

April 3, 2020

Weekly Valuations

Weekly Valuation Report Matrix April 3, 2020

Future TOC

Weekly Valuation Report Matrix April 3, 2020

Growth

	Min	Max	Median	Last	Mean	Sigma	Z-Score
MSCI Emerging Markets Europe Middle East and Africa Index Long Term Price Earnings Ratio	8.9	22.5	14.20	9.44	13.69	1.89	-2.25
Russell 2000 Index Long Term Price Earnings Ratio	11.2	28.7	22.09	15.21	21.63	3.33	-1.93
MSCI India Index 10 Year Moving Average P/E	20.4	33.5	28.42	22.06	27.67	3.03	-1.85
MSCI India SMID Cap 10 Year Moving Average P/E	17.4	34.1	24.34	17.95	24.54	3.76	-1.75
MSCI EM Asia Index 10 Year Moving Average P/E	13.6	23.9	19.06	15.71	19.34	2.10	-1.73
Russell Microcap Index Long Term Price Earnings Ratio	9.7	24.9	18.09	11.64	17.65	3.60	-1.67
MSCI Pacific Index Long Term Price Earnings Ratio	13.7	46.1	20.95	15.23	24.32	7.84	-1.16
MSCI Emerging Markets Index Long Term Price Earnings Ratio	10.9	28.3	15.87	13.48	16.53	2.91	-1.05
MSCI EAFE Index Long Term Price Earnings Ratio	9.9	41.9	19.24	15.14	21.09	7.09	-0.84
MSCI FM EMEA 10 Year Moving Average P/E	10.9	33.3	15.12	13.18	15.56	3.03	-0.78
MSCI China Index 10 Year Moving Average P/E	10.3	64.0	18.71	15.49	20.84	7.94	-0.67
MSCI China A Share Local Long Term Price Earnings Ratio	16.0	94.6	24.23	20.67	28.47	11.90	-0.66
MSCI Emerging Markets Latin America Index Long Term Price Earnings Ratio	3.8	30.6	14.43	12.32	15.32	4.75	-0.63
MSCI FM FRONTIER MARKETS 10 Year Moving Average P/E	11.3	33.3	15.81	14.33	16.08	2.88	-0.61
Russell 1000 Index Long Term Price Earnings Ratio	10.8	37.5	22.13	20.80	22.81	5.56	-0.36
MSCI Europe and Middle East Index 10 Year Moving Average P/E	10.9	21.0	15.40	15.09	15.89	2.69	-0.30
MSCI Argentina Index Price Earnings Ratio (P/E)	2.6	563.1	8.77	6.07	12.25	26.12	-0.24
S&P 500 Index Long Term Price Earnings Ratio	10.7	38.5	21.31	21.04	22.35	5.89	-0.22
MSCI Frontier Asia Index 10 Year Moving Average P/E	12.3	40.5	30.06	24.99	25.70	9.06	-0.08

Weekly Valuation Report Matrix April 3, 2020

Real Assets

	Min	Max	Median	Last	Mean	Sigma	Z-Score
S&P Global Natural Resources Total Return Index Long Term Price Earnings Ratio	8.1	18.0	13.41	9.66	13.23	2.01	-1.78
S&P North American Natural Resources Sector Total Return Index Long Term Price Earnings Ratio	8.2	31.1	15.54	9.14	16.39	4.18	-1.74
Bloomberg Commodity Index Last Price	61.1	234.1	98.52	62.20	110.66	31.72	-1.53
Alerian MLP Index Last Price	86.5	539.9	248.34	92.93	252.61	108.83	-1.47
Alerian MLP Infrastructure Index Last Price	100.0	890.7	395.90	155.32	396.26	198.81	-1.21
Henry Hub Natural Gas Last Price	1.0	15.0	3.03	1.50	3.75	2.18	-1.04
WTI Crude Oil Last Price	18.3	1654.8	189.61	89.02	303.21	280.33	-0.76
Brent Crude Last Price	62.6	2370.5	482.59	345.81	599.71	475.53	-0.53
Bloomberg ExEnergy Subindex Total Return Last Price	93.3	303.4	153.71	153.68	164.50	51.92	-0.21
MSCI US REIT Index Dividend 12 Month Yld - Gross	3.2	13.9	4.08	5.95	4.42	1.42	1.07
Gold Last Price	69.4	482.1	108.85	400.03	179.93	113.93	1.93
FTSE NAREIT Timber REITs Index USD Dividend 12 Month Yld - Gross	2.5	8.2	3.78	7.88	4.04	1.02	3.76
	Min	Max	Median	Last	Mean	Sigma	Z-Score
5Y TIPS Yield	-1.8	4.1	0.88	-0.39	1.16	1.57	0.99
10Y TIPS Yield	-0.9	4.4	1.64	-0.48	1.66	1.38	1.55

***Z-Score values are flipped for yield figures to reflect inverse valuations relative to other asset classes

Weekly Valuation Report Matrix April 3, 2020

Income

	Min	Max	Median	Last	Mean	Sigma	Z-Score
BB: EM USD Agg: Corp Yield to Worst	4.3	19.9	6.10	7.50	6.58	2.26	-0.41
BB Non-Agency IG CMBS Total Return Yield to Worst	2.4	43.7	6.34	9.64	7.94	6.98	-0.24
BB US Corporate High Yield Statistics Index Yield to Worst	0.0	23.0	9.06	9.77	9.34	4.01	-0.11
BB Pan-European HY Statistics Index Yield to Worst	3.0	29.2	7.57	9.29	8.84	4.77	-0.09
BB EM USD Agg Stats Index Yield to Worst	4.0	18.2	7.13	7.07	8.27	3.20	0.37
BB Pan European Agg Corp Stats Index Yield to Worst	0.5	8.0	4.05	2.04	3.71	1.82	0.92
BB US Agg ABS Statistics Index Yield to Worst	0.9	11.0	4.58	2.13	4.21	2.21	0.94
BB CMBS IG Statistics Index Yield to Worst	1.7	17.1	4.50	2.55	4.83	2.26	1.01
BB Pan-European Agg: Credit Stats Index Yield to Worst	0.4	7.4	3.94	1.62	3.53	1.81	1.06
BB Muni Bond Index TR Index Value Unhedged USD Yield to Worst	1.2	9.8	4.25	2.47	4.55	1.83	1.14
BB US Corporate Statistics Index Yield to Worst	2.2	12.6	6.24	3.47	6.21	2.40	1.14
BB US Aggregate Statistics Index Yield to Worst	1.4	11.8	5.47	1.58	5.42	2.43	1.58
BB US MBS Index Stats Index Yield to Worst	1.1	12.6	5.93	1.32	5.94	2.54	1.82
BB US Convertibles Preferreds TR Unhedged USD Yield to Worst	0.1	0.8	0.59	0.34	0.58	0.13	1.84
BB EM Local Currency Gov't Stats Index Yield to Worst	3.3	8.9	5.27	3.43	5.42	0.91	2.19
BB US Convertibles Composite TR Unhedged USD Yield to Worst	0.6	1.2	1.02	0.79	1.00	0.09	2.31

***Z-Score values are flipped for yield figures to reflect inverse valuations relative to other asset classes

Weekly Valuation Report Matrix April 3, 2020

Defensive

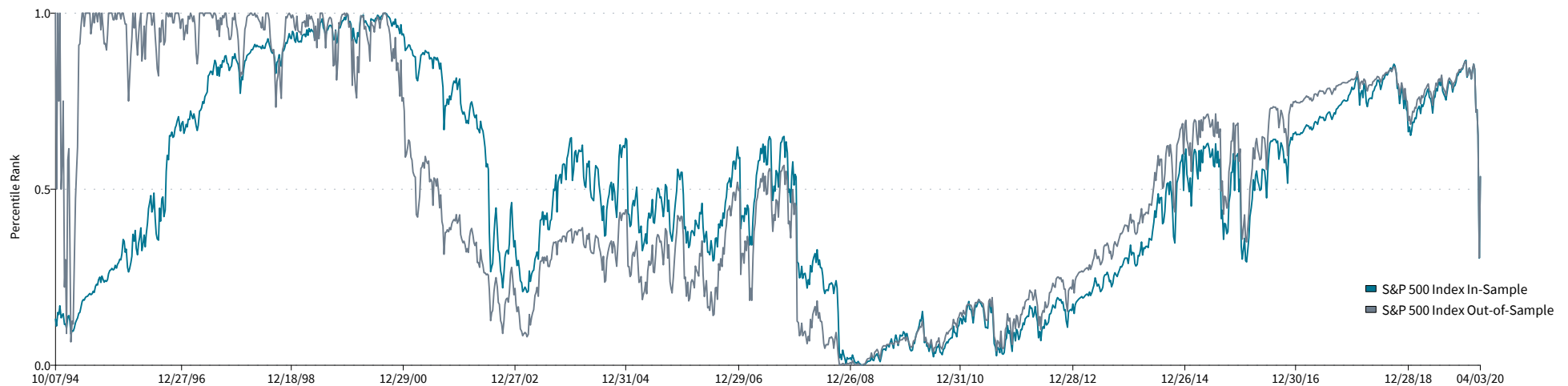
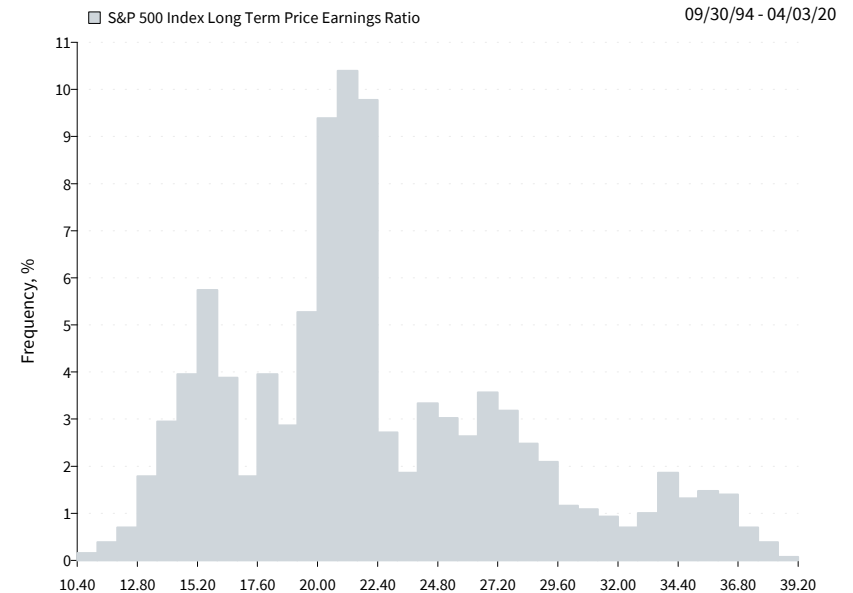
	Min	Max	Median	Last	Mean	Sigma	Z-Score
Japan Govt 10 Year Yield	-0.3	8.2	1.44	-0.02	2.02	1.88	1.08
Indian Govt 10 Year Yield	5.0	12.3	7.75	6.14	7.90	1.51	1.16
Germany Govt 10 Year Yield	-0.7	9.1	4.00	-0.44	3.82	2.46	1.74
UK Govt 10 Year Yield	0.2	10.0	4.55	0.31	4.39	2.34	1.75
US Govt 10 Year Yield	0.6	11.9	4.79	0.60	5.06	2.38	1.88
US Govt 30 Year Yield	1.2	11.9	5.21	1.22	5.54	2.15	2.01
China Govt 10 Year Yield	2.6	4.7	3.49	2.56	3.55	0.46	2.14

***Z-Score values are flipped for yield figures to reflect inverse valuations relative to other asset classes

	Min	Max	Median	Last	Mean	Sigma	Z-Score
SG Short-Term Traders Index Last Price	953.7	1151.9	1039.88	1057.78	1040.85	48.50	0.35
HFRX Macro/CTA Index Last Price	482.3	1478.3	1146.48	1171.72	1078.82	216.51	0.43
HFRX Absolute Return Index Last Price	610.8	1179.5	998.34	1032.92	961.06	136.70	0.53
HFRX Macro Systematic Diversified CTA Index Last Price	976.2	1753.5	1522.96	1622.46	1468.43	190.52	0.81
SG CTA Index Last Price	925.7	2405.2	1915.16	2240.56	1786.81	396.90	1.14
SG Trend Index Last Price	839.6	2979.3	2195.87	2710.28	2023.73	546.47	1.26
Chicago Board Options Exchange Volatility Index Last Price	9.1	79.1	17.08	46.80	19.10	8.11	3.42

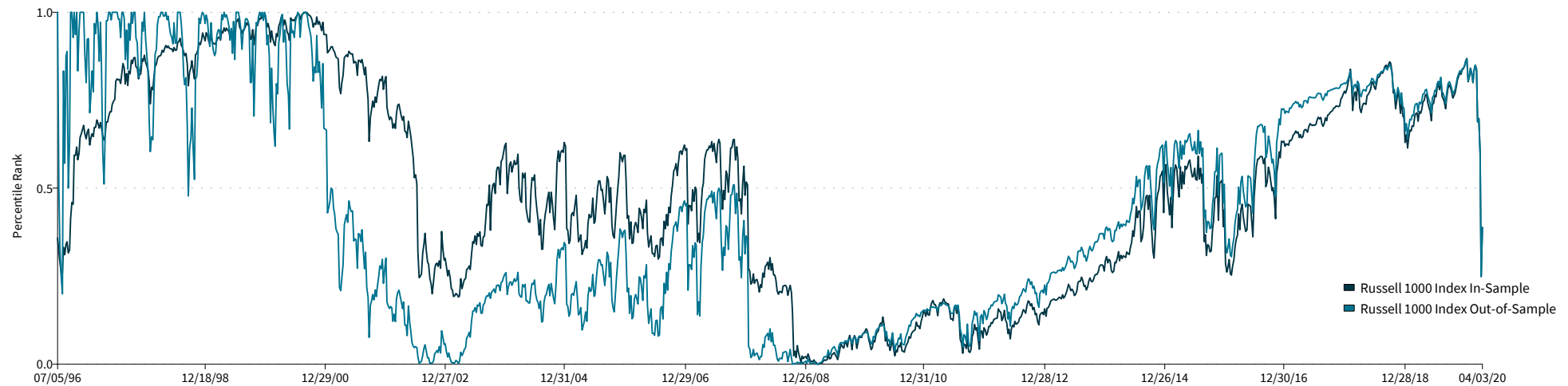
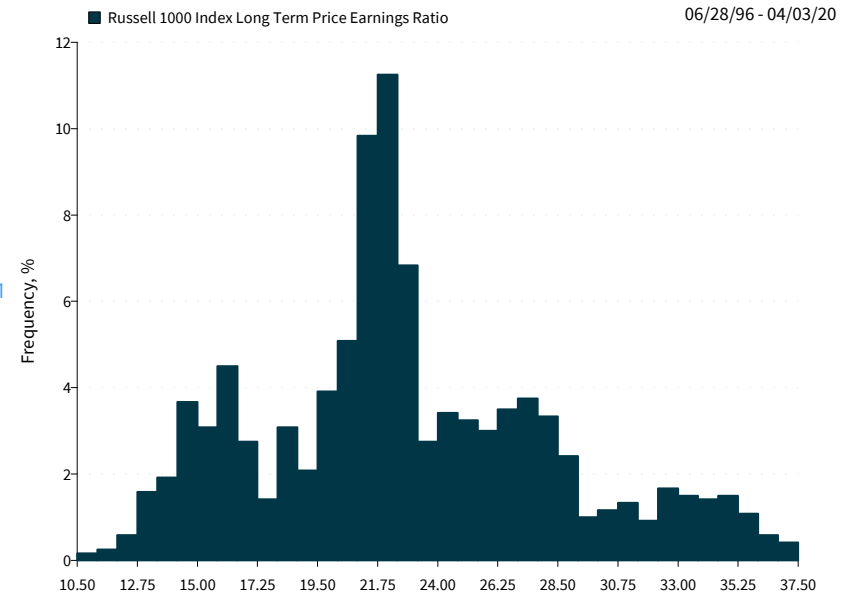
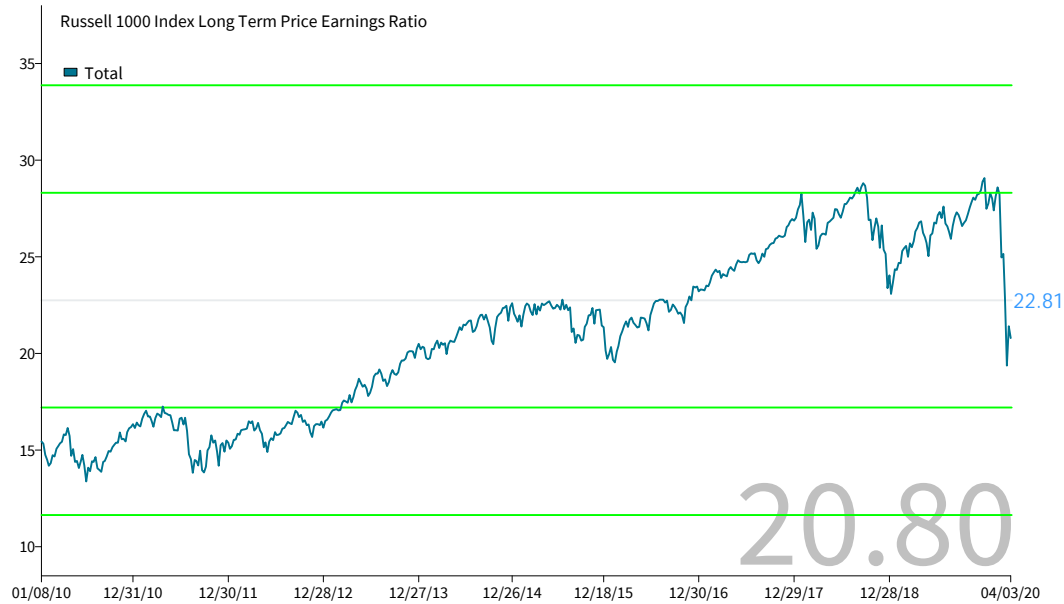
Weekly Valuation Report -- Growth April 3, 2020

Growth



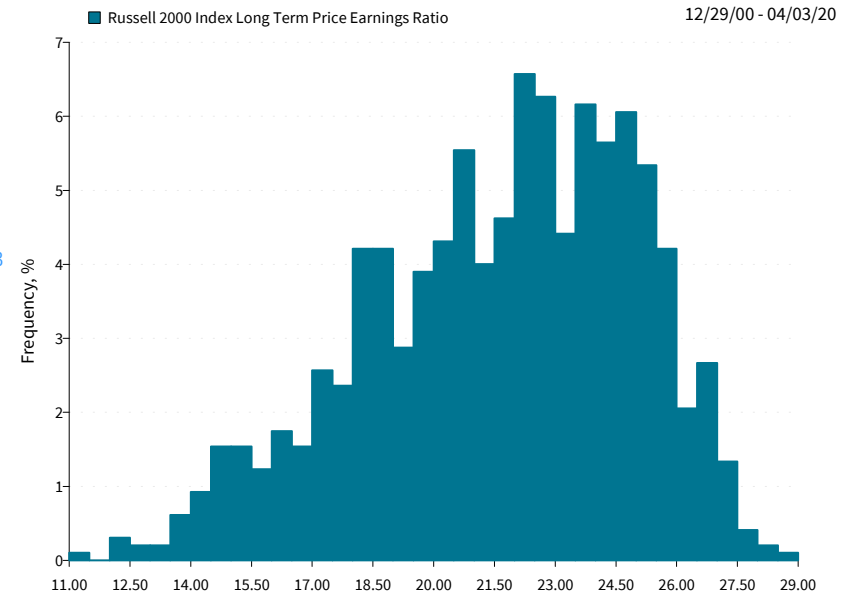
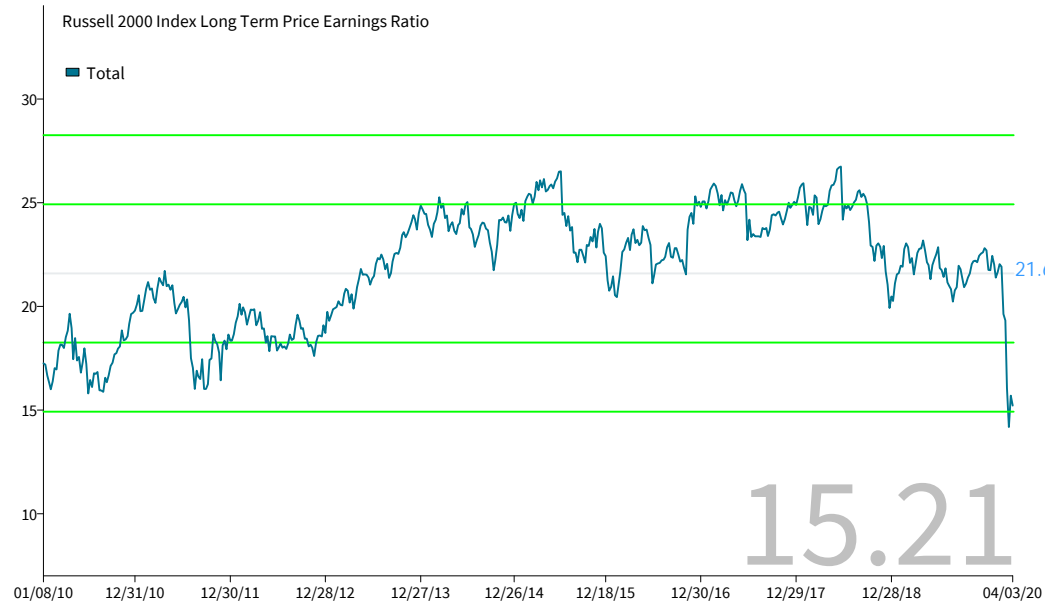
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Growth



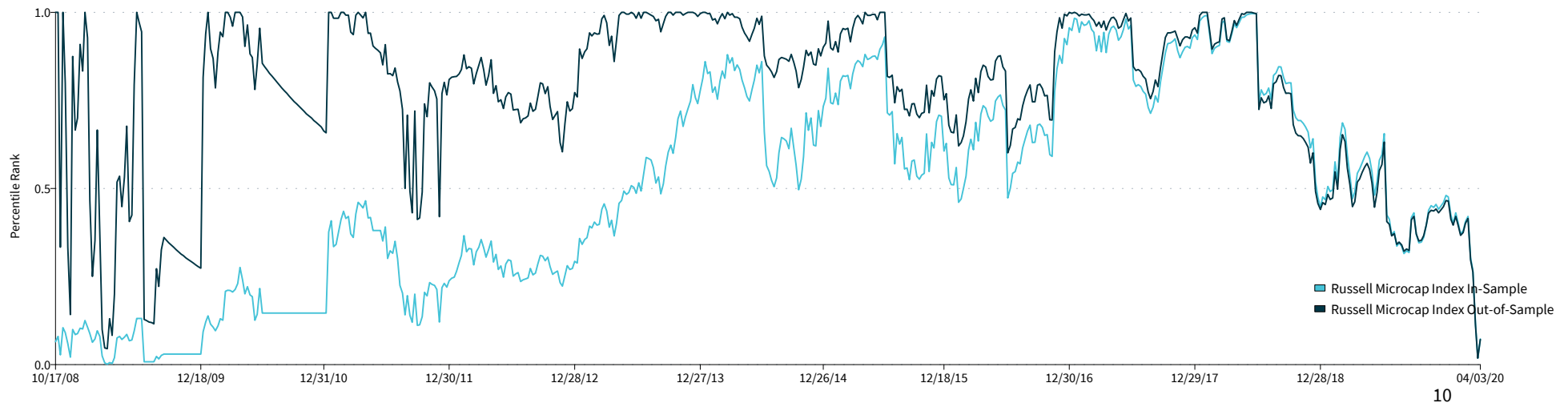
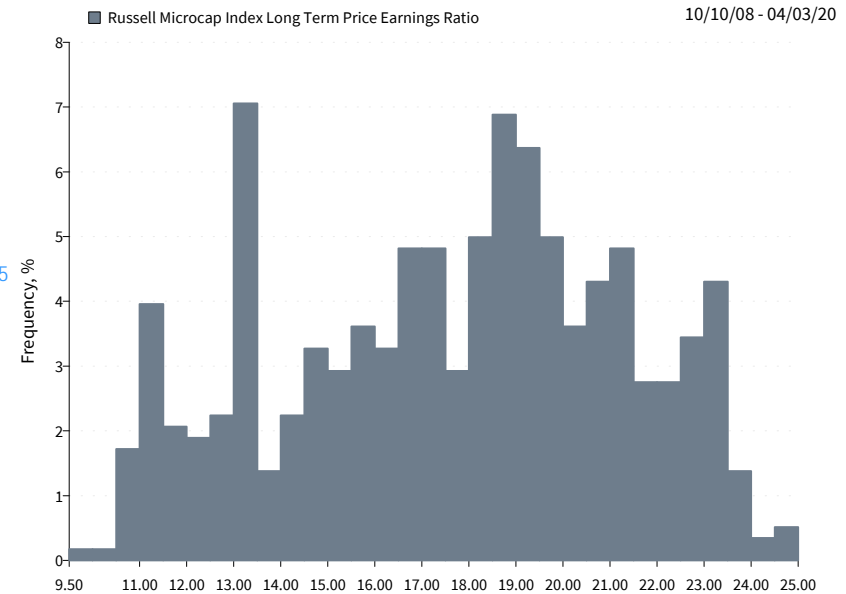
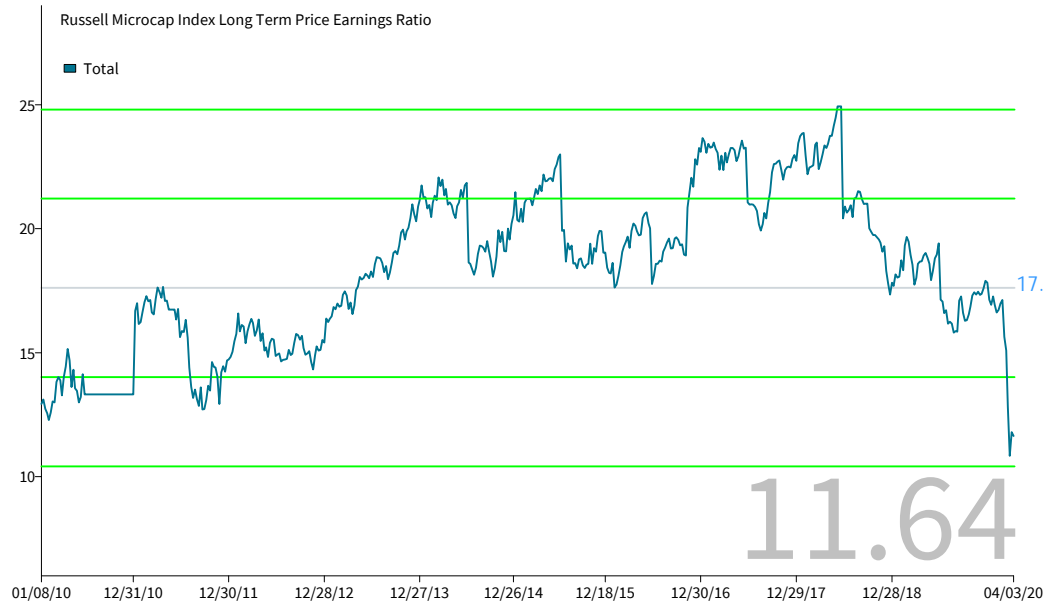
Weekly Valuation Report -- Growth April 3, 2020

Growth



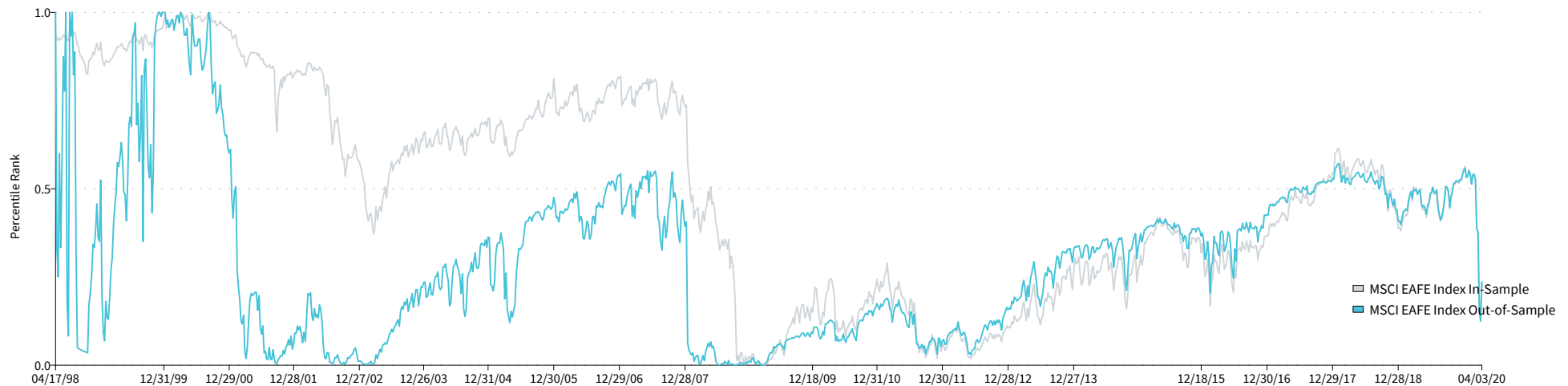
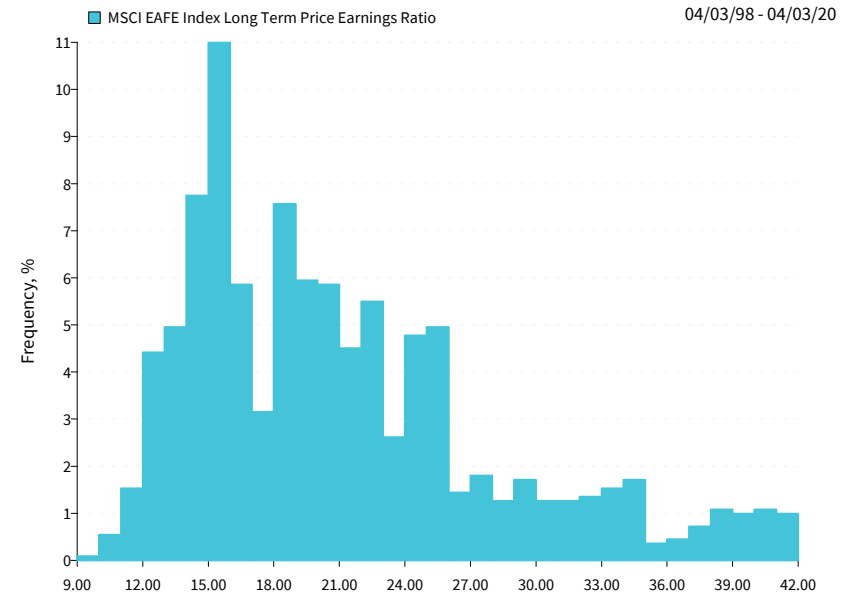
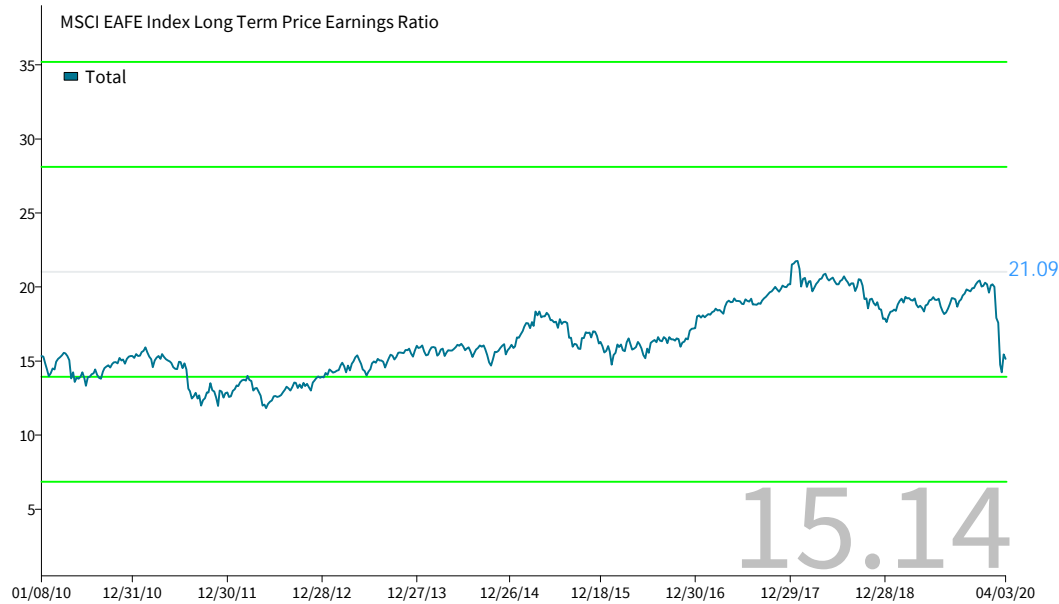
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Growth



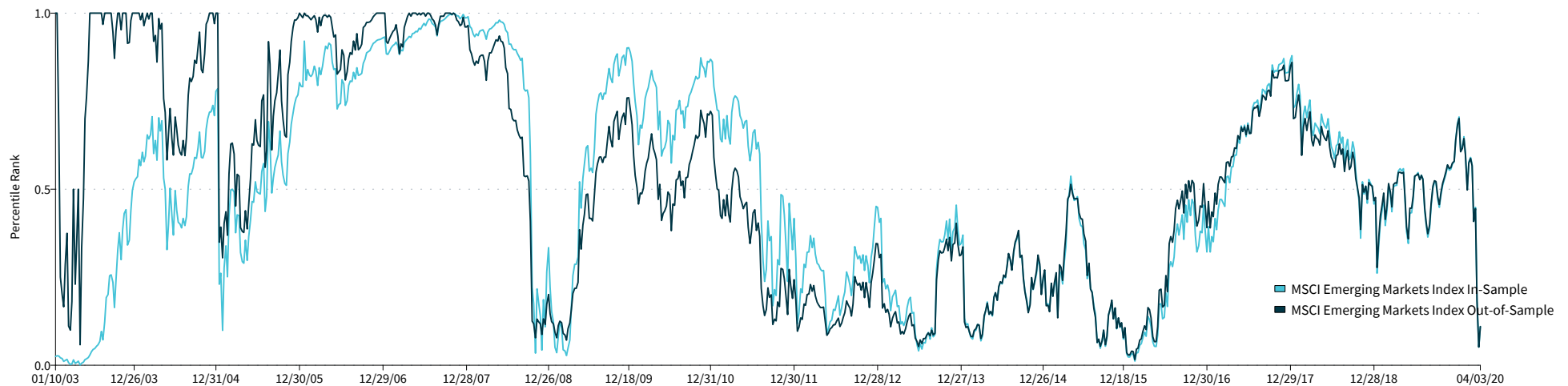
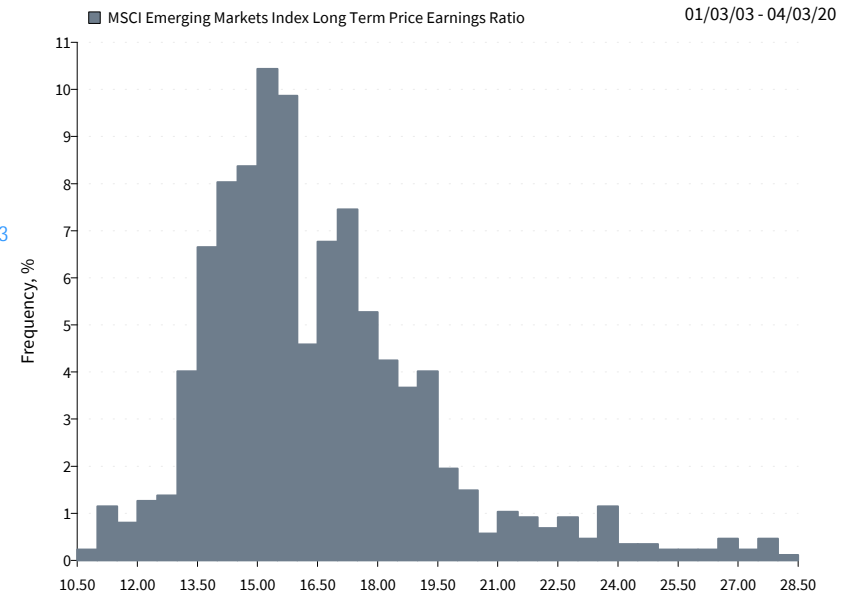
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Growth



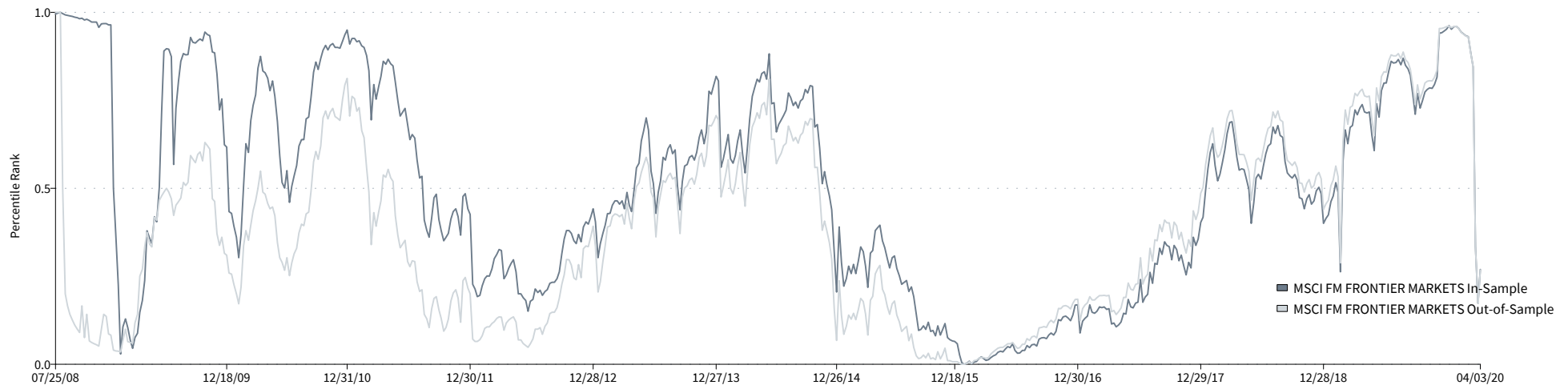
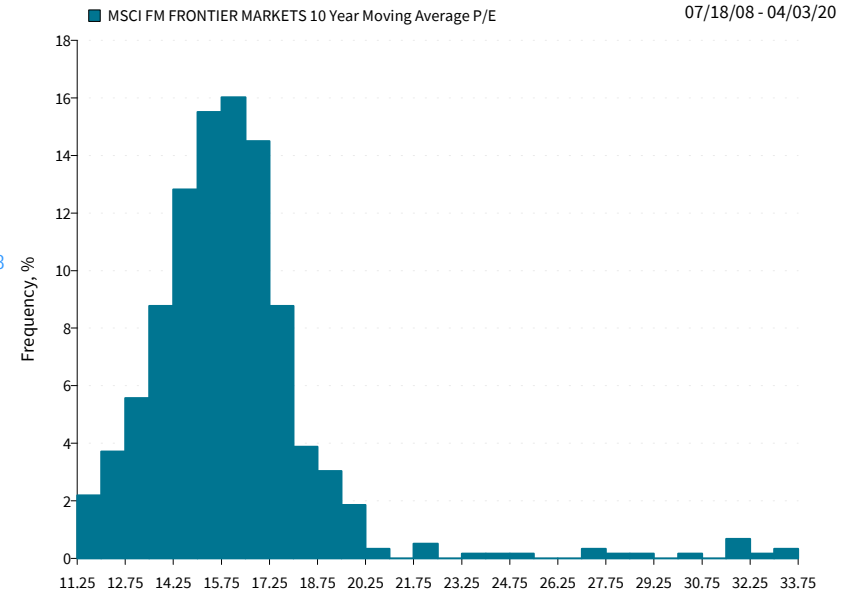
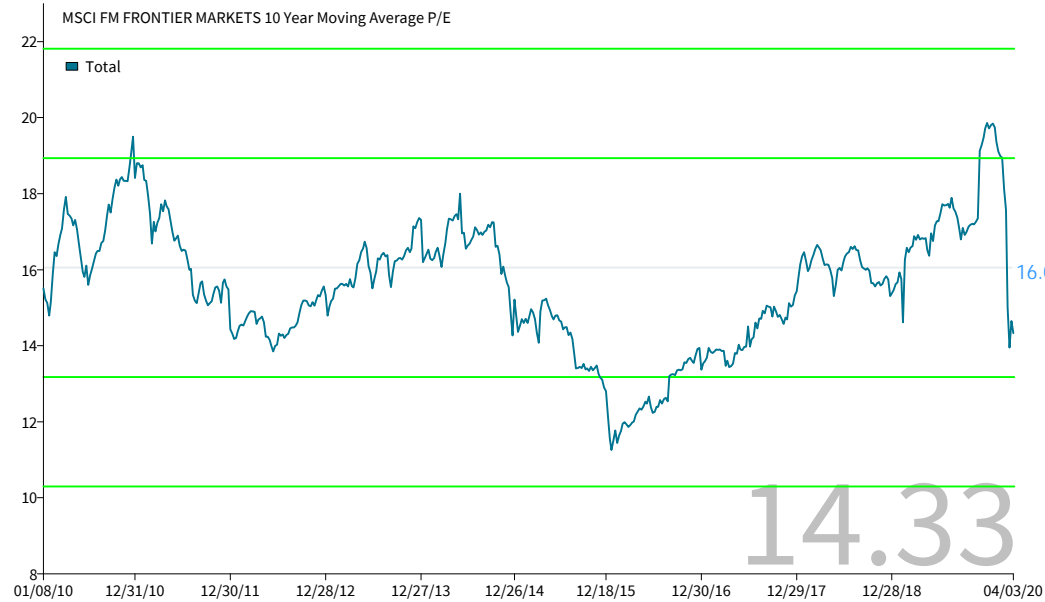
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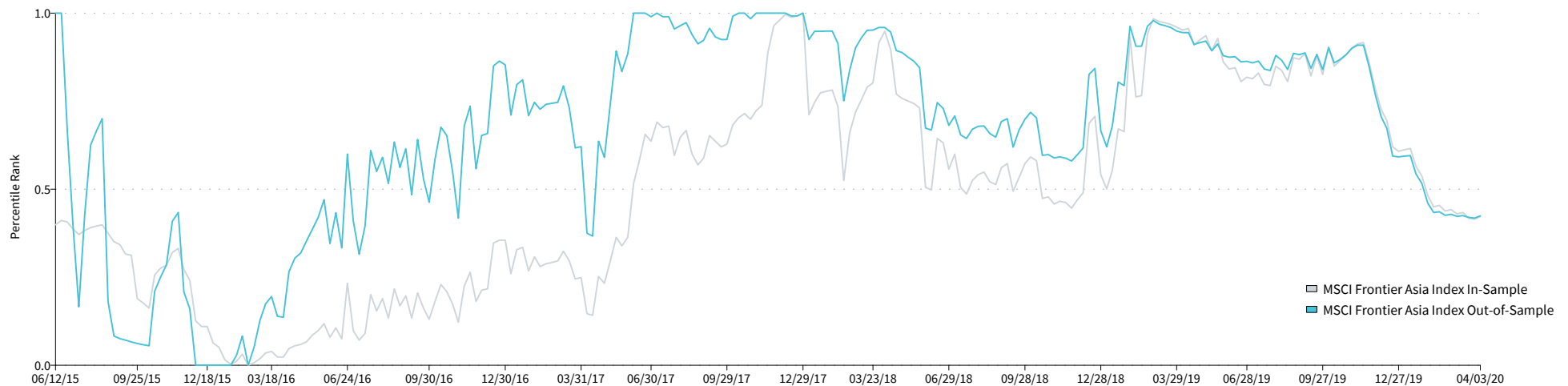
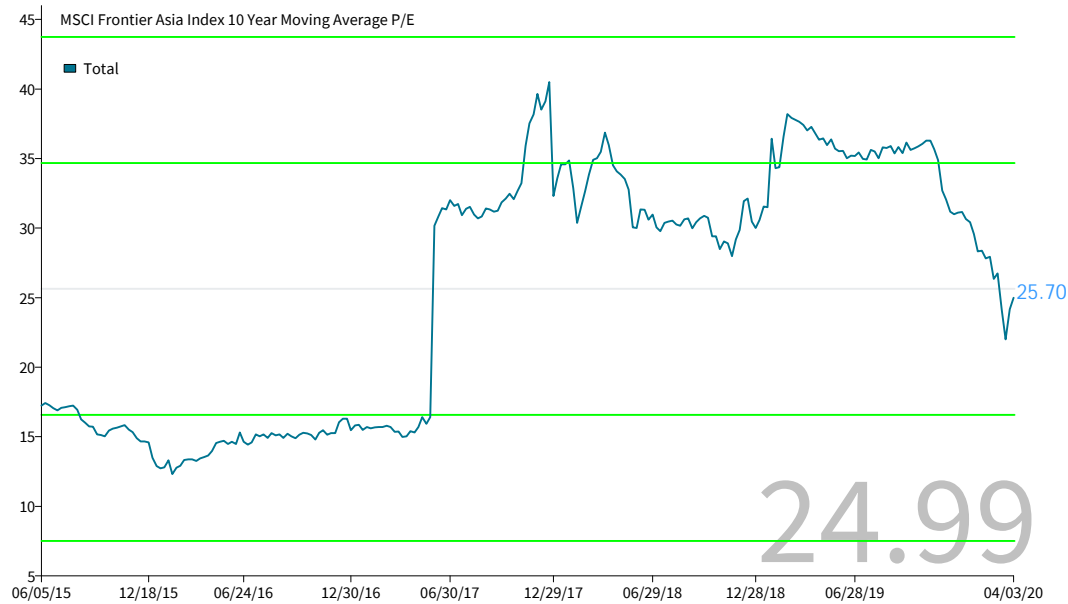
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Growth



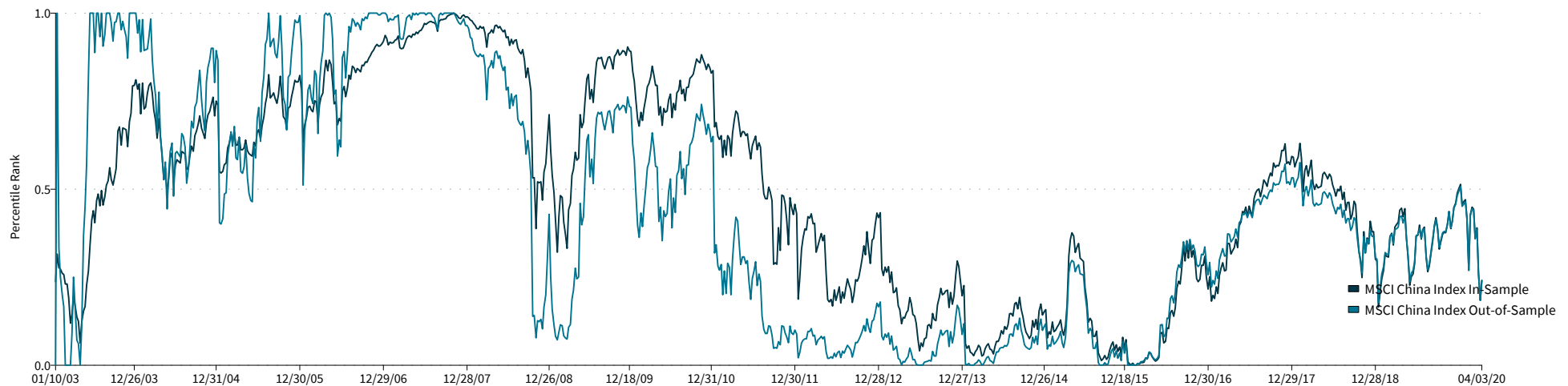
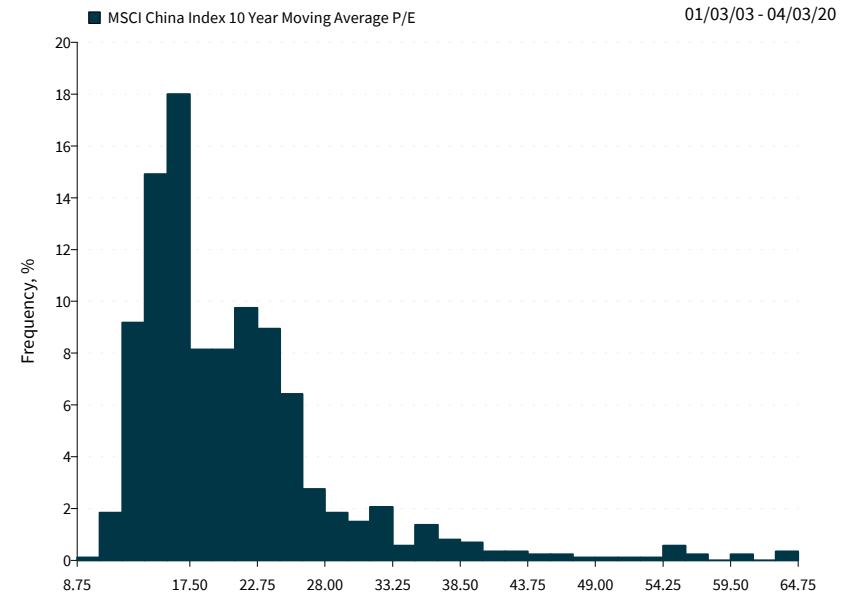
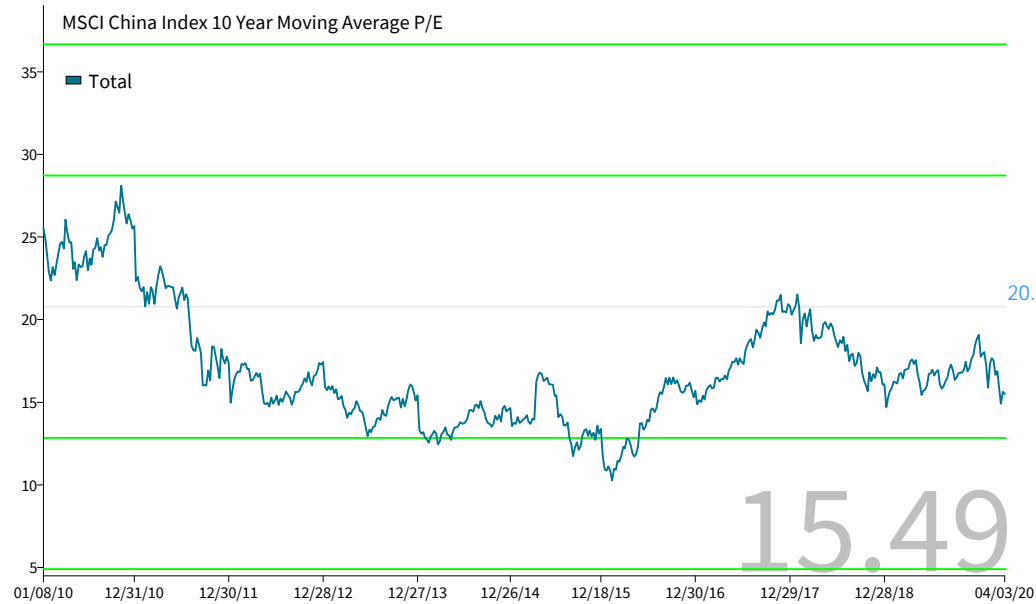
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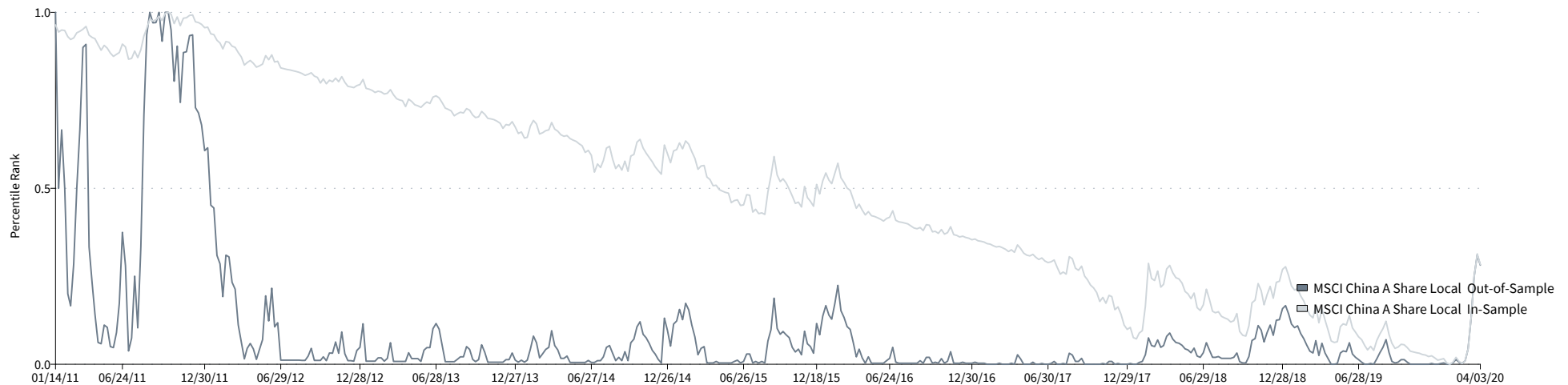
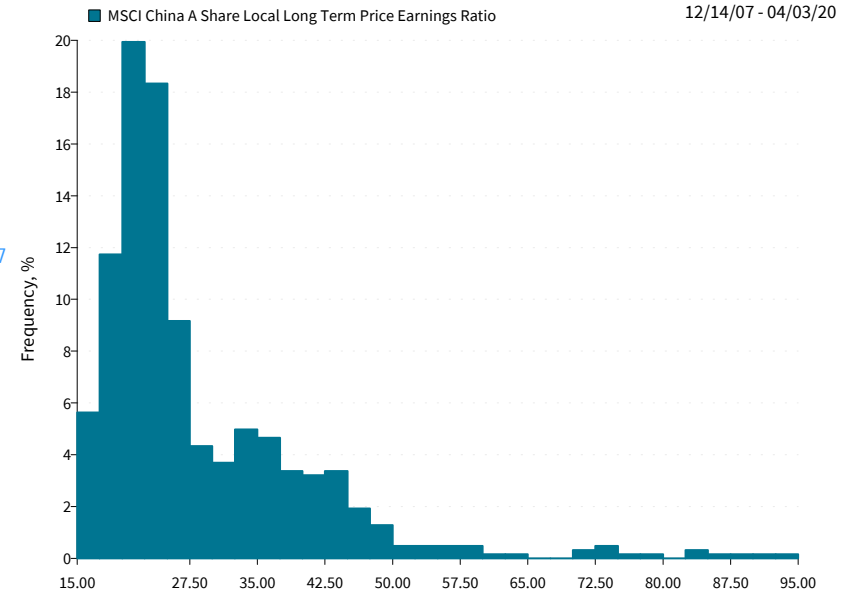
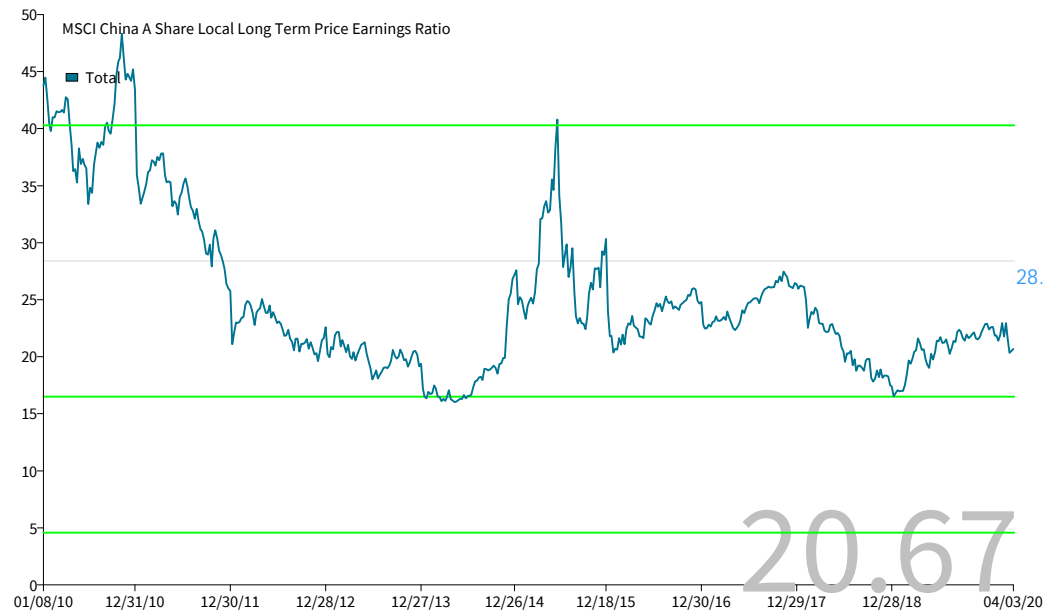
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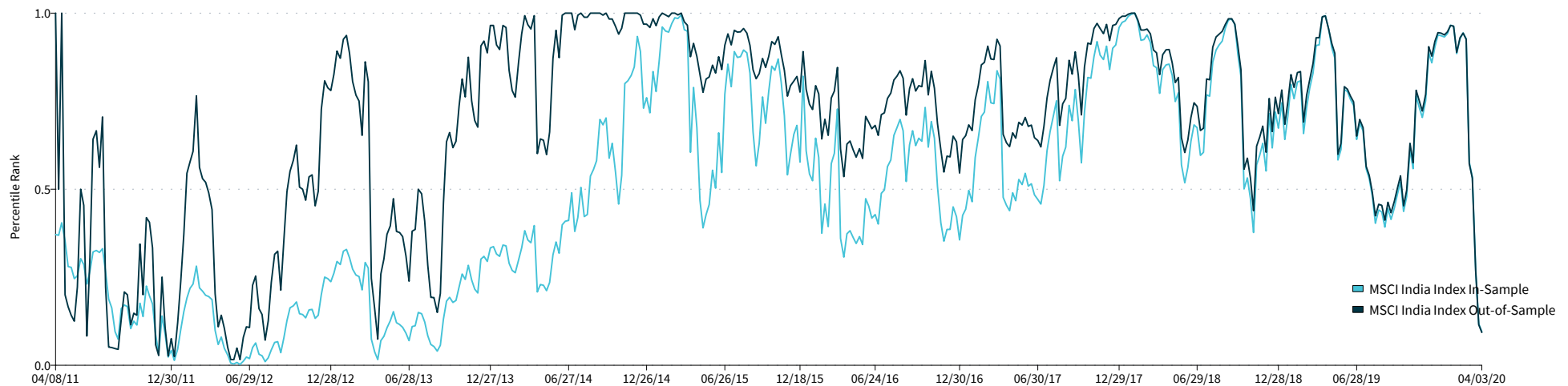
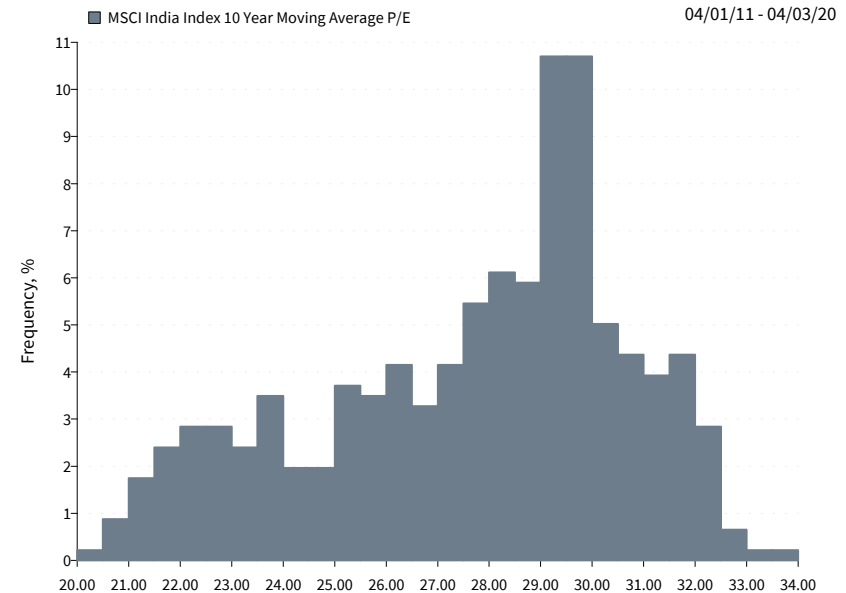
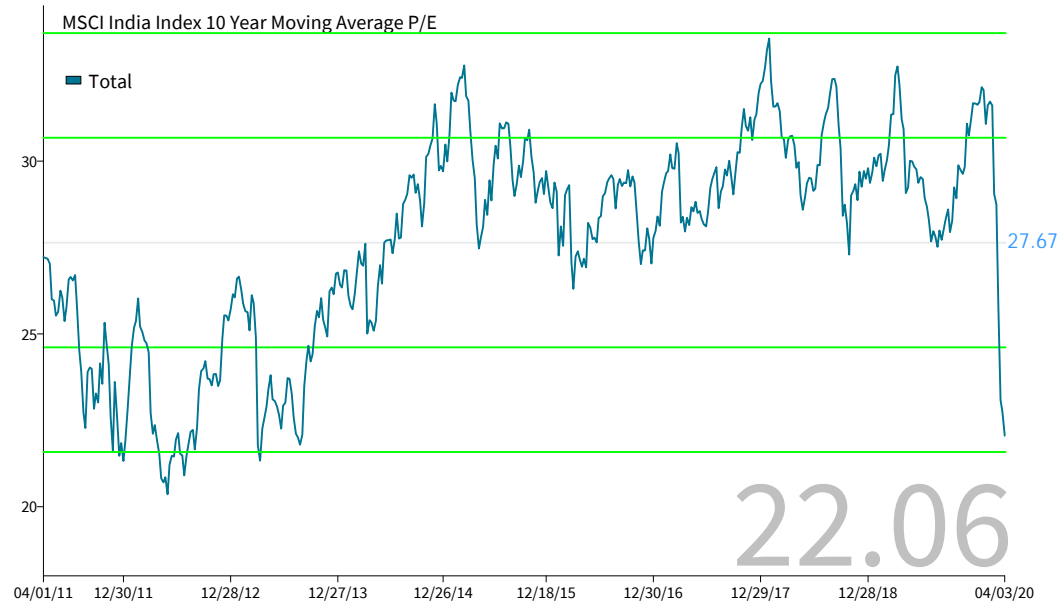
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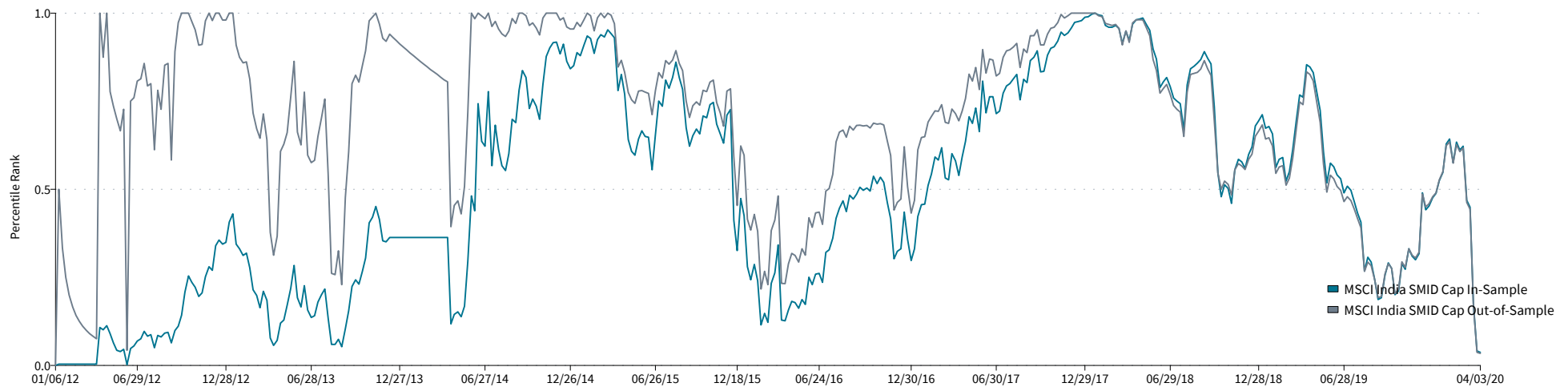
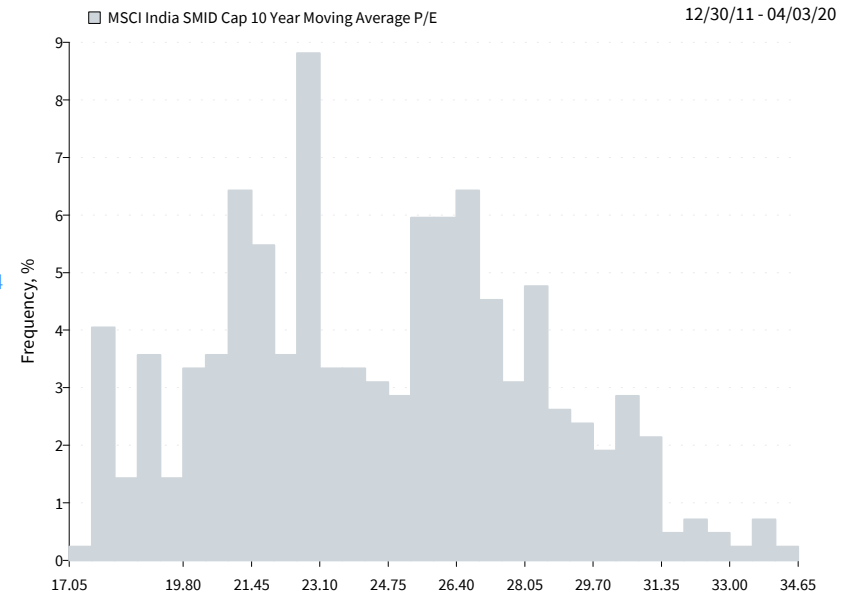
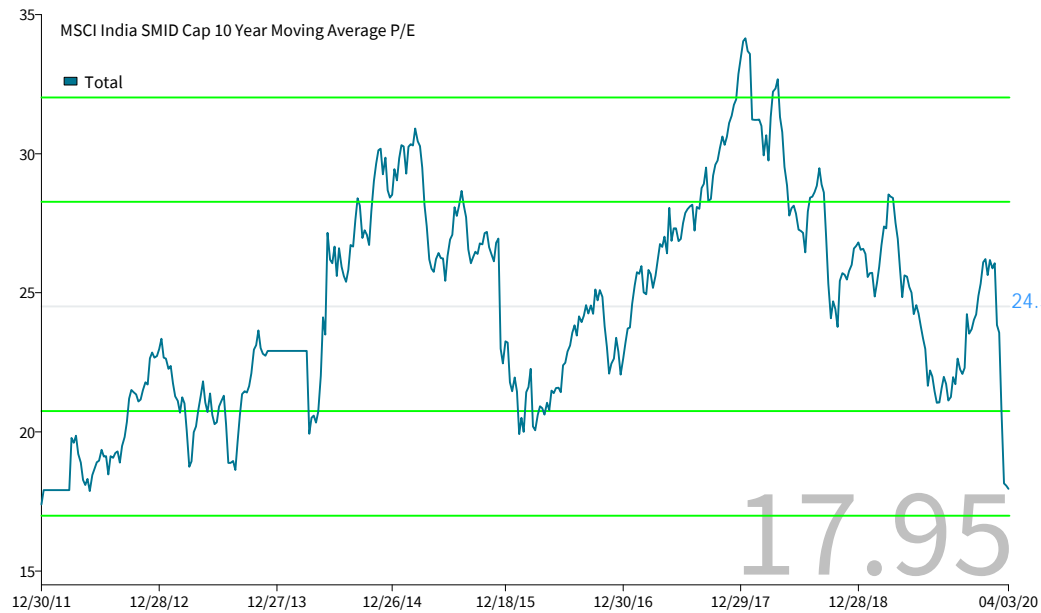
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Growth



