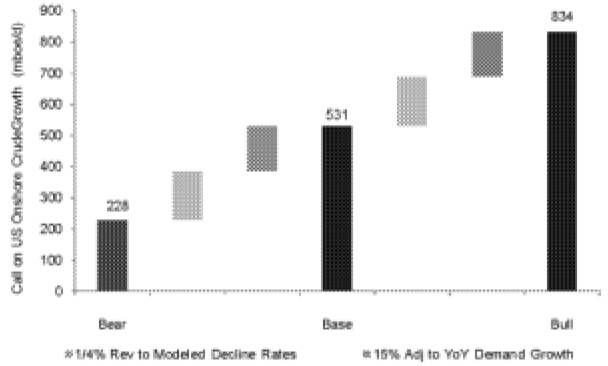
Other Risks to the Outlook

Global oil demand and Decline Rates

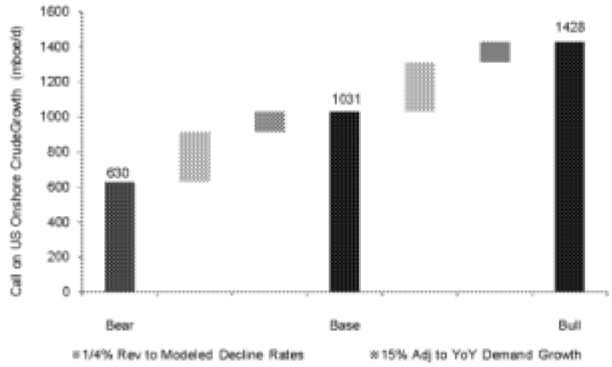
Our base case assumes global product demand growth of 1.2 Mb/d in 2016 and 2017. To date in 2015, demand has generally surprised to the upside, with gasoline demand growth in the US (+2% YoY) stronger than anticipated, while Europe and Asia have also shown surprisingly robust growth. 10%+ incremental upside to YoY product demand growth results in a ~+100 mbpd increase in the 2017 implied call on US onshore crude growth. On decline rates, we assume an average global decline rate of 1/4%/yr. We estimate a swing of 150 mbpd in the 2017 implied call on US onshore crude growth call for each 1/4% change in modeled decline rates (ex-US onshore and OPEC and compounded from 2015+).

Figure 59: 2017 Call on US Crude Onshore Growth (YoY)



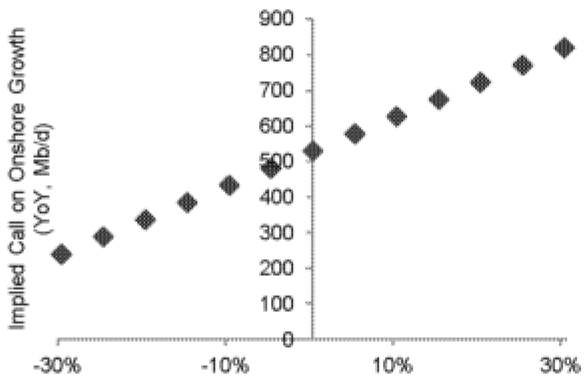
Source: Deutsche Bank, Wood Mackenzie, IEA, EIA, YoY Growth is calculated as the implied 2017 Call on US Onshore Production – Dbe 2016 US Onshore production. Revisions to modeled decline rates only applies to those regions we have specifically modeled out in this note and excludes US onshore, and OPEC production aside from Angola.

Figure 60: 2020 Call on US Crude Onshore Growth (YoY)



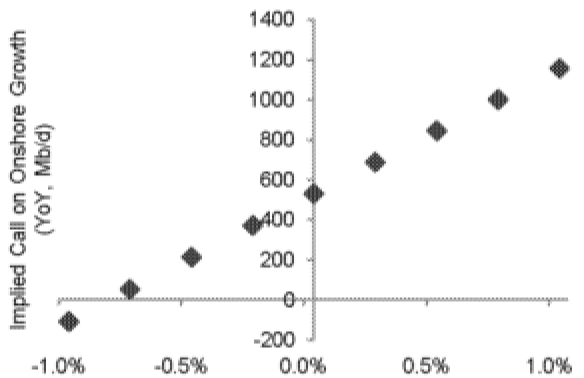
Source: Deutsche Bank, Wood Mackenzie, IEA, EIA, YoY Growth is calculated as the implied 2020 Call on US Onshore Production – 2019 Call on US Onshore Production. Revisions to modeled decline rates only applies to those regions we have specifically modeled out in this note and excludes US onshore, and OPEC production aside from Angola.

Figure 61: A +5% premium to '17 demand growth increases implied onshore crude growth by ~50 mbpd



Source: Deutsche Bank, Wood Mackenzie, IEA, EIA, YoY Growth is calculated as the implied 2017 Call on US Onshore Production – Dbe 2016 US Onshore production. Revisions to modeled decline rates only applies to those regions we have specifically modeled out in this note and excludes US onshore, and OPEC production aside from Angola.

Figure 62: A +1/4% revision to modeled Non-OPEC decline rates increases implied onshore crude growth by ~150 mbpd in 2017 over our base case



Source: Deutsche Bank, Wood Mackenzie, IEA, EIA, YoY Growth is calculated as the implied 2017 Call on US Onshore Production – Dbe 2016 US Onshore production. Revisions to modeled decline rates only applies to those regions we have specifically modeled out in this note and excludes US onshore, and OPEC production aside from Angola.