

April 26, 2019

ICT

Some light at the end of the tunnel

We expect all three mobile operators to take NBTC's offers by deferral of 900MHz payment and bring in 700MHz license. Our model suggests accepting this will create negative value to operators as costs of 700MHz is higher benefit of delay 900MHz payment. But ADVANC' and TRUE's TP is still above the current price. This deal has also been bad allowing ADVANC and DTAC to raise dividend payout and avoiding cash call for TRUE. ADVANC and TRUE are the picks for sector, DTAC is Neutral call

Assume all three accept NBTC's offer, but values would drop due to 700MHz

All three mobile carriers are likely to accept the offer from NBTC to defer payment for 900MHz on the condition they bid for 700MHz spectrum. However, we still expect cost for the 700MHz license to exceed benefits from deferring payment for 900MHz. Our assumptions are conservative as we assumed zero incremental value from deploying 700MHz for 4G or potentially 5G. ADVANC and TRUE will see relatively similar impact at negative Bt6.2bn, while DTAC will be most affected at negative Bt10.3bn. On target price, ADVANC will be least affected with our TP being reduced by 1% to Bt213, followed by TRUE by 3% to Bt6, and DTAC by 7.5% to Bt54.

NBTC's offer would hurt stock values but operators will benefit from generous payment terms

Despite the negative benefits of NBTC's offer, generous payment terms for both 900MHz and 700MHz will benefit all three operators. ADVANC and DTAC will have room to raise dividend payout ratio to 100%. ADVANC's dividend yield will raise to 5.4%-5.5% from 3.8%-3.9% and DTAC to 4.4%-4.6% from 2.2%-2.3%. TRUE can avoid cash call risk as net debt to equity and net debt to EBITDA stay in the manageable level at 0.7x and 3x, respectively. This is below the level seen in 2015 before TRUE asked for cash injection.

Top picks are ADVANC and TRUE

Our DCF-based TP for ADVANC and TRUE are Bt213 and Bt6, respectively. We like ADVANC for potentially raising dividend yield after accepting NBTC's offer and the firm would have room to utilize 700MHz spectrum better than peers due to relatively spectrum limitation compared with its current subs. This indicated via its bandwidth/total subs, which is much fewer than its peers (2.9MHz/sub for ADVANC vs. 3.8 for TRUE and 5.2 for DTAC). TRUE would be a turnaround play both on profit and balance sheet strength, after accepting the NBTC's deal. We are Neutral on DTAC with a TP of Bt54. DTAC is no longer cheap and revenue is still falling as they continue to lose subs. The only positive factor is potentially higher dividend yield after accepting the NBTC's deal.



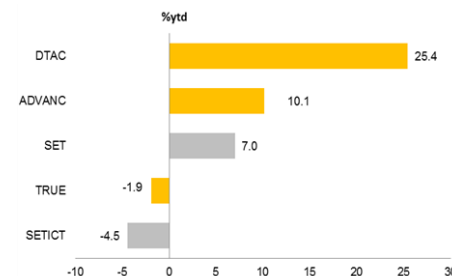
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Sector – EV/EBITDA



Source: Bloomberg, Krungsri Securities

Share Price Performance - YTD



Source: Bloomberg, Krungsri Securities

BB	M Cap	Price (Bt)	TP	U/D	Rec	EPS G%	ROE (%)	PE (x)	P/BV (x)	Div Yld (%)					
Ticker	(US\$)	25-Apr	(Bt)	(%)		19F	20F	19F	20F	19F	20F	19F	20F		
ADVANC	17,767	190.0	213.0	12.1	OUTPERFORM	3.6	2.7	35.5	34.5	18.4	18.0	8.4	7.4	3.8	3.9
TRUE	5,352	5.1	6.0	17.6	OUTPERFORM	N/A	197.1	1.2	3.5	78.3	26.3	0.5	0.4	0.6	1.9
DTAC	4,040	54.3	54.0	(0.5)	NEUTRAL	12.6	3.8	24.3	22.5	22.7	21.8	5.2	4.7	2.2	2.3

Accepting NBTC's offer but values will drop

To recap, the NBTC's offer for 900MHz involves stretching payment for the license to 10 years instead of 4 years, starting from the first year of validity (ADVANC and TRUE 2016, DTAC 2018). The annual payments would be spread out equally over 10 years (see figure). However, if they accept this offer, they are obligated to take and pay for, the 700MHz license. NBTC has given them 30 days from 11 April to submit a letter of interest. Having said that, it seems NBTC is more relaxed with the condition, allowing the operators to submit a letter to withdraw from the NBTC's offer if conditions for 700MHz, including pricing, are unfavorable to mobile carriers. We summarize below preliminary details for the 700MHz license that were unveiled on 17 April:

- Offering three 700MHz licenses, each comprising 2x15MHz bandwidth.
- Price for each license (2x15MHz) would not exceed Bt25bn.
- Payment will be spread out equally over 10 years (2020-2029).
- Coverage requirement is expected to be similar to 700MHz license, but we do not expect any requirements on technology.

We assumed the above conditions in our profit models. The 10-year payment term is crucial as we believe that would be the deciding factor for carriers to accept the total package from the NBTC.

Based on the above assumptions for 700MHz, we still expect the cost to exceed the benefits from the deferral of 900MHz payment. Our assumptions are conservative as we assumed zero value from deploying 700MHz for 4G or potentially 5G. ADVANC and TRUE will see relatively similar impact at negative Bt6.2bn, while DTAC will be most affected at negative Bt10.3bn. On target price, ADVANC will be least affected with our TP being reduced by 1% to Bt213, followed by TRUE by 3% to Bt6, and DTAC by 7.5% to Bt54.

