



## DISCLAIMER

*Data in this presentation is based upon unaudited preliminary numbers from Northern Trust, Advisors, Bloomberg, MSCI Barra and other different market sources. Some of the performance data may not reconcile, since these reports are not all published on the same day and preliminary results change over time before being finalized.*

*Real Assets and Private Equity returns are reported on a lagged-quarter basis.*

# UNJSPF Diversification: Global & Complex

- The Fund is one of the most complex and globally diverse pension plans in the world.
- The Fund is well diversified across asset classes, geographic regions and currencies.
- The Fund is a leader in Environmental, Social, and Governance (ESG or SDG) investing.
- The Fund has investments in developed and developing (emerging markets and frontier) markets. As a per cent of total assets, the **Fund's** exposure to developing markets is greater than that of most other pension plans.

# UNJSPF's Guiding Criteria for Investments

- ▶ Safety
- ▶ Profitability
- ▶ Liquidity
- ▶ Convertibility

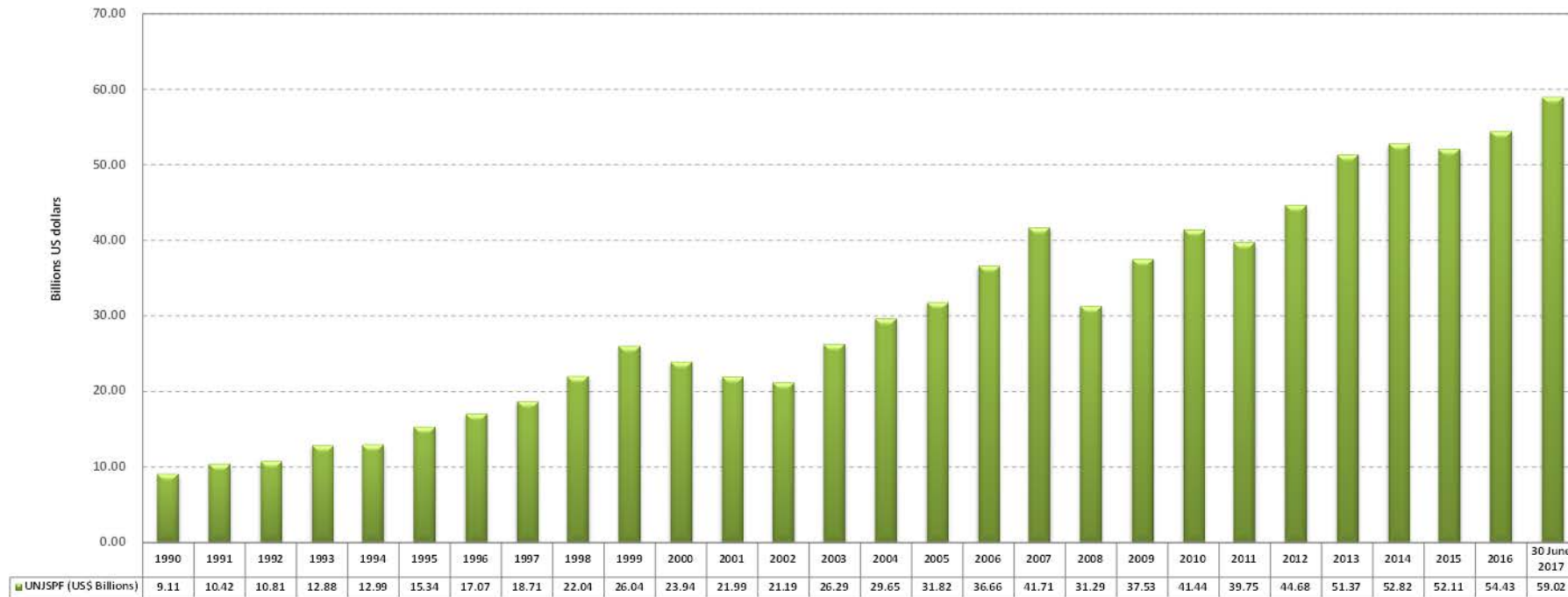
# Near term & Long term

- Near term
  - Market volatility continues to be a dominant theme across asset classes due to Central Bank actions and geopolitical uncertainty. During 2016, for example, there were material changes in oil prices and certain currency valuations.
  - The **Fund's** policy benchmark serves as a near term guide post to track the **Fund's** performance relative to its long term performance objective.
- Long term
  - The Fund is well positioned relative to its primary investment objective, which is to meet or exceed a real rate of return of 3.5 per cent over the long term.

