



Monitoring the Philippine Economy Year-End Report for 2019

Project of Angelo King Institute

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Registering a 5.9 percent growth in 2019, the Philippine economy fell short of the full-year growth target of 6.0 to 6.5 percent due to budget delay, unfavorable weather disturbances, policy uncertainties, and international economic challenges.

Philippine economy registers slower growth amid internal and external economic challenges.

The Philippines realized a growth of 5.9 percent in 2019, which was slower than the previous year's 6.2 percent growth and was the lowest in 8 years, after the 3.7 percent growth in 2011. Due to various economic challenges such as budget impasse, election ban, unfavorable weather conditions, and trade tensions, the slower growth fell short in achieving the national government's revised full-year target range of 6.0 to 6.5 percent. Nevertheless, the Philippines remained as one of the fastest-growing economies in Asia, ranking third in the region, next to Vietnam (7.0 percent growth) and China (6.1 percent growth). On the demand side, domestic consumption accelerated, investments plunged, government spending slowed, and trade deficit narrowed. On the supply side, the service sector and agriculture sector strengthened, while industry sector weakened.

- **Major components of aggregate demand**
 - **Domestic consumption was the main engine of demand-side growth.** Household Final Consumption Expenditure (HFCE) in 2019 posted a growth of 5.8 percent year-on-year (y-o-y), which was slightly faster than 5.6 percent the previous year. According to the Philippine Statistics Authority (PSA)², the increase was caused by faster growth in most of HFCE components. Food and Non-alcoholic Beverages, accounting for more than 40 percent of HFCE, grew by 5.0 percent from 4.8 percent, y-o-y. Likewise, Clothing and Footwear (3.8 percent from -0.6 percent, y-o-y), Transport (4.9 percent from 1.4 percent, y-o-y), Recreation and culture (6.9 percent from 4.3 percent, y-o-y), Alcoholic beverages and Tobacco (-2.8 percent from -5.2 percent, y-o-y), Health (5.8 percent from 3.9 percent, y-o-y), and Communication (6.7 percent from 5.1 percent, y-o-y) contributed to faster HFCE growth. On the other hand, Education (7.9 percent from 13.8 percent, y-o-y), Housing, water, electricity, gas and other fuels (6.1 percent from 7.9 percent, y-o-y), Furnishings, household equipment and routine household maintenance (4.5 percent from 5.6 percent, y-o-y), Restaurants and hotels (6.5 percent from 7.0 percent, y-o-y), and Miscellaneous goods and services (8.3 percent from 8.5 percent, y-o-y) dampened HFCE growth. The overall increase in private consumption in 2019 may be attributable to the eased rates of inflation. Furthermore, personal remittances

¹ Report is based on latest available data as of March 15, 2020. For comments and questions, please email mitzie.conchada@dlsu.edu.ph

² <https://psa.gov.ph/nap-press-release/sector/Household%20Final%20Consumption>

increased by 3.9 percent, reaching a record high of US\$33.5 billion, higher than US\$32.2 billion the previous year. Remittances boosted private consumption, accounting for 9.3 percent of GDP in 2019³.

