Chevron Inc. (CVX)
Analyst: Rudra Luitel
Spring 2016

Recommendation: BUY Target Price until12/31/2017: \$112

1. Reasons for recommendation

My recommendation to buy of chevron stocks depends on my expectations of growth of crude oil price in future that will influence company performance in future. Chevron performance mostly depend upon the price of crude oil. Factors that determine future crude oil price are world's economic growth, Oil importing and exporting countries demand and supply of oil, Global oil and gas production and relative strength of dollar compared to other currency. Apart from this, Chevron's decreasing capital expenditure, Constant dividend payment and future cash flow from Chevron Australia strengthens my buy recommendation. Furthermore, increasing oil production by OPEC and Non-OPEC members, decreasing oil consumption in Japan, increasing efficiency in US fracking and quantity of oil production by Iran may decrease the price of oil in future.

According to World Bank, world economy grew 2.75% from 2010 to 2015. The World Bank has forecasted that world economy will grow at 3% from 2016 to 2018. According to IEA, Global oil and liquids consumption was at 93 million barrel per day for 2014 and 2015 and consumption remain at 94.86 million barrel per day. IEA has forested that global oil and liquids consumption will remain 96.19 million barrel per day in 2017. Global, oil and liquids production reaches 96.27 million barrel daily and expected at 96.61 million barrel daily in 2017. OPEC is producing currently 2.5 million barrels of excess oil per day and if OPEC maintains current level of production, world oil consumption will be equal to world oil production by mid of 2017 due to world's economic growth. According to European commodity forecast, price of crude oil will remains around \$70 per barrel in 2017 irrespective of current excess level of oil production. China represents 25% of global oil demand and its oil demand depends upon various factors like domestic economic growth, manufacturing activities, inventory buildup and its expansion of export market. Although, China adjusted its economic growth forecast to 6.8% in 2015 and forecasted that its economy will grow at 6.4% in 2016 but aggregate demand of oil will be higher and forecasted that demand will increase by 4% in 2016. Furthermore, According to CNN money, Indian economy is expanding rapidly with expected growth rate of 7.5% in 2016 and 2017 along with increasing demand of 350,000 thousand barrels of oil per day. Moreover, decreasing capital expenditure in oil exploration and production activities will help to increase oil price. US oil production and exploration investment has decreased by 52.34% over past 2 years (from \$285,620 billion in 2014 to \$136,133 billion in 2016). In addition with this, inflation in US Dollar is expected in the future. European central bank announces asset buying program in January 2015 of 60 billion euro per month. The ECB bond buying program extended in March from 60 billion euro from month to 80 billion euro and main interest rate was reduced from 0.05% to 0%. Furthermore, bank deposit rate was cut further from minus 0.3% to minus 0.4%. The European QE will buy more than 1.1 trillion euro up to 2016. Japan has introduced negative interest rate and on its first day Japanese yen lost its Value by 2.5%. China still buying US treasury to make US dollar stronger and devaluate its own currency to boost its export. All these activities makes dollar stronger so Federal Reserve Bank president, Janet Yellen, stated that negative interest rate is on the table. So far, chances that Federal Reserve Bank will announce specific monetary policy to create inflation in near future is high. Aggregate Inflation in US remains around 0.1%, but after deducting the inflation of food and energy, Inflation remains around 2.2% so inflation is expected in near future.

