THE GHANA CHAMBER OF MINES

PERFORMANCE OF THE MINING INDUSTRY IN 2017

6/1/2018

Global and Local Economic Developments

On the back of positive and strong economic growth outturns in both advanced as well as emerging market and developing economies (EMDE), the World Bank (World Bank, 2018) reports that global output expanded by 3.0 per cent in 2017. This represents an improvement of 0.6 percentage point over the preceding year's growth rate of 2.4 per cent and the largest broad-based growth since 2010. The modest acceleration in global economic activities was driven largely by growth in trade, investments and manufacturing.

Economic growth in the advanced economies: United States, Euro Area, Japan and United Kingdom, strengthened from 1.6 per cent in 2016 to 2.3 per cent in 2017 following a string of better than forecasted growth performance (World Bank, 2018). In the United States, a combination of improved business sentiments, a depreciating dollar and strong external demand led to a 2.3 per cent expansion in gross domestic product (GDP) in 2017 compared to 1.5 per cent chalked in the previous year (World Bank, 2018).

Similarly, the discrete growth outturn of member states in the Euro Area was largely positive, with most countries emerging out of the recession which characterized their economies in recent years. Coupled with the robust acceleration in the economies of the leading member states; Germany, France, Italy and Spain, the value of measured economic activity in the Euro Area increased by 2.4 per cent in 2017. The comparable rate in 2016 was 1.8 per cent (World Bank, 2018).

Japan also recorded a GDP growth rate of 1.7 per cent in 2017, an improvement over the 0.9 per cent growth outturn in 2016. This was largely attributable to the recovery in consumer spending and investment as well as implementation of a fiscal stimulus programme. On the other hand, economic growth slowed down from 1.9 per cent in 2016 to 1.7 per cent in 2017 in the United Kingdom partly due to uncertainty arising from its decision to withdraw from the membership of the European Union (World Bank, 2018).

In the emerging market and developing economies (EMDE), economic activity expanded from 3.7 per cent in 2016 to 4.3 per cent in 2017 (World Bank, 2018). China, the region's leading

economy, recorded a marginal increase in its GDP, from 6.7 per cent in 2016 to 6.8 per cent in 2017. The slow growth of the Chinese economy reflects the legacies of reforms in rebalancing the domestic economy to de-emphasize the role of state-led investments. In Sub-Saharan Africa (SSA), a rebound in commodity prices drove the region's GDP upwards from 1.3 per cent in 2016 to 2.4 per cent in 2017 (World Bank, 2018).

The economic growth outlook for 2018 remains bullish and with a high prospect for GDP growth to exceed the level recorded in 2017. Quantitative easing measures are expected to be complemented by fiscal stimulus packages in providing tail winds to fuel economic growth in advanced countries. Conversely, the resurgence in commodity prices, which is anticipated to be sustained in 2018, would be the primary driver of growth in the EMDE. On the downside, however, concerns on heightened trade protection policies and deteriorating debt burden could exert a moderating influence on the 2018 growth projection. On the whole, the upside risk is expected to outweigh the drag on growth in 2018. The World Bank (World Bank, 2018) therefore projects that economic activity will increase by 3.1 per cent in 2018.

With respect to Ghana, the decision by the operators of Jubilee Field to defer the remediation of the damaged turret bearing of FPSO Kwame Nkrumah allowed for increased oil production in 2017 (Ministry of Finance, 2017). Coupled with the strong recovery of the cocoa sub-sector, the country recorded its fastest real GDP growth in five years. The country's value of measured economic activities (in constant 2006 prices) expanded from GH₵ 36,104 million in 2016 to GH₵ 39,175 million in 2017, representing a growth rate of 8.4 per cent in 2017 (Ghana Statistical Service, 2018).

As expected, the Industrial Sector recorded the highest growth rate in 2017. The improvement in the Sector's growth outturn from -0.5 per cent in 2016 to 16.7 per cent in 2017 could largely be ascribed to the performance of the mining and quarrying sub-sector, of which the main driver was the oil and gas industry (Ghana Statistical Service, 2018). Specifically, the oil and gas sub-sector grew by 80.4 per cent between 2016 and 2017 and therefore led to a 46.7 per cent increase in the mining and quarrying sub-sector, which consists of mining, quarrying and oil & gas (Ghana Statistical Service, 2018). This also implies that core mining and quarrying (without oil

and gas) contracted within the period under consideration. Data from the Ghana Statistical Service (Ghana Statistical Service, 2018) indicates that core mining and quarrying declined by 32.6 per cent in 2017. In monetary terms, the real value of output of the core mining and quarrying sub-sector decreased from GH₵ 733 million in 2016 to GH₵ 494 million in 2017 (Ghana Statistical Service, 2018).

The other sub-sectors of the Industrial Sector, Manufacturing, Water and Sewerage, Electricity and Construction, recorded growth rates of 3.7 per cent, 6.8 per cent, 6.3 per cent and 4.6 per cent respectively in 2017 (Ghana Statistical Service, 2018). Their corresponding outturns in 2016 were 2.7 per cent, -3.2 per cent, 11.7 per cent, and 2.9 per cent respectively. The Agricultural and Services Sectors also grew from 3.0 per cent to 8.4 per cent and from 5.7 per cent to 4.3 per cent in 2016 and 2017 respectively (Ghana Statistical Service, 2018).

In terms of contribution to GDP, the Industrial Sector accounted for 25.5 per cent of total output in 2017. This was an increase over its 2016 share of 24.3 per cent (Ghana Statistical Service, 2018). All the other sectors' share of GDP declined marginally over the period under consideration. The share of Agriculture in GDP fell to 18.3 per cent in 2017 from 18.9 per cent in 2016 while that of Services decreased to 56.2 per cent in 2017 from 56.8 per cent in 2016 (Ghana Statistical Service, 2018).

Although the growth prospects of Ghana in 2018 is buoyant, the knock-on effect associated with the Bank of Ghana's efforts to strengthen the financial intermediation system and scheduled repair of the FPSO Kwame Nkrumah are expected to culminate in reduced GDP growth in 2018. However, this may be partly counteracted by full year oil production from the Samoa Gaye Nyame Field. Overall, the GDP growth rate is forecasted to slow down to 6.8 per cent in 2018 (Ministry of Finance, 2017).

Overview of the Global Gold Industry in 2017

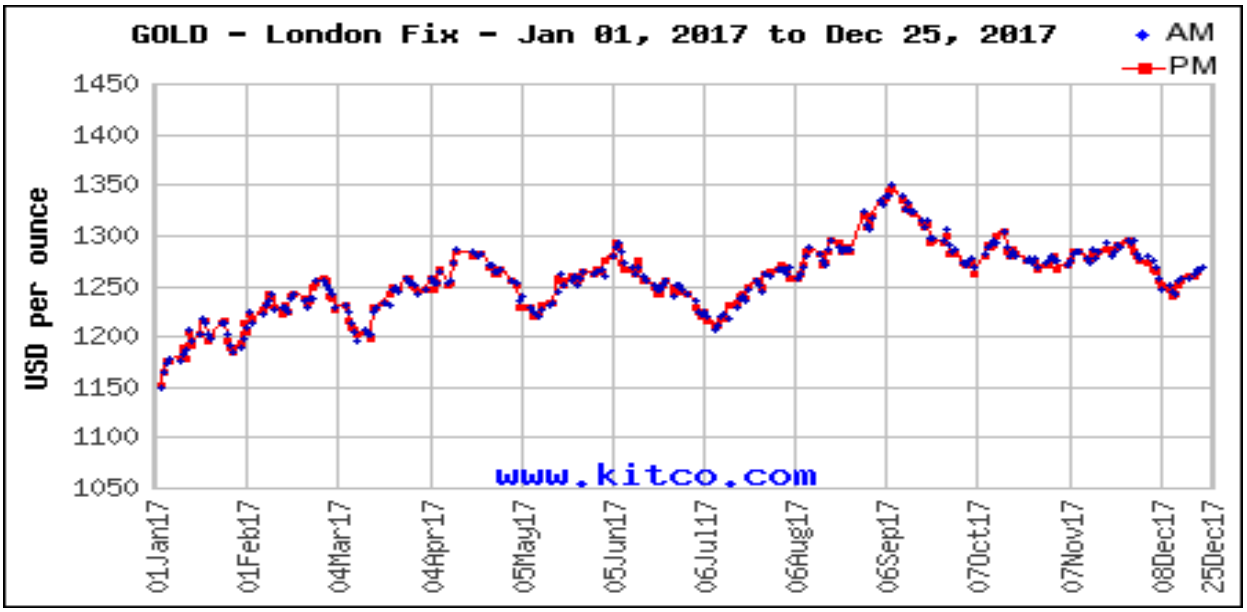
In the early trading sessions of 2017, the bullion market recovered from the pass-through effect of the US Federal Open Market Committee's (FOMC) decision to raise its benchmark interest rate (also known as Federal Funds Rate) in December 2016. The increase in the Federal Funds

Rate by 0.25 per cent led to a situation where returns on money market instruments were more competitive than gold-backed investment instruments. As a result, investors in the bullion market reduced their holdings of bullion and other gold-backed assets in favor of liquid assets. The ensuing glut in supply drove the traded price of gold downwards on the London Metal Exchange (LME) in the latter part of 2016, ending the year at US$ 1,145 per ounce.

In the first quarter of 2017, Deutsche Bank's settlement of fines imposed by US authorities on sale of toxic mortgage securities triggered a depreciation of the US Dollar. In order to preserve their capital, investors reorganized their portfolio in favor of safe haven assets such as gold. Consequently, the yellow metal's price rose from US$ 1,151 per ounce on the first day of trading in 2017 to US$ 1,216 in mid-January and ended the month at a price of US$ 1,212 per ounce. Geopolitical tension arising from Democratic People's Republic of Korea's (North Korea) nuclear missile test and the vote by United Kingdom's Parliament to exit the European Union led to a sustained increase in the price of gold until late February where it peaked at US$ 1,257 per ounce. Thereafter, the yellow metal's price fluctuated between US$ 1,211 per ounce and US$ 1,293 per ounce between March and July. The price movements were largely in response to heightened political tensions.

The uncertainty emanating from the outcome of the G8 Summit and further missile tests by North Korea bolstered prices of gold upwards to a year high of US$ 1,346 per ounce in September. In the months that followed, the price of gold weakened in response to interest rate hike by the Bank of England and unanticipated surge in the value of crypto currencies. The metal's end of year price was US$ 1,291 per ounce as shown in Fig 1.0. On the whole, gold traded at a cumulative average price of US$ 1,257 per ounce in 2017, which was higher than the corresponding price of US$ 1,250 per ounce in 2016.

