

Vietnam

ADD (no change)

Consensus ratings*: Buy 6 Hold 1 Sell 0

Current price:	VND20,600
Target price:	VND25,000
Previous target:	N/A
Up/downside:	21.4%
CGS-CIMB / Consensus:	6.0%
Reuters:	PVS.HM
Bloomberg:	PVS VN
Market cap:	US\$424.5m
	VND9,846,106m
Average daily turnover:	US\$2.52m
	VND58,459m
Current shares o/s:	478.0m
Free float:	34.0%

*Source: Bloomberg

Key changes in this note

➤ N/A



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	-1	16.4	2
Relative (%)	0.5	8.1	18.7

Major shareholders	% held
PetroVietnam Group	51.4
VinaCapital	5.5
Dragon Capital	4.0

PetroVietnam Technical Services

Let the good times roll

- We believe PetroVietnam Technical Services (PVS) could be a key beneficiary of Vietnam's push for renewed dry gas reserves.
- We expect it to deliver strong earnings growth (net profit CAGR of 25.4%) in FY18-21F.
- Initiate coverage with Add and target price of VND25,000.

A diversified oilfield services company with strong financial health

PVS provides a variety of technical services to the oil and gas industry, ranging from exploration support, field construction and oil production to supply bases. Despite facing difficulties from weak market conditions since the collapse of crude oil prices in 2014, PVS has successfully maintained strong financial health (FY18 net margin of 7.0% and FY18 ROE of 9.3%), underpinned by high liquidity ratios (current ratio of 2.0x), low leverage (debt/equity ratio of 0.1x) and a high cash balance (cash per share of VND16.80 at the end-FY18E).

Key beneficiary of Vietnam's push for renewed dry gas reserves

PVS is the sole domestic contractor that provides engineering, procurement and construction (EPC) services to offshore oil and gas projects in Vietnam. Currently, PVS is the main EPC contractor for the Sao Vang Dai Nguyet project (total contract value of c.US\$850m). Other big projects in its pipeline are Su Tu Trang Phase 2, Nam Du – U Minh, Blue Whale, and Block B – O Mon. The total order backlog for these projects, while not yet disclosed in detail, could amount to US\$2,000m, based on our estimates.

Strong earnings growth expected in FY18-21F

With several big projects on the horizon, we forecast PVS to post a sales CAGR of 19.6% and net profit CAGR of 25.4% in FY18-21F. Based on the scope of work for these projects, PVS's mechanical & engineering (M&C) and floating production storage & offloading (FPSO/FSO) segments are likely to benefit the most once these projects get off the ground.

Initiate coverage with Add and target price of VND25,000

Initiate on PVS with an Add and TP of VND25,000, based on a combination of DCF (weight 50%) and target FY19-21F P/E of 7.8x (weight 50%), based on historical 5-year mean P/E.

Potential re-rating catalysts and risks

If the geopolitical issues facing Ca Rong Do are resolved and the project starts up again, we estimate it could add: 1) c.VND500bn (engineering works) to PVS's net profit in FY18-21F, and 2) c.VND300bn p.a. (FPSO vessel for field operators) to net profit post FY21F. Downside risks are geopolitical issues hampering progress of key oil and gas projects.

Analyst(s)



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Financial Summary

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Revenue (VNDb)	16,729	14,667	13,627	21,180	26,362
Operating EBITDA (VNDb)	710	871	1,311	1,662	1,961
Net Profit (VNDb)	801	1,023	1,194	1,572	2,015
Core EPS (VND)	1,793	2,213	2,499	3,288	4,216
Core EPS Growth	(18.9%)	23.4%	12.9%	31.6%	28.2%
FD Core P/E (x)	11.49	9.31	8.24	6.26	4.89
DPS (VND)	594	1,064	1,243	1,118	1,265
Dividend Yield	2.88%	5.17%	6.03%	5.43%	6.14%
EV/EBITDA (x)	(0.74)	(1.40)	(2.09)	(2.15)	(2.51)
P/FCFE (x)	NA	8.40	4.12	7.33	5.10
Net Gearing	(50.7%)	(58.6%)	(66.5%)	(70.6%)	(74.4%)
P/BV (x)	0.86	0.87	0.78	0.75	0.70
ROE	7.6%	9.3%	10.0%	12.2%	14.8%
% Change In Core EPS Estimates			0%	0%	0%
CIMB/consensus EPS (x)			1.38	1.52	1.49

SOURCES: VND RESEARCH, COMPANY REPORTS

Let the good times roll

INVESTMENT THESIS

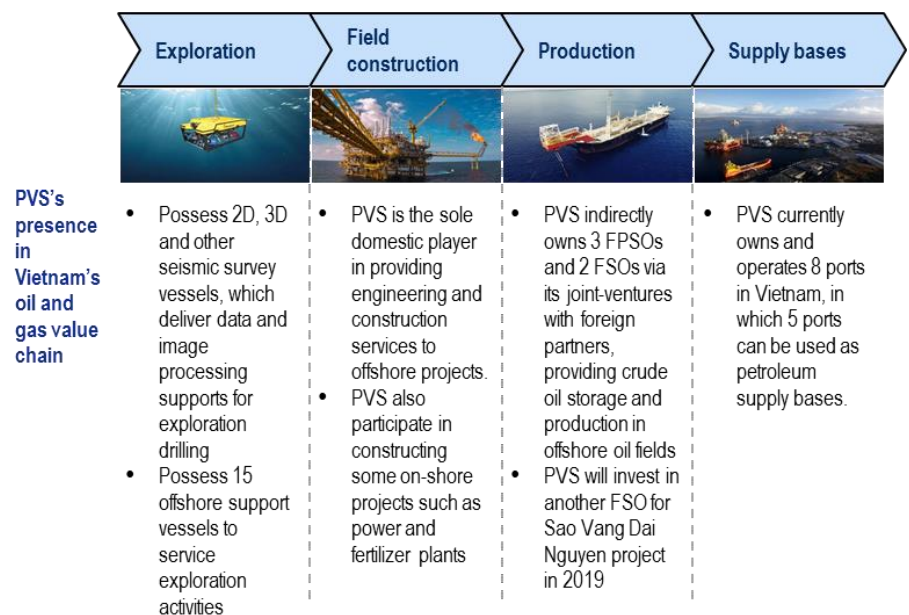
A diversified oilfield services company with strong financial health and significant net cash position ►

PVS provides a variety of technical services to the oil and gas industry, ranging from exploration support, field construction and oil production to supply bases. The two business segments that contribute the most to PVS's revenue and gross profit are mechanical and engineering (M&C, 47.4% and 42.1% of FY18E's revenue and gross profit, respectively) and floating production storage and offloading (FPSO/FSO, 11.0% and 47.3% of FY18E revenue and gross profit, respectively).

PVS's business segments are described below:

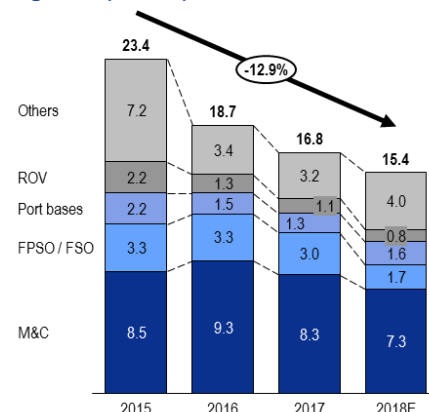
1. **Mechanical & engineering (M&C):** Provides offshore construction services to oil and gas projects in Vietnam
 2. **Floating, production, storage and offloading (FPSO/FSO):** Provides full-service leasing of FPSO/FSO vessels to oil and gas operators.
 3. **Port base:** Provides management, administration, and port operation services to oil and gas operators.
 4. **Seismic survey (ROV):** Provides 2D and 3D seismic survey and data-processing services to oil and gas explorers.
- Other segments: Includes the provision of offshore support vessels, operation and maintenance services, hospitality, and security services.

