KBSV RESEARCH

Oil & Gas

Peak performance only after Brent hits USD55

Oil & Gas & Chemicals
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Peak performance only after Brent moves above USD55 breakeven

Vietnam's breakeven oil price is about USD55 and previous oil price shocks show that performance for oil & gas stocks peak only after Brent prices move above this breakeven level. Oil shocks that saw oil prices trading below USD55 were last seen during the *Great Recession* of 2008-2009 and the global slowdown during the *Taper Tantrum* in 2015-2016.

Volatility & correlations spike up when oil falls below USD55

Trading patterns of Vietnam's oil & gas stocks show two key characteristics when oil prices fall below USD55: 1) volatility spikes up alongside oil prices; and 2) correlations tighten against oil prices. This can be seen during both periods in 2008-2009 and 2015-2016 when the steep drop in oil prices saw the direction of oil prices drive the sharp moves in oil & gas stocks. Importantly, the peak performance of oil & gas stocks only occurred after Brent prices moved above the breakeven level of USD55.

GAS the best choice; PVS & PVD at risk of deviating from oil prices

Currently, all three major oil & gas companies – PV Gas (GAS), PV Well Services & Drilling (PVD) and PV Technical Services (PVS) – are closely tracking the rebound in oil prices. GAS is the best among these and is the most closely linked to oil prices. Products are priced off heavy fuel oil that should allow the stock to fully reflect the recovery in oil prices. The same cannot be said for PVS and PVD where share price performance is largely determined by day rates in the upstream market that usually lag the recovery in oil prices. This was seen during the previous two oil price recessions when initially strong correlations broke down and both shares failed to match the performance of recovering oil prices.

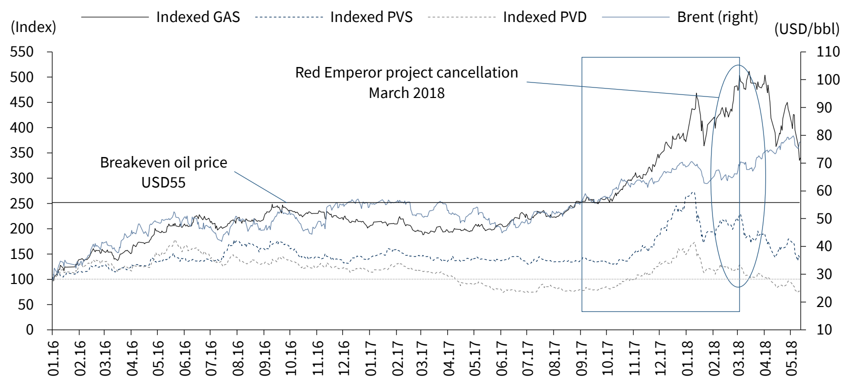
Peak performance after breakeven

Performance in oil & gas stocks usually peak after oil recovers USD55 breakeven

Looking to the most recent downturn in oil prices in 2015-2016 shows that performance for Vietnam's oil & gas stocks peak after Brent prices move above the USD55 level. With Vietnam's oil production becoming profitable above USD55, a sustained move above this level usually signals the return of profitability for the sector and provision reversals to boost results further. Strong correlations to Brent usually only last during the initial rebound in oil prices after a severe drop. Historically, PV Gas (GAS) has shown the best ability to fully-track the recovery in oil prices, while PV Technical Services (PVS) and PV Drilling & Well Services (PVD) underperformed against Brent prices. The last cycle for Vietnam's oil & gas stocks began in January 2016 when Brent prices bottomed out at USD28 and ended with the cancellation of the *Red Emperor* project in March 2018 during which time oil prices recovered to US70.

