

QUARTERLY REPORT



OFFICES OF THE COUNTY EXECUTIVE

Isiah Leggett
County Executive

Timothy L. Firestine
Chief Administrative Officer

May 18, 2018

Members of the Montgomery County Council

I am pleased to present to you the Quarterly Report of the Montgomery County Employees' Retirement System ("ERS") for the quarter ended March 31, 2018. This quarterly report is designed to assist you in understanding the current status of the ERS. This report was prepared pursuant to the provisions of the Montgomery County Code.

History

The Employees' Retirement System was established in 1965 as a cost-sharing multiple-employer defined benefit pension plan providing benefits to the employees of Montgomery County and other agencies or political subdivisions who elect to participate. The System is closed to employees hired on or after October 1, 1994, except public safety bargaining unit employees and employees who elect to participate in the Guaranteed Retirement Income Plan ("GRIP"). There were approximately 5,760 ERS and GRIP active members and 6,700 retirees participating in the ERS as of December 31, 2017.

Performance Results

The total return achieved by the ERS' assets for the quarter was a loss of 0.16%, 92 basis points ahead of the 1.08% loss recorded by the policy benchmark. For the one-year period ending March 31, 2018 the ERS' gross return (before fees) was a gain of 10.24%, 245 basis points ahead of the 7.79% gain recorded by the policy benchmark. The one-year gross return places the ERS' performance slightly below median of the universe of comparable pension funds constructed by the Board's consultant, Wilshire Associates. Our annualized performance of 6.64% for the three-year period and 7.91% for the five-year period ranked in the third quartile. The annualized return for the ten-year period was 7.34% and ranks in the top decile of Wilshire's Large Public Funds Universe. The asset allocation on March 31, 2018 was: Domestic Equities 18.9%, International Equities 15.6%, Global Equities 3.2%, Fixed Income 22.1%, Inflation Linked Bonds 12.0%, Public Real Assets 10.2%, Private Equity 7.7%, Private Real Assets 4.8%, Private Debt 1.2%, Opportunistic 3.1%, and Cash 1.2%. We estimate that the funded status of the ERS was 96.0% as of March 31, 2018. The actual funded status will be affected by the ERS' membership experience, as well as demographic and economic changes and may be higher or lower when calculated by the actuary during the next valuation.

Major Initiatives

During the quarter, the following commitments were made: \$17 million to Whitehorse Liquidity Partners II, LP, a secondary focused private debt fund, \$15.5 million to Juniper Capital III, LP, a U.S. upstream exploration and production private real assets manager, and \$8 million to Senator Global Opportunity Fund, LP, a multi-strategy hedge fund.

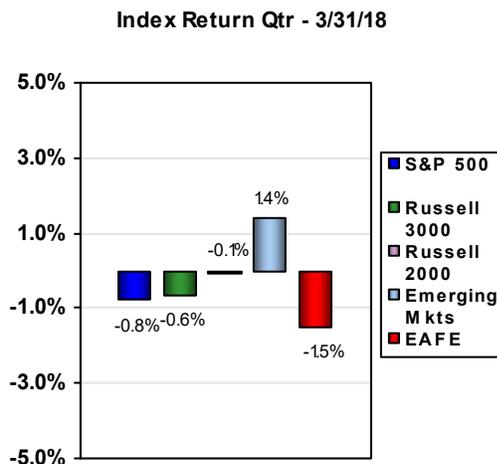
QUARTERLY REPORT

Capital Markets and Economic Conditions

Economic data reflected that GDP increased at an annualized rate of 2.3% in the first quarter of 2018, exceeding market expectations of 2.0%. Consumer spending was disappointing for the quarter, growing 1.1%, which represents the slowest pace in five years. Most analysts believe the slowdown in consumer spending to be temporary and due to seasonal factors and predict that the economy will rebound in Q2 as tax cuts take hold and the strong job market continues to positively impact incomes. The economy added 635,000 jobs during the quarter, a slight decrease from Q4's 647,000 gain. The U.S. unemployment rate held steady at 4.1%, which is a 17-year low. Q1 inflation was in line with expectations as CPI increased 2.4% year-over-year. This level of inflation was the highest rate in a year, primarily driven by housing and automobile prices. The housing market continues to show strength as new housing starts averaged 1.32M in Q1 relative to 1.25M in Q4 and 1.24M in Q1 of 2017. However, housing starts are still 50% below their levels seen before the bursting of the housing bubble in 2007.

