

Vinh Hoan Corporation (VHC)

Most leveraged to 2020E turnaround

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Fisheries Analyst Nguyen Thanh Danh danhnt@kbsec.com.vn

Initiate coverage with BUY and VND47,100 target price as Vietnam's leading *pangasius* exporter to the important US market

EU also becoming an important market, with close to half of production already receiving global certifications

Management committed to increasing internal sourcing to boost GPMs and upgrade farming methods to global standards

We initiate coverage of Vinh Hoan Corporation (VHC) as our sector top pick with a BUY recommendation and a target price of VND47,100 based on our DCF valuation. Superior product quality and premium pricing should allow VHC to benefit most from inventory restocking in the important US market and allow it to avoid any antidumping duties. VHC is Vietnam's leading *pangasius* exporter to the US, with about 60% of the company's exports going to the US market.

Consumers in the EU are highly sensitive to environmental sustainability and food safety, making global quality standards important for this market. We estimate about 80% of VHC's internal farming sites already received one of three global certifications (eg, ASC, BAP or GlobalG.A.P). Given about 55% of total production is sourced internally, this implies about 44% of production – and well above peers – will meet minimum global standards. This gives VHC a unique advantage to benefit from falling tariffs in the EU when the EVFTA begins in August.

The new *Tan Hung* farms should add about 220 hectares of ponds from 380 hectares at the end of 2019 or a 58% increase in land area. We expect about half to be ready this year to boost internally–sourced fish stocks to 55% in 2020E and 60% in 2021E. Part of this new land will be dedicated to a hatchery complex (50 hectares) to meet about 30% of internal fingerling demand from zero now to stabilize costs and meet global quality standards.

Buy initiate

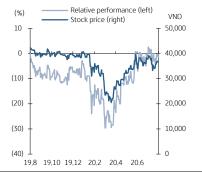
Forecast earnings & valuation

Target Price	VND47,100
Total return (%)	34.2%
Current price (Aug 12)	VND36,600
Consensus target price	VND39,000
Mkt capitalization (USDbn)	USD288mn

rading data	
Free float (%)	50.1%
Avg trading value (3M)	USD0.95mn
Foreign available (%)	67.5%
Major shareholders (%)	Truong Thi Le Khanh (43.2%)

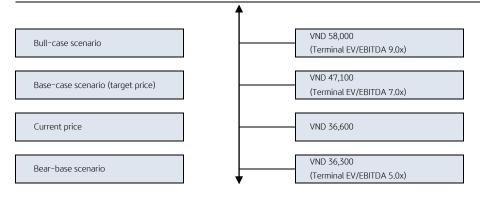
Fiscal year-end 2019A 2020E 2021E 2022E Revenue (VNDbn) 7,867 8,036 9,472 10,419 EBIT 1,132 1,022 1,220 1,372 NP attributable to parent 1,179 965 1,133 1,262									
Fiscal year-end	2019A	2020E	2021E	2022E					
Revenue (VNDbn)	7,867	8,036	9,472	10,419					
EBIT	1,132	1,022	1,220	1,372					
NP attributable to parent	1,179	965	1,133	1,262					
EPS (VND)	6,430	5,262	6,176	6,880					
EPS growth (%)	(18.2)	(18.2)	17.4	11.4					
P/E (x)	5.7	7.0	5.9	5.3					
EV/EBITDA (x)	5.8	6.3	5.2	4.7					
P/B (x)	1.4	1.2	1.1	1.0					
ROE (%)	26.5	18.6	19.6	19.8					
Div viold (%)	2.8	5.5	8.7	9.6					

Share price per	ormance			
(%)	1M	3M	6M	12M
Absolute	-3.7	9.9	5.3	-13.7
Relative	-0.9	8.4	16.6	-1.5



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) New *Tan Hung* farm from 2021E
- 2) 4Q pangasius export turnaround
- 3) Steady recovery in ASPs

Bull-case scenario: upside risk

- 1) Tan Hung farm ahead of schedule
- 2) Export turnaround before 4Q
- 3) Strong recovery in ASPs

Bear-case scenario: downside risk

- 1) Tan Hung farm delays
- 2) Turnaround pushed back to 2021E
- 3) Weak ASPs

Revised earnings estimates

	Revise	ed .	Previo	us	Change	
(VNDbn, %)	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						
Source: Bloomberg, KB Secu	rities Vietnam					

KBSV estimate vs consensus

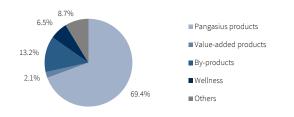
	KBSV estir	nates	Consen	sus	Difference		
(VNDbn, %)	2020E	2021E	2020E	2021E	2020E	2021E	
Revenue	8,036	9,472	8,026	8,758	0.1	8.1	
EBIT	1,022	1,220	1,274	1,363	(19.8)	(10.5)	
OP	1,090	1,287	1,010	1,167	8.0	10.3	
NP after MI	965	1,133	936	1,095	3.1	3.4	

Source: Bloomberg, KB Securities Vietnam

Valuation & target price

- Valuation method:
 Discounted cash flow (DCF) model
- 2) Target price calculation Terminal EV/EBITDA 7x WACC 10.6%
- 3) Target price range: VND36,300 - VND58,000
- 4) Valuation at target price 7.0x P/E 1.2x P/B

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

Mkt	12m fwd	3y EPS	12m fwd	12m fwd
Сар	P/E	CAGR	ROE	P/B
0.3	6.9	-10.0	17.7	1.2
0.2	na	na	na	na
0.1	10.5	-28.8	8.5	0.9
0.1	na	na	na	na
	Cap 0.3 0.2 0.1	Cap P/E 0.3 6.9 0.2 na 0.1 10.5	Cap P/E CAGR 0.3 6.9 -10.0 0.2 na na 0.1 10.5 -28.8	Cap P/E CAGR ROE 0.3 6.9 -10.0 17.7 0.2 na na na 0.1 10.5 -28.8 8.5

Source: Bloomberg, KB Securities Vietnam

Most leveraged to 2020E turnaround

Vinh Hoan Corporation (VHC): Sector top pick and most leveraged to 4Q turnaround We initiate our coverage of VHC as our sector top pick with a BUY rating and a target price of VND47,100. Our target price is based on a discounted cash flow model using the free cash flow to the firm approach. VHC is our sector top pick as the most leveraged to the expected 4Q turnaround in *pangasius* exports given the company's leadership in the important US market.

2Q weak on pandemic and continued fall in export ASPs; 2H momentum into 4Q with inventory restocking in the US and price recovery to pre-pandemic levels Preliminary 2Q earnings fell by 49% YoY to VND215 billion on VND1,630 billion in revenue (down 19% YoY) due largely to: 1) drop in US and China exports after the pandemic negatively impacted food service demand; 2) lower gross profit margin to 20% from 22% last year on the industry–wide drop in export ASPs (falling since mid–2019); and 3) base effect from last year's one–off gain from the *Van Duc Tien Giang* divestment (earnings down 32% YoY excluding this gain). For 2H, we expect recovery to build momentum into 4Q (earnings up 8% YoY in 3Q and up 64% YoY in 4Q) due to: 1) inventory restocking in the US; 2) more strength from the EU (that even saw 1H revenues up 37% YoY despite the pandemic); 3) higher *pangasius* export prices as they slowly return to prepandemic levels; and 4) base effect from 2H 2019's weaker performance.

We estimate a CAGR of 8.4% between 2021E and 2025E to determine our 12-month target price

Over our forecast period, we estimate an earnings CAGR of 8.4% between 2021E to 2025E and expect a 17% YoY rebound in 2021E results after overseas markets recover from the pandemic. Our forecasts assume: 1) overseas markets recover from 4Q (especially the US); 2) additional production from the new *Tan Hung* farm in 2021E to support export volumes; and 3) stronger gross profit margins with initial start of the 50-hectare hatchery (we have yet to reflect the second stage expansion to 100 hectares until construction begins).

We determine our 12-month target prices using DCF valuations 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 Vietnam's fishery companies make our DCF models the preferred method to set our 12-month target prices, especially in light of the severe swings in profitability arising from the cyclicality of the sector's commodity products. 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 as companies upgrade farming methods to satisfy stricter global quality standards.

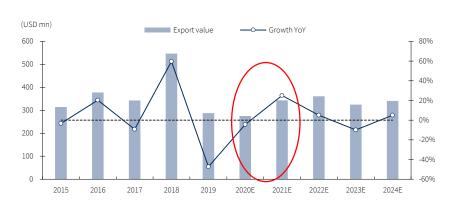
Table 1. Vinh Hoan Corp (VHC) - Valuation (DCF) & target price (VND, %)

Line item	Notation		Notes
WACC	W	10.60%	$(E/(E + D) * k_E) + ((D/(E+D) * k_D * (1-t))$
Cost of equity	k_{E}	11.77%	rf + (β _E * m)
Re-levered beta	₿E	0.982	$B_A(1+((1-t)*D/E))$
Unlevered beta	B_{A}	0.810	Weighted-average sector unlevered beta
Cost of debt	k _D	7.00%	$r_f + (\beta_D * m)$
Debt beta	B_D	0.448	d/m
Assumptions			
Target gearing	D/E	25.00%	Long-term debt/equity ratio
Statutory tax rate	t	15.00%	Marginal corporate tax rate
Debt premium	d	4.00%	Estimated investment grade spread
Market risk premium	m	8.93%	Expected market return - risk free rate
Risk free rate	$\Gamma_{\rm f}$	3.00%	10-year government bond
Terminal value as % of firm value	ue	71.9%	
PV of future cash flows (VNDbn)	2,709	
PV of terminal value (VNDbn)		6,936	
PV of Firm (VNDbn)		9,644	
Total return		34.2%	
Target price (VND)		47,100	
Dividend per share (VND)		2,000	

Source: KB Securities Vietnam

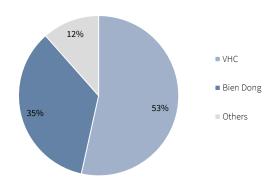
Sector top pick: VHC most leveraged to the turnaround in *pangasius* exports, with a dominating position in the US market We expect VHC to benefit most from the long-awaited turnaround in *pangasius* exports, especially in the important US market. VHC dominates in the US *pangasius* market, securing leadership with superior product quality and premium pricing. This should allow the company to benefit most from resumption of 1Q's inventory restocking that was not only delayed by the coronavirus but will now likely be extended into 2021E. VHC's sales into the US were 53% of Vietnam's total *pangasius* exports into the US in 2019 and makes the company the most recognized supplier among local US wholesalers looking to replenish stocks. With the US market representing about 60% of VHC's total export revenue, we expect the rebound in US exports to drive a strong recovery in sales for 2H 2020E and 2021E.

