

BUY (Unchanged)

Change in Numbers

TP: Bt 24.00

Upside : 17.6%

(From: Bt 22.00)

13 DECEMBER 2021

Small Cap Research

Amata Corporation Pcl (AMATA TB)

At an inflection point

We reaffirm our BUY call on AMATA with a higher TP of Bt24. We see operational inflection points for a turnaround being land finally being available for sale in Vietnam, revenue recognition of backlog, pent-up demand for new land sales and recurring businesses bottoming out.



RATA LIMSUTHIWANPOOM

662 – 483 8297

rata.lim@thanachartsec.co.th

Reaffirming BUY

We reaffirm our BUY call on AMATA. **First**, we foresee four inflection points for a business turnaround, ie, Vietnam land sales, post-COVID pent-up Thai land sales demand, revenue recognition of backlog and a bottoming out of recurring income. **Second**, we expect this year to mark the deep bottom of its earnings base with a sharp turnaround of 102/19% In 2022-23F. **Third**, we foresee more revenue flows kick-starting deleveraging, which should support earnings and end its rising debt trend. **Lastly**, there is decent potential upside to our higher SOTP-based 12-month TP of Bt24, where we already conservatively assign an average 30% discount to its landbank value. AMATA also looks inexpensive to us on 2022F P/BV of 1.4x, vs. its pre-COVID past-five-year average of 1.6x.

The inflection points

First, after years of waiting for land in Vietnam, the region's FDI star, it has finally started coming through for 73%-owned Amata Vietnam (AMATAV TB, Bt7.75, SELL) and we expect 397/438/500 rai of land presales in 2021-23F vs. none in 2019-20. We prefer to play this via the parent AMATA. **Second**, we expect pent-up demand to lead to land presales resuming in Thailand at 410/500/700 rai in 2021-23F, vs. 648/212 in 2019-20. **Third**, a COVID-induced land transfer delay of 917 rai, or Bt5.8bn in backlog, should turn into revenue in 2022-23F. **Fourth**, we project a turnaround to Bt1.6/1.7bn in 2021-22F recurring operating income (water, power, rental and other services) after the drop to Bt1.7/1.5bn in 2019-20 from the COVID-19 impact.

Halong the savior in Vietnam

AMATA, via AMATA VN Pcl. (AMATAV), has had a long hiccup in its Vietnam business, where its first 27-year-old industrial estate (IE) ran out of land many years ago while Long Than, its second IE there, has taken many years to get land delivered. Exhibit 5 shows the drying up of Vietnam land sales. AMATAV invested in its third IE, Halong, from 2018. Halong's land has been delivered faster than we'd expected and it received 500 rai p.a. in 2019/21. It presold to its first customer 322 rai in total for 9M21. We expect AMATAV's land sales target of 400 rai in 2022 to be achievable.

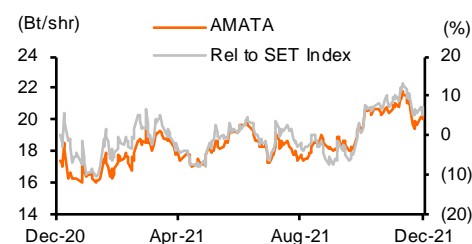
Lifting our TP to Bt24

We cut our EPS estimate by 31% this year on higher gas costs and the many waves of COVID-19 disrupting its businesses. However, we raise our numbers by 6/20% in 2022-23F. As for our TP, we boost it to Bt24 (from Bt22) as we incorporate more Vietnam land bank and include its replacement power plant project. Please see our SOTP breakdown in Exhibit 11 and 12.

COMPANY VALUATION

Y/E Dec (Bt m)	2020A	2021F	2022F	2023F
Sales	4,202	4,036	6,635	8,074
Net profit	1,103	737	1,490	1,778
Consensus NP	—	1,141	1,542	1,797
Diff frm cons (%)	—	(35.4)	(3.4)	(1.1)
Norm profit	1,153	737	1,490	1,778
Prev. Norm profit	—	1,074	1,402	1,482
Chg frm prev (%)	—	(31.4)	6.3	20.0
Norm EPS (Bt)	1.0	0.6	1.3	1.5
Norm EPS grw (%)	(41.2)	(38.3)	102.2	19.3
Norm PE (x)	19.6	31.8	15.7	13.2
EV/EBITDA (x)	21.4	24.4	13.8	11.1
P/BV (x)	1.5	1.5	1.4	1.3
Div yield (%)	1.0	1.3	2.5	3.0
ROE (%)	7.8	4.6	9.0	10.0
Net D/E (%)	70.4	63.4	49.2	36.6

PRICE PERFORMANCE



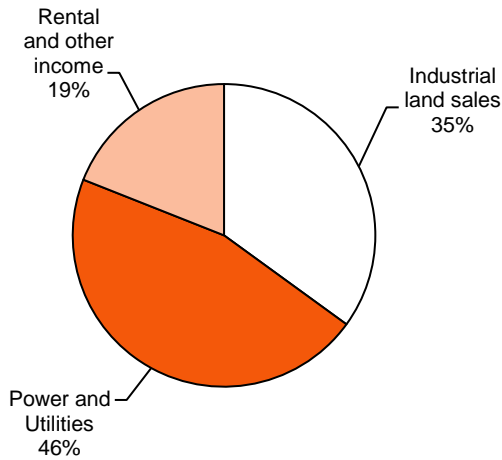
COMPANY INFORMATION

Price as of 13-Dec-21 (Bt)	20.40
Market Cap (US\$ m)	702.2
Listed Shares (m shares)	1,150.0
Free Float (%)	73.0
Avg Daily Turnover (US\$ m)	7.0
12M Price H/L (Bt)	21.80/16.00
Sector	Industrial Estate
Major Shareholder	Kromadit family 26.2%

