Division](#) and [Food and Agriculture Organization](#)

Although the three regions contributed to over half of global GDP from 1970 to 2017, their share shrank from 82.5% to 61.7% in 2017. By contrast, Asia and the Pacific share rose over 3.5 fold from 7.7% to 27.9% (Chart 2).

Chart 2. Regional Contribution to Global GDP, constant 2010 USD (billions), 1970-2017



Source: United Nations Statistics Division and Food and Agriculture Organization

Adjusting for population, real per capita GDP more than doubled between 1970 to 2017 from roughly \$4,700 to \$10,500, driven largely by the 7-fold increase from \$720 to \$5,080 in Asia and the Pacific. Africa saw the smallest increase of 62%, with real per capita GDP rising from \$1,175 to \$1,910 (Table 2).

Table 2: Real Per Capita GDP, constant 2010 USD

	1970	1980	1990	2000	2010	2017
Africa	1,176.28	1,346.02	1,378.79	1,367.57	1,876.55	1,910.80
Asia & Pacific	722.33	1,006.05	1,378.12	2,096.39	3,648.17	5,079.77
Europe	8,556.94	11,261.03	19,824.29	23,027.88	26,868.04	29,484.88
Latin America & Caribbean	4,801.74	6,904.94	6,517.51	7,470.09	8,954.10	9,114.61
Northern America	22,874.94	28,626.48	35,745.60	44,655.71	48,446.74	53,267.84
Other Developed	19,749.81	26,460.80	37,677.59	42,656.57	46,077.45	50,474.49

Global	4,736	5,800	7,098	8,086	9,476	10,568
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Source: [United Nations Statistics Division](#) and [Food and Agriculture Organization](#)

Investment drives real per capita GDP growth

High investment growth in Asia and the Pacific led to its increased contribution to global GDP.

Investment in capital, measured by Gross Fixed Capital Formation (GFCF), was a key driver of GDP growth, increasing more than 4-fold in real terms from \$4.5 trillion to \$20 trillion in the 47 year period. Investment as a share of GDP (the investment ratio) remained relatively stable, between 22% and 25%, throughout the period. Asia and the Pacific saw the highest increase in investment, rising 33-fold from \$0.24 to \$7.8 trillion between 1970 and 2017, enlarging the region's share in global real investment from 5.3% to 39.3%. The investment ratio in Asia and the Pacific more than doubled from 16.3% to 35.6%. In contrast, the investment ratio fell in all other regions except Northern America (Table 3).

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

	1970 - 1979	1980 - 1989	1990 - 1999	2000 - 2009	2010 - 2017	1970 - 2017
Africa	0.27	0.23	0.19	0.20	0.24	0.23
Asia & Pacific	0.19	0.23	0.26	0.29	0.35	0.26
Europe	0.27	0.24	0.21	0.21	0.21	0.23
Latin America & Caribbean	0.22	0.19	0.18	0.18	0.20	0.20
Northern America	0.17	0.18	0.19	0.21	0.20	0.19
Other Developed	0.30	0.28	0.29	0.25	0.23	0.27
Global	0.20	0.23	0.22	0.23	0.25	0.22

Source: [United Nations Statistics Division](#) and [Food and Agriculture Organization](#)

