QUARTERLY REPORT

OFFICES OF THE COUNTY EXECUTIVE

Isiah Leggett
County Executive

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Chief Administrative Officer

March 15, 2019

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 December 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 6,126 ERS and GRIP active members and 6,299 retirees participating in the ERS as of December 31, 2018.

Performance Results

The total return achieved by the ERS' assets for the quarter was a loss of 5.23%, 14 basis points ahead of the 5.37% loss recorded by the policy benchmark. For the one-year period ending December 31, 2018 the ERS' gross return (before fees) was a loss of 1.44%, 195 basis points ahead of the 3.39% loss recorded by the policy benchmark. The one-year gross return places the ERS' performance near the first quartile of the universe of comparable pension funds constructed by the Board's consultant, Wilshire Associates. Our annualized performance of 7.67% for the three-year period and 6.06% for the five-year period ranks in the top quartile. The annualized return for the ten-year period was 9.64% and ranks at the top decile of Wilshire's Large Public Funds Universe. The asset allocation on December 31, 2018 was: Domestic Equities 14.6%, International Equities 12.4%, Global Equities 2.7%, Fixed Income 23.0%, Inflation Linked Bonds 12.9%, Public Real Assets 12.8%, Private Equity 9.6%, Private Real Assets 5.3%, Private Debt 1.8%, Opportunistic 3.4%, and Cash 1.5%. We estimate that the funded status of the ERS was 94.7% as of December 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.

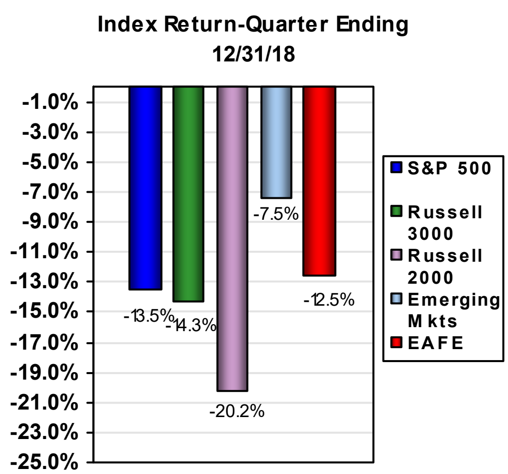
Major Initiatives

During the quarter, the following commitments were made: $9.5 million to Lyme Forest Fund V, L.P., a private real asset fund.

Capital Markets and Economic Conditions

Economic data reflected that GDP increased at an annualized rate of 2.6% in the fourth quarter of 2018, outpacing market expectations of 2.4%. Consumer spending, which accounts for over two thirds of the U.S. economy, advanced at a 2.8% rate while non-residential business investment posted a strong gain of 6.2%. GDP for the calendar year 2018 advanced at a rate of 3.1%, which is the highest level of economic growth since 2005. The biggest detractors to growth during the quarter were slowing government spending and weakening residential fixed investment. Net exports were also a drag as imports rose at a faster pace than exports, although the trade war had a negative impact on both imports and exports. The economy added 695,000 jobs during the quarter, an increase from Q3's 569,000 gain. The U.S. unemployment rate increased by 0.2% to 3.9% primarily due to an increase in people entering the labor force in search of jobs. The unemployment rate began the quarter at 3.7%, which represented a 47-year low. Q4 inflation was below expectations as the Consumer Price Index increased 1.9% year-over-year due to a sharp slowdown in energy prices, which brought the inflation measure below 2.0% for the first time since 2017. The housing market continued its slump as new housing starts dropped 13% due to affordability concerns given the increase in interest rates as well as continued labor shortages in the construction sector.

