

**PUBLIC DOCUMENT
TRADE SECRET DATA HAS BEEN
EXCISED**

FERC Detail Inc Stmtnt Comp

**[TRADE SECRET
DATA BEGINS...]**

MERC TOTAL CALENDAR REVENUE48700
0 - Late Fees
488000 - Miscellaneous Service Revenues
493000 - Rent from Gas Property
Total 495 Other Gas Revenues
Gas Revenues

	2021	2022	2023	
	Corporate	Corporate	Corporate	Allocator
				Minnesota Direct
	170	725	950	Minnesota Direct
	587	54	30	Minnesota Direct
	-	30	40	Minnesota Direct
	85,222	(31,764)	354	Minnesota Direct
Purchased Gas	231,503	291,960	291,792	

804: Nat Gas Cty Gate Purch - Nonfuel Portion
804M: (Enter Description)
804W: (Enter Description)
804.1: (Enter Description)
807: Purchase Gas Expense
808.12: Gas Withdrawn from Storage
808.22: Gas Delivered to Storage
812: Gas Used Other Utility Oper
813: (Enter Description)
Natural Gas

	0	0	0	Minnesota Direct
	0	0	0	System Sales
	0	0	0	System Sales
	371	383	392	System Sales
	0	0	0	System Sales
	0	0	0	System Sales
	0	0	0	System Sales
	0	0	0	System Sales
	58	62	64	System Sales
Natural Gas	429	445	456	

	2021	2022	2023	2023	2021	2022	2023
Minnesota	Minnesota	Minnesota	Minnesota	Michigan	Michigan	Michigan	Michigan
Allocator	Amount	Amount	Amount	Allocator	Amount	Amount	Amount
	262,863	418,365	406,984				
	170	725	950				
	587	54	30				
	-	30	40				
	85,222	(31,764)	354				
	348,842	387,410	408,358				
Purchased Gas	231,503	291,960	291,792				
	-	-	-				
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	371	383	392	0.0000%	-	-	-
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	-	-	-	0.0000%	-	-	-
100.0000%	58	62	64	0.0000%	-	-	-
	429	445	456				

...TRADE SECRET DATA ENDS]

	2021	2022	2023		Minnesota	Minnesota	Minnesota	Minnesota	Michigan	Michigan	Michigan	Michigan
	Corporate	Corporate	Corporate	Allocator	Allocator	Amount	Amount	Amount	Allocator	Amount	Amount	Amount
735: Misc. Production Expense	1,310	1,310	250	System Sales	100.0000%	1,310	1,310	250	0.0000%	-	-	-
756: Field measuring and regulating station expenses	72	77	80	System Sales	100.0000%	72	77	80	0.0000%	-	-	-
856: Mains	3	3	503	Total Sales	90.7553%	3	3	457	9.2447%	0	0	47
857: Measuring & Regulating Station Equipment	0	0	0	Total Sales	90.7553%	0	0	0	9.2447%	0	0	0
863: Mains	1	1	426	Total Sales	90.7553%	1	1	386	9.2447%	0	0	39
865: Measuring & Regulating Station Equipment	2	2	2	Total Sales	90.7553%	2	2	2	9.2447%	0	0	0
871: Dist Load Dispatching	400	412	426	Distribution Plant		400	412	426		-	-	-
874: Mains and Services	4,329	4,881	5,114	Distribution Plant		4,329	4,881	5,114		-	-	-
875: Meas and Reg Sta - General	336	350	361	Distribution Plant		336	350	361		-	-	-
878: Meter and House Reg Exp	491	509	606	Distribution Plant		491	509	606		-	-	-
879: Cust Install Expense	78	81	84	Distribution Plant		78	81	84		-	-	-
880: Other Expenses	4,057	4,271	5,304	Distribution Plant		4,057	4,271	5,304		-	-	-
881: Rents	27	29	29	Distribution Plant		27	29	29		-	-	-
885: Supervision and Engineering	23	25	26	Distribution Plant		23	25	26		-	-	-
887: Mains	1,085	1,336	1,378	Distribution Plant		1,085	1,336	1,378		-	-	-
889: Meas and Reg Sta Equip - General	386	407	911	Distribution Plant		386	407	911		-	-	-
891: Meas and Reg Sta - Gate Station	253	439	453	Distribution Plant		253	439	453		-	-	-
892: Services	1,433	1,497	4,569	Distribution Plant		1,433	1,497	4,569		-	-	-
893: Meters and House Regulators	986	1,046	1,780	Distribution Plant		986	1,046	1,780		-	-	-
894: Other Equipment	101	108	112	Distribution Plant		101	108	112		-	-	-
901: Supervision	222	229	234	Customers	99.9996%	222	229	234	0.0004%	0	0	0
902: Meter Reading Expenses	533	1,234	827	Customers	99.9996%	533	1,234	827	0.0004%	0	0	0
903: Cust. Records and Collection Exp	4,452	4,745	7,047	Customers	99.9996%	4,452	4,745	7,047	0.0004%	0	0	0
904: Uncollectible Accounts	1,065	2,169	2,996	Customers	99.9996%	1,065	2,169	2,996	0.0004%	0	0	0
905: Misc.	69	72	74	Customers	99.9996%	69	72	74	0.0004%	0	0	0
907: Supervision	22	23	18	Customers	99.9996%	22	23	18	0.0004%	0	0	0
908: Customer Assistance Expense - Other	584	607	698	Customers	99.9996%	584	607	698	0.0004%	0	0	0
909: Info & Instructional Advertising Exp	100	108	110	Customers	99.9996%	100	108	110	0.0004%	0	0	0
913: Advertising Expenses	0	0	0	Customers	99.9996%	-	-	-	0.0004%	-	-	-
920: Administrative & General Salaries	4,146	4,236	4,217	Salaries and Wages	99.9983%	4,146	4,236	4,217	0.0017%	0	0	0
921: Office Supplies & Expenses	5,317	2,201	2,745	Salaries and Wages	99.9983%	5,317	2,201	2,745	0.0017%	0	0	0
922: Admin Exp Transferred - CR	0	0	0	Salaries and Wages	99.9983%	-	-	-	0.0017%	-	-	-
923: Outside Services Employed	1,010	1,086	1,310	Salaries and Wages	99.9983%	1,010	1,086	1,310	0.0017%	0	0	0
924: Property Insurance	47	50	62	Salaries and Wages	99.9983%	47	50	62	0.0017%	0	0	0
925: Injuries and Damages	1,762	1,892	2,155	Salaries and Wages	99.9983%	1,762	1,892	2,155	0.0017%	0	0	0
926: Employee Pensions & Benefits	3,905	4,198	4,354	Salaries and Wages	99.9983%	3,905	4,198	4,354	0.0017%	0	0	0
927: Franchise Requirements	0	0	0	Salaries and Wages	99.9983%	-	-	-	0.0017%	-	-	-
928: Regulatory Commission Exp	424	456	470	Salaries and Wages	99.9983%	424	456	470	0.0017%	0	0	0
930.1: General Advertising Exp	3	3	3	Salaries and Wages	99.9983%	3	3	3	0.0017%	0	0	0
930.2: Misc. General Expenses	1,071	916	931	Salaries and Wages	99.9983%	1,071	916	931	0.0017%	0	0	0
931: Rents	497	534	551	Salaries and Wages	99.9983%	497	534	551	0.0017%	0	0	0
Non-Fuel O&M	41,026	41,987	51,672			41,026	41,986	51,585		1	1	86

