



THAMMASAT

# Alternative Investments

**EE532 Selected Topics in Monetary Economics 2**

*January 2020*

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Thana Sheanakul, CFA  
Fund Manager  
Principal Asset Management

### Education

- B.A. Econ (International Program), Thammasat University (BE 16)
- Chartered Financial Analyst

### Working Experience

- 2016 – present Fund Manager, Principal Asset Management
- 2015 – 2016 Analyst, Social Security Office
- 2013 – 2015 Analyst , Stock Exchange of Thailand

### Flagship Funds

- Principal Property Income Fund (Principal iPROP) Morningstar Ratings™ ★★★★★
- Principal Property Income RMF (Principal iPROPRMF) Morningstar Ratings™ ★★★★★
- Principal Strategic Income Fund (Principal SIF) Morningstar Ratings™ ★★★★★

## 2020 Level II Study Sessions

[2020 Level II Study Sessions combined](#)

Topic	Exam Weight	Sessions
Ethical and Professional Standards	10-15%	<a href="#">Study Session 1</a> <a href="#">Readings 1-3</a>
Quantitative Methods	5-10%	<a href="#">Study Session 2</a> <a href="#">Study Session 3</a>
Economics	5-10%	<a href="#">Study Session 4</a>
Financial Reporting and Analysis	10-15%	<a href="#">Study Session 5</a> <a href="#">Study Session 6</a>
Corporate Finance	5-10%	<a href="#">Study Session 7</a> <a href="#">Study Session 8</a>
Equity Valuation	10-15%	<a href="#">Study Session 9</a> <a href="#">Study Session 10</a> <a href="#">Study Session 11</a>
Fixed Income	10-15%	<a href="#">Study Session 12</a> <a href="#">Study Session 13</a>
Derivatives	5-10%	<a href="#">Study Session 14</a>
Alternative Investments	5-10%	<a href="#">Study Session 15</a>
Portfolio Management	5-15%	<a href="#">Study Session 16</a> <a href="#">Study Session 17</a>

**Reading 39 Private Real Estate Investment**

**Reading 40 Publicly Traded Real Estate Securities**

**Reading 41 Private Equity Valuation**

**Reading 42 Introduction to Commodities and Commodity Derivatives**

- **Introduction to Real Estate Investment Trust (REITs)**
  - **What is REITs?**
  - **Overview of REITs Market**
  - **Type of REITs**
- **REITs Investment Characteristics**
- **Advantage and Disadvantage of REITs Investment**
- **Terminology & Considerations in Analysis and Due Diligence**
- **Economics Drivers**
- **Case Study**

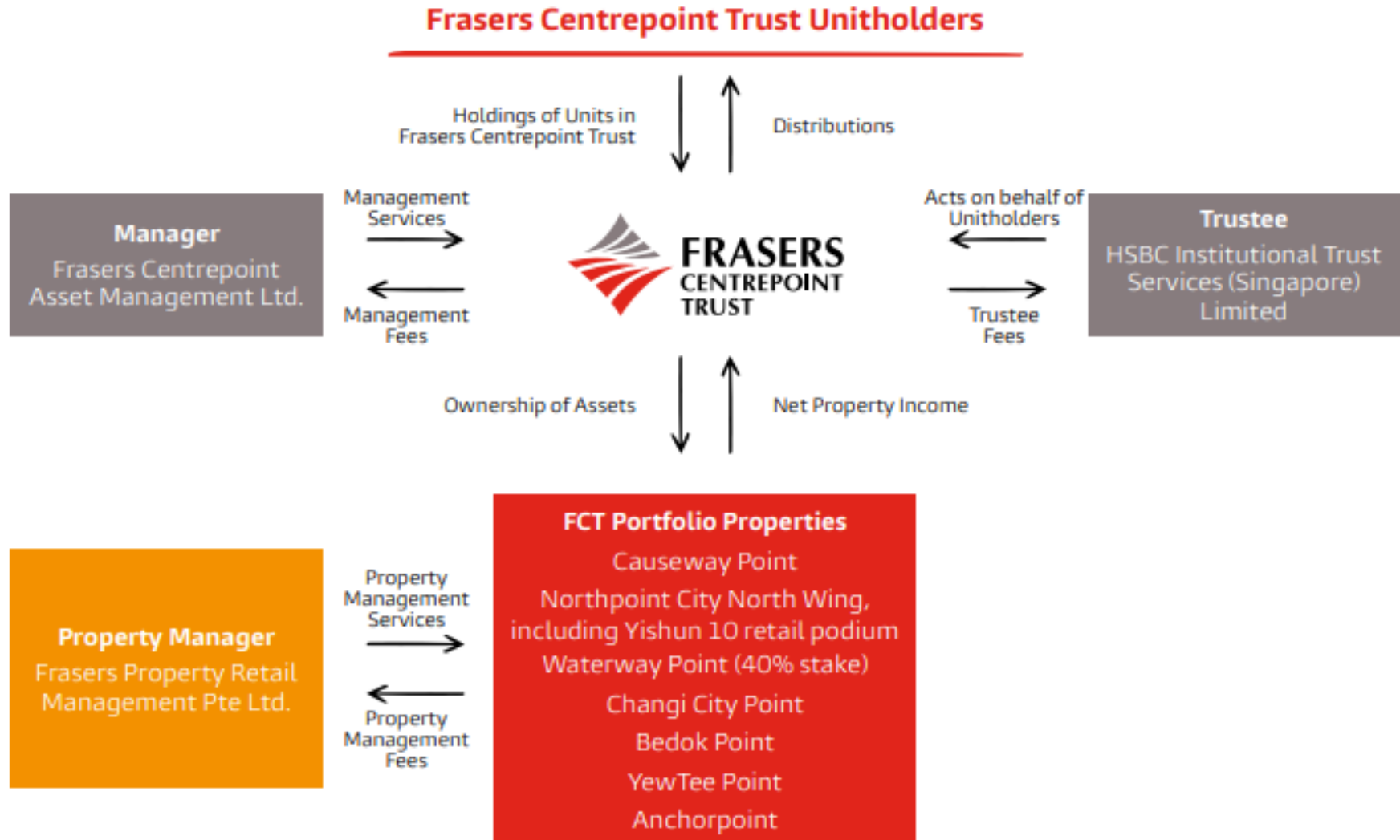
- Real Estate Investment Trust (REITs)
  - Tax-advantaged entities (companies or trusts) that typically own and operate income-producing real estate property. Most REITs are regulated to payout at least 90% of their profit to shareholders through dividend.
- Real Estate Operating Companies (REOCs)
  - Ordinary taxable real estate ownership companies. The primary cash inflows are from sales of developed or improved properties rather than from recurring lease or rental income.
- Mortgage-Backed Securities (MBS)
  - Asset-backed securitized debt obligations that represent rights to receive cash flows from portfolios of mortgage loans.