Furthermore, decreasing Chevron's capital expenditure will helps to increase its earnings in coming years. Chevron had invested around \$7 billion as capital expenditure in each past year in Gorgon project and Wheatstone project in Australia. The project is almost completed and company expected to invest less than \$1 billion in 2016. Chevron had spent \$52 billion in Gorgon Project and \$29 billion in Wheatstone project and due to completion of these Australian project, chevron will decrease its capital expenditure by \$7 billion in 2016 from this sector. Chevron has announced that it will spend \$26.6 billion as capital

expenditure in 2016 compared to \$35 billion and \$29 billion in 2014 and 2015 receptively. In addition to this, Company said that it will spend \$17 billion in 2017 and \$27 billion in 2018. This expenditure also includes budget for oil and gas exploration expenses, which will drop from \$3 billion this year to \$1 billion next year. The statement released in January stated that chevron will cut 4,000 workers in 2016. However, Company will continue to invest major portion of its capital expenditure in international upstream such as Angola, Nigeria, Gulf of Mexico, Middle East and Kazakhstan because of low marginal cost of oil production in these countries. Company will invest around \$5.4 billion in US upstream and downstream in 2016. Decreasing capital expenditure gives positive growth expectations for the chevron stock.

Chevron's two big natural gas project will increase its cash flow in the future. The most expensive \$56 billion Gorgon project (47.3% interest) begins production and first shipment of liquefied natural gas lifted to Japan. The Gorgon project has capacity of producing 2.6 billion cubic feet of natural gas per day with expected economic life exceeding 40 years. Wheatstone project (64.1%) cost \$29 billion with production capacity of 1.6 billion cubic feet of natural gas per day and expected to supply first cargo in 2017. According to World Bank commodity forecast January 2016, Natural gas will trade around \$2.5 per thousand cubic feet. Price of natural gas will increase by 20% in 2017 compared to 2016 and by 16% in 2018 compared to 2017. The growth in price will contributed by increasing demand in Japan, China, South Korea and other East Asian nations. According to EIA, Japan is world's largest LNG importer and represents 37% of world's imports. Japan LNG production is low due to declining reserves and after Fukushima incident imports of natural gas rose by more than 25% from 3.3 trillion feet of natural gas per year to 4.2 trillion feet of natural gas per year. Gorgon and Wheatstone LNG project could supply 25% of japans annual gas demand. The power sector is largest consumer (68%) of natural gas in Japan. Chevron made long term contract with Asian buyers and most of Australian LNG is contracted to Japan, china and others East Asian nations on long term basis. Japan contracted to import 79% of its existing production and 35% from new project. China will import 15% existing production and 23% from new projects. Around 2 billion cubic feet of natural gas production will be sold on spot basis. According to Australian Government department of industry, LNG shipments will increase by 23% by June 2016 and future demand of LNG may surge export by 45% in 2017.

Another reason for the recommendation is expectations of dividend in the future. Chevron CEO, John Watson, has signaled that company won't cut its dividend in coming year. Chevron is cutting cost, reducing its capital expenditure, generating cash flow from Chevron Australia and increasing its asset sale in coming years thus tries to increase its net income margin. This activities signals that chevron will continue to pay dividends. Past year, company paid around \$8 billion as cash dividend although company made net earnings of \$4.5 billion. Historically, Chevron is dividend paying stock rather than capital gain stock. For the past 8 years, the stock average holding period return was 28.19% where, Company capital gain yield was around 1% per annum and company paid total \$16 per share during 8 years. From 2010 to 2014, company had purchased 180.9 million shares for \$20B assuming that stocks price were undervalued. Company did not acquire any share in 2015 and it doesn't have any set time or monetary limit to stop stock repurchase program. This will give positive outlook for future stock price.

The further overproduction of crude oil By OPEC and Non-OPEC members provides the greatest threat for chevron. Latin America largest economy, Brazil, is suffering from economic contraction. According to CNN money, Brazil GDP has contracted by 3.5% in 2015 and contraction will continue in 2016. Another major player, Iran, has started supplying oil in international market from 2016. The national Iranian oil company production volume remains 3.4 million barrels per day in 2015 with the forecasted growth of 0.3% in 2016. Japan is the third largest importer of crude oil and imports 4.4 million barrel per day but import is declined by 22% since 2000. Currently, Japan is focusing on energy efficient mechanism to decrease its energy consumption in long run. Although the number of active oil producing

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rigs in US has decreased by 59% compared to previous year, US shale output remains constant because of increasing efficiency in fracking. The IEA has forecasted that US shale industry will produce 9.33 million barrels of oil per day in 2016 and expected to increase to 10 million barrel per day in 2017. All these situations put downward pressure on oil price.

