THE GHANA CHAMBER OF MINES

PERFORMANCE OF THE MINING INDUSTRY IN GHANA - 2018

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PERFORMANCE OF THE MINING INDUSTRY IN 2018

Global and Domestic Economic Developments

The two-year rebound in global economic activity retreated on the back of heightened policy uncertainty, tighter financing conditions in non-developed economies as well as trade tensions and tariff hikes between the United States and China. Coupled with other developments, these factors combined to decelerate growth in measured economic output in both advanced market and developing economies (EMDEs). According to the International Monetary Fund (IMF), growth in global gross domestic product (GDP) declined from 3.8 per cent in 2017 to 3.6 per cent in 2018 (see Figure 1.0).

In the advanced economies, lower-than-projected economic growth outturn in the euro area, Japan and United Kingdom outweighed an expansion in output of the United States. Consequently, the region’s GDP growth declined from 2.4 per cent in 2017 to 2.2 per cent in 2018. Specifically, growth in the euro area decreased from 2.4 per cent in 2017 to 1.8 per cent in 2018 mainly as a result of a slowdown in economic activities of its leading member states; Germany, France and Italy. Whereas weak industrial production, which was occasioned by the introduction of new emission standards, was the primary reason for the poor growth in Germany, the slow growth outcome in France was largely due to the spillover effects of the yellow-vest movement protests. On the other hand, concerns on budget overruns, weak domestic demand and elevated yields on sovereign debt instruments were the main drivers of weak economic growth in Italy.

Likewise, a confluence of natural disasters and adverse weather conditions contributed to a deceleration in economic activities in Japan. The country’s GDP growth rate fell from 1.9 per cent in 2017 to 0.8 per cent in 2018. Economic growth in the United Kingdom also declined from its 2017 rate of 1.8 per cent to 1.4 per cent in 2018 on account of uncertainties elicited by its decision to withdraw from the membership of the European Union and the resultant draw-out negotiations. On the contrary, the value of recorded economic activities in the United States increased by 2.9 per cent in 2018 as compared to 2.2 per cent in 2017. The upturn in growth was largely a consequence of an increase in exports and private inventory investment as well as residual effects of the federal government’s fiscal stimulus.

Economic growth in Emerging Market and Developing Economies (EMDEs) was dampened by a string of weak GDP growth outturns in the leading economies, which counterbalanced GDP improvements in other relatively small countries. In China, GDP growth declined from 6.8 per cent in 2017 to 6.6 per cent in 2018. The downturn in activities was primarily attributable to reduced export demand, financial sector regulatory reforms and ongoing structural reforms to reinforce the fundamentals of the economy. In contrast, Sub-Saharan Africa, recorded a modest growth in its GDP, from 2.9 per cent in 2017 to 3.0 per cent in 2018. The sub-region’s growth was largely driven by the recovery of Nigeria’s economy from recession. On the whole, economic growth rate in EMDEs reduced from 4.8 per cent in 2017 to 4.5 per cent in 2018 as shown in Figure 1.0.
Global economic growth prospect in 2019 remains tilted towards the downside due to forecasted sluggish growth in advanced economies and EMDEs. The tapering of fiscal stimulus and accommodative monetary policies in the United States is expected to culminate in lower GDP growth for that country. Moreover, the uncertainty around the outcome of the protracted negotiations on Britain’s exit from the European Union is projected to weigh on growth in the euro area. As well, the rising debt level of most EMDEs is expected to increase the risk premium on sovereign bonds. This may even be compounded by the expected appreciation of the US dollar as the Federal Reserve Bank has signaled its intention to normalize monetary policy in the US. In the absence of any interventions, these developments could trigger a reversal of capital flows in EMDEs. However, Sub-Saharan Africa’s economy is expected to expand in response to improvements in commodity prices. In addition, trade tensions between the US and China are anticipated to impact negatively on growth in EMDEs. This will however be moderated by the planned fiscal stimulus of the Chinese government and potential truce in trade disputes between the United States and China. On the whole, the IMF projects that global economic growth will reduce further to 3.3 per cent in 2019.

In Ghana, an upturn in mining and quarrying activities combined with appreciable growth in the information and communication as well as health and social work sub-sectors to lessen the knock-on effects of the banking sector reforms on the economy in 2018. The value of measured goods and services (in constant 2013 prices) grew at a lower rate of 6.3 per cent in 2018 relative
to 8.1 per cent in the preceding year\(^1\). In nominal terms, the country’s GDP improved from GH₵ 134.486 billion in 2017 to GH₵ 145.438 billion in 2018.

The industrial sector, which comprises mining and quarrying (including oil and gas), manufacturing, electricity, water and sewerage as well as construction, recorded the highest growth rate for the second consecutive year in spite of the slowdown in oil and gas activities. In 2018, the sector’s growth rate, which stood at 10.6 per cent was largely propelled by the mining and quarrying sub-sector (excluding oil and gas). The nominal value of mining and quarrying activities increased from GH₵ 8.813 billion in 2017 to GH₵ 13.095 billion in 2018, representing a year-on-year growth rate of 48.6 per cent. Primarily, the significant expansion in the mining sector’s value was occasioned by rebasing of the national accounts as well as growth in mineral production. In the case of the former, the rebasing involved the adjustment of the base year from 2006 to 2013 and inclusion of some mining support services as part of the mining and quarrying sub-sector.

The other sub-sectors, manufacturing, electricity and construction, recorded growth rates of 4.1 per cent, 5.5 per cent and 1.1 per cent respectively in 2018. In contrast, the water and sewerage sub-sector contracted by 3.6 per cent in the same period. The corresponding growth outturns in 2017 were 9.5 per cent, 19.4 per cent, 5.1 per cent and 6.1 per cent respectively. The remaining sectors, agriculture and services, also recorded slower growth rates in 2018 as compared to 2017. Specifically, the agricultural sector’s growth rate reduced from 6.1 per cent in 2017 to 4.8 per cent in 2018 while that of the services sector declined from 3.3 per cent to 2.7 per cent within the same period.

With respect to sectoral contribution to GDP, the services sector continued to be the largest productive economic activity in the country. Its share in GDP improved marginally from 46 per cent in 2017 to 46.3 per cent in 2018. In the same vein, the industrial sector’s share in GDP improved by 1.3 percentage points to 34 per cent in 2018. This was largely on account of developments in the mining and quarrying sub-sector (excluding oil and gas), whose share in GDP increased from 7.3 per cent in 2017 to 9.8 per cent in 2018. In relative terms, the mining and quarrying sub-sector (excluding oil and gas) is the fourth largest economic activity by value (in current prices). On the contrary, agricultural sector’s contribution to GDP declined for the second successive year, from 21.2 per cent in 2017 to 19.7 per cent in 2018.

The country’s growth prospect in 2019 remains bullish as a rebound in the financial services sub-sector is expected to complement the mining and quarrying sub-sector (including oil and gas) to accelerate GDP growth to 7.6 per cent. However, the persistent challenges in the electricity sector may curtail the country’s growth outlook in 2019.

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\(^1\) In 2018, the Ghana Statistical Service rebased the national accounts using 2013 as the base year
Table 1.0: Selected Macroeconomic Indicators of the Mining and Quarrying Sub-Sector

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Rate (%)</td>
<td>-3.3</td>
<td>48.6</td>
</tr>
<tr>
<td>Share in Industrial Sector (%)</td>
<td>22.4</td>
<td>28.9</td>
</tr>
<tr>
<td>Share in Gross Domestic Product (%)</td>
<td>7.3</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Source: Ghana Statistical Service (2019)

Overview of the Global Gold Industry in 2018

The traditional classes of demand for gold recorded mixed growth outturns in 2018 due to a combination of country-specific macroeconomic fundamentals as well as global economic and political factors. Notwithstanding the heterogeneity in growth outcomes of the various types of demand, data from the World Gold Council suggests that global demand for gold increased from 4,159.9 tonnes in 2017 to 4,345.1 tonnes in 2018. The 4.5 per cent growth in aggregate demand for gold was driven mainly by improvements in central bank purchases and technology-related applications of gold, which moderated the reduction in investment demand. On the other hand, demand for gold jewellery was largely unchanged as shown in Figure 2.0.

Figure 2.0: Trends in Global Demand for Gold (2017 and 2018)

Source: Based on data from World Gold Council (2019)

Investment demand for gold, which comprises demand for gold bars and coins as well as gold-backed exchange-traded funds (ETFs), declined from 1,251 tonnes in 2017 to 1,591 tonnes in 2018. The 7 per cent reduction in investment demand for gold was ascribed to the steep contraction in gold-backed ETFs (from 206.4 tonnes in 2017 to 68.9 tonnes in 2018), which displaced the modest growth in demand for gold bars and coins (from 2,090.4 tonnes in 2017 to 2,180.4 tonnes in 2018). While the fall in demand for ETFs was primarily caused by the robust

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2 This excludes the oil and gas sub-sector
performance of traded equities in the United States, the increased demand for gold bars and coins was occasioned by heightened political uncertainty and currency depreciation in some Middle Eastern countries. The bullish performance of equities in the United States lowered investors’ appetite for safe haven assets such as gold. As a result, most investors diversified their portfolios away from gold-backed instruments. Conversely, the appreciation of the US dollar, escalation in tensions between US and Iran, as well as breakdown in diplomatic relationship between Qatar and its neighbours provided fertile grounds for investors in the Middle East to reorganize their assets in favour of the yellow metal. Specifically, the region’s demand for gold bars and coins increased by 102 per cent, from 43.2 tonnes in 2017 to 87.1 tonnes in 2018. Unsurprisingly, Iran recorded the highest year-on-year expansion in demand for gold bars and coins in the Middle East region. Purchases of gold bars and coins in Iran increased from 19.2 tonnes in 2017 to 61.8 tonnes in 2018, representing a growth rate of 222 per cent.

Regarding gold jewellery, total demand was largely unchanged at 2,200 tonnes in 2018 in spite of the divergent outturns in the leading markets. In China, the global leader for gold jewellery, aggregate demand increased by 3 per cent to 672.5 tonnes in 2018. Similarly, the United States recorded a year-on-year growth in demand for gold jewellery, from 123.7 tonnes in 2017 to 128.4 tonnes in 2018. On the other hand, demand for gold jewellery in the world’s second largest consumer market, India, fell from 601.9 tonnes in 2017 to 598 tonnes in 2018. In the same vein, demand for gold jewellery in the Middle East declined by 15 per cent to 168.2 tonnes in 2018 relative to 197 tonnes in 2017. The underlying factors for the dissimilar demand outcomes range from country-specific factors, such as low disposable income, high inflation and unemployment, to global economic and political developments. For instance, the introduction of a 5 per cent VAT in United Arab Emirates (UAE) and Saudi Arabia culminated in a decrease in total demand for gold jewellery. Demand for gold jewellery in Saudi Arabia fell from 45.7 tonnes in 2017 to 39.4 tonnes in 2018 while that of UAE declined from 46.7 tonnes to 36.2 tonnes in the same period.