Fig 1. Vietnam fisheries – Annual *pangasius* export values to the US & growth forecasts, 2015–2024E (million USD, % YoY)



Source: Vietnam Association of Seafood Exporters & Producers, US Department of Agriculture, KB Securities Vietnam

Fig 2. US fisheries – Market share of Vietnamese *pangasius* exporters by value, 2019 (%)



Source: Company reports, KB Securities Vietnam

5

■US ■ China ■ EU ■ Others 13% 15% 17% 20% 20% 20% 6% 11% 13% 13% 20% 16% 20% 20% 10% 2% 68% 60% 58% 58% 57%

2017A

2018A

2019A

Fig 3. Vinh Hoan (VHC) - Revenue breakdown by market, 2014-2019 (%)

2016A

Source: Company reports

2014A

2015A

VHC's premium pricing allowed the company to pass all antidumping reviews

Premium pricing has protected VHC from any risk of antidumping tariffs that has forced the exit of large competitors from the US, like Hung Vuong Corporation (HVG) and Nam Viet Corp (ANV). The company's ability to maintain higher export pricing comes from its ability to meet strict quality standards. With a strong track record (ie, documentation) and having passed all antidumping reviews, we expect VHC to capture the bulk of the rebound in US exports. Most Vietnamese peers struggle with antidumping duties and we believe lengthy antidumping reviews may prevent smaller exporters from entering the US market in time to benefit from rebounding exports.

Table 2. Vietnam fisheries - Final results of antidumping tariffs on pangasius (USD/kg)

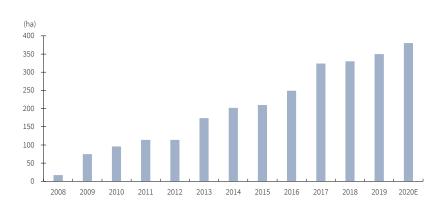
	Period of	VN-	Vinh	Hung	Bien	Nam		Cuu
	review	wide	Hoan	Vuong	Dong	Viet	NTSF	Long
POR 5	2007-2008	2.11	0		0.02		0	
POR 6	2008-2009	2.11	0		0.02		0	
POR 7	2009-2010	2.11	0		0.19		0	
POR 8	2010-2011	2.11	0.13	0.77	0.19	0.77	0.77	
POR 9	2011-2012	2.11	0	1.2	0.19	0.77	0.42	0.42
POR 10		2.39	0	0.97	0.19	0.97	0.97	0.97
POR 11		2.39	0	0.41	0.19	0.69	0.69	0.69
POR 12	2014-2015	2.39	0	0.41	0.19	0.69	0.69	0.69
POR 13	2015-2016	2.39	0	3.87	0.19	0.69	3.87	3.87
POR 14	2016-2017	2.39	0	3.87	0.19	0.69	1.37	1.37
POR 15	2017-2018	2.39	0	3.87	0.19	0.69	0.15	1.37

Source: US Department of Commerce

Embracing global quality standards ahead of the EVFTA

We estimate that about 80% of VHC's farming ponds are certified by one of the three global standards (ASC – Aquaculture Stewardship Council, BAP – Best Aquaculture Practices, or GlobalG.A.P. – Global Good Agricultural Practice). Management's longer–term strategic focus continues to be 100% certification for all internally–sourced production, especially for the new 220 hectares at the *Tan Hung* farms. Certifications and management's commitment to global quality standards should give VHC a distinct advantage in the EU market that is sensitive to food safety and environmental sustainability. Certifications also support new product lines like VHC's *Vinhwellness* brand that launched the world's first ASC–certified Collagen Supplement (a by–product of *pangasius* processing) in Sweden in October 2019. VHC's revenue from wellness products (collagen and gelatin) saw 24% YoY growth in 1H20 despite the pandemic.

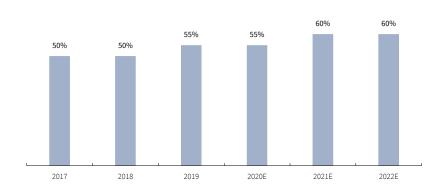
Fig 4. Vinh Hoan (VHC) – Farming area certified to at least one global standard, 2008–2020E (hectares)



Source: Company reports, KB Securities Vietnam

Also boosting internal sourcing to boost GPMs and upgrade farming methods to global standards VHC is also increasing internal sourcing by slowly expanding farming sites to strengthen supply chain management and expand gross profit margins. About half of the new *Tan Hung* site's 220 hectares should be ready for farming in 2020E, with the remaining ponds available in 2021E after alum treatments are complete. Importantly, the 50-hectare hatchery complex will give VHC the ability to internally source about 30% of its fingerling needs from zero previously to complete the production chain, improve cost competitiveness and meet global quality standards. We expect internally-sourced production to reach 55% in 2020E and increase to 60% from 2021E when the *Tan Hung* farm is fully operational.

Fig 5. Vinh Hoan (VHC) - Internal supply percentage, 2017-2022E (%)



Source: Company reports, KB Securities Vietnam

Fig 6. Vietnam fisheries – Monthly *pangasius* export values to the US & growth, Jan 2019–June 2020 (million USD, % YoY)



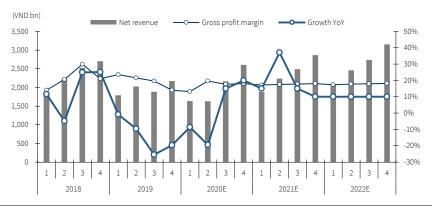
Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Fig 7. Vietnam – Monthly pangasius export values to the EU & growth, Jan 2019–June 2020 (million USD, % YoY)



Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Fig 8. Vinh Hoan (VHC) – Quarterly revenue, growth & gross profit margin forecasts, 2018–2022E (billion VND, %)



Source: Company reports, KB Securities Vietnam

Long-Awaited *Pangasius* Turnaround in 4Q

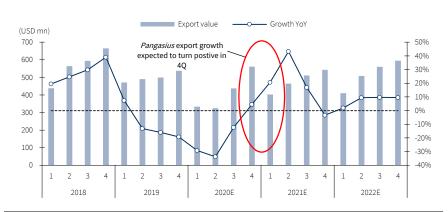
NEAR-TERM OUTLOOK: Our expectations for export growth to turn positive in 4Q should be an important catalyst for *pangasius* exporters The return to positive growth for exports will be a key catalyst for Vietnam's pangasius exporters and we estimate this inflection point will be hit in 4Q. After recording 27% growth during 2018's boom year, exports have been falling continuously since March 2019 and kept skepticism high for any turnaround in share price performance. But several factors are currently at work – including steady volume recovery, price stability and the waning base effect – that should drive a sharp improvement in sentiment and reverse the near two-year slump. Bad weather at the beginning of 2018 led to a shortage of fingerlings (baby fish), severe shortfall in whole fish material for processing plants and surge in prices that initially kicked off a bonanza for pangasius farmers but also quickly pushed the market into oversupply by the end of 2018 when record prices led to a boost in production.

EXPORT VALUES: Two important milestones

Two important milestones likely reached as early as 3Q

The coronavirus has led to a deeper contraction in exports in 1H, falling by 32% YoY after volumes contracted by 12% YoY and prices plunged by 22% YoY. But our estimates show that volumes are recovering at a sufficient pace and prices have reached stable enough levels to return exports to positive growth by 4Q. Two important milestones will be reached as early as 3Q according to our calculations: 1) export volumes should stop falling and register flat YoY growth; and 2) export prices should bottom out and begin to trend higher from 4Q.

Fig 9. Vietnam fisheries – Quarterly *pangasius* export values & growth forecasts, 2018– 2022E (million USD, % YoY)



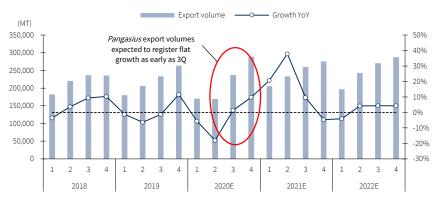
 $Source: \textit{Agromonitor}, Vietnam \ Association \ of \ Seafood \ Exporters \ \& \ Producers, KB \ Securities \ Vietnam$

9

EXPORT VOLUMES:

Export volumes should stop falling as early as 3Q led by China recovery and US inventory restocking and then turn positive in 4Q led by the EU on the EVFTA Our most recent data point is the preliminary June number from Vietnam's customs office and only China has shown signs of recovery as the first large overseas market to reopen its economy (all other major markets continued to register negative growth). This should change from 3Q but the pace of recovery will likely differ by market. We expect US recovery to join China led by inventory restocking in 3Q followed by renewed growth from the EU in 4Q with the start of the EU-Vietnam Free Trade Agreement (EVFTA).

