Complications around POMV

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Policy wonk concerns over SB 26

- Statutory definition of ERA creates risks for execution of POMV.
- Inflation proofing increases risks for POMV.
- SB 26 5-year average does not address real uncertainty for government.
- State has multiple assets to manage, not just PF.

Permanent Fund Presentation to House Finance, 2016

http://www.legis.state.ak.us/basis/get_documents.asp?session=29&docid=51247

Alaska Permanent Fund House Finance Committee February 24, 2016

Approximate Permanent Fund Balances

Total contributions	$40B
Retained earnings	$10B
Principal	$50B
Earnings Reserve	$14B
Total	$64B
Constitutional Budget Reserve	$1.7B

APFC Board of Trustees

- Six board members
- Two state members (Comm. of Revenue and another cabinet member.)
- Four public members
  - Appointed by Governor
  - Staggered, 4-year terms
  - Experience in finance, investments, or business management
  - May only be removed "for cause"

Alaska Constitution

Article IX, Section 15, provides:

"At least twenty-five percent of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the State shall be placed in a permanent fund, the principal of which shall be used only for those income-producing investments specifically designated by law as eligible for permanent fund investments. All income from the permanent fund shall be deposited in the general fund unless otherwise provided by law."

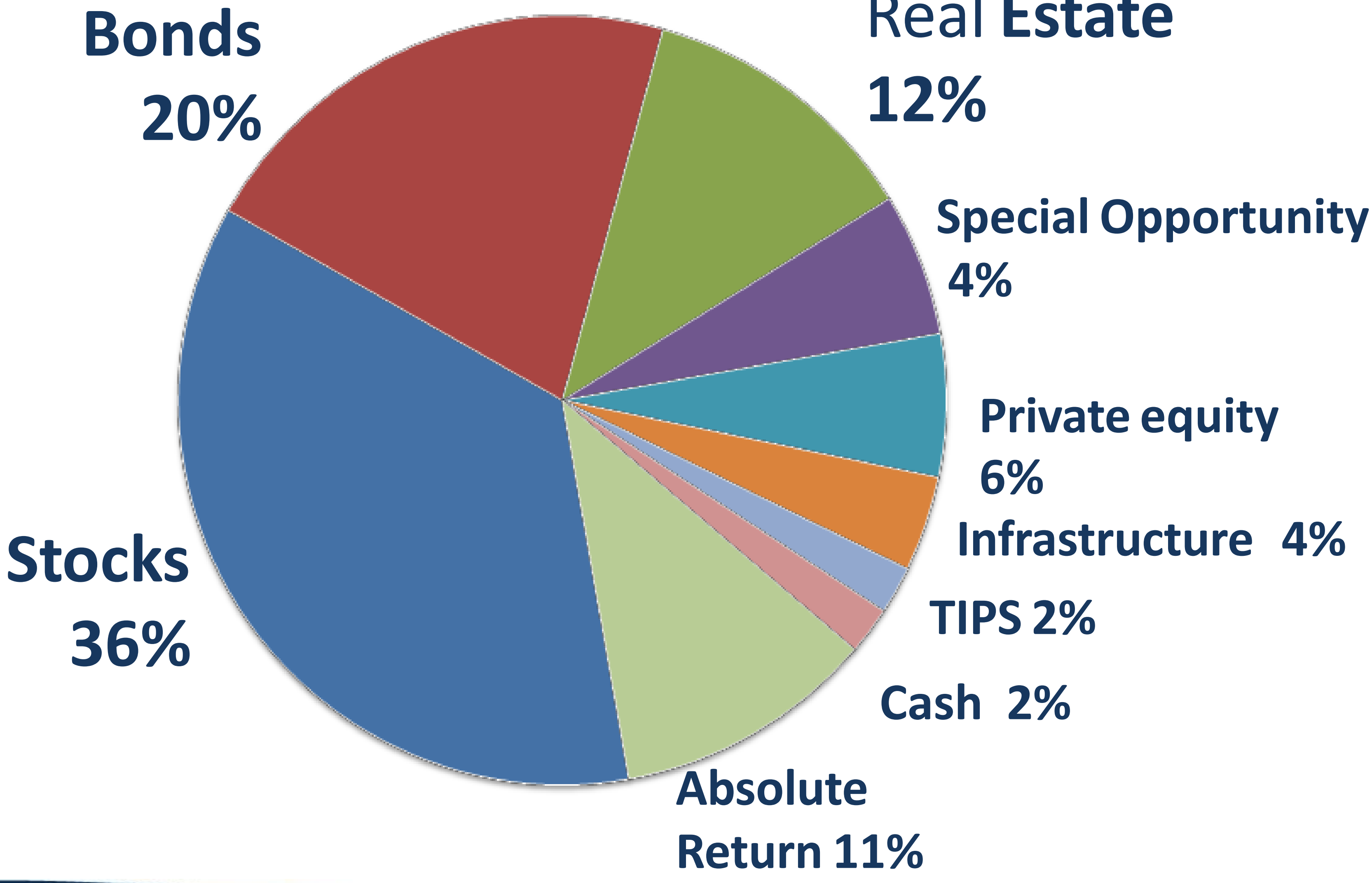
1998 Statutory Definition of Earnings Reserve (AS 37.13.140)

Statutory net income excludes unrealized gains and losses; only realized gains are transferred to the ERA. Unrealized gains earned by Principal are accounted for as part of Principal until they are realized, and unrealized gains earned by Earnings Reserve Account (ERA) are accounted for as part of ERA.