Sources: Bloomberg, Company data, Thanachart estimates

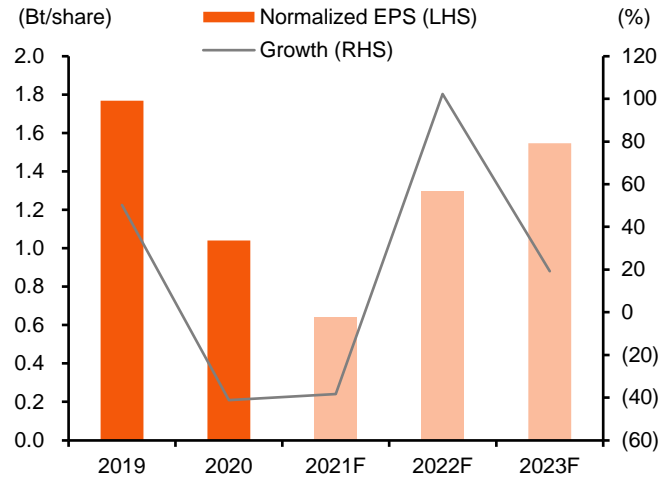


Ex 1: 2022F Operating Profit Breakdown



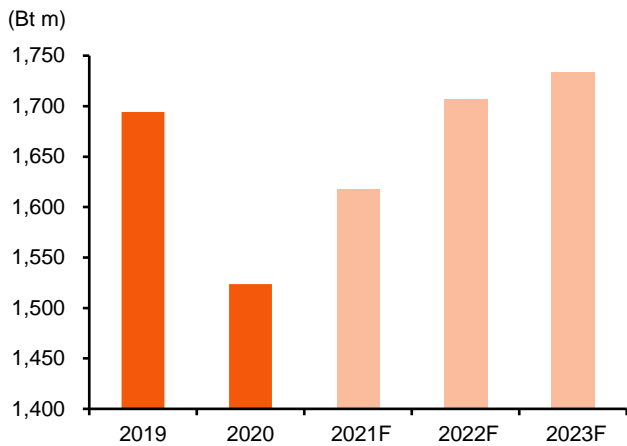
Source: Thanachart estimates
 Note: power business is an equity investment

Ex 2: Normalized EPS Forecasts



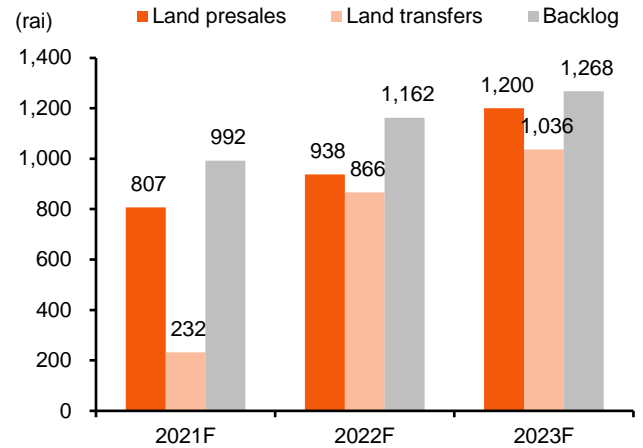
Sources: Company data, Thanachart estimates

Ex 3: Recurring Operating Income



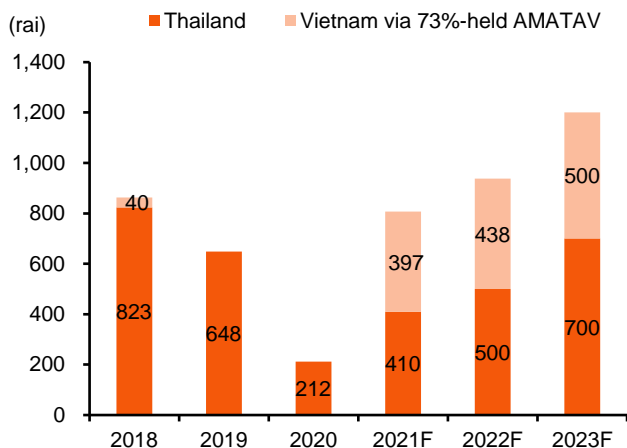
Sources: Company data, Thanachart estimates