Summary of the NBTC's proposals for 900MHz and 700MHz

หน่วย: ล้านบาท	1	2	3	4	5	6	7	8	9	10	11	12	13	14	รวม
จำนวนใบที่รวม VAT	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	รวม
AIS															
เงินชำระเข้ารัฐรูปแบบเดิม 900 AIS (5 ปี 4 งวด)	8,603	0	4,301	4,301	63,744	0	0	0	0	0	0	0	0	0	80,950
เงินที่ต่อชำระจากรูปแบบใหม่ AIS (ไม่รวมคลื่น 700 MHz)	8,603	0	4,301	4,301	23,269	8,095	8,095	8,095	8,095	8,095	0	0	0	0	80,950
TRUE															
เงินชำระเข้ารัฐรูปแบบเดิม 900 TRUE (5 ปี 4 งวด)	8,603	0	4,301	4,301	64,433	0	0	0	0	0	0	0	0	0	81,639
เงินที่ต่อชำระจากรูปแบบใหม่ TRUE (ไม่รวมคลื่น 700 MHz)	8,603	0	4,301	4,301	23,614	8,164	8,164	8,164	8,164	8,164	0	0	0	0	81,639
DTAC															
เงินชำระเข้ารัฐรูปแบบเดิม 900 DTAC (5 ปี 4 งวด)	0	0	4,301	0	2,151	2,151	32,126	0	0	0	0	0	0	0	40,728
เงินที่ต่อชำระจากรูปแบบใหม่ DTAC (ไม่รวมคลื่น 700 MHz)	0	0	4,301	0	7,917	4,073	4,073	4,073	4,073	4,073	4,073	4,073	0	0	40,728
รวมสามผู้ประกอบการ	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	รวม
เงินที่ต่อชำระเข้ารัฐรูปแบบเดิม ก่อนคำสั่ง คสช.	17,206	0	12,904	8,603	130,328	2,151	32,126	0	0	0	0	0	0	0	203,317
เงินที่ต่อชำระจากรูปแบบใหม่ (ไม่รวมคลื่น 700 MHz)	17,206	0	12,904	8,603	54,800	20,332	20,332	20,332	20,332	20,332	4,073	4,073	0	0	203,317
ผู้ที่ได้รับสัมปทานระยะเวลาดคลื่น 900 MHz จะต้องชำระมูลค่าคลื่น 700 MHz ที่จะไม่ชำระมูลค่าซึ่งจากการประเมินเบื้องต้นราคาประมูลคลื่น 700 MHz ต่ำสุดไม่ต่ำกว่า 25,000 ล้านบาทต่อราย (รวมสามค่าย 75,000 ล้านบาทและจำนวนใบที่รวม VAT)					7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	75,000
รวมเงินที่รัฐจะได้หลังคำสั่ง คสช.	17,206	0	12,904	8,603	62,300	27,832	27,832	27,832	27,832	27,832	11,573	11,573	7,500	7,500	278,317

รวมแล้วรัฐได้เงินมากกว่าเดิมเกือบ 40% โดยจะไม่รวมผลประโยชน์ต่อเศรษฐกิจประเภทที่เกิดจากการลงทุนของภาคเอกชน

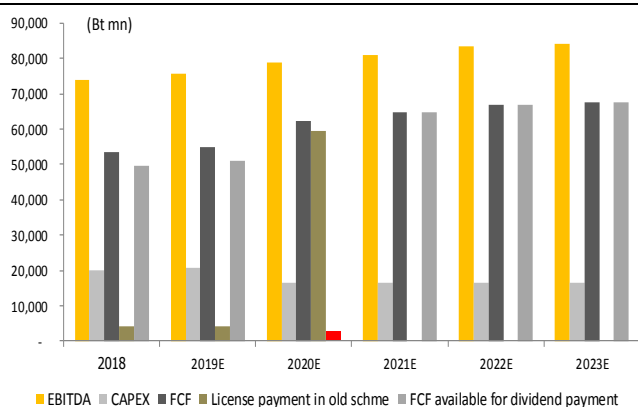
Source: NBTC, Krungsri Securities

Generous payment terms will benefit operators

Despite negative benefits from the NBTC's total package, operators will try to extract other benefits, which could be reduced cash flow burden. We conducted a cash flow analysis to get an insight on how the longer payment terms for 700MHz and 900MHz would benefit operators. The results are summarized below:

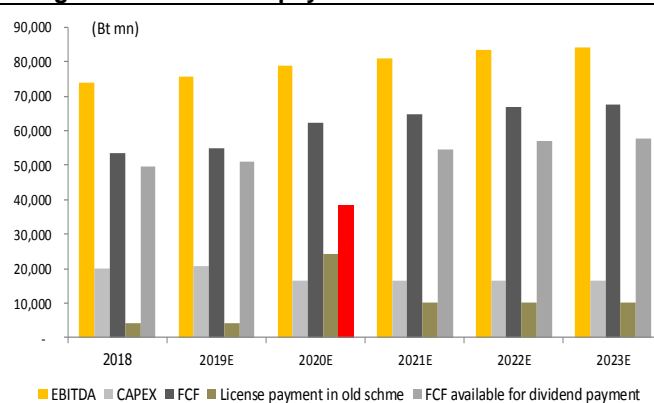
We concluded ADVANC would be able to resume 100% dividend payout ratio starting 2019 if they accept the package. TRUE would be able to avoid a cash call, and DTAC would be able to raise dividend payout ratio to 100% from 50% of net profit in dividends.