Fig 1.0: Trends in Gold Price (2017)



Source: www.kitco.com (Accessed on 20th April, 2018)

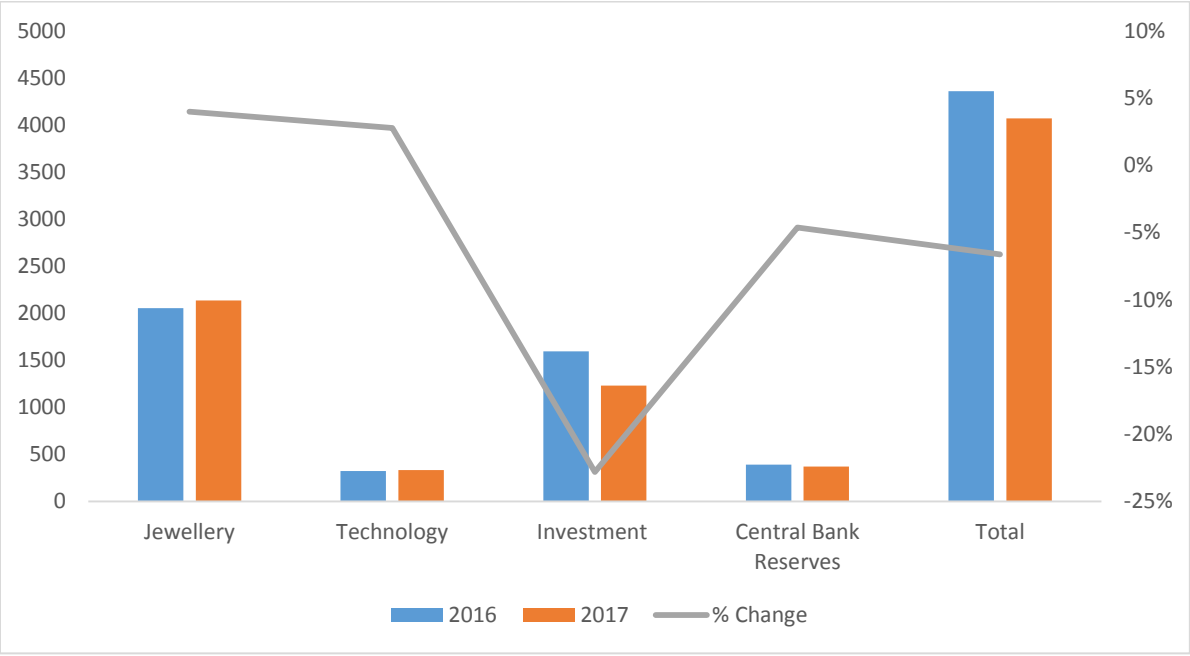
In addition to the developments within the political economy, the observed volatility in the price of gold was also a reflection of the underlying global demand and supply conditions. Data from the World Gold Council (World Gold Council, 2018) shows that demand for gold reduced from 4,360 tons in 2016 to 4,071 tons in 2017, a decline of 7 per cent. The primary drivers of the contraction in consumption of gold were lower gold investment demand and gold reserve holdings by Central Banks. Specifically, investment demand for gold fell by 23 per cent to 1,231 tons in 2017 relative to 1,595 tons in 2016 (World Gold Council, 2018). This outturn could be ascribed to the improvement in the global economy, which often tends to redirect investments away from bullion or gold backed investment instruments to money market assets or equities.

On the other hand, the decrease in Central Bank gold reserves was largely attributable to the lapse of Venezuela's swap deal with Deutsche Bank. In an effort to improve its liquidity of foreign reserves, the highly debt-stressed Venezuelan government entered into a deal with Deutsche Bank for $ 1.7 billion facility and secured the loan with bullion worth US$1.2 billion (World Gold Council, 2018). The government could however not honour the terms of the agreement. As a result, the ownership of the gold collateral transferred to the Bank after the expiration of the contract timelines. The resulting reduction in gold reserves of the Central Bank

of Venezuela displaced the increases in reserves of the Central Bank of Russia, Turkey, and Kazakhstan. The growth in gold reserves of Russia, Turkey, and Kazakhstan was primarily in response to political uncertainty.

The other components of gold demand - jewellery and technology - recorded growth rates of 4 per cent and 3 per cent in 2017 respectively (World Gold Council, 2018). This was the first positive growth outturn for gold jewellery and technology demand since 2010 and 2013 respectively. Gold jewellery demand increased from 2,053 tonnes in 2016 to 2,135 tonnes in 2017, mainly on the back of lower gold prices and improved health of the global economy (World Gold Council, 2018). More so, the removal of the anti-money laundering regulation from gemstones and jewelleries by the Indian government led to an upturn in demand in the world's second largest consumer of jewellery (World Gold Council, 2018). With respect to technology demand, the enhanced use of gold in the fabrication of electronic components such as wireless chips and printed circuit board (PCB) was the foremost reason for the rise in consumption from 323 tonnes in 2016 to 332 tonnes in 2017 as shown in Fig 2.0.

Fig 2.0: Trends in Global Demand for Gold (2017)



Source: World Gold Council (2018)

The outlook for global gold demand in 2018 is bright and it is projected to record a positive year-on-year growth rate. Global political uncertainties, which tend to strengthen the role of gold as a safe haven asset, are expected to combine with improvements in the health of the world economy to increase demand for gold (World Gold Council, 2018).

With respect to gold supply, data from Thomson Reuters (Thomson Reuters, 2018) shows that mine production declined marginally from 3,251 tonnes in 2016 to 3,246 tonnes in 2017. The 0.2 per cent dip in supply of gold was mainly due to a decline in production from mines in South America and Asia, which outweighed expansion in gold output from producers in Europe, Africa and North America.

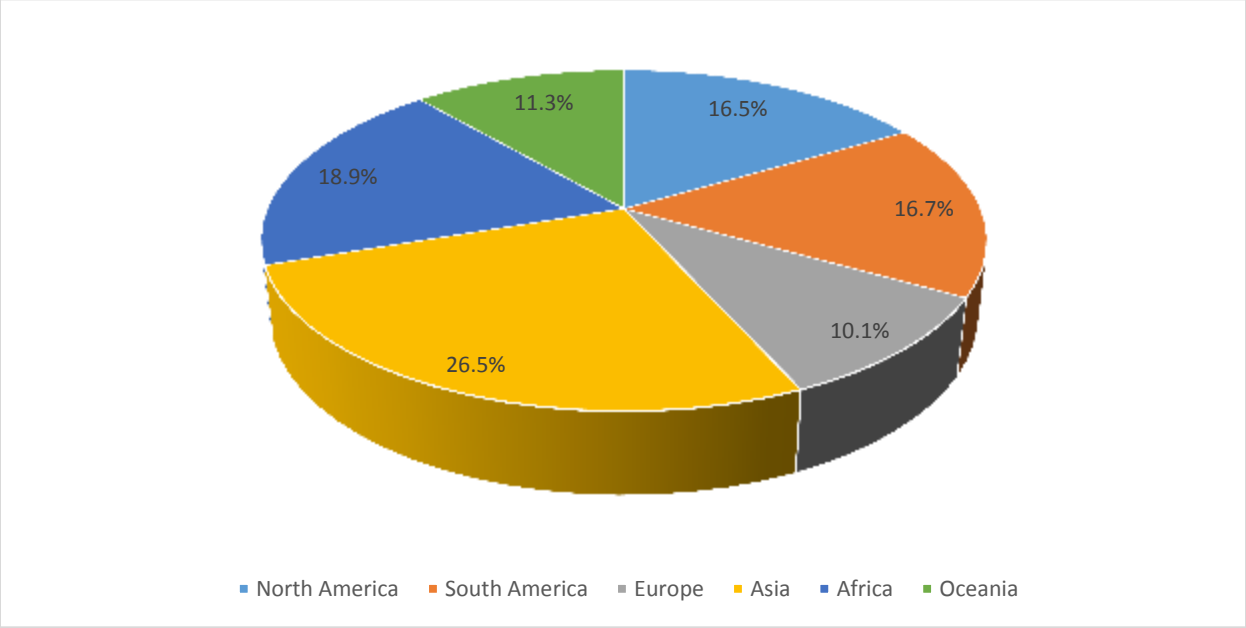
Gold production from mines in Asia decreased by 5 per cent to 860 tonnes in 2017 relative to 909 tonnes in 2016 while that of South America shrank by 3 per cent, from 557 tonnes in 2016 to 541 tonnes in 2017 (Thomson Reuters, 2018). The fall in Asia's production was mainly on the back of declines in gold supply from the continent's leading producers; China and Indonesia. Specifically, China's gold production contracted by 6 per cent, from 453 tonnes in 2016 to 426 tonnes in 2017 while Indonesia's output fell by 12 per cent, from 174 tonnes in 2016 to 154 tonnes in 2017. With respect to South America, a 4 per cent dip in Peru's production (from 169 tonnes in 2016 to 162 tonnes in 2017), 5 per cent fall in Brazil's output (from 84 tonnes in 2016 to 80 tonnes in 2017) and 16 per cent drop in Chile's output (43 tonnes in 2016 to 36 tonnes in 2017) were the primary drivers of the continent's low output.

Conversely, Africa, North America, Europe and Oceania recorded growth in output. Gold production from Africa increased from 595 tonnes in 2016 to 614 tonnes in 2017, representing a growth rate of 3 per cent. The improvement in the continent's gold output was driven largely by increased production from Ghana (94 tonnes in 2016 to 102 tonnes in 2017), Mali (50 tonnes in 2016 to 52 tonnes in 2017), Burkina Faso (41 tonnes in 2016 to 50 tonnes in 2017) and Guinea (20 tonnes in 2016 to 22 tonnes in 2017). Regarding North America, total gold production increased from 520 tonnes in 2016 to 536 tonnes in 2017 primarily due to expansion in output of

Canada. Canada's production increased from 165 tonnes in 2016 to 176 tonnes in 2017, a lift of 7 per cent.

Growth in the production of Russia (from 254 tonnes in 2016 to 271 tonnes in 2017) was largely responsible for the 7 per cent upturn in the Europe's gold production. Its gold production increased from 306 tonnes in 2016 to 327 tonnes in 2017. Similarly, a 2 per cent growth in gold production from Australia (290 tonnes in 2016 to 295 tonnes in 2017) was the main driver for the growth in Oceania's gold production. Oceania's gold production increased by 1 per cent to 368 tonnes in 2017 from 364 tonnes in 2016 (Thomson Reuters, 2018). The contribution of the various continents to global mine gold supply is shown in Fig 3.0.