Ex 4: Land Sales Forecasts



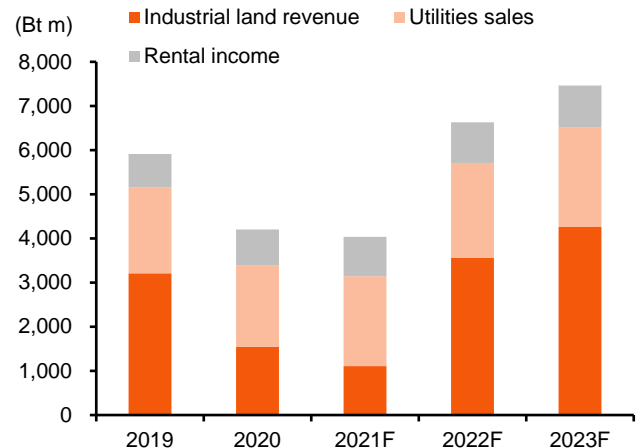
Source: Thanachart estimates

Ex 5: Land Pre-sales Forecasts By Location



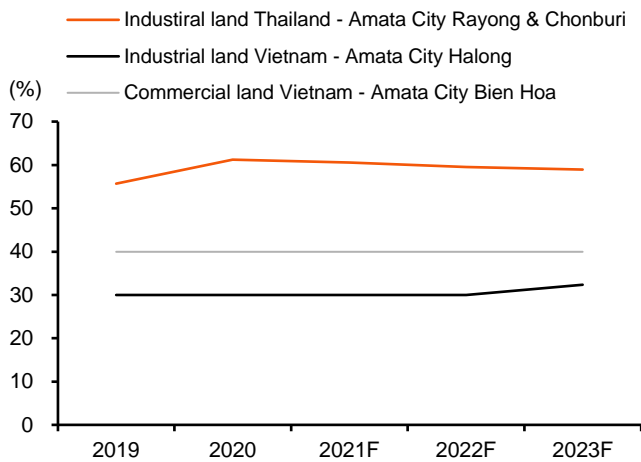
Sources: Company data, Thanachart estimates

Ex 6: Revenue Forecasts



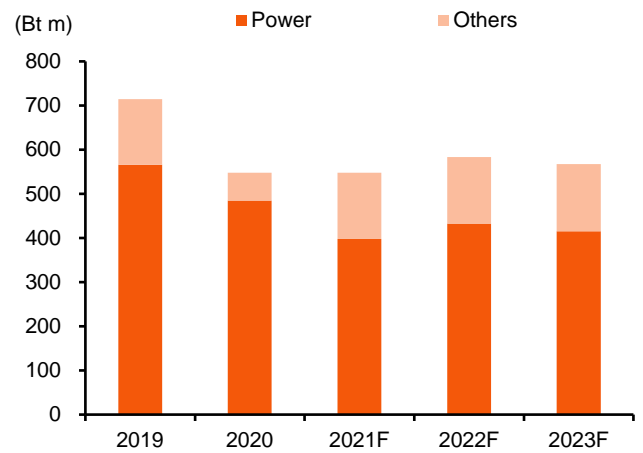
Sources: Company data, Thanachart estimates

Ex 7: Gross Profit Margin Forecasts



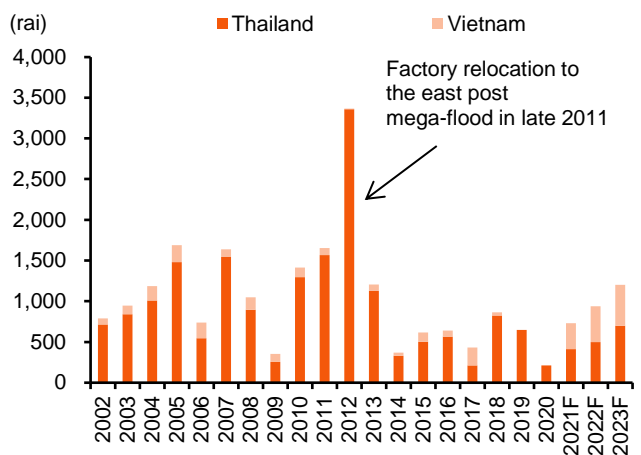
Sources: Company data, Thanachart estimates

Ex 8: Equity Income



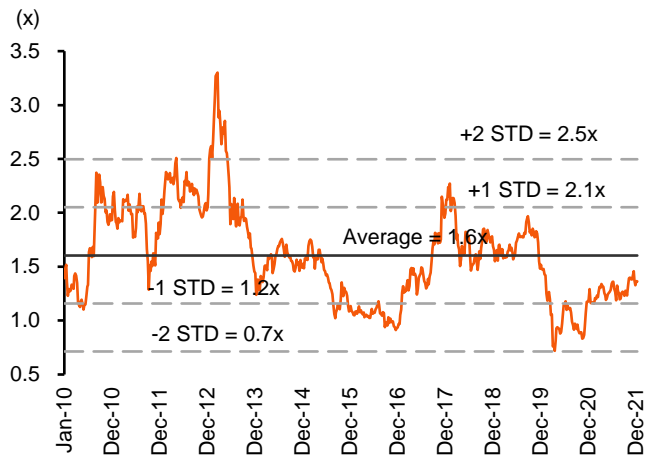
Sources: Company data, Thanachart estimates

Ex 9: AMATA's Land Presales



Sources: Company data, Thanachart estimates

Ex 10: Share Price Trades Below Average P/BV



Sources: Bloomberg, Thanachart estimates

Ex 11: Our NAV-Derived SOTP-Based TP Upgrade

	New		Old	
	Equity value (Bt/share)	SOTP (%)	Equity value (Bt/share)	SOTP (%)
Thailand operations	20.0	83%	19.0	91%
Industrial estates	11.6	48%	11.4	53%
Power and utilities	6.1	25%	5.3	27%
Rental factories/other assets	1.9	8%	1.9	9%
REIT investment	0.4	2%	0.4	2%
Vietnam operations	4.0	17%	3.0	9%
Total	24.0	100%	22.0	100%