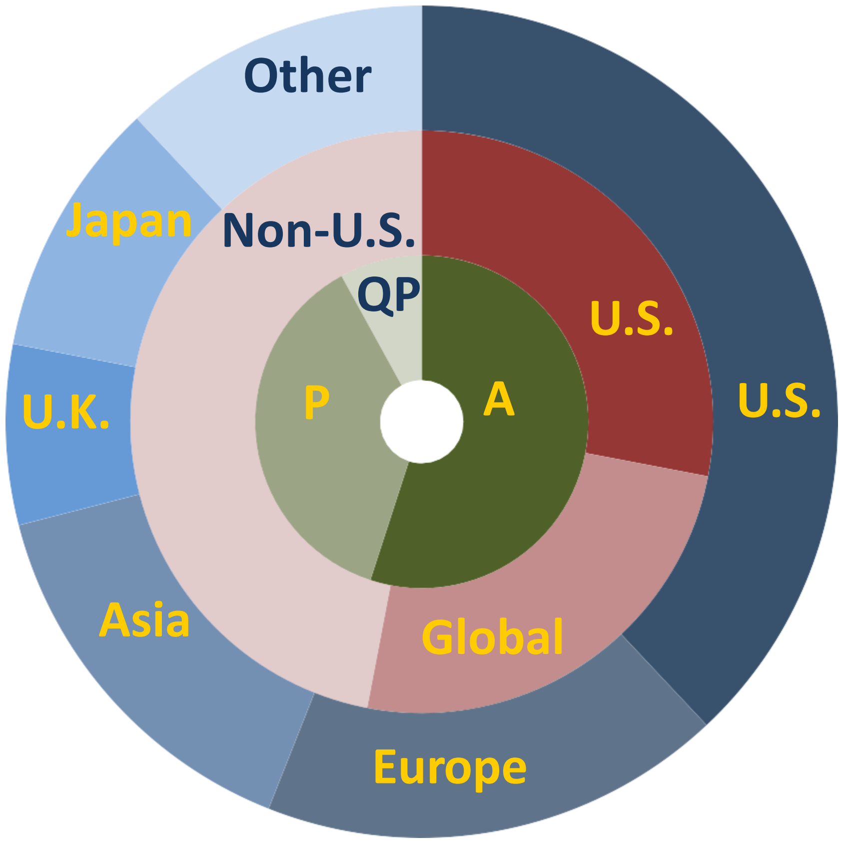
Statutory investment rules evolve

- Evolution from legal list to prudent-investor
- Starting in 2005: “Prudent-investor rule” guides investment of Fund assets
  - Duty of care
  - Duty of loyalty
- The Board will maintain a reasonable diversification of assets