Fig 3.0: Continent Share of World Mine Gold Supply (2017)



Source: Thomson Reuters (2018)

In spite of the challenges confronting mines in China, it maintained its position as the world's largest producer of gold in 2017. Likewise, Australia, Russia and the United States ranking as the second, third and fourth largest producers of gold were also unchanged in 2017 relative to 2016. Canada, however, moved up by two places to fifth on the league of top global gold producers in 2017 while Indonesia declined from the fifth to seventh position. Peru's position as the sixth

largest producer of gold in the world in 2017 was also unchanged as compared to last year's. South Africa and Mexico continued to occupy the eighth and ninth spots in 2017. Ghana completes the ranking as the world's tenth top gold producer, just as it did in 2016 (Thomson Reuters, 2018).

With respect to cost of production, the All-In-Sustaining-Cost (AISC) of gold producers increased from US$ 837 per ounce in 2016 to US$ 878 per ounce in 2017. The 5 per cent growth in global cost of gold production was driven chiefly by higher fuel costs, lower grades and adverse movements in the currencies of host mining countries (Thomson Reuters, 2018).

The Performance of Ghana's Mining Industry in 2017

Data from the Bank of Ghana shows that export of gold increased from 3.84 million ounces in 2016 to 4.61 million ounces in 2017 (Bank of Ghana, 2018). The 20 per cent growth in exports was driven mainly by a combination of modest increase in gold price and an upturn in the output of large-scale producers as well as the volume of gold exported by Licensed Gold Exporting Companies. As well, exports of manganese increased from 2 million tonnes in 2016 to 3 million tonnes in 2017 while shipments of bauxite also expanded from 1.14 million tonnes to 1.47 million tonnes over the same period (Minerals Commission, 2018). The growth rate in shipments of manganese and bauxite are 50 per cent and 29 per cent respectively. On the other hand, exports of diamonds by PMMC shrank by 39 per cent, from 143,005 carats in 2016 to 87,068 carats in 2017 (Minerals Commission, 2018).

Macroeconomic Contributions of Mining in 2017

Fiscal Revenue Performance

The minerals and mining sector retained its position as the foremost source of direct domestic revenue mobilized by the Ghana Revenue Authority (GRA) in 2017. Statistics from the GRA shows that all streams of fiscal revenue attributable to the mining and quarrying sector in 2017 improved over those recorded in 2016.

Specifically, corporate income tax receipts increased from GH₵ 696.9 million in 2016 to GH₵ 969.6 million in 2017 while mineral royalty revenue grew from GH₵ 550.7 million to GH₵ 702.4 million over the same period. These represent an increment of 39 per cent and 28 per cent respectively. Further, employee income tax (pay-as-you-earn) increased by 22 per cent to GH₵ 487.9 million in 2017 as compared to GH₵ 399.9 million in 2016. Other forms of taxes collected by GRA, which are officially classified as self-employed, also increased from GH₵ 0.54 million in 2016 to GH₵ 0.78 million in 2017. This translates into a growth rate of 44 per cent. Overall, total mining fiscal receipts mobilized by the GRA increased by 31 per cent year-on-year, from GH₵ 1.65 billion in 2016 to GH₵ 2.16 billion in 2017 (Ghana Revenue Authority, 2018).

In terms of share of total direct domestic revenues collected by GRA, the mining and quarrying sector accounted for 16.3 per cent of those revenues in 2017. It is a marginal 0.5 percentage point improvement over the 15.8 per cent recorded in 2016. The sector's strong fiscal performance in 2017 could partly be ascribed to a combination of growth in production of large-scale producers and increases in gold price.

Table 1.0: Fiscal Revenue Performance of the Mining and Quarrying Sector

Type of Fiscal Revenue (GH₵)	2016	2017	% Change
Corporate Income	696,978,327	969,567,314	39%
Royalty	550,738,649	702,407,280	28%
PAYE	399,925,811	487,988,013	22%
Others (Self-Employed)	540,259.67	780,164	44%
Total	1,648,183,048	2,160,742,773	31%

Source: Ghana Revenue Authority (2018)

Merchandize Export Revenues and Balance of Payments

The minerals and mining sector plays a critical role in providing reliable and steady supply of foreign exchange to finance the import demands of the country and in maintaining a stable exchange rate. This is particularly important due to the fact that movements in exchange rates have an impact on the standard of living through the effect on price levels.

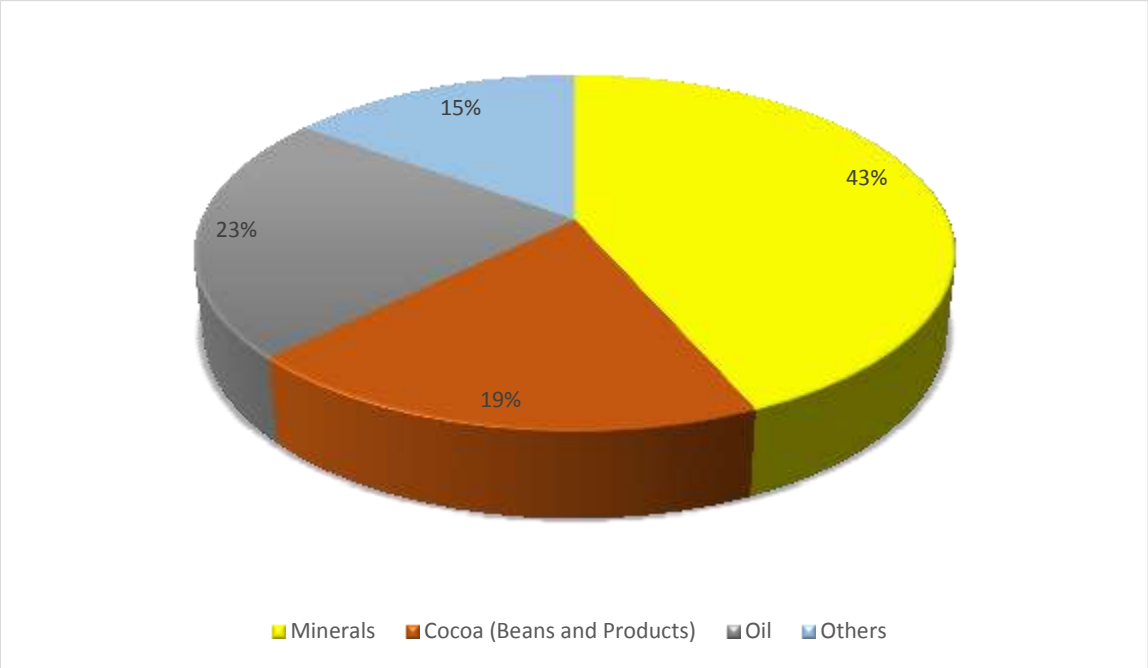
Data from the Bank of Ghana (Bank of Ghana, 2018) indicates that proceeds from the export of minerals increased by 19 per cent to US$ 6,004 million in 2017 from US$ 5,060 million in 2016. The upturn in mineral export receipts was due to broad-based increase in realized revenue from the country's four (4) mineral export commodities; gold, diamond, manganese and bauxite. Receipts from the export of gold increased from US$ 4,919 million in 2016 to US$ 5,786 million in 2017, representing a growth of 17 per cent. Similarly, revenue from the export of diamonds improved from US$ 2.05 million in 2016 to US$ 2.81 million in 2017 while that of manganese increased from US$ 100.22 million to US$ 164.51 million within the same period. Further, revenues from the shipment of bauxite increased from US$ 38.70 million in 2016 to US$50.86 million in 2017. The 2017 mineral revenue outturn also implies that gold accounted for 96 per cent of mineral export revenue in 2017, which was not significantly different from its share of 97 per cent in 2016 (Bank of Ghana, 2018).

Against the backdrop of strong export revenue performance, the share of mineral receipts in total merchandize export in 2017 was 43 per cent. Although this represents a 2 per cent dip in the previous year's share, it compares favourably with the shares of the country's other major export commodities; cocoa and oil. Proceeds from the export of cocoa and oil accounted for 19 per cent and approximately 23 per cent of merchandize export revenue in 2017. In essence, receipts from the export of gold were slightly higher than the sum of receipts from cocoa and oil in 2017, making it the leading source of foreign exchange from the export of commodities (Bank of Ghana, 2018).

The improved mineral export revenue outturn in 2017 also had significant impact on the country's balance of payments (BOP) and Gross International Reserves. Together with the growth in revenue from other export commodities and decline in imports, the increase in mineral receipts contributed to an improvement in the trade account balance, from a deficit of US$ 1,733 million in 2016 to a surplus of US$ 1,067 million in 2017 (Bank of Ghana, 2018). This and other favourable developments in the external sector culminated in a surplus BOP of US$ 1,091 million at the end of 2017, translating into an improvement in the country's Goss International Reserve position. According to the Bank of Ghana (Bank of Ghana, 2018), the total

Gross International Reserve increased from 3.5 months of import cover in 2016 to 4.3 months of import cover in 2017.The substantial expansion in the Gross International Reserves partly contributed to the deceleration in the country's exchange rate. The Cedi depreciated against the US Dollar by 4.9 per cent in 2017 relative to 9.2 per cent in 2016 (Bank of Ghana, 2018).

Fig 4.0: Share of Export Commodity in Merchandize Exports in 2017



Source: Bank of Ghana (2018)

Local Impact of Mining in 2017[1]

The plough back of mineral export receipts and expenditure of same in-country are critical pathways by which mining influences the growth of the non-mineral economy and national development. In 2017, the producing member companies of the Chamber returned US$ 2.57 billion of their US$ 3.68 billion mineral revenue into the country. This represents 70 per cent of mineral revenue in 2017.

