

LIGHT AT THE END OF THE TUNNEL

Construction Industry
Industrial Real Estate Industry
Ceramic Tile Industry



MÚC TÝC

A. VIETNAM ECONOMY IN 2020 AND OUTLOOK FOR 2021	4
I. Bleak economy in 2020 due to covid-19	4
Vietnam's economic growth in 2020 was the lowest in 30 years, however still relatively high co to other Asia – Pacific countries	-
 Vietnam's Covid-19 outbreaks were promptly and effectively controlled, facilitating recovery FDI slowed down, imports and exports grew slightly 	
Support from combined fiscal and monetary policies implemented by the government	
II. Positive recovery outlook for 2021	
B. VIETNAM CONSTRUCTION INDUSTRY	12
I. A bleak 2020 due to legal bottlenecks and reduced investment demand	12
Shaky growth due to Covid-19 breakouts	12
Construction material prices increased sharply in December 2020	
3. Revenue of general contractor companies slowed down and decreased in 9M2020	
II. Positive industry outlook in 2021 thanks to legal reform and economic recovery	
1. Non-residential construction to recover strongly as tourism and manufacturing bounce back	
 Residential construction supported by legal reform removing administrative bottlenecks Infrastructure construction prospects limited by state budget and legal framework 	
III. Publicly listed construction companies currently covered by FPTS	
C. VIETNAM INDUSTRIAL REAL ESTATE MARKET	
VIETNAM INDOSTRIAL REAL ESTATE MARKET 1. 2020 in review: New leased-area decreased, price increased due to slight decreased in dem	
extremely limited new supply.	22
 New leased-area decreased because investing demand has been limited by Covid-19 pande Land lease price in 2020 continues increasing due to limitation of new leasable-area 	
Earning reports of industrial park development enterprises	
II. Vietnamese industrial real estate prospects in 2021	
1. Investment demand is expected to recover	
2. Market is expected to be more active as many new projects launched	27
Land lease price continues increasing in 2021	
III. Publicly listed industrial real estate companies currently covered by FPTS	29
D. VIETNAMESE CERAMIC TILE INDUSTRY	31
 2020 in review – Tile consumption recovered well in the last 3 quarters of 2020 despite a sharp in the 1st quarter due to the Covid-19 epidemic 	
1. 2020 annual production and consumption estimated to fall slightly as compared to 2019	31
2. Average selling prices of tiles fell under negative impact from Covid-19 epidemic	
3. Fuel prices (thermal coal and natural gas) fell sharply in 2020	
II. Vietnamese ceramic tile industry prospect in 2021	
 Tile production and consumption forecast to grow respectively 5.5% and 7.3% in 2021 Competitive advantage rooting in the ability to differentiate and manufacture large tiles 	
Thermal coal and natural gas prices forecast to rise in 2021	
III Publicly listed Vietnamese tile manufacturers currently covered by FPTS	38



Abbreviat	ions					
CAGR	Compounded Annual Growth Rate					
FDI	Foreign Direct Investment					
GEP	Global Economic Prospects					
GSO	General Statistics Office					
IIP	Index of Industrial Production					
IMF	International Monetary Fund					
MPI	Ministry of Planning and Investment					
OWID	Our World in Data					
PMI	Purchasing Managers' Index					
PPP	Public Private Partnership					
SBV	State Bank of Vietnam					
UNCTAD	United Nations Conference on Trade and Development					
VARS	Vietnam Association of Realtors					
WB	World Bank					
WEO	World Economic Outlook					





Through the first issue of FPTS' Outlook 2021 reports, we would like to present investors an overview of 2020 and outlook for 2021 of Construction, Industrial Real Estate, and Ceramic Tile industries — all of which are strongly influenced by macroeconomic environment and government's policies — after a year of turmoil caused by the Covid-19 pandemic.

Due to Covid-19's impact, Vietnam's GDP real growth in 2020 was only 2.91%, the lowest in the last 30 years. However, thanks to effective anti-pandemic measures and economic support policies, Vietnam economy has entered the recovery period with brighter outlook for 2021.

"After a bleak 2020, we expect growth of Vietnam GDP in general and Construction, Industrial Real Estate and Ceramic Tiles industries in particular will **RECOVER** in 2021, as the currently-loose fiscal and monetary policies are expected to continue, and pandemic control is expected to improve as Covid-19 vaccines are being developed globally."



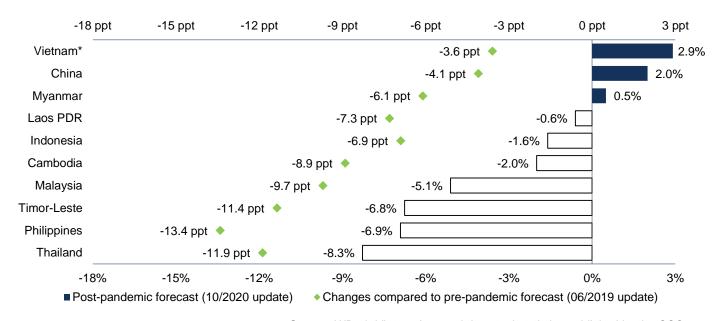
A. VIETNAM ECONOMY IN 2020 AND OUTLOOK FOR 2021

- I. Bleak economy in 2020 due to covid-19
- 1. Vietnam's economic growth in 2020 was the lowest in 30 years, however still relatively high compared to other Asia Pacific countries

Overall, 2020 was a bleak year for the world economy in general and Vietnam in particular, mainly due to Covid-19 outbreaks globally. With over 1.9 million deaths and 90 million cases worldwide as of 12/01/2021, the Covid-19 pandemic is considered to be "the most adverse peacetime shock in over a century" by the WB, shutting down many countries and pushing the world economy into recession. Specifically, the IMF forecasted that the world economy would decline by 4.4% in 2020, 7.8 percentage points (ppt) lower than its pre-pandemic forecast, equivalent to about 10.3 trillion USD in losses globally (*October 2020 WEO report*).

In Vietnam's case, real GDP growth in 2020 was only 2.91%, the lowest since 1988 (CAGR for this period was 6.75%). However, this is still relatively high compared to regional and global averages. While most Asia – Pacific countries were still struggling to contain the pandemic, Vietnam has already entered the recovery period since the second half of 2020. As a result, Vietnam recorded the highest real GDP growth among Asia – Pacific countries and the least pandemic loss – only about 3.6 ppt lower than pre-pandemic WB forecast.

Chart 1: Forecasted 2020 economic growth of Asia - Pacific countries



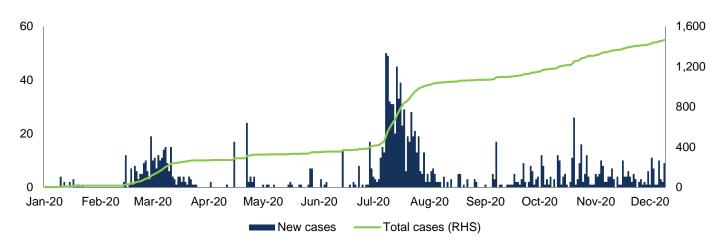
Source: WB - *: Vietnam's growth is actual statistics published by the GSO

2. Vietnam's Covid-19 outbreaks were promptly and effectively controlled, facilitating recovery

To date, the Covid-19 pandemic in Vietnam has basically been controlled with a small number of community infections. By 31/12/2021, Vietnam recorded nearly 1.500 Covid-19 cases, mainly from two domestic outbreaks in March and July 2020, both of which were controlled after about a month.



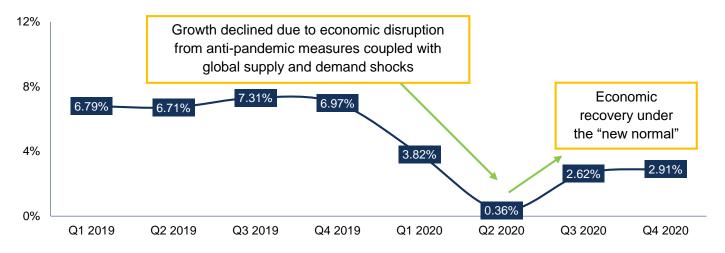
Chart 2: Vietnam Covid-19 cases



Source: OWID

Vietnam's ongoing pandemic containment success stemmed from the government's commitment to implement large scale measures¹ early despite their significant economic disruptions. This resulted in GDP growth of only 0.36% in the first half of 2020, as social distancing, international flight and border closure combined with global supply chain shocks stifled economic activities in Vietnam.

Chart 3: Cumulative real year-on-year growth of Vietnam GDP



Source: GSO

On the other hand, trading off short-term economic growth for effective pandemic control bought time for Vietnam to invest in its public health system and develop other "smart containment measures" with smaller economic impact, such as increasing public awareness, mass testing and contact tracing. These are necessary tools for the government to gradually loosen anti-pandemic measures, move toward a "new normal" and facilitate economic recovery in the second half of 2020.

Bloomberg - FPTS<GO> 5

¹ Large scale anti-pandemic measures implemented by the government during the March 2020 outbreak included international flight closure, temporary suspension of border entry, school closure, and nation-wide social distancing.



3. FDI slowed down, imports and exports grew slightly

Contrary to general global economic disruption, Vietnam's FDI inflows and import-export value recorded promising results in 2020, mainly because Vietnam has become an attractive alternative to China in the global supply chain, thanks to convenient geoChartical location and effective pandemic control.

• **FDI:** FDI inflows into Vietnam in 2020 has slowed down but at much less slower pace than global average². In general, investment demand has dropped significantly in 2020 due to reduced economic prospects and increased uncertainty. Additionally, Vietnam's mobility restrictions against foreign visitors hindered investment activities, leading to registered capital of FDI in 2020 only reached 26.4 billion USD (-25% yoy, which included 4 billion USD from the Bac Lieu Liquefied Natural Gas Power Plant registered before the outbreaks in January 2020). On the other hand, effective pandemic control has helped to stabilize domestic economy and maintain investors' confidence, resulting in realized capital of FDI only slightly down at 20 billion USD (-02% yoy).

Chart 4: Cumulative registered capital of FDI

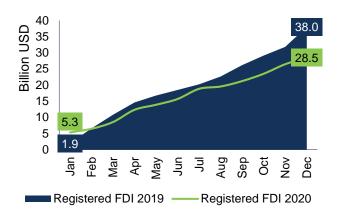
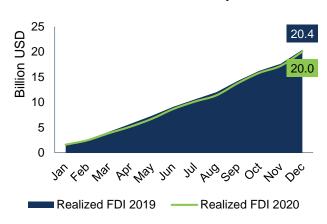


Chart 5: Cumulative realized capital of FDI



Source: GSO Source: GSO

• Imports – Exports: Although Vietnam is exposed to significant risks stemming from its economy's high degree of openness³, its exports and imports both posted slight growth in 2020, mainly due to Vietnam's favorable geoChartical location and effective pandemic control, thus becoming an attractive alternative to China as Chinese Covid-19 outbreaks caused significant disruption to global supply chain. Thanks to (1) the opportunity to replace China in the global supply chain, and (2) support from Free Trade Agreements (among which the EU – Vietnam Free Trade Agreement came into effect on 01/08/2020), Vietnam's exports and imports in 2020 reached 281.5 (+6.5% yoy) and 262.4 billion USD (+3.6% yoy) respectively, corresponding to 19.1 billion USD in trade surplus, up 75% yoy and is the highest in the last 07 years.

