Introduction to Real Estate Investment Trusts (REITs)

Peculiarities and Its Relation to Private Real Estate

Alex Van de Minne

April 7, 2022

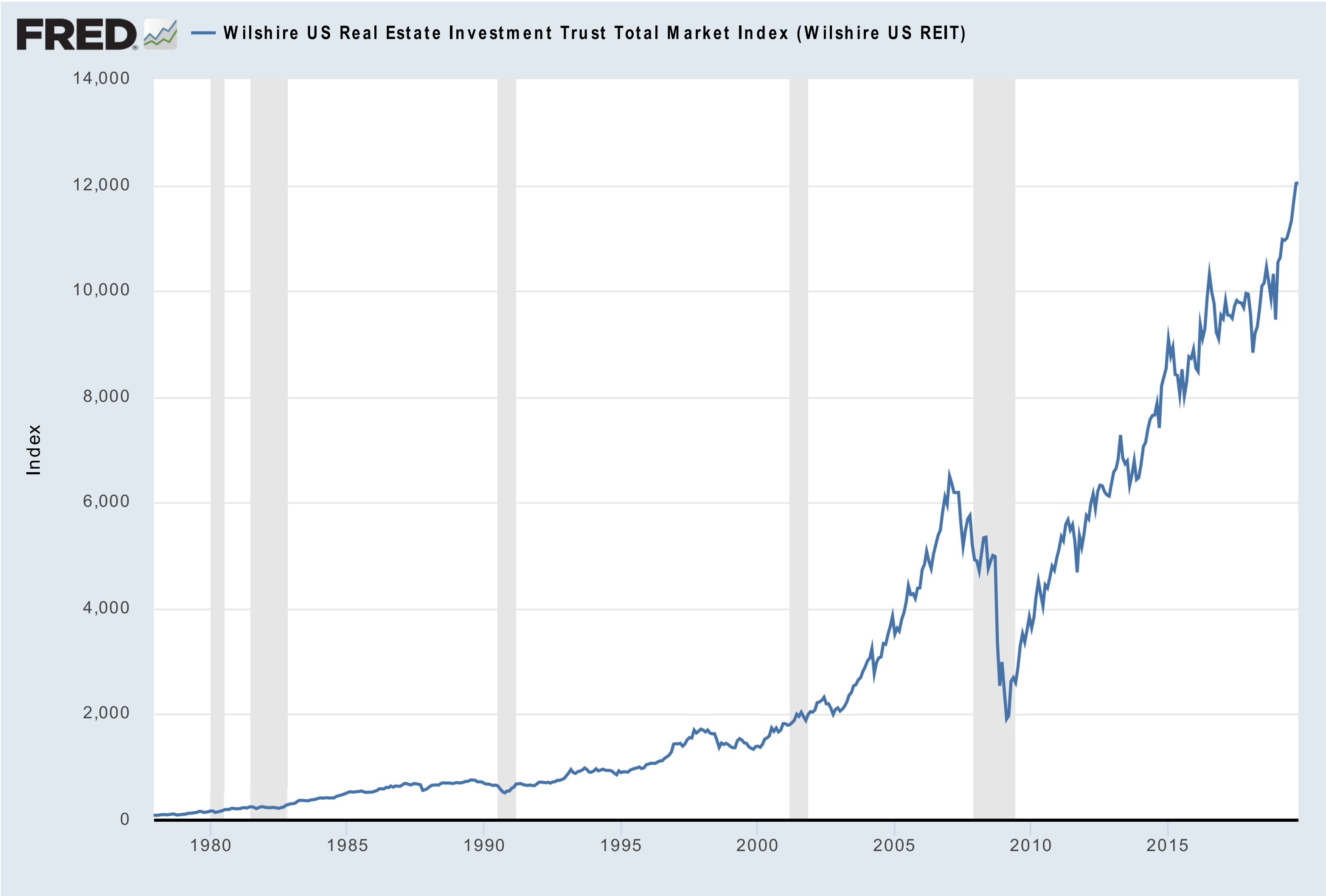
Introduction

Where do we place REITs?