# Record Highs

- ▶ The Fund achieved a record high in 2017.
- ▶ **The Fund's Market Value of Assets (MVA) exceeded USD 60 billion for the first time on 18 July 2017.**
- ▶ **As at 20 July 2017, the Fund's MVA was USD 60,458,486,430.**
- ▶ This represented a nominal year to date return of 11.19 per cent for 2017.
- ▶ Adjusted for inflation, as measured by U.S. CPI, which is currently approximately 2 per cent, **the Fund's year to date real rate of return for 2017 is approximately 9 per cent.**
- ▶ **When the 2017 results are combined with the Fund's 3.1 real rate of return for 2016, this represents a real return average of approximately 6 per cent per year.**
- ▶ As depicted on the next chart, strong investment performance has resulted in **growth in the Fund's MVA over the long term.**
- ▶ The benefit is secure.

# Market Value of Assets for each calendar year end 1990-2016 and the first half of 2017

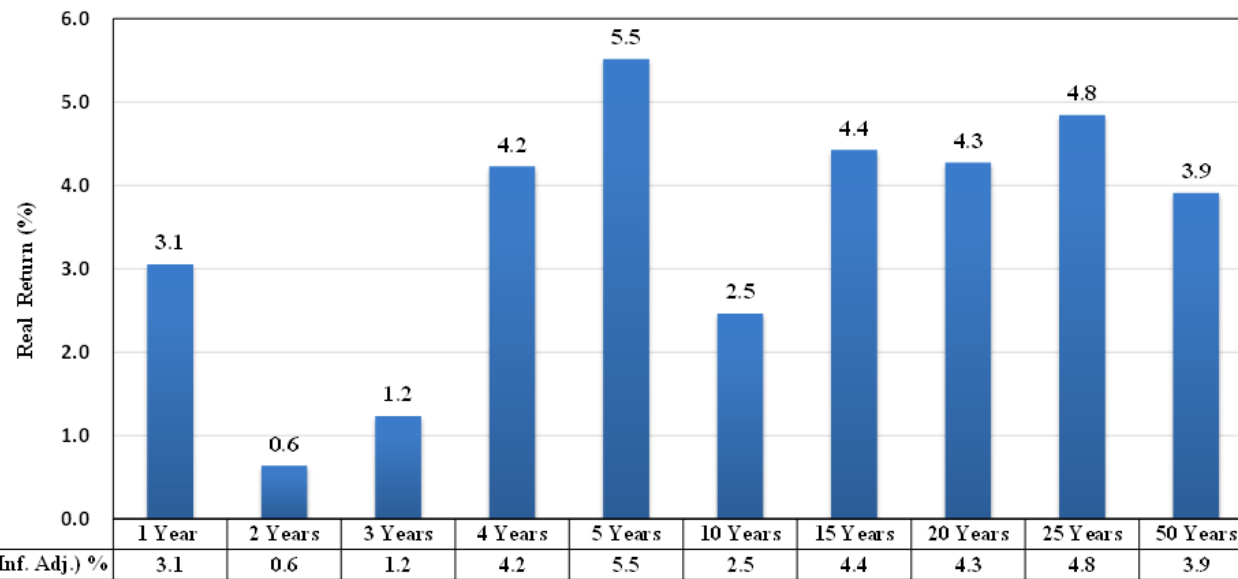


# 3.5% Real Rate of Return Objective

- ▶ The **Fund's primary objective is to meet or exceed a real rate of return of 3.5 per cent over the long term. The 3.5 per cent real rate of return is the Fund's most important investment objective**, as this is the rate of return needed over the long term to ensure the fully funded status of the Fund.
- ▶ The **Fund's real rate of return is calculated by adjusting the Fund's nominal return for inflation**, as measured by U.S. CPI. For example, if inflation is 2 per cent for a given year, the Fund would need to generate a nominal return of approximately 5.5 per cent in order to achieve a real return of 3.5 per cent.
- ▶ The Fund generated performance which exceeded the 3.5 per cent real rate of return objective in 14 out of the past 22 calendar years.
- ▶ On average, the Fund generated performance which exceeded the 3.5 per cent real rate of return objective over the past 5, 15, 20, 25, and 50 years.

