

PV Drilling & Services (PVD)

Drilling doldrums

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Initiate coverage with HOLD rating and target price of VND9,600

We initiate our coverage of PVD with a HOLD rating and a target price of VND9,600. Our target price is based on a discounted cash flow model that reflects weaker cash generating capabilities following the sharp slowdown in Vietnam's upstream E&P activities.

Jack up day rates flat at USD65,000 for 2020E & 2021E

Jack up days rates should remain flat at USD65,000 for 2020E and into 2021E due to: 1) cuts to capital expenditure budgets amid weak oil prices; and 2) fewer contracts from Malaysia after the country agreed to May's OPEC+ production cuts. We expect Malaysian project delays to drop jack up utilization rates to 77% in 2020E and only move up to 85% in 2021E.

Outlook only improves from 2H 2021E when the TAD starts up operations

The *PV Drilling V –Tender Assisted Rig (TAD)* will start up operations in 2H 2021E after sitting idle for the past three years. But mediocre day rates at USD85,000–90,000 should keep any profits unexciting during the six–year contract with Brunei Shell Petroleum. The job will offer a four–year contract and optional two–year extension and day rates can only be renegotiated after an initial four–year lock up period.

HOLD initiate

Target Price	VND9,600
Total return (%)	6.3%
Current price (Jul 27)	VND9,030
Consensus target price	VND11,900
Mkt capitalization (USDmn)	USD164mn

Trading data	
Free float (%)	49.4%
Avg trading value (3M)	USD2,25mr
Foreign available (%)	36.9%
Major shareholders (%)	PetroVietnam (50.46%)

Forecast	aarnings	۲.	valuation	

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	4,368	5,029	5,709	6,597
EBIT	37	118	135	498
NP attributable to parent	184	132	165	473
EPS (VND)	438	314	392	1,121
EPS growth (%)	(6.3)	(28.3)	24.8	186.3
P/E (x)	20.6	28.8	23.1	8.1
EV/EBITDA (x)	8.8	8.9	8.3	4.9
P/B (x)	0.3	0.3	0.3	0.3
ROE (%)	1.3	0.9	1.1	3.2
Div yield (%)	0.1	0.0	0.0	0.0

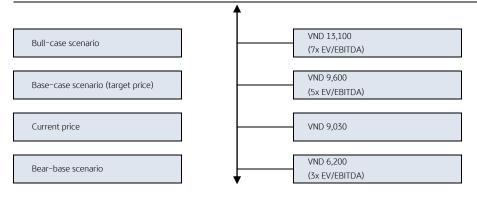
Share price performance

(%)	1M	3M	6M	12M
Absolute	-13.6	0.1	-39.6	-46.2
Relative	-6.2	-1.7	-23.7	-31.9



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) Jack up day rates at USD65,000
- 3) Tender Assisted Rigs in 2H21

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) Jack up day rates above USD70,000 3)Tender Assisted Rigs before 2H21

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Jack up day rates below USD65,000
- 3) Tender Assisted Rigs after 2H21

Revised earnings estimates

	Revise	d	Previo	US	Change		
(VNDbn, %)	2020E	2021E	2020E	2021E	2020E	2021E	
Revenue							
EBIT							
OP							
NP after MI							

Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

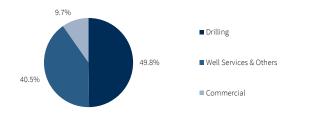
	KBSV estir	nates	Consen	sus	Difference			
(VNDbn, %)	2020E	2021E	2020E	2021E	2020E	2021E		
Revenue	5,029	5,709	204	206	2,361.2	2,666.8		
EBIT	118	135	162	336	(27.0)	(59.7)		
OP	54	42	150	221	(64.1)	(80.8)		
NP after MI	132	165	107	120	23.7	37.6		

Source: Bloomberg, KB Securities Vietnam

Valuation & target price

- 1) Valuation method: Discounted cash flow (DCF) model
- 2) Target price calculation Terminal EV/EBITDA 5x WACC 16.0%
- 3) Target price range: VND 6,200 - VND 13,100
- 4) Valuation at target price 30.6x P/E 0.3x P/B

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

	Mkt	12m fwd	3y EPS	12m fwd	12m fwd
(USDbn, x, %)	Сар	P/E	CAGR	ROE	P/B
PVD VN	0.2	21.9	13.8	0.9	0.3
GAS VN	5.3	14.3	-5.7	17.6	2.4
PLX VN	2.2	19.8	0.0	11.8	1.9
PVS VN	0.2	6.5	-7.5	6.6	0.4
BSR VN	8.0	-6.7	-18.7	2.1	0.6
PVT VN	0.1	5.4	-6.9	9.4	0.4