Typically, the mineral revenue is brought back into the country through the commercial and central banks. Since 2016, however, the Bank of Ghana issued a directive for mining companies

[1] The remaining sections of the report is based on data submitted to the Chamber by producing member companies

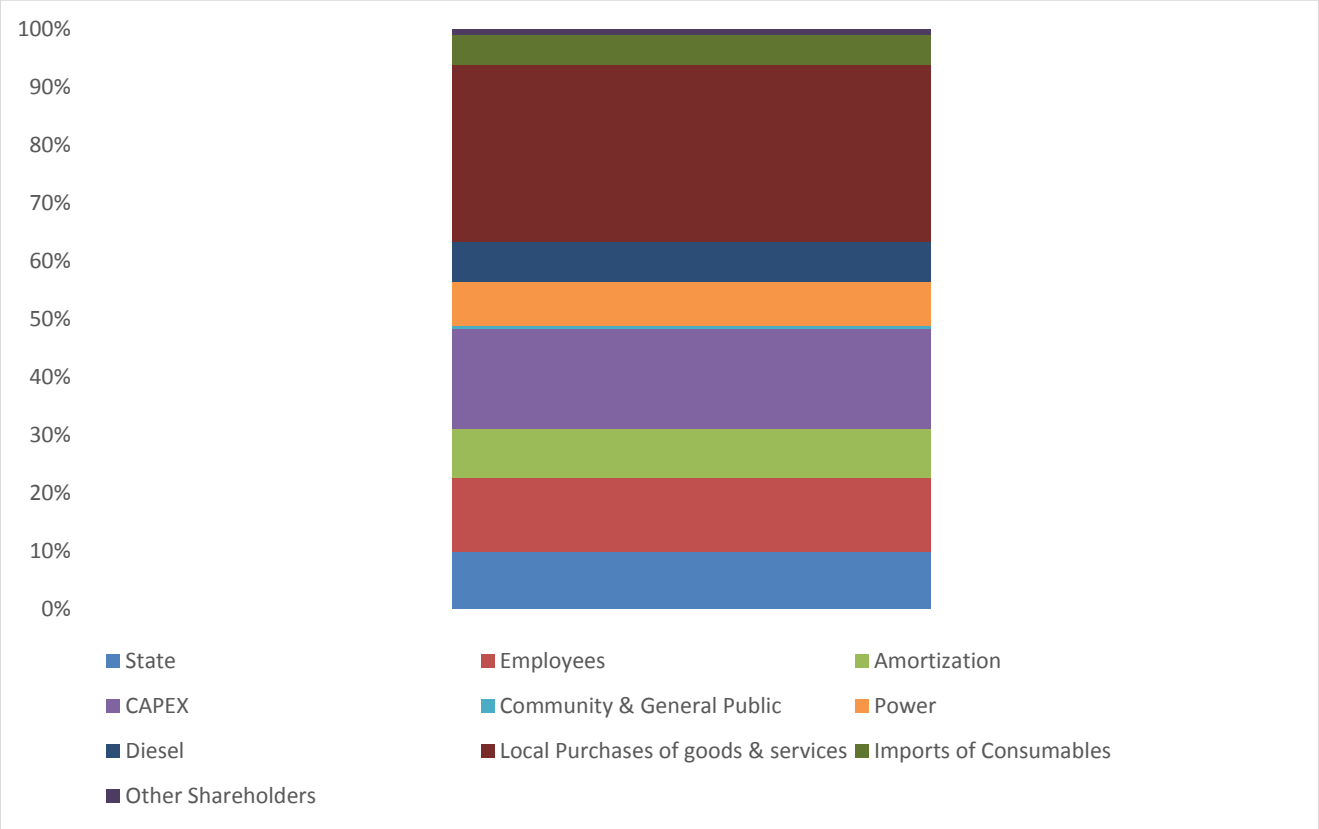
and other export revenue earners to cede the equivalent share of their foreign exchange revenue under the mandatory surrender requirements to commercial banks. The objective of the directive was to deepen the foreign exchange market. Notwithstanding, the Bank continues to be a conduit for ploughing back mineral export proceeds into the country due to some challenges in implementing the policy directive. In 2017, US$ 368.164 million of the returned mineral revenue of US$ 2.57 billion was brought back into the country through the Central Bank. This translates into 22 per cent of mineral revenue. The remaining US$ 2.20 billion was returned into the country through the commercial banks.

The total expenditure of the producing member companies on goods and services procured from in-country suppliers and manufacturers stood at US$ 1.23 billion in 2017. This represents 34 per cent of realized mineral revenue and an increment over the 31 per cent outturn in 2016. Further, the proportion of the producing mines' expenditure of mineral revenue on imported consumables declined from 7 per cent in 2016 to 6 per cent in 2017. The 2017 share of expenditure translates into US$ 215.6 million in nominal terms. In the last few years, the companies' pattern of expenditure consistently show year-on-year increases in demand for locally sourced inputs and steady decline in spending on imported consumables. To a large extent, this mirrors the mining industry's efforts to substitute imported inputs used in the production process with comparable ones from the local economy.

Moreover, the mining companies' statutory payments to parastatals and central government totaled US$ 400.4 million in 2017 while compensation payments to employees were US$ 515.1 million in the same period. These represent 11 per cent and 14 per cent of realized mineral revenue respectively. The corresponding shares in the preceding year were 10 per cent and 13 per cent respectively. Payments to other shareholders were also US$ 36.8 million in 2017, representing 1 per cent of mineral revenue. Expenditure on electricity, diesel, capex and amortization were US$ 307.2 million, US$ 285.6 million, US$ 695.8 million and US$ 349.4 million respectively. In relation to share of mineral receipts, these expenditures translate into 8 per cent, 7.8 per cent, 18.9 per cent and 9.5 per cent respectively. The producing mines also spent US$ 19.8 million on various social intervention projects in their respective host

communities. This was an improvement over the US$ 12.2 million invested in the operational areas of producing mines in 2016.

Fig. 5.0: Distribution of Mineral Revenue of Producing Member Companies in 2017



Source: Ghana Chamber of Mines (2018)

Direct Employment by Producing Member Companies in 2017

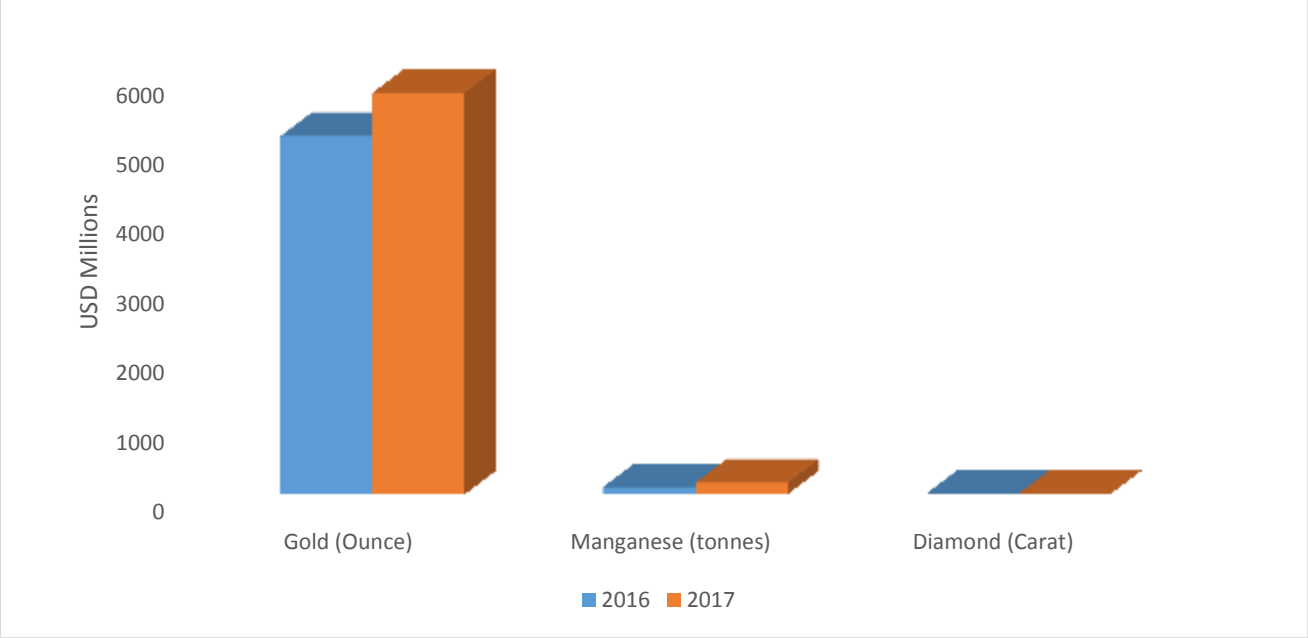
Total direct employment by the producing member companies was 10,503 in 2017 relative to 11,628 in 2016. Out of the 10,503 direct employees, 159 were expatriates and the remaining 10,344 were Ghanaians. The former represents 1.5 per cent of the workforce. The reduction in the industry's work force could be attributed mainly to the limited labour rationalization measures undertaken by Golden Star Resources and Abosso Goldfields Limited's shift from owner to contract mining. The two mines operated by Golden Star Resources, Golden Star Wassa Limited and Golden Star Bogoso Prestea Limited, will transition into solely mechanized underground mines in the first quarter of 2018. In that regard, the mines downsized their workforce to match their operational requirements.

Production Performance of Member Companies in 2017

Against the backdrop of relatively higher gold prices and increased production of gold and manganese, the realized mineral revenue of the member companies of the Chamber rose by 13 per cent to US$ 5.945 billion in 2017 from US$ 5.262 billion in 2016. The upswing in realized mineral revenue was attributable to broad-based growth in output of the producing member companies as well as increase in the quantity of gold assayed by Precious Minerals Marketing Company (PMMC), which counterbalanced the decline in export of diamonds by PMMC.

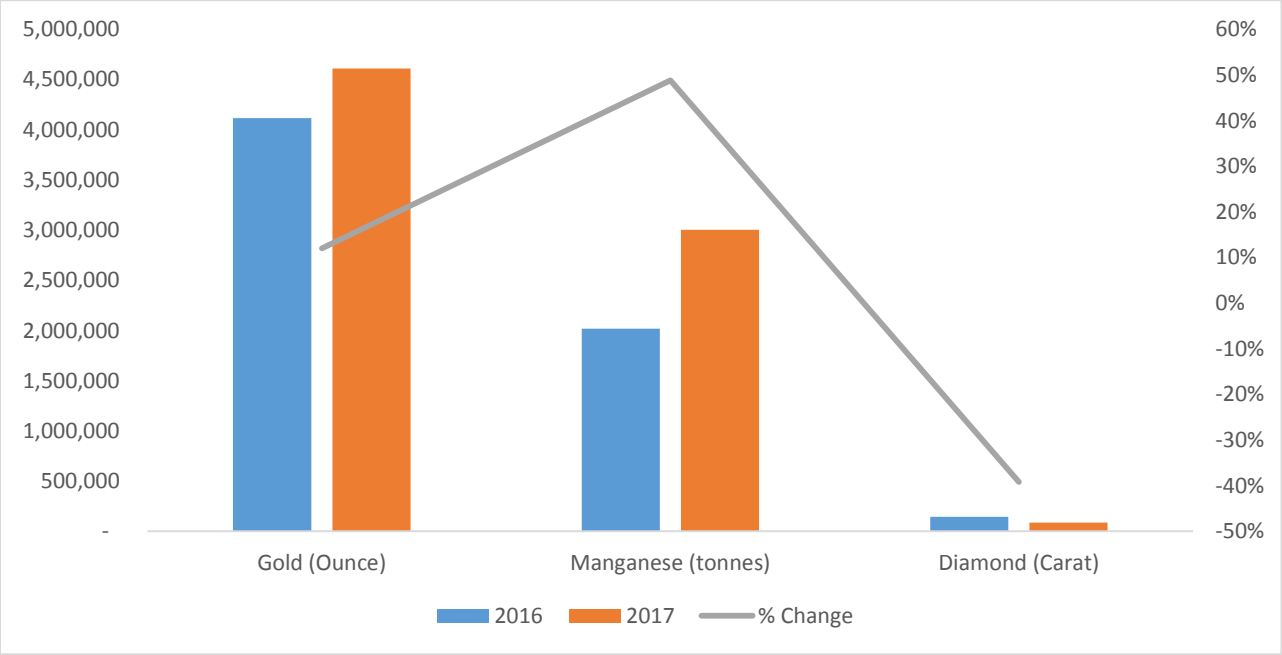
Total gold production attributable to the Chamber's producing members grew from 2.546 million ounces in 2016 to 2.805 million ounces in 2017 while the volume of gold assayed by PMMC increased from 1.570 million ounces to 1.805 million ounces over the same period. Likewise, shipments of manganese by Ghana Manganese Company increased from 2.018 million tonnes in 2016 to 3.003 million tonnes in 2017. On the other hand, exports of diamonds by PMMC plummeted from 143,005 carats in 2016 to 86,924 carats in 2017.