- **Gross domestic capital formation plunged to negative territory.**⁴ Domestic investment struggled during the year, as the component tumbled to a negative growth of 0.6 percent, down from a positive 13.9 percent the previous year. The tumble was contributed by the notable deceleration in Construction (9.2 percent from 15.1 percent, y-o-y) and negative growth in Durable Equipment (-5.6 percent from 13.4 percent, y-o-y). Moreover, Breeding Stocks and Orchard Development posted a slower growth of 3.6 percent from 4.8 percent, y-o-y, while Intellectual Property Products experienced an uptick of 24.1 percent growth from 23.9 percent, y-o-y.
- **Government spending slowed due to budget impasse and election ban at the beginning of the year.** Government final consumption expenditure displayed a growth of 10.5 percent, lower than the 12.8 percent growth the previous year. The significant slowdown is largely attributable to budget impasse that caused delays in the implementation of government programs and projects, and election ban that mainly affected infrastructure projects in the first half of 2019⁵. Nevertheless, the government ramped up its spending in the second half of the year. According to National Economic and Development Authority (NEDA)⁶, public construction increased by 34 percent in Q4 2019, with the completion of projects of the Department of Public Works and Highways, payment for the acquisition of right-of-way, and construction of government buildings.
- **Trade deficit narrowed amid decline in imports.** In full-year 2019, imports continued to decelerate. Exports and imports realized slower growths of 3.2 percent and 2.1 percent, respectively, which are remarkably lower than 11.5 percent and 14.5 percent achieved the previous year. As a result, 2019 registered a narrowed trade deficit of US\$37.05 billion, a 14.9 percent contraction from the previous year's US\$43.53 billion deficit⁷. The slowdown in imports was due to non-passage of the 2019 budget, which limited infrastructure spending. Previously, a significant portion of the imports was fueled by infrastructure spending. Nonetheless, economists⁸ forecast exports to improve and imports to recuperate for the new year ahead, given the phase one trade deal signed between the US and China, but wary of the disruptive consequences the novel coronavirus pandemic could bring to the global supply chain. NEDA⁹ emphasizes the importance of heightening efforts against downside risks brought by health- and climate-related hazards that can affect the trade sector.

³ <http://www.bsp.gov.ph/publications/media.asp?id=5290&yr=2020>

⁴ <https://psa.gov.ph/nap-press-release/sector/Capital%20Formation>

⁵ <http://www.neda.gov.ph/statement-of-socioeconomic-planning-secretary-ernesto-m-pernia-at-the-press-conference-on-the-philippine-economic-performance-for-the-fourth-quarter-and-full-year-of-2019/>

⁶ <http://www.neda.gov.ph/statement-of-socioeconomic-planning-secretary-ernesto-m-pernia-at-the-press-conference-on-the-philippine-economic-performance-for-the-fourth-quarter-and-full-year-of-2019/>

⁷ http://www.psa.gov.ph/system/files/PH-IMTS_PR%20Stat%27%20Tables_Dec%202019_02112020mx.pdf

⁸ <https://www.bworldonline.com/trade-gap-narrows-in-december/>

⁹ <http://www.neda.gov.ph/govt-should-step-up-trade-efforts-amid-health-and-climate-threats-neda/>

- **Major components of aggregate supply**

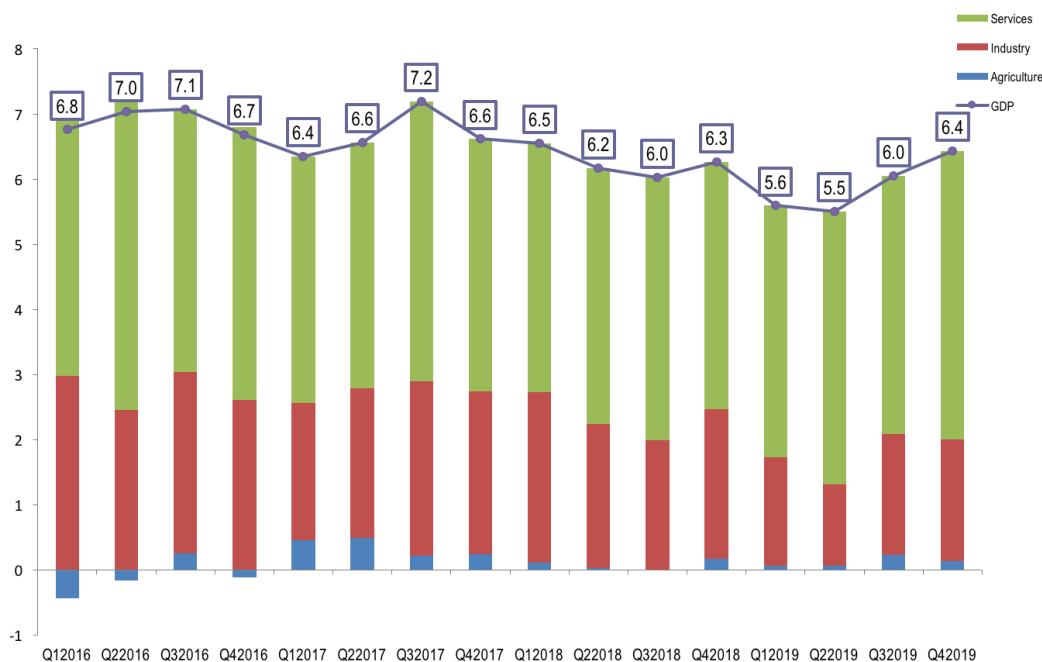
In this report, we present results from an alternative to the “traditional” (TRAD) method of decomposing growth of GDP in constant prices into sector contributions. This alternative method is a “generalized” (GEN) growth decomposition that applies to GDP in constant prices (e.g., in the Philippines) and to GDP in chained prices (e.g., in Canada and the US). While TRAD recognizes only “quantity” growth as the source of a sector’s contribution to GDP growth, GEN posits that a sector’s contribution comes from “quantity” growth and from “real price” growth where this price is, by definition, the ratio of a sector’s deflator to the overall GDP deflator. The GDP deflator as the common denominator of the above ratio makes real GDP the numeraire and, thus, this ratio is the relative price or exchange value of the GDP of a sector in “GDP units,” i.e., the “real price” of a sector’s GDP. Therefore, a sector’s positive “quantity” growth contribution will be diminished if accompanied by a negative “real price” growth of the same sector that may even result in a negative net contribution by the sector to GDP growth. On the other hand, a sector’s positive “quantity” growth contribution will be enhanced if accompanied by a positive “real price” growth (see Table 3).¹⁰