Target Asset Allocation



Stock Portfolio



$20.9 billion as of 06/30/2015

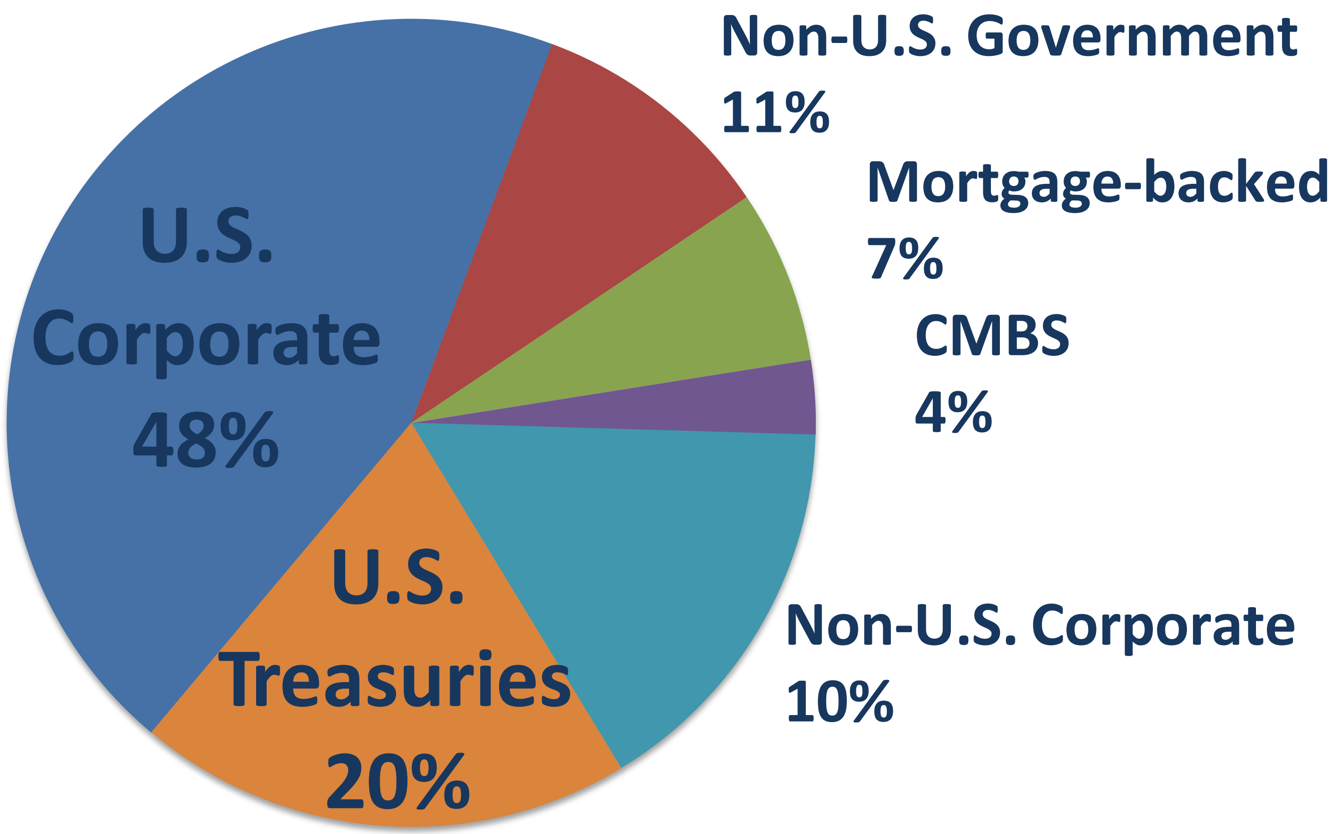
By country or region

By mandate:
U.S., Global, Non-U.S.