Source: Bloomberg, KB Securities Vietnam

Drilling doldrums

PV Drilling & Well Services (PVD): Exposed to weak oil prices below Vietnam's USD55.00 breakeven

We initiate our coverage of PVD with a HOLD rating and a target price of VND9,600. Our target price is based on a discounted cash flow model that reflects weaker cash generating capabilities following the sharp slowdown in Vietnam's upstream E&P activities.

Jackup day rates should remain flat at USD65,000 for 2020E and into 2021E due to: 1) cuts to capital expenditure budgets amid weak oil prices; and 2) fewer contracts from Malaysia after the country agreed to May's OPEC+ production cuts. We expect Malaysian project delays to drop jackup utilization rates to 77% in 2020E and only move up to 85% in 2021E.

Our forecasts generate a CAGR of 36.7% between 2020E to 2025E. We expect PVD's average jackup drilling day rates to remain flat at about USD65,000 into 2021E on depressed oil prices. Jobs from Malaysian operators – some of PVD's largest clients - are down after the country agreed to May's extension of OPEC+ production cuts. Moreover, PVD will need to find new drilling contracts for the jackup rigs as most contracts will end by the 2H of 2021E even after factoring in projects that have been pushed back to 2021E. The company may need to rely on the 6-year contract (4-year contract plus 2-year option) with Brunei Shell Petroleum for the TAD rig (Tender-Assisted Drilling) until new drilling contracts are announced.

Table 1. PV Drilling & Well Services (PVD) - Valuation (DCF) & target price (VND, %)

Line item	Notation		Notes
WACC	W	16.0%	$(E/(E + D) * k_E) + ((D/(E+D) * k_D * (1-t))$
Cost of equity	k_{E}	18.1%	rf + (β _E * m)
Re-levered beta	β_{E}	1.693	β _A (1+((1−t)*D/E))
Unlevered beta	ВА	1.459	PVD unlevered beta
Cost of debt	$k_{\scriptscriptstyle D}$	7.0%	$r_f + (\beta_D * m)$
Debt beta	\mathcal{B}_{D}	0.449	d/m
Assumptions			
Target gearing	D/E	20.0%	Long-term debt/equity ratio
Statutory tax rate	t	20.0%	Marginal corporate tax rate
Debt premium	d	4.0%	Estimated investment grade spread
Market risk premium	m	8.9%	Expected market return - risk free rate
Risk free rate	$\Gamma_{\rm f}$	3.0%	10-year government bond
Terminal value as % of firm	value	53.7%	
PV of future cash flows (VNI	Dbn)	3,120	
PV of terminal value (VNDbr	1)	3,616	
PV of Firm (VNDbn)		6,736	
Total return		6.3%	
Target price (VND)		9,600	
		*	
Dividend per share (VND) ource: KB Securities Vietnam		0	

Our 12-month target price based on a DCF model to reflect the lack of consistent dividend payouts Our valuations are based on discounted cash flow models (DCF) that utilize the capital asset pricing model (CAPM) to estimate the cost of equity and cost of debt for individual stocks. This allows us to determine the appropriate weighted cost of capital (WACC) to discount projected free cash flows to the firm (FCFF approach). The lack of consistent dividend policies from PVD make our DCF models the preferred method to set our 12–month target prices. That said, we expect the volatility of cash flows – and ability of companies to adopt sustainable dividend payout policies – to improve over our forecast period.

Headline 2Q earnings down 44% YoY but up 27% YoY excluding last year's one-off due to higher jackup days rates and steady utilization Preliminary headline 2Q earnings were VND61 billion or down 44% YoY but were up 27% YoY excluding last year's one-off on the still vibrant drilling market in Malaysia. Based on our estimates, we believe 2Q earnings benefitted from: 1) 2% QoQ increase in average jackup day rates vs 1Q's 3% QoQ rise (up 10% YoY in 2Q and up 9% YoY in 1Q); and 2) still high utilization at 86% vs 1Q's 97%. PVD recognized one-offs last year after reversing VND60 billion in Malaysian holding taxes. 1H earnings were VND85 billion or up 286% YoY.