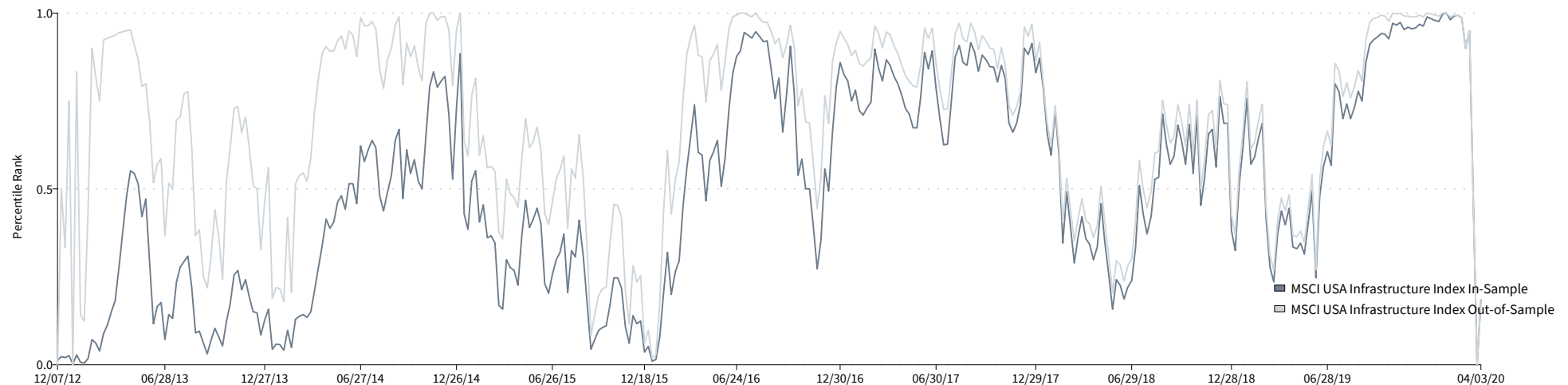
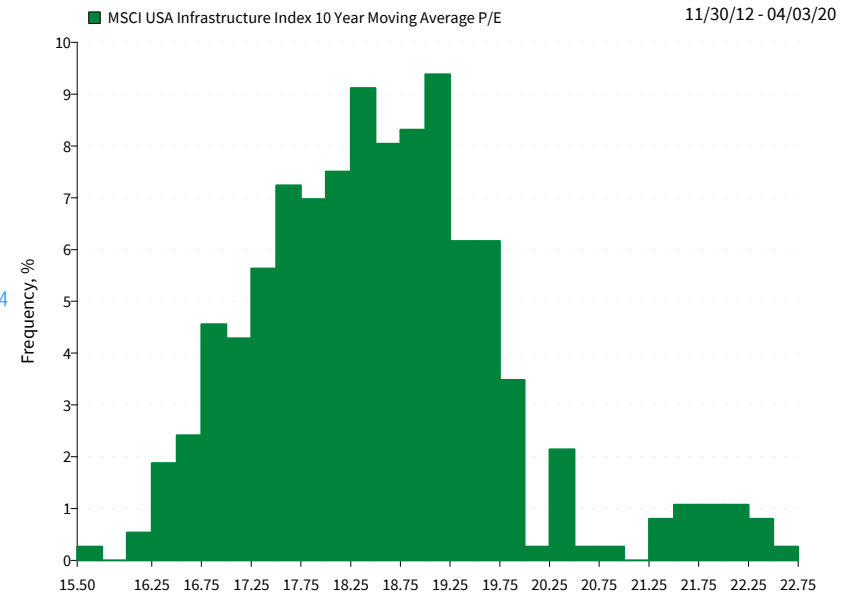
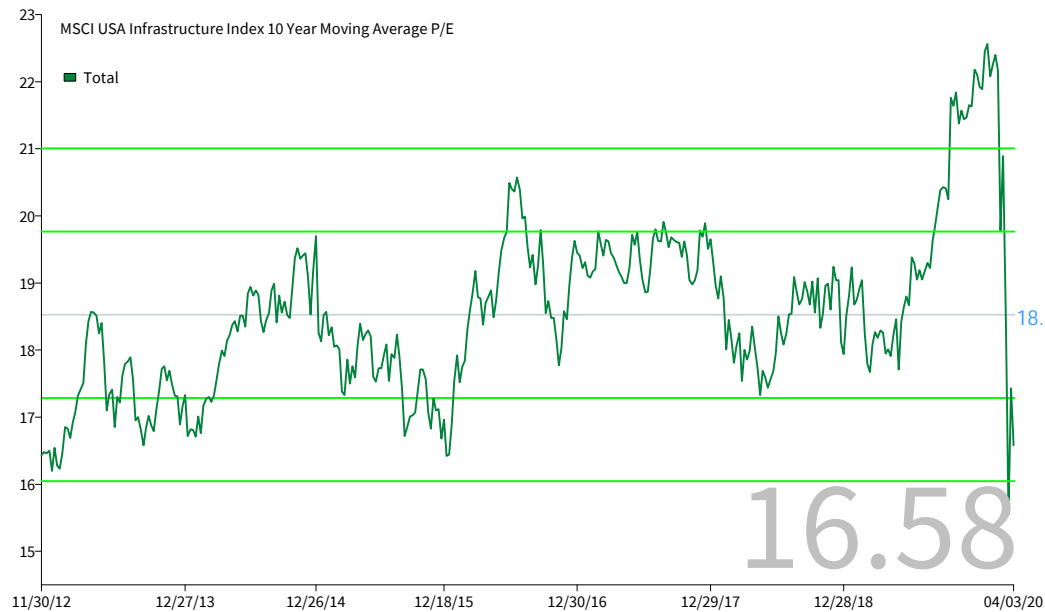
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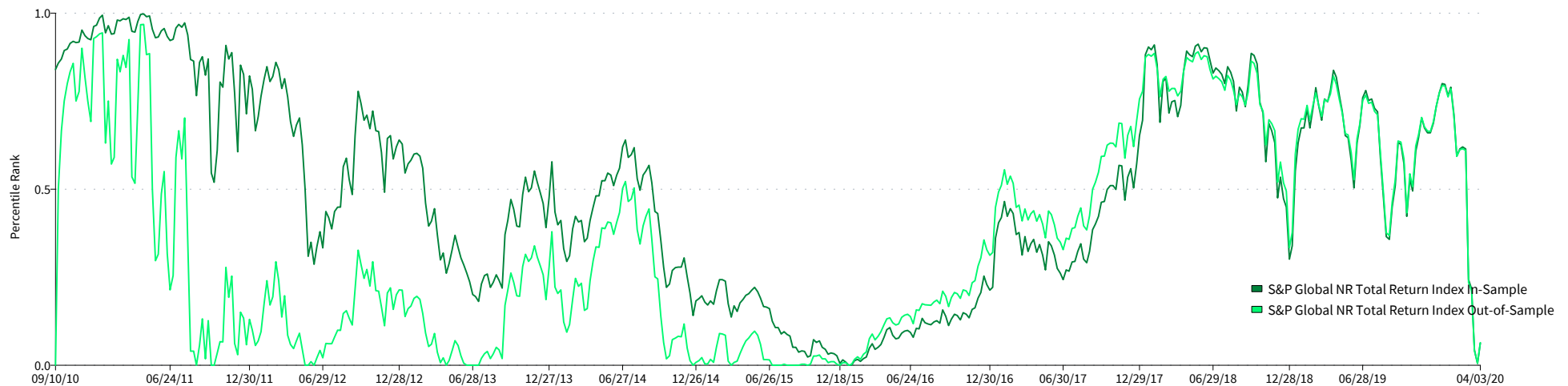
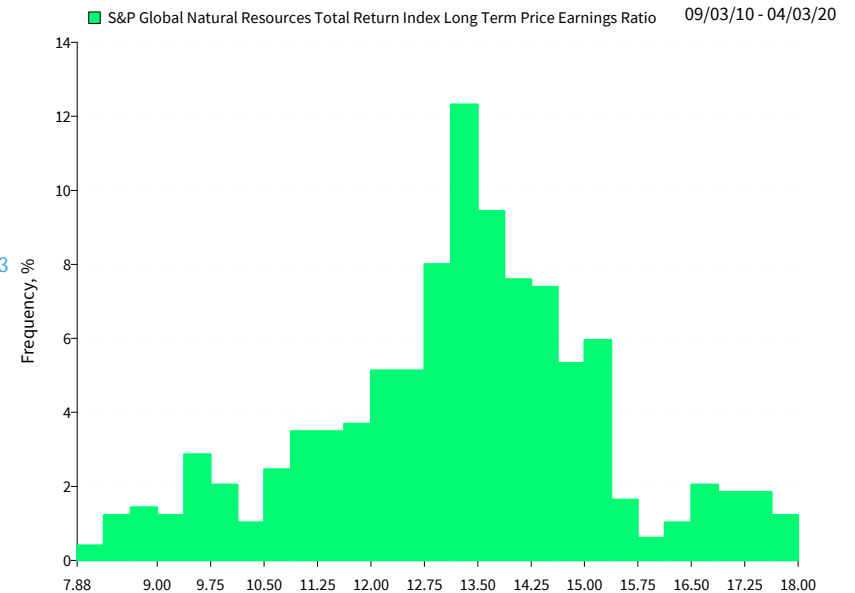
Weekly Valuation Report -- Real April 3, 2020

Real



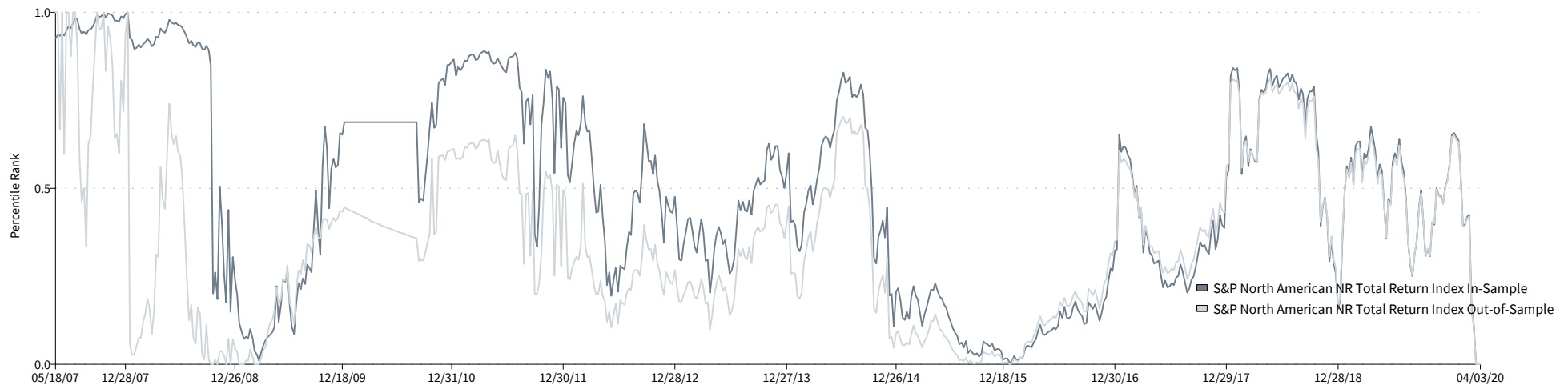
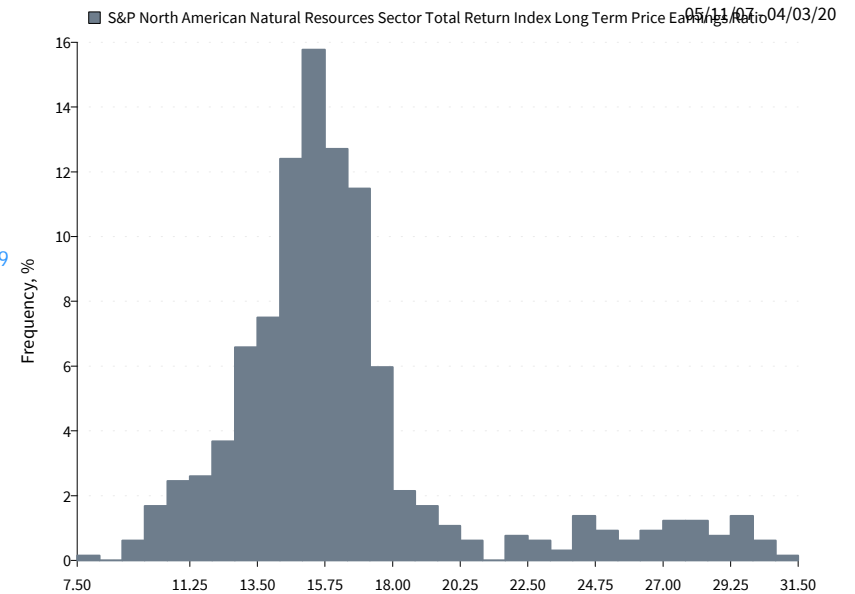
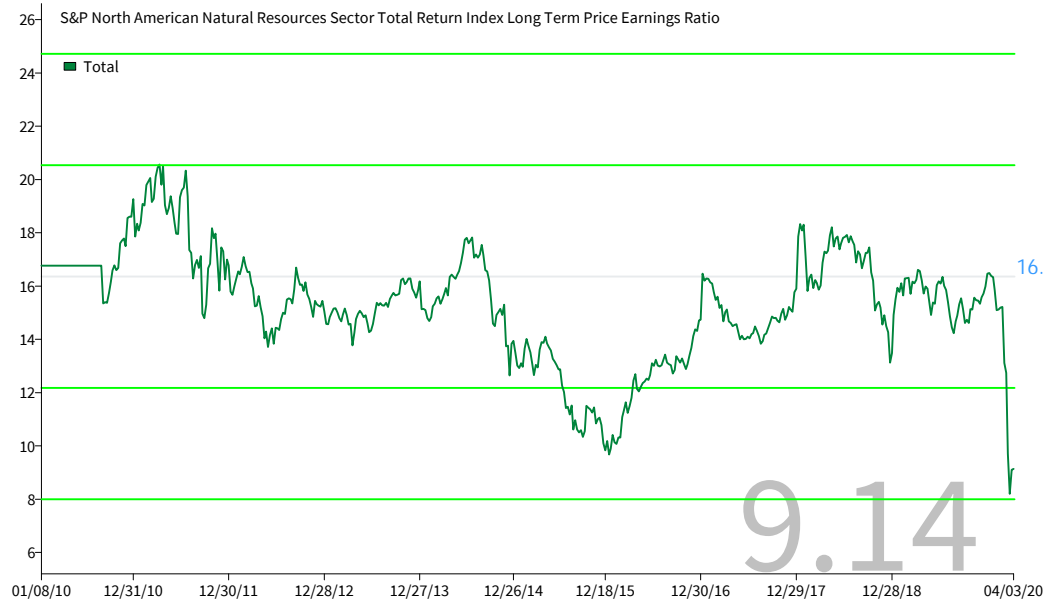
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Real



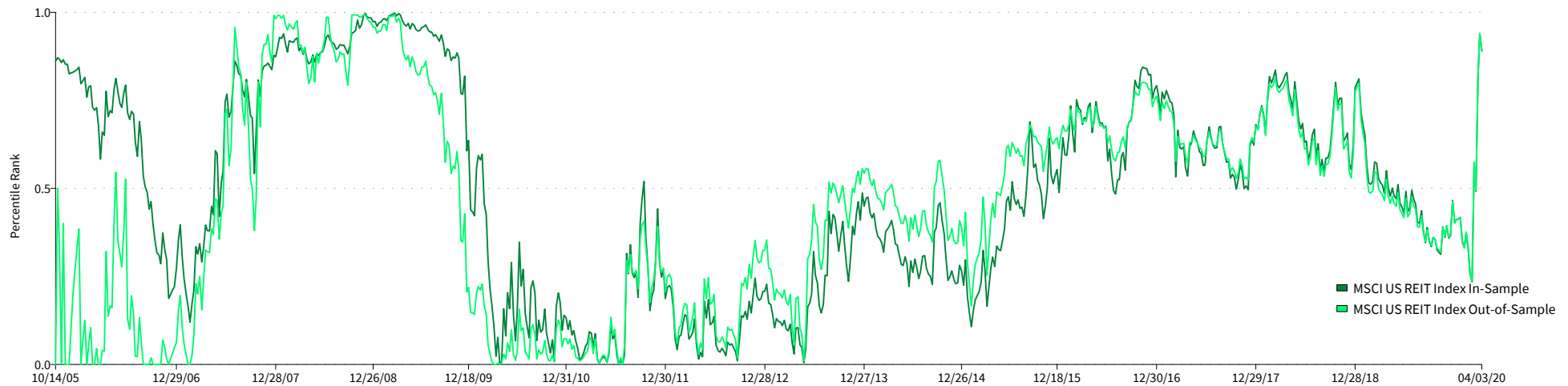
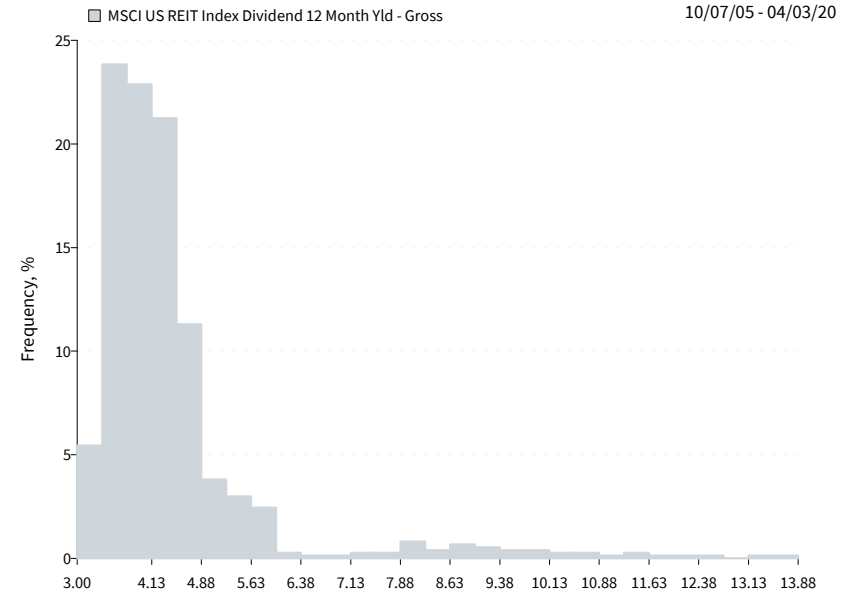
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Real



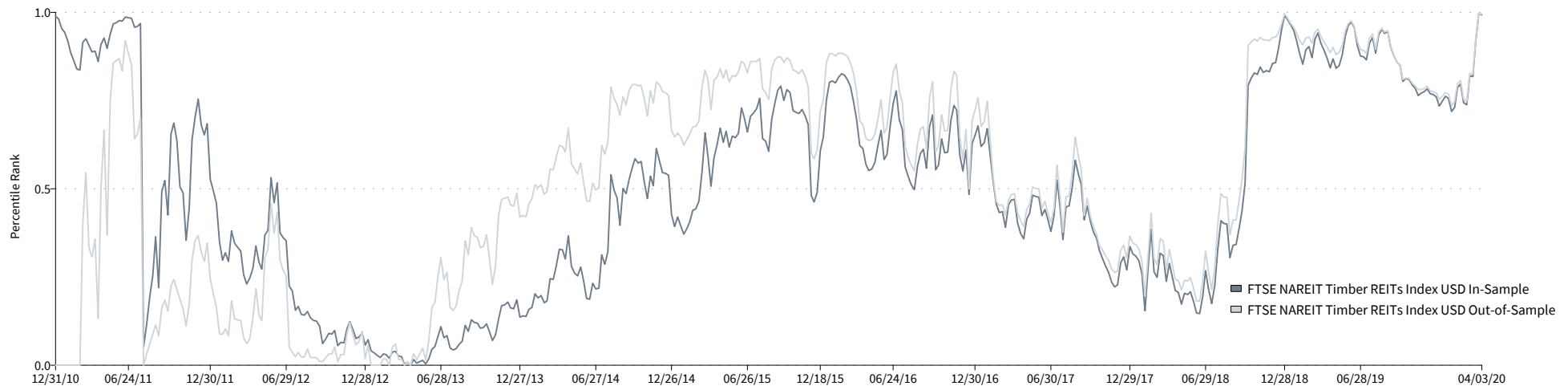
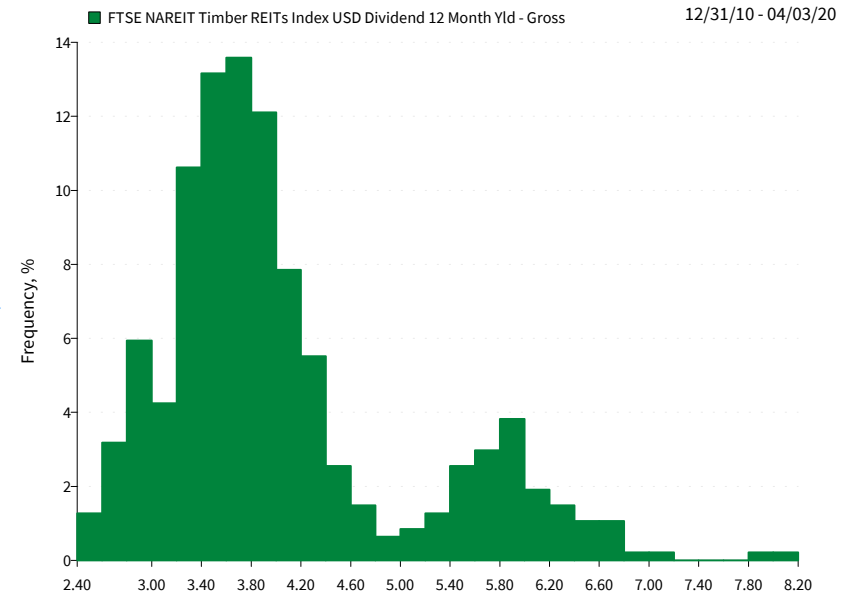
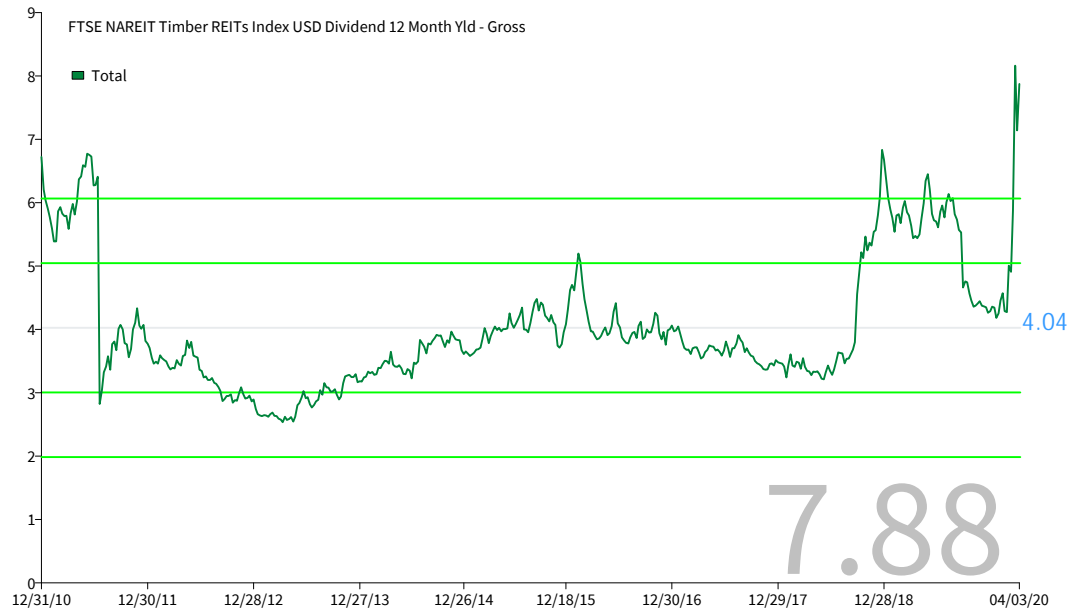
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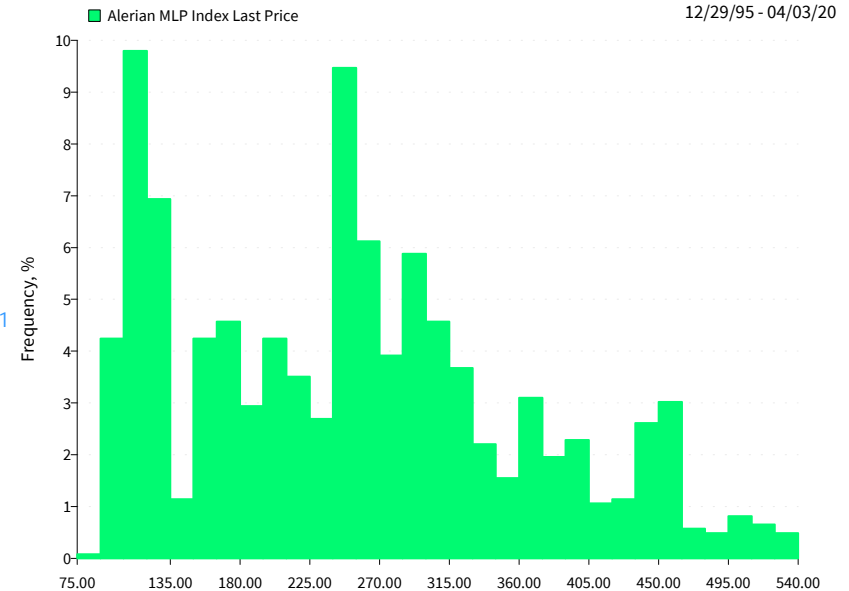
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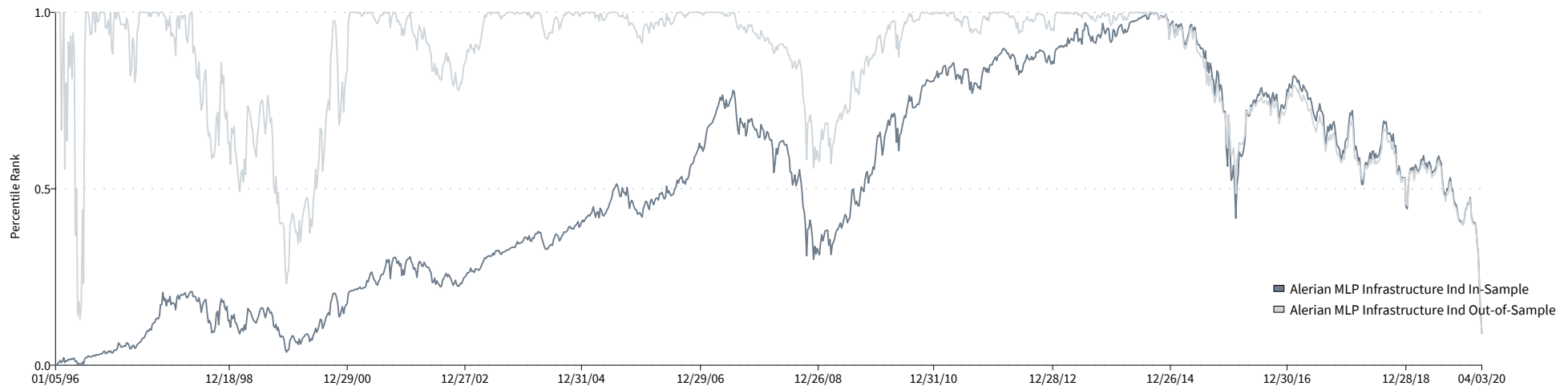
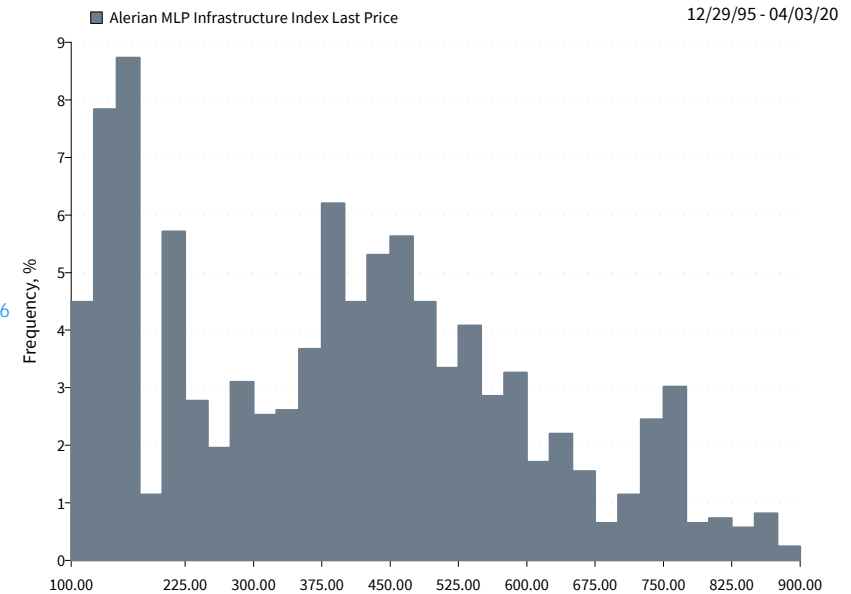
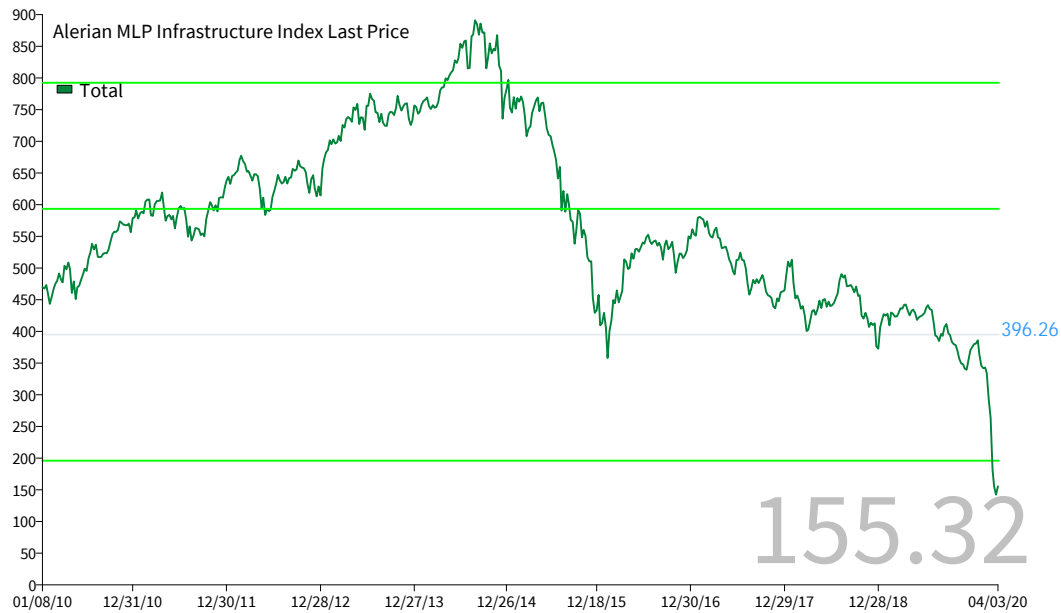
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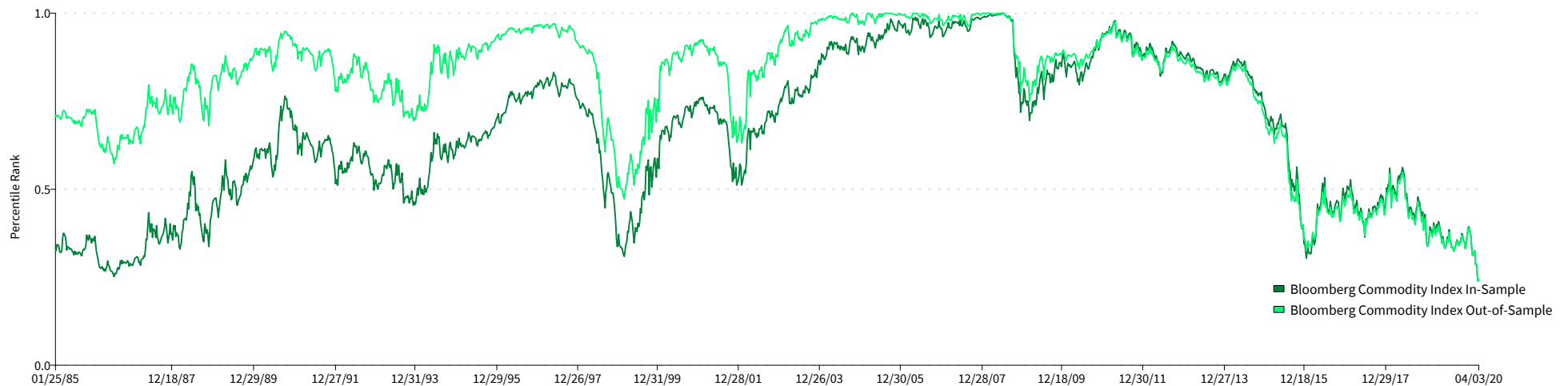
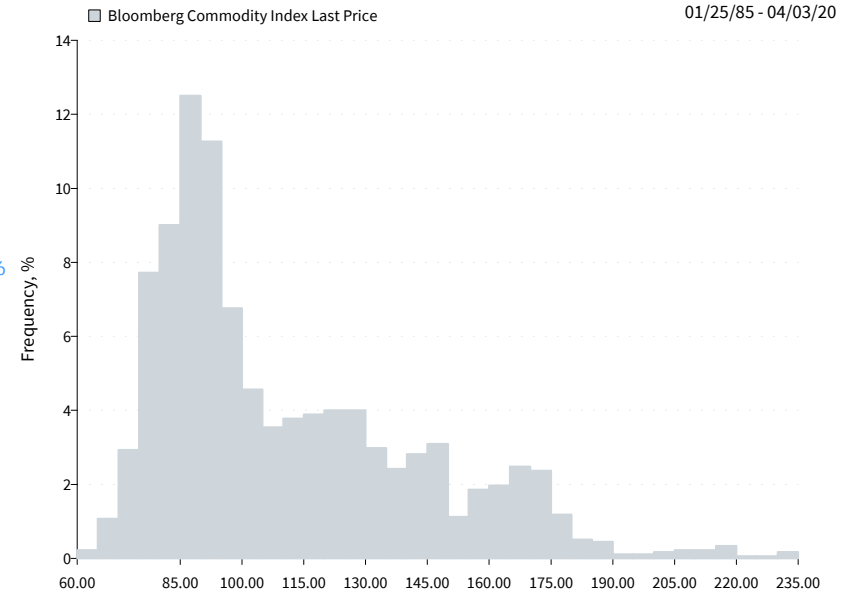
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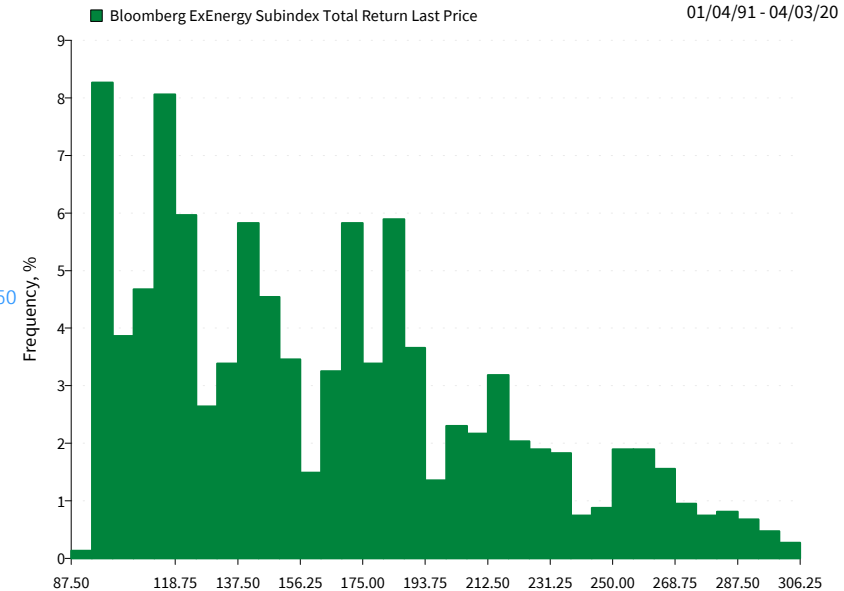
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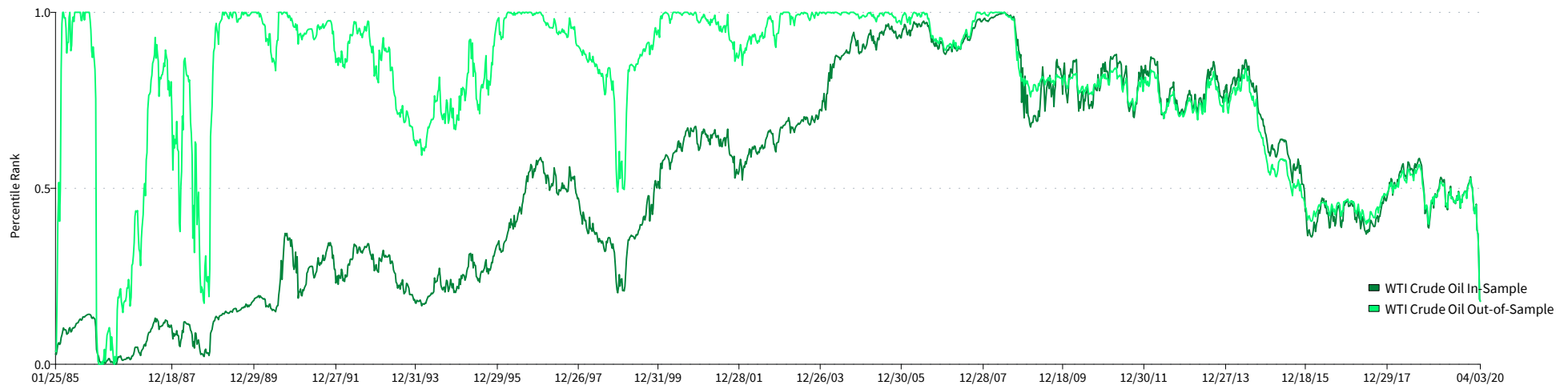
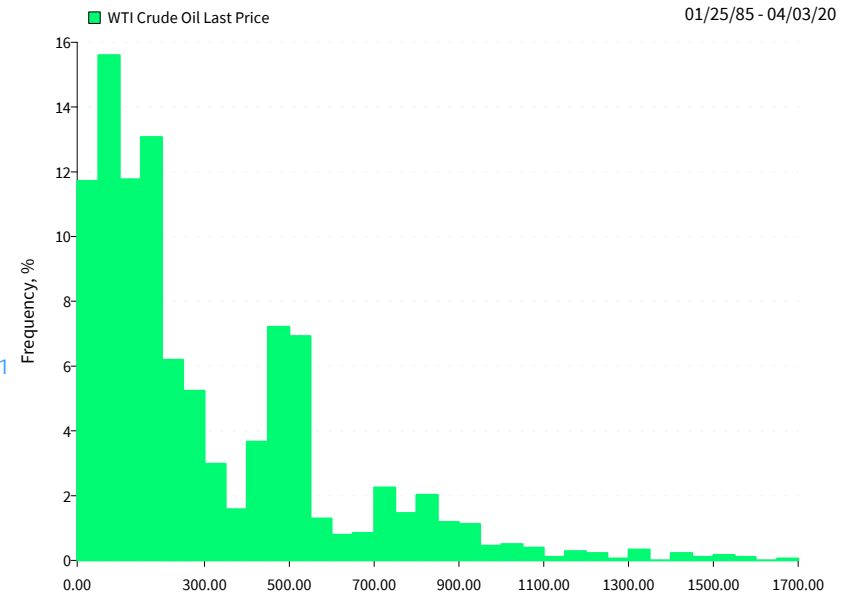
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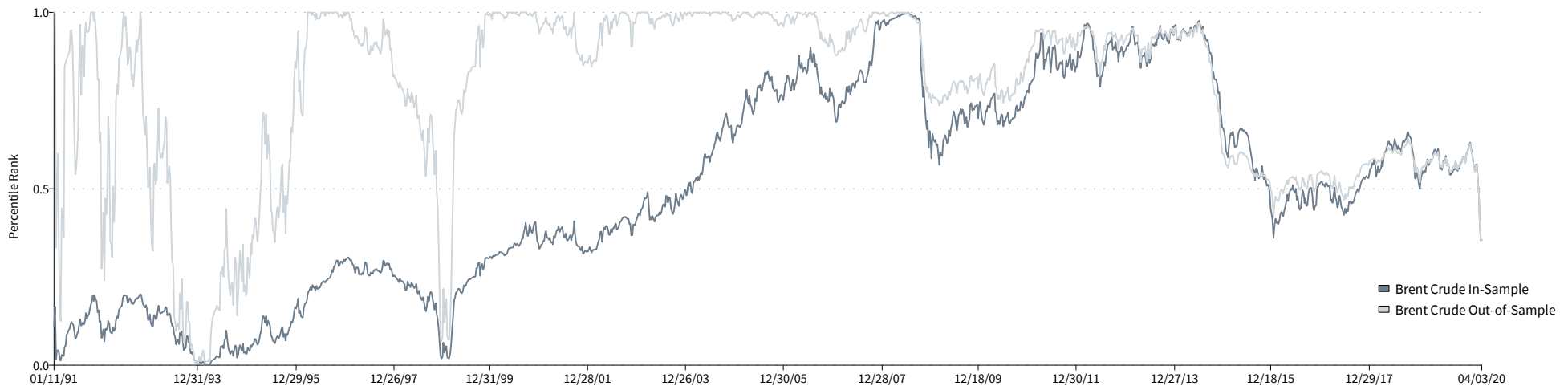
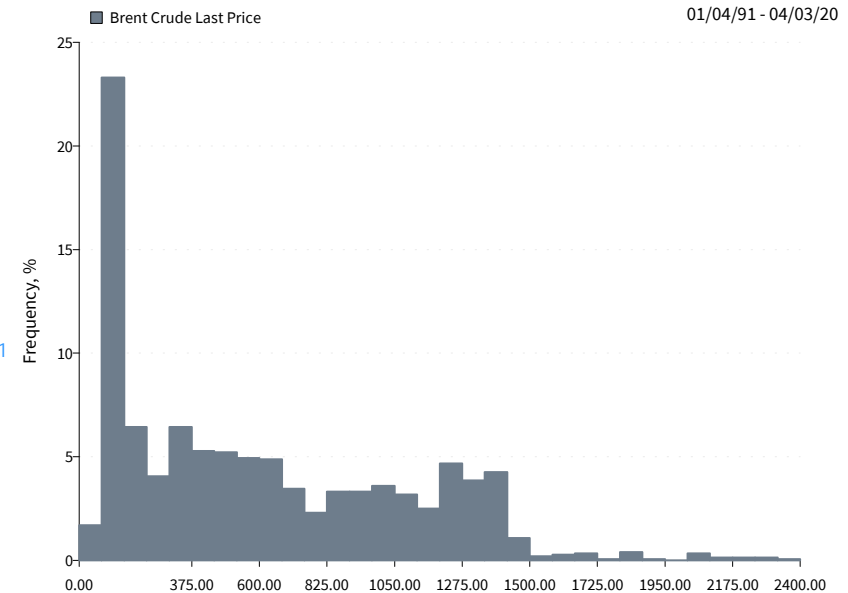
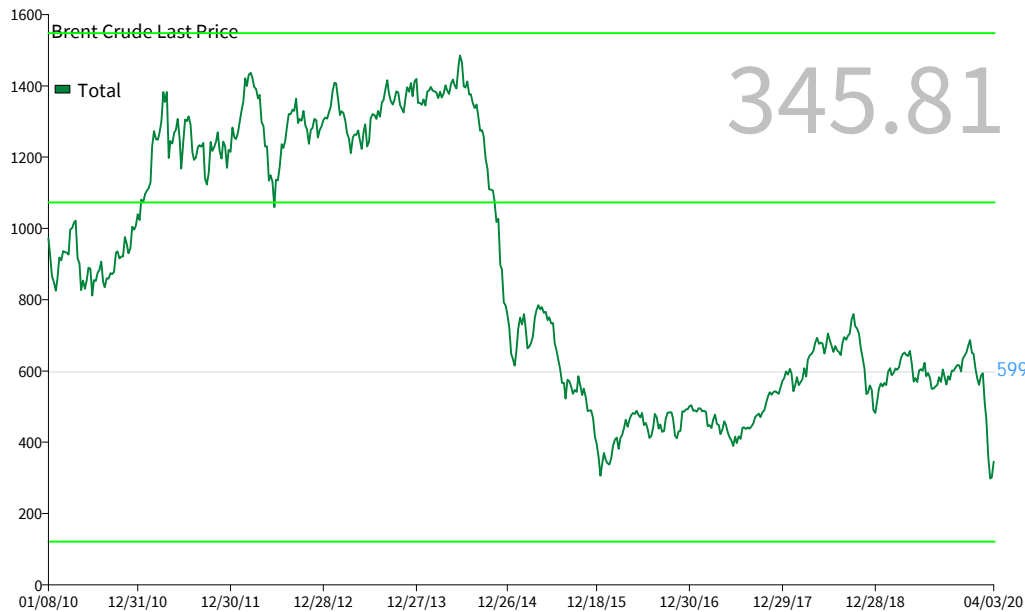
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Real