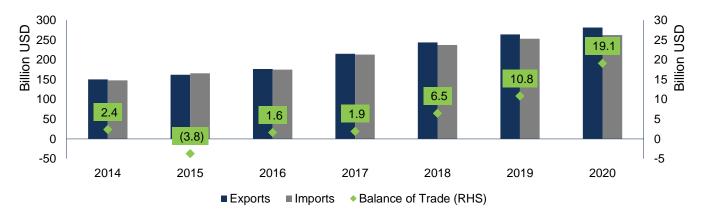
Bloomberg - FPTS<GO>| 6

² According to Investment Trend Monitor report of UNCTAD, FDI inflows declined by about 49% yoy globally in the first half of 2020, of which FDI inflows into developing countries decreased by 16% and Asian countries by 12%.

³ According to ISEAS, the ratio of (Exports+Imports)/GDP of Vietnam reached over 200% in 2017, ranking 6th globally and 3rd in Asia. Additionally, the ratio of FDI/GDP in 2019 of Vietnam reached 6.3%, ranking 4th in South East Asia.



Chart 6: Vietnam exports, imports, and trade surplus



Source: GSO

4. Support from combined fiscal and monetary policies implemented by the government

Despite successful pandemic containment, Vietnam cannot avoid Covid-19's negative social and economic impact. Therefore, economic support to affected individuals and businesses is necessary to prevent mass bankruptcy and unemployment from turning short-term pains into long-term scars. In 2020, the Vietnam government loosened both fiscal and monetary policies to support individuals and businesses affected by Covid-19. Specifically:

• **Fiscal policy:** included 180 trillion VND for tax, land rental, other taxes and fees reduction or deferral; 62 trillion VND to support affected individuals, and increasing disbursement of public investment. However, many years of budget deficits have reduced the government's ability to provide fiscal support: (1) A WB survey in June 2020 indicated that only about 22% of households and 19% of businesses that lost income due to Covid-19 received direct support from the government; and (2) government investment and development capital disbursement as of 12/15/2020 reached 356 trillion VND (+12.4%), meeting only 75.7% of budget estimate despite considerable increase compared to last year.

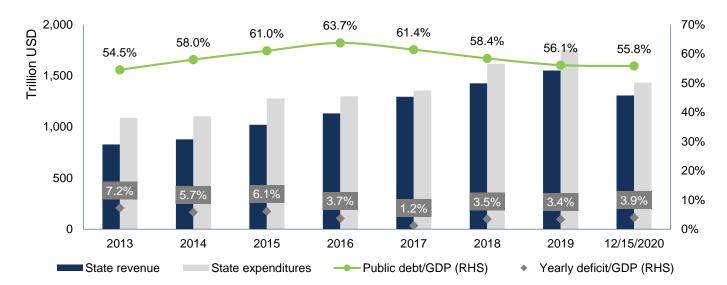
Loosening fiscal policy has put considerable pressure on state budget, which has been in deficit for many years, especially in 2020 as revenue decreased but spending must increase to pay for pandemic control, support for affected individuals and businesses, and economic stimulus. As of 15/12/2020, total state budget revenue was estimated at 1,307.4 trillion VND (-7.6% yoy) and total spending at 1,432.5 trillion VND (+8.8% yoy), corresponding to a 125.1 trillion VND deficit (~1.99% of Vietnam 2020 GDP). It should be noted that, since disbursement is typically concentrated at end of year, the figure above is likely to be much lower than actual 2020 deficit, which was estimated to be at 248.5 trillion VND by the Ministry of Finance, equivalent to ~3.9% of 2020 GDP and 5.8% higher than budget estimate, putting considerable pressure on public debt. Also according to the Ministry of Finance, Vietnam's public debt in 2020 was expected to reach about 55.8% of GDP (-0.3 ppt). Although spending cuts in recent years have created a sizable buffer against the 65% debt ceiling, higher-than-budget-estimate deficit in 2020 would lead to many other public debt ratios to exceed permitted threshold⁴ and threaten national fiscal security, highlighting the government's limited ability to increase spending. Beside budget constraints, Vietnam public funding disbursement is also limited by other long-standing problems such as administrative procedures and land compensation mechanisms.

Bloomberg - FPTS<GO> 7

⁴ According to <u>Thanh Nien</u>, in 2020, the ratio of Foreign debt obligation/Export was at 34,6%, about 10 ppt over the 25% limit imposed by Congress, and the ratio of Debt/State revenue was at 27%, also over its limit.



Chart 7: Vietnam state revenue, spending and public debt



Source: GSO, FPTS research

• Monetary policy: included (1) requiring credit institutions to restructure debts and reduce interests for customers affected by Covid-19 and (2) decreasing policy interest rate three times in 2020. Reduced policy rate coupled with lessened business borrowing demand lowered both lending and mobilizing interest rates in 2020. Specifically, average 12-month VND mobilizing interest rate of commercial banks decreased to 6.2%/year, down 0.9 ppt compared to early 2020. Additionally, SBV lowered maximum short-term VND lending interest rate of credit institutions and foreign banks' branches for selected industries⁵ to 5.5% in March, then subsequently to 5% in August and 4.5% in October 2020, persuant to Decision 1730/QD-NHNN.

Chart 8: 12-month VND mobilizing rate and maximum short-term VND lending rates in 2020



Source: SBV

Thanks to prudent policies in recent years, Vietnam's financial system has become more stable and thus has more ability to support economic stimulus. On the other hand, it should be noted that monetary policy is a blunt instruments, economic consequences of which may take from 03 – 24 months to have the full effect. The biggest risk of lowering interest rates to boost the economy is rapid inflation, however this has not

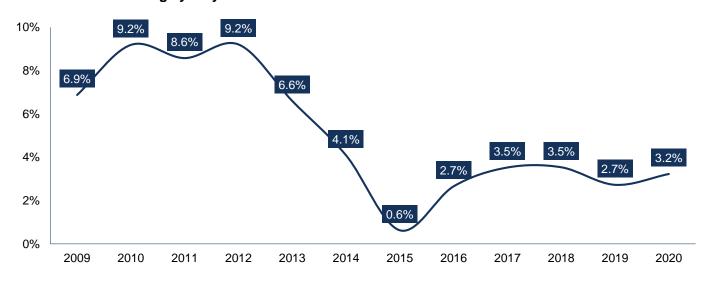
Bloomberg - FPTS<GO>| 8

⁵ Applicable for loans for agricultural and rural development; exporting; small and medium enterprises, high-tech enterprises; and developing supporting industries (according to Article 3-2, Circular 39/2016/TT-NHNNVN). Previously, SBV has reduced the maximum short-term lending interest rate for these industries down to 5.5% (Decision 420/QD-NHNN, effective from 17/03/2020), then subsequently to 5.0% (Decision 920/QD-NHNN, effective 13/05/2020).



happened in 2020, as average CPI only increased by 3.23% yoy, about 0.5 ppt higher than that of 2019 and under the 04% target.

Chart 9: Vietnam average yearly inflation 2009 - 2020

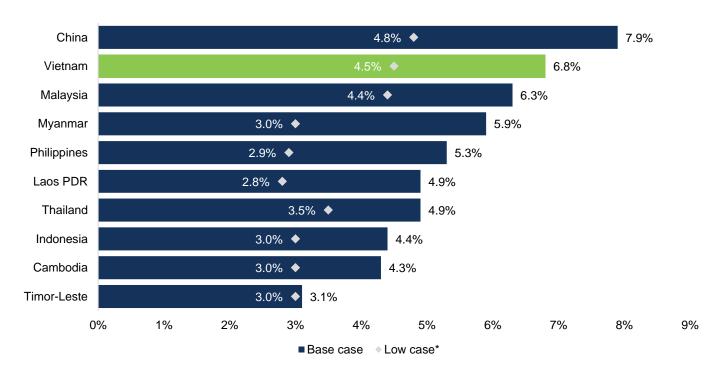


Source: GSO

II. Positive recovery outlook for 2021

Overall, thanks to prompt anti-pandemic measures coupled with stable fundamental economic factors and support from combined fiscal and monetary policies, Vietnam economy has started to recover since the second half of 2020, indicating a positive outlook for 2021. The WB forecasted that Vietnam economy will grow by 6.8% in 2021, ranking second among Asia – Pacific countries, below China at 7.9%.

Chart 10: Forecasted economic growth of Asia – Pacific countries in 2021



Source: WB - *: Low case refers to deeper economic contraction and slower recovery



In addition, it is likely that Vietnam's policy environment will keep its currently-loosened state in 2021:

- Fiscal policy: According to state budget estimate for 2021, budget deficit will be at 343.7 trillion VND (+46% compared to 2020 estimate)⁶. Investment and development spending will continue to be the focus, reaching 477.3 trillion VND (+1.4% compared to 2020 estimate), including two National Important Project, the North South expressway 15 trillion VND and Long Thanh airport resettlement 6.7 trillion VND. This indicates that the Vietnam government will continue running a high deficit to support investment and promote economic recovery.
- Monetary policy: The SBV set the main goal of 2021 to be operating monetary policy in a proactive and
 prudent manner, closely coordinating with fiscal and other macroeconomic policies to keep average
 inflation under 04%, supporting macroeconomic stability, and contributing to economic recovery.

However, due to its high degree of openness, stable growth for Vietnam is only possible after the Covid-19 pandemic is under control globally with large-scale vaccination, which is expected to be underway by the end of 2021. Based on positive macroeconomic outlook and assessing fundamental factors of each industry, we believe that the **Construction, Industrial Real Estate, and Ceramic Tiles** industries will **RECOVER** in 2021.

⁶ The ratio of Budget deficit/GDP in 2021 estimate of 04% is based on recalculated GDP (about 25% higher than pre-recalculation). Therefore, for comparison's sake, we estimate that the ratio of Budget deficit/pre-recalculation GDP at about 05%, the highest in 2016 – 2019.





2020 in review:

- The construction industry recovered after a bleak first half of 2020, ending the year with real year-on-year growth of 6.8%.
 However, 2020's growth is still the lowest since 2014, mainly due to reduced private and foreign investment demand as Covid-19 outbreaks disrupted economic activities and increased risks.
- The sudden spike in construction material prices at the end of 2020 could reduce profits and increase risks for construction companies in the next year.

2021 outlook:

In 2021, the construction industry is expected to recover moderately with forecasted real growth of 7.2%. In particular:

- Non-residential construction is expected to have the highest growth rate at 8.7%, thanks to signs of recovery of domestic tourism and manufacturing at the end of 2020.
- Residential construction would benefit from legal reforms at the beginning of 2021 with forecasted real growth of 7.2%
- Infrastructure construction is expected to continue growing at the low rate of 4.9% in 2021 due to limited state budget and unclear effectiveness of the new PPP Law.