# What is REITs?



**Most REITs have a straightforward business model:**

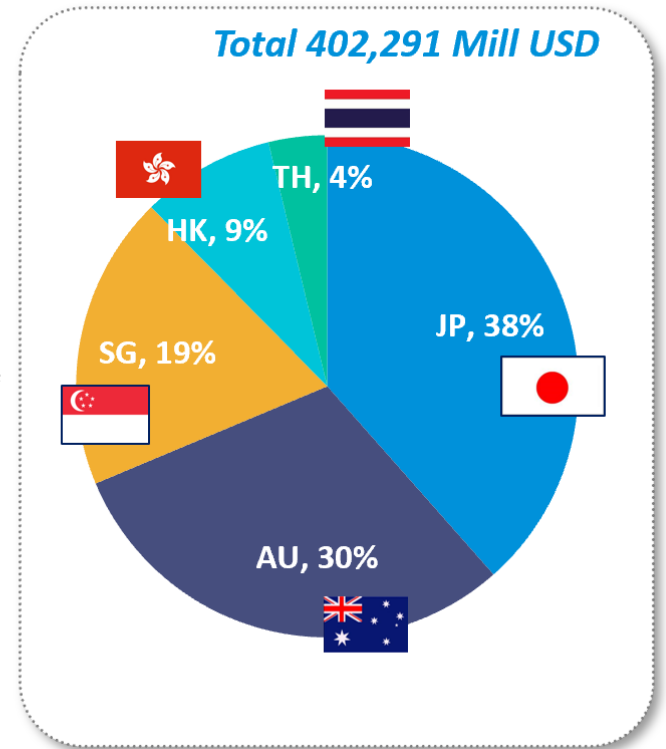
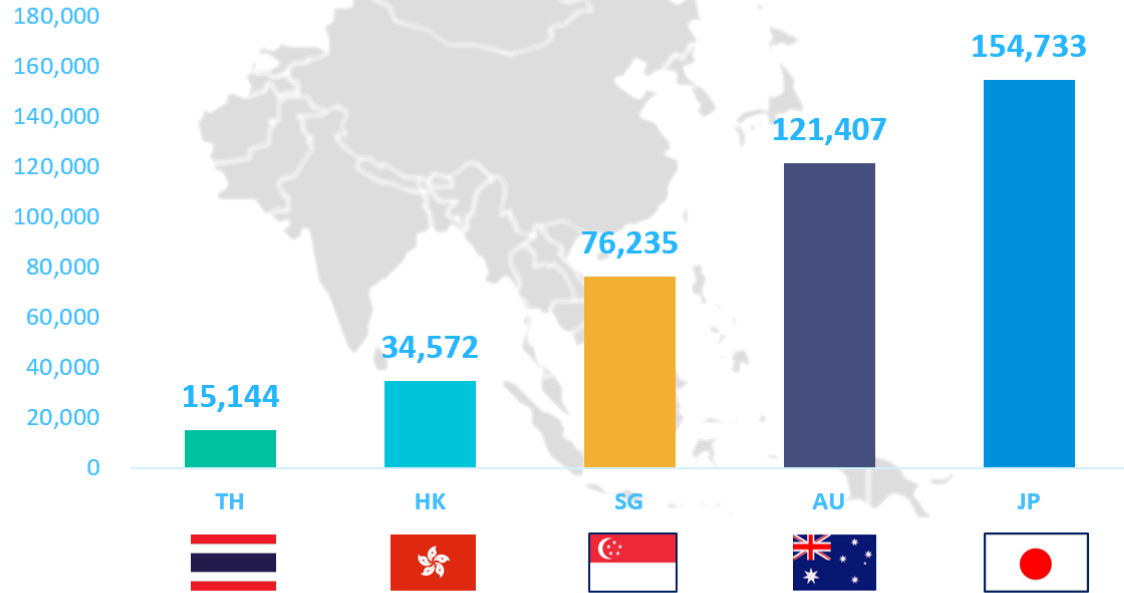
The REIT leases space and collects rents on the properties, then distributes that income as dividends to shareholders.



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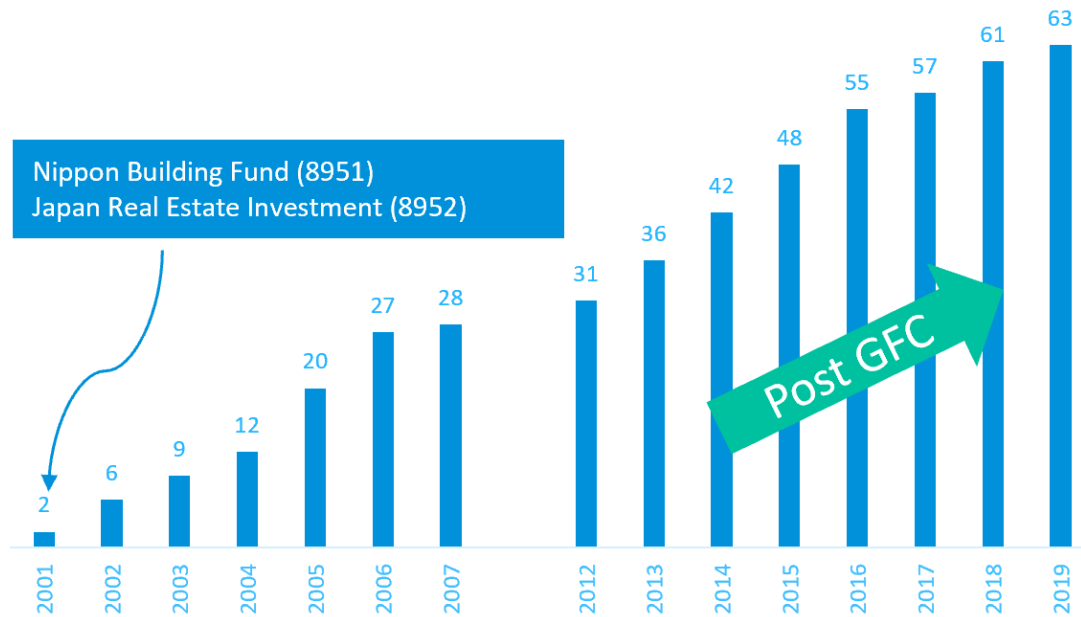
## 2019 Market Cap.

(Mill USD)