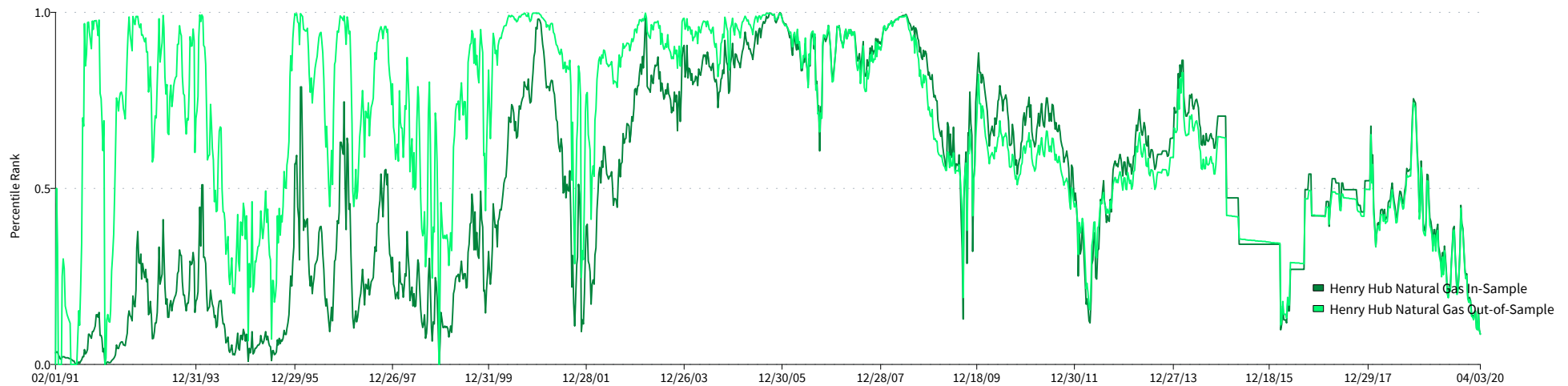
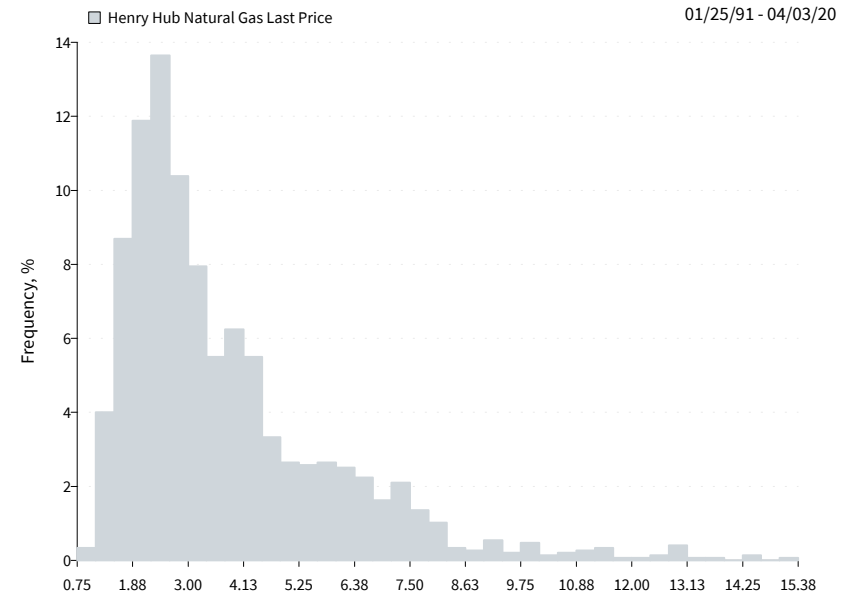
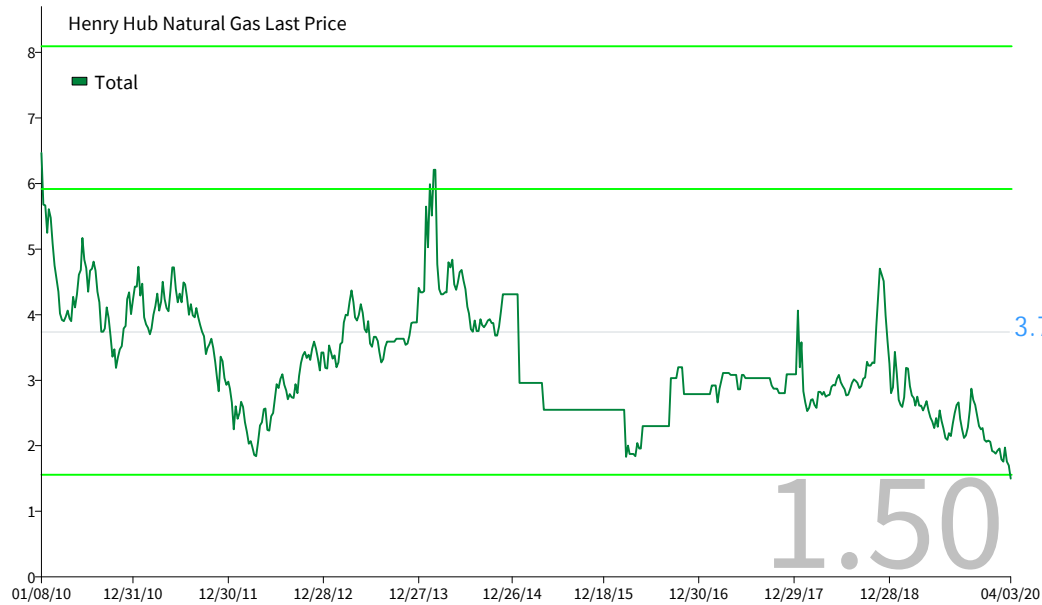
Weekly Valuation Report -- Real April 3, 2020

Real



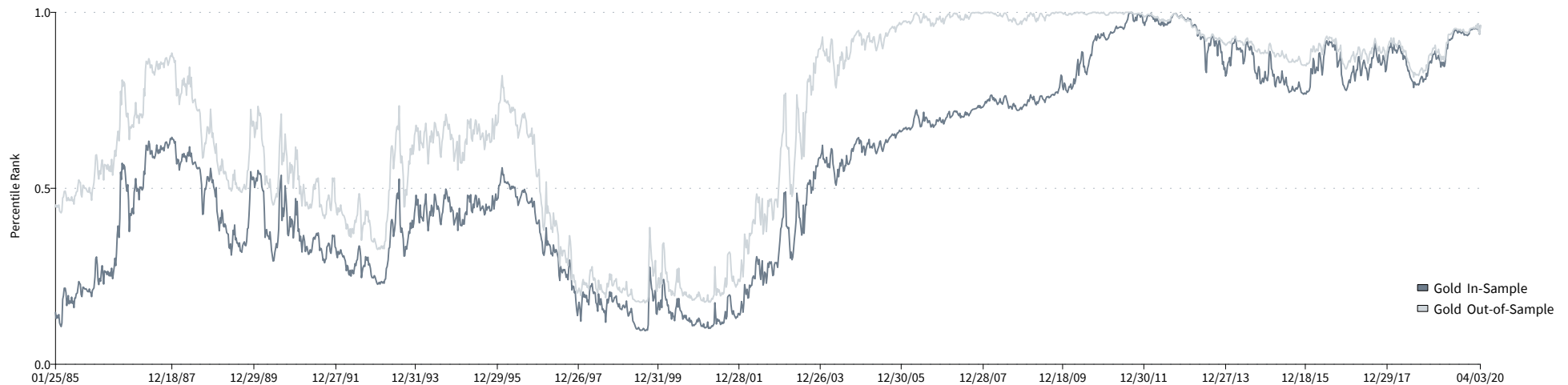
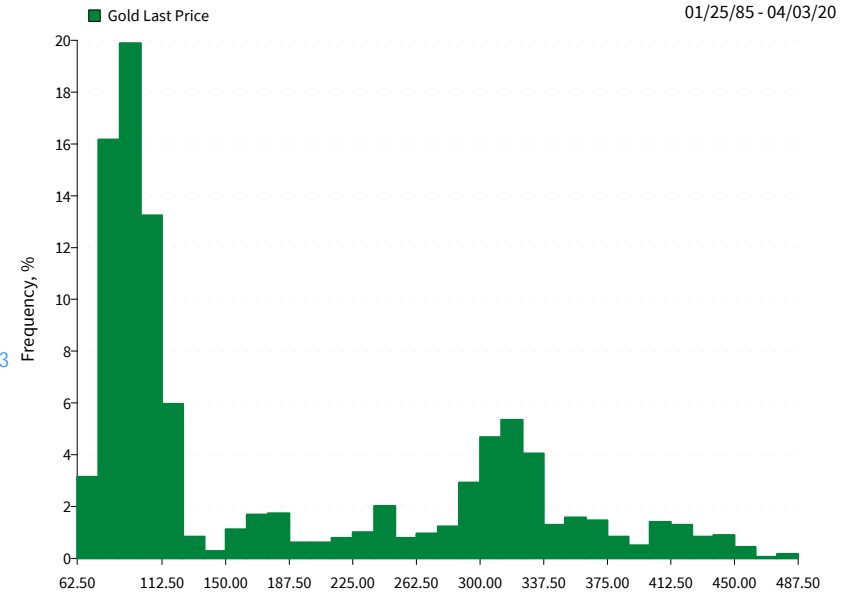
Weekly Valuation Report -- Real April 3, 2020

Real



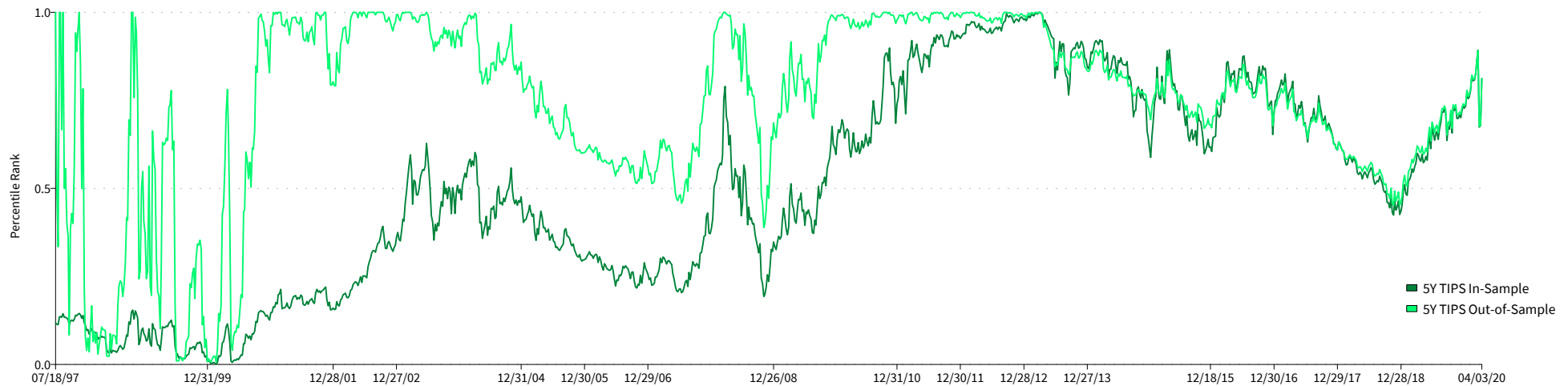
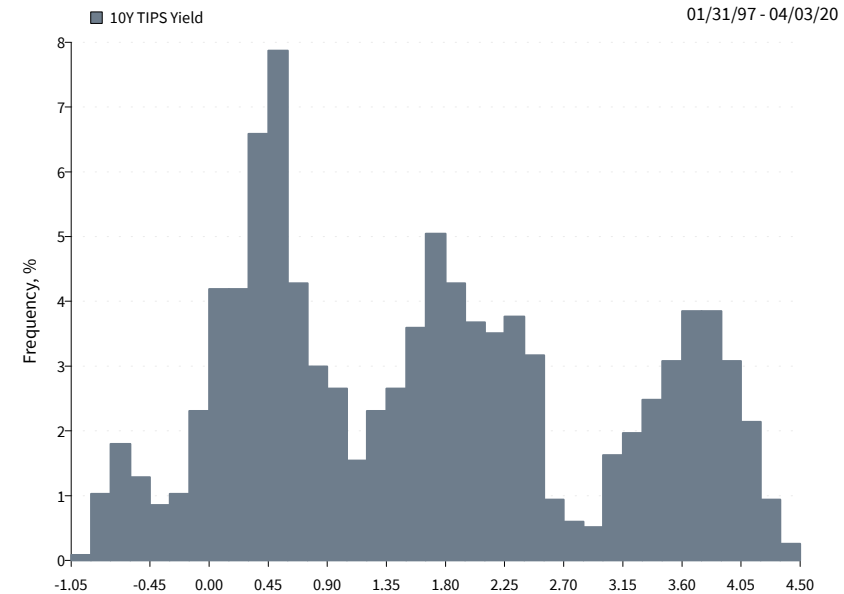
Weekly Valuation Report -- Real April 3, 2020

Real



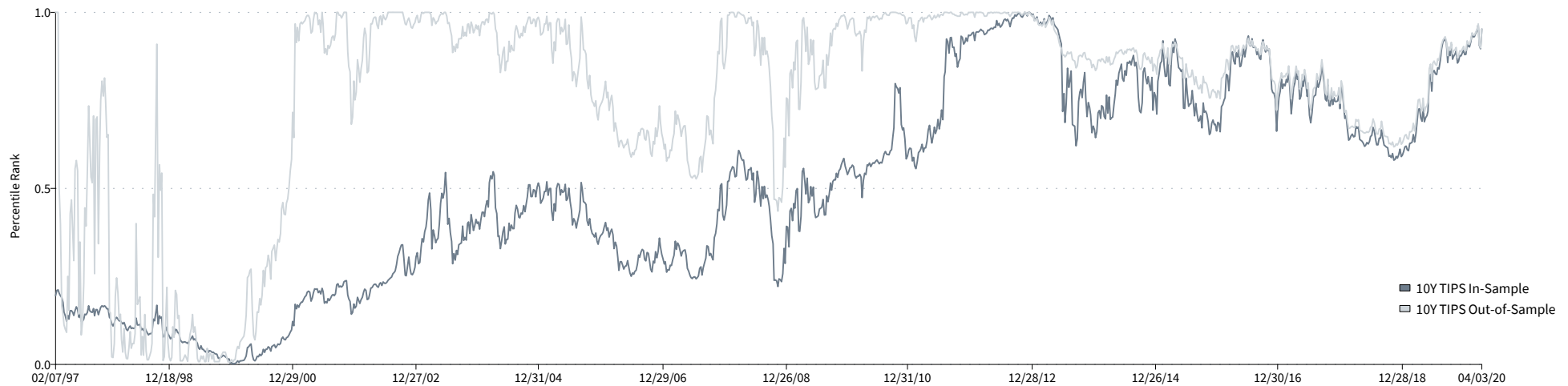
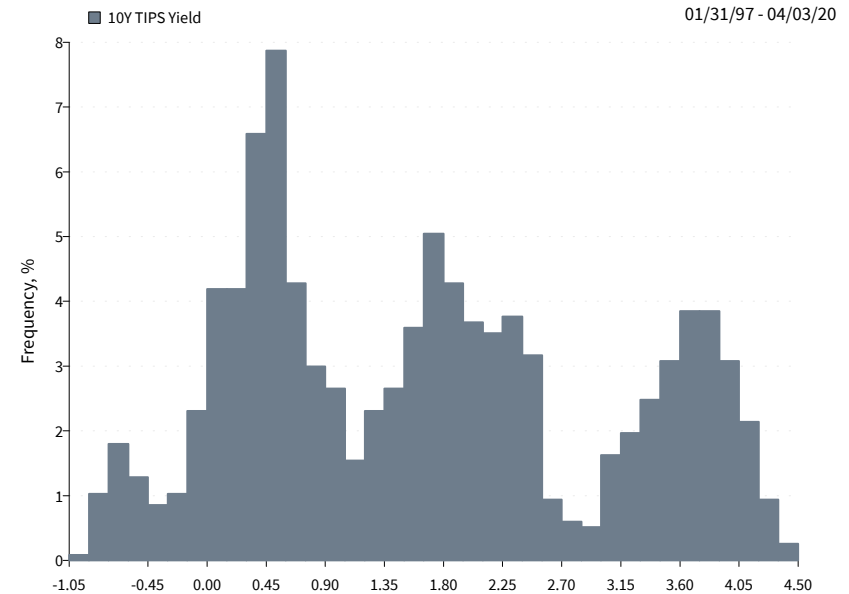
Weekly Valuation Report -- Real April 3, 2020

Real



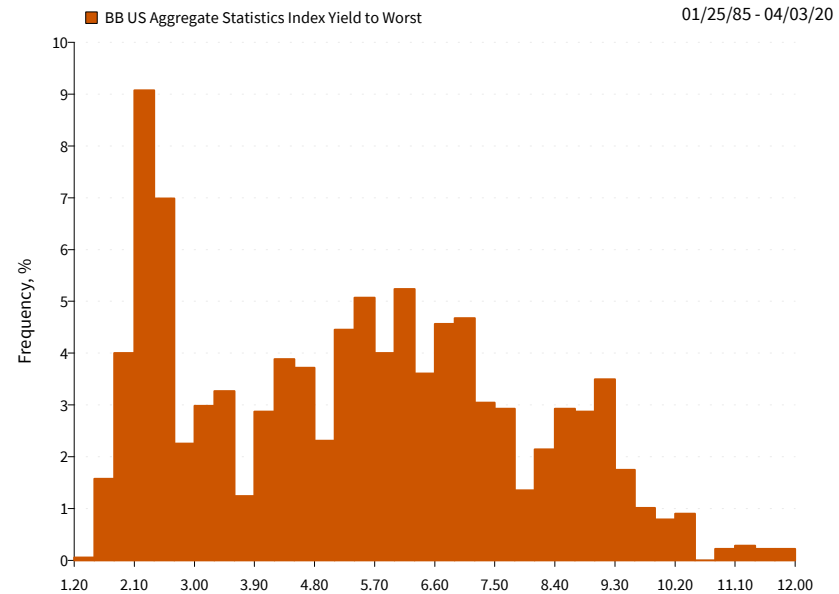
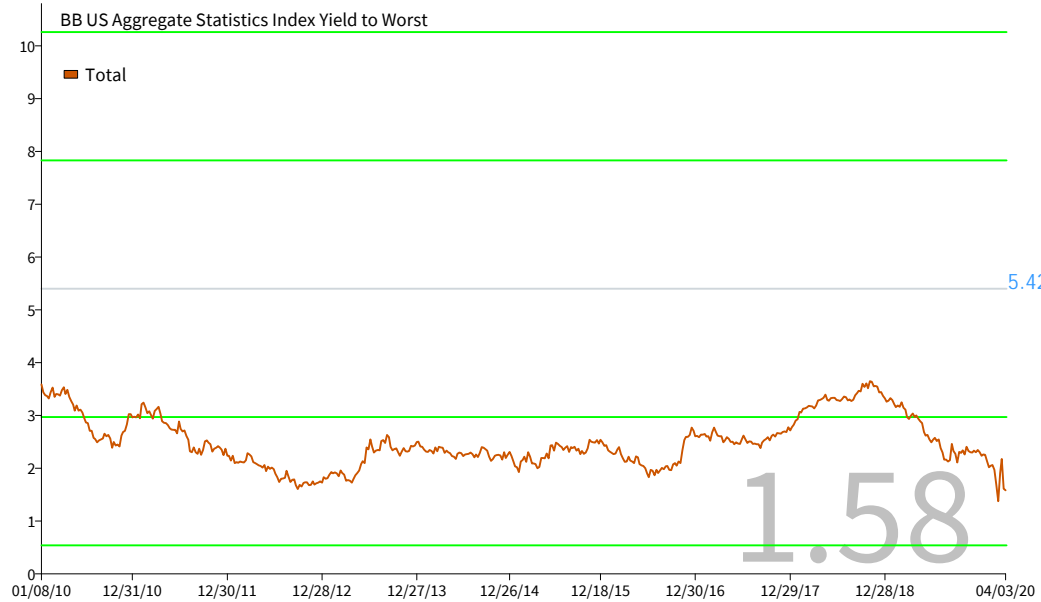
Weekly Valuation Report -- Real April 3, 2020

Real



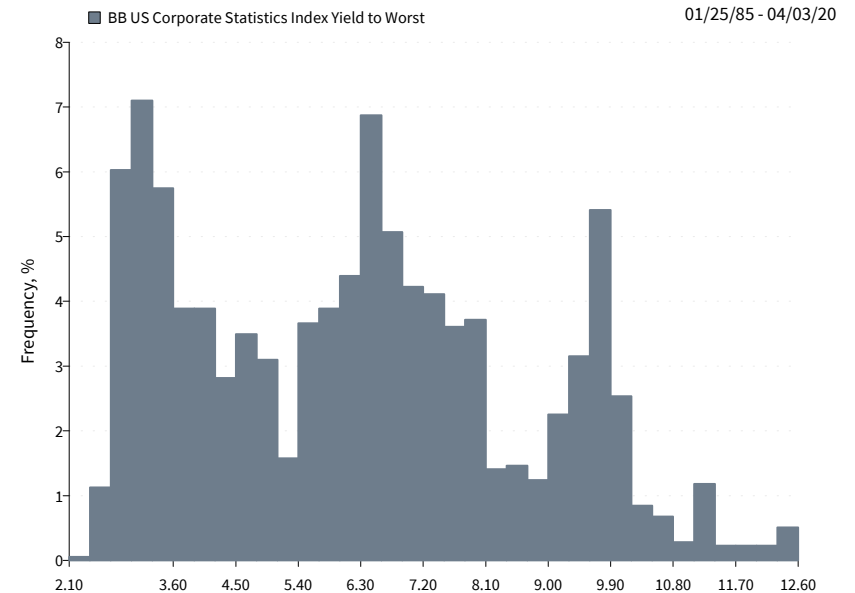
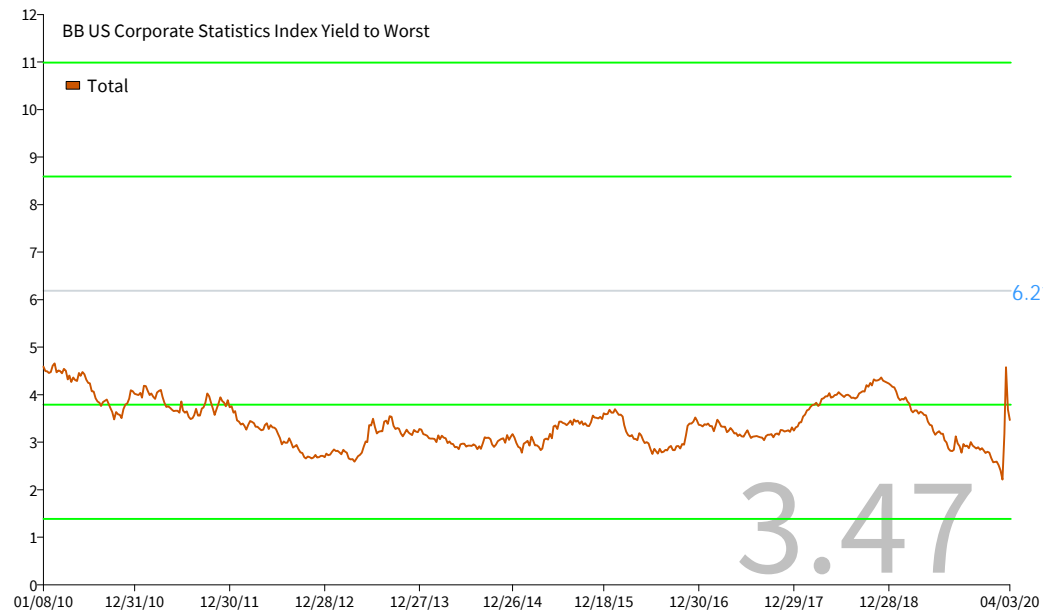
Weekly Valuation Report -- Income April 3, 2020

Income



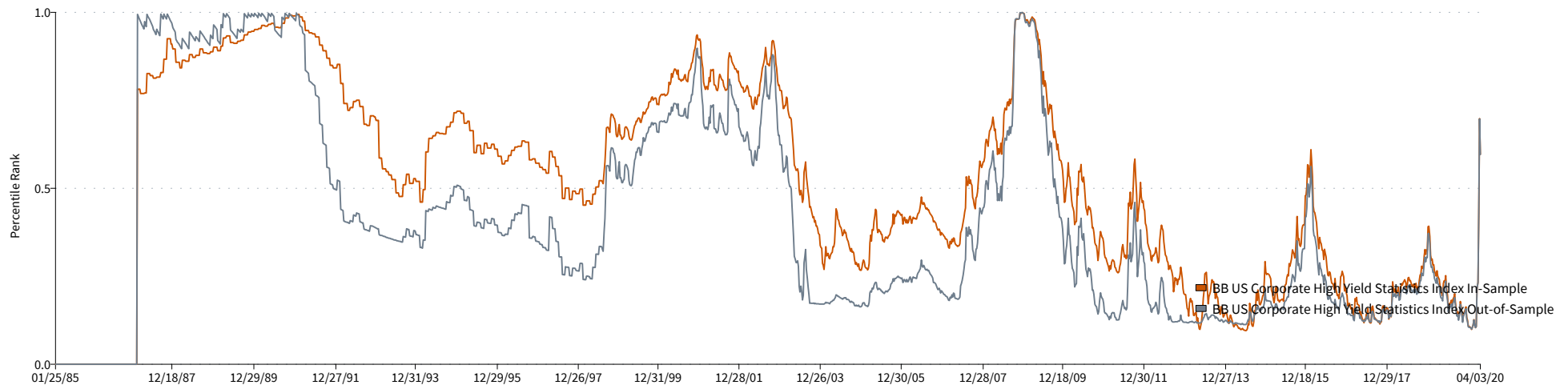
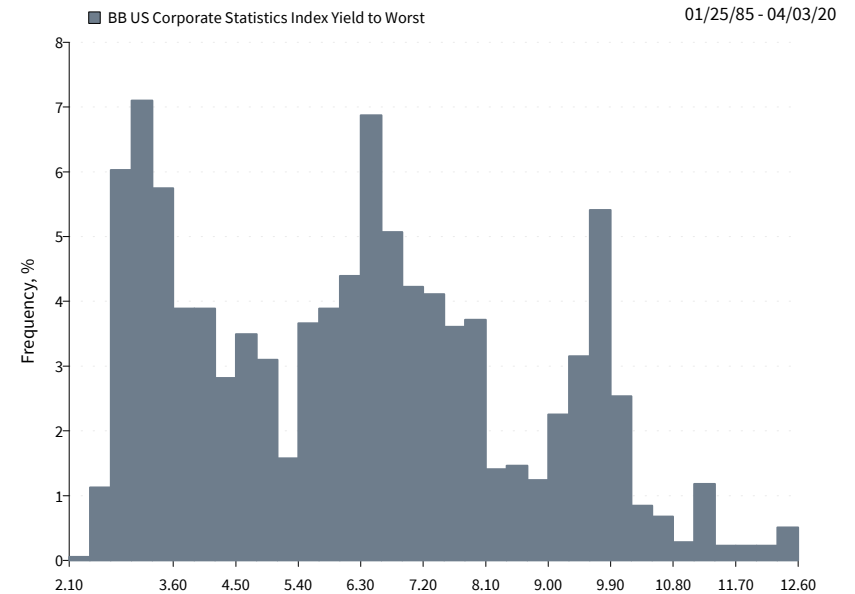
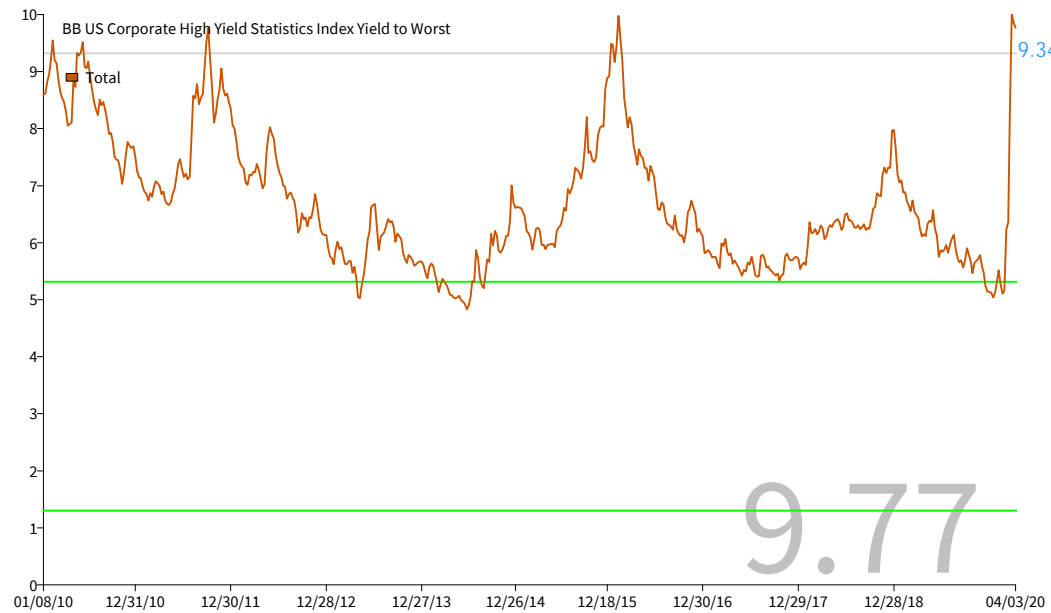
Weekly Valuation Report -- Income April 3, 2020

Income



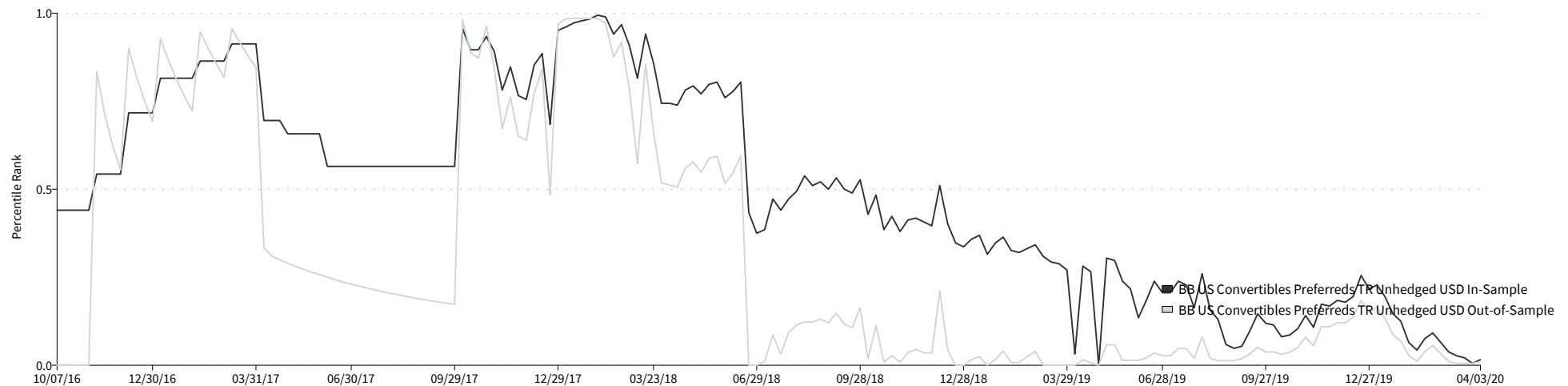
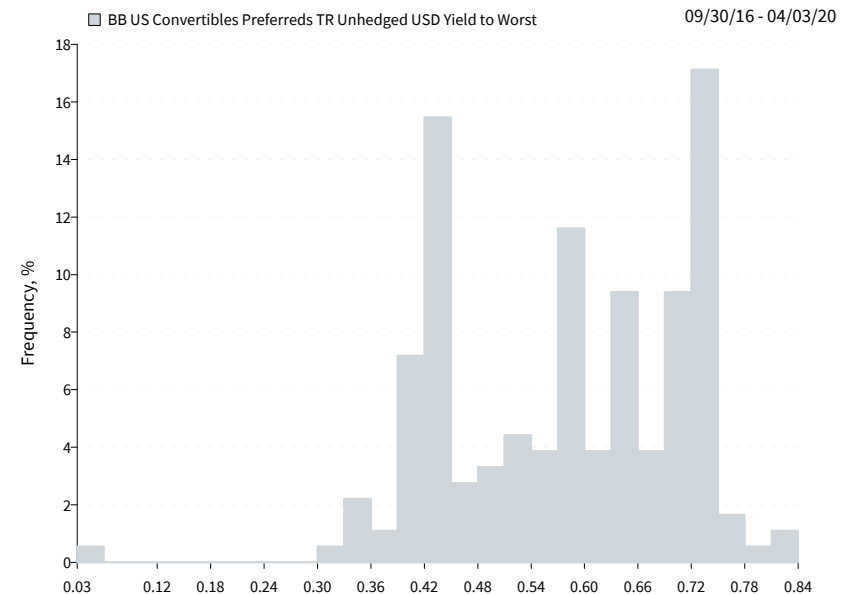
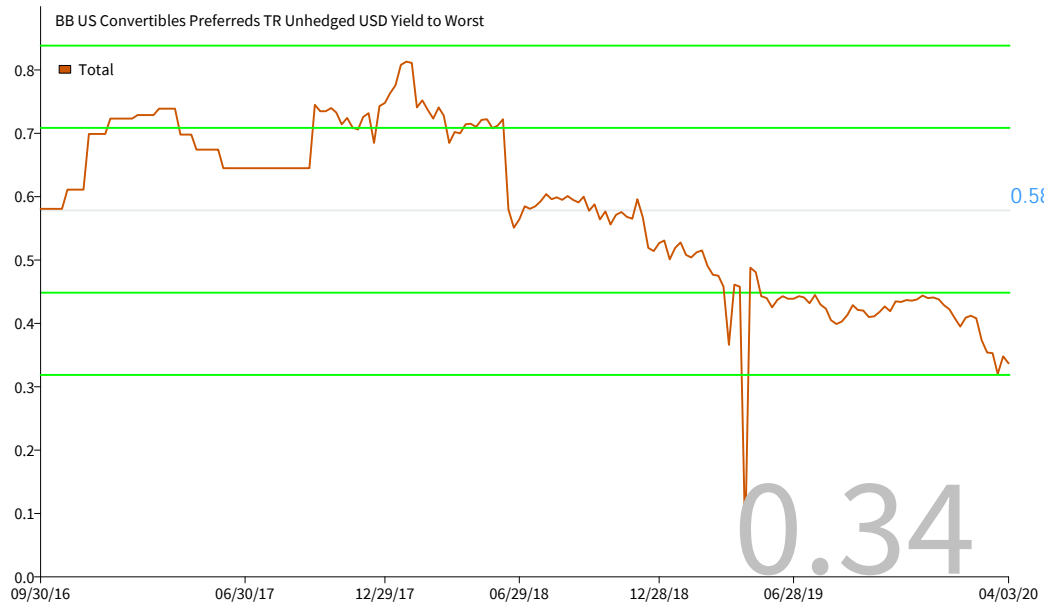
Weekly Valuation Report -- Income April 3, 2020

Income



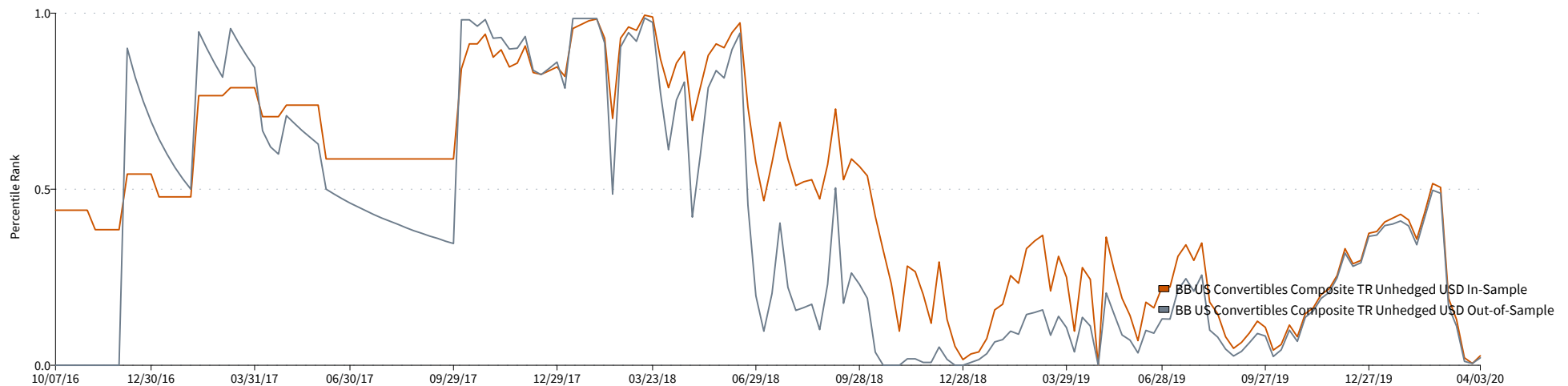
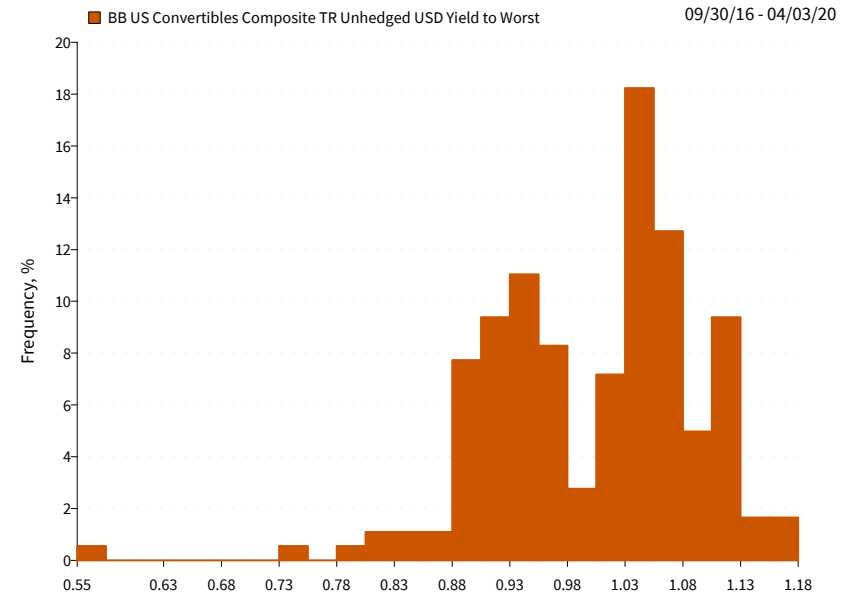
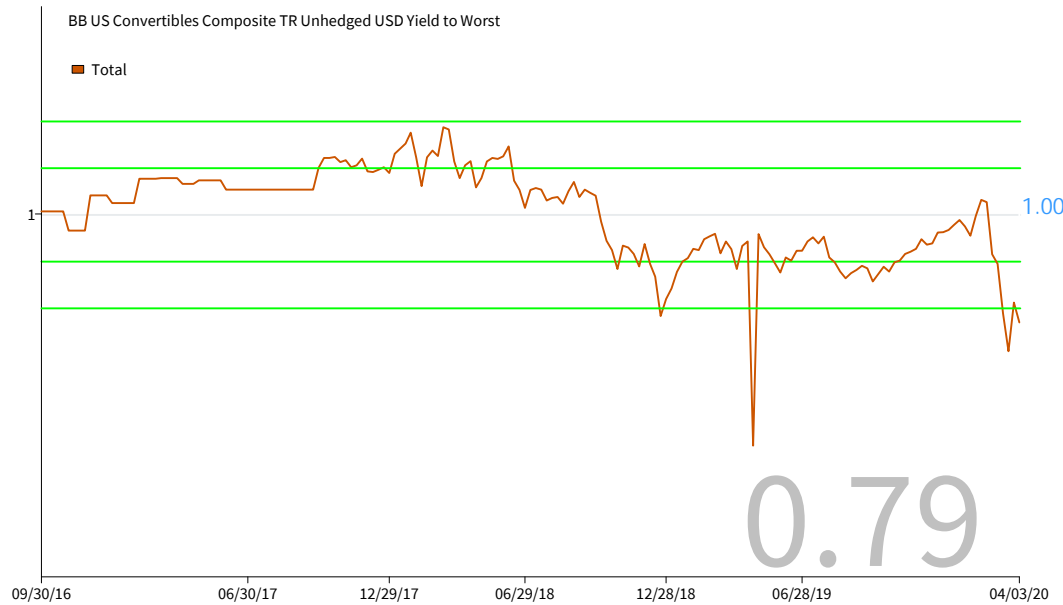
Weekly Valuation Report -- Income April 3, 2020

Income



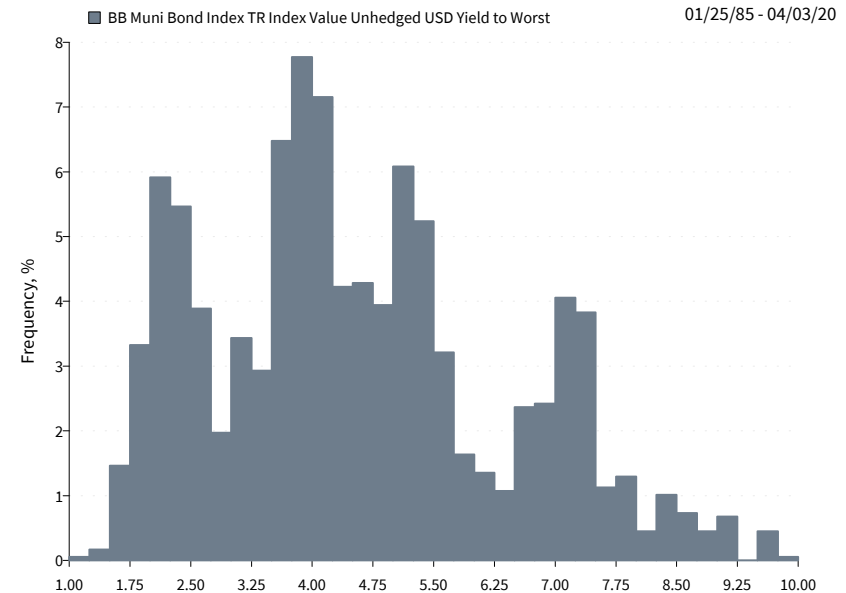
Weekly Valuation Report -- Income April 3, 2020

Income



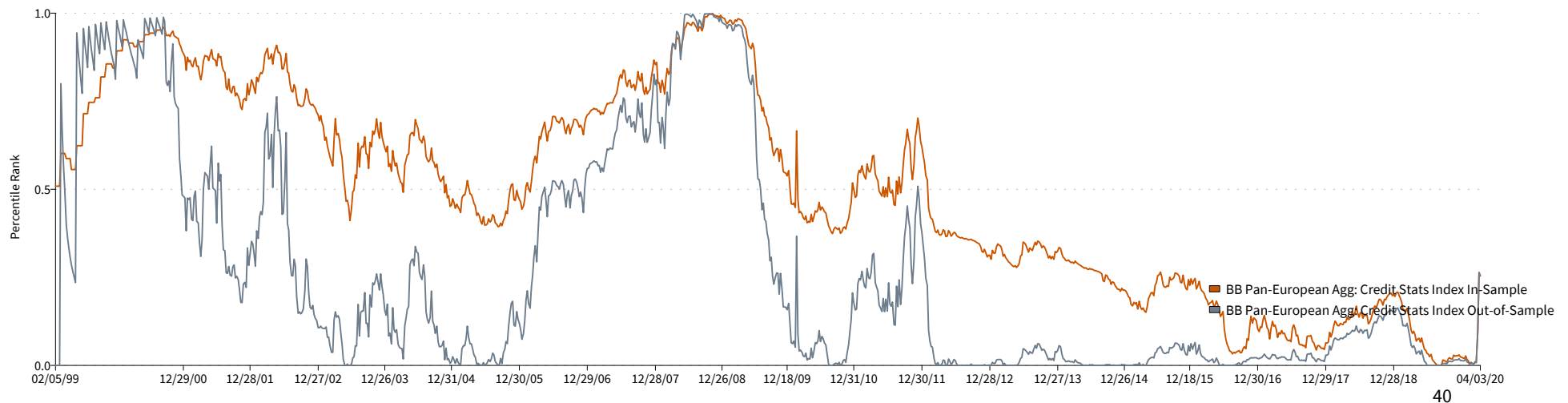
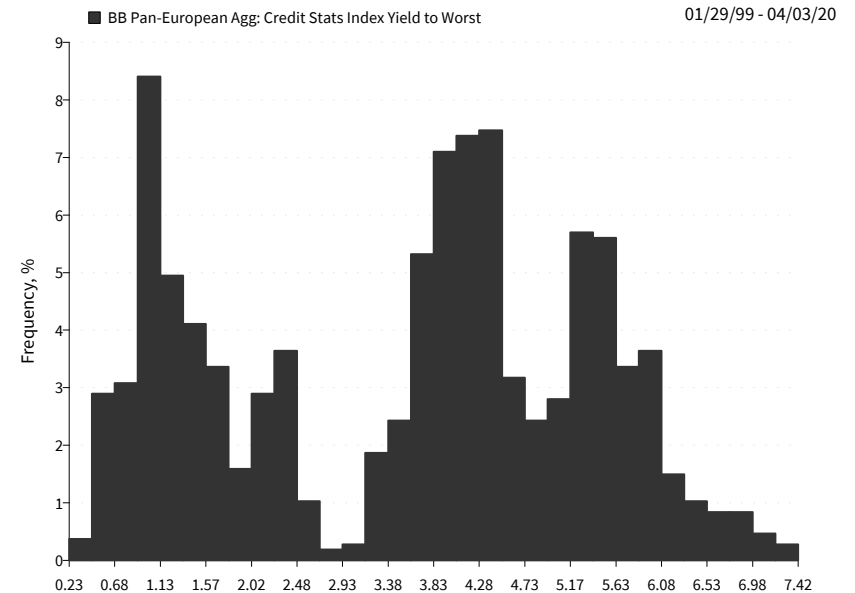
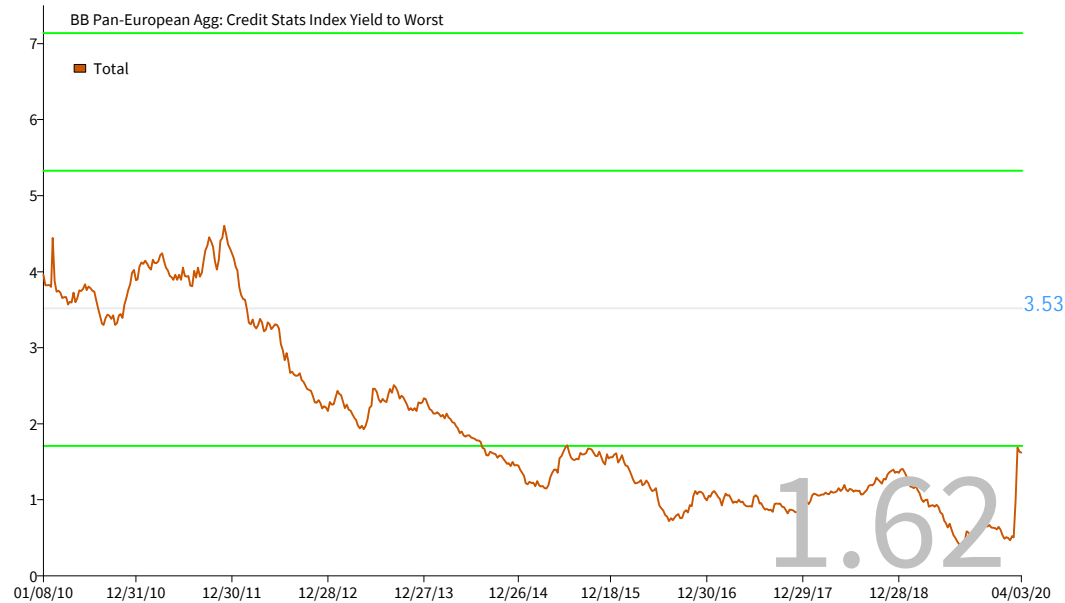
Weekly Valuation Report -- Income April 3, 2020

Income



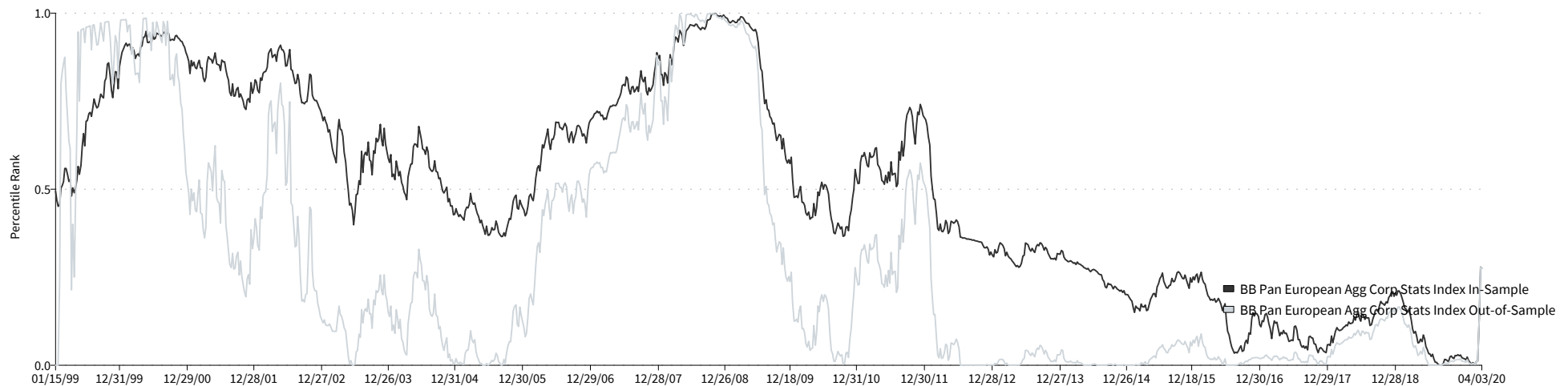
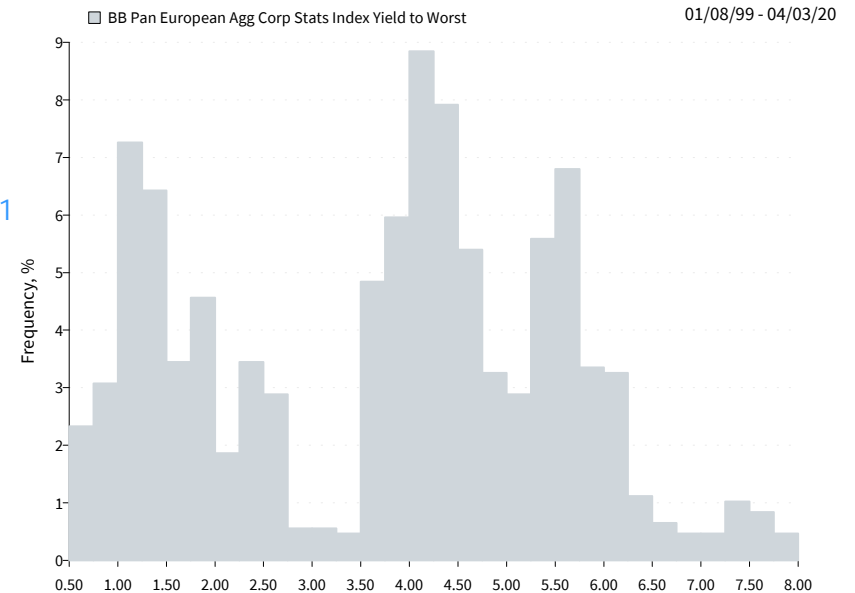
Weekly Valuation Report -- Income April 3, 2020

Income



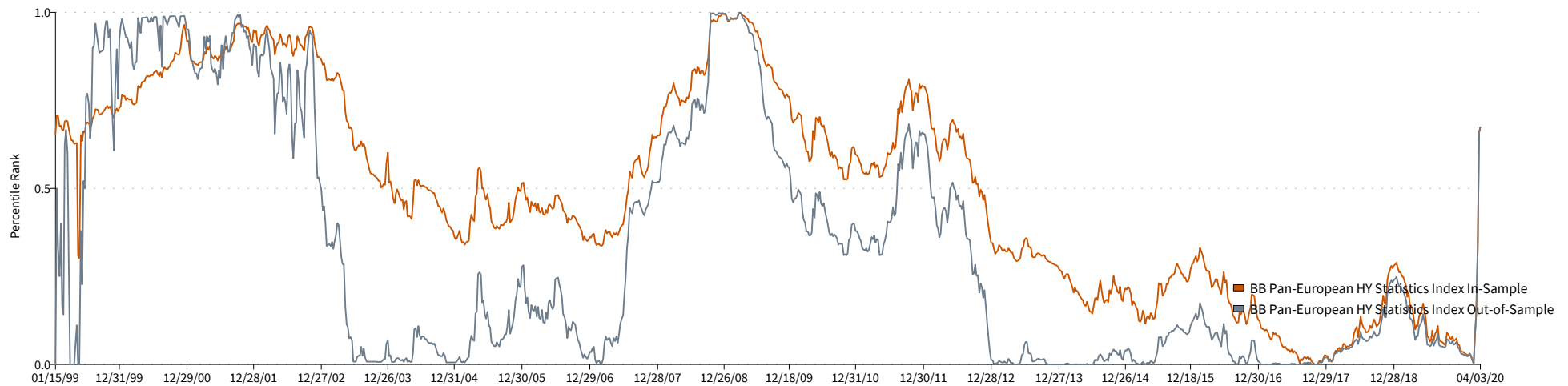
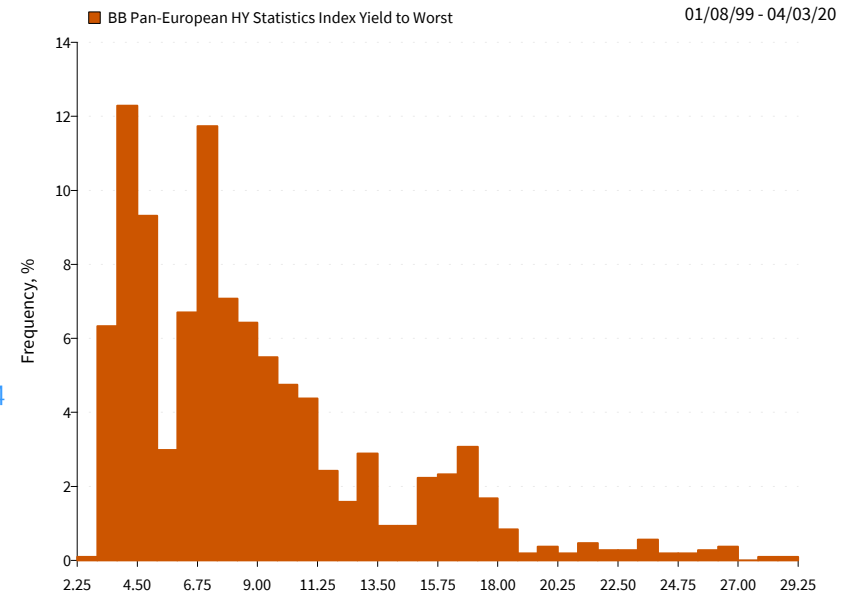
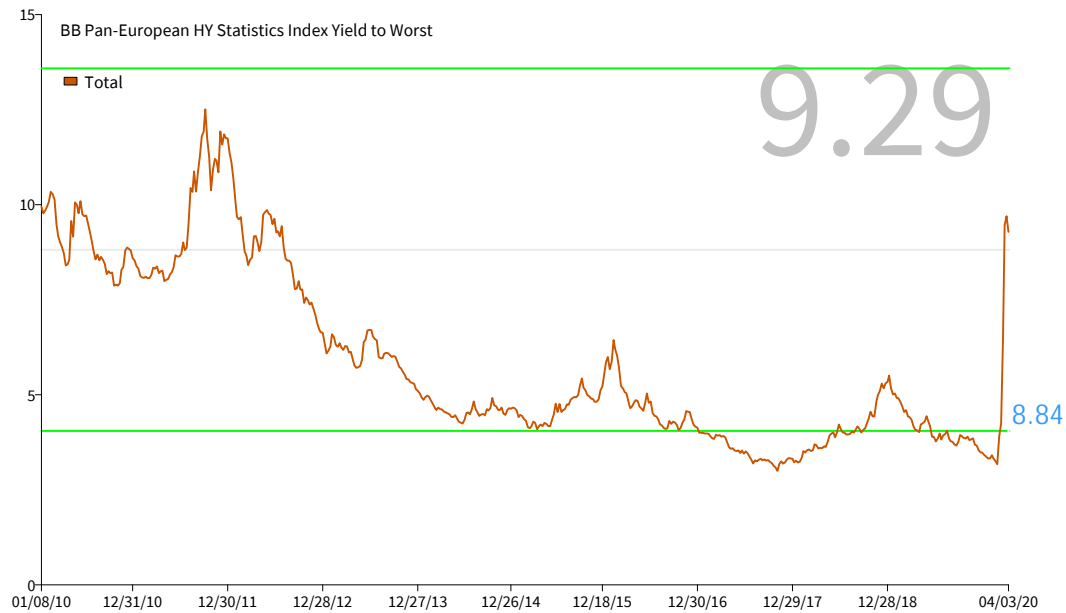
Weekly Valuation Report -- Income April 3, 2020

