

Summary of July Index Duration Changes and Projected Duration Change for August 1, 2019

	Treasury	Agency	Credi	Govt/Credit	MBS*	Aggregate	Long Gov/Cred	Credit	Intermediate Govt	Govt/Credit	US High Yield	Canada Aggregate
Duration As of End of June	6.38	4.01	7.39	6.76	3.15	5.73	15.64	4.16	3.77	3.92	3.23	8.18
Aging of Bonds	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
Yield Change (Month-to-Date)	-0.02	-0.02	-0.01	-0.02	0.03	-0.01	-0.03	0.00	-0.01	0.00	0.02	-0.02
Current Index (Passive Portfolio) Duration **	6.31	3.94	7.33	6.70	3.13	5.67	15.56	4.10	3.72	3.86	3.20	8.11
New Issuance	-0.04	-0.04	-0.01	-0.03	0.00	-0.02	-0.01	0.00	0.01	0.00	0.02	0.00
Issues Dropping from Index	0.10	0.12	0.06	0.09	0.00	0.06	0.05	0.06	0.06	0.07	0.01	0.02
Coupon & Principal Payments	0.00	0.01	0.02	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.02	0.01
New Index Duration	6.37	4.03	7.40	6.76	3.18	5.73	15.62	4.17	3.79	3.93	3.25	8.14
Forecast Duration Change***	0.06	0.09	0.07	0.06	0.05	0.06	0.06	0.07	0.07	0.07	0.05	0.03

US TIPS (Series-L) real extension at 0.20 years****

US Government Inflation-Linked (Series-B) Index extension at 0.21 years

* Given the complex structure of the MBS Index, duration changes are attributed to yield changes, new production and principal paydowns.

** Index Duration as of July 19, 2019.

*** "Forecast Duration Change" can help gauge the margin by which passive managers will need to adjust portfolio duration.

"Forecast Duration Change" is the difference between "New Index Duration" and "Current Index Duration" and will remain constant through month-end despite possible yield fluctuations.

The "Current Index Duration" and "New Index Duration" will fluctuate as yields change throughout the remainder of the month.

**** Empirical duration is not being reported for Series-L US TIPS.

Summary of July Index Duration Changes and Projected Duration Change for August 1, 2019

	Pan-Euro Aggregate	Pan-Euro Agg Treasury	Pan-Euro Agg Agency	Pan-Euro Agg Credit	Pan-Euro Agg Securitized	Pan-Euro High Yield	Euro Aggregate	Euro Agg Treasury	Sterling Aggregate	Sterling Agg Treasury
Duration As of End of June	7.59	8.76	5.91	6.11	4.96	4.11	7.08	8.10	10.92	12.29
Aging of Bonds	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
Yield Change (Month-to-Date)	0.06	0.07	0.03	0.04	0.02	0.00	0.04	0.05	0.14	0.16
Current Index (Passive Portfolio) Duration**	7.59	8.77	5.88	6.09	4.92	4.05	7.06	8.09	11.01	12.39
New Issuance	0.00	0.00	0.00	0.02	0.03	0.01	0.00	-0.01	-0.01	-0.02
Issues Dropping from Index	0.09	0.11	0.06	0.06	0.04	0.08	0.08	0.09	0.18	0.28
Coupon & Principal Payments	0.01	0.02	0.00	0.01	0.00	0.02	0.01	0.02	0.02	0.04
New Index Duration	7.69	8.90	5.94	6.18	4.99	4.16	7.15	8.19	11.20	12.69
Forecast Duration Change***	0.10	0.13	0.06	0.09	0.07	0.11	0.09	0.10	0.19	0.30

** Index Duration as of July 19, 2019.

† New Index Duration does not include the Italian government taps scheduled for July 26 and 30, 2019.

*** "Forecast Duration Change" can help gauge the margin by which passive managers will need to adjust portfolio duration.

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	Asia-Pac Aggregate	Asia-Pac Treasury	Asia-Pac Agency	Asia-Pac Credit	Japan Aggregate	Japanese Agg Treasury
Duration As of End of June	8.88	9.43	4.56	4.11	9.61	9.88
Aging of Bonds	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
Yield Change (Month-to-Date)	0.01	0.02	0.02	0.01	0.01	0.01
Current Index (Passive Portfolio) Duration**	8.83	9.38	4.52	4.06	9.55	9.83
New Issuance	0.01	0.02	0.00	0.02	0.02	0.01
Issues Dropping from Index	-0.02	0.00	0.00	0.09	0.02	0.02
Coupon & Principal Payments	0.01	0.01	0.01	0.00	0.01	0.00
New Index Duration	8.83	9.41	4.53	4.17	9.60	9.86
Forecast Duration Change***	0.00	0.03	0.01	0.11	0.05	0.03

** Index Duration as of July 19, 2019.

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The "Current Index Duration" and "New Index Duration" will fluctuate as yields change throughout the remainder of the month.

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