

ROEs	Low	Mean	High
OECD growth	7.88%	8.00%	8.13%
OECD growth with extrapolation beyond 2060	7.83%	7.96%	8.09%

<https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=realyieldYear&year=2016>

<https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2016>

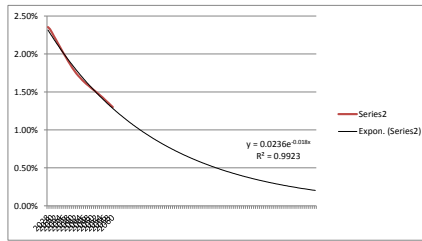
Inflation	DATE	5 YR 5	7 YR 7	10 YR 10	20 YR 20	30 YR 30	
Inflation	Average		1.88	1.93	2.02	2.04	2.11
Inflation	1/25/2017		1.96	2.04	2.08	2.06	2.14
Inflation	1/26/2017		1.94	2.03	2.08	2.06	2.14
Inflation	1/27/2017		1.96	2.03	2.08	2.06	2.15
Inflation	1/30/2017		1.95	2.02	2.07	2.06	2.14
Inflation	1/31/2017		1.94	2	2.05	2.04	2.12
Inflation	2/1/2017		1.92	1.96	2.05	2.03	2.12
Inflation	2/2/2017		1.93	1.97	2.05	2.01	2.11
Inflation	2/3/2017		1.91	1.94	2.05	2.01	2.1
Inflation	2/6/2017		1.91	1.95	2.02	1.98	2.07
Inflation	2/7/2017		1.87	1.91	2	1.98	2.06
Inflation	2/8/2017		1.82	1.88	1.96	1.96	2.05
Inflation	2/9/2017		1.86	1.91	1.99	1.99	2.09
Inflation	2/10/2017		1.87	1.93	2.01	2.03	2.11
Inflation	2/13/2017		1.87	1.92	2	2.03	2.12
Inflation	2/14/2017		1.87	1.92	2.01	2.04	2.13
Inflation	2/15/2017		1.93	1.99	2.06	2.08	2.16
Inflation	2/16/2017		1.9	1.93	2.02	2.05	2.1
Inflation	2/17/2017		1.85	1.89	2.01	2.06	2.12
Inflation	2/21/2017		1.87	1.9	2.03	2.06	2.12
Inflation	2/22/2017		1.92	1.96	2.04	2.07	2.13
Inflation	2/23/2017		1.9	1.96	2.03	2.06	2.13
Inflation	2/24/2017		1.9	1.95	2	2.05	2.1
Inflation	2/27/2017		1.86	1.91	2.01	2.05	2.1
Inflation	2/28/2017		1.89	1.94	2.02	2.04	2.1
Inflation	3/1/2017		1.84	1.88	2.03	2.06	2.12
Inflation	3/2/2017		1.84	1.88	2.01	2.05	2.11
Inflation	3/3/2017		1.92	1.96	2.04	2.06	2.12
Inflation	3/6/2017		1.9	1.94	2.01	2.04	2.11
Inflation	3/7/2017		1.92	1.95	2.03	2.04	2.1
Inflation	3/8/2017		1.9	1.94	2.01	2.02	2.09
Real	DATE	5 YR	7 YR	10 YR	20 YR	30 YR	
Real	1/25/2017	0.03	0.29	0.45	0.78	0.96	
Real	1/26/2017	0.01	0.27	0.43	0.76	0.94	
Real	1/27/2017	-0.02	0.25	0.41	0.74	0.91	
Real	1/30/2017	-0.01	0.26	0.42	0.76	0.94	
Real	1/31/2017	-0.04	0.24	0.4	0.74	0.93	
Real	2/1/2017	0.01	0.31	0.43	0.77	0.96	
Real	2/2/2017	-0.01	0.3	0.43	0.79	0.98	
Real	2/3/2017	0.02	0.33	0.44	0.81	1.01	
Real	2/6/2017	-0.05	0.24	0.4	0.78	0.98	
Real	2/7/2017	-0.02	0.26	0.4	0.76	0.96	
Real	2/8/2017	-0.01	0.26	0.38	0.72	0.91	
Real	2/9/2017	0.02	0.29	0.41	0.75	0.93	
Real	2/10/2017	0.02	0.29	0.4	0.72	0.9	
Real	2/13/2017	0.05	0.32	0.43	0.74	0.91	
Real	2/14/2017	0.11	0.37	0.46	0.77	0.94	
Real	2/15/2017	0.08	0.34	0.45	0.76	0.93	
Real	2/16/2017	0.05	0.33	0.43	0.75	0.95	
Real	2/17/2017	0.07	0.34	0.41	0.72	0.91	
Real	2/21/2017	0.06	0.34	0.4	0.72	0.92	
Real	2/22/2017	0	0.27	0.38	0.71	0.91	
Real	2/23/2017	-0.03	0.24	0.35	0.69	0.89	
Real	2/24/2017	-0.1	0.17	0.31	0.64	0.85	
Real	2/27/2017	0.01	0.27	0.35	0.67	0.88	
Real	2/28/2017	0	0.25	0.34	0.66	0.87	
Real	3/1/2017	0.15	0.41	0.43	0.75	0.94	
Real	3/2/2017	0.19	0.44	0.48	0.79	0.98	
Real	3/3/2017	0.1	0.36	0.45	0.77	0.96	
Real	3/6/2017	0.12	0.38	0.48	0.8	0.99	