ADVANC: Minimal FCF in 2020 if paying for 900MHz under old scheme



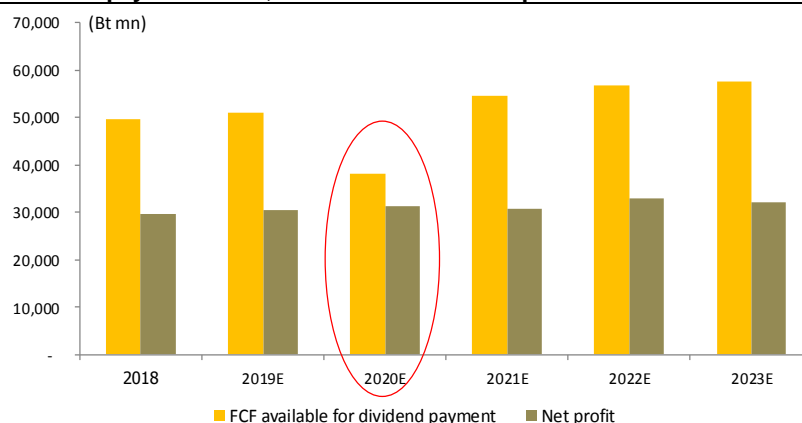
Source: Company, Krungsri Securities

ADVANC: Under new scheme, FCF in 2020 would be enough to declare 100% payout



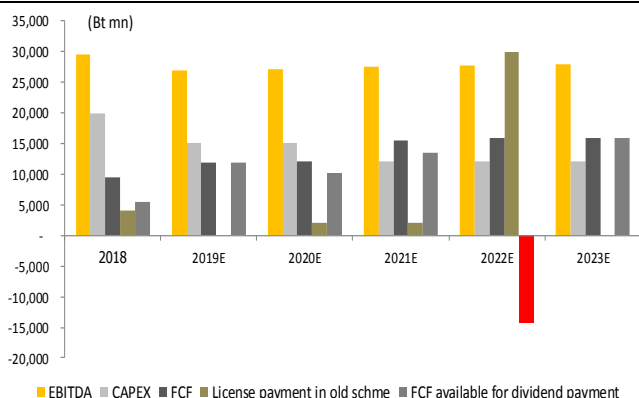
Source: Company, Krungsri Securities

Under new payment terms, FCF would exceed net profit in 2020



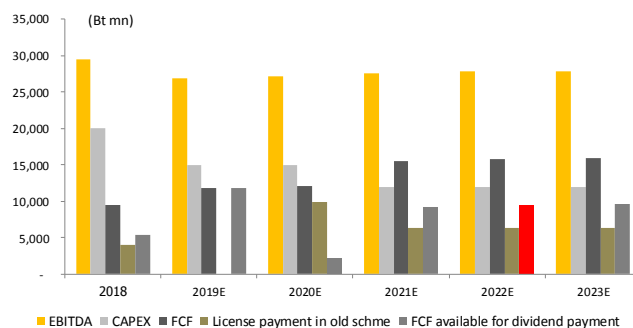
Source: Company, Krungsri Securities

DTAC: Negative FCF in 2022 if they pay for 900MHz under old scheme



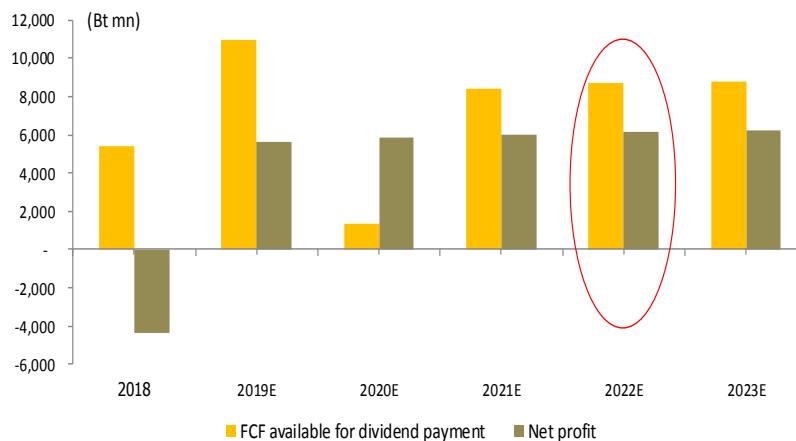
Source: Company, Krungsri Securities

Under new scheme, FCF would be enough to pay 100% payout by 2022



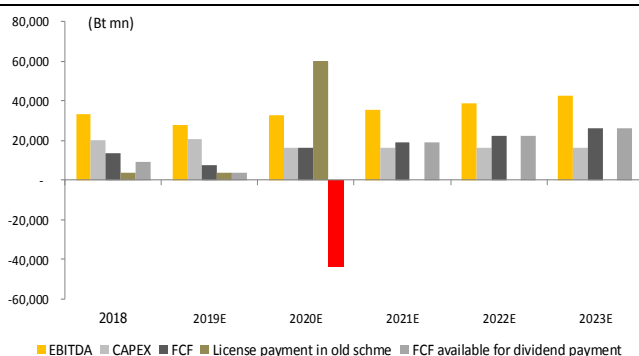
Source: Company, Krungsri Securities

Under new payment scheme, FCF would surpass net profit



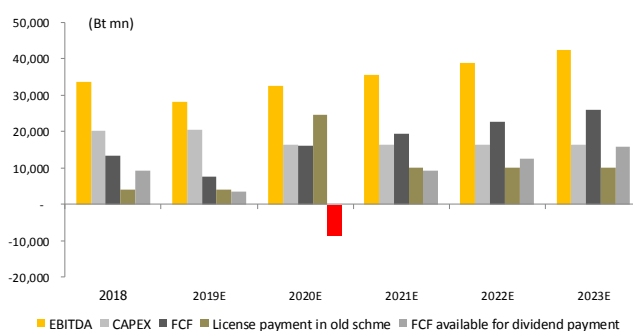
Source: Company, Krungsri Securities

TRUE: Negative FCF in 2020 if they pay for 900MHz under old scheme



Source: Company, Krungsri Securities

Negative FCF in 2020 under new scheme allowing TRUE to borrow fewer loans to finance the license

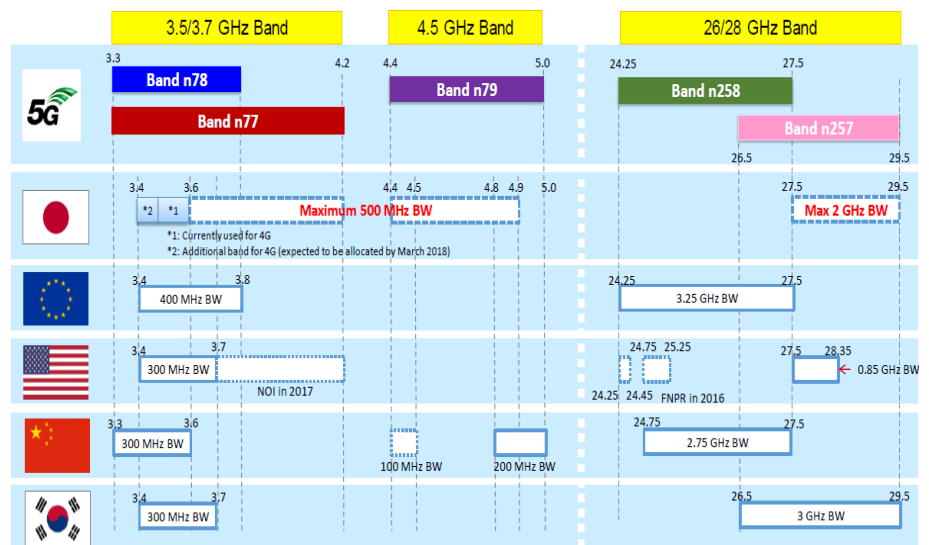


Source: Company, Krungsri Securities

4G deployment on 700MHz for early years

We believe the operators will deploy 700MHz spectrum to expand 4G capacity rather than for 5G services. They would not deploy 700MHz for 5G, at least in the near-term, because most countries have yet to launch 5G services on a commercial scale. The European Union plans to deploy 700MHz spectrum for 5G and the National Regulatory Authorities (NRAs) in EU Member States have set a deadline of 30 June 2020 (about one year from now) to reassign the 700MHz frequency band (694-790MHz) to wireless broadband services in Europe. But there are still several hurdles to cross, including the predominant use of 700MHz for TV multiplexes, and they could miss that deadline. This implies that if Thailand proceeds with 5G on 700MHz, it could take at least four years before they launch 5G services. Countries like the USA, China, Korea and Japan, who are about to commercially launch 5G services, are deploying them on higher frequency bands including 2.6GHz, 3.5GHz, 4.5GHz and 26/28GHz (see figure below). Hence, we expect Thai mobile carriers to deploy 700MHz to boost 4G capacity and reduce annual capex.