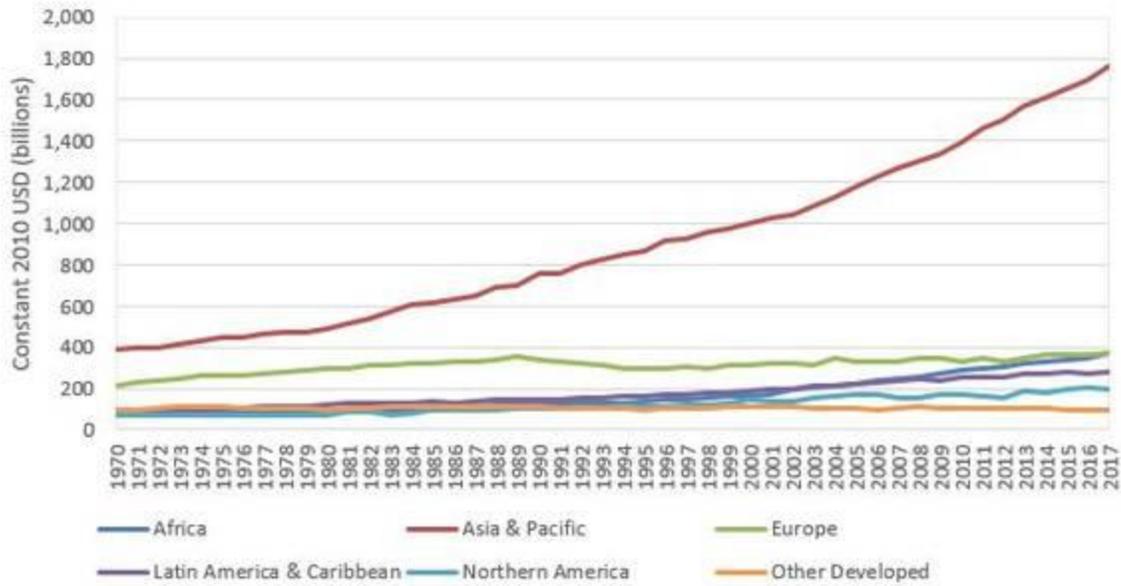
The declining contribution of agriculture to GDP

Globally and across regions, agriculture GDP grew more slowly than other sectors, leading to a reduced share of total GDP.

Between 1970 and 2017, global agriculture GDP rose from \$0.9 to \$3.0 trillion in real terms, though the sector's contribution to real GDP fell from 5% to 3.9%. This relative decline depends from a faster growth of non-agricultural activities compared to agriculture. The sector, however, plays a crucial role in the agro-industry

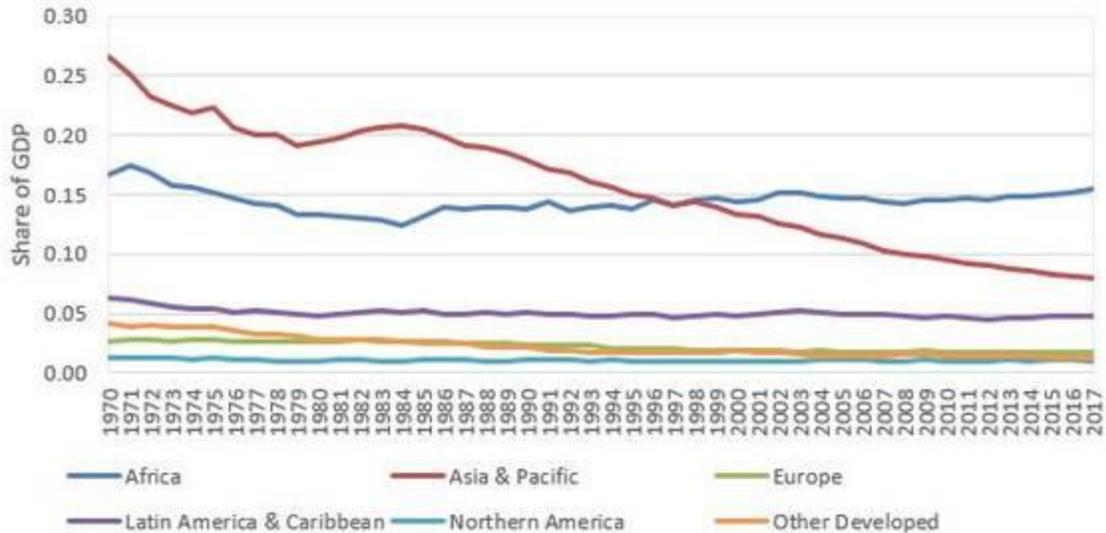
value-chain, in the use of natural resource. In turn, it affects the quality of the environment and food security beyond what is captured by its contribution to the overall GDP. In the 1970s, Asia and the Pacific (41.4%) and Europe (22.9%) were the main contributors to global agriculture GDP. The Other high-income region closed the leading trio with a contribution of 10.6%. By 2017, Asia and the Pacific contributed 56.4% of the sector's global GDP, while the shares for Europe and Other high-income region fell significantly to 12.0% and 3.1%, respectively. Other regions' contribution to global agriculture GDP saw more limited change from 1970 to 2017: Africa's rose from 8.5% to 12.1%; Latin America and the Caribbean's remained around 9.1%; and Northern America's remained between 5.7 and 7.5% (Chart 3).