Total A&G	18,179	15,571	16,797		18,179	15,571	16,797		0	0	0
Energy	557	477	515		583	499	515		0	0	0
Demand	-	-	-		-	-	-		-	-	-
Transmission	3	3	3		3	3	3		0	0	0
Distribution	14,425	12,355	13,329		14,333	12,276	13,328		0	0	0
Customer Accounts	2,401	2,056	2,218		2,424	2,076	2,218		0	0	0
Customer Service	793	679	733		837	717	733		0	0	0
Sales	-	-	-		-	-	-		-	-	-
Production											
Energy	2,368.51	2,310.06	1,300.25		2,394	2,332	1,300		0	0	0
Demand	-	-	-		-	-	-		-	-	-
Other	-	-	-		-	-	-		-	-	-
Production Total	2,369	2,310	1,300		2,394	2,332	1,300		0	0	0
Transmission	9	9	934		9	8	848		1	1	86
Distribution	28,408	27,745	34,482		28,316	27,666	34,481		0	0	0
Customer Accounts	8,741	10,505	13,396		8,764	10,525	13,396		0	0	0
Customer Service	1,500	1,418	1,559		1,543	1,455	1,559		0	0	0
Sales	-	-	-		-	-	-		-	-	-
Total O&M Expense	41,026	41,987	51,672		41,026	41,986	51,585		1	1	86

	2021 Corporate	2022 Corporate	2023 Corporate	Allocator	Minnesota Allocator	Minnesota Amount	Minnesota Amount	Minnesota Amount	Michigan Allocator	Michigan Amount	Michigan Amount	Michigan Amount
403000 Depreciation Expense	20,941	22,789	24,717									
Depreciation	20,941	22,789	24,717									
Amortization Plant	-	-	-									
Total Depreciation	20,941	22,789	24,717									
Transmission Direct	212	219	250									
Distribution Direct	16,634	17,941	19,163									
General and Intangible Direct	4,095	4,629	5,303									
Energy	131	148	162									
Demand	-	-	-									
Trans	1	1	1									
Distribution	3,228	3,650	4,208									
Customer	734	830	932									
Total System												
Energy	131	148	162	System Sales	100.0000%	131	148	162	0.0000%	-	-	-
Demand	-	-	-	System Sales	100.0000%	-	-	-	0.0000%	-	-	-
Transmission	213	220	251	Total Sales	90.7553%	192	200	228	9.2447%	21	20	23
Distribution - Direct	16,634	17,941	19,163	See Distribution Allocator Tab	100.0000%	16,634	17,941	19,163	-	-	-	-
Distribution - General	3,228	3,650	4,208	Distribution Plant	100.0000%	3,228	3,650	4,208	0.0000%	-	-	-
Customer	734	830	932	Customers	99.9996%	734	830	932	0.0004%	0	0	0
Total	20,941	22,789	24,717			20,920	22,769	24,694		21	20	23
407.4: Regulatory Credits	126	6,625	14,077	Minnesota Direct		126	6,625	14,077				
407.3: Regulatory Debits	11,707	5,926	390	Minnesota Direct		11,707	5,926	390				
Amortization Other	11,833	12,551	14,468			11,833	12,551	14,468		-	-	-
Payroll from Budget	1,223	1,355	1,324	Salaries & Wages	99.9983%	1,223	1,355	1,324	0.0017%	0	0	0
Property Taxes	10,939	15,961	22,064	Net Plant	99.8799%	10,924	15,945	22,038	0.1201%	15	16	26
Property Tax Tracker - Amortization (incl non-refund deferral \$)	374	(4,455)	(891)	Net Plant	99.8799%	374	(4,450)	(890)	0.1201%	1	(5)	(1)
408120 State Unitary Fees	23	2	2	Net Plant	99.8799%	23	2	2	0.1201%	0	0	0
408082 Unauthorized Insurance Tax	69	59	60	Net Plant	99.8799%	69	59	60	0.1201%	0	0	0
				Net Plant	99.8799%	-	-	-	0.1201%	-	-	-
Taxes Other Than Income Taxes	12,629	12,921	22,559			12,613	12,909	22,534		16	12	26
Salaries & Wages	1,223	1,355	1,324			1,223	1,355	1,324		0	0	0
Energy	39	43	41			39	43	41		0	0	0
Demand	-	-	-			-	-	-		-	-	-
Transmission	0	0	0			0	0	0		0	0	0
Distribution	964	1,068	1,050			964	1,068	1,050		0	0	0
Customer	219	243	233			219	243	233		0	0	0
Gross Plant & Direct Assigned	11,406	11,566	21,235			11,390	11,555	21,210		16	12	25
Energy	32	31	59			32	31	59		0	0	0
Demand	-	-	-			-	-	-		-	-	-
Transmission	136	143	301			0	142	300		0	0	0
Distribution	11,056	11,215	20,540			11,041	11,203	20,515		16	11	25
Customer	181	178	336			181	178	336		0	0	0

2021

PLANT	Production	Transmission	Distribution	General/Intangible	Total
Total	-	8,804	666,815	65,692	741,311
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	2,106	12	51,793	11,781	65,692
Total Function	<u>2,106</u>	<u>8,816</u>	<u>718,608</u>	<u>11,781</u>	<u>741,311</u>
Minnesota Allocation %	100.0000%	90.2454%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.7546%	0.0000%	0.0004%	
Minnesota	2,106	7,956	718,608	11,780	740,451
Michigan	-	860	-	0	860
Total	<u>2,106</u>	<u>8,816</u>	<u>718,608</u>	<u>11,781</u>	<u>741,311</u>
	0.2841%	1.1892%	96.9375%	1.5891%	100.0000%
Gross Plant %					
Minnesota					99.8840%
Michigan					0.1160%
Total					