- **Services sector retained its position as the key driver for supply-side growth.** The sector grew by 7.1 percent growth from 6.8 percent, y-o-y, and maintained its position as the highest contributor to GDP growth, with 4.12 percentage points from positive quantity and real price growth (see Table 3). The acceleration was caused by the improved performance of various sub-sectors, namely Transport Communications and Storage (6.7 percent from 5.4 percent, y-o-y), Trade and Repair of Motor Vehicles Motorcycles Personal (8.0 percent from 6.0 percent, y-o-y), and Financial Intermediation (10.4 percent from 7.2 percent, y-o-y). Meanwhile, the Real Estate, Renting and Business Activities (3.7 percent from 4.7 percent, y-o-y), Public Administration and Defense (10.3 percent from 15.2 percent, y-o-y), and Other Services (6.1 percent from 7.7 percent, y-o-y) displayed lackluster growth.
- **Industry sector experienced lethargic growth.** The industry sector registered a growth of 4.9 percent, slower than the 6.7 percent the previous year. The sector contributed 1.66 percentage points to GDP growth (see Table 3). The deceleration of industry sector growth can be explained by the sustained slowdown in Manufacturing (3.8 percent from 4.9 percent, y-o-y), which was the lowest growth registered by the sub-sector since 2011. Nevertheless, it still provided the highest contribution in the sector with 0.88 percentage points to GDP growth. Additionally, Construction posted a slower growth (7.7 percent from 14.9 percent, y-o-y) but was offset by faster growth in Mining and Quarrying (5.9 percent from 1.3 percent, y-o-y) and Electricity Gas and Water Supply (6.5 percent from 5.5 percent, y-o-y).

¹⁰ See the footnote to Table 3 for the source of the GDP growth contributions.

- Agriculture sector experienced buoyant growth.** The agriculture sector posted a growth of 1.5 percent, better than the 0.9 percent the previous year. The sector contributed to GDP growth by 0.12 percentage points (see Table 3). Both sub-sectors of Agriculture and Forestry (1.3 percent from 1.1 percent, y-o-y) and Fishing (2.5 percent from -0.2 percent, y-o-y) exhibited improved performances. Favorable weather conditions allowed better fish catch and more fishing trips. While agriculture sub-sectors expanded compared to the previous year, full potential was not reached, attributable to the El Niño phenomenon in the first half of 2019. There were significant declines in corn, sugar, and banana due to delayed planting and harvesting. Furthermore, livestock growth was restrained, following the stringent implementation and monitoring of movements of live animals across provinces to avoid the spread of the African Swine Fever.¹¹

Figure 1. Quantity Growth Contributions to GDP growth (y-o-y, %) from Aggregate Supply



Source: Author's calculations of PGE* based on data in Table 3 below.