Fig 6.0: Realized Mineral Revenue of Member Companies of the Chamber



Source: Ghana Chamber of Mines (2018)

Fig 7.0: Mineral Production, Assay and Shipments by Member Companies of the Chamber



Source: Ghana Chamber of Mines (2018)

The 10 per cent upturn in gold production was primarily attributable to concurrent growth in the output of most producing member companies. Apart from the Gold Fields' Tarkwa and Damang mines as well as AngloGold Ashanti's Obuasi Mine, all the other producing mines recorded growth in output.

Output at Ghana's largest mine, Gold Fields Ghana Limited-Tarkwa Mine, declined marginally by 0.3 per cent to 566,388 ounces in 2017 from 568,036 ounces in 2016. In the same vein, production at the Damang Mine (Abosso Goldfields Limited) of Gold Fields dropped by 3 per cent, from 147,720 ounces in 2016 to 143,568 ounces in 2017. On account of the contraction in output of Tarkwa and Damang Mines, the share of Gold Fields in the total gold output of the producing member companies of the Chamber fell to 25 per cent in 2017 as compared to 28 per cent in 2016. In terms of the respective mines' contribution to total gold production, Tarkwa Mine accounted for 20 per cent of output in 2017 while Damang's share was 5 per cent in the same period. Their corresponding shares in the previous year were 22 per cent and 6 per cent respectively.

Newmont's Akyem Mine increased its year-on-year production by 1 per cent while output at its Ahafo Mine plateaued. Specifically, production at Akyem Mine picked up from 470,313 ounces in 2016 to 473,390 ounces in 2017 while that of Ahafo Mine remained largely unchanged, from 348,861 ounces in 2016 to 349,031 in 2017. The marginal growth in production at the Akyem Mine was mainly due to higher mill recovery. In spite of the upturn in production, the contribution of Akyem Mine to total gold production of member companies of the Chamber dipped from 18 per cent in 2016 to 17 per cent while Ahafo Mine's waned to 12 per cent in 2017 from 14 per cent in 2016. Consequently, the combined share of production attributable to Newmont decreased to 29 per cent in 2017 as compared to 32 per cent in 2016.

After ramping up production at its underground mine, Golden Star Resource's Wassa Mine recorded a 31 per cent growth in output. Production from underground operations increased from 11,062 ounces in 2016 to 61,437 ounces in 2017 while output from the Wassa Main pit shrank from 93,322 ounces to 75,797 ounces within the same period. In view of the 456 per cent expansion in output from the underground mine, which compensated for the 18 per cent decrease in output from the open pit mine, Golden Star Wassa Limited's output increased from 104,382 ounces in 2016 to 137,234 ounces in 2017. The latter represents 5 per cent of total gold production by member companies in 2017, an improvement over its share of 4 per cent in 2016.

A combination of fresh production from its Prestea underground mine and an upsurge in production from the open pits occasioned a 45 per cent growth in gold output at Golden Star Bogoso Prestea Limited. Production from the Prestea complex, comprising underground and open pit, increased from 89,673 ounces in 2016 to 130,331 ounces in 2017. The Prestea underground mine accounted for 8,574 ounces of output in 2017, with the remaining 121,757 ounces originating from the surface operations. In 2016, production from the open pits, which was also equivalent to full year production, was 89,673 ounces. Following the upturn in production, Golden Star Bogoso Prestea Limited's share in total gold production inched up to 5 per cent in 2017 relative to 4 per cent in 2016. Overall, the contribution of Golden Star Resources to gold production increased by 2 per cent to 10 per cent in 2017, from 8 per cent in 2016.

Production at the Iduapriem Mine of AngloGold Ashanti increased from 214,196 ounces in 2016 to 227,833 ounces in 2017, representing a 6 per cent growth in output. Coupled with greater mining-fleet productivity, which led to a 27 per cent growth in tonnage of ore mined, the expansion in gold production was chiefly a function of the mine's decision to mine in deeper and higher grade areas of its pits. Notwithstanding the upswing in output, the 2017 share of AngloGold Ashanti's Iduapriem Mine in total gold production was unchanged from its 2016 rate of 8 per cent. Unsurprisingly, production at the Obuasi Mine of AngloGold Ashanti, which has been under care and maintenance since 2016, fell by 46 per cent to 1,662 ounces in 2017 as compared to 3,072 ounces in 2016. The share of AngloGold Ashanti in total gold production ebbed from 9 per cent in 2016 to 8 per cent in 2017.

Although the surface mining operations of Kinross' Chirano Gold Mine ceased in the second quarter of 2017, increased mining activities in the Paboase and Akoti underground deposits partially offset the potential slump in production. As expected, the total ore tonnage mined reduced by 11 per cent, from 2,722,000 in 2016 to 2,410,000 in 2017. However, the relatively higher grade from the underground deposits and a higher recovery rate more than counterbalanced the impact of the decline in tonnage of ore mined on gold produced. As a result, the mine's gold production improved from 211,440 ounces in 2016 to 246,027 ounces in 2017, an increase of 16 per cent. Further, Chirano Gold Mine's share in total gold output of producing member companies increased from 8 per cent in 2016 to 9 per cent in 2017.

At the Edikan Mine of Perseus Mining (Ghana) Limited, gold production increased from 153,208 ounces in 2016 to 208,226 ounces in 2017. The 36 per cent expansion in output was driven primarily by the mine's ability to access higher grade areas of its concession, improvement in tonnage of ore mined and marginal improvement in the plant recovery rate. On account of the impressive growth outturn, the share of Perseus Mining (Ghana) Limited in total gold production increased to 7 per cent in 2017 from 6 per cent in 2016.

The flexibility of mining from multiple pits - Nkran, Akwasisio, Dynamite Hill and Nkran Extension - underpinned the strong production performance of Asanko Gold Mines in 2017. The mine's output went up by 39 per cent, from 147,501 ounces in 2016 to 205,047 ounces in 2017.

Consequently, its share in total gold output of producing member companies expanded from 6 per cent in 2016 to 7 per cent in 2017.

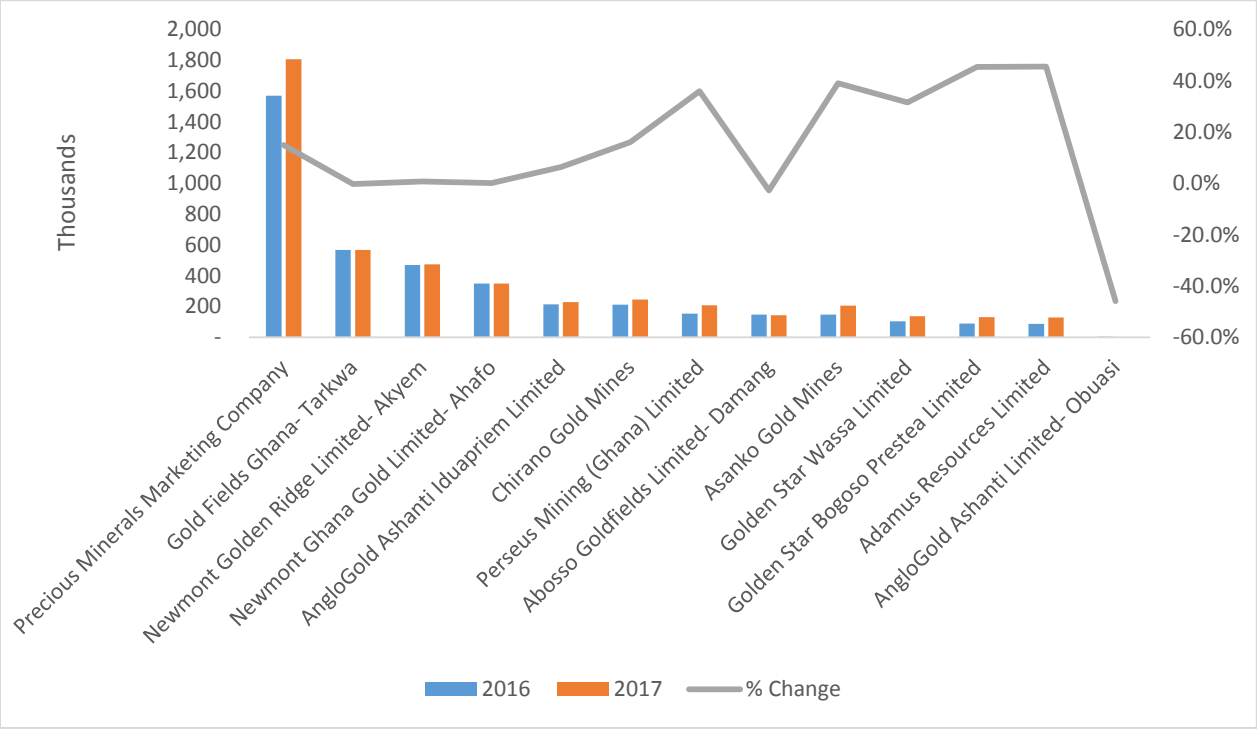
Gold Production at the Nzema Mine of Adamus Resources Limited increased from 87,710 ounces in 2016 to 117,242 ounces in 2017, representing an upturn of 34 per cent. The significant expansion in output was against the backdrop of the successful completion of the cutback of the Adamus pit which commenced in 2016. This enabled the mine to access fresh and high grade ore. The mine's share in total gold production was 4 per cent in 2017.

The parent company (CONSMIN) of the sole producer of manganese in Ghana, Ghana Manganese Company, was partly acquired by TMI in the latter part of 2016. Since then, the new owner has injected capital into the mine's operations to expand its surface infrastructure and production. As a result, the mine's shipment of manganese increased from 2,018,254 tonnes in 2016 to 3,003,580 tonnes in 2017. To a large extent, the 48 per cent increment in shipment was in response to increased global demand for the premium manganese produced by the company.