ACCUMULATED DEPRECIATION

	Production	Transmission	Distribution	General/Intangible	Total
Total		3,697	229,046	19,054	251,796
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	584	3	15,119	3,347	19,054
Total Function	<u>584</u>	<u>3,700</u>	<u>244,165</u>	<u>3,347</u>	<u>251,796</u>
Minnesota Allocation %	100.0000%	90.2454%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.7546%	0.0000%	0.0004%	
Minnesota	584	3,339	244,165	3,347	251,435
Michigan	-	361	-	0	361
Total	<u>584</u>	<u>3,700</u>	<u>244,165</u>	<u>3,347</u>	<u>251,796</u>
Gross Plant %					
Minnesota					99.8567%
Michigan					0.1433%

2021

DEFERRED TAXES

	Production	Transmission	Distribution	General/Intangible	Total
Total		1,713	91,896	9,652	103,261
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	296	2	7,659	1,696	9,652
Total Function	296	1,715	99,555	1,696	103,261
Minnesota Allocation %	100.0000%	90.2454%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.7546%	0.0000%	0.0004%	
Minnesota	296	1,547	99,555	1,696	103,094
Michigan	-	167	-	0	167
Total	296	1,715	99,555	1,696	103,261

Gross Plant %					
Minnesota					99.8380%
Michigan					0.1620%

CWIP

	Production	Transmission	Distribution	General/Intangible	Total
Total		2,228	24	2,739	4,992
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	84	0	2,173	481	2,739
Total Function	84	2,229	2,198	481	4,992
Minnesota Allocation %	100.0000%	90.2454%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.7546%	0.0000%	0.0004%	
Minnesota	84	2,011	2,198	481	4,774
Michigan	-	217	-	0	217
Total	84	2,229	2,198	481	4,992

Gross Plant %					
Minnesota					95.6443%
Michigan					4.3557%

Net Plant	1,311	5,630	377,086	7,219	391,245
	0.2742%	1.1779%	78.8930%	1.5102%	

Net Plant				\$	%
Minnesota				390,696	99.8596%
Michigan				549	0.1404%
Total				391,245	100.0000%

2022

PLANT

	Production	Transmission	Distribution	General/Intangible	Total
Total	-	9,839	719,242	69,992	799,073
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	2,144	12.19	55,539	12,297	69,992
Total Function	<u>2,144</u>	<u>9,851</u>	<u>774,781</u>	<u>12,297</u>	<u>799,073</u>
Minnesota Allocation %	100.0000%	90.9716%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.0284%	0.0000%	0.0004%	
Minnesota	2,144	8,962	774,781	12,297	798,183
Michigan	-	889	-	0	889
Total	<u>2,144</u>	<u>9,851</u>	<u>774,781</u>	<u>12,297</u>	<u>799,073</u>
	0.2683%	1.2328%	96.9600%	1.5389%	100.0000%
Gross Plant %					
Minnesota					99.8887%
Michigan					0.1113%
Total					

ACCUMULATED DEPRECIATION

	Production	Transmission	Distribution	General/Intangible	Total
Total		3,806	235,950	20,899	260,654
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	640	4	16,583	3,672	20,899
Total Function	<u>640</u>	<u>3,810</u>	<u>252,533</u>	<u>3,672</u>	<u>260,654</u>
Minnesota Allocation %	100.0000%	90.9716%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.0284%	0.0000%	0.0004%	
Minnesota	640	3,466	252,533	3,672	260,310
Michigan	-	344	-	0	344
Total	<u>640</u>	<u>3,810</u>	<u>252,533</u>	<u>3,672</u>	<u>260,654</u>
Gross Plant %					
Minnesota					99.8680%
Michigan					0.1320%

2022

DEFERRED TAXES

	Production	Transmission	Distribution	General/Intangible	Total
Total		1,957	104,054	10,774	116,786
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	330	2	8,550	1,893	10,774
Total Function	330	1,959	112,603	1,893	116,786
Minnesota Allocation %	100.0000%	90.9716%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.0284%	0.0000%	0.0004%	
Minnesota	330	1,782	112,603	1,893	116,609
Michigan	-	177	-	0	177
Total	330	1,959	112,603	1,893	116,786

Gross Plant %					
Minnesota					99.8485%
Michigan					0.1515%

CWIP

	Production	Transmission	Distribution	General/Intangible	Total
Total		745	24	5,960	6,729
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	183	1	4,729	1,047	5,960
Total Function	183	746	4,753	1,047	6,729
Minnesota Allocation %	100.0000%	90.9716%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.0284%	0.0000%	0.0004%	
Minnesota	183	678	4,753	1,047	6,661
Michigan	-	67	-	0	67
Total	183	746	4,753	1,047	6,729

Gross Plant %					
Minnesota					98.9994%
Michigan					1.0006%

Net Plant	1,356	4,828	414,398	7,779	428,361
	0.2838%	1.0100%	86.6994%	1.6275%	

Net Plant				\$	%
Minnesota				427,925	99.8982%
Michigan				436	0.1018%
Total				428,361	100.0000%

2023

PLANT

	Production	Transmission	Distribution	General/Intangible	Total
Total	-	12,060	763,739	76,810	852,609
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	2,353	13.38	60,949	13,494	76,810
Total Function	<u>2,353</u>	<u>12,073</u>	<u>824,689</u>	<u>13,494</u>	<u>852,609</u>
Minnesota Allocation %	100.0000%	90.7553%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.2447%	0.0000%	0.0004%	
Minnesota	2,353	10,957	824,689	13,494	851,493
Michigan	-	1,116	-	0	1,116
Total	<u>2,353</u>	<u>12,073</u>	<u>824,689</u>	<u>13,494</u>	<u>852,609</u>
	0.2760%	1.4160%	96.7253%	1.5827%	100.0000%
Gross Plant %					
Minnesota					99.8691%
Michigan					0.1309%
Total					

ACCUMULATED DEPRECIATION

	Production	Transmission	Distribution	General/Intangible	Total
Total		3,924	234,909	22,815	261,647
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	699	4	18,103	4,008	22,815
Total Function	<u>699</u>	<u>3,928</u>	<u>253,012</u>	<u>4,008</u>	<u>261,647</u>
Minnesota Allocation %	100.0000%	90.7553%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.2447%	0.0000%	0.0004%	
Minnesota	699	3,565	253,012	4,008	261,284
Michigan	-	363	-	0	363
Total	<u>699</u>	<u>3,928</u>	<u>253,012</u>	<u>4,008</u>	<u>261,647</u>
Gross Plant %					
Minnesota					99.8612%
Michigan					0.1388%

2023

DEFERRED TAXES

	Production	Transmission	Distribution	General/Intangible	Total
Total		1,937	108,105	11,056	121,099
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	339	1.93	8,773	1,942	11,056
Total Function	339	1,939	116,878	1,942	121,099
Minnesota Allocation %	100.0000%	90.7553%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.2447%	0.0000%	0.0004%	
Minnesota	339	1,760	116,878	1,942	120,919
Michigan	-	179	-	0	179
Total	339	1,939	116,878	1,942	121,099