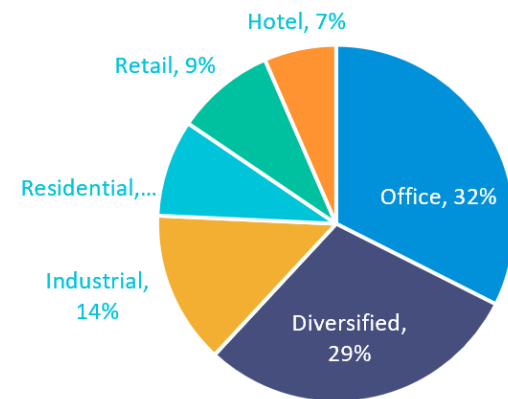
No. of Japan listed REITs



**Top 3**

Nippon Building Fund	7%	
Japan Real Estate	7%	
Nomura Real Estate	6%	

*20% of Japan REITs*








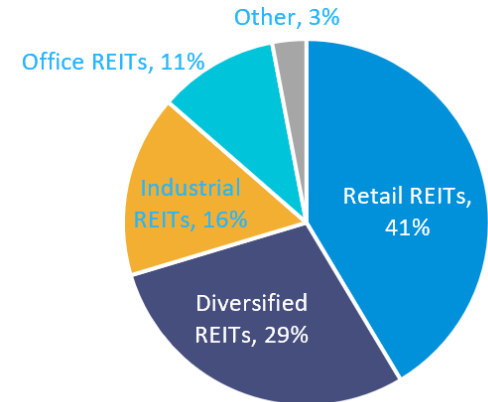
No. of AUS listed REITs



Top 3

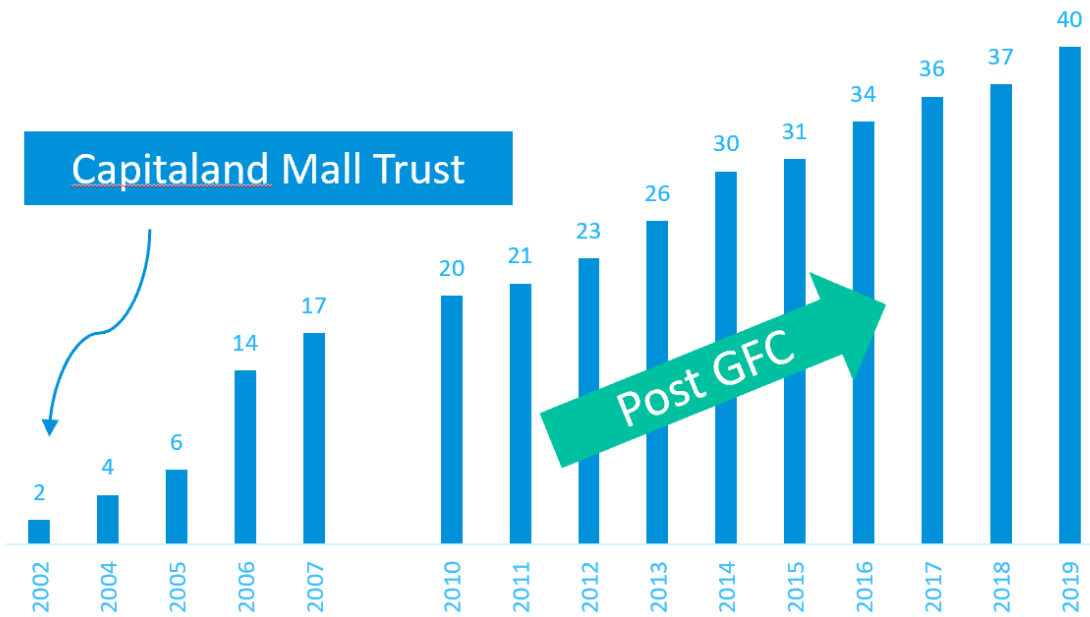
Westfield	18%	
Goodman	15%	
Scentre	12%	

45% of Australian REITs








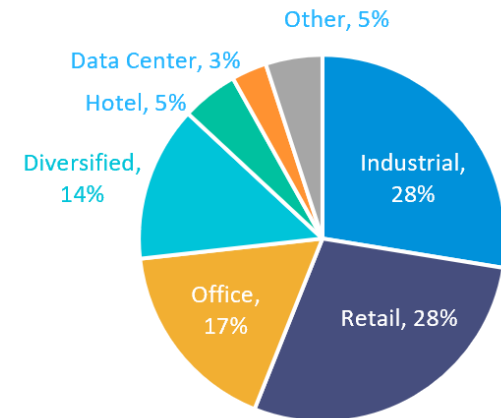
No. of SG listed REITs



**Top 3**

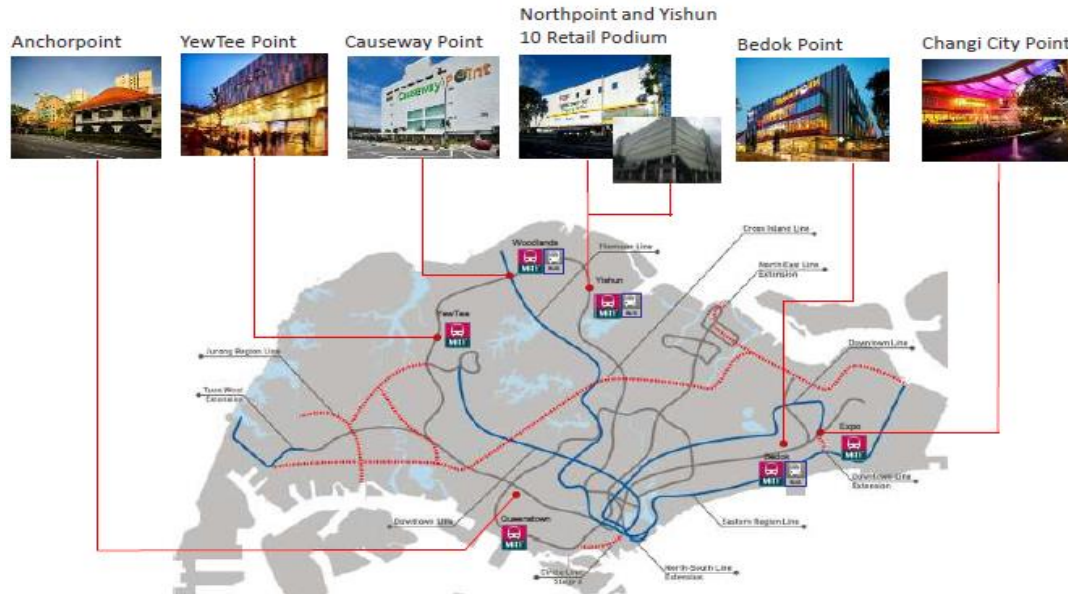
Capitaland Mall	9%	
Ascendas REIT	9%	
Mapletree Com. Trust	7%	

**25% of Thailand REITs**



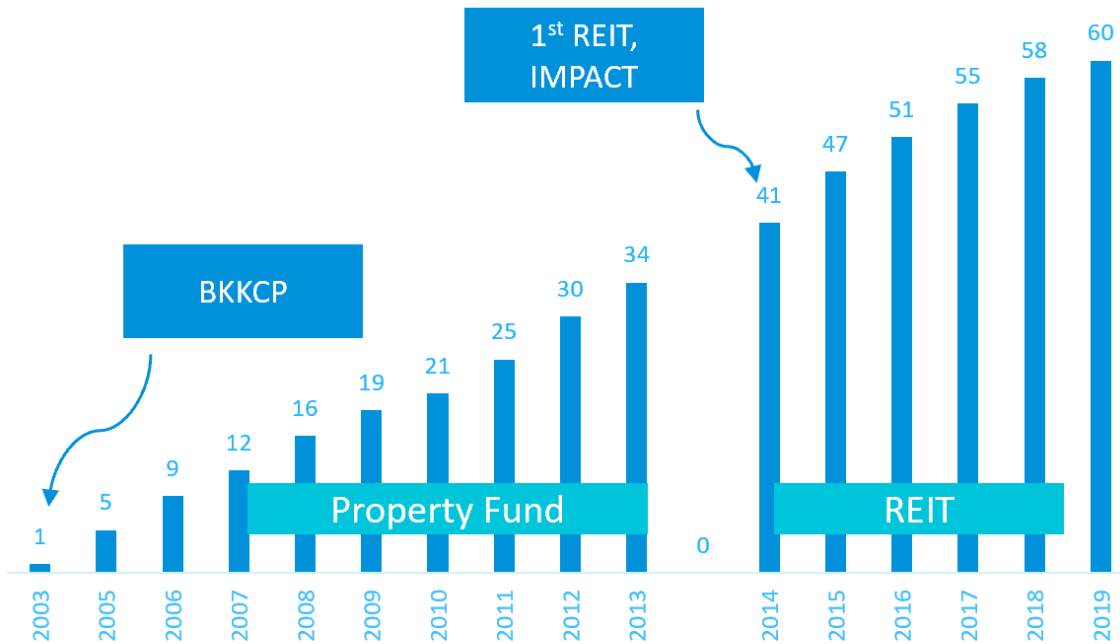
# Example of SG REIT Frasers Center Point Trust (FCT)

