



A Strategic Partner of **S&P Global**

Investor Outreach

**2019:
Economic View
and Key Industry Outlook**



A diagonal collage of Indonesian Rupiah banknotes, including a 10,000 Rupiah note and a 20,000 Rupiah note, set against a blue and white geometric background.

2019: Slower Pace of Economic Growth

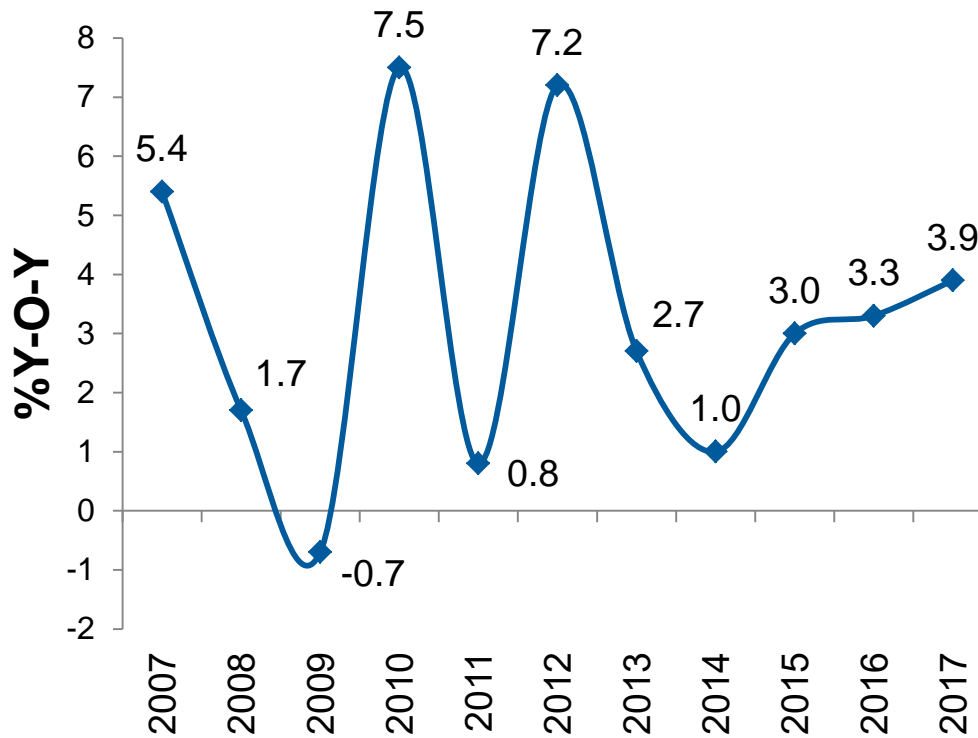
14 February 2019

Economic Outlook

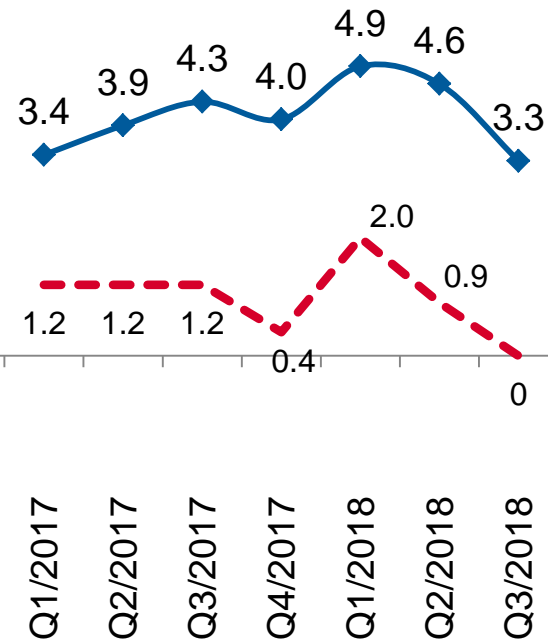
TRIS Rating revises its estimate of 2018 Thailand GDP growth rate to 4%, and projects the economy to grow at a slower pace 3.9% in 2019

- The revised estimate of 2018 GDP growth rate is based on weaker-than-expected key economic indicators in Q4/2018.
- 2019F GDP growth is projected to be 3.9%, driven by a weak trend in private consumption which is projected to drop to a 4.0% growth rate in 2019 from 4.7% in 2018

Real GDP growth



Real GDP Growth	%
2018E	4.0
2019F	3.9



◆ GDP - - - GDP (%QoQ Seasonally Adjusted)

Source: NESDB and TRIS Rating

Real GDP Forecast

%YoY Growth	2016	2017	2018E	2019F
Real GDP	3.3	3.9	4.0	3.9
Private Consumption	3.0	3.2	4.7	4.0
Public Consumption	2.2	0.5	2.1	2.6
Private Investment	0.5	1.7	3.6	4.5
Public Investment	9.5	-1.2	4.6	6.6
Export volume of goods & services	2.8	5.5	3.6	4.0
Import volume of goods & services	-1.0	6.8	7.6	3.2
Current account balance (%GDP)	11.7	11.0	7.8	8.4
Export value of goods	0.1	9.8	7.0	3.8
Exchange Rate (Baht/USD)	35.30	33.94	32.31	n.a.
Inflation (%)	0.2	0.7	1.1	1.0

Source: NESDB, Bank of Thailand and TRIS Rating

Key Economic Drivers in 2019

TRIS Rating forecasts a 6.6% growth in public investment and a 4.5% growth in private investment, recovered from 4.6% and 3.6%, respectively, in 2018.

Our view is supported by:

- On-going investments in large public infrastructure projects approved in 2018
- Investments and expansion in Eastern Economic Corridor (EEC)

Investment in infrastructure projects

Line	Destination	Distance (km.)	Progress
Blue	Bangsue-Tha pra	13	under construction
Blue	Hua lumpong-Bang kae	14	under construction
Dark Green South	Bearing-Samutprakarn	12.8	under construction
Dark Green North	Mo Chit - Saphan Mai - Khu Khot	18.4	under construction
Dark Red	Bangsue - Rangsit	26.3	under construction
Orange	Cultural center - Minburi	31	under construction
Pink	Kae rai - Minburi	35	under construction
Yellow	Lad Proa - Sam Rong	30.4	under construction
Gold	Krungthonburi - Prachatipok	2.7	Bidding complete
Light Red	Bang sue - Hua mak	25.9	Cabinet approved
Dark Red	Bang sue - Hua lumpong	11	Cabinet approved
Purple South	Tao poon - Ratch Burana	23.6	Cabinet approved

Source: Data collected by TRIS Rating

Key Economic Constraints in 2019

- A slower growth in private consumption as a consequence of:
 - High household debts leaves no room for debt fueled consumption
 - Persistently low commodities prices have constrained household purchasing power in the farming sector

TRIS Rating forecasts a 4% growth in private consumption, a drop from 4.7% in 2018

We expect policy rate to increase no more than 25bp in 2019

- A modest rate hike is expected to have minimal impact on corporates' funding costs

Downside Risks in 2019

The 2019 GDP growth could fall below 3.9% in 2019, taking into consideration the following downside risks:

- **Growth in export of goods and services** could fall below our base-case projection 4% growth driven by a potential global economic slowdown aggravated by trade tensions and baht appreciation
- **Private investment** could grow less than our base-case projection of 4.5%, depending on the post-election sentiment



Financial institutions: **BANKS**

14 February 2019

Banks Rated by TRIS

Issuer	Rating/Outlook
BAY	AAA/Stable
TCAP	A+/Stable
TBANK	AA-/Stable
TISCO	A-/Stable
TISCOB	A/Stable
KK	A-/Positive
LHFG	BBB+/Positive
LHBANK	A-/Positive
Mega-ICBC	AAA/Stable
RHBTH	AA/Stable T1+/Stable
GSB	AAA/Stable

Our Observations

- Retail lending led overall credit growth in 2018
- Banks are shifting focus to higher-yielding assets to make up for losses in fee revenues
- Asset quality: Signs of deterioration in the auto sector emerge; housing remains weak

- NPL management remains a challenge as NPL relapses remain high
- Funding cost to rise only gradually given excess liquidity
- Smaller banks are securing fixed funding to lock in rates

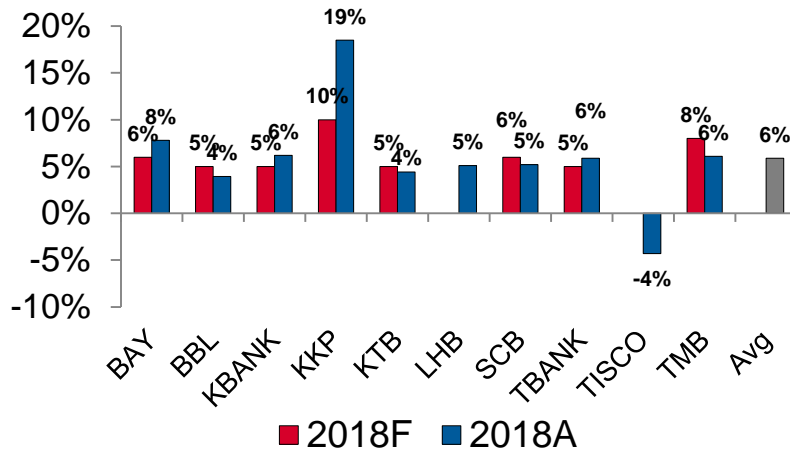
- Capital is strong for all banks; capital quality is average to high
- Macro-prudential measures likely to have short-term impact on credit growth

Banking Industry Outlook

- Industry outlook: **Stable**
- Expect mid-single digit credit growth
- Asset quality passed its worst. Some weakness in retail sector but manageable
- Capital still solid and continue to strengthen further
- Funding/liquidity still ample; rate hikes by commercial banks so far have been random

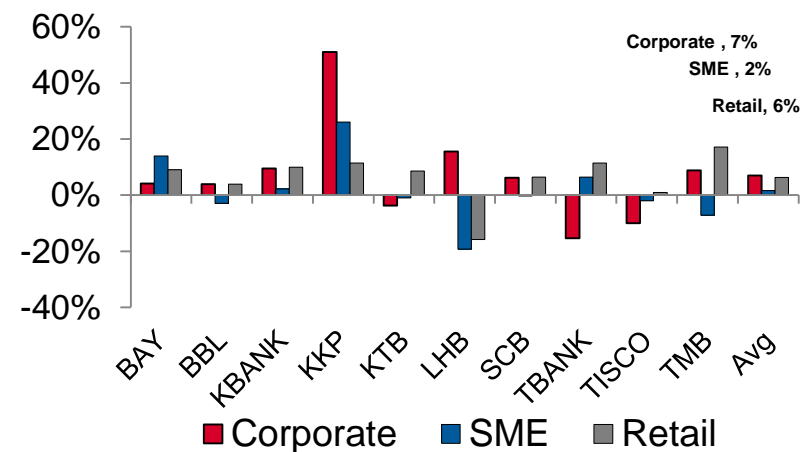
2018 Loan Growth

2018 loan growth vs. target



Source: Company data

Loan growth in 2018 (% chg y-y)



Source: Company data. Note: Excluding KKP, corporate +2%, SME -1%, retail +6%

2018:

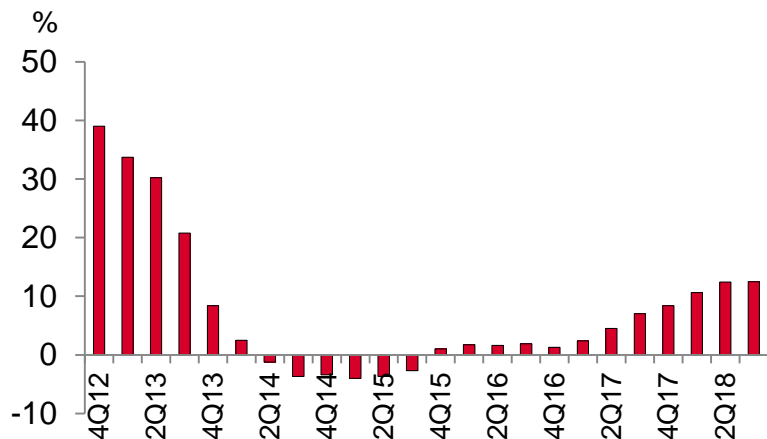
- Average loan growth: 6%
- 4 of 10 banks achieved loan growth target
- Retail was the growth driver, mainly auto and housing

2019F:

- TRIS expects average loan growth for rated commercial banks at 7%
- Retail is likely to still lead growth, but focus shifting to unsecured lending while auto and housing likely slowing down

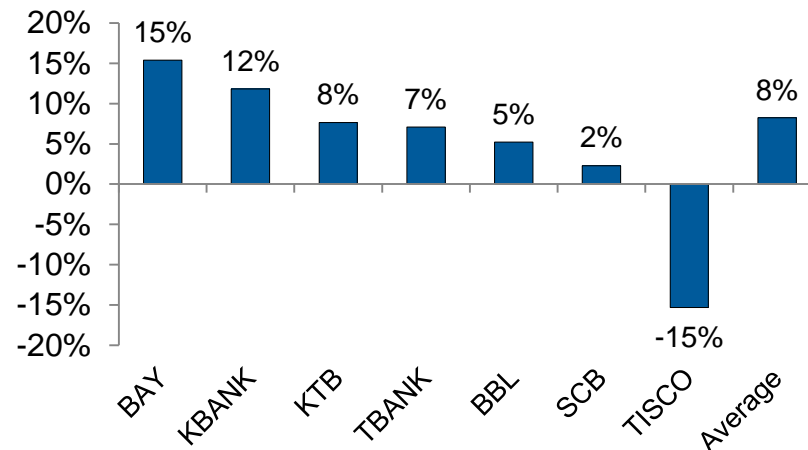
Retail Loan Growth

Auto loan (% chg y-y)



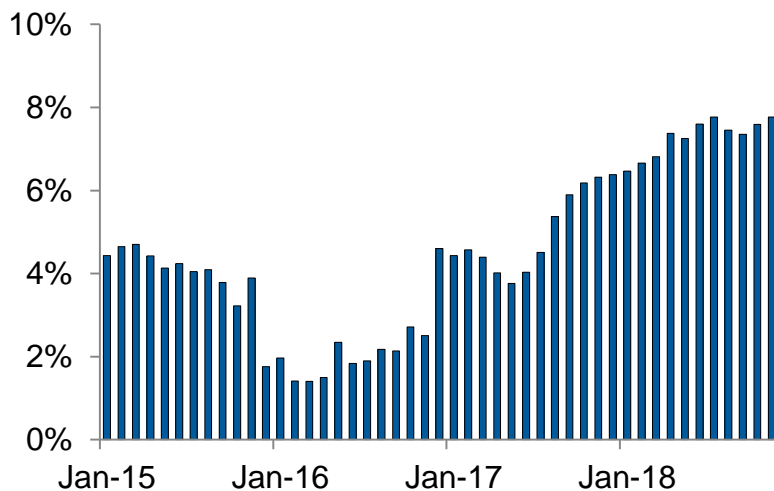
Source: Bank of Thailand

Residential mortgage 2018 (% chg y-y)



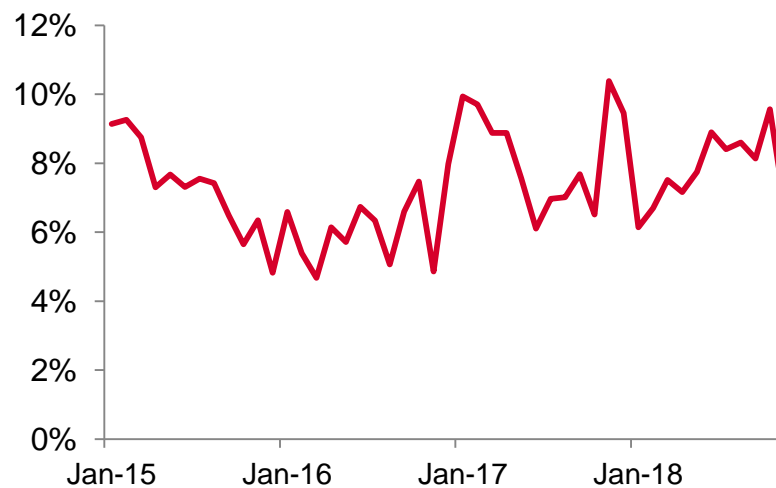
Source: Company data

Personal loan (% chg y-y)



Source: Bank of Thailand

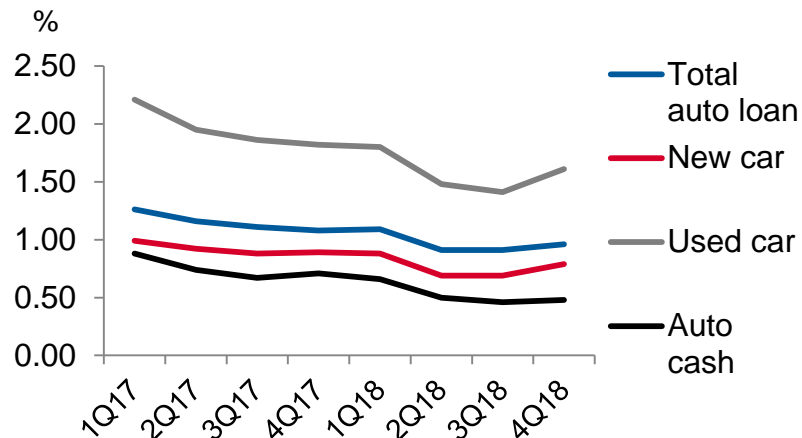
Credit card loan (% chg y-y)



Source: Bank of Thailand

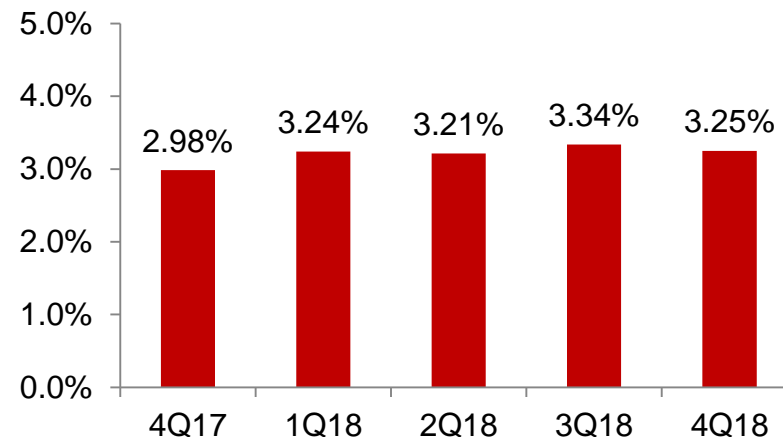
Asset Quality

Auto HP NPL



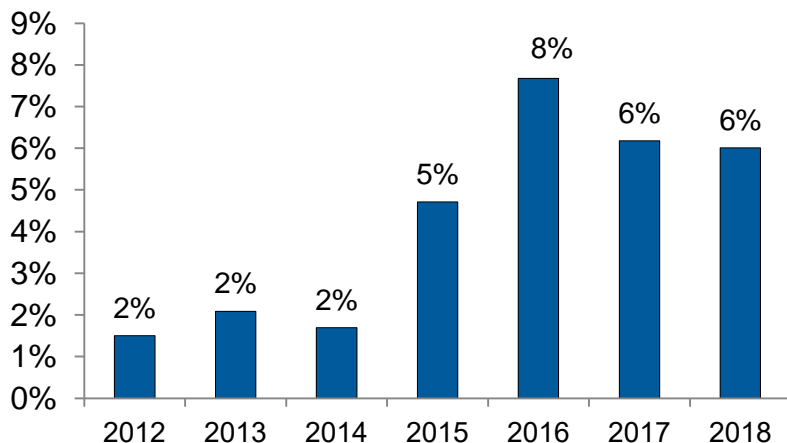
Source: TRIS Rating, Company data (average of available data from rated banks)

Housing loan NPL



Source: TRIS Rating, Company data (average of available data from 3 commercial banks)

NPL relapse rate



Source: Company data (average of available data from rated banks);
TDR : Trouble debt restructuring

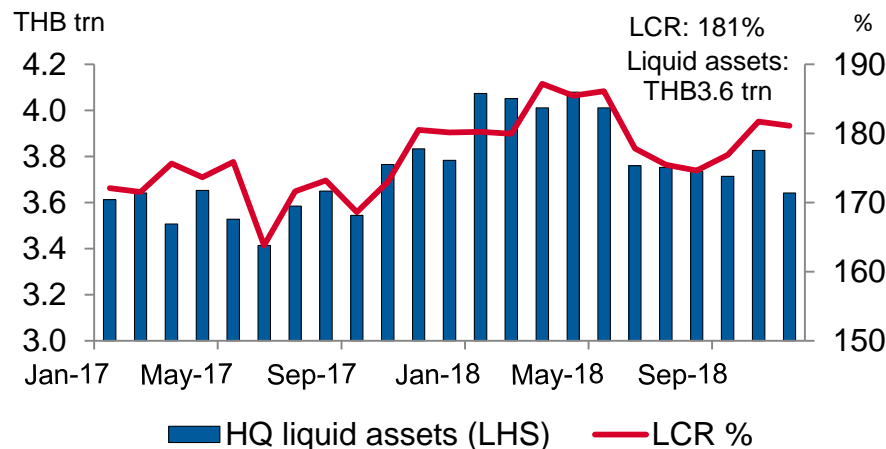
- Auto loans show signs of deterioration after stabilization
- Used car segment appears to be a potential weak spot
- Housing loan NPL remains vulnerable. Ratio may rise once loan growth slows in 2019
- NPL relapses remain a challenge