By management:
Active, Passive,
Quasi-passive

Bond Portfolio Composition

$11.1 billion as of 06/30/2015

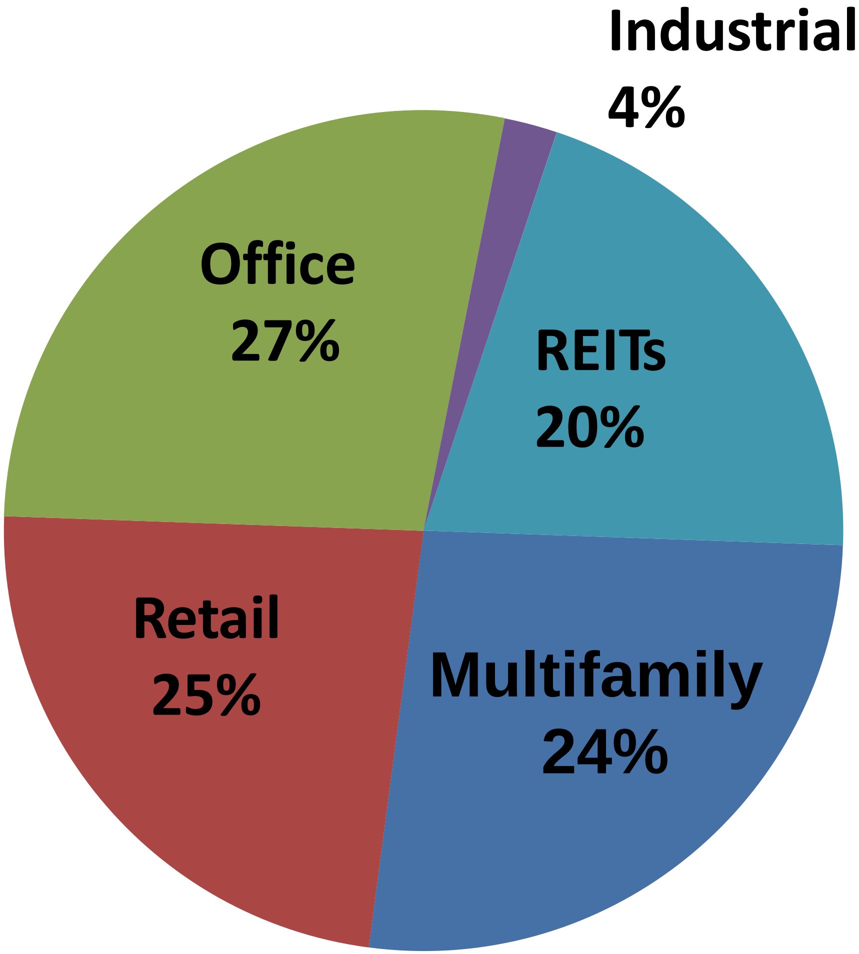


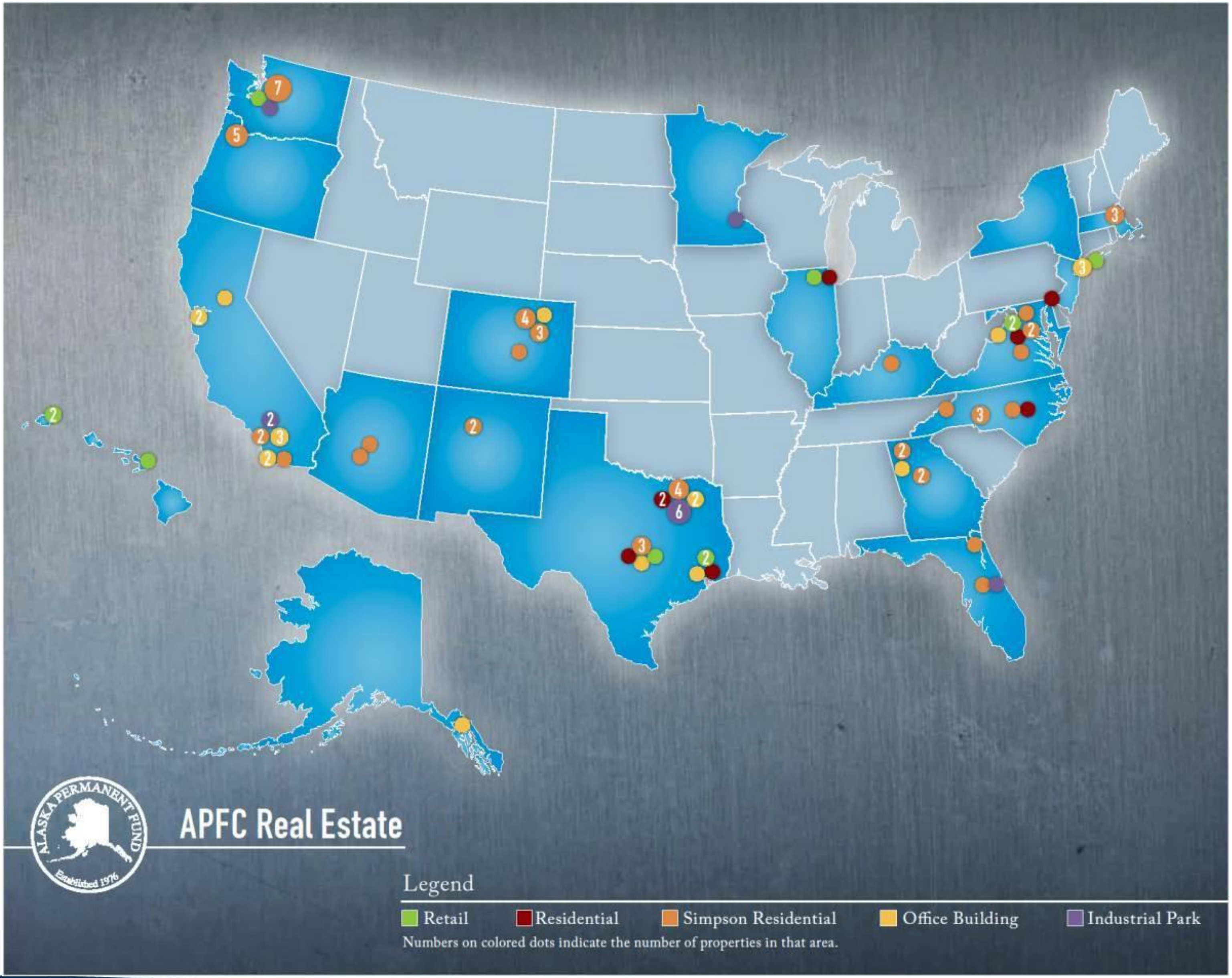
Real Estate

$6.5 billion as of 06/30/2015

58 directly held properties