Deployment of 5G spectrum in leading countries

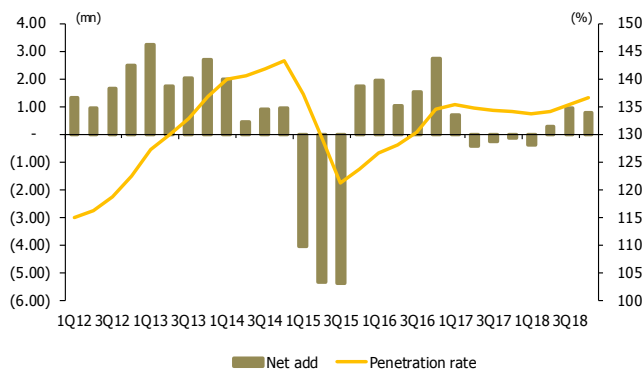


Source: NTT Docomo, Krungsri Securities

Without 5G, revenue growth will be muted

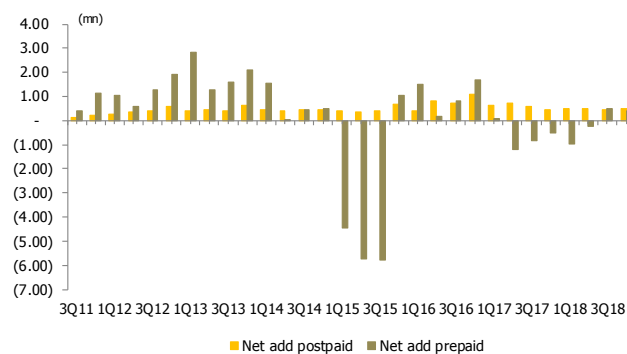
We expect sector revenue to grow by 3-5% in 2019-2020, in line with GDP growth because the mobile industry in Thailand is matured. Penetration rate is above 130%. Hence, the key revenue driver would be higher ARPU, which would be created mainly by the long-term trend of migration from prepaid to postpaid services. As at end-2018, postpaid subscribers accounted for 23.9% to total subscribers compared with only 10% in 2011 (before Thailand launched 3G). This trend will continue for at least the next three years driven by urbanization.

Mobile penetration rate is 137% currently



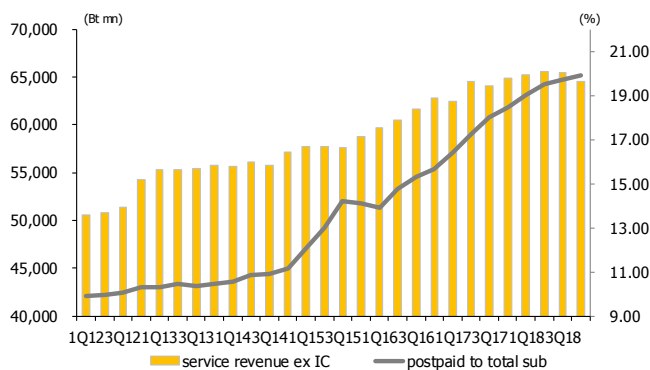
Source: Company, Krungsri Securities

Postpaid net adds have been positive for many years



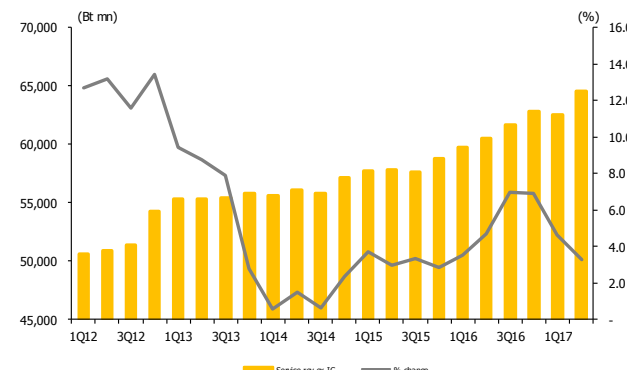
Source: Company, Krungsri Securities

Rising number of postpaid subs remain a major revenue driver for mobile carriers



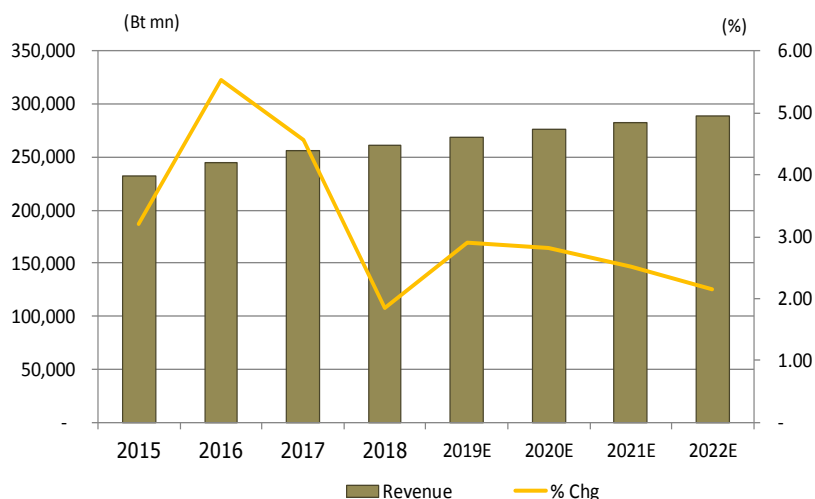
Source: Company, Krungsri Securities

Revenues are rising but at a modest pace



Source: Company, Krungsri Securities

Revenue growth for sector is expected to be modest fore next couple of years



Source: Company, Krungsri Securities

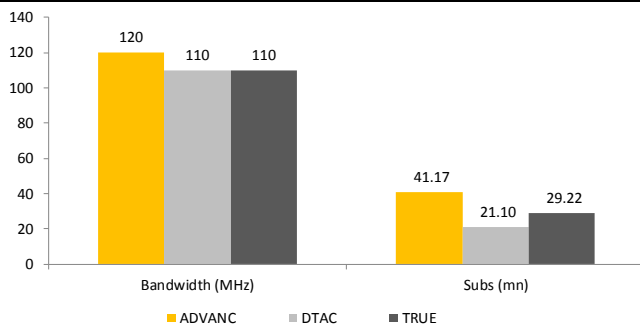
Top picks are ADVANC and TRUE

We are Buyers of ADVANC with a lower DCF-based TP of Bt213, and TRUE with DCF-based TP of Bt6. We rate DTAC Neutral with DCF-based TP of Bt54.

We rate ADVANC Outperform and it is our top pick in the sector for the following reasons:

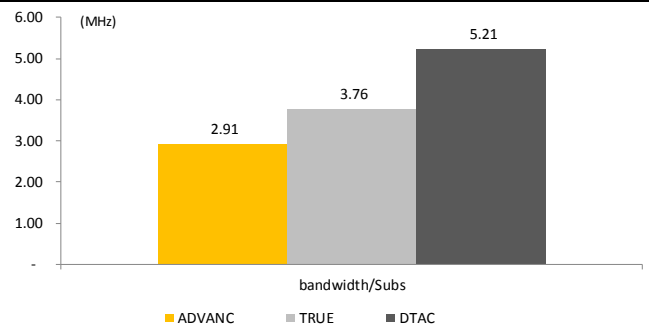
- i) We reiterate that ADVANC would be able to raise dividend payout ratio to 100% from 70% currently if the firm takes NBTC's package, due to generous payment terms. This would lift dividend yield to 5.4-5.5% in 2019-2020, from 3.8-3.9%.
- ii) ADVANC would reap larger upside from the deployment of 700MHz for 4G than TRUE and DTAC, as its bandwidth/total subs is much lower than peers' which mean service quality is slightly worse than its peers'. Hence, ADVANC would utilize the 700MHz spectrum more than peers.
- iii) We expect earnings growth to resume in 2019 following many years of earnings shrinkage, driven by better cost control and rising revenue

ADVANC has relatively equal bandwidth with peers but has higher subs base...