<b>THB 71.1 bn Market Cap.</b>	<b>32.9% Gearing Ratio</b>	<b>7 suburban retail malls</b>	<b>4.4% Yield</b>	<b>96.5% Occupancy</b>
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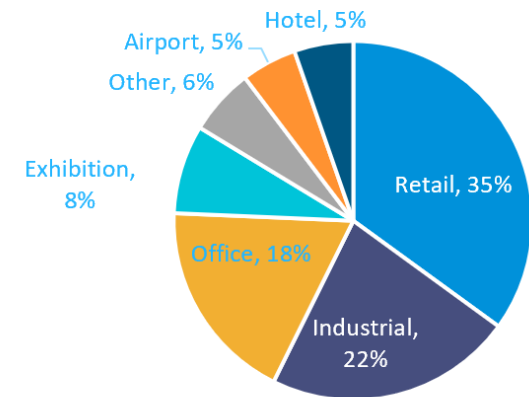
No. of TH listed PF&REITs



Top 3

CPNREIT	16%	
TLGF	12%	
FTREIT	9%	

37% of Thailand REITs



**THB 76 bn  
Market Cap.**

**31%  
Gearing Ratio**

**5 Retail Malls  
1 Hotel**

**4.6%  
Yield**

**95%  
Occupancy**



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- 1. Retail REITs**
- 2. Office**
- 3. Industrial**
- 4. Hotel**
- 5. Others**

## Retail REIT

- Regional Shopping malls
  - Large space, tenant mixed tend to be in higher-priced discretionary goods (eg. Fashionable clothing)
- Community shopping centers
  - Necessity goods and services as food and groceries, home furnishings
- Typical lease term is 3 years. (Anchor tenant lease term is longer)
- Key indicators: Sales per sq.m, footfall, occupancy cost



## Office REIT

- Types
  - By quality => Grade A,B,C
  - By Location => CBD , non-CBD
- Lease term are typically longer than retail REITs (3-25 years)
- Key indicators: Tenants mixed, business condition of anchor tenants.



## Office Grade Definition & Classification

Source: Knight Frank

STANDARD REQUIREMENTS				FACTORS
	Grade A	Grade B	Grade C	
Current Rent	>900 B/sq.m./mo.	900-500 B/sq.m./mo.	<500 B/sq.m./mo.	<ul style="list-style-type: none"> <li>Distance to mass transit system</li> <li>Location</li> <li>Rental rate, terms and conditions</li> <li>Supporting retail</li> <li>Car park capacity</li> <li>Lift</li> <li>Cost of renovation &amp; relocation</li> <li>Safety systems</li> <li>Available space for rent</li> <li>Column free</li> <li>Air con. System</li> <li>Fire escape</li> <li>Building floor layout</li> <li>Building appearance</li> </ul>
Accessibility	Easy	Standard	Difficult	
Ceiling Height	At least 2.7m	At least 2.6m	Below 2.6	
Car Park	Safety with high capacity	Safety with std. capacity	Low capacity	
Facilities	Supporting retail	Food court	Not required	
Floor plate	>1,000 sq.m.	>900 sq.m.	< 900 sq.m.	
Air Con. System	Central chiller system with variable air volume, supplying water for computer network	Central chiller system with constant volume supply water for computer network	Split type	
Building management	Professional mgmt., pro-active, and constantly improve the standard	Standard management, and periodically improve the standard	Basic management	
Lift	High floors zone, serviced lift, and short waiting time	High floors zone, serviced lift, and moderate waiting time	No high floors zone and long waiting time	
Fire protection system	As per minimum requirements, two fire escape routes/floor and regular drills	As per minimum requirements and two fire escape routes/floor	As per minimum requirements	
Interior design	High standard, large common area, toilet, and M&E rooms are in common area	Average standard, avg. common area, toilet, and M&E rooms are in common area	Low standard, small common area, toilet and M&E rooms are in rental area	
Safety system	High standard	Average standard	Low standard	

## Industrial REIT

- Warehouses, Distribution Centers, Manufacturing facilities and Data Center.
- Typical lease term is 3-25 years.
- Short time required to build new supply (usually under a year)
- Key indicators: Government Policy toward industrial space, Trends in tenants' requirement ( Ceiling height, Floor Load, Accessibility to Port or Airport) for example, new demand changing from Auto manufacturing to E-Commerce.

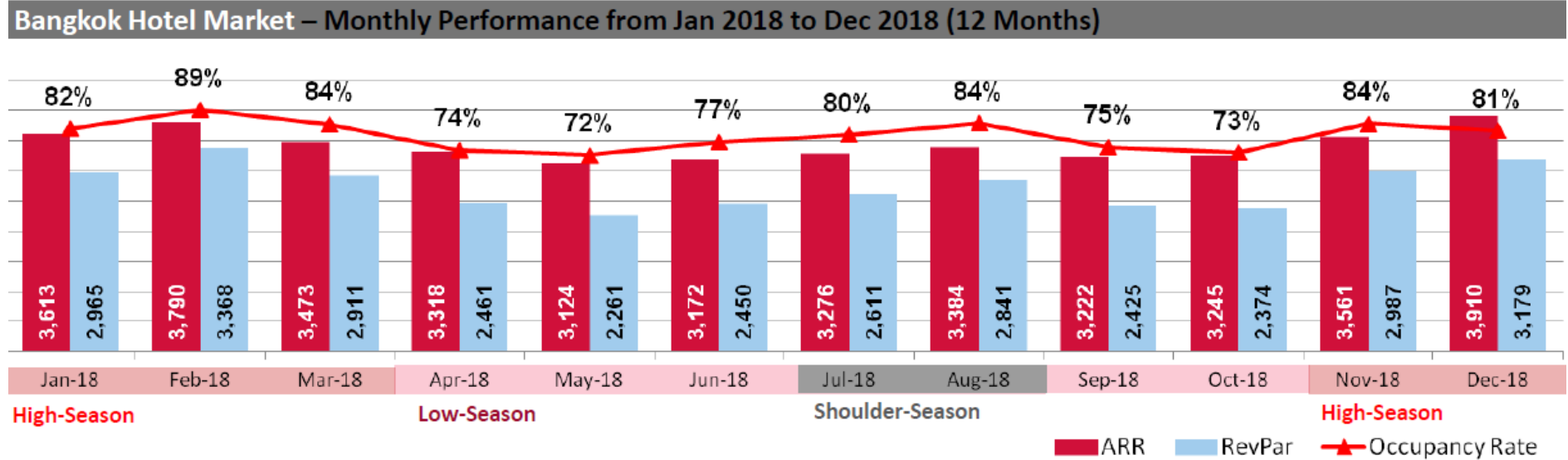


## Hotel REIT

- Types
  - By quality => Luxury, Midscale, Economy and Budget
  - By location => City, Tourism
- The hotel sector is cyclical because it is not protected by long-term lease and is thus exposed to revenue volatility.
- Hotel REITs typically lease all their properties to REIT subsidiaries or to third party lessees (Master Lease), who operate them ensuring the hotel REIT parent receives passive rental income.
- Key indicators : Forward bookings, Tourists Number, Revenue Per Available Room (RevPar)