Furthermore, the quantum of gold used in technology-related applications increased by a percentage point from 332.6 tonnes in 2017 to 334.6 tonnes in 2018 as shown in Fig 2.0. The marginal improvement in technology demand for gold was primarily driven by the increased application of gold in high-end consumer electronics and electronic system of vehicles. The consumption of gold in the electronics market increased from 316.6 tonnes in 2017 to 319.3 tonnes in 2018. In contrast, the other component of technology-related applications, dentistry, reduced by 6 per cent, from 16.3 tonnes in 2017 to 15.4 tonnes in 2018.

Lastly, central banks’ demand for gold increased to its highest level since the abandonment of the gold standard by the United States in 1971. Purchases of gold by central banks and other institutions increased from 374.8 tonnes in 2017 to 651.5 tonnes in 2018. The 74 per cent growth in gold demand was largely a reflection of the geopolitical tensions and uncertainties which characterised most part of 2018. These developments encouraged the lenders of last resort to reorganize their assets in favour of gold. In particular, the central bank of Russia purchased 274.3 tonnes of gold in 2018, making it the highest buyer of gold in the period. While the significant addition to the Bank’s reserve mirrors the tensions between the United States and Russia, it also
reflects an attempt to substitute its dollar reserves with gold. Other notable purchasers of gold in 2018 include the central banks of Turkey, Kazakhstan, China, Poland and Hungary.

The heightened global political tensions and uncertainties about how the United Kingdom will exit the European Union are projected to provide momentum for a year-on-year growth in global demand for gold in 2019. However, the stance of monetary policy in the United States and European Union will have a moderating influence on the demand for gold. Specifically, if monetary policy leads to an increase in interest rates, it may dampen the allure of gold as an investment instrument. As a result, investors will have an incentive to reduce their demand for gold.

Global gold supply, which comprises recycled gold, net producer hedging and mine production, increased by 18 tonnes to 4,490.2 tonnes in 2018. According to the World Gold Council, the quantum of measured recycled gold increased by a percentage point, from 1,156.1 tonnes in 2017 to 1,172.6 tonnes in 2018 while the global hedge book shrank by 29.4 tonnes in 2018. Similarly, the supply of gold from the mines increased modestly from 3,318.9 tonnes in 2017 to 3,346.9 tonnes in 2018. The one per cent growth in mine production mirrored mixed performances in the various gold mining jurisdictions. While production outturn in North America, Central and South America reduced marginally, output from mines in Europe and Asia increased slightly. On the other hand, Africa, Commonwealth of Independent States (CIS) and Oceania recorded marked growth in gold production.

In spite of a 10 per cent increase in gold production by mines in Canada, total gold supply by producers in the North American region declined from 527.1 tonnes in 2017 to 526.1 tonnes in 2018. The fall in gold supply was mainly due to the contraction in production attributable to the region’s largest producer (United States) and Mexico. With respect to the United States, total gold production reduced by 6 per cent to 222.7 tonnes in 2018 from 236.5 tonnes in 2017. Similarly, Mexico’s gold output nosedived from 119.4 tonnes in 2017 to 114.3 tonnes in 2018. This represents a decline of 4 per cent in output. Notwithstanding the contraction in output, the region’s share in global gold production remained largely unchanged at 15 per cent as shown in Figure 3.0.

**Figure 3.0: Share of Global Gold Production by Region**
Gold output from producers in Central and South America improved marginally from 566 tonnes in 2017 to 566.3 tonnes in 2018. The seeming stagnation in production could be ascribed to broad reduction in output of most of the region’s producers, which balanced the year-on-year growth in output recorded by a few countries. For instance, the output of the region’s largest producer, Peru, dropped steeply from 166.6 tonnes in 2017 to 157.8 tonnes in 2018. In contrast, Brazil recorded a 2 per cent increase in its production, from 95.8 tonnes in 2017 to 97.4 tonnes in 2018. On the whole, the region’s contribution to global mine production rose from 15 per cent in 2017 to 16 per cent in 2018.

In Europe and CIS, gold output expanded from 26.9 tonnes in 2017 to 27.9 tonnes in 2018 and from 466.4 tonnes to 498.5 in the same period respectively. Whereas the modest growth in output in Europe was primarily a reflection of the even improvement across mines in the region, the growth outturn in CIS was imbalanced. Russia, the leading gold producer in CIS, recorded an output of 297.3 tonnes in 2018 relative to 280.7 tonnes in 2017. The 6 per cent upturn in output in Russia pales in comparison to the 22 per cent increment in Kazakhstan’s production. In view of the dissimilar production outcomes, Europe’s share in global gold production was unchanged at 0.8 per cent while CIS’ contribution to global gold production increased from 13.6 per cent in 2017 to 14.2 per cent in 2018.

For the fourth consecutive year, gold production by China declined in response to reforms in environmental regulations by the government. In 2018, the country’s 5 per cent reduction in production to 404.1 tonnes from 429 tonnes in 2017 stalled growth in gold supply from producers in Asia in spite of the rise in Indonesia’s output. Specifically, the region’s production increased from 675.3 tonnes in 2017 to 676.8 tonnes in 2018. On account of the marginal growth in output, the region’s share in total mine gold production pared to 19.3 per cent in 2018 as compared to 19.6 per cent in 2017.

Contrarily, an 8 per cent growth in the world’s second largest gold producer, Australia, drove supply from Oceania upwards to 395 tonnes in 2018 from 367.5 tonnes in 2017. More so, other producers in the region also recorded growth in production, leading to a 0.6 per cent increase in share of global mine production. The region’s contribution to world gold output improved from 10.7 per cent in 2017 to 11.3 per cent in 2018.

Industrial unrest and a general hike in cost of production occasioned a steep decline in South Africa’s output. The 15.7 per cent slump in gold production drove the country’s output to its lowest level in more than ten years, from 154 tonnes in 2017 to 129.8 tonnes in 2018. Consequently, Ghana replaced South Africa as the largest producer of gold in the Africa Region as shown in Table 2.0. Gold output from Ghana increased from 130.7 tonnes in 2017 to 136.2 tonnes in 2018, a lift of 4.6 per cent. Other countries that recorded significant growth in production include Mali (from 50.4 tonnes in 2017 to 61.2 tonnes in 2018), Democratic Republic of Congo (36.6 tonnes in 2017 to 44.9 tonnes in 2018), Senegal (12.3 tonnes in 2017 to 17.5 tonnes in 2018), Burkina Faso (52.6 tonnes in 2017 to 58.4 tonnes in 2018) and Cote D’Ivoire (36.7 tonnes in 2017 to 40.9 tonnes in 2018). As a result of the general improvement in the
output of most countries, total gold production from Africa increased by 1.6 per cent to 825.9 tonnes in 2018. However, its share in global gold production was fairly constant at 23.6 per cent in 2018.

In 2019, gold supply is projected to grow at a more accelerated rate than the previous year. Ramping up of production in some mine projects and the lifting of the moratorium on small-scale mining in Ghana as well as new projects in Canada and Argentina are expected to be the main drivers of growth in mine production. As well, production in South Africa is expected to return to its normal trajectory following the resolution of the industrial dispute and efforts to rein in production cost. The additional output from these countries is anticipated to offset the forecasted decline in production from China and South America in 2019. Furthermore, the recent increase in supply of recycled gold and reduction in the global hedge book are expected to persist in 2019.

Table 2.0: Leading Gold Producing Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Gold Produced (Tonnes)</th>
<th>Rank</th>
<th>Gold Produced (Tonnes)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>429.4</td>
<td>1st</td>
<td>404.1</td>
<td>1st</td>
</tr>
<tr>
<td>Australia</td>
<td>292.5</td>
<td>2nd</td>
<td>315.1</td>
<td>2nd</td>
</tr>
<tr>
<td>Russia</td>
<td>280.7</td>
<td>3rd</td>
<td>297.3</td>
<td>3rd</td>
</tr>
<tr>
<td>United States</td>
<td>236.5</td>
<td>4th</td>
<td>222.7</td>
<td>4th</td>
</tr>
<tr>
<td>Canada</td>
<td>171.2</td>
<td>5th</td>
<td>189.1</td>
<td>5th</td>
</tr>
<tr>
<td>Peru</td>
<td>166.6</td>
<td>6th</td>
<td>157.8</td>
<td>6th</td>
</tr>
<tr>
<td>South Africa</td>
<td>154.0</td>
<td>7th</td>
<td>129.8</td>
<td>9th</td>
</tr>
<tr>
<td>Ghana</td>
<td>130.2</td>
<td>8th</td>
<td>136.2</td>
<td>8th</td>
</tr>
<tr>
<td>Mexico</td>
<td>119.4</td>
<td>9th</td>
<td>114.3</td>
<td>10th</td>
</tr>
<tr>
<td>Indonesia</td>
<td>114.1</td>
<td>10th</td>
<td>136.9</td>
<td>7th</td>
</tr>
</tbody>
</table>


In addition to the underlying global demand and supply conditions, geopolitical and economic developments were the primary influence on the price of gold in 2018. The rebound in price of gold in December 2017 continued in January 2018 and remained so for most part of the first quarter. With an opening price of US$ 1,312 per ounce on the first trading session on the London Metals Exchange (LME), the yellow metal’s price rose to an all-year high of US$ 1,354 per ounce on 25th January, 2018. The bullish price outturn of gold in this period was mainly due to low inflation in the United States and a weaker dollar.

In the ensuing months, expectations about a possible hike in the Federal Reserve’s fund rate led to a sustained decline in the price of gold. In line with market expectations, the Federal funds rate was raised by quarter of a percentage point in March 2018. This development did not only signal an improvement in the health of US economy but also resulted in increased yields on money market assets. Consequently, investors moved away from holding gold as an investment asset to more liquid instruments such as treasury bonds. Even though the announcement of an imposition of tariffs on steel and aluminium imported from Mexico, Canada and the European
Union provided tailwinds for a surge in the metal’s price, it was short-lived. The sustained robust growth of the US economy, which was validated by another raise in Federal funds rate in June 2018, overshadowed concerns on a potential trade war with traditional allies of the US government. Investors were therefore less inclined to demand safe haven assets such as gold, leading to a slump in its price to US$ 1,178 per ounce in August 2018. This was also the yellow metal’s lowest price in 2018.

The deteriorating political climate in Venezuela and stalled discussions between United States and Democratic People’s Republic of Korea provided impetus for a recovery in price of gold in the early part of September 2018. This was however interrupted by a third increase in the Federal funds rate. Following the normalization of the effects of the adjustment in interest rate on the bullion market, the price of gold returned to the trajectory of growth in most part of October 2018. For the remaining period in the year, uncertainties around Brexit drove the price of gold upwards, ending the year at US$ 1,279 per ounce as shown in Fig 4.0. On the whole, gold traded at a cumulative average price of US$ 1,268 per ounce in 2018, which is 0.87 per cent higher than the outturn of US$ 1,257 per ounce in 2017.