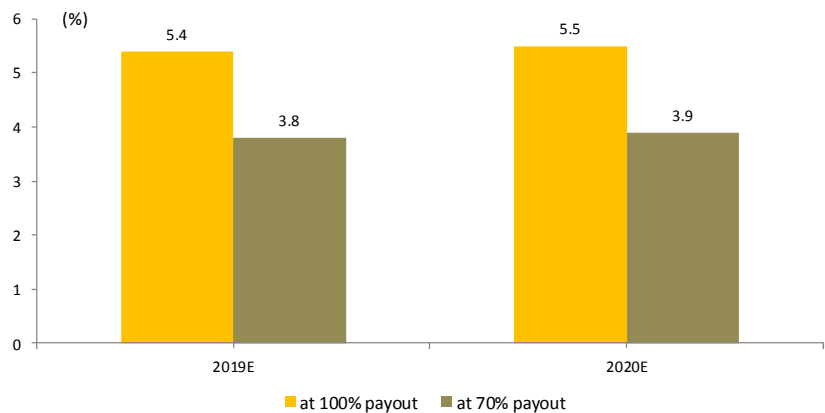
Source: Company, Krungsri Securities

...this implies ADVANC is the one needing new spectrum to increase the capacity



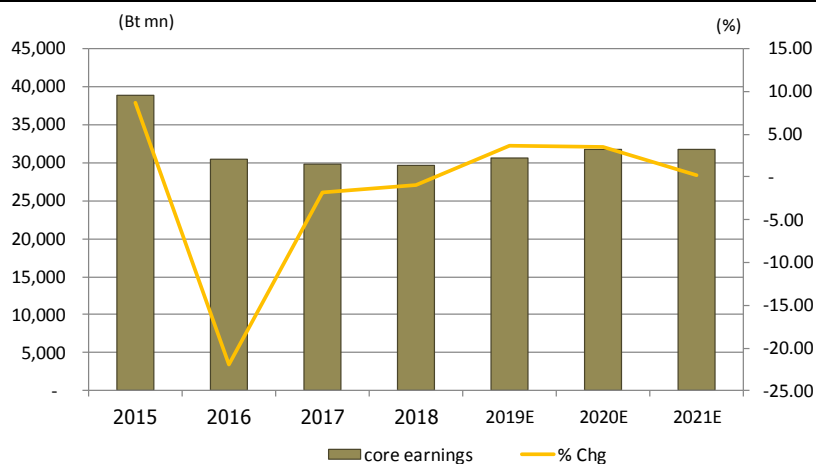
Source: Company, Krungsri Securities

Dividend yield will be higher if ADVANC can pay 100% as dividend



Source: Company, Krungsri Securities

Earnings are expected to resume growing

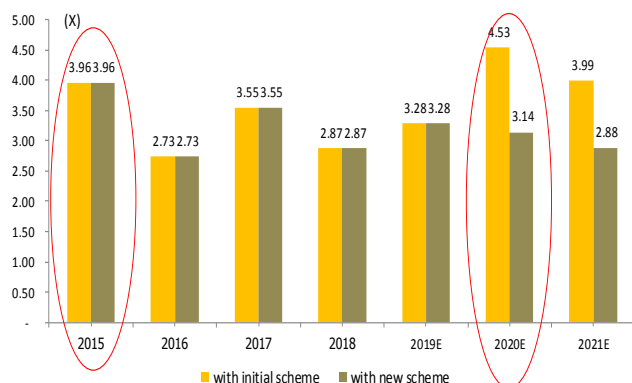


Source: Company, Krungsri Securities

We also rate TRUE Outperform and it is our top pick in the sector for the following reasons:

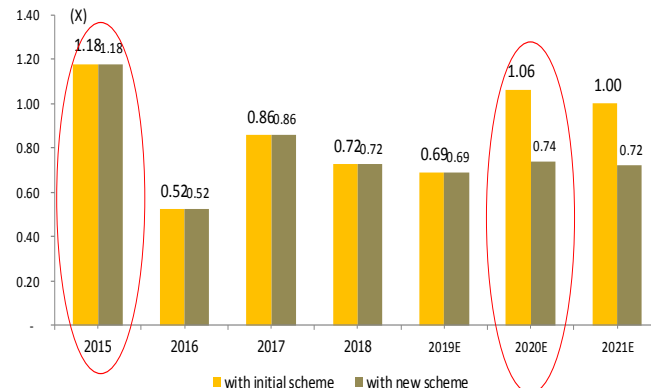
- i) TRUE can avoid a cash call because of the generous payment term for 900MHz. Accepting the NBTC's offer would ensure their financial position remains sound with net debt to EBITDA ratio of 3x and net debt to equity of 0.7x vs. 4.5x and 1.1x if they reject the offer. Note net debt to EBITDA ratio and net debt to equity in 2015 (before TRUE asked for the cash injection in 2016) were 4x and 1.2x, respectively.
- ii) The company will turn profitable this year driven by cost-cutting programs, especially handset subsidies. We expect TRUE to report Bt1.6bn core profit, compared to core losses for 2016-2018. This will be underpinned by smaller loss from handset subsidies, as TRUE had to adopt a more conservative accounting practice for the item under IFRS15. From 2012 to 2018, TRUE booked Bt10bn amortization charge for handset subsidies, much higher than peers (Bt3-4bn) because they are the sole carrier who are still subsidizing the prepaid segment. If TRUE can reduce handset subsidies to peers' levels, it would lift bottom line by Bt6-7bn annually.
- iii) The current share price has factored in most of the adverse impacts, including losing the lawsuit to TOT for high-speed internet (ADSL) and cash call risk if they had to make a lump sum final payment for 900MHz license in 2020. Accepting the NBTC's package would ease these concerns and the share price could re-rate accordingly.

