

STATE OF RHODE ISLAND

EMERGING MARKET DEBT

February, 2020



Will Forde, CFA, CAIA, Senior Consultant

Doug Moseley, Partner

Kevin Leonard, Partner



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

EXECUTIVE SUMMARY

NEPC, LLC —————

EMERGING MARKET DEBT PROCESS SUMMARY

- **As a reminder, the SIC approved a 2% allocation (~\$170M) to Emerging Market Debt at the December meeting**
 - Based on early feedback from the SIC the allocation to EMD is a blend of both hard and local currency and is benchmarked against the 50/50 index

		Current Target	Current Allocation
Income	Equity Options	2.0%	0.0%
	Liquid Credit	2.8%	3.6%
	EMD (Blended)	2.0%	0.0%
	HY Infrastructure	1%	1%
	REITs	1%	1%
	Private Credit	3.2%	2.0%
	TOTAL INCOME	12%	8%

- **Over the last several months, NEPC and Staff have conducted additional research to better inform how best to implement the blended allocation**
 - There are several different flavors of blended strategies and thus the performance of managers can vary considerably
- **As a result of this additional research, NEPC & Staff have invited Wellington Management to present to the SIC today**
 - Manages \$31B in dedicated EMD assets and \$4.8B specifically in the Blended Opp EMD strategy
 - While the Blended Opp EMD strategy inception dates back to 2009, Wellington has been managing assets in the space since the mid 90's



WHY WELLINGTON?

NEPC & the RI Investment team ultimately agreed upon Wellington as our recommendation to the SIC for several reasons

1. The implementation of their strategy is aligned with the blended view of the SIC

- Relative to peers, Wellington offers more of a balanced mix between hard and local currency bonds
- NEPC has a strong conviction in Wellington's broad expertise but particularly in the hard currency area given our 1-rating of their hard currency strategy

2. Active management is challenging in this space but Wellington has produced strong absolute and risk-adjusted numbers

- Wellington's trailing performance is strong relative to the benchmark and peers
- However, it is their risk-adjusted performance given their information ratio

3. Wellington is a well resourced firm which we think is critically important when investing in the Emerging Markets

- Risk management within the emerging markets is important and we believe Wellington leverages its resources to thoughtfully minimize drawdown and downside risk



WELLINGTON MANAGER SUMMARY

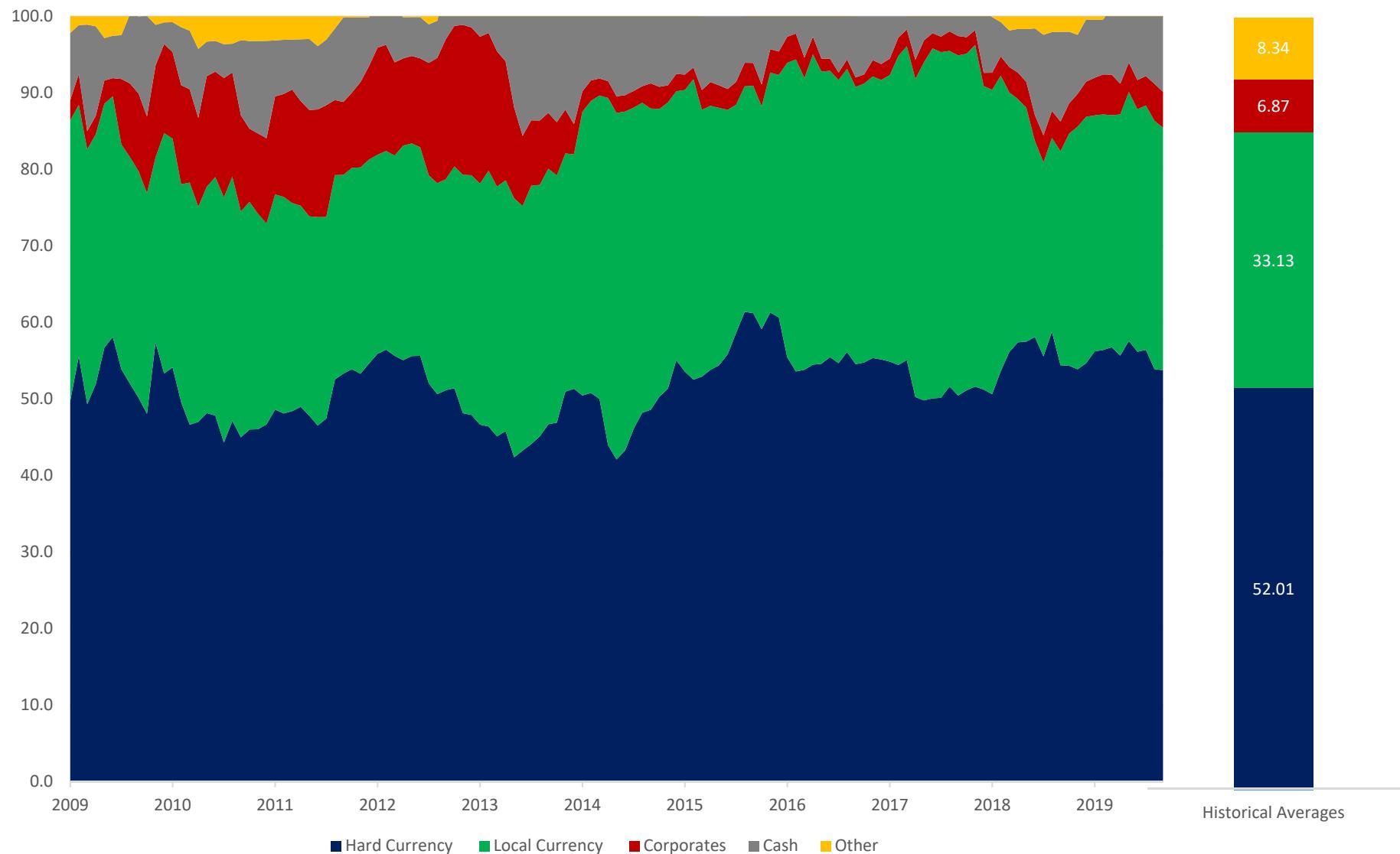
General Firm & Strategy Information		General Firm & Strategy Information	Fees
Firm Name	Wellington Management	Strategy Description	Fee
Strategy Name	Blended Opportunistic Emerging Market Debt		
Strategy AUM	\$4.8 Billion		
Strategy Inception Date	February 2009	Strategy Benchmark	<u>Standard Commingled Fee:</u> 55 bps
NEPC Product Rating	3 (Neutral)*		OPTION 1 <u>ERSRI Commingled Fee:</u> 50 bps flat
Representative List of Competitors	<ol style="list-style-type: none"> 1. Ashmore 2. BlackRock 3. Investec 4. Lazar 5. PGIM 6. PIMCO 7. Schroder 	Important Considerations	OPTION 2: <u>Performance Based Fee</u> 25 bps flat 20% incentive fee on net outperformance relative to benchmark