Fig 10. Vietnam fisheries – Quarterly *Pangasius* export volumes & growth forecasts, 2018–2022E (metric tons, % YoY)



Source: Agromonitor, KB Securities Vietnam

EXPORT PRICES:

Export prices should also bottom out in 3Q and then trend higher

We expect overall export prices to bottom out in 3Q and trend higher from 4Q when the better pricing environment in China and the EU become more clearly evident in 4Q. China's tight inspection standards for seafood imports due to the coronavirus should last until 3Q and extend price weakness for only one more quarter before being relaxed to support price recovery in 4Q. Moreover, prices for EU exports should benefit from the start of the EU–Vietnam Free Trade Agreement (EVFTA) in August that will reduce tariffs and improve the price competitiveness of Vietnam's *pangasius* exports by 4Q.

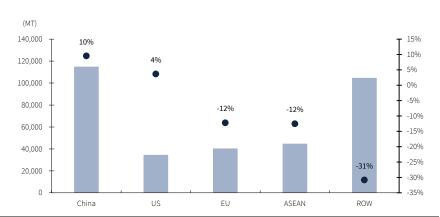
Fig 11. Vietnam fisheries – Quarterly *Pangasius* export prices & growth forecasts, 2018–2022E (USD/kg, % YoY)



Source: Agromonitor, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

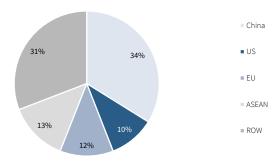
EXPORT VOLUMES BY MARKET: Volumes in the US and China have been more resilient but collapsed in the EU, ASEAN and rest of the world Export volumes to the US and China have proven resilient – and maintained positive growth in 1H despite the pandemic – with most of the hit to export volumes coming from the EU, ASEAN and the rest of the world. The US and China together now make 44% of volumes or close to half of Vietnam's total export volumes and are, in our view, the most promising markets for recovery, followed by the EU, with markets in ASEAN and the rest of the world likely to recover into 2021E.

Fig 12. Vietnam fisheries – *Pangasius* export volumes by market & growth, 1H20 (metric tons, % YoY)



Source: Agromonitor, KB Securities Vietnam

Fig 13. Vietnam fisheries - Pangasius export volume breakdown by market, 1H20 (%)



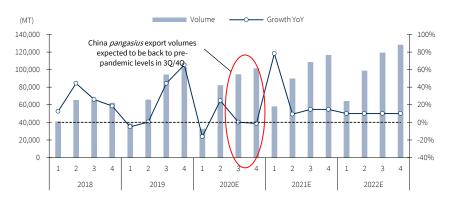
Source: Agromonitor, KB Securities Vietnam

11

China already starting to recover with reopening of the economy

China volumes have already turned positive in 2Q as the first major market to reopen its economy. China is the one market clearly hit by the coronavirus given attractive growth in the past few years alongside greater use of *pangasius* in China's restaurant industry. We expect China to be the first market to resume pre-pandemic trends and believe volumes will rebound quickly to 2019 levels in 3Q and 4Q.

Fig 14. Vietnam fisheries – Quarterly *pangasius* export volumes to China & growth forecasts, 2018–2022E (metric tons, % YoY)

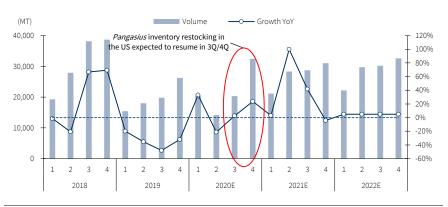


Source: Agromonitor, KB Securities Vietnam

Reopening and restocking to drive export volumes to the US market

Reopening of the US market should see demand pickup from the food services industry as well as inventory restocking from wholesalers. Demand from the US market is split between the food services industry and retail (ie, supermarkets) sold via wholesalers. We expect both areas to recover alongside the reopening of the economy. Of these, US wholesalers were already restocking inventories from 1Q after running down stockpiles bought in 2019 due to concerns over a US-China trade war. We expect this – and delayed purchases during 2Q's usually stronger seasonality – to support volumes in 3Q and continue into 4Q's holiday season (the seasonally strongest quarter).

Fig 15. Vietnam fisheries – Quarterly *pangasius* export volumes to the US & growth forecasts, 2018–2022E (metric tons, % YoY)

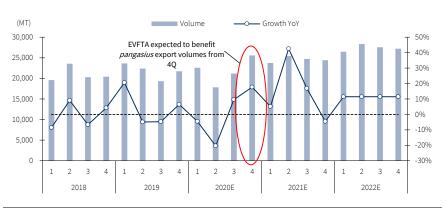


Source: Agromonitor, US Department of Agriculture, KB Securities Vietnam

EVFTA should help stop the downtrend in EU volumes

We expect the EU-Vietnam Free Trade Agreement (EVFTA) to help stop the downtrend in EU export volumes, with tariffs dropping to 4.1% from 5.5% in 2020E and eliminated by 2023E. Benefits will not be limited to improving the price competitiveness of Vietnam's exports but the EVFTA should also overcome issues related to rules of origin, food safety and environmental sustainability. Most of the benefit from the EVFTA should be realized in 4Q, when we expect export volumes to the EU to regain momentum.

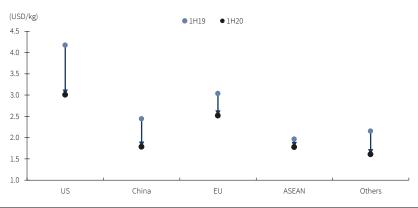
Fig 16. Vietnam fisheries – Quarterly *pangasius* export volumes to the EU & growth forecasts, 2018–2022E (metric tons, % YoY)



Source: Agromonitor, KB Securities Vietnam

EXPORT PRICES BY MARKET: Some delays from coronavirus but export prices have fallen to more sustainable levels Export prices have stabilized to more sustainable levels after falling precipitously from 2018's record highs. Prices have largely overcome the negative effects of 2018's *pangasius* shortages that caused prices to surge in 2018 and then crash in 2019 after the spike in prices led to over–farming and oversupply. Moreover, inventories in the US market are back in balance after stockpiling on US–China trade war concerns bloated inventories and extended the downturn in prices.

Fig 17. Vietnam fisheries – *Pangasius* export prices by market, 1H19–1H20 (USD/kg)



Source: Agromonitor, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

2024F

(USD/kg) Price ------ 5-year average

3.0
2.5
2.0
1.5
1.0
0.5

2019

2020F

2021F

2022F

Fig 18. Vietnam fisheries - Pangasius overall export prices, 2015-2024E (USD/kg)

Source: Agromonitor, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

2018

0.0

2015

2016

2017

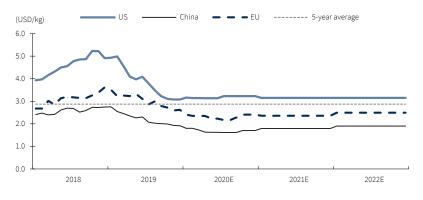
Some delays from coronavirus but export prices have fallen to more sustainable levels

China pricing: ASPs are usually 30%–40% lower than the US and 20%–30% lower than the EU market due to: 1) lower transportation and inspection costs; and 2) lower farming costs with less stringent environmental and food safety requirements. With demand already coming back in China, we expect export prices to move higher from 4Q when China relaxes the current tight inspections due to the coronavirus.

US pricing: Offering the highest ASPs due to: 1) high proportion of more processed frozen fillets; 2) strict environmental and food safety regulations; and 3) less room to cut pricing amid anti-dumping concerns. Vietnam's *pangisius* exporters have been closely monitored by customs officials since 2003 for unfair pricing and pay heavy antidumping duties compared to the country's shrimp exports (except for the top 2 exporters that pay none or marginal duties). This prevents most from undercutting export prices or has forced exit of some from the US market. Inventories from 2019's stockpiling of *pangasius* ahead of the US-China trade war have been largely responsible for the extended weakness in US export prices. But with excess inventory drawn down and restocking well underway prior to the pandemic – and only pausing during social distancing – we expect export prices to slowly trend higher in 3Q and 4Q.

EU pricing: ASPs are highly sensitive to environmental and food safety issues but also weaker demand and competition from other types of white fish (eg, haddock and Alaskan pollock). The waning popularity of *pangasius* and criticism of farming methods (ie, environmental sustainability) led to weaker export pricing trends in the EU compared to China and the US prior to the pandemic. That said, we estimate that near–term pricing will benefit from 2020E's scheduled tariff cut to 4.1% from 5.5%, with most of this increase expected for 4Q.

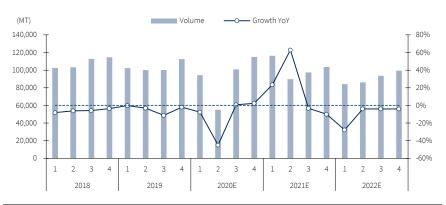
Fig 19. Vietnam fisheries - Pangasius export prices by market, 2018-2022E (USD/kg)



Source: International Trade Centre, US Department of Agriculture , Eurostat, KB Securities Vietnam

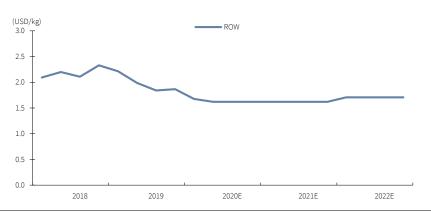
ROW: ASEAN, the Middle East and Latin America will probably not recover until 2021E We do not expect recovery for exports to the rest of the world until 2021E when the pandemic comes under better control given the severity of volume contraction seen in 1H. The main regions within the rest of world category are the ASEAN countries (mainly Singapore and Malaysia), the Middle East and Latin America. Export volumes to ASEAN were down 15% YoY, the Middle East were down nearly 30% YoY and Latin America were down close to 40% YoY. One encouraging sign, however, is that markets in this category have witnessed stable prices which should bode well for recovery when volume demand picks up again.