¹¹ <http://www.neda.gov.ph/statement-of-socioeconomic-planning-secretary-ernesto-m-pernia-at-the-press-conference-on-the-philippine-economic-performance-for-the-fourth-quarter-and-full-year-of-2019/>

Challenges facing the economy

- **The COVID-19 outbreak may adversely affect the economy on a global scale¹².** In early January 2020, a novel coronavirus disease, named COVID-19, was first identified in Wuhan, People's Republic of China (PRC). While the fatality rate of COVID-19 is within the range of 1.0 percent to 3.4 percent, significantly lower than fatality rates of other coronaviruses such as SARS (10.0 percent) and MERS (34.4 percent), its transmission has been exponential. By February 2020, COVID-19 had infected 85,403 people in 55 countries and caused 2,924 deaths. As COVID-19 progressed from an outbreak to epidemic and to pandemic, numerous countries have declared states of calamity to prevent further spreading of the disease. In March 17, Enhanced Community Quarantine was implemented in the whole of Luzon region limiting the movement of people except for essential services. Consequently, economic activities have been strained or disrupted in various sectors. These include a sharp but temporary decrease in domestic consumption, contraction in investments, adverse health effects, decline in tourism and business travel, and supply-side disruptions to production and trade. Given that the Philippines has strong trade and production linkages with the PRC, the Philippine economy is forecasted to experience significant losses. The Philippines may experience up to -1.7 percent growth contraction in GDP. Nonetheless, the magnitude of the impact will depend on how the outbreak would progress, which remains highly uncertain.
- **Unfavorable economic factors may serve as adversities to the Philippine economy.** External factors such as (a) forecasts of weaker global growth, (b) geopolitical tensions, (c) persisting US-China trade tensions serve as hindrances to the Philippine economy. In addition, internal factors such as the (a) sluggish agriculture and industry outputs, (b) security risks, (c) capacity of the government to adopt technological advancements, (d) lack of competition in key sectors, (e) difficulty in the acquisition of right-of-way, (f) delays in procurement (g) skills shortage, and (h) natural disasters challenge the resiliency of the domestic financial system.
- **Weather disturbances act as a threat to the Philippine economy.** Unforeseen inclement weather conditions, natural disasters, and the like interrupt agricultural activities in the country. These harsh conditions may aggravate poverty level and further threaten food security, especially the poor Filipinos. Infrastructural improvements are deemed necessary to augment agriculture sector's resiliency.

¹² <http://dx.doi.org/10.22617/BRF200096>

Other economic news

- **Peso-dollar exchange rate begins to appreciate**¹³. Based on monthly averages in 2019, the peso strengthened by 1.67 percent to ₱51.80/US\$1, from the previous 2018 average of ₱52.66/US\$1. Following series of peso-dollar depreciation, exchange rate commenced to appreciate in 2019, attributed to favorable domestic inflation and dovish stance of the US Federal Reserve. Sustained inflows from overseas Filipino remittances, foreign direct investments, BPO receipts, adequate level of the country's Gross International Reserves provided support to the peso.
- **Stock market reports rising PSEi**. PSEi reported a rise of 2.1 percent with an average index points of 7,905.47, which was higher than the average index points of 7,745.00 the previous year. The PSEi peaked at 8,365.29 index points on July 15 and hit a low of 7,475.16 on May 16¹⁴. Several factors weighed on the main index, namely, BSP's easing monetary policy stance amid improvement in domestic inflation environment, optimism over easing trade tensions between US and China, upbeat US stock markets, and dovish outlook for both US Federal Reserve. However, the delay in ratification of the 2019 national budget, impeachment case of US President Donald Trump, concerns over global economic slowdown, and persistent geopolitical tensions contributed to the moderation of the positive economic impacts on the main index in 2019.
- **Inflation is well within the government target**¹⁵. Inflation in 2019 had an average headline value of 2.5 percent, notably lower than the 5.2 percent average in 2018. The inflation rate continuously fell from the beginning of the year, reaching its lowest point in October with a rate of 0.8 percent, lowest since May 2016. The reported average inflation settled within the government's target range of 2.0 to 4.0 percent. The favorable domestic inflation environment was mainly due to decreases in both food (1.8 percent from 6.6 percent, y-o-y) and non-food (2.4 percent from 3.4 percent, y-o-y) price levels, resulting from (a) decline in rice prices due to by implementation of the rice tariffication law, (b) decrease in other food prices, (c) mitigation measures set by the Department of Agriculture against El Niño, (d) downward pressure in utility prices of electricity, gas, and other fuels, (e) easing global crude oil prices, and (f) lower transport inflation due to decreased domestic airfare prices. Average inflation for 2020 and 2021 are forecasted to be at 2.9 percent and 3.1 percent, respectively¹⁶.