Figure 1: PVS's presence in Vietnam's oil and gas value chain



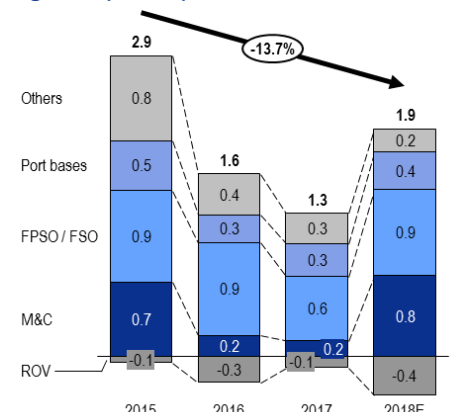
SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 2: PVS's revenue breakdown by segment (VND tr)



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 3: PVS's adjusted gross profit by segment (VND tr)



SOURCES: VND RESEARCH, COMPANY REPORTS

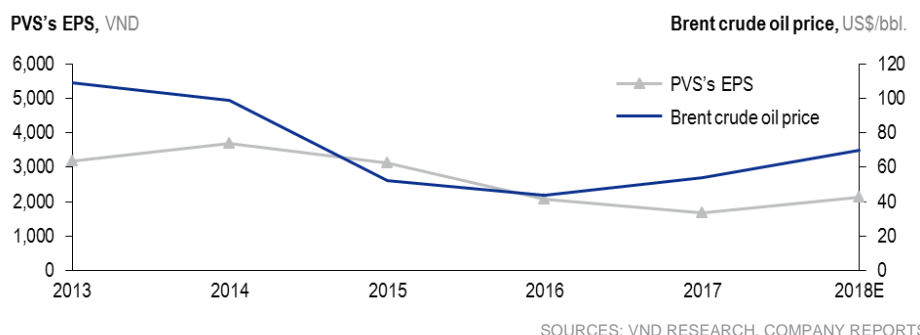
The collapse of crude oil prices in late-2014 led to significant spending cuts by major oil and gas operators, hence reducing PVS's net profit in recent years. Even though global crude oil prices recovered somewhat in 2017 and 2018, the financial performance of PVS has not improved in tandem. Generally, it takes 1-2 years before oilfield services companies like PVS start benefiting from upward

movements of crude oil prices due to the long lead times associated with a resumption of exploration activity.

Despite the difficulties from weak market conditions, PVS has successfully maintained strong financial health (FY18 net margin of 7.0% and FY18 ROE of 9.3%), underpinned by high liquidity ratios (current ratio of 2.0x), low leverage (debt/equity ratio of 0.1x) and a high cash balance (cash per share of VND16.80 at the end-FY18E).

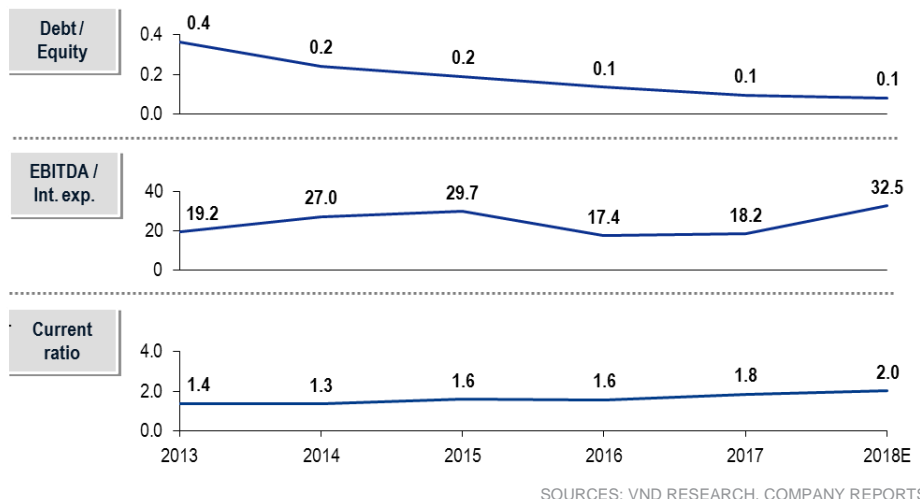
The collapse of the crude oil price in late 2014 led to significant spending cuts by major oil and gas operators, which reduced PVS's EPS in recent years.

Figure 4: PVS's profitability vs. crude oil price movements



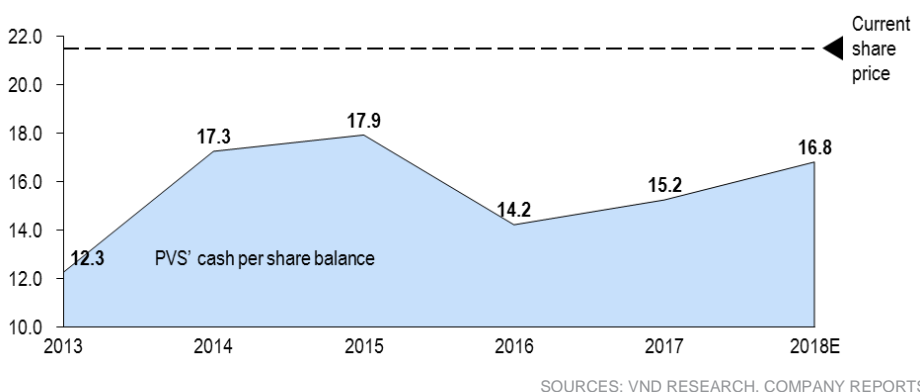
Despite difficulties from weak market conditions, PVS has managed to maintain strong financial health.

Figure 5: PVS's key liquidity and leverage ratios



PVS's cash and cash equivalent accounted for c.35% of the company's total assets at end-FY18.

Figure 6: PVS's cash per share vs. PVS's share price (VND)



Key beneficiary of Vietnam's push for renewed domestic dry gas reserves ➤

PVS is the sole domestic contractor providing engineering, procurement and construction (EPC) services to offshore oil and gas projects in Vietnam. Given its

dominant market position, we expect PVS to participate in almost all of Vietnam's major oil and gas projects in the coming years.

Currently, PVS is the main EPC contractor for the ongoing Sao Vang Dai Nguyet project (total contract value of c.US\$850m). Other big projects in its pipeline are Su Tu Trang Phase 2, Nam Du – U Minh, Blue Whale, and Block B – O Mon. The total order backlog for these projects, while not yet disclosed in detail, could amount to US\$2,000m, based on our estimates. Ca Rong Do is another big upcoming project, but is currently suspended (possibly for another two years) due to a force majeure event in Mar 2018.

All of these projects are key to ensuring Vietnam's national energy security over the next few decades. We believe these projects are well timed to meet the imminent rise in dry gas demand domestically. (Please refer to our sector report for more information.)