Peak performance for Vietnam's oil & gas stocks occurred after Brent oil prices rose above the USD55 breakeven level

Fig 1. Oil & gas – Indexed share prices vs Brent, Jul 2015-Dec 2017 (USD/bbl)



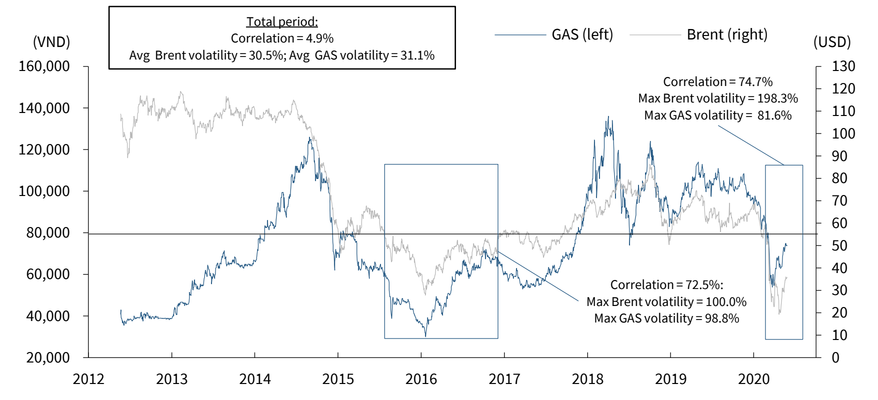
Source: Bloomberg, KB Securities Vietnam

Annualized volatility & correlations usually rise for GAS during a crash in Brent prices

GAS only began trading from May 2012 but there is sufficient share price history to show the sharp rise in volatility and tighter correlations to Brent oil prices when oil prices fell below USD55 breakeven in 2015-2016. Annualized volatility for GAS shares jumped close to 100% during the 2015 oil crash versus the usual 31% volatility witnessed over a longer time series. Moreover, the correlation of GAS shares to Brent prices tightened to 73% vs the minimal 5% level normally seen.

During the 2015-2016 oil price downturn annualized volatility in GAS shares jumped close to 100% and correlation to oil prices tightened to 73%.

Fig 2. Oil & gas – GAS vs Brent, May 2012–May 2020 (VND, USD/bbl)



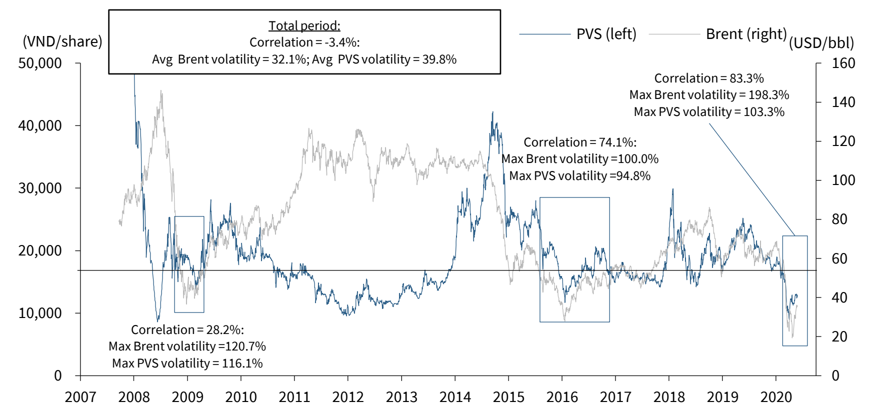
Source: Bloomberg, KB Securities Vietnam

PVS & PVD also witnessed higher volatility and correlations during two previous oil price crashes

Both PVS and PVD have share price histories extending back to 2008-2009 and 2015-2016 that allow us to examine two periods of crashing oil prices. Importantly, PVS and PVD show the same trends in spiking volatility and correlations to during these two previous downturns. Annualized volatility surged to 116% for PVS and 70% for PVD between 2008 and 2009, while correlations rose to 28% for PVS but fell to 4% for PVD due to the lagging impact of oil prices on day rates for jackup rigs. Nonetheless, the 2015-2016 recession saw annualized volatility jump to 95% for PVS and 92% for PVD alongside correlations that rose to 74% for PVS and 52% for PVD.