Public Equity Markets: Domestic equity markets declined strongly during the quarter on concerns of an economic slowdown due to the additional rate increases by the Fed. Further, the uncertainty about the outcome of U.S. China trade negotiation also weighed on the markets. The market decline marked the worst quarter for U.S. equities since 2011 and the first down year since the financial crises in 2008. Value stocks outperformed growth stocks and large cap stocks outperformed small cap stocks. Within the S&P 500 sectors, energy, industrials, and IT declined strongly while utility stocks, due to their defensive tilt appeal, advanced slightly. Our combined domestic equity performance was a loss of 16.07%, underperforming the 14.30% loss of the Russell 3000 Index. Active management was additive in the small cap space but negative in the large cap space.



International developed markets performed slightly better than their domestic counterparts. Europe underperformed Asia with Austria and Belgium posting strong losses. In Asia, Hong Kong was the best performing market. In terms of sectors, energy, IT, and materials performed the worst while utilities and real estate declined the least. In Europe, the uncertainty surrounding Brexit and the ongoing global trade tensions impacted investor sentiment. Emerging markets outperformed developed markets, but still posted a meaningful loss. China continued to be the main focus within emerging markets due to the U.S. China trade war concerns. Within emerging markets, Pakistan declined the most while Brazil and Indonesia posted strong results. Our combined international equity performance was a loss of 13.51%, underperforming the 11.77% loss recorded by the benchmark. However, our global equity allocation recorded a loss of 11.43%, outperforming the 12.75% loss of the MSCI ACWI Index.

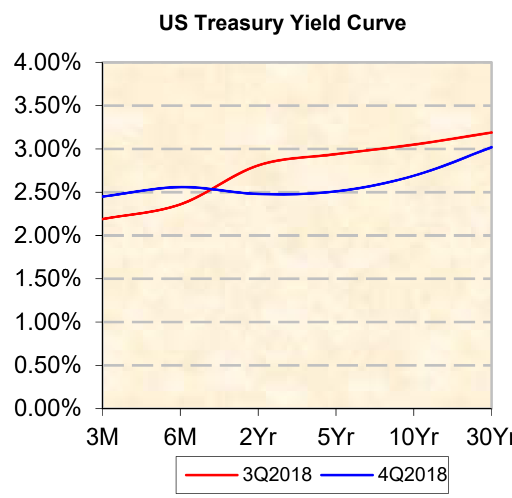
Private Equity: The fundraising market slowed in 2018 with a total of 1,175 funds closing on $426 billion throughout the year, down from 2017 which saw 1,670 funds close on $566 billion. Funds of $1 billion or greater in size secured $264, or 62% of total fund raising, with the 10 largest funds accounting for almost a quarter of the total capital raised. In 2018, 639 funds closed with a focus on North America and raised $240 billion, while 196 funds with a focus on Europe raised $90 billion, and 250 funds with a focus on Asia raised $196 billion. The average fund size for 2018 was $363 million, surpassing the prior year's level of $339 million; this level is the highest since 2007 when the average fund size was $422 million. The number of global buyout deals in 2018 totaled 5,106, the highest number ever recorded, for an aggregated deal value of $465 billion, surpassing the 4,829 deals and $488 billion in 2017. Of the deals announced, 42% were add-on acquisitions, the largest proportion of any deal type. While the number of exits fell slightly from 1,977 in 2017 to 1,958 in 2018, the aggregated exit deal value increased from $297 billion to $326 billion. The largest deal in 2018 was the $21 billion acquisition of Keurig Dr. Pepper, Inc. in January. Three of the years' top ten buyout deals were announced in the fourth quarter and included the transactions of Johnson Controls' Power Solutions for $13.2 billion, ARRIS International for $7.4 billion, and Magneti Marelli for $6.2 billion. Dry powder continued to climb throughout 2018, reaching a record setting $1.2 trillion at year end.

U.S. based venture capital funds raised $47 billion in 2018 across 365 fund closings. Despite the second lowest deal total over the past seven years, a record high $98 billion in capital was deployed into venture backed companies across 5,223 deals. The number of U.S. based IPOs increased year over year, with 78 recorded in 2018 compared to the 60 in 2017. At the end of 2018 there are 892 U.S. based venture capital funds seeking to raise an aggregate $79 billion, a 37% increase from the $58 billion targeted from the same time period in the prior year.