Funding and Liquidity

- Banks are likely to raise interest rates only gradually due to ample liquidity and moderate loan growth

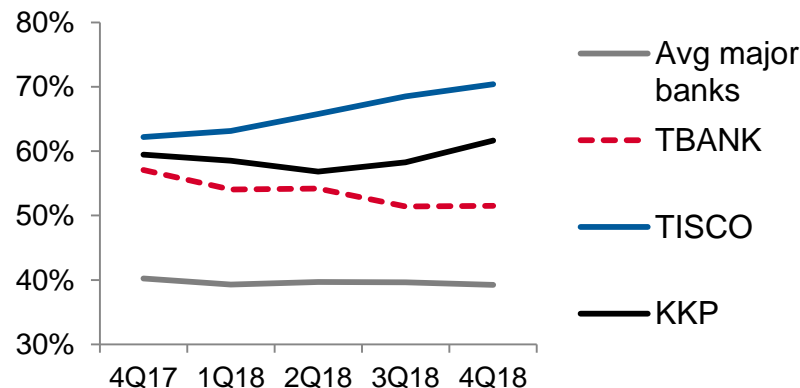
- Smaller banks: Distinctive funding profile means greater need to secure fixed funding in advance

High-quality liquid assets vs. LCR



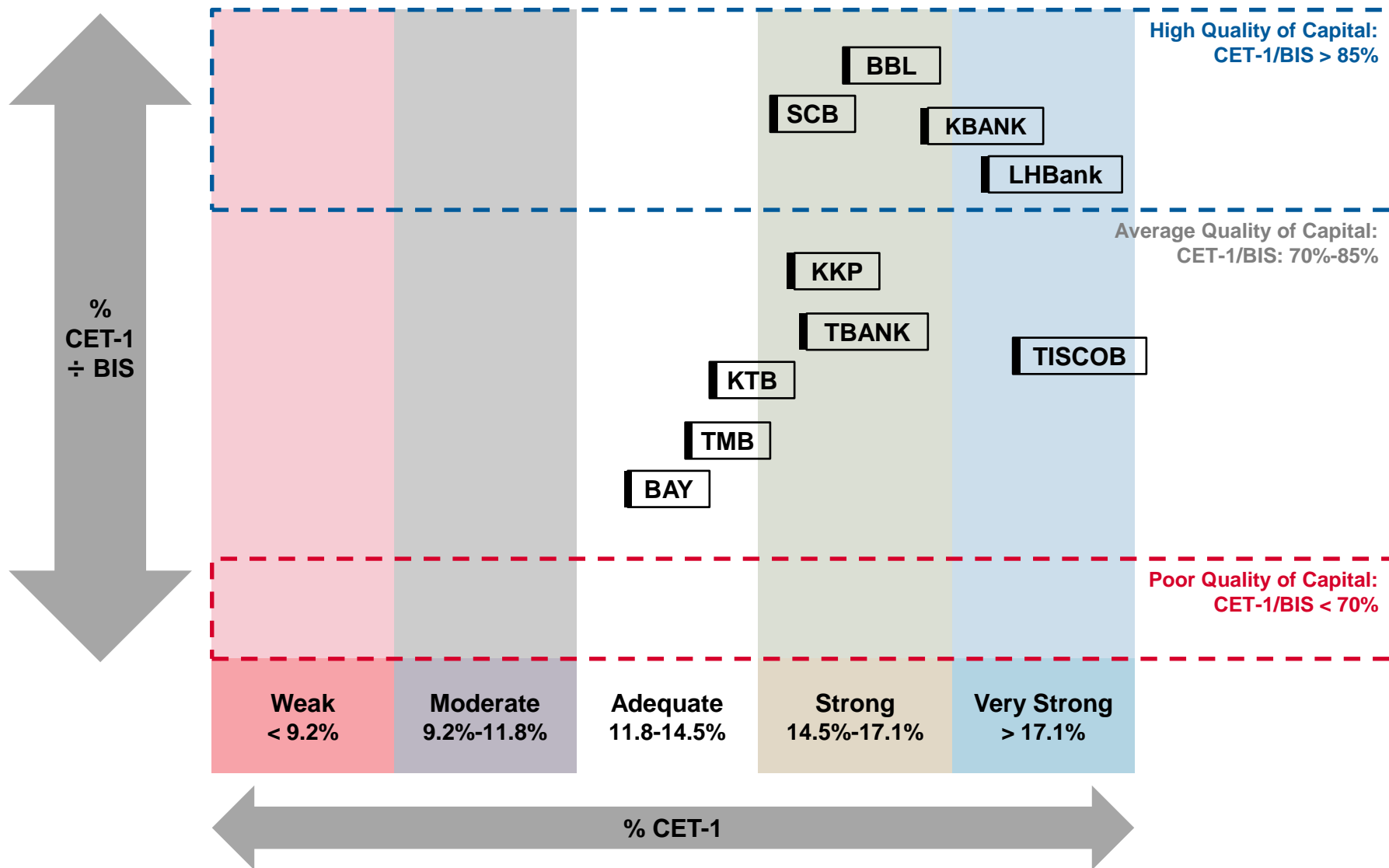
Source: Bank of Thailand (all banks) (Minimum Liquidity Coverage Ratio (LCR) for 2019: 90%)

Fixed deposits + CD / total deposits



Source: Company data (CD: Certificate of deposits)

Capital Position



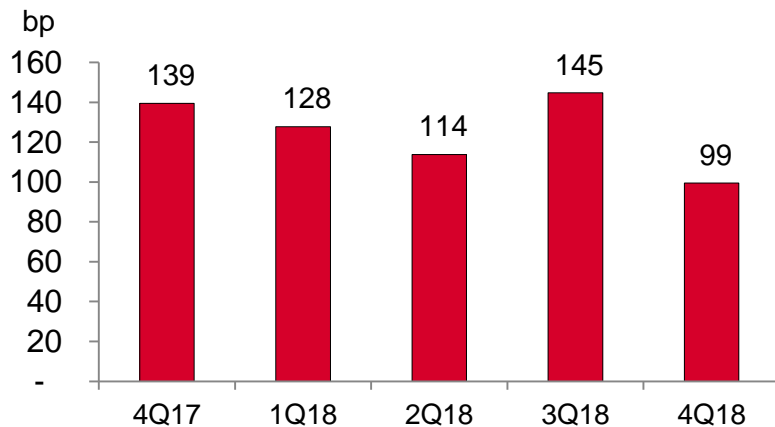
Source: TRIS, Company data. Note: Ratios as of 4Q18; the ratios have not incorporated 2H18 net profits

Earnings

	2017	2018
Loan / Deposit ratio	109%	105%
Asset yield	4.7%	4.6%
Cost of fund	1.7%	1.7%
Net interest margin	3.3%	3.2%
Cost to income ratio	44%	46%
NPL coverage ratio	140%	144%
% NPLs	2.9%	3.0%
Credit cost (bp)	116	104
ROA	1.4%	1.5%
ROE	11.4%	11.7%

Source: TRIS, Company data (10 listed companies)

Credit cost



Source: TRIS, Company data (10 listed companies)

- **2018 financial performance remained relatively healthy despite pressure on fee revenue due to lower credit cost**
- **Potential rise in asset yield as interest rate cycle picks up**
- **Risk of rising funding costs for smaller banks**

Rating Factors

Positive

- **Capital remains strong and likely to strengthen further**
- **Limited funding risk due to strong system liquidity and moderate credit demand**
- **Healthy profitability, despite revenue pressure and, supported by lower credit cost**

Negative

- **Risk of rising funding cost for smaller banks**
- **Revenue pressure continues from fee-waiving strategy and regulatory requirement on market conduct**
- **Intense competition and high operating expenses could limit margin improvement**

The background features a close-up, black and white photograph of a motorcycle's instrument cluster. It includes a speedometer with markings from 200 to 260, a fuel gauge with a 'Diesel 1/2' label, and a headlight. The image is partially obscured by blue diagonal graphic elements.

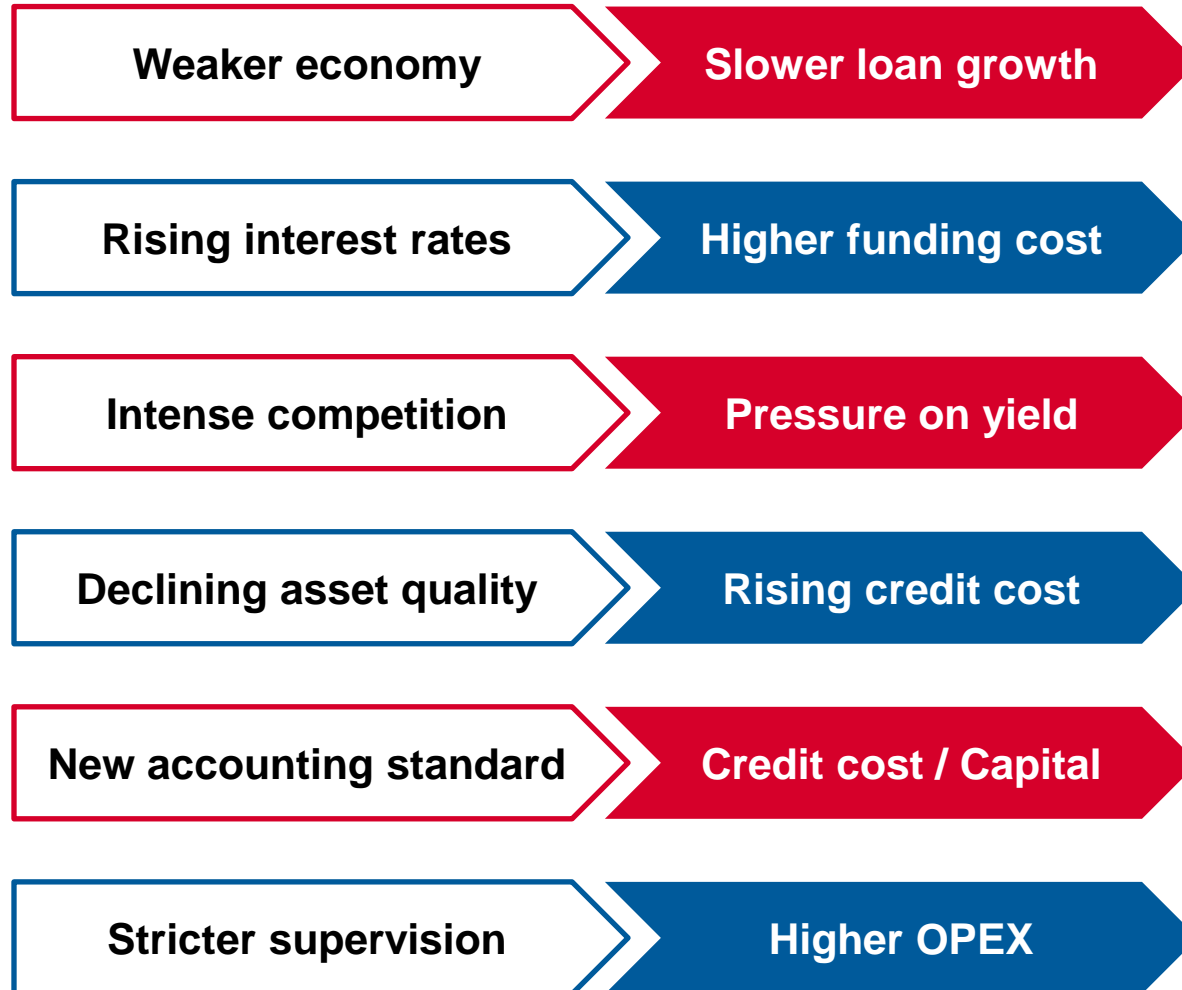
Financial institutions: NBFIs

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NBFIs Rated by TRIS

Hire purchase / Leasing		Consumer finance		Asset-backed loan		Other	
Name	Issuer/Issue Rating	Name	Issuer/Issue Rating	Name	Issuer/Issue Rating	Name	Issuer/Issue Rating
ASK	BBB+/Stable	KCC	AAA/Stable	MTC	BBB/Stable	ACAP	BB/Stable
AYCAL	AA/Stable	KTC	A+/Stable	NTL	A-/Stable	BFIT	BBB/Stable
BMUL	AAA/Stable			SAWAD	BBB/Stable	JMT	BBB/Stable
BSL	BBB/Stable					KCAR	A-/Stable
ECL	BBB-/Stable					PL	A-/Stable
GL	BB+/Negative						
ML	BBB-/Stable						
S11	BBB-/Stable						
THANI	A-/Stable						
TK	A-/Stable						
TLT	AAA/Stable						
TTL	AAA/Stable						

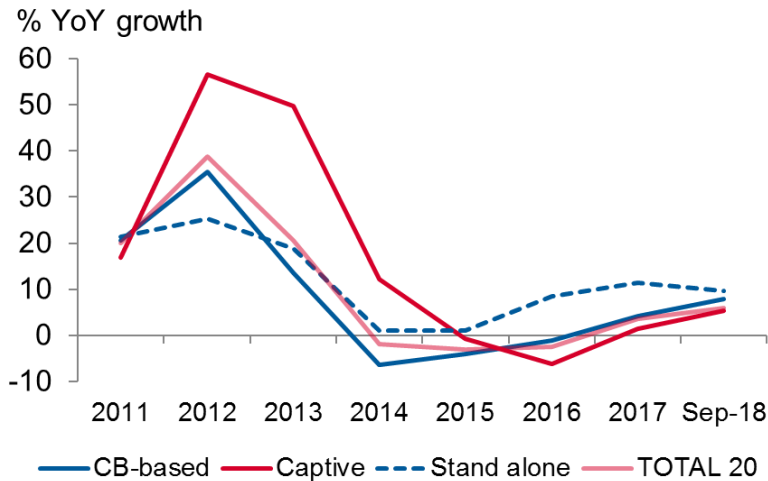
Key Credit Concerns



**Capital,
Leverage &
Earnings**

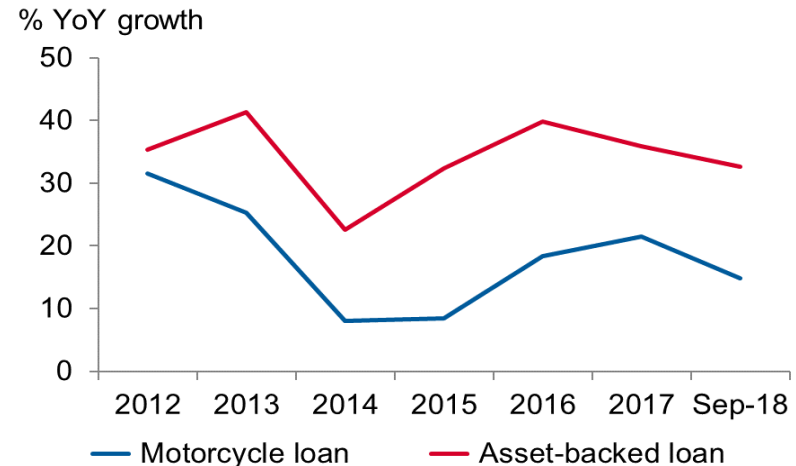
Receivable Growth

Auto HP loans



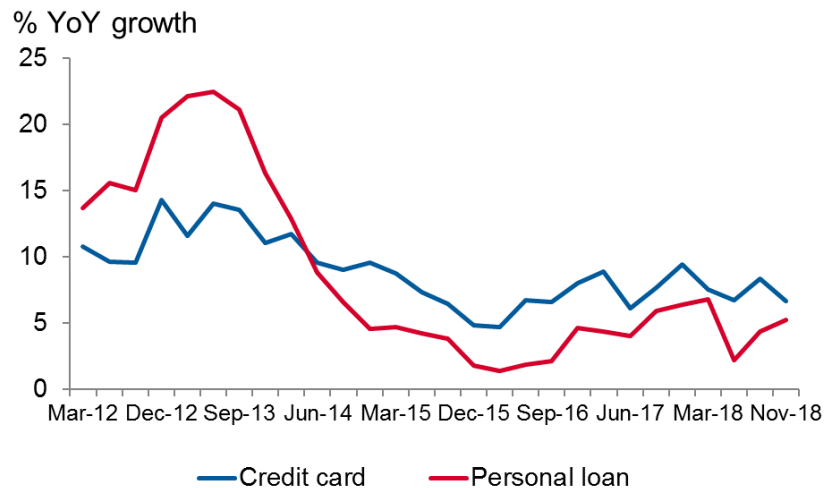
Source: Company data, TRIS Rating

Motorcycle and asset-backed loans



Source: Company data, TRIS Rating

Consumer finance

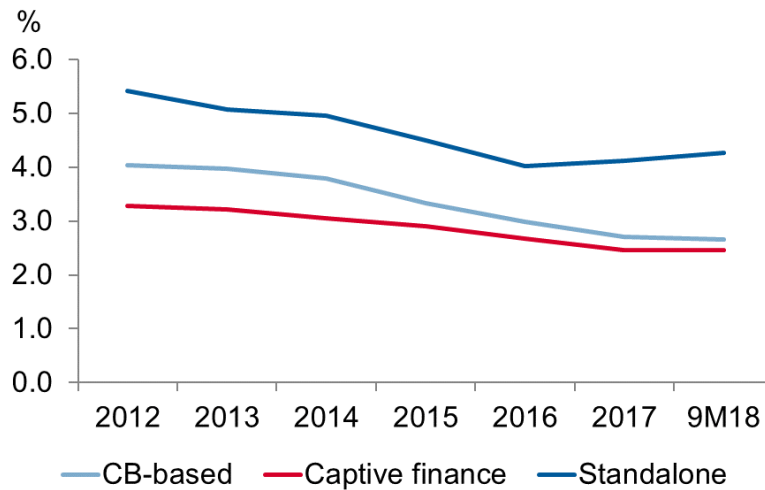


Source: Bank of Thailand

- **Slower economic growth still supports credit expansion in all segments**
- **Auto industry recovery supports loan growth**
- **Regulation of consumer finance has minimal impact on receivable growth**
- **Expect loan growth in 2019F for auto HP and motorcycle to remain flat at 10%, consumer finance to remain stable at 8% and asset-backed loans to decline to 20%**