**Fig 4.0: Trends in Gold Price in 2018**

![Gold Price Graph](https://www.kitco.com)

Source: www.kitco.com (Accessed on 19th April, 2019)

With respect to production cost, the World Gold Council and Metals Focus report that the global All-In-Sustaining Cost (AISC) increased by 3.2 per cent, from US$ 881 per ounce in 2017 to US$ 909 per ounce in 2018. The growth in AISC was primarily a reflection of the general increase in cost of producing gold across all the mining regions, except for Oceania which

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3 See Box 1.0 for a discussion on the computation of AISC
recorded a year-on-year decline of 2 per cent in AISC, from US$ 861 per ounce in 2017 to US$ 843 per ounce in 2018.

In North America, the AISC rose from US$ 862 per ounce in 2017 to US$ 943 per ounce in 2018 as a result of an increase in production cost of the region’s leading producers; United States, Canada and Mexico. Likewise, an 8 per cent growth in production cost of the largest gold producer in Central and South America, Peru, contributed to a rise in the region’s AISC from US$ 866 per ounce in 2017 to US$ 893 per ounce in 2018. This translates into an increment of 3.1 per cent.

Europe continued to be the most expensive destination for gold production, with an AISC of US$ 1,011 per ounce in 2018. The 2018 cost outturn was 0.1 per cent higher than the 2017 level of US$ 1,010 per ounce. The cost of producing an ounce of gold in the Commonwealth of Independent States (CIS) also increased by 3 per cent to US$ 747 per ounce in 2018. Its equivalent rate in 2017 was US$ 725 per ounce.

The AISC of Asia grew by 13 per cent relative to the outturn in 2018, making it the highest year-on-year increment over the period. Production cost per ounce of gold moved from US$ 705 per ounce in 2017 to US$ 796 per ounce in 2018 mainly as a result of broad-based increase in operational costs. Producers of gold in Africa recorded a 0.6 per cent upturn in AISC, from US$ 995 per ounce in 2017 to US$ 1,001 per ounce in 2018 as shown in Figure 5.0.

Figure 5.0: Global All-In-Sustaining Cost of Gold Producing Regions

Source: Metals Focus and World Gold Council (2019)

The Performance of Ghana’s Mining Industry in 2018
The growth outturn in production, assay, shipment and purchase of Ghana’s traditional minerals was mixed in 2018. While gold output of the large-scale mining sector declined marginally, the quantum of gold assayed by the national assayer, Precious Minerals Marketing Company (PMMC), on behalf of Licensed Gold Exporting Companies (LGECs) increased by 50.1 per cent in 2018. Similarly, shipments of manganese increased by 51.5 per cent in 2018. On the downside, shipments of bauxite and purchases of diamond by PMMC declined by 31.5 per cent and 33.8 per cent respectively.

Gold produced by the large-scale mining companies declined from 2.808 million ounces in 2017 to 2.807 million ounces in 2018. The sub-sector’s performance was mostly a reflection of the near-symmetry in expansion and contraction in production across the country’s large-scale gold mines. With the change in its mandate from a buyer of gold to a national assayer, the volume of gold assayed by PMMC for LGEC is generally used as a proxy for production by small-scale miners. However, it must be noted that some of the LGECs engage in trans-shipment of gold. This implies that the firms act as agents in transporting gold produced in other countries to a final buyer who is usually a non-resident entity. In 2018, the quantity of locally sourced gold assayed by PMMC was 1.987 million ounces relative to 1.479 million ounces in 2017. The summation of output from the large-scale and small-scale mining sectors indicates that the quantum of gold attributable to in-country producers increased by 12 per cent, from 4.287 million ounces in 2017 to 4.795 million ounces in 2018, which is also the highest level of output in more than three decades. The 2018 production outturn also means that the share of small-scale miners in total gold production rose to 41.4 per cent in 2018 relative to 34.5 per cent in 2017. With respect to trans-shipment, the quantity of gold assayed by PMMC for foreign producers increased by 974.5 per cent to 0.269 million ounces in 2018 from 0.0250 million ounces in 2017.

Likewise, shipments of manganese by the country’s sole producer, Ghana Manganese Company, increased from 3.003 million tonnes in 2017 to 4.552 million tonnes in 2018. In contrast, the quantity of bauxite shipped by Ghana Bauxite Company declined from 1.477 million tonnes in 2017 to 1.011 million tonnes in 2018 and exports of diamond reduced from the 2017 level of 0.087 million carats to 0.058 million carats in 2018 as shown in Table 3.0.

Table 3.0: Mineral Production, Assay, Purchases and Shipment

<table>
<thead>
<tr>
<th>Mineral</th>
<th>2017</th>
<th>2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Produced by Large-Scale Mines (Ounces)</td>
<td>2,808,435</td>
<td>2,807,918</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Gold Assayed by PMMC (Ounces)</td>
<td>1,478,687</td>
<td>1,987,298</td>
<td>34.4%</td>
</tr>
<tr>
<td>Total Gold Production (In-Country)</td>
<td>4,287,122</td>
<td>4,795,215</td>
<td>11.9%</td>
</tr>
<tr>
<td>Trans-shipment of Gold (Ounces)</td>
<td>25,088</td>
<td>269,565</td>
<td>974.5%</td>
</tr>
<tr>
<td>Manganese (Tonnes)</td>
<td>3,003,580</td>
<td>4,551,754</td>
<td>51.5%</td>
</tr>
<tr>
<td>Bauxite (Tonnes)</td>
<td>1,476,966</td>
<td>1,011,302</td>
<td>-31.5%</td>
</tr>
<tr>
<td>Diamond (Carats)</td>
<td>86,925</td>
<td>57,531</td>
<td>-33.8%</td>
</tr>
</tbody>
</table>

Macroeconomic Contributions of the Mining Sector in 2018

Fiscal Revenue Performance

The minerals and mining sector continued to be a leading source of fiscal revenue in financing the country’s developmental priorities. In recognition of the sector’s pre-eminent contributions to fiscal revenue, two member companies of the Chamber, Newmont and Ghana Manganese Company, were recognized by the Ghana Revenue Authority (GRA) as the second and third largest tax payers in 2018 respectively. Fiscal payments attributable to the mining sector increased from GH₵ 2.16 billion in 2017 to GH₵ 2.36 billion in 2018. The 9.3 per cent growth in mining sector fiscal revenue was primarily driven by an increase in corporate income tax inflows and mineral royalty, which dampened the decline in income tax (pay-as-you-earn) as well as other residual fiscal payments as shown in Table 4.0.

Table 4.0: Fiscal Revenue Contributions of the Mining and Quarrying Sector

<table>
<thead>
<tr>
<th>Type of Fiscal Payment (GH₵)</th>
<th>2017</th>
<th>2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Income Tax (Pay-As-You-Earn)</td>
<td>487,988,013</td>
<td>457,156,177</td>
<td>-6.3%</td>
</tr>
<tr>
<td>Corporate Income Tax</td>
<td>969,567,315</td>
<td>1,199,597,591</td>
<td>23.7%</td>
</tr>
<tr>
<td>Royalty</td>
<td>702,407,281</td>
<td>705,262,160</td>
<td>0.4%</td>
</tr>
<tr>
<td>Others (Self-Employed)</td>
<td>780,164</td>
<td>178,498</td>
<td>-77.1%</td>
</tr>
<tr>
<td>Total</td>
<td>2,160,742,773</td>
<td>2,362,194,425</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Source: Ghana Revenue Authority (2019)

In line with recent trends, corporate income tax payments by mining companies continued to exceed that of mineral royalty. Total corporate income tax receipts increased from GH₵ 969.57 million in 2017 to GH₵ 1.19 billion in 2018, a growth rate of 23.7 per cent. The significant growth in corporate income tax receipts was partly explained by the movement of Adamus Resources Limited from a loss to profit-making position in the year under review. Furthermore, mineral royalty receipts improved marginally by 0.4 per cent to GH₵ 705.262 million in 2018.

Conversely, employee income tax receipts (PAYE) mobilized by GRA from the mining sector reduced from GH₵ 487.99 million in 2017 to GH₵ 457.16 million in 2018. The 6.3 per cent fall in PAYE receipts was largely an outcome of the change in some mining companies’ business model from owner to contract mining. This is explained by the fact GRA classifies the activities of contract mining companies as part of services instead of mining and quarrying sector. Consequently, the PAYE of employees of contract mining firms are credited to the services sector. Lastly, the residual type of fiscal receipts, which is officially classified as self-employed, also plummeted by 77.1 per cent to GH₵ 0.178 million in 2018.

In spite of the upturn in mining sector’s fiscal receipts in 2018, its share in total direct domestic revenue collected by GRA decreased from 16 per cent in 2017 to 14 per cent in 2018. The reduction in the mining sector’s share in direct domestic revenue was primarily due to a 26 per
cent increase in total direct domestic fiscal receipts, from GH₵ 13.2 billion in 2017 to GH₵ 16.6 billion in 2018. Against this backdrop, the mining sector slipped to the second position on the league of economic sectors assessed by the GRA in 2018. In terms of domestic and total government revenue, the 2018 minerals sector fiscal performance translates into 5 per cent and 4.9 per cent of those revenues respectively. As shown in Figure 6.0, the comparable outturn in 2017 was 5.4 per cent and 5.2 per cent.

Figure 6.0: Contribution of the Minerals Sector to Government Revenue

Source: Ghana Revenue Authority (2019) and Ministry of Finance (2019)

Merchandise Exports and Balance of Payments
Like any other import dependent economy, adverse movements in Ghana’s exchange rate is generally transmitted through the economy as an increase in the price level. In order to mitigate such pressures, it is important for the financial intermediation system to have regular access to forex. The minerals and mining sector plays a crucial role in that regard by serving as a steady source of supply of forex to finance the import demands of the country and stabilize the exchange rate.

Data from the Bank of Ghana shows that export proceeds from the country’s minerals sector declined by 3.7 per cent to US$ 5.779 billion in 2018 from US$ 6.004 billion in 2017. The reduction in mineral exports receipts was largely a consequence of simultaneous declines in the export volume of gold, diamond and bauxite, which outweighed the expansion in manganese shipments. Proceeds from the export of gold plummeted from US$ 5.786 billion in 2017 to US$ 5.461 billion in 2018, a fall of 5.6 per cent. Likewise, receipts from the purchases of diamonds contracted by 32.3 per cent to US$ 1.90 million in 2018 while that of bauxite declined by 53.7 per cent to US$ 23.57 million in the same period. In contrast, proceeds from the shipments of manganese increased from US$ 164.51 million in 2017 to US$ 292.71 million in 2018, an upturn of 77.9 per cent.

On account of the reduction in proceeds from the export of gold, its share in mineral export revenue declined to 94.4 per cent in 2018 relative to 96 per cent in 2017. The analogous outturns for manganese, bauxite and diamond in 2018 were 5.06 per cent, 0.41 per cent and 0.03 per cent respectively.

Notwithstanding the weak export revenue performance, the minerals sector retained its position as the leading source of foreign exchange from the export of commodities in 2018. The sector’s share in total merchandise exports receipts was 39 per cent, which compares favourably to the outturns of cocoa and crude oil. As shown in Figure 7.0, cocoa and crude oil accounted for 14 per cent and 31 per cent of merchandise exports in 2018 respectively. In the previous year (2017), the minerals sector’s share stood at 43 per cent while that of crude oil and cocoa were 23 per cent and 19 per cent respectively.