Sources: Company data, Thanachart estimates

We use SOTP methodology to value AMATA, whose normalized profit breakdown in 2022F is 35% from land sales, 46% from electricity (equity income) and water sales, and 19% from rental income. We use DCF to value its power plant and PE for its utilities businesses, while we use land prices to value its industrial estate (IE) business and AMATAV. For landbank in Thailand, we apply a 30% discount for developed land and value raw land at cost. For Vietnam land bank, we apply a 30% discount for the Halong industrial estate's developed land, 20% for the Bien Hoa commercial project and 40% for the Long Thanh industrial estate, while raw land is valued at cost. Our SOTP-based 12-month TP is now at Bt24 (see Exhibit 5), up from Bt22, mainly because we incorporate more landbank from AMATA VN's Halong estate. We also factor in the equity value of two power plants under its joint venture with BGrimm Power Pcl (BGRIM TB, Bt39.5, BUY) in which AMATA holds a 14% stake. These power plants are to replace the expiring existing projects, which have 47 equity-MW (54% is sold to the Electricity Generating Authority of Thailand [EGAT] under a power purchase contract and the rest is sold to industrial users). The replacement project that is scheduled to come on stream late next year is designed to have a total capacity of 40 equity-MW (21% of which would be sold to EGAT and the remainder sold to industrial users).

Ex 12: Our NAV-Derived SOTP-Based TP For AMATA

	Sellable area		Selling price/rai (Bt m/rai)	Land cost/rai (Bt m/rai)	NAV	
	Developed	Raw land			Developed land*	Undeveloped land*
	(rai)	(rai)			(Bt m)	(Bt m)
Thailand						
Amata City Chonburi	598	8,411	11.0	1.3	4,605	10,934
Amata City Rayong	1,230	806	4.5	0.55	3,875	443
Total	1,828	9,217			8,479	11,378
Total landbank value						19,857
Power (294MW equity-owned)						7,716
Water @ 8x PE						2,776
AMATAR (REIT) - 17% stake						749
Fixed assets (rental factory business, investments in associates and other fixed assets @ 50% discount)						3,281
Total assets						34,379
Less: Net debt (ending 2021F)						8,327
Less Minority interest (ending 2021F)						3,103
Equity value						22,949
Equity value/share (Bt)						20.0
Vietnam						
Amata Bien Hoa Commercial Complex	75	0	24.8	1.5	1,488	0
Amata City Long Thanh IP	125	1,669	8.9	2.3	670	4,208
Amata City Halong IP	2800	0	4.0	0.8	7,777	539
Total	3,000	1,669			9,935	4,208
Total landbank value						14,143
Fixed assets (rental factory business, other fixed assets @ 50% discount)						346
Investments in associates in power business (16% stake- @ 50% discount)						72
Total assets						14,561
Less: Net debt (ending 2021F)						7,815
Less: Minority interest (ending 2021F)						366
Equity value						6,380
Equity value/share (Bt)						4.0
AMATA						24.0

Sources: Company data, Thanachart estimates

* For developed land, we apply 30% discount to Thai's estates, 30% to Vietnam's Halong estate, 40% to Vietnam's Long Thanh estate and 20% for Vietnam's commercial land at Bien Hoa, while we value land bank at cost.

Ex 13: Our Key Assumption Changes

	2019	2020	2021F	2022F	2023F
Presales of industrial land (rai)					
New					
Thailand	648	212	410	500	700
Vietnam	0	0	322	438	500
Total	648	212	732	938	1,200
Old					
Thailand	648	212	200	500	700
Vietnam	0	0	375	438	500
Total	648	212	575	938	1,200
Industrial land revenue (Bt m)					
New					
Thailand	3,148	1,541	844	2,044	2,342
Vietnam	62	0	267	1,522	2,534
Total	3,210	1,541	1,110	3,565	4,876
Old					
Thailand	3,148	1,541	843	1,759	2,228
Vietnam	62	0	887	1,317	1,758
Total	3,210	1,541	1,730	3,076	3,985
Vietnam commercial land					
Presales (rai)	0	0	75	0	0
Revenue (Bt m)	0	0	0	0	605
Gross margin (%)	0	0	0	0	40
Normalized profit contribution from Vietnam business via AMATAV with a 73% stake (Bt m)					
New	105	12	29	209	391
Old	105	12	133	200	271
<i>Change (%)</i>	<i>0.0</i>	<i>0.0</i>	<i>(78.1)</i>	<i>4.6</i>	<i>44.1</i>
Normalized profit (Bt m)					
New	1,742	1,103	737	1,490	1,778
Old	1,887	1,153	1,074	1,402	1,482
<i>Change (%)</i>	<i>(7.7)</i>	<i>(4.3)</i>	<i>(31.4)</i>	<i>6.3</i>	<i>20.0</i>