In 2016, the Ministry of Lands and Natural Resources amended the role of Precious Minerals Marketing Company (PMMC) in the domestic gold market from being a buyer of gold from small-scale miners to a state assayer of gold. PMMC commenced the implementation of its new mandate with the small-scale gold mining sector in 2016 and continued to do so in 2017. The total quantity of gold assayed by PMMC increased by 15 per cent to 1.805 million ounces in 2017 from 1.570 million ounces in 2016. Out of the recorded gold volume of 1.805 million ounces in 2017, 16,260 ounces were transshipments, that is non-resident persons or companies who export their gold to foreign countries through Ghana. The remaining 1.788 million ounces reflect exports by domestic Licensed Gold Exporters.

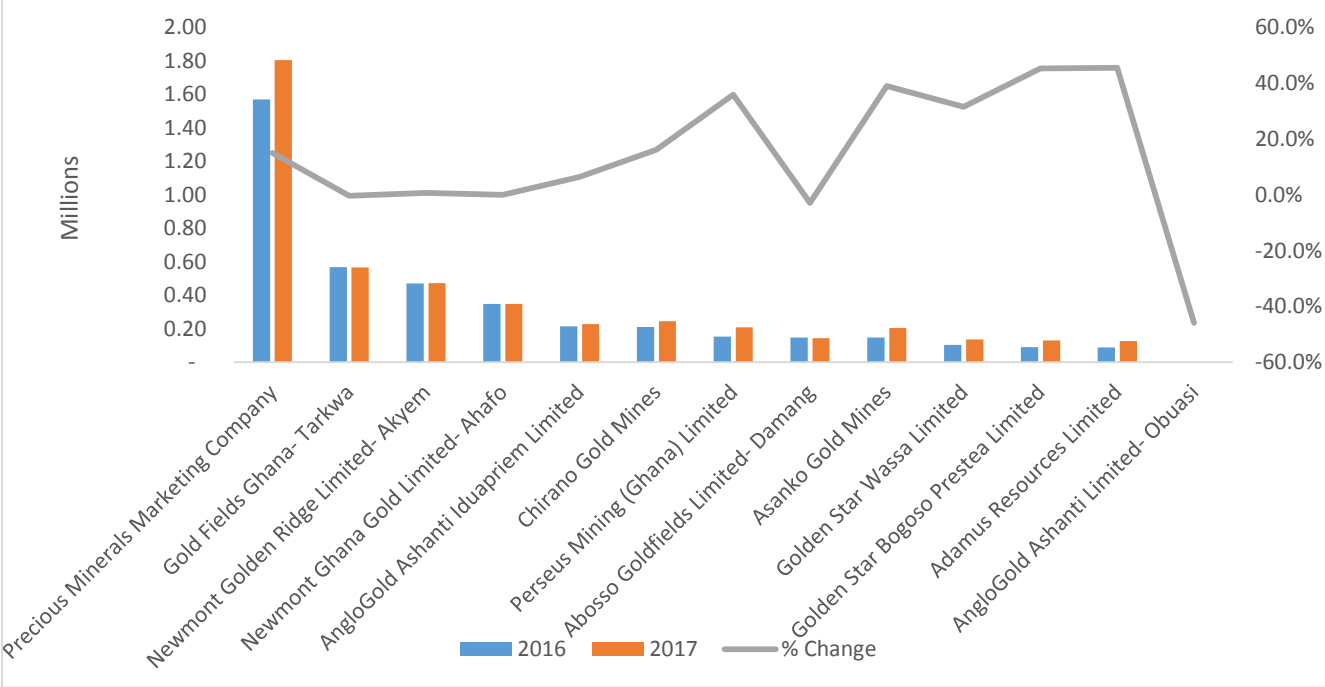
Exports of diamond by PMMC continued to decline as in the previous years due to low recoveries from the winners, who are predominantly small-scale miners. The total amount of diamond exported in 2017 was 86,925 carats relative to 143,005 carats in 2016, a dip of 39 per cent.

Fig 8.0: Gold Production Value and Assay Value of Member Companies of the Chamber



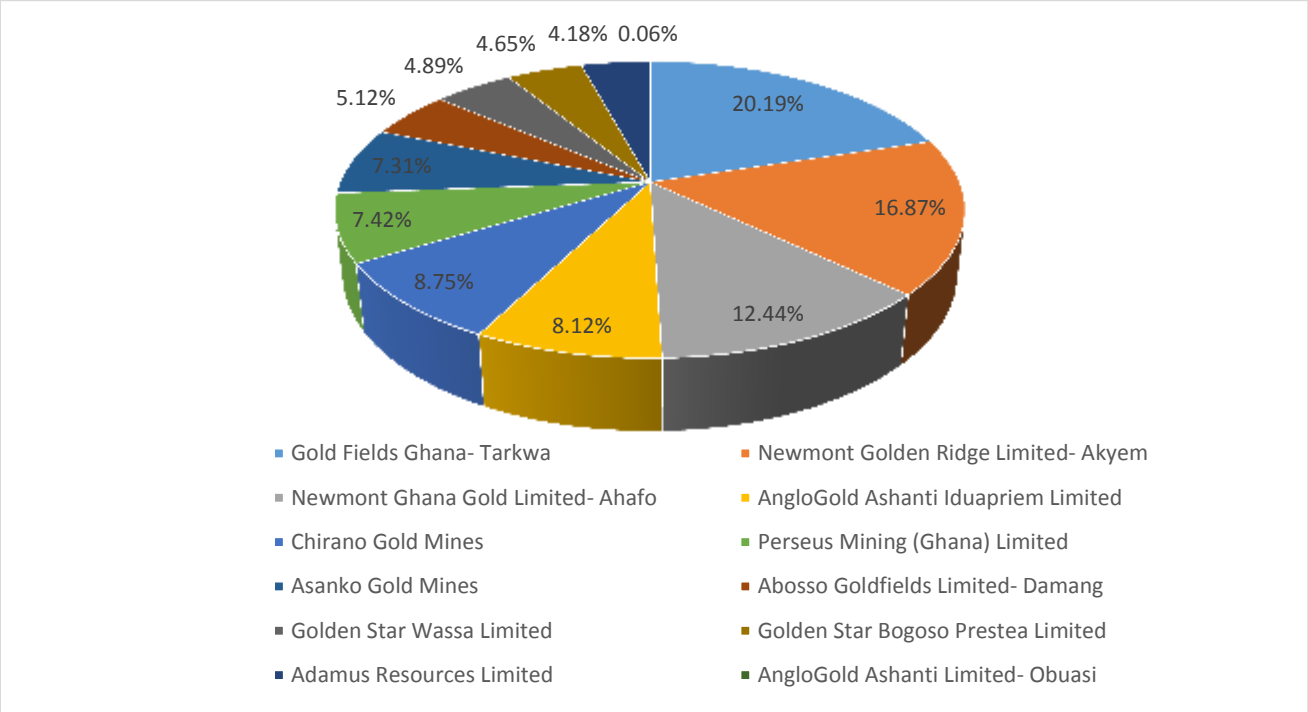
Source: Ghana Chamber of Mines (2018)

Fig 9.0: Gold Production and Assay Outturn of Member Companies of the Chamber



Source: Ghana Chamber of Mines (2018)

Fig 10.0: Share in Gold Production by Producing Member Companies



Source: Ghana Chamber of Mines (2018)

Production Cost Profile of Producing Member Companies

The average production cost of gold producing member companies, as measured by the All-In Sustaining Cost (AISC), declined from US$ 1,089 per ounce in 2016 to US$ 1,012 per ounce in 2017. In spite of the 7 per cent drop in production cost, Ghana's AISC is still significantly higher than the global average of US$ 878 per ounce. The AISC is a World Gold Council proprietary cost parameter that measures production cost and all other costs that relate to sustaining current production and sustaining capital expenditure. The 7 per cent fall in the AISC of member companies was due to contemporaneous decline in the production cost of all producing member companies, except for Newmont's Akyem Mine, AngloGold Ashanti's Iduapriem Mine and Asanko Gold Mines.

Production cost at Gold Fields' Tarkwa Mine dipped by 2 per cent to US$ 940 per ounce in 2017 relative to US$ 959 in 2016. The downturn in the AISC was largely occasioned by a 6 per cent fall in the mine's cost of sales, which moderated the impact of the 8 per cent increase in capital spending. The latter was primarily due to higher expenditure on the mine's mining fleet while the

former could be ascribed to savings in energy cost and continuing benefits of the Development Agreement (DA). Gold Fields signed a Power Purchase Agreement with Genser Energy to supply electricity to both Tarkwa and Damang mines. Since Genser delivers electricity to the mines at a tariff lower than its previous supplier, it has culminated in savings on energy cost. Further, Gold Fields signed a Development Agreement with the Government of Ghana in 2016. Among other things, the DA provides fiscal stability to the mines (Tarkwa and Damang) and provides a foundation to life of mine planning.

Likewise, cost of sales at the Gold Fields operated Damang Mine declined by 10 per cent between 2016 and 2017 on account of the previously cited reasons and the decision to switch from owner to contract mining. However, capital expenditure increased markedly due to the ongoing reinvestment programme. On the balance, Damang Mine's AISC decreased to US$ 1,027 per ounce in 2017 from US$ 1,254 per ounce in 2016. This represents a fall of 15 per cent over the period.

A combination of lower stockpile inventory adjustments, which led to a decrease in amortization and depreciation, as well as lower oil prices culminated in a 17 per cent reduction in the AISC of Newmont's Ahafo Mine. The AISC plummeted from US$ 1,152 per ounce in 2016 to US$ 961 per ounce in 2017. On the contrary, the Akyem Mine of Newmont recorded a 14 per cent growth in its AISC, from US$ 584 per in 2016 ounce to US$ 664 per ounce in 2017. To a large extent, this was precipitated by unfavourable strip ratio and adjustments to stockpile inventory (increasing depreciation and amortization) which offset the savings associated with the reduced oil prices in 2017.

The AISC of Golden Star Resources' Wassa Mine declined from US$ 1,027 per ounce in 2016 to US$ 996 per ounce in 2017, a dip of 3 per cent. This was primarily due to reduced capital spending that stemmed from the completion of the development of the underground mine and an increase in gold production as well as the associated realized revenue in 2017. With respect to Golden Star Bogoso Prestea Limited, its capital expenditure increased markedly in the period under consideration due to the development of the underground mine and open pits. However, increased gold production and the associated realized revenue compensated for the higher capital

expenditure, leading to a 7 per cent drop in the mine's AISC. Specifically, Golden Star Bogoso Prestea Limited's AISC declined from US$ 841 per ounce in 2016 to US$ 784 per ounce in 2017.