**Figure 7.0: Share of Export Commodity in Gross Merchandise Exports**
Source: Based on data from Bank of Ghana (2019)

The minerals sector’s forex receipts combined with other export commodity revenues to improve on the positive trade balance recorded in the previous year. The excess of merchandise exports over merchandise imports improved from US$ 1,187 million in 2017 to US$ 1,778 million in 2018. The 49 per cent year-on-year growth in the trade surplus is particularly significant given that imports of goods increased within the period. More so, it marks the second successive year the country has recorded a trade surplus in its balance of payments.

Despite the appreciable positive growth in the trade and transfer accounts, unfavourable developments in the services and investment income account worsened the current account deficit to US$ 2,071 million in 2018 from US$ 2,002 million in 2017. The impact of the expansion in the current account deficit on overall balance of payments (BOP) was somewhat moderated by a positive outturn in the capital and financial account, which stood at US$ 1,612 million at the end of 2018. Consequently, the overall balance reduced from a surplus of US$ 1,091 million in 2017 to a deficit of US$ 671 million in 2018. Against this backdrop, the country’s gross international reserves declined to the equivalent of 3.6 months of imports cover in 2017 relative to 4.3 months of import cover in 2018. In the light of the deterioration in the external account, the local currency depreciated against the US dollar at a faster pace of 8.4 per cent in 2018 as compared to 4.9 per cent in 2017.

**Local Impact of Mining in 2018**

A potent pathway through which the minerals and mining sector interacts with the non-mining economy to spur national development is the plough back of minerals export receipts and expenditure of same in-country. In 2018, the producing member companies of the Chamber returned US$ 2.882 billion out of their realized export receipts of US$ 3.858 billion into the country through the commercial banks. This translates into 74.7 per cent of mineral export revenue, which compares favourably with the outturn of 70 per cent in 2017.

The returned mineral receipts were spent on procurement of goods and services, payment of salaries as well as honouring obligations to the state and mining communities. In 2018, the total amount of funds expended on the purchase of inputs sourced from in-country suppliers or manufacturers stood at US$ 2.270 billion. This comprised expenditure on diesel (US$ 320.599 million), electricity (US$ 246.999 million) as well as goods and services (US$ 1.702 billion). The 2018 outturn, which is equivalent to 58.5 per cent of mineral export receipts, was 24.2 per cent higher than the corresponding amount of US$ 1.827 billion recorded in 2017. In discrete terms, the expenditure on diesel, electricity as well as goods and services represents 8 per cent, 6 per cent and 44 per cent of mineral export receipts respectively.

Moreover, the producing member companies of the Chamber spent US$ 632.341 million, US$ 450.071 million and US$ 24.093 million on statutory payments to the state, compensation to employees and corporate social investment projects respectively. These payments translate into 16 per cent, 12 per cent and 1 per cent of total mineral export proceeds in 2018 respectively.
Their equivalence in the preceding year were 11 per cent, 14 per cent and 0.5 per cent respectively. Overall, the total proportion of mineral export receipts spent in-country was 87.05 per cent in 2018, which was a marked improvement over the 74.9 per cent recorded in 2017.\(^4\)

In line with the Chamber’s efforts to leverage the mining industry to stimulate the local economy, the proportion of mineral export revenue spent on imported consumables declined from 6 per cent in 2017 to 5 per cent in 2018. In monetary terms, the latter translates into US$ 204.824 million. It is also worth pointing out that the reduction in spending on imported consumables is consistent with the industry’s expenditure pattern since 2012. Over the period, mining companies’ expenditure on locally sourced goods and services has increased year-on-year while that of imported consumables has progressively decreased. Further, the producing member companies spent US$ 202.060 million on amortization of loans, US$ 720.564 million on capital expenditure and US$ 261.153 as payments to non-government shareholders. These payments amount to 5 per cent, 19 per cent and 7 per cent of mineral export receipts in 2018 as shown in Figure 8.0 and their corresponding shares in 2017 were 10 per cent, 19 per cent and 1 per cent respectively.

**Figure 8.0: Distribution of Mineral Export Receipts by Producing Member Companies**

\(^4\) The revenue spent in country includes expenditure from Obuasi Mine which neither produced nor earned the associated mineral revenue in the period under consideration.
In spite of the significant growth in employment at Newmont’s Ahafo mine, the change in Gold Fields Tarkwa mine’s business model from owner to contract mining and Golden Star Resources’ decision to rightsize its Wassa and Bogoso/Prestea mines culminated in a reduction in the industry’s workforce. Total direct employment by the producing member companies declined by 4 per cent to 10,109 persons in 2018. This comprised 9,950 Ghanaian employees and 159 expatriate workers. The latter represents 1.6 per cent of the producing member companies’ workforce in 2018.

**Performance of Producing Member Companies in 2018**

Buoyed by a marginal rise in gold price and a steep increase in manganese shipments, total mineral revenue of the producing member companies of the Chamber increased by 4.6 per cent,
from US$ 3.687 billion in 2017 to US$ 3.858 billion in 2018. In terms of revenue outturn of the specific minerals, proceeds from the production of gold increased by 1.1 per cent, from US$ 3.522 billion in 2017 to US$ 3.561 billion in 2018. As well, receipts from the shipment of manganese improved by 79.8 per cent on a year-to-year basis, from US$ 165.198 million in 2017 to US$ 297.007 million in 2018, as shown in Figure 9.0.

**Figure 9.0: Mineral Revenue of Producing Member Companies of Chamber of Mines**

![Figure 9.0: Mineral Revenue of Producing Member Companies of Chamber of Mines](image)

Source: Ghana Chamber of Mines (2019)

**Figure 10.0: Mineral Produced by Member Companies of the Ghana Chamber of Mines**

![Figure 10.0: Mineral Produced by Member Companies of the Ghana Chamber of Mines](image)

Source: Ghana Chamber of Mines (2019)

The slight increase in receipts from gold production was primarily due to a marginal increase in realized price of the metal which outweighed the dip in output. Total gold output attributable to the producing member companies of the Chamber reduced from 2.806 million ounces in 2017 to 2.804 million ounces in 2018. The 0.1 per cent fall in gold production mirrored the near eveness

**Figure 11.0: Gold Produced by Member Companies of the Ghana Chamber of Mines**

![Gold Produced by Member Companies of the Ghana Chamber of Mines](image)

Source: Ghana Chamber of Mines (2019)

**Figure 12.0: Receipts of Gold Produced by Member Companies of Ghana Chamber of Mines**

![Receipts of Gold Produced by Member Companies of Ghana Chamber of Mines](image)
Production at the Gold Fields’ operated Tarkwa Mine, which transitioned from owner to contract mining, reduced by 7 per cent to 524,869 ounces in 2018 relative to 566,388 ounces in 2017. The contraction in the mine’s output was basically due to a decline in the mill head grade from 1.30 gram per tonne in 2017 to 1.18 gram per tonne in 2018. On account of the fall in output, the share of Gold Fields’ Tarkwa Mine in total gold production of the Chamber’s members decreased by a percentage point to 19 per cent in 2018. Nonetheless, the mine retained its position as the largest gold producer in Ghana.

Conversely, output at the Damang Mine of Gold Fields increased from 143,568 ounces in 2017 to 180,844 ounces in 2018. The remarkable 26 per cent growth in output was primarily precipitated by a rise in the volume of ore mined by the mine’s two local contractors, BCM and E&P. Against this backdrop, the share of Damang Mine in total gold production of the Chamber’s membership appreciated from 5 per cent in 2017 to 6 per cent in 2018. On account of the contrasting production outturn of the two mines, the contribution of Gold Fields to gold production of the Chamber’s members remained largely unchanged at 25 per cent in 2018.

With fresh ore from its Subika underground mine which achieved commercial production in the fourth quarter of 2018, production at Newmont’s Ahafo Mine increased by 25 per cent, from 349,032 ounces in 2017 to 436,106 ounces in 2018. The additional production from the underground operations more than compensated the decline in output from the open pits and also improved the average head grade. In view of the growth in output, the share of Ahafo Mine in gold output of the Chamber’s producing members increased to 15 per cent in 2018 as compared to 12 per cent in 2017.
On the other hand, production at the Akyem Mine of Newmont decreased from 473,390 ounces in 2017 to 414,427 ounces in 2018. The 12 per cent fall in output was a consequence of concurrent decline in the mill throughput, quantum of ore processed, mill recovery rate and average head grade. Owing to the dip in output, the mine’s contribution to gold output of the Chamber’s members waned from 17 per cent in 2017 to 15 per cent in 2018. On the whole, the share of Newmont in total gold output of the Chamber’s producing member companies improved slightly to 30 per cent in 2018 relative to 29 per cent in 2017.

On the back of mixed production outturns from its Wassa and Prestea Mines, Golden Star Resources accounted for 8 per cent of gold output of the Chamber’s members. In 2017, the corresponding share was 10 per cent. Following the cessation of mining in its open pits in February 2018, Wassa Mine operated solely as an underground operation for the rest of the year. In the absence of complementary supply from the surface operations, the volume of ore mined decreased in 2018 relative to 2017. However, this was somewhat moderated by supplementary supplies from the open pits’ stockpiled material. Further, the relatively higher grade of the underground deposits led to an improvement in the average head grade from 3.03 gram per tonne in 2017 to 4.18 gram per tonne in 2018. Owing to the moderating influences on the reduction in ore mined, total production at Wassa Mine improved from 137,234 ounces in 2017 to 149,698 ounces in 2018. This represents an increment of 9 per cent in the mine’s output and 5 per cent of total gold production of producing member companies in 2018.

Regarding the Prestea Mine, production fell by 42 per cent to 75,087 ounces in 2018 from its 2017 level of 130,331 ounces. The reduction in output was predominantly as a result of the slower-than-expected ramp up in production at the underground mine which attained commercial production on 1st February, 2018. This situation was exacerbated by the planned decrease in production from the mine’s open pits whose end of life was pegged at the end of 2017. However, the mine continued to obtain ore from these pits in 2018 to shore up production from its underground operations. In the light of the operational challenges, the share of Golden Star Bogoso Prestea Limited in total gold production of producing member companies declined from 5 per cent in 2017 to 3 per cent in 2018.

With the Obuasi Mine under care and maintenance in 2018, the only source of production for the AngloGold Ashanti operated mines in Ghana was the Iduapriem Mine, which also recorded its highest ever production level of 253,487 ounces. The comparable level of output in 2017 was 227,833 ounces. This 11 per cent upturn in production came on the back of a simultaneous 8 per cent and 6 per cent increase in the quantity of ore mined and milled respectively as well as a 5 per cent growth in the average head grade, from 1.40 gram per tonne in 2017 to 1.47 gram per tonne in 2018. In the case of the latter, it was brought about by improvements in grinding of the ore laden materials and efficiency of the milling plant. More so, the mining activities focused on the deeper and higher grade areas in the main Teberebie pit. On account of the growth in production, the share of Iduapriem Mine in total gold production increased by a percentage point to 9 per cent in 2018 as shown in Figure 13.0. It must also be pointed out that Iduapriem Mine’s contribution to total gold production was analogous to that of the AngloGold Ashanti group.