Sources: Company, Thanachart estimates

Valuation Comparison

Ex 14: Valuation Comparison With Regional Peers

Name	BBG code	Country	EPS growth		PE		P/BV		EV/EBITDA		Div yield	
			21F (%)	22F (%)	21F (x)	22F (x)	21F (x)	22F (x)	21F (x)	22F (x)	21F (%)	22F (%)
Sembcorp Industri	SCI SP	Singapore	96.4	42.7	12.8	9.0	1.0	0.9	9.4	8.8	2.4	3.2
Bekasi Fajar Industrial Estate	BEST IJ	Indonesia	14.3	61.0	na	na	0.3	0.3	101.5	19.4	0.5	0.1
Alam Sutera Realty	ASRI IJ	Indonesia	na	23.4	10.6	8.6	0.4	0.4	8.1	7.5	na	na
Bumi Serpong Damai	BSDE IJ	Indonesia	422.9	16.7	14.2	12.2	0.6	0.6	8.5	7.8	0.3	0.7
Ciputra Development	CTRA IJ	Indonesia	10.0	(3.1)	13.6	14.0	1.2	1.1	8.3	8.7	0.8	1.1
Lippo Karawaci	LPKR IJ	Indonesia	98.1	na	na	112.5	0.5	0.5	8.5	9.4	0.0	0.0
Pakuwon Jati	PWON IJ	Indonesia	35.9	28.8	18.7	14.5	1.5	1.4	10.6	9.5	0.6	0.8
Summarecon Agung	SMRA IJ	Indonesia	58.7	54.9	47.6	30.7	1.8	1.7	13.6	12.3	0.2	0.4
Surya Semesta	SSIA IJ	Indonesia	(12.5)	na	na	95.3	0.6	0.6	12.6	7.3	0.0	0.0
Amata Corporation *	AMATA TB	Thailand	(38.3)	102.2	31.8	15.7	1.5	1.4	24.4	13.8	1.3	2.5
Amata VN *	AMATAV TB	Thailand	153.9	615.8	180.8	25.3	2.2	2.0	33.6	16.3	1.3	1.6
Frasers Property *,**	FPT TB	Thailand	57.3	26.3	11.2	8.9	0.8	0.7	15.9	13.5	3.6	4.5
WHA Corp PCL *	WHA TB	Thailand	9.6	34.9	19.2	14.3	1.9	1.7	25.3	20.5	2.1	2.8
Average			75.5	91.2	36.1	30.1	1.1	1.0	21.6	11.9	1.1	1.5

Sources: Company data, Thanachart estimates

Note: * Thanachart estimates, using normalized EPS

** FPT's fiscal year ends in September

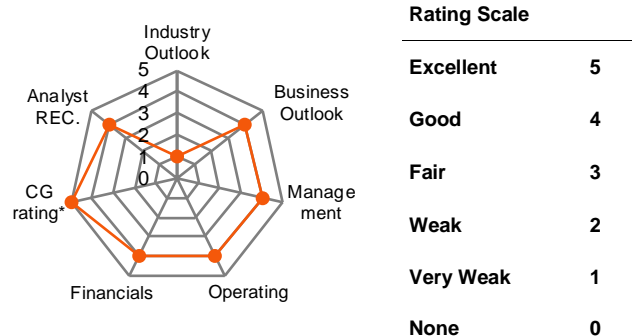
Based on 13-Dec-21 closing prices

COMPANY DESCRIPTION

Amata Corporation Pcl (AMATA) develops industrial estates primarily serving manufacturing plants and factories. The company acquires land and develops the essential infrastructure and facilities required for industrialized operations. It has two estates in Thailand; Amata City Chonburi and Amata City in Rayong, and one operating estate in Vietnam with two estates to be launched.

Source: Thanachart

COMPANY RATING



Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Strategically located. Amata Nakorn is 42km from Suvarnabhumi airport and Amata City is 27km from Laem Chabang deep-sea port.
- Operates in an oligopolistic market.
- Huge landbank available for sale.

O — Opportunity

- EEC scheme to attract new investment cycle in the next two years with rising land prices ahead of the game.
- Diversification into businesses which contribute recurring income, i.e., rental business, utilities and power.

W — Weakness

- Earnings are highly dependent on land sales which are by nature bulky and can cause high earnings volatility.
- Business is capital intensive.
- Business is less diversified than peers'.

T — Threat

- Highly sensitive to economic conditions.
- A weakening global economy.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	22.11	24.00	9%
Net profit 21F (Bt m)	1,141	737	-35%
Net profit 22F (Bt m)	1,542	1,490	-3%
Consensus REC	BUY: 11	HOLD: 2	SELL: 3

HOW ARE WE DIFFERENT FROM THE STREET?

- Our earnings for 2021-22F are well below the Bloomberg consensus which we attribute to us being more conservative on land sales.
- Our TP however is 9% above the Street's, which we attribute to us valuing the company's existing assets using NAV methodology.

Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- If new investment incentives fail to attract investors, we see downside risk to our land sales assumptions.
- Domestic or global economic downturns could pose downside risk to our land sales assumptions.
- We see downside risk to our earnings if AMATAV cannot sell and transfer land as expected.
- If Vietnam's economy grows slower than the level we expect presently, there could be downside risk to AMATAV's (AMATAV TB, Bt7.75, SELL) long-term earnings which contribute to AMATA's bottom line.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	5,914	4,202	4,036	6,635	8,074
Cost of sales	2,917	2,066	2,134	3,587	4,446
Gross profit	2,997	2,136	1,902	3,048	3,628
% gross margin	50.7%	50.8%	47.1%	45.9%	44.9%
Selling & administration expenses	1,053	815	818	1,001	1,197
Operating profit	1,944	1,321	1,084	2,047	2,431
% operating margin	32.9%	31.4%	26.9%	30.8%	30.1%
Depreciation & amortization	311	355	387	409	430
EBITDA	2,254	1,676	1,471	2,456	2,861
% EBITDA margin	38.1%	39.9%	36.5%	37.0%	35.4%
Non-operating income	319	177	96	96	96
Non-operating expenses	0	0	0	0	0
Interest expense	(330)	(436)	(488)	(484)	(437)
Pre-tax profit	1,932	1,062	691	1,659	2,090
Income tax	314	164	138	265	334
After-tax profit	1,618	899	553	1,394	1,755
% net margin	27.4%	21.4%	13.7%	21.0%	21.7%
Shares in affiliates' Earnings	715	552	548	584	568
Minority interests	(446)	(298)	(364)	(487)	(545)
Extraordinary items	(145)	(49)	0	0	0
NET PROFIT	1,742	1,103	737	1,490	1,778
Normalized profit	1,887	1,153	737	1,490	1,778
EPS (Bt)	1.6	1.0	0.6	1.3	1.5
Normalized EPS (Bt)	1.8	1.0	0.6	1.3	1.5

