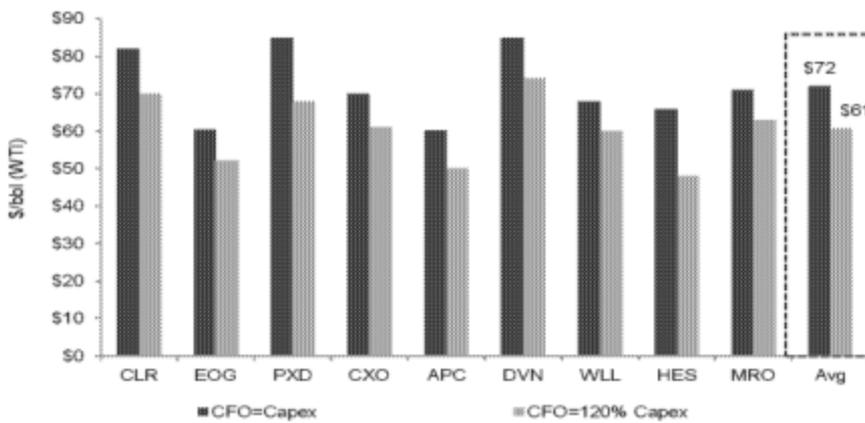




And \$40-55/bbl oil isn't going to suffice

Despite arguments about asset breakevens in the onshore at prices as low as \$40/bbl, the number that matters for the resumption of drilling/completion activity is corporate level cash flow, not single well rates of return, in our view. Despite the sector being fairly well capitalized at present, partially thanks to a recent wave of equity issuance, total leverage remains quite high and companies are likely to stick relatively close to cash flow as activity picks up. Across the E&P universe, if we assume 20% decline in well costs and spend within cash flow in 2016/2017, we estimate an average oil price of \$70/bbl to support 35% of pre-collapse production growth (our estimated demand for US onshore crude by late 2016). This falls to \$60/bbl breakeven when spending 120% of cash flow. In other words, we will need a materially higher price than asset-breakeven prices to make the US onshore "machine" work.

Figure 6: Oil Price to generate 35% of prior peak growth in 2016-17

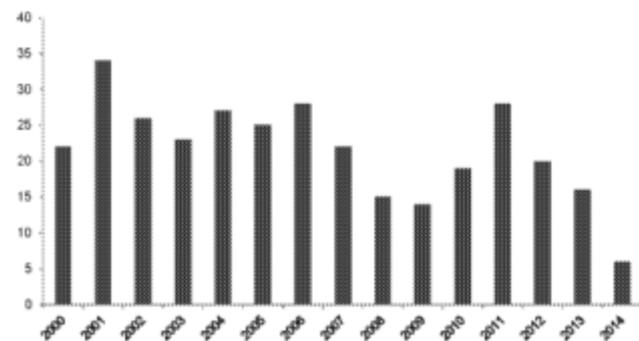


Source: Deutsche Bank

By late 2017, hold on to your hats

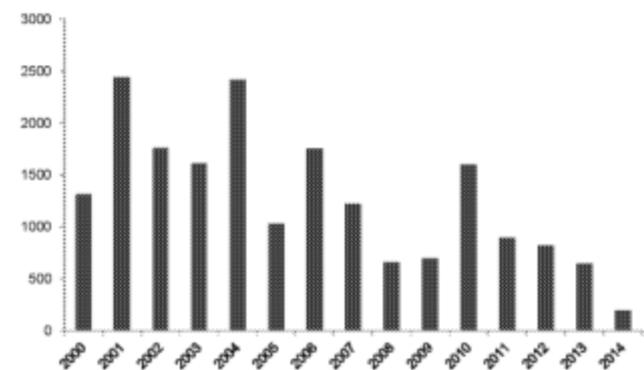
By late 2017, rising declines and deferred FIDs will drive a rapidly escalating call on US supply. Major oil project FIDs fell to 6 in 2014, the lowest level in 15 years, well below the average of 23/yr since 2000, with 2015 likely to be even lower. With an average of 1.2 MMb/d of capacity sanctioned a year over the past 10 years, the hole left by deferrals will be difficult to address, sending the call on US crude growth north of 1,000 Mb/d/yr by late this decade.

Figure 7: Major Oil Project Sanctions (FIDs) by year



Source: Deutsche Bank, Wood Mackenzie

Figure 8: Peak capacity of project FIDs by year (Mb/d)



Source: Deutsche Bank, Wood Mackenzie