Income



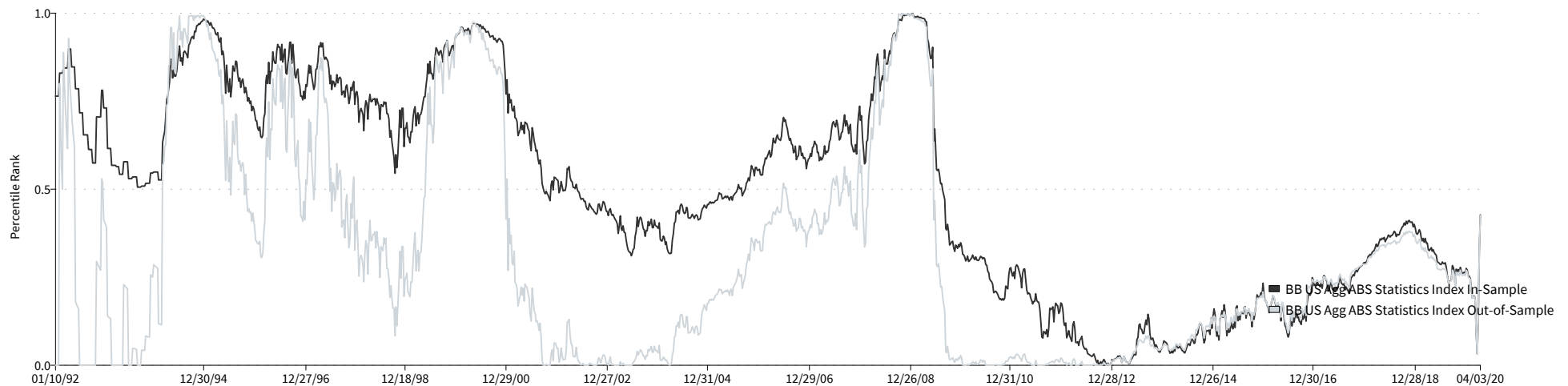
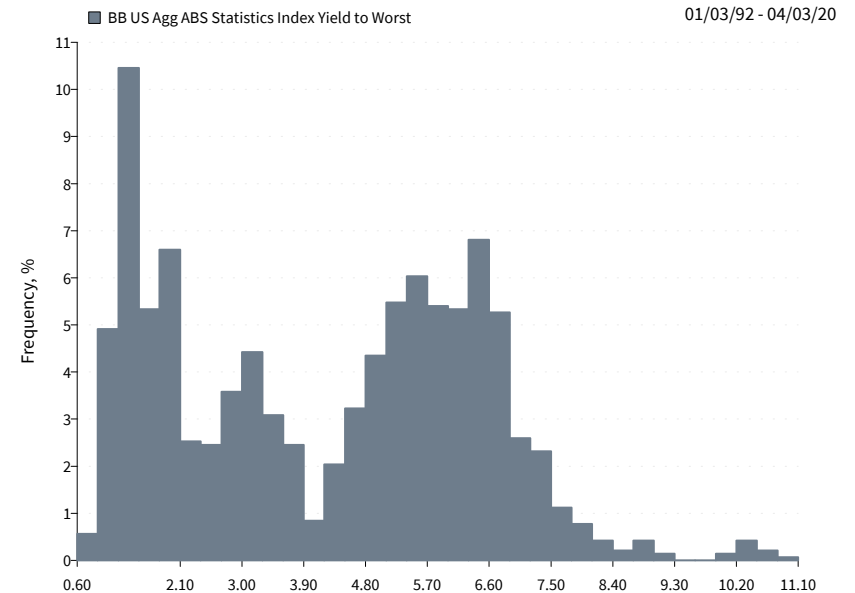
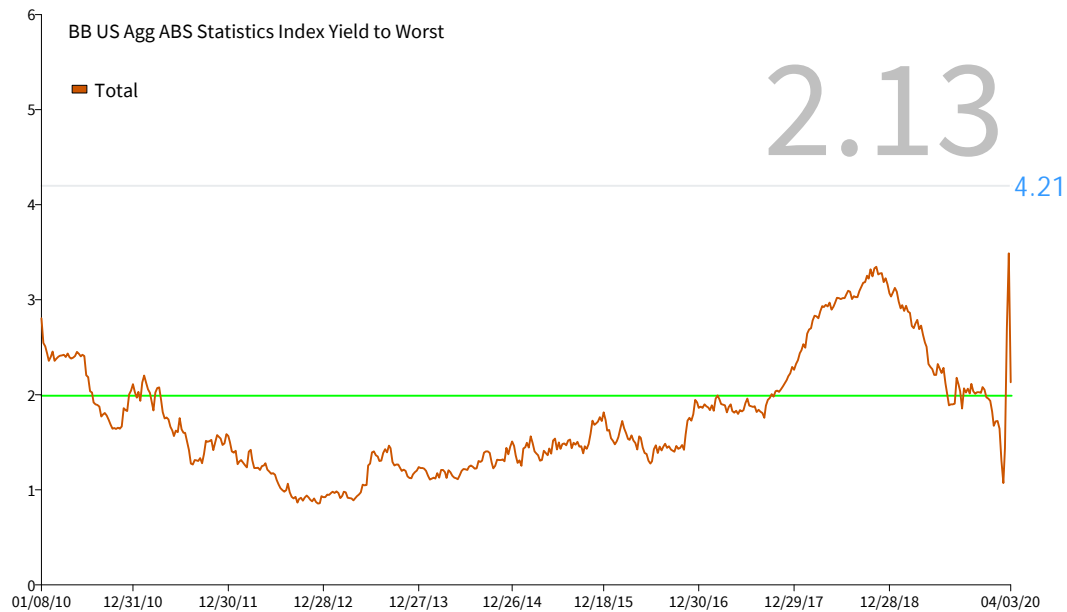
Weekly Valuation Report -- Income April 3, 2020

Income



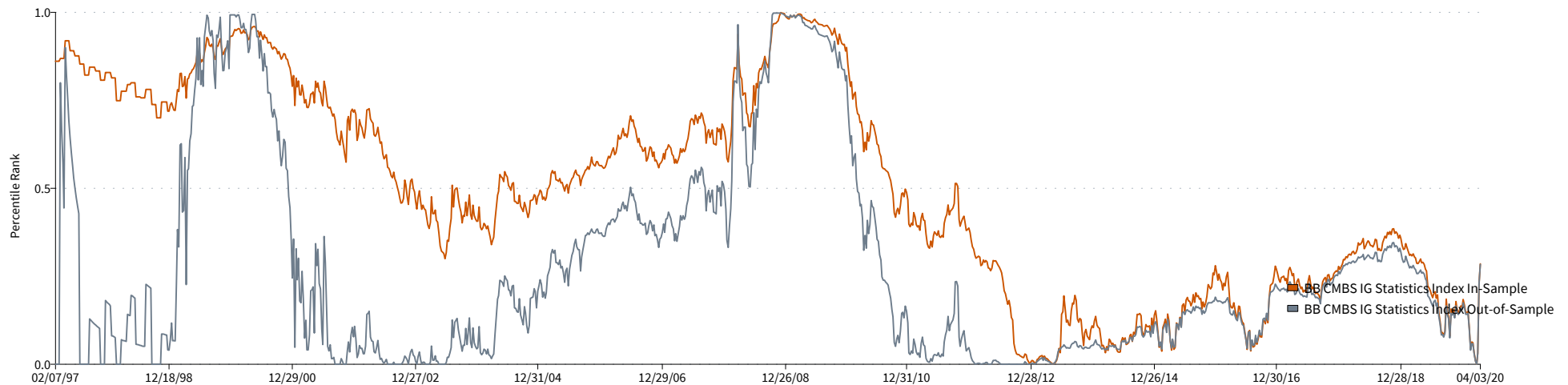
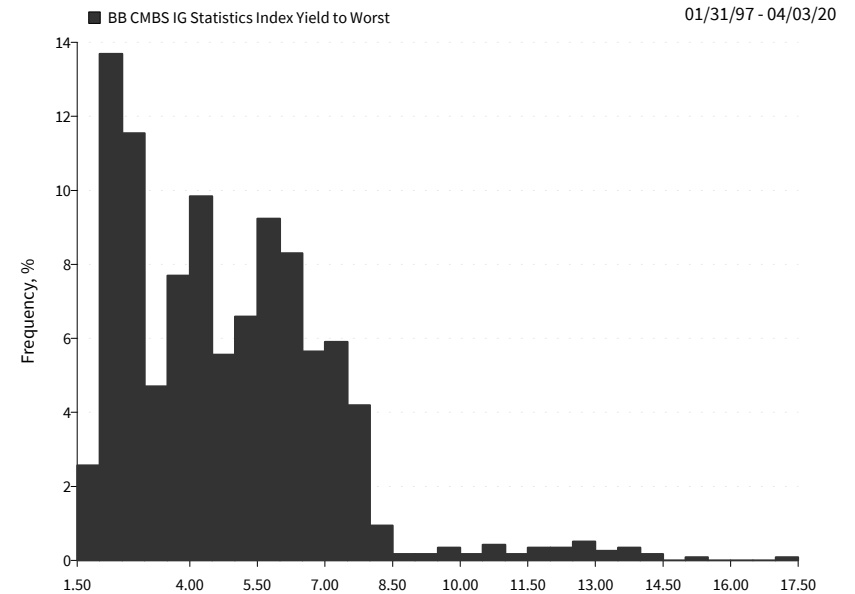
Weekly Valuation Report -- Income April 3, 2020

Income



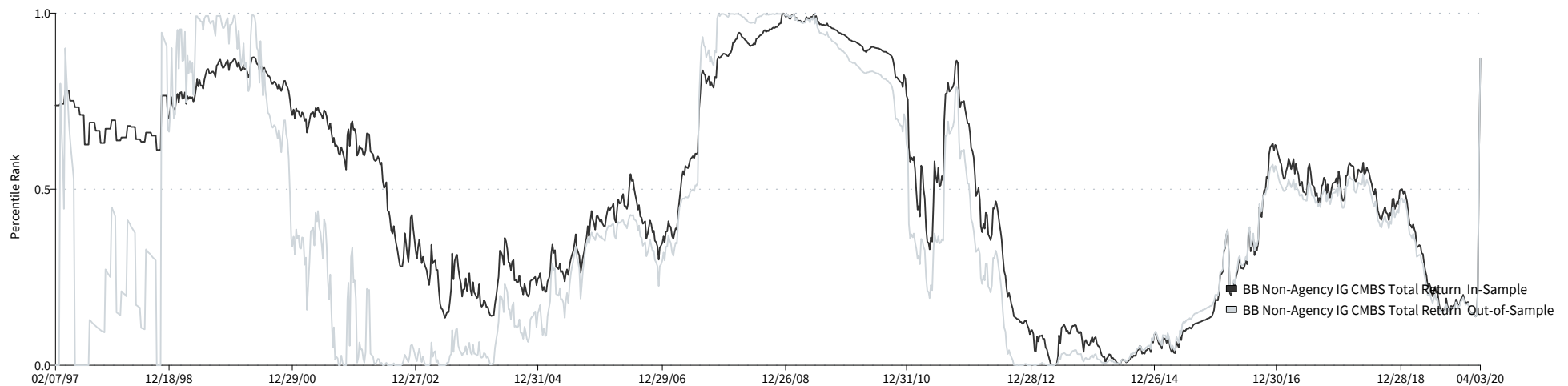
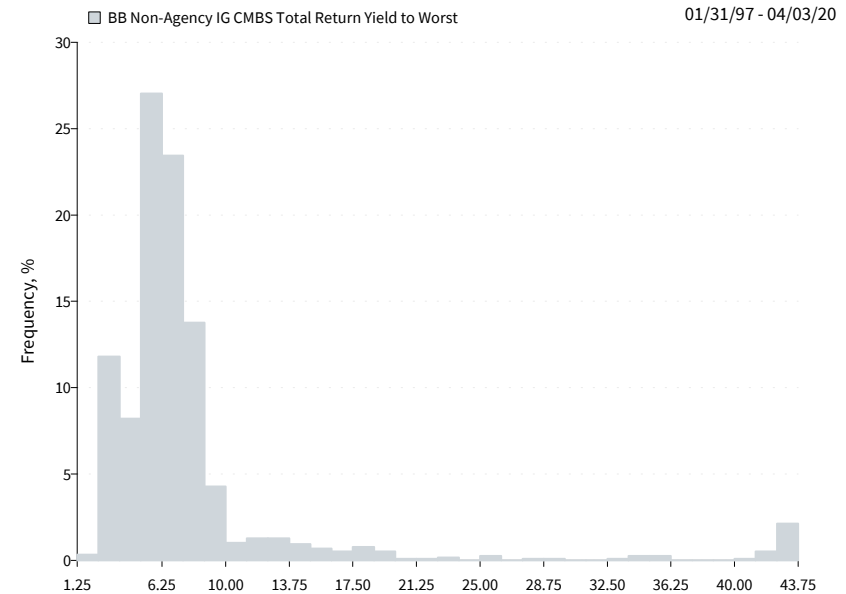
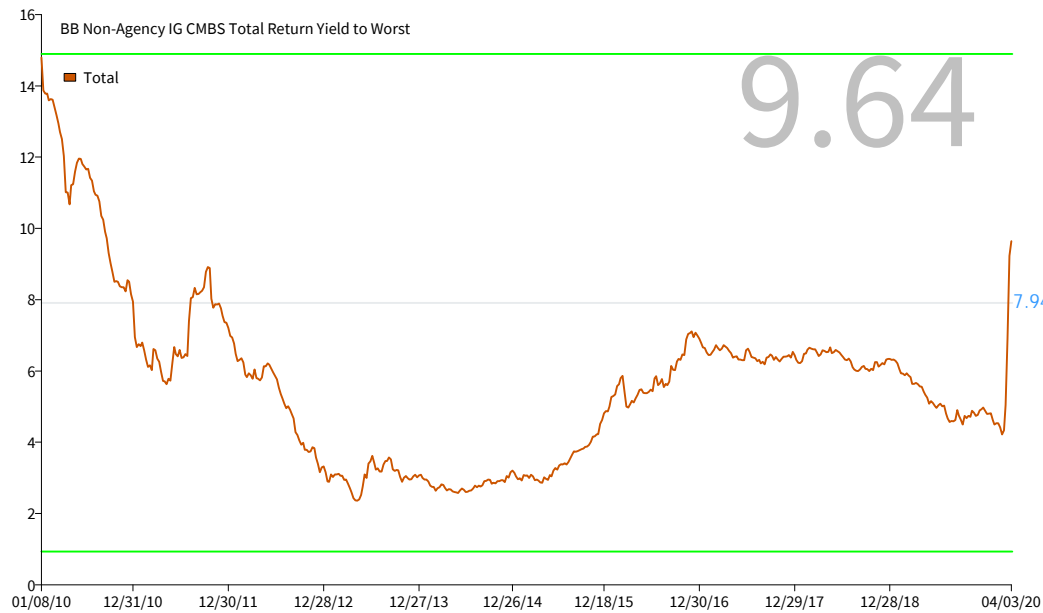
Weekly Valuation Report -- Income April 3, 2020

Income



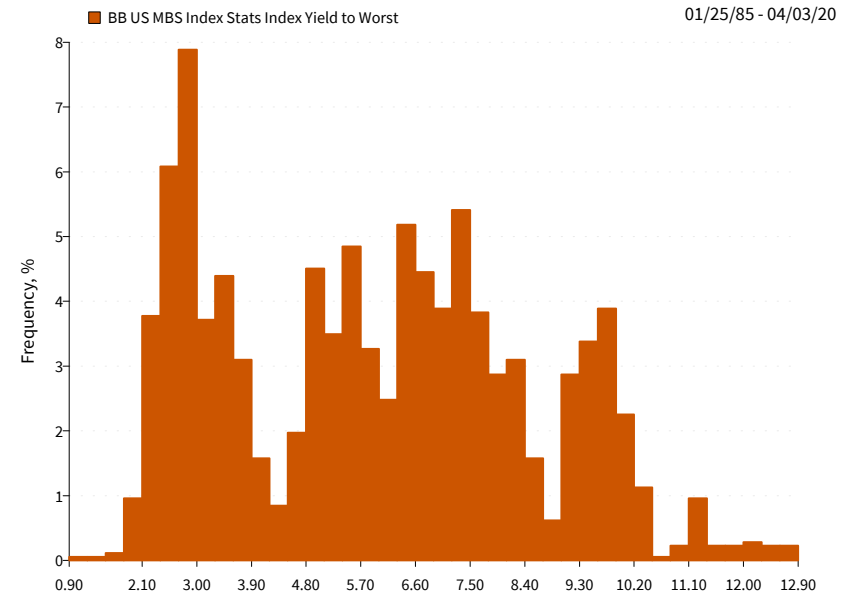
Weekly Valuation Report -- Income April 3, 2020

Income



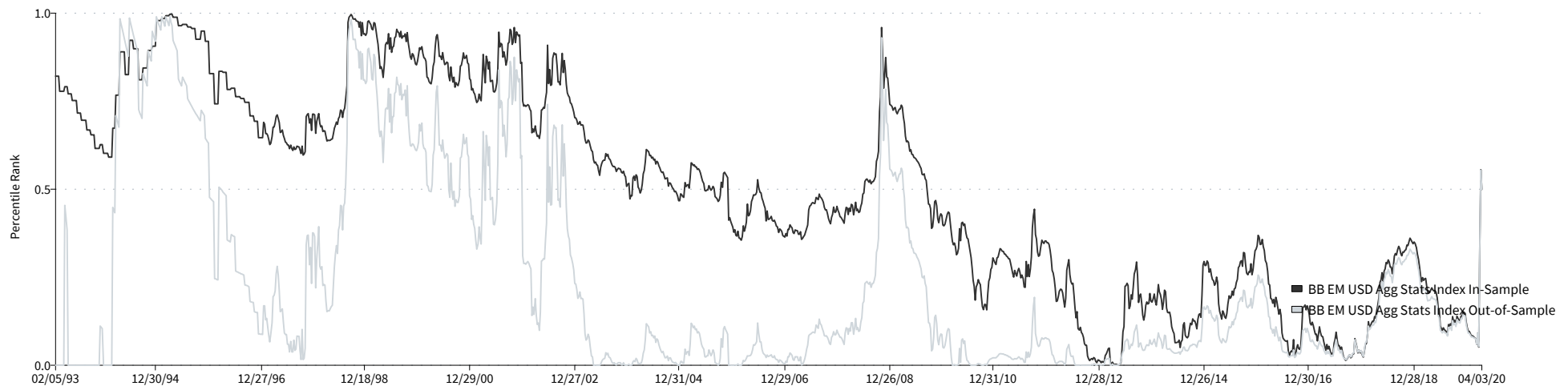
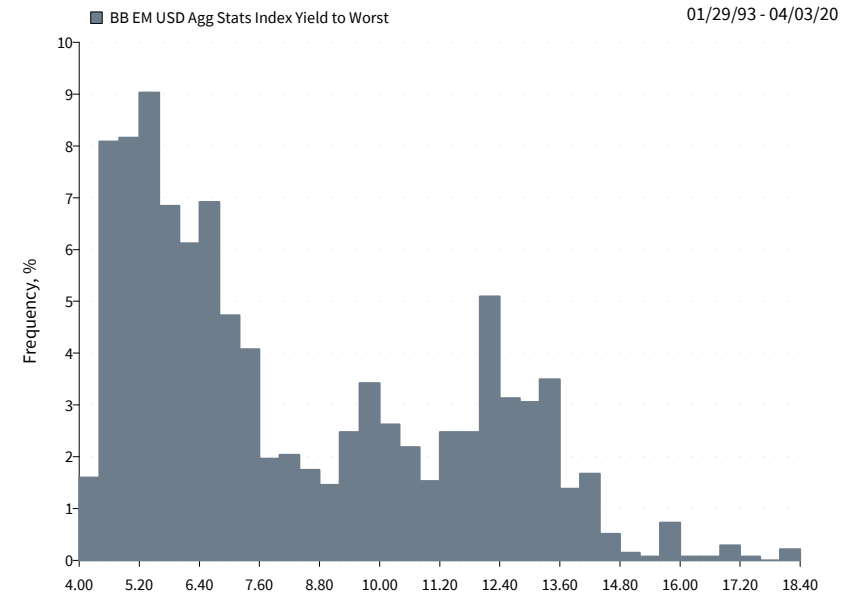
Weekly Valuation Report -- Income April 3, 2020

Income



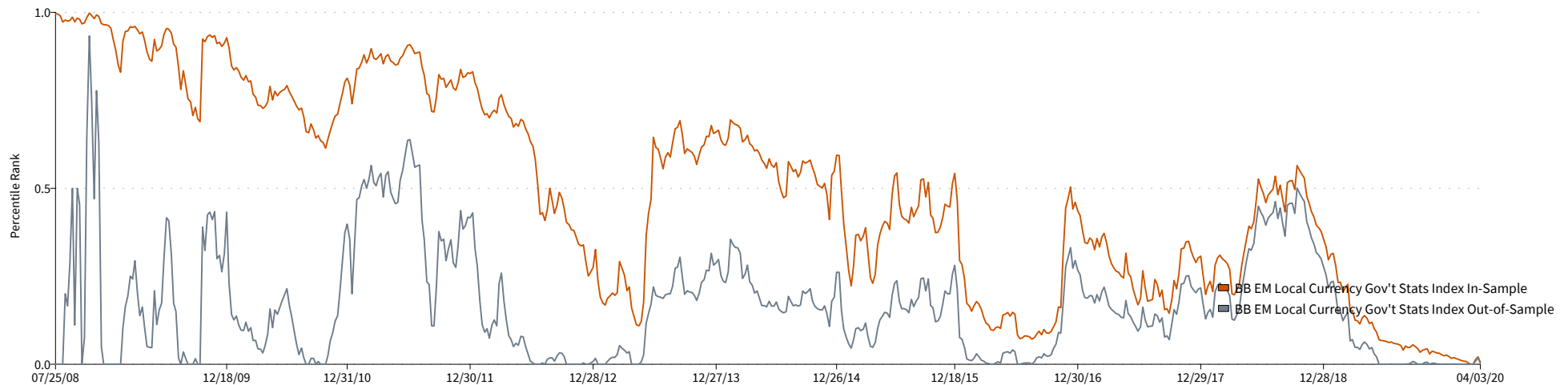
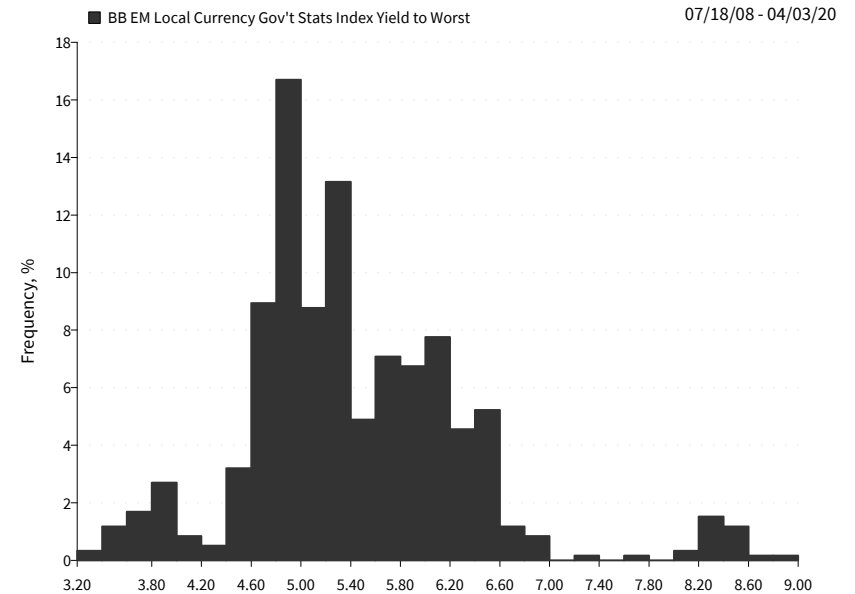
Weekly Valuation Report -- Income April 3, 2020

Income



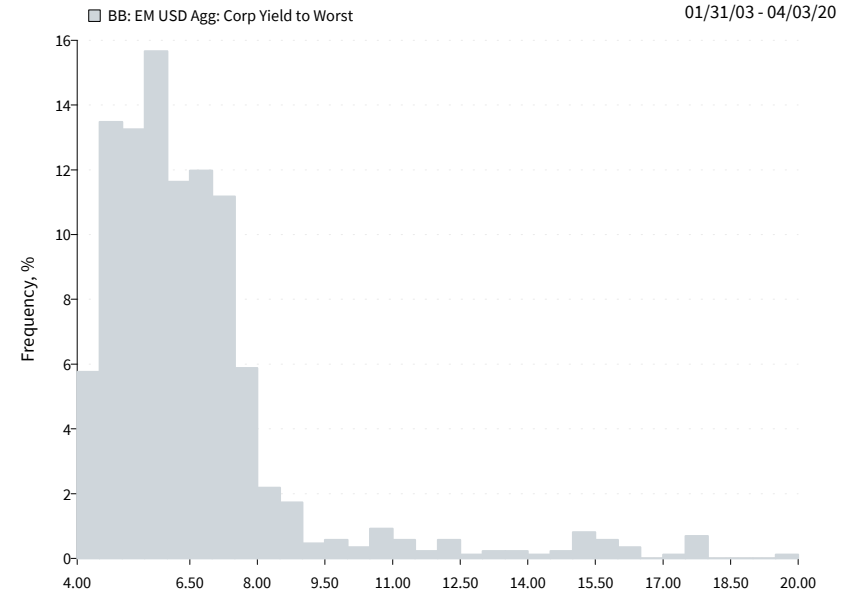
Weekly Valuation Report -- Income April 3, 2020

Income



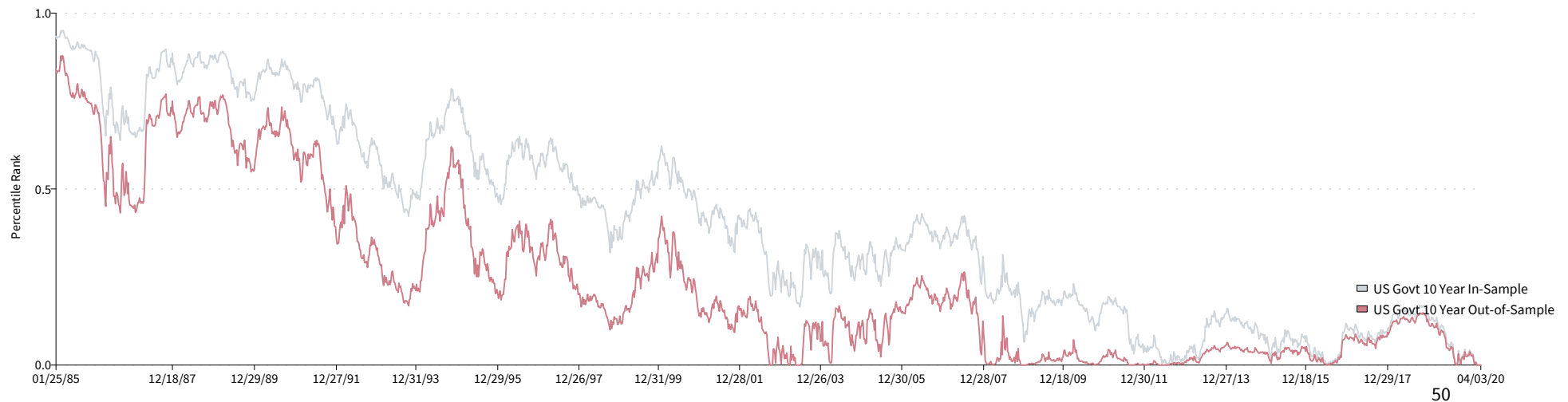
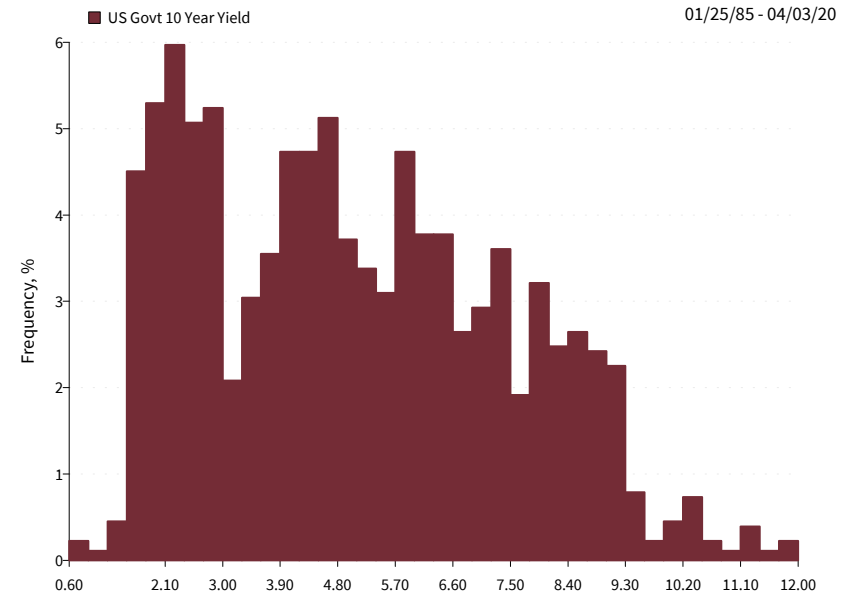
Weekly Valuation Report -- Income April 3, 2020

Income



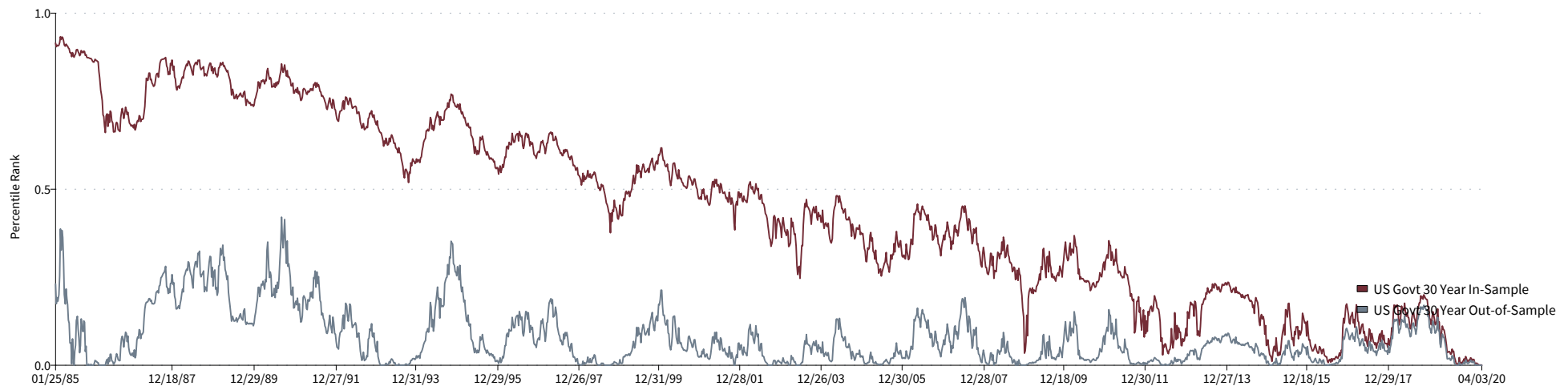
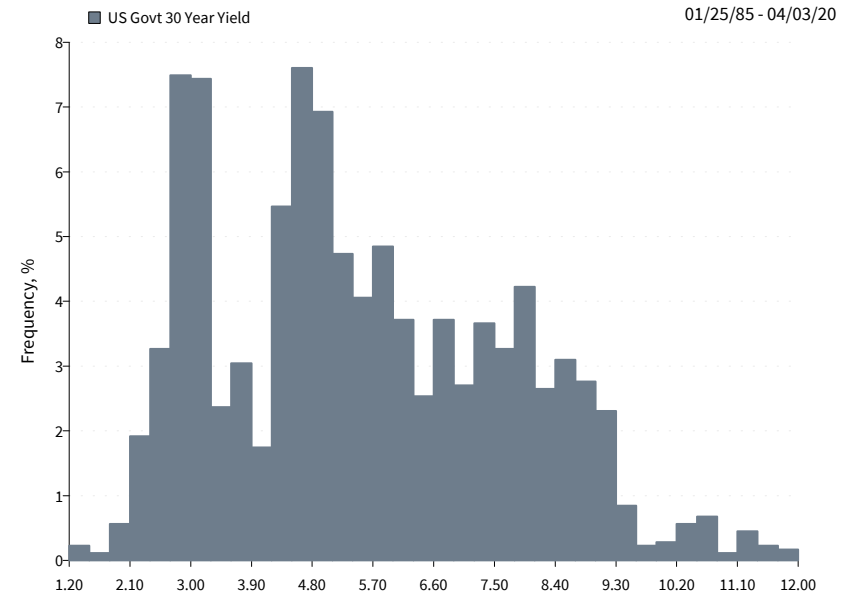
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



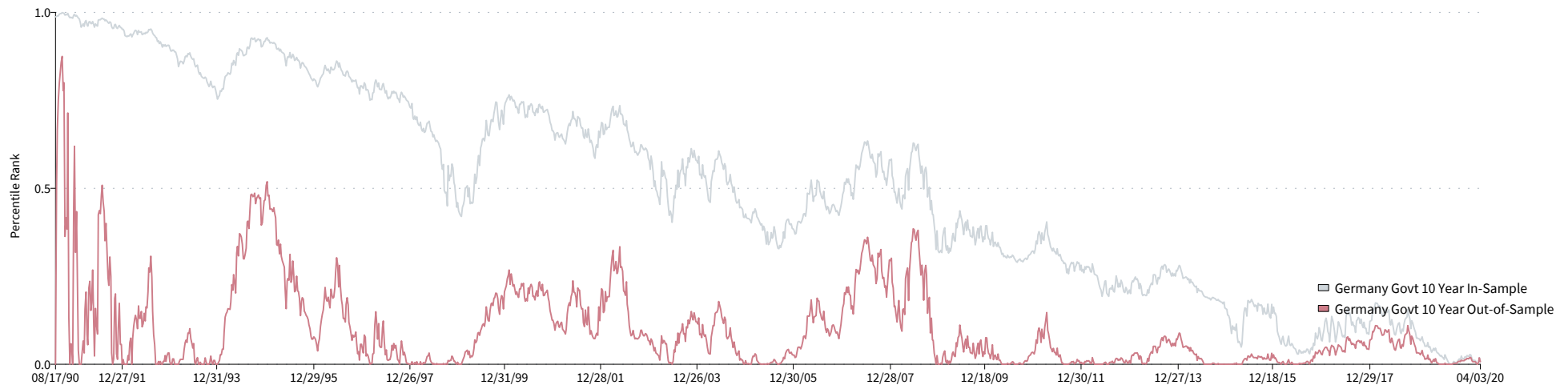
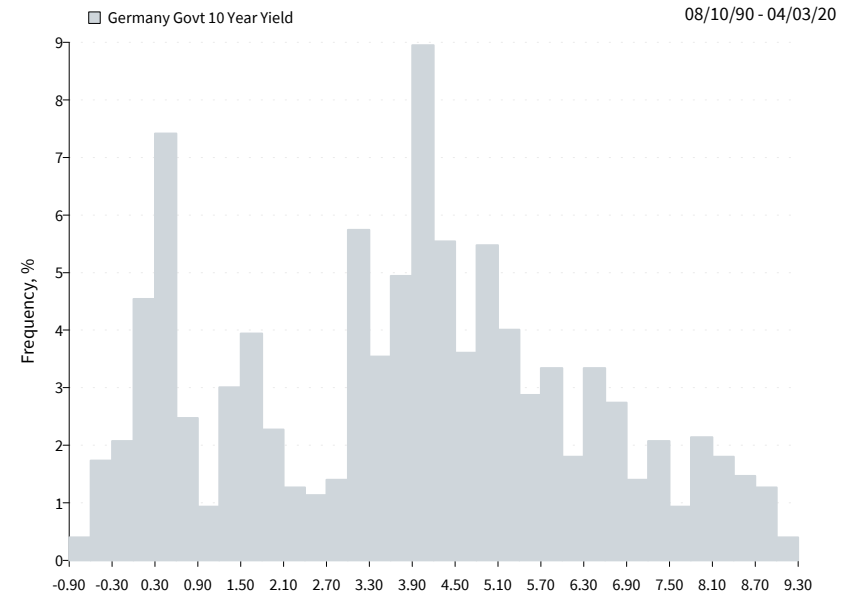
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



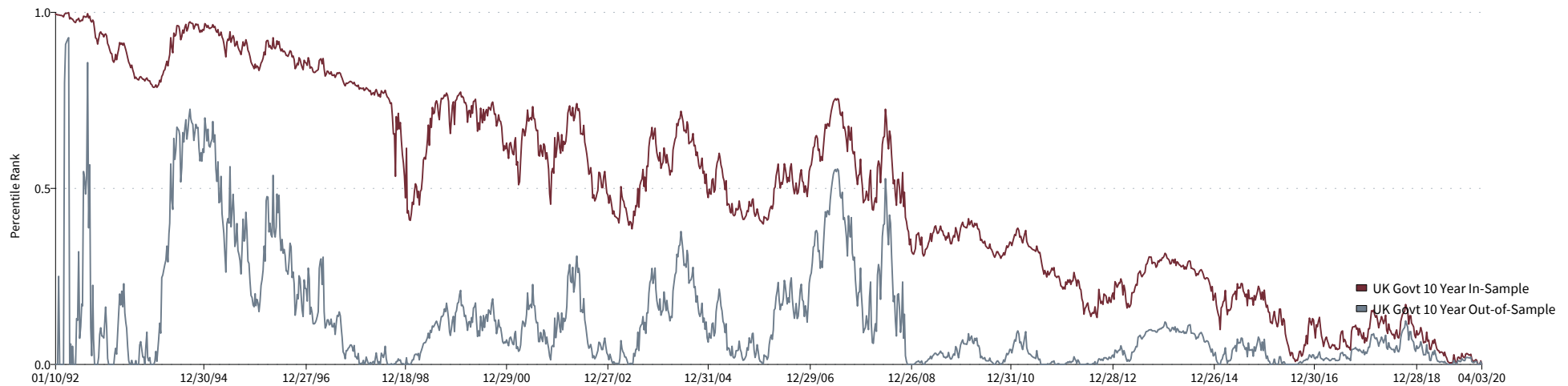
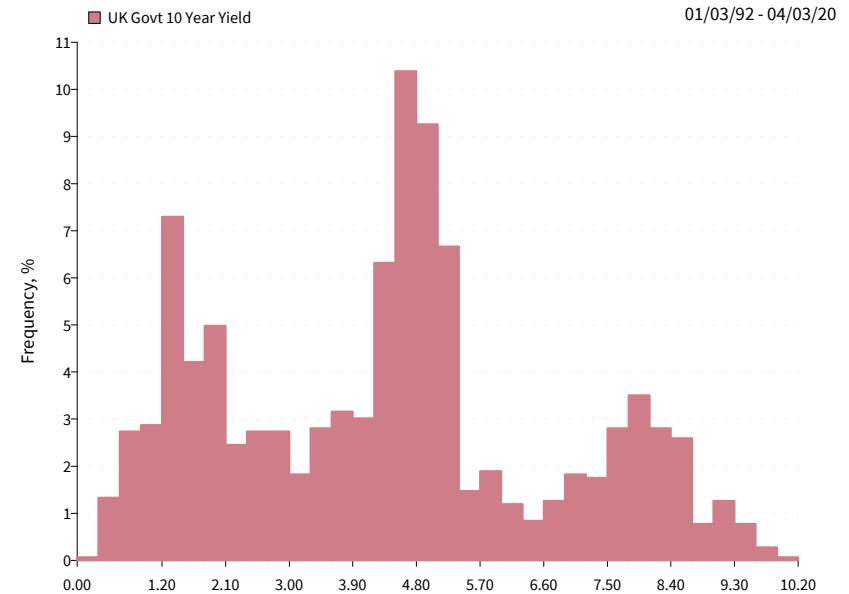
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



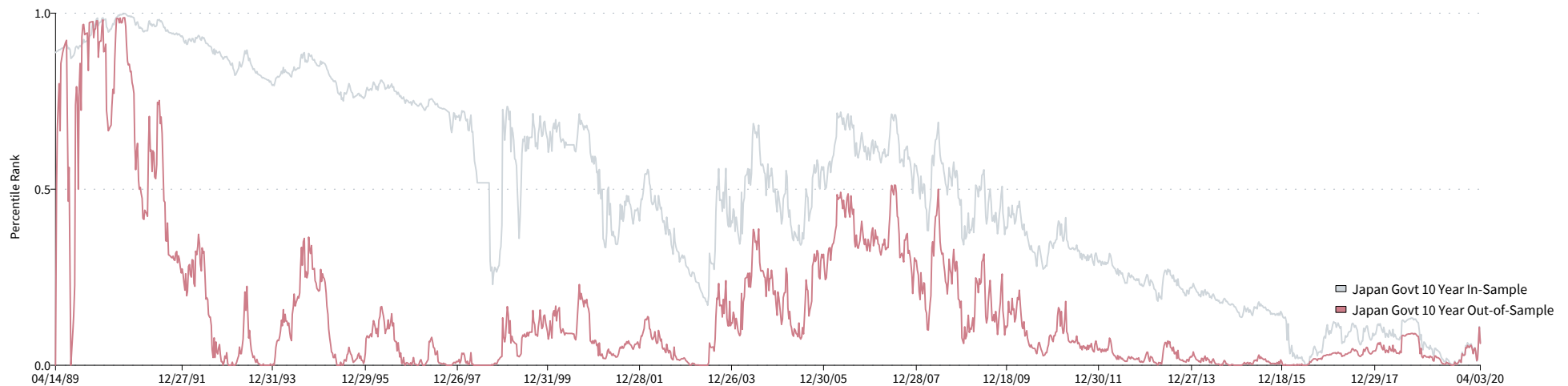
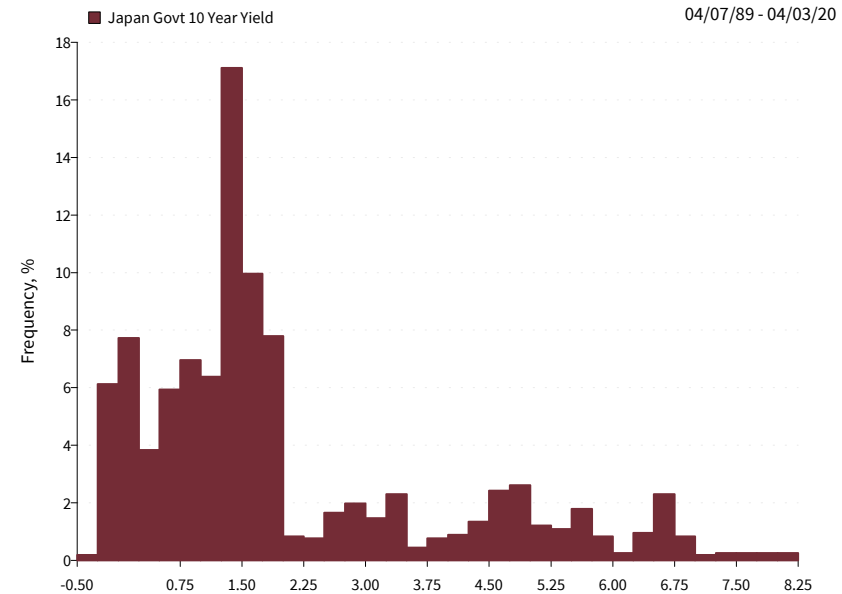
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



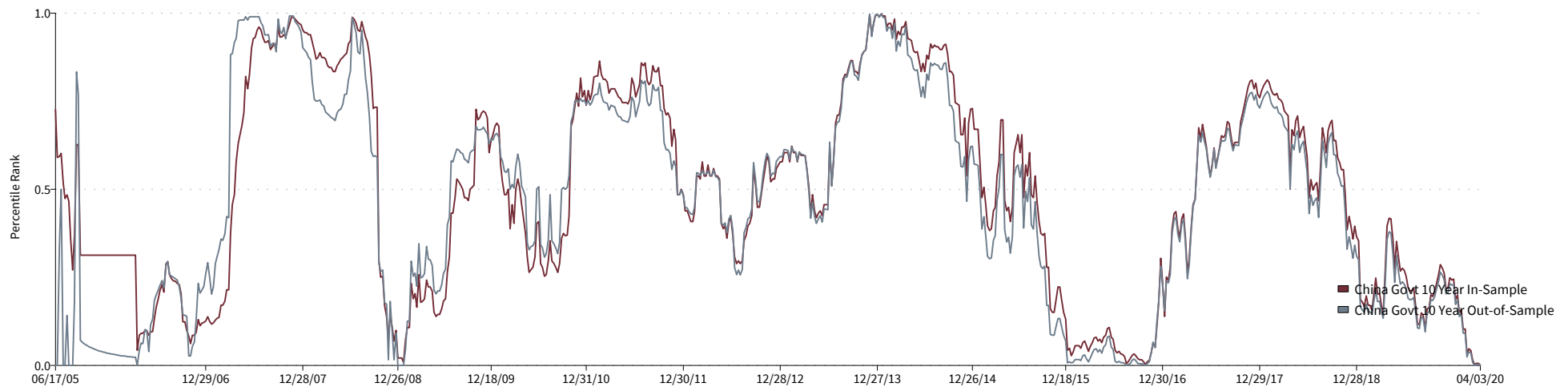
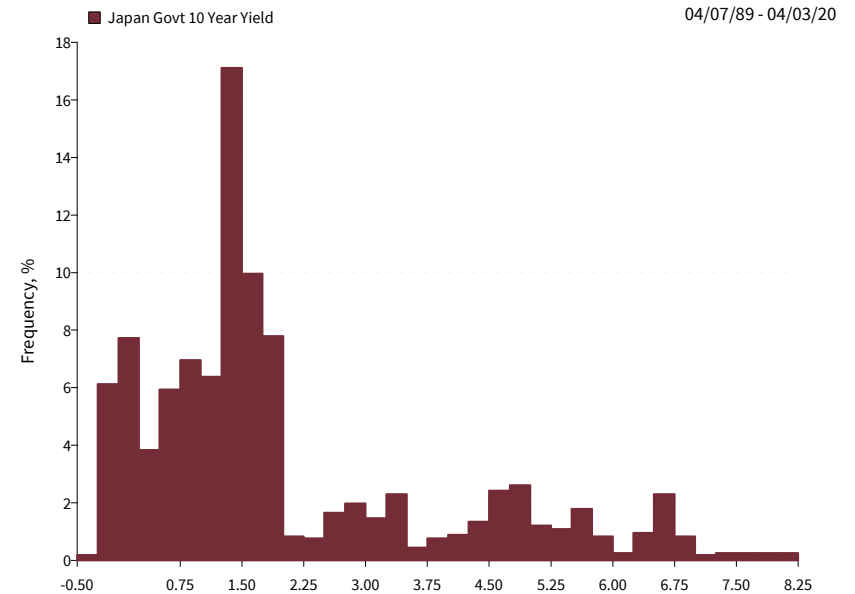
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



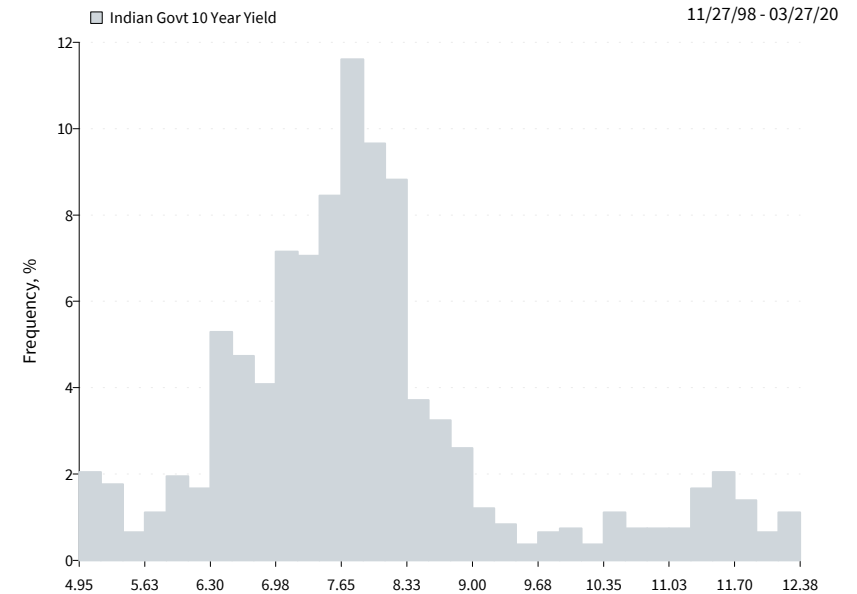
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



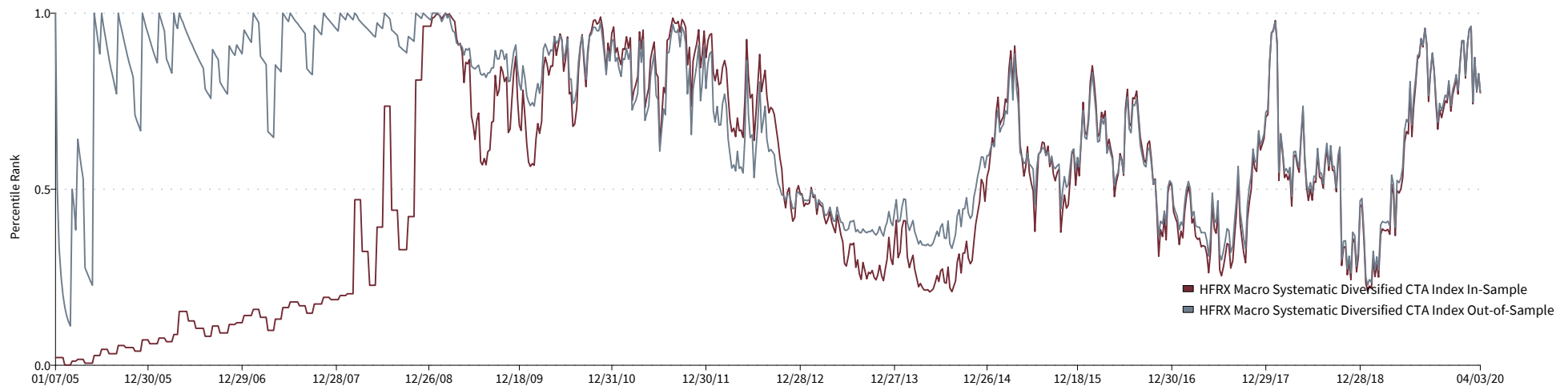
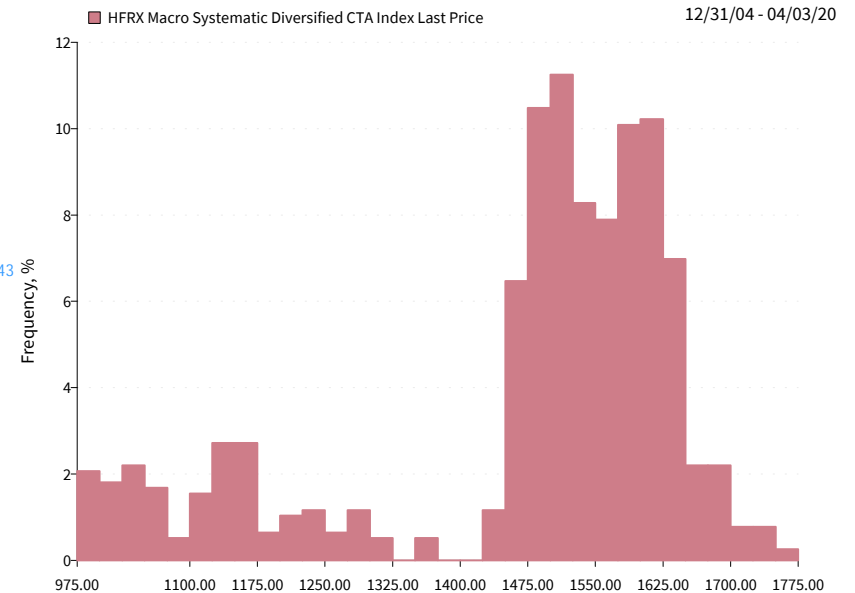
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



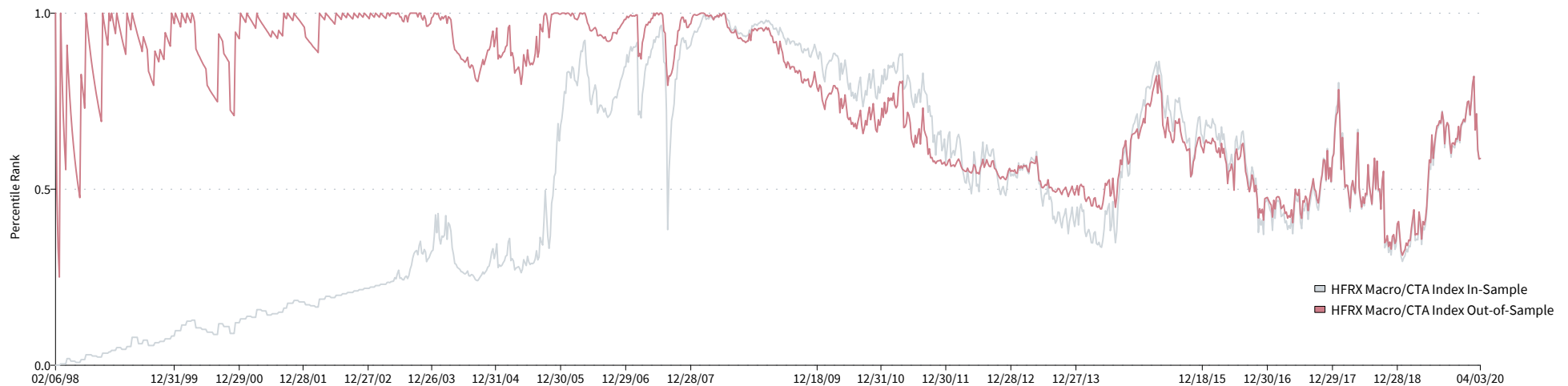
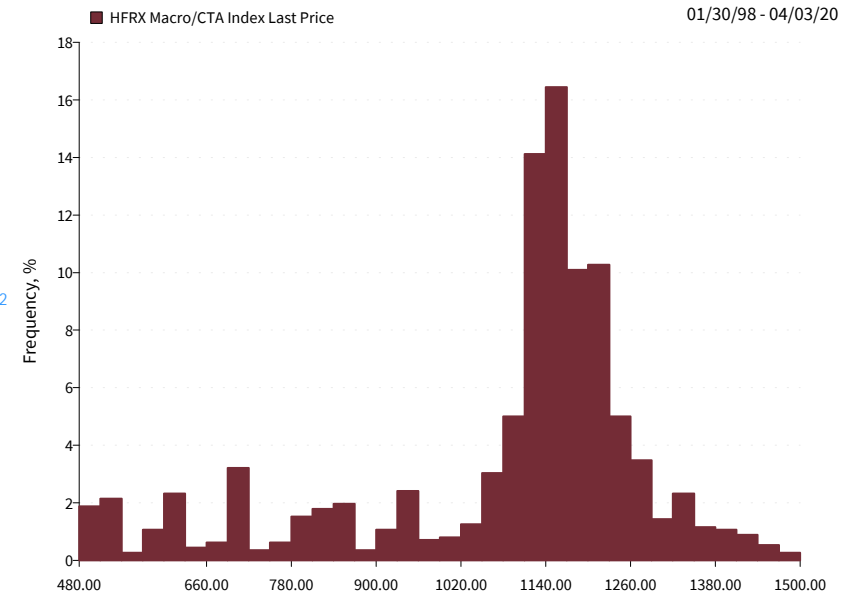
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



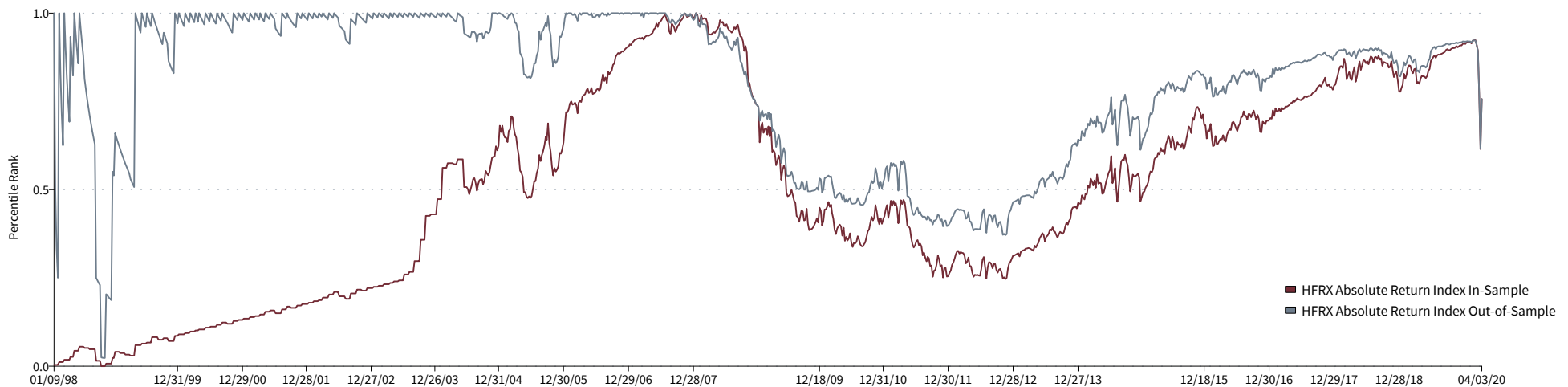
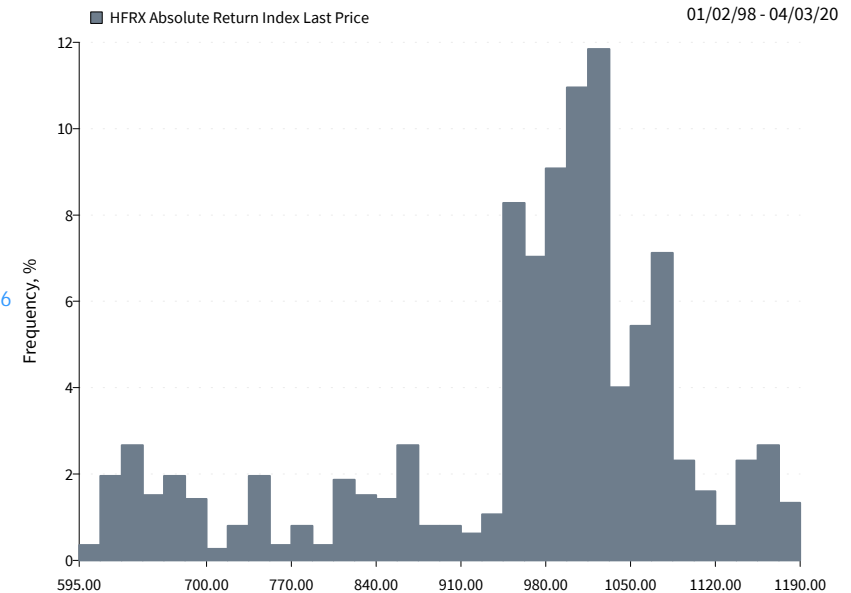
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