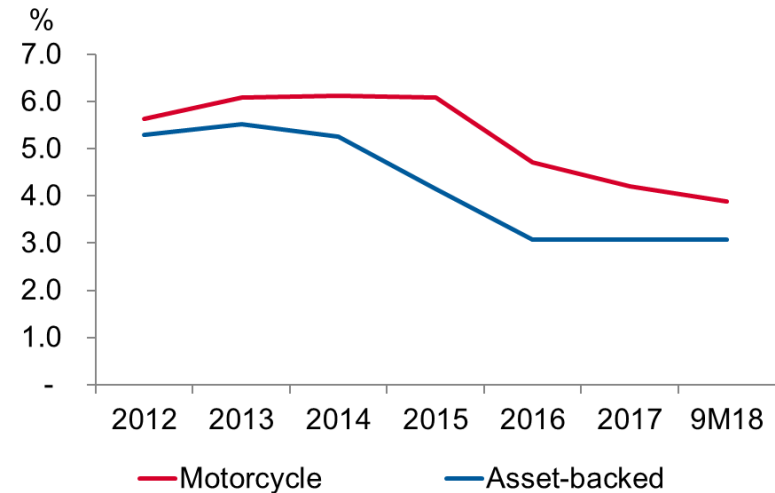
Funding Cost

Auto HP loans



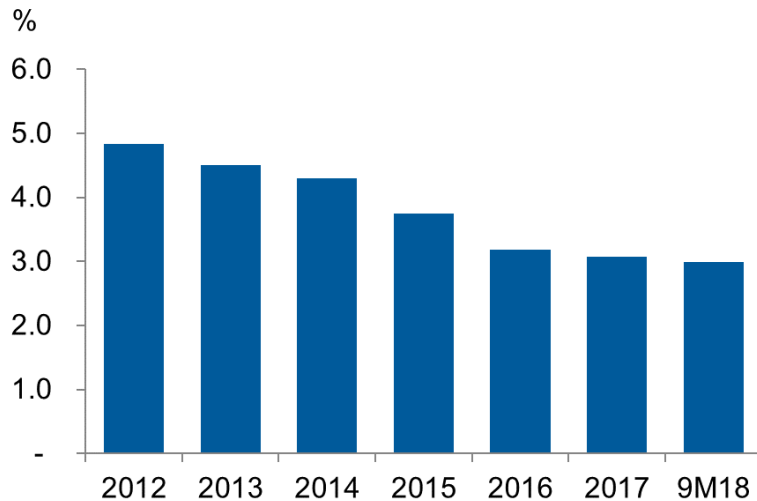
Source: Company data, TRIS Rating

Motorcycle and asset-backed loans



Source: Company data, TRIS Rating

Consumer finance

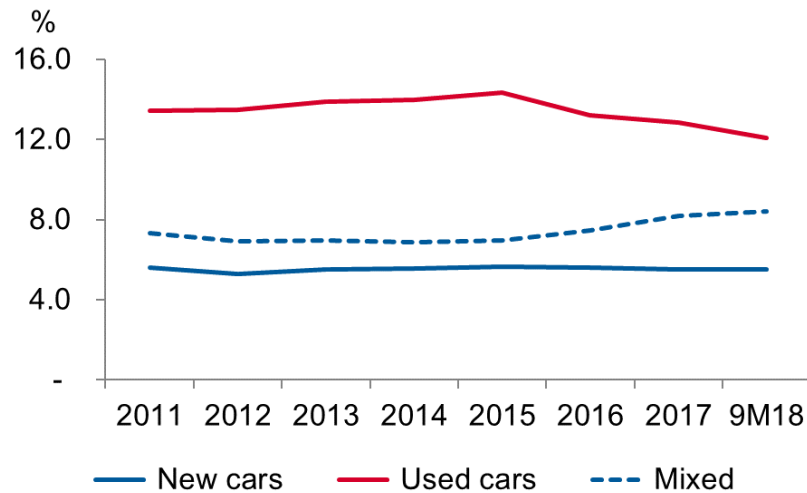


Source: Company data, TRIS Rating

- **Operators have shifted funding structure from short-term to longer-term in 2018**
- **Rising interest rate might result in narrower spread**
- **Rising funding cost can be a risk for standalone auto loan lenders**
- **Funding cost is not a major concern for motorcycle lenders due to low leverage**

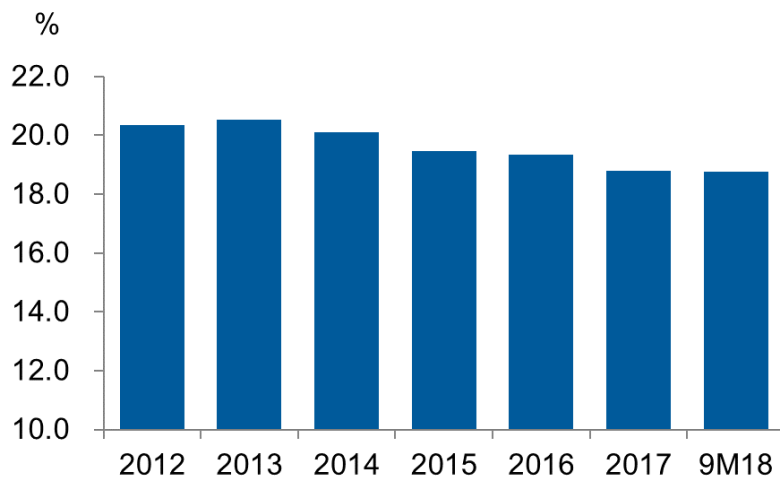
Loan Yield

Auto HP loans



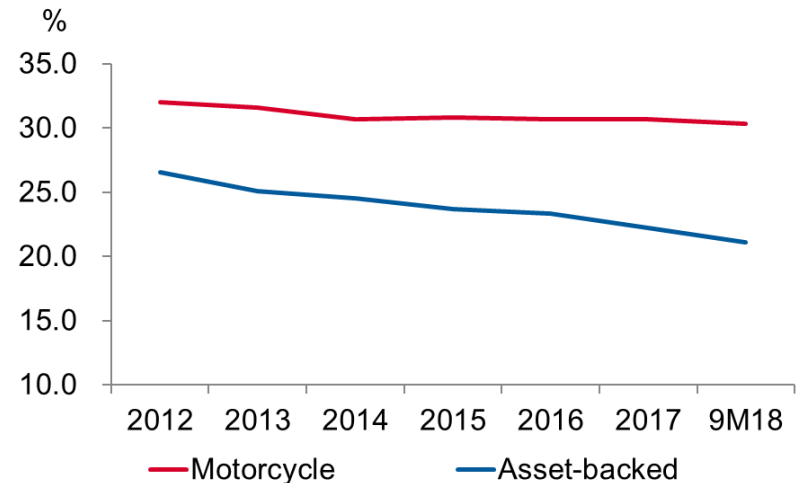
Source: Company data, TRIS Rating

Consumer finance



Source: Company data, TRIS Rating

Motorcycle and asset-backed loans

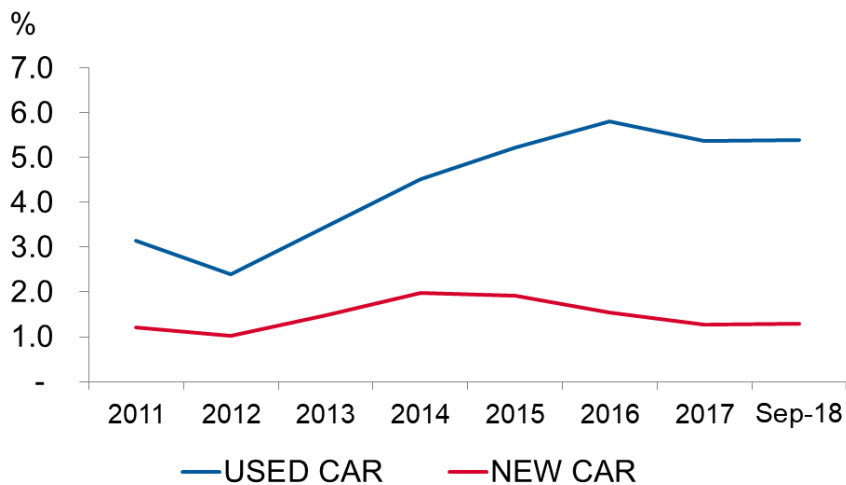


Source: Company data, TRIS Rating

- **Yield on used cars is attractive but loan quality control is a challenge**
- **Regulatory risks**
 - **Yield enhancement is limited, leading to more focus on merchant fees**
 - **Guidelines on asset-backed loans to have minimal impact on yield**
 - **Pending guideline on hire purchase and leasing businesses remains a risk**

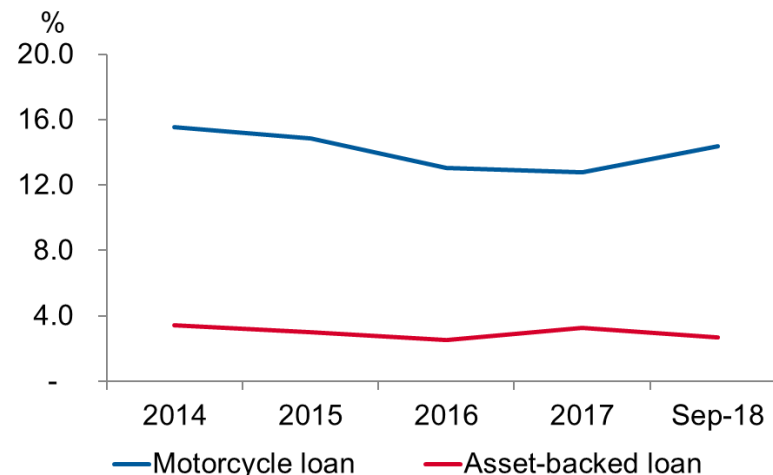
NPL + Write Off

Auto HP loans



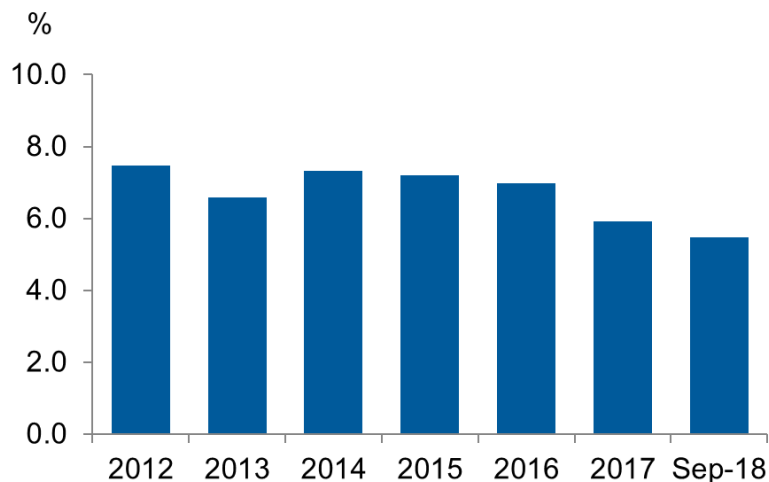
Source: Company data, TRIS Rating

Motorcycle and asset-backed loans



Source: Company data, TRIS Rating

Consumer finance



Source: Company data, TRIS Rating

Auto loan

- Signs of weakening loan quality in both new and used car segments but manageable

Motorcycle loan

- Loan quality has deteriorated

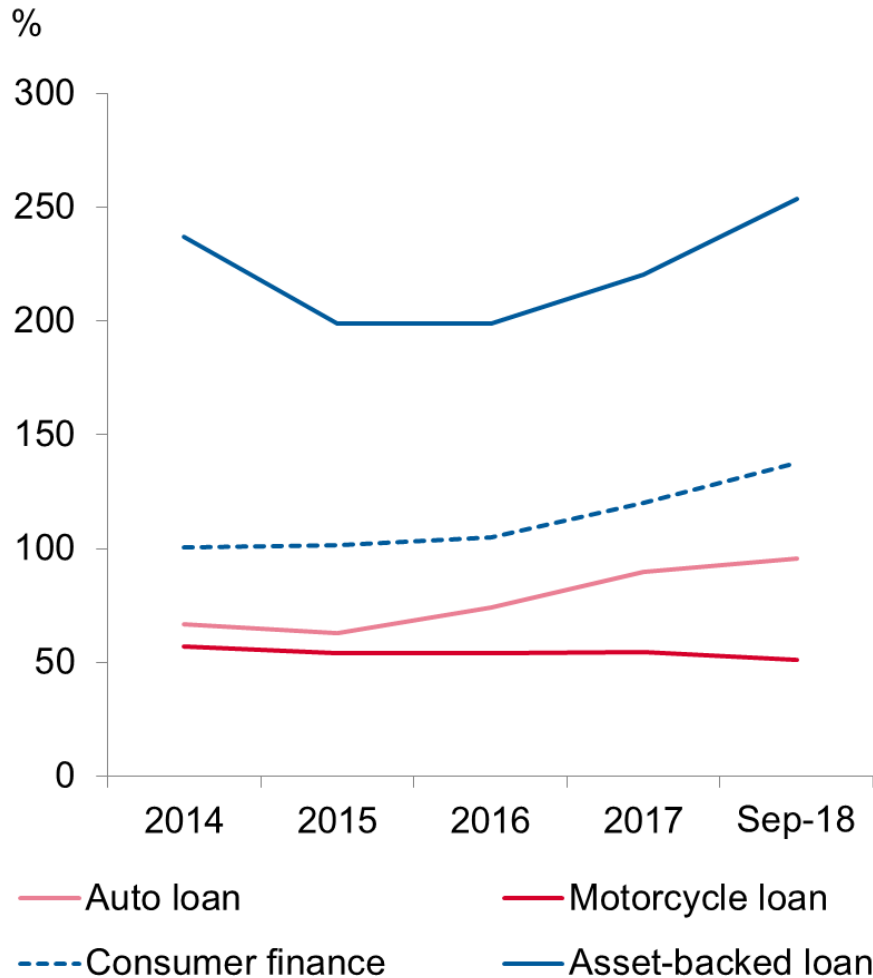
Consumer finance

- Credit quality has strengthened
- Regulations have helped to limit credit risk
- Lenders shift towards higher-income group

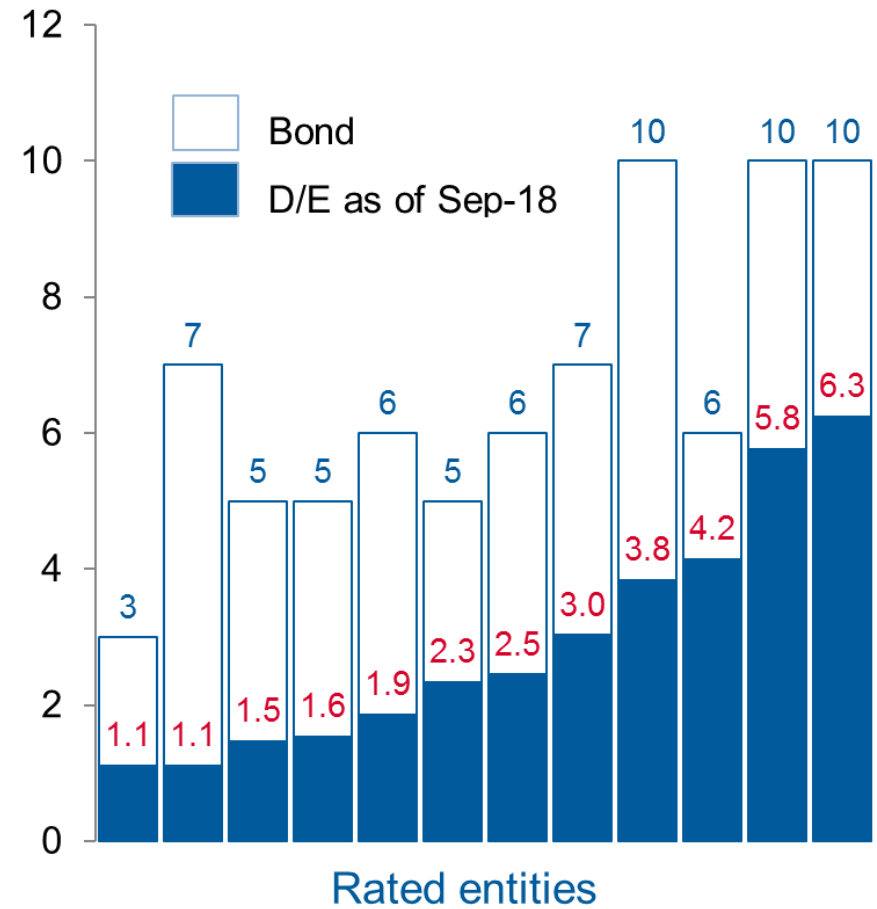
Asset-backed loan

- Appropriate LTV helps to control loan quality

NPL Coverage and Leverage



D/E Ratio (times)



Source: Company data, TRIS Rating

Regulatory Supervision on NBFIs

Product	Effective	Licence requirement	Maximum Interest Rate (%)*	Minimum Paid-up capital (Bt. Mil.)	Lending Limit	Purpose of borrowing	Regulator	Operation / Consumer Protection
HP/Leasing (Auto/Motorcycle)	Pending	Pending	Pending	Pending	Pending	Pending	MOC	Consumer Protection Board
Credit Card	2002	Credit Card	18%	50	1.5-5x monthly income	Not specified	BOT	BOT's market conduct guidelines
Personal Loan	2005	Personal loan	28%	50	1.5-5x monthly income	Not specified	BOT	BOT's market conduct guidelines
Nano Finance	2015	Nano Finance	36%	5	Bt100,000	Occupational	BOT	n.a.
Micro Finance	2016	Pico finance	36%	5	Bt50,000	Not specified	MOF	n.a.
Asset-Backed Loan (only auto-backed loan under loan contract)	Feb 2019	Personal loan	28%	50	Depend on collateral value and repayment ability	Not specified	BOT	BOT's market conduct guidelines
	Feb 2019	Pico finance	36%	5	Bt50,000	Not specified	MOF	BOT's market conduct guidelines

Impacts on Rated Entities

Credit expansion continues

- Economic growth may decline but remains relatively healthy
- Household debt has been increasing at a declining rate
- Tighter regulations and market conduct should help to eliminate unqualified operators

... but profitability could weaken

- Rising funding costs for small operators
- Competition pressures loan yield
- Declining loan quality and IFRS9 implementation may push credit cost higher
- Market conduct and regulatory requirements increase operating expenses



Agribusiness and Commodity Food

14 February 2019

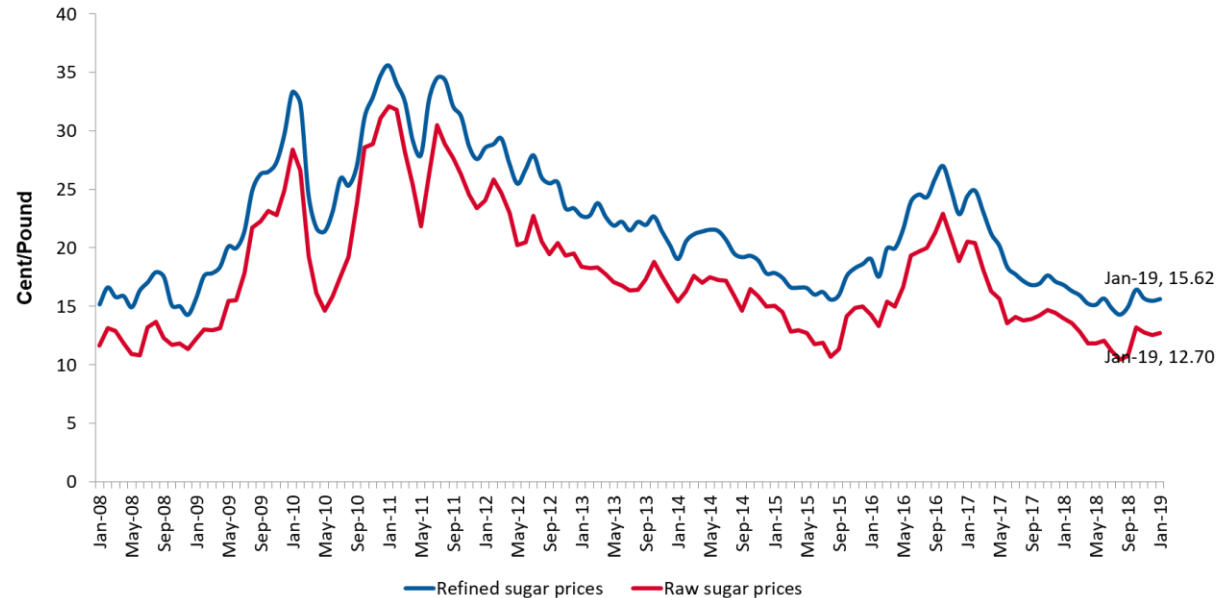
Agri-Food Companies Rated by TRIS

Subsector	Company Symbol	Rating	Outlook
Sugar	BRR	BBB-	Stable
	KSL	A	Stable
	MPSC	A+	Stable
Livestock/Aqua	BTG	A-	Stable
	CPF,CPFTH	A+	Stable
	TFG	BBB-	Stable
	CFRESH	BBB	Stable
	TU	A+	Stable
Others	STA	BBB+	Stable
	TWPC	BBB+	Stable

Sugar: Oversupply continues

- World sugar surpluses are keeping prices low
- Consumers have lower demand for sugar
- Thai white sugar producers to face competition from Indian low quality white sugar exporters

World Sugar Prices



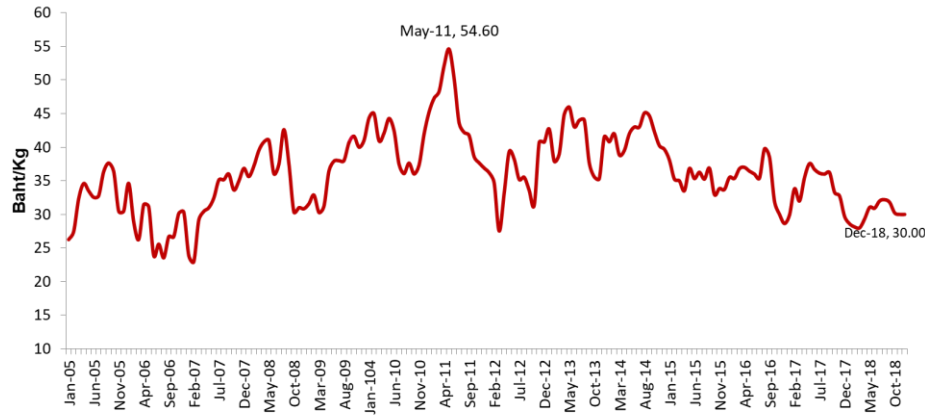
Source: USDA:

1) Refined Sugar: London International Financial Futures and Options Exchange

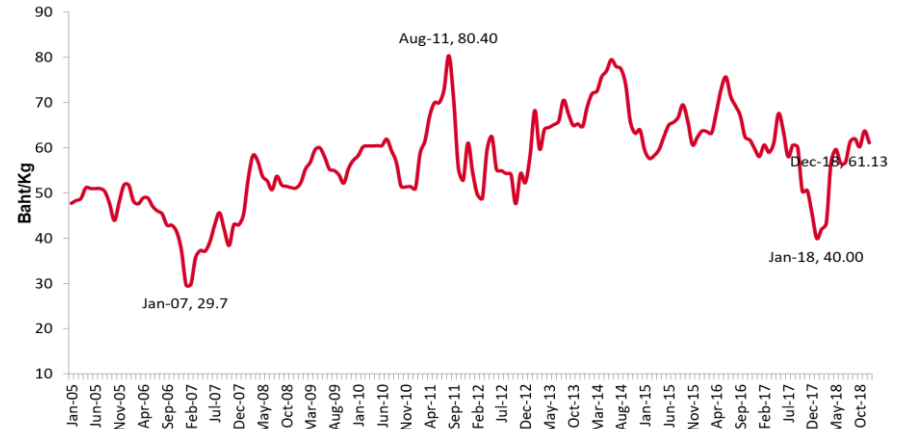
2) Raw Sugar Prices: Contract 11, New York Board of Trade

Livestock/Aquaculture: Price Trends

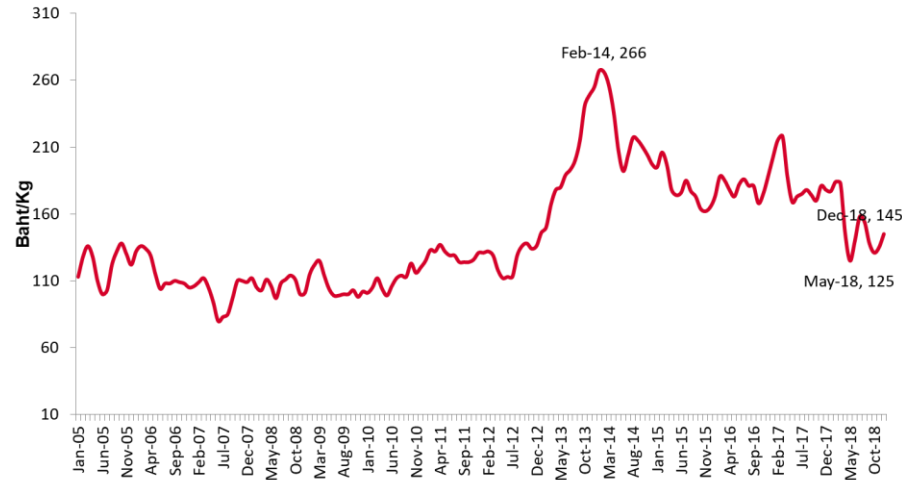
Broiler: Struggling with oversupply



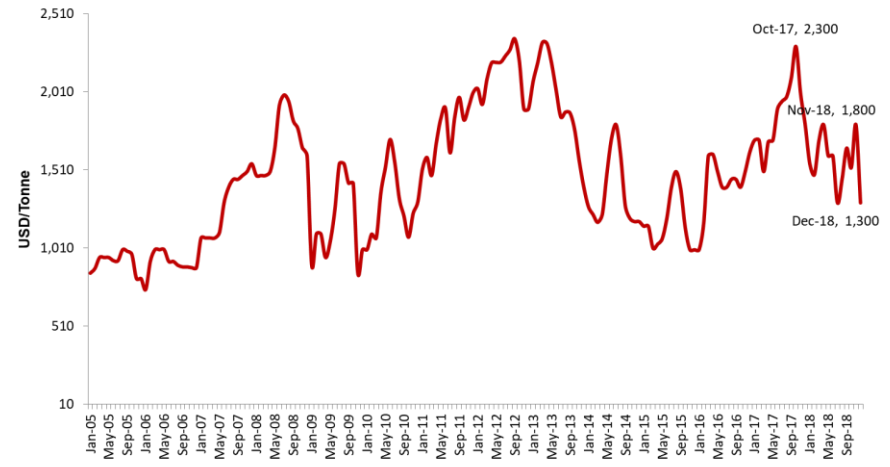
Swine: Moderate rebound



Shrimp: Declining trend

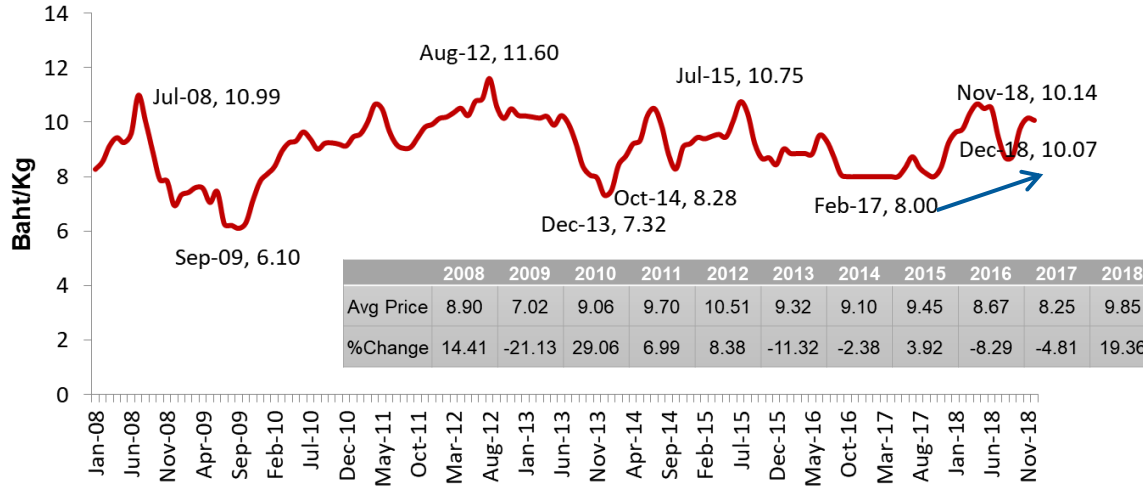


Tuna: More stabilized cost



Livestock feed prices to rise

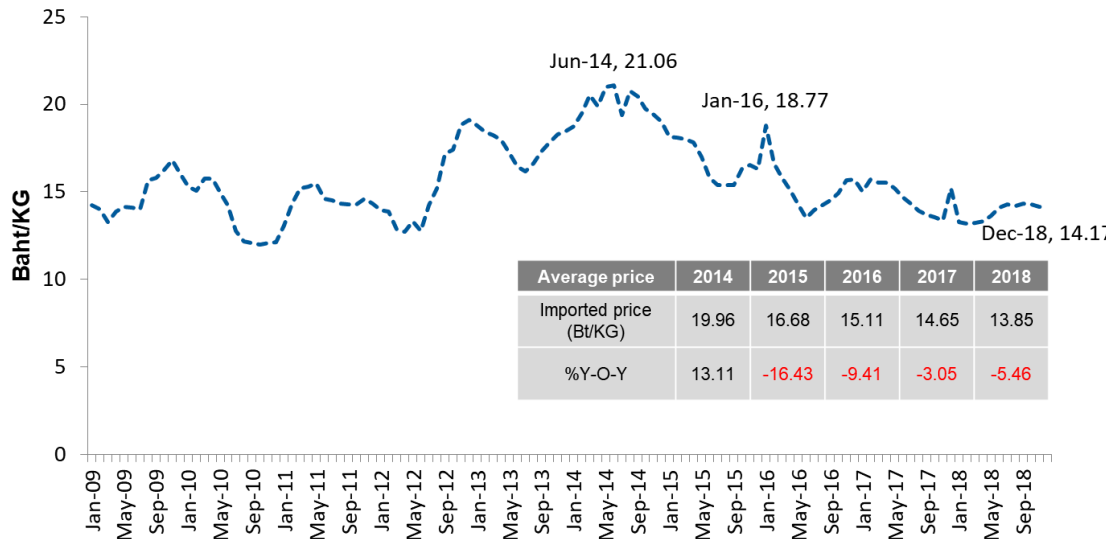
Corn



- 2019F: Expect supply shortage of corn (5 MMT production vs. 8 MMT demand)

Imported Soybean Meal

Source: TFMA



- Possibility of corn subsidies may push cost higher for livestock producers (corn accounts for 5%-15% of total CGS)
- Soybean may trend downward but has no material impact on CGS

Our Observations

Sugar:

- **Diversifying into power and fuel (ethanol) to stabilize commodity price risk**

Two sugar companies rated by TRIS have 20% market share in biomass power plants and 36% share in ethanol production in Thailand

Livestock/Aqua:

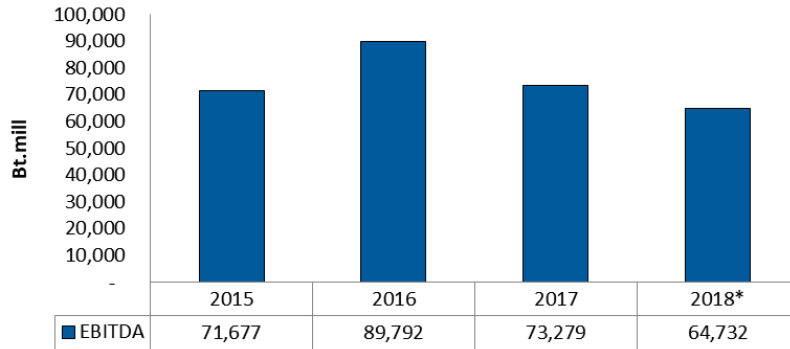
- **“Farm-to-Table” theme results in shifts to high-margin segments**

Farm to table: Livestock to meat → Bulk meat to retail → Retail pack to food service/ Ready-to-eat markets → Brand ownership

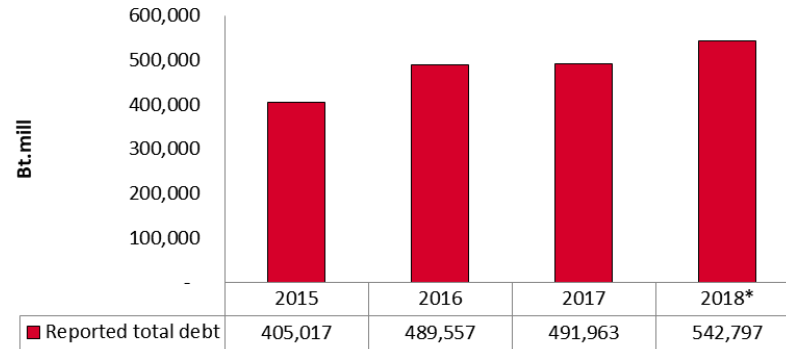
- **Develop own distribution channels**
- **Cut costs and invest in automation to enhance business efficiency**
- **Balance sheet deteriorates from debt-funded M&A activities**

2018: A tough year – Weaker performance and higher leverage

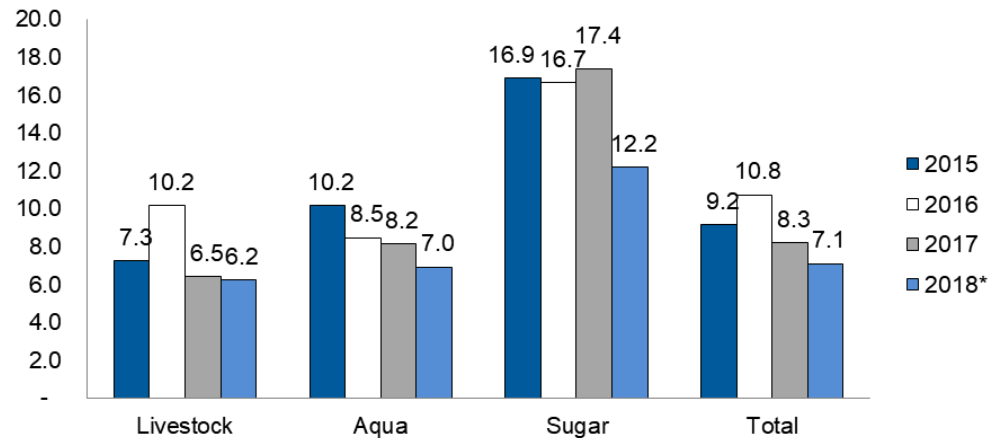
Aggregated EBITDA: Rated-agri companies



Total Debt: Rated-agri companies



% EBITDA Margin



*2018 figures are 12-month trailing annualized

Rating Factors

- (+) Recovery in swine and tuna prices**
- (+) Thailand lifted from Yellow cards status by the EU**
- (-) Continued imbalance between supply & demand**
- (-) Cost pressures are rising**
- (-) Increased trade protectionism**
- (-) Strengthening Thai Baht**



Impact on Rated Entities

- Overall sales growth continues but at a slower pace
- Weaker profitability and cash flow generation
- NOT foreseeing drastic changes in ratings on the large, well-diversified/capitalized companies
- Weaker credit profile of smaller companies (limited product portfolios and higher debt levels)

TRIS Rating's focus:

Competitive position	Profitability
Cash flow/leverage analysis	Financial discipline

A grayscale photograph of a power tower's lattice structure, viewed from a low angle looking up, creating a sense of height and depth. The structure is composed of numerous interconnected steel beams forming a complex truss system.

POWER

14 February 2019

Power Companies Rated by TRIS

Rated Entities*	Full Name	Rating / Outlook
BGRIM	B. Grimm Power PLC	A / Stable
CKP	CK Power PLC	A / Stable
EA	Energy Absolute PLC	A- / Stable
EDLGEN	EDL-Generation Public Company	BBB+ / Stable
EGAT	Electricity Generating Authority of Thailand	AAA / Stable
EGATi	EGAT International Co., Ltd.	AAA / Stable
EP	Eastern Power Group PLC	BBB- / Stable
GLOW	Glow Energy PLC	AA- / Developing
GULF	Gulf Energy Development PLC	A / Stable
GUNKUL	Gunkul Engineering PLC	BBB / Stable
NPS	National Power Supply PLC	BBB- / Stable
RATCH	Ratchaburi Electricity Generating Holding PLC	AAA / Stable
RATCHGEN	Ratchaburi Electricity Generating Co., Ltd.	AAA / Stable
SPCG	SPCG PLC	A / Stable
SUPER	Super Energy Corporation PLC	BBB- / Stable
TPCH	TPC Power Holding PLC	BBB / Stable
TPIPP	TPI Polene Power PLC	BBB+ / Stable
TSE	Thai Solar Energy PLC	BBB / Stable

* Sample of rated power-generating entities

- **Total Number of Rated Power Entities : 30**
- **Representing around 70% of total power generation capacity connected to EGAT grid**
- **Ranging from large and long-established operators to small-sized new comers**

Power Industry Outlook

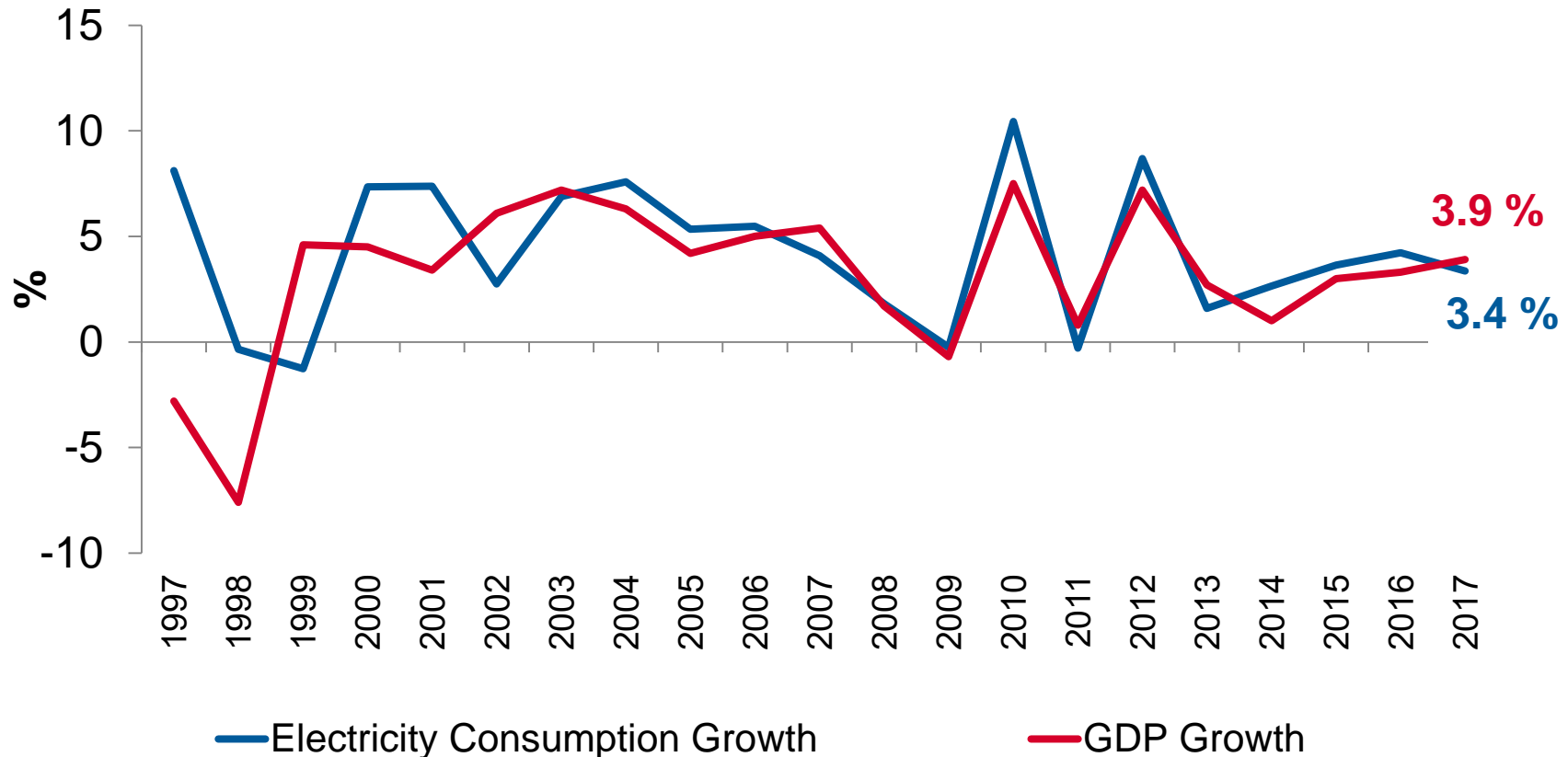
Outlook : **Stable**

- The power sector in Thailand will continue to grow, albeit at a low rate.
- Offshore expansion seems inevitable to achieve growth target, leading to potentially higher execution risks.
- Challenges in securing expansion opportunities with acceptable investment risk and return
- Investment opportunities for SPP, IPP, and renewable power producers under new PDP2018.