Net debt to EBITDA comparison



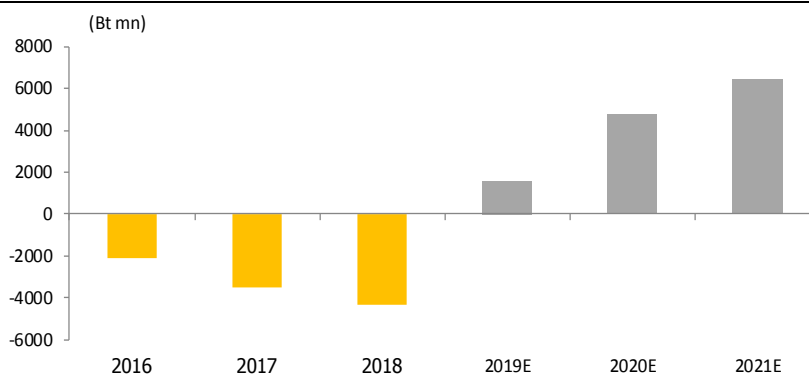
Source: Company, Krungsri Securities

Net debt to equity comparison



Source: Company, Krungsri Securities

Expect performance to turn around in 2019

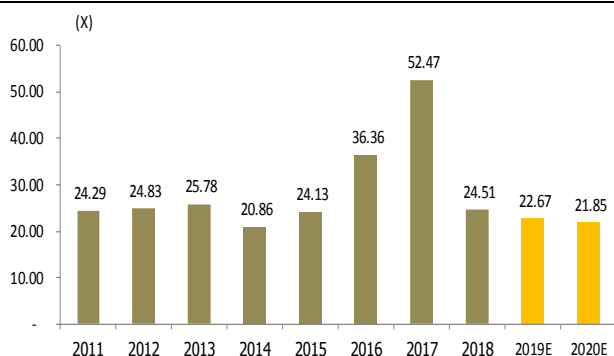


Source: the company, Krungsri Securities

We rate DTAC Neutral with a DCF-based TP of Bt54, for the following reasons:

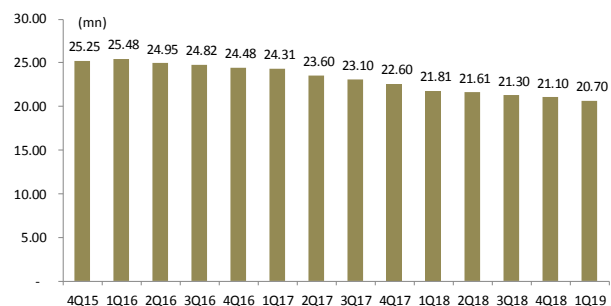
- i) Stretched valuation. DTAC's share price has risen almost 100% over the past year and outperformed peers substantially. Most of the positive factors have been priced in, including having sufficient spectrum to maintain its business, cost-cutting efforts and turnaround in operations following the end of the concession in September 2018. We expect DTAC to register Bt6.4bn profit in FY19F compared to Bt4.3bn loss in FY18. The stock is now trading at 20x 2019 PE, close to 2011 high, but earnings would be flat over the next two years because DTAC does not have key growth drivers, particularly revenue.
- ii) DTAC is still losing subscribers. Their subscriber base has shrunk from 25mn at end-2015 to 20.7mn at end-1Q19 due to inferior network quality. Although DTAC secured new spectrum in the last 12 months, including 900MHz, 1800MHz and 2300MHz, it would be difficult for DTAC to steal back subs from peers because DTAC's network quality is simply catching up with peers, not better than peers'. This suggest a very small window of opportunity for DTAC.
- iii) The only positive from holding DTAC is dividend yield. Like ADVANC, DTAC would be able to raise dividend payout ratio to 100% from 50% currently, if the firm accepts the NBTC's package due to the generous payment terms. It would lift dividend yield to 4.4-4.6% in 2019-2020, from 2.2-2.3%.

PE Valuation



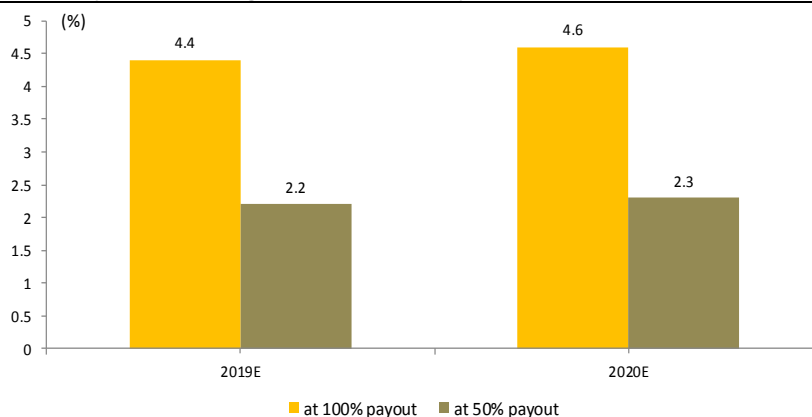
Source: Company, Krungsri Securities

Subs base still on the decline from interior network quality compared with peers



Source: Company, Krungsri Securities

Dividend yield will be higher if DTAC can pay 100% as dividend



Source: Company, Krungsri Securities

DTAC reported Bt1.4bn profit for 1Q19, 6% and 12.5% below our and street estimates, respectively, on the back of lower-than-expected revenue. 1Q19 earnings account for 25% of our full-year forecast of Bt5.6bn (+13% yoy).

Service revenue ex IC continued to drop both yoy (-7%) and qoq (-2.5%) to Bt14.89bn. The combination of weaker ARPU and a further decline in subscribers dragged revenue in 1Q19. EBITDA margin tumbled to 31.2% from 43.4% in 1Q18, due to a new cost base structure following the end of the concession. DTAC has been leasing 2.3G network from TOT since April 2018 and signed the contract to rent towers and telecom equipment from CAT in 3Q18.

DTAC: 1Q19 results

Quarterly P&L (Bt m)	1Q18	2Q18	3Q18	4Q18	1Q19	yoy	qoq
Sales	19,060	18,760	17,964	19,196	19,660	3%	2%
COGS (incl. depreciation)	(14,247)	(14,764)	(15,276)	(12,993)	(13,679)	-4%	5%
Gross Profit	4,813	3,996	2,688	6,203	5,981	24%	-4%
SG&A	(3,643)	(3,590)	(3,643)	(3,976)	(3,738)	3%	-6%
Operating Profit	1,170	406	(955)	2,227	2,243	92%	1%
Net other income/expense	50	52	54	151	18	-64%	-88%
Net interest	(352)	(378)	(380)	(766)	(611)	74%	-20%
Pretax profit	868	80	(1,281)	1,612	1,650	90%	2%
Income Tax	216	9	0	241	(221)	-202%	-192%
Associates	18	18	48	41	0		
Minority interest	1	1	1	1	1	0%	0%
Profit after tax (pre-ex)	787	124	(60)	1,340	1,428	81%	7%
Extraordinaries, GW & FX	528	55	-862	-6,281	-20	-104%	-100%
Reported net profit	1,315	179	(922)	(4,941)	1,408	7%	-128%
Shares out (end Q, m)	2,368	2,368	2,368	2,368	2,368	0%	0%
Adjusted shares (m)	2,368	2,368	2,368	2,368	2,368	0%	0%
Pre-ex EPS	0.33	0.05	(0.03)	0.57	0.60	81%	7%
EPS	0.56	0.08	(0.39)	(2.09)	0.59	7%	-128%