DUC NGOC NGUYEN

Email: <u>ducnn2@fpts.com.vn</u>

Tel: (+84) 24 3773 7070

Ext: 4307



B. VIETNAM CONSTRUCTION INDUSTRY

I. A bleak 2020 due to legal bottlenecks and reduced investment demand

1. Shaky growth due to Covid-19 breakouts

Although relatively less affected by Covid-19 compared to regional and global averages in 2020, Vietnam's domestic and foreign economic activities were still disrupted. Consequently, the construction industry was also negatively affected. In Q1/2020, construction industry value-added only increased by 3.8% yoy in real terms, the lowest since 2015. Thanks to economic recovery in the second half of 2020, construction value-added real growth reached 6.7% yoy, a remarkable improvement but still the lowest since 2014.

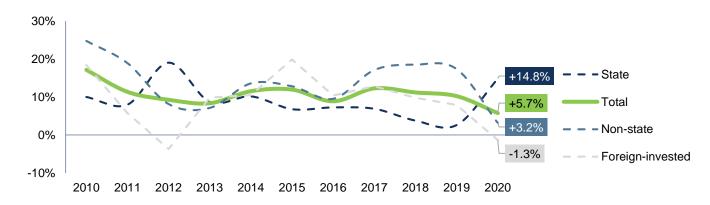
Chart 11: Cumulative year-on-year value-added real growth of construction and Vietnam economy



Source: GSO

Aside from general economic disruption, each construction sector was affected differently by Covid-19, as shown by the trend of investment by type of ownership in 2020. In general, Covid-19 restricts investment demand through (1) reduced outlook due to deteriorating economic environment and (2) increased risks due to uncertainty over outbreaks and anti-pandemic measures. As a result, investment at current prices only increased by 5.7% in 2020, the lowest since 2010.

Chart 12: Vietnam nominal year-on-year investment growth



Source: GSO

Specifically, Covid-19's negative effect on investment was mainly concentrated in the private sector, which accounts for about 65% total investment and has been the main growth driver for the last 10 years. Of which, non-state investment grew by 3.2%, about 10 ppt lower than 2010-2019 CAGR; and foreign invested sector



even fell 1.3% due to additional impact from international mobility restrictions. On the contrary, state investment grew by 14.8%, the highest since 2015, mainly due to the government's efforts to increase public investment disbursement. The slowdown of private investment demand would negatively impact residential and non-residential construction sectors, while the increase in public investment would soften negative impact on infrastructure construction sector.

2. Construction material prices increased sharply in December 2020

Materials account for about 70% of total construction cost, among which steel and cement are the most commonly used, respectively accounting for 45% and 15% of material cost. In 2020, material prices were supported by export, mostly to China for investment projects aimed at stimulating the economy.

Steel bar prices decreased slightly during the year but increased sharply at year-end

Chart 13: Vietnam steel prices



Source: FPTS research

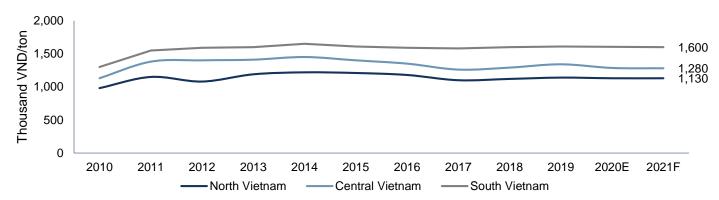
Steel prices sharply increased at the end of 2020, partly due to (1) the Ministry of Industry and Trade extended safeguarding duties against imported steel billets and steel bars to 2023 (Decision 918/QD-BCT, extending Decision 2968/QD-BCT of 2016) in March 2020; (2) cost of many materials for steel production increased sharply; and (3) steel exports to China increased abnormally⁷. According to VTV, in December 2020, many companies reported that prices of steel bars and pipes increased by 25% compared to the end of Q3. **Due to this sudden increase in material prices and China's import demand, Vietnam steel price trend in 2021 is difficult to assess, posing significant risks to construction companies.**

⁷ In the first 10 months of 2020, steel export to China reached 1.3 billion USD, 12 times more than that of the same period last year, according to the Vietnam Steel Association. This increase in exports to China was partly due to (1) Chinese steel production affected by Covid-19 outbreaks, and (2) China's restructuring policy, eliminating small-scale steel production in the country.



b) Cement prices slightly down

Chart 14: Vietnam cement prices



Source: FPTS research

In 2020, cement prices continued their sideway trend started in 2013, about 1.3% down from last year, mainly because declined domestic demands (11M2020 reached 58.1 million tons, -3.0% yoy) was offset by increased exports (11M2020 reached 34.9 million tons, +14.1% yoy) – most of which went to China for key infrastructure projects aimed to stimulate the country's economy.

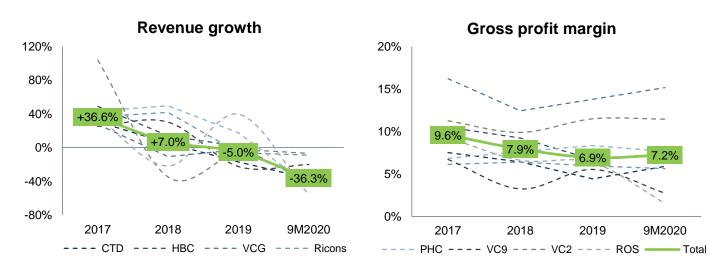
In 2021, we expect domestic consumption to increase by 6.5% yoy as construction activities recover. On the other hand, exports are expected to reduce by 05-10% yoy if Chinese demand slows down. Slowing demand coupled with increasing supply from new cement plants in Central and South Vietnam will keep competitive pressure high. Therefore, we expect cement prices will not change significantly in 2021.

3. Revenue of general contractor companies slowed down and decreased in 9M2020

As projects can take about 06 – 24 months to complete, 9M2020 business results of general contractors only partially reflect negative impact of Covid-19 since most of recorded revenue comes from projects signed before Covid-19 outbreaks.

a) Residential and non-residential general contractors: includes <u>CTD</u>, <u>HBC</u>, <u>VCG</u>, Ricons, <u>PHC</u>, <u>VC9</u>, VC2, and ROS

Chart 15: Residential and non-residential general contractors' revenue growth kept declining trend



Source: Financial reports

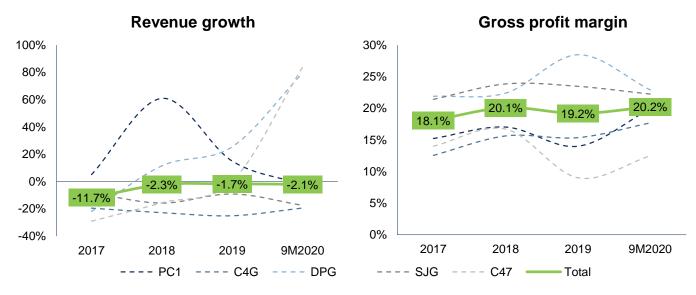


In 9M2020, total revenue of these residential and non-residential general contractors decreased 36% yoy, as a result of (1) slowing commercial residential housing market in large cities due to legal bottlenecks, and (2) partial impact of economic disruptions by Covid-19 pandemic.

In contrast, average gross margin improved by 0.3 ppt, indicating that costs at on-going projects did not increase. However, reduced investment in 2020 would pressure contractors to reduce price to compete, leading to a possible decrease of gross margin in 2021 as general contractors begin to record revenue from projects bid at low prices.

b) Infrastructure general contractors: includes PC1, C4G, DPG, SJG, and C47

Chart 16: Infrastructure general contractors continuing sideway trend



Source: Financial reports

Total 9M2020 revenue of these infrastructure general contractors decreased 2.1% yoy, highlighting limited growth potential of the infrastructure sector.

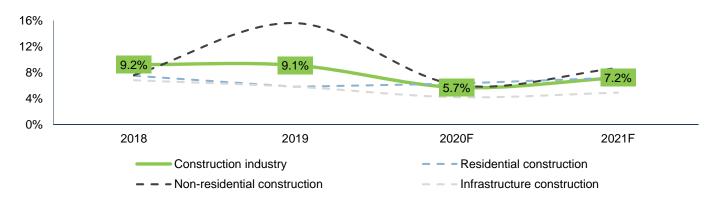
Additionally, gross margins of infrastructure general contractors are typically at about 20%, much higher than residential and non-residential general contractors, partly due to (1) lesser competitive pressure in infrastructure construction, and (2) infrastructure contractors typically have investment in energy, which has higher gross profit margin and is less affected by Covid-19.



II. Positive industry outlook in 2021 thanks to legal reform and economic recovery

We believe that construction industry outlook in 2021 is POSITIVE with forecasted real growth of 7.2%, based on assumptions that the Covid-19 pandemic will be effectively controlled, facilitating economic recovery.

Chart 17: Vietnam construction industry forecasted real growth



Source: BMI

In 2021, residential and non-residential construction is expected to recover moderately, continuing to be growth drivers of the construction industry with forecasted real growth at 8.7% and 7.2%; infrastructure construction, on the other hand, is expected to keep a slow pace of growth at 4.9%.

1. Non-residential construction to recover strongly as tourism and manufacturing bounce back

Non-residential construction is forecasted to recover strongly at 8.7% real growth in 2021.

- International tourism and investment into Vietnam plummeted in 2020 due to travel and entry bans: The number of international visitors to Vietnam in 11M2020 was only at 3.8 million, down 77% yoy with almost no visitors since April. Additionally, registered capital of FDI in 11M2020 was only at 26.4 billion USD (-25% yoy, including 4 billion USD from the Bac Lieu Liquefied Natural Gas Power Plant registered before the outbreaks in January 2020).
- **Domestic economic activity is less affected:** Domestic tourism decreased by about 30% yoy⁸ thanks to effective pandemic control and partially-successful domestic tourism stimulating effort. Vietnam's industrial production also ended its multi-year growth period (since 2014 according to IIP⁹ and 2016 according to PMI¹⁰): IIP declined by 13.4% yoy in 04/2020 and PMI dropped below 50 (indicating decline) in 02/2020 and bottomed in 04/2020. With declining prospects and rising risks, private investment has slowed down: (1) Private sector investment (non-state and foreign-invested) in 2020 only increased by 1.7% nominally (sharply down from 12.9% CAGR in the last 10 years); (2) Realized capital of FDI reached at 20 billion USD in 2020, down 1.8% yoy.

Bloomberg - FPTS<GO>| 16

⁸ In 2020, total national passenger transport reached 3.56 passengers, down 30% yoy, according to GSO.

⁹ The Index of Industrial Production is an index which shows the growth rate of industries, calculated as IIP is the percentage ratio between volume of industrial production in the current period over that of a specified period.

¹⁰ The Purchasing Manager's Index is an index measuring economic trends in the manufacturing sector. An PMI above 50 indicates expansion, and vice versa.