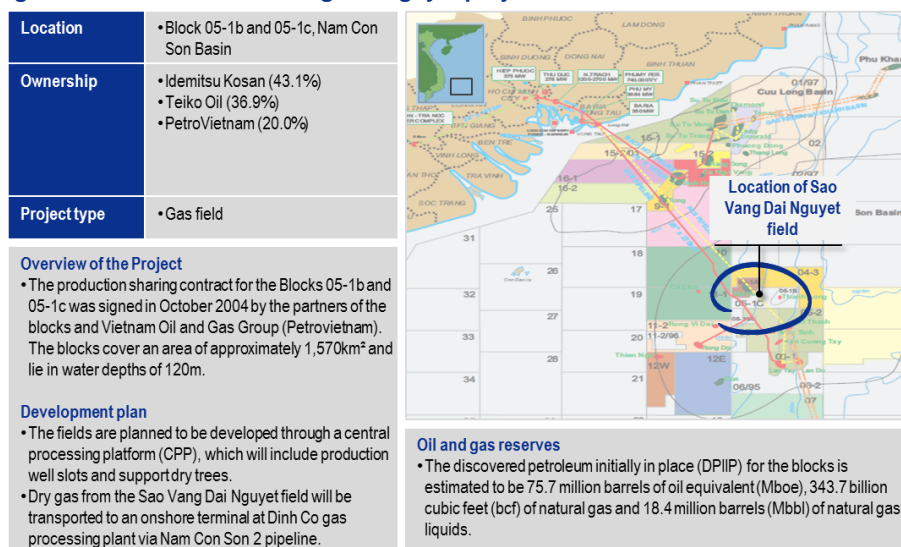
Figure 7: PVS's key projects in FY19-22F

Key projects	Contract value, US\$m	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F
Sao Vang Dai Nguyet	• c.850	EPC + FSO contracts							
Su Tu Trang Phase 2	• c.500			EPC contract					
Nam Du – U Minh	• c.650			EPC + FPSO contracts					
Blue Whale	• N/a				Not yet disclosed				
Block B – O Mon	• c.1,000						EPC contracts		
Ca Rong Do	• c.1,700	In suspension							

SOURCES: VND RESEARCH, COMPANY REPORTS

PVS is the main EPC contractor for the Sao Vang Dai Nguyet project. The company is responsible for constructing a central processing platform, which will include production well slots and support dry trees. In addition, PVS's joint venture Malaysian-Vietnam Offshore Terminal will also supply an FSO vessel to the project, starting from 2H20F.

Figure 8: Overview of Sao Vang Dai Nguyet project



SOURCES: VND RESEARCH, COMPANY REPORTS

Su Tung Trang phase 2 is a high-potential project for PVS in FY18-21F. For this project, we expect PVS to construct additional central processing platforms for the field.

Figure 9: Overview of Su Tu Trang Phase 2 project

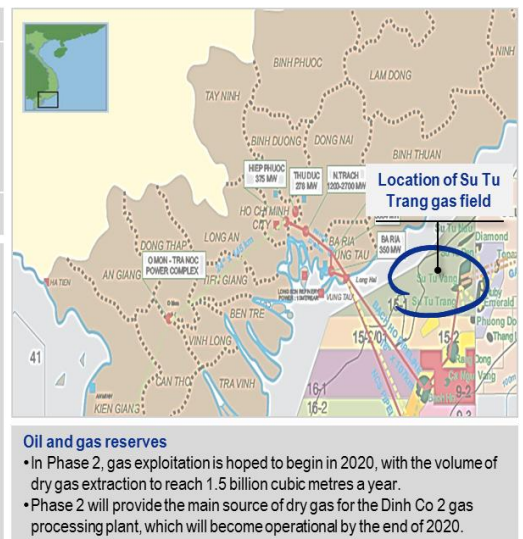
Location	•Block 15-1, Cuu Long Basin
Ownership	<ul style="list-style-type: none"> •PetroVietnam (50.0%) •Perenco (23.25%) •Korea National Oil Company (14.25%) •SK Corp (9.0%) •Geopetrol (3.5%)
Project type	•Gas field

Overview of the Project

- Su Tu Trang gas field (White Lion) has been in production since 2012 is at a water depth of 50m and about six kilometers away from the existing Su Tu Den field (Black Lion).

Development plan

- Phase 1 of this project was already completed by end of 2012. PVS was the main contractor for providing overall project engineering, procurement and fabrication works.
- Phase 2 of this project will see the construction of additional extraction, central processing platforms and pressurized pumps to maintain annual gas extraction levels at 1.5 bcm/annum until 2035.



SOURCES: VND RESEARCH, COMPANY REPORTS

Nam Du – U Minh is a potential project for PVS in FY20-22F. The project will require the construction of two wellhead platforms and one FPSO vessel to serve production activities.

Figure 10: Overview of Nam Du – U Minh project

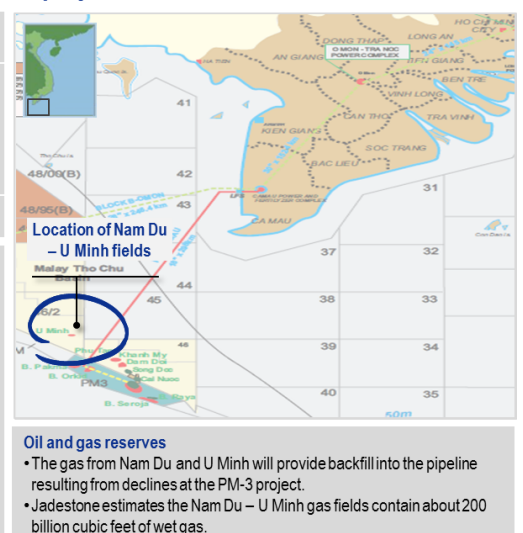
Location	•Block 46/07 and Block 51, Malay Tho Chu basin
Ownership	<ul style="list-style-type: none"> •Jadestone Energy (70%) •PetroVietnam Exploration Production Corporation (30%)
Timeline	•2020-2022

Overview of the Project

- The Nam Du discovery is located within the Block 46/07 PSC on the north-eastern margin of the Malay-Tho Chu Basin, approximately 200 kilometers offshore Vietnam in a water depth of 47.9 meters.
- In 2H18, Jadestone is progressing with the front end engineering design stage. Final investment decision for the project is expected in 2H19.

Development plan

- Jadestone is aiming to connect its Nam Du and U Minh gas condensate fields to the PM-3 subsea gas export pipeline. Wellhead platforms will be located on each field, as well as a FPSO for condensate storage.



SOURCES: VND RESEARCH, COMPANY REPORTS

Block B – O Mon is one of the largest gas projects in Vietnam to date, with total investment of roughly US\$10bn. We expect PVS to be the sub-contractor responsible for constructing some operation platforms for the project.

However, the development timeline for Block B – O Mon is uncertain due to current financing difficulties. We expect this project to only commence in 3QFY23F, at the earliest.

Figure 11: Overview of Block B – O Mon project

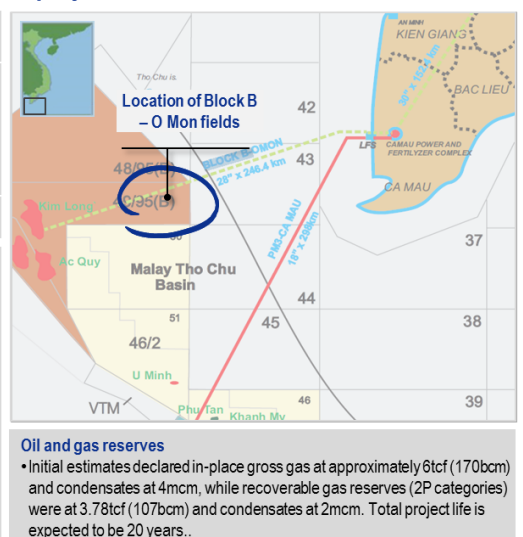
Location	•Blocks B, 48/95 and 52/97, Malay – Tho Chu basin
Ownership	<ul style="list-style-type: none"> •PetroVietnam (42.9%) •PetroVietnam Exploration Production Corporation (26.8%) •Mitsui Oil Exploration (22.6%) •PTTEP (7.7%)
Timeline	•2022-2025

Overview of the Project

- Blocks B, 48/95 and 52/97 lie offshore Vietnam in water depths ranging from 60m to 80m. The blocks cover an area of 3,200km² in the Malay-Tho Chu basin, southwest of Vietnam.