Annualized volatility in PVS shares jumped to 95% and correlation to oil prices tightened to 74% during the last downturn in oil prices.

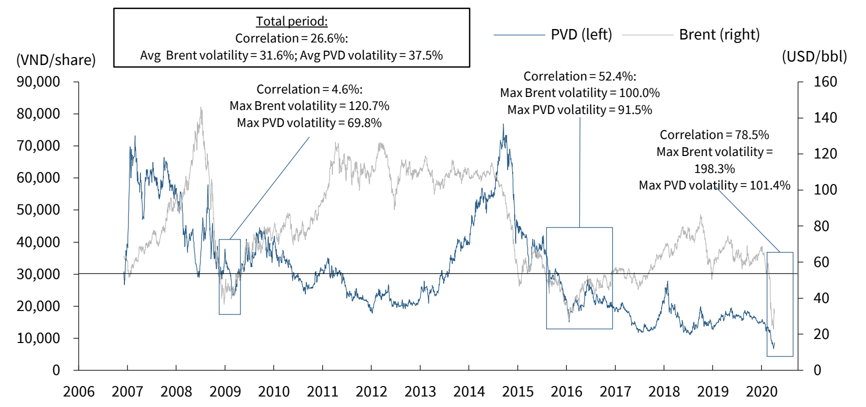
Fig 3. Oil & gas – PVS vs Brent, Sep 2007–May 2020 (VND, USD/bbl)



Source: Bloomberg, KB Securities Vietnam

PVD is usually less directly impacted by oil prices but annualized volatility still rose sharply to 92% and correlations increased to 52% in 2015-2016 when Brent prices fell below USD55

Fig 4. Oil & gas– PVD vs Brent, Dec 2006–May 2020 (VND, USD/bbl)



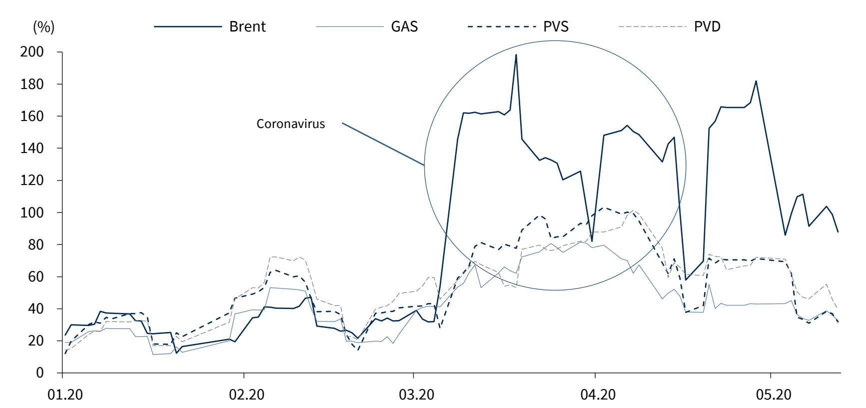
Source: Bloomberg, KB Securities Vietnam

Currently seeing similar trends with volatility spiking higher…

Price action of the oil & gas stocks are showing similar trends to during the previous downturns in oil prices. Annualized volatility has reached close to 100% for GAS, PVS and PVD alongside surging volatility in Brent oil prices to near 200%.

Annualized volatility of GAS, PVS & PVD has already spiked to 100% levels

Fig 5. Oil & gas – 10-day annualized volatility, Jan 2020–May 2020 (%)