Gross Plant %					
Minnesota					99.8520%
Michigan					0.1480%

CWIP

	Production	Transmission	Distribution	General/Intangible	Total
Total		-	82	8,026	8,108
	Energy	Transmission	Distribution	Customer	
General Functionalized by Salaries and Wages	246	1	6,369	1,410	8,026
Total Function	246	1	6,451	1,410	8,108
Minnesota Allocation %	100.0000%	90.7553%	100.0000%	99.9996%	
Michigan Allocation %	0.0000%	9.2447%	0.0000%	0.0004%	
Minnesota	246	1	6,451	1,410	8,108
Michigan	-	0	-	0	0
Total	246	1	6,451	1,410	8,108

Gross Plant %					
Minnesota					99.9983%
Michigan					0.0017%

Net Plant	1,561	6,207	461,249	8,954	477,971
	0.3266%	1.2987%	96.5014%	1.8733%	

Net Plant				\$	%
Minnesota				477,397	99.8799%
Michigan				574	0.1201%
Total				477,971	100.0000%

PUBLIC DOCUMENT - TRADE SECRET DATA HAS BEEN EXCISED

MERC - 4500
 4500

	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
3111000000 Common Stock	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3112000000 Other Paid In Capital	184,990,265	185,008,905	209,010,145	209,011,517	209,012,846	209,014,219	209,015,547	209,016,920	209,018,293	209,019,621	209,020,994	209,022,322	209,023,689	209,062,062
3114000000 Unappropriated Retained Earnings	101,057,454	107,508,971	113,904,261	116,943,310	119,261,045	119,497,613	118,052,406	117,323,753	116,522,465	115,687,704	116,315,461	119,763,275	122,472,519	119,201,600
Total Equity	286,047,820	292,517,976	322,914,505	325,954,927	328,273,990	328,511,932	327,068,053	326,340,773	325,540,858	324,707,425	325,336,555	328,785,698	331,496,309	328,263,762
		24,033,4240	24,053.1573	54.7631	56.5410	55.2125	53.8397	52.5113	51.1385	49.7657	48.4372	47.0644	45.7360	44.3690
		21,415.0651	11,692.6293	10,949.6689	12,535.0616	11,219.7518	10,903.4039	203.3984	(13,092.7983)	(25,831.1364)	(34,098.9764)	(34,819.5330)	(31,995.4687)	(25,776.2541)

MERC - 4500

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
4500														
3111000000	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3112000000	209,064,908	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	209,068,058	222,711,503	222,711,503	222,711,503
3114000000	124,853,930	129,478,371	130,480,796	130,401,017	118,255,805	104,230,955	90,691,329	81,588,727	81,495,928	87,767,807	96,696,265	130,685,616	159,232,677	175,416,784
Total Equity	333,918,937	338,546,530	339,548,955	339,469,175	327,323,963	313,299,113	299,759,487	290,656,885	290,564,086	296,835,965	305,764,424	353,397,218	381,944,280	398,128,387
	13,649,4408	13,646,5950	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443	13,643,4443
	11,484,0152	34,378,7475	45,938,4128	45,670,2028	35,831,6008	28,012,5668	21,068,7890	14,894,4454	9,698,9645	5,965,3840	13,483,9694	26,767,1074		

MERC - 4500		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	
4500											
3111000000	Common Stock	100	100	100	100	100	100	100	100	100	
3112000000	Other Paid In Capital	222,711,503	222,711,503	222,711,503	222,711,503	222,711,503	222,711,503	222,711,503	222,711,503	222,711,503	
3114000000	Unappropriated Retained Earnings	176,150,999	166,232,618	146,268,371	125,299,744	105,585,774	91,287,692	87,461,312	101,251,776	123,463,373	
	Total Equity	398,862,602	388,944,220	368,979,974	348,011,346	328,297,377	313,999,294	310,172,914	323,963,379	346,174,975	328,672,750

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 SUMMARY SCHEDULE
 (in millions)

Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
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 Schedule 1
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Line	Capitalization	Amount (a)	Hybrid Equity Adjustment (b)	Adjusted Amount (c)	Percent of Total Capitalization (d)	Cost of Capital (e)	Weighted Cost of Capital (f)
<u>HISTORICAL YEAR ENDED 12/31/21</u>							
					[TRADE SECRET BEGINS...]		
1	Long Term Debt	\$ 13,103.5	\$ (250.0)	\$ 12,853.5			
2	Short Term Debt						
3	Long Term & Short Term Debt		\$ (250.0)				
4	Preferred Stock	30.4		30.4		3.95%	
5	Common Equity		250.0			9.70%	
6	Total Capitalization		\$ -		100.0%		

PROJECTED YEAR ENDED 12/31/22

[REDACTED]							
						9.70%	
					100.0%		

PROPOSED YEAR ENDED 12/31/23

[REDACTED]							
						10.30%	
					100.0%		

...TRADE SECRET ENDS]

NOTES:

All are 13 month average balances except long term debt, which is based on average end of year balances
 Cost of Common Equity uses MERC's cost of equity.

Hybrid Equity Adjustment

Included in long-term debt on our balance sheets as of December 31, 2021, is \$500.0 million principal amount of WEC Energy Group Junior Notes (unsecured). The adjusted presentation attributes \$250.0 million of these Junior Notes to common equity and \$250.0 million to long-term debt. This adjusted view is how the rating agencies view WEC's capital structure.

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 Long-Term Debt
 (in millions)

Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
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 Schedule 2
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HISTORICAL YEAR ENDED 12/31/21