*Wellington is a 1-rated manager on NEPC's Hard Currency FPL

**The proposed performance based fee is net of management fee and operating expenses



HISTORICAL ALLOCATIONS



*Other includes Credit Default Index (EM/Non EM CDX) and supranationals.



As of November 2019

PERFORMANCE SUMMARY (GROSS OF FEE)

	1 Year	3 Years	5 Years	7 Years	10 Years
Wellington	17.28	8.34	5.95	3.68	6.47
50/50 Benchmark	14.31	6.92	4.57	2.27	4.86
Difference	2.97	1.42	1.38	1.41	1.61



As of December 2019

PEER GROUP PERFORMANCE (GROSS OF FEE)

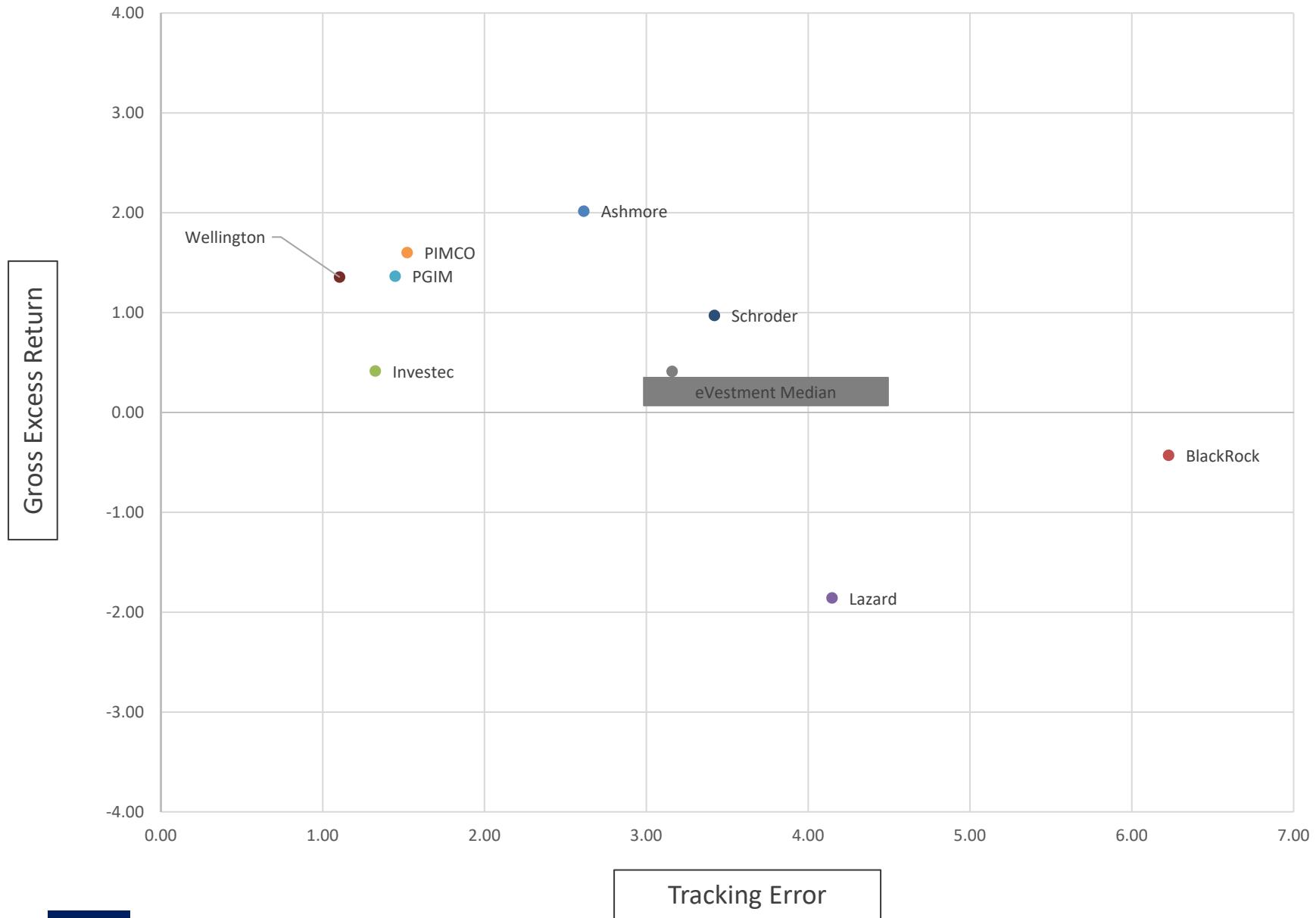
Firm Name	Strategy Name	1 Year	Rank (92)	3 Years	Rank (85)	5 Years	Rank (69)	10 Years	Rank (29)
Ashmore	EM Blended Debt Total Return Strategy	11.5	82	6.8	54	6.6	15	6.0	39
BlackRock	Fundamental Emerging Markets Flexi-Dynamic Bond	7.7	90	1.0	98	4.2	78	---	---
Investec	Emerging Markets Blended Debt	15.5	27	7.8	21	5.0	50	---	---
Lazard	Emerging Markets Debt Total Return	11.7	78	3.1	91	2.7	91	---	---
PGIM Fixed Income	Emerging Markets Debt - Hard/Local Currency Blend	16.8	13	8.2	14	6.0	31	6.3	32
PIMCO	Emerging Markets Blended Global Government Bond	16.6	14	8.2	11	6.2	25	6.1	36
Schroder	Emerging Markets Debt Relative Return	11.8	75	6.2	70	5.6	40	---	---
Wellington	Blended Opportunistic Emerging Markets Debt	17.3	5	8.3	9	6.0	32	6.5	25

50/50 Benchmark	14.3	49	6.9	45	4.6	61	4.9	64
Hard Currency Benchmark	15.0	32	6.7	55	6.2	23	6.9	17
Local Currency Benchmark	13.5	64	7.0	37	2.8	90	2.7	96



As of December 2019

PEER GROUP PERFORMANCE (5 YEAR)