REITs are investment vehicles in real estate. The shares of REITs are publicly traded on the stock market. Consider the following major types of capital asset markets and investment products;

	Public Markets	**Private Markets**
Equity Assets	Stocks	Real property
	REITs	Private equity
	Mutual funds	Hedge funds
Debt Assets	Bonds	Bank loans
	MBS	Whole mortgages
	Money instruments	Venture debt and LBOs

Index of REIT composite



The four rules of REITs (1/2)

To retain REIT tax status (dividends deductible from corporate taxable income), REITs **must** continually pass 4 tests (1&2):

1. **Ownership Test:** “Five or Fewer Rule.” REIT cannot be a closely held corporation: no five or fewer individuals may own more than 50% of REIT’s stock, and there must be at least 100 different shareholders. (“Look-Through Provision” enacted 1993: pension funds not limited by the five-or-fewer rule.)
2. **Asset Test:** $\geq$ 75% of a REIT’s total assets must be real estate, mortgages, cash, or federal government securities, and 75% or more of the REIT’s yearly gross income must be derived directly or indirectly from real property (including mortgages, partnerships, and other REITs). No more than 20% of its assets can consist of stock of a Taxable REIT Subsidiary (TRS).

To retain REIT tax status (dividends deductible from corporate taxable income), REITs **must** continually pass 4 tests (3&4):

3. **Income Test:** $\geq$ 75% of income from primarily passive sources like rents and mortgage interest. Cannot be “merchant builders” developing properties for quick sale, or flipping properties. Property sales must obey:
   - ☐ Held for at least four years.
   - ☐ Aggregate adjusted basis of the property sold per year does not exceed 10% of the aggregate basis of all assets of the REIT as of the beginning of the year.
4. **Distribution Test:** At least 90% of a REITs annual taxable net income must be distributed to shareholders as dividends each year.

What are differences between investing in REITs versus investing in direct real estate?

- Equity held/traded as securities (shares of common stock, small denomination, identical).
- Equity usually publicly traded (in stock market), hence **highly liquid**, low transactions and management costs, small dollar threshold for investment.
- Transparent pricing, rigorous accounting and reporting, informational efficiency of stock market, small investor obtains protection from information disadvantage.
- Highly competitive investment marketplace (Darwinian selection of REITs in stock market).
- Economies of scale and scope (in operations, in capital cost).