	2021 Weighted Average Interest Rate	Year Due	Actual 2021	Actual 2020	2 Point Average	Interest 2021	LT Debt Cost Rate 2021
WEC Energy Group Senior Notes (unsecured)	1.67%	2023-2033	3,070.0	2,270.0	2,670.0		
WEC Energy Group Junior Notes (unsecured)	2.27%	2067	500.0	500.0	500.0		
WE Debentures (unsecured)	4.13%	2024-2095	2,785.0	2,785.0	2,785.0		
WEPCO Environmental Trust Finance I, LLC (secured, nonrecourse)	1.58%	2022-2035	114.7	-	57.3		
WPS Senior Notes (unsecured)	3.89%	2028-2051	1,675.0	1,625.0	1,650.0		
WG Debentures (unsecured)	3.35%	2024-2046	790.0	640.0	715.0		
IntegrYS Junior Notes (unsecured)	6.00%	2073	221.4	400.0	310.7		
PGL First and Refunding Mortgage Bonds (secured)	3.31%	2024-2047	1,870.0	1,670.0	1,770.0		
NSG First Mortgage Bonds (secured)	3.56%	2027-2043	157.0	132.0	144.5		
MERC Senior Notes (unsecured)	3.04%	2025-2047	210.0	170.0	190.0		
MGU Senior Notes (unsecured)	3.18%	2025-2047	150.0	150.0	150.0		
UMERC Senior Notes (unsecured)	3.26%	2029	160.0	160.0	160.0		
Bluewater Gas Storage Senior Notes (unsecured)	3.76%	2022-2047	115.2	117.8	116.5		
ATC Holding Senior Notes (unsecured)	4.05%	2025-2030	475.0	475.0	475.0		
We Power Subsidiaries Notes (secured, nonrecourse)	5.60%	2022-2041	934.6	970.8	952.7		
WECC Notes (unsecured)	6.94%	2028	50.0	50.0	50.0		
WECI Wind Holding I Senior Notes (secured, nonrecourse)	2.75%	2022-2032	374.6	413.6	394.1		
Total			<u>13,652.6</u>	<u>12,529.2</u>	<u>13,090.9</u>		
IntegrYS acquisition fair value adjustment			2.9	8.4	5.7		
Jayhawk acquisition			7.3				
Unamortized debt issuance costs			(77.7)	(65.2)	(71.5)		
Unamortized discount, net and other			(21.7)	(21.9)	(21.8)		
Total long-term debt, including current portion			<u>13,563.4</u>	<u>12,450.5</u>	<u>13,007.0</u>		
Finance lease obligations			<u>129.7</u>	<u>63.4</u>	<u>96.5</u>		
Long-term debt, including current portion and finance leases			<u>13,693.1</u>	<u>12,513.9</u>	<u>13,103.5</u>		
Hybrid Equity Adjustment			(250.0)	(250.0)	(250.0)		
Total long-term debt adjusted for hybrid equity credit			<u><u>13,443.1</u></u>	<u><u>12,263.9</u></u>	<u><u>12,853.5</u></u>		

TRADE SECRET BEGINS...



...TRADE SECRET ENDS]

NOTES:

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 Long-Term Debt
(in millions)

Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
 Informational Requirements Document No. 16
 Schedule 2
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HISTORICAL YEAR ENDED 12/31/21

	2021 Weighted Average Interest Rate	Year Due	Actual 2021	Actual 2020	2 Point Average	Interest 2021	LT Debt Cost Rate 2021
Interest includes debt discount, debt expense and loss on reacquired debt							

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 Long-Term Debt
 (in millions)

Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
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 Schedule 3
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PROJECTED YEAR ENDED 12/31/22

	Projected 2022	Actual 2021	2 Point Average	Interest 2022	LT Debt Cost Rate 2022
WEC Energy Group Senior Notes (unsecured)		3,070.0			
WEC Energy Group Junior Notes (unsecured)		500.0			
WE Debentures (unsecured)		2,785.0			
WEPCO Environmental Trust Finance I, LLC (secured, nonrecourse)		114.7			
WPS Senior Notes (unsecured)		1,675.0			
WG Debentures (unsecured)		790.0			
Integrys Junior Notes (unsecured)		221.4			
PGL First and Refunding Mortgage Bonds (secured)		1,870.0			
NSG First Mortgage Bonds (secured)		157.0			
MERC Senior Notes (unsecured)		210.0			
MGU Senior Notes (unsecured)		150.0			
UMERC Senior Notes (unsecured)		160.0			
Bluewater Gas Storage Senior Notes (unsecured)		115.2			
ATC Holding Senior Notes (unsecured)		475.0			
We Power Subsidiaries Notes (secured, nonrecourse)		934.6			
WECC Notes (unsecured)		50.0			
WECI Wind Holding I Senior Notes (secured, nonrecourse)		374.6			
Total		<u>13,652.6</u>			
Integrys acquisition fair value adjustment		2.9			
Jayhawk acquisition		7.3			
Unamortized debt issuance costs		(77.7)			
Unamortized discount, net and other		(21.7)			
Total long-term debt, including current portion		<u>13,563.4</u>			
Finance lease obligations		129.7			
Long-term debt, including current portion and finance leases		<u>13,693.1</u>			
Hybrid Equity Adjustment		(250.0)			
Total long-term debt adjusted for hybrid equity credit		<u>13,443.1</u>			

NOTES:

Interest includes debt discount, debt expense and loss on reacquired debt

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 Long-Term Debt
 (in millions)

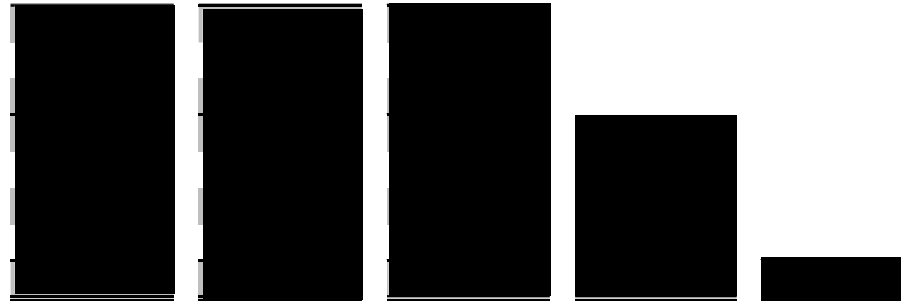
Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
 Informational Requirements Document No. 16
 Schedule 4
 Page 1 of 1

PROPOSED YEAR ENDED 12/31/23

	Proposed 2023	Projected 2022	2 Point Average	Interest 2023	LT Debt Cost Rate 2023
WEC Energy Group Senior Notes (unsecured)					
WEC Energy Group Junior Notes (unsecured)					
WE Debentures (unsecured)					
WEPCO Environmental Trust Finance I, LLC (secured, nonrecourse)					
WPS Senior Notes (unsecured)					
WG Debentures (unsecured)					
Integrys Junior Notes (unsecured)					
PGL First and Refunding Mortgage Bonds (secured)					
NSG First Mortgage Bonds (secured)					
MERC Senior Notes (unsecured)					
MGU Senior Notes (unsecured)					
UMERC Senior Notes (unsecured)					
Bluewater Gas Storage Senior Notes (unsecured)					
ATC Holding Senior Notes (unsecured)					
We Power Subsidiaries Notes (secured, nonrecourse)					
WECC Notes (unsecured)					
WECI Wind Holding I Senior Notes (secured, nonrecourse)					
Total					
Integrys acquisition fair value adjustment					
Jayhawk acquisition					
Unamortized debt issuance costs					
Unamortized discount, net and other					
Total long-term debt, including current portion					
Finance lease obligations					
Long-term debt, including current portion and finance leases					
Hybrid Equity Adjustment					
Total long-term debt adjusted for hybrid equity credit					

[TRADE SECRET BEGINS...