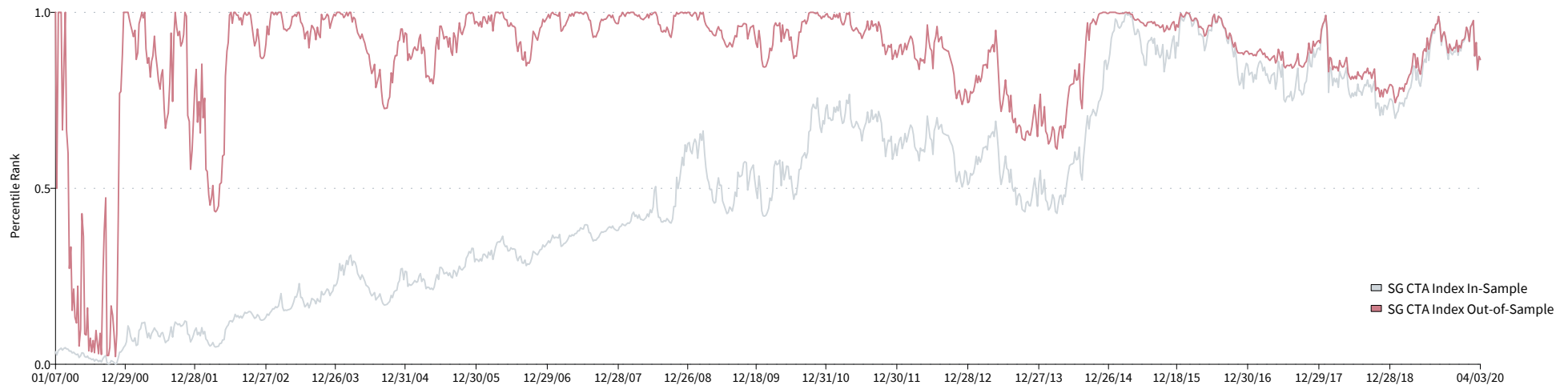
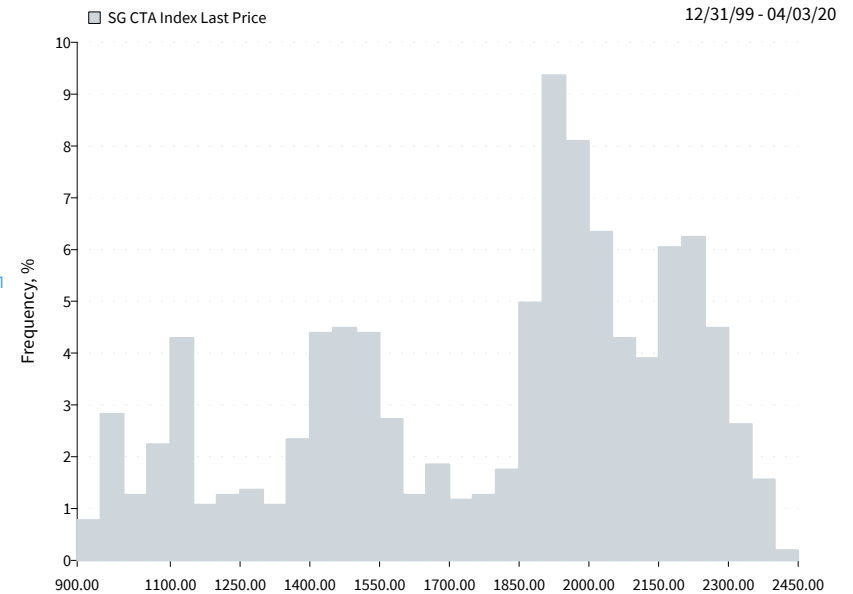
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



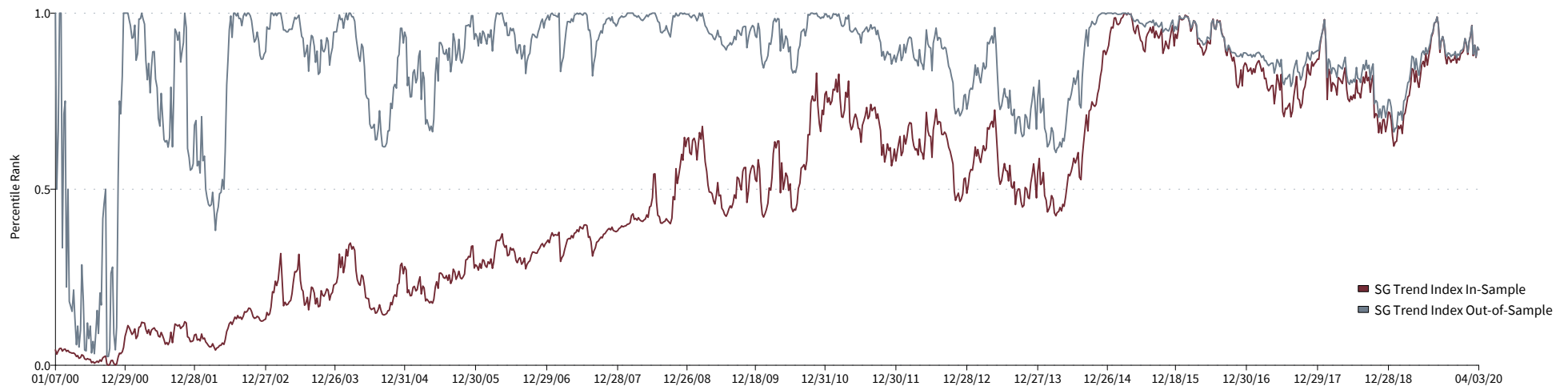
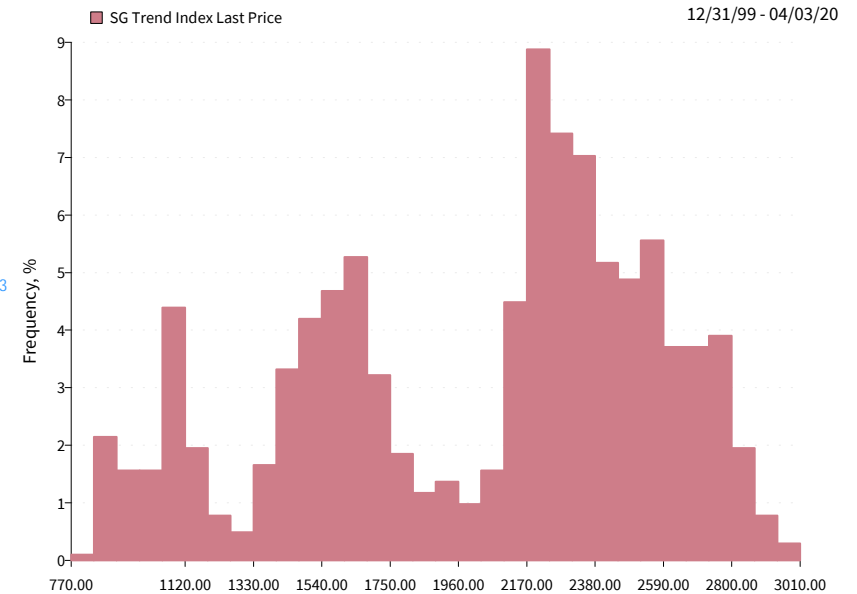
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



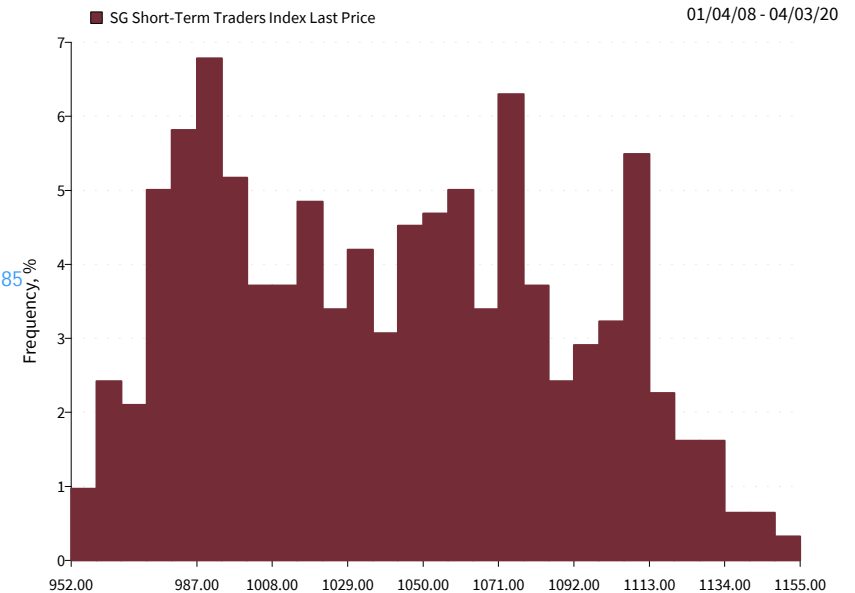
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



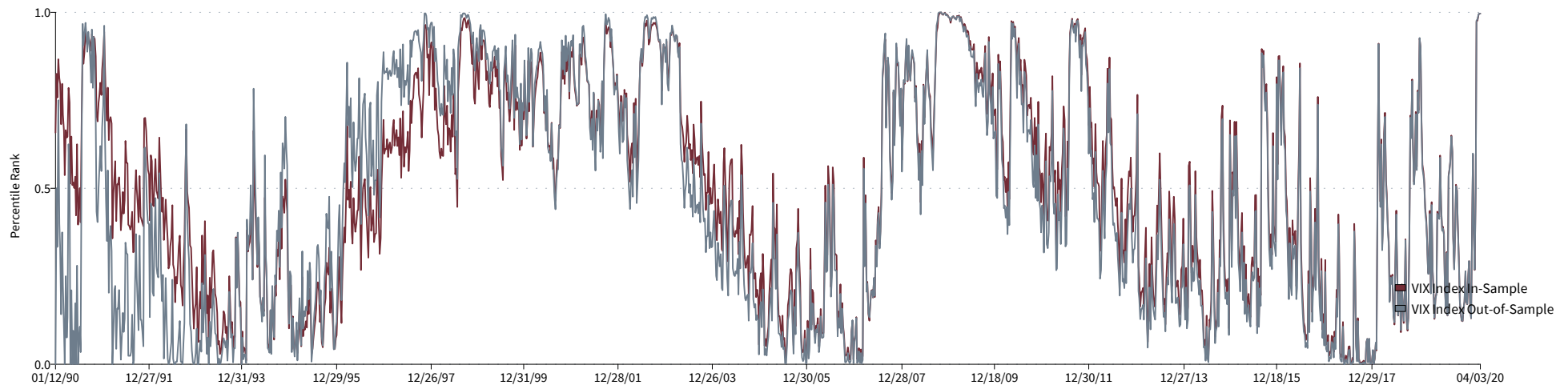
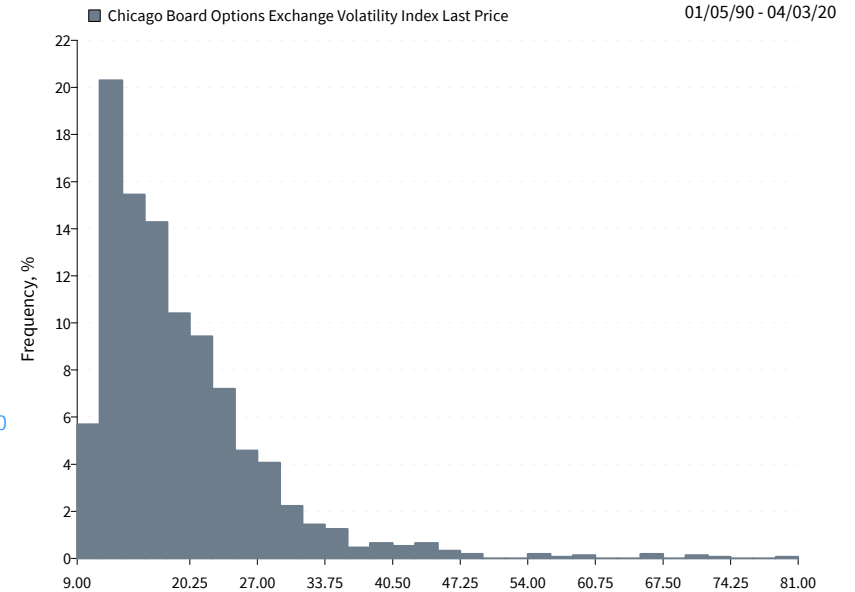
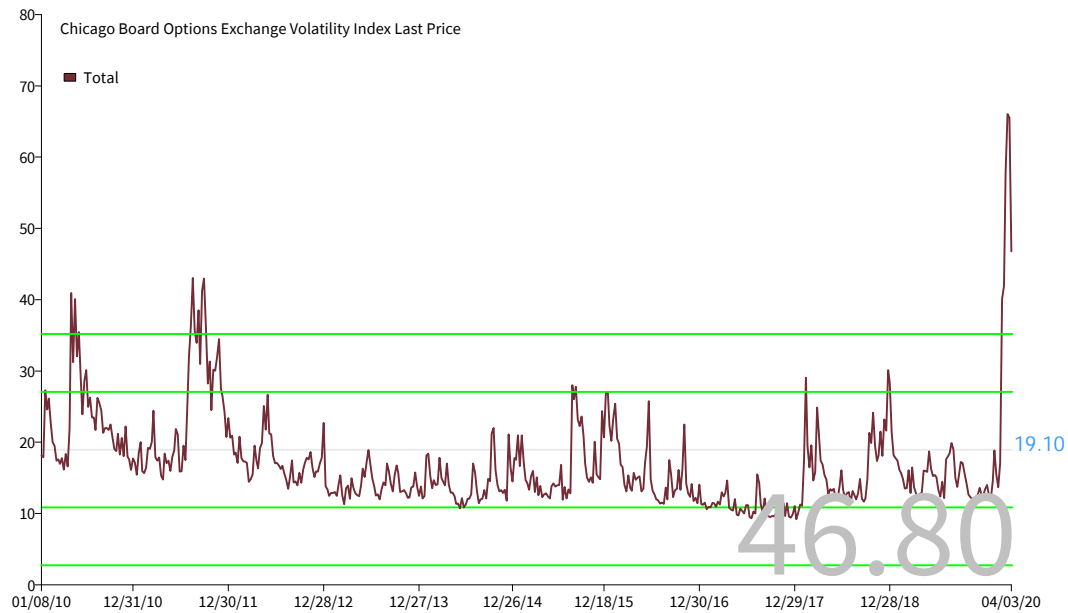
Weekly Valuation Report -- Defensive April 3, 2020

Defensive



Weekly Valuation Report -- Defensive April 3, 2020

Defensive



April 3, 2020

Historical Forward Return Monthly Valuations

Valuations and Forward Return MPI Version April 3, 2020

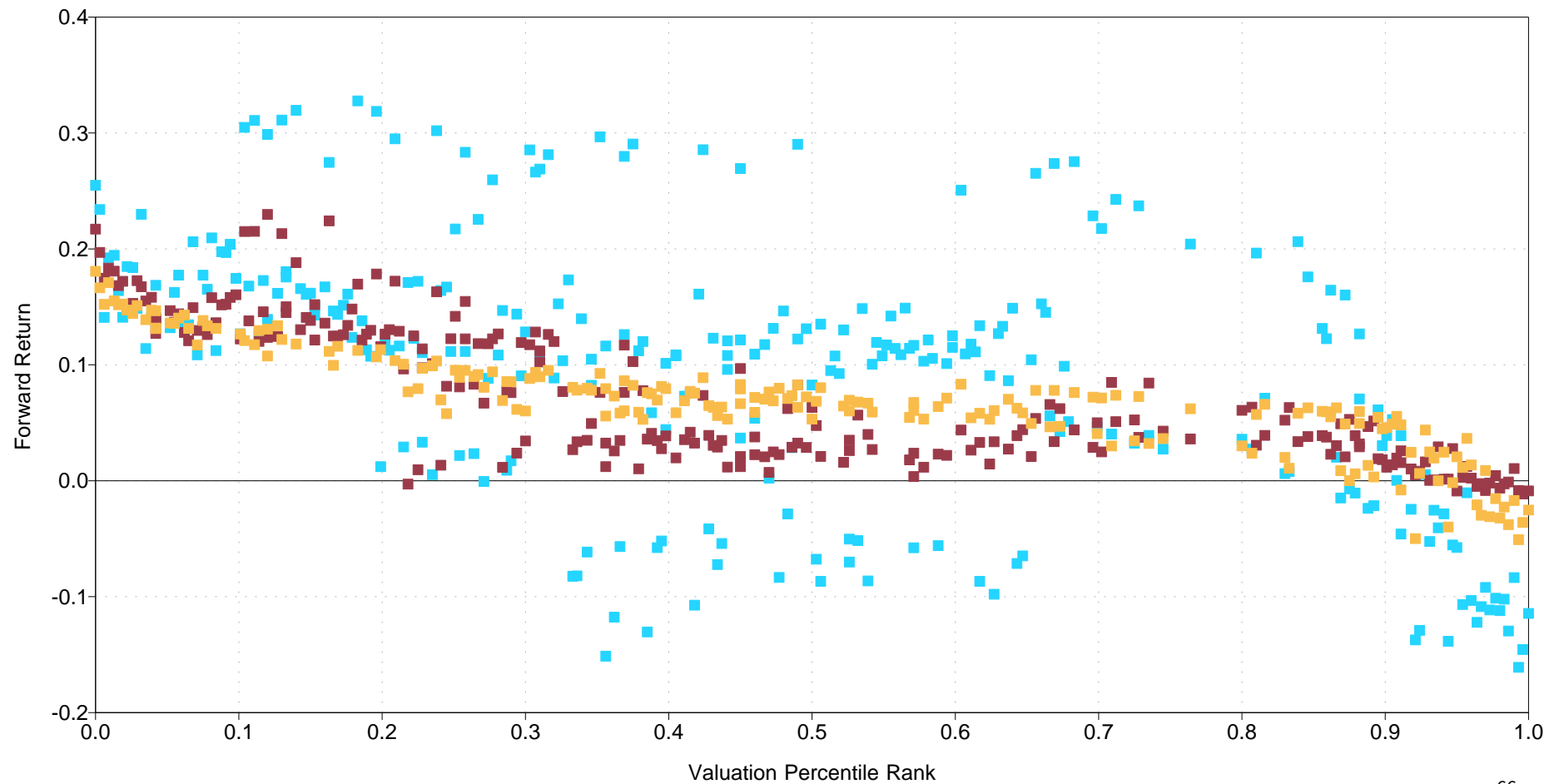
Future TOC

Valuations and Forward Return MPI Version April 3, 2020

Growth

Jan-60 - Mar-17

- S&P 500 Index Fwd 3yr TR
- S&P 500 Index Fwd 6yr TR
- S&P 500 Index Fwd 9yr TR

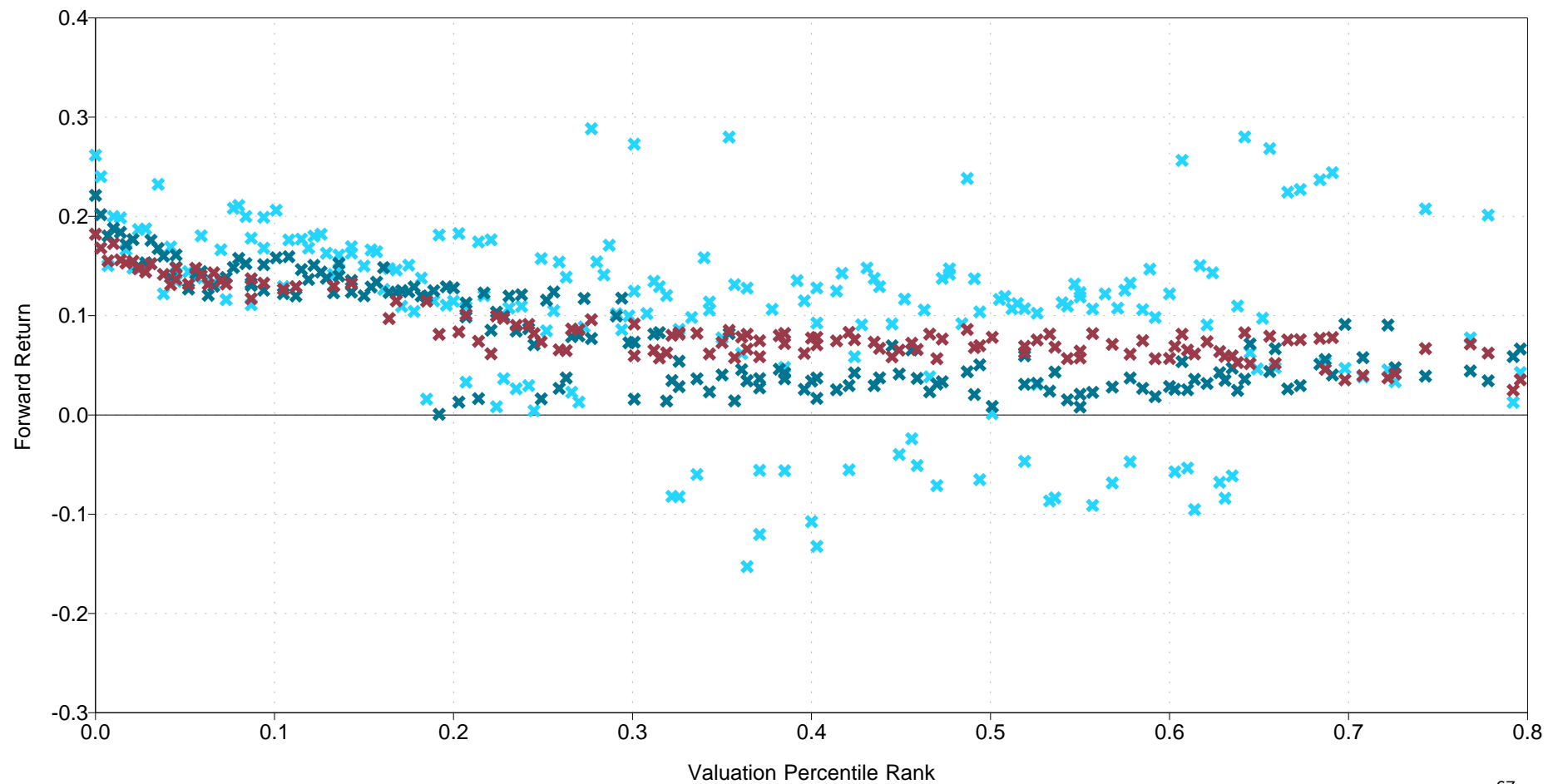


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-78 - Mar-17

- ✕ Russell 1000 Index Fwd 3yr TR
- ✕ Russell 1000 Index Fwd 6yr TR
- ✕ Russell 1000 Index Fwd 9yr TR

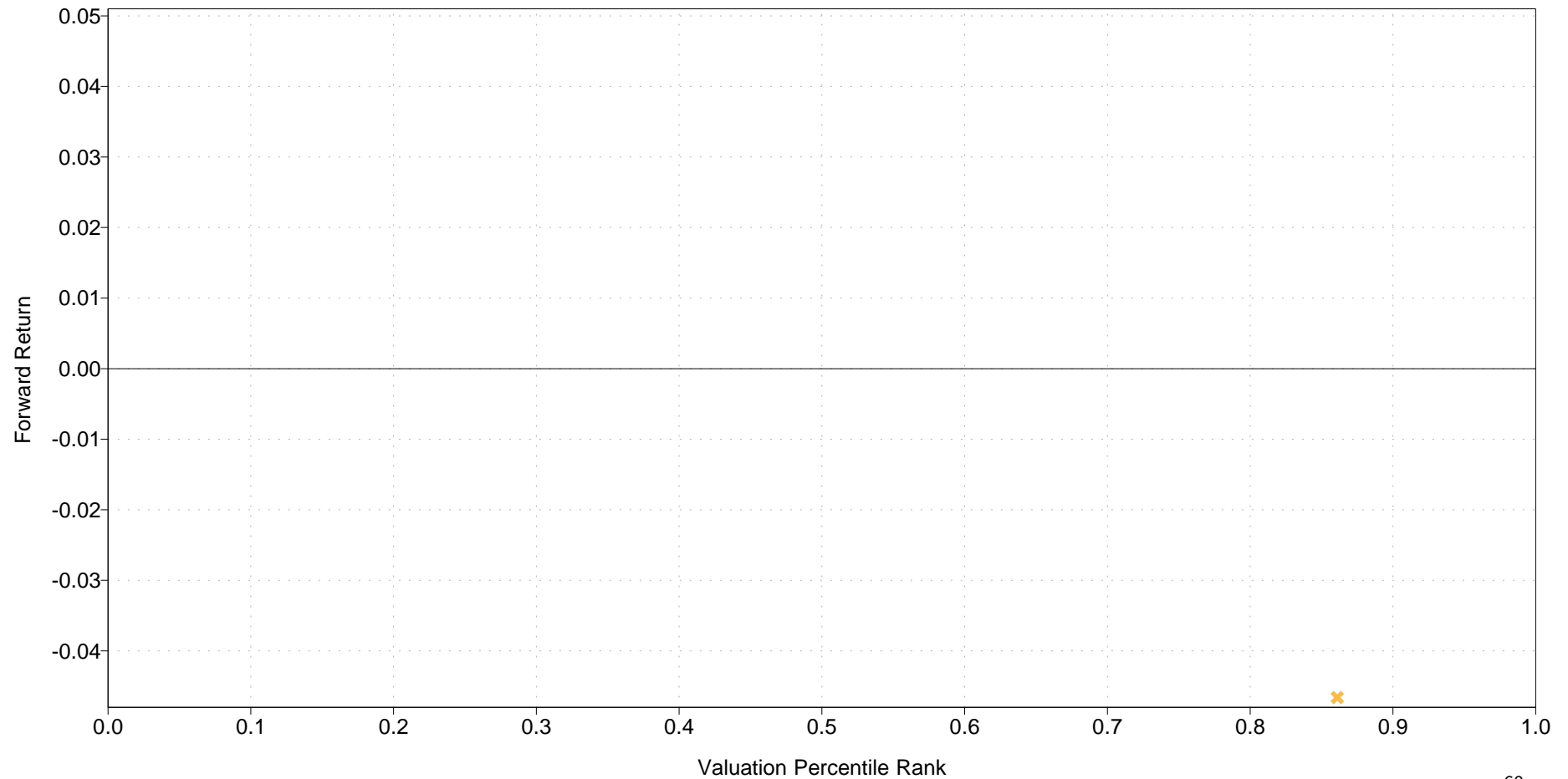


Valuations and Forward Return MPI Version April 3, 2020

Growth

Mar-17 - Feb-20

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- ✕ Russell 2000 Index Fwd 6yr TR
- ✕ Russell 2000 Index Fwd 9yr TR

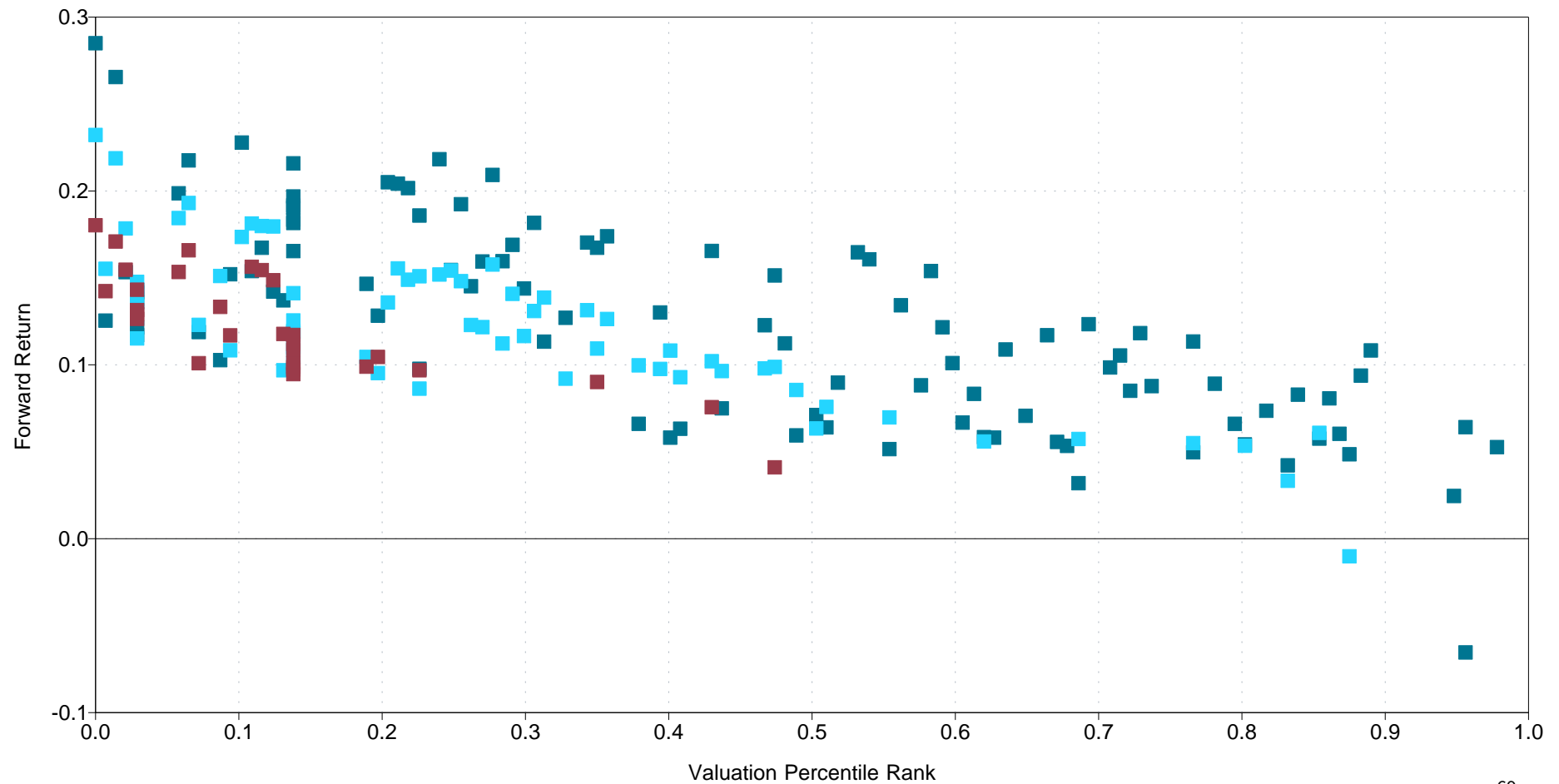


Valuations and Forward Return MPI Version April 3, 2020

Growth

Nov-05 - Mar-17

- Russell Microcap Index Fwd 3yr TR
- Russell Microcap Index Fwd 6yr TR
- Russell Microcap Index Fwd 9yr TR

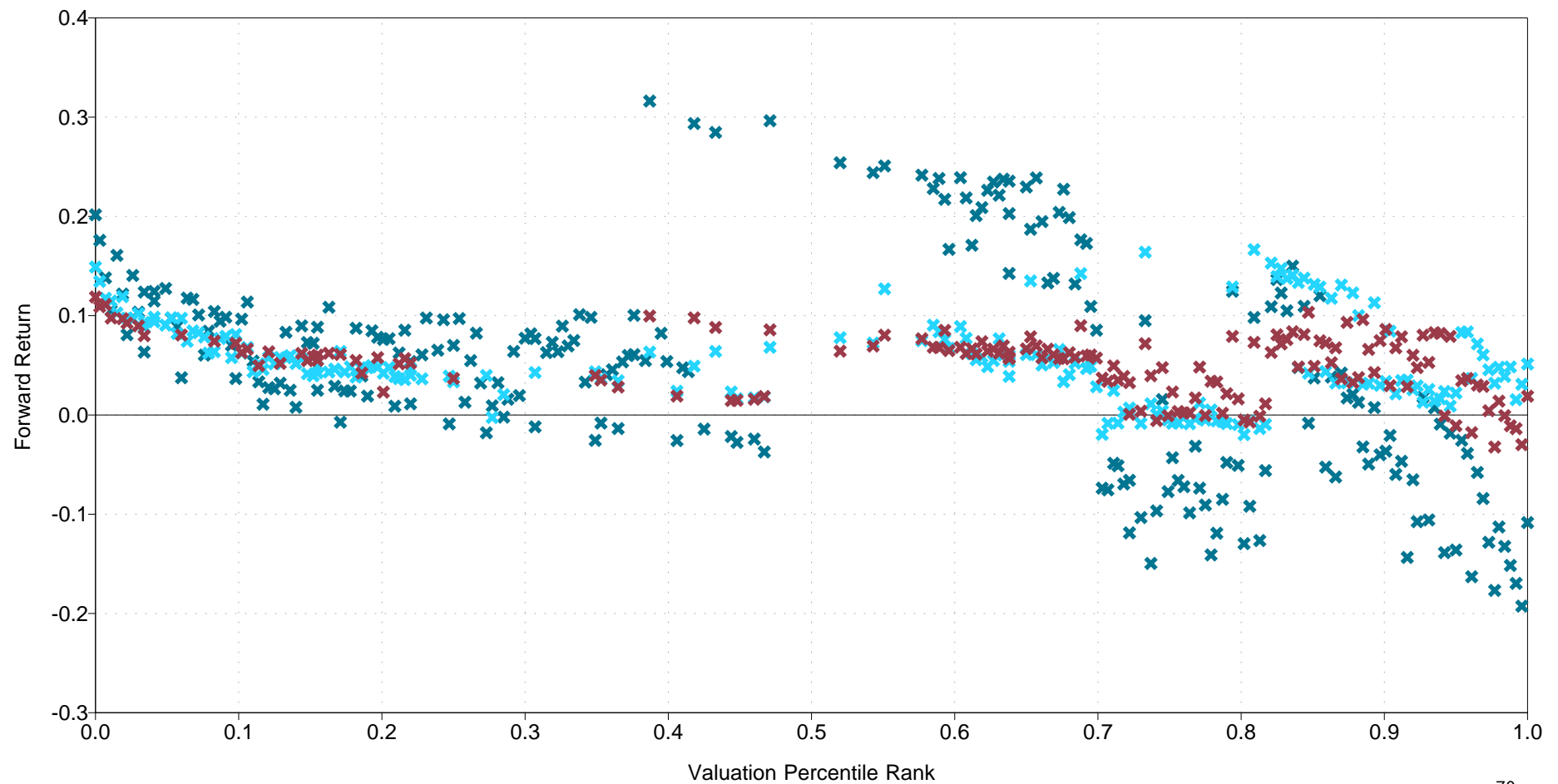


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-69 - Mar-17

- ✕ MSCI EAFE Index Fwd 3yr TR
- ✕ MSCI EAFE Index Fwd 6yr TR
- ✕ MSCI EAFE Index Fwd 9yr TR

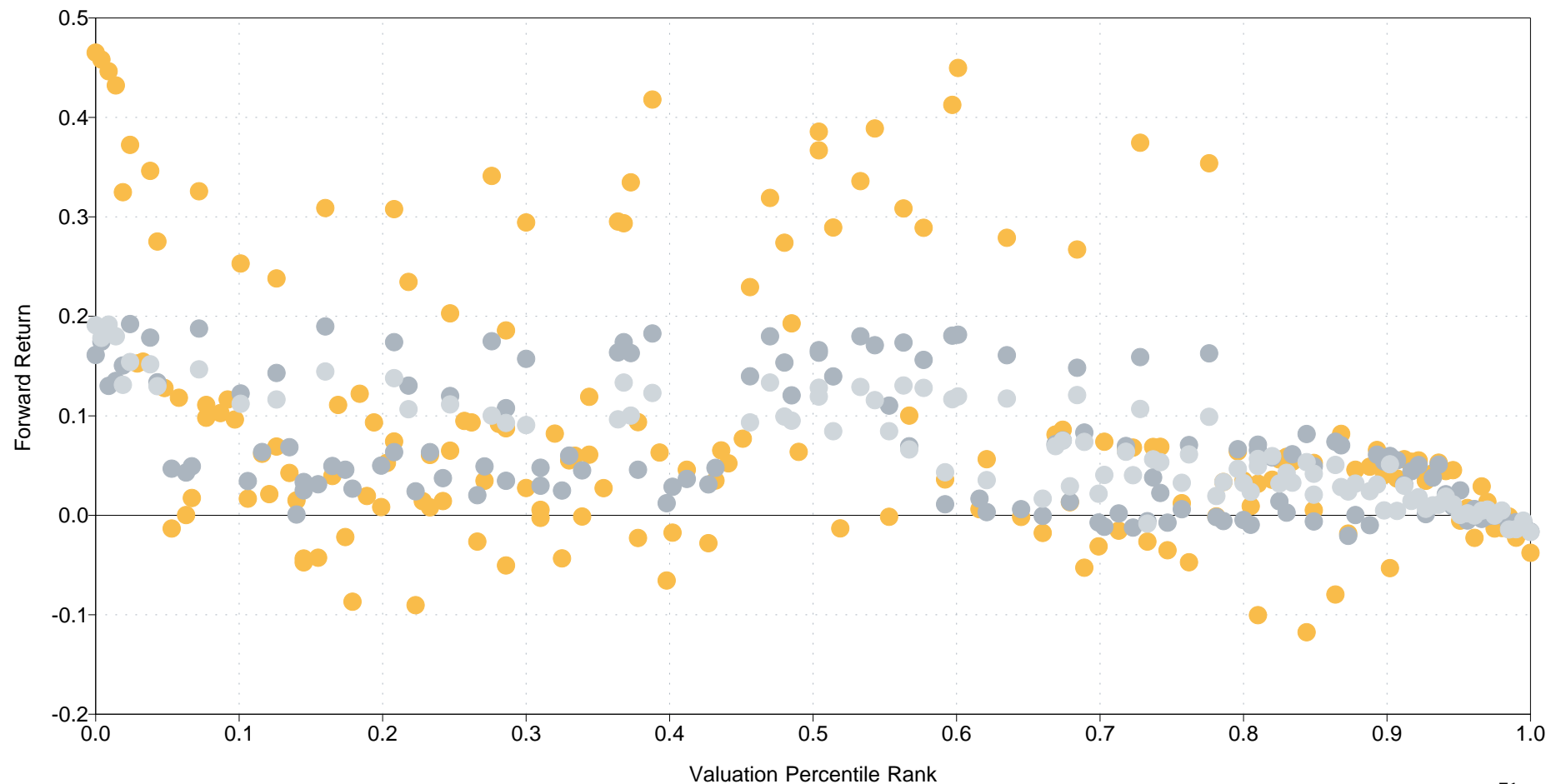


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-87 - Mar-17

- MSCI Emerging Markets Index Fwd 3yr TR
- MSCI Emerging Markets Index Fwd 6yr TR
- MSCI Emerging Markets Index Fwd 9yr TR

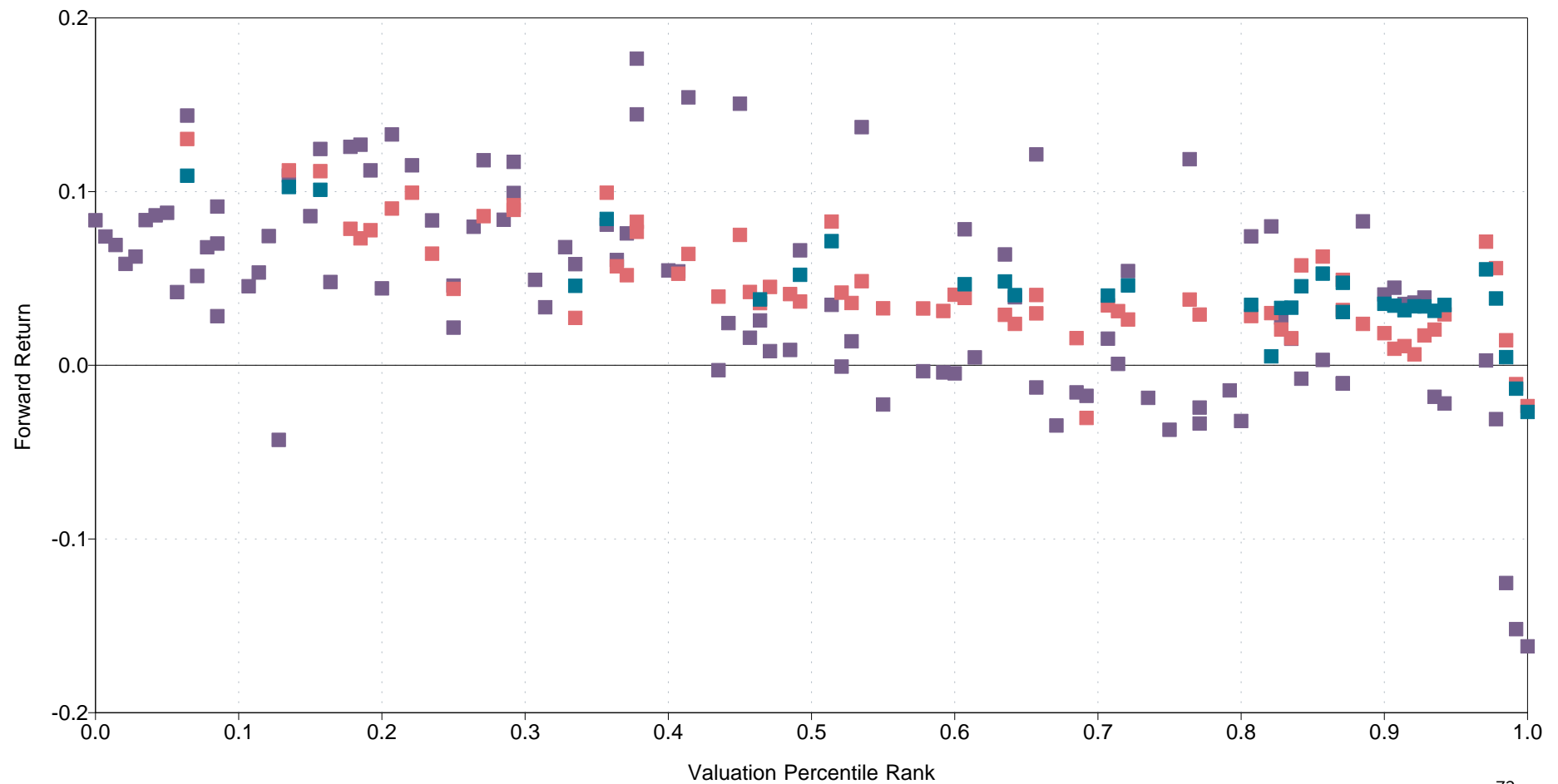


Valuations and Forward Return MPI Version April 3, 2020

Growth

May-02 - Mar-17

- MSCI FM FRONTIER MARKETS Fwd 3yr TR
- MSCI FM FRONTIER MARKETS Fwd 6yr TR
- MSCI FM FRONTIER MARKETS Fwd 9yr TR

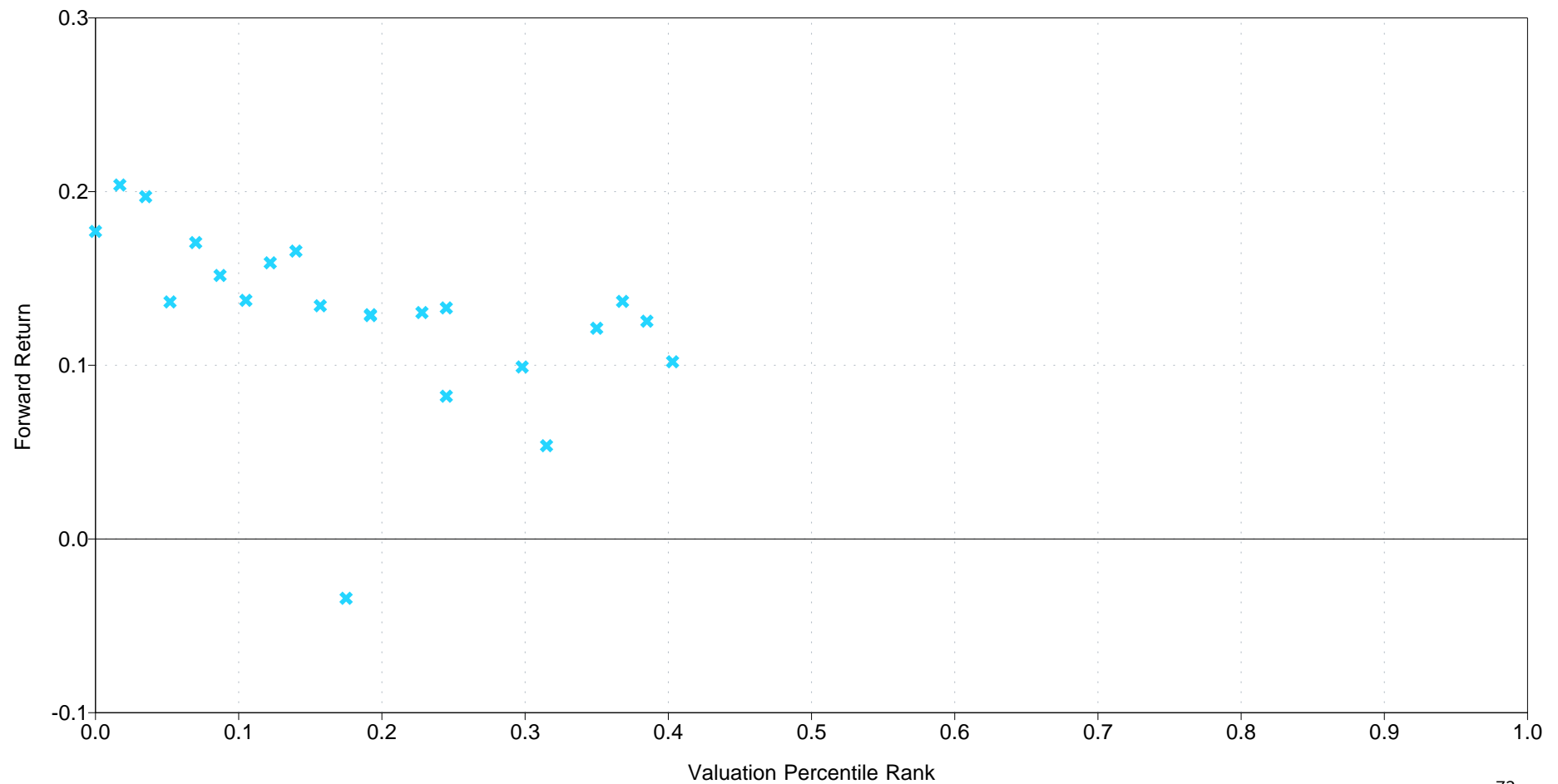


Valuations and Forward Return MPI Version April 3, 2020

Growth

May-09 - Mar-17

- ✕ MSCI Frontier Asia Index Fwd 3yr TR
- ✕ MSCI Frontier Asia Index Fwd 6yr TR
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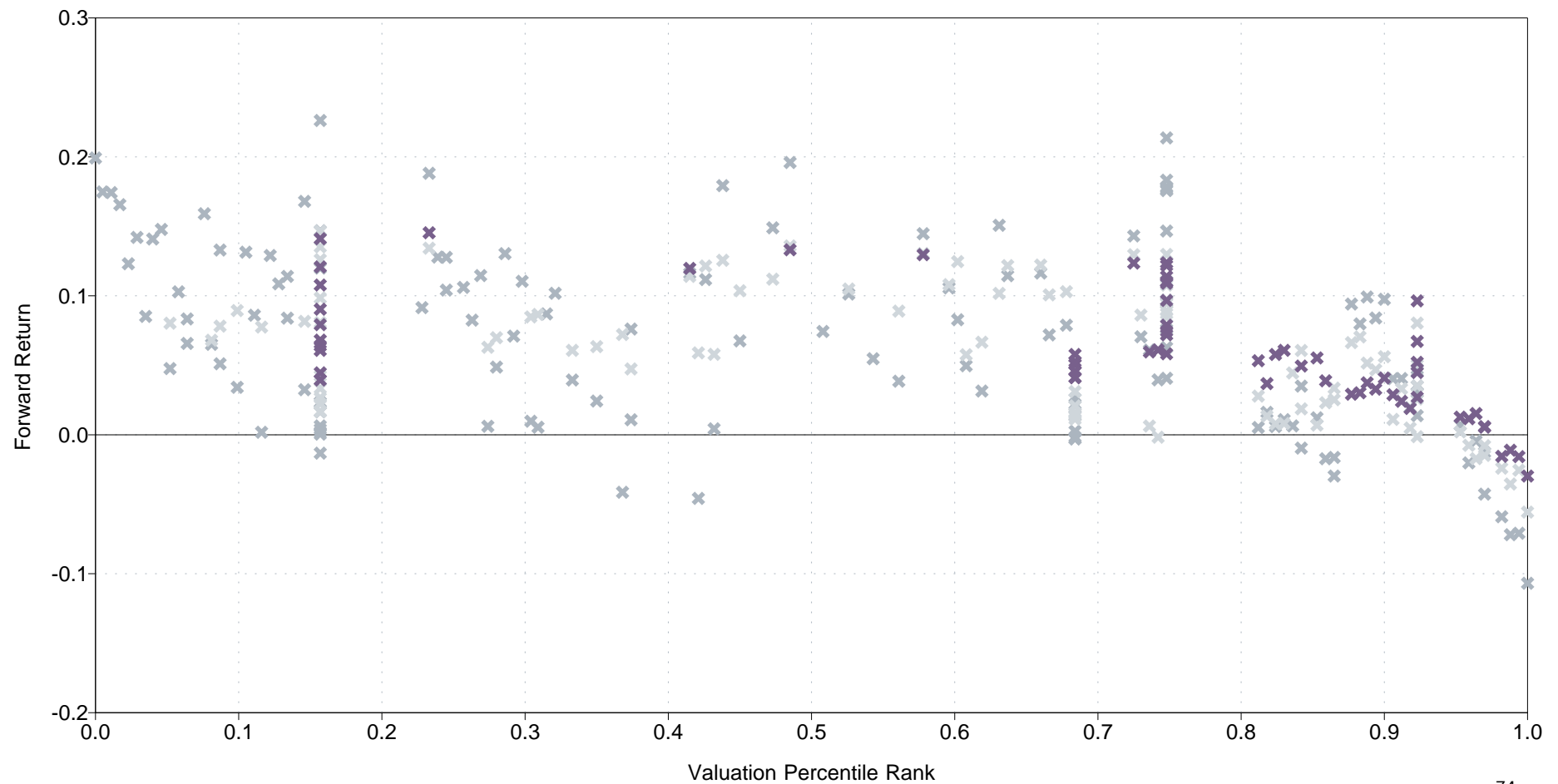


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-92 - Mar-17

- ✕ MSCI China Index Fwd 3yr TR
- ✕ MSCI China Index Fwd 6yr TR
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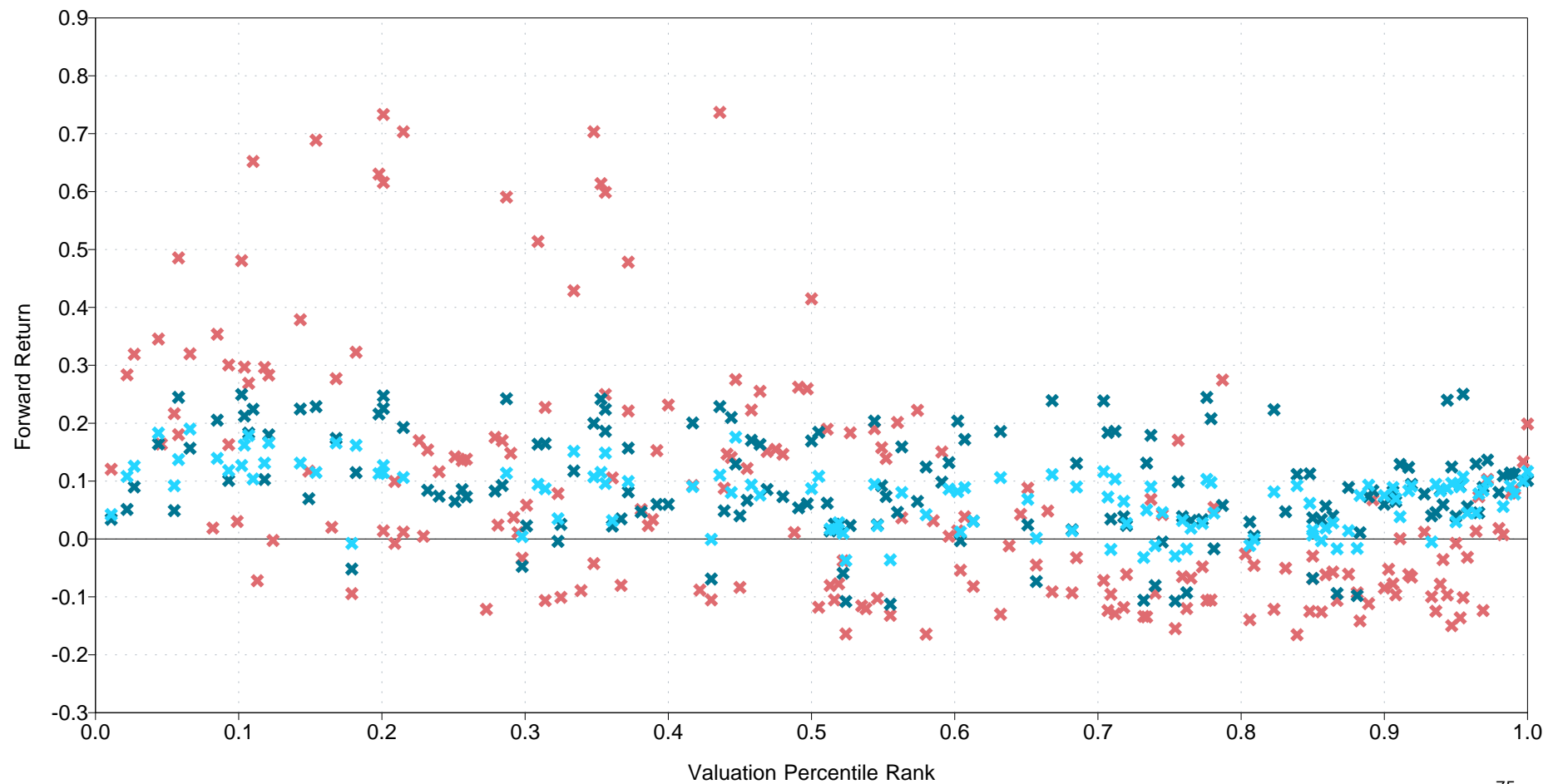


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-00 - Mar-17

- ✕ MSCI CHINA A Shares Local Fwd 3yr TR
- ✕ MSCI CHINA A Shares Local Fwd 6yr TR
- ✕ MSCI CHINA A Shares Local Fwd 9yr TR

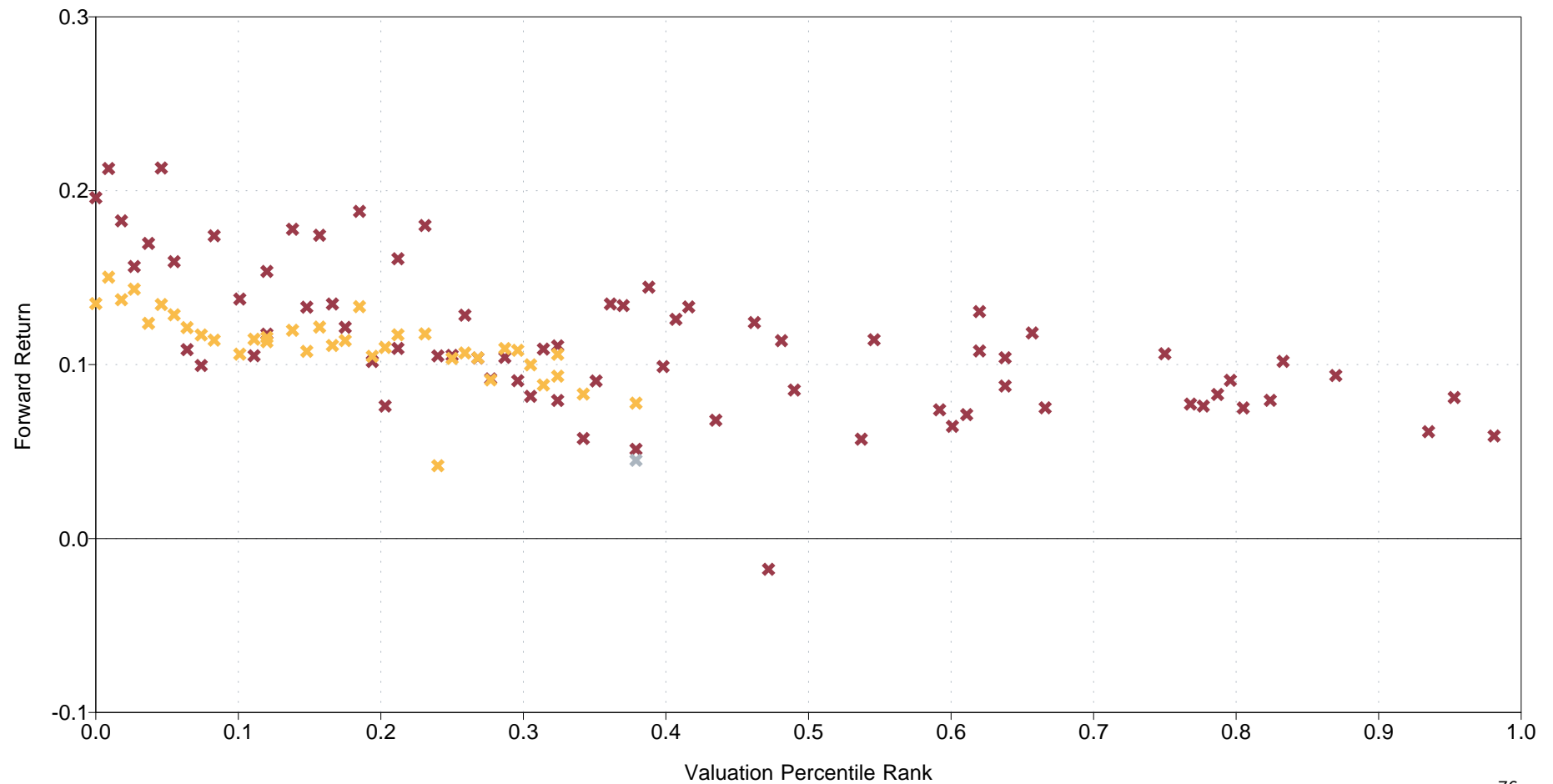


Valuations and Forward Return MPI Version April 3, 2020

Growth

Dec-92 - Mar-17

- ✕ MSCI India Index Fwd 3yr TR
- ✕ MSCI India Index Fwd 6yr TR
- ✕ MSCI India Index Fwd 9yr TR