At AngloGold Ashanti's Iduapriem Mine, the AISC increased by 9 per cent to US$ 1,033 per ounce in 2017, from US$ 951 per ounce in 2016. This was mainly due to the cost associated with waste stripping and cut back of the Teberebie pit undertaken in 2017. Once the cut back is completed, it is expected to enhance access to high grade orebody which will sustain the mine's operations in the years ahead.

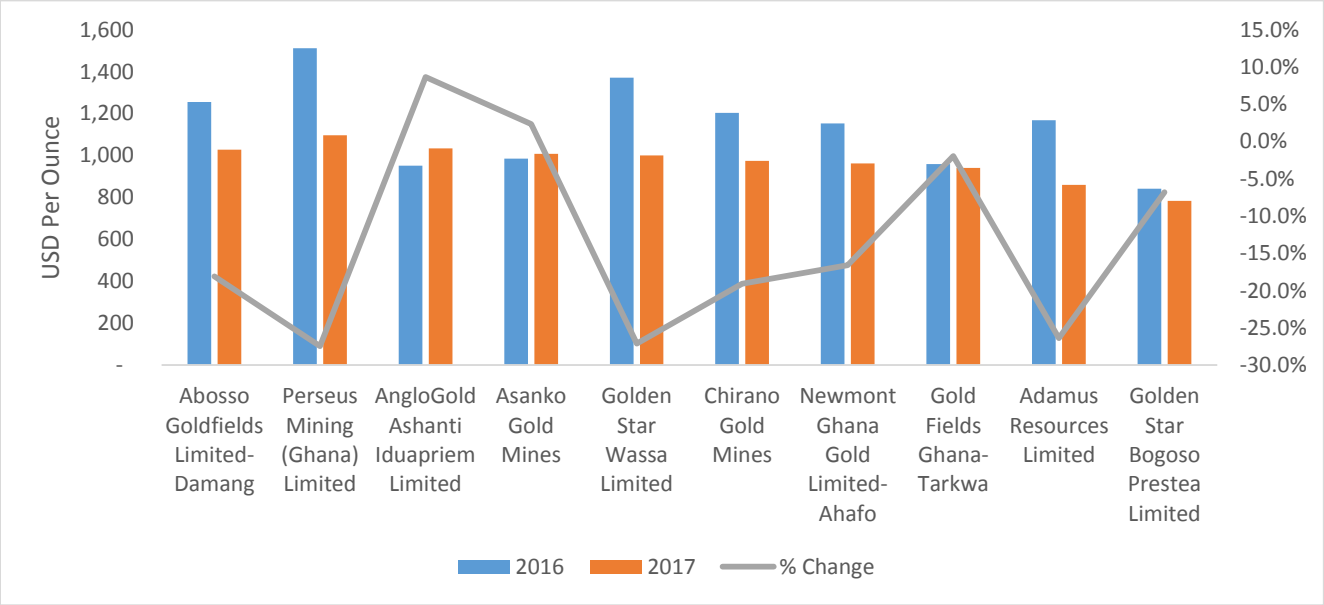
Higher revenue from the sale of metals and a decline in power cost subdued the growth in labour and maintenance costs of the Kinross operated Chirano Gold Mines Limited. Consequently, the mine's AISC contracted by 19 per cent, from US$ 1,203 per ounce in 2016 to US$ 973 per ounce in 2017.

Similarly, lower capital expenditure resulting from the completion of the resettlement and other major capital projects as well as higher mineral revenue combined to drive the AISC of Perseus Mining Limited's Edikan Mine downwards. Its AISC plunged by 27.4 per cent, from US$ 1,511 per ounce in 2016 to US$ 1,097 per ounce in 2017.

With respect to Asanko Gold Mines, its AISC increased from US$ 984 per ounce in 2016 to US$ 1,007 per ounce in 2017 due to a number of factors. Firstly, the mine recorded lower depreciation in 2016 because it declared commercial production in April 2016 and therefore carried on some depreciation charges into 2017. It also did not achieve steady-state production until mid-2016. Further, the mine recorded growth in capital expenditure due to the higher stripping cost associated with the pushback of one of its pits, Nkran. However, the effect of the increased capital spending was tempered by growth in mineral revenue arising mainly from increased production.

The completion of the pushback of the Adamus pit, which involved stripping of waste to enhance access to high grade ore, culminated in reduced capital expenditure at the Nzema Mine of Adamus Resources Limited. This situation, coupled with higher mineral revenue resulted in the mine's AISC falling from US$ 1,167 per ounce in 2016 to US$ 859 per ounce in 2017, a decline of 26 per cent.

Fig 11.0: All-In Sustaining Cost of Producing Member Companies of the Chamber



Source: Ghana Chamber of Mines (2018)

Mineral Production Outlook for 2018

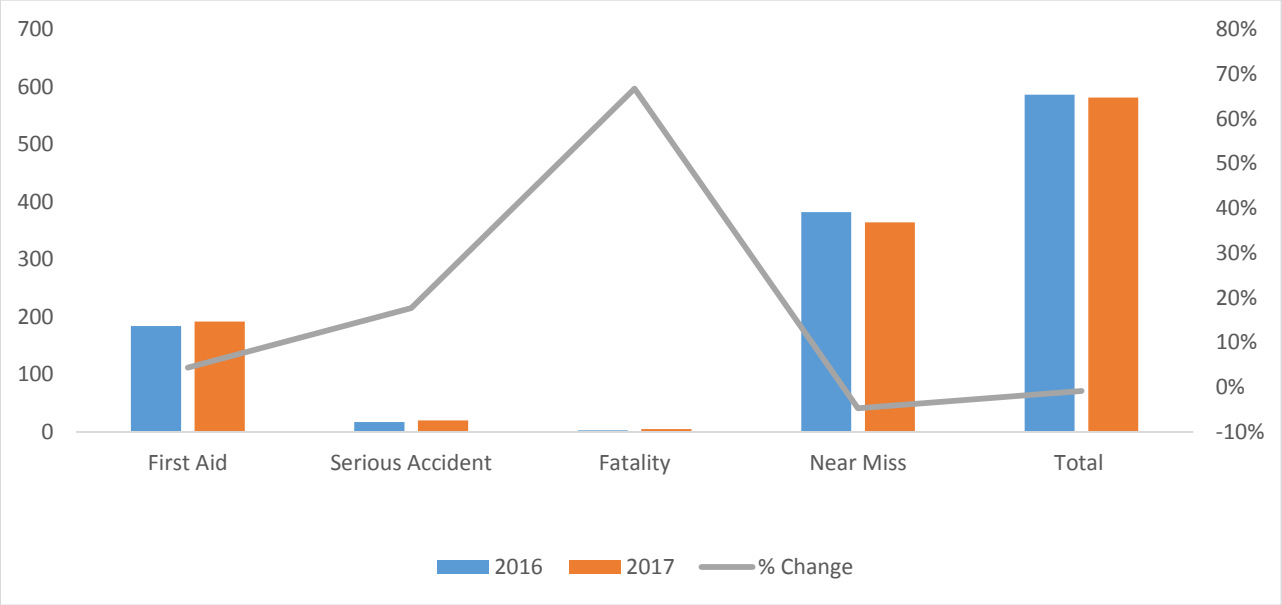
The production guidance of our member companies point towards marginal growth in gold output in 2018. Newmont Ahafo's Subika underground mine is expected to achieve commercial production in the first half of the year and Golden Star Bogoso Prestea Limited is expected to ramp up production at its underground mine. The growth in output from these mines is expected to moderate the impact of the anticipated decline in production from Gold Fields' Tarkwa and Damang mines. Regarding shipments of manganese, Ghana Manganese Company expects to double its production to 6 million tonnes in 2018.

Health and Safety Performance of Ghana's Mining Industry in 2017

In furtherance of their commitment to adhering to the highest standards of safety, mining companies continue to improve upon their operations to reduce the frequency of incidents. The total number of incidents reduced by five (5), from five hundred and eighty-six (586) in 2016 to five hundred and eighty-one (581) in 2017. Out of the recorded five hundred and eighty one (581) injuries in 2017, one hundred and ninety-two (192) were First Aid Injuries. In 2016, the equivalent number of first aid cases, which are basically minor injuries that do not lead to loss of shift, was one hundred and eighty-four (184). On the other hand, the frequency of Near Miss Incidents dropped from three hundred and eighty-two (382) to three hundred and sixty-four (364). Near Miss incidents are occurrences on the mines that do not result in injury, loss of time, death or damage to equipment.

Further, the number of Serious Accidents on the mines deteriorated to twenty (20) in 2017 relative to seventeen (17) in 2016. According to the Inspectorate Division of Minerals Commission, Serious Accident is a class of incident that involves a loss of time of more than fourteen (14) days. The total number of fatal incidents on the mines, which involves loss of life, also increased by two (2), from three (3) in 2016 to five (5) in 2017.

Fig 12.0: Frequency of Incidents in Ghana's Mining Industry (2016 and 2017)



Source: Based on data from the Inspectorate Division of Minerals Commission

Challenges

High Cost of Exploration

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 of minerals by discovery of new mineral resources to supplement production from existing mines or replace output of mines whose economic ore body is exhausted. Accordingly, it is crucial to put in place an incentive scheme that will attract the required investments into mineral exploration.

It is also worth noting that the preponderant share of exploration licenses issued by the Minerals Commission 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 through entering into partnerships with investors to develop a mine or trade the right to large-scale mining companies.

Consequently, an incentive scheme could reduce the cost induced entry barrier to exploration and boost the probability of making a viable commercial find. As a first step, the government should consider exempting exploration companies from payment of VAT on big ticket cost items such as Drilling and Laboratory Services. Such a measure would not only reduce the cash flow and other related constraints or costs borne by these companies but also enhance the country's image as a competitive destination for exploration investment and assure a steady flow of mineral revenue.

Overlapping Roles of Environmental Protection Agency and Inspectorate Division of Minerals Commission

Regulation of the mining industry is crucial to ensuring that the outcomes of mining do not impact adversely on the natural environment and the lives of host community members. In that regard, the Chamber and its member companies endeavour to comply with the requisite statutory regulations from the two main regulatory agencies of the mining industry; the Inspectorate Division of Minerals Commission (IDMC) and the Environmental Protection Agency (EPA).

However, the directives from both agencies do not always converge and any divergence from the common goals makes compliance difficult for companies. This has implications for the efficient operations of mining companies as the duplicity results in not only incongruence but avoidable additional duplicated costs. A classic example of such a situation relates to the lining Tailings Storage Facilities (TSFs). Whereas the EPA requires mining companies to use HDPE liners, the IDMC recommends the use of clay as liners for TSFs and proscribes mining companies from using HDPE as liners.

