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Angelo King Institute  
for Economic and Business Studies

## Monitoring the Philippine Economy Year-End Report for 2018

### Project of Angelo King Institute

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*Registering a growth of 6.2 percent in 2018, the Philippine economy falls short in reaching full-year target due to unfavorable weather conditions, policy uncertainties, and international economic challenges.*

**Philippine economy registers slower growth but remains as one of Asia's fastest-growing economies.** The Philippines registered a growth of 6.2 percent in 2018, which was slower than the previous year's 6.7 percent growth. Due to various economic challenges such as high inflation rates, second-round effects of the TRAIN Law, unfavorable weather disturbances, and ongoing trade tensions, the slower growth fell short in achieving the government's full-year target range of 6.5 to 6.9 percent. However, the robust growth trend for 7 consecutive years put up the Philippines as one of Asia's fastest-growing economies. On the demand side, domestic consumption slowed, investments accelerated, government spending remarkably expanded, and trade deficit worsened. On the supply side, the service sector, industry sector, and agriculture sector all experienced decelerated growth.

- **Major components of aggregate demand**
  - **Domestic consumption experienced slowdown.** Household Final Consumption Expenditure (HFCE) in 2018 posted a growth of 5.6 percent year-on-year (y-o-y), which was slower than 5.9 percent the previous year. According to Bangko Sentral ng Pilipinas (BSP)<sup>2</sup>, the decrease was caused by the slower growth of some major items. Food and Non-alcoholic Beverages, accounting for more than 40 percent of HFCE, grew only by 4.9 percent from 5.5 percent, y-o-y. Likewise, Transportation (1.5 percent from 4.8 percent, y-o-y), Restaurant and hotels (6.7 percent from 10.4 percent, y-o-y), Furnishings, household equipment and routine household maintenance (5.8 percent from 7.0 percent, y-o-y), and Health (3.7 percent from 6.8 percent, y-o-y) contributed to the decline in HFCE growth. The overall decrease in private consumption in 2018 may be attributable to the high rates of inflation. Meanwhile, personal remittances increased by 3 percent, recording a total of US\$32.21 billion in 2018, higher than US\$31.29 billion the previous year. Remittances continued to be a major driver of private consumption, accounting for 9.7 percent of GDP in 2018.
  - **Gross domestic capital formation performed as the key contributor to GDP.**<sup>3</sup> Domestic investment accelerated to 13.9 percent growth from 9.4 percent the

<sup>1</sup> Report is based on latest available data as of April 21, 2019. For comments and questions, please email [mitzie.conchada@dlsu.edu.ph](mailto:mitzie.conchada@dlsu.edu.ph)

<sup>2</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

<sup>3</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

previous year. The increase was contributed by the double-digit growth of both construction and durable equipment, which posted respective growths of 15.1 percent and 13.4 percent. Furthermore, Breeding Stocks and Orchard Development grew by 4.8 percent from 3.3 percent, y-o-y, while Intellectual Property Products growth declined to 23.9 percent from 32.5 percent, y-o-y.

- **Government spending posted a remarkable double-digit growth.** Government final consumption expenditure displayed a growth of 12.8 percent, higher than the 7.0 percent growth the previous year. The notable growth is largely attributable to the expansionary fiscal policy the current administration is implementing. According to the Department of Budget and Management (DBM) <sup>4</sup>, increased government spending covers upgrade in public infrastructure, provision of quality and accessible healthcare, education, and poverty-reduction programs. As shown by the surge in government consumption, the administration is committed to pursuing its major infrastructure project: *Build Build Build*. Officially begun in 2018, the project is presently proceeding towards full implementation.
- **Trade deficit worsened as imports continued to exceed exports.** In full-year 2018, imports continued to outgrow exports. Exports and imports realized slower growths of 11.5 percent and 14.5 percent, respectively, which are lower than 19.5 percent and 18.1 percent achieved the previous year. Consequently, 2018 registered a trade deficit of US\$41.44 billion, a 51 percent surge from the previous year's US\$27.38 billion deficit <sup>5</sup>. The further widening of the trade gap is due to policy uncertainties and ongoing trade tensions. To mitigate external economic challenges, it is essential to work on legislative reforms that will open up sectors for foreign investments. The government's chief economist <sup>6</sup> expressed that the proposed amendments to the Foreign Investment, Retail Trade, and Public Services Acts must be pursued. The full implementation of the Ease of Doing Business and Efficient Government Service Act of 2018 would help eliminate bureaucratic and regulatory barriers.