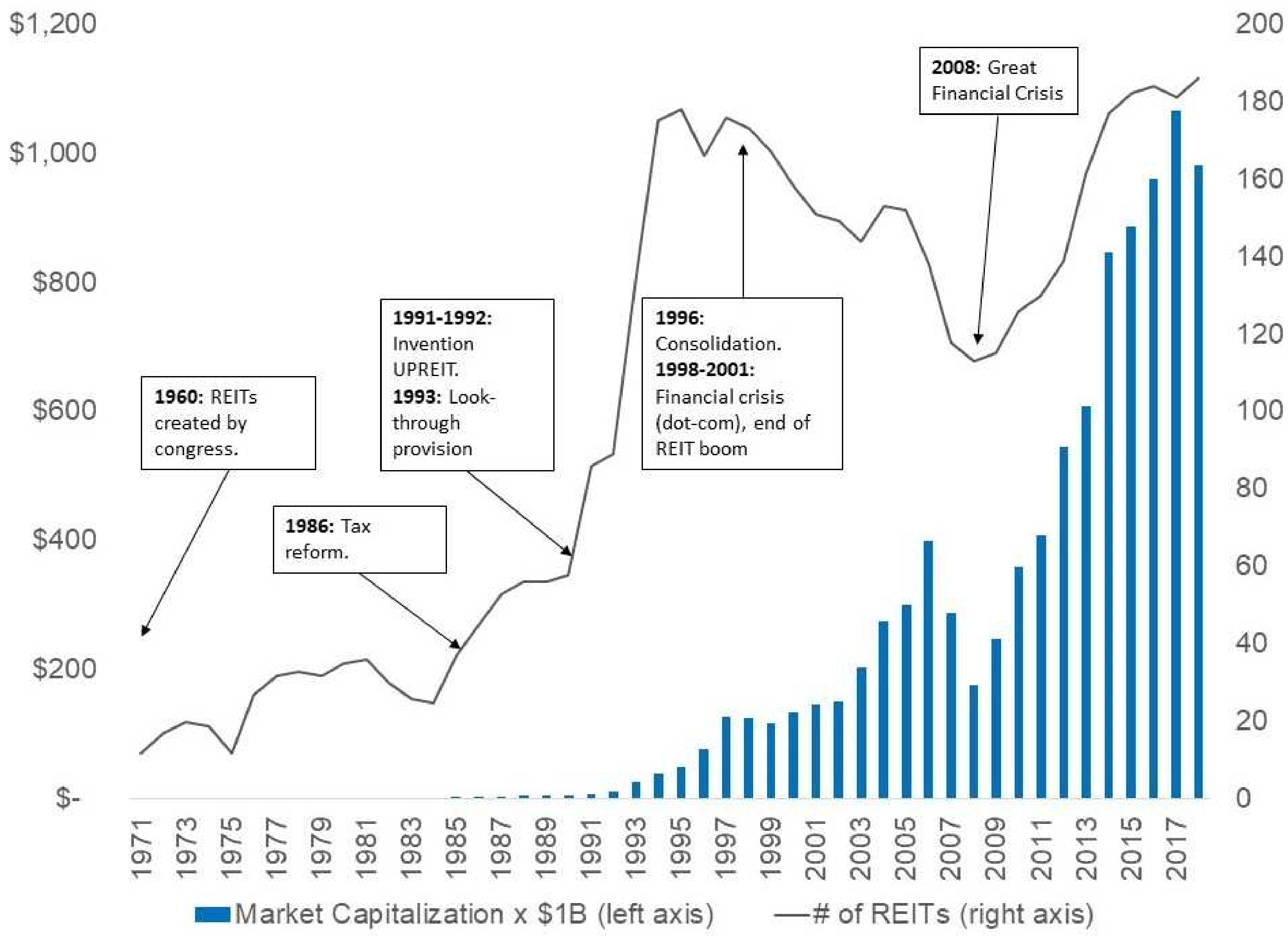
Vertically integrated

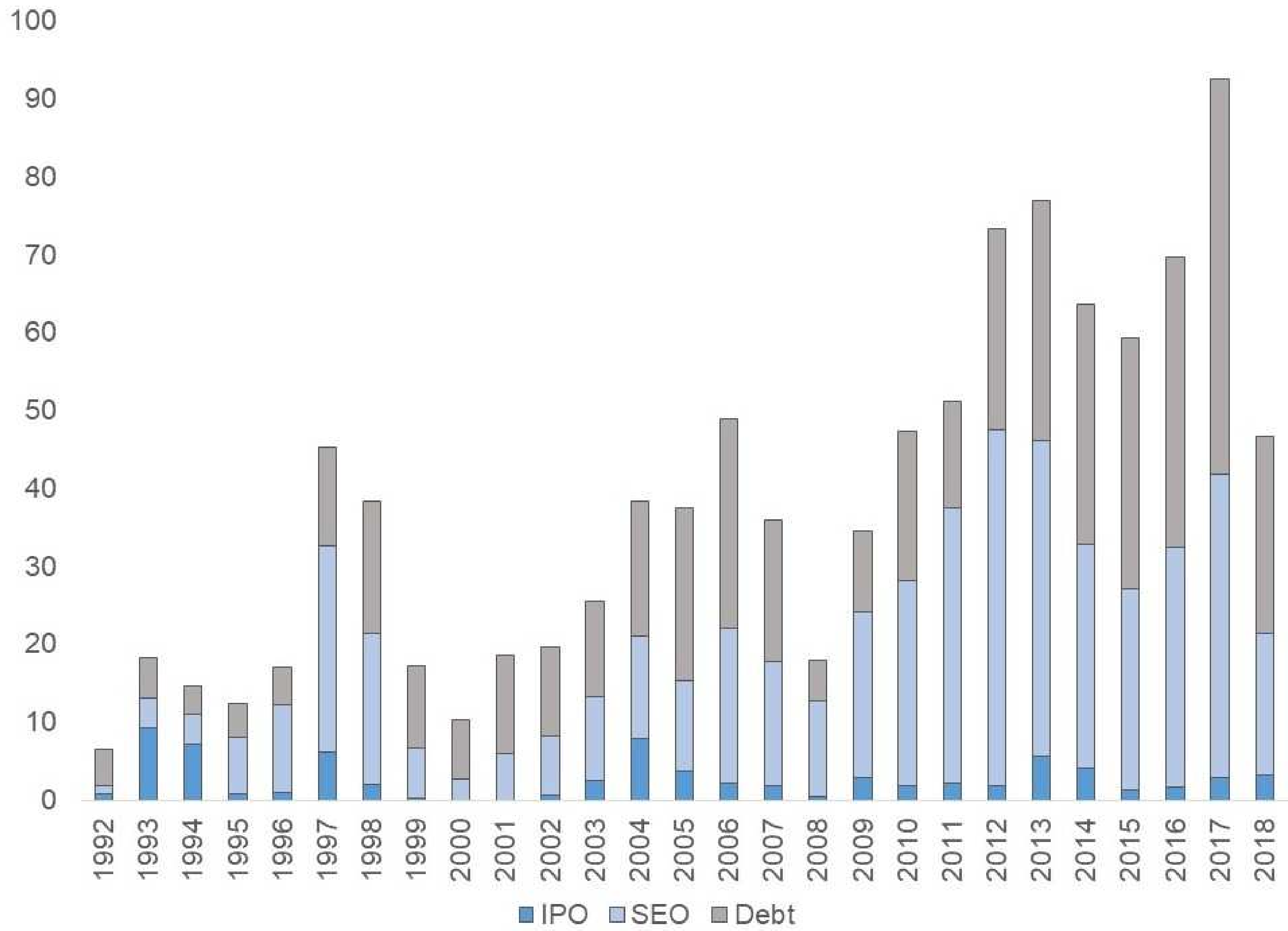
Large REITs are actively-managed, vertically integrated firms, providing commercial real estate goods and services for their “costumers” (tenants & users of space)

Vertical integration involves;

- Land acquisition
- Development
- Ownership
- Operation
- Tenant services
- Disposition

History of REITs


$1,200
$1,000
$800
$600
$400
$200
$-
200
180
160
140
120
100
80
60
40
20
0
1960: REITs created by congress.
1986: Tax reform.
1991-1992: Invention UPREIT. 1993: Look-through provision