Public Equity Markets: Following several quarters of gains, equity markets took a pause in Q1 and finished down slightly as investors worried about the impact of rising interest rates as well as trade concerns. U.S. equities began the year with a continuation of the low volatility, strong performing characteristics of 2017. However, volatility spiked significantly in February as investors became spooked by inflation fears as well as the potential impact of U.S.-China trade sanctions. The VIX, a measure of equity market volatility,

experienced one of its largest weekly spikes since the global financial crisis in early February. The only two sectors in the S&P 500 to finish in positive territory for the quarter were Information Technology and Consumer Discretionary. The worst performing sectors were the commodity-oriented sectors of Energy and Materials as well as the higher yielding sectors of Consumer Staples, Real Estate, Utilities, and Telecom. During the quarter, large cap underperformed small and growth outperformed value. Our combined domestic equity performance was a gain of 0.30%, outperforming the 0.64% loss of the Russell 3000 Index. The outperformance was driven by strong active management within the large cap and small cap growth sectors.



Much like the fourth quarter of 2017, emerging market equities outperformed developed market equities in Q1. Within developed markets, Asia significantly outperformed Europe as Japan performed well while many European markets sold off due to concerns over increasing U.S. interest rates and concerns over the outlook of global trade. The U.K. was the worst performing major market as the Pound Sterling increased following expectations that the Bank of England may lift interest rates quicker than anticipated. The commodity-oriented sectors of Energy and Materials underperformed in a similar fashion to their U.S. counterparts, while the Utilities, Information Technology, and Consumer Discretionary sectors performed well. Emerging market equities continued to rally with strength in three of the sector's largest countries, Brazil, Russia, and China. Brazilian equities returned over 12% due to news that former president Lula da Silva saw his criminal conviction upheld, increasing the chances that he would not be permitted to participate in the upcoming presidential election. Russian equities recorded a 9% gain despite the weakness in commodities as the country's central bank cut interest rates. India was the notable underperformer within emerging markets, due to concerns of fraud at a state-owned bank. Our combined international equity performance was a loss of 0.29%, outperforming the 1.09% loss recorded by the benchmark index. Our global equity allocation recorded a loss of 0.28%, outperforming the 0.96% loss of the MSCI ACWI Index.

Private Equity: 180 PE funds reached a final close securing \$80 billion globally in Q1, which was the lowest amount of capital raised in the first quarter of any years since 2015. Q1 saw the lowest number of funds closed in a five-year period with capital remaining concentrated among the top managers (59% of capital raised was secured by the 10 largest funds). Out of the 180 funds, 82% achieved or exceeded their target size. 30% fewer North American-focused funds closed in Q1 2018 than Q1 2017. Deal activity was down 10% while aggregate deal was 49% higher versus the previous quarter due to increased competition and higher ticket prices in the industry. Deal value in North America grew by 185% with two mega deals affecting the growth: the merger of Keurig and Dr. Pepper (\$21B), and the takeover of the Financial and

QUARTERLY REPORT

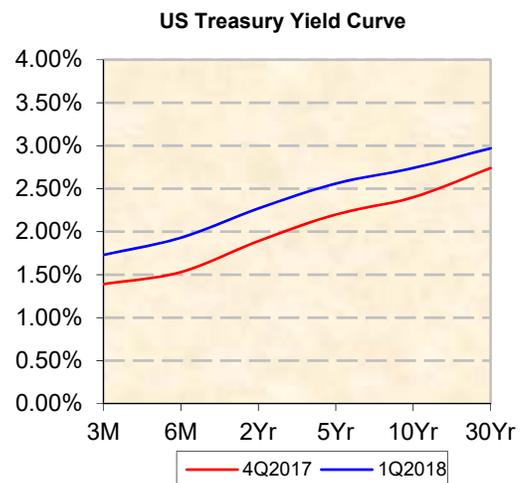
Risk Business of Thomson Reuters (\$17B). Europe saw a 30% increasing deal activity while the number of deals in Asia declined 34% from Q1 2017. Exit activity declined 15% from the prior quarter with 354 PE backed buyouts exits in aggregate, representing the lowest quarterly number of exits since 2010. Meanwhile, dry powder levels reached \$1.09 trillion due to the strong fundraising and challenging deal environment.