Our Observations

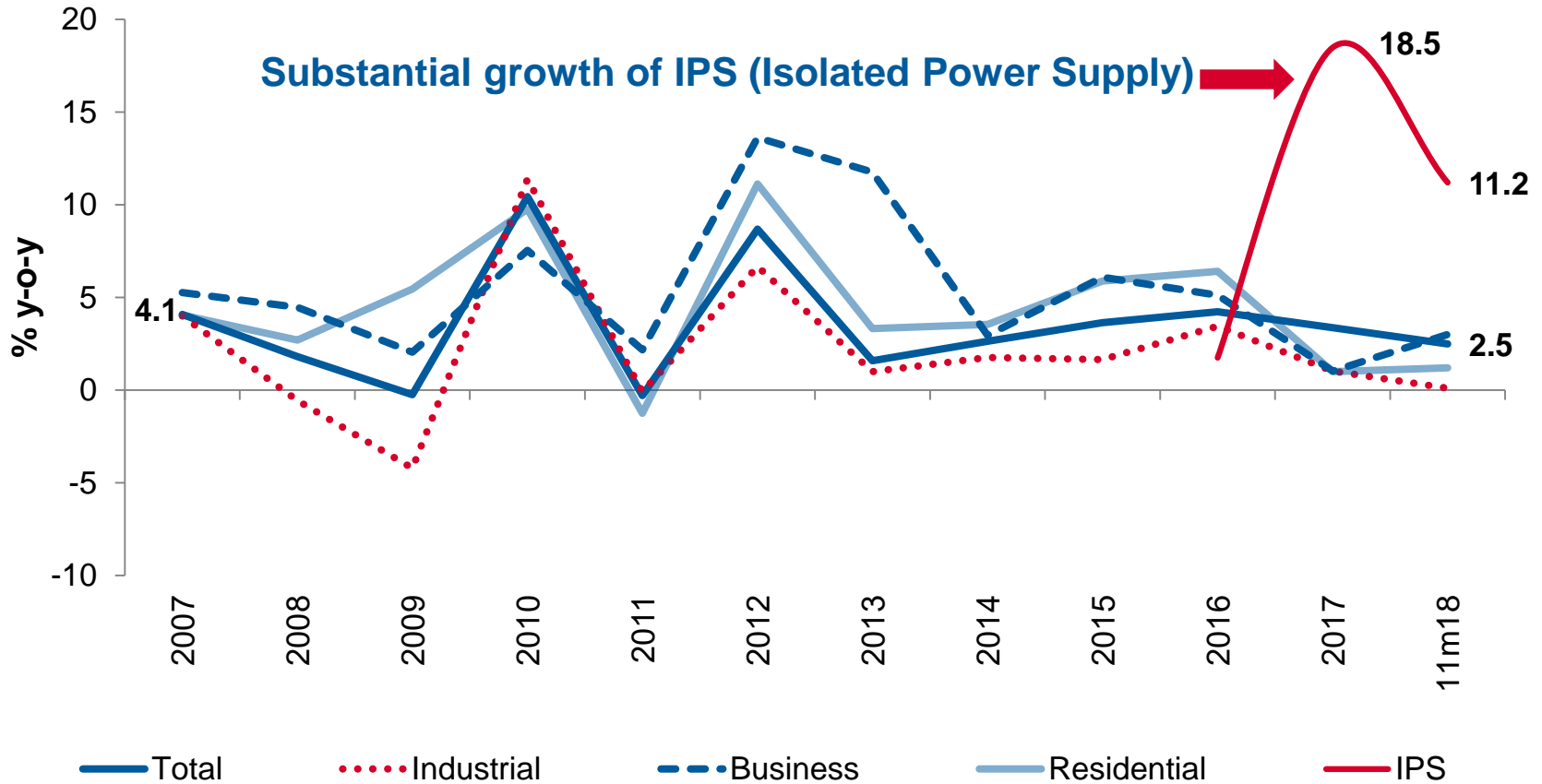
- Limited domestic opportunities for large-scale power producers (IPP), leading to declining growth of assets.
- We see growth of IPS (Isolated Power Supply) and renewable power. Many new comers penetrated into VSPP renewables.
- Delay of PDP revision caused uncertainties.
- Power producers move towards overseas investments, especially CLMV, causing exposure to higher risks (e.g. country, off-takers)

Modest Growth in Power Demand



- Power consumption moved in tandem with GDP over past years.
- Growth rate ranged 2%-4% since 2013 (after Global Crisis in 2008 and Great Flood in 2011)

Electricity Consumption Growth

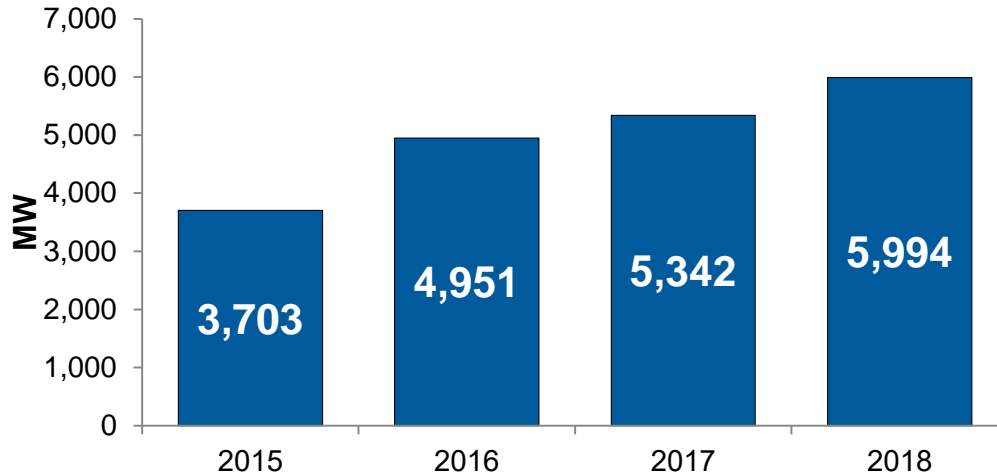


Sources: EPPO, NESDB

IPS has been included in growth calculation since 2016.

Growth in Renewable Power

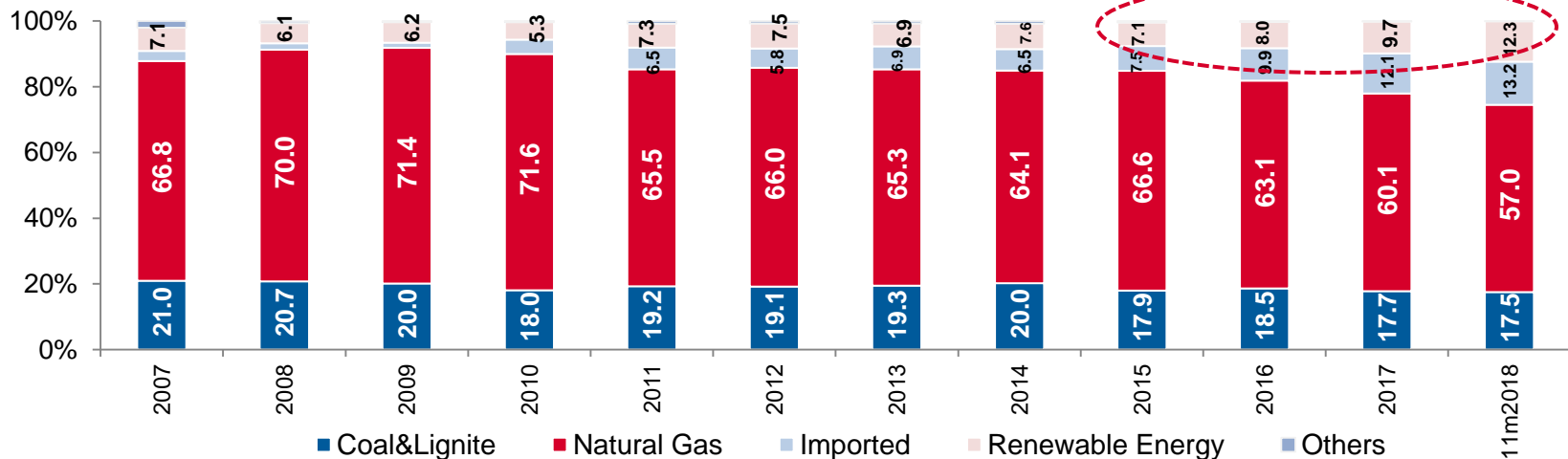
Renewable Power Capacity



Growing capacity of renewable power, with solar making up nearly half of current capacity

Source: EPPO (excluding EGAT capacity)

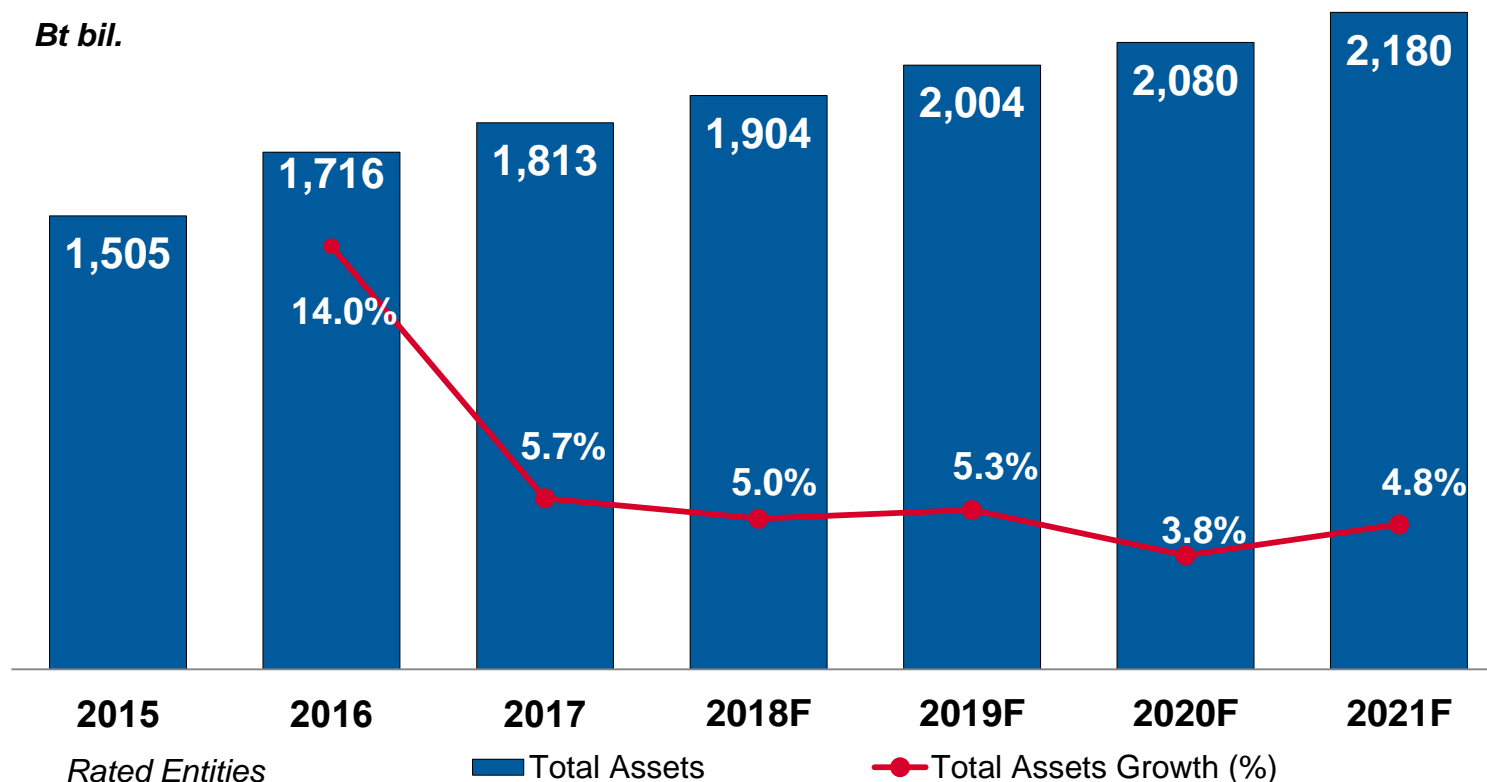
Electricity Generation via EGAT Grid



Source: EPPO

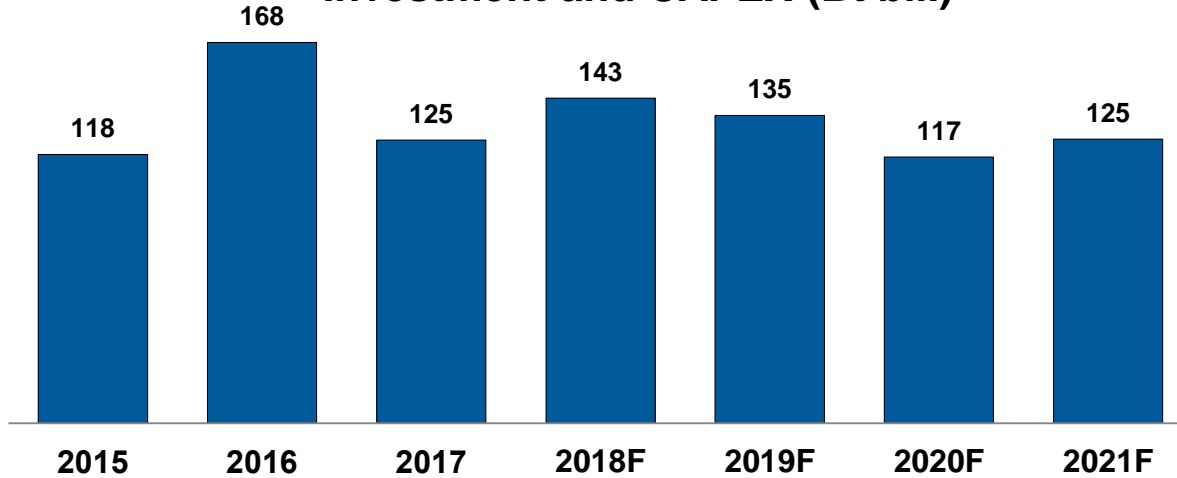
Growth of Assets

Estimated average asset growth of less than 5% p.a. on average in 2019-2021F
(pre-PDP2018)



Investments by Rated Power Entities

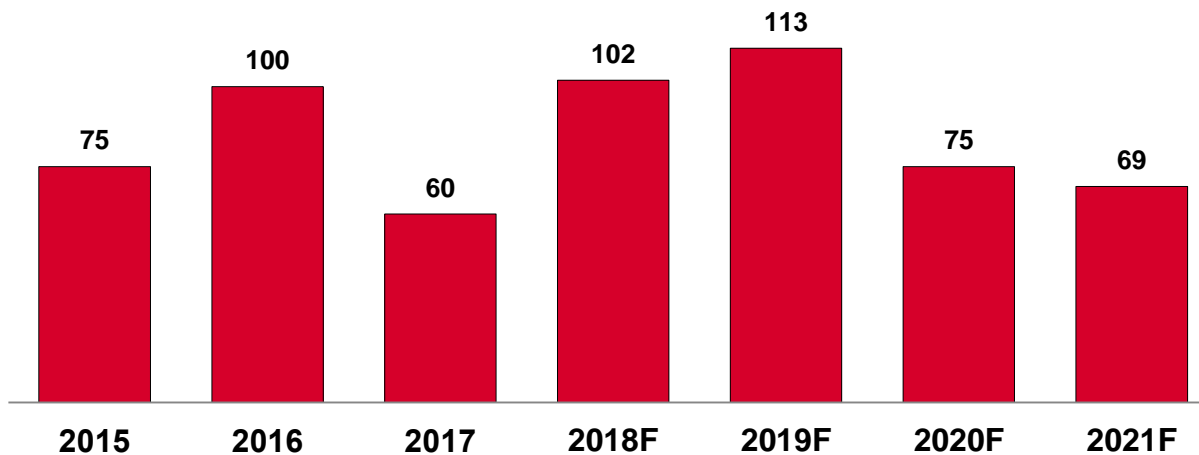
Investment and CAPEX (Bt bil.)



← Sector

Rated Entities

Investment and CAPEX (Bt bil.)

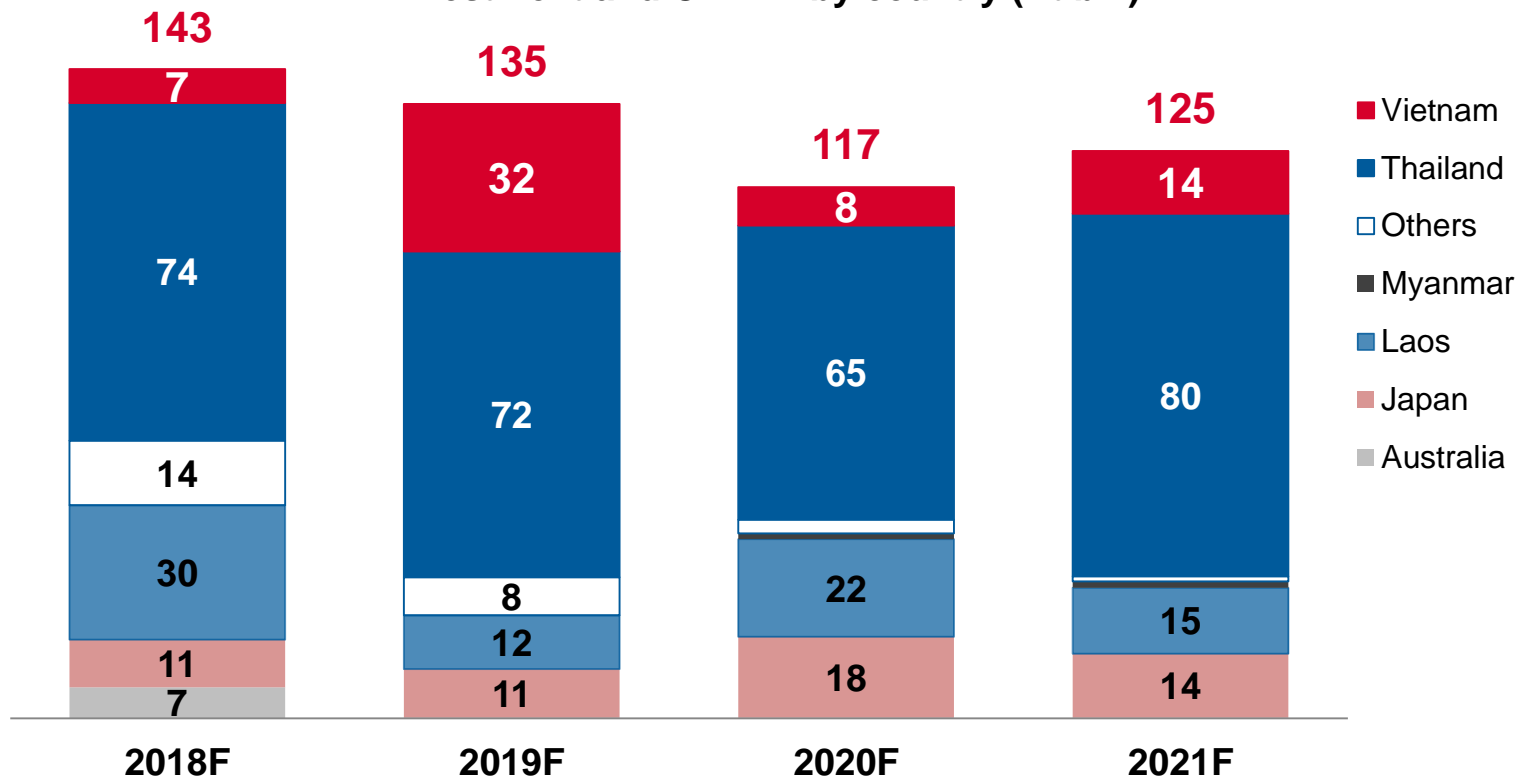


← Private power companies

Rated Entities, excluding EGAT, EDLGEN

Move Towards Offshore Investments

Investment and CAPEX by country (Bt bil.)



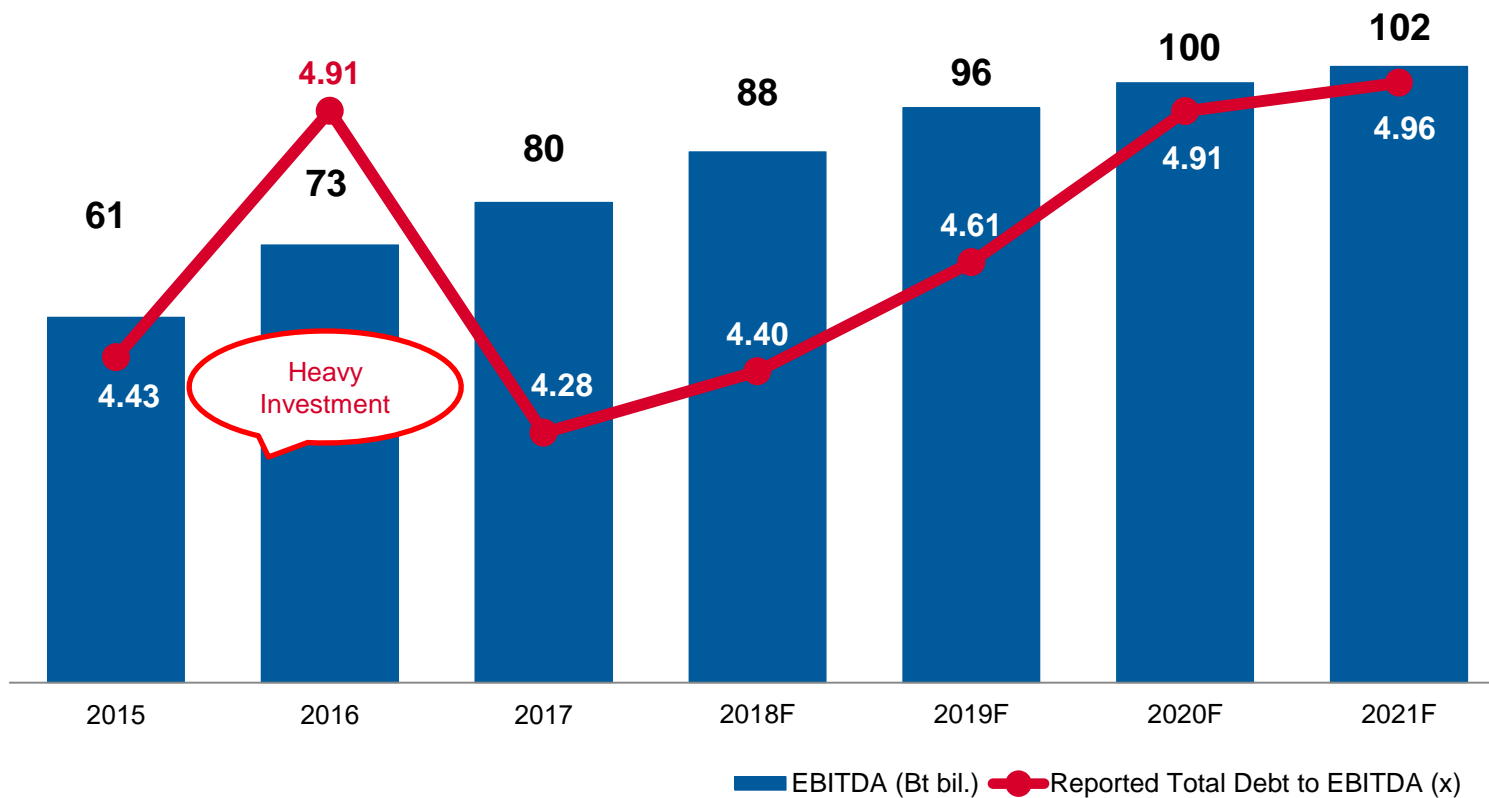
Rated Entities

- Domestic power investments account for about 50%-60% for 2018-2021
- Power companies are increasingly looking for opportunities outside of Thailand for business expansion

Leverage and Cashflow Protection

Bt mil.