1996: Consolidation. 1998-2001: Financial crisis (dot-com), end of REIT boom
2008: Great Financial Crisis
1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017
Market Capitalization x $1B (left axis)
# of REITs (right axis)


100
90
80
70
60
50
40
30
20
10
0
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
IPO
SEO
Debt

Ownership (in 2017)

Type	Size	N types	N prop.	Ave prop. value
Sovereign Wealth Fund	$ 3,211,699,168	20	15.0	$ 214,829,376
REIT	$ 1,989,767,607	293	54.2	$ 36,706,032
Pension Fund	$ 1,312,796,355	100	13.3	$ 98,632,333
Non Traded REIT	$ 987,866,770	150	47.1	$ 20,985,698
Equity Fund	$ 834,355,636	488	20.8	$ 40,075,349
Insurance	$ 726,514,319	130	11.7	$ 62,217,959
Investment Manager	$ 688,590,615	555	14.0	$ 49,324,702
REOC	$ 496,533,758	200	12.5	$ 39,770,425
Endowment	$ 118,984,766	21	3.6	$ 32,877,370
Bank	$ 117,640,487	411	3.1	$ 38,101,056
Developer/Owner/Operator	$ 82,582,410	19,851	4.7	$ 17,635,123
High Net Worth	$ 80,920,748	752	3.5	$ 22,833,922
Educational	$ 80,797,179	199	3.3	$ 24,510,120
Finance	$ 74,905,085	124	3.8	$ 19,974,689
Corporate	$ 69,593,141	1,898	4.1	$ 17,010,661
Religious	$ 41,848,527	54	3.2	$ 13,062,546
Government	$ 33,062,522	501	2.3	$ 14,316,615
Non-Profit	$ 32,080,101	308	2.6	$ 12,554,855