Tracking Error

*Tracking error is relative to the 50/50 policy index

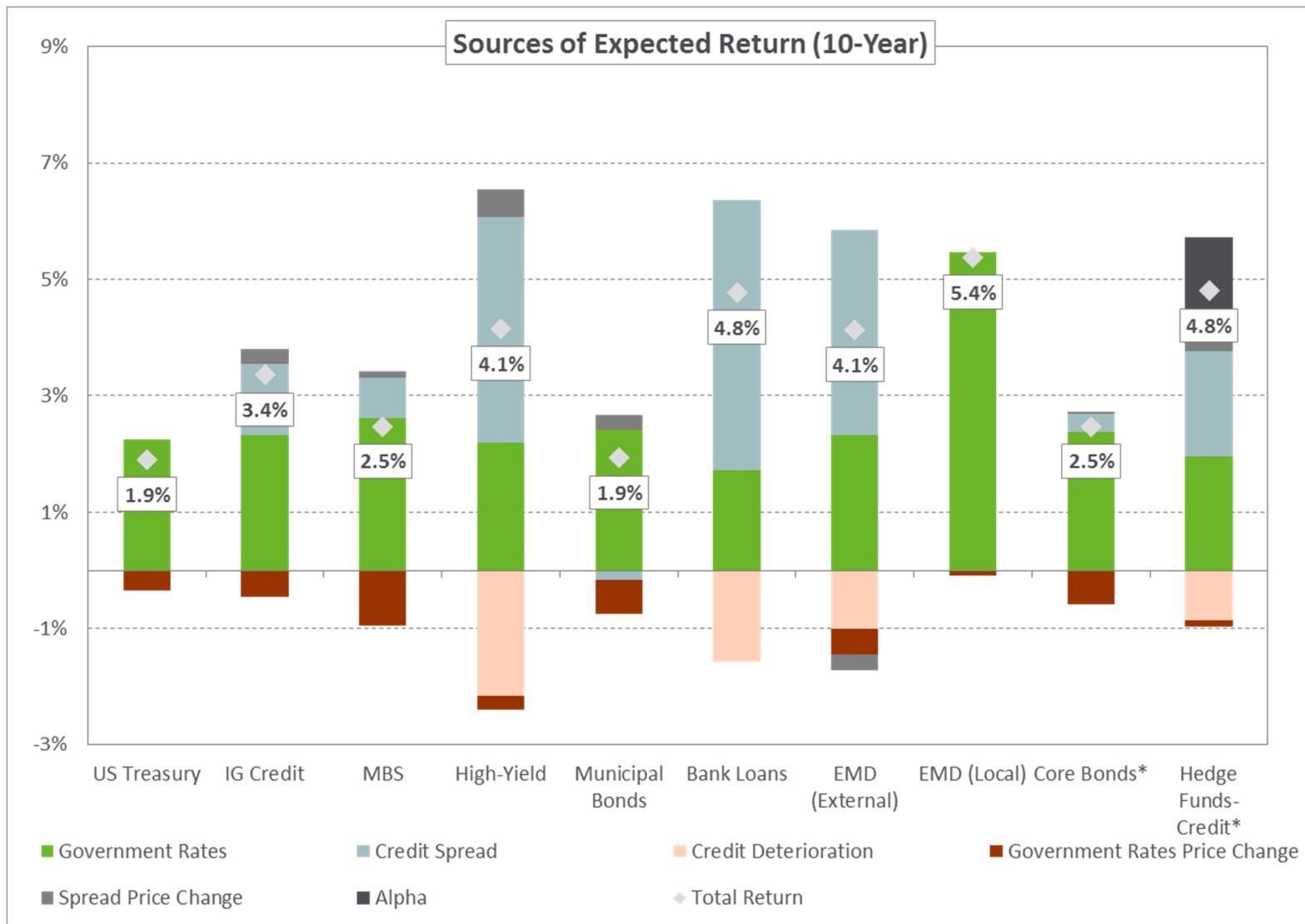
As of December 2019



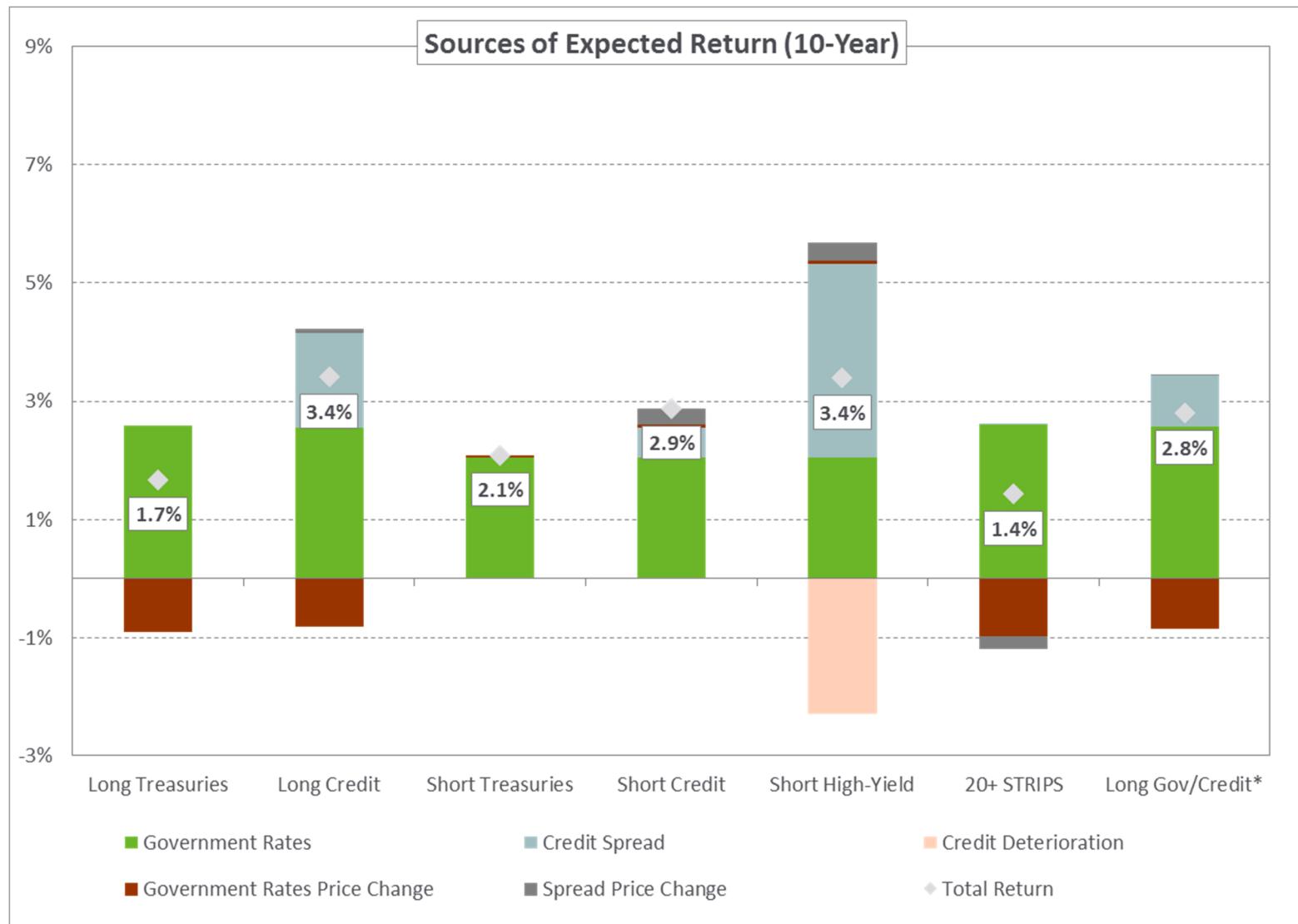
APPENDIX

NEPC, LLC

FIXED INCOME: BUILDING BLOCKS



FIXED INCOME: BUILDING BLOCKS



EMERGING MARKETS DEBT

General Market Thoughts

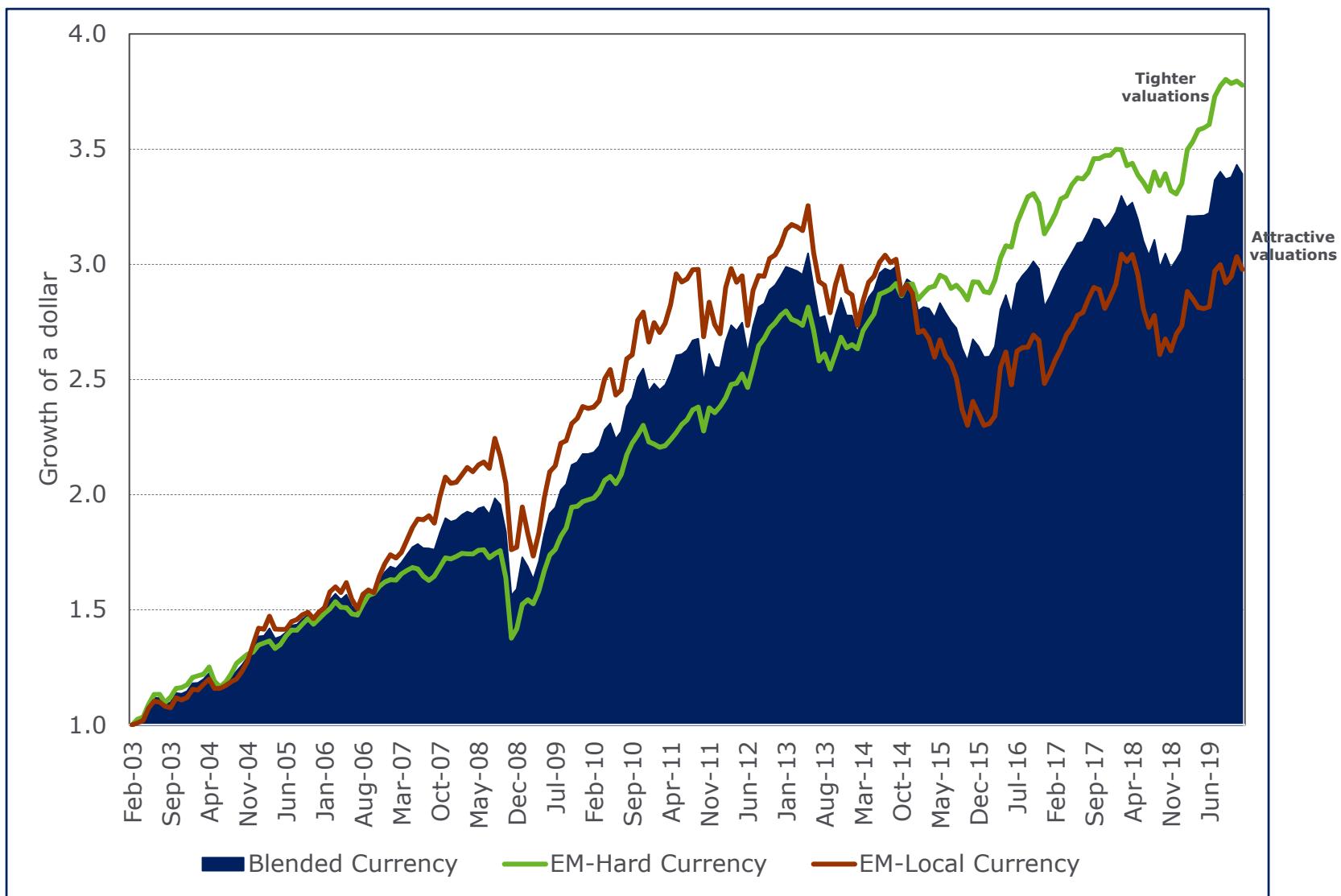
- **Increasing caution across the EMD universe**
 - Overall growth forecasts trend upwards, albeit expectations were revised down in late 2019
 - Volatility is amplified with trade tensions and increased level of geopolitical risks
 - EMD has had good performance across sectors in 2016, 2017 and 2019
- **EM hard currency at tight valuations, local currency remains attractive**
 - Inflows have been strong; hard currency sovereigns have been the major recipient
 - Favorable outlook for valuations, fundamentals, and technicals for local rates and FX
- **EMD Blended vs. EMD Local**
 - EMD blended approach moderates FX volatility and serves as a long-term strategic allocation.
 - EMD Local-only approach is a concentrated bet on local rates and currencies with a higher risk-return potential relative to blended

Implementation Views

Strategy	Outlook	Commentary
EMD Local	Positive	Attractive real rates differential remains vs. DM, EM FX still attractive; volatility heightened
EMD External Sovereign	Neutral	Valuations are tight, idiosyncratic risks, significant inflows in 2019, upside limited
EMD External Corporates	Neutral	Stable fundamentals, fair valuations