Exposure to Europe growing



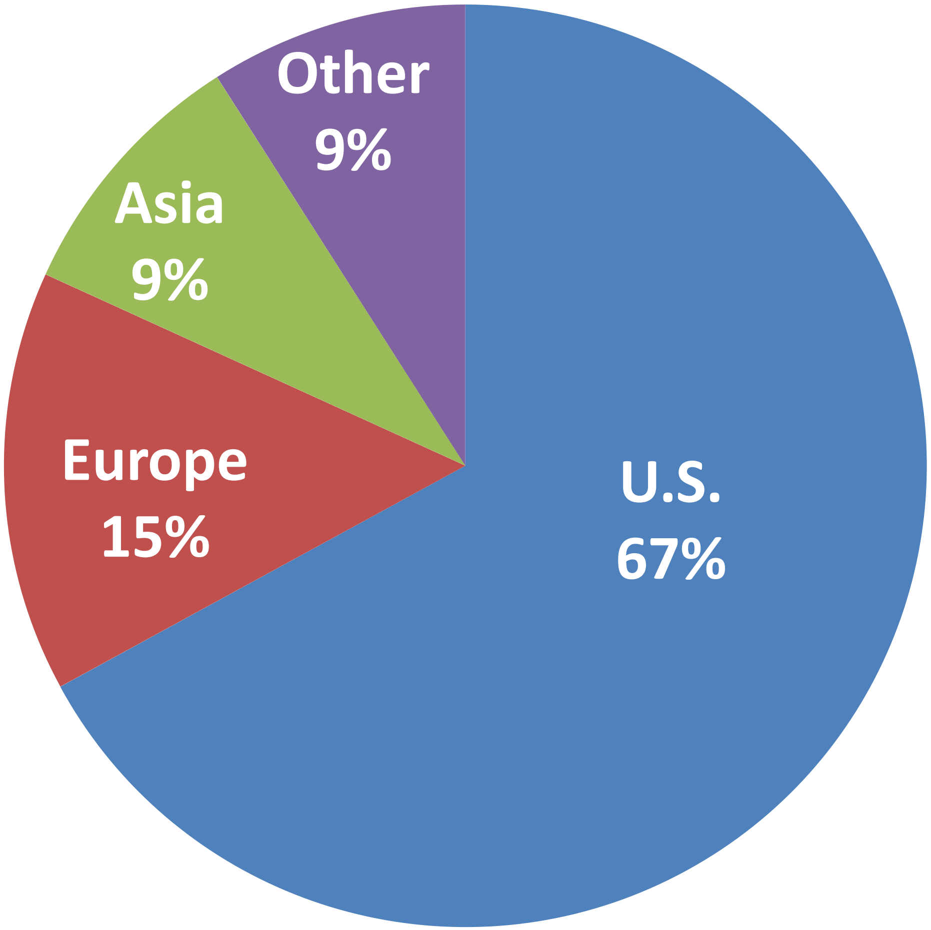

APFC Real Estate
Legend
Retail
Residential
Simpson Residential
Office Building
Industrial Park
Numbers on colored dots indicate the number of properties in that area.