## Bangkok Hotel Market Seasonality



## Hotel Grade Definition

### Hotel Classification by THA (based on quality)

	<u>Key success factor</u>	
<b>Luxury</b>	<ul style="list-style-type: none"> <li>Spacious and luxurious accommodation throughout the hotel with highest international standards.</li> <li>Interior design full of quality and attention to detail, comfort and sophistication.</li> <li>Immaculate furnishings.</li> <li>Services are formal, well supervised and flawless in attention to guests' needs, without being intrusive along with wide range of facilities available.</li> <li>The restaurants demonstrate a high level of technical aptitude, creating dishes to the highest international standards.</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional ranges of services.</li> <li>High standards with perfect attention to detail in every offering throughout the hotel.</li> <li>Hotel is impressive to guests and offers new experiences for their stay.</li> <li>Branded hotels have large global client base.</li> </ul>
<b>Upscale</b>	<ul style="list-style-type: none"> <li>A degree of luxury as well as quality in the furnishings, decor and equipment.</li> <li>High staff level to provide services like concierge, porter, 24-hour room service, laundry and dry-cleaning.</li> <li>High-quality cuisine restaurants.</li> <li>Well-designed and spacious rooms.</li> </ul>	<ul style="list-style-type: none"> <li>The value of the product is worth the rate of stay.</li> <li>Full service with international standards</li> <li>luxurious rooms.</li> <li>Offers a wide range of facilities.</li> </ul>
<b>Midscale</b>	<ul style="list-style-type: none"> <li>Significantly greater quality and range of facilities than economy hotels, usually with meeting rooms.</li> <li>Reception and common areas are more spacious.</li> <li>With restaurants.</li> <li>All bedrooms have full en-suite bathrooms and offer a good standard of comfort and equipment, such as a hair dryer, telephone and toiletries</li> </ul>	<ul style="list-style-type: none"> <li>Moderate price point with good service.</li> <li>Economy of scale in number of rooms.</li> <li>Facilities are enough to meet the market demand.</li> </ul>
<b>Economy</b>	<ul style="list-style-type: none"> <li>Offers a wide range of straightforward services, including food and drink.</li> <li>Comfortable and well-equipped accommodation.</li> </ul>	<ul style="list-style-type: none"> <li>Room rates are affordable.</li> <li>Rooms are basic and clean.</li> <li>Good accessibility.</li> </ul>
<b>Budget</b>	<ul style="list-style-type: none"> <li>Limited facilities.</li> <li>Rooms are simple with basic furnishings, ranging from 12 to 18 sq m.</li> </ul>	<ul style="list-style-type: none"> <li>Low room rates.</li> <li>Basic rooms.</li> </ul>

### Hotel Classification by OTA

FACILITIES	5-Star	4-Star	3-Star
Massage	✓	✓	✓
Swimming Pool	✓	✓	✓
Garden	✓	✓	✓
Parking	✓	✓	✓
Laundry Service	✓	✓	✓
Restaurant	✓	✓	✓
Reception 24H	✓	✓	✓
Tour Service	✓	✓	✓
Shuttle Bus	✓	✓	✓
Bar	✓	✓	✓
Safe	✓	✓	✓
WIFI	✓	✓	✓
Fitness	✓	✓	✗
Spa	✓	✓	✗
Library	✓	✓	✗
Coffee Shop	✓	✓	✗
Room Service	✓	✓	✗
Car Rental	✓	✓	✗
Babysitting	✓	✓	✗
Family Room	✓	✓	✗
Steam Room	✓	✓	✗
Sauna	✓	✗	✗
Jacuzzi	✓	✗	✗
Meeting Room	✓	✗	✗
Business Centre	✓	✗	✗
Tennis Court	✓	✗	✗
Shops	✓	✗	✗

### Multi-family / Residential REITs

- Rental apartment for lease to individual tenants, typically using one-year leases.
- Key Indicators: Demographics trend, cost and availability of homeownership, Government control of local residential rents.

### Storage REITs

- Self-storage properties use by individuals for storing personal items and by small businesses.

### Health Care REITs

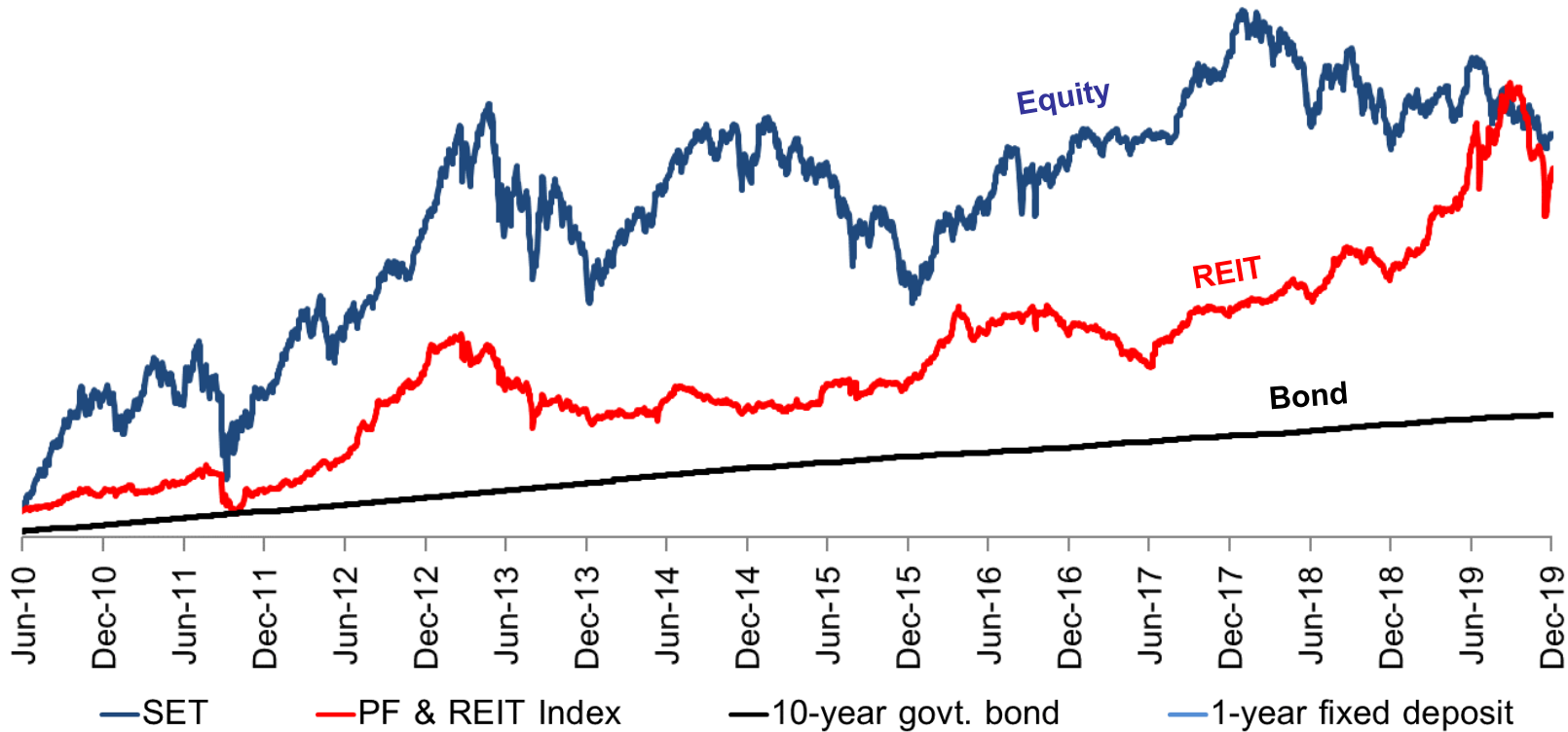
- Nursing Home and Hospital
- Key indicators : Government policy on health care.

### Diversified REITs

- Own and operate in more than one type of property.

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- Performance & Return
  - REIT's risk and return in the long run is less than equity but higher than fixed income.



