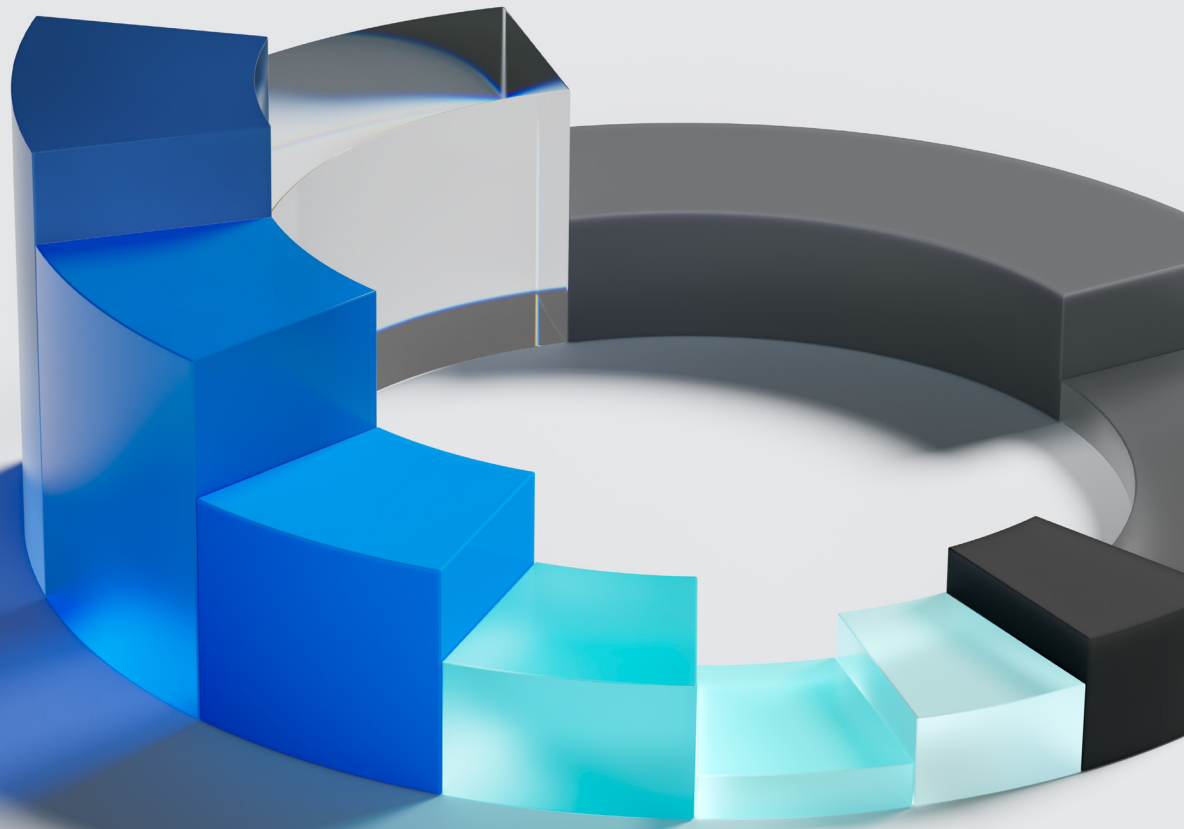


27th annual edition

2023 Long-Term Capital Market Assumptions

Time-tested projections to build
stronger portfolios

Assumption matrix: Colombian peso



		Compound Return 2022 (%)				Annualized Volatility (%)				Arithmetic Return 2023 (%)				Compound Return 2023 (%)																																			
Fixed Income						Colombian Inflation	Colombian Cash	Colombian Government Bonds	U.S. Aggregate Bonds	U.S. Inv Grade Corporate Bonds	U.S. Long Corporate Bonds	U.S. High Yield Bonds	U.S. Leveraged Loans	Euro Government Bonds	Euro Inv Grade Corp Bonds	Euro High Yield Bonds	Global Aggregate Bonds hedged	Emerging Markets Sovereign Debt	Emerging Markets Local Currency Debt	Emerging Markets Corporate Bonds																													
		3.90	3.91	1.50	3.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																													
Equities	Colombian Equity	12.80	16.70	30.94	11.50	0.00	0.04	0.37	-0.81	-0.73	-0.53	-0.52	-0.67	-0.60	-0.53	-0.20	0.11	-0.55	-0.41	-0.64	1.00																												
	U.S. Large Cap	7.40	8.56	16.03	4.30	-0.32	-0.20	0.01	0.44	0.53	0.52	0.74	0.61	0.48	0.58	0.66	0.00	0.63	0.57	0.61	-0.23	1.00	U.S. Large Cap																										
	U.S. Mid Cap	7.50	8.83	17.16	4.50	-0.30	-0.19	0.07	0.33	0.45	0.47	0.72	0.56	0.37	0.50	0.66	0.05	0.57	0.51	0.55	-0.13	0.98	1.00	U.S. Mid Cap																									
	U.S. Small Cap	7.60	9.37	19.91	4.60	-0.31	-0.14	0.08	0.29	0.38	0.40	0.65	0.50	0.33	0.43	0.58	0.03	0.49	0.48	0.47	-0.12	0.94	0.95	1.00	U.S. Small Cap																								
	European Large Cap	9.30	10.42	15.84	6.60	-0.28	-0.17	0.10	0.24	0.35	0.37	0.62	0.44	0.45	0.59	0.77	0.04	0.50	0.55	0.47	-0.06	0.83	0.83	0.75	1.00	European Large Cap																							
	European Small Cap	10.80	12.39	19.12	8.00	-0.27	-0.19	0.15	0.13	0.27	0.32	0.57	0.38	0.33	0.50	0.77	0.10	0.44	0.44	0.40	0.04	0.76	0.82	0.75	0.92	1.00	European Small Cap																						
	UK Large Cap	8.60	9.56	14.58	5.20	-0.19	-0.21	0.02	0.26	0.35	0.34	0.62	0.51	0.36	0.50	0.72	-0.06	0.46	0.48	0.48	-0.07	0.77	0.76	0.69	0.92	0.83	1.00	UK Large Cap																					
	Japanese Equity	9.90	10.90	14.96	6.90	-0.27	-0.14	-0.07	0.48	0.56	0.55	0.68	0.56	0.49	0.57	0.61	0.04	0.57	0.54	0.58	-0.30	0.72	0.68	0.64	0.69	0.62	0.66	1.00	Japanese Equity																				
	EAFE Equity	9.30	10.22	14.35	6.70	-0.28	-0.16	0.09	0.29	0.41	0.44	0.66	0.48	0.46	0.60	0.76	0.06	0.54	0.59	0.52	-0.09	0.86	0.86	0.79	0.97	0.90	0.91	0.79	1.00	EAFE Equity																			