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<sup>4</sup> <https://www.dbm.gov.ph/index.php/secretary-s-corner/press-releases/list-of-press-releases/1332-government-spending-remains-strong-in-november-2018>

<sup>5</sup> [http://www.psa.gov.ph/system/files/PH-IMTS\\_PR%20Statistical%20Tables\\_December%202018\\_0.pdf](http://www.psa.gov.ph/system/files/PH-IMTS_PR%20Statistical%20Tables_December%202018_0.pdf)

<sup>6</sup> <https://business.mb.com.ph/2019/02/12/ph-trade-deficit-tops-41-billion-in-2018/>

- **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).<sup>7</sup>*

- **Services sector remained as the key driver for supply-side growth .** Although the services sector slowed to 6.6 percent growth from 6.8 percent, y-o-y, it maintained its position as the highest contributor to GDP growth, with 3.89 percentage points from positive quantity and real price growth (see Table 3). The deceleration was caused by the lethargic performance of various sub-sectors, namely Trade and Repair of Motor Vehicles Motorcycles Personal (5.9 percent from 7.3 percent, y-o-y), Financial Intermediation (7.1 percent from 7.6 percent, y-o-y), and Real Estate, Renting and Business Activities (4.8 percent from 7.4 percent, y-o-y). The decrease can be explained by the domestic economic challenges such as the inflation uptick, TRAIN Law, as well as the gloomy performance of the business process outsourcing (BPO) industry during the year<sup>8</sup>. These slower growth rates were counterbalanced, however, by faster growth of Transport Communication and Storage (5.1 percent from 4.0 percent, y-o-y), Public Administration and Defense (14.6 percent from 7.8 percent, y-o-y), and Other Services (7.7 percent from 6.4 percent, y-o-y).
- **Industry sector exhibited sluggish growth performances.** The industry sector registered a growth of 6.8 percent, slower than the 7.2 percent the previous year. The sector contributed 2.28 percentage points to GDP growth (see Table 3). The deceleration of industry sector growth can be partially explained by the significantly lower growth in Manufacturing, down from 8.4 percent to 4.9 percent, y-o-y, which was the lowest growth registered by the sub-sector since 2011. Nonetheless, it was able to contribute 1.16 percentage points to GDP growth. Additionally, Mining and Quarrying posted a slower growth (1.0 percent from 3.7 percent, y-o-y) but was offset by faster growth in Construction, up from 5.3 percent to 15.9 percent, y-o-y, which was the highest increase for the sub-sector since 2013. Consequently, the sub-sector was able to contribute 0.93 percentage points to GDP growth. Moreover, Electricity Gas and Water Supply experienced an uptick (5.3 percent from 3.4 percent, y-o-y)<sup>9</sup>.