Chart 18: Vietnam IIP

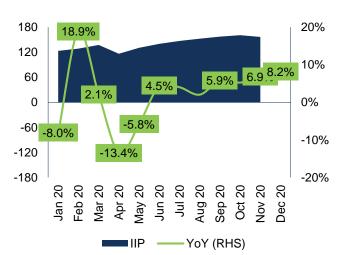
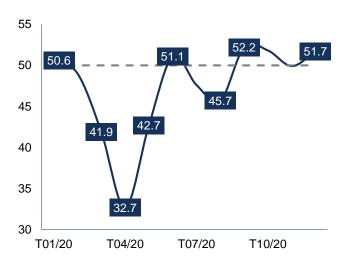


Chart 19: Vietnam PMI



Source: GSO Source: IHS Markit

Recovery signs of domestic tourism and manufacturing in the second half of 2020 are positive signals for non-industrial construction growth in 2021. However, the staggered nature of Covid-19 outbreaks globally will continue to stifle international tourism and investment into Vietnam, delaying the trend of investment shifting away from China into Vietnam (started by the US – China trade war and initial Covid-19 outbreaks in China, including many large corporations such as Samsung, Sharp, Microsoft, Nintendo, Dell...).

2. Residential construction supported by legal reform removing administrative bottlenecks

Among construction sectors, residential construction is the least affected by Covid-19 with projected real growth of 7.2% in 2021, because about 93% of residential construction market are self-built houses, demand of which is less sensitive to short-term changes in economic environment.

On the other hand, commercial residential construction market is mainly concentrated at major cities and is very sensitive to changes in economic and legal environment. Despite making up only about 7% of total residential construction market, commercial residential construction is the main market for large-scale general contractors. In 2020, this market continued to slow down due to many administrative legal bottleneck, especially in Hanoi and Ho Chi Minh city, indicated by limited apartment supply in 2019 and 9M2020 (according to statistics recorded by VARS).

Chart 20: Apartment supply in Hanoi and Ho Chi Minh city



Source: VARS

Also according to VARS, there are 126 commercial residential projects currently delayed by administrative bottlenecks in Ho Chi Minh city alone. While these bottlenecks are long-standing problems, most of them are



related to current Laws and are beyond the ability of local agencies to resolve. As a result, Ho Chi Minh city officials' effort to support these projects¹¹ in 2020 had not been very effective.

We expect this situation to improve in 2021, thanks to two new Laws passed by Congress on 17/06/2020 and effective from 01/01/2021 (Law on Amendments to Construction Law – Construction Law 2020 and Law on Investment 2020) with changes to remove current legal bottlenecks:

- (1) Discrepancy between "project owner" and "investor" 12: many commercial residential projects in Ho Chi Minh city were not approved to organize detailed planning by the city's Department of Planning and Investment despite having investment policy decision issued by the city's People's Committee. This is because the Law on Urban Planning 2009 requires project owner to organize detailed planning for areas assigned to them for investment (Article 19-7). However, the Law on Investment 2014 states that the People's Committee's investment policy decision only contains name of the investor implementing the project. Since the investor is legally not the project owner, they cannot organize detailed planning. To address this problem, the Construction Law 2020 amended that "the project owner is the investor approved by a competent authority" (Article 1-4).
- (2) Types of land used to conduct projects: Law on Housing 2014 requires commercial housing projects to be built on "lawful residential land plots" (Article 23-1). However, many urban commercial residential projects often include small patches of public land (canals, roads, fences...), hindering project implementation. Moreover, these patches are typically scattered and cannot be grouped to process through land-use change procedures together, further delaying implementation. To remove this bottleneck, the Law on Investment 2020 states that commercial housing project can be built on lawful residential land plots and other types of land approved by a competent authority change land-use to residential" (Article 75-1c).
- (3) Additionally, these two new Laws will standardize investment projects approval procedure, saving time and cost for investors¹³.

As city officials have already signaled willingness to support, we expect these legal reforms aimed at administrative procedures will soon have practical results, spurring recovery of commercial residential construction market and improve residential general contractor's business results.

3. Infrastructure construction prospects limited by state budget and legal framework

Infrastructure construction is expected to continue its slow pace of growth at 4.9% forecasted real growth in 2021, 0.6 ppt less than pre-pandemic forecast. Low growth of infrastructure construction mainly stems from limited state budget and incomplete PPP legal framework

• Efforts to increase public investment limited by budget constraints: As of 15/12/2020, state expenditure for investment and development reached 356 trillion VND (+12.4% yoy), meeting 75.7% of budget estimate. In the same effort, the government has also converted 05 projects in the North – South expressway (total investment about 51 trillion VND¹⁴) from PPP into public investment in order to accelerate project implementation. However, multi-year deficit, close-to-limit public debt, and administrative bottleneck have put considerable pressure on the government's efforts.

Bloomberg - FPTS<GO>| 18

¹¹ In 02/2020, Mr. Nguyen Thanh Phong, chairman of Ho Chi Minh city People's Committee, met with real estate businesses to discuss ongoing problems and direct city officials to support businesses in addressing administrative bottlenecks for affected real estate projects.

¹² Originally in Vietnamese as "chu dau tu" and "nha dau tu," respectively.

¹³ For more information on positive impacts and limitations of these new Laws, investors can refer to Official dispatch 71/2020/CV-HoREA and 71/2020/CV-HoREA of Ho Chi Minh Real Estate Association

¹⁴ Includes Mai Son – National Highway 45, Vinh Hao – Phan Thiet, Phan Thiet – Dau Giay (in 06/2020), National Highway 45 – Nghi Son and Nghi Son – Dien Chau (in 01/2021).



• Prospects of completing PPP legal framework needs to be proven: Vietnam has been unable to attract significant international capital into its PPP projects in recent years, despite having the biggest PPP project pipeline in Asia¹⁵ and favorable economic environment, mainly due to incomplete legal framework, lacking risk-sharing mechanisms, resulting in higher legal risks and investment costs. To address this problem, Congress approved the new Law on PPP 2020 on 18/06/2020, effective from 01/01/2021. The Law on PPP 2020 specifies which fields can be invested under PPP, investors eligibility, investor selection method, and mechanisms to share increases/decreases in revenue¹⁶ - which is the main concern for many international investors. It should be noted that, unlike administrative reforms in the Construction Law 2020 and Law on Investment 2020, the Law on PPP 2020's legal reforms are systematic in nature, requiring additional guidance decrees¹⁷, and therefore will take longer to show practical results. In 2021, progress of current PPP road projects can be considered as a gauge to the new Law's short-term effectiveness.

Under budget constraints and unclear effectiveness of the new Law on PPP, infrastructure construction prospects will remain the lowest among construction sectors with no breakthrough in the short-term.

Bloomberg - FPTS<GO>| 19

¹⁵ According to BMI, PPP projects account for 40% of total projects under planning in Vietnam.

¹⁶ Specified at Article 84, Law on PPP 2020.

¹⁷ The Law on PPP 2020 is currently being completed with at least 03 guidance decrees under development by the Ministry of Planning and Investment and the Ministry of Finance.



III. Publicly listed construction companies currently covered by FPTS

Table 1: Publicly listed construction companies currently covered by FPTS

Stock ticker	Market capitalization (12/18/2020) (billion VND)	Gross revenue 9M2020 (billion VND)	Profit after tax 9M2020 (billion VND)	Profit after yoy	Profit after tax margin	Last 04 quarters ROE	P/E
CTD	5,401	10,301	369	-22.7%	3.6%	7.2%	8.96x

- CTD is the leading residential general contractors in Vietnam with a focus in high-rise appartments.
- CTD's business results in 9M2020 declined mainly due to the slowdown of commercial residential construction market coupled with Covid-19's negative impacts.
- Internal power struggle led to resignations of several high-level executives, highlighting considerable governance and key personnel risk. As a result, CTD's recovery prospects is highly uncertain.

DC1	1 107	1 101	204	24 20/	0.40/	10 20/	0.207
<u>PC1</u>	4,187	4,184	394	31.3%	9.4%	12.3%	9.38x

- PC1 has the highest market share among power construction contractors in Vietnam. PC1's main markets include high-voltage transmission lines, electrical substations, and renewable energy projects. In addition, PC1 also have sizable investments into hydroelectricity (total capacity of 168MW) and real estate.
- PC1's business results in 9M 2020 were supported by PCC1 Thanh Xuan real estate project with expected revenue of 870 billion VND and 03 new hydroelectricity plants completed in 2020, raising average yearly capacity to 156 MW, + 37% yoy.
- PC1's 2021 business results are expected to decline as PC1 will not have any real estate projects lined up in 2021.
 Growth will resume in 2022 as PC1 expects to finish its PCC1 Vinh Hung real estate projects and 03 wind power plants (total capacity of 14MW).

<u>DPG</u> 1,270 1,371 74 6,653.5% 5.4% 36.3%	5.02x
---	-------

- DPG is an infrastructure general contractors with focus on road and bridge projects. Additionally, DPG also invested
 in hydroelectricity (total capacity 89MW) and real estate projects in Hoi An.
- DPG's 2020 business results recorded high growth thanks to 608 billion VND revenue from Vong Nhi Casamia real estate project and 607 billion VND revenue from construction (+7.4% yoy).
- As infrastructure construction continues its slow growth pace, real estate will be DPG's main growth driver in the medium terms as DPG owns more than 200ha of land bank in Hoi An.

Source: Financial reports





2020 In Review:

New leased-area decreased but price increased due to levelled off in demand and limited supply:

- New leased area in 06 key Northern provinces and 05 key Southern provinces decreased by 16% and 13% yoy respectively due to the decline in demand when Covid-19 pandemic broke out, causing risks to increase and economic prospects to decrease.
- Average land lease price in key provinces increased (the North 102 USD/m2/term, +7.1% yoy; the South 106 USD/m2/term, +9.7% yoy) due to new supply is very limited, leading to very high occupancy rates in these provinces, ranging from 73% 99%.

2021 Outlook:

- The need for domestic and foreign investment has been resumed thanks to (1) effective domestic epidemic control, economic recovery and (2) progress of vaccine development recorded many positive signals.
- The market is more active as supply is expected to grow 20% due to a series of plans to expand and develop new land bank.
- Land lease price will continue growing by 7-8% in the South and 5-6% in the North.

TRAN KY DUYEN

Email: duyentk@fpts.com.vn

Tel: (+84) 24 6290 8686

Ext: 7583



C. VIETNAM INDUSTRIAL REAL ESTATE MARKET

After a period of positive development, in 2020, Vietnam's industrial real estate market was bleak when the demand for new leasing decreases due to the outbreak of Covid-19 and the supply of industrial land in key provinces is lacking. Entering 2021, we assess that the industry will **RECOVER** thanks to the reconnection of supply and demand. In particular, the demand has recovered based on the expectation that Vietnam's economy will recover and the epidemic situation in the world will improve thanks to the good news about vaccine development. At the same time, the supply is also plentiful again thanks to many new industrial park (IP) projects launched in 2021.