Venture capital fundraising in Q1 2018 accounted for 14% of aggregate PE capital raised, although this marked a significant decline in the amount of capital raised and number of funds closed compared to prior years. 3,269 venture capital financings were announced globally during the quarter, which accounted for an 11% increase from the previous quarter. The aggregate deal value was up 57% from one year ago, recording the highest quarterly figure for Q1 since 2007. North America venture capital deals accounted for 35% of deals globally in Q1 2018, followed by China-based deals.

During the quarter, our private equity managers called a combined \$16.0 million and paid distributions of \$13.8 million. Our current allocation to private equity is 7.74%, with a market value of \$314.7 million. From its 2003 inception through September 30, 2017, the total private equity program (including fund-of-funds) has generated a net internal rate of return of 9.8% versus a 12.3% return for the dollar-weighted public market equivalent (the Russell 3000 Index plus 300 bps). The direct private equity program generated a 18.1% return versus 17.1% for the benchmark since inception (2009).

Opportunistic: Hedge funds, as measured by the HFRI Fund of Funds Composite Index, gained 1.90% in the first quarter. On a sub-strategy basis, the HFRI Event-Driven Index rose 2.01%, the HFRI Relative Value Index gained 1.63%, the HFRI Equity Hedge Index advanced 2.34%, and the HFRI Macro Index was down 0.24%. The Diversifying hedge fund portfolio returned 2.71% versus a 0.56% return for the HFRI Fund of Funds Conservative Index and the Directional hedge fund portfolio returned .08% during the quarter versus a 0.37% return for the HFRI Fund of Funds Strategic Index.

Fixed Income: The yield curve flattened slightly during the quarter as short-term bond yields increased more than long-term yields. The increase in shorter-term yields is attributed to the transition away from years of accommodative monetary policy by the Fed. After dropping to levels unseen since the late 1990's, both investment-grade and high-yield credit spreads increased for the quarter. The yield on the 30-year bond increased by 24 bps during the quarter and ended the period at 2.98%. The spread between 2-year and 10-year Treasuries, the main gauge of the yield curve, tightened by 4bps to 47bps, the tightest level since the last time the yield curve inverted in 2007. For the quarter, the 2-year Treasury yield ended at 2.27%, up 38 bps from the prior period, while the 10-year Treasury yield rose by 34 bps to 2.74%. For the quarter, the Merrill Lynch High Yield II Constrained Index was down 0.91%, the Barclays Aggregate was down 1.46%, and the Barclays Long Govt/Credit index recorded a loss of 3.58%.



The high yield portfolio's performance for the quarter was a loss of 0.49%, outperforming the 0.91% loss of the Merrill Lynch High Yield II Constrained Index and the long duration portfolio's performance for the quarter was a loss of 3.64%, underperforming the 3.58% loss posted by the Barclays Long Govt/Credit Index. Our global inflation-linked bond portfolio, combined with a portable alpha overlay, recorded a gain of 1.2%, outperforming the custom benchmark's loss of 0.70%.

Private Debt: Private debt fundraising in the first quarter slowed from 2017's pacing level, as 19 funds reached a final close, securing a total of \$14 billion in capital commitments. European focused funds were the primary driver behind the capital raising slowdown, as those vehicles secured only \$3.5 billion for the quarter versus \$8.6 billion in Q1 2017. Direct lending funds also contributed to the decrease in fundraising, as just seven vehicles reached a final close during the quarter. Dry power in the sector, a measure of how much capital is available to be invested, stayed constant from Q4 2017, and now stands at \$235 billion as of the end of March. During the quarter, our private debt managers called a combined \$2.8 million and paid distributions of \$1.6 million. Our current allocation to private debt is 1.17%, with a market value of \$47.7 million. From inception through September 30, 2017, the private debt program generated a net internal

QUARTERLY REPORT

rate of return of 10.5% versus a 9.9% return for the dollar-weighted public market equivalent benchmark (BoFA Merrill Lynch High Yield Master II Constrained + 300 bps).