Real	3/7/2017	0.13	0.39	0.49	0.81	1.01
Real	3/8/2017	0.18	0.44	0.56	0.87	1.06
Nominal	Date	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
Nominal	1/25/2017	1.99	2.33	2.53	2.84	3.1
Nominal	1/26/2017	1.95	2.3	2.51	2.82	3.08
Nominal	1/27/2017	1.94	2.28	2.49	2.8	3.06
Nominal	1/30/2017	1.94	2.28	2.49	2.82	3.08
Nominal	1/31/2017	1.9	2.24	2.45	2.78	3.05
Nominal	2/1/2017	1.93	2.27	2.48	2.8	3.08
Nominal	2/2/2017	1.92	2.27	2.48	2.8	3.09
Nominal	2/3/2017	1.93	2.27	2.49	2.82	3.11
Nominal	2/6/2017	1.86	2.19	2.42	2.76	3.05
Nominal	2/7/2017	1.85	2.17	2.4	2.74	3.02
Nominal	2/8/2017	1.81	2.14	2.34	2.68	2.96
Nominal	2/9/2017	1.88	2.2	2.4	2.74	3.02
Nominal	2/10/2017	1.89	2.22	2.41	2.75	3.01
Nominal	2/13/2017	1.92	2.24	2.43	2.77	3.03
Nominal	2/14/2017	1.98	2.29	2.47	2.81	3.07
Nominal	2/15/2017	2.01	2.33	2.51	2.84	3.09
Nominal	2/16/2017	1.95	2.26	2.45	2.8	3.05
Nominal	2/17/2017	1.92	2.23	2.42	2.78	3.03
Nominal	2/21/2017	1.93	2.24	2.43	2.78	3.04
Nominal	2/22/2017	1.92	2.23	2.42	2.78	3.04
Nominal	2/23/2017	1.87	2.2	2.38	2.75	3.02
Nominal	2/24/2017	1.8	2.12	2.31	2.69	2.95
Nominal	2/27/2017	1.87	2.18	2.36	2.72	2.98
Nominal	2/28/2017	1.89	2.19	2.36	2.7	2.97
Nominal	3/1/2017	1.99	2.29	2.46	2.81	3.06
Nominal	3/2/2017	2.03	2.32	2.49	2.84	3.09
Nominal	3/3/2017	2.02	2.32	2.49	2.83	3.08
Nominal	3/6/2017	2.02	2.32	2.49	2.84	3.1
Nominal	3/7/2017	2.05	2.34	2.52	2.85	3.11
Nominal	3/8/2017	2.08	2.38	2.57	2.89	3.15