2. Company Analysis

Chevron is globally diverse in six continents and largest oil and Gas Company in US after Exxon Mobil. Capital allocation in Specific upstream segment is major strength of chevron. Chevron is actively investing PP&E in five countries. Chevron has invested around \$2.5 billion each year in Angola and Nigeria. According to EIA 2014 report, the marginal cost of production in Nigeria is \$15 per barrel and in Angola is \$40 per barrel. Chevron has invested \$3 billion in gas and oil in each year from 2013 in Kazakhstan where the marginal cost of producing crude oil is \$16 per barrel. In addition to this, chevron is actively selling its US upstream Assets and shallow water assets in Gulf of Mexico where marginal cost of production in US shale is \$73 per barrel. Chevron is investing around \$3 billion since 2013 in Deepwater oil production in Gulf of Mexico where marginal cost of production is \$57 per barrel. Apart from this, company is adding investments in Middle East where the average marginal cost of production is \$15 per barrel. Furthermore, global diversification of company investment gives chevron risk reduction in operation and generates revenue from all continents. For past years, company generates around 50% of its revenue from Asia, 20% from US, and 10% from Australia, 10% from other America, 5% from Africa and 5% from Europe. Apart from this, it has strongest balance sheet with huge cash deposit compared to its competitors. Chevron currently has \$11 billion cash deposit compared to \$3.7 billion of Exxon Mobil and \$2.7 billion of Schlumberger.

Huge investment in American Upstream is major chevron weakness. Due to high marginal cost of production in US (\$73 per barrel), chevron made \$4 billion loss in US upstream compared to \$1 billion ExxonMobil. For past 4 years, chevron total upstream capex as property plant and equipment accounts 35% in US Upstream and 65% in international upstream as gross investment in cost whereas ExxonMobil accounts 25% in US upstream and 75% in international upstream. Thus, Chevron US upstream made loss of \$4 billion in 2015 and generated average 20% of total upstream profit before 2015. Chevron's US upstream produces 25% of its total oil production so it has greatest loss compared to ExxonMobil. Furthermore, chevron's future growth in downstream segment is low. Although chevron made \$8 billion profit in 2015 from downstream, most of the profit came from gain in asset sale from Caltex Australia. In 2015, Chevron refined 924 million barrel of oil per day in US with total operable capacity 963 million barrel per day and Chevron utilized 96% of US downstream capacity. Although company has invested 1.6 billion in US downstream in 2016, refining is assume to start after 2 years. When it comes to its affiliates, its affiliates companies utilized 90% of theirs capacity in 2015. International downstream refined 279 million barrels per day in 2015 with the operable capacity of 330 million barrel per day. Chevron utilized 92.75% of its downstream capacity in 2015. Chevron may increase its earning in 2016 in downstream due to fall in oil price but future production growth in downstream is hard for the company for couple of years. In addition to this, increasing debt burden is major weakness for chevron. Over the past 3 years, company total debt increased by 47% in each year and reaches to \$38.5 billion in 2015.

According to IEA, Global LNG gas demand will increase by 2% in each year up to 2017. Europe LNG import demand will double between 2015 and 2020 and Europe domestic production will fall by 20% in 2020 compared to 2014. The Russian supply of natural gas in Europe will remain at today's 150-160 billion cubic meter range. China demand will increased by average 10% in coming year and cheap gas price will increase further consumption in Asia. Lower gas price compared to previous years will slow production till 2020 and price continuously increases till 2020. Furthermore, global LNG export capacity increased by more than 40% by 2020 with 90% addition coming from Australia and USA. Great

