Recommendation: HOLD  
Target Price until (12/31/2016): $14

1. Reasons for the Recommendation

FCX is one of the world’s largest copper producers, second behind the state owned Codelco in Chile. Within the US, FCX maintains the largest market share at 43% in copper mining. Looking outside of the US, FCX owns the Grasberg minerals district, which is the largest gold mine in the world and also one of the largest copper mines in the world. FCX is also the largest molybdenum producer in the US with a market share of 38.1%. FCX’s strength is in its mining operations, specifically copper mining, and its consolidated mining operations, excluding the oil and gas segment, has remained profitable despite the weak commodity environment.

Operating margins for FCX’s mining operations as a whole have remained positive throughout the past several years. The oil and gas segment has not performed as well and has been unprofitable since 2014. The oil and gas segment of FCX has put the biggest dent in its operating income and net income. This will continue until the end of 2015 and into 2016. Impairment attributable to its oil and gas operations has been written down each quarter since 2014 and has persisted to the most recent quarter. Due to the nature of these impairment charges (i.e. ceiling test impairment charges, which are based on a 12-month simple average of oil price), further impairment write-downs in 2016 will occur if the price of oil does not recover. However, impairment attributable to oil and gas operations is not indefinite. If oil prices persist through 2016 at the current level, impairment will be written down until the carrying value of these assets are no longer overvalued relative to market value. Therefore, impairment write-downs will occur for 12 months, after which, the carrying value of the oil and gas assets will be in line with the 12-month average of oil prices.

FCX is a cyclical business whose volatility is greater than the market’s volatility and has a beta of 2.14.1 Weak economic growth, especially in emerging markets, and the slowdown of growth in China will put downward pressure on future expectations of copper demand as well as its price. With this outside factor alone and all else constant, downward pressure on FCX’s stock price may occur due to emotions and fears of the market. Revenue is influenced by the price of the commodities FCX produces, especially copper, and will experience downward pressure if commodity prices decline. The reliance on factors outside of the company’s control may be a cause for concern.

The large mining corporation and competitor Glencore has been in the process of cutting copper production. However, other large mining competitors such as Rio Tinto, BHP Billiton, and Codelco have, thus far, vowed not to cut copper production.2,3 Within this weak commodity environment, the price of copper has, overall, been in decline over the past years, and the absence of any scaling back in production from large miners will continue to put downward pressure on the price of copper. Revenue growth will be modest if growth in commodity prices is modest.

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1 Yahoo Finance
2 http://www.ft.com/cms/s/0/1681ce0e-6dc8-11e5-aca9-d87542bf8673.html#axzz3qTlAQ1vX
3 http://www.ft.com/intl/cms/s/0/a0e8b79c-7287-11e5-bdb1-e6e4767162cc.html#axzz3qTlAQ1vX
FCX controls multiple steps in the production chain, from mining ore to refining and smelting, from turning copper ore into the metal that is used in telephone wiring, construction, cars, hand held electronics, plumbing, etc. FCX’s copper operations engage in the mining, exploration, smelting, and refining processes of copper production, which means it has a wide control of the production chain. With Atlantic Copper Smelting & Refining and PT Smelting, subsidiaries controlled by FCX, FCX’s mines are ensured of a customer to refine and smelt the ore it produces. This integration gives FCX control of and an edge in its copper production.

2. Company Analysis

FCX has three main business operations. These operations are Freeport Minerals Corp. (FMC), Freeport Indonesia (PT-FI), and Freeport-McMoRan oil and gas (FMOG). Within the mining segments of FCX (FMC and PT-FI), operations are held around the globe in North America, South America, Africa, and Indonesia. FMOG operates wells in California, the Gulf of Mexico, Louisiana, and Wyoming.

FCX mines copper, gold, and molybdenum, along with small amounts of silver and cobalt hydroxide. The core competency of the firm is in its copper production and accounts for 59.8% of revenue. Together, the mining segments contributed 80.3% to FCX’s revenues with the oil and gas segment contributing 19.7% in 2014. As of the third quarter of 2015, the oil and gas segment has contributed 13.2% to FCX’s revenue.

FCX is in control of estimated mineral reserves, both proven and probable, totaling 103.5 billion pounds of copper, 28.5 million ounces of gold, and 3.11 billion pounds of molybdenum. At very conservative prices of $2/lb. for copper, $1000/oz. for gold, and $10/pound for molybdenum, this equates to $207 billion worth of copper, $28.5 billion worth of gold, and $31.1 billion worth of molybdenum.

With regard to labor matters, FCX has had a relatively volatile relationship with its Indonesian miners and the Indonesian government. This includes a three-month strike in 2011, halted production due to damage from the strike, and multiple shootings. Recent regulation passed by the Indonesian government took precedence over rights FCX obtained through its contract of work (COW) signed back in 1992, and because of this, FCX was not able to export products without paying increased royalties in 2014. Although a new agreement has recently been made with the Indonesian government that provides FCX with the same operating rights it had in its COW, threats to production and operating rights in Indonesia remain a concern.

Risks that remain in store for FCX are a commodity environment in which low copper prices continue to persist. FCX has made plans to change mining operations and cut costs. This includes a 44% cut in capital expenditures by 2016, reduced production rates at various North American mines, and a reduced workforce. With all of FCX’s contracts denominated in US dollars, an appreciating dollar remains a risk with low commodity prices.