COMPARING PERFORMANCE ACROSS LOCAL, HARD, BLENDED

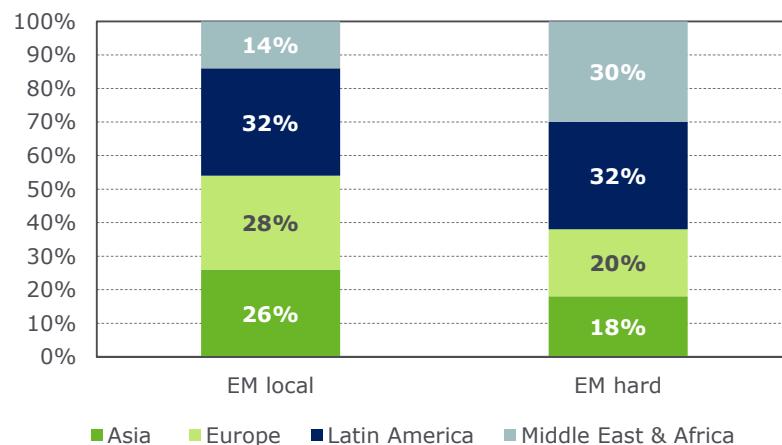


EM FUNDAMENTALS REMAIN ATTRACTIVE

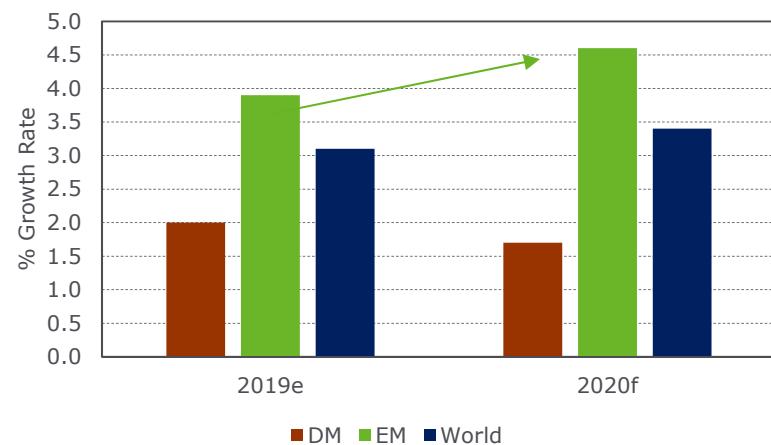
Commentary

- **EM Debt universe is balanced geographically**
 - Latin America is approximately a third of the universe for both hard as well as local debt
 - Asia (China) has smaller footprint compared to EM equity universe
- **EM-DM growth differential expected to increase in 2020 and beyond**
 - LatAm and CEEMEA, which house the largest economies in the index(Brazil, Mexico, South Africa, Russia, and Turkey) are expected to recover faster which serves as a supportive backdrop