Opportunities lies ahead for chevron Australia. Chevron produced 5,269 million cubic feet of natural gas in 2015 which is 2% more than 2014. In addition to this company will add further 2.6 billion cubic feet of natural gas per day from Gorgon project and 1.6 million cubic feet of gas from Wheatstone project, which will start production from December 2016. The Gorgon project in Australia, which chevron Australia has 47.3% ownership, has reserve of 35.3 trillion cubic feet of natural gas and estimated average life of 40 years and already started shipping to Japan. According to EIA, Asia will become world second largest natural gas market with in 2017. Asian countries like Japan, China and Korea depend upon natural gas for major energy. After Fukushima incident, Japan increases demand of natural gas by 33% and great opportunities lies ahead for chevron to occupy future growing market of natural gas in Asia.

The major threat of chevron is future price of crude oil price. Chevron upstream segment revenue is fully dependent on price of crude oil. When the price of crude oil reached to \$52 per barrel in 2015, US upstream made \$4 billion loss and net income declined by 76%. Future decrease in oil price directly affects its activities. There is a financial pressure for chevron to pump more oil from US upstream although oil price remain low. Decreasing Chevron's net proven reserve of crude oil, condensate, natural gas liquids and synthetic oil is another major threat for chevron. Chevron currently has 6,262 million barrel of proven oil and natural gas but proven reserve decreased by 0.75% each year from 2010 to 2015. Decreasing net proven reserve not only decreases future cash flow but also affects chevron current investment. In addition to this, chevron is facing stiff competition from various competitors for oversupplying oil beyond demand. The future oil supply amount by OPEC and Russia also determine chevron future performance. Oil is traded in dollar, so chevron faces threat from forex exchange. When dollar appreciates against other currency, chevron will have less earning in dollar when company bought its earnings from overseas. High asset sale in past years helped chevron to decrease its capital expenditure and company sold \$3 billion of asset in each past 3 year. Chevron announced to sale its assets in Philippines, Indonesia and shallow water Gulf of Mexico this year. If company is unable to sale any asset in 2016, chances of negative earning in income statement is high. Another threat lies on investment in property plant and equipment when oil was trading more than \$100 per barrel from 2011 to early 2014 but when oil started trading below \$50 per barrel in 2015, chevron started to cancel several projects globally and didn't start oil production from facilities which are supposed to produce in 2015. Moreover, chevron credit rating is recently downgraded by S&P from AA to AA- so company will face threat of obtaining debt at low interest rate.

3. Industry Analysis.

Chevron receives more than 50% of its revenue from Asia and 20% from US. It has to face stiff competition from not only from largest companies like Exxon and Mobil but also from national oil companies like Saudi Arabian oil companies, Petro china, Gazprom etc. The various strategy adopted by different members of oil producing nations affect oil price.

The revolution in American fracking increases the efficiency of oil production in US. The American fracking companies are able to decreases fracking cost sharply and increases efficiency in oil production per hole so, US production level will be continue to be strong. The breakeven cost for the most of American fracking companies remains around \$70 per barrel. The oil supply strategy adopted by OPEC and Non-OPEC countries will influence the future of US oil shell. US fracking can sustain for long period of time when the price of crude oil remains at least \$70 per barrel and breakeven price of American oil companies is falling. US oil production increases by 8.5% in 2015 remain 9.23 million barrel per day currently. Chevron occupies 4.3% of American market which is highest in the industry. Other player's market share include ExxonMobil (2.9%), Royal Dutch shell (3.9%), Devon energy Corp (1.5%) and Hess Corporation (0.9%). IEA has forested that US oil production increases to 10.5 million barrel from

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2017 to 2020. In addition to this, number bankruptcy oil companies are increasing and operating oil rig count has fallen to lowest level since shell boom in US.