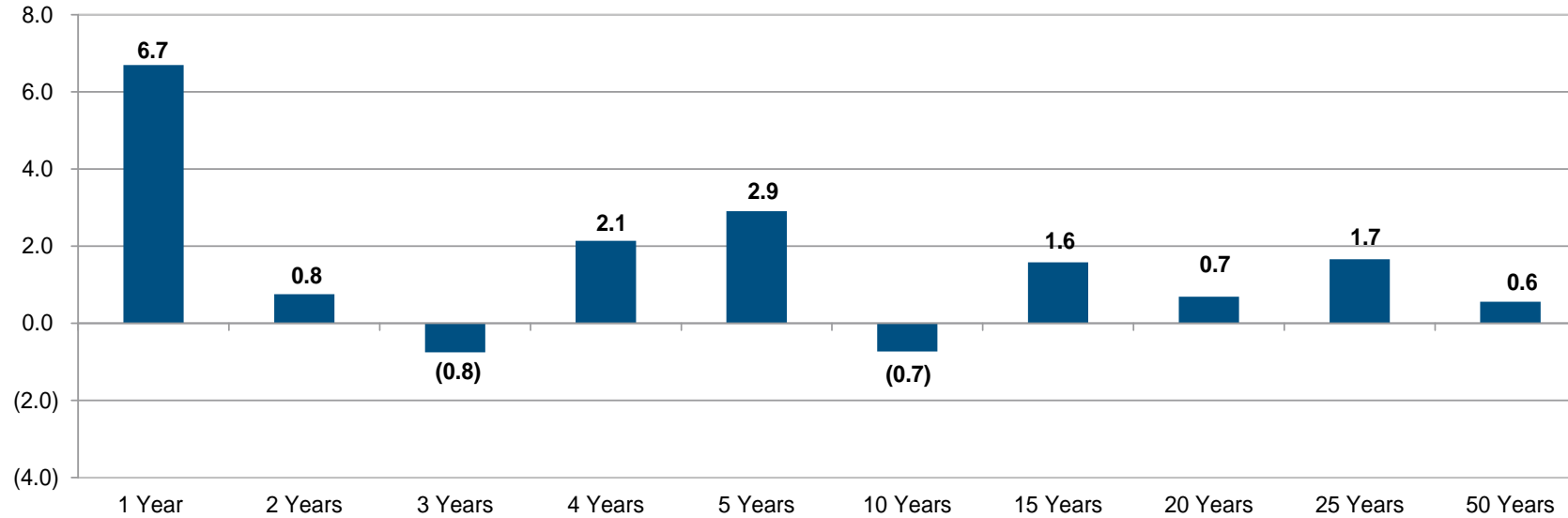


# UNJSPF Nominal and Real Returns as at 31 December 2016



	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years	20 Years	25 Years	50 Years
<b>UN Nominal Return %</b>	5.2	2.0	2.4	5.6	6.9	4.3	6.6	6.5	7.2	8.2
<b>US CPI</b>	2.1	1.4	1.2	1.3	1.4	1.8	2.1	2.1	2.3	4.1
<b>UN Real Return (Inf. Adj.) %</b>	3.1	0.6	1.2	4.2	5.5	2.5	4.4	4.3	4.8	3.9
<b>Excess Return (3.5%)</b>	(0.4)	(2.9)	(2.3)	0.7	2.0	(1.0)	0.9	0.8	1.3	0.4

**UNJSPF Real Return excess of 3.5 % Long-term Investment Objective  
through 30 June 2017**



	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years	20 Years	25 Years	50 Years
<b>UN Nominal Return %</b>	12.0	5.6	3.7	6.9	7.8	4.4	7.3	6.4	7.5	8.3
<b>US CPI</b>	1.6	1.3	0.9	1.2	1.3	1.6	2.1	2.1	2.3	4.1
<b>UN Real Return (Inf. Adj.) %</b>	10.2	4.3	2.7	5.6	6.4	2.8	5.1	4.2	5.2	4.1
<b>Excess Return (3.5%)</b>	6.7	0.8	(0.8)	2.1	2.9	(0.7)	1.6	0.7	1.7	0.6

(from MRK, the Inflation adjusted returns are geometric differences of Nominal returns and US CPI and numbers are rounded off to single decimal point)

Source: Independent MRK - Northern Trust

# Policy Benchmark

- ▶ The **Fund's** nominal performance is compared to the **Fund's** policy benchmark. The policy benchmark is a weighted average of the target weighting and benchmark for each asset class.
- ▶ The policy benchmark represents the return that the Fund would achieve if it were fully indexed and rebalanced daily. In periods when the **Fund's** nominal performance exceeds the policy benchmark, active management is contributing favourably to the performance of the Fund and vice versa.
- ▶ A review of results over the past 22 years shows that the Fund outperformed its policy benchmark in 12 of the past 22 calendar years, and on average, the Fund generated performance which exceeded the policy benchmark over the past 22 calendar years.