...TRADE SECRET ENDS]

NOTES:

Interest includes debt discount, debt expense and loss on reacquired debt

WEC ENERGY GROUP, INC.
 Consolidated
 Rate of Return Cost of Capital Schedules
 Short-Term Debt
 (in millions)

Trade Secret

Minnesota Energy Resources Corporation
 Docket No. G011/GR-22-504
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Month	Month End Balance	Interest Expense	ST Debt Cost Rate
<u>Most Recent Fiscal Year 2021</u>			
Dec 2020 [TRADE SECRET BEGINS...	1,776.9		
Jan			
Feb			
Mar	1,580.4		
Apr			
May			
Jun	1,424.5		
Jul			
Aug			
Sep	1,508.9		
Oct			
Nov			
Dec	1,897.0		
13 Month Average			

<u>Projected Fiscal Year 2022</u>			
Jan			
Feb			
Mar	1,450.0		
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			
13 Month Average			

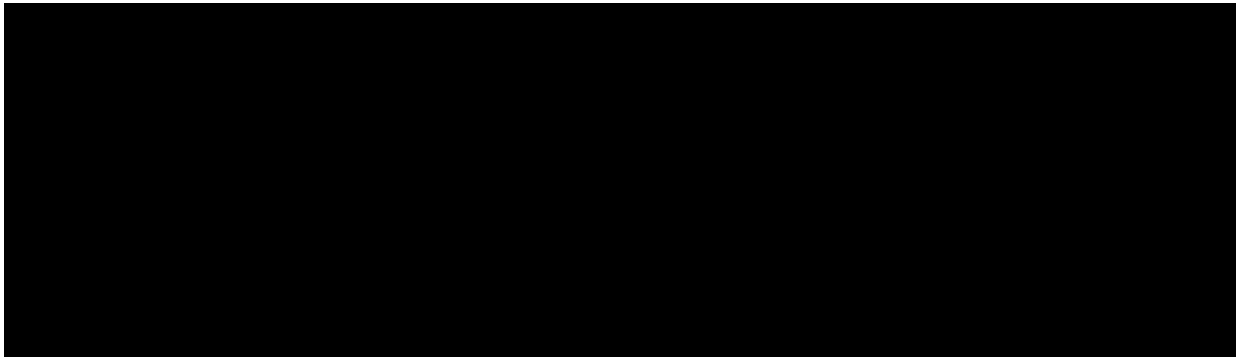
<u>Proposed Test Year 2023</u>			
Jan			
Feb			
Mar			
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			
13 Month Average			

...TRADE SECRET ENDS]

Trade Secret in millions Year 2021 Year 2022 Year 2023

WEC Consol

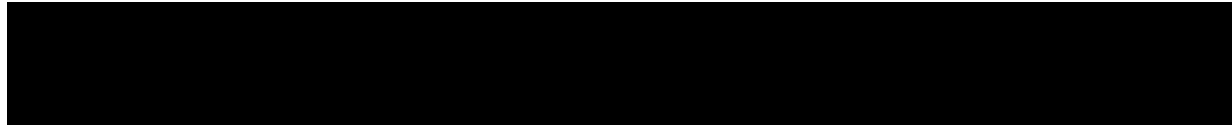
[TRADE SECRET DATA BEGINS... B:[]



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[TRADE SECRET DATA BEGINS...

2021 2022 2023



.TRADE SECRET DATA ENDS]

CONSL_LVL : WEC Energy Group Consoli Trade Secret

Consolidated Condensed Balanced Sheet (Unaudited)

COMPANY: Legal Total | PERIOD: Dec-21 | MEASURES: Periodic

in millions	[TRADE SECRET DATA BEGINS...]				2020 10-K 1Q '21 10Q 2Q '21 10Q 3Q '21 10Q per 1Q '22 10Q						
	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	12/31/2020	3/31/2021	6/30/2021	9/30/2021	12/31/2021	3/31/2022
Total Common Stock Equity	10,469.7	10,767.0	10,830.8	10,908.5	10,913.2	10,469.7	10,767.1	10,830.9	10,908.5	10,913.2	11,243.2
Preferred Stock	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
Total Long-Term Debt	11,672.8	2,263.3	12,642.5	12,624.3	13,472.4	11,728.1	12,317.7	12,695.7	12,678.1	13,523.7	13,514.3 includes Finance Leases
Capital Lease Obligations	55.3	54.4	53.2	53.7	51.3						
Current Portion Long-Term Debt	777.7	778.5	485.4	490.5	91.0	785.8	787.0	493.6	496.7	169.4	163.4 includes Finance Leases
Current Portion Capital Leases	8.1	8.5	8.2	6.1	78.3						
Short-Term Debt	1,776.9	1,580.5	1,424.5	1,508.9	1,897.0	1,776.9	1,580.4	1,424.5	1,508.9	1,897.0	1,450.0
check total	2,562.7	2,367.5	1,918.0	2,005.6	2,066.4	2,562.7	2,367.4	1,918.1	2,005.6	2,066.4	1,613.4
						0.0	(0.1)	0.1	0.0	0.0	

.TRADE SECRET DATA ENDS]

PUBLIC DOCUMENT - TRADE SECRET DATA HAS BEEN EXCISED

Trade Secret in millions	a-Jan	a-Feb	a-Mar	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	13 month average 2022	13 month average 2023
[TRADE SECRET DATA BEGINS...]																										
WE: [Unamortized Debt Expense]																										
CE: [Total Common Stock Equity]																										
CK: [Preferred Stock 6%]																										
CL: [Preferred Stock 3.6%]																										
CN: [Long Term Debt - External]																										
CO: [Long-term debt fair value adjustme]																										
CR: [Obligations Under Capital Lease]																										
CK: [Current Portion LTD]																										
DC: [Commerical Paper]																										
Total long-term debt, including current portion																										

.TRADE SECRET DATA ENDS]



SURVEY OF PROFESSIONAL FORECASTERS

Release Date: August 12, 2022

THIRD QUARTER 2022

Forecasters See Slower Growth

The U.S. economy looks weaker now than it did three months ago, according to 35 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The panel predicts real GDP will grow at an annual rate of 1.4 percent this quarter, down from the prediction of 2.5 percent in the last survey. Over the next three quarters, the panelists also see slower output growth than they predicted previously. Using the annual-average over annual-average computation, the forecasters expect real GDP to grow at an annual rate of 1.6 percent in 2022 and 1.3 percent in 2023. These annual projections are lower than the estimates of three months ago.

Upward revisions beginning from the fourth quarter of this year to the projections for the unemployment rate accompany the outlook for growth. On an annual-average basis, the forecasters predict the unemployment rate will increase from 3.7 percent in 2022 to 3.9 percent in 2023 and remain at the same rate over the following two years.