Figure 13.0: Share in Gold Production by Producing Member Companies in 2018
Production at the Kinross operated Chirano Gold Mines contracted by 8 per cent. The fall in output from 245,511 ounces in 2017 to 226,370 ounces in 2018 was mainly a reflection of the aftereffect of discontinuation of mining in the open pits in the second quarter of 2017. This was however moderated by increased mining activities in the Akoti and Akwaaba underground pits as well as reliance on stockpiled material. A corollary outcome of the sequencing of underground and stockpiled materials was an 11 per cent decline in the grade of processed ore. Against this backdrop, the contribution of the mine to total gold output of the Chamber’s producing members shrank to 8 per cent in 2018 as compared to 9 per cent in 2017.

Apart from operating multiple pits; Nkran, Nkran Extension, Akwasiso, Dynamite Hill and Esaase Bulk Sample Point, Asanko Gold Mines’ increased application of technology gave rise to an increase in production, from 205,047 ounces in 2017 to 223,152 ounces in 2018. The 9 per cent expansion in production was partly on account of the installation of a mill slicer technology, modifications to the comminution circuit as well as commissioning of a secondary cone crusher to support the existing mobile crusher. These developments culminated in an improvement in the mine’s average head grade from 1.5 gram per tonne in 2017 to 1.6 gram per tonne in 2018. As well, its share in total gold production increased by a percentage point to 8 per cent in 2018. In the year under review, Gold Fields acquired a 45 per cent stake in Asanko Gold Mines.

At the Edikan Mine of Perseus Mining (Ghana) Limited, mining activities focused largely on the high grade zones of its pits; Chirawewa, Fetish, Esuajah North and Fobinso. Coupled with an increase in the quantum of ore mined and milled, the average grade of milled ore improved in 2018 relative to 2017. These occasioned a 4 per cent growth in the mine’s output, from 208,226
ounces in 2017 to 217,219 ounces in 2018. Furthermore, the share of Perseus in total gold output of member companies rose to 8 per cent in 2018 from 7 per cent in 2017.

Adamus Resources Limited recorded a 12 per cent year-on-year decline in production as a result of two main operational challenges. Firstly, the Adamus pit was flooded for nearly two months and therefore hampered access to the ore. Further, the other pit, Bokrobo, was inundated by illegal miners who did not only interfere with planned mining activities but also depleted portions of the orebody. Moreover, mining activities were centered in the low grade zones of the pits. This also led to a decline in the average head grade. Notwithstanding the resulting decline in output from 117,242 ounces in 2017 to 103,731 ounces in 2018, Adamus’ contribution to total gold production of member companies was largely unchanged at 4 per cent within the period.

In line with its decision to ramp up production to meet increased global demand, shipments by the monopoly producer of manganese in the country, Ghana Manganese Company, rose by 52 per cent to 4.551 million tonnes in 2018. The corresponding shipment level in 2017 was 3.003 million tonnes.

**Outlook of Mineral Production in 2019**

Based on the production guidance of our member companies, we expect broad-based increases in output in 2019. Newmont’s Ahafo Mine is projected to ramp up production at its underground mine which achieved commercial production in 2018. Further, the Damang Mine of Gold Fields is forecasted to record year-on-year growth in output on the back of the progress made in accessing the high grade area in the Damang pit. Similarly, AngloGold Ashanti Iduapriem Limited, Perseus Mining (Ghana) Limited, Asanko Gold Mines Limited and Golden Star Wassa Limited are also expected to improve upon their 2018 output levels. More so, the Obuasi Mine of AngloGold Ashanti will pour its first gold in the post care and maintenance era in the fourth quarter of 2019. The rise in production from these firms are anticipated to offset the planned decrease in production from the other member companies. With respect to manganese, Ghana Manganese Company is expected to increase its shipments in line with recent trends.

**Production Cost Profile of Gold Producing Member Companies in 2018**

The average cost of producing an ounce of gold by the Chamber’s producing member companies, as measured by the All-In-Sustaining Cost (AISC), increased from US$ 935 per ounce in 2017 to US$ 941 per ounce in 2018. This is relatively higher than the global AISC of US$ 909 per ounce in 2018 reported by Metals Focus and World Gold Council. The 0.6 per cent expansion in cost was mainly due to the general increase in mining cost and decline in production. AISC is a proprietary metric of the World Gold Council that measures production and other costs related to sustaining current gold production and sustaining capital expenditure as shown in Box 1.0.

**Box 1.0: Composition of All-In-Sustaining Cost**
The cost of producing an ounce of gold at Gold Field’s Tarkwa Mine rose to US$ 951 in 2018 from US$ 940 in 2017. Primarily, the percentage point increase in AISC was due to relatively higher cost of sales and reduced production, which were moderated by lower capital expenditures. On the other hand, the Damang Mine of Gold Fields recorded a 21 per cent year-on-year decrease in production cost. The decline in AISC from US$ 1,027 per ounce in 2017 to
US$ 813 per ounce in 2018 was mainly driven by the growth in production and better-than-expected efficiencies from contractors. These factors were sufficient to offset the growth in cost of sales and capital expenditure within the period.

In spite of the relatively high levels of depreciation and amortization rates as well as oil prices in 2018, the reduced cost of sales, power costs as well as sustaining capital and remediation costs led to a 7 per cent decline in the AISC of Newmont’s Ahafo Mine. The AISC fell from US$ 933 per ounce in 2017 to US$ 864 per ounce in 2018. Conversely, the cost of producing an ounce of gold at the Akyem Mine of Newmont grew by 6 per cent, from US$ 663 per ounce in 2017 to US$ 705 per ounce in 2018. The primary drivers of the increment in cost were higher oil prices, higher stockpile inventory adjustments and lower levels of gold sold, which were partially offset by reduced power costs and favourable strip ratio.

Golden Star Wassa Mine’s AISC decreased from US$ 966 per ounce in 2017 to US$ 735 per ounce. The 24 per cent reduction in AISC was occasioned by an increase in production and lower cost of sales, which balanced an increase in capital expenditure. Conversely, the AISC of Golden Star Bogoso Prestea increased by 57 per cent to US$ 1,235 per ounce in 2018 from US$ 788 per ounce in 2017. The growth in production cost was primarily due to increase in inventory cost and mine operating expenses as well as reduced output.

With respect to the Iduapriem Mine of AngloGold Ashanti, its AISC dropped from US$ 1,005 per ounce in 2017 to US$ 977 per ounce in 2018. The 5 per cent nosedive in production cost was realized on the back of an Operational Excellence programme which led to a reduction in sustaining capital expenditure. As well, the mine’s record level of production contributed to the fall in AISC in 2018.

At Kinross’ Chirano Gold Mines, a combination of lower overhead, maintenance and power costs outweighed the reduction in production revenue to exert downward pressure on cost per ounce of gold produced. AISC plummeted by 9 per cent to US$ 889 per ounce in 2018 relative to US$ 973 per ounce in 2017.

The AISC of Asanko Gold Mines increased from US$ 1,007 per ounce in 2017 to US$ 1,072 per ounce in 2018, an expansion of 6 per cent. While the growth in production was the main moderating influence, the cost push factors include hikes in fuel cost, the conversion of a refundable fiscal payment into a non-refundable levy as well as relatively high mining costs. In the case of the latter, it was basically due to the costs associated with ramping up production at one of its pits, Dynamite Hill.

A reduction in capital expenditure and higher output were insufficient in offsetting the growth in mining costs, leading to an increase in the AISC of Perseus Mining (Ghana) Limited. The AISC increased from US$ 1,096 per ounce in 2017 to US$ 1,129 per ounce. This represents a rise of 3 per cent.

Regarding Adamus Resources Limited, its AISC increased from US$ 859 per ounce in 2017 to US$ 981 per ounce in 2019 as shown in Figure 14.0. The 14 per cent hike in production cost could be ascribed to the decline in output.
Fig 14.0: All-In-Sustaining Cost of Producing Member Companies

![Graph showing the All-In-Sustaining Cost of Producing Member Companies for various companies in 2017 and 2018.](image)

Source: Chamber of Mines (2019)

**Health and Safety Performance of Ghana’s Mining Industry in 2018**

Data from Ghana’s mining industry regulator, Minerals Commission, suggests that the total number of incidents (629) in 2018 was 8 per cent higher than the 581 recorded in 2017. The frequency of incidents which does not result in loss of shift, injury, death or damage to equipment, which is referred to as Near Miss, increased by 12 per cent. It rose from 364 to 407 cases. However, the recorded cases of First Aid Injuries, which refers to the class of injuries that does not involve loss of shift, declined from 192 in 2017 to 189 in 2018. This translates into a 2 per cent reduction in such class of injuries.

On the other hand, the frequency of serious incidents increased by 30 per cent, from 20 in 2017 to 26 in 2018. A Serious Injury is any type of injury that results in a loss of time of more than 14 days. As well, the number of fatal incidents, which are occurrences on the mines that lead to mortality, increased by 40 per cent to 7 in 2018. Its corresponding outturn in 2017 was 5 as shown in Figure 15.0.

**Figure 15.0: Frequency of Incidents in Ghana’s Mining Industry**
Challenges Confronting Member Companies in 2018

In the ensuing section, we group the challenges into three broad themes; non-fiscal, fiscal and advocacy issues.

Non-Fiscal Issues

Utilization of Royalties and Poor Development Outcomes in Mining Communities

At the 2018 edition of the West African Power Conference and Exhibition, H.E. the President remarked that “the distressed state of communities in which mining companies operate is nothing short of a disgrace, and we must work to change the situation. Even though mining companies have, over the years, complemented the work of government in these communities, I am certain that a lot more can be done to transform the communities if government and the mining companies collaborate in an intelligent and sustainable manner.”

The poor state of mining communities is largely an outcome of the mechanism for allocating and utilizing fiscal revenues realized from the extraction of mineral resources. Apart from the statutory proportion of mineral royalty that is ploughed back to the host mining communities, all
the other streams of fiscal revenue originating from the mining sector accrue to the central
government. On the back of the multifaceted developmental challenges confronting the country,
the government is unable to return the commensurate level of revenue needed to finance the
infrastructural requirements of mining communities. As a result, most mining communities tend
to have pronounced deficits in most development parameters such as roads, schools, health
facilities and potable water.

Even in the case of mineral royalty, only 13 per cent of the realized revenue is ploughed back to
the communities where mining takes place. Out of this amount, 4.95 per cent accrues to the
District Assembly while the Mining Community Development Scheme (MCDS) set up under the
Minerals Development Fund (MDF) Act, 2016 (Act 912) receives 4 per cent. The remaining
amount is ploughed back to traditional authorities in the host mining communities. In essence,
the share of mineral royalty that is used to support development in mining communities is 8.95
per cent. Obviously, this is woefully inadequate to address the infrastructure shortfalls in the
origins of the country’s mineral wealth. It is on this premise that the Chamber urges the
government to consider increasing the community’s share of royalty from 8.95 per cent to 30 per
cent and earmark same for specific projects.