Source: Bloomberg

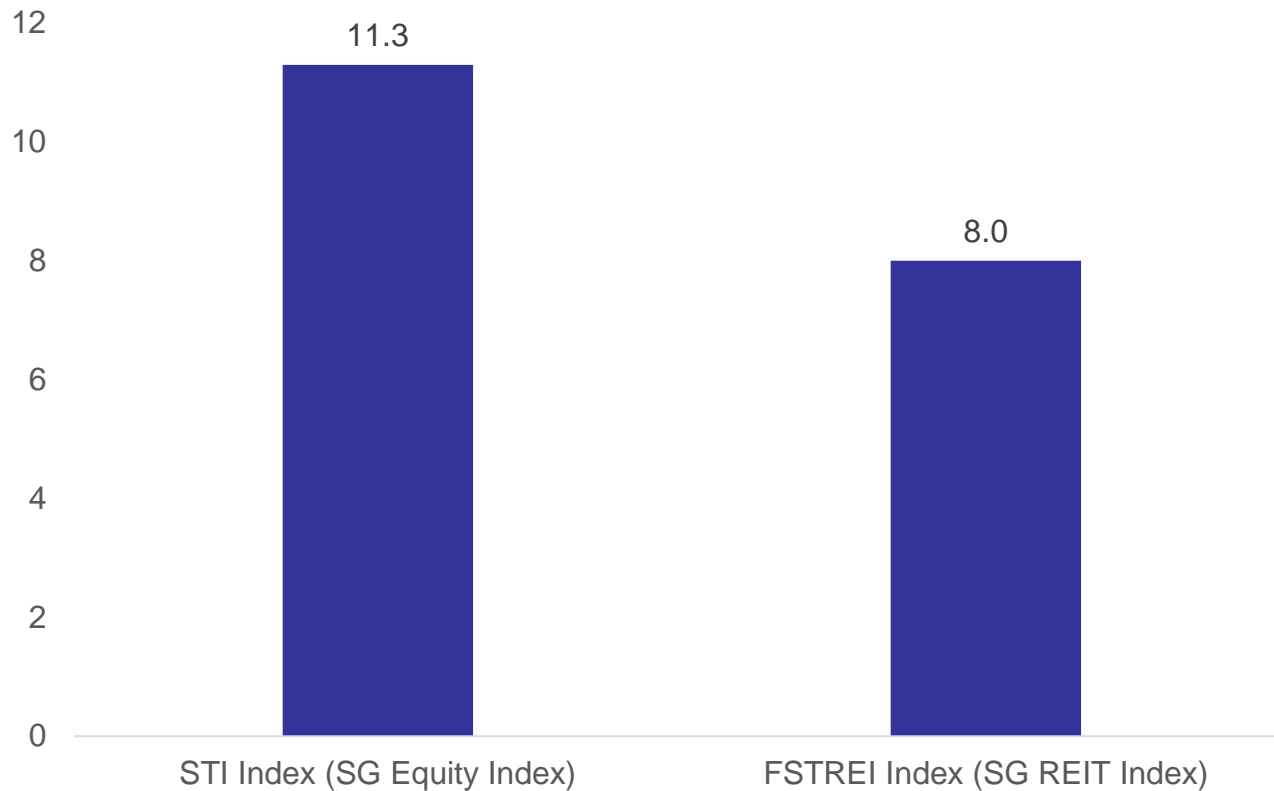
- Lower Correlations
  - REIT will maintain fairly low correlations with other asset classes over reasonably long time periods.

01/05/2015 - 01/23/2020 Weekly Calculation Correlation Local CCY

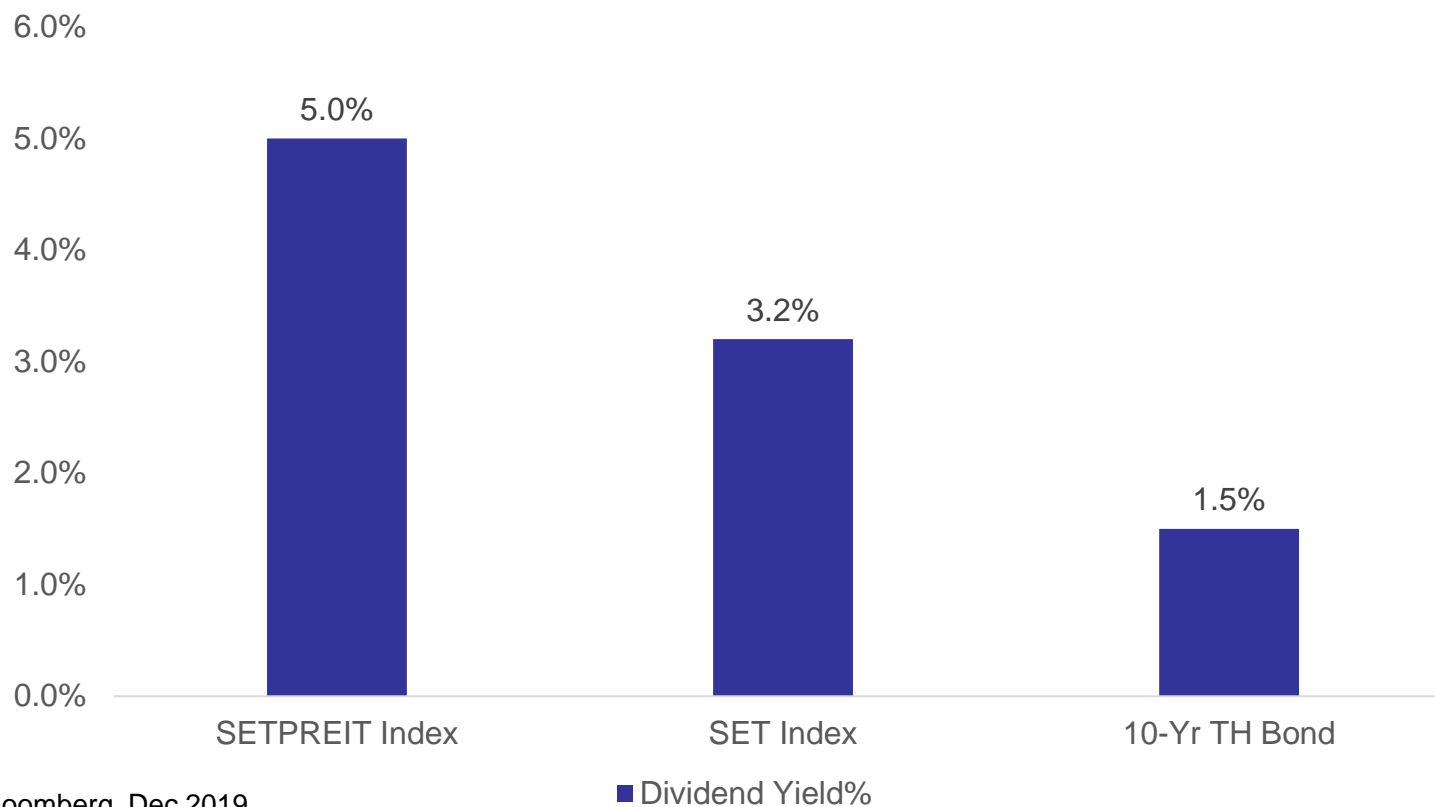
<Filter> Correlation Matrix (9 Rows x 9 Columns)