Some accounting principles

GAAP principles

Direct Property		REIT	
PGI	180	PGI	180
Vacancy	-9	Vacancy	-9
Operating Expenses	-71	Operating Expenses	-71
NOI	100	NOI	100
		G. and A. Expenses	-3
		EBITDA	97
Interest Expense	-40	Interest Expense	-40
		FFO	57
Depreciation Expense	-20	Depreciation Expense	-20
Taxable Income	40	GAAP Net Income	37
Add back Depreciation	+20	Add back Depreciation	+20
Capital Expenses	-15	Capital Expenses	-15
EBTCF	45	*AFFO*	42

Remember that REITs need to payout 90% of its income as dividends. With “income” we mean the GAAP Net Income, however;

- Note that depreciation is not an actual “cash expense”.
- Thus, the dividends (Div) you pay out are;

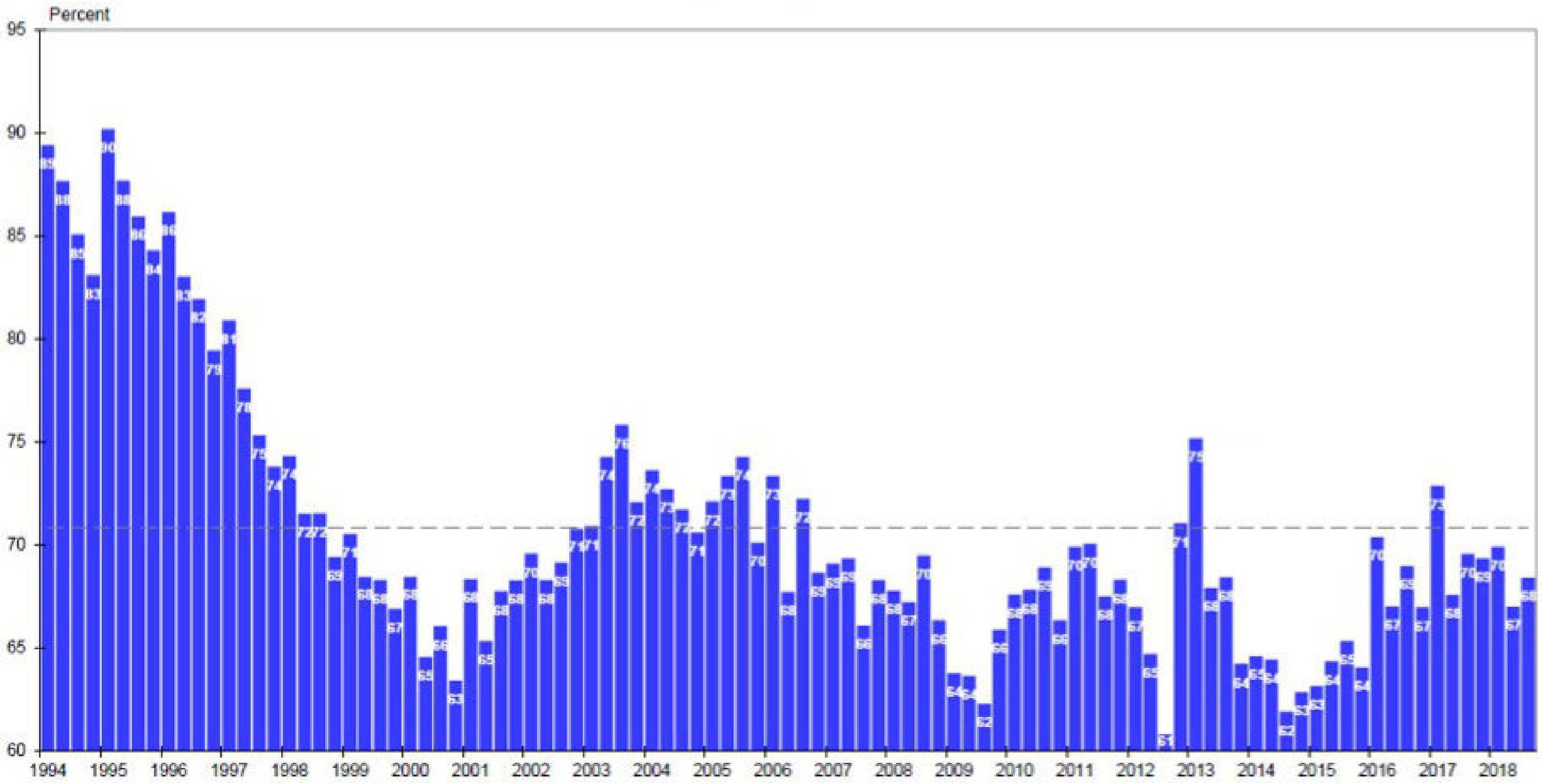
$$\text{Div} = 0.9 \times \text{GAAP Net Income} = 0.9 \times \$37 = \$33.3.$$