Expecting softer earnings in 2H as Malaysian drilling projects are pushed back to 2021E Conditions in 1H's Malaysian drilling market are unlikely to continue into 2H and management has already warned that several drilling projects will be pushed back to 2021E. We estimate 3Q earnings at VND31 billion or up 14% YoY but down 49% QoQ and 4Q earnings at VND27 billion or down 14% YoY and down a further 13% QoQ due to these delays. We estimate that Malaysia's production cuts will drop PVD's utilization ratio to 77% from 89% at the start of the year.

We expect a 36.7% CAGR between 2020E-2025E driven by the TAD rig (Tender-Assisted Drilling)

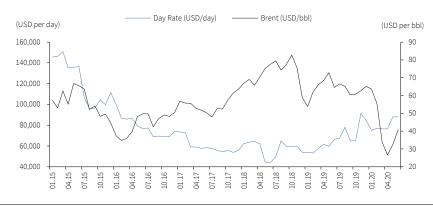
Our forecasts generate a CAGR of 36.7% between 2020E to 2025E. We expect PVD's average jackup drilling day rates to remain flat at about USD65,000 into 2021E as depressed oil prices force many E&P companies to cut capital expenditure budgets. Jobs from Malaysian operators – some of PVD's largest clients – are down after the country agreed to May's extension of OPEC+ production cuts. Moreover, PVD will need to find new drilling contracts for the jackup rigs as most contracts will end by the 2H of 2021E even after factoring in projects that have been pushed back to 2021E. The company may need to rely on the 6-year contract (4-year contract plus 2-year option) with Brunei Shell Petroleum for the TAD rig (Tender-Assisted Drilling) until new drilling contracts are announced.

Table 2. PV Drilling & Well Services (PVD) - Jackup & Tender Assisted Rig (TAD) Projects, Jan 20-Dec 21E

		2020E									2021E														
	_	1Q 2Q			3Q 4Q				1Q		2Q			3Q		4Q									
	Types	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
PVD I	Jackup								Hibicus	5							No official plan								
PVD II	Jackup			Petr	onas				Ν	lot anr	nounce	ed .			Petro	onas				١	lo offic	cial pla	n		
PVD III	Jackup			Repsol	l				Caml	bodia					Kris	Energ	y & Re	psol		No official plan					
PVD VI	Jackup		Sapura	3				Rosneft										Ν	lo offic	ial pla	ın				
TAD	TAD					Idle Brunei Shell Petroleui							leum												

Source: Company reports & KB Securities Vietnam

Fig 1. PV Drilling & Well Services (PVD) – Southeast Asia jackup drilling day rates, Jan 15–Jun 20 (USD per day, USD per barrel)

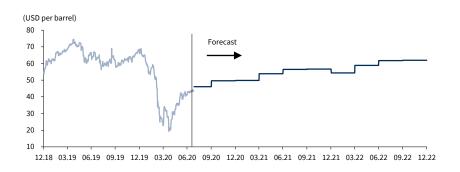


Source: IHS Markit, KB Securities Vietnam

Unwinding the cyclical trade

Bounce back in Brent crude prices largely over and we recommend unwinding trades in the upstream operators PVS & PVD Our global commodities team at KB Securities in Korea expects a slower recovery trend for crude oil prices for the remainder of 2020E. WTI crude oil prices are likely to average USD40.10 in 3Q and USD43.60 in 4Q vs 2Q's lows of USD28.00. In Brent terms – the more relevant benchmark oil price for Vietnam – these prices would equate to average quarterly prices of USD46.10 for 3Q and USD49.60 for 4Q compared to 2Q's USD33.39. Our house forecasts imply a sharp slowdown in momentum, with recovery at only 7.6% in 4Q compared to the 38.1% rebound between 2Q and 3Q average prices. Moreover, growing signs of a second wave of coronavirus outbreaks in many large economies may put our house view on oil prices at risk of downgrades in the coming weeks.

Fig 2. Oil - Brent crude oil prices & forecasts, Jan 19-Dec 22E (USD per barrel)

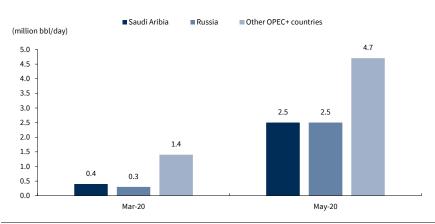


Source: Bloomberg, KB Securities Vietnam

OPEC+ countries unlikely to add to existing production cuts

The OPEC+ countries agreed to a second round of deeper production cuts in May but may be less willing to add to these. May's new production cuts began at a higher level than the original March agreement but are scheduled to be gradually lowered until April 2022. Cuts began at 9.7 million barrels a day for May and June and should fall to 7.7 million barrels per day from July to December; and then 5.8 million barrels a day for the remaining sixteen months of the agreement.