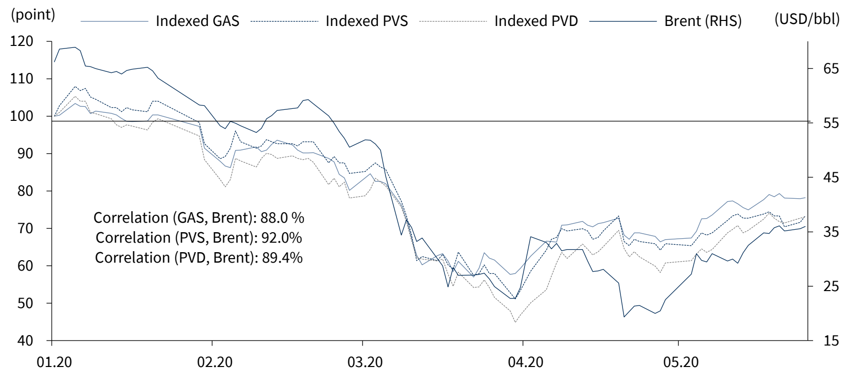
Source: Bloomberg, KB Securities Vietnam

...and correlations growing stronger vs Brent prices

Rebounding oil prices are also already driving sharp moves in the share prices of the oil & gas stocks and correlations have tightened considerably against Brent to almost 90% levels for GAS, PVS and PVD.

Correlations with Brent oil prices have jumped to almost 90% levels for GAS, PVS and PVD

Fig 6. Oil & gas – Share prices vs Brent (indexed), Jan 2020–May 2020 (USD/bbl)



Source: Bloomberg, KB Securities Vietnam

Not all correlations sustainable

Correlations to oil prices break down after the initial recovery bounce in oil prices

Only GAS has shown the ability to fully track the recovery in oil prices, while PVS and PVD actually deviated quite substantially from oil prices and significantly underperformed the rebound in oil prices. Correlations to oil prices do not last over the entire recovery of oil prices and the short duration of this interaction is clearly seen in previous trading history. Oil & gas stocks have only been able to closely track recovery in Brent prices during the initial recovery bounce that came directly after the steep drop.

GAS exhibits the most enduring correlation with oil prices during the recovery period

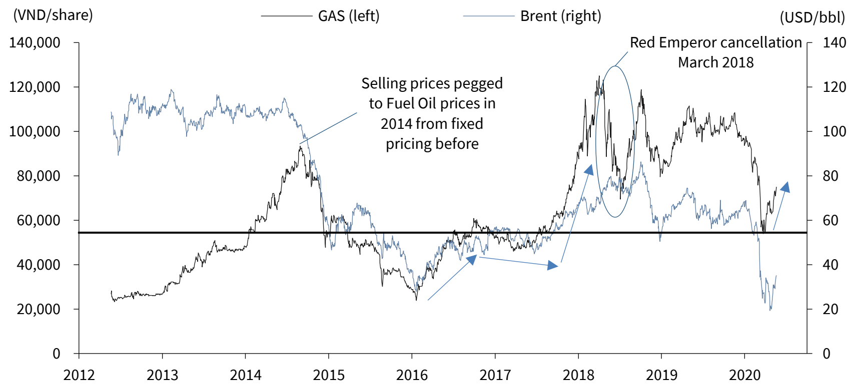
Share performance at GAS is the most closely related to underlying Brent prices largely due to the floating price system adopted in 2014. Product prices are pegged to High Sulphur Fuel Oil (HSFO) prices based on the following formula:

Selling price = Max [46% HSFO price, wellhead price]
+ transportation & tariffs

This pricing formula gives GAS the most direct relationship to Brent oil prices among the oil & gas stocks, with the direction of earnings determined by HSFO prices helping to sustain the close relationship between the share prices and the recovery in oil prices.

Fig 7. Oil & gas – GAS vs Brent, 2012–2020 (VND, USD/bbl)

Product pricing based on high sulfur fuel oil (HSFO) prices helps GAS sustain its linkage to Brent oil prices



Source: Bloomberg, KB Securities Vietnam

PVS & PVD share prices impacted more by upstream day rates and prevented both stocks from fully tracking the recovery in Brent prices in the past