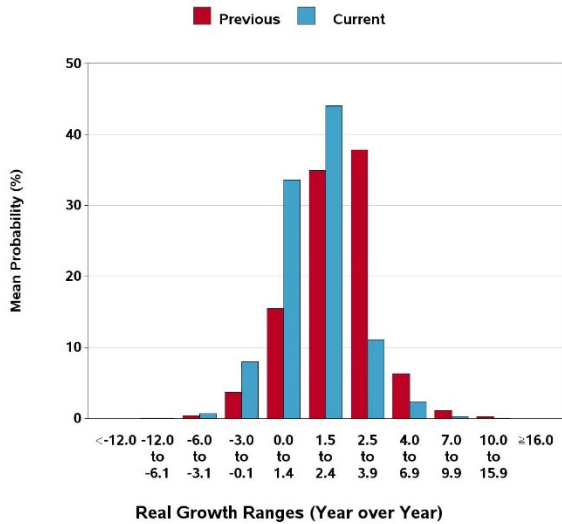
On the employment front, the forecasters revised upward their estimate for job growth for the current quarter but revised downward their estimates for the next two quarters. The projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 487,500 in 2022 and 167,600 in 2023. (These annual-average projections are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)

Median Forecasts for Selected Variables in the Current and Previous Surveys

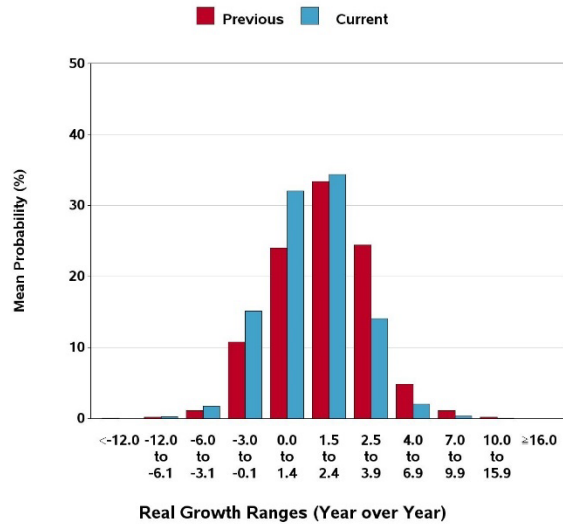
	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
	Previous	New	Previous	New	Previous	New
Quarterly data:						
2022:Q3	2.5	1.4	3.5	3.5	293.7	342.5
2022:Q4	2.3	1.2	3.5	3.7	193.2	167.9
2023:Q1	2.1	1.1	3.5	3.8	158.8	89.0
2023:Q2	2.3	1.5	3.5	3.9	61.3	96.6
2023:Q3	N.A.	1.5	N.A.	4.0	N.A.	80.7
Annual data (projections are based on annual-average levels):						
2022	2.5	1.6	3.6	3.7	479.7	487.5
2023	2.3	1.3	3.6	3.9	172.7	167.6
2024	2.0	2.3	3.8	3.9	N.A.	N.A.
2025	2.3	2.1	3.8	3.9	N.A.	N.A.

The charts below provide some insight into the degree of uncertainty the forecasters have about their projections for the rate of growth in the annual-average level of real GDP. Each chart presents the forecasters' previous and current estimates of the probability that growth will fall into each of 11 ranges. The forecasters expect a lower probability than they predicted in the last survey that growth will be 2.5 percent or higher in 2022 and 2023.

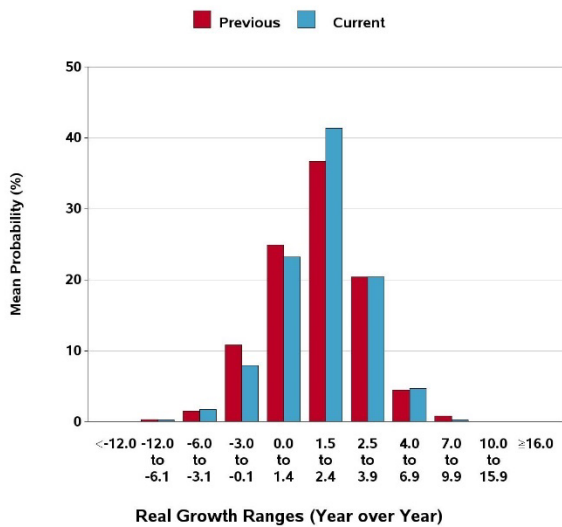
Mean Probabilities for Real GDP Growth in 2022



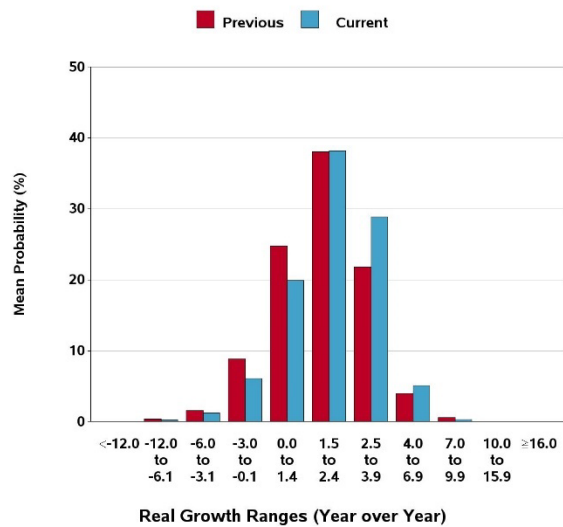
Mean Probabilities for Real GDP Growth in 2023