Further, the plough back of mineral royalty revenue to the community has been characterized by
perennial delays. This situation does not only erode the value of revenue to community members
but also hampers the ability of the Municipal and District Assemblies to effectively plan the
execution of developmental projects on the back of such streams of income. Although we
recognize that the MDF Act has adequate provisions to ensure timeliness in transfer of mineral
royalty to the mining communities, it is rarely the case in practice. This problem, in part, is also
due to the inability of the Ministry to inaugurate the Board of the MDF. Accordingly, we
encourage the Ministry to do so expeditiously. In addition, we request the Ministry to inaugurate
the Local Development Committees in each mining jurisdiction as stipulated in Act 912.
Evidently, the setting up of these bodies will enable the nation to realize the benefits of the
legislation, which is to use mineral revenue to accelerate development of mining communities.
Delays in Issuance of Environmental Permits

The lack of adequate personnel at the Environmental Protection Agency (EPA) to review permit applications causes long delays in approval of same. The unpredictable lead times for issuing permits by the EPA adversely affect project planning and execution. It also impacts negatively on raising of investment capital for projects since it creates uncertainty regarding cash flows and other project metrics. A survey by the Fraser Institute in 2017 showed that most investors were concerned about the long lead time for the approval of environmental permits for both mining and exploration firms.

In order to proactively address this problem, the Chamber is liaising with the EPA to introduce permit tracker technology to reduce the waiting time. We therefore urge government to complement the Chamber’s efforts by improving the human resource capacity of EPA.

Withdrawal of Troops from Mining Companies

Over the years, the Chamber and its producing member companies have received the support of the security agencies in protecting assets at the mines. In particular, the Chamber’s relationship with the Ghana Army was formalized through a Memorandum of Understanding (MoU) which was first signed in 2014. Under this arrangement, some military personnel are deployed to the mines to provide a range of high level and strategic services to support the operations of mining companies. Generally, this excludes guard duties or any other activities that bring the officers in close proximity with civilians. As a matter of fact, the presence of military personnel on the mines is basically to deter crime and complement the mining companies’ internal security arrangements.

The Chamber was informed about government’s decision to withdraw military officers from the concessions of its producing members from 1st November to 31st December, 2018. Although the personnel were pulled-out on 31st January, 2019, it is obvious that this will culminate in serious security challenges for the operating mines. Firstly, the Minerals and Mining (Explosives) Regulations, 2012 (Act 2177) provides that magazines for storing explosives should be manned by highly competent security persons. The civilian guards who used to undertake such duties were unable to ward off armed intruders from stealing explosives. In view of the risk the
development posed to the country’s security, an agreement was reached among National Security, Minerals Commission and mining companies for armed military persons to permanently protect explosives magazines. Thus, the pull-out of troops from the mines would lead to a situation where the mines may not be able to effectively safeguard such critical installations. In the context of recent happenings in the sub-region, this development could even be a fertile ground for coordinated attacks on the mines.

Further, the mine sites and their host communities are usually targets for sophisticated crimes which cannot be easily repelled by internal security officers. Indeed, the severity of the situation led to the deployment of military persons in mining communities under “Operation Calm Life”. The military persons were accommodated on the mines at the behest of government due to the inability of local government authorities to provide the required logistics. In essence, the presence of military officers at the mines was in service to the nation even as they protect a natural resource which is owned by the good people of Ghana. The level of crime in such areas have not remarkably improved to warrant a withdrawal of military officers. Accordingly, the Chamber urges the state to deploy police officers to complement private security personnel to protect life, limb and property at the various mines.

**Deplorable State of Railway Infrastructure**

The Western railway line, which was the primary mode of hauling bulk minerals to the Takoradi port, has deteriorated over the years as a result of obsolescence and limited investments. Consequently, the bulk mining companies, like the other producers of bulk export commodities, have had to make use of the more expensive road system. For instance, Ghana Manganese Company hauled 15.6 per cent of its shipment via the western railway line and the remnant by road. It is estimated that the cost of road haulage is 50 per cent more expensive than the alternative of using the railway lines. This erodes the bottom line of the bulk mineral producers and could compel them to fold up prematurely if a solution is not found sooner.

Successive Budget Statements and Economic Policies point out the intention of government to rehabilitate the western rail network. Unfortunately, this is yet to happen, even though the benefits of a well-functioning railway system will not be a preserve of the mining industry but
the entire economy. It could also serve as an alternative means of transporting life, foodstuff and other commodities across the country.

The Chamber is therefore pleased at government’s efforts to rehabilitate the country’s railway network, particularly, the western railway line. We urge government to expedite action in that regard since it has the inherent potential to generate revenue to pay back the initial investment cost.

**Fiscal Issues**

*Incentives for Exploration Companies*

The relevance of exploration in ensuring a pipeline of future viable projects cannot be over-emphasized. It is the single most critical activity that guarantees continuous production and discovery of mineral resources to supplement production from existing mines or replace output of mines whose economic ore body is exhausted. However, exploration investment in Ghana has declined significantly in recent years. This is alarming for a country to which mining is critical for forex and fiscal revenue generation.

It is also worth noting that the preponderant share of exploration licenses issued by the Ministry of Lands and Natural Resources is held by Ghanaians who are usually constrained in raising capital to finance the high-risk business of exploration. Given that Ghanaians hold a large share of exploration mineral rights, they stand to benefit if the hurdles of exploration in terms of upfront costs are reduced to facilitate effective exploration and consequent commercial finds.

In other words, it is crucial to put in place an incentive scheme that will reduce the cost associated with exploration and attract the required critical investments into the high risk business of mineral exploration. As a first step, we suggest that the government should exempt exploration companies from payment of VAT on big ticket cost items such as drilling and laboratory services. In Ghana, VAT is payable on exploration expenditure and it cannot be recovered by the exploration companies unless they make a commercial find and commence production. This implies that where exploration is unsuccessful, VAT will not be recoverable. Effectively, the extent of actual exploration activity is diminished by upfront costs such as VAT on inputs. Thus, relieving the usually illiquid exploration companies from the payment of VAT
would not only improve their cash flow and reduce their operational costs but also enhance the country’s image as a competitive destination for exploration investment. In the long-run, this will guarantee continuous mineral production and flow of fiscal and forex receipts as well as other benefits from the minerals sector.

Relatedly, exploration companies experience significant delays in the processes relating to the acquisition of permits for their activities. This situation, which could persist up to five years, does not only weaken the underlying fundamentals for the projects but also dissuades investors from injecting additional capital into ongoing exploration concerns. We therefore request government to reduce the lead time between application and receipt of exploration permits.

**Amendment of VAT Act, 2013 (Act 870)**

In the mid-year review of the 2018 Budget Statement and Economic Policy, the Minister of Finance announced a review of the VAT Act, 2013 (Act 870). This entailed a reduction in the VAT rate from 17.5 per cent to 12.5 per cent as well as the imposition of 2.5 per cent Ghana Education Trust Fund (GETFUND) Levy and 2.5 per cent National Health Insurance Levy (NHIL). These amendments were subsequently approved by Parliament.

Although we fully recognize that these fiscal measures were introduced to augment the government’s revenue generation efforts, the associated negative impact on businesses could undermine the State’s objective. The erstwhile VAT regime allowed mining companies to reclaim their entire VAT payments through the input-output arrangement. However, the recent amendment reduced the claimable portion of the VAT impost from 17.5 per cent to 12.5 per cent with the conversion of NHIL and GETFUND levy to a flat rate.

The latter has led to a situation where payments for supply or import of goods or services made in respect of NHIL and GETFUND Levy cannot be treated as deductible input cost by mining companies. Evidently, these fiscal measures have instantaneously culminated in a minimum of 5 per cent increase in cost of doing business. This is on account of the fact that the tax induced cost cannot be passed on to mining firms in the short-term, especially in situations where contracts have fixed process. Where prices are not fixed, the impact on mining firms have been steep. In a
particular instance, the ramifications of this fiscal change has resulted in an additional cost of US$ 10 million per annum.

This additional cost comes on the back of a challenging business environment that has undermined the competitiveness of mining companies in Ghana. More so, the already high fiscal burden on mining companies will be compounded by the additional impost occasioned by the new tax measures. We therefore respectfully request the government to reverse this fiscal measure.

**Audit of Mining Firms by Ghana Revenue Authority (GRA) and Matters Arising**

The Ghana Revenue Authority (GRA) recently conducted an audit of mining firms and raised a number of issues with some of the latter’s practices. Specifically, GRA cited some of the mining firms for abusing the Mining List and other concessions granted them by transferring items acquired through such exemptions to other third party entities that are either mining companies or mine support service companies. It must be pointed out that these companies are also beneficiaries of the exemptions provided in the Mining List either directly or through the Minerals & Mining (Support Services) Regulations, 2012 (LI2174).

In the light of the adverse findings, GRA imposed fines on the affected companies. While recognizing the statutory authority of GRA to pronounce such judgements, the Chamber is of the view the decision to mete out fines was premised on a narrow interpretation of the law without regard to the broad purpose of the law. We therefore urge the relevant duty bearers to rescind the pecuniary sanction imposed on the affected member companies.

**Concerns on Income Tax Act, 2015 (Act 896)**

In 2015, the government passed the Income Tax Act, 2016 (Act 896), with the overriding objective of expanding its tax base and enhancing tax payments as well as revenue collection. Following the passage of the Act, the Chamber identified a number of concerns and raised them directly with the Minister of Finance. The specific concerns of the Chamber are as follows:
Ring Fencing

Ring fencing is one of the major and fundamental concepts underlying the entire Act 896. In addition to the general provisions on ring fencing in the Act, there are specific provisions pertaining to the mining industry. Section 78 (1) provides that subject to this section, the following shall constitute a separate mineral operation:

- a mineral operation pertaining to each mine; and
- a mineral operation with a shared processing facility.

Key to the provisions on ring fencing is the concept of “Shared Processing Facility”. In 2013, the Chamber, the Ghana Revenue Authority and the Minerals Commission had a workshop to discuss the implementation of the ring fencing provisions contained in the Internal Revenue (Amendment) Act, 2012 (Act 839). The Chamber outlined key operational reasons why the concept of ring fencing as contained in Act 592 was not practicable. The concept of “Shared Processing Facility” was introduced and it was defined to mean “a cluster of processing plants in close proximity”. This was the consensus reached at the workshop subject to holding subsequent discussions to fine-tune its implementation.

Based on the current wording of Act 896, however, it appears that if a single mine has two processing facilities, each processing facility shall be ring fenced separately. This raises practical difficulties in situations where ore from different pits is trucked to these facilities. The provision in the Act is not consistent with the consensus reached at the aforementioned workshop. Further, the current wording of the law artificially creates separate mineral operations and makes it difficult for mining companies to comply with it from a cost allocation perspective. The law suggests that the mining firm should separately account for income and expenses for its unnaturally segregated business.