Private Equity

$3.2 billion as of 06/30/2015

2,800 underlying companies

Co-investment program implemented in FY2014

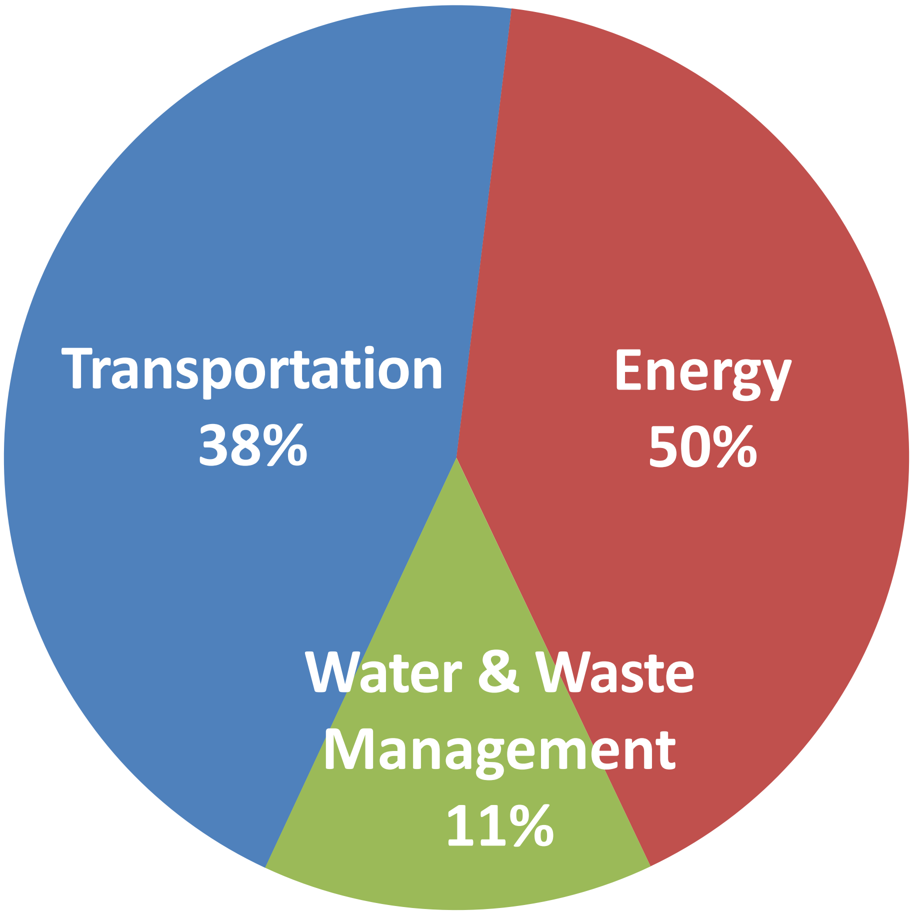


Infrastructure Holdings

$1.5 billion as of 06/30/2015

Properties in the U.S., U.K., India, Argentina and Canada

Co-investment program implemented in FY14, currently at $35 million



Special Opportunities

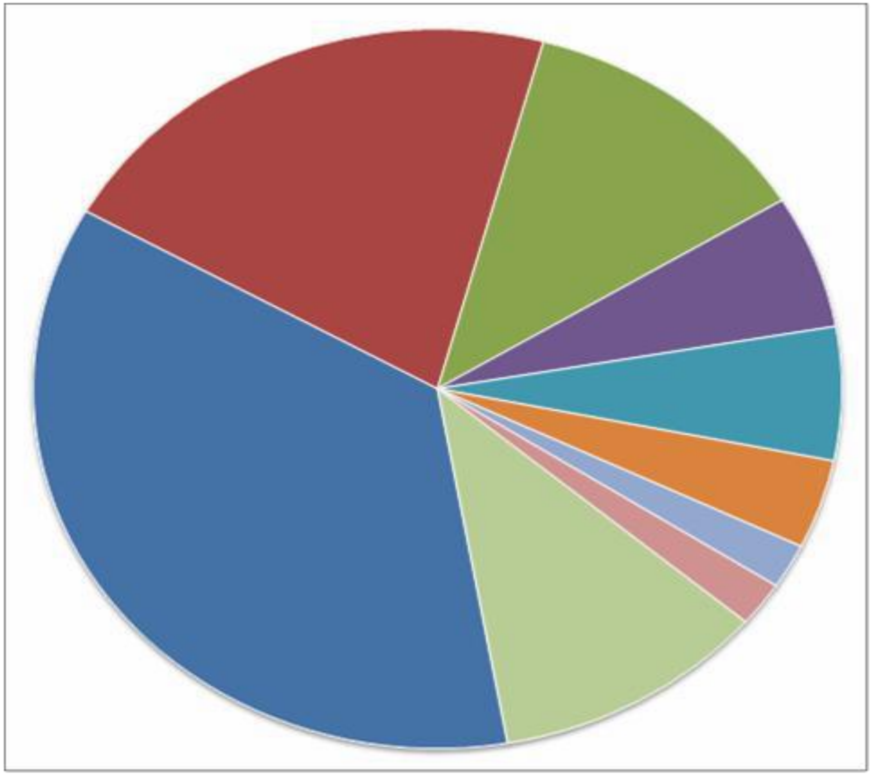
- Direct investments in private companies-examples: Juno Therapeutics and Denali Therapeutics
- Direct investments in specialized funds-examples: Dyal and Blackstone funds
- $1.9 billion as of 06/30/2015

ERA is not "automatically" determined

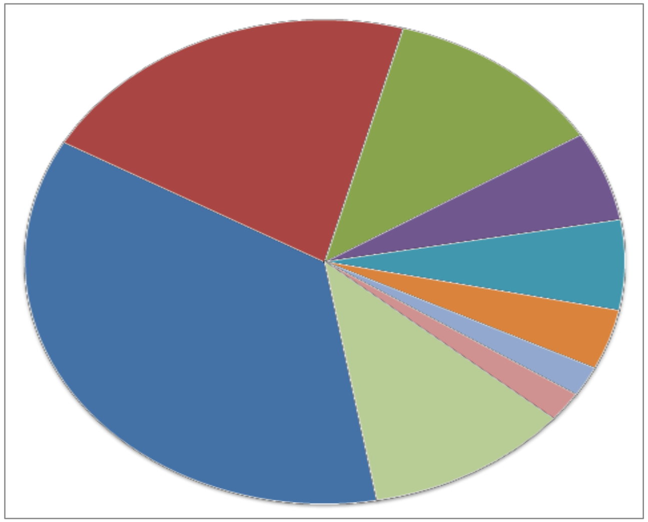
- Income from bond interest, dividends, rents, etc., flows directly to ERA
- But APFC has discretion to realize capital gains, and hence to determine size of "principal" versus ERA.
- Asset allocation strategies may require realization of losses or gains.
- Is discretion constrained by "prudent investment" strategy?
- Could a future governor use appointments to influence capital gains realization?

Pro rata share of main fund assets, not cash, are transferred to ERA

Main Fund allocation



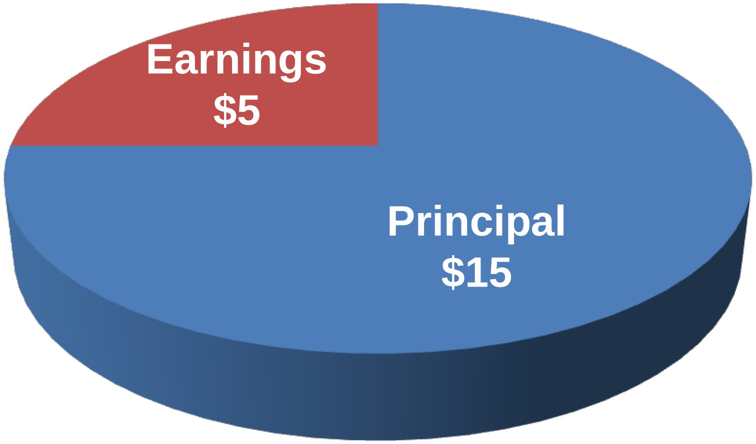
ERA allocation



In rare circumstances (e.g., 2009) ERA can decline

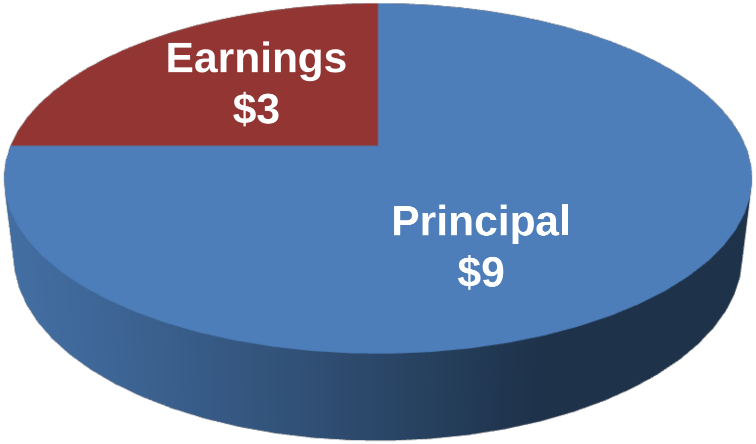
Principal vs. Earnings Reserve

- The Fund buys an investment for $20
  - Earnings reserve reflects 25% of total fund
  - $20 investment was funded with
    - $15 of principal
    - $5 of earnings