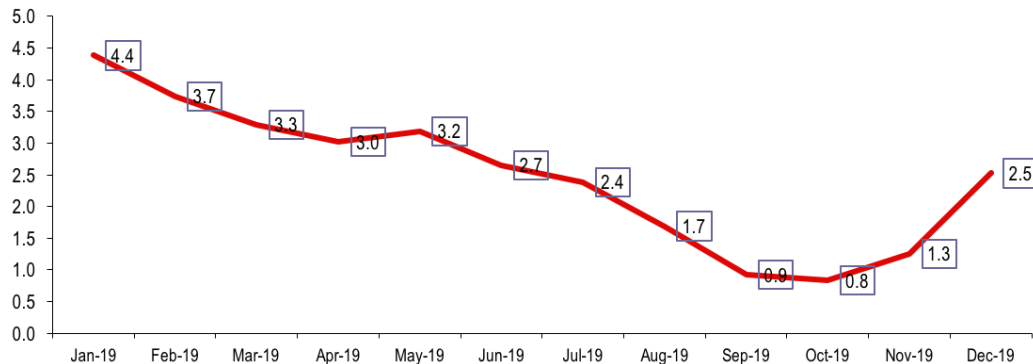
¹³ http://www.bsp.gov.ph/statistics/spei_new/tab12_pus.htm

¹⁴ <https://finance.yahoo.com/quote/PSEI.PS/history?period1=1546300800&period2=1577750400&interval=1d&filter=history&frequency=1d>

¹⁵ <http://www.neda.gov.ph/2019-full-year-inflation-settles-within-govt-target/>

¹⁶ http://www.bsp.gov.ph/downloads/Publications/2019/IR4qtr_2019.pdf

Figure 2. Consumer price index (y-o-y, %)



Source: Graph prepared by author based on Philippine Statistics Authority data.

- Full-year economic growth is 5.9 percent, slightly below the lower-bound of the 2019 target.** The Philippine economy attained the slowest full-year growth in eight years, falling below the government's target range of 6.0 percent to 6.5 percent. But it remained as one of the fastest-growing economies in Asia, ranking third in the region, next to Vietnam (7.0 percent growth) and China (6.1 percent growth)¹⁷. According to NEDA¹⁸, the budget impasse, coupled with the election ban at the start of 2019 adversely impacted the national economy. Delayed implementation of government projects and programs hindered the economy from reaching its full potential. Nevertheless, the Congress and the Department of Budget and Management guaranteed the timely passage of the 2020 General Appropriations Act, and approved the validity extension of the 2019 fiscal program until the end of 2020.
- Consumer outlook weakens but remains optimistic.**¹⁹ Overall confidence index (CI) for the final quarter of 2019 was recorded at 1.3 percent, lower than 4.6 percent the previous quarter, but remarkably higher than -22.5 percent the previous year. The less optimistic sentiment was due to expectations of (a) higher commodity prices, (b) minimal or no increase in salary, (c) increase in household expenses, and (d) high unemployment rate. The outlook a quarter ahead seems steady as the CI declined by 0.1 percentage point only from the previous quarter's survey. However, in the year ahead the outlook is less optimistic as the CI declined to 26.4 percent from 29.8 percent, quarter-on-quarter.
- Business outlook strengthens**²⁰. Overall confidence index (CI) increased to 40.2 percent from 37.3 percent the previous quarter. The improved sentiment was due to (a) higher consumer demand during the holiday and harvest seasons, (b) increase in sales, orders, and projects, (c) better macroeconomic conditions, (d) accelerated government expenditure, and (e) business expansion. However, CI is expected to weaken in the next quarter due to expectations of (a) lower consumer demand after the holiday and harvest seasons, (b) deceleration in orders and sales, (c) stiffer competition, and (d) other factors such as rising prices, concerns over the African Swine Flu, and fishing ban period.