Operational turnaround

BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
ASSETS:					
Current assets:	10,221	10,321	10,551	11,392	11,675
Cash & cash equivalent	2,285	2,386	2,400	2,400	2,400
Account receivables	573	398	387	818	885
Inventories	7,204	7,416	7,648	7,983	8,158
Others	159	121	116	191	232
Investments & loans	4,424	4,574	4,574	4,574	4,574
Net fixed assets	7,280	7,037	7,398	7,742	8,266
Other assets	14,473	18,554	20,155	20,623	20,803
Total assets	36,397	40,486	42,678	44,330	45,318
LIABILITIES:					
Current liabilities:	5,179	4,174	4,827	5,606	5,845
Account payables	683	548	567	953	1,182
Bank overdraft & ST loans	851	305	889	767	645
Current LT debt	2,144	1,894	2,228	1,923	1,617
Others current liabilities	1,501	1,427	1,143	1,962	2,401
Total LT debt	10,443	13,386	11,696	10,098	8,489
Others LT liabilities	3,798	4,173	6,564	7,502	8,192
Total liabilities	19,421	21,733	23,087	23,206	22,525
Minority interest	2,922	3,104	3,469	3,956	4,501
Preferreds shares	0	0	0	0	0
Paid-up capital	1,067	1,150	1,150	1,150	1,150
Share premium	174	1,070	1,070	1,070	1,070
Warrants	0	0	0	0	0
Surplus	101	(14)	(14)	(14)	(14)
Retained earnings	12,713	13,443	13,917	14,962	16,086
Shareholders' equity	14,055	15,648	16,123	17,168	18,292
Liabilities & equity	36,397	40,486	42,678	44,330	45,318

Due to the nature of its business, it carries huge land inventory for sale

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	1,932	1,062	691	1,659	2,090
Tax paid	(251)	(229)	(131)	(215)	(298)
Depreciation & amortization	311	355	387	409	430
Chg In working capital	533	(173)	(202)	(380)	(14)
Chg In other CA & CL / minorities	390	353	140	1,223	881
Cash flow from operations	2,916	1,369	886	2,697	3,089
Capex	(791)	(77)	(700)	(700)	(900)
Right of use	0	(264)	(300)	(50)	(50)
ST loans & investments	0	0	0	0	0
LT loans & investments	(621)	(149)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(2,318)	(2,939)	703	522	553
Cash flow from investments	(3,730)	(3,429)	(297)	(228)	(397)
Debt financing	1,696	2,132	(773)	(2,024)	(2,038)
Capital increase	0	979	0	0	0
Dividends paid	(395)	(373)	(262)	(445)	(654)
Warrants & other surplus	(260)	(116)	0	0	0
Cash flow from financing	1,041	2,622	(1,035)	(2,469)	(2,692)
Free cash flow	2,125	1,292	186	1,997	2,189

Share price trades below
average P/BV

VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	11.5	19.6	31.8	15.7	13.2
Normalized PE - at target price (x)	13.6	23.1	37.4	18.5	15.5
PE (x)	12.5	20.5	31.8	15.7	13.2
PE - at target price (x)	14.7	24.1	37.4	18.5	15.5
EV/EBITDA (x)	14.6	21.4	24.4	13.8	11.1
EV/EBITDA - at target price (x)	16.3	23.8	27.2	15.5	12.6
P/BV (x)	1.5	1.5	1.5	1.4	1.3
P/BV - at target price (x)	1.8	1.8	1.7	1.6	1.5
P/CFO (x)	7.5	16.5	26.5	8.7	7.6
Price/sales (x)	4.0	5.6	5.8	3.5	2.9
Dividend yield (%)	1.0	1.0	1.3	2.5	3.0
FCF Yield (%)	9.8	5.7	0.8	8.5	9.3
(Bt)					
Normalized EPS	1.8	1.0	0.6	1.3	1.5
EPS	1.6	1.0	0.6	1.3	1.5
DPS	0.2	0.2	0.3	0.5	0.6
BV/share	13.2	13.6	14.0	14.9	15.9
CFO/share	2.7	1.2	0.8	2.3	2.7
FCF/share	2.0	1.2	0.2	1.7	1.9