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4 SEC EDGAR 2014 10-K filing
5 SEC EDGAR 2015 Q3 10-Q filing
6 FCX Investor Relations 10-08-2015 press release
FCX is reviewing alternatives for FMOG in order to enhance shareholder value, which may include an equity carve out, spin-off, joint venture, or more reductions in spending, although it is unlikely an equity offering will occur in the currently weak market conditions. If FMOG does separate from FCX, the allocation of debt may have implications for FCX’s capital structure, where FCX’s net debt ($20.4 billion) is well above its market value ($11.8 billion). In August of this year, it was announced that activist investor Carl Icahn acquired an 8% stake in FCX. This may be seen as an opportunity, but it should be noted that Icahn does not have a perfect record in returning value to shareholders.7

The elephant in FCX’s room that should be addressed is the risk of bankruptcy. Although Altman’s z-score suggests FCX is in distress, there is reason to believe FCX will not file for bankruptcy. As previously mentioned, FCX is actively responding to the current commodity environment. FCX is doing this by reducing capital expenditures, reducing production, reducing its workforce, decreasing dividend payouts, and reviewing alternatives for FMOG. With regard to FMOG, the question is no longer whether FCX will do something or not in response to its performance. The question is what they will do. Although it cannot yet be said what FCX will do, what is certain is that FCX will not be the same company in the future. This is because impairment write-downs attributable to the oil and gas segment, which is the line item on FCX’s financial statements that have tarnished operating and net income, will stop. Without impairment and all else constant, FCX would have been profitable in 2014 with an EPS of 3.99.

3. Industry Analysis

Each of the key industries FCX operates within (copper, gold, molybdenum, and oil & gas) are industries in which large amounts of capital are required with heavy regulation. This makes barriers to entry high. Large initial capital expenditures are required, making competition arise from the ability to minimize the cost of production and the amount of provable/proven resources available. These industries, for the most part, are heavily globalized. Revenue growth within these industries is driven by rising prices. However, the appreciation of the dollar relative to other currencies will put negative pressure on US companies offering products in US dollar denominated contracts as it becomes more expensive for outside countries to import American products.

Because copper is heavily used in the construction industry (wiring and telecommunication), the urbanization of China and India as well as their growth will affect the copper industry. China is the leading consumer of copper, accounting for 40% of the world’s demand.8 Long run demand for construction in China, India, and the US will be the main facilitator of growth for the copper industry and prices. Expectations are that world wide copper usage will increase 2% in 2016.9 Copper prices are expected to decline 0.4% in the five years leading to 2020.10 Copper production worldwide is expected to grow and in 2016 will exceed demand. The overall outlook for copper is that prices will slowly decline overall by 2020, and supplies will exceed demand, although demand will increase.

7 http://graphics.wsj.com/activist-investor/#FBHS
9 IBIS World
The oil and gas industry has a large number of players that participate in the production and exploration of oil and gas. The market share among industry players is widely dispersed. In other words, there is a low level of market share concentration. However, members of OPEC collectively account for 40% of the world’s oil production. With the oil industry being highly globalized, exports are important and OPEC accounts for 60% of the world’s oil exports. With the low level of market share concentration, there is a high level of competition. The BRIC nations have driven energy demand, but the slowdown of Chinese growth may hinder this as well as growth in the price of oil. Revenue growth within the industry is expected to decline over the next five years. Moving forward, downward pressure on the price of oil will continue as BRIC nations, along with other emerging markets, experience slowing growth in addition to the world’s oversupply of oil.

Within the US, the gold mining industry has two big players, Barrick Gold Corporation and Newmont Mining corporation, which account for 30.1% and 21.7% of the market share, respectively. Globalization of the gold industry is relatively low with high competition. This competition is driven by the cost of production because of the inability of global players to influence gold prices. Gold typically does well during times of economic uncertainty and gold prices are expected to experience modest growth over the coming years. With modest growth in the price of gold, revenue growth will also be modest.

The demand for molybdenum is heavily influenced by the steel industry and production that requires steel because molybdenum is used as an alloying agent. Steel production has grown in 2010 and 2011 and is expected to grow through 2019. The world price of molybdenum is expected to grow at an annual rate of 1.2% to 2020. With steel output expected to increase in the US, molybdenum production will attract new players, especially with rising prices, albeit a modest rise. Overall, molybdenum mining is expected to grow in both production and price, as there are few substitutes for molybdenum and limited production within the US.
Appendix: Inputs into valuation using multiples

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<tr>
<td><strong>Stock Price (year end)</strong></td>
<td>80.29</td>
<td>120.09</td>
<td>36.79</td>
<td>34.20</td>
<td>37.74</td>
<td>23.36</td>
<td>9.69</td>
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<td><strong>EPS (Basic)</strong></td>
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<td>4.67</td>
<td>4.81</td>
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<td>2.65</td>
<td>-1.26</td>
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<td><strong>Sales</strong></td>
<td>15,040</td>
<td>18,982</td>
<td>20,880</td>
<td>18,010</td>
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<td>21,438</td>
<td>15,103</td>
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<tr>
<td><strong>Sales per share (basic)</strong></td>
<td>18.14</td>
<td>20.75</td>
<td>22.05</td>
<td>18.98</td>
<td>20.88</td>
<td>20.63</td>
<td>11.51</td>
<td>17.70</td>
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<td><strong>P/E</strong></td>
<td>26.34</td>
<td>25.72</td>
<td>7.64</td>
<td>10.67</td>
<td>14.23</td>
<td>-</td>
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<td>9.72</td>
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<tr>
<td><strong>P/S</strong></td>
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<td>5.79</td>
<td>1.67</td>
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<td>1.13</td>
<td>0.84</td>
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*Analyst's own calculations. Source of basic data: company's 10-K; Yahoo! Finance*