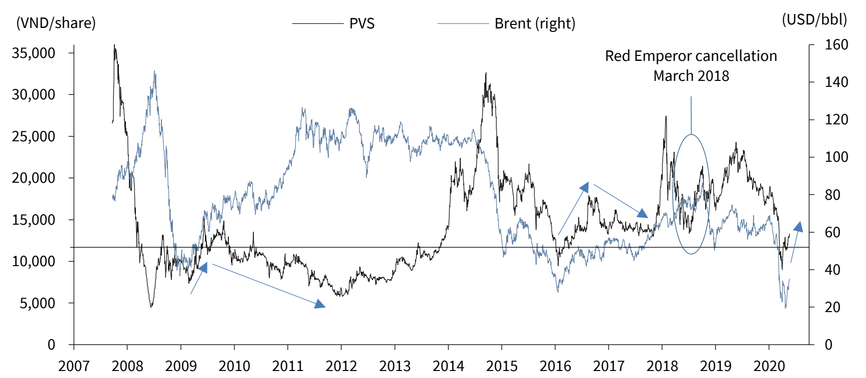
Share prices and earnings at PVS and PVD are more influenced by day rates in the upstream market. Moreover, pricing mechanisms for day rates are complex and usually require that oil prices remain above extraction costs to boost rig utilization before recovery can be realized. This was seen during the previous two oil recessions, when lackluster day rates after plunging oil prices led to weak earnings at PVS and PVD and prevented both from keeping pace with the recovery in Brent prices.

Falling FPSO day rates and weak pricing on EPC contracts for new oil projects could see PVS underperform oil prices again

Specifically, day rates for Floating Production Storage & Offloading (FPSO) services are the most relevant for PVS. This means the current weakness in FPSO day rates could see PVS repeat the disappointing performance of past. PVS already took provisions in 1Q against the growing likelihood of lower day rates on its FPSOs after operations were hit with lower production output from production cutbacks; the sharp drop off in demand; and storage facilities at full capacity. Moreover, prices for EPC contracts on new oil development projects also play an important role for earnings, exposing share prices to event risk in the case of project delays or cancellations. With EPC contracts already in a downturn for the past five years, extended periods of oil prices trading below breakeven threatens additional project delays or cancellations.

PVS failed to track the recovery in oil prices during the previous recessions due to weak FPSO day rates and risk of EPC project delays or cancellations

Fig 8. Oil & gas – PVS vs Brent, 2007-2020 (VND, USD/bbl)



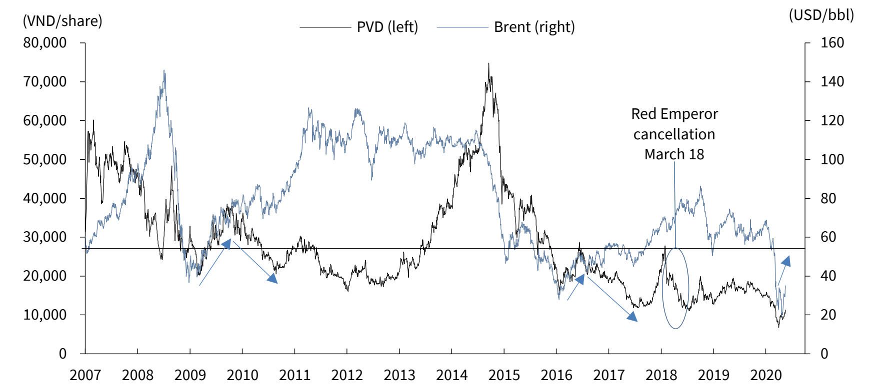
Source: Bloomberg, KB Securities Vietnam

Lackluster day rates on jackup rigs are the biggest risk to share price performance and has often plagued PVD in the past

Day rates for jackup rigs usually play the largest role in determining earnings and share prices for PVD. At present, day rates for jack-up rigs have not only been negatively impacted by the crash in oil prices but the coronavirus has also led to another round of production cuts from the OPEC+ countries. This should not only limit the ability of day rates to rebound alongside recovering oil prices but also make it harder for PVD to match the gains in oil prices. Similar occurrences happened during the previous downturns as Brent prices below breakeven led to production cutbacks and new project cancellations. Moreover, the bulk of PVD's drilling contracts end in 2020E and the company will need to sign new job contracts in the coming months.