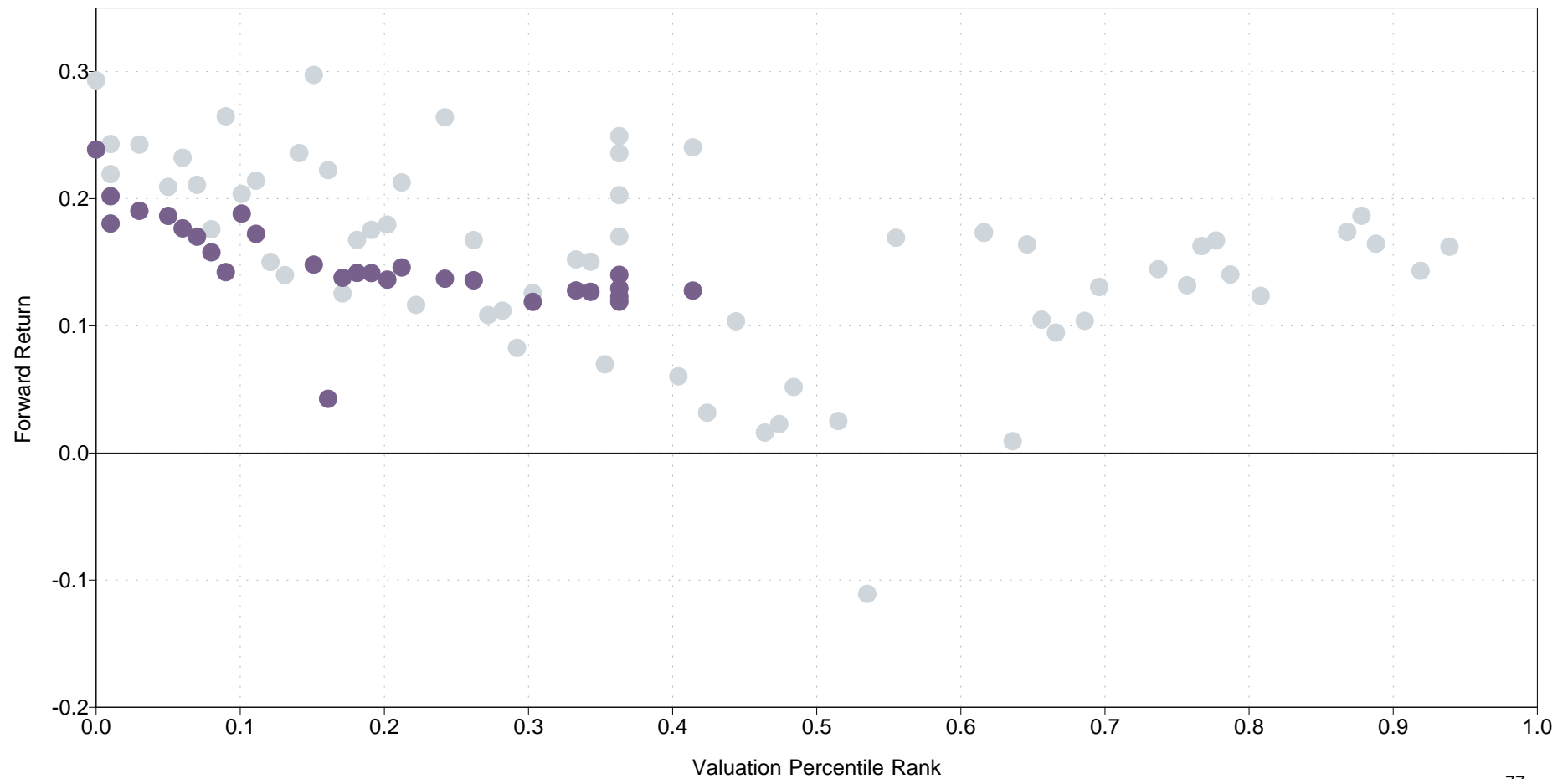


Valuations and Forward Return MPI Version April 3, 2020

Growth

Mar-09 - Mar-17

- MSCI India SMID Cap Fwd 3yr TR
- MSCI India SMID Cap Fwd 6yr TR
- MSCI India SMID Cap Fwd 9yr TR

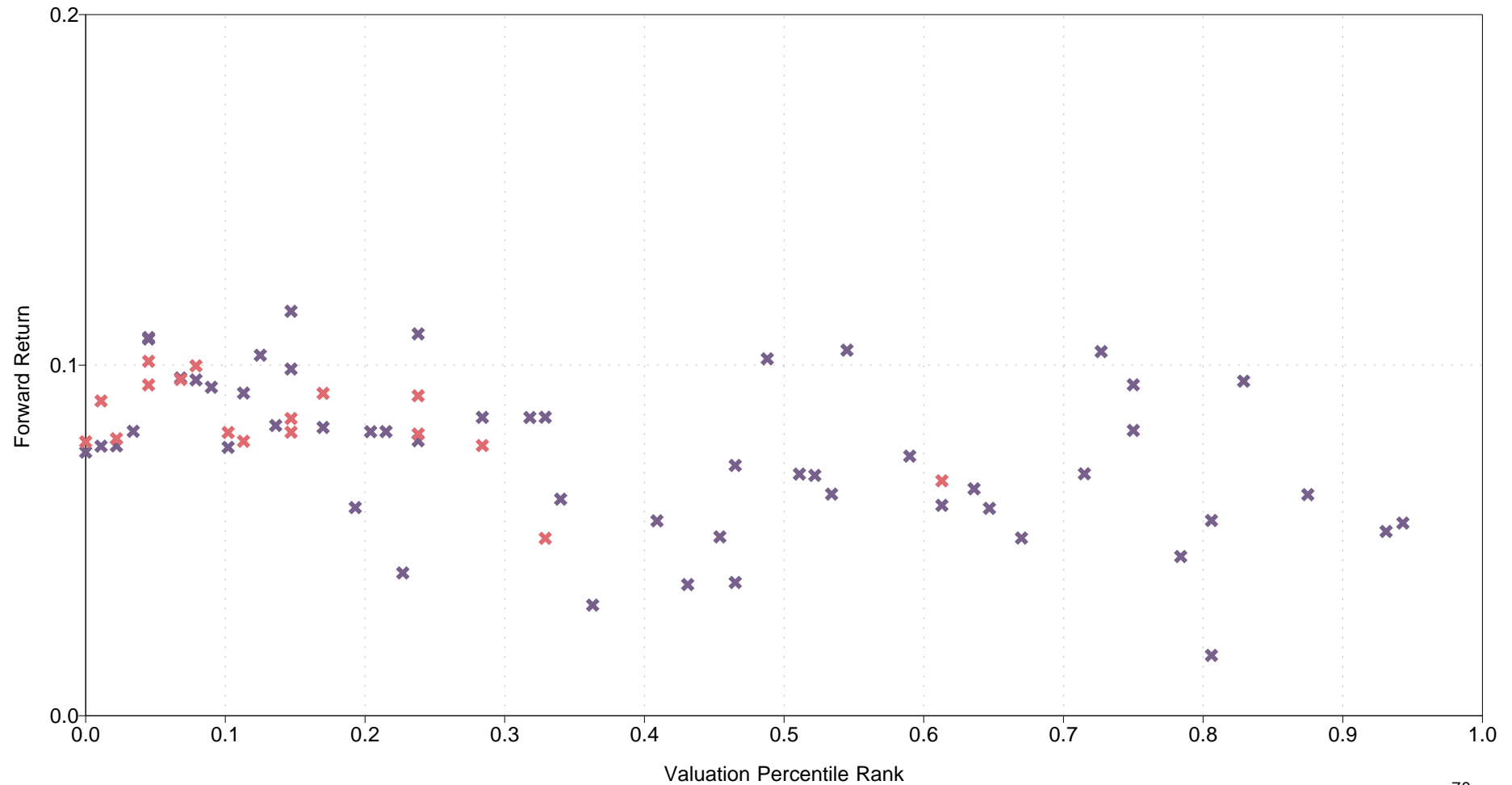


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jul-11 - Mar-17

- ✕ MSCI USA Infrastructure Index Fwd 3yr TR
- ✕ MSCI USA Infrastructure Index Fwd 6yr TR

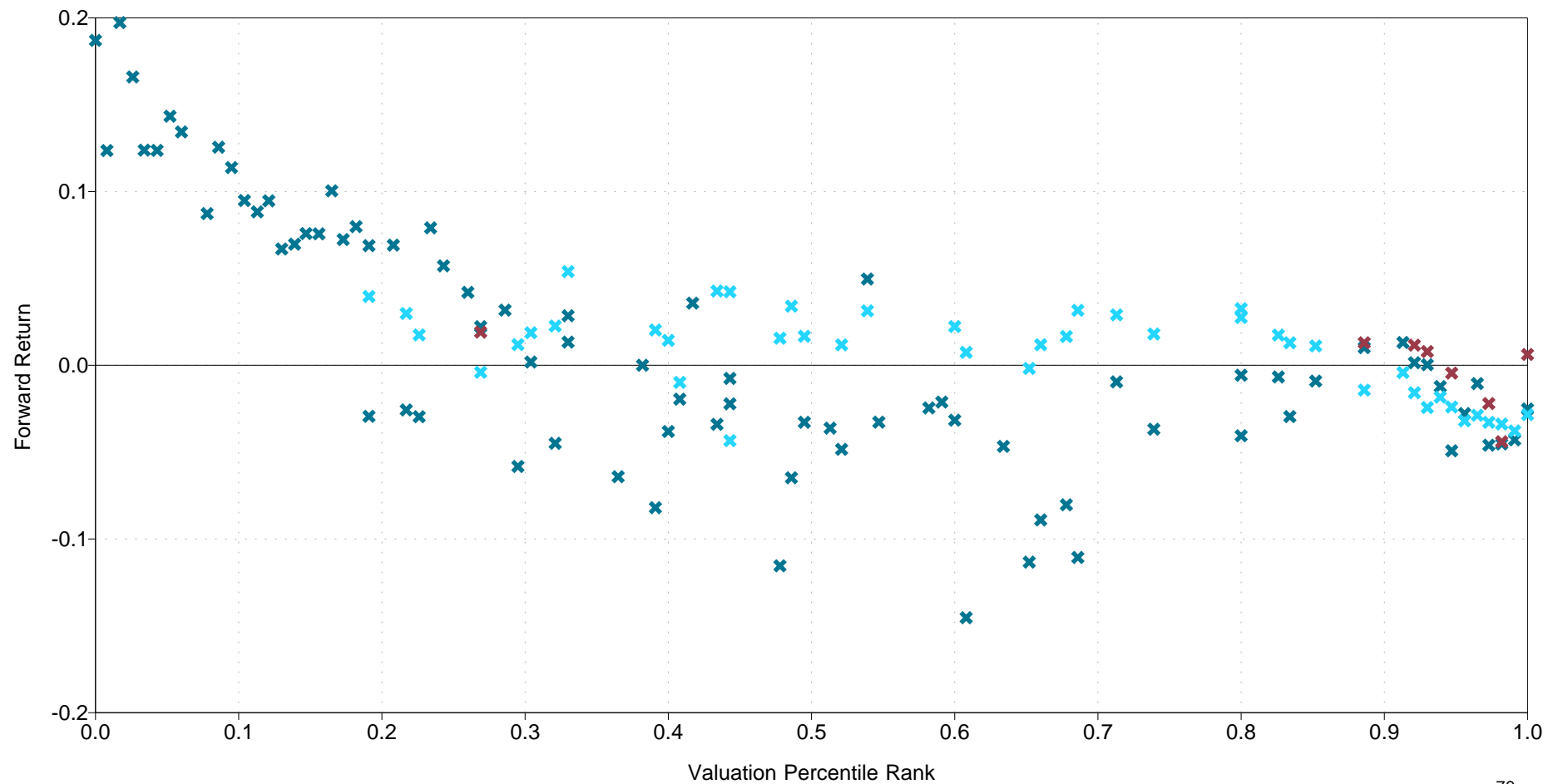


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Nov-02 - Mar-17

- ✕ S&P Global Natural Resources Total Return Index Fwd 3yr TR
- ✕ S&P Global Natural Resources Total Return Index Fwd 6yr TR
- ✕ S&P Global Natural Resources Total Return Index Fwd 9yr TR

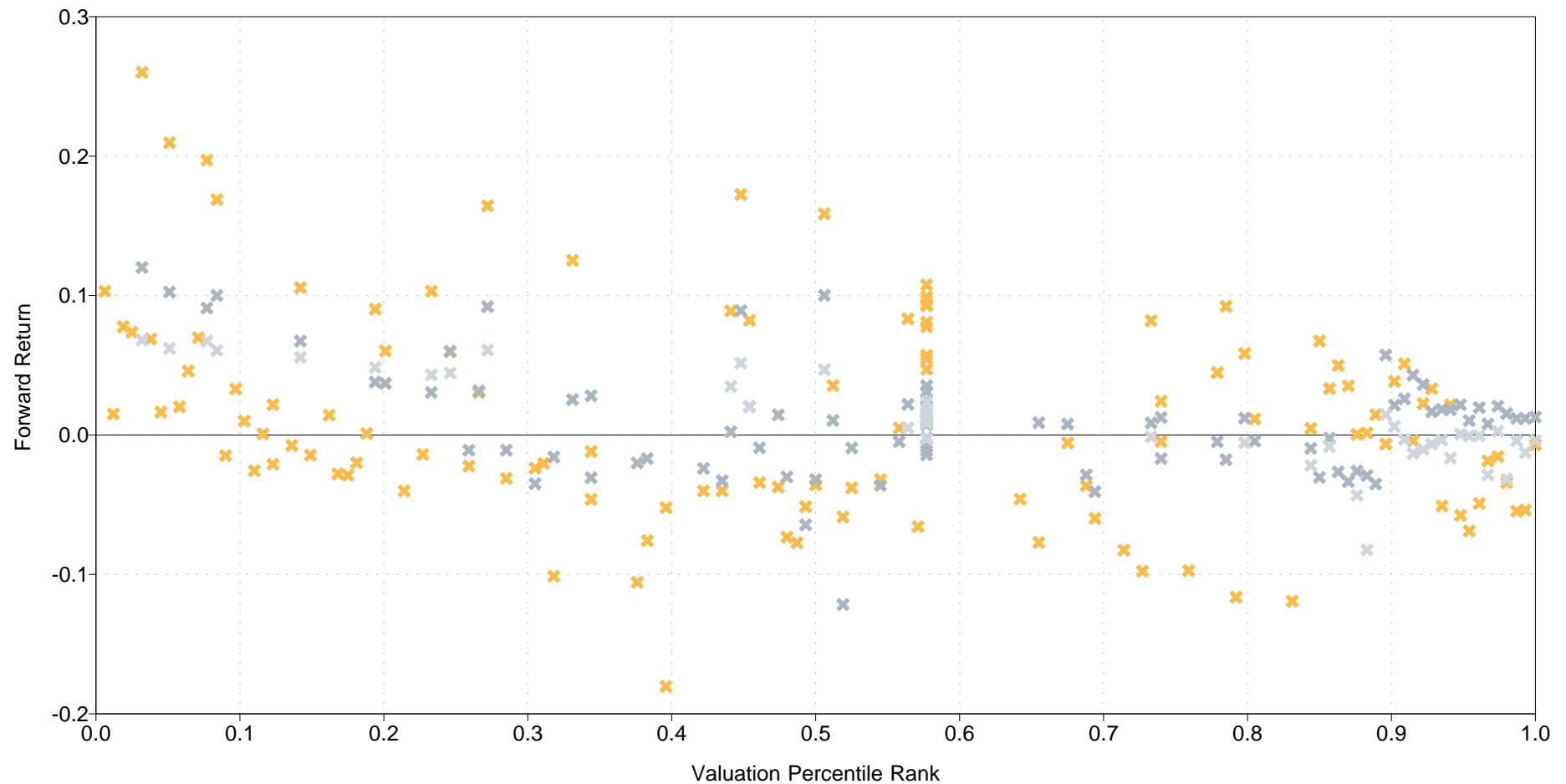


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Aug-96 - Mar-17

- ✕ S&P North American Natural Resources Sector Total Return Index Fwd 3yr TR
- ✕ S&P North American Natural Resources Sector Total Return Index Fwd 6yr TR
- ✕ S&P North American Natural Resources Sector Total Return Index Fwd 9yr TR

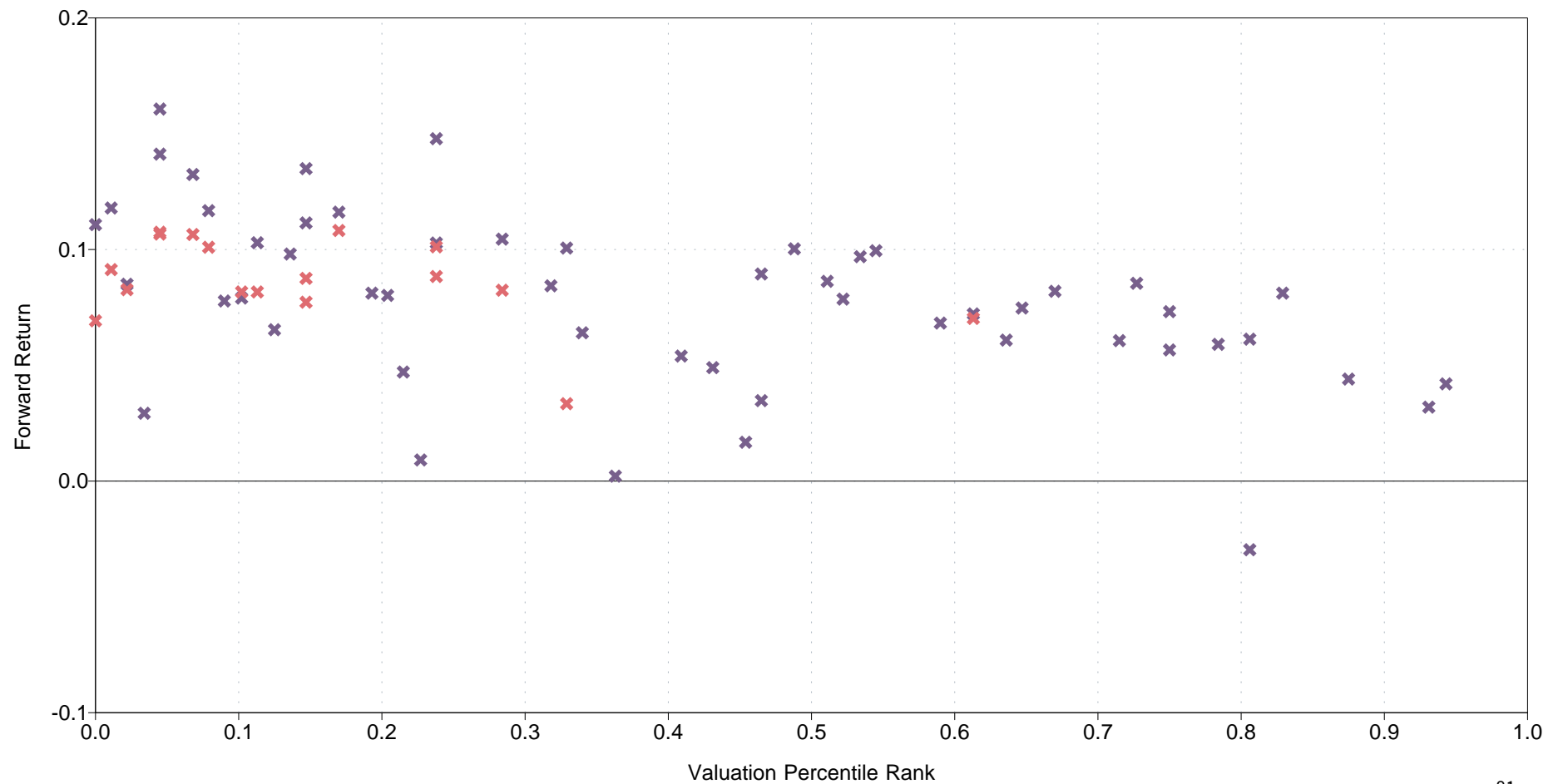


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jun-05 - Mar-17

- ✕ MSCI US REIT Index Fwd 3yr TR
- ✕ MSCI US REIT Index Fwd 6yr TR
- ✕ MSCI US REIT Index Fwd 9yr TR

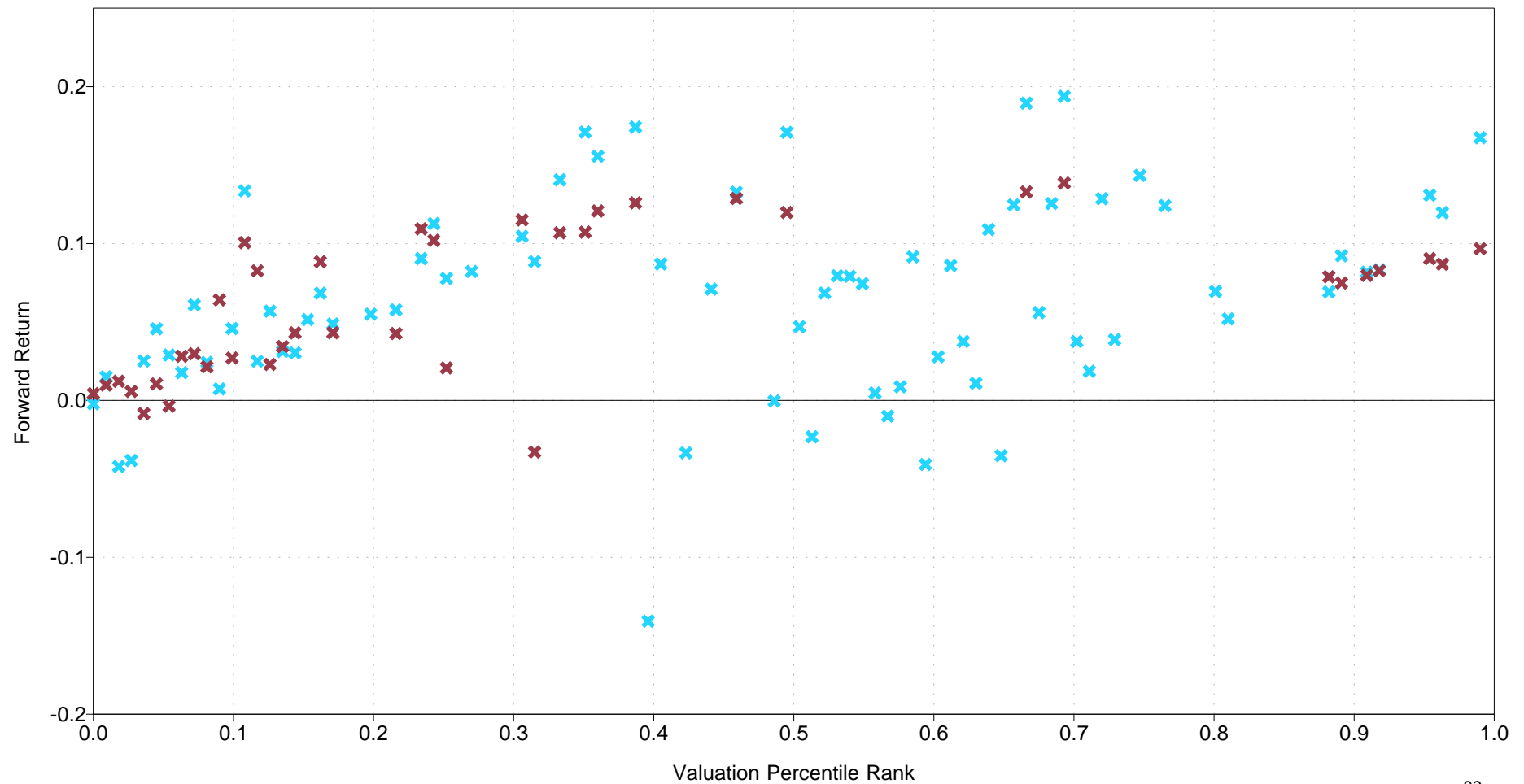


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Dec-10 - Mar-17

- × FTSE NAREIT Timber REITs Index USD Fwd 3yr TR
- × FTSE NAREIT Timber REITs Index USD Fwd 6yr TR

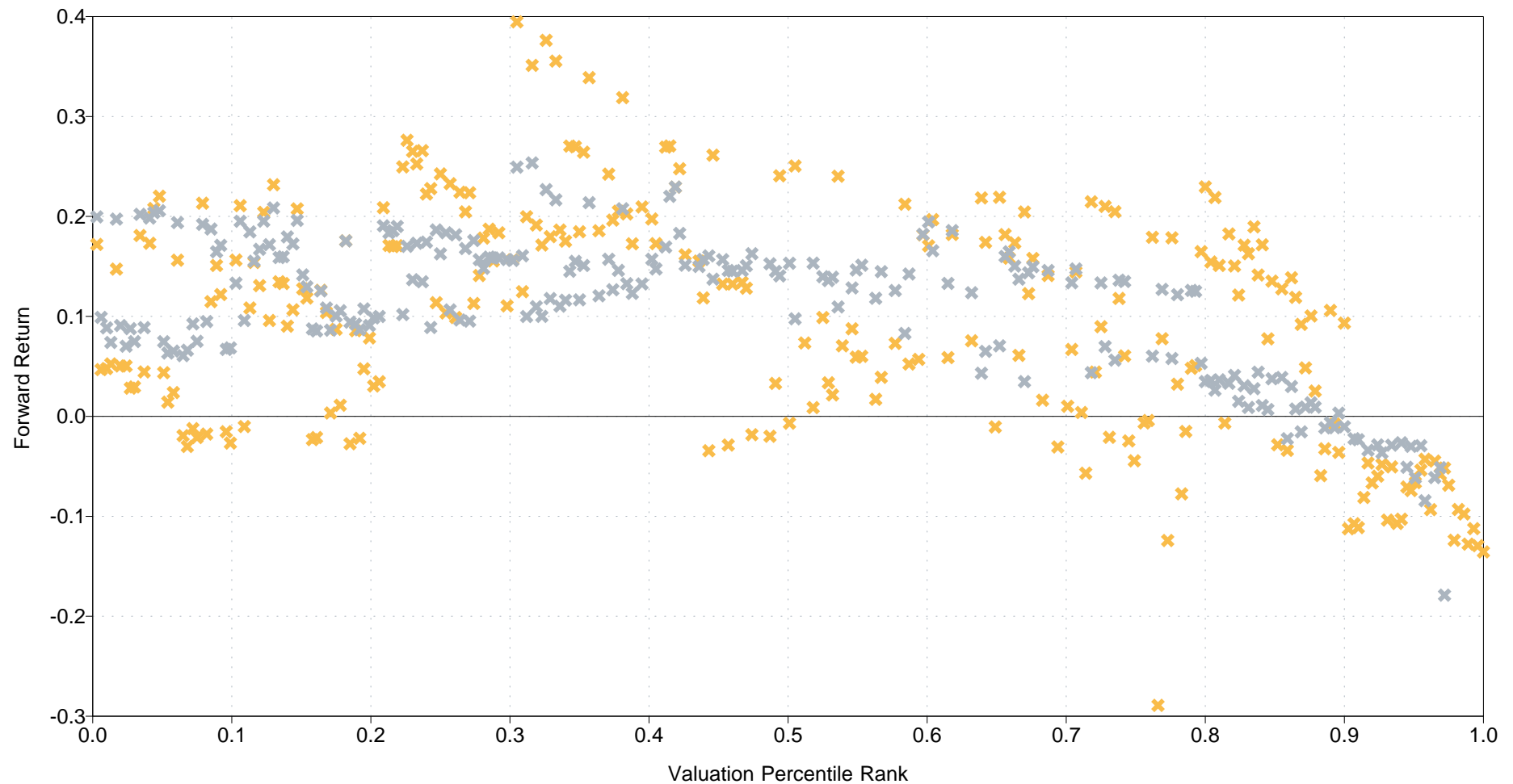


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Dec-95 - Mar-17

- ✕ Alerian MLP Index Fwd 3yr TR
- ✕ Alerian MLP Index Fwd 6yr TR

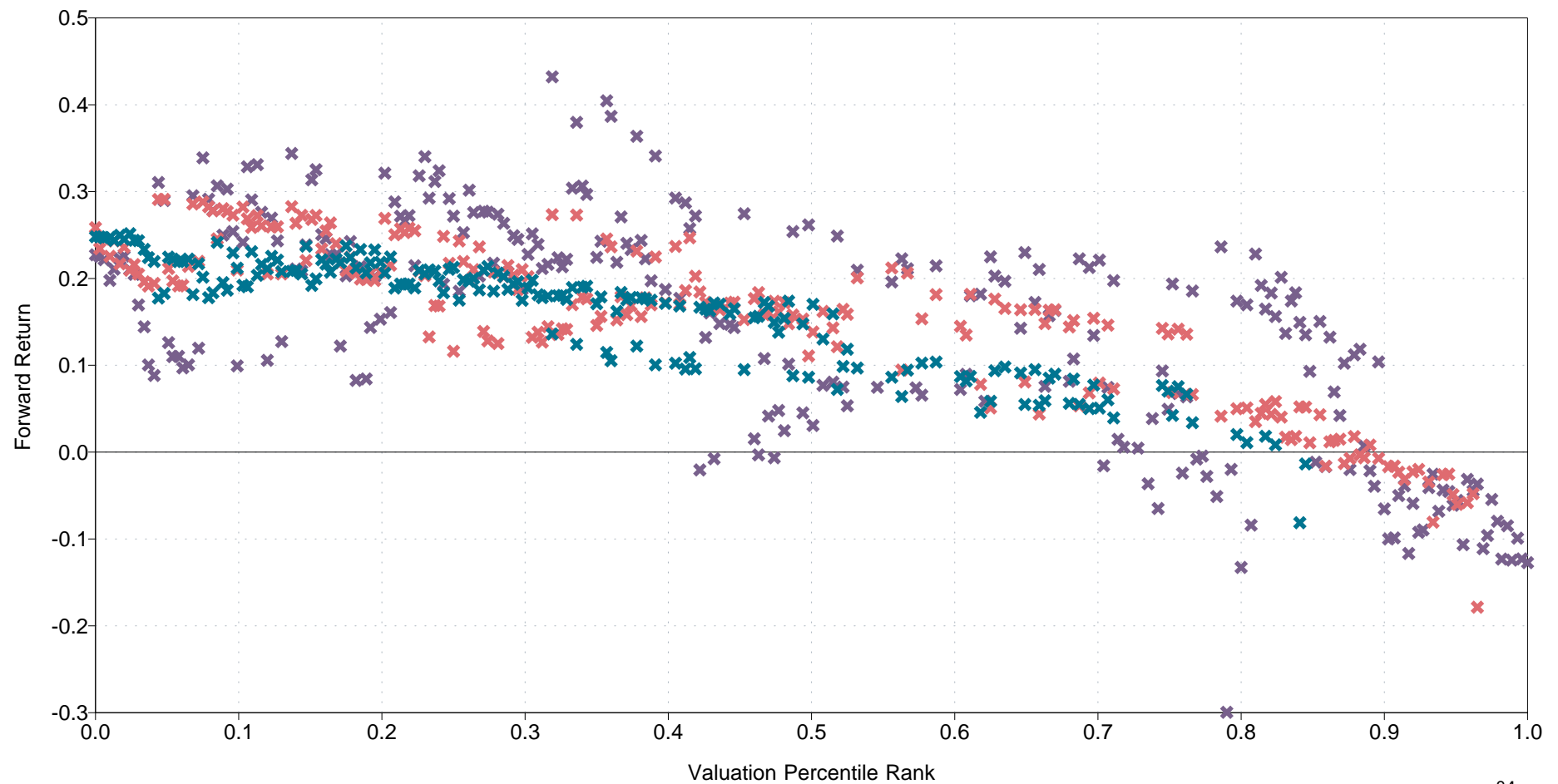


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Dec-95 - Mar-17

- ✕ Alerian MLP Infrastructure Index Fwd 3yr TR
- ✕ Alerian MLP Infrastructure Index Fwd 6yr TR
- ✕ Alerian MLP Infrastructure Index Fwd 9yr TR

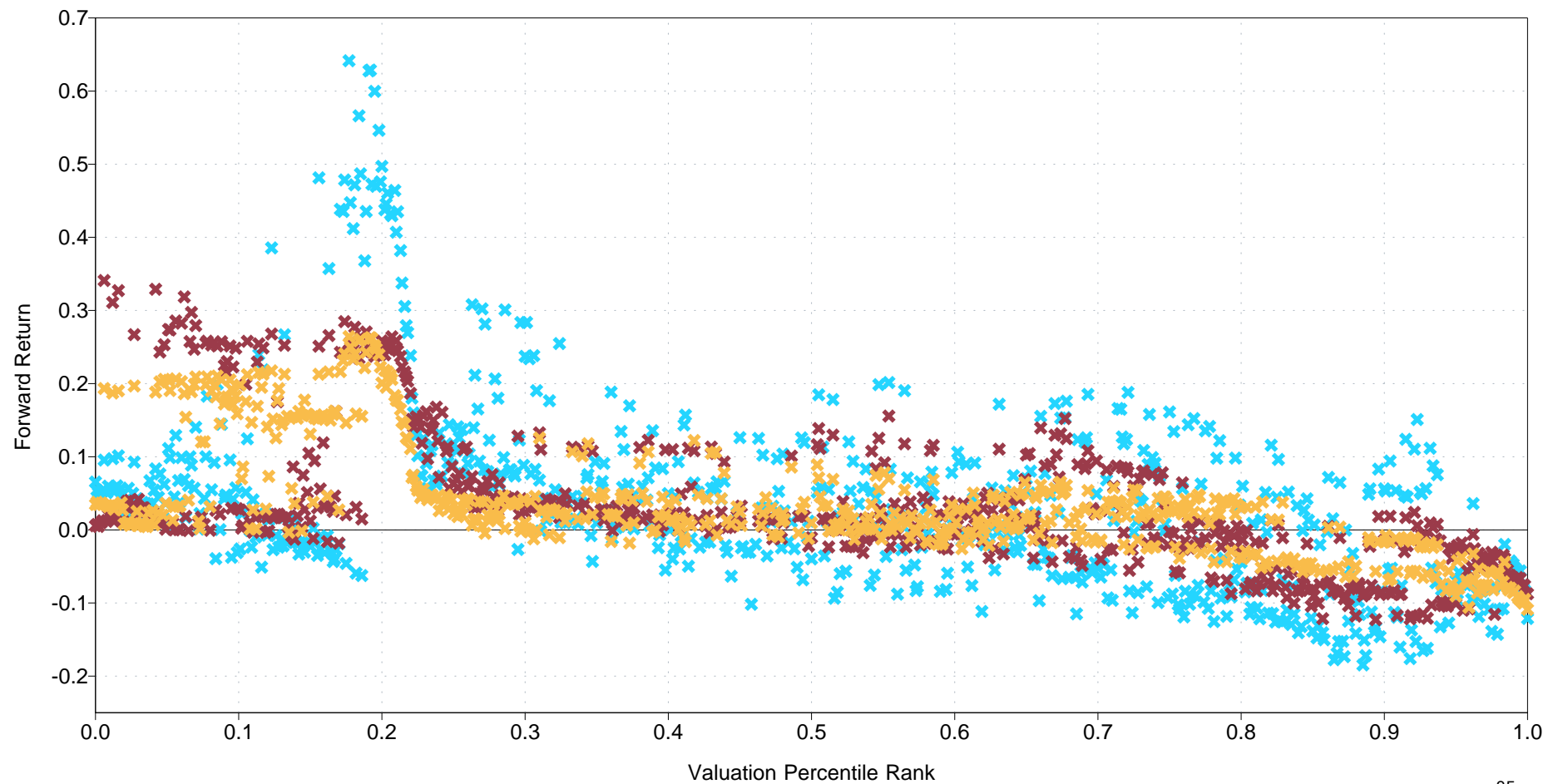


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jan-60 - Mar-17

- ✕ Bloomberg Commodity Index Fwd 3yr TR
- ✕ Bloomberg Commodity Index Fwd 6yr TR
- ✕ Bloomberg Commodity Index Fwd 9yr TR

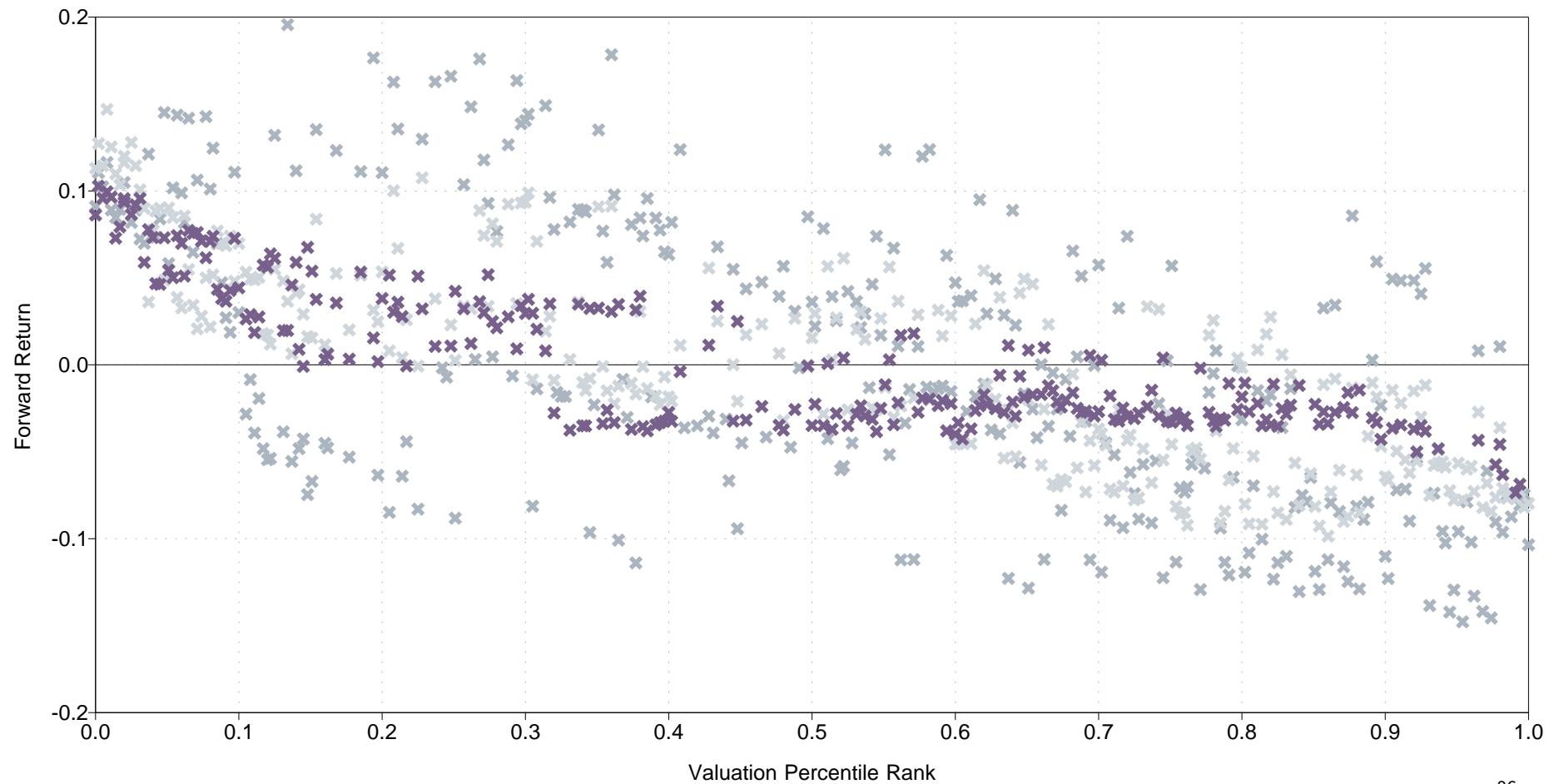


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jan-91 - Mar-17

- ✕ Bloomberg ExEnergy Subindex Fwd 3yr TR
- ✕ Bloomberg ExEnergy Subindex Fwd 6yr TR
- ✕ Bloomberg ExEnergy Subindex Fwd 9yr TR

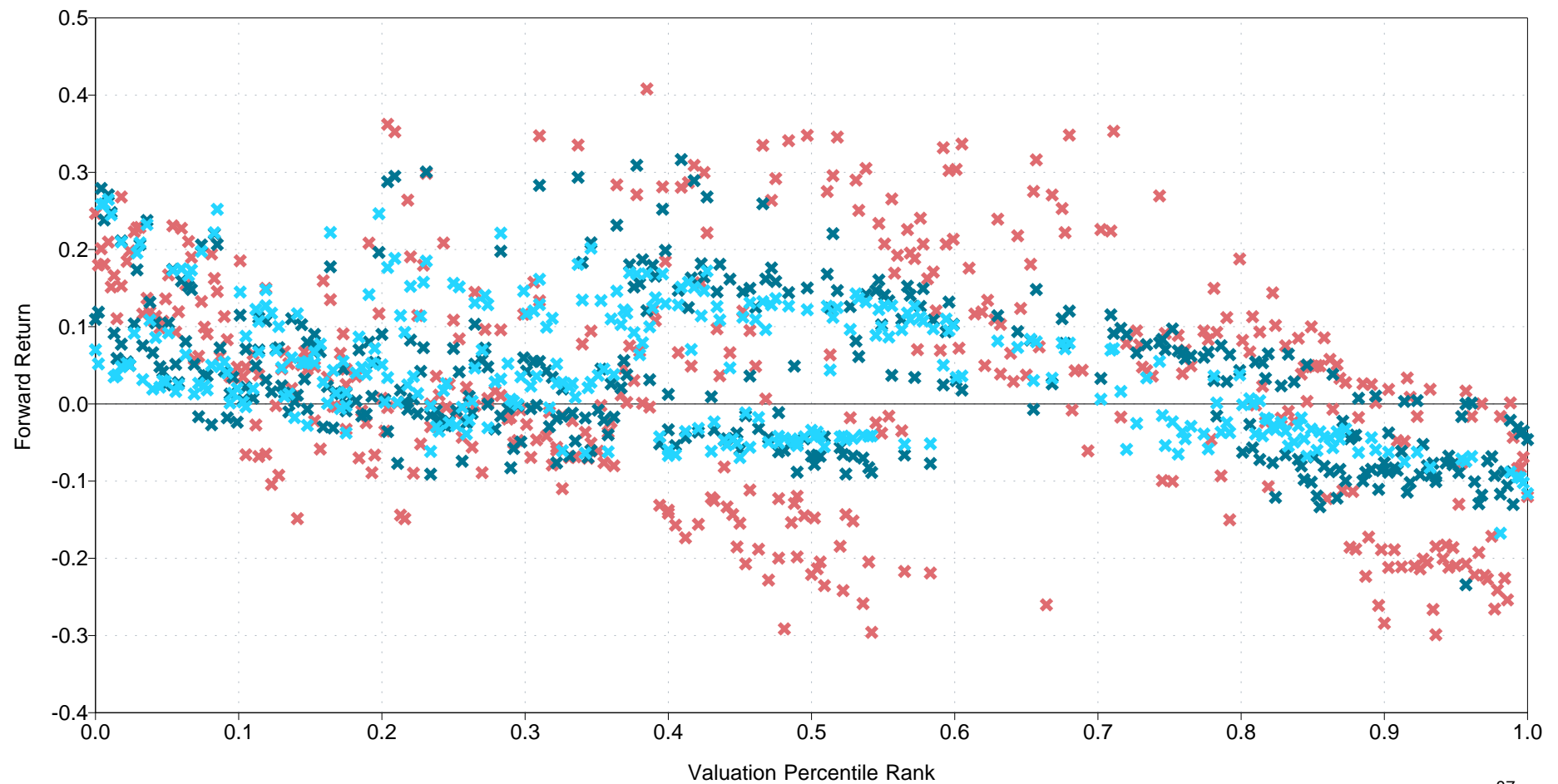


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Mar-83 - Mar-17

- × Generic 1st 'CL' Future Fwd 3yr TR
- × Generic 1st 'CL' Future Fwd 6yr TR
- × Generic 1st 'CL' Future Fwd 9yr TR

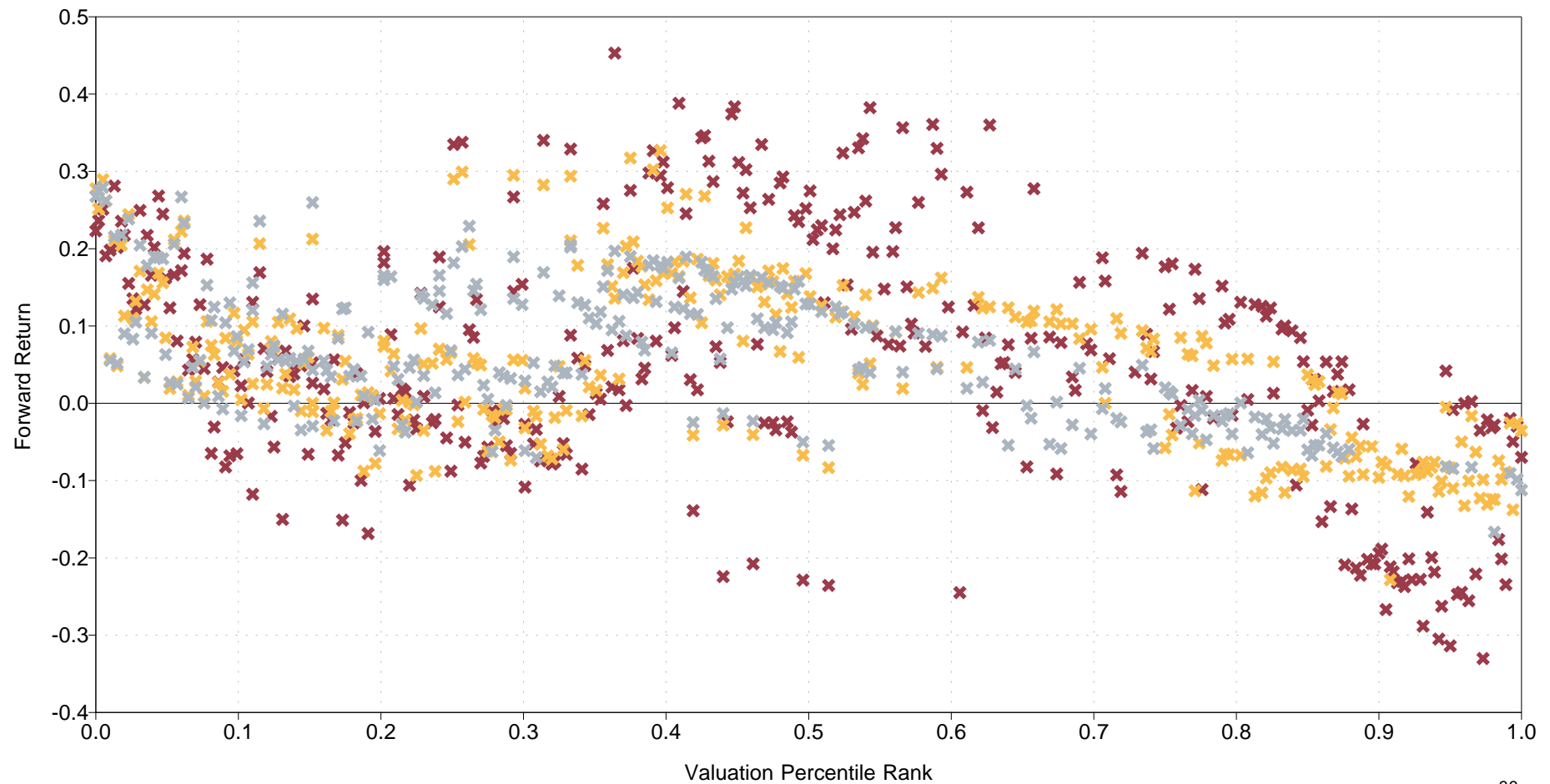


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jun-88 - Mar-17

- × Generic 1st 'CO' Future Fwd 3yr TR
- × Generic 1st 'CO' Future Fwd 6yr TR
- × Generic 1st 'CO' Future Fwd 9yr TR

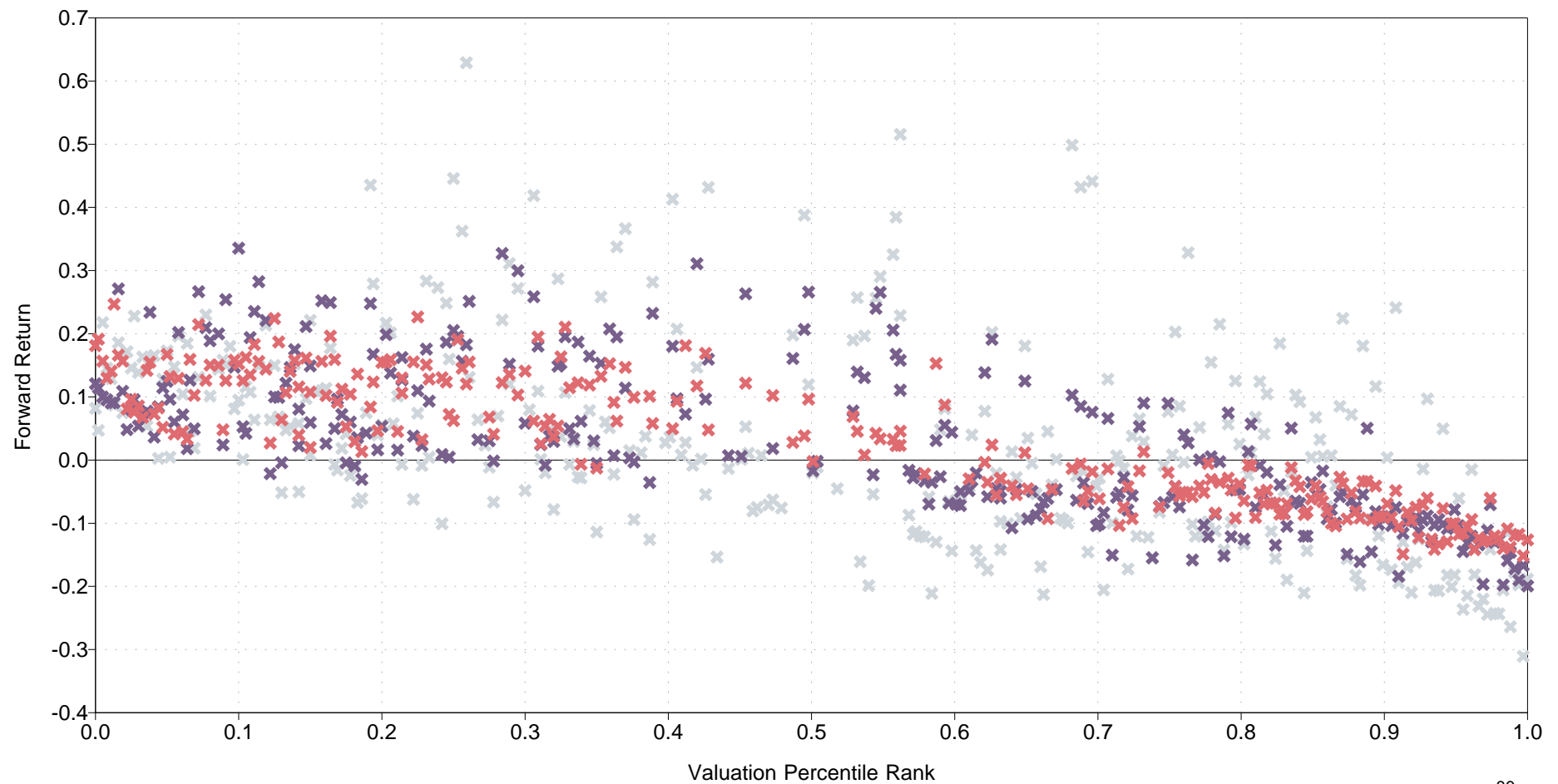


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Apr-90 - Mar-17

- Generic 1st 'NG' Future Fwd 3yr TR
- Generic 1st 'NG' Future Fwd 6yr TR
- Generic 1st 'NG' Future Fwd 9yr TR

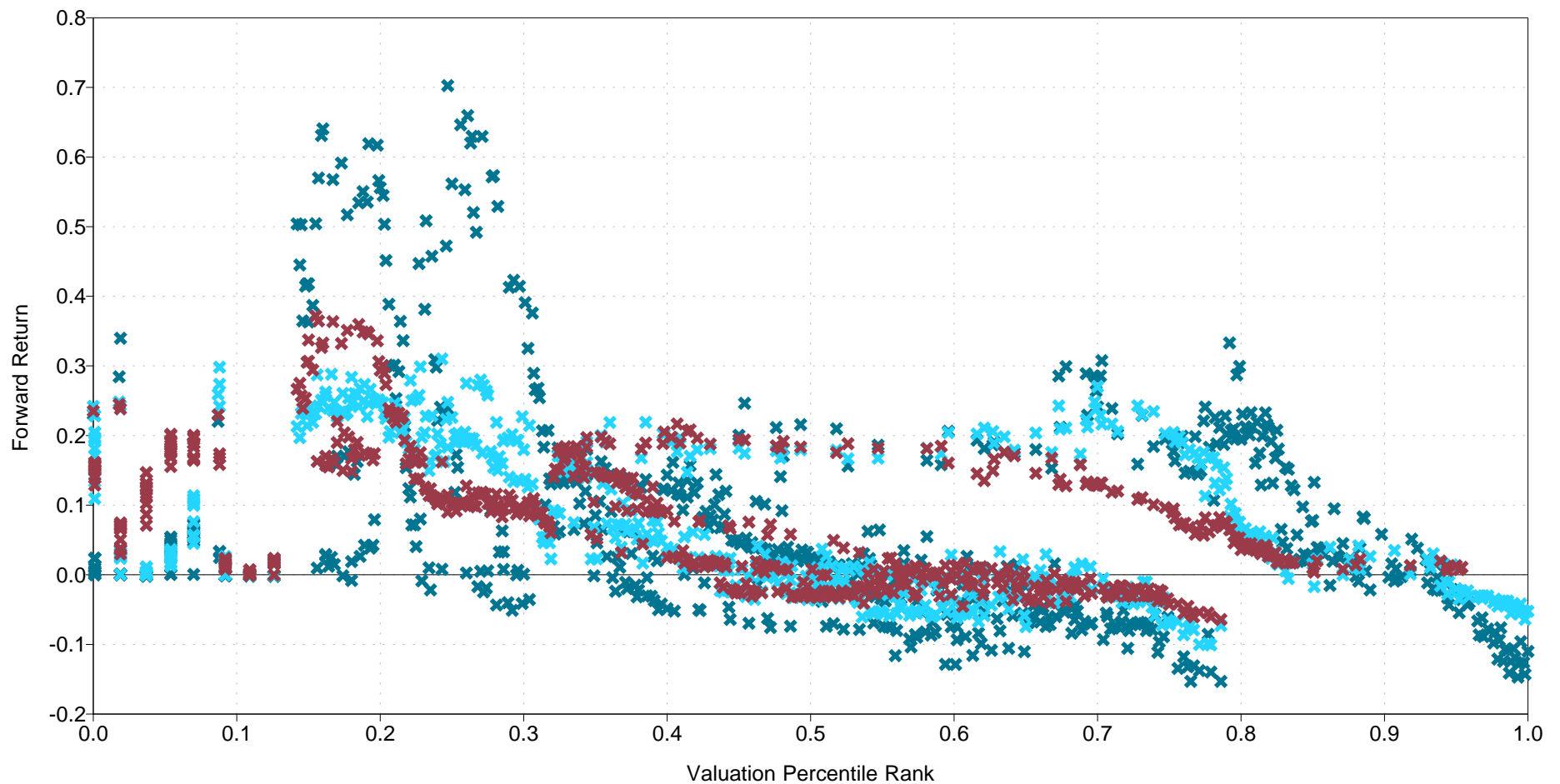


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jan-60 - Mar-17

- ✕ GOLD SPOT \$/OZ Fwd 3yr TR
- ✕ GOLD SPOT \$/OZ Fwd 6yr TR
- ✕ GOLD SPOT \$/OZ Fwd 9yr TR