Fig 20. Vietnam fisheries – Quarterly *pangasius* export volumes to rest of the world & growth forecasts, 2018–2022E (metric tons, % YoY)



Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

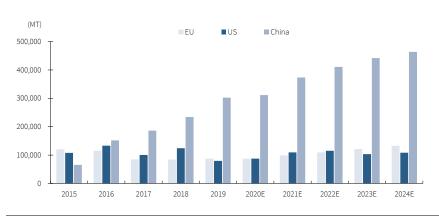
Fig 21. Vietnam fisheries – *Pangasius* export prices to rest of the world, 2018–2022E (USD/kg)



Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

MID- TO LONG-TERM OUTLOOK: Vietnam's three major overseas markets - the US, China & EU should continue recovery into 2021E We expect 2020E's turnaround in exports to gain momentum from 2021E for all of Vietnam's major overseas markets. China should resume pre-pandemic trends and see a pickup in demand from the important food service segment (most demand from China is from the restaurant industry). Inventory overhang in the US has cleared and restocking will probably continue into 2021E, while food service demand should continually improve as the US economy normalizes. August's official start of the EU-Vietnam Free Trade Agreement (EVFTA) should not only improve price competitiveness but should also help facilitate a sustainable turnaround in the EU market by resolving issues related to environmental sustainability and food safety. We estimate 2021E export volumes to increase by 20% to China vs our 2020E growth estimate of 3%; 25% to the US vs our 2020E growth estimate of 10%; and 13% to the EU vs our 2020E estimate for flat growth.

Fig 22. Vietnam fisheries – *Pangasius* export volume forecasts by market, 2015–2020E (metric tons)



Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Reduced farming has also vastly improved supply dynamics to maintain stable pricing

Vietnam's supply situation has vastly improved and should translate into a more pronounced rebound in export values from 2021E onwards. Farming output remains at depressed levels and we expect the greater use of internally—sourced fish stocks, food safety and environmental issues to lead to a more measured ramp up in production over the next cycle. This should go a long way to keep export prices stable throughout our forecast period, while gradually increasing export volumes to boost overall export values over the mid—to long—term and avoid repeating the mistakes of 2018. We estimate that Vietnam's export values will increase by 12% in 2021E and average about 5%—6% growth in the coming years vs our expectations for minus 15% growth in 2020E.

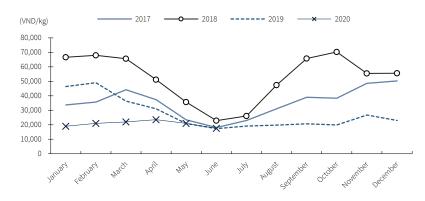
Fig 23. Vietnam fisheries – *Pangasius* export value forecasts & growth forecasts, 2010–2024E (million USD, % YoY)



Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Weak fingerling feedstock prices the bellwether for local farming activities Fingerling (baby fish) prices are currently at four-year lows and signal weak farming activities and the apprehension of local producers to increase fish stocks. We believe this primarily reflects limited financial resources to boost production amid the uncertain demand outlook that has deteriorated further due to the coronavirus. This bodes well for pricing into 2021E and we expect the pickup in demand will initially outpace the ability of local *pangasius* farmers to increase output and keep supply tight during the upturn. It takes about six months to grow a fingerling to a mature fish.

Fig 24. Vietnam fisheries – Price of *pangasius* fingerlings (size 30 pieces/kg), Jan 2017–Jun 2020 (VND/kg)



Source: Agromonitor

New farming sites will be ready for production by 2021E

The *pangasius* harvest should see positive growth in 2021E when new farms are ready for production. Major *pangasius* processors initiated sizable investments from 2018 to cut raw material costs and internally–source more fish supplies by expanding farming areas (Nam Viet: 600ha; and Vinh Hoan 220ha). Most of these projects will be complete by 2021E and we estimate the new farming sites will be primarily dedicated to exports and add about 10% to Vietnam's overall *pangasius* production in 2021E.

Fig 25. Vietnam fisheries – *Pangasius* farming area & liveweight harvest forecasts, 2011–2021E (hectares, thousand metric tons)

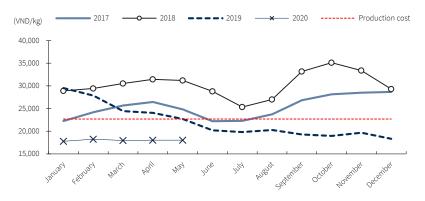


Source: Ministry of Agriculture & Rural Development, KB Securities Vietnam

Price recovery should also revitalize fallow ponds to boost harvests

Farmers have been willing to sell raw fish to processing plants at about 15% below costs since mid–2019. This comes after most farms reduced crop sizes and were forced to sell fish as soon as they reached minimum maturity to recoup feed costs. Most ponds remain empty or have switched to shrimp farming where prices have been more resilient. Consequently, we expect higher pangasius selling prices to revitalize fallow fish farms and boost overall harvests.

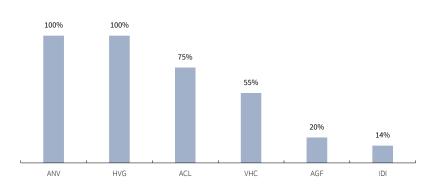
Fig 26. Vietnam fisheries – Raw mature *pangasius* selling prices (size 700 grams/piece) & production costs, Jan 2017–May 2020 (VND/kg)



Source: Agromonitor

But greater use of in-house production should keep the pace of output increases in check Vietnam's *pangasius* exporters are moving to in-house production to better control output and cut raw material costs. This trend is also to overcome the difficulty of tracking raw fish from third-party suppliers needed to receive global quality certifications. Internal supply allows processors to meet strict requirements for food safety, environmentally-approved farming methods and rules of origin for the US and EU markets. We expect the greater reliance on internally-sourced raw fish – and the heavy capital expenditure for *pangasius* processors – to keep the pace of output increases in check.

Fig 27. Vietnam fisheries – Percentage of internal supply at major *pangasius* exporters, 2019 (%)



ANV = Nam Viet Corp (ANV); HVG = Hung Vuong Corp (HVG); ACL = Cuu Long Fish (ACL); VHC = Vinh Hoan Corp (VHC); AGF = Angiang Fisheries Import Export (AGF); & IDI = International Development & Investment Corp (IDI) Source: Company reports, KB Securities Vietnam

CHINA 2021E & BEYOND: Attractive penetration of the China market should resume from 2021E onwards

The coronavirus impacted China exports in 2020E and stalled penetration rates but we expect this market to revert back to pre-pandemic trends from as early as 2021E and retain its leading role as a large-volume market. *Pangasius* quickly gained popularity from Chinese consumers as a high quality white fish sold mainly through restaurants (eg, hot pot). Frozen fillets and butterflied whole fish are also competitively priced at about USD1.60 per kilogram. *Pangasius* was first introduced to the China market in small volumes at higher prices before wider acceptance allowed Vietnam's exporters to drop prices to boost volumes significantly from March 2019. China became Vietnam's largest *pangasius* market in 2019 after strong volume demand from restaurants led to a CAGR of 53% when popularity first grew between 2015 and 2018.

Fig 28. Vietnam fisheries – Monthly *pangasius* export volumes to China & prices, Jan 2016–May 2020 (metric tons, USD/kg)

"Higher price, low volume" early acceptance phase

→ Pangasius begins to gain widespread popularity among Chinese consumers as a competitively-priced, high-quality white fish

March-December 2019:

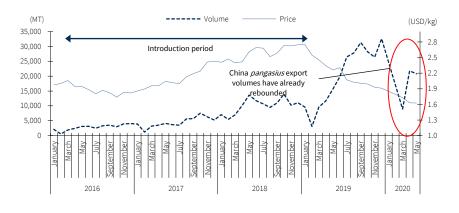
Prior to March 2019:

"High volume, lower price" penetration phase

→ Exporters cuts prices to significantly boost volumes to penetrate further into this large-volume market

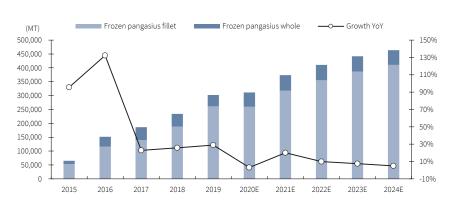
January 2020-now:

COVID-19 pandemic negatively impacted restaurant demand from China and exports



Source: International Trade Centre, KB Securities Vietnam

Fig 29. Vietnam fisheries – *Pangasius* export volumes to China & growth forecasts, 2015–2024E (metric tons, % YoY)



Source: International Trade Centre, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

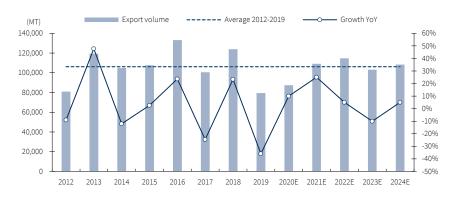
20

US 2021E & BEYOND

Growing popularity to restore US market volumes to pre-pandemic levels by 2021E and drive longer-term growth

With inventory overhang largely resolved in the US market by 2020E, restocking should continue into 2021E as the pandemic delays top-up buying this year. Together with ongoing recovery in the food services industry, we estimate that export volumes could reach about 109,000 metric tons in 2021E (+25% YoY) or back to average levels seen between 2012 and 2019. Moreover, anti-dumping tariffs for major *pangasius* exporters – Vinh Hoan (VHC) and Bien Dong (unlisted) – are currently near zero and should not interfere with any rebound in exports. Other than the difficulties with anti-dumping – and the one area that will need to be closely monitored – we expect growing popularity of *pangasius*, better food safety and price competitiveness against US-cultivated cat fish to sustain mid– to long–term growth in the US market.