# 2016 Performance vs. Policy Benchmark

- ▶ For the calendar year (CY) 2016, the Fund achieved a nominal return of 5.19 per cent, trailing the policy benchmark return of 6.90 per cent by 1.71 per cent or 171 basis points.
- ▶ This is due to the fact that 2016 was a year which favoured indexation over active management.
- ▶ The **Fund is actively managed, and most of the Fund's portfolios** performed in line with similar funds in the eVestment universe during 2016.
- ▶ The components of performance versus the policy benchmark are identified on the next chart, which provides attribution for the period. The main drivers were security selection in public equities, relatively short duration in fixed income, and a negative yield environment in the cash and short-term market.

# Attribution of Returns vs. Policy Benchmark as at 31 December 2016

	1Q16	2Q16	3Q16	4Q16	1 Yr.	3 Yrs.	5 Yrs.	10 Yrs.
<b>Total Fund Performance*</b>	1.12	1.07	3.50	(0.56)	5.19	2.43	6.94	4.31
UN Policy Benchmark Performance *	2.13	1.73	3.85	(0.92)	6.90	3.13	6.89	4.21
<b>Relative Performance</b>	<b>(1.01)</b>	<b>(0.66)</b>	<b>(0.36)</b>	<b>0.37</b>	<b>(1.71)</b>	<b>(0.69)</b>	<b>0.05</b>	<b>0.10</b>
<b>Equity Impact Restrictions</b>								
Tobacco	(0.08)	(0.05)	0.09	0.05	0.00	(0.06)	(0.01)	(0.06)
Armaments	(0.00)	(0.02)	0.04	(0.05)	(0.04)	(0.03)	(0.07)	(0.04)
<b>Equity Restrictions Total Impact</b>	<b>(0.08)</b>	<b>(0.07)</b>	<b>0.13</b>	<b>(0.01)</b>	<b>(0.04)</b>	<b>(0.10)</b>	<b>(0.08)</b>	<b>(0.10)</b>
<b>Total Fund Net Relative Performance</b>	<b>(0.93)</b>	<b>(0.59)</b>	<b>(0.48)</b>	<b>0.38</b>	<b>(1.67)</b>	<b>(0.60)</b>	<b>0.14</b>	<b>0.20</b>
<b>Total Attribution by Asset Class</b>								
Public Equity	(0.55)	(0.09)	(0.12)	0.21	(0.55)	(0.08)	0.03	0.23
Equity Restrictions (Tobacco and Armaments)**	0.08	0.07	(0.13)	0.01	0.04	0.10	0.08	0.10
<b>Net Public Equity</b>	<b>(0.47)</b>	<b>(0.02)</b>	<b>(0.24)</b>	<b>0.22</b>	<b>(0.51)</b>	<b>0.02</b>	<b>0.11</b>	<b>0.33</b>
Fixed Income	(0.49)	(0.52)	(0.00)	0.24	(0.80)	(0.30)	0.20	(0.06)
Real Assets <sup>1</sup>	0.06	0.00	0.02	(0.14)	(0.07)	(0.23)	(0.17)	(0.14)
Alternative Investments <sup>1</sup>	0.06	0.00	(0.13)	0.01	(0.06)	0.02	(0.03)	(0.02)
Cash & Short Term	(0.10)	(0.07)	(0.12)	0.04	(0.25)	(0.17)	(0.00)	0.07
<b>Net Relative**</b>	<b>(0.94)</b>	<b>(0.60)</b>	<b>(0.48)</b>	<b>0.37</b>	<b>(1.70)</b>	<b>(0.66)</b>	<b>0.11</b>	<b>0.19</b>
Tactical Asset Allocation	(0.21)	(0.18)	(0.03)	0.09	(0.34)	(0.17)	0.23	0.25
Selection	(0.81)	(0.50)	(0.32)	0.27	(1.40)	(0.54)	(0.20)	(0.16)
Residual	0.01	0.02	0.00	0.00	0.03	0.02	0.02	0.01
Restriction	0.08	0.07	(0.13)	0.01	0.04	0.10	0.08	0.10
<b>Total Attribution***</b>	<b>(0.93)</b>	<b>(0.59)</b>	<b>(0.48)</b>	<b>0.38</b>	<b>(1.67)</b>	<b>(0.60)</b>	<b>0.14</b>	<b>0.20</b>
<b>Currency Contribution****</b>								
Fund Currency Contribution	1.64	(0.30)	0.22	(2.80)	(1.30)	(3.34)	(2.37)	(0.96)
UN Policy Benchmark Currency Contribution	1.86	(0.04)	0.28	(3.09)	(1.08)	(3.36)	(2.59)	(0.70)
<b>Net Currency Contribution</b>	<b>(0.23)</b>	<b>(0.26)</b>	<b>(0.06)</b>	<b>0.29</b>	<b>(0.22)</b>	<b>0.01</b>	<b>0.22</b>	<b>(0.26)</b>