Fig 3. OPEC+ – Agreed production cuts, Mar 2020 & May 2020 (million bbl/day)

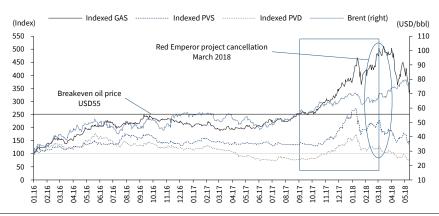


Source: KB Securities Vietnam

Investors should not abandon the oil & gas sector completely as performance only peaks after Brent oil prices recover the USD55.00 breakeven level

We would not recommend that investors abandon all investments in Vietnam's oil & gas sector despite the growing likelihood of a more muted recovery for oil prices. Looking to the most recent downturn in oil prices in 2015–2016 shows that performance for Vietnam's oil & gas stocks only peak after Brent prices move above the USD55.00 level. With Vietnam's oil production becoming profitable above USD55.00, 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 oil prices recovered to US70.00

Fig 4. Vietnam oil & gas - Indexed share prices vs Brent, 2016-2017 (USD/bbl)



Source: Bloomberg, KB Securities Vietnam

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Early correlations to oil prices break down after the initial recovery bounce in oil prices; switch out of PVS & PVD into GAS But we do recommend that investors unwind positions in PVS and PVD and switch holdings into GAS. Only GAS has shown the ability to fully track the recovery in oil prices, while PVS and PVD as upstream operators 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.

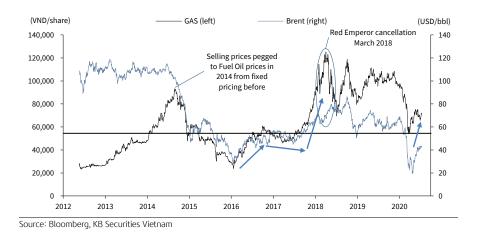
GAS exhibits the most enduring correlation with oil prices during the recovery period

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 (including markup)

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 5. Vietnam oil & gas - GAS vs Brent, 2012-2020 (VND, USD/bbl)

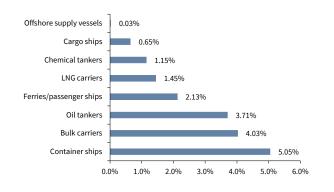


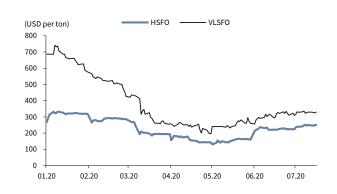
We also believe HSFO prices have bottomed

HSFO prices should recover from lows seen with the introduction of IMO2020 (International Maritime Organization 2020) in January that forced vessels to lower sulfur emissions. This pressured earnings at GAS as falling HSFO prices also lowered domestic dry gas selling prices. Scrubber installations should also increase as higher–priced Very Low Sulphur Fuel Oil (VLSFO) encourage shipping companies to add the devices to lower sulphur emissions and allow the use of HSFO for bunkering. Currently, about 4,000 vessels or 6% of the global fleet are equipped with scrubbers.

Fig 6. Global shipping – Scrubber installations by vessel type, 2019 (% of global fleet)

Fig 7. Global commodities – HSFO & VLSFO prices, Jan 2020 – Jul 2020 (USD per ton)





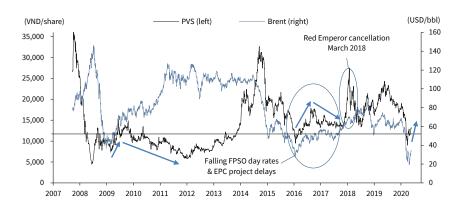
Source: Statistics, KB Securities Vietnam

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 from 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 FPSO (Floating Production Storage & Offloading) 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 (Engineering, Procurement & Construction) 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.

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

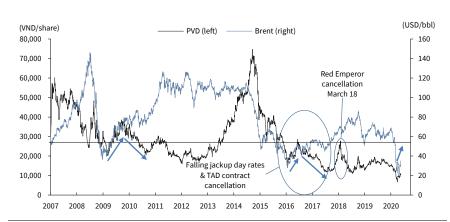


FPSO: Floating Production, Storage & Offloading. EPC: Engineering, Procurement & Construction Source: Bloomberg, KB Securities Vietnam

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.