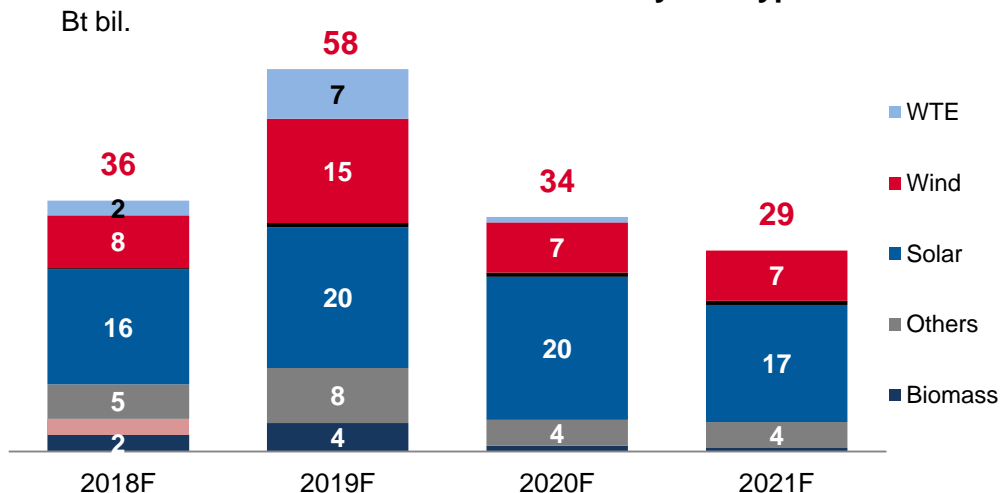
EBITDA vs Debt to EBITDA ratio



Source: TRIS Rating Rated Entities, excluding EGAT, EDLGEN

Investments by Rated Renewable Power Companies

Investment and CAPEX by fuel type

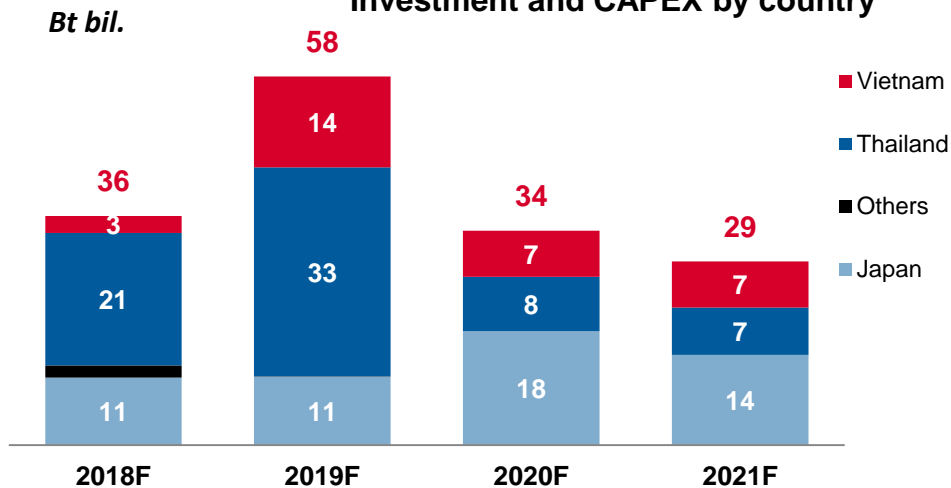


- Renewable power companies expand from simple solar power towards more challenging and complex projects such as WTE, biomass
- Solar power still maintains the largest portion

Rated Renewable Power Companies

- Significant investments in solar power in Japan
- Increased investments in Vietnam, given the lack of domestic opportunities, and currently unfavorable Japan tariffs for solar projects

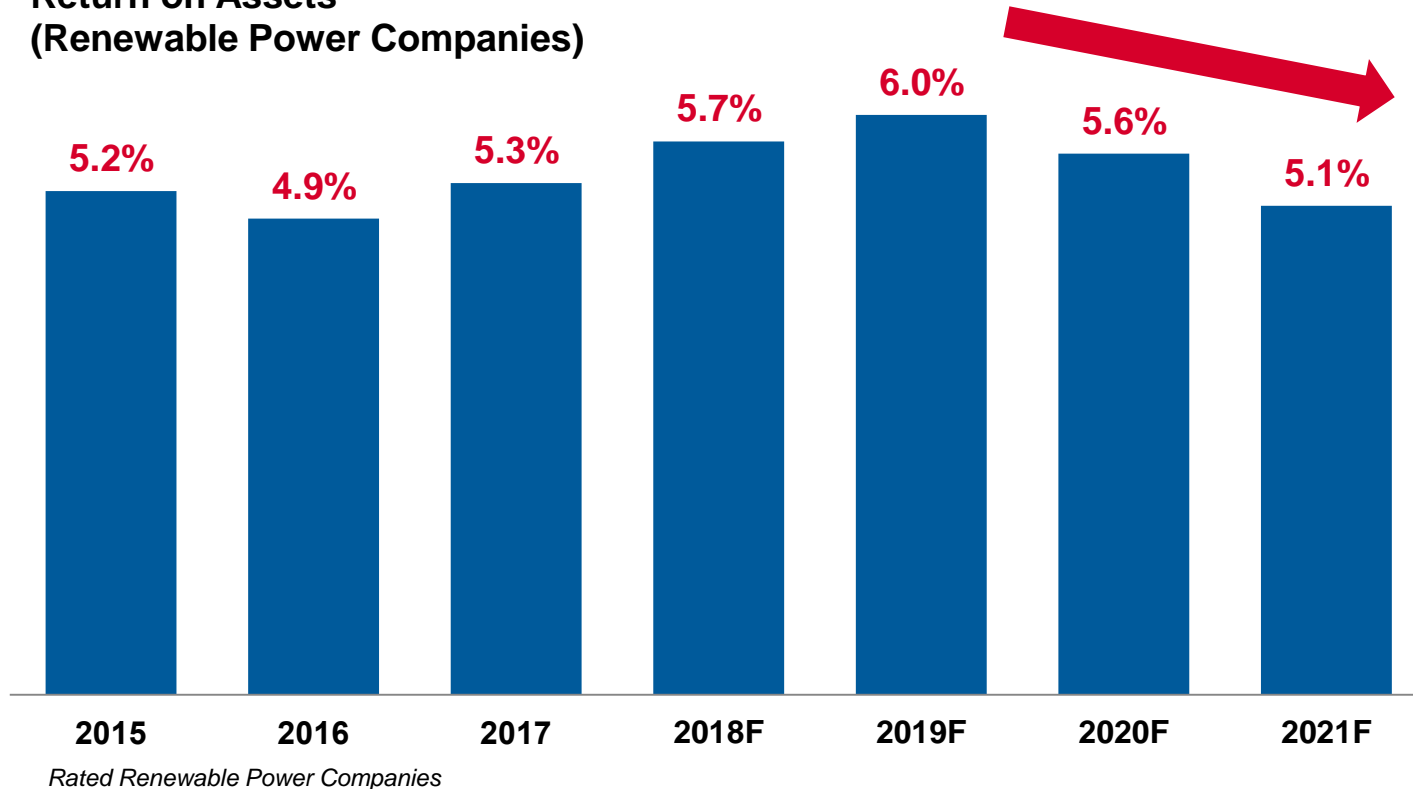
Investment and CAPEX by country



Rated Renewable Power Companies

Declining ROA of Renewable Power Companies

Return on Assets
(Renewable Power Companies)



Return on assets is on a downward trend, despite lower project costs, due to:

- Expiration of adders
- Lower supportive tariff
- Bidding price scheme
- Potential rise in financial cost

Power Development Plan 2018

- PDP2018 (2018-2037) was approved by National Energy Policy Council (NEPC) on 24-Jan-19
- Subject to review every 5 years
- Tariff Bt3.50-Bt3.63 per kWh (or avg. Bt3.58)
- Larger contribution from GAS. Coal is less (12%)
(Gas (53%) Coal (12%) Renewable (20%) Imported Hydro (9%))
- More opportunities in solar power
- SPP renewal and IPP replacement

Item	PDP 2015 (2015-2036)	PDP 2018 (2018-2037)
Grand total Capacity (end of plan)	70,335 MW	77,211 MW
New Capacity	57,459 MW	56,431 MW

Private Rooftop Solar : 10,000 MW

Timeline : 1,000 MW over 10 years
 Launch in 2019 : 100 MW
 Expected tariff Bt1.6-Bt1.8 kWh

- SPP Renewal (25 projects) : approx. 2,000 MW
- IPP : 8,300 MW

Type (MW)	PDP 2015	PDP 2018
Renewables	21,648	20,766
Pump-storage hydro power	2,101	500
Cogeneration	4,119	2,112
Combined Cycle	17,478	13,156
Coal	7,390	1,740
Import	1,473	5,857
Other (thermal)	3,250	-
Replacement (IPP/EGAT)	-	8,300
Energy Efficiency Plan (EEP)	-	4,000
Total (MW)	57,459	56,431

Rating Factors

Positive

- Demand continues to grow in tandem with economic growth, albeit at a slower pace. Remote likelihood of precipitous drop
- Minimal payment risk of state-run power buyers
- New investment opportunities arising from PDP2018

Negative

- Chances of declining return on investment
- Tentative bidding scheme
- Rising cost of debt in the medium term
- Higher execution risks of overseas investments

Expected Impact on Rated Entities

- **Credit ratings of large-scale and long-established power producers should remain solid, considering their competitive strengths, financing capabilities and substantial cushions.**
- **Medium-to-small power producers, especially new comers, are more susceptible to changes in investment landscapes due to moderate growth capabilities amid declining returns and higher risks of new projects.**

REITs

14 February 2019

REITs Rated by TRIS

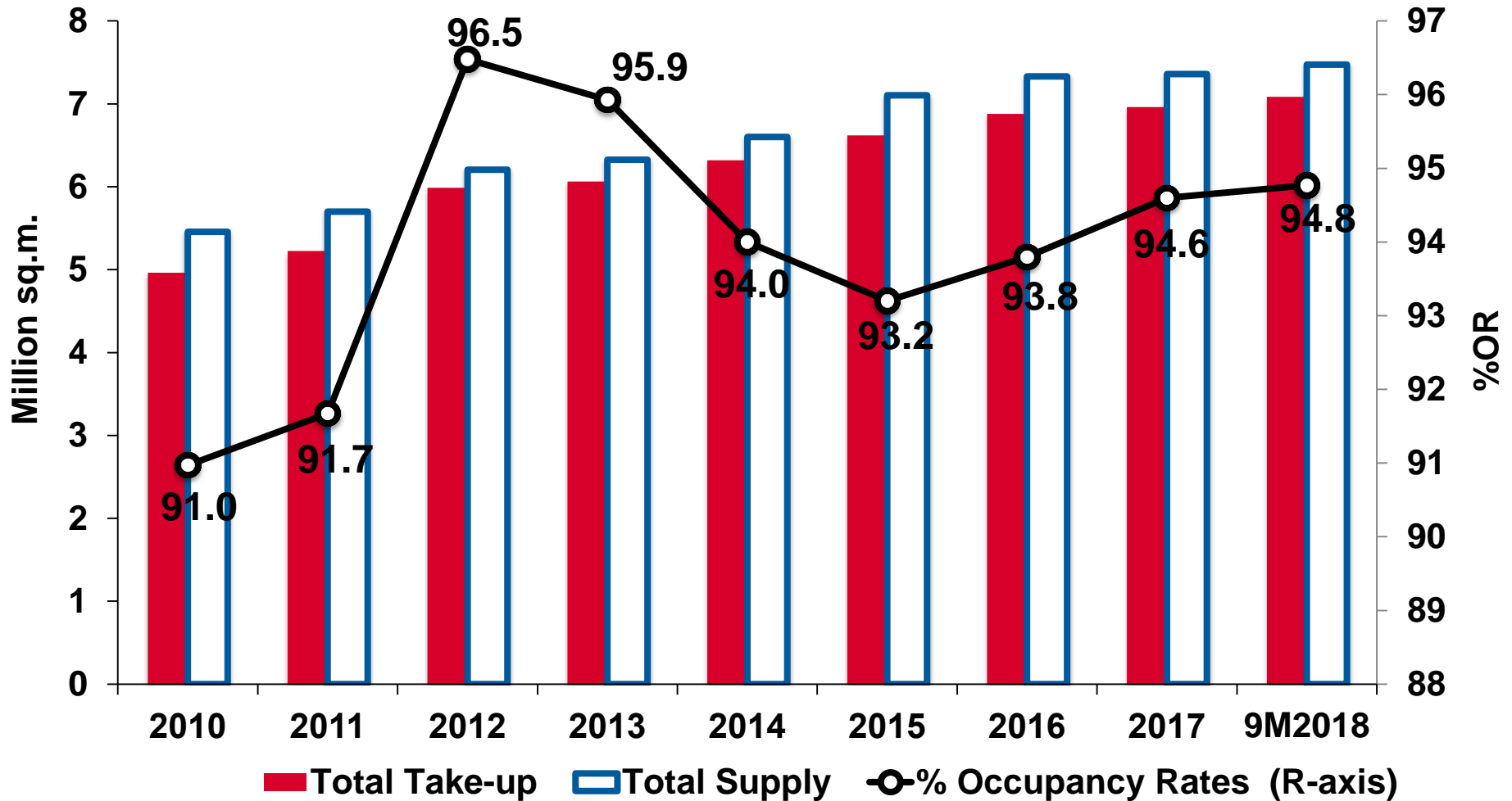
Name	Property Type	Rating	Outlook
CPNREIT	Retail Hotel	AA	Stable
GVREIT	Office	A-	Stable
HREIT	Factory Warehouse	BBB+	Stable
FTREIT (TREIT)	Factory Warehouse	A	Stable
WHART	Factory Warehouse	A	Stable