Global oil industry is very much influenced by strategy of nationally owned oil companies. The major player Saudi Arabia oil company occupies 8.5% world's oil market and produces around 12.5 million barrel of oil and gas daily. The company occupies 25% of world crude oil but due to cheaper oil prices revenue has fallen by 6.6% in this year. Others major players such as Petro china occupies 3.2%, national Iranian oil company occupies 3.8%, ExxonMobil occupies 2.3%, Gazprom occupies 1% of global oil market demand. When it comes to different blocks of oil producers, their production level and market share differs. OPEC is producing 39.1 million of barrel of oil and liquids and occupies 31.6% of world market share. OPEC expected to increase its production level to 40 million barrel daily for 2016 and 2017. Likewise Non-OPEC nation producing 57.16 million of barrel daily and expected to remain same level for up to 2017. Global, oil production reaches 96.27 million barrel daily and expected to at 96.61 million barrel daily in 2017. Global oil consumption was at 93 million barrel per day for 2014 and 2015 and consumption remain at 94.86 million barrel per day. IEA has forested that global oil consumption will remain 96.19 million barrel in 2017. Globally, excess oil is produced at 0.93 million barrel per day in 2014 and 2.06 million barrel per day in 2015. In 2016 excess production reaches to 1.41 million barrel per day and IEA has forecasted that 0.42 million barrel excess oil is produced daily in early 2017.

The demand of crude oil price is determine by supply and demand of crude oil. The demand and supply of oil is determined by World economic growth and manufacturing level of largest oil consuming economies. Boom in oil production in US and Overproduction of oil by OPEC nation distorted the price of crude oil. US fracking has high cost of production compared to production of oil in Middle East. OPEC surplus oil producing capacity was 2.07 million barrel per day in 2014 but they decrease that capacity to 1.62 million barrel per day in 2015 by producing excess oil and forecasted surplus capacity will remain 1.66 million barrel per day for 2016 and 2017. The ongoing strategy adopted by OPEC to Bankrupt US fracking industries by supplying excess of cheaper crude oil may sluggish oil price recovery. It may possible that OPEC will supply excess of oil for long period of time at that level in which price of oil will remain between \$65 and \$70 per barrel because this price represent the breakeven price for the US oil production. According to CNN money, it takes around 80 days for American bankrupt companies to produce oil again (if those companies are financed again) so, there is a high chance that price of oil will remain around \$65 to \$70 per barrel up to 2018.

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Appendix: Inputs into Valuation using multiples

	2010A	2011A	2012A	2013A	2014A	2015A	2016F	2017F	2018F
Stock Price(Avg.)	77.78	100.66	107.51	119.81	119.94	95.66	90.64	111.62	118.11
Sales	204,928	253,706	241,909	228,848	211,970	138,477	99,850	138,076	170,426
Sales/Share	102.61	126.79	123.11	119.38	112.51	74.13	53.22	73.20	89.72
EBIT	32,055	47,634	46,332	35,905	31,202	4,942	-4,797	8,081	14,835
EBITA	45,118	60,545	59,745	50,091	47,995	25,979	15,861	30,138	38,825
EPS(Basic)	9.52	13.44	13.32	11.17	10.21	2.45	-2.62	3.340	6.15
MVE	155,338	201,426	211,253	229,685	225,978	178,698	160,827	192,993	200,141
Debt	11,190	10,024	12,093	20,334	27,750	38,512	19,149	26,480	32,684
EV	152,468	195,586	202,407	233,774	240,943	206,188	170,057	210,546	224,344
P/E	9.6	7.9	8.1	10.2	10.3	19.5	31.2	21.84	17.472
P/S	0.9	0.9	0.9	1	1	1.1	1.47	1.36	1.19
EV/EBIT	4.76	4.11	4.37	6.51	7.72	41.72	-35.45	26.05	15.12
EV/EBITDA	3.38	3.23	3.39	4.67	5.02	7.94	10.72	6.99	5.78
EV/Sales	0.74	0.77	0.84	1.02	1.14	1.49	1.70	1.52	1.32

^{*} Analyst's own calculations. Source of data: Company's 10-K; Yahoo! Finance

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