During the quarter, our private equity managers called a combined $24.4 million and paid distributions of $30.2 million. Our current allocation to private equity is 10.05%, with a market value of $372.8 million. From its 2003 inception through September 30, 2018, the total private equity program (including fund-of-funds) has generated a net internal rate of return of 11.0% versus a 12.9% return for the dollar-weighted public market equivalent (the Russell 3000 Index plus 300 bps). The direct private equity program, which began in 2009, generated a 21.1% return versus 17.8% for the benchmark.

Opportunistic: Hedge funds, as measured by the HFRI Fund of Funds Composite Index, finished down 3.54% in the fourth quarter. On a sub-strategy basis, the HFRI Event-Driven Index declined 2.30%, the HFRI Relative Value Index lost 1.38%, the HFRI Equity Hedge Index fell 5.33%, and the HFRI Macro Index also declined 2.55%. During the fourth quarter, the System's Diversifying hedge fund portfolio returned a loss of 1.95% versus a 1.97% decline for the HFRI Fund of Funds Conservative Index, and the System's Directional hedge fund portfolio returned a loss of 1.55%, outperforming the 4.81% decline by the HFRI Fund of Funds Strategic Index.

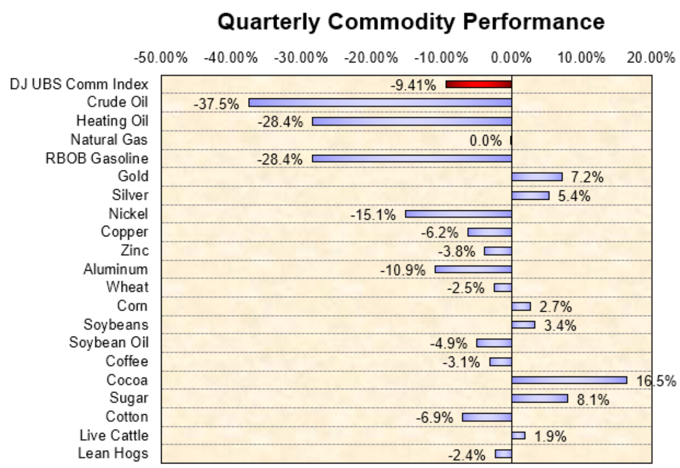
Fixed Income: The yield curve moved significantly flattening further over the quarter, with the curve inverting (i.e. yields on short maturity bonds were higher than longer maturity bonds) intra-quarter for the first time since 2007. An inverted yield curve is a widely watched indicator of a looming recession and could lead to the Fed slowing their rate of interest rate increases. The yield on the 30-year bond decreased by 17 bps during the quarter and ended the period at 3.02%. The spread between 2-year and 10-year Treasuries, the main gauge of the yield curve, continued to tighten by 3 bps to 21 bps. For the quarter, the 2-year Treasury yield ended at 2.48%, down 33 bps from the prior period, while the 10-year Treasury yield fell by 36 bps to 2.69%. The high yield portfolio's performance for the quarter was a loss of 4.75%, underperforming the Merrill Lynch High Yield II Constrained Index by 8 bps. The long duration portfolio's return for the quarter was a gain of 0.93%, outperforming the Barclays Long Govt/Credit Index by 15 bps. Our global inflation-linked bond portfolio, combined with a portable alpha overlay, recorded a gain of 4.17%, outperforming the custom benchmark's loss of 0.28%.