Fig 9. Vietnam oil & gas- PVD vs Brent, 2007-2020 (VND, USD/bbl)

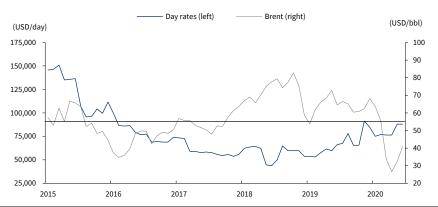


TAD: Tender-Assisted Drilling for deepwater projects.

Source: Bloomberg, KB Securities Vietnam

Renewed and deeper OPEC+ production cuts may reverse the shallow recovery in jackup day rates 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 original 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.

Fig 10. Vietnam oil & gas - Day rates for jackup rigs, 2015- 2019 (USD/day, USD/bbl)



Source: IHS Markit, KB Securities Vietnam

PV Drilling & Well Services (PVD) – Discounted cash flow model

DCF	VAL	UAT	ION

Proper				Terminal v	value (VND in	billions)				Termina	al value (US\$	in millions)	
MACC 10			4,557				10,633	•	197	262	328	393	459
MACC 3.0k 4.0k 5.0k 6.0k 7.0k 1.0k				_				•					
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Projected Unlevered Free Cash Flows Vivilia Vivil				L									
VMObn 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E 20					-			_					0.50
VMObn 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E 20	Projected Holovered Free Cas	h Elous											
Taxes on EBIT © 20.0%	(VNDbn)		2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Earnings before interest 2,551 1,717 129 -517 80 29 95 108 598 588 475 520 Depreciation & provisions 1,162 1,643 921 791 501 576 587 788 970 1,021 997 966 (Profit)/loss from investing -587 -372 -251 -143 -163 -223 -145 -154 -167 -180 -194 -210 Other adj for oper activities -180 -1 -462 -707 -154 -155 88 159 220 226 228 242 Cash flow from operations 2,946 2,987 556 -376 265 229 625 881 1,421 1,456 1,515 1,519 Change in working capital 113 -252 641 159 -195 -450 269 -141 -21 -13 -14 -9 Capital expenditures -1,801 -4,418 -635 -55 -163 -44 -651 -356 -212 -200 -187 -174 Decrease in investments 342 16 -6 64 -27 -65 -52 -56 -61 -65 -71 -76 Unlevered free cash flow 1,599 -1,667 356 -228 -119 -328 191 347 1,127 1,177 1,242 1,259 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Unlevered FCF (USSmn) 75 -74 16 -10 -5 -14 8 15 48 50 55 53 55 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Unlevered FCF (USSmn) 75 -74 16 -10 -5 -14 8 15 48 50 55 53 55 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Unlevered FCF (USSmn) 75 -74 16 -10 -5 -14 8 15 48 50 55 53 55 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,266 23,359 23,455 23,547 23,641 25,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,266 23,359 23,455 23,547 23,641 23,736 Change rate 21,388 22,445 22,761 22,698 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175 23,175	EBIT	2,939	2,146	161	-396	100	37	118	135	498	486	591	650
Depreciation & provisions 1,162 1,643 921 791 501 576 587 788 970 1,021 997 966 (Profit)/hoss from investing -387 -372 -231 -145 -163 -225 -145 -154 -167 -180 -194 -210 Other adj for oper activities -180 -1 -462 -707 -154 -155 88 139 220 226 238 242 Cash flow from operations 2,946 2,987 556 -376 265 229 625 881 1,421 1,456 1,515 1,519 (Change in working capital 113 -252 641 139 -193 -450 269 -141 -21 -15 -14 -9 (Capital expenditures -1,801 -4,418 -655 -55 -165 -44 -655 -55 -165 -44 -651 -336 -212 -200 -187 -174 Capital expenditures 342 