- I. 2020 in review: New leased-area decreased, price increased due to slight decreased in demand but extremely limited new supply.
- 1. New leased-area decreased because investing demand has been limited by Covid-19 pandemic

In 2020, the new leased-area in key provinces of Vietnam has all decreased. In which, total new leased-area in 06 Northern provinces decreased by 16% yoy and 05 Southern provinces decreased slightly, at 13% yoy.

Chart 21: New leased-area in 2020



Source: Savills, JLL, FPTS Research.

Limited investment demand due to the effects of Covid-19 epidemic:

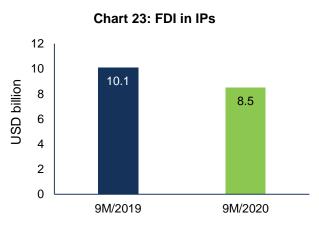
The decrease in new leased-area is mainly due to the limited investment demand of enterprises in 2020 when pandemic outbreaks, lead to increasing risks and declining economic prospects. According to the Ministry of Planning and Investment (MPI), the total newly and additionally registered domestic direct investment (DDI) and foreign direct investment (FDI) capital in Vietnam's IPs in 9M2020 both decreased, reaching 91 trillion VND (-6.1% yoy) and \$ 8.5 billion, (-15.8% yoy) respectively.

Chart 22: DDI in IPs

100
80
96.9
91

96.9
91

9M/2019
9M/2020



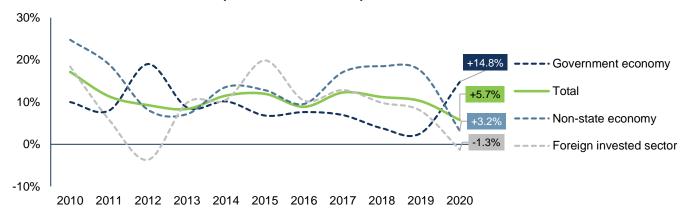
Source: MPI, FPTS Research



Domestic investment demand decreased due to disruption of domestic industrial production

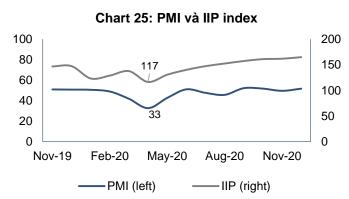
Growth of investment capital for social development of private sector declined significantly in 2020. In which, growth of non-state economy sector reached 3.2% yoy and foreign invested sector decreased by 1.3% yoy, points out the sensitivity of private investment when the economic prospects are influenced by the Covid-19 epidemic.

Chart 24: Growth of investment capital for social development



Source: GSO

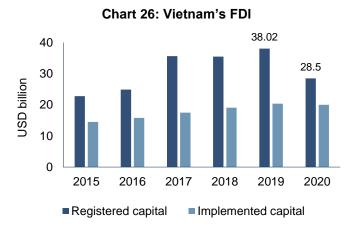
The decline in domestic investment demand is mainly due to industrial production disruptions in 2020:



Source:: MPI, Trading economics

Vietnam's industrial production in 2020 was interrupted by a supply shock when the Covid-19 epidemic broke out in China and the domestic social distancing in March 2020, reflected on the weakening of the Industrial Manufacturing (IIP) index and Purchasing Managers' Index (PMI). In April 2020, these two indices declined at the lowest levels, of which PMI dropped to 32.7 points (decreased for the first time since 2016) and IIP dropped to 117 points, downside 13.4% yoy.

Foreign direct investment decreased due to the difficult world economy and hindered trade



Source: MPI, FPTS research

The world economy is in a difficult time: The Covid-19 epidemic has caused many big countries to close and push the global economy into recession, leading to a decline in global FDI inflows in 2020 by up to 40%, according to projections in Global Investment Report of UNCTAD. Particularly for Vietnam, registered FDI in 2020 reached 28.5 billion USD, down 25% yoy, relatively positive compared to the 50% decline of the world in first half year of 2020¹⁸.

Bloomberg - FPTS<GO>| 23

¹⁸ According to the OECD's FDI data report, by the first half of 2020, global FDI has decreased by 50% compared to the previous 6 months with 364 billion USD - the lowest in the same period since 2013.



Trade has been hindered: restrictions on movement to fight epidemics have a significant negative impact on the industrial zone's real estate industry as trade, sightseeing, field surveys and new lease negotiations in industrial zones become difficult, especially with international partners. In Vietnam, the number of passengers circulating after the stop of international and domestic flights at the end of March decreased by about 90% yoy. Although Vietnam has gradually loosened travel restrictions in the second half of 2020, the number of international arrivals and arrivals remains very low, reaching only 41,000 in October 2020, equal to about 1% over the same period (statistics on the number of international passengers passing through the airports of the Civil Aviation Administration). Therefore, according to JLL, successful land lease transactions are recorded quite modestly, mainly from pre-translation contracts or from domestic customers. According to BCM - the largest developer of industrial real estate in the country, during the first half of the year, the company was unable to execute a new land lease contract with foreign investors and had 3 MOU-type contracts (Memorandum of Understanding - Memorandum of understanding) worth VND 6,000 billion delayed to reassess the impact of the pandemic.

2. Land lease price in 2020 continues increasing due to limitation of new leasable-area

Despite the declining demand, the average land lease rate in key provinces in 2020 have increased, mainly due to the limited supply of leasable land banks. Particularly, according to Savills, the average lease land price in the North (by the end of Q3/2020) reached 102 USD/m2/term, +7.1% yoy; and the South (by the end of Q2/2020) reached 106 USD/m2/term, +9.7% yoy. According to JLL, the average factory rental price in the two regions continued to be stable, at 4.5 and 4.3 USD/m2/month respectively for a term of at least 3-5 years.

Chart 26: Average land lease price



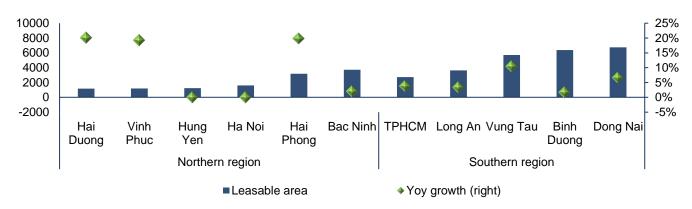
Source: Savills

Lack of leasable area in key cities:

The new launched leasable area in key provinces did not keep up with the demand in 2020, as can be seen through the lease price and occupancy rates in these provinces has increased in 2020 despite the decline in leasing demand. New supply in 2020 in these provinces is quite limited, with only Hai Duong, Vinh Phuc, Hai Phong recording growth of up to 20% (however their land banks are still small) then Vung Tau and Dong Nai at around 10%. Therefore, the occupancy rate in key provinces and cities will increase to a very high level in 2020, about 73% - 99%, of which the highest growth rate in 2020 is Bac Ninh (the occupancy rate increases by 10 points, reaching 95%) and Vung Tau (+9 points, reaching 79%). The supply of new leasable land in these provinces is limited due to (1) the government's policy of narrowing the scope and relocating factories out of the city; (2) many problems in legal procedures and difficulties in compensation and site clearance; (3) disruptions caused by the covid-19 pandemic, preventing new land banks from entering the market supply.

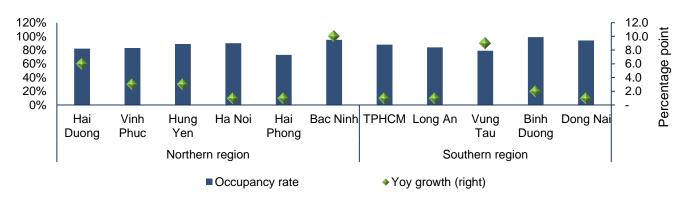


Chart 24: Leasable area in key industrial cites



Source: Savills, FPTS research

Chart 25: Occupacy rate in key industrial cities



Source: Savills, FPTS research

3. Earning reports of industrial park development enterprises

development enterprises in 9M/2020

20,000

17,346

15,000

10,000

5,000

Revenue

Profit after tax

9M/2019

9M/2020

Chart 27: Earning reports of industrial zone

Source: Earning reports of publicly listed Vietnamese firms.

In the first 9 months of the year, listed companies in the industry recorded revenue of nearly 16 trillion VND, -8% yoy, net profit of 3.5 trillion VND, -15% yoy. The main causes of the decline: (1) The strong increase in factory relocation from 2019 has helped businesses record high profits in 2019; (2) The land bank available for business of many large enterprises such as IDC, D2D is no longer available, leading to a sharp decline in profits in 2020; (3) Deposit interest rates in 2020 decreased, affecting financial revenue of many businesses.

The biggest declines in revenue and profit after tax were KBC (-62.6% and -94.0%), D2D (-46.7% and -22.7%), and ITA. (-33.0% and -5.6%)... Meanwhile, there are a few businesses that have recorded good business results with the after-tax profit growth of over 30% such as HPI (+29.6%), IDV (+80.5%), LHG (+37.5%), NTC (+35.9%), SIP (+64.7%), SZC (+41.3%). Most of these businesses still have leasable land bank and benefit from the increase in industrial park rental rates in 2020. Therefore, businesses with leasable land banks or can expand new land banks in 2021 will be the brightest enterprises of the industry.



II. Vietnamese industrial real estate prospects in 2021

1. Investment demand is expected to recover

Domestic investment has recovered thanks to (1) effective domestic epidemic control and (2) restoration of production. The prevention and control activities of the Government of Vietnam last year are effective and highly appreciated by the international community. Vietnam soon entered a new normal state and was more experienced in controlling outbreaks (if any). In the second half of 2020, manufacturing has rebounded, reflected by the recovery of the PMI index (highest in December 2020 with 51.7 points) and IIP (highest on December 20 with 164.9 points).

Foreign investment has recovered as concerns about the epidemic will ease due to vaccine development progresses. From the second half of 2020, the world has made many strides in efforts to make Covid-19 vaccine. According to the World Health Organization (WHO), as of early January 2021, experts around the world had researched and developed 192 Covid-19 vaccines. Of which 73 vaccines are being clinically tested and 7 vaccines have been approved for use in the community, the most popular were those developed by BNT162b2 by Pfizer, Inc. and BioNTech, which is currently used in 48 countries. In addition, the industrial real estate market has also made improvements to cope with obstacles caused by epidemics such as the development of virtual applications and online marketing platforms. These solutions support investors to access information, visit the online IP remotely, maintain the connection with potential customers before all trading activities return to normal. However, the effect is not clear.

Large projects delayed in 2020 will restart in 2021 and plans to move production into Vietnam of other enterprises and corporations around the world will be promoted in 2021 (specifically the joint venture groups Japanese industry as shown in Table 4).