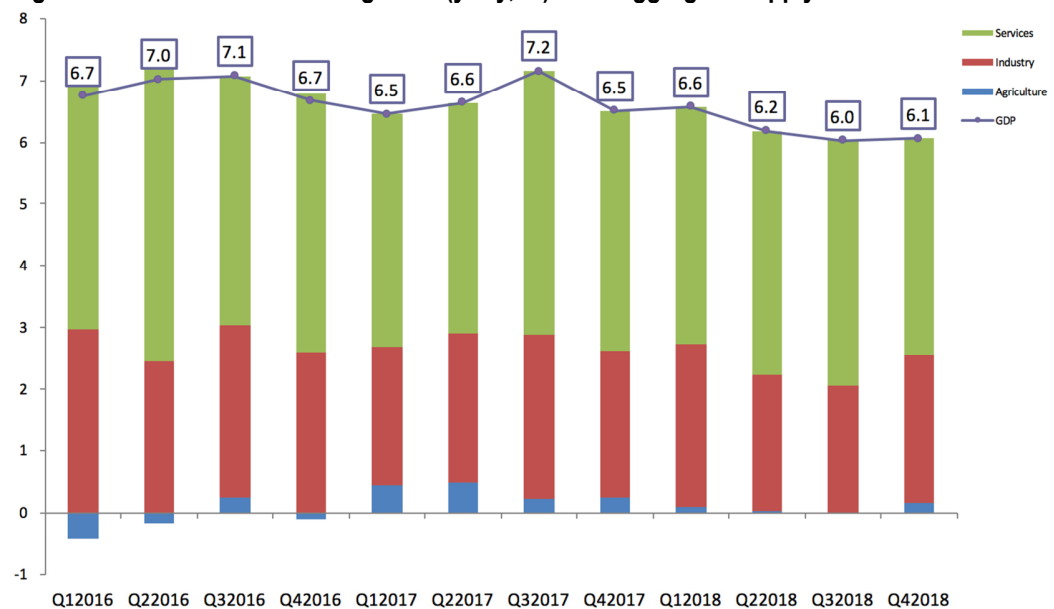
<sup>7</sup> See the footnote to Table 3 for the source of the GDP growth contributions.

<sup>8</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

<sup>9</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

- Agriculture sector was adversely affected by natural disasters.** The agriculture sector posted a growth of 0.8 percent, slower than the 4.0 percent the previous year. The sector contributed to GDP growth by 0.08 percentage points (see Table 3). With 19 typhoons hitting the country in 2018, the agriculture, hunting, forestry, and fishing (AHFF) sector was adversely affected. Specifically, typhoon *Ompong* left severe damages in Northern Luzon, the country's major rice-producing area. As a result, *palay*, which accounts for 26.4 percent of the total agriculture output in 2018, grew by 1.0 percent only from 9.4 percent growth the previous year. With unfavorable weather conditions disrupting sector activities, the government is looking into supporting the sector by (1) construction of more farm-to-market roads (FMR), (2) setting up small water irrigation systems, (3) installation of post-harvest, (4) logistics and transport facilities, and (5) provision of easy credit access to farmers and fishermen<sup>10</sup>.

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



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

<sup>10</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

### ***Challenges facing the economy***

- **Peso-dollar exchange rate continues to depreciate.** Based on monthly averages in 2018, the peso weakened by 4.32 percent to ₱52.68/US\$1, from the previous 2017 average of ₱50.40/US\$1. During the year, the depreciation was mainly attributed to the series of interest hikes by the US Fed and concerns over the increased trade tensions between the US and its majoring trading partners, including China. This was combatted by the series of policy rate hikes by the BSP to prevent further depreciation of the peso. Moreover, sustained inflows from OFW remittances, FDIs, and BPO receipts helped prevent further peso depreciation as well.
- **Unfavorable economic factors may serve as adversities to the Philippine economy<sup>11</sup>.** External factors such as (a) forecasts of weaker global growth, (b) aggravated trade tensions, (c) tightening of global financial conditions, and (d) spillover effects emerging from geopolitical tensions serve as hindrances to the Philippine economy. In addition, internal factors such as the (a) delay in infrastructure projects given the foreseen 45-day ban on government expenditures before the May 2019 midterm elections, (b) heightened intensity and frequency of natural disasters, (c) lethargic agricultural output, and (d) security risks challenge domestic growth and development.
- **Weather disturbances act as a threat to the Philippine economy.** Unexpected 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.