PVD share prices are dependent on day rates for jackup rigs that have caused shares to underperform against oil price recovery

Fig 9. Oil & gas– PVD vs Brent, 2007–2020 (VND, USD/bbl)



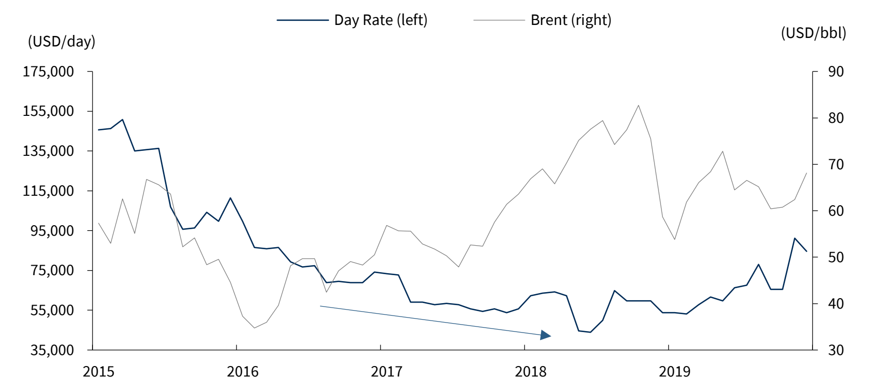
Source: Bloomberg, KB Securities Vietnam

Day rates more determined by the level of activity in the oil & gas industry

Vietnam's oil & gas markets could be facing a similar situation to past oil price downturns where weak upstream day rates put PVS and PVD at risk of weakening the correlation with oil price recovery. Early signs of recovery in day rates for jackup rigs ahead of expectations for the March expiry of OPEC+ production cuts have been cut short by the sharp drop off in production demand and the new round of production cuts announced in April due to the coronavirus. Moreover, major global oil companies have already reduced capex budgets for E&P projects this year which should negatively impact the outlook for production output.

The new round of OPEC+ production cuts may extend the multi-year weakness in day rates for jackup rigs

Fig 10. Oil & gas – Day rates for jackup rigs, 2015– 2019 (USD/day, USD/bbl)



Source: IHS Markit, KB Securities Vietnam

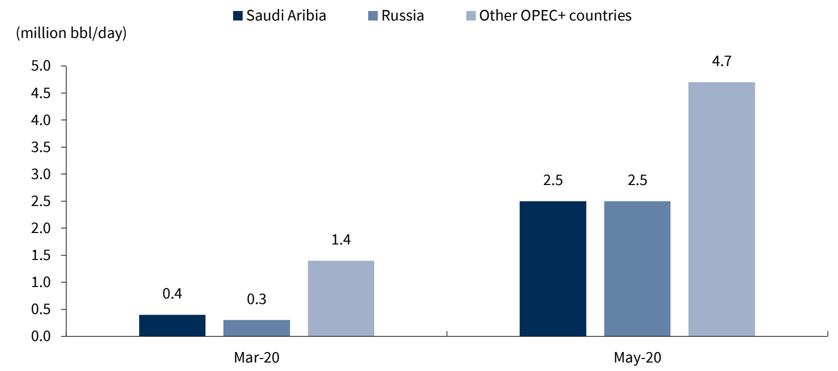
Worst probably seen for Brent prices

New production cuts should prevent Brent prices from revisiting recent lows

Brent prices have bottomed after falling as much as 70% since the start of the year due to the supply shock from failed talks on production cuts and the demand shock from the coronavirus. That said, recent production cuts announced by the OPEC+ countries should prevent oil prices from revisiting lows and support recovery as demand improves in the coming months with easing COVID-19 lockdowns. The OPEC+ countries agreed to new production cuts that will begin above the previous agreement that expired in March but will gradually be lowered until April 2022. Cuts will begin at 9.7 million barrels a day for May and June; 7.7 million barrels per day from July to December; and then 5.8 million barrels a day for the remaining sixteen months.