Chart 3. Agriculture GDP by region, constant 2010 USD (billions), 1970-2017



Source: United Nations Statistics Division and Food and Agriculture Organization

Chart 4. Agriculture Value Added as a share of GDP by region, constant 2010 USD, 1970-2017



Source: United Nations Statistics Division and Food and Agriculture Organization

Despite the increasing contribution of Asia and the Pacific to global agriculture GDP, as expected the sector's relative contribution to the overall economy of the region shrank from 26.6% in 1970 to 7.9% in 2017 (Chart 4). This highlights the faster growth in other sectors of the region's economy.

A closer look agricultural GDP in the leading region of Asia and Pacific

China is by far the largest agricultural economy of Asia and Pacific but not necessarily always the fastest growing in agriculture. When comparing China, mainland to other major economies of Asia and Pacific, we can see that it does not always outpace its neighbors. It is also interesting to see how some of the other regions in Asia and the Pacific have accelerated or decelerated their growth through the decades.

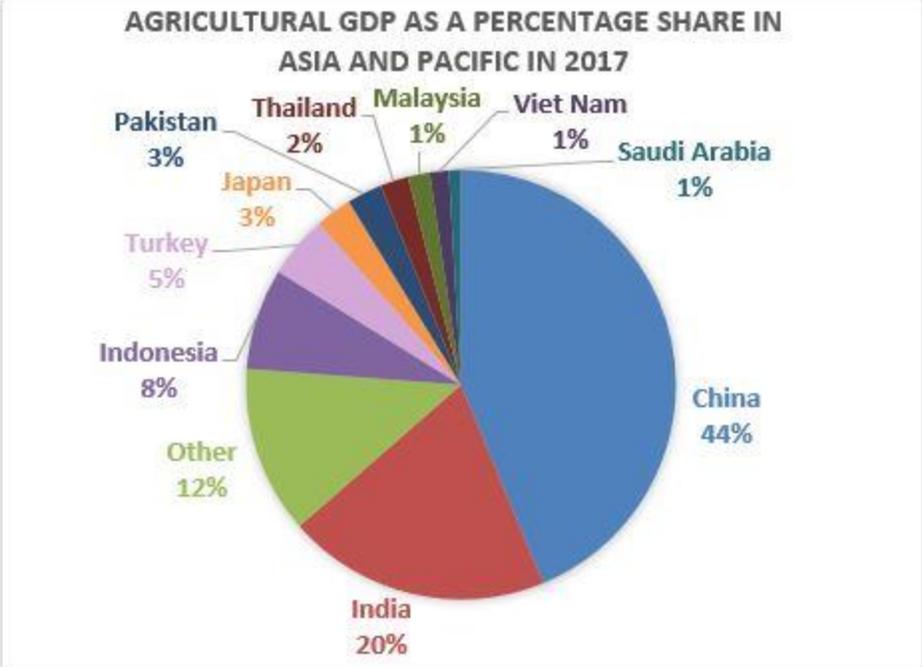
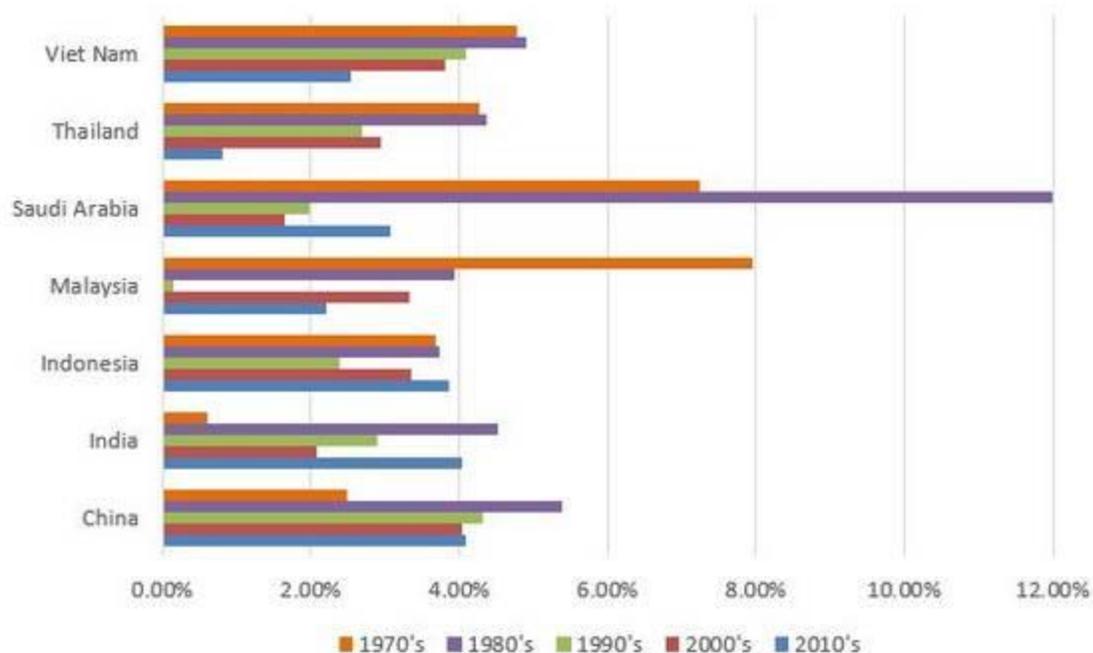