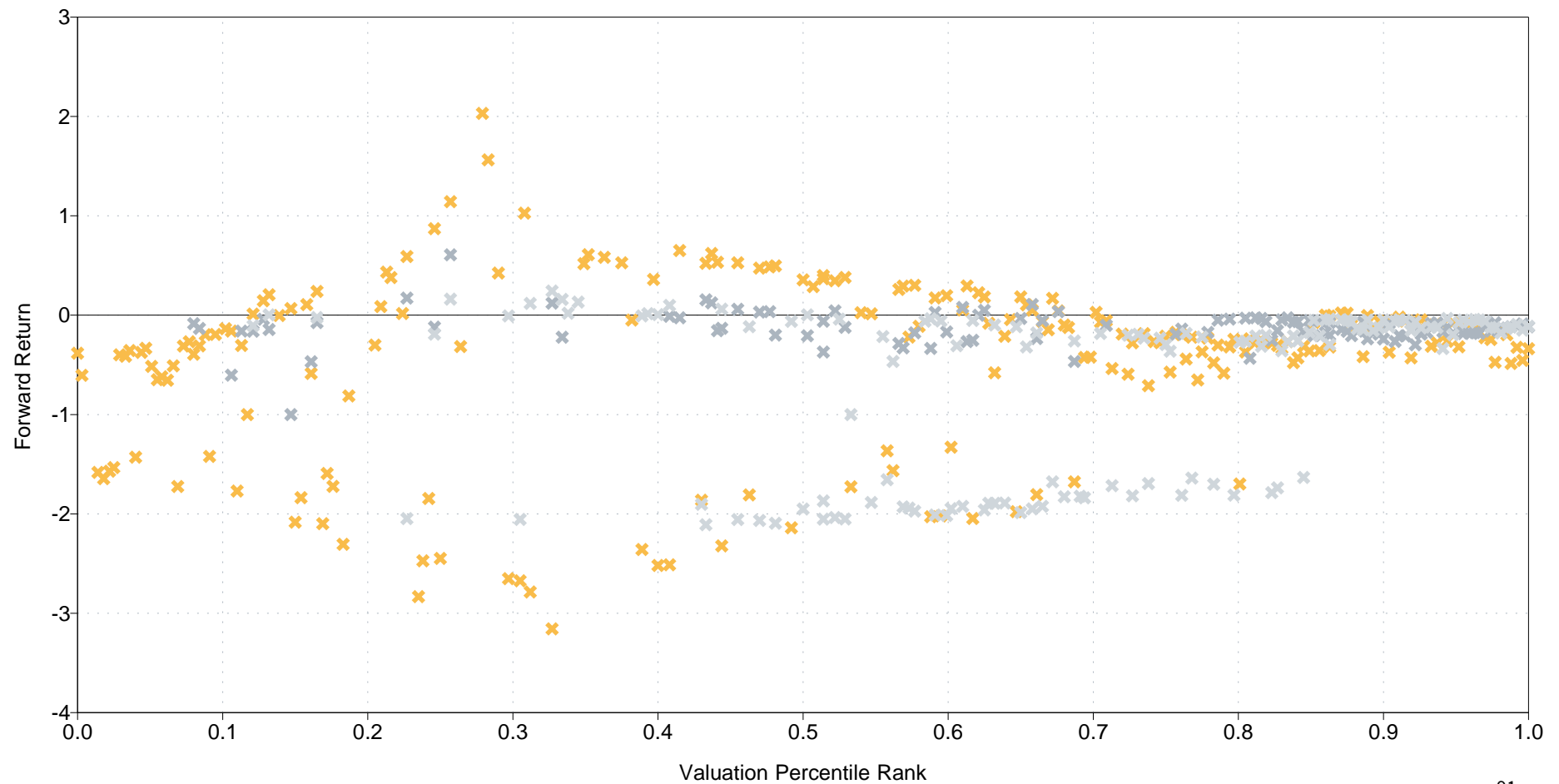


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jul-97 - Mar-17

- ✕ 5y TIPS Fwd 3yr TR
- ✕ 5y TIPS Fwd 6yr TR
- ✕ 5y TIPS Fwd 9yr TR

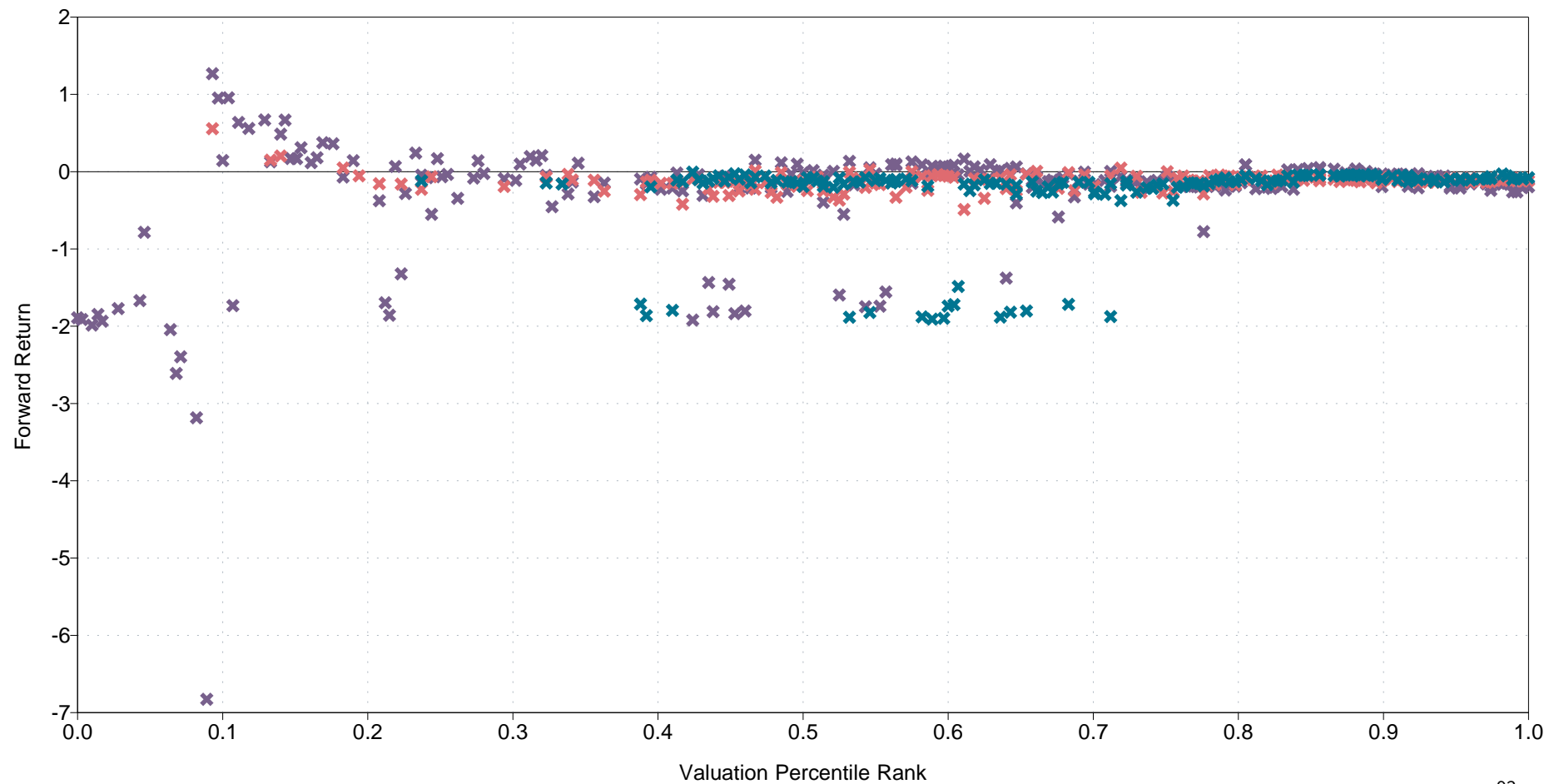


Valuations and Forward Return MPI Version April 3, 2020

Real Assets

Jan-97 - Mar-17

- ✕ 10y TIPS Fwd 3yr TR
- ✕ 10y TIPS Fwd 6yr TR
- ✕ 10y TIPS Fwd 9yr TR

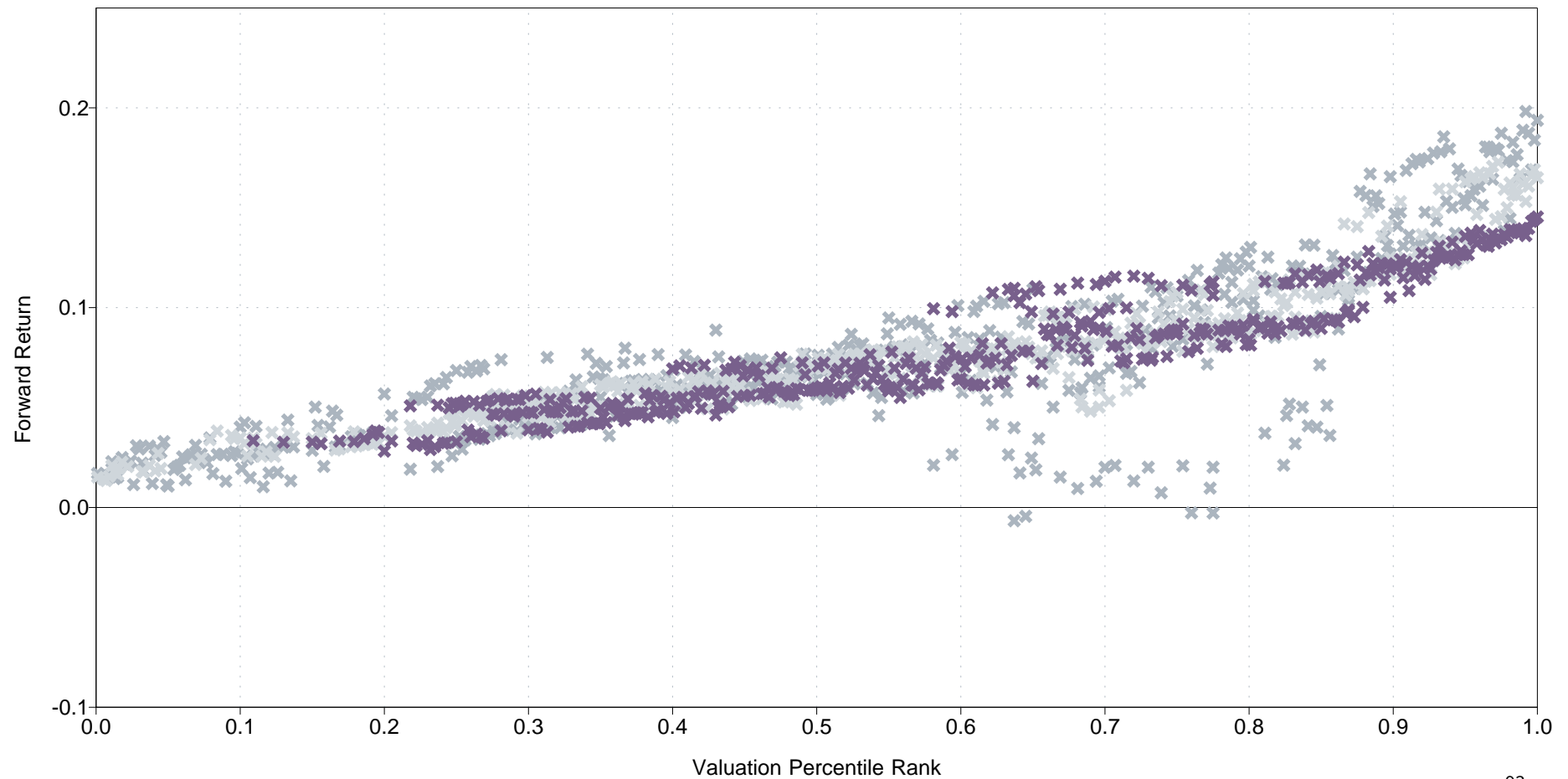


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-76 - Mar-17

- ✕ Bloomberg Barclays US Aggregate Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays US Aggregate Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays US Aggregate Statistics Index Fwd 9yr TR

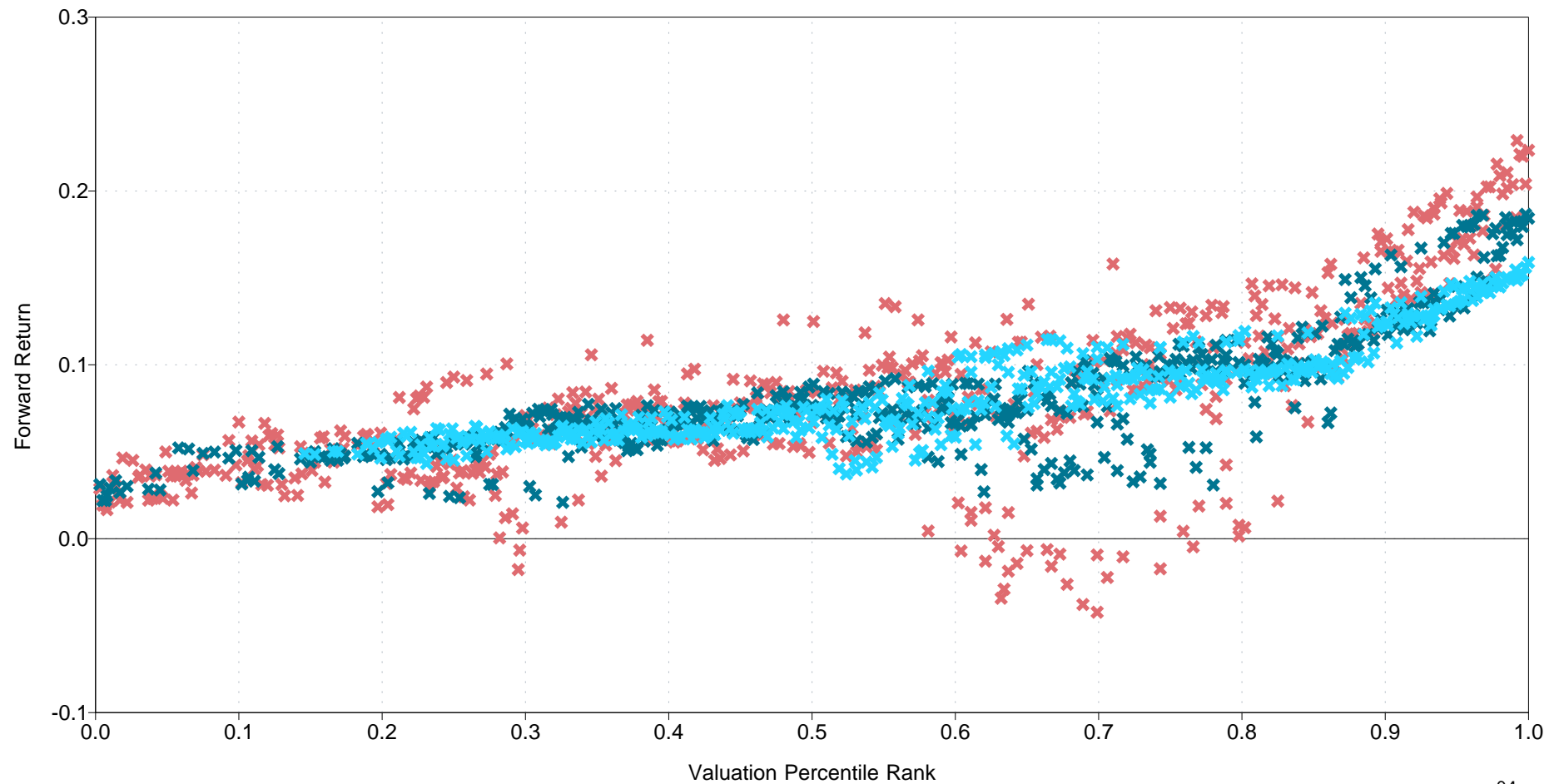


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-73 - Mar-17

- ✕ Bloomberg Barclays US Corporate Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays US Corporate Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays US Corporate Statistics Index Fwd 9yr TR

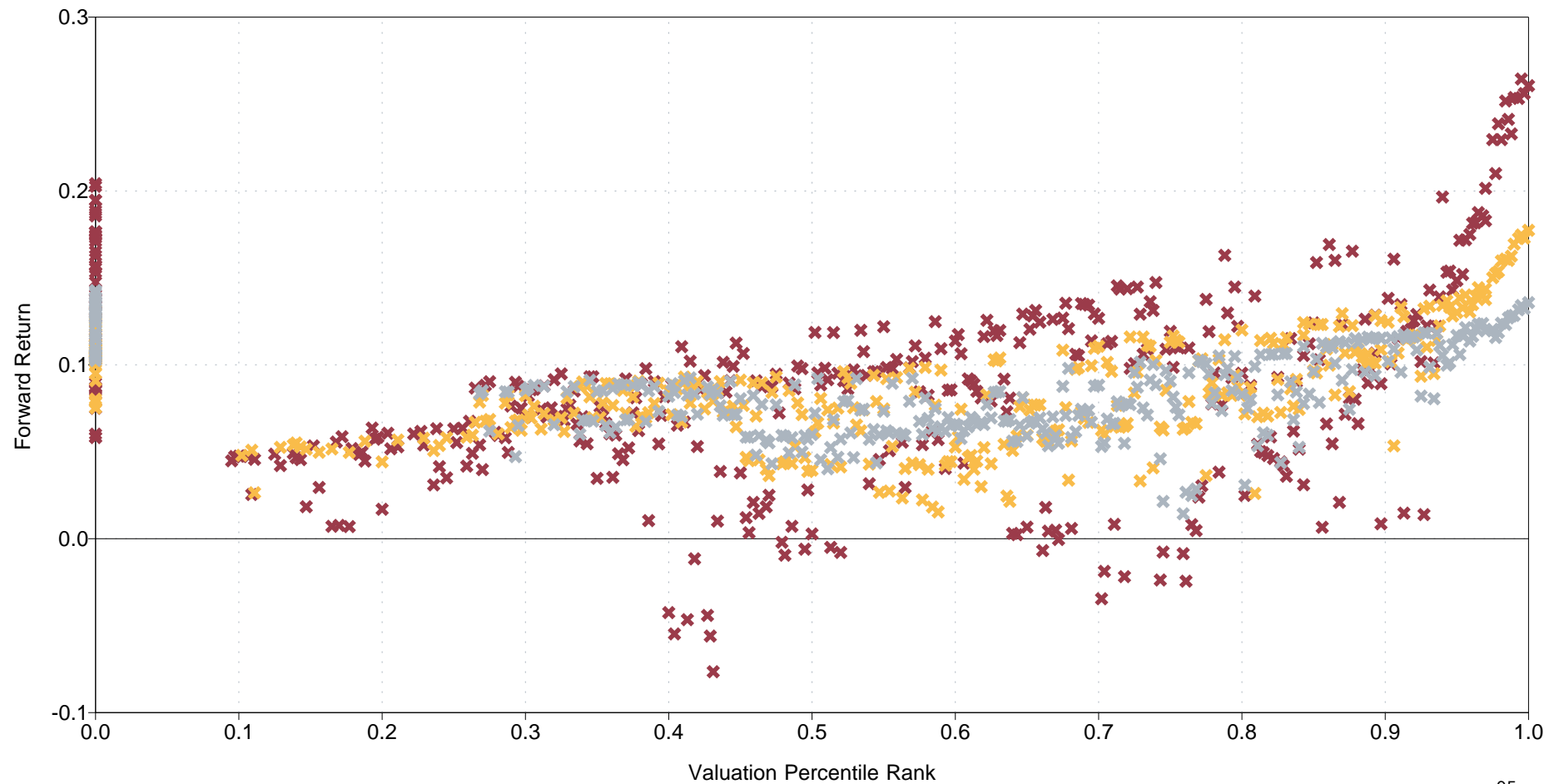


Valuations and Forward Return MPI Version April 3, 2020

Income

Jul-83 - Mar-17

- ✕ Bloomberg Barclays US Corporate High Yield Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays US Corporate High Yield Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays US Corporate High Yield Statistics Index Fwd 9yr TR

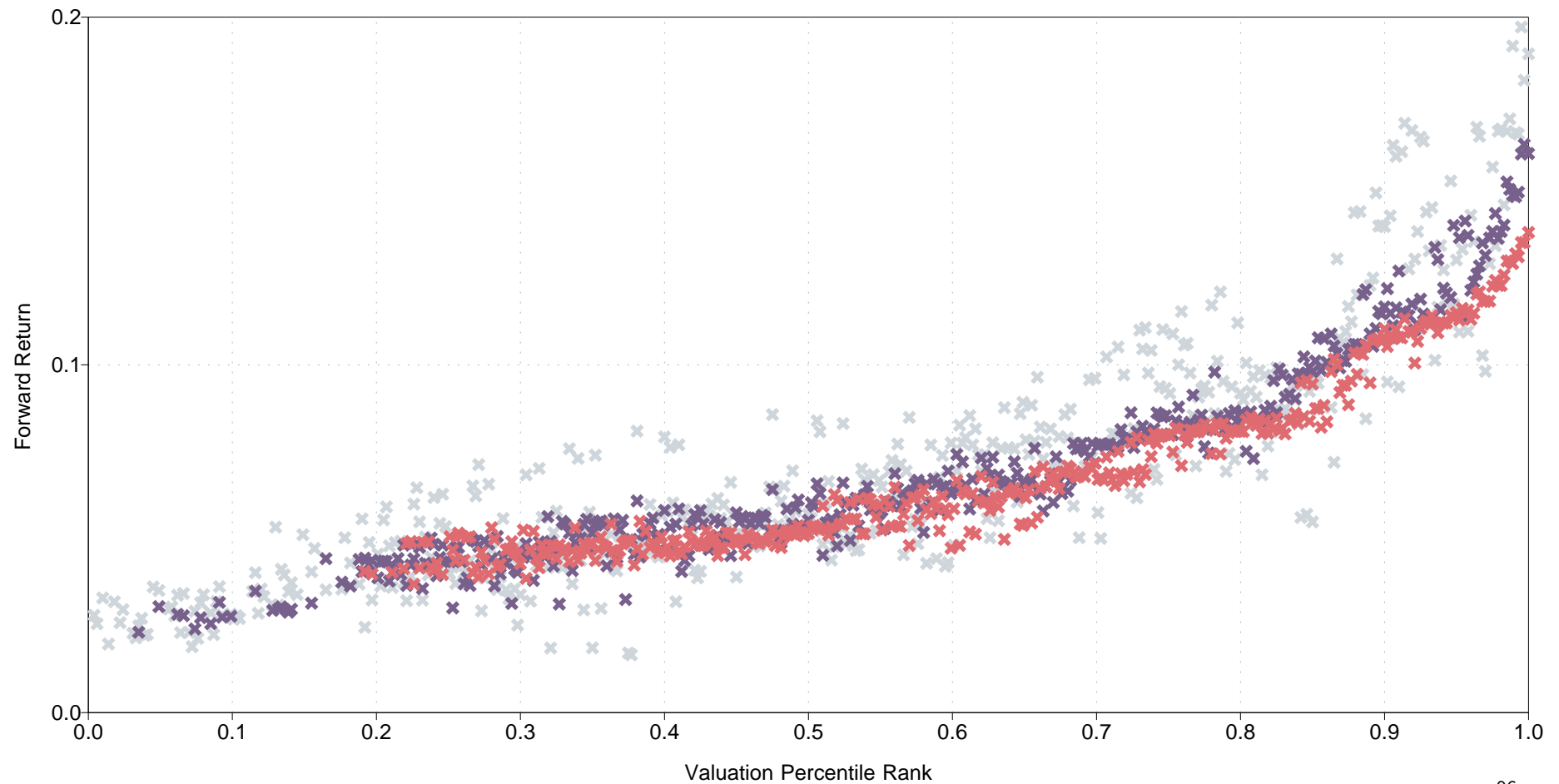


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-80 - Mar-17

- ✕ Bloomberg Barclays Municipal Bond Index Total Return Index Value Unhedged USD Fwd 3yr TR
- ✕ Bloomberg Barclays Municipal Bond Index Total Return Index Value Unhedged USD Fwd 6yr TR
- ✕ Bloomberg Barclays Municipal Bond Index Total Return Index Value Unhedged USD Fwd 9yr TR

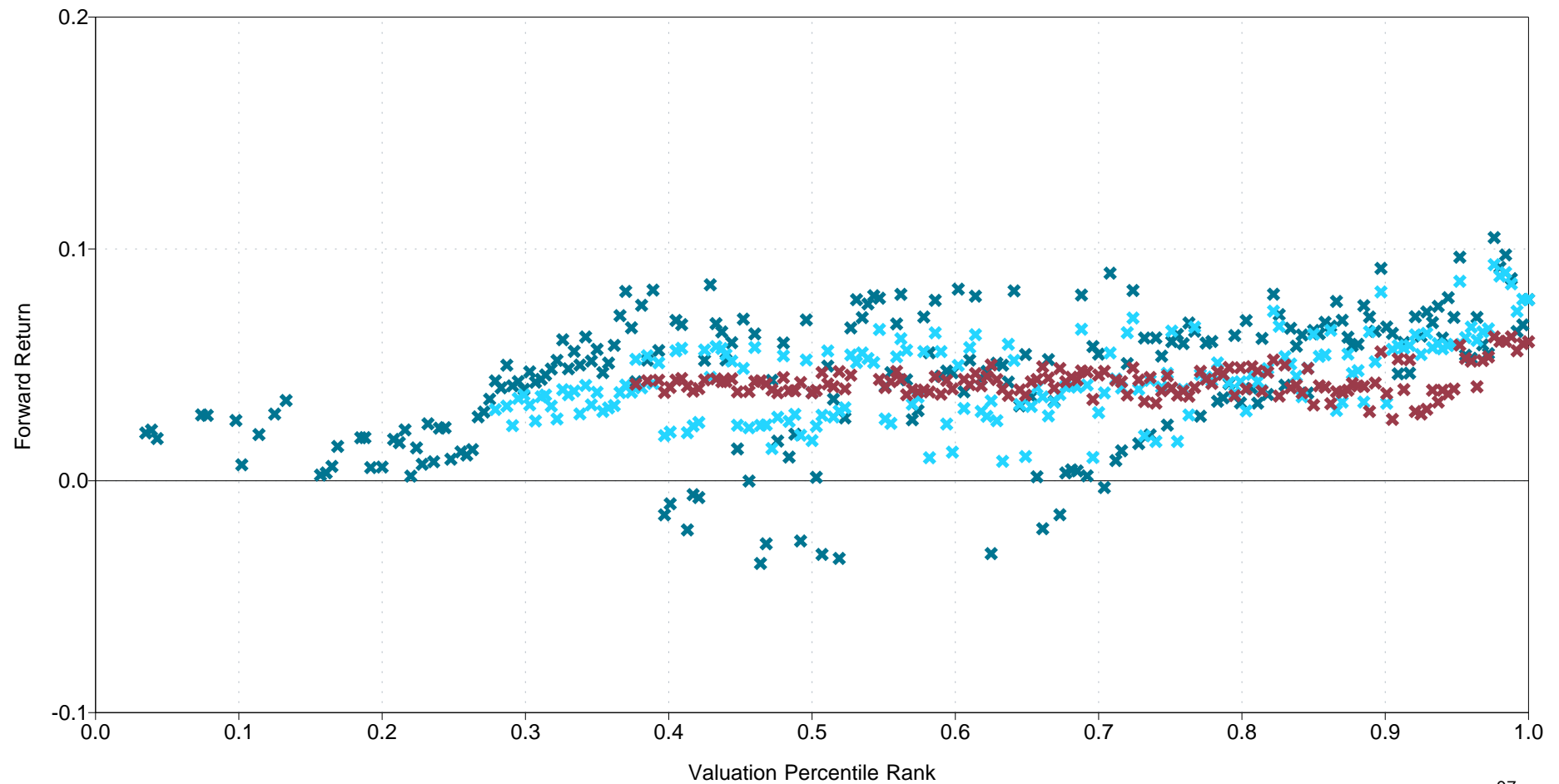


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-99 - Mar-17

- ✕ Bloomberg Barclays Pan-European Aggregate: Credit Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays Pan-European Aggregate: Credit Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays Pan-European Aggregate: Credit Statistics Index Fwd 9yr TR

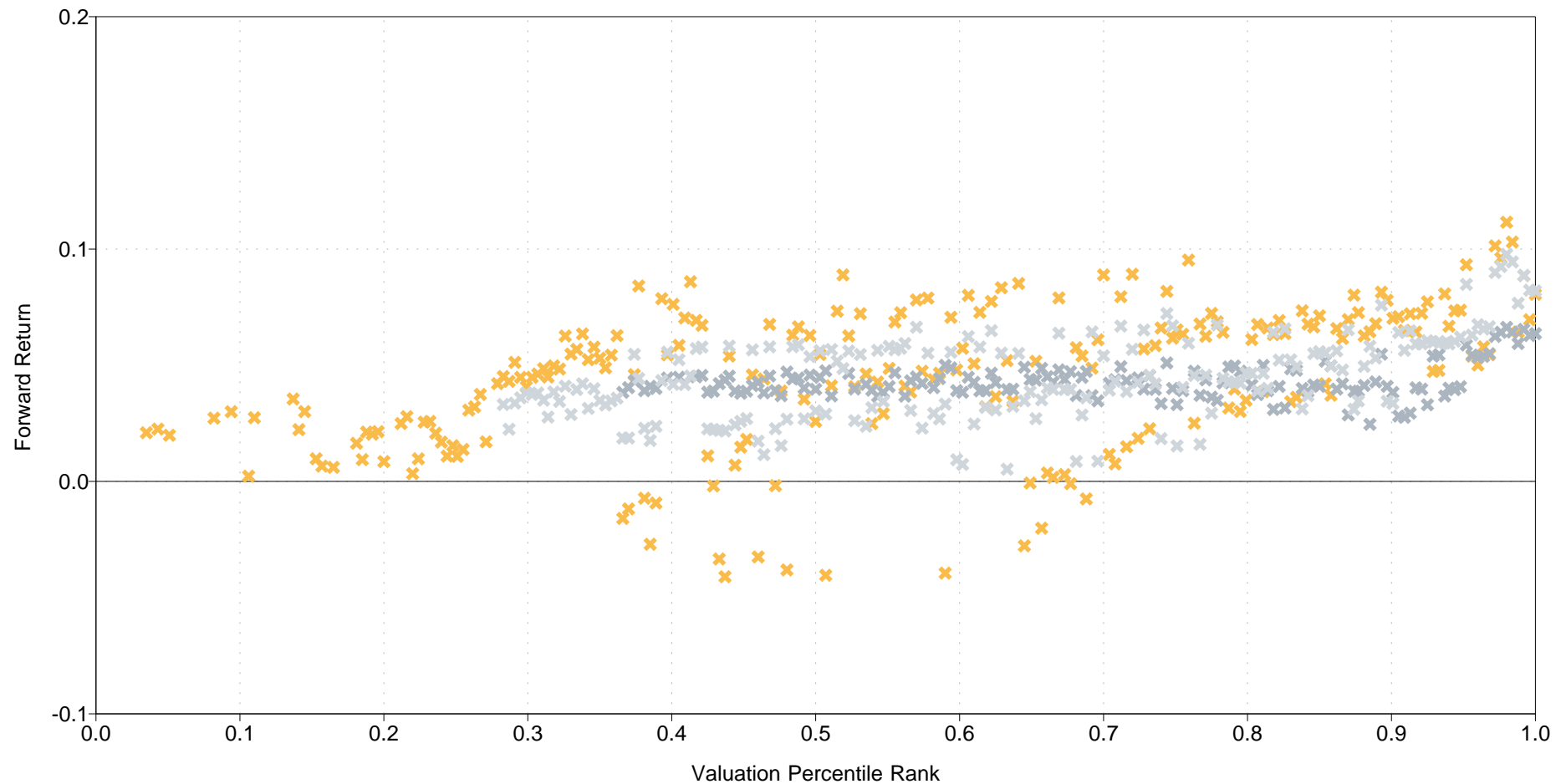


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-99 - Mar-17

- ✕ Bloomberg Barclays Pan European Aggregate Corporate Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays Pan European Aggregate Corporate Statistics Index Fwd 9yr TR
- ✕ Bloomberg Barclays Pan European Aggregate Corporate Statistics Index Fwd 6yr TR

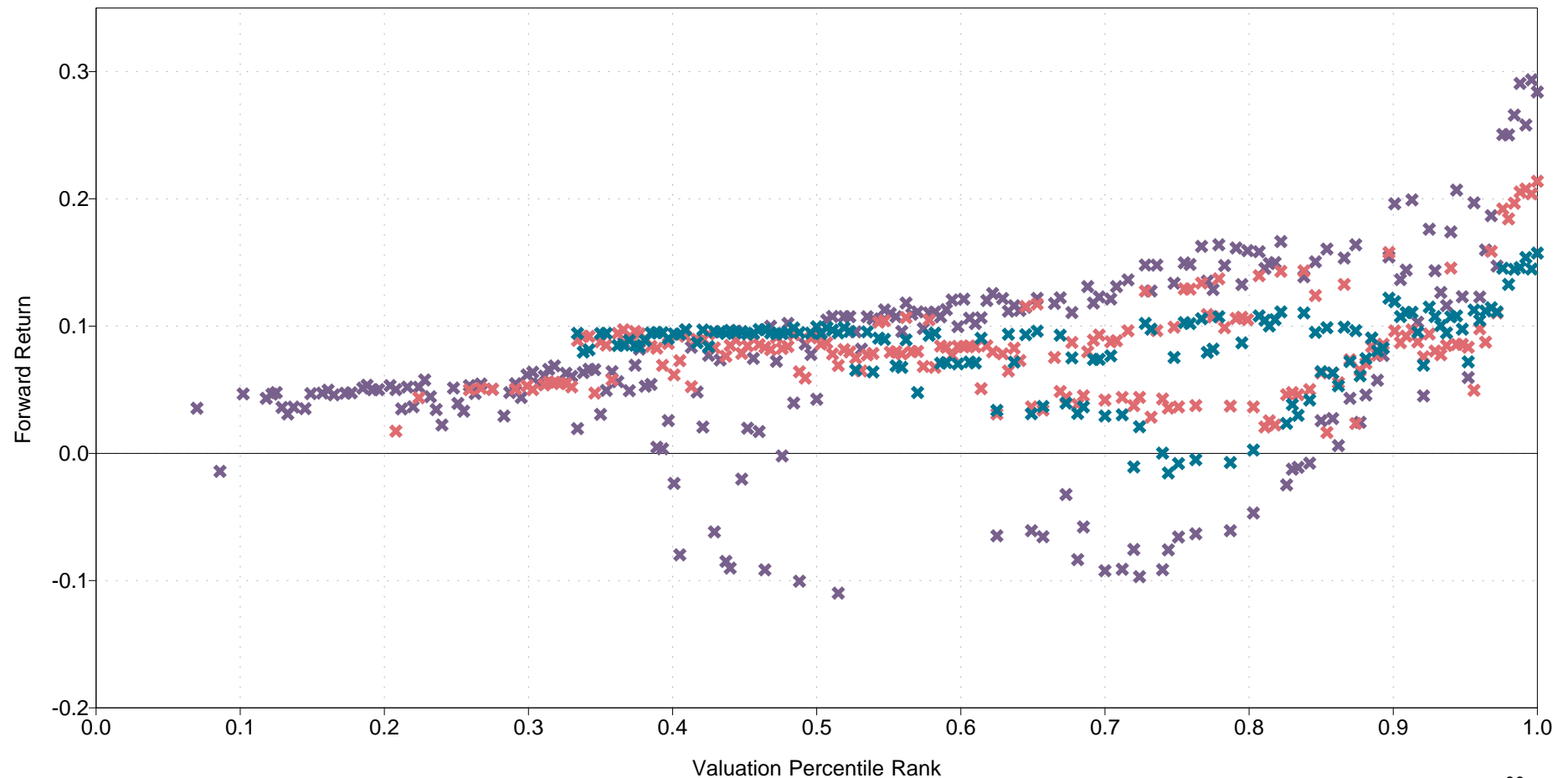


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-99 - Mar-17

- ✕ Bloomberg Barclays Pan-European High Yield Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays Pan-European High Yield Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays Pan-European High Yield Statistics Index Fwd 9yr TR

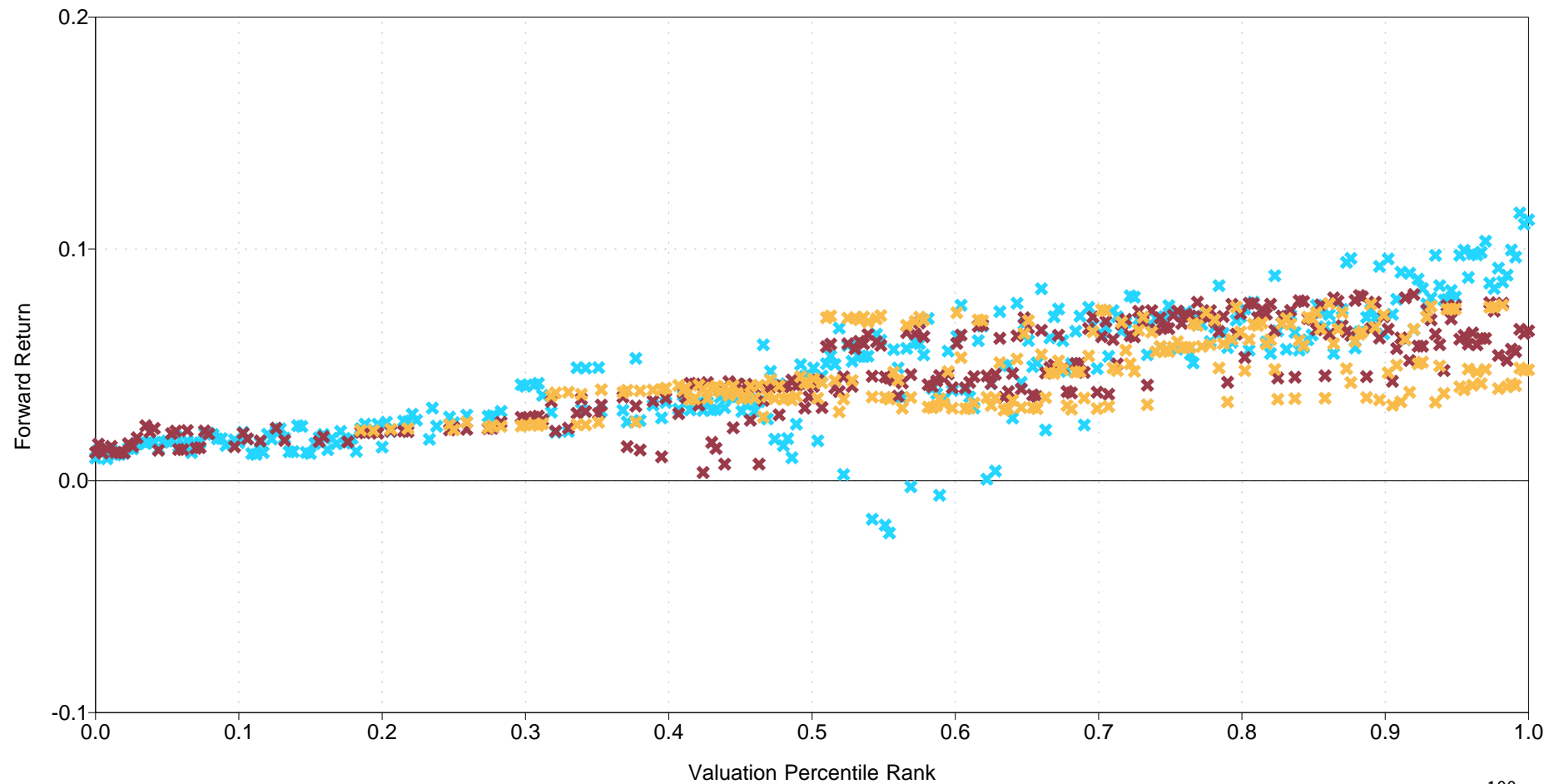


Valuations and Forward Return MPI Version April 3, 2020

Income

Dec-91 - Mar-17

- ✕ Bloomberg Barclays US Agg ABS Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays US Agg ABS Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays US Agg ABS Statistics Index Fwd 9yr TR

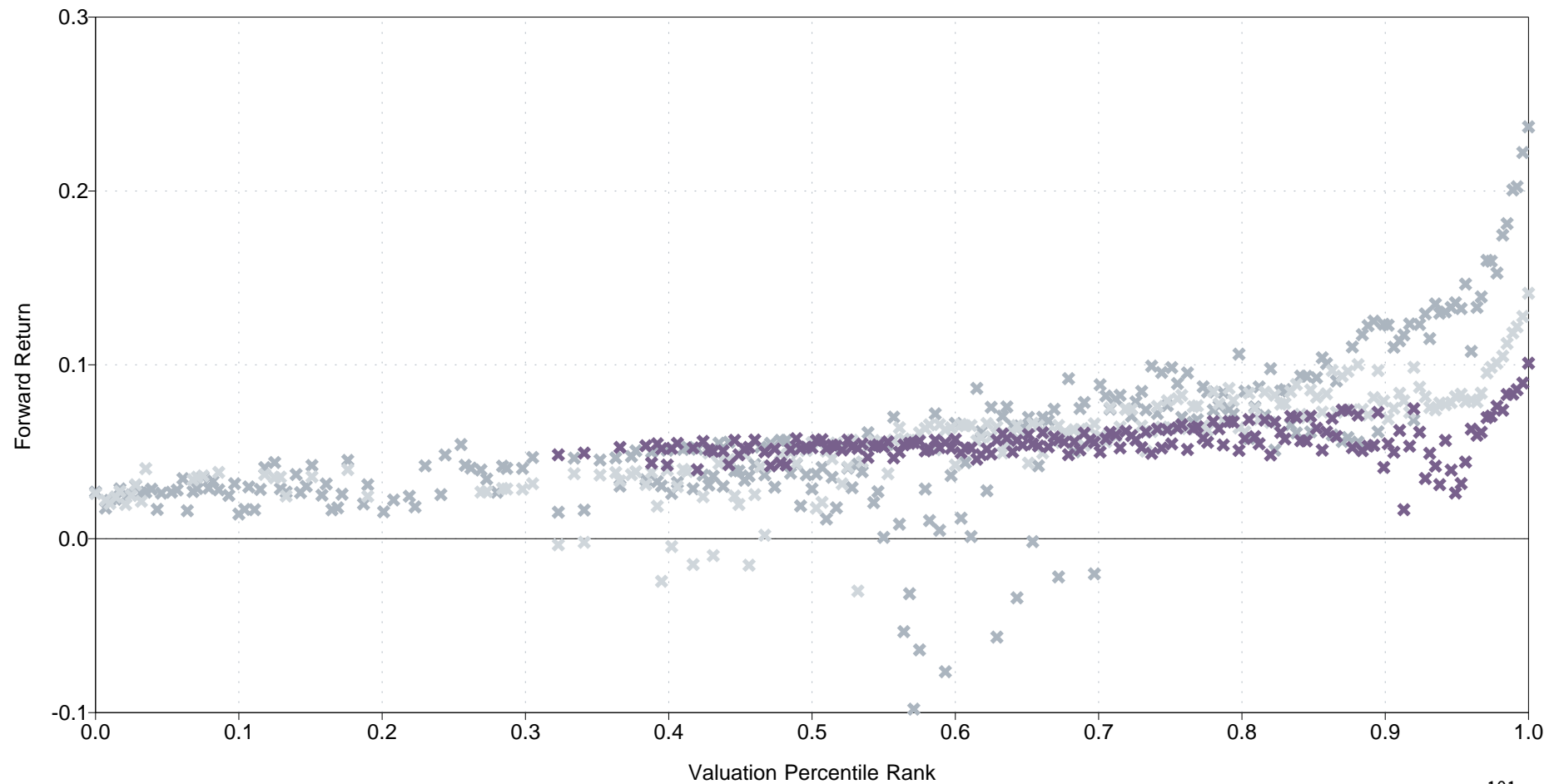


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-97 - Mar-17

- ✕ Bloomberg Barclays CMBS Investment Grade Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays CMBS Investment Grade Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays CMBS Investment Grade Statistics Index Fwd 9yr TR

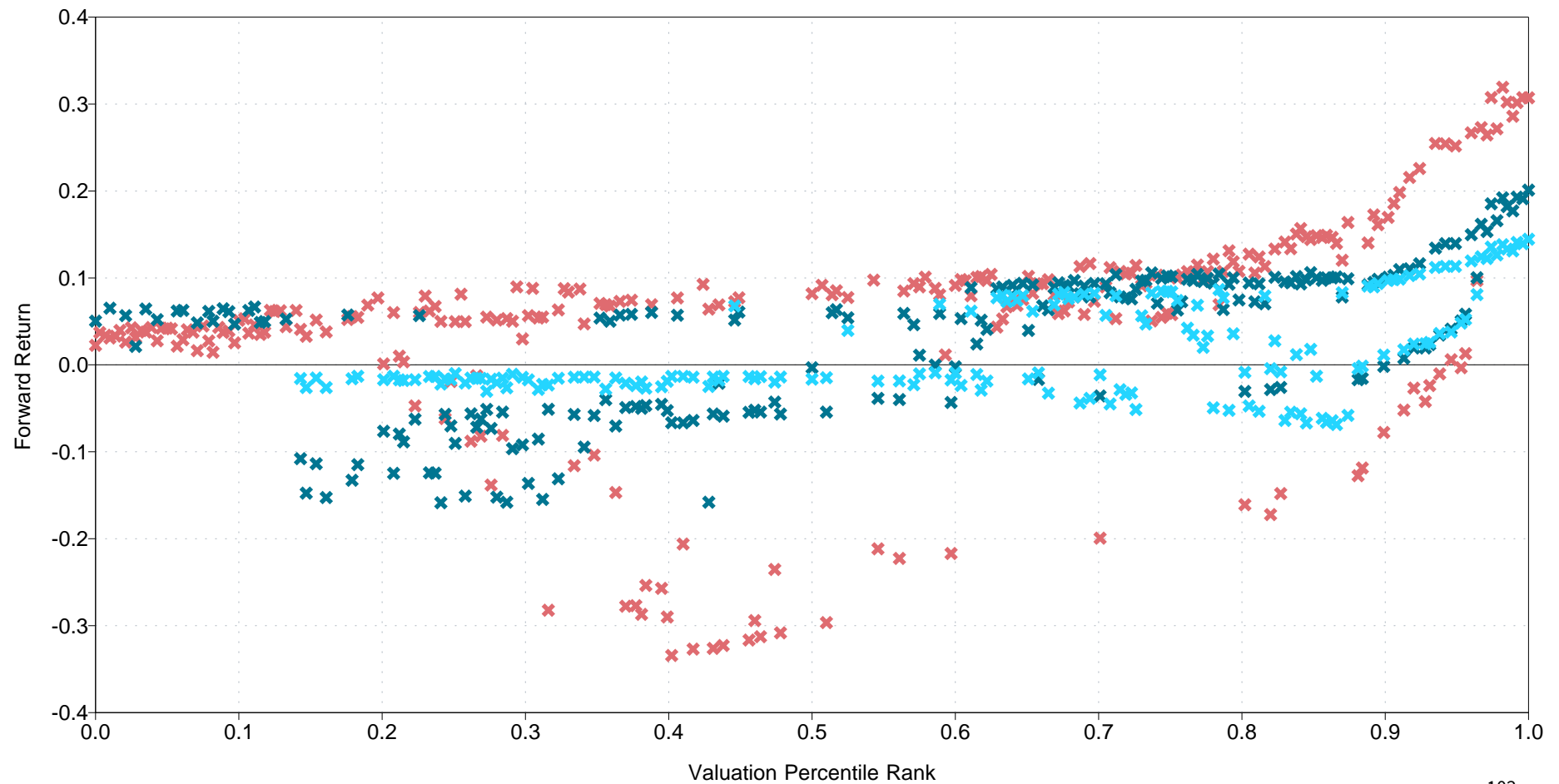


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-97 - Mar-17

- ✕ Bloomberg Barclays Non-Agency Investment Grade CMBS: Bbb Total Return Unhedged Fwd 3yr TR
- ✕ Bloomberg Barclays Non-Agency Investment Grade CMBS: Bbb Total Return Unhedged Fwd 6yr TR
- ✕ Bloomberg Barclays Non-Agency Investment Grade CMBS: Bbb Total Return Unhedged Fwd 9yr TR

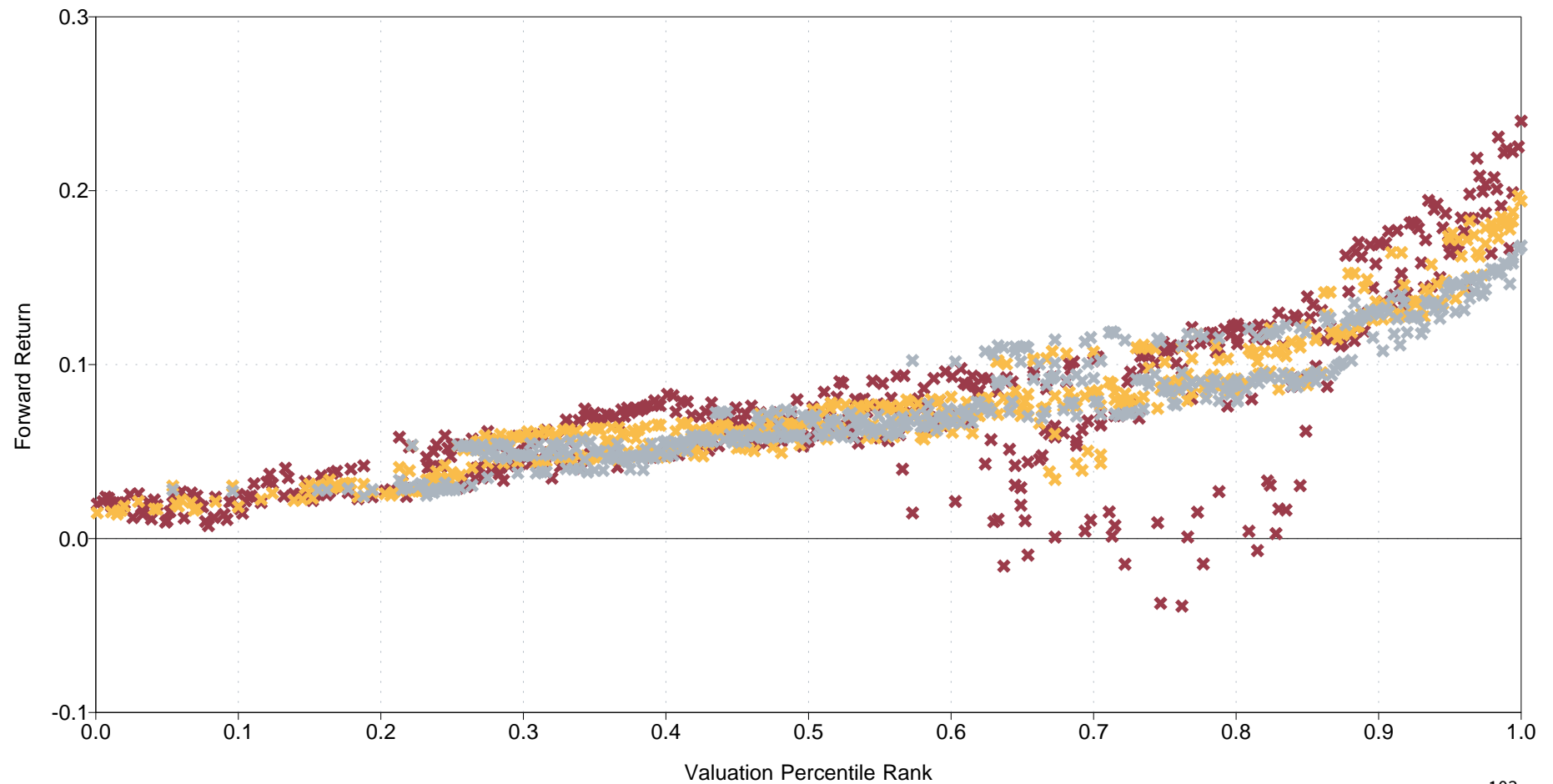


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-76 - Mar-17

- ✕ Bloomberg Barclays US MBS Index Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays US MBS Index Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays US MBS Index Statistics Index Fwd 9yr TR

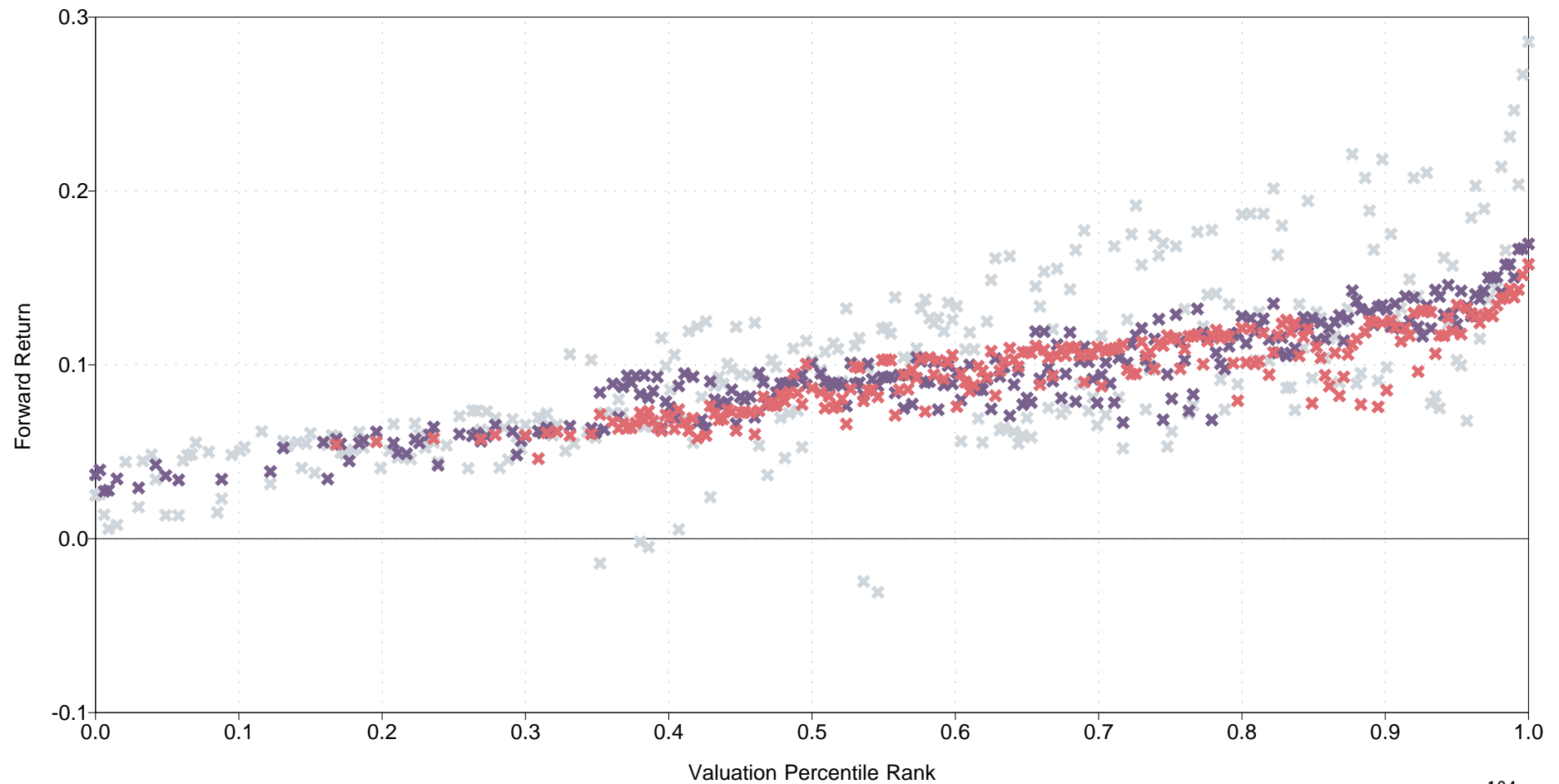


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-93 - Mar-17

- ✕ Bloomberg Barclays EM USD Aggregate Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays EM USD Aggregate Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays EM USD Aggregate Statistics Index Fwd 9yr TR

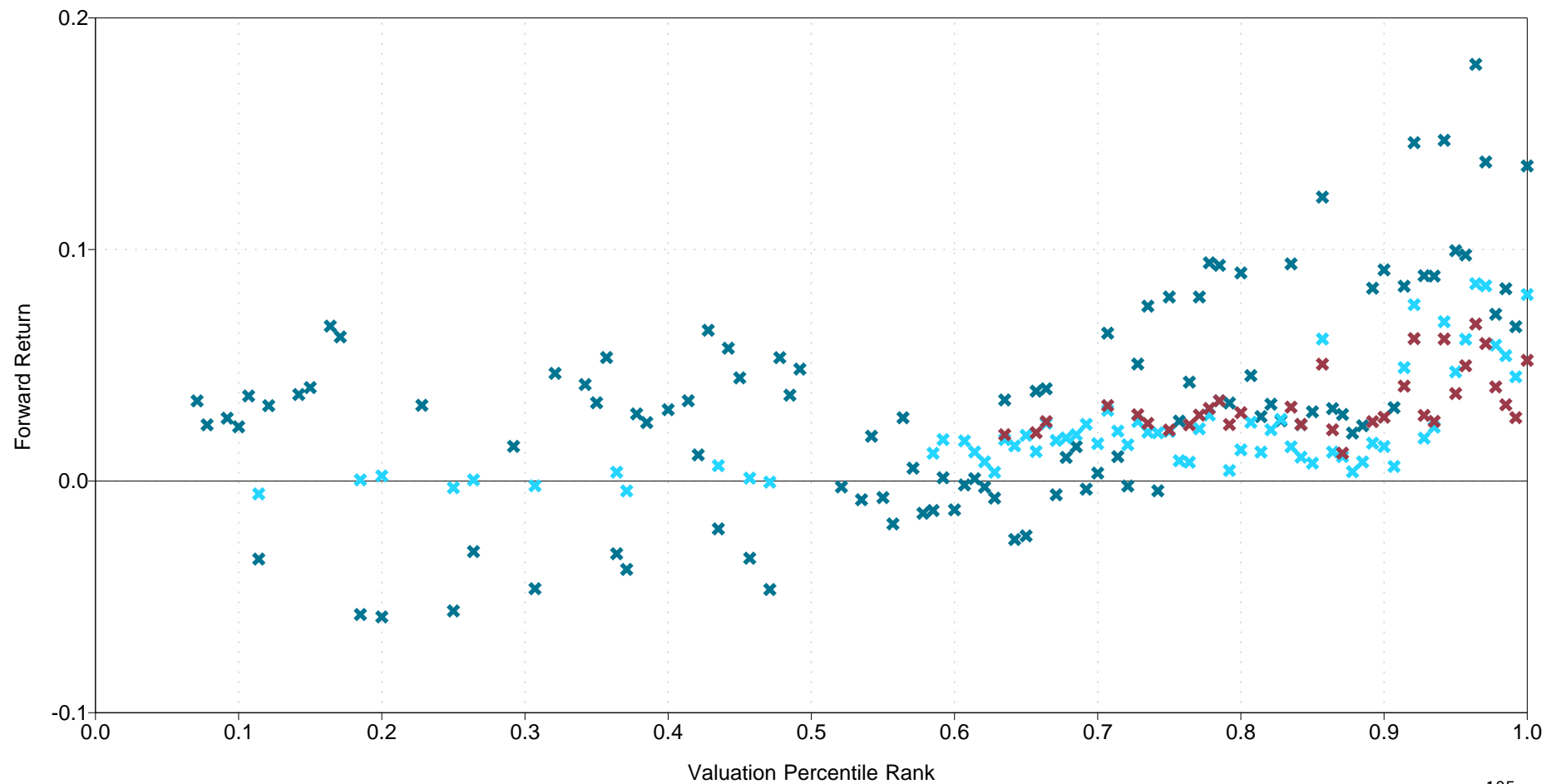


Valuations and Forward Return MPI Version April 3, 2020

Income

Jun-08 - Mar-17

- ✕ Bloomberg Barclays EM Local Currency Government Statistics Index Fwd 3yr TR
- ✕ Bloomberg Barclays EM Local Currency Government Statistics Index Fwd 6yr TR
- ✕ Bloomberg Barclays EM Local Currency Government Statistics Index Fwd 9yr TR