Development plan

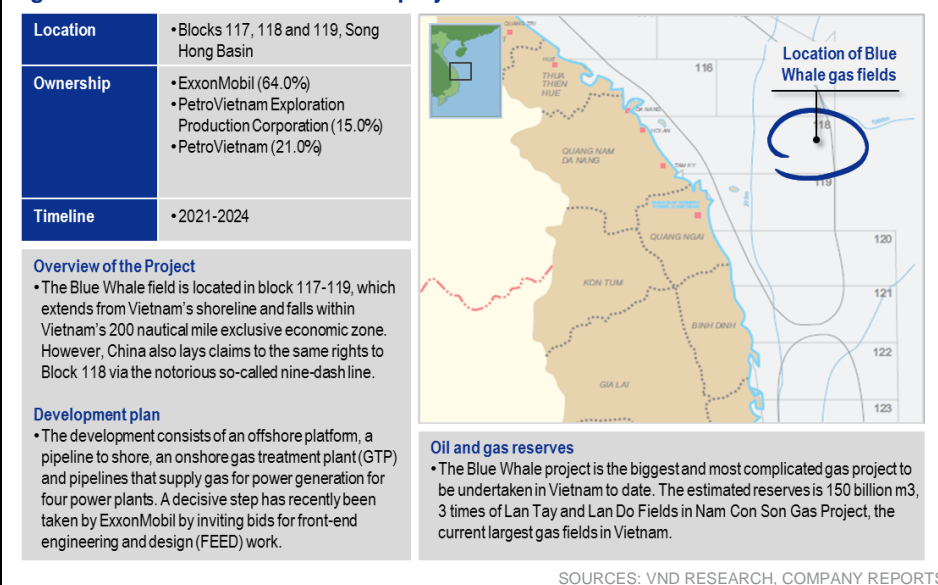
- The Block B field development will include one central technology platform, 46 operations platforms, a housing platform, one condensate vessel and drilling of 750 production wells. The development is planned to supply dry gas to new gas-fired power plants in Kien Giang and O Mon regions. A tender barge and one jack-up rig are required to perform the drilling operation.



SOURCES: VND RESEARCH, COMPANY REPORTS

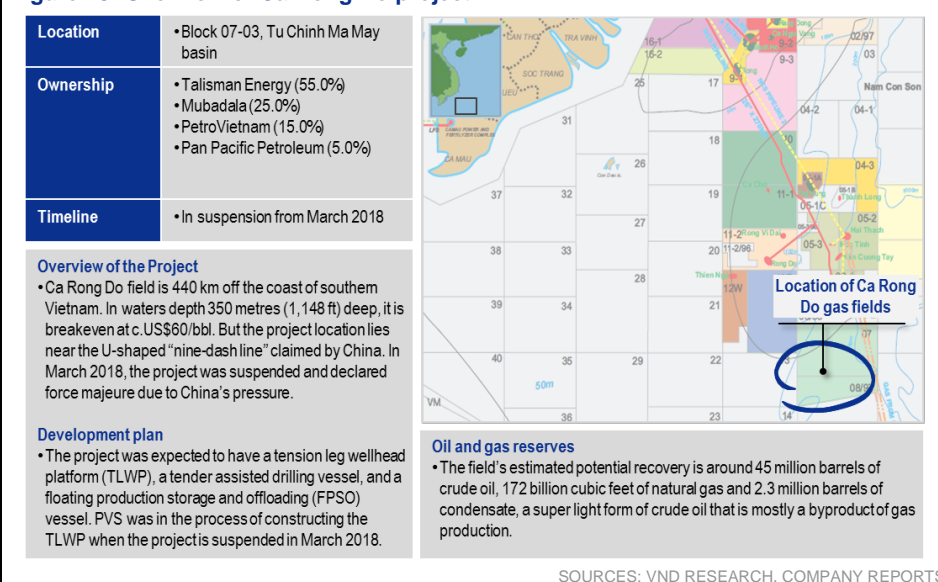
Ca Voi Xanh is the largest gas field discovered in Vietnam to date. The project is expected to supply an especially important source of natural gas for electricity generation and the petrochemical industry. However, as the project has not reached final investment decision (FID), we have not integrated this project into our PVS financial forecasts for FY18-21F.

Figure 12: Overview of Ca Voi Xanh project



The Ca Rong Do project is considered key in slowing the decline of Vietnam's oil and gas production in FY18-20F. However, due to unexpected geopolitical issues, the project was suspended in Mar 2018. PVS is the main EPC contractor for the project, responsible for constructing a tension leg wellhead platform and supplying an FPSO vessel for oil production. As the project is unlikely to resume before 2021F, we eliminate this project from our PVS financial forecasts for the FY18-21F period.

Figure 13: Overview of Ca Rong Do project



Strong earnings growth expected in FY18-21F ➤

With several big projects on the horizon, we forecast PVS to post a sales CAGR of 19.6% and net profit CAGR of 25.4% in FY18-21F. Based on the scope of work for these projects, PVS's M&C and FPSO/FSO segments are expected to benefit the most once these projects get off the ground.

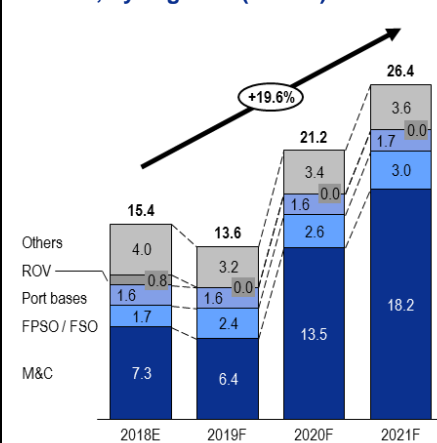
In addition, we anticipate PVS's profitability in FY18-21F to improve, thanks to the discontinuation of the loss-making remote-operated vehicle (ROV) seismic survey segment from FY19F. We note that this segment alone incurred gross losses of c.VND400bn in FY18, equivalent to 21.1% of PVS's adjusted gross profit in FY18.

With several big projects on the horizon, we forecast PVS to post a sales CAGR of 19.6% and adjusted gross profit CAGR of 18.2% in FY18-21F.

We note that the adjusted gross profit of the FPSO/FSO segment in FY18E was abnormally high, thanks to the non-recurring profit recorded from the asset re-valuation of FSO Orkid and FPSO Ruby.

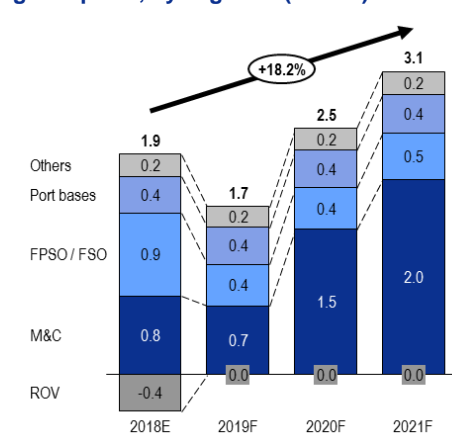
We forecast PVS to post a net profit CAGR of 25.4% in FY18-21F

Figure 14: Our forecasts for PVS's revenue, by segment (VND tr)



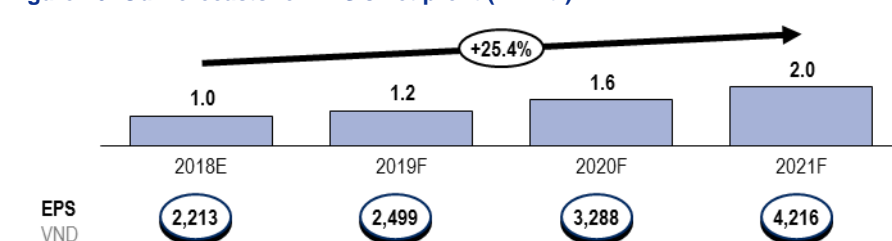
SOURCES: VND ESTIMATES, COMPANY REPORTS

Figure 15: Our forecasts for PVS's adjusted gross profit, by segment (VND tr)



SOURCES: VND ESTIMATES, COMPANY REPORTS

Figure 16: Our forecasts for PVS's net profit (VND tr)



SOURCES: VND RESEARCH, COMPANY REPORTS

VALUATION AND RECOMMENDATION

Initiate coverage with Add and target price of VND25,000 ➤

We initiate coverage on PVS with an Add rating and target price of VND25,000, based on a combination of DCF (weight 50%) and target FY19-21F P/E multiple of 7.8x (weight 50%).