16 -6 64 -27 -65 -55 -165 -44 -651 -356 -212 -200 -187 -174 -174 Cultivered free cash flow 1,599 -1,667 356 -228 -119 -328 191 347 1,127 1,177 1,242 1,259 (Indivered FCF (US\$mn) 75 -74 16 -10 -5 -14 8 15 48 50 55 55 (Indivered FCF (US\$mn) 75 -74 16 -10 -5 -14 8 15 48 50 55 55 (Indivered FCF (US\$mn) 1,519 PV of firm (NNDbn) 3,616 2020E Cash (NNDbn) 4,521 Cost of Capital Calculations (Indiversed FCF (US\$mn) 1,519 PV of Firm (NNDbn) 3,616 2020E Cash (NNDbn) 4,215 (Indivered School Capital Calculations (Indiversed FCF (US\$mn) 1,519 PV of Firm (NNDbn) 2,3180 (Indiverse School Capital Calculations (Indiver	Taxes on EBIT @ 20,0%	588	429	32	-79	20	7	24	27	100	97	118	130
Profity loss from investing	Earnings before interest	2,351	1,717	129	-317	80	29	95	108	398	388	473	520
Profity loss from investing	Depreciation & provisions	1.162	1.643	921	791	501	576	587	788	970	1.021	997	966
Other adj for oper activities													
Change in working capital 113	Other adj for oper activities		-1			-154		88			226	238	242
Capital expenditures	Cash flow from operations	2,946	2,987	356	-376	263	229	625	881	1,421	1,456	1,513	1,519
Capital expenditures	Change in working capital	113	-252	641	139	-193	-450	269	-141	-21	-13	-14	-9
Cost of Capital Calculations Cost of Gapital Calculations Cost of Capital Calculations Cost of Gapital Calculations Cost of Gapital Calculations Cost of Gapital Calculations Cost of Gapital Calculations Cost of Capital Calculations	Capital expenditures	-1,801	-4,418	-635	-55	-163	-44	-651	-336	-212	-200	-187	-174
Forecasted exchange rate 21,588 22,445 22,761 22,698 23,175 23,173 23,266 23,359 23,453 23,547 23,641 23,736 Unlevered FCF (US\$mn) 75 -74 16 -10 -5 -14 8 15 48 50 53 53 53 53 53 53 53 53 53 53 53 53 53	Decrease in investments	342	16	-6	64	-27	-63	-52	-56	-61	-65	-71	-76
Firm Value Calculations	Unlevered free cash flow	1,599	-1,667	356	-228	-119	-328	191	347	1,127	1,177	1,242	1,259
Firm Value Calculations													
Firm Value Calculations WACC 16.0% PV of future cash flows (VNDbn) 3,120 2020E Total debt (VNDbn) 4,521 DCF period 5 Yrs PV of terminal value (VNDbn) 3,616 2020E Cash (VNDbn) 1,846 Terminal EBITDA (VNDbn) 1,519 PV of Firm (VNDbn) 6,736 Terminal value as % of firm value 53,7% Terminal multiple (x) 5.0x Current exchange rate (VND) 23,180 Current shares outstanding (mn) 421.5 Cost Of Capital Calculations WACC 16.0% Re-levered beta 1.693 Risk free rate 3.0% Cost of equity 18.1% Debt beta 0,449 Market risk premium 8.9% Cost of debt 7.0% Unlevered beta 1.459 Target gearing 20.0% Statutory corporate tax rate 20.0% Debt premium 4.0% Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 0.00 1.08 1.25 1.45 1.68 1.95 2.27 Present value in VND 0 0 0 0 0 0 0 177 277 776 699 636 555	Forecasted exchange rate			22,761	22,698						23,547	23,641	23,736
WACC 16,0% PV of future cash flows (VNDbn) 3,120 2020E Total debt (VNDbn) 4,521 DCF period 5 Yrs PV of terminal value (VNDbn) 3,616 2020E Cash (VNDbn) 1,846 Terminal EBITDA (VNDbn) 1,519 PV of Firm (VNDbn) 6,736 Terminal value as % of firm value 53,7% Terminal multiple (x) 5.0x Current exchange rate (VND) 23,180 Current shares outstanding (mn) 421,5 Cost Of Capital Calculations WACC 16.0% Re-levered beta 1.693 Risk free rate 3.0% Cost of equity 18.1% Debt beta 0.449 Market risk premium 8.9% Cost of debt 7.0% Unlevered beta 1.459 Target gearing 20.0% Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 0.00 177	Unlevered FCF (US\$mn)	75	-74	16	-10	-5	-14	8	15	48	50	53	53