Table 2: Factory building projects in Vietnam

Company	Industry	Industrial Park	Location	Estimated Time	Progress
Radian Jinyu	Rubber products	-	Tay Ninh	2020	Licensed
Pegatron	Electronics	Deep C	Hai Phong	2020	Licensed
Panasonic	Machinery & equipment	VSIP II	Binh Duong	2019	Started
Foxconn	Electronics	Nam Son Hap Linh	Bac Ninh	2020	Delayed
OPPO	Electronics	Nam Son Hap Linh	Bac Ninh	2020	MOU signed
Luxshare ICT	Electronics	Quang Chau	Bac Giang	2020	Delayed
Sharp	Machinery & equipment	VSIP	Binh Duong	2020	Delayed

Source: FPTS Research



Table 3: Japanese manufacturers relocating to/expanding in Vietnam, 2020

Company	Scale	Industry
Hoya	Large scale	Glass products
Matsuoka	Large scale	Garment production
Meiko	Large scale	Electronics
Yokoo	Large scale	Metal products
Shin-Etsu	Large scale	Chemical products
Nikkiso	Large scale	Aerospace components
Akiba DieCasting	SME	Metal coating
Inoue Iron Works	SME	Metal products
Able Yamauchi	SME	Garment production
Showa	SME	Rubber products
Techno Global	SME	Electronics
Hashimo Cross	SME	Plastic products
Fujikin	SME	Prcision components
Plus	SME	Machinery & equipment
Pronics	SME	Machinery & equipment

Source: JETRO

2. Market is expected to be more active as many new projects launched

Table 4: New industrial park projects in 2021

Company	IPs project	Scale	Cities
Vinhomes Industrial Park	Nam Trang Cat	200 ha	Hai Phong
Development Investment JSC	Thuy Nguyen	319 ha	Tiai i Tiong
Kinh Bac Urban Development Corporation (KBC)	Nam Son Hap Linh	238 ha	Bac Ninh
Viet Nam TNI Holdings	Song Lo 1	177 ha	Vinh Phuc
TIZCO JSC and Vietnam Creative Industrial Park Management JSC (VNIP)	Viet Phat	1,800 ha	Long An
Vietnam Rubber Industry Group (GVR)	9 projects	4,000 ha	Binh Duong, Binh Phuoc, Dong Nai and Pleiku

Source: FPTS Research

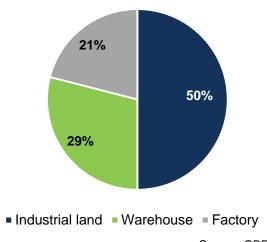


Expansion in supply

The increasing demand has led to a race to expand land bank of IP developers and attracts other businesses to join the industry in the second half of 2020. We estimate that the new IP projects in 2021 will contribute about 20% to the growth of the industrial leasable area in the key provinces of both regions. In general, supply constraints in 2020 are expected to be removed to meet the needs of new capital flows.

Potential in ready-built industrial property segment

Chart 28: Industrial leasing enquiry by types

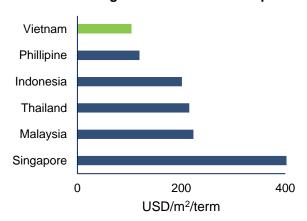


Factory cor

According to CBRE, companies that invest in production in a new country often have difficulty in capital, location and procedures for building factories and factories. Therefore, choosing to rent a warehouse or ready-built factory is a useful solution. Besides, the e-commerce industry in Vietnam is more and more developed, especially during the pandemic period because people tend to go shopping online. This leads to the need for more warehouses and factories. In 2021, CBRE expects the total supply of ready-built factories and warehouses to reach 3.1 million m² in the North (+35% yoy) and 5.6 million m² in the South (+19% yoy). Accordingly, rental rates will also increase 4-11% once the disease is controlled and the wave of production shift takes place stronger.

3. Land lease price continues increasing in 2021

Chart 29: Average industrial land lease price



Source: JLL, FPTS research

According to JLL statistics, the average land lease price of IPs in Vietnam by the end of Q3/2020 is still lower than some countries in the region - benefiting from the trend of investment transfer, specifically lower than about 25-30% compared to Indonesia and Thailand.

In 2021, we expect that the market will be active again thanks to the reconnection of supply-demand and the average land lease price of IPs in Vietnam will grow 7-8% in the South and 5-6% in the North.



III. Publicly listed industrial real estate companies currently covered by FPTS

Table 5: Vietnam's industrial real estate firms

Ticker	Market capital (12/28/2020)	Revenue 9M/2020	Profit after tax 9T/2020	Growth in profit after tax	EAT margin	ROE (4 recently quarters)	P/E	P/B
SZC	3,275	362	162	41.3%	44.8%	14.5%	17.6	2.6

- Sonadezi Chau Duc JSC (HSX: SZC) is a real estate infrastructure developer in Ba Ria Vung Tau with stable income from the BOT 768 project and many potentialities from Chau Duc Industrial - Urban project with a total scale of 2,287 ha.
- SZC's business activities and development orientation still focus on Chau Duc Industrial and Urban projects. In particular, the urban land fund has compensated about 440-450 ha, bringing great value in the long term when compensation costs are low. In the next 2-3 years, leasing and exploiting IP will still be the main highlight of SZC.
- Leasable land in 2021 is up to 759 ha. The company has plenty of room to increase prices because the
 land rental price is at 55 USD/m2/term, lower than the average of Ba Ria Vung Tau (60-65 USD), Dong
 Nai (90 USD), Binh Duong (85 USD). Huu Phuoc Residential Area (42 ha) is expected to be ready for sale
 in early 2021, this will bring a huge profit for SZC, expected to record sales of 4-5 ha in 2021

<u>NTC</u>	6,883	195	239	35.9%	122.6%	61.5% 15.4	9.5
------------	-------	-----	-----	-------	--------	------------	-----

- Nam Tan Uyen Industrial Park JSC (Upcom: NTC) is a fairly large-scale industrial park infrastructure developer in Binh Duong with a total land area of 966 ha, including 3 IPs, of which 2 parks are 100% filled and the remaining is in developing progress. Revenue growth in 9M/2020 mainly comes from leasing the last services area of 2 old IPs. Net profit growth mainly comes from financial activities that have been stable for many years.
- Binh Duong market, which is an attractive bright spot for foreign capital flows, is currently running out of supply when the occupancy rate has reached 99%. Along with the steady growth in rental rates, the new project with 255 hectares of commercial land is expected to bring great growth prospects for NTC in 2021.

Source: Financial statements of SZC and NTC.





2020 In Review:

- Despite the heavy impact from the Covid-19 epidemic in the 1st quarter, Vietnamese ceramic tile industry did recover positively with annual production and consumption volumes estimated at 550 and 451 million square meters; fell slightly by 1.8% and 3.4% as compared to 2019.
- The industry recorded no growth in 2020 in terms of production capacity.
- Average selling price of tiles has been decreasing since 2017 given the largest fall recorded in prices of high-ended products.
- In contrast to falling tiles' selling prices, 2020 substantially downward trend in prices of fuel prices (including thermal coal and natural gas) helped ease the negative pressure on gross profit margins of tile producers.

2021 Outlook:

- Given that Vietnamese residential construction growth is forecast recover at 7.9% in 2021, we expect the ceramic tile industry to recover its normal annual growth. Specifically, tile production and consumption volumes are forecast to reach respectively 580 million (+5.5% yoy) and 484 million square meters (+7.3% yoy).
- The main driver of revenue and profit lies in the ability to differentiate large-sized ceramic and porcelain tiles.
- Prices of thermal coal and natural gas are both expected to go up in 2021.

BUI DUC DUY

Email: <u>duybd@fpts.com.vn</u>
Tel: (+84) 24 3773 7070

Ext: 4307



D. VIETNAMESE CERAMIC TILE INDUSTRY

- 2020 in review Tile consumption recovered well in the last 3 quarters of 2020 despite a sharp decline in the 1st quarter due to the Covid-19 epidemic
- 1. 2020 annual production and consumption estimated to fall slightly as compared to 2019

1st Quarter/2020 - Ceramic tile demand suffered heavily from the Covid-19 epidemic

In recent years, demand for finishing construction materials, in particularly ceramic tiles has been negatively affected by the deceleration in the Vietnamese residential and non-residential annual real growth rate. However, the impact was much severe in 2020 due to the emergence of the Covid-19 epidemic.

During the first 4 months of 2020, the epidemic Covid-19 emerged widely and severely for the first time in Vietnam. That the local government released social distancing measure sped up the deceleration of Vietnamese construction growth rate. As a result, building activities and the country's real estate market were more or less quiet in the 1st quarter of 2020. Particularly speaking, during that period, Vietnamese real construction value grew modestly at 4.4%, much lower than the figure – 6.7% of the same period in 2019.

Chart 30: Vietnamese construction's quarterly real growth rates between 2014 and 2020



Source: GSO

Accordingly, demand for finishing construction materials quickly plummeted. In Q1/2020, aggregate production volume stood at 120.5 million square meters (-7.3% yoy).

Chart 31: Revenue & Profit of several listed Vietnamese tile producing companies

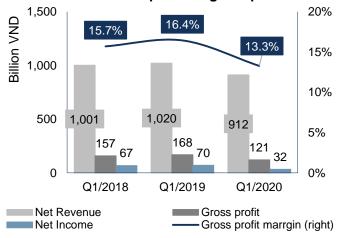


Chart 32: Average inventory value of finished tiles of listed Vietnamese tile producing companies



Source: Q1 financial statements of 4 listed Vietnamese ceramic tiles producing companies, including CVT, TLT, VIT & VHL

According to fiscal Q1 earning reports of 4 listed Vietnamese tile producing companies, the total Q1 net revenue was 912 billion VND (-10.6% yoy) and total net income stood at 32.2 billion VND, which was equivalent to a drastic decline of 54% yoy. The main reason came from 2 sources: falling average selling prices of tiles and soaring selling expenses in order to maintain quarterly consumed volume given tough Covid-19 situation. As a



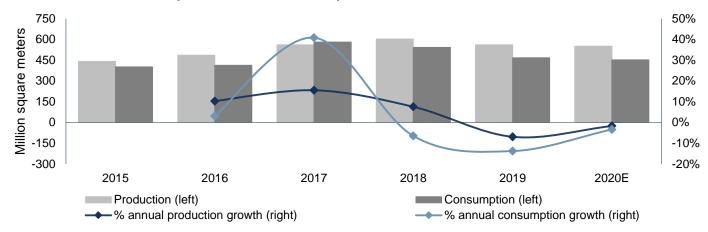
result, the average gross profit margin witnessed a big decrease of 3.1 percent. The figure was only 13.3% as compared to 16.4% of the same period in 2019.

Tiles production and consumption recovered well during 3 last quarters of 2020

That the Covid-19 epidemic has been quickly and well put under control opened the door for Vietnamese construction recovery, especially residental and non-residential sectors. In particular, real construction value growth reached 4.5 and 5.0 percent respectively in Q2 and Q3/2020. Though the figures were much lower than those of same periods in 2019, it did show a good recovery given the statistics of 4.4% in Q1/2020.

According to quarterly reports of the Ministry of Construction, up to November of 2020, tile consumption recovered well and reached 426 million square meters (-0.3% yoy). During the same period, tile export increased to 26 million square meters (+5.6% yoy). 11-month tile production was estimated at 511 million square meters (-0.5% yoy).

Chart 33: Vietnamese tile production and consumption



Source: Ceramic World Web, FPTS Research.