Our DCF valuation for PVS is VND24,295, based on terminal growth of 1.0% and weighted average cost of capital (WACC) of 22.5%. We estimate PVS's WACC at 21.7% assuming: 1) a risk-free rate of 5.0%, 2) beta of 1.75, and 3) equity risk premium of 11%.

Figure 17: DCF model – Summary of free cash flow (FCF)

VNDbn	Dec-16A	Dec-17A	Dec-18E	Dec-19F	Dec-20F	Dec-25F	Dec-30F	Dec-35F	CAGR 20-35F
Total revenue	18,720	16,729	14,667	13,627	21,180	33,247	36,758	39,013	4.2%
% yoy	0.0%	-10.6%	-12.3%	-7.1%	55.4%	2.8%	1.6%	1.0%	
COGS & OPEX	(18,620)	(16,704)	(14,363)	(12,886)	(20,044)	(31,437)	(34,757)	(36,890)	
Unlevered profit / EBIT	100	24	304	741	1,136	1,810	2,001	2,124	4.3%
Operating margin	0.5%	0.1%	2.1%	5.4%	5.4%	5.4%	5.4%	5.4%	
Effective tax rate	-30.7%	-22.0%	-42.7%	-22.0%	-22.0%	-22.0%	-22.0%	-22.0%	
EBIT * (1-Tax) or NOPAT	69	19	174	578	886	1,411	1,561	1,656	4.3%
+ Depreciation and amortisation	871	685	567	567	520	678	752	799	
% of revenue	4.7%	4.1%	3.9%	4.2%	2.5%	2.0%	2.0%	2.0%	
- Capex	(448)	(436)	(355)	(329)	(512)	(804)	(889)	(943)	
% of revenue	-2.4%	-2.6%	-2.4%	-2.4%	-2.4%	-2.4%	-2.4%	-2.4%	
+ Change in working capital	(767)	677	(204)	(28)	(1,257)	(1,162)	(1,300)	(1,384)	
% of revenue	-4.1%	4.0%	-1.4%	-0.2%	-5.9%	-3.5%	-3.5%	-3.5%	
Interest and other financial activities, net	1,140	978	655	763	830	1,354	1,496	1,587	
% of revenue	6.1%	5.8%	4.5%	5.6%	3.9%	4.1%	4.1%	4.1%	
Unlevered free cash flow (UFCF)	865,052	1,923,111	837,543	1,551,331	467,309	1,478,070	1,619,860	1,715,855	
% yoy	0.0%	122.3%	-56.4%	85.2%	-69.9%	0.6%	2.1%	1.0%	

SOURCES: VND RESEARCH ESTIMATES, COMPANY REPORTS

Figure 18: Cost of equity
Cost of equity

Risk Free Rate	5.4%
Beta	1.75
Risk Premium	11.0%
Cost of Equity	24.7%

SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 19: WACC and terminal growth
VNDbn

Equity Value	9,559
Debt	1,155
Cost of Debt	6.0%
Tax Rate	22.0%
WACC	22.5%
Perpetual Growth Rate	1.0%

SOURCES: VND RESEARCH, COMPANY REPORTS

Our target price is rounded down to VND25,000, based on a combination of DCF (weight 50%) and target FY19-21F P/E multiple of 7.8x (weight 50%).

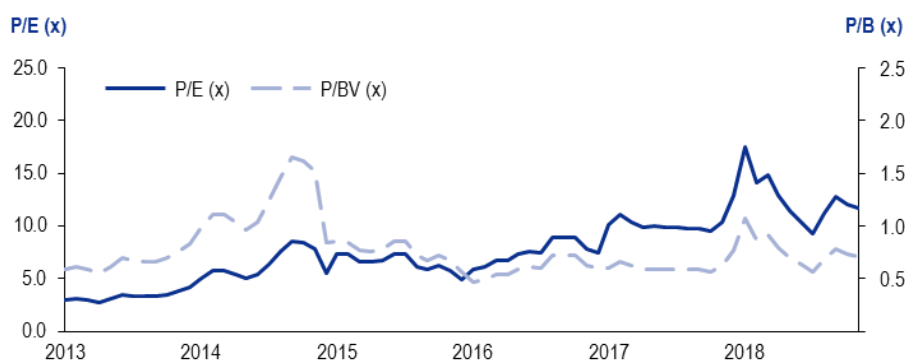
Figure 20: Blended target price

Method	Implied share price (VND)	Weight (%)	Weighted share price (VND)
DCF	24,295	50%	12,148
FY19-21F target P/E of 7.8x	25,804	50%	12,902
Blended value		100.0%	25,050
Target price			25,000

SOURCES: VND RESEARCH ESTIMATES, COMPANY REPORTS

Our target FY19-21F P/E multiple of 7.8x is derived from PVS's historical 5-year average P/E multiple. Using a 3-year forward FY18-21F EPS of VND3,308, our implied valuation based on P/E is VND25,804.

Our target FY19-21F P/E multiple of 7.8x is derived from PVS's historical 5-year average P/E multiple.

Figure 21: PVS's historical P/E and P/BV


SOURCES: VND RESEARCH, COMPANY REPORTS, BLOOMBERG












Figure 22: Global oil services peer comparison

Company	Bloomberg Ticker	Recom.	Share Price (local curr)	Target Price (local curr)	Market Cap (US \$ m)	P/E (x)				3-year EPS	P/BV (x)				ROE (%)			ROA (%)		
						5-yr	TTM	CY19F	CY20F	CAGR (%)	5-yr	TTM	CY19F	CY20F	5-yr	TTM	CY19F	5-yr	TTM	CY19F
Oil services companies																				
PV Technical Services	PVS VN	ADD	20,600	25,000	420	8.7	9.8	8.7	6.6	-25.7%	0.7	0.9	0.8	0.8	14.6%	6.7%	7.0%	5.2%	3.1%	4.5%
Mermaid Maritime	MMT SP	NOT RATED	0.08	N/A	119	23.0	N/A	N/A	N/A	-36.0%	0.6	0.3	N/A	N/A	-6.7%	-4.2%	N/A	-4.6%	-3.1%	N/A
Yinson Holdings	YNS MK	ADD	4.52	4.84	1,085	16.0	13.7	24.4	36.7	3.5%	3.3	1.9	1.5	1.5	17.5%	9.6%	6.6%	6.8%	4.0%	6.0%
Sembcorp Marine	SMM SP	ADD	1.68	2.46	2,604	21.6	N/A	103.2	68.7	-70.8%	2.2	1.3	1.5	1.5	6.9%	-8.6%	1.5%	2.7%	-2.3%	1.2%
Hyundai Engineering	000720 KS	ADD	51,600	68,000	4,979	12.1	18.2	13.9	13.2	-21.7%	1.0	0.9	1.0	0.9	7.6%	4.6%	7.6%	2.4%	1.6%	4.1%
Keppel Corp	KEP SP	ADD	6.21	8.28	8,159	10.2	12.1	11.5	10.1	-39.1%	1.5	0.9	0.9	0.8	12.2%	10.1%	8.3%	4.2%	4.7%	4.3%
Malaysia Marine Eng	MMHE MK	NOT RATED	0.79	N/A	212	21.9	36.0	N/A	N/A	-35.9%	1.3	0.4	N/A	N/A	2.4%	1.0%	N/A	1.2%	0.8%	N/A
Average - Oil services peers					2,511	16.2	18.0			-32.2%	1.5	0.9			7.8%	2.7%		2.6%	1.3%	