### ***Other economic news***

- **Stock market reports a declining PSEi<sup>12</sup>.** PSEi reported a decline of 1.3 percent with an average index points of 7,745.0, which was lower than an average index points of 7,850.5 the previous year. The PSEi peaked at 9,058.62 index points on January 28. Afterwards, starting February, the market showed a declining trend until the month of July. Several factors weighed on the main index, namely, rising domestic inflation and interest rates; moderating outlook for the Philippine economy; expectations of the delayed approval of the national budget; slowing global growth due to geopolitical tensions; and normalizing US Fed monetary policy.
- **Inflation is above government's target<sup>13</sup>.** 2018 inflation reported a remarkable average headline value of 5.2 percent, notably higher than the 2.9 percent average in 2017. The inflation rate continuously rose from the beginning of the year, peaked during Q3 2018, and eased by Q4 2018. The reported average inflation exceeded the government's target range of 3.0 percent  $\pm$  1.0 percentage point. The high inflation rate was mainly due to supply-side factors, specifically, increase in both food and energy prices alongside the implementation of tax reform measures. Food inflation increased 6.6 percent from 3.2 percent the previous year as prices of key food commodities such as rice, fish, meat, and vegetables hiked due to supply bottlenecks caused by unfavorable weather conditions. Also, non-food inflation also increased too due to rising

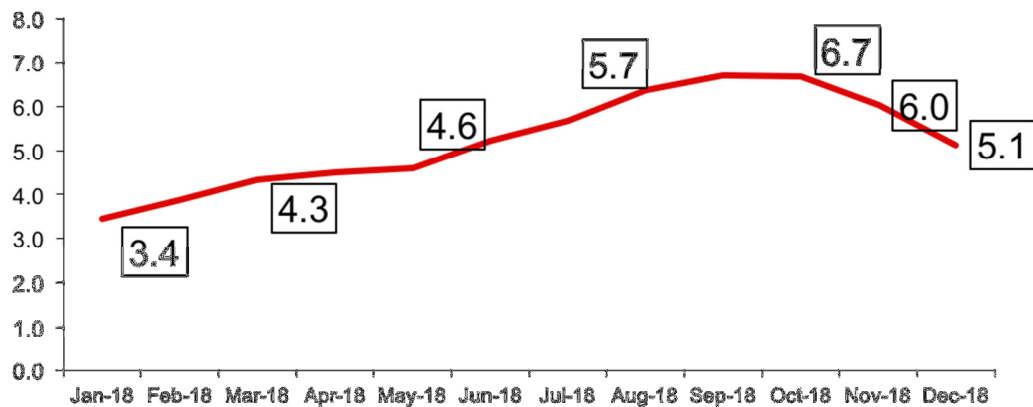
<sup>11</sup> [http://www.bsp.gov.ph/downloads/Publications/2018/LTP\\_4qtr2018.pdf](http://www.bsp.gov.ph/downloads/Publications/2018/LTP_4qtr2018.pdf)

<sup>12</sup> <http://www.bsp.gov.ph/downloads/publications/2018/annrep2018.pdf>

<sup>13</sup> <http://www.bsp.gov.ph/downloads/Publications/2018/annrep2018.pdf>

international oil prices caused by geopolitical tensions. Consequent to hiked oil prices, minimum fares for jeepney and bus rides were adjusted upwards during the fiscal year. Simultaneously, direct and indirect impacts of tax reform implementation also affected prices of sugar-sweetened drinks, gaming tickets, and domestic petroleum products.