 - Many other EM countries have room for further easing, including big index weights such as Mexico (10%) and Indonesia (9.4%)
 - In contrast, the growth projections for many DM countries has flattened or reduced and their rates have fallen with no more room for policy actions

EMD – geographically balanced



Diverging EM-DM growth rates



Source: IMF, JPM

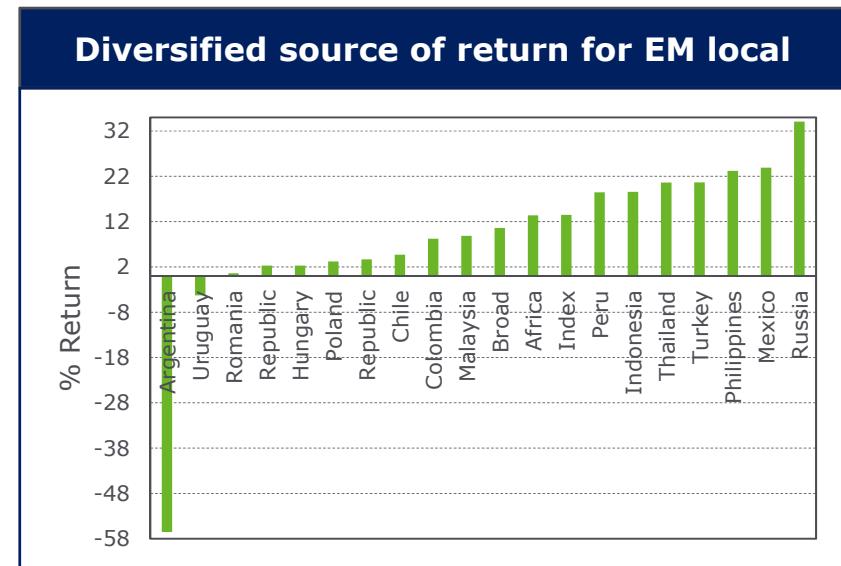
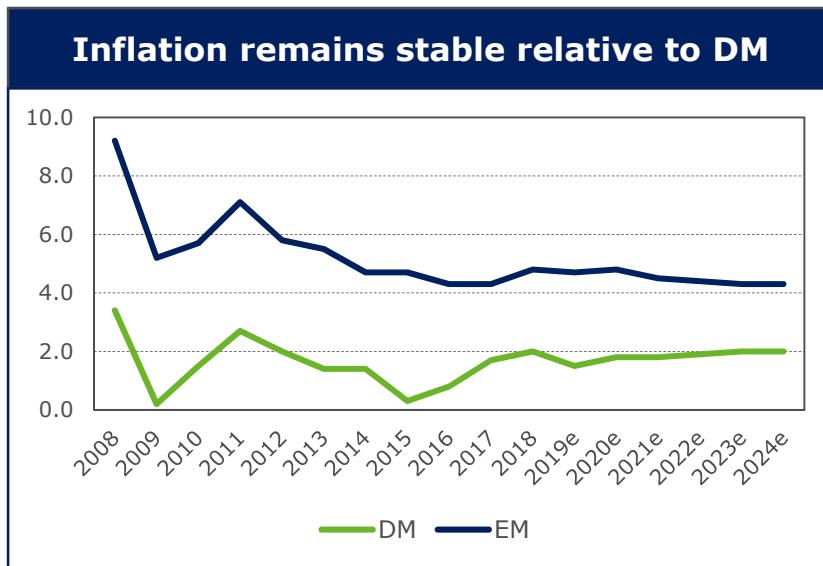
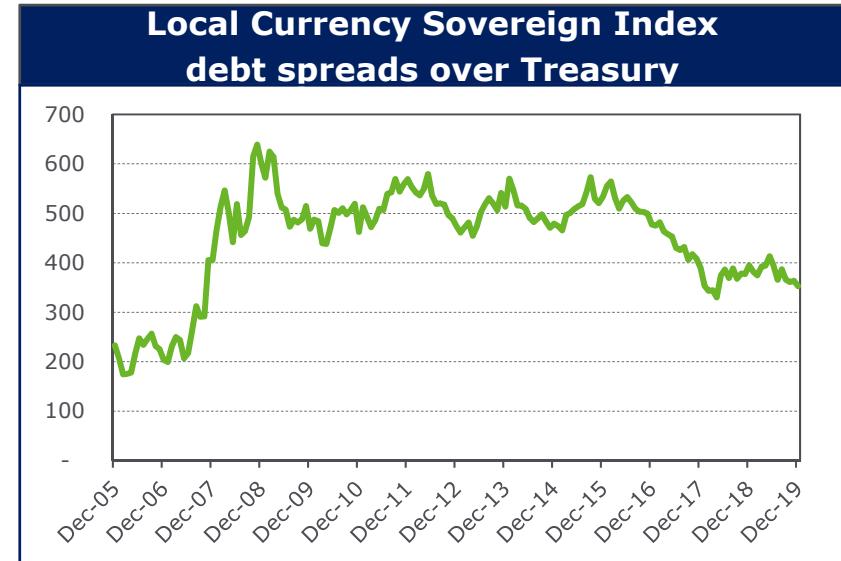
Data as of: 10/31/2019, 11/30/2019