Note: Not Rated forecasts based on Bloomberg consensus estimates; trailing 12 months (TTM)

SOURCES: VND RESEARCH, COMPANY REPORTS, BLOOMBERG (AS AT 26 MAR 2019)

Figure 23: Brief description of global comparable companies

Companies	Country of origin	Description
 Mermaid Maritime (MMT SP, Not rated)	 Thailand	Mermaid Maritime PCL is a subsea and offshore services company. It provides full turnkey services to oil and gas majors operating offshore such as subsea vessels, specialized diving equipment, remotely operated vehicles and drilling and accommodation rigs. Mermaid's operating segments are the Subsea group, Drilling group, and Holding. The Subsea group provides services including inspection, repair and maintenance (IRM), infrastructure installation support, remotely operated vehicle (ROV) Support, and cable.
 Yinson Holdings (YNS MK, Add, TP:RMB4.35)	 Malaysia	Yinson Holdings Bhd is a transportation and logistics company domiciled in Malaysia. The company organises itself into two segments: offshore & marine and other operations. The marine segment, which generates the vast majority of revenue, leases, trades, and operates vessels; offers chartering for other floating marine assets; provides consulting services for ship management, and provides other marine-related services. The other operations segment makes investments, and offers business and management
 Sembcorp Marine (SMM SP, Add, TP:\$S2.21)	 Singapore	Singapore-based Sembcorp Marine is a leading global marine and offshore engineering group with a 50-year record. The company specializes in ship repair, shipbuilding, ship conversion, rig building, and offshore engineering and construction. The company operates worldwide, with key hubs in Brazil, India, the United Kingdom, Indonesia, and China. Its Singapore operations comprise six shipyards, including one of the largest integrated yards globally, Sembmarine Integrated Yard at Tuas.
 Hyundai Engineering (000720 KS, Hold, TP:W68,000)	 South Korea	Hyundai Engineering & Construction Co Ltd works in the construction industry, and has completed civil, building, plant, and energy projects. It constructs buildings, structures, and infrastructure primarily geared toward transportation, power stations, gas facilities, and real estate. The company operates four business segments: building works, civil works, plant works/electrical works, and other. Procuring materials and delivering timely performance to develop large, complex structures are focuses of the business.
 Keppel Corp (KEP SP, Add, TP:\$S8.28)	 Singapore	Singapore-based Keppel is one of the world's largest offshore rig builders, with more than three decades of experience. As a conglomerate with marine, property, infrastructure, and other businesses, Keppel generates more than half of its revenue from its offshore and marine segment, which builds and repairs world-class drilling rigs used in offshore oil and gas exploration and production. Keppel follows a "near market, near customer" strategy, operating multiple shipyards in regions with a significant client presence.
 Malaysia Marine & Heavy Engineering (MMHE MK, Not rated)	 Malaysia	Malaysia Marine and Heavy Engineering Holdings Bhd is a marine and heavy engineering solutions provider for a range of offshore and onshore facilities and vessels. The company operates through three segments. Its Heavy engineering segment is engaged in the provision of service for oil and gas engineering, construction and conversion works. The Marine segment offers repair services and dry docking of liquefied natural gas carriers.

SOURCES: VND RESEARCH, COMPANY REPORTS

RISKS AND CATALYSTS

Downside risks ➤

- Geopolitical issues could hamper the progress of key oil and gas projects such as Block B – O Mon, Blue Whale, and Su Tu Trang phase 2. If these projects are suspended, we think the profitability of PVS would be severely negatively affected.
- Crude oil price stays below US\$55/bbl in FY19-20F due to: 1) lower demand caused by a significant economic slowdown, and 2) technological revolution in shale oil extraction, which could enable the US flood the oil market with more cheap supply.

Potential re-rating catalysts ➤

- If the geopolitical issues surrounding Ca Rong Do are resolved and this project starts up again, we estimate it could add: 1) c.VND500bn to PVS's net profit in FY18-21F from related engineering works, and 2) c.VND300bn per year to PVS's net profit post FY21F from supplying a floating production storage and offloading (FPSO) vessel to field operators.