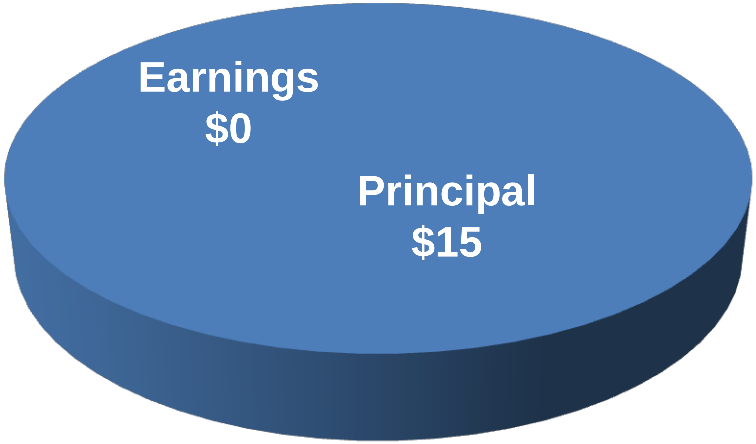
Capital Depreciation

- The value drops from $20 to $12
  - principal investment is valued at $9, reflecting unrealized loss of $6
  - Earnings investment is valued at $3, reflecting unrealized loss of $2
- Should APFC sell or hold?



Realizing Losses

- Assume we conclude it is prudent to sell the investment for $12
  - $12 is returned to principal from sale proceeds
  - $3 is moved to principal from earnings reserve
  - Leaving earnings reserve with a loss of $8
- Note: with a long-term time investment horizon, this activity is rare (example-2009)



Statutory Net Income

Fiscal Year	Realized Net Income	Realized Return
2005	$1,754	6.30%
2006	$2,689	8.66%
2007	$3,428	9.96%
2008	$2,938	7.77%
2009	($2,475)	-7.86%
2010	$1,590	4.91%
2011	$2,143	5.96%
2012	$1,568	4.02%
2013	$2,927	6.97%
2014	$3,530	7.52%
2015	$2,907	5.67%

SB 26

- July 1, 2018: 5.25% of preceding 5 year average cap on appropriation from ERA.
- July 1, 2021: 5% of preceding 5 year average
- APFC to move funds from earnings reserve to the principle to offset inflation, based upon CPI.

The wonky problem: what if ERA goes to zero?

- $14B in 2018
- Withdraw $2.7B for POMV and $1B for inflation proofing.
- $10.3 before any realized earnings in 2019

- ??But what if fund had no realized earnings for 3 years, while inflation went to 6%? Remove $5.7B per year for 2 years and ERA is empty.

OK, but what's the real risk?