While the Chamber and its stakeholder institutions, Ministries of Lands and Natural Resources (MLNR) and Environment, Science, Technology and Innovation (MESTI), EPA and Minerals Commission have attempted to resolve the conundrum, it has not yielded the desired outcome. We therefore urge the relevant duty bearers to expedite action in resolving the long-standing conflicting roles between the two regulators.

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 (3) years after the passage of Act 900, some mining companies continue to pay an amount equivalent to 5% of mineral revenue as required in the amended Act while others are required to pay a variable royalty rate, an example of which is shown in Table 2.0. The latter are mines that have Investment/Development Agreements with the state and are relatively large gold producers.

Table 2.0: Renegotiated Royalty Rates in Investment and Development Agreements

Royalty Rate (%)	*Gold Price (USD per ounce)*
3.0	Less than $1,300
3.5	$1,300- $1,449.99
4.0	$1,450- $2,299.99
5.0	$2,300 and above

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 being mined is commendable as it enhances predictability in the fiscal regime and accommodates the volatile mood swings of the minerals markets, especially the price of gold, the preponderant mineral mined in Ghana. It also assures government of additional revenue in periods of high prices.

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 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. Leaving lower grade but potentially profitable ore in the ground, as a consequence of economic factors, including the weighting of taxation applied, 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 more 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.

High Impost on Fuel Products

Based on the price window of 16th September, 2017 shown in Table 3.0, the total taxes, levies and margins on the price of diesel supplied to the mines is GHp 216.7836 per litre while the ex-refinery price is the equivalent of GHp 232.0985. This implies that 48% of the price of diesel is taxes and levies.

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 2016, the mining industry's expenditure on fuel was USD 301 million of which nearly one-half represents taxes and levies. This contributes significantly to the relatively high cost of mining in Ghana, making the country less attractive relative to even land locked peers in the sub-region, where the product is double-handled because they do not have sea ports. It is reasonable to expect that double handling should ordinarily make the end-product price higher. It is however not the case with diesel fuel supplied to mining companies in these countries.

In view of the adverse effect of the tax and levy-induced hike in fuel products on the operations of the mining firms, the Chamber strongly requests that the Energy Debt Recovery Levy, Price Stabilization and Recovery Levy (PSRL), Road Fund Levy, Primary Distribution Margin and BOST Margin should be removed from the PBU of diesel supplied to the mines. Our reasons are as follows:

Table 3.0: Price Build-Up of Diesel Supplied to the Mines

Item	Amount (GHp)
*Ex-refinery Price [2]	232.0985
UPPF	13.5000
Energy Debt Recovery Levy	41.0000
Road Fund Levy	40.0000
Energy Fund Levy	1.0000
Price Stabilization And Recovery Levy	10.0000
Primary Distribution Margin	7.5000
BOST Margin	3.0000
Fuel Marking Margin	2.0000
Special Petroleum Tax	52.3281
Marketers Margin	27.4555

[2] The ex-refinery price is typically quoted in USD. On the applicable date (16th September, 2017), it was quoted at 52.66 US Cents. We converted it into Ghana Cedis using an exchange rate of USD 1= 4.4075, as quoted by the Bank of Ghana on 15th September, 2017.

Dealers (Retailers/Operators) Margin	19.0000

Source: National Petroleum Authority (2017)

The 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. With respect to the mine diesel, the product has for a long time been categorized as an export product because it is an input to an enterprise whose output are minerals which is exported. Alongside ATK and Gas oil to the rigs, these products are priced at 11 cents per litre at an import parity price.

Over and above this was a line item described as the Price Stabilization Margin (PSM) also at 11cents per litre which is applied to the so-called export prices. In an ingenious manner the PSM was used by the authorities to cross-subsidize the price of petroleum products for the street consumer, especially gasoline and diesel. Obviously, the mining sector did not contribute to the creation of debts in the energy sector. It is on this basis that we urge the government to exclude mining companies from the payment of the Energy Debt Recovery Levy.

With respect to the inclusion of the Price Stabilization and Recovery Levy (PSRL) in the PBU to offset exchange rate related cost, it is not consistent with the policy of pricing diesel supplied to mines in foreign currency (USD). In essence, the pricing regime of diesel for the mining industry responds to increases in cost induced by movements in the exchange rate. Thus, the inclusion of a separate levy in the PBU to account for exchange rate movements induced cost is double billing.

Operationally, the diesel supplied to major mining sites does not flow through the generic tank farms as other diesel products do. The reason is simple; the quality specification for quite advanced technological mining earth moving equipment requires a level of cleanliness that is not obtainable in the tank farms used for moving generic petroleum products. In essence, mine diesel does not co-mingle with generic diesel. It is therefore not handled by BOST and the primary

depots. 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, 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.

Our proposal for the Road Fund Levy to be excluded from the PBU of diesel is premised on the fact that mining operations are in-situ in remote areas and the earth moving equipment – dump trucks, excavators, drill rigs and other ancillary items used in mining- are also not used on public roads. They are rather used in well-defined areas as prescribed by law. As a result, the rationale for the inclusion of Road Fund levy in the PBU of diesel supplied to the mines is an iteration which must be removed.

3 % VAT Flat Rate Scheme

Unlike the earlier VAT policy which was applicable to suppliers within a defined threshold, the new 3% VAT flat rate scheme applies to all suppliers, including companies within the Large Tax Payers Unit. Since all suppliers to the mining companies have been classified as wholesalers or retailers, the law impacts on the mining sector directly.

Most of the companies that supply products to the mining companies import more than 97% of their wares, including consumables. Already, these company pay duties and 17.5% VAT paid on the imported items. With the passage of the new VAT law, companies cannot claw back the 17.5% import VAT as input VAT. Consequently, the mining companies will bear the 3% VAT in addition to the 17.5% VAT which cannot be reclaimed, which would be treated as output VAT without any input VAT.

We therefore request that companies be given the opportunity to claim input VAT suffered regardless of whether or not they fall within the 3% VAT scheme or alternatively revert to the historical basis where revenue levels determined the applicability or otherwise of the 3% VAT scheme.

Mineral Revenue Management Law

Minerals, like other natural resources, are finite and their prices are externally determined, which makes the returns susceptible to shocks. The cyclical behaviour of mineral prices and exhaustibility of mineral resources pose a major challenge to mineral dependent economies such as Ghana with respect to sustainable development. In order to smoothen the expenditure of inflows from resources that are finite and exhibit price volatility, most matured economies enact fiscal laws to govern the use of natural resource revenues. We therefore urge the government to promulgate a law to regulate the use of mineral revenue to promote accountability and sustainability in the mining industry.

Issues with 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 difficulties on the ground where ore from different pits is trucked to these facilities. The provision in the Act is not consistent with the consensus reached at the afore-mentioned 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 & 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 noncommercial 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 between 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.

Thin Capitalisation

The new income tax Act 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 constitute 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.

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

In section 12 of the Act, 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% on the written down value of the pool at the end of the year to which the repairs and improvement cost relates to. 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.

Statistical Appendix

Appendix One: Production and Assay of Gold, Shipments of Diamond and Manganese

Company	**2016**	**2017**
Gold Produced (Ounces)		
Gold Fields Ghana- Tarkwa	568,036	566,388
Newmont Golden Ridge Limited- Akyem	470,313	473,390
Newmont Ghana Gold Limited- Ahafo	348,861	349,032
AngloGold Ashanti Iduapriem Limited	214,196	227,833
Chirano Gold Mines	211,440	245,511
Perseus Mining (Ghana) Limited	153,208	208,226
Asanko Gold Mines	147,501	205,047
Abosso Goldfields Limited- Damang	147,720	143,568
Golden Star Wassa Limited	104,382	137,234
Golden Star Bogoso Prestea Limited	89,673	130,331
Adamus Resources Limited	87,710	117,242
AngloGold Ashanti Limited- Obuasi	3,072	1,662
Total Gold Produced	***2,546,112***	***2,805,464***
Gold Assayed (Ounces)		
Precious Minerals Marketing Company (In-country sources)	1,570,029	1,788,780
Precious Minerals Marketing Company (Transshipment)	n.a.	16,260
Total	**1,570,029**	**1,805,040**
Export of Diamonds (Carats)		
Precious Minerals Marketing Company	143,005	86,925
Shipment of Manganese (Tonnes)		
Ghana Manganese Company	2,018,254	3,003,580

Source: Ghana Chamber of Mines (2018)

Appendix Two: Mineral Revenue (US$) of Member Companies of the Chamber

Company	**2016**	**2017**
Gold Produced (US$)		
Gold Fields Ghana- Tarkwa	708,864,563	710,828,770
Newmont Golden Ridge Limited- Akyem	586,878,575	593,501,515
Newmont Ghana Gold Limited- Ahafo	434,741,967	437,410,929
AngloGold Ashanti Iduapriem Limited	268,261,229	285,592,063
Chirano Gold Mines	258,452,610	317,626,290
Perseus Mining (Ghana) Limited	165,324,528	252,542,488
Asanko Gold Mines	195,388,905	256,203,177
Abosso Goldfields Limited- Damang	183,390,746	180,268,662
Golden Star Wassa Limited	129,284,717	172,864,696
Golden Star Bogoso Prestea Limited	111,970,441	164,261,555
Adamus Resources Limited	107,150,748	147,685,310
AngloGold Ashanti Limited- Obuasi	3,268,846	3,460,288
Total	**3,257,646,310**	**3,522,245,743**
Gold Assayed (U$)		
Precious Minerals Marketing Company (In-country sources)	1,999,943,636	2,234,545,039
Precious Minerals Marketing Company (Transshipment)	n.a.	20,506,676
Total Value of Gold Assayed	**1,999,943,636**	**2,255,051,716**
Export of Diamond (US$)		
Purchase of Diamond	4,931,157	2,859,056
Shipment of Manganese (US$)		
Ghana Manganese Company	104,807,091	165,198,565.00
Total (Mineral Revenue)	**5,262,521,103**	**5,945,355,080**

Source: Ghana Chamber of Mines (2018)

Appendix Three: All-In Sustaining Cost (US$ per Ounce) of Producing Member Companies

Company	**2016**	**2017**
Gold Fields Ghana- Tarkwa Mine	959	940
Newmont Golden Ridge Limited- Akyem Mine	584	664
Newmont Ghana Gold Limited- Ahafo Mine	1,152	961
AngloGold Ashanti Iduapriem Limited	951	1,033
Chirano Gold Mines	1,174	973
Perseus Mining (Ghana) Limited	1,511	1,096
Asanko Gold Mines	984	1,007
Abosso Goldfields Limited- Damang Mine	1,254	1,027
Golden Star Wassa Limited	1,027	996
Golden Star Bogoso Prestea Limited	841	784
Adamus Resources Limited	1,167	859

Source: Ghana Chamber of Mines (2018)

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