¹⁷ <https://www.manilatimes.net/2020/01/23/second-headline/economic-growth-in-2019-slowest-in-8-years-psa/676724/>

¹⁸ <http://www.neda.gov.ph/statement-of-socioeconomic-planning-secretary-ernesto-m-pernia-at-the-press-conference-on-the-philippine-economic-performance-for-the-fourth-quarter-and-full-year-of-2019/>

¹⁹ http://www.bsp.gov.ph/downloads/Publications/2019/CES_4qtr2019.pdf

²⁰ http://www.bsp.gov.ph/downloads/Publications/2019/BES_4qtr2019.pdf

- **Philippine unemployment rate decreases further in 2019²¹.** Unemployment rate in the Philippines decreased to 5.1 percent from 5.3 percent the previous year. Services sector, with a share of 58.0 percent, accounted for over half of the total employed population. In addition, agriculture sector and industry sector comprised of 22.9 percent and 19.1 percent, respectively.
- **Poverty rate in the Philippines is forecasted to decline in the upcoming years²².** According to World Bank (WB), poverty rate decreased to 20.8 percent in 2019 from 26.0 percent in 2015, as a result of eased inflation, improved labor market conditions, and increased income. A sustained poverty reduction is expected in 2020 and 2021 with rates of 19.7 percent and 18.7 percent, respectively.
- **The Philippine economy is expected to grow by 6.1 percent in 2020²³.** The WB reported, *“in the short term, fast tracking the implementation of recently approved game-changing reforms would help to achieve inclusive growth, and in the long term, promoting competition to generate quality jobs will enhance the impact of growth on poverty reduction in the Philippines.”* WB further elaborates that a weak global economic environment and a slow recovery in public investments may hinder the Philippine economy from achieving its growth target.
- **Southeast Asian (SEA) Games bolsters Central Luzon’s tourism and economy²⁴.** Last November 30 to December 11, the Philippines hosted the 30th SEA Games at Pampanga, San Fernando City. With more than 12,000 athletes and other members of the SEA Games delegation arriving to the country via Clark International Airport, the region experienced an upsurge in tourist volume. Prior to the SEA Games, the government improved infrastructures in Central Luzon under the *Build Build Build* program. The modernization of the Clark International Airport is expected to attract businessmen and tourists. In fact, the Department of Tourism recorded 2.4 million tourist arrivals during the first seven months of 2019, and forecasted some 12 million passengers increase per year. Likewise, Clark Freeport and Subic Freeport, where some sporting events were held, experienced a boost in the tourism industry. In the first ten months, 15 cruise ship arrivals in Subic brought 38,985 visitors and generated expenditures of approximately P8.07 million. The Philippine Sports Tourism Awards (PSTA) recognized the Clark Freeport as “sports tourism destination of the year” for hosting more than 200 events that included fun runs, marathons, triathlons, duathlons, football, baseball, cycling, and other sports-related activities. In addition, Clark was selected as a preferred destination for Meetings, Incentives, Conferences, and Exhibits (MICE). With continuous implementation of massive infrastructure projects, the government foresees stimulated business activities in the region.