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Growth Rate					
Sales (%)	35.8	(28.9)	(4.0)	64.4	21.7
Net profit (%)	71.1	(36.7)	(33.2)	102.2	19.3
EPS (%)	71.1	(39.1)	(35.6)	102.2	19.3
Normalized profit (%)	50.2	(38.9)	(36.1)	102.2	19.3
Normalized EPS (%)	50.2	(41.2)	(38.3)	102.2	19.3
Dividend payout ratio (%)	12.2	20.8	40.0	40.0	40.0
Operating performance					
Gross margin (%)	50.7	50.8	47.1	45.9	44.9
Operating margin (%)	32.9	31.4	26.9	30.8	30.1
EBITDA margin (%)	38.1	39.9	36.5	37.0	35.4
Net margin (%)	27.4	21.4	13.7	21.0	21.7
D/E (incl. minor) (x)	0.8	0.8	0.8	0.6	0.5
Net D/E (incl. minor) (x)	0.7	0.7	0.6	0.5	0.4
Interest coverage - EBIT (x)	5.9	3.0	2.2	4.2	5.6
Interest coverage - EBITDA (x)	6.8	3.8	3.0	5.1	6.5
ROA - using norm profit (%)	5.4	3.0	1.8	3.4	4.0
ROE - using norm profit (%)	14.0	7.8	4.6	9.0	10.0
DuPont					
ROE - using after tax profit (%)	12.0	6.1	3.5	8.4	9.9
- asset turnover (x)	0.2	0.1	0.1	0.2	0.2
- operating margin (%)	38.3	35.7	29.2	32.3	31.3
- leverage (x)	2.6	2.6	2.6	2.6	2.5
- interest burden (%)	85.4	70.9	58.6	77.4	82.7
- tax burden (%)	83.7	84.6	80.0	84.0	84.0
WACC (%)	0.0	0.0	0.0	0.0	0.0
ROIC (%)	7.2	4.4	3.0	6.0	7.4
NOPAT (Bt m)	1,628	1,117	867	1,719	2,042
invested capital (Bt m)	25,208	28,848	28,535	27,556	26,643

Sources: Company data, Thanachart estimates

General Disclaimers And Disclosures:

This report is prepared and issued by Thanachart Securities Public Company Limited (TNS) as a resource only for clients of TNS, Thanachart Capital Public Company Limited (TCAP) and its group companies. Copyright © Thanachart Securities Public Company Limited. All rights reserved. The report may not be reproduced in whole or in part or delivered to other persons without our written consent.

This report is prepared by analysts who are employed by the research department of TNS. While the information is from sources believed to be reliable, neither the information nor the forecasts shall be taken as a representation or warranty for which TNS or TCAP or its group companies or any of their employees incur any responsibility. This report is provided to you for informational purposes only and it is not, and is not to be construed as, an offer or an invitation to make an offer to sell or buy any securities. Neither TNS, TCAP nor its group companies accept any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

The information and opinions contained herein have been compiled or arrived at from sources believed reliable. However, TNS, TCAP and its group companies make no representation or warranty, express or implied, as to their accuracy or completeness. Expressions of opinion herein are subject to change without notice. The use of any information, forecasts and opinions contained in this report shall be at the sole discretion and risk of the user.

TNS, TCAP and its group companies perform and seek to perform business with companies covered in this report. TNS, TCAP, its group companies, their employees and directors may have positions and financial interest in securities mentioned in this report. TNS, TCAP or its group companies may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any entity mentioned in this report. Therefore, investors should be aware of conflict of interest that may affect the objectivity of this report.

Note: Thanachart Securities Public Company Limited act as a Market Maker and Derivative Warrants Issuer. At present, TNS has issued 129 Derivative Warrants which are ACE16C2201A, ACE16C2202A, ADVA16C2201A, ADVA16C2202A, AEON16C2201A, AEON16C2201B, AMAT16C2112A, AOT16C2204A, AOT16C2112A, AOT16C2202A, BAM16C2112A, BANP16C2112A, BANP16C2201A, BANP16C2202A, BBL16C2204A, BBL16C2201A, BBL16C2203A, BCH16C2201A, BCH16C2203A, BEC16C2202A, BGRI16C2112A, CBG16C2204A, CBG16C2201A, CBG16C2202A, CHG16C2112A, CHG16C2202A, COM716C2112A, COM716C2203A, CPAL16C2112A, CPAL16C2203A, CPF16C2112A, CPN16C2202A, CRC16C2204A, DELT16C2112A, DELT16C2202A, DELT16C2203A, DOHO16C2112A, DOHO16C2202A, DTAC16C2112A, EA16C2201A, ESSO16C2202A, GLOB16C2201A, GLOB16C2203A, GPSC16C2201A, GPSC16C2201B, GPSC16C2203A, GULF16C2112A, GULF16C2202A, GUNK16C2112A, GUNK16C2201A, GUNK16C2203A, HANA16C2112A, HANA16C2202A, HMPR16C2202A, INTU16C2201A, INTU16C2202A, IRPC16C2112A, IVL16C2202A, JAS16C2202A, JMAR16C2201A, JMAR16C2202A, JMT16C2201A, JMT16C2203A, KBAN16C2201A, KBAN16C2202A, KCE16C2201A, KTC16C2112A, KTC16C2202A, LH16C2202A, MAJO16C2201A, MEGA16C2112A, MINT16C2112A, MINT16C2203A, MTC16C2204A, MTC16C2112A, MTC16C2202A, OR16C2112A, OR16C2202A, OR16C2203A, PTG16C2201A, PTG16C2202A, PTG16C2203A, PTL16C2201A, PTL16C2202A, PTL16C2202B, PTT16C2112A, PTT16C2201A, PTT16C2203A, PTTE16C2112A, PTTE16C2203A, RBF16C2112A, RBF16C2202A, RS16C2112A, RS16C2201A, S5016C2112A, S5016C2112B, S5016C2112C, S5016C2112D, S5016C2203A, S5016P2112A, S5016P2112B, S5016P2112C, S5016P2112D, S5016P2203A, SAWA16C2204A, SAWA16C2112A, SAWA16C2202A, SCB16C2112A, SCB16C2201A, SCB16C2202A, SCC16C2112A, SCGP16C2201A, SCGP16C2202A, SPAL16C2202A, SPRC16C2201A, STA16C2203A, STA16C2112A, STA16C2201A, STEC16C2201A, STGT16C2202A, SYNE16C2202A, TASC16C2201A, TOP16C2112A, TOP16C2202A, TRUE16C2202A, TRUE16C2203A, TU16C2204A, TU16C2202A, WHA16C2202A (underlying securities are ACE, ADVANC, AEONTS, AMATA, AOT, BAM, BANPU, BBL, BCH, BEC, BGRIM, CBG, CHG, COM7, CPALL, CPF, CPN, CRC, DELTA, DOHOME, DTAC, EA, ESSO, GLOBAL, GPSC, GULF, GUNKUL, HANA, HMPRO, INTUCH, IRPC, IVL, JAS, JMART, JMT, KBANK, KCE, KTC, LH, MAJOR, MEGA, MINT, MTC, OR, PTG, PTL, PTT, PTTEP, RBF, RS, SAWAD, SCB, SCC, SCGP, SPALI, SPRC, SET50, STA, STEC, STGT, SYNTEC, TASCO, TOP, TRUE, TU, WHA). Since TNS covers those underlying securities in research report, consequently TNS incurs conflicts of interest. Moreover, investors are advised to carefully review the details and information in the prospectus before making investment decisions.