	10-Yr	20-Yr	30-Yr
Treasury Yield	2.44%	2.78%	3.04%

LOCATION	INDICATOR	SUBJECT	MEASURE	FREQUENCY	TIME	Value	Growth
USA	GDPLTFORECAST	TOT	MLN_USD	A	2009	13,263,170	
USA	GDPLTFORECAST	TOT	MLN_USD	A	2010	13,595,648	2.51%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2011	13,846,806	1.85%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2012	14,231,650	2.78%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2013	14,498,952	1.88%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2014	14,898,390	2.75%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2015	15,423,341	3.52%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2016	15,928,727	3.28%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2017	16,401,209	2.97%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2018	16,854,354	2.76%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2019	17,299,339	2.64%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2020	17,743,025	2.56%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2021	18,189,112	2.51%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2022	18,639,481	2.48%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2023	19,095,177	2.44%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2024	19,556,981	2.42%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2025	20,025,623	2.40%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2026	20,502,008	2.38%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2027	20,987,134	2.37%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2028	21,481,323	2.35%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2029	21,981,214	2.33%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2030	22,482,236	2.28%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2031	22,983,846	2.23%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2032	23,485,734	2.18%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2033	23,987,555	2.14%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2034	24,488,756	2.09%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2035	24,988,766	2.04%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2036	25,487,157	1.99%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2037	25,983,743	1.95%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2038	26,478,465	1.90%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2039	26,971,187	1.86%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2040	27,461,839	1.82%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2041	27,950,685	1.78%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2042	28,438,332	1.74%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2043	28,925,353	1.71%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2044	29,412,141	1.68%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2045	29,898,935	1.66%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2046	30,386,016	1.63%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2047	30,873,747	1.61%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2048	31,362,302	1.58%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2049	31,851,655	1.56%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2050	32,341,599	1.54%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2051	32,831,958	1.52%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2052	33,322,633	1.49%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2053	33,813,350	1.47%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2054	34,303,649	1.45%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2055	34,792,848	1.43%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2056	35,280,357	1.40%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2057	35,765,758	1.38%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2058	36,248,677	1.35%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2059	36,728,931	1.32%
USA	GDPLTFORECAST	TOT	MLN_USD	A	2060	37,206,576	1.30%

<https://data.oecd.org/gdp/gdp-long-term-forecast.htm#indicator-chart>



Electric & Gas Proxy Group - Zacks
Growth

30 Calander Days

Company	Ticker	Min Price	Average Price	Max Price	Dividend	Dividend Forecast	Zacks Growth	Min Yield	Mean Yield	Max Yield	Mean Constant Growth DCF
Ameren Corporation	AEE	\$ 52.54	\$ 53.88	\$ 55.12	\$ 1.76	\$ 1.82	6.50%	3.30%	3.37%	3.46%	9.87%
Avista Corporation	AVA	\$ 38.52	\$ 39.21	\$ 40.14	\$ 1.43	NA	NA	NA	NA	NA	NA
CenterPoint Energy, Inc.	CNP	\$ 26.05	\$ 26.89	\$ 28.00	\$ 1.07	\$ 1.10	5.00%	3.92%	4.08%	4.21%	9.08%
CMS Energy Corporation	CMS	\$ 42.74	\$ 43.70	\$ 44.68	\$ 1.33	\$ 1.37	6.00%	3.07%	3.13%	3.21%	9.13%
NiSource Inc.	NI	\$ 22.18	\$ 23.13	\$ 24.09	\$ 0.70	\$ 0.73	7.22%	3.01%	3.14%	3.27%	10.36%
NorthWestern Corporation	NWE	\$ 56.36	\$ 57.56	\$ 59.00	\$ 2.10	\$ 2.15	4.33%	3.64%	3.73%	3.81%	8.06%
SCANA Corporation	SCG	\$ 65.06	\$ 68.12	\$ 69.87	\$ 2.45	\$ 2.52	5.33%	3.60%	3.69%	3.87%	9.02%
Vectren Corporation	VVC	\$ 54.54	\$ 55.54	\$ 56.77	\$ 1.68	\$ 1.73	5.67%	3.04%	3.11%	3.17%	8.78%
Wisconsin Energy Corporation	WEC	\$ 57.01	\$ 58.53	\$ 60.27	\$ 2.08	\$ 2.14	6.00%	3.55%	3.66%	3.76%	9.66%
Mean							5.76%	3.39%	3.49%	3.59%	9.25%
σ							0.84%				
-1 σ							4.92%				
+1 σ							6.59%				