Private Real Assets: The NCREIF Property Index (NPI), a measure of private commercial real estate properties in the U.S., gained 1.7% in the first quarter 2018, down slightly from 1.8% last quarter. The total return consisted of a 1.1% income return and 0.6% capital appreciation. While occupancy levels are strong and remain close to their 16-year high, at 93.5%, rental rates and Net Operating Income (NOI) declined 3.3% and 2.5%, respectively for the quarter. If rent and NOI continue to decline, this could put pressure on returns, especially if cap rates increase. Cap rates slightly declined for the quarter, but there could be upward pressure if interest rates continue to rise. The Industrial sector continued to be the stellar performer with a 3.3% return in the first quarter. Industrial real estate is benefiting from the secular online shopping trend which is creating increased demand for last mile warehouse space and hurting many traditional retailers. The other major property sectors, office, apartments and retail returned 1.8%, 1.5% and 0.7% respectively. Within the U.S. oil and gas sector, the number of deals rose year-over-year while the aggregate volume of deals declined. Operators are favoring smaller deals with a focus on capital discipline and positive returns on invested capital. The Permian continues to dominate deal flow; however, deal flow in the Niobrara and Eagle Ford are picking up. During the quarter, our private real assets managers called a combined \$10.6 million and paid distributions of \$15.8 million. Our current allocation to private real assets is 4.8%, with a market value of \$195.7 million. From its 2006 inception through September 30, 2017, the private real assets program (including fund-of-funds) has generated a net internal rate of return of 5.6% versus a 6.6% gain for the long-term benchmark CPI plus 500 bps. Underperformance is primarily due to real estate commitments prior to the financial crisis of 2008 and a private oil and gas fund in 2010.

Public Real Assets: The Bloomberg Commodity Index declined 0.4% as gains in the energy and grain sectors were offset by losses in softs, livestock and industrial metals. Oil prices continued to rally on strong global demand and declining production. Grain prices rallied on adverse weather conditions in major producing regions. Drought in Argentina threatened corn and soy exports and dryness in the U.S. raised concern for the U.S. wheat crop. Sugar and coffee declined as benign weather led to a global surplus. Livestock prices declined on concerns that a potential trade war with China may limit U.S. pork exports. In addition, industrial metal prices fell due to rising global trade tensions.

Quarterly Commodity Performance



Global listed real estate securities as measured by the FTSE EPRA/NAREIT Developed Index declined by 4.5%, led by weakness in Australia, the Netherlands, U.K. and the U.S. The major macro theme driving the declines was rising global bond yields. REITs tend to lag at the beginning of a period of rising interest rates, but then pick up due to strengthening demand. In the U.S., the most interest rate sensitive sectors such as Healthcare and Diversified experienced the steepest declines. Shopping Centers and Regional Malls also gave back some of their M&A premium gains from late 2017 due to increased volatility and ecommerce concerns. Within Europe, Netherlands and U.K, underperformed due to their exposure to the retail and office markets respectively. In contrast, Spain outperformed due to improving real estate property demand driving rental growth, particularly in the office and hotel segments. In Asia, Japanese REITs posted gains on improving investment sentiment and positive fund flows from regional banks. In contrast, Australian and Hong Kong real estate declined due to concerns that rising interest rates will slow growth.

Listed infrastructure decreased 5.3% for the quarter as measured by the Dow Jones Brookfield Global Infrastructure Index. The utilities sector was pressured by rising interest rates. European regulated utilities underperformed due to regulatory risks in the U.K. and Spain whereas Chinese gas utilities outperformed due to strong volume growth because of industrial strength and coal-to-gas switching. Energy infrastructure experienced the steepest declines driven by regulatory concerns as the Federal Energy Regulatory

QUARTERLY REPORT

Commission (FERC) announced unfavorable pricing structures for pipelines owned by Master Limited Partnerships (MLPs). The communication sector was the only sector to realize positive returns as cell tower companies continue to benefit from healthy leasing demand due to the buildout of 5G networks. The transportation sector declined with underperformance in the port sector and outperformance in the airport and toll road sectors.

For the quarter, the public real asset portfolio declined 2.89%, outperforming the custom benchmark by 101 bps due to outperformance by one commodity, REIT, and listed infrastructure manager.

Additions

The primary sources of additions for the ERS include contributions from members and employers and investment income. The following table displays the source and amount of additions for the quarter ending March 31, 2018 and fiscal year-to-date.

Employees' Retirement System Contributions and Investment Income (millions)

	Qtr 3/31/2018	Fiscal YTD
Employer Contributions	\$ 22.4	\$ 69.6
Member Contributions	7.0	21.6
Net Investment Gain/(Loss)	(11.5)	242.3
	<u>\$ 17.9</u>	<u>\$ 333.5</u>

Deductions

The deductions from the Employees' Retirement System include the payment of retiree and survivor benefits, participant refunds, and administrative expenses.