	AC Asia ex-Japan Equity	9.50	10.59	15.68	7.20	-0.29	-0.07	0.21	0.19	0.31	0.35	0.52	0.36	0.33	0.46	0.63	0.09	0.42	0.54	0.42	-0.04	0.63	0.65	0.61	0.71	0.69	0.65	0.54	0.74	1.00	AC Asia ex-Japan Equity																		
	Emerging Markets Equity	9.60	10.62	15.14	7.10	-0.27	-0.07	0.22	0.10	0.23	0.28	0.49	0.31	0.29	0.43	0.66	0.10	0.38	0.55	0.37	0.06	0.62	0.67	0.62	0.74	0.75	0.69	0.52	0.77	0.96	1.00	Emerging Markets Equity																	
	Chinese Domestic Equity	11.30	14.99	29.87	8.40	-0.20	0.02	0.03	0.27	0.32	0.30	0.37	0.33	0.29	0.32	0.35	0.00	0.34	0.34	0.39	-0.19	0.37	0.34	0.33	0.33	0.30	0.33	0.37	0.59	0.51	1.00	Chinese Domestic Equity																	
	Alternatives	Private Equity	9.40	11.06	19.43	8.30	-0.16	-0.22	-0.06	0.32	0.40	0.29	0.69	0.67	0.31	0.47	0.60	-0.31	0.56	0.47	0.60	-0.20	0.77	0.76	0.67	0.72	0.67	0.74	0.53	0.74	0.66	0.67	0.52	1.00	Private Equity														
		Venture Capital	8.00	10.48	23.80	-	-0.29	-0.22	-0.04	0.37	0.40	0.28	0.60	0.61	0.29	0.38	0.40	-0.32	0.52	0.40	0.55	-0.22	0.67	0.66	0.66	0.51	0.48	0.55	0.53	0.57	0.51	0.53	0.80	1.00	Venture Capital														
		U.S. Core Real Estate	5.20	5.93	12.47	6.00	-0.08	-0.35	-0.23	0.24	0.25	0.17	0.49	0.53	0.09	0.16	0.34	-0.35	0.30	0.24	0.39	-0.14	0.48	0.44	0.36	0.38	0.33	0.45	0.39	0.39	0.28	0.27	0.14	0.46	0.34	1.00	U.S. Core Real Estate												
		U.S. Value-Added Real Estate	7.20	8.62	17.74	7.90	-0.06	-0.35	-0.21	0.13	0.14	0.08	0.42	0.45	0.01	0.09	0.32	-0.36	0.21	0.17	0.30	-0.05	0.45	0.42	0.35	0.38	0.34	0.45	0.35	0.38	0.28	0.29	0.11	0.43	0.30	0.99	1.00	U.S. Value-Added Real Estate											
		European Core Real Estate	6.30	7.30	14.74	6.30	-0.13	-0.26	-0.33	0.60	0.61	0.48	0.66	0.71	0.61	0.69	0.52	-0.30	0.65	0.51	0.69	-0.47	0.57	0.47	0.34	0.48	0.40	0.51	0.50	0.51	0.39	0.37	0.42	0.69	0.63	0.43	0.36	1.00	European Core Real Estate										
		Global Core Infrastructure	5.80	6.63	13.38	6.30	-0.12	-0.21	-0.31	0.65	0.66	0.52	0.74	0.80	0.61	0.64	0.54	-0.21	0.73	0.58	0.77	-0.46	0.51	0.39	0.28	0.36	0.26	0.40	0.40	0.39	0.32	0.31	0.25	0.61	0.57	0.51	0.44	0.72	1.00	Global Core Infrastructure									
Global Core Transport		7.00	8.22	16.37	7.60	0.01	-0.10	-0.26	0.82	0.73	0.59	0.57	0.66	0.64	0.56	0.18	-0.14	0.65	0.57	0.70	-0.71	0.39	0.22	0.18	0.14	-0.04	0.14	0.29	0.17	0.09	-0.01	0.17	0.29	0.34	0.43	0.33	0.53	0.69	1.00	Global Core Transport									
Global Timberland		6.20	7.14	14.32	-	-0.13	-0.05	-0.15	0.82	0.78	0.65	0.62	0.67	0.68	0.63	0.25	-0.09	0.74	0.62	0.76	-0.71	0.46	0.32	0.28	0.23	0.07	0.22	0.38	0.27	0.20	0.10	0.36	0.47	0.54	0.21	0.10	0.66	0.65	0.79	1.00	Global Timberland								