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



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

- The Philippine economy falls short in realizing full-year growth targets but remains in a position of strength<sup>14</sup>.** Despite internal and external challenges, the Philippine economy managed to register a full-year growth of 6.2 percent, slower than the 6.7 percent posted the previous year. Unfortunately, it was below the national government's growth target of 6.5 percent to 6.9 percent. Nonetheless, for 7 consecutive years, the Philippine economy's GDP growth rate was above 6.0 percent. With the positive growth trend, the Philippines has been recognized as one of the fastest-growing economies in Asia.
- Consumer outlook remains pessimistic for the quarter and year ahead<sup>15</sup>.** Overall confidence index (CI) remained at a pessimistic territory, further plunging to -22.5 percent from -7.1 percent the previous quarter. The recorded CI for Q4 2018 posted the most drastic decline of 15.4 percentage points since the nationwide survey started in Q1 2007. The negative outlook was due to (a) increase in commodity prices, (b) low salary/income, (c) higher household expenses, (d) surge in unemployment rate, and (e) no increase in income. Similar to the previous quarter, consumer confidence across all income groups weakened for the last quarter of 2018. With leaden prospects, it is expected that CI would continue to be pessimistic for the next quarter.
- Business outlook further declines, registering lowest level since Q1 2010<sup>16</sup>.** In the final quarter of 2018, overall confidence index (CI) weakened to 27.2 percent from 30.1 percent the previous quarter, the lowest level since Q1 2010. The pessimistic sentiment was due to (a) increased inflation caused by rising raw

<sup>14</sup> <http://www.bsp.gov.ph/downloads/Publications/2018/annrep2018.pdf>

<sup>15</sup> [http://www.bsp.gov.ph/downloads/Publications/2018/CES\\_4qtr2018.pdf](http://www.bsp.gov.ph/downloads/Publications/2018/CES_4qtr2018.pdf)

<sup>16</sup> [http://www.bsp.gov.ph/downloads/Publications/2018/BES\\_4qtr2018.pdf](http://www.bsp.gov.ph/downloads/Publications/2018/BES_4qtr2018.pdf)

material costs and global oil prices, (b) weakening peso, (c) increased interest rates, (d) decline in volume of sales and orders, and (e) lack of supply of raw materials. With increasing number of pessimists, business sentiment is expected to be less optimistic for the quarter and year ahead.

- **Philippine unemployment rate decreased in 2018.** In 2018, unemployment rate in the Philippines decreased to 5.3 percent from 5.7 percent the previous year. Services sector, with a share of 56.6 percent, accounted for over half of the total employed population. In addition, agriculture sector and industry sector comprised of 24.3 percent and 19.1 percent, respectively<sup>17</sup>.
- **Minimum wage was increased to counter price hikes.** Effective November 22, 2019, a ₱25 salary increase for minimum wage earners in Metro Manila was approved. The adjustment was mainly due to increased cost of living caused by rising prices of goods and services.
- **BSP actively implements monetary policies to face market uncertainties<sup>18</sup>.** Series of policy rate adjustments was implemented to control the public's elevated inflation expectations and to prevent subsequent supply-side pressures from producing second-round effects, as well as to regulate exchange rate volatility resulting from external uncertainties. As a result, inflation started easing in the last two months of 2018. Monetary tightening measures are foreseen to steer inflation towards desired economic outcomes in the upcoming year.
- **The Philippine economy is expected to grow by 6.7 percent in 2019<sup>19</sup>.** International Monetary Fund (IMF) reported that it is essential that the Philippine *"government strikes a balance between maintaining a strong and stable economy in an uncertain global environment, while continuing to prioritize reforms that raise living standards."* IMF further emphasizes that tackling high inflation is a priority to prevent second-round effects. Moreover, to make the foreseen growth of 6.7 percent more inclusive, it is crucial to sustain the reform momentum to tackle high levels of poverty and inequality.