Another key challenge in respect of the ring fencing provisions under Act 839 is the requirement that each “mining area” be treated as a separate mineral operation and the definition of “mining area” as “the area designated from time to time by the holder of a mining lease with the approval of the Minerals Commission,” which is consistent with the definition of mining area in The Minerals and Mining Act, 2006 (Act 703). This Mining Act definition envisages the routine
practice of progressively declaring mining areas within the mining lease as part of the ongoing plan to develop a single mining operation. In essence, it recognizes that areas within a mine can be developed over time, but it does not follow that they should be treated as artificial separate mining operations for tax purposes as required by section 78 (3). To do so is an impractical and completely uncommercial imposition on mining companies.

For instance, how will ground rent be determined for the various mining areas within the mining lease? Assuming the determination of the rent is based on area of operation, then a deduction will only be available for the small proportion of the fees relating to the declared active mining area. The firm will not be able to offset the ex-mining area costs since there is no income attributable to those areas. More so, tax deductions could be lost in some declared mining areas if those areas are unprofitable.

Of more importance is the requirement in section 77(5) that “arm’s length transaction” pricing rules be applied in each artificial “mineral operation” will create serious tax anomalies. In most cases the “arm’s length” price for toll treating ore is much higher than what could be sustained in an integrated mining operation comprising multiple pits. For most mines, the feasibility of the entire operation is dependent on ore from a number of pits being processed through a central processing facility. An “arm’s length” processing price will likely result in losses being recorded by each of the artificial “mineral operations” containing pits and a profit and tax being payable by the “mineral operation” which contains the processing plant. That scenario is not sustainable.

In the light of the serious and hopefully unintended commercial implications resulting from the definition of “mining area” and the requirement to treat each mining area as a separate operation for tax purposes, together with the practical challenges with the concept of ring fencing, we propose that the GRA suspend the enforcement of these provisions as it dialogues with the Chamber to find a common position. In the petroleum industry, it is comparatively easier to ring-fence on a well by well basis. However, the same practice cannot practically be transferred to the mining industry, especially surface mines, where there is transferability of ore from different pits.
Financial Deductions
The prose in section 81 (4 and 5) suggests that mining companies may be prohibited from deducting interest and costs associated with loans denominated in or indexed to foreign currency, and possibly for losses incurred in hedging transactions undertaken to cushion a mining company against currency or commodity fluctuations. The law seeks to do so by limiting deductions for foreign currency or hedging losses within each corresponding separate “mineral operation” to foreign currency or hedging gains within that particular operational area in the year. While the definition of “foreign currency instrument” is expected to be provided in the yet-to-be published regulation, if it is defined to include debts layered in foreign currency, it will have the previously described effect. On account of the capital intensive nature of mining, such an outcome will obviously have adverse effects on the ability of firms to finance new or expand existing operations with foreign debt. Accordingly, we request that these provisions be suspended pending clarification of definitions and consideration of their effect.

Limitations on Deductibility of Payment for Services to Non-Residents
Under the erstwhile tax laws, non-resident persons were effectively taxed under the withholding tax system. However, Act 896 appears to deny a deduction for expenditure where the income for the service provider is not sourced from Ghana. Specifically, section 81 (2) (b) (ii) provides that “the Commissioner-General shall not allow a deduction for an amount unless that amount is wholly, exclusively and necessarily incurred in acquiring services or facilities for the mineral operation and is income of the recipient which has a source in Ghana”. Section 105 (i), also defines an income to have a source in Ghana “if it relates to payments for or attributable to employment, service rendered or forbearance from exercising employment or rendering a service in the country, regardless of the place of payment”.

These are the unintended consequences of the current wording of the law which the Chamber believes should not be the case. In its current state, the law is acutely detrimental to the mining industry, which is also the tax payer.

It is also unclear whether the restrictions in section 81 (2) have the effect of denying deductions for expenditure such as:
Consumables such as fuel or chemicals acquired for use in the mining process (which is the case unless their purchase is accepted as the acquisition of a valuable asset)

Wages of employees (unless they are classified as services of mining operation)

Electricity costs, rent, telephone, among others.

In view of the nebulousness of the law, we request the GRA to take a second look at the wording of the law and address the concerns raised.

**Thin Capitalisation**

Act 896 extends thin capitalisation provisions to restriction of deductions for interest and foreign exchange losses incurred by a foreign controlled company to all debt from any source. This is a clear departure from the familiar practice of associating thin capitalisation with related party transactions. In its current form, the Act raises a number of practical questions:

- What constitutes debt since debt has not been defined?
- At what point during the year of assessment should reference be made to in determining debt for thin capitalization purposes?
- What is the make-up of exempt equity? Act 896 is silent on retained earnings and other reserves in determining what constitutes equity for thin capitalization purposes.
- At what point during the year of assessment should reference be made to in determining equity for thin capitalization purposes?

The effect of the legislation is to stifle the development of new mines or expansion of existing mines since the non-deductibility of interest and foreign exchange losses will be built into financial models used in the bank’s credit decisions. We therefore request the GRA to provide clarity on the interpretation and application on the provisions of thin capitalisation.

**Artificial deemed Profits or Loss of deductions on change in shareholdings**

Shares held directly or indirectly in a mining company by publicly listed companies should be exempted from the “look-through” provisions in sections 81 (8) and 62. This is on account of the fact that publicly listed companies have no control over the sale of their shares and may not be able to trace the beneficial owners of those shares. In most cases, the Ghanaian mining company,
which is the subject of these provisions may not have the requisite information to comply with the Act.

We recommend that shareholders of a firm listed on a recognized stock exchange should be treated as an individual rather than attempting to look through to its individual shareholders. In fact, this “look-through” provision will stifle exploration and development in the Ghanaian mining industry if not removed entirely, since it has the effect of creating an artificially determined tax profit for, or denying tax deductions to, a Ghanaian company when the company inevitably has to source new funds for exploration or development of a mine.

Surely it is not intended that if a foreign shareholder of a Ghanaian mining or exploration company issues shares to a new shareholder to raise exploration funds for the Ghanaian company in which it has invested, it will either create a taxable profit or deny future deductions under the market value provisions of section 83 (2). There is no disposal of an asset and no profit made by any entity, so how can the Ghanaian exploration or mining company be taxed on the transaction? These provisions seek to create a deemed disposal for the Ghanaian company even where the investment in that company is only a minor part of the investment portfolio of the international investor which has a change of shareholding. Any person who invests in Ghana will be confronted with a perceived triple layer of tax which would have to be factored into purchase prices, thereby increasing transactional costs.

If the aim of Section 83 is to tax benefits received by the sale of shares in non-Ghanaian entities which hold indirect interests in Ghanaian mineral assets as their major investment, GRA must consider replacing Section 83 with a provision which specifically taxes the sale of those indirect shareholdings. More so, if Section 83 is replaced by such a provision, the tax should only apply where the investment in the Ghanaian mining company forms a major part of the underlying assets of the non-resident enterprise whose shares are sold and should not apply to the sale of shares which are listed on a recognized stock exchange.
**Taxation of Dividends**

Section 85(1) excludes Ghanaian company shareholders of mining companies from receiving dividends tax free under section 59 (3) where they own at least one-quarter of the shares in the company. This provision has the potential of creating double taxation, particularly, in the event that the dividend paid by the mining company will be taxed by its immediate shareholder and then again when that shareholder pays a dividend to its shareholder(s). Against this background, we request the GRA to provide clarity on the appropriate interpretation of this provision.

**Repairs and Improvement**

The income of a person is calculated by deducting from that income, any expense that is incurred by that person for the repair or improvement of a depreciable asset of that person, where the repair or improvement cost:

1. Is for a depreciable asset of that person,
2. Must be wholly, exclusively and necessarily incurred in the production of income from investment or business in satisfaction of the requirement
3. Maybe of a capital nature

However, a deduction granted for a year of assessment with respect to a depreciable asset in a particular pool of depreciable assets of a person should not exceed 5% of the written down value of the pool at the end of the year. Any excess for which a deduction is not allowed as a result of the limitation shall be added to the depreciation basis of the pool to which it relates.

The implication of the section 12 of Act 896 is basically asking tax payers to pay more taxes now by restricting the deductible amount for repairs and improvement cost of depreciable assets by carrying forward any excess of 5 per cent on the written down value of the pool at the end of the year to which the repairs and improvement cost relates to. Thus, to restrict cost in a particular year and carrying forward any excess will result in huge amount in tax liability which members’ cash flows cannot sustain.
High Fiscal Impost in the Price Build-Up of Diesel Supplied to the Mines

Based on the last price window in December 2018 shown in Table 5.0, the total taxes, levies and margins on the price of diesel supplied to the mines was GHp 196.96 per litre while the ex-refinery price was the equivalent of GHp 280.2346\(^5\). This implies that 41% of the price of diesel is made up of taxes, levies and margins.

Table 5.0: Price Build-Up of Diesel (PBU) - Effective 16\(^{th}\) to 31\(^{st}\) December, 2018

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount (GHp/ Litre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex-Refinery Price</td>
<td>280.2346</td>
</tr>
<tr>
<td>Energy Debt Recovery Levy</td>
<td>41.0000</td>
</tr>
<tr>
<td>Road Fund Levy</td>
<td>40.0000</td>
</tr>
<tr>
<td>Energy Fund Levy</td>
<td>1.0000</td>
</tr>
<tr>
<td>Price Stabilization And Recovery Levy</td>
<td>10.0000</td>
</tr>
<tr>
<td>Primary Distribution Margin</td>
<td>7.5000</td>
</tr>
<tr>
<td>BOST Margin</td>
<td>3.0000</td>
</tr>
<tr>
<td>Fuel Marking Margin</td>
<td>2.0000</td>
</tr>
<tr>
<td>Special Petroleum Tax</td>
<td>46.0000</td>
</tr>
<tr>
<td>Marketers Margin</td>
<td>27.4555</td>
</tr>
<tr>
<td>Dealers (Retailers/Operators) Margin</td>
<td>19.0000</td>
</tr>
</tbody>
</table>

Source: National Petroleum Authority

Relative to its peers in the sub-region, including land-locked countries where the product is double-handled because they do not have sea ports, Ghana’s price of diesel is high. Ordinarily, double handling should make the end-product price higher. As shown in Figure 16.0, the ex-refinery price of diesel supplied in Ghana is significantly higher than that of Mali, Guinea and Tanzania. Likewise, the share of taxes and levies in the ex-pump price of diesel is more than three times the average of the aforementioned countries.

Given the large volume of diesel consumed in the extraction of ore and in some cases, generating electricity when power is unavailable from the national grid, mining companies incur significant cost on fuel. In 2018, the mining industry’s expenditure on diesel was US$ 320. 6 million, of

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\(^5\) The quoted Ex-refinery price is 58.21 cents per litre. The conversion to GHp is based on an exchange rate of USD 1= GH₵ 4.8142
which 41 per cent (USD 131.4 million) represents taxes, levies and margins. This contributes significantly to the relatively high cost of mineral production in Ghana.