U.S. REITs		6.30	7.54	16.51	5.90	-0.25	-0.16	0.21	0.33	0.41	0.47	0.62	0.47	0.36	0.42	0.50	0.15	0.54	0.54	0.48	-0.15	0.74	0.76	0.72	0.65	0.59	0.56	0.51	0.67	0.47	0.46	0.13	0.49	0.35	0.60	0.59	0.27	0.37	0.40	0.33	1.00	U.S. REITs							
Diversified Hedge Funds		4.50	5.70	16.08	3.80	-0.16	-0.18	-0.33	0.87	0.86	0.69	0.83	0.92	0.66	0.68	0.52	-0.20	0.78	0.58	0.87	-0.75	0.60	0.52	0.45	0.42	0.34	0.47	0.58	0.47	0.35	0.29	0.38	0.65	0.68	0.42	0.32	0.78	0.74	0.73	0.81	0.38	1.00	Diversified Hedge Funds						
Mezzanine Debt		7.70	8.91	16.35	6.40	-0.22	-0.15	-0.11	0.84	0.90	0.83	0.98	0.90	0.71	0.77	0.70	0.08	0.92	0.72	0.93	-0.59	0.71	0.66	0.59	0.56	0.50	0.55	0.66	0.61	0.47	0.41	0.36	0.66	0.60	0.42	0.34	0.70	0.77	0.65	0.72	0.57	0.87	1.00	Mezzanine Debt					
Commodities		2.60	3.72	15.38	2.80	0.13	-0.21	-0.24	0.21	0.21	0.09	0.39	0.44	0.22	0.32	0.37	-0.35	0.25	0.23	0.32	-0.19	0.32	0.33	0.27	0.35	0.30	0.49	0.23	0.35	0.26	0.32	0.10	0.59	0.42	0.42	0.40	0.53	0.46	0.21	0.27	0.19	0.42	0.38	1.00	Commodities				
Gold	3.00	4.86	20.01	3.20	0.01	-0.06	-0.06	0.59	0.58	0.52	0.45	0.46	0.57	0.54	0.32	0.09	0.53	0.52	0.56	-0.47	0.20	0.14	0.08	0.11	0.05	0.15	0.19	0.14	0.16	0.14	0.26	0.21	0.22	0.12	0.04	0.41	0.48	0.58	0.57	0.17	0.52	0.52	0.42	1.00	Gold				

Colombian peso assumptions

Note: All estimates on this page are in Colombian peso terms. Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all of these asset classes and strategies. Exclusive reliance on this information is not advised. This information is not intended as a recommendation to invest in an particular asset class or strategy or as a promise of future performance. These asset class and strategy assumptions are passive only for liquid assets and industry averages (median managers) for alternatives. The assumptions do not consider the impact of active management. Reference to future returns are not promises or even estimates of actual returns portfolio's may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. Forecasts of financial market trends that are based on current market conditions constitute our judgement and are subject to change without notice. We believe the information provided herein is reliable, but to not warrant its accuracy or completeness. This materials is not intended to provide and should not be relied upon for accounting, legal or tax advice.

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