Private Debt: Private debt fundraising in the fourth quarter was a continuation of the trends seen in 2018 – aggregate direct lending and distressed debt capital raised was down significantly, while mezzanine fundraising activity saw substantial growth. Dry powder, or committed capital that has yet to be invested, continued to rise during the quarter and now stands at $280 billion as of the end of Q4. At the start of 2019, there were approximately 400 private debt funds in the market raising capital seeking a total of $168 billion from investors. During the quarter, our private debt managers called a combined $14.4 million and paid distributions of $3.4 million. Our current allocation to private debt is 1.85%, with a market value of $71.4 million. From 2013 through September 30, 2018, the private debt program generated a net internal rate of return of 10.2% versus a 7.9% return for the dollar-weighted public market equivalent benchmark (ICE 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 1.4% in the third quarter 2018, down from 1.7% last quarter. The total return consisted of a 1.1% income return and 0.3% capital appreciation. Occupancy came in at 94.0%, down slightly from the occupancy last quarter of 94.2%. Cap rates edged up slightly to 4.8% and NOI grew at 1.4%, slightly below rent growth of 1.5%. The industrial sector continued to be the stellar performer with a 3.4% return in the fourth quarter. The other major property sectors lagged with office, apartments and retail returning 1.7%, 1.4% and a negative 0.4% respectively. During the quarter, the U.S. achieved record crude oil production of 11.6 mb/d and natural gas liquids production of 4.8 mb/d. Q4 2018 saw a surplus in global oil due to strong supply growth from the U.S. and slowing demand growth. The U.S. is poised for strong crude oil production in 2019 due to a record backlog of 8,500 drilled by uncompleted wells. During the quarter, our private real assets managers called a combined $16.1 million and paid distributions of $10.0 million. Our current allocation to private real assets is 5.3%, with a market value of $205.7 million. From its 2006 inception through September 30, 2018, the total private real assets program (including fund-of-funds) has generated a net internal rate of return of 5.9% versus a 6.7% gain for the long-term benchmark CPI plus 500 bps. Excluding two large commitments prior to 2008, the private real assets program generated a 10.8% return versus the 6.7% return for the benchmark.

Public Real Assets: The Bloomberg Commodity Index decreased 9.4%, led by large declines in energy and industrial metals. Oil prices sold off sharply due to increased output from U.S., OPEC, and Russia, and waivers granted to importers of Iranian oil. This resulted in over supply fears which led to sharp declines in spot prices. Industrial metals fell due to slowing global economic growth concerns and the U.S. / China trade dispute. Precious metals prices rallied as worries over the U.S. government shutdown and severe decline in equity markets triggered safe-haven buying in gold and silver. Agriculture and livestock prices were mixed for the quarter. Corn advanced slightly on lower forecasted corn yields and inclement weather conditions that slowed harvest of the 2018 crop. Brazilian real currency appreciation led to a surge in sugar prices.



Global listed real estate securities as measured by the FTSE EPRA/NAREIT Developed Index declined by 6.0%, led by weakness in growth sectors such as Hotels, Data Centers, Office, and Shopping Centers. Within Asia, REITs in Japan had positive returns as Japan's defensive JREITs were a safe-haven. European returns across countries were mostly negative. French real estate securities were negatively impacted due to civil unrest. The lack of direction in the Brexit negotiations weighed on the U.K. listed real estate markets. U.S. REITs declined, led by sharp declines in growth sectors. Defensive sectors such as Net Lease, Health Care, and Storage had positive returns as interest rates declined.

Listed infrastructure declined by 5.9% for the quarter as measured by the Dow Jones Brookfield Global Infrastructure Index. There was wide dispersion among infrastructure sector returns with the leading detractors being: gas midstream, airports, and electricity transmission & distribution (T&D), and ports. The gas midstream sector was negatively impacted by poor sentiment and the precipitous decline in crude oil prices. The airports and ports sectors underperformed on concerns over tariffs and slowing global growth. The T&D sector was affected by company specific events at PG&E. The following sectors generated positive returns for the quarter: water, communications, toll roads and gas distribution utilities. These sectors benefited from both top down reasons given their perceived defensiveness as well as specific bottom up reasons. Brazilian water companies significantly outperformed due to the election of a pro-business leader and European tunnel operators benefited from additional equity financing from strategic partners.