Fig 30. Vietnam fisheries – Annual *pangasius* export volumes to the US & growth forecasts, 2012–2024E (metric tons, % YoY)



Source: Agromonitor, US Department of Agriculture, KB Securities Vietnam

Fig 31. Vietnam fisheries – Monthly *pangasius* export volumes to the US & prices, Jan 2019–Apr 2020 (metric tons, USD/kg)



Source: US Department of Agriculture, KB Securities Vietnam

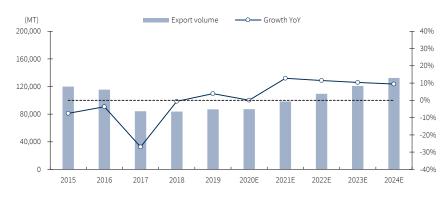
21

EU 2021E & BEYOND

EVFTA provides big opportunity to rebuild the reputation of Vietnam's *pangasius* exports

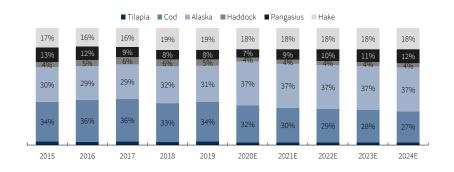
The EVFTA will require Vietnam to adhere to strict food safety and environmental standards and we believe this provides a big opportunity to restore the media–damaged image of *pangasius* exporters and improve exports from 2021E. European consumers have been apprehensive in buying *pangasius* due to the perception that the fish are inferior and grown in unhygienic conditions using farming methods that are harmful to the environment. We believe tighter safety requirements from the EVFTA and greater commitment by Vietnam's *pangasius* exporters to receive global certifications could help repair their reputation and reverse the fall in market share that has been shrinking against other white fishes since 2010. Near–term, we expect *pangasius* exports to benefit from the gradual reduction of the 5.5% import tariff that will drop to 4.1% in 2020E before being ultimately eliminated by 2023E.

Fig 32. Vietnam fisheries – *Pangasius* export volumes to the EU & growth forecasts, 2015–2024E (metric tons, % YoY)



Source: Agromonitor, Eurostat, KB Securities Vietnam

Fig 33. EU fisheries - Whitefish import volumes by species, 2015-2024E (%)



Source: Eurostat, KB Securities Vietnam

Vinh Hoan Corp (VHC) – Discounted cash flow model

DCF VALUATION

			Terminal v	value (VND in	billions)				Terminal v	value (US\$ in	millions)	
	•	8,200	9,840	11,480	13,120	14,760	-	357	428	499	570	642
			Prese	ent value of f	irm				Presi	ent value of f	irm	
	WACC	5.0x	6.0x	7.0x	8.0x	9.0x	-	5.0x	6.0x	7.0x	8.0x	9.0>
-	8.6%	8,136	9,222	10,307	11,393	12,478	-	351	398	445	492	540
	9.6%	7,893	8,930	9,967	11,004	12,040		340	385	430	475	521
	10.6%	7,663	8,654	9,644	10,635	11,626		330	373	416	459	503
	11.6%	7,445	8,392	9,339	10,286	11,234		321	362	403	444	485
-	12.6%	7,238	8,144	9,050	9,956	10,862	-	312	351	391	430	469
			Present va	ue of equity	per share				Present va	lue of equity	per share	
	WACC	5.0x	6.0x	7.0x	8.0x	9.0x	-	5.0x	6.0x	7.0x	8.0x	9.0
=	8.6%	38,900	44,800	50,800	56,700	62,600	-	1.70	1.90	2.20	2.40	2.70
	9.6%	37,600	43,200	48,900	54,600	60,200		1.60	1.90	2.10	2.40	2.60
	10.6%	36,300	41,700	47,100	52,500	58,000		1.60	1.80	2.00	2.30	2.50
	11.6%	35,100	40,300	45,500	50,600	55,800		1.50	1.70	2.00	2.20	2.40
_	12.6%	34,000	39,000	43,900	48,800	53,800	-	1.50	1.70	1.90	2.10	2.30
Projected Unlevered Free Cash	n Flows											
(VNDbn)	2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025
EBIT	416	432	686	761	1,685	1,132	1,022	1,220	1,372	1,541	1,676	1,77
Taxes on EBIT @ 15.0%	62	65	103	114	253	170	153	183	206	231	251	266
Earnings before interest	354	368	583	647	1,433	963	869	1,037	1,166	1,309	1,425	1,50
Depreciation & provisions	117	139	144	198	144	162	187	231	235	239	240	24
(Profit)/loss from investing	-210	-51	-33	-30	-42	-221	-81	-81	-81	-81	-81	-8
Other adj for oper activities	222	71	-29	-169	-291	45	-214	-20	-23	-25	-27	-2
Cash flow from operations	483	527	665	646	1,243	949	761	1,166	1,298	1,442	1,558	1,640
Change in working capital	-528	-335	308	-160	-573	323	-671	-93	-299	-329	-271	-194
Capital expenditures	-484	-287	-334	-489	-22	-349	-546	-271	-276	-281	-287	-29
Decrease in investments	6	-18	2	16	-388	388	0	0	0	0	0	(
Unlevered free cash flow	-524	-112	641	13	260	1,312	-456	802	723	832	1,000	1,153
Forecasted exchange rate	21,388	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)	-24	-5	28	1	11	57	-20	34	31	35	42	49
Firm Value Calculations												
WACC	10.6%		PV of future	e cash flows ((VNDbn)	2,709		2020E Tota	l debt (VNDb	on)		1,23
DCF period	5 Yrs			nal value (VN		6,936		2020E Cash				23
Terminal EBITDA (VNDbn)	1,640		PV of Firm			9,644			lue as % of f	irm value		71.9%
Terminal multiple (x)	7.0x			:hange rate (\	/ND)	23,000			ires outstand			183.4
Cost Of Capital Calculations												
WACC	10.6%		Re-levered	beta		0.982		Risk free ra	te			3.09
Cost of equity	11.8%		Debt beta			0.448		Market risk	premium			8.9%
Cost of debt	7.0%		Unlevered b	oeta		0.810		Target gear	ing			25.0%
			Statutory c	orporate tax	rate	15.0%		Debt premi	um			4.0%
Memorandum												
(VNDbn, USDmn)	2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025
Discount Factor	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.16	1.28	1.42	1.57	1.74
Present value in VND	0	0	0	0	0	0	-435	692	564	587	637	664
Present value in US\$	0	0	0	0	0	0	-19	30	24	25	27	28
ource: Company reports, KB Se	curities Vietr											