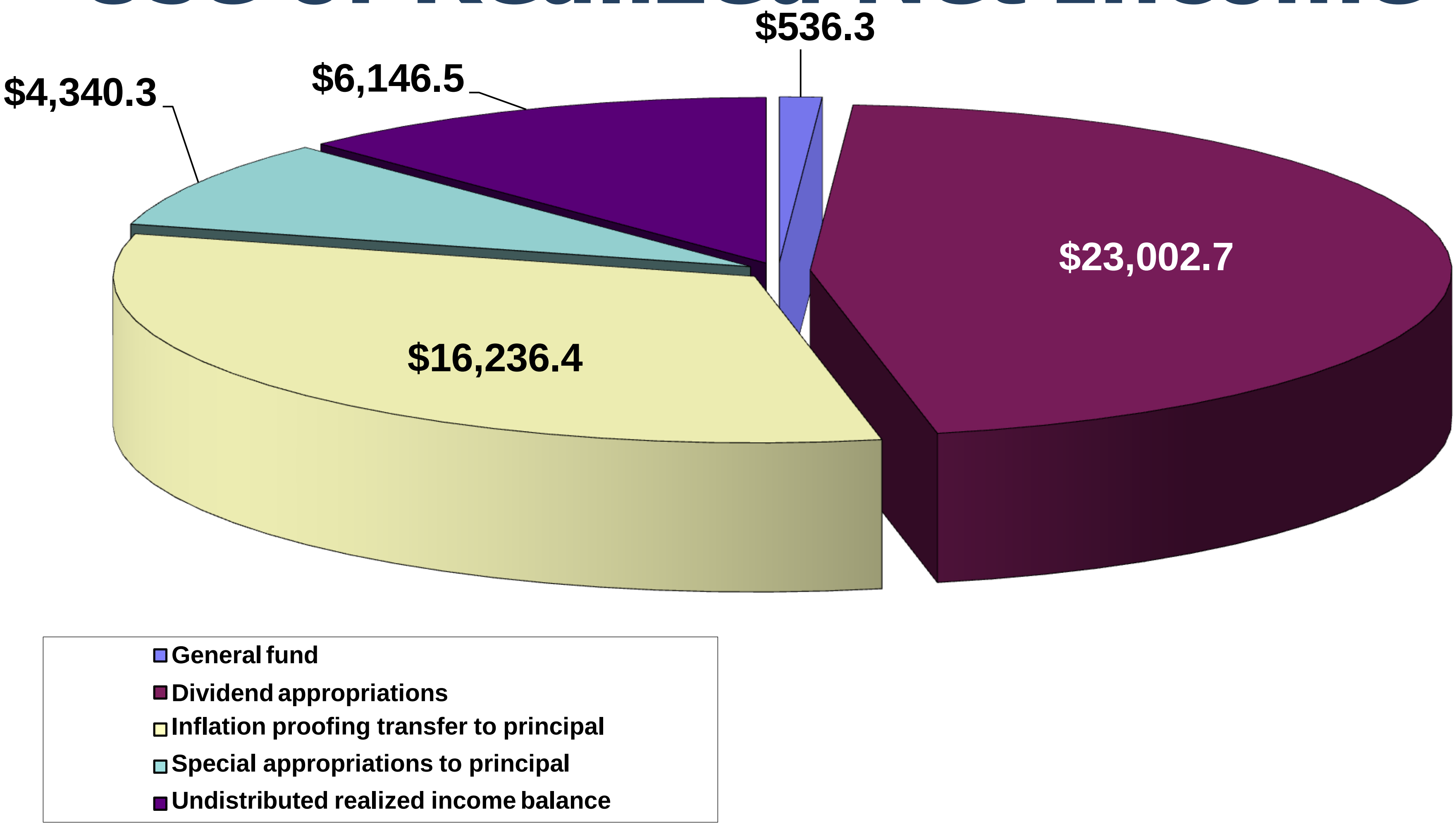
- Requires complicated simulation modelling. Results driven by assumptions.
- Bridgewater estimates to APFC at December 2017 meeting: 30% probability at 2.25% inflation for 5.25%/5% POMV
- Mouhcine Guettabi forthcoming estimates are a bit lower. Hard to compare.
- If inflation goes up, risk increases significantly.

Inflation proofing

- Provides a deposit back to corpus
- Maintains purchasing power of corpus
- Added $16.2 billion to corpus
- Based on value of corpus on June 30 and inflation rate for prior two calendar years

Fiscal Year	Transfer
2005	$641
2006	$856
2007	$860
2008	$808
2009	$1,144
2010	$0
2011	$533
2012	$1,073
2013	$743
2014	$546
2015	$624

Use of Realized Net Income



APFC 2001 POMV proposal

- Traditional endowment approach.
- Percent of value of PF transferred to government.
- Earnings in excess of that percent remain in principal.

- <u>But: </u> Do we really want to permanently tie hands of legislature? *E.g.,* another earthquake?

APFC concerns

- Liquidity Consideration:
  - Some APFC asset classes, like private equity, are illiquid, making a portion of the ERA illiquid
  - Yet all of the ERA is “available for appropriation”
- Volatility Consideration:
  - Permanent Fund and ERA are subject to ups and downs experienced by capital markets
  - Going forward, is a long-term time horizon for ERA workable?

Is 5% too high?

- 5% over 5 years is less than 5% if PF is increasing and more than 5% if PF is declining.
- 5% is required by federal statute of some endowments.
- Endowments not subject to minimum would likely be using 3.5% to 4.5%
- Inflation-proofing limits ERA and hence could cap distribution below 5%
- Depends upon how APFC realizes earnings.

POMV, even averaged, does not solve government revenue volatility problem

- Alaska survived 2014-2017 because of CBR.
- CBR is only $1.7 B and falling under current plan.
- Ideally, mechanism would put some of POMV in CBR when oil prices are high and pre-determined draw as oil prices fall.
- "Other revenue" would reduce volatility.
- Will PFD become de facto shock absorber?

SB 26 and $1600 PFD left state with $1B+ structural deficit.

- Gap of $700 million filled by CBR.
- Pension fund payments growing at ~$50m per year.
- Pension funding based on optimistic returns.
- Capital budget of more than $150-$250m required.

Other state assets

- Dedicated endowments: Mental Health Trust, Power Cost Equalization fund
- Pension funds, which are underfunded
- State infrastructure, which is depreciating as capital budgets are reduced
- Value of oil in ground and other natural resources.
- Human capital

My take-aways

- To say “POMV solved 80% of problem” seems optimistic.
- Current statutory arrangement is “clunky”, with small risk POMV cannot be paid. Inflation proofing a significant wild card.
- APFC 2001 would create “clean” POMV.
- POMV cannot be full answer to state revenue volatility. Role of CBR?
- PF needs to be part of integrated asset management plan.