WACC 16,0% PV of future cash flows (VNDbn) 3,120 2020E Total debt (VNDbn) 4,521 DCF period 5 Yrs PV of terminal value (VNDbn) 3,616 2020E Cash (VNDbn) 1,846 Terminal EBITDA (VNDbn) 1,519 PV of Firm (VNDbn) 6,736 Terminal value as % of firm value 53,7% Terminal multiple (x) 5.0x Current exchange rate (VND) 23,180 Current shares outstanding (mn) 421,5 Cost Of Capital Calculations WACC 16.0% Re-levered beta 1.693 Risk free rate 3.0% Cost of equity 18.1% Debt beta 0.449 Market risk premium 8.9% Cost of debt 7.0% Unlevered beta 1.459 Target gearing 20.0% Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 0.00 177	Firm Value Calculations												
Terminal EBITDA (VNDbn) 1,519 PV of Firm (VNDbn) 6,736 Terminal value as % of firm value 53.7%	WACC	16.0%		PV of futur	e cash flows (VNDbn)	3,120		2020E To	otal debt (V	/NDbn)		4,521
Cost Of Capital Calculations	DCF period	5 Yrs		PV of termi	inal value (VNI	Dbn)	3,616		2020E C	ash (VNDbr	٦)		1,846
Cost Of Capital Calculations	Terminal EBITDA (VNDbn)	1,519		PV of Firm	(VNDbn)		6,736		Terminal	value as %	of firm value	غ	53.7%
WACC 16,0% Re-levered beta 1,693 Risk free rate 3,0% Cost of equity 18,1% Debt beta 0,449 Market risk premium 8,9% Cost of debt 7,0% Unlevered beta Statutory corporate tax rate 1,459 Target gearing 20,0% Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0,00 0,00 0,00 0,00 0,00 1,08 1,25 1,45 1,68 1,95 2,27 Present value in VND 0 0 0 0 0 0 0 1,77 277 776 699 636 555	Terminal multiple (x)	5.0x		Current exc	change rate (V	/ND)	23,180		Current s	shares outs	tanding (mn)		421.5
Cost of equity 18.1% Debt beta 0.449 Market risk premium 8.9% Cost of debt 7.0% Unlevered beta Statutory corporate tax rate 1.459 Target gearing 20.0% Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 1.08 1.25 1.45 1.68 1.95 2.27 Present value in VND 0 0 0 0 0 0 177 277 776 699 636 555	Cost Of Capital Calculations												
Cost of debt 7,0% Unlevered beta 1,459 Target gearing 20,0%	WACC	16.0%		Re-levered	l beta		1.693		Risk free	rate			3.0%
Statutory corporate tax rate 20.0% Debt premium 4.0%	Cost of equity	18.1%					0.449		Market r	isk premiur	n		8.9%
Memorandum (VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 1.08 1.25 1.45 1.68 1.95 2.27 Present value in VND 0 0 0 0 0 177 277 776 699 636 555	Cost of debt	7.0%				ate				-			
(VNDbn, USDmn) 2014A 2015A 2016A 2017A 2018A 2019A 2020E 2021E 2022E 2023E 2024E 2025E Discount Factor 0.00 0.00 0.00 0.00 0.00 1.08 1.25 1.45 1.68 1.95 2.27 Present value in VND 0 0 0 0 0 177 277 776 699 636 555				,									
Discount Factor 0.00 0.00 0.00 0.00 0.00 1.08 1.25 1.45 1.68 1.95 2.27 Present value in VND 0 0 0 0 0 177 277 776 699 636 555	Memorandum (VNDbn. USDmn)	2014A	2015A	2016A	2017A	2018A	2019A	2020F	2021F	2022F	2023F	2024F	2025F
Present value in VND 0 0 0 0 0 177 277 776 699 636 555													
			0		0	0	0	8	12	33	30	27	23