** Note: 5 rated REITs accounted for 37% of total assets (REIT+PF) at YE 2017*

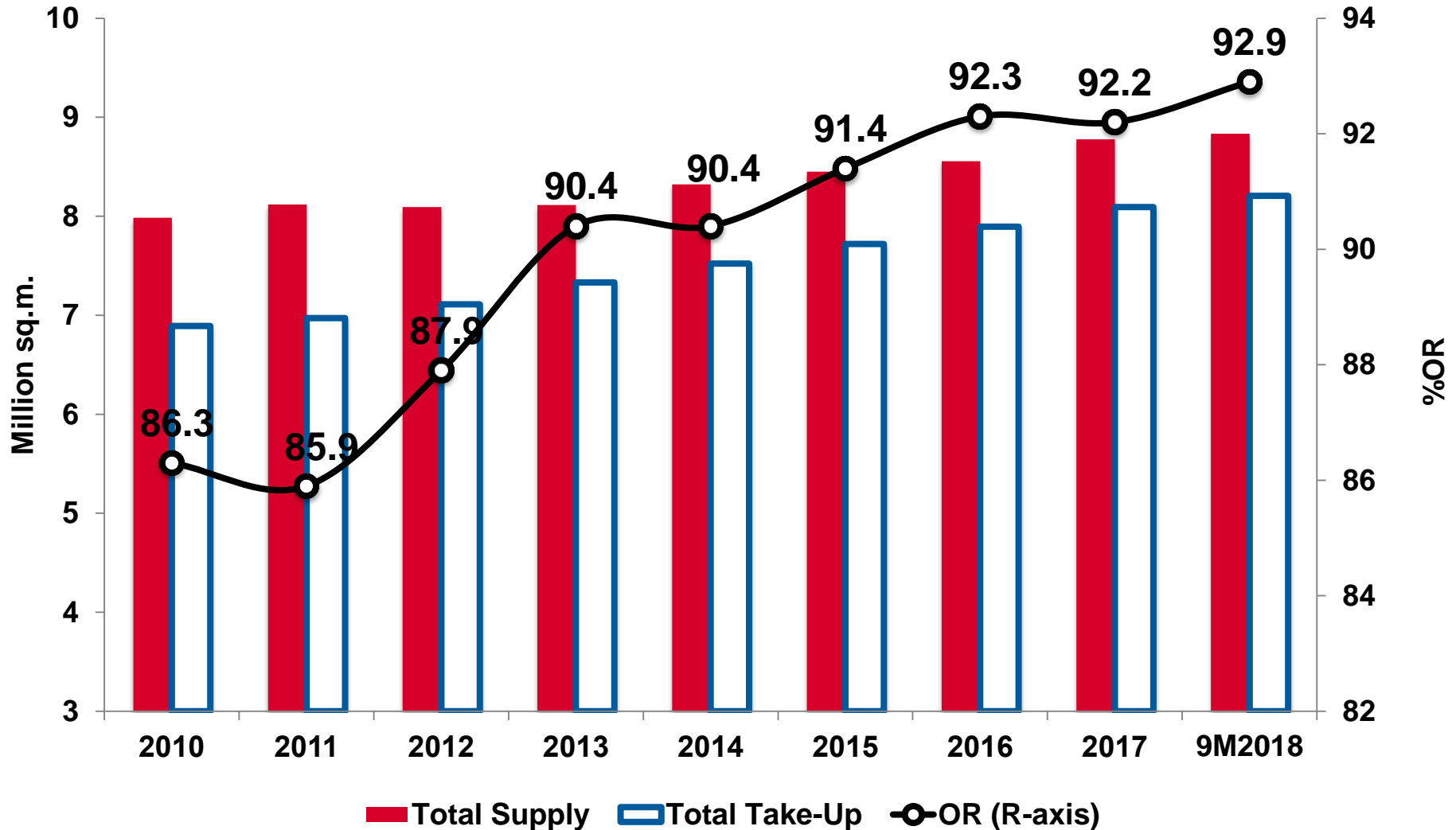
REITs

Industry Outlook

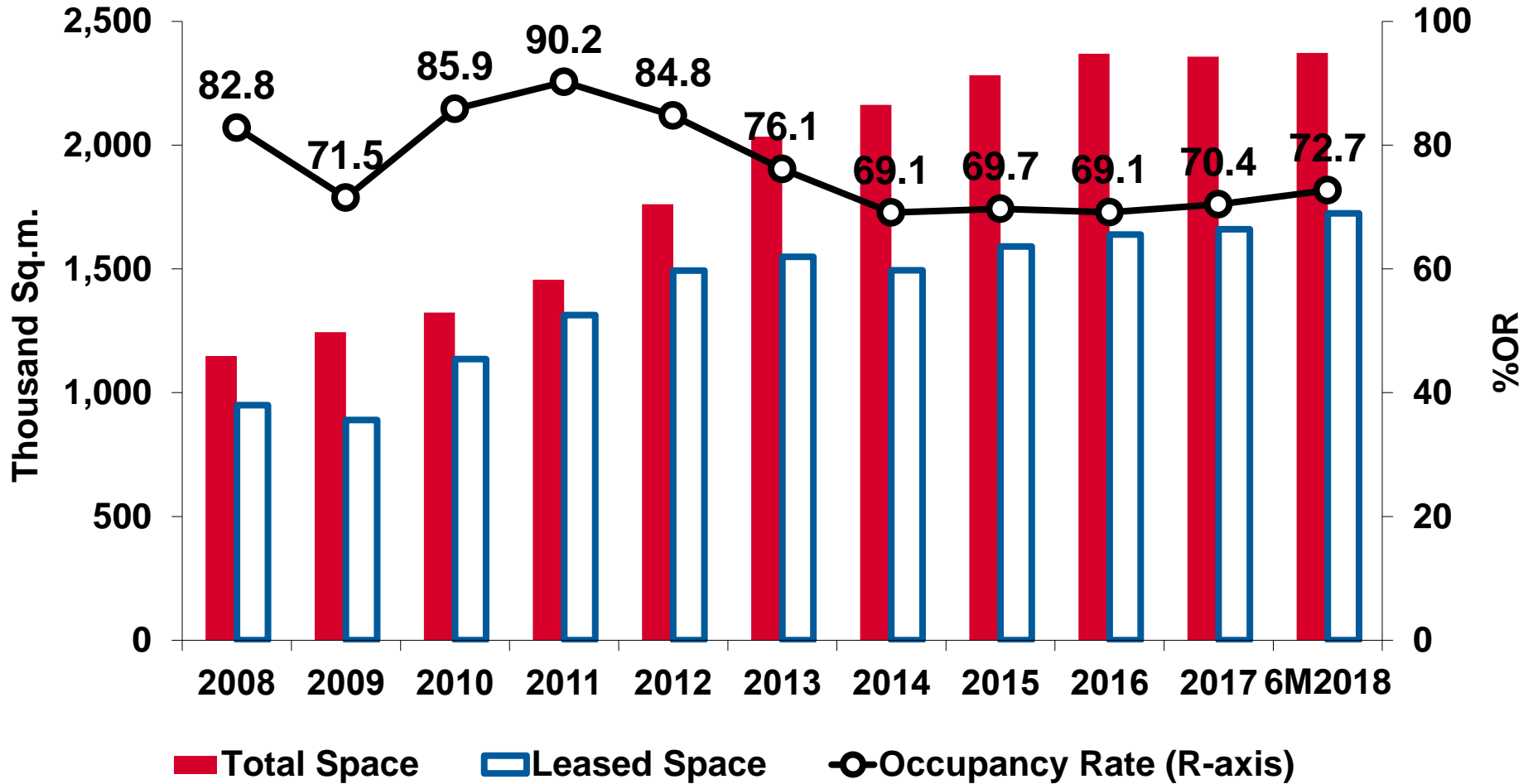
Retail Property in BMA



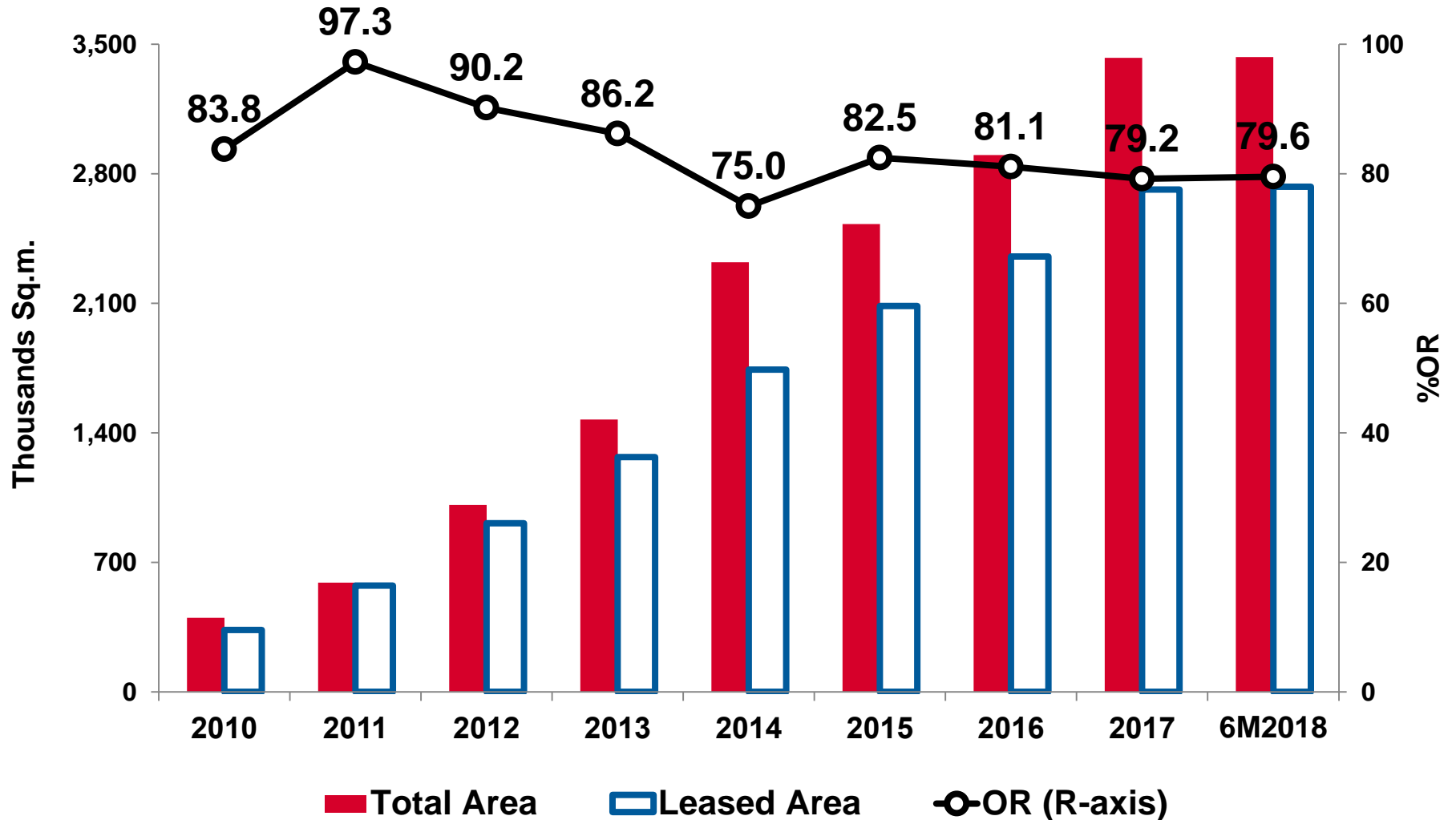
Office Space in BMA



Factory for Rent



Warehouse for Rent



Rating Factors

- REITs are assessed as companies with narrow scope of business
- Heavily regulated by SEC regarding
 - Business scope
 - Capital structure
 - Dividend payout
- Operation: OR/Rent
- Funding policy
- Liquidity management

Impact on Rated Entities

	Regulations	Impact
Business Scope	Invest in property for rent Completed $\geq 75\%$ Developing $\leq 10\%$	Recurring income Less development risk
	Fixed Rent Portion $\geq 66\%$ (for some property like Hotel and Hospital)	Predictable income
Capital structure	Max LTV 35% (non rated) Max LTV 60% (investment grade rated)	Limited-leveraged balance sheet
Distribution	$\geq 90\%$ of <u>adjusted</u> net profit	Cash retention limitations Less financial flexibility Refinancing risk for bullet payment

Our Observations

- Most REITs are set up by sponsors
- Sponsors tend to have controlling stake of 15%-25%
- LTV policy is in a conservative range of 30% - 40%
- REITs have not set aside debt repayment reserve before paying dividend to unit holders, despite being allowed by the SEC
- Management of Conflict of Interest
- Balancing benefits for stakeholders
 - Too much dividend distribution?
 - Sufficient reserve for asset renovation?
 - Sufficient reserve for debt repayment?

REIT – Sponsor Relationship

- **Sponsor usually sets up REIT manager and acts as property manager**
- **Sponsor provides supports to REIT by:**
 - **Maintaining a controlling stake**
 - **Providing personnel and real estate management know-hows**
- **REIT pursues growth through purchases of properties owned by sponsor**
- **Sponsor tends to treat REIT as a “captive” financing instrument.**
- **In some cases, sponsor provides implicit support and/or financial commitment to REIT**

Rating on REITs vs. Sponsors

Property type	REIT	Sponsor
Retail	CPNREIT (AA)	CPN (AA)
Office	GVREIT (A-)	Gold (BBB+) UV (BBB+)
Industrial	WHART (A)	WHA (A-)
	HREIT (BBB+)	WHAID (A-)
	FTREIT (A) (TREIT)	FPT (A) (TICON)

A low-angle photograph of several skyscrapers, with a large blue diagonal graphic overlaying the left side of the image.

Homebuilders and Real Estate Developers

14 February 2019

Developers Rated by TRIS

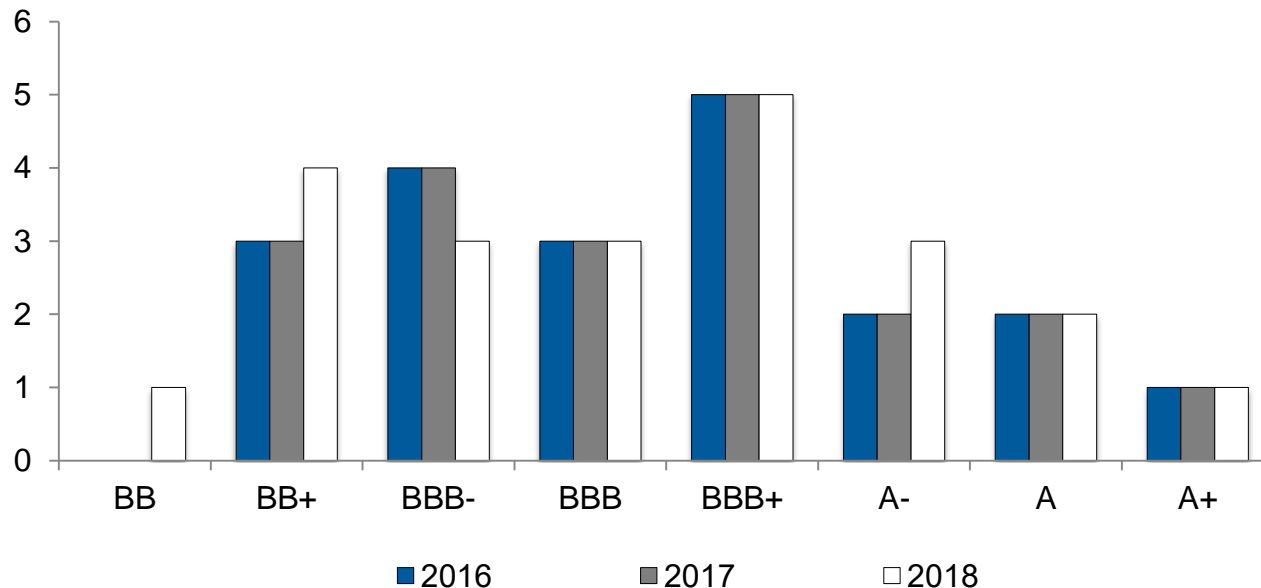
Name	Company Rating	Name	Company Rating
ANAN	BBB/Stable	ORI	BBB-/Positive
AP	A-/Stable	PF	BB+/Stable
AREEYA	BB/Stable	PRIN	BB+/Positive
CI	BB+/Stable	PS, PSH	A/Stable
GOLD	BBB+ /Stable	QH	A-/Stable
LALIN	BBB+/Stable	RML	BBB-/Stable
LH	A+/Stable	SC	BBB+/Stable
LPN	A-/Stable	SENA	BBB-/Stable
MJD	BB+/Stable	SIRI	BBB+/Stable
MK	BBB/Stable	SPALI	A/Stable
NOBLE	BBB/Stable	UV	BBB+/Stable

Rating Distribution and Actions

Rating actions in 2018:

- Assigned two new Issuer Ratings
- Downgraded Issuer Ratings of two companies and revised Outlooks of two companies to “positive” from “stable”

No. of rated companies



Our Observations

- Strong project launch and sale momentum continued from 2017
- New project launches, sales and ending inventory hit record high in 2018
- Average house price per unit rose from Bt3.9 mil/unit in 2017 to Bt4.5 mil/unit in 2018

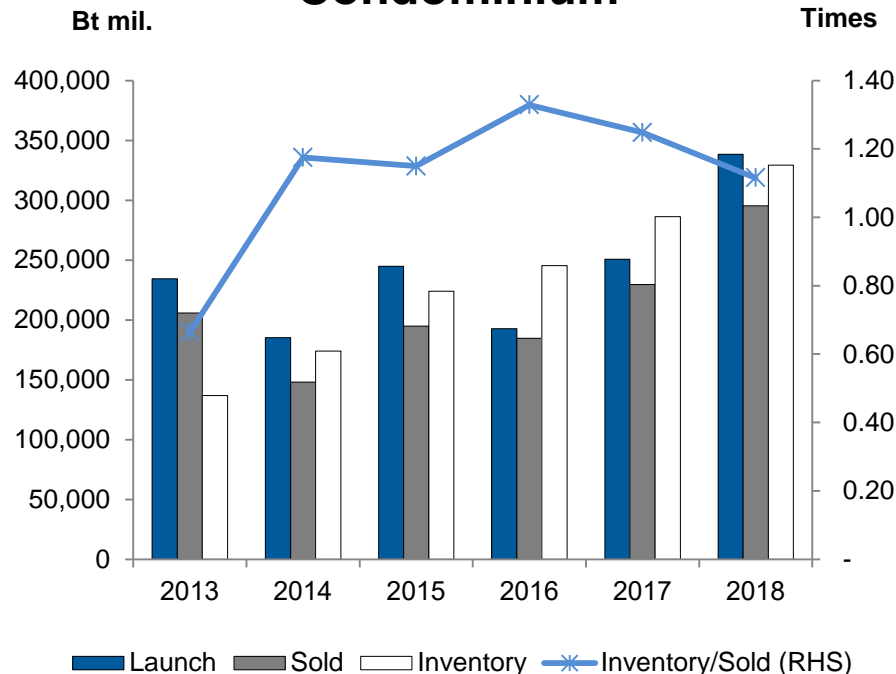
- Condominiums remained market dominant in terms of unit and value sold
- Higher proportion of condominium sales to foreign buyers
- Expect rate hikes to be gradual, unlikely to impact purchasing power

- BOT's new mortgage measures aim to strengthen banks' underwriting standard and reduce speculation
- Developers accelerated backlog transfers before new BOT measures implementation in April 2019

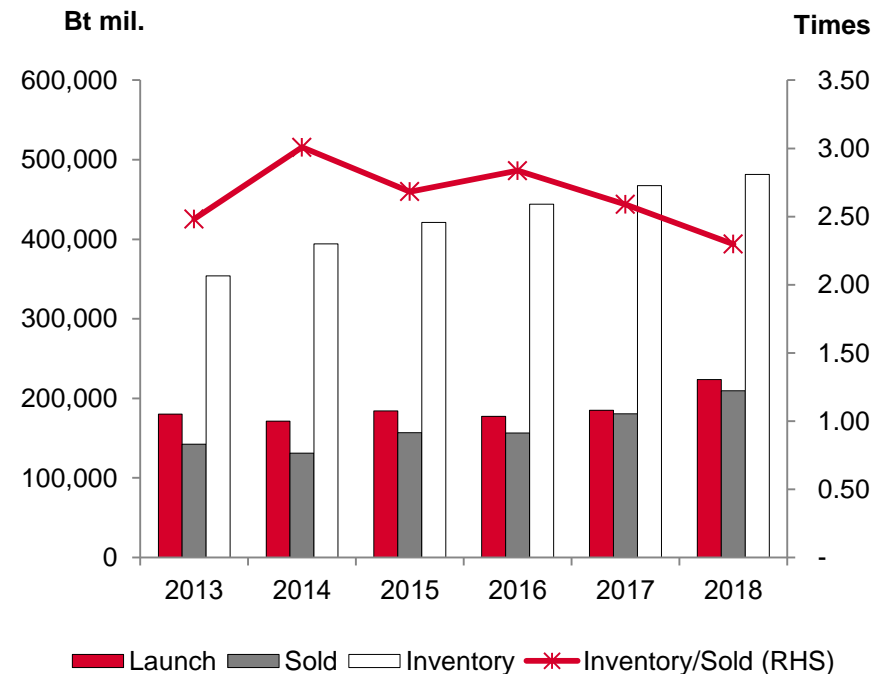
Units Launched, Sold, and Ending Inventory

- The value of new units launched, sold, and inventory grew steadily in the last three years
- Based on average sale value in 2016-2018, we believe it could take up to 1.5 years to absorb to the remaining backlog

Condominium



SDH, DH, and TH



Source: AREA

Absorption Rate of New Projects (BMR)

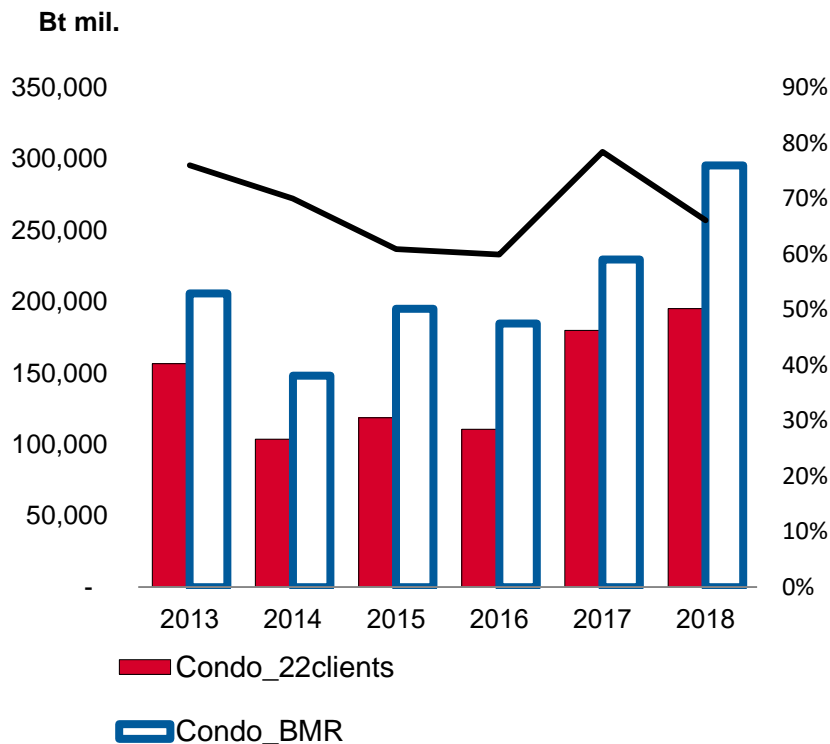
- Demand for condominiums remains stronger than TH, SDH, and DH
- However, absorption rate of condominiums has declined as supply growth outpaced demand growth

Units launched	Condominium			Townhouses			Detached houses (SDH, DH)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
< 3 MB	39,332	35,175	34,688	25,814	29,020	22,740	2,936	849	1,077
3-5 MB	9,843	15,796	18,979	6,237	6,671	7,755	9,980	6,863	7,775
5-10 MB	7,058	10,029	15,948	483	856	1,031	5,597	4,694	6,758
10-20 MB	1,614	1,888	3,202	258	24	191	388	1,419	2,091
> 20 MB	503	738	1,500	-	-	-	532	455	610
Total	58,350	63,626	74,317	32,792	36,571	31,717	19,433	14,280	18,311
Units sold									
< 3 MB	23,374	17,194	18,134	6,428	7,106	6,104	437	194	260
3-5 MB	5,861	10,782	10,997	1,891	2,377	3,313	1,903	1,335	1,462
5-10 MB	4,373	6,382	8,766	174	355	211	1,052	1,091	1,841
10-20 MB	958	1,200	1,386	76	7	132	32	196	411
> 20 MB	211	405	672	-	-	-	86	83	191
Total	34,777	35,963	39,955	8,569	9,845	9,760	3,510	2,899	4,165
% Sold/Launched									
< 3 MB	59%	49%	52%	25%	24%	27%	15%	23%	24%
3-5 MB	60%	68%	58%	30%	36%	43%	19%	19%	19%
5-10 MB	62%	64%	55%	36%	41%	20%	19%	23%	27%
10-20 MB	59%	64%	43%	29%	29%	69%	8%	14%	20%
> 20 MB	42%	55%	45%	-	-	-	16%	18%	31%
Total	60%	57%	54%	26%	27%	31%	18%	20%	23%

Presales by Rated Developers

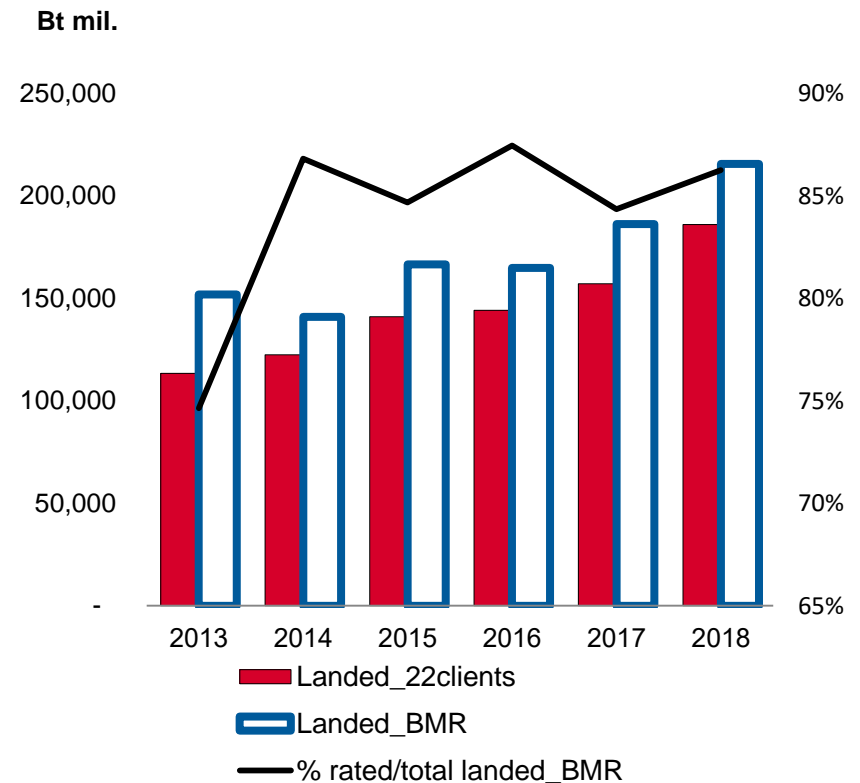
- Large developers continue to dominate the market
- Presales of 22-rated developers accounted for 70%-80% of total presales in BMR