Note: Thanachart Securities has an indirect financial interest in Ratchthani Leasing Pcl (THANI). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds more than 56% of the shareholding in Ratchthani Leasing Pcl (THANI).

Note: Thanachart Capital Public Company Limited (TCAP), TMBThanachart Bank Public Company Limited (TTB), are related companies to Thanachart Securities Public Company Limited (TNS). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds 20.1% of the shareholding in TMBThanachart Bank Pcl.

Thanachart Capital Public Company Limited (TCAP), Ratchthani Leasing Public Company Limited (THANI), TMB Public Company Limited, MBK PUBLIC COMPANY LIMITED (MBK) and PATUM RICE MILL AND GRANARY PUBLIC COMPANY LIMITED (PRG) are related companies to Thanachart Securities Public Company Limited (TNS) . Since TNS covers those securities in research report, consequently TNS incurs conflicts of interest.

Disclosure of Interest of Thanachart Securities

Investment Banking Relationship

Within the preceding 12 months, Thanachart Securities has lead-managed public offerings and/or secondary offerings (excluding straight bonds) of the securities of the following companies: Saksiam Leasing Pcl. (SAK TB), SCG Packaging Pcl (SCGP TB)

Recommendation Structure:

Recommendations are based on absolute upside or downside, which is the difference between the target price and the current market price. If the upside is 10% or more, the recommendation is BUY. If the downside is 10% or more, the recommendation is SELL. For stocks where the upside or downside is less than 10%, the recommendation is HOLD. Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on the market price and the formal recommendation.

For sectors, an "Overweight" sector weighting is used when we have BUYs on majority of the stocks under our coverage by market cap. "Underweight" is used when we have SELLs on majority of the stocks we cover by market cap. "Neutral" is used when there are relatively equal weightings of BUYs and SELLs.

Thanachart Securities Pcl.

Research Team

19 Floor, MBK Tower

444 Phayathai Road, Pathumwan Road, Bangkok 10330

Tel: 662 - 779-9119

Email: thanachart.res@thanachartsec.co.th

Pimpaka Nichgaroon, CFA

Head of Research

Tel: 662-779-9199

pimpaka.nic@thanachartsec.co.th

Pattarawan Wangmingmat

Senior Technical Analyst

Tel: 662-779-9105

pattarawan.wan@thanachartsec.co.th

Phannarai Tiyapittayarut

Property, Retail

Tel: 662-779-9109

phannarai.von@thanachartsec.co.th

Sarachada Sornsong

Bank, Finance, Insurance

Tel: 662-779-9106

sarachada.sor@thanachartsec.co.th

Sittichet Rungrassameephat

Analyst, Quantitative

Tel: 662-483-8303

sittichet.run@thanachartsec.co.th

Adisak Phupiphathirungul, CFA

Retail Market Strategy

Tel: 662-779-9120

adisak.phu@thanachartsec.co.th

Nuttapop Prasitsuksant

Telecom, Utilities

Tel: 662-483-8296

nuttapop.pra@thanachartsec.co.th

Rata Limsuthiwanoom

Auto, Industrial Estate, Media, Prop. Fund

Tel: 662-483-8297

rata.lim@thanachartsec.co.th

Siriporn Arunothai

Small Cap, Healthcare, Hotel

Tel: 662-779-9113

siriporn.aru@thanachartsec.co.th

Thaloengsak Kucharoenpaisan

Analyst, Retail Market

Tel: 662-483-8304

thaloengsak.kuc@thanachartsec.co.th

Chak Reungsinpinya

Energy, Petrochemical, Paper

Tel: 662-779-9104

chak.reu@thanachartsec.co.th

Pattadol Bunnak

Electronics, Food & Beverage, Shipping

Tel: 662-483-8298

pattadol.bun@thanachartsec.co.th

Saksid Phadthananarak

Construction, Transportation

Tel: 662-779-9112

saksid.pha@thanachartsec.co.th

Witchanan Tambamroong

Technical Analyst

Tel: 662-779-9123

witchanan.tam@thanachartsec.co.th