Security	THAI PROP FUND &	HANG SENG REIT INDEX	FTSE ST RE INVEST TRUST	S&P/ASX 200 A-REIT	TSE REIT INDEX	FTSE NAREIT All Eq	MSCI US REIT INDEX	STOCK EXCH OF THAI	S&P 500 INDEX
11) THAI PROP F...	1.000	0.172	0.314	0.177	0.202	0.266	0.257	0.181	0.212
12) HANG SENG R...	0.172	1.000	0.550	0.247	0.397	0.331	0.326	0.346	0.409
13) FTSE ST RE I...	0.314	0.550	1.000	0.344	0.431	0.400	0.392	0.400	0.435
14) S&P/ASX 200...	0.177	0.247	0.344	1.000	0.295	0.471	0.472	0.135	0.244
15) TSE REIT IND...	0.202	0.397	0.431	0.295	1.000	0.331	0.332	0.196	0.279
16) FTSE NAREIT ...	0.266	0.331	0.400	0.471	0.331	1.000	0.992	0.196	0.545
17) MSCI US REIT...	0.257	0.326	0.392	0.472	0.332	0.992	1.000	0.188	0.523
18) STOCK EXCH ...	0.181	0.346	0.400	0.135	0.196	0.196	0.188	1.000	0.453
19) S&P 500 IND...	0.212	0.409	0.435	0.244	0.279	0.545	0.523	0.453	1.000

- Relatively Low Volatility
  - REITs are less volatile on a daily basis than equities.



- High Dividend Yield
  - REITs must pay out at least 90% of its distributable income to shareholders, as a result, REITs' dividends tend to be higher than equities.



- Limited Gearing Ratio
  - Generally REIT will be regulated on gearing ratio.
- More frequent secondary equity offerings.
  - As a result of the distribution requirement, REIT may not be able to retain earnings to finance growth and may need to issue equity to finance property acquisition

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## Advantage

- Greater liquidity
  - Permit greater flexibility in timing the realization of G/L
- Lower investment requirements
- Access to superior quality and range of properties
  - Quality assets may be hard to come by => invest in REIT will give the access.
- Active professional management
  - Capable management can add value to the REIT => maximizing rental rate and occupancies and minimizing operative costs via property enhancements refinancing, sales and reinvestment, selected new development activity and acquisitions with optimize capital structure.

- Diversification
  - REITs have historically provided investors an efficient way to diversify their investments to reduce risk and increase long-term returns.
- Taxation
  - Generally favorable for investors from tax perspective in most jurisdiction.
- Earnings predictability
  - Due to contractual nature of REITs' rental income.
- High income payout and dividend yield
  - Typically REITs pay more than 90% of its distributable income, make them among the most stable and highest yielding of publicly traded equities.

## Disadvantage

- Control
  - Less control over property-level investment decision
- Costs
  - Maintenance of listed co. status can be costly (Structural leakage, Audit fee, Regulatory fee, AGM&EGM)
- Conflict of interest
  - Conflict of interest between sponsor and REITs.
- Relatively moderate-income growth potential
  - Stock market which focus more on growth potential will outperform REIT in the bull market.
- Potential for forced equity issuance at disadvantageous prices
  - Bad management could force REIT to do equity issuance at bad price.

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- Occupancy / Vacancy rate
  - % of occupied space in the asset
- Weighted Average Lease Expiry (WALE)
  - Indicate the average expiry period of all the leases within a property.
- Tenant Retention Rate
  - % of tenant that renew their contract upon expiry date.
- Asking Rent
  - Rental rate for new inquiry.
- Rental Reversion
  - % change between old contract rent and new contract rent.
- Net Lettable Area (NLA)
  - Total leasable area for the asset.

## WALE calculation

- =SUMPRODUCT(No. of year to expiry, % of expiry)

Lease expiry profile (By NLA)

Year Assets	1	2	3	4	5	6	7	8	9	10
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
X	-	5%	5%	10%	-	5%	35%	15%	20%	5%
Y	15%	30%	40%	25%	-	-	-	-	-	-
Z	45%	40%	15%	-	-	-	-	-	-	-

- WALE of Y =  $(1 \times 15\%) + (2 \times 30\%) + (3 \times 40\%) + (4 \times 25\%) = 2.95$  years
- WALE for Z =  $(1 \times 45\%) + (2 \times 40\%) + (3 \times 15\%) = 1.70$  years

## Simple Revenue calculation

- Monthly Rental Rate x NLA x Occupancy rate x 12 = Revenue per year

- Market rent analysis
  - Compare existing rent to market rent.
  - Low in-place rents provide upside potential to cash flows upon lease expiry.
  - High in-place rent represent additional risk to maintaining current cash flow.
- Remaining lease terms & WALE
  - Short remaining lease terms provide mark-to-market opportunities on rent, positive in an expansionary economy vice versa.
  - Hotel < Retail < Office < Industrial
- Inflation Protection
  - Base rent should at least have minimum reversion at inflation rate.
- Tenant concentration
  - Assessing the financial strength of significant tenants and the risk they pose to the REIT are important parts of necessary due diligence.

- Cost of re-leasing space
  - Cost to lease space when lease matures
    - Brokerage commissions
    - Allowances for tenants' improvements to their space.
    - Free rent
    - Down time between leases
  - Usually high in downturn market (hard to find tenants)
  - Can look at tenant retention rate as an indicator, high retention rate typically led to lower cost of re-leasing space
- Availability of new competitive supply
  - Analyze new buildings under construction or planned.
  - Size compare to existing supply, market segment, developers, pre-commit occupancy rate, anchor tenants.

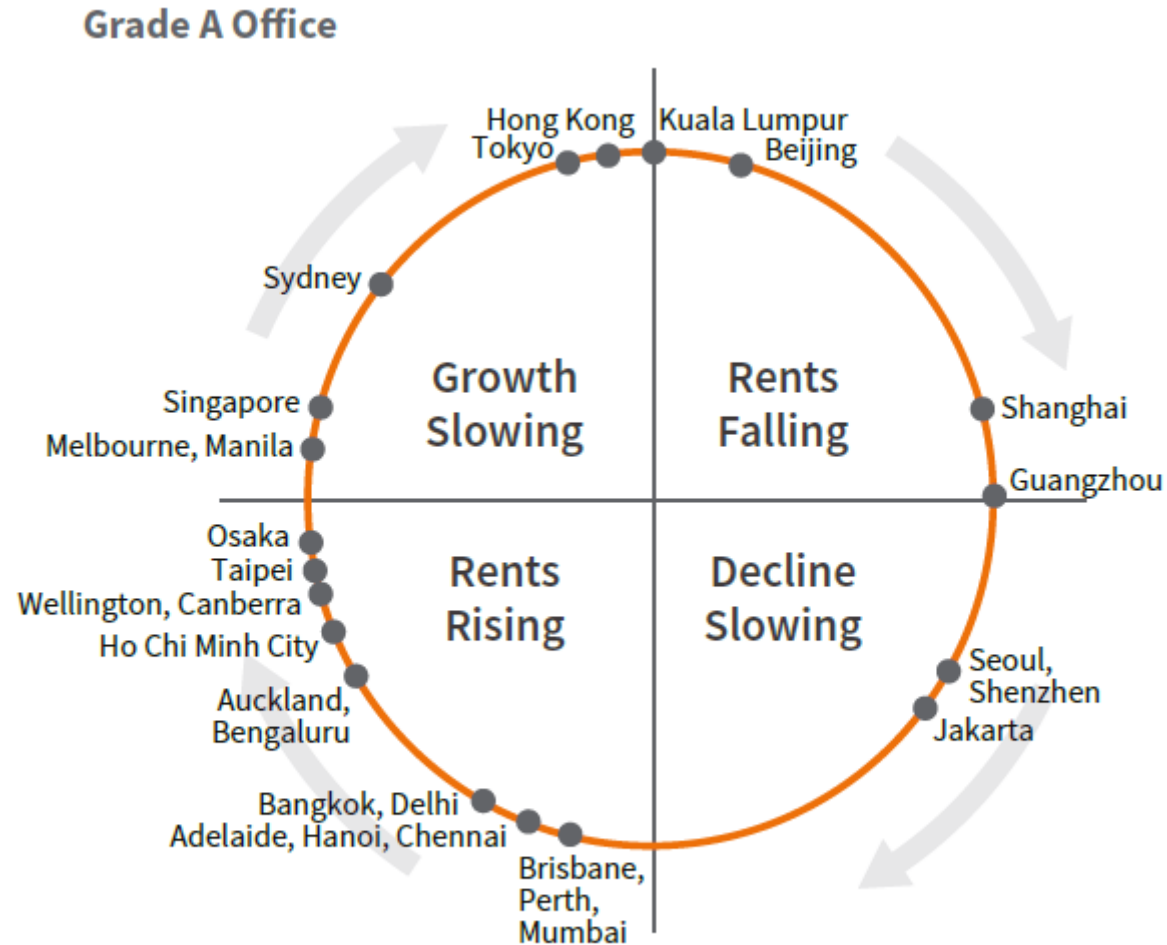
- Balance sheet/ leverage analysis
  - Debt level , Debt maturity profile => should be spread out and diversified.
- Management
  - Senior management's background, skill sets, track records, year of experience and length of time with REIT.
  - Indicate who is the key man => that's where risk is.