Employees' Retirement System Deductions by Type (millions)

	Qtr 3/31/2018	Fiscal YTD
Benefits	\$ 60.3	\$ 178.9
Refunds	1.9	3.8
Administrative Expenses	0.7	2.3
	<u>\$ 62.9</u>	<u>\$ 185.0</u>

Outlook

At the March policy meeting, the U.S. Federal Reserve ("Fed") voted to raise interest rates for the sixth time since the financial crisis in what was Jay Powell's first meeting as chairman. The Fed's benchmark interest rate is now targeted between a range of 1.50%-1.75%. This move was well telegraphed by the Fed and did not catch market participants by surprise. The Federal Open Market Committee (FOMC) noted in their post-meeting statement that the economic outlook has strengthened in recent months and hinted at the potential for a more aggressive policy stance moving forward. Going into the Fed's March meeting, the market was discounting three more hikes in 2018, at which point the Fed would be at a neutral rate. However, following the meeting, the market is now pricing in an additional rate hike in 2019. The Fed also revised their growth expectations upwards, as the 2018 growth projection increased from 2.5% to 2.7% and the 2018 projection increased from 2.1% to 2.4%.

The European Central Bank ("ECB") continued to leave its benchmark interest rate unchanged at 0%. The plan for monthly asset purchases for the ECB's quantitative easing program also remain unchanged as the

QUARTERLY REPORT

ECB will purchase €60 billion of assets each month until December of 2018. While ECB President Mario Draghi noted that the sense of urgency is easing for the European economy, he still insisted that a significant level of stimulus is needed. Much like their U.S. counterparts, the ECB also increased their inflation and growth expectations as the bank projects growth and inflation to reach 1.8% and 1.6% respectively. The Bank of England (“BOE”) left their benchmark rate unchanged at 0.50% but the vote was split, which opens up the potential for a rate hike in May. The March meeting for the Bank of Japan “BOJ” was largely uneventful as the BOJ left rates and the level of asset purchases unchanged.

Sources: BlackRock, Bloomberg, Bridgewater, Eagle, FRM, Gryphon, JP Morgan MSCI, NCREIF, Northern Trust, Oil & Gas Investor, PE Hub, Private Equity Analyst, Pitchbook, Preqin, PwC Deals, Real Capital Analytics, RE Alert, S&P Schroders, T. Rowe Price, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, Wilshire Associates.

QUARTERLY REPORT

EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF FIDUCIARY NET POSITION

March 31, 2018

Assets

Equity in pooled cash and investments	\$ 2,684,699
Investments:	
Northern Trust	4,068,615,905
Aetna	842,156
Fidelity - Elected Officials Plan	665,328
Fidelity - DRSP/DROP	10,416,530
Total investments	4,080,539,919
Contributions receivable	4,600,595
Total assets	4,087,825,213

Liabilities

Benefits payable and other liabilities	5,802,265
Net position restricted for pensions	\$ 4,082,022,948

QUARTERLY REPORT

EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

March 31, 2018

	Quarter	Fiscal YTD
Additions		
Contributions:		
Employer	\$ 22,477,823	\$ 69,585,043
Member	<u>7,040,863</u>	<u>21,633,076</u>
Total contributions	<u>29,518,686</u>	<u>91,218,119</u>
Investment income/(loss)	(6,399,589)	256,917,322
Less investment expenses	<u>5,156,950</u>	<u>14,592,020</u>
Net investment income/(loss)	<u>(11,556,539)</u>	<u>242,325,302</u>
Total additions	<u>17,962,147</u>	<u>333,543,421</u>
Deductions		
Retiree benefits	45,028,824	133,436,896
Disability benefits	12,795,839	38,176,153
Survivor benefits	2,473,479	7,332,260
Refunds	1,934,254	3,811,432
Administrative expenses	<u>667,185</u>	<u>2,269,143</u>
Total deductions	<u>62,899,581</u>	<u>185,025,884</u>
Net increase/(decrease)	<u>(44,937,434)</u>	<u>148,517,537</u>
Net position restricted for pensions		
Beginning of period	<u>4,126,960,382</u>	<u>3,933,505,411</u>
End of period	<u>\$ 4,082,022,948</u>	<u>\$ 4,082,022,948</u>