For the quarter, the public real asset portfolio declined 8.18%, underperforming the custom benchmark by 34 bps due to underperformance by our commodities, REITs and MLP managers.

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 December 31, 2018 and fiscal year-to-date.

Employees' Retirement System
Contributions and Investment Income (millions)

	Qtr 12/31/2018	Fiscal YTD
Employer Contributions	$ 19.0	$ 44.4
Member Contributions	7.6	15.0
Net Investment Gain (Loss)	(225.4)	(165.6)
	$ (198.8)	$ (106.2)

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 12/31/2018	Fiscal YTD
Benefits	$ 65.3	$ 129.3
Refunds	1.9	3.6
Administrative Expenses	0.9	1.4
	$ 68.1	$ 134.3

Outlook

As anticipated by the markets, during the fourth quarter, the U.S. Federal Reserve ("the Fed") raised the benchmark interest rate an additional 25 bps to a range of 2.25% to 2.50%. While the Fed indicated that more interest rate hikes in the future would be necessary and appropriate, the central bank moderately softened their stance by forecasting only two rate increases in 2019 instead of the previously projected forecast of three. Fed officials also reaffirmed that they will continue to be data dependent when making future decisions on the level of interest rates. GDP is now estimated to grow 3% in 2018 and 2.3% in 2019, both targets reflecting slight reductions from estimates provided in the previous quarter.

The European Central Bank ("ECB") expects policy rates to remain at similar levels through at least the summer of 2019 and potentially longer if necessary to ensure that inflation levels remain close to the 2% target. While the ECB's intentions of how future interest rate hikes will be managed is unclear, it is anticipated that the increases will occur in increments of 10 bps. Prospects for a deal between the European Union and the UK continue to remain uncertain ahead of the March 2019 deadline. A "no deal" scenario could negatively impact the UK economy causing a combination of low growth, a currency decline, and high inflation. During the fourth quarter, the Bank of Japan ("BOJ") ruled out any near-term interest rate hikes and kept current monetary policy unchanged. Japanese officials remain ready to step in with further interest rate cuts or increased asset buying should the economy be hampered by current trade frictions with the U.S.

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.

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF FIDUCIARY NET POSITION

December 31, 2018

Assets		
Equity in pooled cash and investments	$	3,888,080
Investments:		
Northern Trust		3,899,510,943
Aetna		840,803
Fidelity - Elected Officials Plan		637,361
Fidelity - DRSP/DROP		9,157,966
Total investments		3,910,147,073
Contributions receivable		7,718,301
Total assets		3,921,753,454
Liabilities		
Benefits payable and other liabilities		12,970,349
Net position restricted for pensions	**$**	**3,908,783,105**

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

December 31, 2018

	Quarter	Fiscal YTD
Additions		
Contributions:		
Employer	$ 19,093,704	$ 44,430,064
Member	7,565,144	14,980,509
Total contributions	26,658,848	59,410,573
Investment income (loss)	(218,165,013)	(153,041,909)
Less investment expenses	7,281,790	12,536,918
Net investment income (loss)	(225,446,803)	(165,578,827)
Total additions (deductions)	(198,787,955)	(106,168,254)
Deductions		
Retiree benefits	49,440,172	97,369,337
Disability benefits	13,286,219	26,838,732
Survivor benefits	2,569,910	5,101,137
Refunds	1,950,071	3,560,379
Administrative expenses	873,154	1,486,497
Total deductions	68,119,526	134,356,082
Net increase (decrease)	**(266,907,481)**	**(240,524,336)**
Net position restricted for pensions		
Beginning of period	**4,175,690,586**	**4,149,307,441**
End of period	**$ 3,908,783,105**	**$ 3,908,783,105**