Fig 11. OPEC+ – Agreed production cuts, Mar 2020 & May 2020 (million bbl/day)

OPEC+ countries agreed to new larger production cuts to stabilize oil prices



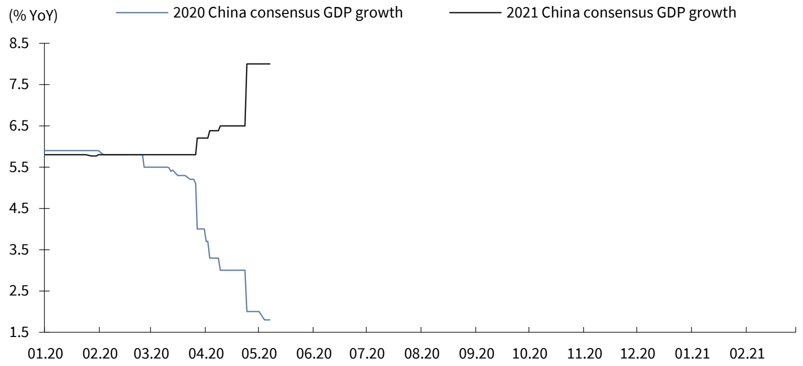
Source: KB Securities Vietnam

Not expecting a prolonged downturn in China's economy from COVID-19

Sentiment on economic recovery has bounced back quickly and recovery in oil prices should also be helped by a more optimistic outlook for economic recovery in the post-COVID-19 period. Consensus forecasts for China's GDP have quickly factored in a sharp slowdown in 2020 but the outlook for 2021E has already turned positive only after a few months. Few are expecting a prolonged downturn in China's economy. This is in stark contrast to the previous downturns, when bearish forecasts lingered for longer periods. During the 2015-2016 downturn, downgrades to China GDP began in July 2015 and upgrades were not seen until October 2016 or fifteen months later. Likewise for 2008-2009, China GDP downgrades started as early February 2008 and continued for seventeen months until upgrades started to appear from July 2009.

The outlook for China's GDP growth has already turned positive only after a few months

Fig 12. China – Annual GDP growth consensus forecasts, Jan 2020–May 2020 (%)



Source: Bloomberg, KB Securities Vietnam

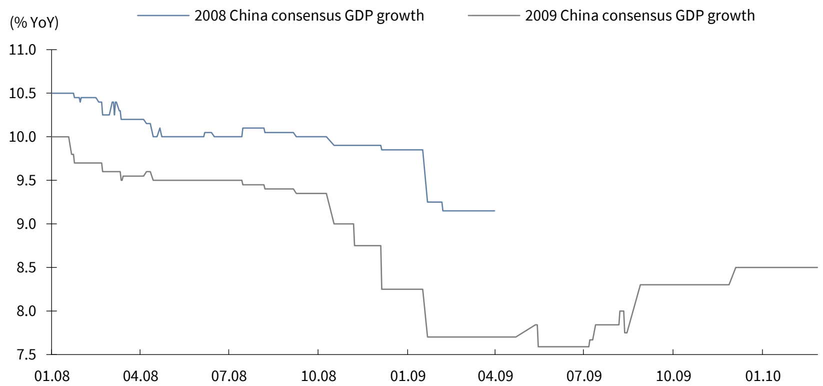
In the 2015-2016 downturn, GDP downgrades began in July 2015 and did not see any upgrades until October 2016 or 15 months later

Fig 13. China – Annual GDP growth consensus forecasts, Jan 2015–Feb 2017 (%)

Source: Bloomberg, KB Securities Vietnam

Downgrades to China's GDP started in February 2008 and lasted until July 2009 or 17 months after the downgrades began

Fig 14. China – Annual GDP growth consensus forecasts, Jan 2008–Feb 2010 (%)