Source : Independent MRK, Northern Trust

<sup>1</sup> Note: The risk and performance dashboard is for Total Fund attribution. For Total Fund attribution, NT applies a cash flow adjusted valuation methodology for private equity and real estate to roll up individual asset class returns to the Total Fund, using Time Weighted Returns (TWR) methodology. We strongly recommend not to use Total Fund attribution to gauge the performance of Alternative Investments (private equity) and Real Assets (real estate).

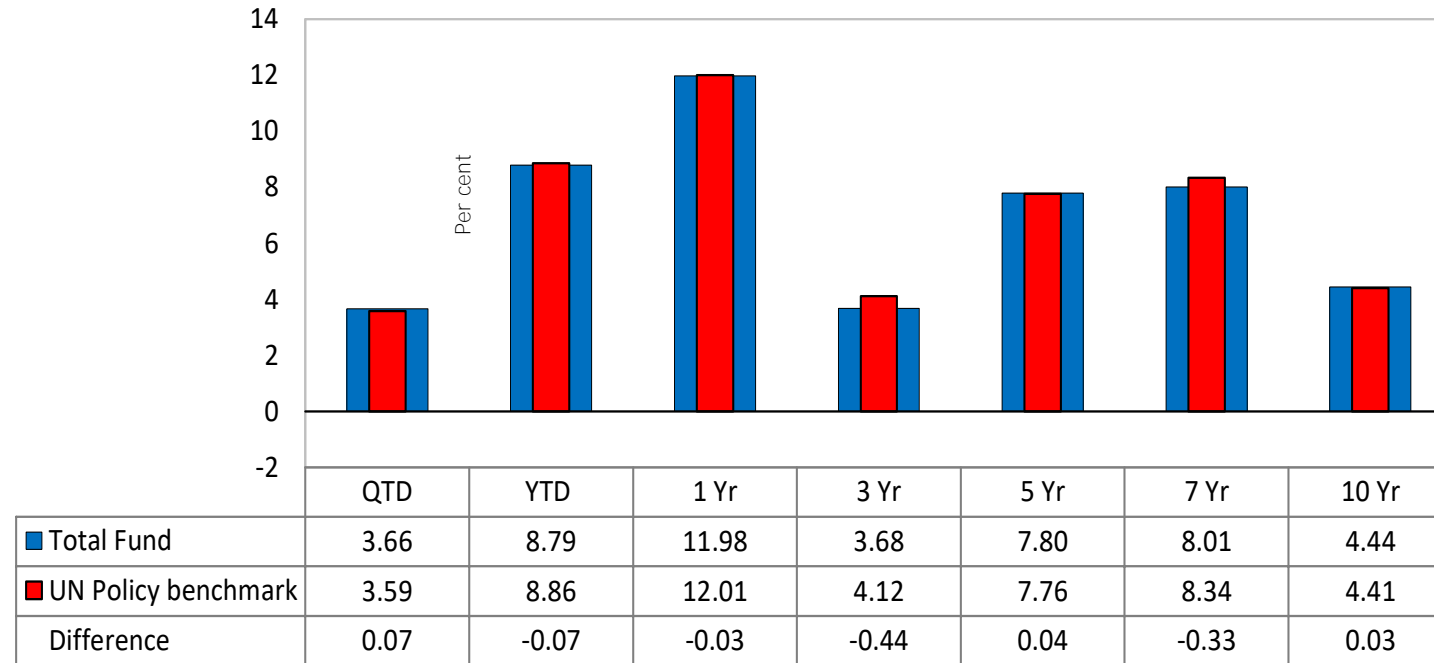
\*The Fund's returns are *final* for the year 2016.

\*\* Equity restrictions is the impact of not investing in Tobacco and Armaments.

\*\*\* This does not include the residual.