Presales: Condominium



Source: AREA, TRIS Rating

Presales: Landed Properties



Source: AREA, TRIS Rating

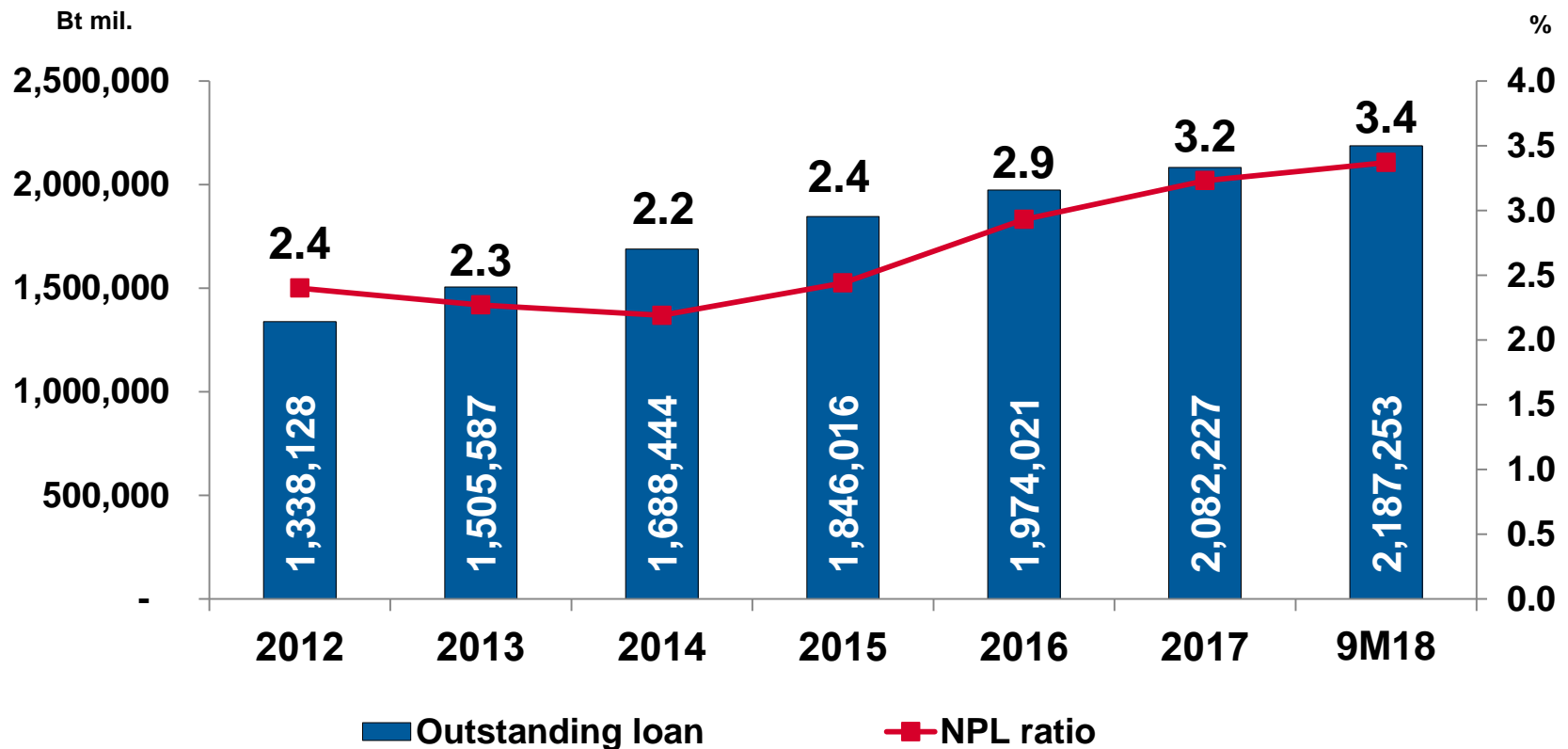
2019 Industry Outlook

- We expect the market to slowdown in 2019 as negative factors outweigh positive factors
- We believe that the negative impact from macro-prudential measures will be short-lived as developers should be able to adjust their products and investments.

Negative Factors	Positive Factors
<ul style="list-style-type: none">• The implementation of macro-prudential measures• Economic slowdown in China may reduce demand from foreign buyers• Rising NPLs lead to tightening of banks' mortgage underwriting	<ul style="list-style-type: none">• On-going investments in infrastructure projects still support project launch and demand along mass transit routes• Relatively stable construction costs are positive for developers

NPLs of Mortgage Loans

- NPLs increased steadily in the past five years from 2.2% at end-2014 to 3.4% at end-9M18



Source: BOT (based on data from 14 commercial banks)

Macro-prudential measures

- New mortgage loans for the second and subsequent homes account for 22% of new mortgage loans, according to the BOT
- Houses priced below Bt10 million per unit account for 90%-95% of total portfolio in terms of unit and 75%-80% in terms of value, based on data from 22 rated developers
- We estimate that if 70% of homebuyers borrow and 22% of them have more than one mortgage loans, then around 15% of homebuyers could be affected by the new LTV rules. However, the impact in terms of value would be around 10-12% of total sales

New LTV Rules (starting 1 April 2019)

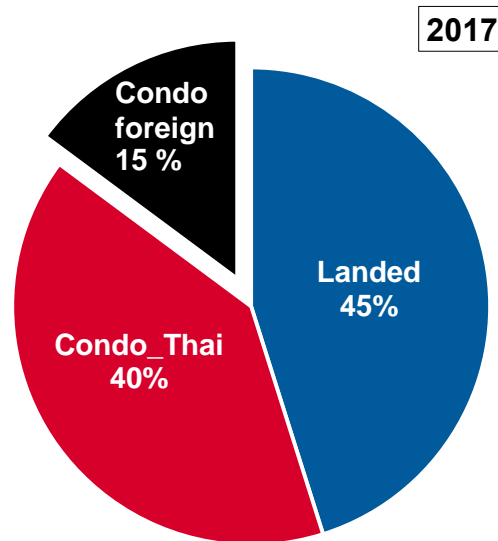
Housing type	LTV limits*	% down payment (new)	% down payment (current)
Housing price < 10 mil. baht/unit			
1st mortgage loan	100%	0%-10%	SDH, DH, TH - 5%
2nd mortgage loan (if the repayment period of the 1st mortgage exceeds three years)	90%	10%	
2nd mortgage loan (if the 1st mortgage period is less than three years)	80%	20%	Condominium - 10%
3rd and subsequent mortgage loans	70%	30%	
Housing price > 10 mil. baht/unit			
1st and 2nd mortgage loans	80%	20%	>=20%
3rd and subsequent mortgage loans	70%	30%	

* Include all top-up loans, except MRTA loans and SME loans

Source: BOT

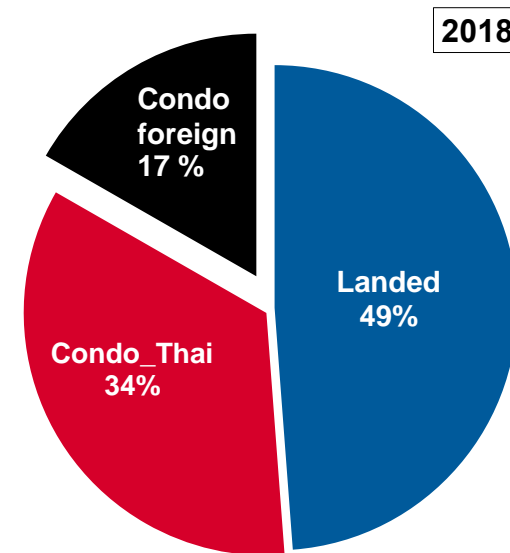
Slowing foreign demand

- Foreign buyers accounted for 33% of total condominium presales value in 2018 vs. 27% in 2017.
- However, the portion of foreign buyers was only 15% and 17% of total presales in 2017 and 2018, respectively.



Source: TRIS Rating

Total presales of 22 rated developers =
Bt348bn in 2017



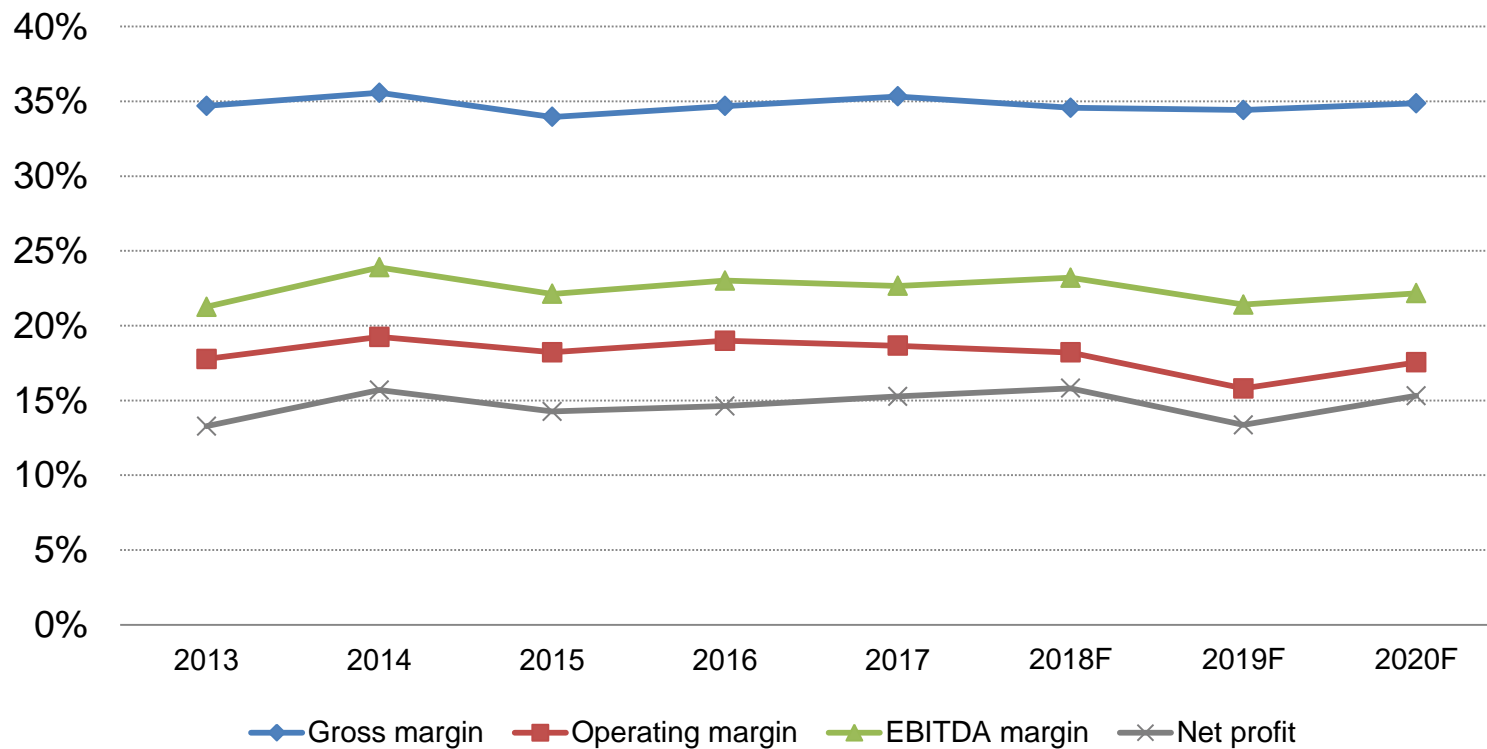
Source: TRIS Rating

Total presales of 22 rated developers =
Bt381bn In 2018

Impact on rated developers

- Profitability in 2019 may drop due to delayed transfers and higher marketing and promotion expenses

Profitability

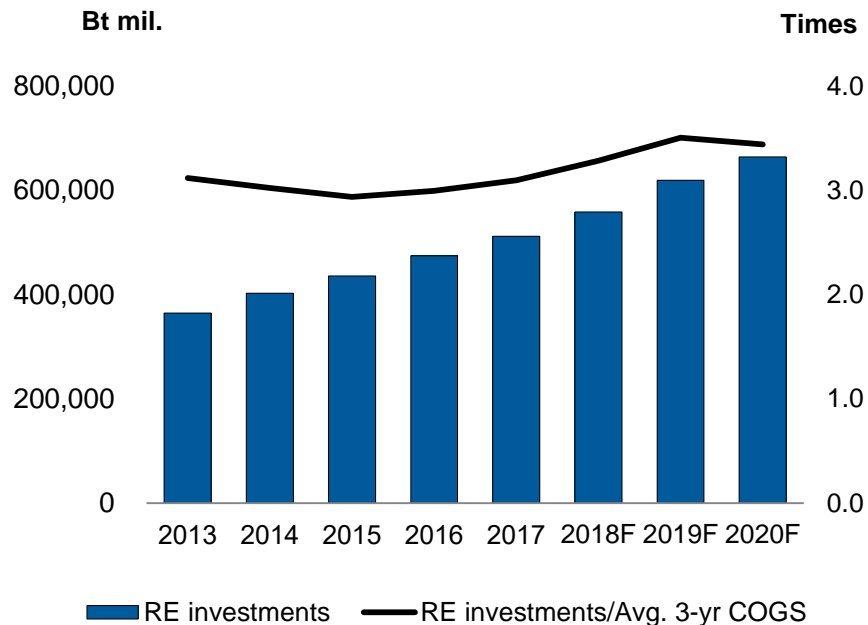


Source: TRIS Rating estimates

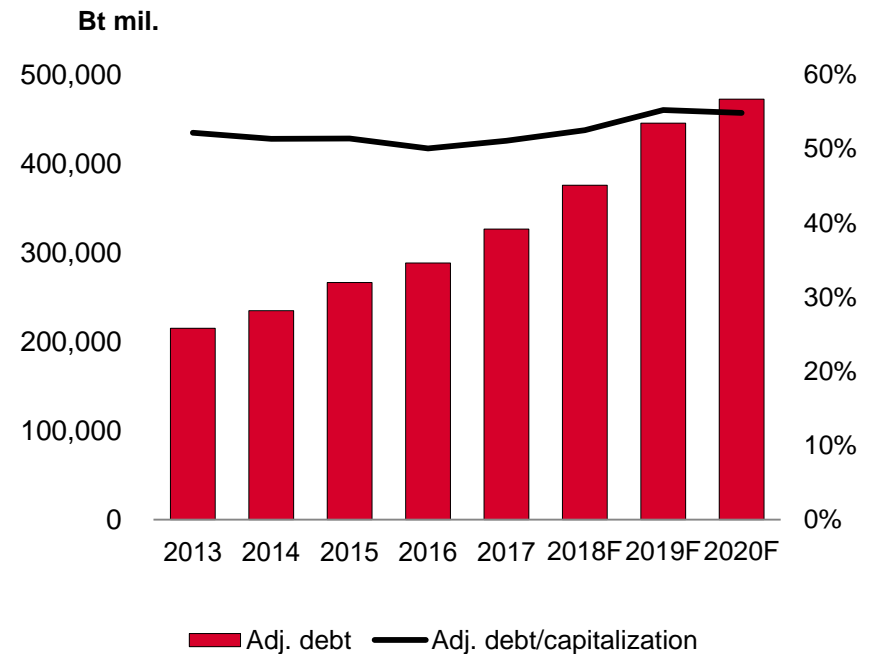
Impact on rated developers

- Inventory may hover at a high level due to delay in unit transfers, leading to rising leverage

RE Investments/Avg. 3-yr COGS



Adj. debt/capitalization

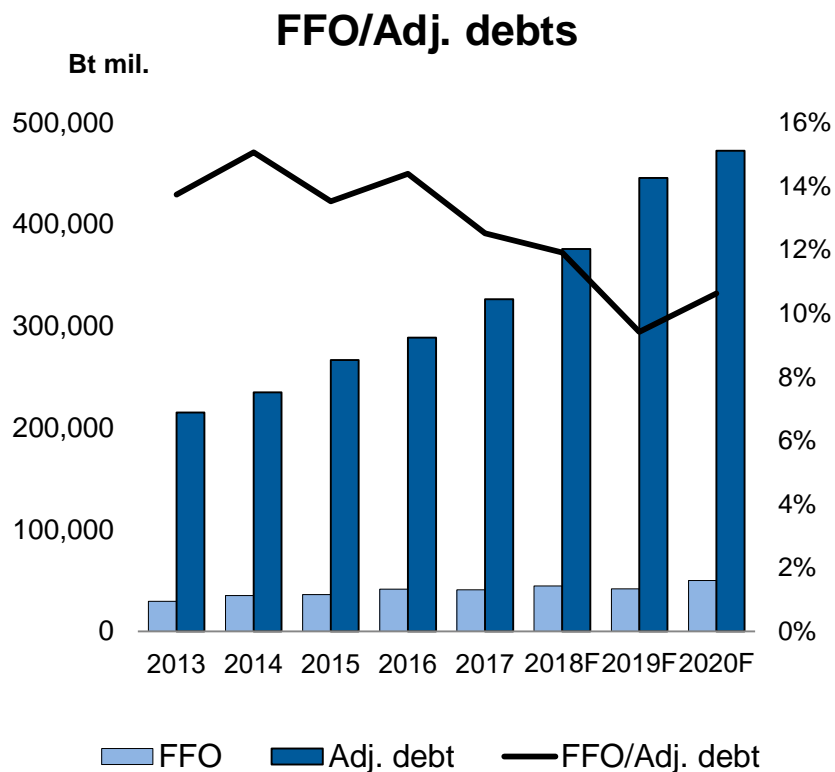


Source: TRIS Rating estimates

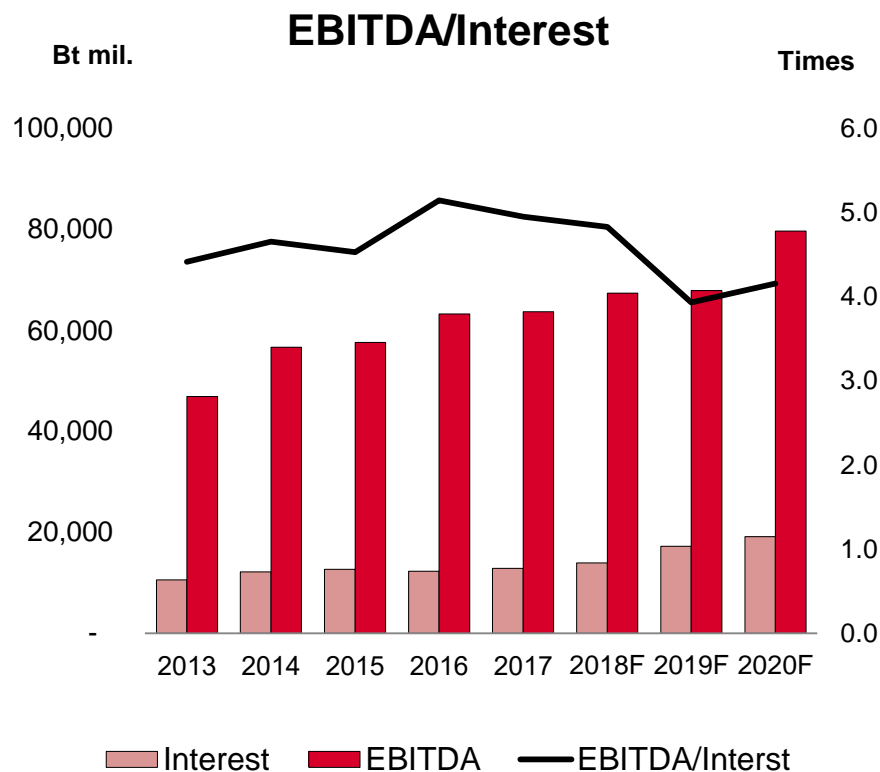
Source: TRIS Rating estimates

Impact on rated developers

- Weakening cash flow protection as profitability drops.



Source: TRIS Rating estimates



Source: TRIS Rating estimates