²¹ <http://www.psa.gov.ph/content/preliminary-results-2019-annual-estimates-labor-force-survey-lfs>

²² <https://www.worldbank.org/en/country/philippines/publication/philippines-economic-update-october-2019-edition>

²³ <https://www.worldbank.org/en/country/philippines/publication/philippines-economic-update-october-2019-edition>

²⁴ <https://www.pna.gov.ph/articles/1089538>



Table 1. Philippine Economic Indicators

Philippines Economic Data												
Monthly Leading Indicators	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Industrial Production (y-o-y, %)	-4.2	-9.3	-8.8	-14.0	-7.8	-9.0	-8.7	-12.5	-6.4	-5.0	-7.9	-10.1
Consumer Price Index (y-o-y, %)	4.4	3.7	3.3	3.0	3.2	2.7	2.4	1.7	0.9	0.8	1.3	2.5
Retail Sales (y-o-y, %)	-0.5	0.3	-1.8	-6.5	1.5	-1.4	-2.9	-5.6	-2.4	-0.8	-3.9	...
Exports (y-o-y, %)	-6.7	-0.1	-1.8	1.0	1.0	3.3	3.5	0.8	-1.2	0.3	-0.4	21.6
Imports (y-o-y, %)	3.6	2.6	7.8	-1.9	-5.2	-10.4	-4.2	-8.8	-10.5	-10.8	-8.0	-7.6
Trade Balance, US\$ million	-3,920	-2,744	-3,100	-3,469	-3,298	-2,370	-3,393	-2,679	-3,035	-3,240	-3,323	-2,469
Total Reserves (less gold), US\$ billion	74	74	75	76	77	77	77	78	78	78	78	80
Policy Rate	4.75	4.75	4.75	4.75	4.5	4.5	4.5	4.25	4	4	4	4
Fiscal Balance (million pesos)	44,537	-76,373	-58,409	86,872	2,564	-41,838	-75,296	-2,488	-178,557	-49,262	-60,883	...
Quarterly/Annual Economic Indicators	2014	2015	2016	2017	1Q2018	2Q2018	3Q2018	4Q2018	1Q2019	2Q2019	3Q2019	4Q2019
Real GDP (y-o-y, %)	6.1	6.1	6.9	6.7	6.5	6.2	6.0	6.3	5.6	5.5	6.0	6.4
- Private Consumption	5.6	6.3	7.1	5.9	5.6	6.0	5.3	5.3	6.1	5.5	5.9	5.6
- Government Consumption	3.3	7.6	9.0	6.2	13.6	11.9	14.3	12.6	7.4	7.3	9.6	18.7
- Gross Capital Fixed Formation	4.2	18.4	24.6	9.4	10.3	20.0	19.6	4.9	8.0	-8.5	-2.6	0.4
Current Account (% of GDP)	4.4	2.9	-0.4	-0.7	-0.4	-4	-2.1	-2.6	-2.1	-0.2	0.8	...
Financial Account (US\$ million)	10,084	2,523	175	-2,798	-816	-1,627	-1,793	-3,768	-3,279	-329	-848	...
- Net Direct Investments, US\$ million	789	-122	-5,883	-6,952	-1,025	-2,672	-1,374	-797	-1,075	-677	-748	...
- Net Portfolio Investments, US\$ million	2,460	4,757	1,480	2,454	1,612	1,021	-224	-1,275	-695	-1,176	895	...
Overall BOP position (US\$, million)	-2,858	2,616	-1,038	-863	-1,227	-2,030	-1,879	2,830	3,797	991	778	...
Unemployment rate	6.8	6.0	5.1	5.7	5.3	5.4	5.1	5.1	5.2	5.1	5.1	5.1
Others	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Overseas Filipinos' Remittances (US\$, million)	2,484	2,301	2,514	2,441	2,609	2,290	2,581	2,589	2,379	2,671	2,372	2,902
... = not available												

Source: Bangko Sentral ng Pilipinas, Philippine Statistics Authority, Asian Development Bank.