Chart 5. Average annual percentage growth of agricultural GDP by country, per decade



To take a closer look at the numbers we encourage you to visit our database at: <http://www.fao.org/faostat/en/#data/MK>

Technical background

Gross Domestic Product (GDP), the most frequently quoted indicator of economic performance, is a comprehensive measure of economic growth, as it measures the total value added generated within an economy over a specific time period. Value added (VA) is calculated as Output less Intermediate Consumption. In this article, Agriculture includes forestry and fishing; Agriculture GDP refers to value added in this combined sector.

To adjust for inflation, this article analyses phenomena in constant 2010 US dollars prices.

Developed regions include Europe, North America and Other Developed Countries.

Real per capita GDP in USD is an important economic indicator that enables cross-country comparisons, particularly in the context of economic development, as it takes into account differences in population size and growth, and can signal the extent to which economic growth reflects productivity increases.

Investment in physical capital is measured by gross fixed capital formation (GFCF), which 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 increases the overall productive capacity of an economy, making large-scale production possible and promoting a greater degree of specialization.

Definitions and acknowledgements

The [FAOSTAT Macro Indicators](#) database provides a selection of country-level macroeconomic indicators relating to total economy; agriculture, forestry and fishing (AFF); manufacturing (MAN); and manufacturing of food, beverage and tobacco products (FBT). It releases time series for a selection of National Accounts variables,

including GDP, GFCF, industry-level VA and gross output. The database also proposes additional indicators such as per capita GDP, year-on-year growth rates and measures of industry contribution to GDP.

Data are available in both local currency and in US dollars, as well as in current prices and in constant 2010 prices. The database follows the International Standard Industrial Classification of All Economic Activities (ISIC).

The territorial coverage consists of about 220 countries and territories, including former countries. FAO compiles aggregate values at regional and global levels. The time coverage is annual from 1970 to 2017 for series covering total economy, MAN, and AFF; and 1990 to 2015 for series on the agriculture sub-industry (Ag) and FBT.

All data relating to total economy, AFF, and MAN comes from the United Nations Statistics Division National Accounts Estimates of Main Aggregates (UNSD NAE) database, which consists of a complete and consistent set of time series of the main National Accounts (NA) aggregates of all UN Members States and other territories in the world for which National Accounts information is available. Series relating to agriculture are obtained from the OECD Annual National Accounts and UNSD National Accounts Official Country Data databases, while series on FBT comes from - in order of priority - from OECD Annual National Accounts and UNIDO INDSTAT2 databases.

The release calendar is the end of first quarter for the partial update on series on total economy, MAN, and AFF stemming from the UNSD NAE database, and the end of the third quarter as a final update on all series, including Ag and FBT related series.