LOCAL YIELDS REMAIN ATTRACTIVE

Commentary

- Despite recent spread tightening, EM rates remain significantly above developed country rates
- EM inflation came down to lowest levels in a decade
- Dispersion across countries offer alpha opportunity for active management

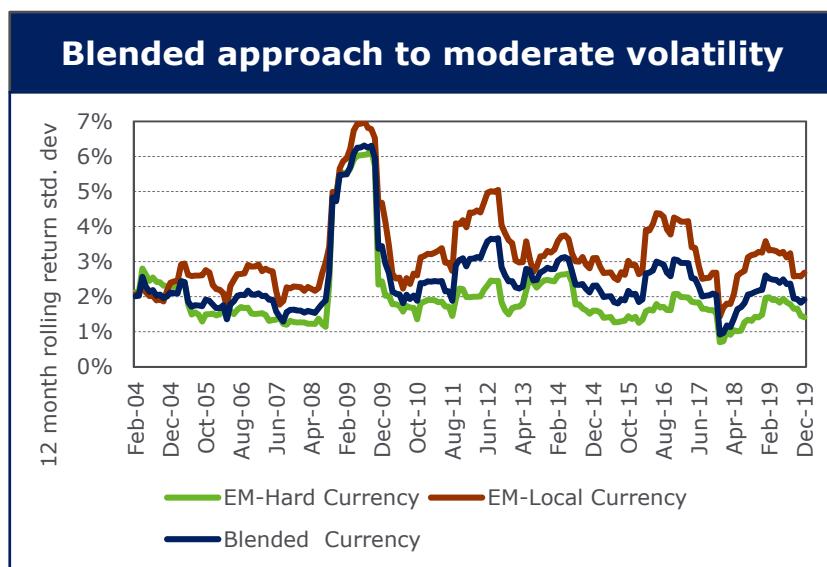


Source: eVestment, Factset
Data as of: 12/31/2019



STRATEGIC ALLOCATION TO BLENDED

Commentary
<ul style="list-style-type: none"> Performance divergence between best vs. worst EMD sectors are often material Blended mandates provide a way to moderate volatility and allow tactical rotation between EMD sectors High volatility for local currencies places more emphasis on implementation, risk tolerance and time horizon



Blended approach provides flexibility				
Year	Hard Currency	Local Currency	Corporates	Winner
2019 (Oct)	12.80%	9.00%	12.00%	Hard Currency EMD
2018	-4.26%	-6.21%	-1.65%	EMD Corporates
2017	10.26%	15.21%	7.96%	Local Currency EMD
2016	10.15%	9.94%	9.65%	Hard Currency EMD
2015	1.18%	-14.92%	1.30%	EMD Corporates
2014	7.43%	-5.72%	4.96%	Hard Currency EMD
2013	-5.25%	-8.98%	-0.60%	EMD Corporates
2012	17.44%	16.76%	15.02%	Hard Currency EMD
2011	7.34%	-1.75%	2.31%	Hard Currency EMD
2010	12.24%	15.68%	13.08%	Local Currency EMD
2009	29.82%	21.98%	34.88%	EMD Corporates
2008	-12.03%	-5.22%	-15.86%	Local Currency EMD

Source: Factset, eVestment
Data as of: 12/31/2019