Vinh Hoan Corp (VHC) – Summarized financials & forecasts, 2019–2022E

Income statement (VNDbn)	2019A	2020E	2021E	2022E	Balance sheet (VNDbn)	2019A	2020E	2021E	2022E
Net sales	7,867	8,036	9,472	10,419	Total assets	6,612	7,656	8,468	9,101
Cost of sales	6,334	6,647	7,795	8,557	Current assets	4,611	5,302	6,079	6,663
Gross Profit	1,533	1,389	1,677	1,862	Cash & equivalents	86	233	435	461
Financial income	251	175	161	161	ST investments	1,492	1,285	1,650	1,808
Financial expenses	90	106	94	100	Accounts receivable	1,516	1,942	1,981	2,179
of which: interest expenses	60	54	62	64	Inventory	1,414	1,699	1,869	2,056
Gain/(loss) from joint ventures	14	0	0	0	Other current assets	103	142	145	159
Selling expenses	252	211	302	332	Long-term assets	2,001	2,354	2,388	2,438
General & admin expenses	149	156	156	157	LT trade receivables	6	3	3	
Operating profit/(loss)	1,308	1,090	1,287	1,434	Fixed assets	1,447	1,928	1,972	2,028
Other income	12	5	0	0	Investment properties	0	0	0	(
Other expense	11	12	0	0	LT incomplete assets	392	257	254	240
Net other income/(expenses)	1	(7)	0	0	LT investments	1	1	1	
Pretax profit/(loss)	1,309	1,084	1,287	1,434	Goodwill	40	34	28	23
Income tax	130	119	154	172	Other LT assets	114	130	129	142
Net profit/(loss)	1,179	965	1,133	1,262	Liabilities	1,735	2,175	2,397	2,402
Minority interests	0	0	0	0	Current liabilities	1,716	2,145	2,364	2,365
Net profit after MI	1,179	965	1,133	1,262	Trade accounts payable	440	462	521	573
Net profit after Mil	1,177	703	1,133	1,202	Advances from customers	20	28	25	27
Operation vation									1,233
Operating ratios (%)	2019A	2020E	2021E	2022E	ST borrowings Special reserves	866 33	1,233 20	1,333 20	1,233
					•				
Revenue growth	(15.1)	2.1	17.9	10.0	Other current liabilities	357	402	465	512
EBIT growth	(32.8)	(9.8)	19.3	12.5	Long-term liabilities	19	30	33	36
EBITDA growth	(29.5)	(5.8)	18.7	10.8	LT payables	0	0	0	(
NP after MI growth	(18.2)	(18.2)	17.4	11.4	LT borrowings	0	0	0	(
Gross profit margin	19.5	17.3	17.7	17.9	Other LT liabilities	19	30	33	30
EBITDA margin	16.5	15.2	15.3	15.4	Shareholders' equity	4,877	5,480	6,070	6,699
EBIT margin	14.4	12.7	12.9	13.2	Paid-in capital	1,834	1,834	1,834	1,834
Pre-tax profit margin	16.6	13.5	13.6	13.8	Share premium	224	224	224	224
Net profit margin	15.0	12.0	12.0	12.1	Treasury stock	(114)	(114)	(114)	(114
					Undistributed earnings	2,932	3,535	4,125	4,754
Cash flow					Reserve & others	0	0	0	0
(VNDbn)	2019A	2020E	2021E	2022E	Minority interests	2	2	2	2
Net profit	1,179	965	1,133	1,262	Total liabilities & equity	6,612	7,656	8,468	9,101
Plus: depreciation & amort	162	187	231	235					
Plus: investing (profit)/loss	(221)	(81)	(81)	(81)	Key ratios				
Change in working capital	323	(671)	(93)	(299)	(x, %, VND)	2019A	2020E	2021E	2022
(Inc)/dec - receivables	481	(423)	(39)	(198)	Valuations				
(Inc)/dec - inventory	(28)	(285)	(170)	(187)	P/E	5.7	7.0	5.9	5.3
(Inc)/dec - other curr assets	(1)	(38)	(3)	(14)	P/E diluted	5.6	6.9	5.8	5.2
Inc/(dec) - payables	(98)	22	59	52	P/B	1.4	1.2	1.1	1.0
Inc/(dec) - advances	9	8	(3)	2	P/S	0.9	8.0	0.7	0.6
Inc/(dec) - other curr liab	(39)	45	63	47	EV/EBITDA	5.2	5.5	4.6	4.2
Other adj for operations	71	(29)	(169)	(291)	EV/EBIT	5.9	6.6	5.5	4.9
Operating cash flow	1,489	186	1,169	1,094	Dividend yield, ordinary (%)	2.8	5.5	8.2	9.6
ST investments	(884)	206	(365)	(158)	EPS	6,430	5,262	6,176	6,88
Capital expenditures	(349)	(546)	(271)	(276)	BVPS	26,597	29,886	33,103	36,53
Investment properties	0	0	0	0	SPS	42,901	43,823	51,651	56,81
Investment in subsidiaries	388	0	0	0	DPS (annual, ordinary)	1,023	2,000	3,000	3,50
Other assets	(43)	(10)	7	(8)	Dividend payout ratio (%)	15.7	37.5	47.9	50.
Other adj for investments	144	310	118	98	Operating performance	23,7	37.3	.,,,	50.
Investing cash flow	(743)	(39)	(511)	(344)	ROE	26.5	18.6	19.6	19.
Free cash flow	1,140	(360)	898	818	ROA	18.3	13.5	14.0	14.
Issuance/(repayment) of debt	1,140	(300)	0	0	ROIC	23.1	18.0	19.6	20.
ST debt	(403)	367	100	(100)	Financial structure	23,1	10.0	13.0	۷٠.
						75.7	70 7	70 F	7.
Other liabilities	(13)	11	3	3	Total liab/equity	35.6	39.7	39.5	35.9
Issuance/(retirement) of equity	910	(7.62)	(5.47)	0	Net debt/equity	16.0	18.2	14.8	11.
Dividends paid	(185)	(362)	(543)	(633)	Current ratio (x)	2.7	2.5	2.6	2.8
Less: changes in equity	(1,042)	0	(0)	(0)	Interest coverage (x)	19.0	19.0	19.8	21.
Other adj for financing	31	(15)	(17)	5	Activity ratios				
Financing cash flow	(703)	0	(457)	(725)	Asset turnover	1.2	1.1	1.2	1.
Net increase in cash & equivalents	43	147	202	26	Receivables turnover	4.5	4.6	4.8	5.0
Cash & equivalents - beginning	43	86	233	435	Inventory turnover	5.6	5.2	5.3	5.

Source: Company reports, KB Securities Vietnam

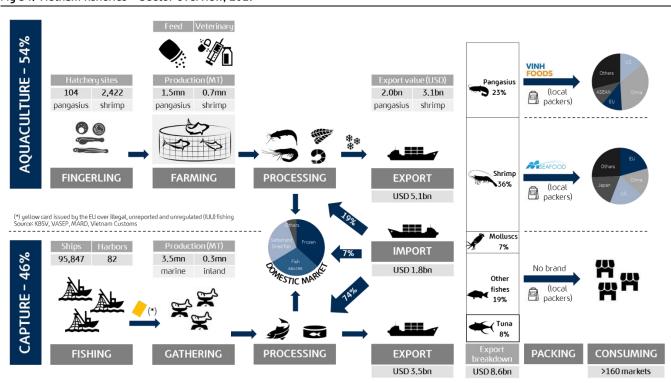
Appendix

Vietnam's fishery industry is undergoing meaningful changes that will change the nature of the upcoming cycle Vietnam's fishery sector is transforming from basic commodity-goods suppliers of frozen and semi-processed fishery products to prepared consumer products able to meet strict global quality standards. Infrastructure investments are currently underway that will upgrade farming methods to meet global specifications for rules of origin, food safety and environmental sustainability. Main growth drivers include: 1) rising global fish consumption; 2) increase in aquaculture production, especially new facilities to meet global standards; and 3) trade deals to further Vietnam's global economic integration.

Vietnam exports about 40% of its fishery production to overseas markets

Vietnam's fishery industry is split between aquaculture at about 54% of production and live capture at 46%. Aquaculture primarily focuses on farming of *pangasius* (about 1.5 million metric tons per year) and shrimp (about 0.7 million metric tons per year) and includes hatcheries to breed fingerlings, farming ponds to grow fish to maturity, local feed producers and processors to clean, peel, fillet and package fish for domestic consumption (fresh) and exports (frozen). Exports are usually sold to wholesalers and distributed to consumers via local distribution networks or under local brands. Branded exports are limited to VHC's *VinhFoods* for *pangasius* and MPC's *MSeafood* for shrimp sold directly to consumers in the US and Japan. Vietnam's live capture production consists of small companies or individual boat owners that sell catches to individually-owned processors for domestic distribution or export.

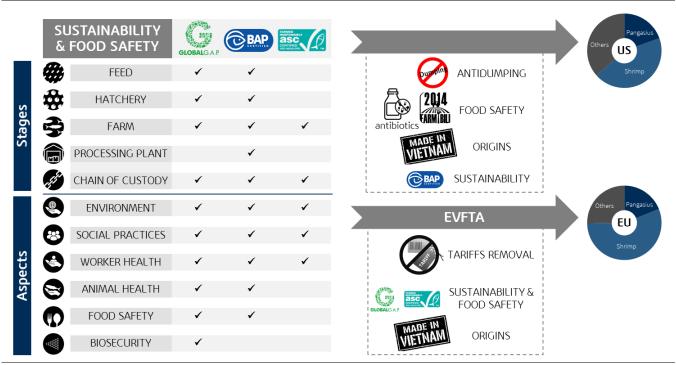
Fig 34. Vietnam fisheries - Sector overview, 2019



Source: Vietnam Association of Seafood Exporters & Producers, Ministry of Agriculture & Rural Development, Vietnam Customs, KB Securities Vietnam

Vietnam is adopting new farming methods to meet global standards for rules of origin, food safety and environmental sustainability The popularity of *pangasius* peaked in overseas markets in 2011 when many consumers were attracted to the low price and texture of the white fish. This changed after consumer groups raised questions on food safety (antibiotics, feed quality and use of wild stock for culturing) and environmental sustainability of open-cage farming methods in the Mekong Delta (disease outbreaks and infections of wild populations). Shrimp has also seen concerns on food safety (antibiotics), rules of origin (exports of Indian shrimp into the US to bypass tariffs) and antidumping investigations. Food safety impacted US exports the most, while environmental sustainability issues have affected shipment volumes to the EU. To overcome these issues, Vietnam's fisheries sector is increasing the use of aquaculture to upgrade farm operating and environmental standards to meet global requirements for rules of origin, food safety and environmental sustainability. Vietnam's major exporters are initially targeting ASC certification requirements (Aquaculture Stewardship Council) by focusing on the greater use of inland farming ponds and chain of custody for fish stocks via stricter documentation. Many are also internally-sourcing more production by cultivating fingerlings in their own hatcheries and purchasing raw material from overseas markets to produce their own feed meal to meet the more stringent requirements for BAP (Best Aquaculture Practices) and GlobalG.A.P. (Good Agricultural Practice) certifications. The BAP certification is recognized in the US, while the EU market uses the ASC and GlobalG.A.P. certifications. Moreover, US anti-dumping investigations are tightening the rules of origin needed to track costs for anti-dumping tariffs and countervailing duties. The start of the EVFTA will also require tougher enforcement of the rules of origin to qualify for tariff exemptions under the trade deal.

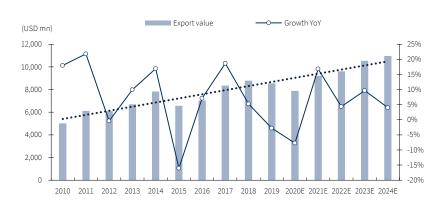
Fig 35. Vietnam fisheries - Global quality standards, 2019



Source: Global Good Agricultural Practices (GlobalG.A.P.), Aquaculture Stewardship Council (ASC), Best Aquaculture Practices (BAP), KB Securities Vietnam

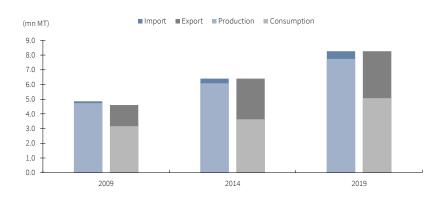
We expect Vietnam's fishery exports to grow at a 5.1% CAGR between 2020E and 2024E The coronavirus will likely cause Vietnam's fishery exports to fall by 7.7% YoY for 2020E to USD7.9 billion according to our estimates. But over our full forecast period, we expect Vietnam's fishery exports to grow at a 5.1% CAGR between 2020E-2024E. This compares to the 4.3% CAGR for exports between 2012 and 2019 and the minus 2.5% YoY performance in 2019 after exports fell to USD8.5 billion from 2018's record high. Exports have grown to 41% of domestic production based on 2019's live weight statistics compared to 30% in 2009.