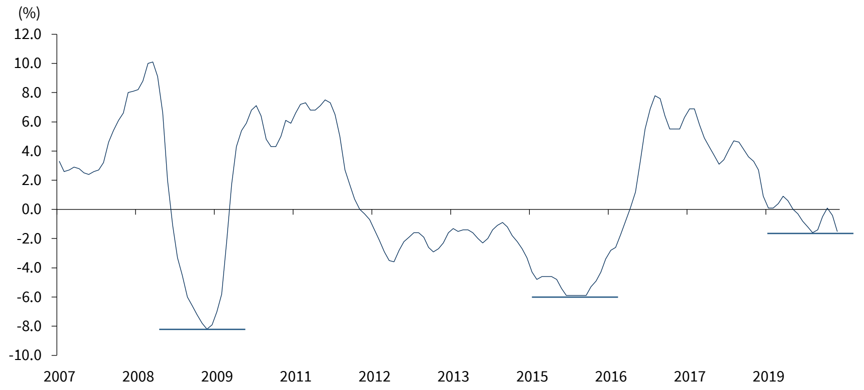
Source: Bloomberg, KB Securities Vietnam

Also less deflationary pressure seen from China compared to previous recessions

The current downturn in oil prices is also not accompanied by any signs of deflationary pressure from China as seen previously. Thus far, deflation from China has held up well and the outlook for a deep but much shorter contraction in China GDP has prevented any alarming indications of deflation. The drop in deflationary measures was more pronounced during both the 2015-2016 and 2008-2009 periods amid concerns of a protracted slowdown in China.

Fig 15. China – Producer price index, 2007-2020 (% YoY)

Lower deflation risk from China in 2020 compared to 2008 and 2015



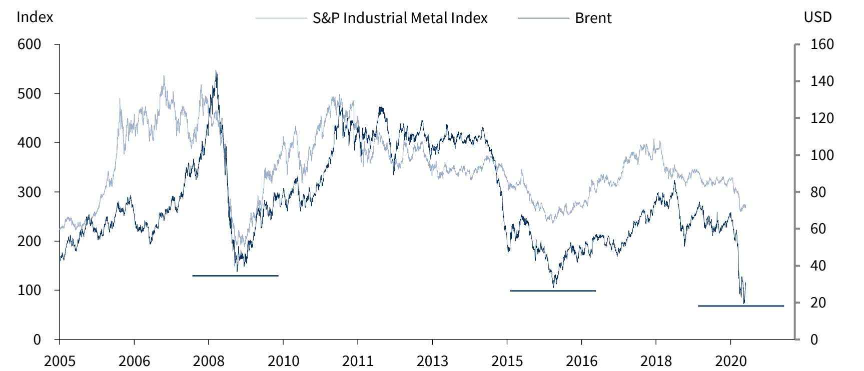
Source: Bloomberg, KB Securities Vietnam

Brent prices have also fallen below industrial metal prices

The crash in Brent oil prices is severe when compared to the sharp drop in industrial metal prices. Brent's current situation can largely be attributed to both a supply and demand shock affecting prices vs the demand shocks in the past. The severity of the crash in Brent oil prices is best seen when compared to the performance of industrial metal prices during previous global downturns. Year-to-date Brent oil prices are down 55% vs the 15.9% fall in industrial metals.

Fig 16. Global commodities – S&P Industrial Metal Index vs Brent, 2005-2020 (USD/bbl)

Brent's reaction to COVID-19 has been more extreme in relation to the S&P Industrial Metal Index compared to past downturns.



Source: Bloomberg, KB Securities Vietnam

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Investment Ratings for Stocks
(based on expectations for absolute price gains over the next 6 months)

Buy:	Hold:	Sell:
+15% or more	+15% to -15%	-15% or more

Investment Ratings for Sectors
(based on expectations for absolute price gains over the next 6 months)

Positive:	Neutral:	Negative:
Outperform the market	Perform in line with the market	Underperform the market