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<sup>17</sup> <http://www.bsp.gov.ph/downloads/Publications/2018/annrep2018.pdf>

<sup>18</sup> <http://www.bsp.gov.ph/downloads/Publications/2018/annrep2018.pdf>

<sup>19</sup> <https://www.imf.org/en/News/Articles/2018/09/27/na092718-the-philippines-economic-outlook-in-six-charts>



**Table 1. Philippine Economic Indicators**

<b>Monthly Leading Indicators</b>	<b>Jan-18</b>	<b>Feb-18</b>	<b>Mar-18</b>	<b>Apr-18</b>	<b>May-18</b>	<b>Jun-18</b>	<b>Jul-18</b>	<b>Aug-18</b>	<b>Sep-18</b>	<b>Oct-18</b>	<b>Nov-18</b>	<b>Dec-18</b>
Industrial Production (y-o-y, %)	11.0	15.5	11.4	21.2	13.3	10.1	10.3	3.5	1.0	2.3	1.9	-11.3
Consumer Price Index (y-o-y, %)	3.4	3.9	4.3	4.5	4.6	5.2	5.7	6.4	6.7	6.7	6.0	5.1
Exports (y-o-y, %)	-4.0	-5.5	-6.8	-4.9	-1.8	2.8	0.3	3.4	0.8	5.5	-0.3	-12.3
Imports (y-o-y, %)	7.7	13.7	0.3	23.1	12.6	24.2	31.6	11.0	26.1	21.4	6.8	-9.4
Trade Balance, US\$ million	-3,163	-2,890	-2,532	-3,480	-3,690	-3,188	-3,546	-3,494	-3,723	-4,081	-3,901	-3,752
Total Reserves (less gold), US\$ billion	72.7	72.1	72.1	71.4	71.0	69.6	68.9	70.3	67.4	66.9	67.9	71.0
Policy Rate	3	3	3	3	3.25	3.5	3.5	4	4.5	4.5	4.75	4.75
Fiscal Balance (million pesos)	10,191	-61,734	-110,693	46,315	-32,873	-54,288	-86,383	-2,587	-96,247	-59,865	-39,118	-81,042
<b>Quarterly/Annual Economic Indicators</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>1Q2017</b>	<b>2Q2017</b>	<b>3Q2017</b>	<b>4Q2017</b>	<b>1Q2018</b>	<b>2Q2018</b>	<b>3Q2018</b>	<b>4Q2018</b>
Real GDP (y-o-y, %)	6.9	6.2	6.1	6.9	6.5	6.6	7.2	6.5	6.6	6.2	6.0	6.1
- Private Consumption	5.6	5.6	6.3	7.0	5.9	6.0	5.4	6.2	5.7	5.9	5.2	5.4
- Government Consumption	8.1	3.3	7.6	8.4	0.1	7.6	8.3	12.2	13.6	11.9	14.3	11.9
- Gross Capital Fixed Formation	27.3	4.4	18.4	23.7	11.4	7.6	10.3	8.3	12.4	21.5	18.2	5.5
Current Account (% of GDP)	4.2	4.4	2.9	-0.4	-1.2	-0.1	0.7	-3.8	-0.4	-4.2	-2.1	-2.6
Financial Account ( US\$ million)	2,230	10,084	2,523	175	328	-945	442	-2,033	-816	-1,627	-1,621	-3,768
- Net Direct Investments, US\$ million	-90	789	-122	-5,883	-1,480	-1,868	-2,117	-2,646	-1,025	-2,672	-1,360	-797
- Net Portfolio Investments, US\$ million	-1,001	2,460	4,757	1,480	3,258	-129	875	-114	1,612	1,021	-500	-1,275
Overall BOP position (US\$, million)	5,085	-2,858	2,616	-1,038	-994	289	-662	505	-1,227	-2,030	-1,879	2,830
Unemployment rate	7.1	6.8	6	5.1	6.6	5.6	5.7	5	5.3	5.4	5.1	5.1
<b>Others</b>	<b>Jan-18</b>	<b>Feb-18</b>	<b>Mar-18</b>	<b>Apr-18</b>	<b>May-18</b>	<b>Jun-18</b>	<b>Jul-18</b>	<b>Aug-18</b>	<b>Sep-18</b>	<b>Oct-18</b>	<b>Nov-18</b>	<b>Dec-18</b>
Overseas Filipinos' Remittances (US\$, million)	2,379	2,267	2,360	2,347	2,469	2,357	2,401	2,476	2,237	2,474	2,326	2,849
... = not available												