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## Major economic factors affecting REITs

- GDP Growth
  - Affecting outlook on the broad base basis
- Job Creation
  - Direct impact on demand for Office space
  - Indirect impact on spending increase in the area => positive for retail , greater hotel room demand as leisure and business travel increases, Increase the use of industrial space in response with job creation.
- Retail Sales growth
  - Direct impact on retail REITs

- Population growth
  - Direct impact on Residential REITs and Health Care REITs
- Supply vs Demand dynamic
  - Affecting all REITs especially sectors with relatively longer construction period like Office, Hotel, Retail and Health Care
  - Over-supply situation come from the spaces on which construction commences in a booming economy and completed two or three years later, potentially during recession



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## Bangkok Office case

Investment Period : 5 Years

	<u>X</u>	<u>Y</u>	<u>Z</u>
Existing Rent (THB/sqm./month)	8.5	10	11.5
Market Rent (THB/sqm./month)	10	10	10
Lease Term (Years)	3	3	3
WALE (years)	7	3	1.2
Quality	A	A	A
Current Occupancy Rate %	100%	90%	90%
Supply and Demand	Gradually over supply in 5 years		
Tenant Concentration	Diversified	Single-Tenant	60% concentrated in Tech Firm and Co-working space
5 years Retention Rate %	50%	100%	30%

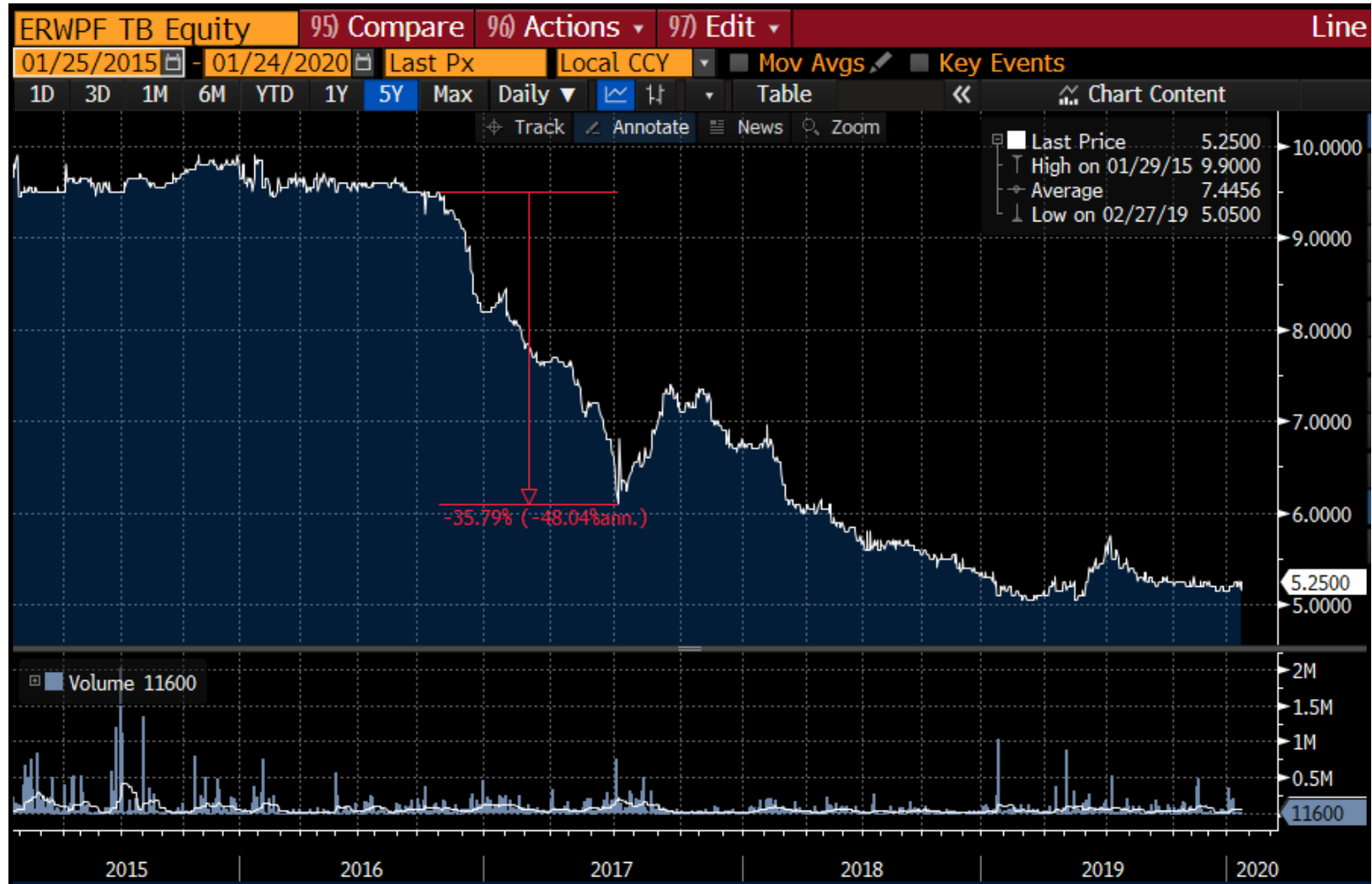
Analyze the following sector :

	Country	Sector
<b>1</b>	Thailand	Office
<b>2</b>	Thailand	Retail
<b>3</b>	Thailand	Hotel
<b>4</b>	Thailand	Industrial
<b>5</b>	Singapore	Office
<b>6</b>	Singapore	Retail
<b>7</b>	Singapore	Hotel
<b>8</b>	Singapore	Industrial

Analysis should cover all the Economics drivers and conclude to the investment thesis.



# Interesting case from TH-REIT history : ERWPF



# Interesting case from TH-REIT history : TLGF



# Interesting case from TH-REIT history : TU-PF