CG Rating 2018 Companies with CG Rating



ADVANC	AKP	AMATA	AMATAV	ANAN	AOT	AP	BAFS	BANPU	BAY	BCP	BCPG	BRR	BTS
BWG	CFRESH	CHO	CK	CKP	CM	CNT	COL	CPF	CPI	CPN	CSS	DELTA	DEMCO
DRT	DTAC	DTC	EA	EASTW	EGCO	GC	GEL	GFPT	GGC	GOLD	GPSC	GRAMMY	GUNKUL
HANA	HMPRO	ICC	ICHI	INTUCH	IRPC	IVL	JSP	KBANK	KCE	KKP	KSL	KTB	KTC
LHFG	LIT	LPN	MAKRO	MBK	MCOOT	MINT	MONO	MTC	NCL	NKI	NVD	NYT	OISHI
OTO	PCSGH	PDJ	PG	PHOL	PLANB	PLANET	PPS	PRG	PSH	PSL	PTG	PTT	PTTEP
PTTGC	PYLON	Q-CON	QH	QTC	RATCH	ROBINS	S & J	SABINA	SAMART	SAMTEL	SAT	SC	SCB
SCC	SCCC	SDC	SE-ED	SIS	SITHAI	SNC	SPALI	SPRC	SSSC	STEC	SVI	SYNTEC	TASCO
TCAP	THAI	THANA	THANI	THCOM	THIP	THREL	TIP	TISCO	TKT	TMB	TNDT	TOP	TRC
TRU	TRUE	TSC	TSTH	TTCL	TU	TVD	UAC	UV	VGI	VIH	WACOAL	WAVE	WHA

WINNER



2S	AAV	ACAP	AGE	AH	AHC	AIRA	AIT	AKR	ALLA	ALT	AMA	AMANAH	APCO
AQUA	ARIP	ARROW	ASIA	ASIMAR	ASK	ASN	ASP	ATP30	AU	AUCT	AYUD	BA	BBL
BDMS	BEC	BEM	BFIT	BGRIM	BIZ	BJC	BJCHI	BLA	BOL	BPP	BROOK	BTW	CBG
CEN	CENTEL	CGH	CHEWA	CHG	CHOW	CI	CIMBT	CNS	COM7	COMAN	CPALL	CSC	CSP
DCC	DCORP	DDD	EASON	ECF	ECL	EE	EPG	ERW	ETE	FN	FNS	FORTH	FPI
FSMART	FVC	GBX	GCAP	GLOBAL	GLOW	GULF	HARN	HPT	HTC	HYDRO	ICN	ILINK	INET
IRC	ITD	JAS	JCKH	JKN	JWD	K	KBS	KCAR	KGI	KKC	KOOL	KTIS	L&E
LANNA	LDC	LH	LHK	LOXLEY	LRH	LST	M	MACO	MAJOR	MALEE	MBKET	MC	MEGA
METCO	MFC	MFEC	MK	MOONG	MSC	MTI	NCH	NEP	NINE	NOBLE	NOK	NSI	NTV
NWR	OCC	OGC	ORI	PAP	PATO	PB	PDI	PJW	PLAT	PM	PORT	PPP	PREB
PRECHA	PRINC	PRM	PT	QLT	RICHY	RML	RS	RWI	S	S11	SALEE	SANKO	SAWAD
SCG	SCI	SCN	SE	SEAFCO	SEAOIL	SELIC	SENA	SFP	SIAM	SINGER	SIRI	SKE	SMK
SMPC	SMT	SNP	SORKON	SPC	SPI	SPPT	SPVI	SR	SSF	SST	STA	SUC	SUSCO
SUTHA	SWC	SYMC	SYNEX	TACC	TAE	TAKUNI	TBSP	TCC	TEAM	TFG	TFMAMA	THRE	TICON
TIPCO	TK	TKN	TKS	TM	TMC	TMI	TMILL	TMT	TNITY	TNL	TNP	TNR	TOA
TOG	TPA	TPAC	TPBI	TPCORP	TRITN	TRT	TSE	TSR	TSTE	TTA	TTW	TVI	TVO
TWP	TWPC	U	UMI	UOBKH	UP	UPF	UPOIC	UT	UWC	VNT	WHAUP	WICE	WIK
XO	YUASA	ZMICO											



7UP	ABICO	ABM	AEC	AEONTS	AF	AJ	ALUCON	AMARIN	AMC	AS	ASAP	ASEFA	ASIAN
BCH	BEAUTY	BGT	BH	BIG	BLAND	BM	BR	BROCK	BSBM	BTNC	CCET	CCP	CGD
CHARAN	CHAYO	CITY	CMO	CMR	COLOR	CPL	CPT	CRD	CSR	CTW	CWT	D	DCON
DIGI	DIMET	EKH	EMC	EPCO	ESSO	ESTAR	FE	FLOYD	FOCUS	FSS	FTE	GENCO	GIFT
GJS	GLAND	GPI	GREEN	GTB	GYT	HTECH	IFS	IHL	III	INOX	INSURE	IRCP	IT
ITEL	J	JCK	JMART	JMT	JTS	JUBILE	KASET	KCM	KIAT	KWC	KWG	KYE	LALIN
LEE	LPH	MATCH	MATI	MBAX	M-CHAI	MDX	META	MILL	MJD	MM	MODERN	MPG	NC
NDR	NETBAY	NNCL	NPK	OCEAN	PAF	PDG	PF	PICO	PIMO	PK	PL	PLE	PMTA
PPPM	PRIN	PSTC	PTL	RCI	RCL	RJH	ROJNA	RPC	RPH	SAMCO	SAPPE	SCP	SF
SGF	SGP	SKN	SKR	SKY	SLP	SMIT	SOLAR	SPA	SPCG	SPG	SQ	SRICHA	SSC
SSP	STANLY	STPI	SUN	SUPER	SVOA	T	TCCC	TCMC	THE	THG	THMUI	TIC	TITLE
TIW	TMD	TOPP	TPCH	TPIPP	TPOLY	TTI	TVT	TYCN	UEC	UMS	UNIQ	VCOM	VIBHA
VPO	WIN	WORK	WP	WPH	ZIGA								

Disclaimer

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an assessment of operation and is not based on inside information. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date or when there is any change to the relevant information. Nevertheless, Krungsri Securities Public Company Limited does not confirm, verify, or certify the accuracy and completeness of such survey result.