Source: Company reports, KB Securities Vietnam

PV Drilling & Well Services (PVD) – Summarized financials & forecasts, 2019–2022E

Income statement (VNDbn)	2019A	2020E	2021E	2022E		ance sheet Dbn)	
ales	4,368	5,029	5,709	6,597	Total assets		20,892
st of sales	3,918	4,512	5,034	5,455	Current assets		5,705
ss Profit	450	517	675	1,141	Cash & equivalents		1,890
inancial income	165	167	199	215	ST investments		1,033
Financial expenses	241	286	351	391	Accounts receivable		1,907
of which: interest expenses	158	146	201	230	Inventory		835
Gain/(loss) from joint ventures	111	55	59	63	Other current assets		39
Selling expenses	17	10	11	13	Long-term assets		15,187
General & admin expenses	397	389	528	630	LT trade receivables		15
perating profit/(loss)	71	54	42	385	Fixed assets		13,936
Other income	130	117	171	198	Investment properties		0
Other expense	12	17	17	20	LT incomplete assets		28
et other income/(expenses)	118	100	154	178	LT investments		1,051
retax profit/(loss)	189	154	197	563	Goodwill		0
Income tax	17	35	39	113	Other LT assets		157
et profit/(loss)	172	119	157	450	Liabilities	6,9	
nority interests	(12)	(13)	(8)	(23)	Current liabilities	2,8	
et profit after MI	184	132	165	473	Trade accounts payable	1,30	
					Advances from customers		18
perating ratios	2015:	202	202:-	2025-	ST borrowings		21
.,	2019A	2020E	2021E	2022E	Special reserves		96
venue growth	(20.6)	15.1	13.5	15.5	Other current liabilities		23
IT growth	(63.2)	223.1	14.5	267.3	Long-term liabilities	4,0	
BITDA growth	8.3	12.6	27.5	58.8	LT payables		0
IP after MI growth	(6.3)	(28.3)	24.8	186.3	LT borrowings	3,23	
ross profit margin	10.3	10.3	11.8	17.3	Other LT liabilities	83	
BITDA margin	14.7	14.4	16.2	22.2	Shareholders' equity	13,96	
BIT margin	0.8	2.4	2.4	7.5	Paid-in capital	4,21	
Pre-tax profit margin	4.3	3.1	3.4	8.5	Share premium	2,43	
let profit margin	4.2	2.6	2.9	7.2	Treasury stock	(21	
					Undistributed earnings	3,80	
ash flow	20104	20205	2021E	2022E	Reserve & others Minority interests	3,28 24	
/NDbn)	2019A	2020E			·		
Net profit	172 576	119	157 788	450 970	Total liabilities & equity	20,89	Z
Plus: depreciation & amort		587		(167)	Vou ratios		
Plus: investing (profit)/loss Change in working capital	(223) (450)	(145) 269	(154) (141)	(21)	Key ratios (x, %, VND)	2019	٨
(Inc)/dec - receivables	(294)	345	(788)	(118)	Valuations	2019	_
(Inc)/dec - inventory	(76)	191	(322)	(48)	P/E	20.	6
(Inc)/dec = other curr assets	(15)	2	(19)	(3)	P/E diluted	20.	
Inc/(dec) - payables	(34)	(164)	571	86	P/B	0.	
Inc/(dec) – advances	(12)	28	23	3	P/S	0.	
Inc/(dec) - other curr liab	(12)	(133)	395	59	EV/EBITDA	5.	
Other adj for operations	(1)	(462)	(707)	(154)	EV/EBIT	104	
perating cash flow	(77)	918	789	1,452	Dividend yield, ordinary (%)	0.	
ST investments	(21)	(959)	(1,807)	(558)	EPS	43	
Capital expenditures	(44)	(651)	(336)	(212)	BVPS	33,13	
Investment properties	0	0	0	0	SPS	10,36	
Investment in subsidiaries	(63)	(52)	(56)	(61)	DPS (annual, ordinary)		7
Other assets	(356)	(36)	(91)	(50)	Dividend payout ratio (%)	1	
Other adj for investments	262	970	1,035	1,117	Operating performance		
nvesting cash flow	(223)	(728)	(1,256)	237	ROE	1	.3
ee cash flow	(122)	267	452	1,240	ROA	0.	
Issuance/(repayment) of debt	(247)	422	155	108	ROIC	0.	
ST debt	158	348	900	0	Financial structure		
Other liabilities	(46)	(291)	270	41	Total liab/equity	49	.6
Issuance/(retirement) of equity	383	0	0	0	Net debt/equity	13.	
Dividends paid	(3)	0	0	0	Current ratio (x)	2	
Less: changes in equity	(434)	199	0	0	Interest coverage (x)	0.	
Other adj for financing	114	(912)	(1,019)	(1,171)	Activity ratios		
,	(75)	(234)	306	(1,022)	Asset turnover	0.	2
inancing cash flow	(13)	(234)	500	(1,022)			_
•	(375)	(44)	(162)	667	Receivables turnover	2.5	5
inancing cash flow let increase in cash & equivalents ash & equivalents - beginning					Receivables turnover Inventory turnover	2.5 5.5	

Source: Company reports, KB Securities Vietnam

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Investment ratings & definitions

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

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