\*\*\*\* The currency contribution returns shown are the arithmetic difference between base returns in USD and local currency returns.

PERFORMANCE VERSUS POLICY BENCHMARK  
30 JUNE 2017



Source: Independent MRK - Northern Trust

Note: Numbers shown above are the Fund's preliminary performance numbers from the independent Master Record Keeper. As of 2Q 2017, the UN Policy benchmark return does not include the NCREIF ODCE benchmark return.

# 22 Year Historic Performance Report

- ▶ The 22 Year Historic Performance Report was developed to help analyse the **Fund's cumulative returns**.
- ▶ Returns are time period dependent, and cumulative data does not show the underlying data for each and every year.
- ▶ Cumulative data represents a snapshot in time, and the start and end dates for cumulative data change each year.
- ▶ For example, ten-year cumulative return results as of 31 December 2016 include the financial crisis of 2008, and this difficult period will not be included in the ten-year results as of 31 December 2017.

# 22 Year Historic Performance Report

- ▶ The Fund generated performance which exceeded that of the 3.5 per cent real rate of return objective in 14 out of the past 22 calendar years.
- ▶ The Fund outperformed its policy benchmark in 12 of the past 22 calendar years.
- ▶ The Fund only met or exceeded both of its return targets in the same year in 7 of the past 22 calendar years (32 per cent of the time).
- ▶ For example, some years such as 2008 and 2011 were worse relative to the policy benchmark and/or the 3.5 per cent real rate of return targets. Instead of focusing on the results of an individual year, it is important to observe the long-term results, particularly the long-term results relative to the 3.5 per cent real rate of return objective.
- ▶ On average, the Fund exceeded both its policy benchmark and the 3.5 per cent real rate of return objective over the past 22 calendar years.
- ▶ In summary, the Fund has generated strong performance over the long-term, **which is in line with the Fund's strategic objectives.**



LONG-TERM PERFORMANCE  
1995 – 2016

Calendar Year	UNJSPF Annual Return (CY) %	UN Policy Benchmark Return (CY) %	Relative Performance %	US CPI	Real Return %	In Excess of 3.5%	MVA (Billions USD)	Change YoY	%	
1995	18.4	20.5	-2.1	2.5	15.9	12.4	15.3	-	-	
1996	12.1	10.2	1.8	3.3	8.8	5.3	17.1	1.7	11.3	
1997	10.0	11.3	-1.3	1.7	8.3	4.8	18.7	1.6	9.6	
1998	18.6	19.1	-0.5	1.6	17.0	13.5	22.0	3.3	17.8	
1999	19.9	14.6	5.2	2.7	17.2	13.7	26.0	4.0	18.2	
2000	-6.2	-6.7	0.5	3.4	-9.6	-13.1	23.9	-2.1	-8.1	
2001	-8.4	-8.5	0.1	1.6	-10.0	-13.5	22.0	-2.0	-8.2	
2002	-2.9	-6.5	3.7	2.4	-5.3	-8.8	21.2	-0.8	-3.6	
2003	24.8	25.0	-0.2	1.9	22.9	19.4	26.3	5.1	24.1	
2004	13.7	13.2	0.5	3.3	10.4	6.9	29.7	3.4	12.8	
2005	7.5	6.6	0.9	3.4	4.0	0.5	31.8	2.2	7.3	
2006	15.9	16.0	-0.1	2.5	13.4	9.9	36.7	4.8	15.2	
2007	13.9	11.4	2.5	4.1	9.8	6.3	41.7	5.1	13.8	
2008	-24.9	-26.3	1.5	0.1	-25.0	-28.5	31.3	-10.4	-25.0	
2009	20.2	20.6	-0.4	2.7	17.5	14.0	37.5	6.2	20.0	
2010	10.3	10.9	-0.6	1.5	8.8	5.3	41.4	3.9	10.4	
2011	-3.9	-1.4	-2.6	3.0	-6.9	-10.4	39.7	-1.7	-4.1	
2012	12.7	12.1	0.6	1.7	10.9	7.4	44.7	4.9	12.4	
2013	15.5	13.5	2.0	1.5	14.0	10.5	51.4	6.7	15.0	
2014	3.2	3.7	-0.5	0.8	2.5	-1.0	52.8	1.5	2.8	
2015	-1.0	-1.1	0.1	0.7	-1.7	-5.2	52.1	-0.7	-1.3	
2016	5.2	6.9	-1.7	2.1	3.1	-0.4	54.4	2.3	4.4	
<b>Statistics</b>										
<b>Average</b>	7.9	7.5	0.4	2.2	5.7	2.2		1.9	6.9	
<b>Median</b>	11.2	11.1	0.1	2.2	8.8	5.3		2.3	10.4	
<b>Standard Deviation</b>	11.9	12.0	1.8	1.0	11.5	11.5		3.9	11.8	
<b>MAX</b>	24.8	25.0	5.2	4.1	22.9	19.4		6.7	24.1	
<b>MIN</b>	-24.9	-26.3	-2.6	0.1	-25.0	-28.5		-10.4	-25.0	
<b>Positive</b>	16	16	12		16	14			15.0	
<b>Negative</b>	6	6	10		6	8			6.0	
<b>Positive %</b>	73%	73%	55%		73%	64%			71%	
<b>Negative %</b>	27%	27%	45%		27%	36%			29%	
<b>Accumulation MVA from CY 1995 to CY 2016 (in Billions USD):</b>							<b>39.09</b>			
<b>Average per annum (in Billions USD):</b>							<b>1.9</b>			
<b>Source: Independent MRK - Northern Trust</b>										
<b>Outperforming both relative and real in the same year:</b>							<b>7</b>	<b>32%</b>		