APPENDICES

Figure 25: Company profile of PVS as at end-2018

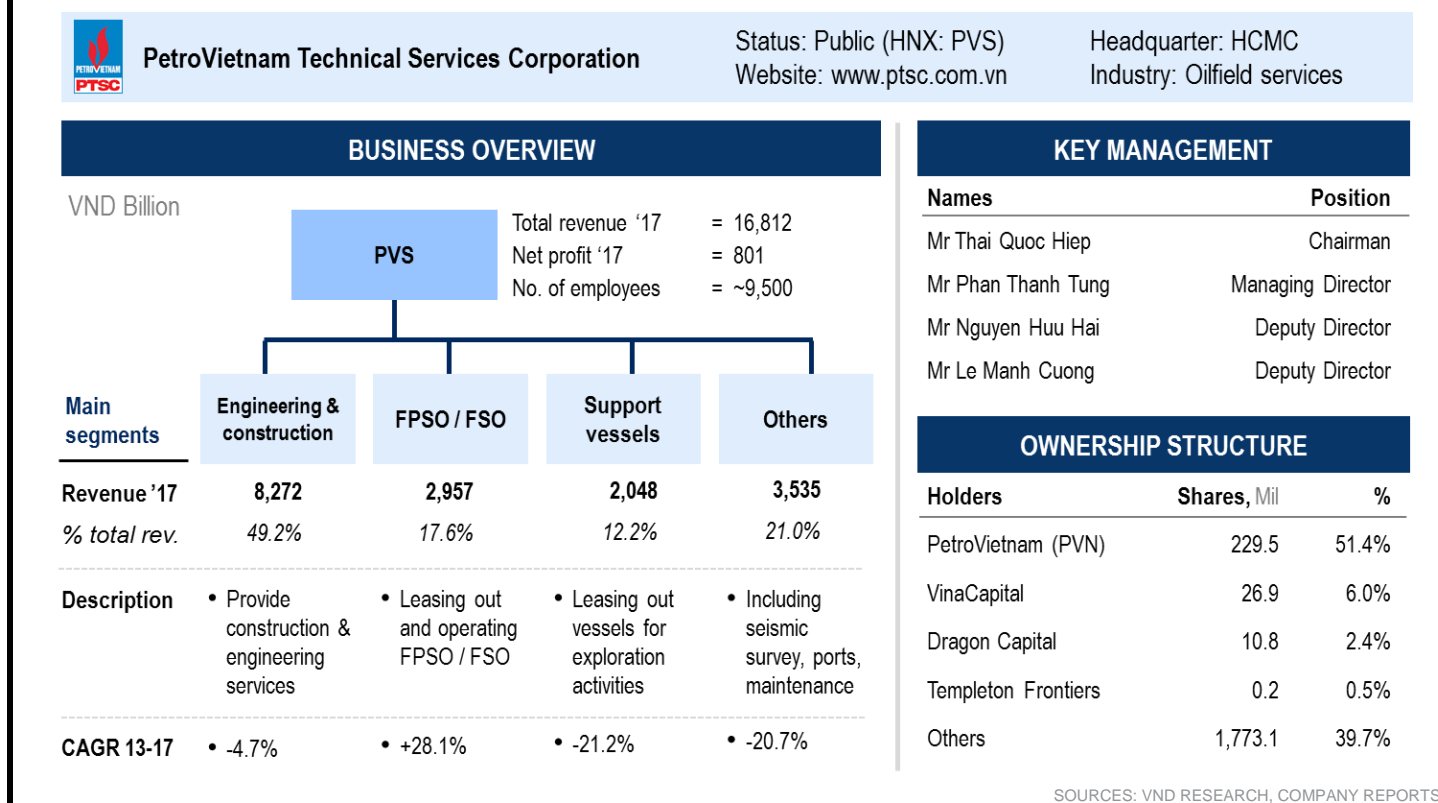
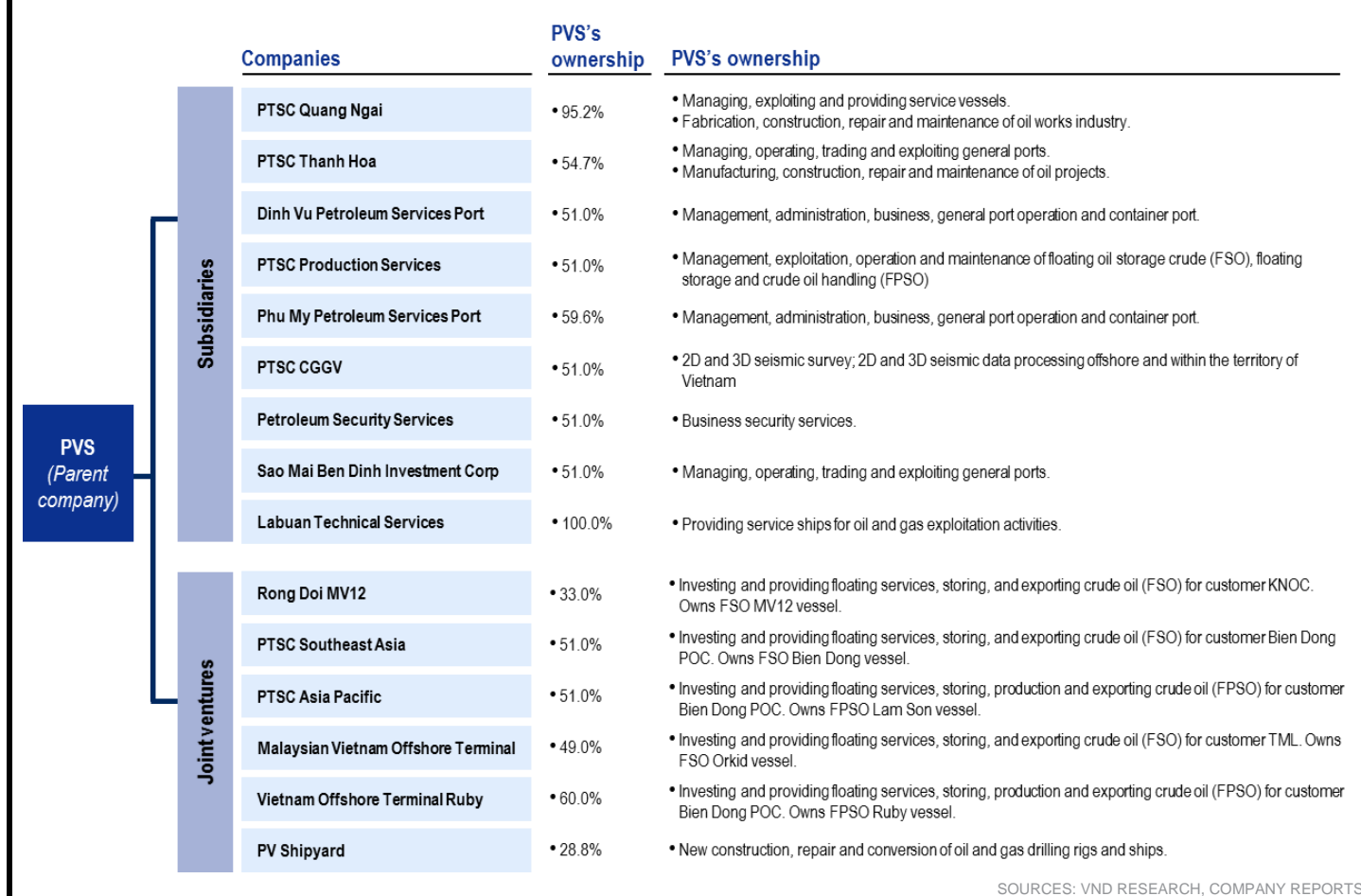
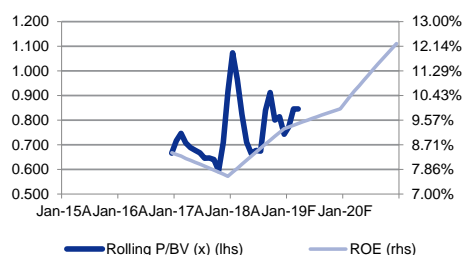


Figure 26: Organisational structure of PVS as at end-2018

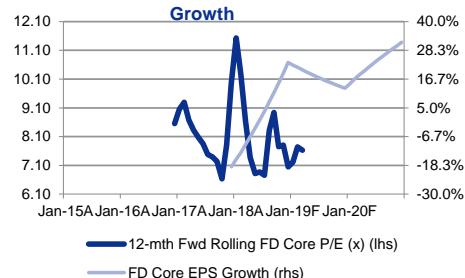


BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Core P/E vs FD Core EPS Growth



Profit & Loss

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Net Revenues	16,729	14,667	13,627	21,180	26,362
Gross Profit	805	1,078	1,463	2,260	2,835
Operating EBITDA	710	871	1,311	1,662	1,961
Depreciation And Amortisation	(685)	(567)	(567)	(520)	(519)
Operating EBIT	24	304	744	1,141	1,443
Financial Income/(Expense)	229	437	416	384	379
Pretax Income/(Loss) from Assoc.	485	734	259	322	552
Non-Operating Income/(Expense)	264	(516)	87	136	169
Profit Before Tax (pre-EI)	1,002	959	1,507	1,983	2,543
Exceptional Items					
Pre-tax Profit	1,002	959	1,507	1,983	2,543
Taxation	(221)	(409)	(332)	(436)	(560)
Exceptional Income - post-tax					
Profit After Tax	782	549	1,175	1,547	1,983
Minority Interests	19	474	19	25	32
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	801	1,023	1,194	1,572	2,015
Recurring Net Profit	801	1,023	1,194	1,572	2,015
Fully Diluted Recurring Net Profit	801	1,023	1,194	1,572	2,015

Cash Flow

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
EBITDA	710	871	1,311	1,662	1,961
Cash Flow from Inv. & Assoc.	(704)	(1,010)	(695)	(724)	(947)
Change In Working Capital	677	(204)	(28)	(1,257)	(809)
(Incr)/Decr in Total Provisions	187	150	0	0	0
Other Non-Cash (Income)/Expense	295	87	196	322	581
Other Operating Cashflow	495	435	574	526	524
Net Interest (Paid)/Received	(44)	(33)	(10)	(9)	(8)
Tax Paid	(630)	(149)	(164)	(215)	(276)
Cashflow From Operations	985	148	1,185	304	1,026
Capex	(436)	(355)	(329)	(512)	(637)
Disposals Of FAs/subsidiaries	9	4	4	4	4
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(882)	1,593	1,593	1,593	1,593
Cash Flow From Investing	(1,308)	1,242	1,267	1,085	959
Debt Raised/(repaid)	(367)	(256)	(65)	(46)	(53)
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(284)	(509)	(594)	(534)	(605)
Preferred Dividends					
Other Financing Cashflow	0	0	0	0	0
Cash Flow From Financing	(651)	(765)	(659)	(580)	(658)
Total Cash Generated	(975)	626	1,793	808	1,328
Free Cashflow To Equity	(691)	1,134	2,387	1,343	1,932
Free Cashflow To Firm	(279)	1,423	2,462	1,397	1,994