- However, your actual cash inflow was the AFFO with $42.
- Thus, as a percentage of AFFO you payed out;

$$\frac{\text{Div}}{\text{AFFO}} = \frac{\$33.3}{\$42} = 79\%.$$

- This is important in order to realize how much REITs can plowback for future investments. Also note that comparing “P/E” ratios is not straightforward with other types of firms. It also relates to pricing REITs, see next Section. . .

Dividends as % of FFO between 1994 and 2019



The average payout rate (dividends) as fraction of FFO between 1994 and 2019 was 70%.

Valuating REITs

We can essentially identify two ways of pricing REITs.

- **Net Asset Value (NAV) approach:** First take the value of all the real estate a REIT has. This can be done by appraisal report done by the REITs themselves, or an Automatic Valuation Model (AVM) from a third party (or built your own!). For the latter you can use "comps" or prevailing market "cap rates". The market cap of the firm is simply;

$$\text{Market Capitalization} = \text{Enterprise Value} - \text{Debt} + \text{Cash},$$

  where the enterprise value is essentially the NAV of all the real estate owned by the target REIT.
- **The Cash flow (GGM) approach:** You can also use the more "traditional" stock market approach of discounting all future cash flows;

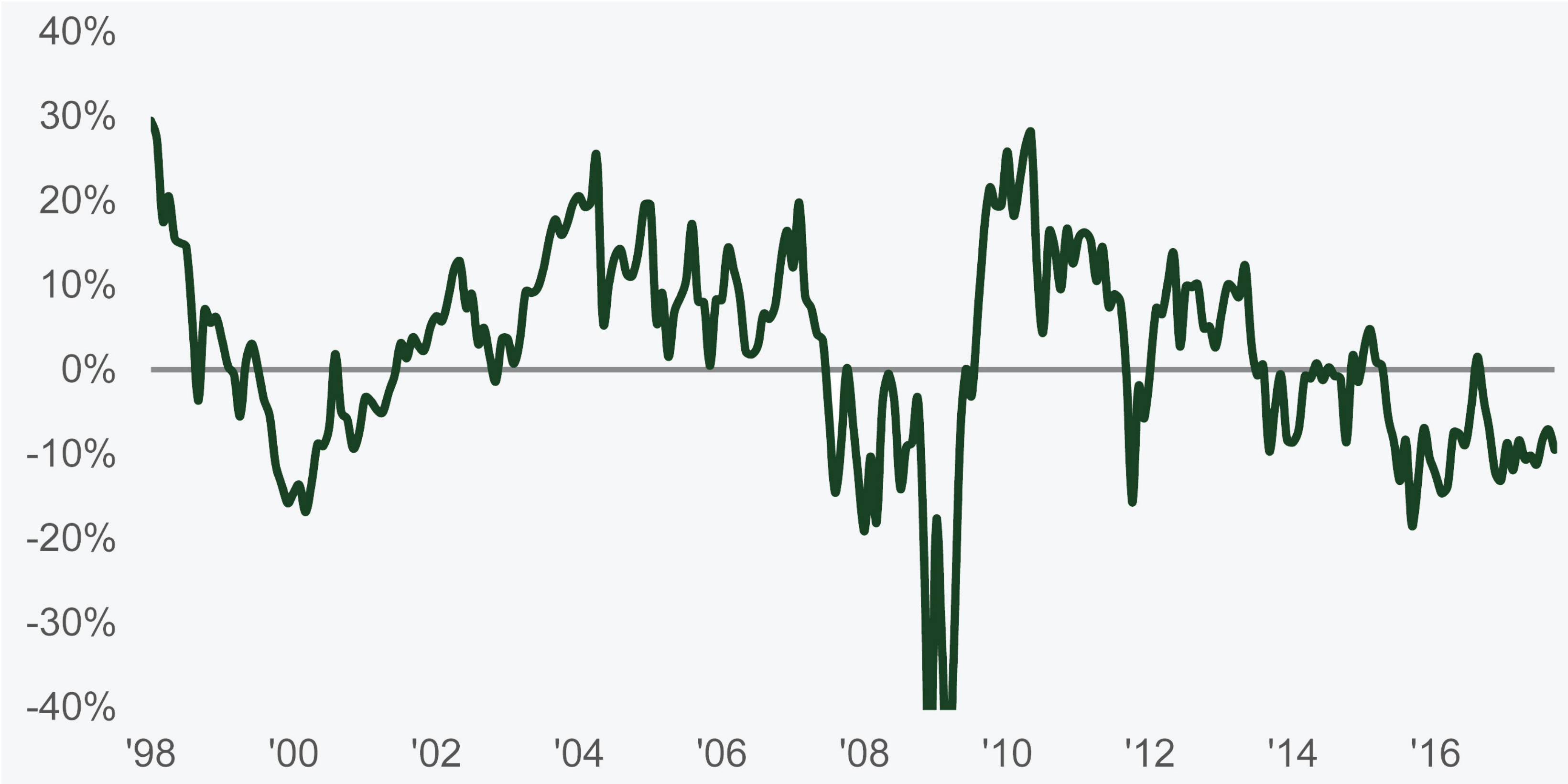
$$E_0 = \frac{Div_1}{(1+r)} + \frac{Div_2}{(1+r)^2} + \cdots + \sum_{t=1}^{\infty} \frac{Div_t}{(1+r)^t}$$

It is also custom to re-write the DCF in a Gordon Growth Model (GGM). (I.e. a perpetuity of the DCF.) The GGM is given by;