For the year 2020, we estimated that Vietnamese tile production and consumption to reach respectively 550 million square meters (-1.8% yoy) and 451 million square meters (-3.4% yoy).

Chart 34: Earning performance of 4 listed Vietnamese tile manufacturers

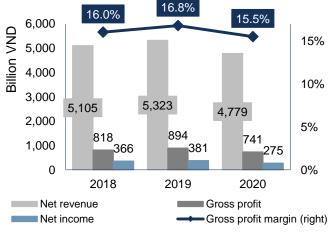
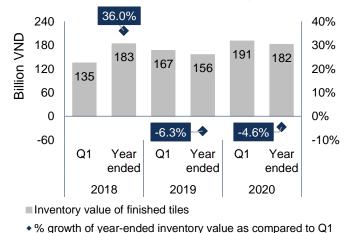


Chart 35: Average inventory value of finished tiles of listed Vietnamese tile producing companies



Source: Financial statements of 4 listed Vietnamese ceramic tiles producing companies, including CVT, TLT, VIT & VHL

According to fiscal year-ended earning reports of 4 listed Vietnamese tile producing companies, the total net revenue was 4,779 billion VND (-10.2% yoy) and total net income stood at 275 billion VND, which was equivalent to a decline of -27.8% yoy. For 2020, gross profit margin of listed Vietnamese ceramic tile



manufacturers averaged at 15.5% which equalled a fall of 1.3% as compared to 2019. For the last 3 quarters of 2020, thanks to Vietnamese government's effective Covid-19 preventative measures, recovery in construction sector has boosted demand for ceramic tiles. However, the most in-demand tiles were mid- and low-end medium-sized tiles while demand for high-ended ones more or less declined. This came as expected when the economy prospects and personal income were strongly and negatively affected by Covid-19.

Thanks to large Vietnamese tile producers' quick shift from producing large sized tiles to manufacturing small and medium mid-end ones, the growth of inventory value at the end of 2020 as compared to Q1 was -4.6%, which was roughly the same as in 2019 (-6.3%). The average inventory value of finished tiles was at 182 billion VND in 2020. A fall of 4.6% as compared to Q1/2020 showed a good recovery in terms of tile consumption.

Industry production capacity estimated to witness no growth in 2020

As Vietnamese annual ceramic tile production has been falling since 2017 together with the fact that ratio of production volume to industry total capacity averages only at approximately 80% between 2011 and 2020, there exists a slowdown in growth of industry's total manufacturing capacity.

In addition of the emergence of the Covid-19 epidemic and the continuing slowdown witnessed in the residential and non-residential construction sector, 2020 ceramic tile production and consumption were estimated to keep on decreasing. As a result, there is no stimulus for Vietnamese tile manufacturers to invest in new production lines.

800 40% Million square meters 600 30% 400 20% 200 10% 0 0% 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020E Industry production capacity (left) -% annual capacity growth (right)

Chart 36: Annual growth of Vietnamese ceramic tile industry between 2011 and 2020E

Source: Ceramic World Web, FPTS Research.

2. Average selling prices of tiles fell under negative impact from Covid-19 epidemic

There exists 3 categories of tiles in Vietnamese tile market, namely cotto, ceramic and porcelain (locally so-called granite). Generally speaking, selling prices of porcelain are the highest. Next come ceramic and cotto tiles. In addition, prices are also higher if sizes of tiles are bigger or tiles are nano polished and digitally printed.

That the industry is oversupplied during recent years has made selling prices of tiles decrease continually. The slowdown in construction sector has been affecting tile demand negatively. This causes tile manufacturers to deploy lower pricing strategy in order to maintain annual consumption growth.

Moreover, in 2020, demand for high-end tiles (including glazed ceramic, polished ceramic, nano polished porcelain (all sized equal to or bigger than 60x30cm) suffered greatly due to Covid-19. In contrast, demand for mid-end products whose sizes range from 30x30cm to 50x50cm is reported to increase sharply. Given this situation, selling prices of high-end products declined substantially while prices of mid-end tiles fluctuated slightly as compared to 2019.



Table 6: Updated changes in selling prices of different tile types

	Company	Type of tiles and sizes	Average selling price in 2019	Average selling price in 2020	% change
		Wall & floor digitally printed porcelain 80x80cm	372,721	394,300	+5.8%
	Viglacera	Wall & floor digitally printed porcelain 60x60cm	287,217	293,500	+2.2%
	Tien Son	Eurotile 30x60cm	352,728	320,455	-9.1%
1	Joint Stock	Eurotile 60x60cm	355,373	314,545	-11.5%
	Company	Eurotile 15x90cm	421,509	379,091	-10.1%
	(HNX: VIT)	Eurotile 30x90cm	379,182	362,273	-4.5%
		Eurotile 45x90cm	423,273	355,455	-16.0%
		Cotto 50x50cm	73,000	80,000	+9.6%
		Floor polished, anti-slippery ceramic (avg price)	78,000	84,000	+7.7%
	CMC Joint Stock Company (HSX: CVT)	Wall polished ceramic 30x60cm (avg price)	118,000	94,000	-20.3%
		Wall polished ceramic 40x80cm (avg price)	228,000	132,000	-42.1%
2		Floor nano polished granite 60x60cm	185,000	128,000	-30.8%
		Floor nano polished granite 80x80cm	653,000	166,000	-74.6%
	(11674. <u>671</u>)	Wall ceramic 13x60cm	96,000	112,000	+16.7%
		Floor soluble salt and polished granite 80x80cm	1,165,000	298,000	-74.4%
		Floor soluble salt and polished granite 60x120cm	1,004,000	350,000	-65.1%
		Floor ceramic 30x30cm	130,950	145,000	+10.7%
3	Viglacera	Cotto 40x40cm	96,030	109,000	+13.5%
3	Ha Noi Ltd.	Floor polished ceramic 50x50cm	107,379	120,700	+12.4%
		Floor porcelain 60x60cm	196,425	212,500	+8.2%
		Wall ceramic 25x40cm	170,000	155,000	-8.8%
		Floor ceramic 40x40cm	200,000	180,000	-10.0%
1	Dong Nai	Prime ceramic 25x25cm	120,000	95,000	-20.8%
4	province	Prime ceramic 30x30cm	150,000	95,000	-36.7%
		Prime ceramic 40x40cm	160,000	97,000	-39.4%
		Prime ceramic 50x50cm	180,000	100,000	-44.4%

Source: FPTS Research.

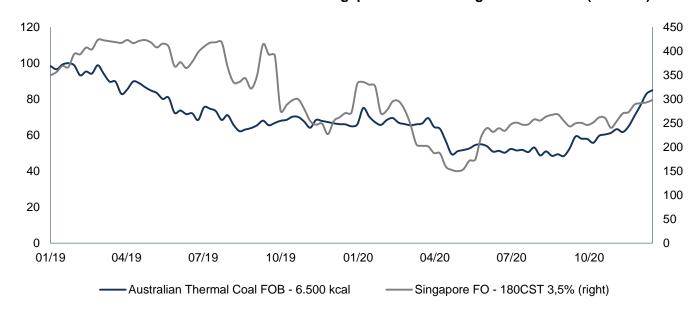
3. Fuel prices (thermal coal and natural gas) fell sharply in 2020

Fuel input for tile manufacturing process includes natural gas (CNG and LPG) and/or thermal coal. These account for 29.3% of the total expense for raw materials and fuel and more than 20% in terms of tiles' cost of goods sold. Therefore, there is an inverse relationship between fuel price and firms' gross profit margin.

During 2020, under the impact of Covid-19, oil and thermal coal prices decreased dramatically. Price of thermal coal reached its lowest since 2016 as Covid-19 drove down global demand for coal. According to World Bank, Australian thermal coal fell by 24% in August 2020 as compared to the same period in 2019. The price stood at 50.14 USD/ton and was the 4-year lowest price. In September and October 2020, thermal coal price did recover at respectively 9% and 7% monthly growth



Chart 37: Price of Australian thermal coal and Singapore fuel oil during 2019 and 2020 (USD/ton)



Source: Bloomberg

Regarding thermal coal price in Vietnam, it did follow the downtrend of global thermal coal but at a much slower rate. This lag resulted from the fact that local coal demand outstripped local supply from mining. In 2020, mined coal volume was estimated at 40.5 million tons (no growth as compared to 2019) while local demand was estimated at 50 million tons. As a result, Vinacomin (TKV) had to import over 10 million tons which was mainly thermal coal. The amount as calculated up to the end of November 2020 was approximately 8.47 million tons. TKV then mixed imported coal with locally mined coal before selling to local manufacturers. As imported coal accounted for only 20% of the mix, Vietnamese thermal coal price in 2020 was more or less the same as in 2019.

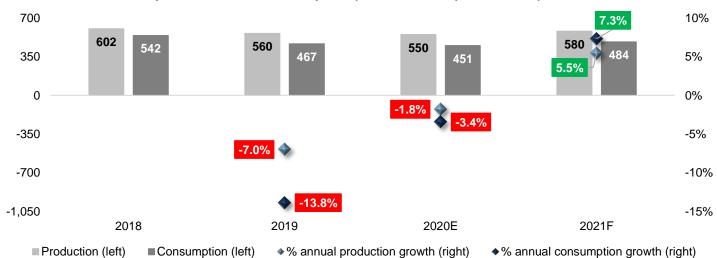
Vice versa, Vietnamese tile producers, who use natural gas as energy input for kilns, benefited a lot from sharply declining price of natural gas. As Vietnamese natural gas' price was calculated based on the price of Singapore fuel oil, that the fuel price fell significantly in 2020 helped reduce input cost for tile manufacturers and to some extent, counter the negative impact of falling selling tile's prices on gross profit margin.



II. Vietnamese ceramic tile industry prospect in 2021

I. Tile production and consumption forecast to grow respectively 5.5% and 7.3% in 2021





Source: Fitch Solutions, FPTS research.

Vietnamese tile production and consumption are forecast to reach respectively 580 million square meters (+5.5% yoy) and 484 million square meters (7.3%). The growth is expected to recover in 2021 owing to the following key points:

- According to Fitch Solutions, residential and non-residential real construction value (the main driver of ceramic tile demand) is forecast to grow at the speed of 7.9% in 2021. The number is 1.7% higher than that of 202E. The sector is expected to recover its normal annual value growth given the main assumption that the Covid-19 epidemic is well controlled and vaccines are available at the end of the year.
- Fast urbanization rate together with population growth of roughly 0.9%/year will further boost demand for ceramic tiles. According to statistics of CIC and population census, between 2019 and 2023, the aggregate demand for new houses and rebuilt houses will be 691.7 thousand units, which is equivalent to 2.5% of the total housing units in 2019.

2. Competitive advantage rooting in the ability to differentiate and manufacture large tiles

The Vietnamese tile industry will still be oversupplied in the long term and there exists little differentiation in product lines of numerous tile manufacturers. Due to these two reasons, price competition will be harsher for Vietnamese tile firms. Thus, in 2021, the profits of enterprises in the industry will continue to narrow.