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Table 2. Level of Philippine GDP, 2018 – 2019

	Nominal GDP		Real GDP	
	(million current pesos)		(million constant pesos)	
	2018	2019	2018	2019
Agriculture	1,617,910	1,554,172	745,781	756,960
Agriculture and Forestry	1,403,040	1,326,173	623,765	631,870
Fishing	214,869	227,999	122,016	125,090
Industry	5,358,045	5,638,399	3,142,846	3,295,786
Mining and Quarrying	146,185	144,220	85,864	90,941
Manufacturing	3,320,346	3,404,491	2,145,011	2,226,003
Construction	1,347,556	1,502,135	618,294	666,168
Electricity Gas and Water Supply	543,958	587,552	293,677	312,674
Services	10,450,248	11,420,474	5,318,262	5,697,852
Transport Communication and Storage	1,030,521	1,100,189	670,803	715,854
Trade and Repair of Motor Vehicles Motorcycles Personal	3,229,363	3,523,602	1,554,868	1,679,977
Financial Intermediation	1,461,025	1,652,726	681,005	751,626
Real Estate Renting & Bus. Actvt	2,227,075	2,366,246	1,046,693	1,085,570
Public Administration & Defense: Compulsory Social Securi	787,464	907,875	398,859	439,952
Other Services	1,714,800	1,869,835	966,034	1,024,873
Sum = GDP	17,426,202	18,613,044	9,206,889	9,750,598

Source: Philippine Statistics Authority



Table 3. Industry Contributions to Philippine GDP Growth, 2018 – 2019

	TRAD	GEAD		GEAD
	GDP Growth			GDP Growth
	PGE*	PGE*	PCE*	PGE* + PCE*
	(percent)	(percent)	(percent)	(percent)
		(1)	(2)	(1)+(2)
GDP Growth	5.91	5.91	0.00	5.91
Industry Growth Contribution				
Agriculture	0.12	0.12	1.61	1.73
Agriculture and Forestry	0.09	0.09	1.66	1.75
Fishing	0.03	0.03	-0.05	-0.02
Industry	1.66	1.66	-3.23	-1.57
Mining and Quarrying	0.06	0.06	-0.10	-0.04
Manufacturing	0.88	0.88	-4.00	-3.12
Construction	0.52	0.52	0.95	1.47
Electricity Gas and Water Supply	0.21	0.21	-0.09	0.12
Services	4.12	4.12	1.62	5.75
Transport Communication and Storage	0.49	0.49	-1.51	-1.02
Trade and Repair of Motor Vehicles Motorcycles Personal	1.36	1.36	1.38	2.74
Financial Intermediation	0.77	0.77	0.72	1.48
Real Estate Renting & Bus. Actvt	0.42	0.42	1.74	2.17
Public Administration & Defense: Compulsory Social Security	0.45	0.45	0.01	0.45
Other Services	0.64	0.64	-0.71	-0.07

Source: DLSU-AKI Philippine Economic Monitor calculations by applying the data in Table 2 to a "generalized exactly additive decomposition" (GEAD) of GDP growth into pure growth effect (PGE*) and price change effect (PCE*) as an alternative to the "traditional" (TRAD) GDP growth decomposition that recognizes PGE* but not PCE*. PGE* is the result of real GDP or "quantity" growth holding relative price (real price) constant and PCE* is the result of "real price" growth holding quantity constant. PCE* measures the change in value of an industry's output when outputs of all industries are converted to the same unit of measure, in terms of the economy's "GDP basket." The GEAD formulas for PGE* and PCE* and the TRAD formula (which equals PGE*) are given, respectively, by equations (39), (40), and (46) in Dumagan, Jesus C. (2018), "Modifying the 'Generalized Exactly Additive Decomposition' of Growth of GDP and Aggregate Labor Productivity in Practice for Consistency with Theory," Working Paper Series No. 2018-07-053, Angelo King Institute for Economic and Business Studies, De La Salle University, Manila. The paper by Dumagan, Jesus C. (2013), "A Generalized Exactly Additive Decomposition of Aggregate Labor Productivity Growth," Review of Income and Wealth, 59 (Issue 1): 157-168 decomposed growth of aggregate labor productivity (ALP), which is the ratio of GDP to total labor employment. Thus, by removing the labor variable, the decomposition of ALP growth becomes a decomposition of GDP growth into the modified PGE* and PCE* formulas which were implemented in this Table 3.