**Figure: 16.0: Comparison of Diesel Prices in Selected African Countries**

![Comparison of Diesel Prices in Selected African Countries](image)

Source: AngloGold Ashanti Iduapriem (2017)

In order to abate the impact of the rising cost of crude oil on the operations of mining firms, the Chamber strongly recommends that government should relieve them from the payment of levies and taxes which are not directly related to their activities and have already been paid for through other means. These include Energy Debt Recovery Levy, Price Stabilization and Recovery Levy (PSRL), Road Fund Levy, Primary Distribution Margin (PDM) and Bulk Oil Storage and Transportation Company Limited (BOST) Margin.

**Energy Debt Recovery Levy**

Mining companies procure electricity from Volta River Authority or Electricity Company of Ghana within the framework of the Wholesale Electricity Market (WEM), where the cost of electricity is not subsidized. As a matter of fact, the mining industry even cross-subsidizes the consumption of electricity by household consumers and some energy intensive industries since it pays a premium for the supply of identical unit of electricity. Obviously, the mining sector did
not contribute to the creation of debts in the energy sector. It is therefore not appropriate to include the Energy Debt Recovery Levy in the price build-up of diesel supplied to the mines.

**Price Stabilization and Recovery Levy (PSRL)**

Again, the inclusion of the Price Stabilization and Recovery Levy (PSRL) in the PBU to offset exchange rate related cost is not consistent with the policy of pricing diesel supplied to mines in foreign currency (USD). As shown in Table 5.0, the ex-refinery price of diesel is priced in USD and the companies make payments to their relevant suppliers in the same currency. As a result, the pricing regime of diesel for the mining industry inherently responds to increases in cost induced by depreciation of the local currency against the US Dollar. Thus, the inclusion of a separate levy in the PBU to account for exchange rate movements induced cost is analogous to double billing.

**Primary Distribution Margin (PDM) & Bulk Oil Storage and Transportation Company Limited (BOST) Margin**

Operationally, the mine diesel does not flow through the generic tank farms as do the other diesel products. The is due to the fact that the quality specification for the earth moving equipment used by the mining companies requires a level of cleanliness that is not obtainable in the tank farms used for moving generic petroleum products. In other words, diesel used by the mines is not co-mingled with generic diesel. It is therefore not handled by BOST and the primary depots, which makes it untenable for the mining companies to pay the BOST levy. In fact, because diesel supplies to the mines has not been part of the Unified Petroleum Products Fund (UPPF) for about thirteen years, it stands to reason that its related element, the Primary Distribution Margin (PDM) should be removed from the mines’ price build-up. As could be inferred, mining companies have for the past thirteen years paid the full and total cost of transporting fuel to the mine sites.

**Road Fund Levy**

Typically, mining operations takes place in remote areas and the earth moving equipment, such as dump trucks and excavators, are also not used on public roads but in well-defined areas as prescribed by law. As a result, the rationale for the inclusion of Road Fund levy in the price build-up of diesel supplied to the mines is an aberration which must be removed.
Advocacy on Policy Issues of the Chamber of Mines in 2018

*Harmonization of Royalty Regime*

Following consultations with stakeholders of the mining industry, section 25 of the Minerals and Mining Act, 2006 (Act 703) was amended by the repeal of Act 794 and substituted with a provision that gives discretionary powers to the Minister responsible for mining to prescribe the rate and manner for payment of royalty to the Republic. These amendments are contained in the Minerals and Mining (Amendment) Act, 2015 (Act 900). Although, the Minister is yet to publish regulations on the rate and manner for the payment of royalty almost three years after the passage of Act 900, some mining companies continue to pay an amount equivalent to 5 per cent of mineral revenue as required in the amended Act\(^6\) while others are required to pay a variable royalty rate as shown in Table 6.0. The latter are mines that have investment agreements with the state and are relatively large gold producers.

**Table 6.0: Renegotiated Royalty Rates in Investment and Development Agreements**

<table>
<thead>
<tr>
<th>Royalty Rate (%)</th>
<th>Gold Price (USD per ounce)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Less than $1,300</td>
</tr>
<tr>
<td>3.5</td>
<td>$1,300- $1,449.99</td>
</tr>
<tr>
<td>4.0</td>
<td>$1,450- $2,299.99</td>
</tr>
<tr>
<td>5.0</td>
<td>$2,300 and above</td>
</tr>
</tbody>
</table>

Source: Johannesburg Stock Exchange (2016)

In the considered view of the Chamber, the adoption of a sliding scale royalty regime based on the price of mineral is commendable as it enhances predictability in the fiscal regime and accommodates the volatile mood swings of the minerals market, especially the price of gold, which is also the preponderant mineral mined in Ghana.

On the downside, however, the selective application of the variable royalty regime culminates in a situation where mid-tier mines are heavily taxed. The current situation does not encourage

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\(^6\) Section 6(2) of the amended Act stipulates that “despite the repeal of Act 794, the rate of royalty in force immediately before the commencement of this Act shall continue in force until the rate is altered”.

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marginal and mid-tier mines to increase investment and may reduce mine development, which could be inimical to the sustainability of the mining industry. It may also result in high-grade mining and the associated sub-optimal development and harnessing of the country’s mineral endowment. High grade mining is a form of mining that focuses on extraction of high grade ore to the exclusion of lower grade, potentially profitable ore, which will not allow government to realize the full potential mineral revenue, including multipliers.

Furthermore, the state involuntarily penalizes the medium and marginal mines during periods of sluggish commodity prices. In the long run, the critical investments which are needed to supplement or extend the life of existing mines may not materialize since the companies may invest the capital in other mining jurisdictions with competitive royalty rates. Naturally, this will shrink government revenue and weaken the State’s ability to grow the economy on the back of the minerals industry.
## Statistical Appendix

### Appendix 1: Output and Shipments of Producing Member Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gold Produced (Ounces)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Fields Ghana- Tarkwa</td>
<td>566,388</td>
<td>524,869</td>
</tr>
<tr>
<td>Newmont Golden Ridge Limited- Akyem</td>
<td>473,390</td>
<td>414,427</td>
</tr>
<tr>
<td>Newmont Ghana Gold Limited- Ahafo</td>
<td>349,032</td>
<td>436,106</td>
</tr>
<tr>
<td>AngloGold Ashanti Iduapriem Limited</td>
<td>227,833</td>
<td>253,487</td>
</tr>
<tr>
<td>Chirano Gold Mines</td>
<td>245,511</td>
<td>226,370</td>
</tr>
<tr>
<td>Perseus Mining (Ghana) Limited</td>
<td>208,226</td>
<td>217,219</td>
</tr>
<tr>
<td>Asanko Gold Mines</td>
<td>205,047</td>
<td>223,152</td>
</tr>
<tr>
<td>Abosso Goldfields Limited- Damang</td>
<td>143,568</td>
<td>180,844</td>
</tr>
<tr>
<td>Golden Star Wassa Limited</td>
<td>137,234</td>
<td>149,698</td>
</tr>
<tr>
<td>Golden Star Bogoso Prestea Limited</td>
<td>130,331</td>
<td>75,087</td>
</tr>
<tr>
<td>Adamus Resources Limited</td>
<td>117,242</td>
<td>103,731</td>
</tr>
<tr>
<td>AngloGold Ashanti Limited- Obuasi</td>
<td>2,796</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total (Gold Produced)</strong></td>
<td><strong>2,806,597</strong></td>
<td><strong>2,804,990</strong></td>
</tr>
</tbody>
</table>

| **Shipments of Manganese (Tonnes)**          |       |       |
| Ghana Manganese Company                      | 3,003,580 | 4,551,754 |

Source: Ghana Chamber of Mines (2019)
## Appendix 2: Mineral Revenue (US$) of Producing Member Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gold Produced (US$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Fields Ghana- Tarkwa</td>
<td>710,828,770</td>
<td>666,903,612</td>
</tr>
<tr>
<td>Newmont Golden Ridge Limited- Akyem</td>
<td>593,501,515</td>
<td>525,562,745</td>
</tr>
<tr>
<td>Newmont Ghana Gold Limited- Ahafo</td>
<td>437,410,929</td>
<td>552,814,514</td>
</tr>
<tr>
<td>AngloGold Ashanti Iduapriem Limited</td>
<td>285,592,063</td>
<td>322,611,642</td>
</tr>
<tr>
<td>Chirano Gold Mines</td>
<td>317,626,290</td>
<td>285,981,659</td>
</tr>
<tr>
<td>Perseus Mining (Ghana) Limited</td>
<td>252,542,488</td>
<td>276,642,909</td>
</tr>
<tr>
<td>Asanko Gold Mines</td>
<td>256,203,177</td>
<td>285,008,422</td>
</tr>
<tr>
<td>Abosso Goldfields Limited- Damang</td>
<td>180,268,662</td>
<td>228,953,694</td>
</tr>
<tr>
<td>Golden Star Wassa Limited</td>
<td>172,864,696</td>
<td>190,015,785</td>
</tr>
<tr>
<td>Golden Star Bogoso Prestea Limited</td>
<td>164,261,555</td>
<td>95,837,297</td>
</tr>
<tr>
<td>Adamus Resources Limited</td>
<td>147,685,310</td>
<td>131,032,157</td>
</tr>
<tr>
<td>AngloGold Ashanti Limited- Obuasi</td>
<td>3,460,288</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,522,245,742</td>
<td>3,561,364,435</td>
</tr>
<tr>
<td><strong>Shipments of Manganese (US$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana Manganese Company</td>
<td>165,198,565</td>
<td>297,006,754</td>
</tr>
</tbody>
</table>

Source: Ghana Chamber of Mines (2019)
## Appendix 3: All-In Sustaining Cost (US$ per Ounce) of Gold Producing Member Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>2017</th>
<th>2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Fields Ghana- Tarkwa</td>
<td>940</td>
<td>951</td>
<td>1%</td>
</tr>
<tr>
<td>Newmont Golden Ridge Limited- Akyem</td>
<td>663</td>
<td>705</td>
<td>6%</td>
</tr>
<tr>
<td>Newmont Ghana Gold Limited- Ahafo</td>
<td>933</td>
<td>864</td>
<td>-7%</td>
</tr>
<tr>
<td>AngloGold Ashanti Iduapriem Limited</td>
<td>1,033</td>
<td>977</td>
<td>-5%</td>
</tr>
<tr>
<td>Chirano Gold Mines</td>
<td>973</td>
<td>889</td>
<td>-9%</td>
</tr>
<tr>
<td>Perseus Mining (Ghana) Limited</td>
<td>1,096</td>
<td>1,129</td>
<td>3%</td>
</tr>
<tr>
<td>Asanko Gold Mines</td>
<td>1,007</td>
<td>1,072</td>
<td>6%</td>
</tr>
<tr>
<td>Abosso Goldfields Limited- Damang</td>
<td>1,027</td>
<td>813</td>
<td>-21%</td>
</tr>
<tr>
<td>Golden Star Wassa Limited</td>
<td>966</td>
<td>735</td>
<td>-24%</td>
</tr>
<tr>
<td>Golden Star Bogoso Prestea Limited</td>
<td>788</td>
<td>1,235</td>
<td>57%</td>
</tr>
<tr>
<td>Adamus Resources Limited</td>
<td>859</td>
<td>981</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: Chamber of Mines (2019)