The opportunity to maintain and improve profit margins will come from the ability to manufacture differentiated product lines. A number of listed companies in the second half of 2019 made a move to differentiate their products such as Viglacera Tien Son (Euro tile & Colorful body) or JSC CMC (Soluble salt polished, micro crystal polished and sugar tiles). However, due to Covid-19, these products' prices fell sharply with decreases ranging from 4.5% up to 74.4%. In 2021, given the assumption that Covid-19 will be well controlled with the availability of vaccines, recovery in construction activities will boost the demand for these high-end products.

In 2021, the two types of tiles which are expected to sell well will be mosaic tiles (sizes 10x10cm, 15x15cm, 20x7cm and 20x20cm) together with large and super-large tiles (80x80cm, 60x120cm, 80x120cm, 120x240cm and 160x320cm). With such trends in tiles' consumption, manufacturers of ceramic tiles with aesthetic differences and large sizes such as 80x80cm, 60x120cm, 80x120cm are expected to increase competitiveness and improve profit margins.



3. Thermal coal and natural gas prices forecast to rise in 2021

With regard to thermal coal price, demand for coal is expected to increase in 2021 thanks to positive news about Covid-19 vaccine experiments which helps boost the speed of recovery of the world economic activities. Thermal coal price forecasts of World Bank and IMF are as below:

- The World Bank October 2020 commodity forecast estimated that the price of coal will increase to 57.8 USD/mt in 2021 from 57.3 USD/mt in 2020, with slow growth beyond 2021.
- The IMF October 2020 release of the World Economic Outlook detailed an alternative scenario under which prices could reach 63.5 USD/mt in 2021 and increase still further to 2023 to 73 76 USD/mt.

Given the fact that the proportion of imported thermal coal in the mix with locally mined coal is rising annually, we expect the price of thermal coal sold to Vietnamese tile firms will quickly react and follow the trend of world coal price. As a result, for the world coal price is forecast to increase, the gross profit margin of Vietnamese tile manufacturers will be further reduced in 2021.

113.2 120 94.1 100 USD/metric tonne 107 82.2 70.1 80 63.5 62.7 88.5 59.6 77.9 60 66.1 58.9 57.8 57.2 40 20 0 2015 2016 2017 2018 2019 2020E 2021F - IMF Forecast World Bank forecast

Chart 39: Australian thermal coal price between 2015 and 2021F

Source: IMF & World Bank.

For CNG and LPG, the future price depends larhely on the forecast oil price. According to EIA, Brent oil price will average at 52.7 USD/barrel in 2021, which is higher than the estimated price of 41.7 USD/barrel in 2020.

According to oil forecast by EIA, the price for Brent oil will average at 52.7 USD/barrel in 2021, which will be higher than the estimated price at 41.7 USD/barrel in 2020. The forecast increase in Brent oil comes from the expectation that crude oil inventory will decrease as a result of increasing oil demand and production cut by OPEC.

Fuel cost accounts for 29.3% of the total expense for raw materials and fuel and more than 20% in terms of tiles' cost of goods sold. Therefore, that the world thermal coal and Brent oil prices are forecast to rise by 6.5% and 26.4% respectively will create a negetive impact on the gross profit margin of tile manufacturing firms.



III. Publicly listed Vietnamese tile manufacturers currently covered by FPTS

Table 7: List of Vietnamese tile manufacturing firms currently covered by FPTS

Ticker	Market capitalization (12/25/2020)	Net revenue 2020	Net income 2020	Annual net income growth (%)	Gross profit margin	ROE	P/E trailing
<u>CVT</u>	VND 1,556b	VND 1,293b	VND 117b	- 29.9%	15.8%	15.4%	13.2x

- In terms of production capacity, CVT is the 7th largest manufacturer of ceramic and porcelain tiles in the industry and the biggest one among listed tile firms.
- 2020 continued to be a difficult year for CVT when the firm's net revenue and net income witnessed negative growth. Specifically, 2020 net revenue reached 1,293 billion VND (-11.7% yoy) and net income was 117 billion VND (-29.9% yoy). The Covid-19 epidemic made the current price competition among Vietnamese tile manufacturers become more serious and sharply reduced the demand for high-end products with high prices. To be specific, the selling price of the large ceramic and porcelain tiles group of CVT has decreased dramatically, ranging from 20.3% to 74.6%. This is the main reason why the gross profit margin of the business decreased significantly.
- **Prospects:** With the expectation that the Covid-19 epidemic will be well controlled by vaccines in 2021, domestic demand for ceramic tiles will increase as compared to 2020, from which it is expected that CVT will enjoy revenue and profit growth in 2021. The group of products with outstanding consumption will be decorative wall tiles and floor tiles with the size of 500x500 mm or more. For vitrified and soluble salt floor tiles, consumption is forecast to remain modest considering that these products have been launched since 2018 and demand from the market is not too high due to the difficulty of competing with well-known imported tiles from Italy, Spain and China.

VIT VND 306b VND 1,291b VND 59b -18.1% 12.5% 19.1%	6 5.42x
--	---------

- VIT manufacturers 100% porcelain tiles. Regarding production capacity, VIT is the 9th largest manufacturer in the industry and the 2nd biggest one among listed firms.
- In 2020, under the impact of Covid-19,VIT's net revenue and net income of VIT showed a negative growth. Specifically, net revenue in 2020 reached 1,291 billion VND (-12.4% yoy) and net income was only 59 billion VND (-18.1% yoy). While the selling prices of regular digitally printed granite tiles increased from 2.2% to 5.8%; the Eurotile group had its prices reduced up to 16% in 2020. That personal income was affected by the Covid-19 epidemic caused a marked reduction in demand for high-end products, leading to harsh price competition and VIT had to lower selling prices to ensure sales volume. In addition, natural gas prices plummeted in 2020, helping VIT maintain gross profit margin which decreased slightly as compared to 2019 although it was negatively affected by lower selling prices.
- **Prospects:** 2020 is an unusual year with the outbreak of Covid-19, which affected VIT's business negatively. As for the year 2021, with vaccines release and economic production expected to resume normal operations, VIT is expected to continue to maintain the growth momentum of revenue and profit as in 2019 with two product lines on the market, namely Euro tile and Colorful Body.

<u>VHL</u> VND 675b VND 1,898b VND 84b - 33.9% 17.4% 12.5% 7.89x

- VHL manufactures 100% cotto tiles. With regard to production capacity, VHL is the 16th largest manufacturer in the industry and the 5th biggest one among listed firms.
- The firm's net revenue and net income in 2020 was at 1,898 billion VND (-5.1% yoy) and 84 billion VND (-33.9% yoy) respectively. Demand for finishing construction materials is negatively affected by the slowdown in residential and non-residential construction growth and the tendency to use unfired materials instead of conventional fired ones, which made VHL's selling prices continue to decline. Gross profit margin for the whole 2020 was 17.4%, down by 1.7% as compared to the same period.



Prospects: In 2021, the forecasted decreasing price of fired bricks and cotto tiles together with the trend of preferring
unfired roof tiles to fired ones will make VHL face many difficulties in terms of pushing sales volume. Moreover, given
the Ministry of Construction's planning of using unfired construction materials, the long-term prospect of VHL is quite
gloomy.

TTC VND 77b VND 297b VND 15b 0% 15.5% 12.3% 5.40x

- In terms of production capacity, TTC is the 15th largest manufacturer of ceramic and porcelain tiles in the industry and the 4th biggest one among listed firms.
- TTC's net revenue and after-tax income in 2020 were 297 billion VND (-23.3% yoy) and 15 billion VND (more or less the same as in 2019) respectively. Due to the slight reduction in selling prices of TTC's mid-end products and the great benefit from the sharp fall in oil prices over the year, TTC's gross profit margin stood at 15.5%, which increased by 3.4% as compared to 2019.
- TTC's sales prospect is expected to be modest in 2021. The firm's competiveness is weak as the manufacturing technology is outdated and the firm can not manufacture tiles which are bigger than the size of 60x60cm

Source: Financial Statements of CVT, VIT, VHL and TTC.



RESEARCH DEPARTMENT CONTACTS

Deputy Director:

Nguyen Thi Kim Chi

chintk@fpts.com.vn

Fundamental Analysts

Analysts:

Nguyen Ngoc Duc

ducnn2@fpts.com.vn

Bui Duc Duy

duybd@fpts.com.vn

Ta Viet Phuong

phuongtv@fpts.com.vn

Bui Thi Phuong

phuongbt@fpts.com.vn

Duong Bich Ngoc

ngocdb@fpts.com.vn

Dau Duc Nam

namdd@fpts.com.vn

Hoang Thi Tuyen

tuyenht@fpts.com.vn

Nguyen Vu Cuong

cuongnv2@fpts.com.vn

Dang Viet Hoang

hoangdv@fpts.com.vn

Nguyen Thi Cuc

cucnt@fpts.com.vn

Truong Thi Phuc Nguyen

nguyenttp@fpts.com.vn

Lam Man Nhi

nhilm@fpts.com.vn

Do Quoc Viet

vietdq@fpts.com.vn

Trinh Hao Tin

tinth2@fpts.com.vn

Tran Ky Duyen

duyentk@fpts.com.vn

Nguyen Duc Thanh Nhan

nhanndt@fpts.com.vn

Data Analysts

Analysts:

Vu Thi Hong

hongvt@fpts.com.vn

Nguyen Tuan Nghia

nghiant@fpts.com.vn
Le Thi Thuy Duong

duongltt@fpts.com.vn

Technical Analysts

Team Leader:

Nguyen Ngoc Tuan

tuannn@fpts.com.vn

Analysts:

Nguyen Duc Anh

anhnd2@fpts.com.vn



Disclaimer

All information and analysis in this report by FPTS are based on reliable, public and legal sources. However, we do not guarantee the accuracy and completeness of the sources.

Investors need to be aware that all judgements in this report are FPTS analysts' subjective opinions and have to be fully responsible for their decisions when using this report.

FPTS can make investment decisions based on the information provided in this report or others without having any claims on the legal perspective of given information.

This report may not be copied, reproduced, published or redistributed for any purpose without written permission of an authorized representative of FPTS. Please cite the sources when quoting.

Information related to stocks and industries could be found at https://ezsearch.fpts.com.vn or provided upon official requests.

© Copyright by FPT Securities 2010

Head Office

No. 52 Lac Long Quan, Buoi Ward, Tay Ha Distric, Hanoi, Vietnam Tel: (84.24) 3 773 7070 / 271 7171

Fax: (84.24) 3 773 9058

FPT Securities Joint Stock Company FPT Securities Joint Stock Company Ho Chi Minh City Office

3rd Floor, Ben Thanh Times Square, No. 136-138 Le Thi Hong Gam, District 1, Ho Chi Minh City, Vietnam

Tel: (84.28) 6 290 8686 Fax: (84.28) 6 291 0607

FPT Securities Joint Stock Company Da Nang Office

3rd – 4th Floor, Trang Tien Building, No. 130 Dong Da, Hai Chau District, Danang, Vietnam

Tel: (84.23) 6 3553 666 Fax: (84.23) 6 3553 888