# Asset Allocation

- The **Fund's** Strategic Asset Allocation (SAA) is comprised of target weightings for each asset class and ranges for the weightings of each asset class.
- The SAA target weightings for each asset class are intended to enable the Fund to achieve the 3.5 per cent real return target over the long term.
- The **Fund's** Tactical Asset Allocation (TAA), as defined in the **Fund's** Investment Policy Statement (IPS), is a set of ranges for each asset class which is more narrow than the SAA ranges.
- The TAA ranges are reviewed with the Investments Committee (IC) on a quarterly basis, and the RSG signs a Summary of Decisions (SOD) document on a quarterly basis to reflect this. The SOD is included as an Annex to the IPS, and it is attached to the minutes for each IC meeting.

# Tactical Asset Allocation (TAA)

- In the current environment, the **Fund's** TAA is being maintained close to the **Fund's** SAA target weightings for each asset class in order to limit risk.
- The Fund is being rebalanced to stay within the TAA ranges, as the equity market has rallied.
- The allocation to global equities exceeds the 58 per cent target. This is because it takes time to build the allocations for real estate and private equity. In combination, those two categories are 4 per cent underweight relative to target, so the adjusted target for equity is 62 per cent. Therefore, the current 63 per cent weighting for equity is relatively close to target.
- The allocation to global fixed income as of 31 December 2016 was 22.8 per cent, and this underweight position relative to the fixed income target weighting of 26.5 per cent is being maintained due to the low yield environment.
- The allocation to the cash and short-term asset class is overweight relative to the target of 1.5 per cent, and this overweight is intended to serve as dry powder which will be invested in global fixed income when yields rise to more attractive levels.

# Adjustments to Limit Risk

- ▶ The Investments Committee was actively engaged during 2016, seeking input on the challenging environment
- ▶ Consensus was to reduce risk in efficient markets, and this was done as follows:
  - ▶ Duration neutral position in fixed income
  - ▶ New fixed income limits for currency and duration
  - ▶ Reduced overweight to U.S. equities, and reduced active risk in US equity by increasing the number of holdings at benchmark weight
  - ▶ Increased weighting in European equities and Global Emerging Market equities to be closer to ACWI benchmark regional weightings
- ▶ The results have been favourable, as returns in 2017 are tracking the policy benchmark closely and exceeding the 3.5 per cent real rate of return

As of 30 June 2017:		YTD nominal return 8.80%		Market Value of Assets US\$ 59,015,436,202		
Asset Classes	SAA <sup>1</sup>			TAA <sup>2</sup>		Actual 30 June 2017
	Minimum	Target	Maximum	Near-Term Minimum	Near-Term Maximum	
Global Equities <sup>3</sup>	50%	58%	69%	52%	64%	62.97%
Real Assets <sup>4</sup>	3%	9%	10%	4%	10%	6.79%
Alternative Investments <sup>5</sup>	0%	5%	10%	2%	8%	3.07%
Global Fixed Income	19%	26.5%	37%	22%	31%	22.47%
Cash & Short-term	0%	1.5%	6%	0%	6%	4.71%
<b>Total</b>		<b>100%</b>				<b>100%</b>

<sup>[1]</sup> SAA or Strategic Asset Allocation represents long-term asset allocation targets and ranges effective 1 August 2015, based on the 2015 ALM study.