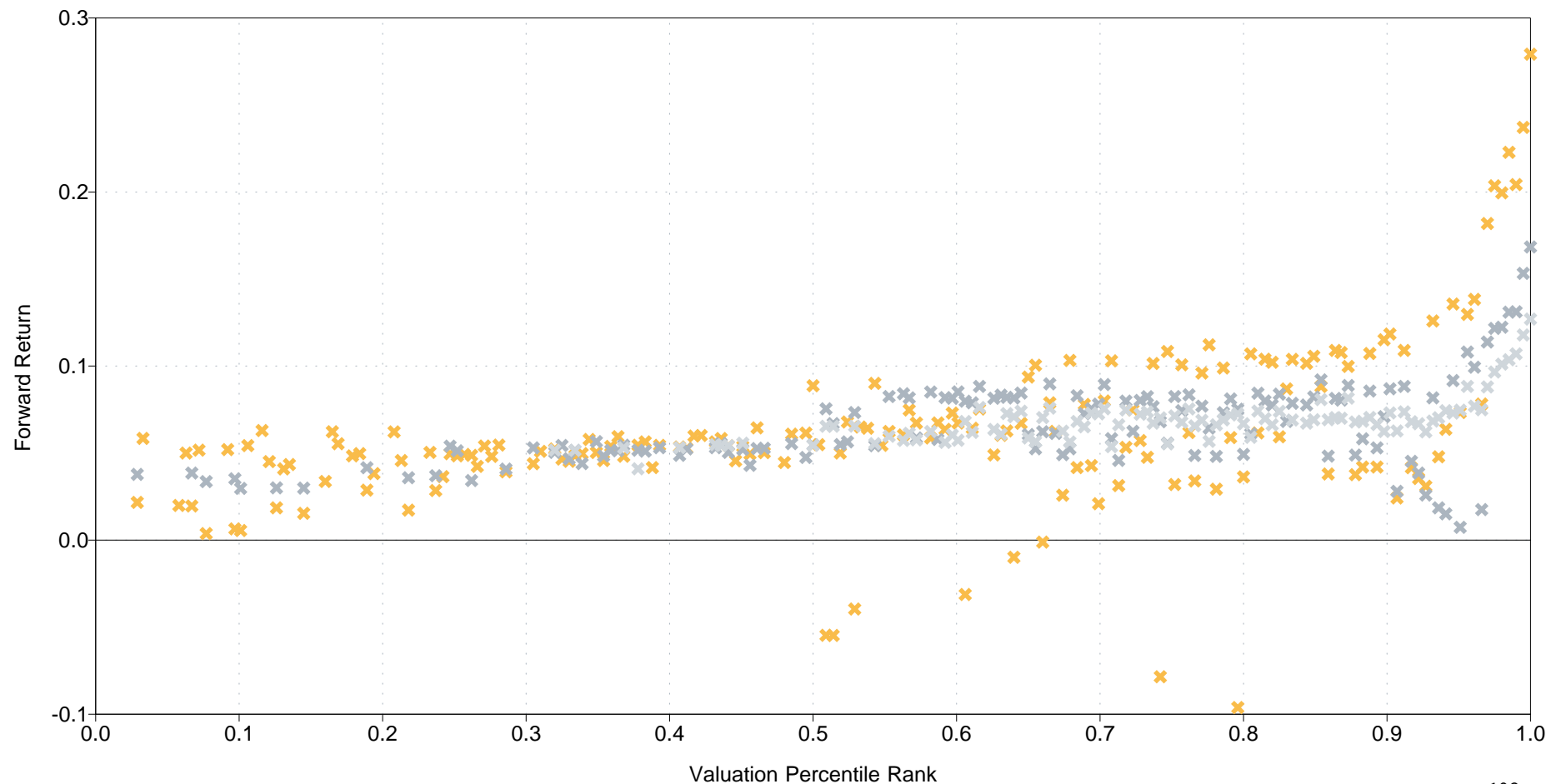


Valuations and Forward Return MPI Version April 3, 2020

Income

Jan-03 - Mar-17

- ✕ Bloomberg Barclays: EM USD Aggregate: Corporate Fwd 3yr TR
- ✕ Bloomberg Barclays: EM USD Aggregate: Corporate Fwd 6yr TR
- ✕ Bloomberg Barclays: EM USD Aggregate: Corporate Fwd 9yr TR

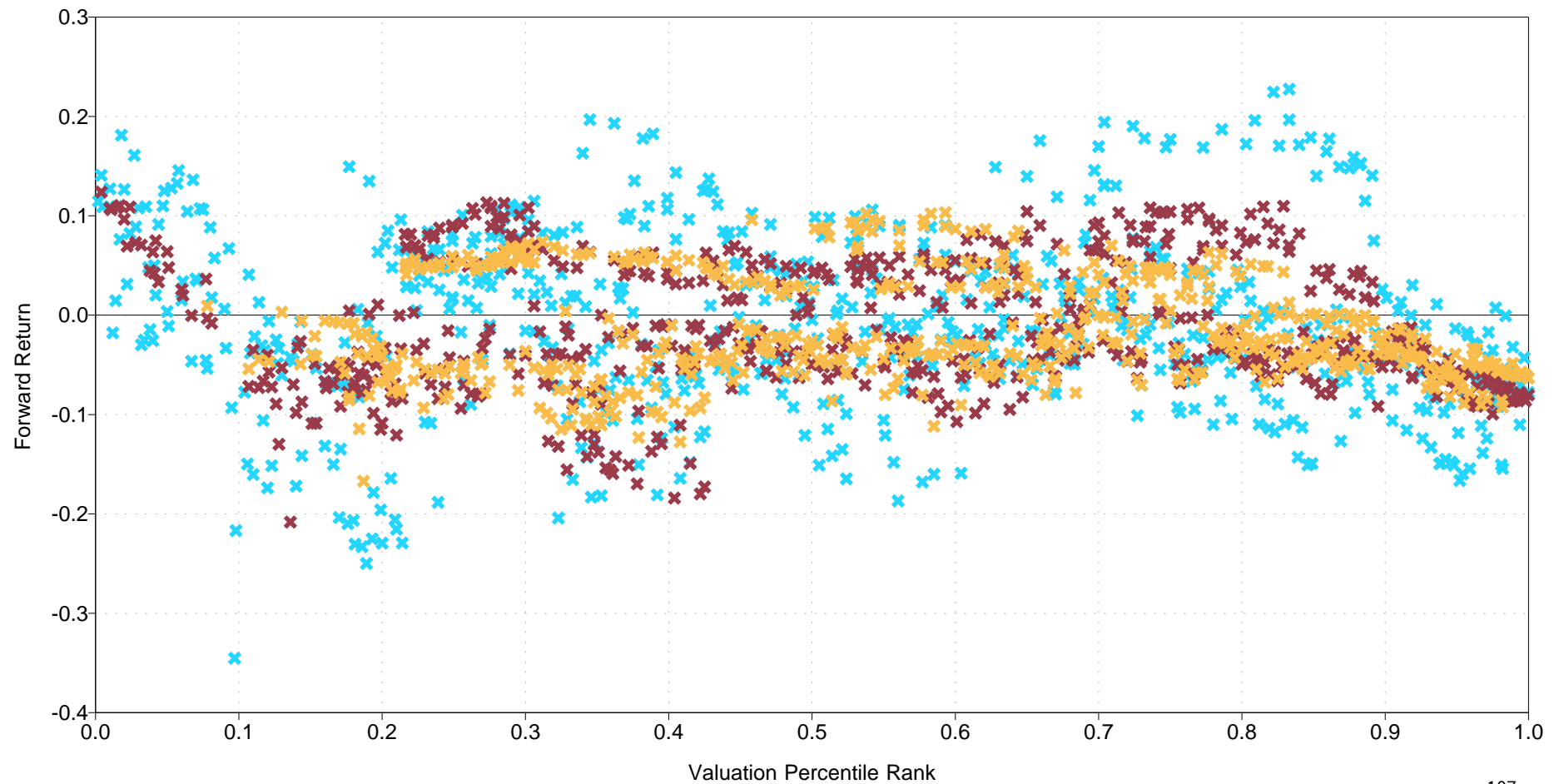


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jan-62 - Mar-17

- US 10y Fwd 3yr TR
- US 10y Fwd 6yr TR
- US 10y Fwd 9yr TR

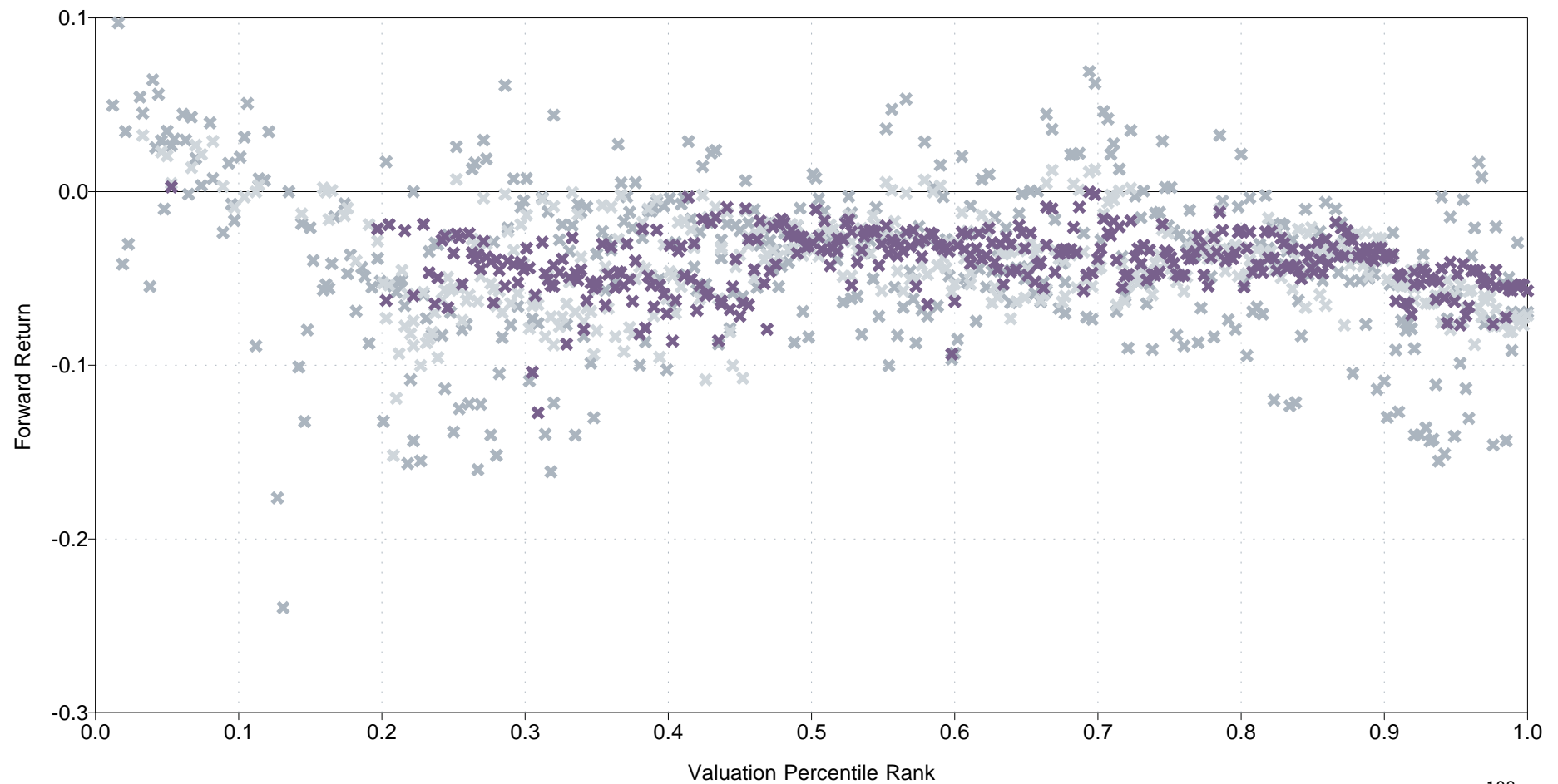


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Dec-80 - Mar-17

- ✕ US 30y Fwd 3yr TR
- ✕ US 30y Fwd 6yr TR
- ✕ US 30y Fwd 9yr TR

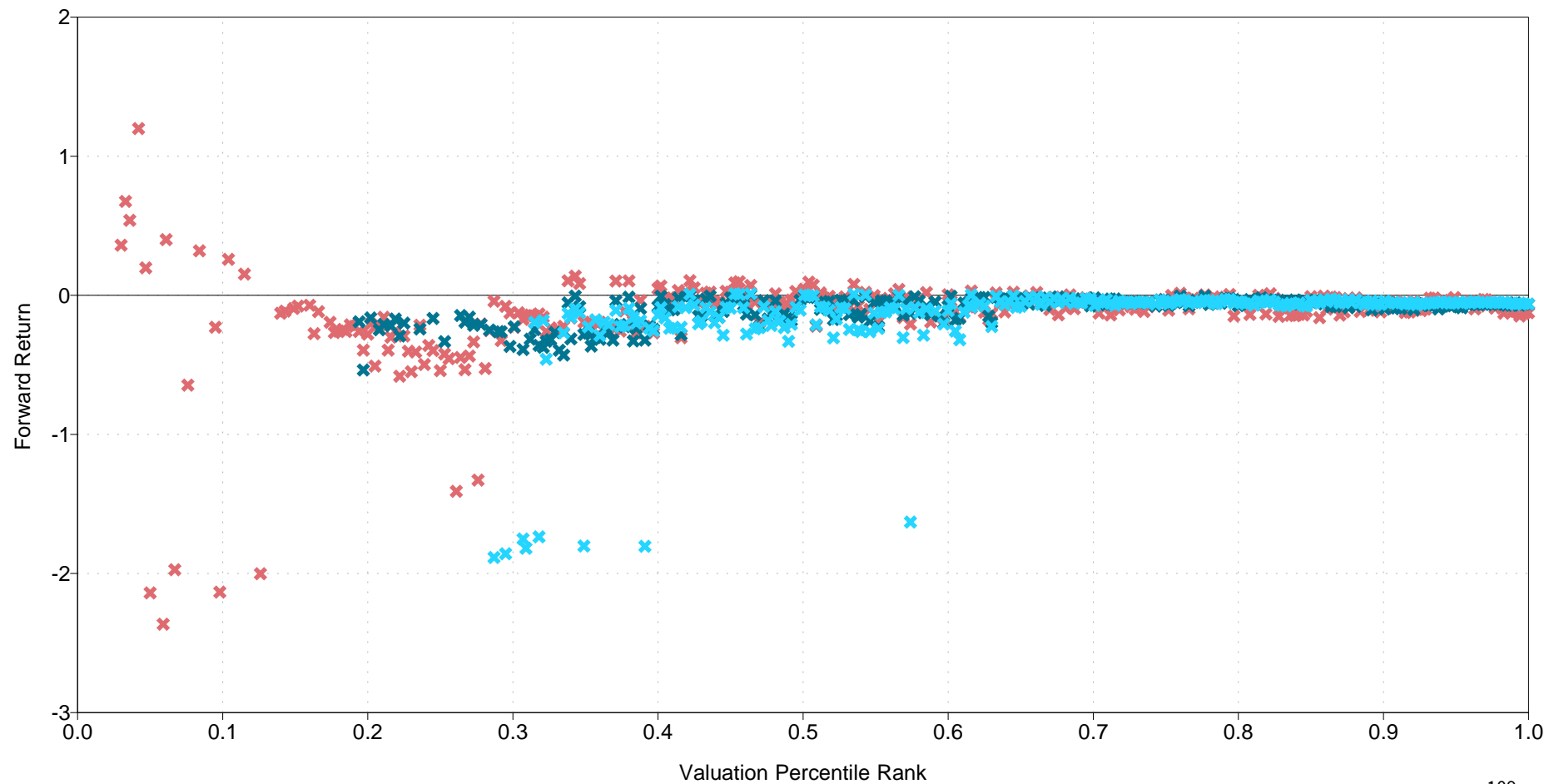


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Aug-90 - Mar-17

- ✕ Bundesrepublik Deutschland Bundesanleihe Fwd 3yr TR
- ✕ Bundesrepublik Deutschland Bundesanleihe Fwd 6yr TR
- ✕ Bundesrepublik Deutschland Bundesanleihe Fwd 9yr TR

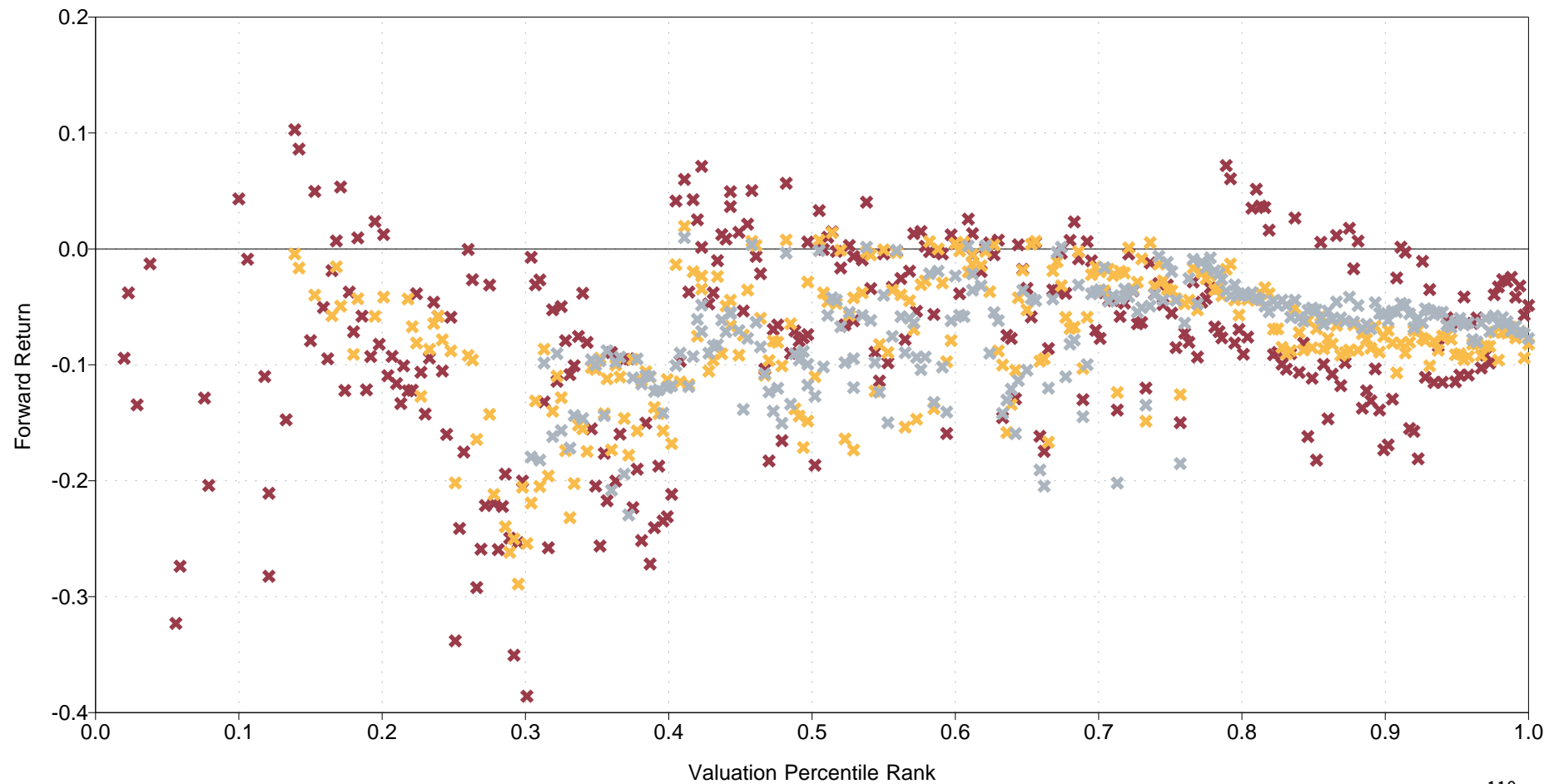


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jan-92 - Mar-17

- ✕ United Kingdom Gilt Fwd 3yr TR
- ✕ United Kingdom Gilt Fwd 6yr TR
- ✕ United Kingdom Gilt Fwd 9yr TR

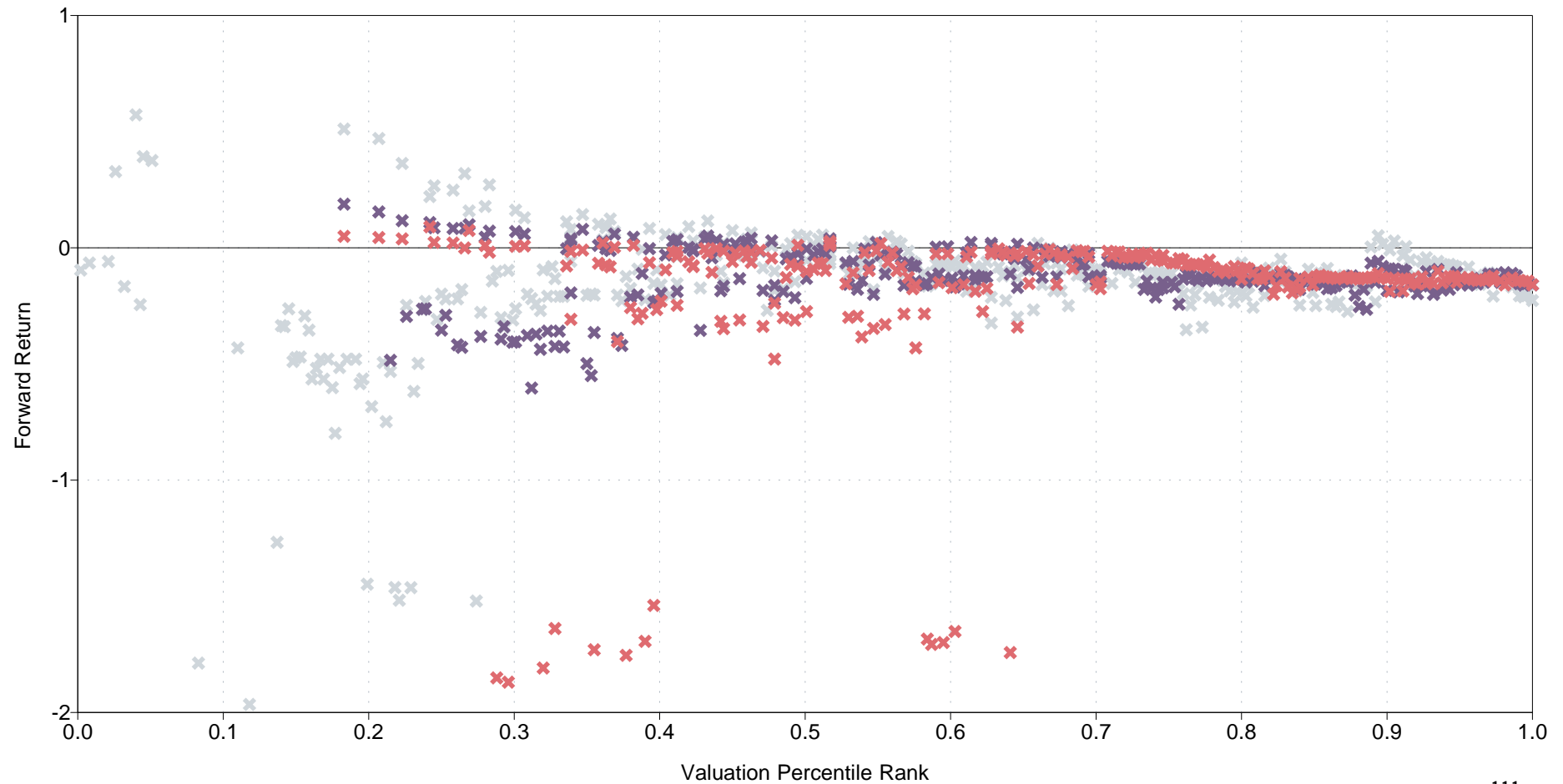


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Apr-89 - Mar-17

- ✕ Japan Government Ten Year Bond Fwd 3yr TR
- ✕ Japan Government Ten Year Bond Fwd 6yr TR
- ✕ Japan Government Ten Year Bond Fwd 9yr TR

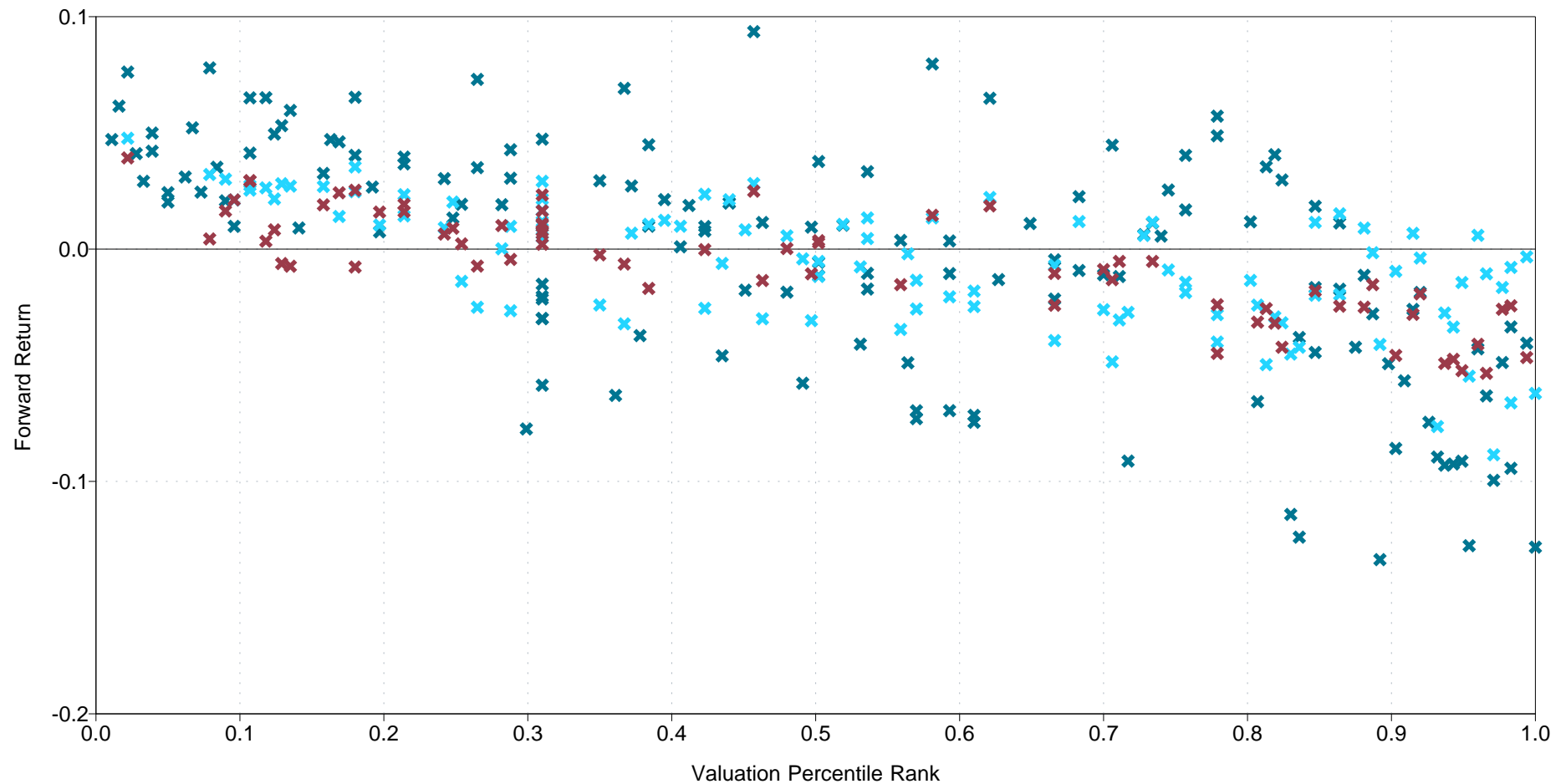


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jun-05 - Mar-17

- ✕ China Govt Bond Generic Bid Yield 10 Year Fwd 3yr TR
- ✕ China Govt Bond Generic Bid Yield 10 Year Fwd 6yr TR
- ✕ China Govt Bond Generic Bid Yield 10 Year Fwd 9yr TR

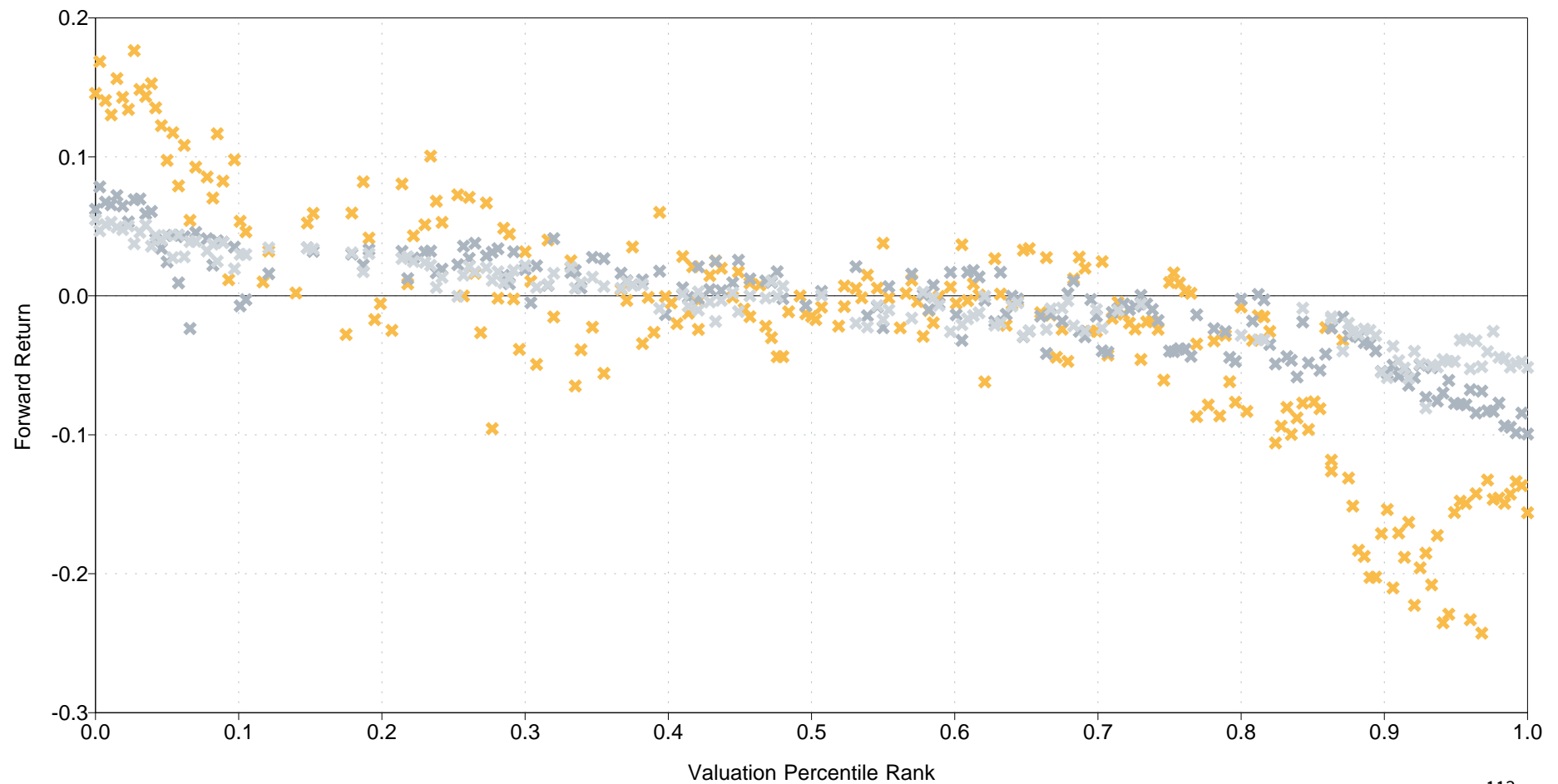


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Nov-98 - Mar-17

- ✕ India Govt Bond Generic Bid Yield 10 Year Fwd 3yr TR
- ✕ India Govt Bond Generic Bid Yield 10 Year Fwd 6yr TR
- ✕ India Govt Bond Generic Bid Yield 10 Year Fwd 9yr TR

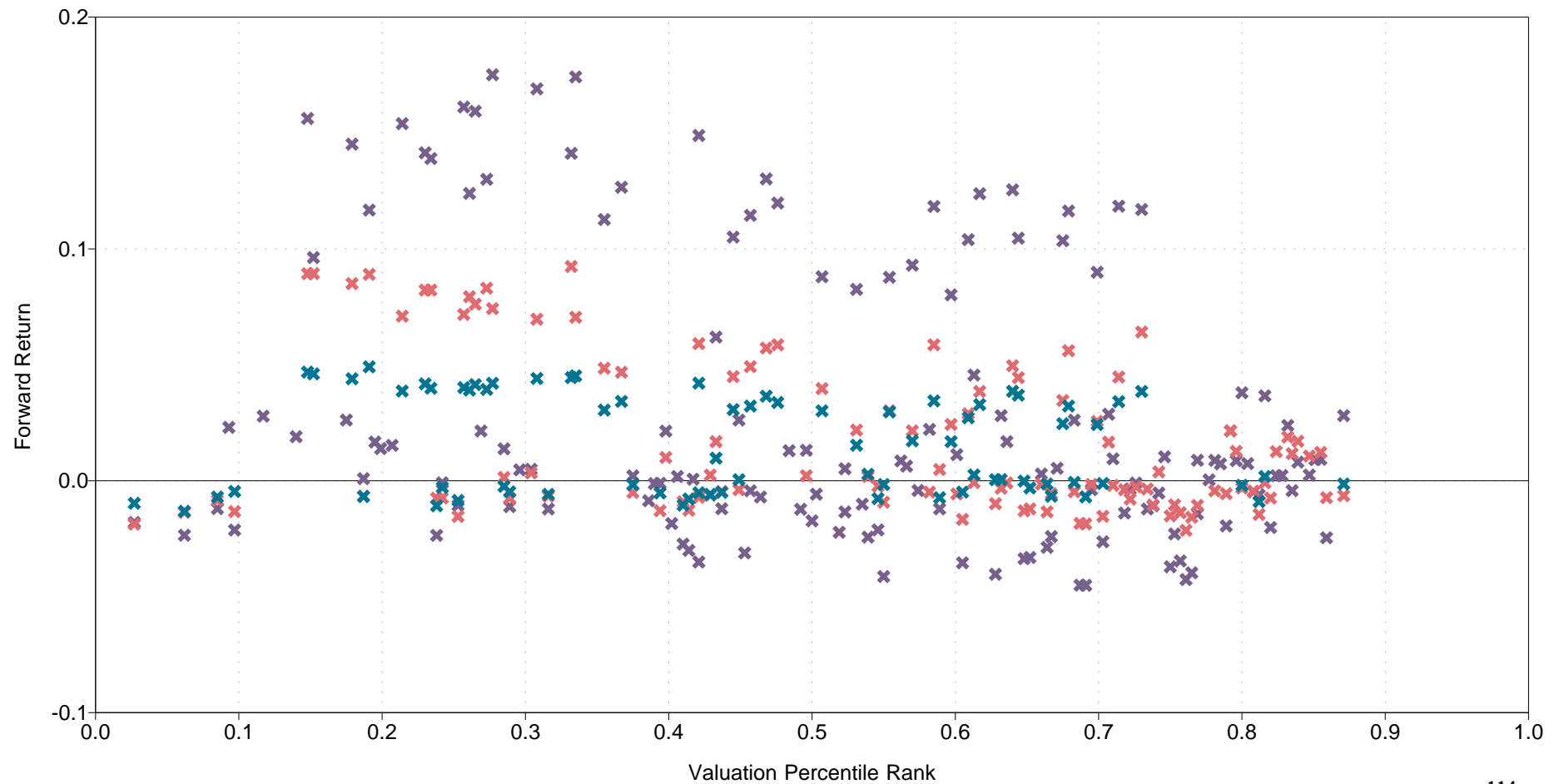


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Dec-04 - Mar-17

- ✕ HFRX Macro Systematic Diversified CTA Index Fwd 3yr TR
- ✕ HFRX Macro Systematic Diversified CTA Index Fwd 6yr TR
- ✕ HFRX Macro Systematic Diversified CTA Index Fwd 9yr TR

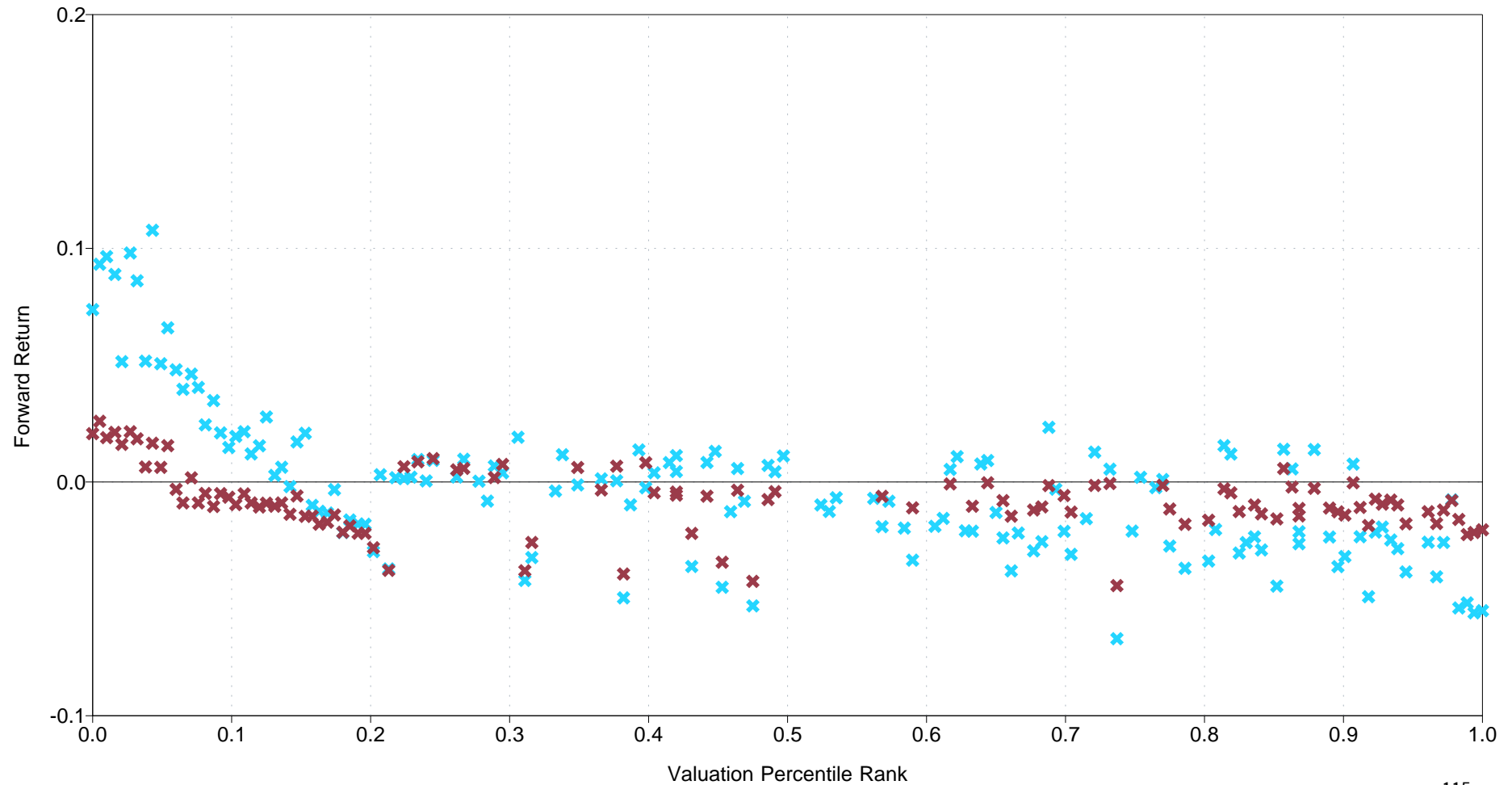


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jan-98 - Mar-17

- ✕ HFRX Macro/CTA Index Fwd 3yr TR
- ✕ HFRX Macro/CTA Index Fwd 6yr TR

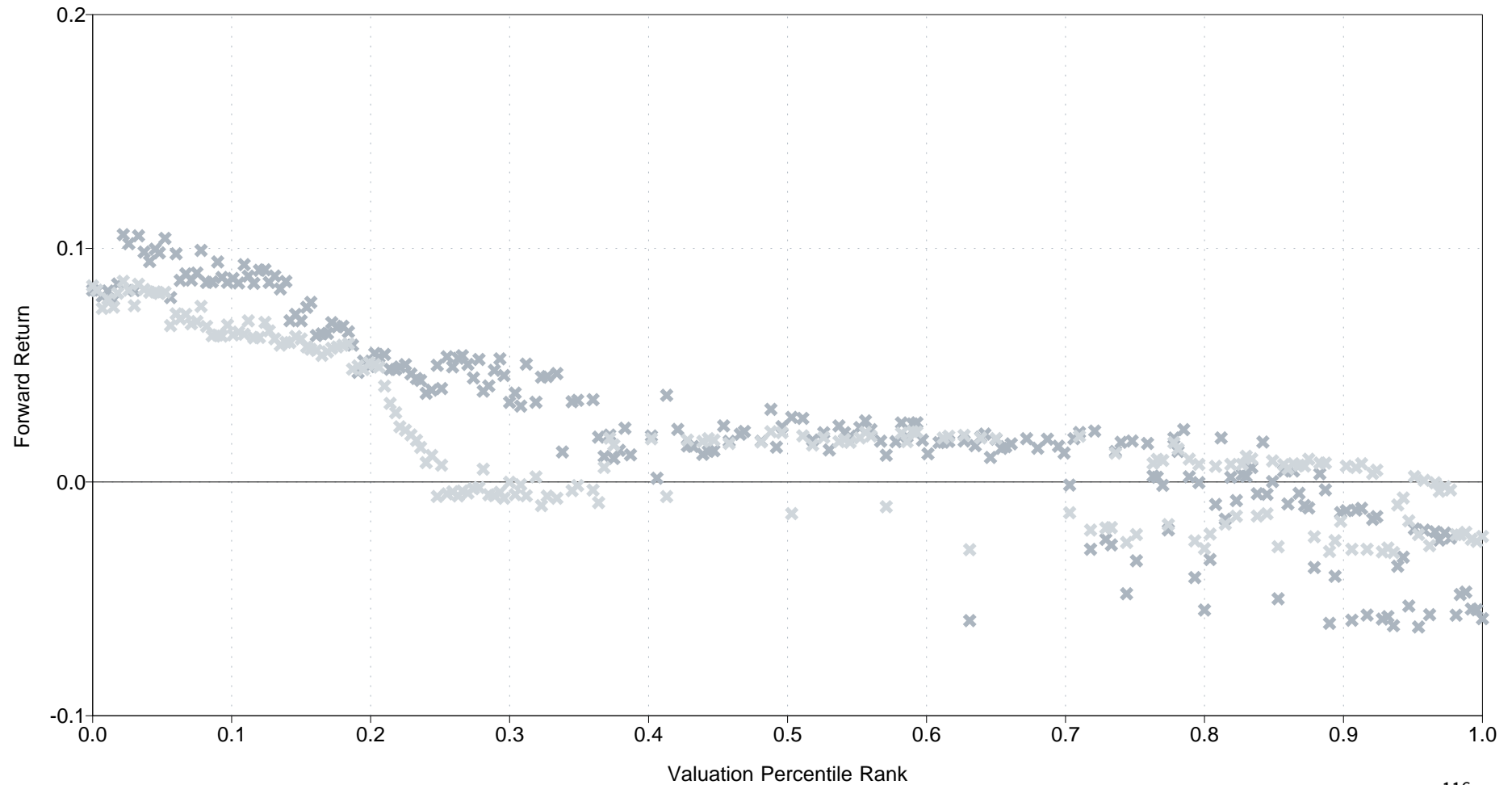


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Dec-97 - Mar-17

- ✕ HFRX Absolute Return Index Fwd 3yr TR
- ✕ HFRX Absolute Return Index Fwd 6yr TR

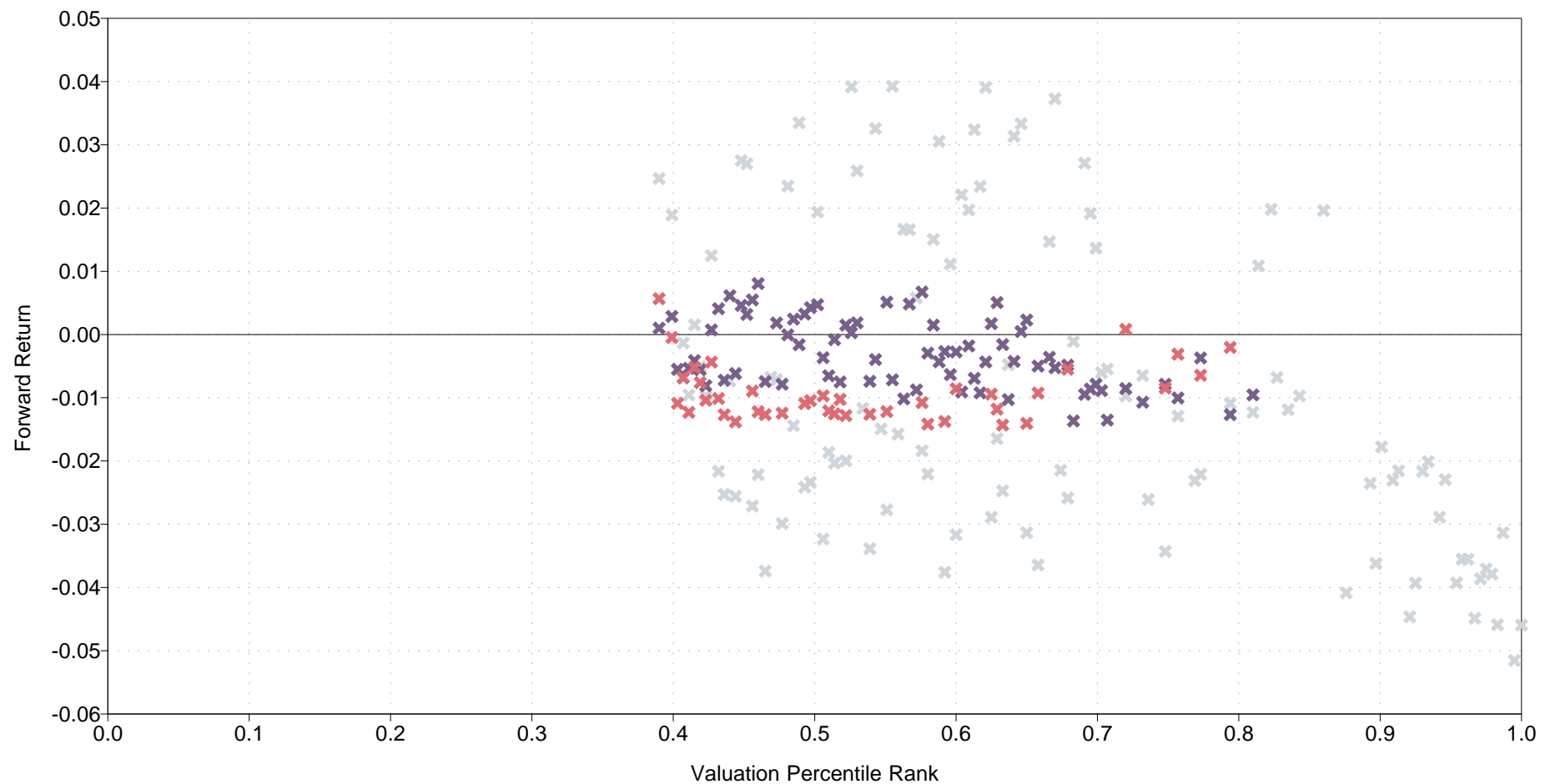


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jan-60 - Feb-20

- ✕ SG Short-Term Traders Index Fwd 3yr TR
- ✕ SG Short-Term Traders Index Fwd 6yr TR
- ✕ SG Short-Term Traders Index Fwd 9yr TR

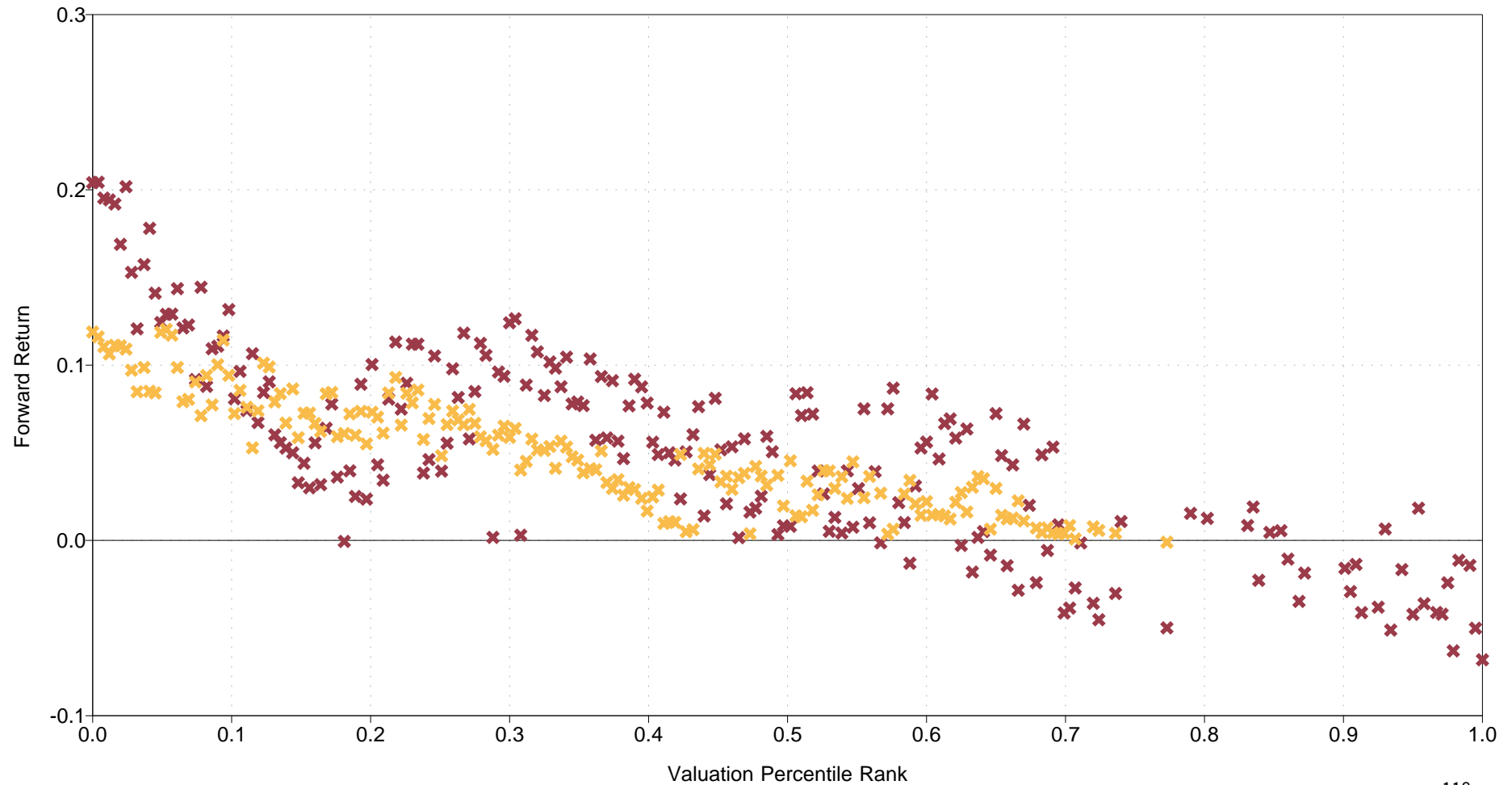


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Dec-99 - Mar-17

- ✕ SG Trend Index Fwd 3yr TR
- ✕ SG Trend Index Fwd 6yr TR

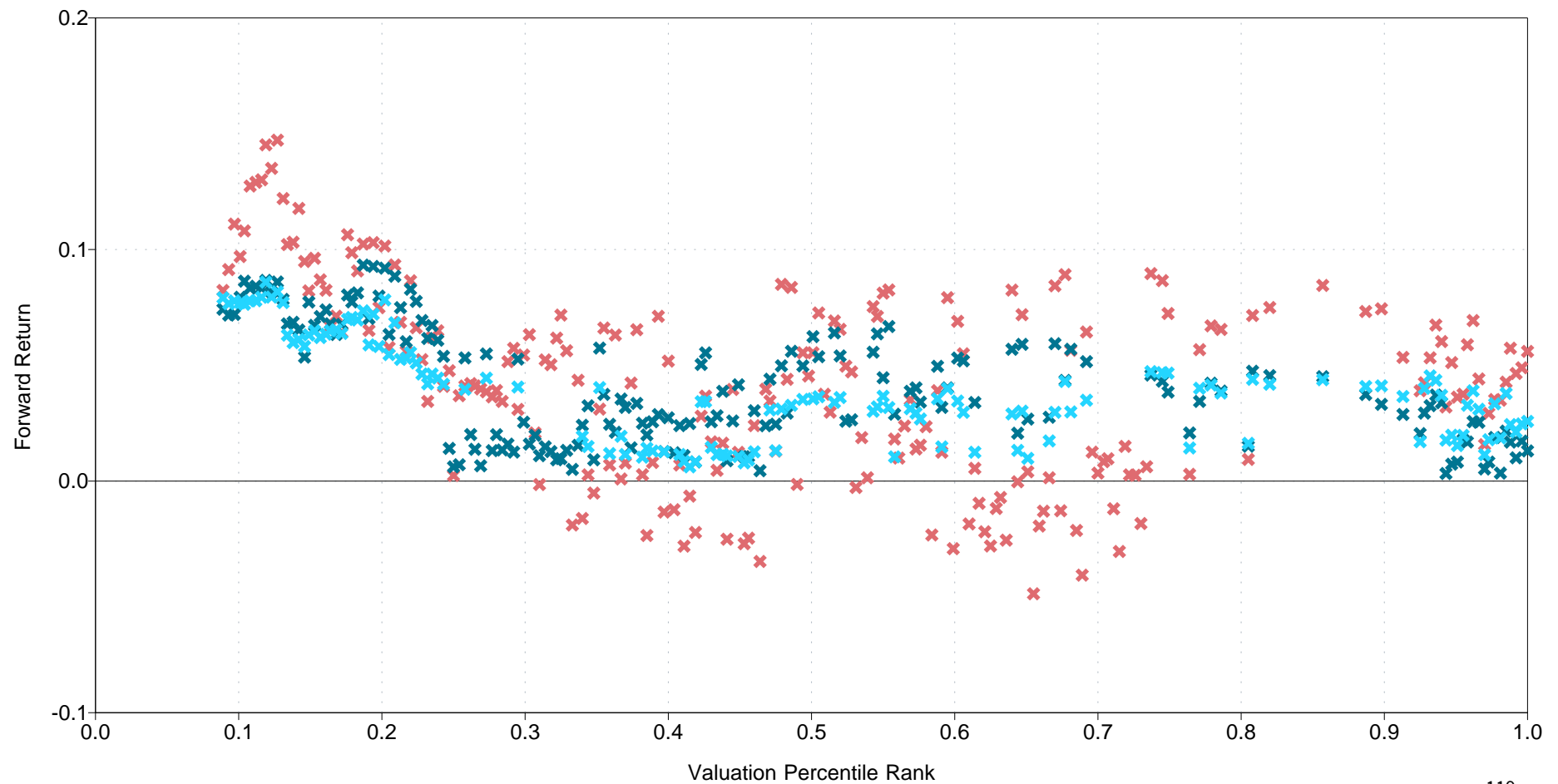


Valuations and Forward Return MPI Version April 3, 2020

Defensive

Dec-99 - Mar-17

- ✕ SG CTA Index Fwd 3yr TR
- ✕ SG CTA Index Fwd 6yr TR
- ✕ SG CTA Index Fwd 9yr TR



Valuations and Forward Return MPI Version April 3, 2020

Defensive

Jan-90 - Mar-17

- ✕ CBOE VIX Fwd 3yr TR
- ✕ CBOE VIX Fwd 6yr TR
- ✕ CBOE VIX Fwd 9yr TR