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





Table 2. Level of Philippine GDP, 2017 – 2018

	<b>Nominal GDP</b> (million current pesos)		<b>Real GDP</b> (million constant pesos)	
	<b>2017</b>	<b>2018</b>	<b>2017</b>	<b>2018</b>
<b>Agriculture</b>	<b>1,527,571</b>	<b>1,617,910</b>	<b>739,195</b>	<b>745,781</b>
Agriculture and Forestry	1,330,374	1,403,040	616,963	623,765
Fishing	197,197	214,869	122,232	122,016
<b>Industry</b>	<b>4,810,842</b>	<b>5,358,045</b>	<b>2,945,538</b>	<b>3,142,846</b>
Mining and Quarrying	133,955	146,185	84,795	85,864
Manufacturing	3,075,374	3,320,346	2,044,189	2,145,011
Construction	1,113,606	1,347,556	538,107	618,294
Electricity Gas and Water Supply	487,908	543,958	278,447	293,677
<b>Services</b>	<b>9,469,183</b>	<b>10,450,248</b>	<b>4,981,084</b>	<b>5,318,262</b>
Transport Communication and Storage	962,574	1,030,521	636,612	670,803
Trade and Repair of Motor Vehicles Motorcycles Personal	2,917,900	3,229,363	1,467,006	1,554,868
Financial Intermediation	1,297,583	1,461,025	635,139	681,005
Real Estate Renting & Bus. Actvt	2,084,296	2,227,075	999,420	1,046,693
Public Administration & Defense: Compulsory Social Secur	654,038	787,464	346,234	398,859
Other Services	1,552,792	1,714,800	896,674	966,034
<b>Sum = GDP</b>	<b>15,807,596</b>	<b>17,426,202</b>	<b>8,665,818</b>	<b>9,206,889</b>

Source: Philippine Statistics Authority



**Table 3. Industry Contributions to Philippine GDP Growth, 2017 – 2018**

	<b>TRAD</b>	<b>GEAD</b>		<b>GEAD</b>
	<b>GDP Growth</b>			<b>GDP Growth</b>
	<b>PGE*</b>	<b>PGE*</b>	<b>PCE*</b>	<b>PGE* + PCE*</b>
	(percent)	(percent)	(percent)	(percent)
		(1)	(2)	(1)+(2)
<b>GDP Growth</b>	<b>6.24</b>	<b>6.24</b>	<b>0.00</b>	<b>6.24</b>
<b>Industry Growth Contribution</b>				
<b>Agriculture</b>	<b>0.08</b>	<b>0.08</b>	<b>1.66</b>	<b>1.74</b>
Agriculture and Forestry	0.08	0.08	1.74	1.82
Fishing	0.00	0.00	-0.08	-0.09
<b>Industry</b>	<b>2.28</b>	<b>2.28</b>	<b>-3.93</b>	<b>-1.66</b>
Mining and Quarrying	0.01	0.01	-0.09	-0.08
Manufacturing	1.16	1.16	-4.08	-2.92
Construction	0.93	0.93	0.35	1.28
Electricity Gas and Water Supply	0.18	0.18	-0.11	0.07
<b>Services</b>	<b>3.89</b>	<b>3.89</b>	<b>2.27</b>	<b>6.16</b>
Transport Communication and Storage	0.39	0.39	-1.27	-0.88
Trade and Repair of Motor Vehicles Motorcycles Personal	1.01	1.01	1.67	2.68
Financial Intermediation	0.53	0.53	0.86	1.39
Real Estate Renting & Bus. Actvt	0.55	0.55	1.93	2.48
Public Administration & Defense: Compulsory Social Security	0.61	0.61	-0.21	0.40
Other Services	0.80	0.80	-0.71	0.09

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.