<sup>[2]</sup> TAA or Tactical Asset Allocation represents near-term asset allocation ranges.

<sup>[3]</sup> Global Equities include Public Equity (including REITs), Minimum Volatility Equity and Green Equity strategies.

<sup>[4]</sup> Real Assets include Real Estate, Infrastructure, and Timberland.

<sup>[5]</sup> Alternative Investments include Private Equity and a modest allocation to Real Return Funds.

Source: Preliminary numbers from the independent Master Record Keeper, Northern Trust. Note: Numbers may not total to 100 due to rounding.

# Fund Currency Contribution

The Strength of the US Dollar had a negative contribution to returns for 2014, 2015, and 2016. The trend reversed in the first half of 2017. Over the long term, currency tends to have a minimal impact on returns.

UNJSPF - INVESTMENT MANAGEMENT DIVISION		PERFORMANCE DASHBOARD					
FUND PERFORMANCE		30 June 2017					
	2Q17	1Q17	YTD	1 Yr.	3 Yrs.	5 Yrs.	10 Yrs.
<b>Total Fund Performance*</b>	3.68	4.96	8.81	12.00	3.68	7.80	4.44
UN Policy Benchmark Performance *	3.59	5.09	8.86	12.01	4.12	7.76	4.41
<b>Relative Performance</b>	<b>0.09</b>	<b>(0.13)</b>	<b>(0.04)</b>	<b>(0.01)</b>	<b>(0.43)</b>	<b>0.05</b>	<b>0.03</b>
<b>Currency Contribution****</b>							
Fund Currency Contribution	1.27	1.16	2.52	(0.25)	(2.75)	(1.77)	(0.82)
UN Policy Benchmark Currency Contribution	1.27	1.18	2.54	(0.50)	(2.80)	(1.94)	(0.54)
Net Currency Contribution	(0.00)	(0.02)	(0.02)	0.25	0.05	0.17	(0.28)

Source : Independent MRK, Northern Trust

# Progress since 2016

- ▶ Senior Vacancies filled
- ▶ Succession plan developed and implemented
- ▶ Anti-Fraud and Anti-Corruption policy adopted
- ▶ Investment Policy Statement updated
- ▶ Risk budget updated
- ▶ Target Operating Model consultant (Cutter Associates) engaged
- ▶ ICT strategy underway
- ▶ New Trade Order Management System (Bloomberg AIM) implemented

# Progress since 2016

- ▶ Currency study underway
- ▶ External manager policy adopted
- ▶ Several new risk and performance attribution reports developed and implemented including new fixed income limits for currency and duration. Similar limits are **being developed to manage active risk in the Fund's equity portfolios.**
- ▶ The Fund is a leader in Environmental, Social and Governance (ESG) investing. The Fund received high marks in 2016 from PRI for ESG awareness and from Asset Owners Disclosure Project (AODP) for climate change disclosure reporting.
- ▶ **The Fund's investments in developing markets (emerging and frontier markets) continue to be increased. The Fund's commitment to investments in developing markets exceeds that of most other large pension funds.**



# ESG

- ▶ ESG stands for Environmental, Social and Governance. This is the investment version of SDG or Sustainable Development Goals.
- ▶ Objective: Enhance the ways in which ESG (particularly climate change) investments may be measured and/or managed.
- ▶ The Fund received high marks from Principles for Responsible Investing (PRI).
- ▶ The Fund received rankings of AA in 2017 and AAA in 2017 from Asset Owners Disclosure Project (AODP).
- ▶ AODP measures climate disclosure reporting, while PRI has a broader ESG focus.

# Diversification

- ▶ Goal: Comply with the mandate from the General Assembly to continue to diversify geographically in developed, developing and emerging markets, wherever this serves the interests of the participants and the beneficiaries of the Fund, taking fully into account the four main criteria of safety, profitability, liquidity and convertibility.
- ▶ 2016 Results: Investments in developing countries were increased by 6.2 per cent during 2016. The book value (cost) of investments in developing countries increased from USD 5.857 billion as of 31 December 2015 to USD 6.221 billion as of 31 December 2016.

# Summary

- ▶ A conservative approach.
- ▶ 2016 was a year of capital appreciation in a challenging time.
- ▶ The Fund grew by USD 2.318 billion during 2016.
- ▶ Furthermore, the Fund is USD 6 billion higher than it was at the end of 2016.
- ▶ This is, indeed, good news.
- ▶ The benefit is secure.