Fig 36. Vietnam fisheries – Total fishery export value & growth forecasts, 2010–2024E (million USD, % YoY)



Source: Vietnam Customs, KB Securities Vietnam

Fig 37. Vietnam fisheries – Fishery balance by live weight, 2009–2019 (million metric tons)



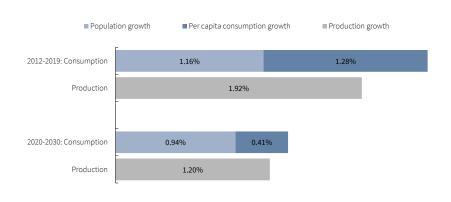
Note: OECD = Organisation for Economic Co-operation & Development, FAO = Food & Agriculture Organization of the United Nations

Source: OECD-FAO 2020, KB Securities Vietnam

Global fish consumption driven by population growth

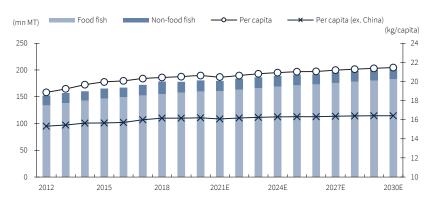
Population growth should be the main driver behind rising global fish consumption. The FAO (Food & Agriculture Organization of the United Nations) estimates that global per-capita fish consumption will grow by 0.41% per annum to reach 21.4 kg/year by 2030E from 2020E's 20.6 kg/year after falling by 1.28% per year in the last decade due to the slowdown in global fish production. Most of this rise will likely come from China and excluding China per-capita fish consumption was only 16.2 kg/year in 2019 and is expected to remain flat over the next decade. But this forecast also assumes the world's population will grow at a 0.94% CAGR or more than double the rise in per-capita consumption, making population growth an important factor for overall global fish consumption. The FAO attributes the sharp slowdown in per-capita fish consumption to lower production growth that may fall to a CAGR of 1.20% between 2020E and 2030E from the 1.92% CAGR seen between 2012 and 2019. In contrast, population growth should slow less from 1.16% CAGR seen between 2012 and 2019.

Fig 38. Global fisheries – Fish consumption CAGR decomposition & total production CAGR, 2012–2030E (%)



Source: United Nations, OECD-FAO 2020, KB Securities Vietnam

Fig 39. Global fisheries – Total & annual per–capita fish consumption, 2012–2030E (million metric tons, kg per capita)

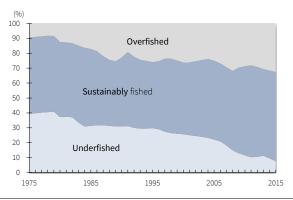


Source: OECD-FAO 2020, KB Securities Vietnam

Static growth in live capture and limited opportunities to expand aquaculture has hindered global fish consumption

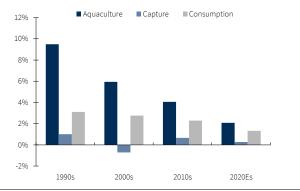
Global fish consumption has been hindered by static growth in live capture fishing and limited opportunities to expand aquaculture capacity. Live capture fishing reached its natural limit in the late 1980s when catches from newly accessed fish stocks failed to replace overfished fishing grounds and led to static growth since then. Growth in aquaculture has also slowed to 2% levels after peaking at 10% in the 1980s and 1990s due to the lack of suitable new farming locations, spread of disease from intensive aquaculture and stricter environmental regulations.

Fig 40. Global fisheries – Marine fish stocks breakdown by sustainability, 1975–2015 (%)



Source: *FAO 2018*

Fig 41. Global fisheries – Annual growth rate of fishery production & consumption, 1980s–2020Es (%)

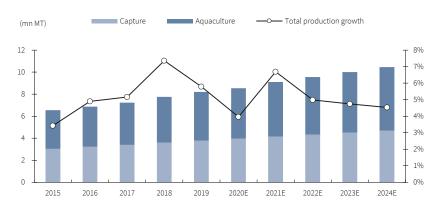


Source: OECD-FAO 2020, KBSV

Increasing aquaculture production to support export growth

Growth in both wild-caught fishing and aquaculture production should support Vietnam's exports during our 2020E-2024E forecast period (albeit likely to see a slowdown in wild-caught catches). Notably, additional stocks from the South China Sea's large fishing grounds have allowed Vietnam's wild-caught fishing industry to maintain positive growth for the past 15 years to total 8.2 million tons in 2019 or a CAGR of 5.21% between 2012 and 2019 when world wildcaught fishing recorded a CAGR of only 0,09%. But this should slow to a CAGR of 4.5% between 2020E and 2024E as we expect offshore tensions to reduce catches from the South China Sea. Vietnam's live-capture production has fallen on several occasions due to maritime tensions, including 2011's Binh Minh event, 2014's Haiyang Shiyou event and 2019's Haiyang Dizhi event. Moreover, Vietnam is still under a "yellow card" from 2017's IUU action from the EU. The IUU or illegal, unreported and unregulated fishing regulatory framework requires flag states to certify the origin and legality of fish caught and exported to the EU. That said, we expect the growth in aquaculture production to offset this slowdown and support overall export growth. Productivity improvements in shrimp farming and expansion of pangasius ponds – Vietnam's two major fishery export items - have allowed aquaculture production to grow at a CAGR of 5.3% between 2012 and 2019. These trends should continue and we forecast aguaculture to record a CAGR of 5.4% between 2020E and 2024E. Aguaculture has represented over half of Vietnam's total fishery production since 2008 and is now at 54% or inline with the global trend.

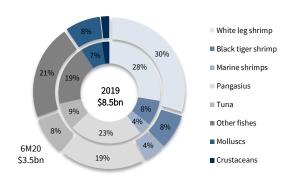
Fig 42. Vietnam fisheries – Capture & aquaculture fishery production & total growth forecasts, 2015–2024E (million metric tons, % YoY)

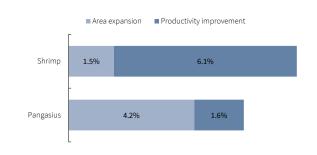


Source: General Statistics Office of Vietnam, KB Securities Vietnam

Fig 43. Vietnam fisheries – Total fishery export breakdown by species, 2019–6M20 (billion USD, %)

Fig 44. Vietnam fisheries – CAGR decomposition of shrimp & pangasius production, 2015–2019 (%)



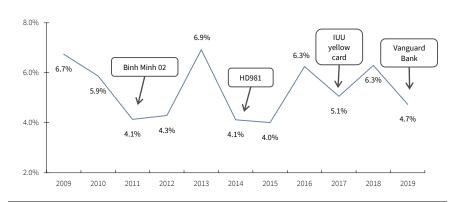


Source: Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Source: Ministry of Agriculture & Rural Development, KB Securities Vietnam

- 2011: China's patrol vessels accused of severing exploration cables on Vietnam's *Binh Minh 02* survey ship
- -2014: China's *Haiyang Shiyou 981* (HD981) rig drills by the Paracel Islands in waters claimed by Vietnam
- -2017: European Commission issues IUU "yellow card" warning on Vietnam's fishery exports into the EU
- -2019: *Haiyang Dizhi 8* (HD8) survey ship sparks standoff at Vanguard Bank

Fig 45. Vietnam fisheries - Capture fishery production growth, 2009-2019 (% YoY)



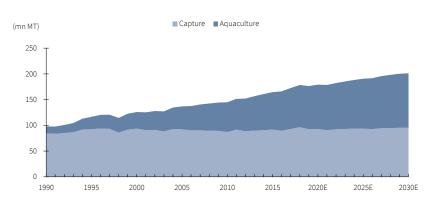
Source: General Statistics Office of Vietnam, KB Securities Vietnam

31

Aquaculture taking larger role to meet growing fishery demand over the longer term

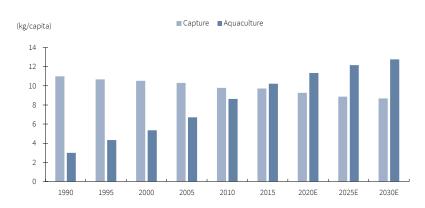
The mid- to long-term global competitiveness of Vietnam's fishery sector will largely depend on its ability to meet growing demand from rising populations around the world as well as changing consumer preferences that place a higher priority on food safety and environmental sustainability. We expect Vietnam to increasingly rely on aquaculture to face these challenges given advantages over live-capture, including the ability to boost harvest sizes by expanding pangasius farming areas and improving productivity at shrimp farms, as well as greater control over the entire production process to strengthen the sustainability and tracking of fish. Live-capture fishing faces the difficulties of limited natural resources (South China Sea tensions), enforcement (the EU's IUU yellow card imposed on Vietnam) and rules of origin (US antidumping investigations). These issues largely explain why live-capture fishing volumes have remained flat after reaching a natural limit in the 1980s and the rise of aquaculture since 1990 to meet increasing demand. Reflecting this, per-capita consumption of farmed fish already reached 11.2kg/year by 2019 after surpassing wild-caught fish in 2015.