SOURCES: VND RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd

Balance Sheet

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Cash And Equivalents	7,286	8,035	9,828	10,636	11,964
Total Debtors	5,402	4,951	4,810	7,475	9,304
Inventories	438	469	376	585	727
Total Other Current Assets	438	368	342	531	661
Total Current Assets	13,564	13,823	15,355	19,228	22,657
Fixed Assets	3,679	2,863	2,625	2,617	2,736
Total Investments	4,965	4,490	4,490	4,490	4,490
Intangible Assets	0	0	0	0	0
Total Other Non-Current Assets	1,664	1,367	1,124	923	759
Total Non-current Assets	10,308	8,720	8,238	8,030	7,984
Short-term Debt	255	721	670	634	592
Current Portion of Long-Term Debt					
Total Creditors	3,388	3,311	3,039	4,728	5,940
Other Current Liabilities	3,717	2,812	2,862	4,448	5,536
Total Current Liabilities	7,360	6,844	6,570	9,810	12,067
Total Long-term Debt	901	193	179	169	158
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	3,530	3,351	3,351	3,351	3,351
Total Non-current Liabilities	4,431	3,544	3,531	3,521	3,510
Total Provisions	0	0	0	0	0
Total Liabilities	11,791	10,388	10,101	13,330	15,577
Shareholders' Equity	10,745	11,322	12,641	13,050	14,155
Minority Interests	1,336	833	852	877	909
Total Equity	12,081	12,155	13,493	13,927	15,064

Key Ratios

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Revenue Growth	(10.6%)	(12.3%)	(7.1%)	55.4%	24.5%
Operating EBITDA Growth	(26.9%)	22.8%	50.5%	26.7%	18.0%
Operating EBITDA Margin	4.24%	5.94%	9.62%	7.84%	7.44%
Net Cash Per Share (VND)	13,724	14,898	18,785	20,572	23,461
BVPS (VND)	24,054	23,687	26,447	27,303	29,615
Gross Interest Cover	0.6	11.3	93.4	157.0	217.6
Effective Tax Rate	22.0%	42.7%	22.0%	22.0%	22.0%
Net Dividend Payout Ratio	35.5%	49.7%	49.7%	34.0%	30.0%
Accounts Receivables Days	125.4	128.8	130.7	106.1	116.2
Inventory Days	23.61	12.18	12.68	9.30	10.18
Accounts Payables Days	81.63	84.09	91.22	71.91	79.24
ROIC (%)	0.4%	5.4%	15.3%	27.0%	39.0%
ROCE (%)	2.6%	6.1%	8.6%	10.6%	12.0%
Return On Average Assets	2.42%	0.86%	3.65%	4.87%	5.80%

Key Drivers

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Oil Price (US\$/bbl)	54.0	72.0	65.0	68.0	70.0
Volume Growth (%)	-4.6%	-0.5%	-0.8%	0.4%	-0.2%
Ratio Of Up To Downstream (x)	N/A	N/A	N/A	N/A	N/A
Operating Cash Cost (US\$/bbl)	N/A	N/A	N/A	N/A	N/A
Ratio Of High To Low Margin (x)	N/A	N/A	N/A	N/A	N/A

SOURCES: VND RESEARCH, COMPANY REPORTS

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The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. CGS-CIMB Thailand does not confirm nor certify the accuracy of such survey result.

Score Range:	90 - 100	80 – 89	70 - 79	Below 70 or	No Survey Result
Description:	Excellent	Very Good	Good	N/A	

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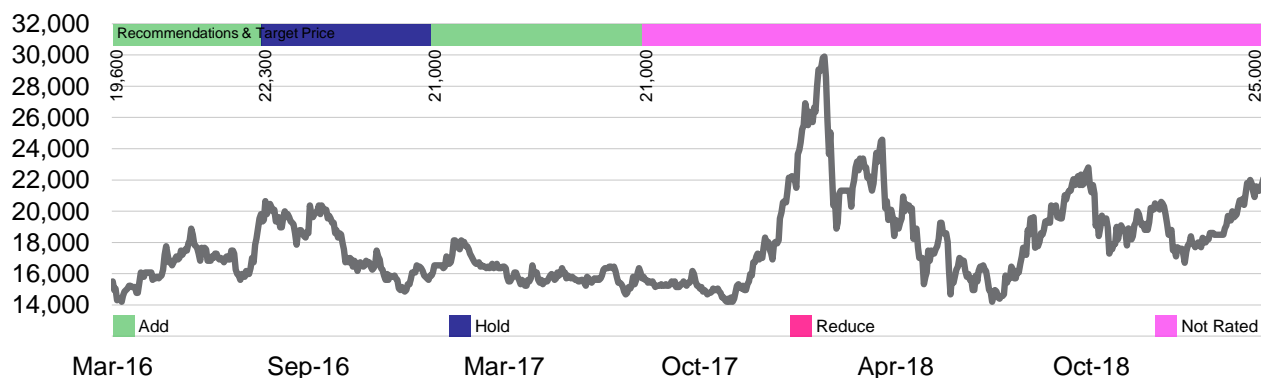
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Distribution of stock ratings and investment banking clients for quarter ended on 31 December 2018		
758 companies under coverage for quarter ended on 31 December 2018		
	Rating Distribution (%)	Investment Banking clients (%)
Add	61.2%	4.2%
Hold	25.1%	2.1%
Reduce	13.7%	0.4%

Spitzer Chart for stock being researched (2 year data)

PetroVietnam Technical Services (PVS VN)

— Price Close



Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2018, Anti-Corruption 2018

ADVANC – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, Declared, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BEM** – Very Good, n/a, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, **BGRIM** – Very Good, Declared, **BH** – Good, n/a, **BJC** – Very Good, Declared, **BJCHI** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** – Good, Declared, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENTEL** – Very Good, Certified, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Very Good, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **DELTA** – Excellent, n/a, **DEMCO** – Excellent, Certified, **DDD** – Very Good, Declared, **DIF** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** – Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** – Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HREIT** – Excellent, Certified, **ICHI** – Excellent, Declared, **HUMAN** – not available, n/a, **III** – Good, n/a, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD*** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – not available, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Very Good, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Declared, **MALEE** – Very Good, Certified, **MC** – Very Good, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Declared, **NETBAY** – Good, n/a, **PLANB** – Excellent, Declared, **PLAT** – Very Good, Certified, **PSH** – Excellent, Certified, **PSTC** – Good, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, Certified, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Very Good, n/a, **RSP** – not available, n/a, **SAMART** – Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Declared, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Very Good, Certified, **SF** – Good, n/a, **SIRI** – Very Good, Certified, **SPA** – Good, n/a, **SPALI** – Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Declared, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, Declared, **TMB** – Excellent, Certified, **TNR** – Very Good, Declared, **TOP** – Excellent, Certified, **TPCH** – Good, n/a, **TPIPP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Very Good, Declared, **UNIQ** – Good, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WORK** – Good, n/a.

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 31, 2018) are categorized into:

- Companies that have declared their intention to join CAC, and
- Companies certified by CAC

* The company, its director or management had been reportedly accused for breaching proper corporate governance such as violation of the SEC's regulations or charged with corruption.

RECOMMENDATION FRAMEWORK

Stock Ratings

Definition:

Add	The stock's total return is expected to reach 15% or higher over the next 12 months.
Hold	The stock's total return is expected to be between negative 10% and positive 15% over the next 12 months.
Reduce	The stock's total return is expected to fall below negative 10% over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

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