Anti-corruption Progress Indicator 2018

Companies that have declared their intention to join CAC

A	ABICO	AIE	AJ	AMATA	AMATAV	ANAN	AOT	APCO	ARROW	ASIAN	B	BJC	BLAND
BLISS	BM	BPP	BR	BUI	CEN	CGH	CHG	CHO	CHOTI	CI	CIMBT	CITY	COL
CPR	DDD	EFORL	EKH	ESTAR	ETE	FLOYD	FN	FPI	FTE	GPI	GYT	ICHI	ILINK
INSURE	IRC	ITEL	JAS	JTS	KWG	LDC	LEE	LIT	LRH	MATCH	MATI	META	MFEC
MILL	MTC	NCL	NEP	NWR	ORI	PAP	PK	PLANB	POST	PRM	PRO	PSL	PYLON
QTC	ROJNA	RWI	SAPPE	SCI	SHANG	SPALI	SST	STANLY	SUPER	SWC	SYMC	SYNEX	TAKUNI
THE	THIP	TKN	TMC	TNR	TOPP	TPP	TRITN	TTI	TVO	UEC	UKEM	UPA	UREKA
UV	UWC	VIH	XO	YUASA									

Companies certified by CAC

ADVANC	AKP	AMANAH	AP	APCS	ASK	ASP	AYUD	BAFS	BANPU	BAY	BBL	BCH	BCP
BCPG	BGRIM	BJCHI	BKI	BLA	BROOK	BRR	BSBM	BTS	BWG	CENTEL	CFRESH	CHEWA	CIG
CM	CNS	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DEMCO	DIMET	DRT	DTAC	DTC
EASTW	ECL	EGCO	EPCO	FE	FNS	FSS	GBX	GC	GCAP	GEL	GFPT	GGC	GJS
GLOW	GOLD	GPSC	GSTEL	GUNKUL	HANA	HARN	HMPRO	HTC	ICC	IFEC	IFS	INET	INTUCH
IRPC	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL	KTB	KTC	KWC
L&E	LANNA	LHFG	LHK	LPN	M	MAKRO	MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC
MINT	MONO	MOONG	MSC	MTI	NBC	NINE	NKI	NMG	NNCL	NSI	OCC	OCEAN	OGC
PATO	PB	PCSGH	PDG	PDI	PDJ	PE	PG	PHOL	PL	PLANET	PLAT	PM	PPP
PPPM	PPS	PREB	PRG	PRINC	PSH	PSTC	PT	PTG	PTT	PTTEP	PTTGC	Q-CON	QH
QLT	RATCH	RML	ROBINS	S & J	SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SE-ED
SELIC	SENA	SGP	SINGER	SIRI	SIS	SITHAI	SMT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSI	SSSC	STA	SUSCO	SVI	SYNTEC	TAE	TASCO	TCAP
TCMC	TFG	TFI	TFMAMA	THANI	THCOM	THRE	THREL	TICON	TIP	TIPCO	TISCO	TKT	TMB
TMD	TMILL	TMT	TNITY	TNL	TNP	TOG	TOP	TPA	TPCORP	TRU	TRUE	TSC	TSTH
TTCL	TU	TVD	TVI	TWPC	U	UBIS	UOBKH	VGI	VNT	WACOAL	WHA	WICE	WIIK

N/A

2S	7UP	AAV	ABM	ACAP	ACC	ADAM	ADB	AEC	AEONTS	AF	AFC	AGE	AH
AHC	AI	AIRA	AIT	AJA	AKR	ALLA	ALT	ALUCON	AMA	AMARIN	AMC	APEX	APURE
AQ	AQUA	ARIP	AS	ASAP	ASEFA	ASIA	ASIMAR	ASN	ATP30	AU	AUCT	BA	BAT-3K
BCT	BDMS	BEAUTY	BEC	BEM	BFIT	BGC	BGT	BH	BIG	BIZ	BKD	BOL	BROCK
BSM	BTNC	BTW	CBG	CCET	CCP	CGD	CHARAN	CHAYO	CHOW	CHUO	CK	CKP	CMAN
CMC	CMO	CMR	CNT	COLOR	COMAN	COTTO	CPH	CPL	CPT	CRANE	CRD	CSP	CSR
CSS	CTW	CWT	D	DCON	DCORP	DELTA	DIGI	DNA	DOD	DTCI	EA	EARTH	EASON
ECF	EE	EIC	EMC	EPG	ERW	ESSO	EVER	F&D	FANCY	FC	FMT	FOCUS	FORTH
FSMART	FVC	GENCO	GIFT	GL	GLAND	GLOBAL	GRAMMY	GRAND	GREEN	GTB	GULF	HFT	HPT
HTECH	HUMAN	HYDRO	ICN	IEC	IHL	III	INGRS	INOX	IRCP	IT	ITD	J	JCK
JCKH	JCT	JKN	JMART	JMT	JSP	JUBILE	JUTHA	JWD	KAMART	KC	KCM	KDH	KIAT
KKC	KOOL	KTECH	KTIS	KWM	KYE	LALIN	LH	LOXLEY	LPH	LST	LTX	LVT	MACO
MAJOR	MANRIN	MAX	M-CHAI	MCS	MDX	MEGA	METCO	MG	MIDA	MJD	MK	ML	MM
MODERN	MPG	MPIC	MVP	NC	NCH	NDR	NER	NETBAY	NEW	NEWS	NFC	NOBLE	NOK
NPK	NPPG	NTV	NUSA	NVD	NYT	OHTL	OISHI	OSP	OTO	PACE	PAE	PAF	PERM
PF	PICO	PIMO	PJW	PLE	PMTA	POLAR	POMPUI	PORT	PPM	PR9	PRAKIT	PRECHA	PRIN
PTL	RAM	RCI	RCL	RICH	RICHY	RJH	ROCK	ROH	RP	RPC	RPH	RS	RSP
S	S11	SAAM	SAFARI	SALEE	SAM	SAMART	SAMCO	SAMTEL	SANKO	SAUCE	SAWAD	SAWANG	SCP
SDC	SE	SEAFCO	SEAOIL	SF	SFP	SGF	SIAM	SIMAT	SISB	SKE	SKN	SKR	SKY
SLP	SMART	SMM	SMT	SOLAR	SONIC	SPA	SPCG	SPG	SPORT	SPPT	SPVI	SQ	SR
SSC	SSP	STAR	STEC	STHAI	STI	STPI	SUC	SUN	SUTHA	SVH	SVOA	T	TACC
TAPAC	TBSP	TC	TCC	TCCC	TCJ	TCOAT	TEAM	TEAMG	TGPRO	TH	THAI	THANA	THG
THL	THMUI	TIC	TIGER	TITLE	TIW	TK	TKS	TM	TMI	TMW	TNDT	TNH	TNPC
TOA	TPAC	TPBI	TPCH	TIPL	TIPIP	TPAS	TPOLY	TQM	TR	TRC	TRT	TRUBB	TSE
TSF	TSI	TSR	TSTE	TTA	TTL	TTM	TTW	TVT	TWP	TWZ	TYCN	UAC	UMI
UMS	UNIQ	UP	UPF	UPOIC	UT	UTP	UVAN	VARO	VCOM	VI	VIBHA	VNG	VPO
WAVE	WG	WHAUP	WIN	WINNER	WORK	WORLD	WP	WPH	WR	YCI	YNP	ZIGA	ZMICO

Disclaimer

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, Krungsri Securities Public Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment result."

Reference

Disclosure: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of July 31, 2017) are categorised into:

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

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Definition of Ratings

- OUTPERFORM** - Stocks with an expected capital gain above 10% in the next 12 months for small-caps, above 5% for big-caps
- NEUTRAL** - Stocks with an expected capital gain between -10% and +10% in the next 12 months for small-caps, -5% to +5% for big-caps
- UNDERPERFORM** - Stocks with an expected capital gain below 10% in the next 12 months for small-caps, below 5% for big-caps