Fig 46. Global fisheries – Capture & aquaculture fishery production, 1990–2030E (million metric tons)



Source: OECD-FAO 2020

Fig 47. Global fisheries – Aquaculture & capture contribution to per–capita consumption, 1990–2030E (kg/capita)

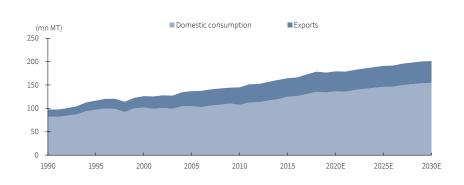


Source: OFCD-FAO 2020

Trade deals also facilitating more global trade in fishery products

Developing nations like Vietnam are benefitting from free trade agreements that remove duplicate customs fees, reduce tariffs and facilitate access to new overseas markets. These trade deals also impose tighter regulations on rules of origin, illegal fishing and environmental sustainability. Lower trade barriers are becoming increasingly important as the ratio of fishery exports has risen to 25% of total global production since 2006 from 15% in 1990. Moreover, the FAO estimates that global fishery production will grow to 201.1 million metric tons by 2030E from 2019's 176.3 million metric tons.

Fig 48. Global fisheries – Total fish production breakdown by purpose, 1990–2030E (million metric tons)

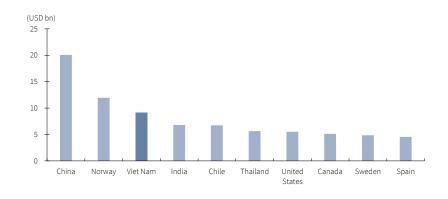


Source: OECD-FAO 2020, KB Securities Vietnam

Vietnam ranks as the world's third-largest fishery exporter

Vietnam ranked third among the world's largest fishery exporters in 2018 at USD8.8 billion. Among the specialty exporters, Vietnam's two main export items are *pangasius* and shrimp, while Norway is famous for salmon and India for shrimp. The outlook is also promising for exports to the EU when the EVFTA comes into effect in August and immediately removes about half of Vietnam's tariffs on fishery exports and the remaining eliminated over the next three to seven years according to the EVFTA schedule.

Fig 49. Global fisheries – Export value of major fishery exporters, 2018 (billion USD)



Source: UN Comtrade, KB Securities Vietnam

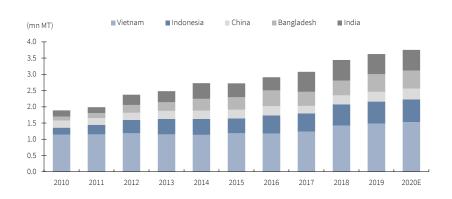
Little threat seen in global markets for Vietnam's specialization in pangasius Competition in the pangasius market will likely be contained to existing local exporters due to Vietnam's dominance in the global pangasius market. Although some concerns have been raised about potential supply from China, India and Indonesia - and plans by India and Indonesia to focus on exports over the next couple of years - volumes remain small in global markets and most production is consumed domestically. Natural barriers to pangasius production include fresh water that needs to be: 1) within a temperature range of 22-30 degrees Celsius; 2) at a pH greater than 5; and 3) salinity under 0.1%. In particular, pangasius cultivation is highly sensitive to salinity and saltwater intrusion that has negatively impacted fish farms in the past, Environmental conditions that meet these requirements are only found in the Lower Mekong River in the An Giang and Dong Thap provinces, where all of Vietnam's pangasius production is concentrated. VHC has led pangasius exports for the past ten years at 15% market share and the next-largest companies have been at 6%-7%. Vietnam's other major pangasius companies include (in order of size): Bien Dong (traded in the OTC market), ANV, I.D.I (IDI and listed on Ho Chi Minh Stock Exchange) and Hung Vuong (HVG and listed on UPCoM).

Table 3. Vietnam fisheries - Top 3 pangasius exporters by export value, 2010-2019 (million USD)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Vinh Hoan	Vinh Hoan	Vinh Hoan							
126	151	155	166	207	228	251	270	345	286
Hung Vuong	Hung Vuong	Hung Vuong	AGIFISH	Hung Vuong	Bien Dong	Bien Dong	Hung Vuong	Bien Dong	Nam Viet
101	124	112	113	140	117	134	121	218	136
Viet An	AGIFISH	AGIFISH	Hung Vuong	Nam Viet	Hung Vuong	Hung Vuong	Bien Dong	Nam Viet	Bien Dong
62	84	92	106	110	96	102	114	134	130

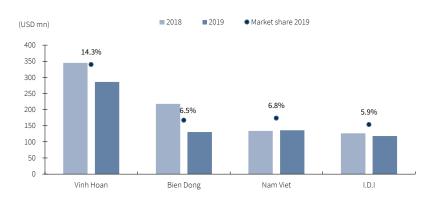
Source: Company reports, KB Securities Vietnam

Fig 50. Global fisheries – *Pangasius* production by country, 2010–2020E (million metric tons, % YoY)



Source: Food & Agricultural Organization, National Fisheries Institute, Global Seafood Market Conference (2019 & 2020)

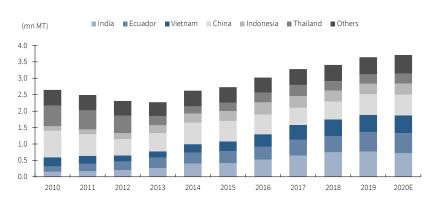
Fig 51. Vietnam fisheries – Export values and market share of major $\it pangasius$ exporters, 2018–2019 (million USD, %)



Source: Company reports, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

Vietnam's competitive landscape for shrimp concentrated locally but many global players Vietnam's competitive landscape for shrimp exporters is relatively stable, with MPC at 19% market share and the next-largest players having market shares of less than 6% each. Vietnam's main shrimp exporters are (in order of size): Stapimex (traded in the OTC market), Fimex (FMC and listed in the Ho Chi Minh Stock Exchange), Thuan Phuoc (THP and traded in UPCoM) and Camimex (CMX listed on the Ho Chi Minh Stock Exchange). We expect MPC to maintain its leading role as Vietnam's biggest shrimp exporter that also ranks among the world's largest shrimp producers. Global competition remains intense but has eased somewhat after Thailand and China lost their dominance in global farmed shrimp production following the EMS (Early Mortality Syndrome) outbreak in 2013. Since 2014, India, Ecuador, Vietnam and Indonesia all have increased shrimp production to become the world's leading largest shrimp producing countries.

Fig 52. Global fisheries – Farmed shrimp production, 2010–2020E (million metric tons)



Source: Food & Agricultural Organization, National Fisheries Institute, Global Seafood Market Conference 2020

Fig 53. Vietnam fisheries – Export values and market share of major shrimp exporters, 2018–2019 (million USD, %)



Source: Company reports, Vietnam Association of Seafood Exporters & Producers, KB Securities Vietnam

KB SECURITIES VIETNAM RESEARCH

Head of Research - Nguyen Xuan Binh

binhnx@kbsec.com.vn

Macro/Strategy

Head of Macro & Strategy - Tran Duc Anh

anhtd@kbsec.com.vn

Macro Analyst - Thai Thi Viet Trinh

trinhttv@kbsec.com.vn

Market Strategist - Le Anh Tung

tungla@kbsec.com.vn

Equity (Hanoi)

Head of Equity Research (Hanoi) – Duong Duc Hieu

hieudd@kbsec.com.vn

Information Technology & Logistics Analyst - Nguyen Anh Tung

tungna@kbsec.com.vn

Property Analyst - Pham Hoang Bao Nga

ngaphb@kbsec.com.vn

Power & Construction Material Analyst - Le Thanh Cong

conglt@kbsec.com.vn

Financials Analyst - Nguyen Thi Thu Huyen

huyenntt@kbsec.com.vn

Equity (Ho Chi Minh)

Head of International Research - Harrison Kim

harrison.kim@kbfg.com

Consumer & Retailing Analyst – Dao Phuc Phuong Dung

dungdpp@kbsec.com.vn

Fisheries & Pharmaceuticals Analyst - Nguyen Thanh Danh

danhnt@kbsec.com.vn

Oil & Gas & Chemicals Analyst - Nguyen Vinh

vinhn@kbsec.com.vn

Research Marketing

Korea Marketing Analyst – Seon Yeong Shin

shin.sy@kbsec.com.vn

KB SECURITIES VIETNAM (KBSV)

Head Office:

Levels G, 2 & 7, Sky City Tower, 88 Lang Ha Street, Dong Da District, Hanoi, Vietnam Tel: (+84) 24 7303 5333 – Fax: (+84) 24 3776 5928

Hanoi Branch:

Level 1, VP Building, 5 Dien Bien Phu, Ba Dinh District, Hanoi, Vietnam

Tel: (+84) 24 7305 3335 - Fax: (+84) 24 3822 3131

Ho Chi Minh Branch:

Level 2, TNR Tower Nguyen Cong Tru, 180–192 Nguyen Cong Tru Street, District 1, HCMC, Vietnam

Tel: (+84) 28 7303 5333 - Fax: (+84) 28 3914 1969

Saigon Branch:

Level 1, Saigon Trade Center, 37 Ton Duc Thang, Ben Nghe Ward, District 1, HCMC, Vietnam

Tel: (+84) 28 7306 3338 - Fax: (+84) 28 3910 1611

CONTACT INFORMATION

Institutional Client Center: (+84) 28 7303 5333 - Ext: 2656 Private Customer Care Center: (+84) 24 7303 5333 - Ext: 2276

Email: ccc@kbsec.com.vn Website: www.kbsec.com.vn

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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

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