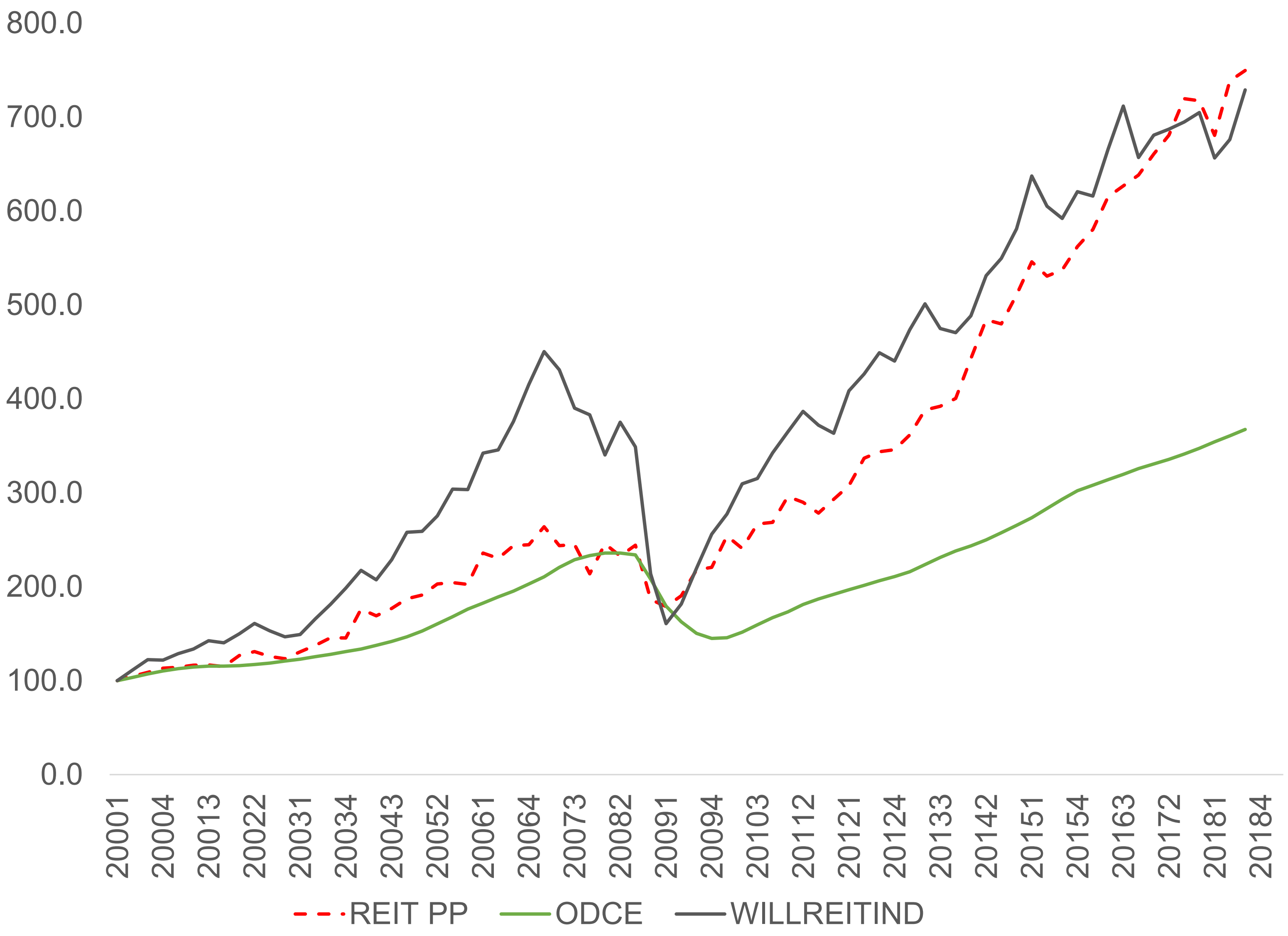
$$E = \frac{Div_1}{(r-g)},$$

- Div = AFFO - the plowback for future investments.
- g = is the long-run average future growth rate in dividends. We idenity three sources;
  - "Same-store" growth. No plowback, just increases in EBTCF from existing properties.
  - Plowback is used to purchase similar properties (with similar debt levels), thus dividends grow, but price/earnings do not change. (Assuming NPV = 0 projects.)
  - REITs find positive NPV projects. And yes, we find evidence of this!
- r = the firm's average equity opportunity cost of capital, or $r_f + RP$.

Differences between share price and NAV per share



- Currently, REITs trade with approximately a 9% discount compared to what the underlying assets are worth.
- Why is there even a difference?


800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
20001
20004
20013
20022
20031
20034
20043
20052
20061
20064
20073
20082
20091
20094
20103
20112
20121
20124
20133
20142
20151
20154
20163
20172
20181
20184
REIT PP
ODCE
WILLREITIND

Comparing the income/cash yields