Mean Probabilities for Real GDP Growth in 2024

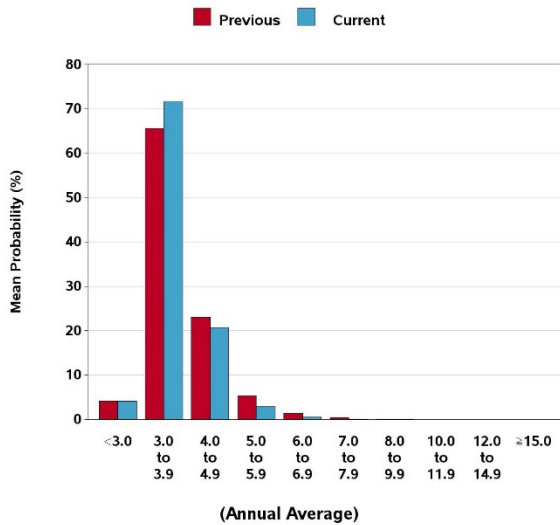


Mean Probabilities for Real GDP Growth in 2025

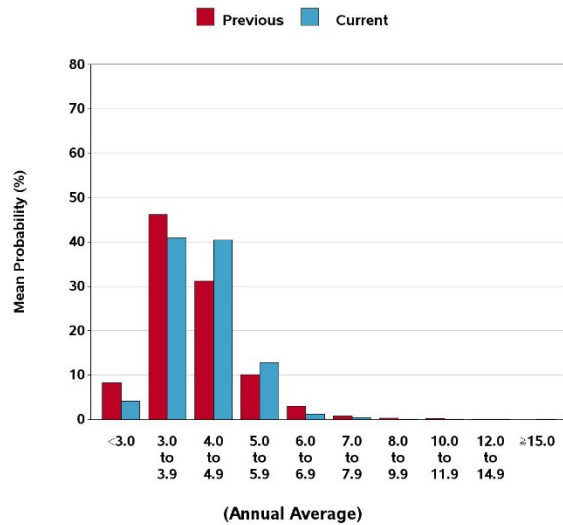


The forecasters' density projections for unemployment, shown below, shed light on uncertainty about the labor market over the next four years. Each chart presents the forecasters' current and previous estimates of the probability that unemployment will fall into each of 10 ranges. For 2022, the forecasters are increasing their probability estimates from the last survey for an unemployment rate in the range of 3.0 to 3.9 percent. Over each of the following three years, from 2023 to 2025, the forecasters see a higher probability than they predicted three months ago that unemployment will fall into the ranges of 4.0 percent or higher.

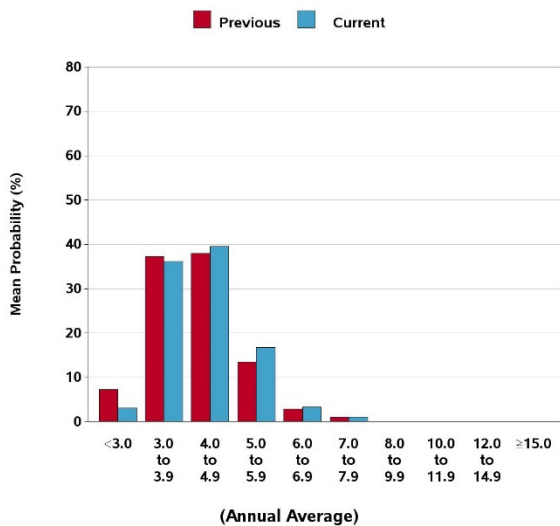
Mean Probabilities for Unemployment Rate in 2022



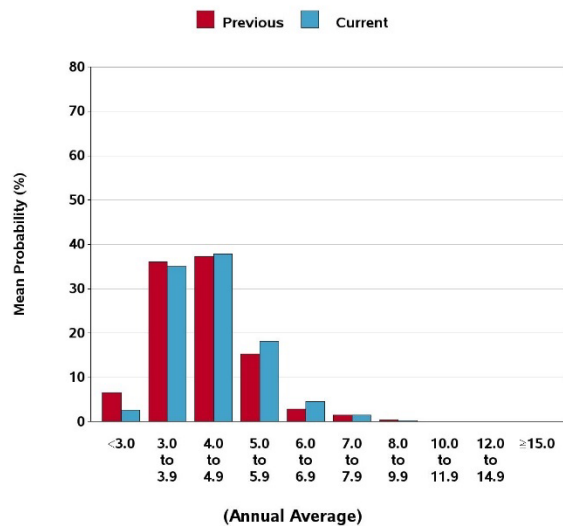
Mean Probabilities for Unemployment Rate in 2023



Mean Probabilities for Unemployment Rate in 2024



Mean Probabilities for Unemployment Rate in 2025



Forecasters Raise Their Projections for Inflation

The forecasters expect current-quarter headline CPI inflation will average 6.7 percent at an annual rate, up from the prediction of 4.5 percent in the previous survey. Headline PCE inflation over the current quarter will also be higher at an annual rate of 5.3 percent, up from the last estimate of 4.1 percent.

Projections for headline and core CPI and PCE inflation at most other forecast horizons have been revised upward, compared with those of the previous survey.

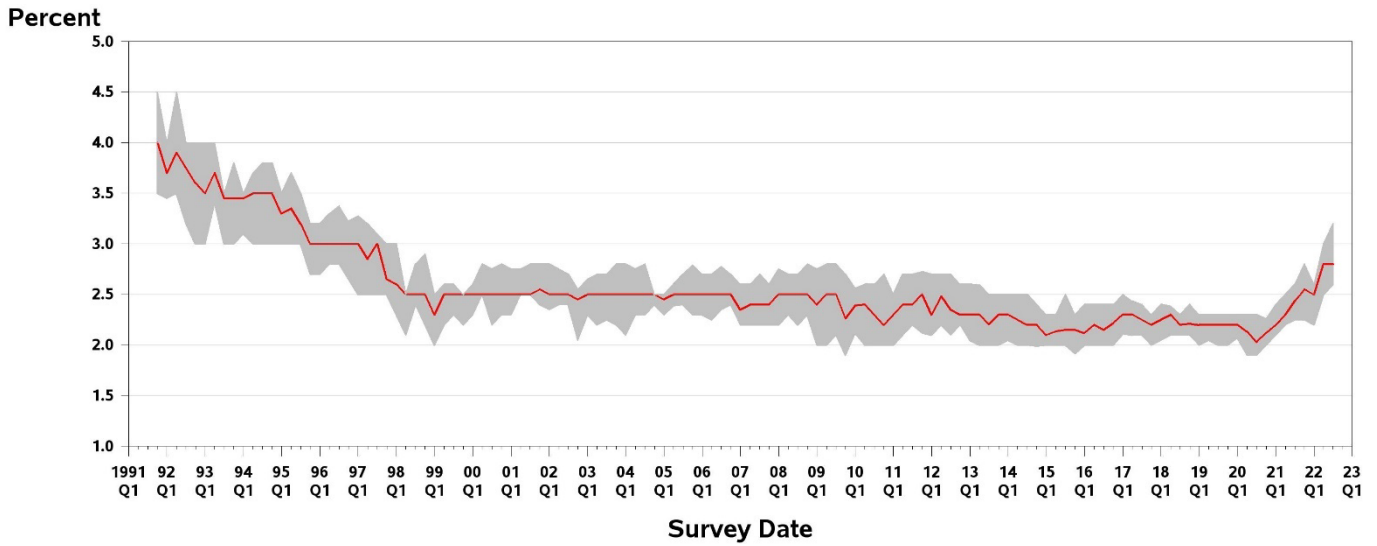
Over the next 10 years, 2022 to 2031, the forecasters predict headline CPI inflation will remain unchanged from their previous estimate, at an annual-average rate of 2.80 percent. The corresponding estimate for 10-year annual-average PCE inflation is 2.45 percent, slightly higher than the previous estimate.

Median Short-Run and Long-Run Projections for Inflation (Annualized Percentage Points)

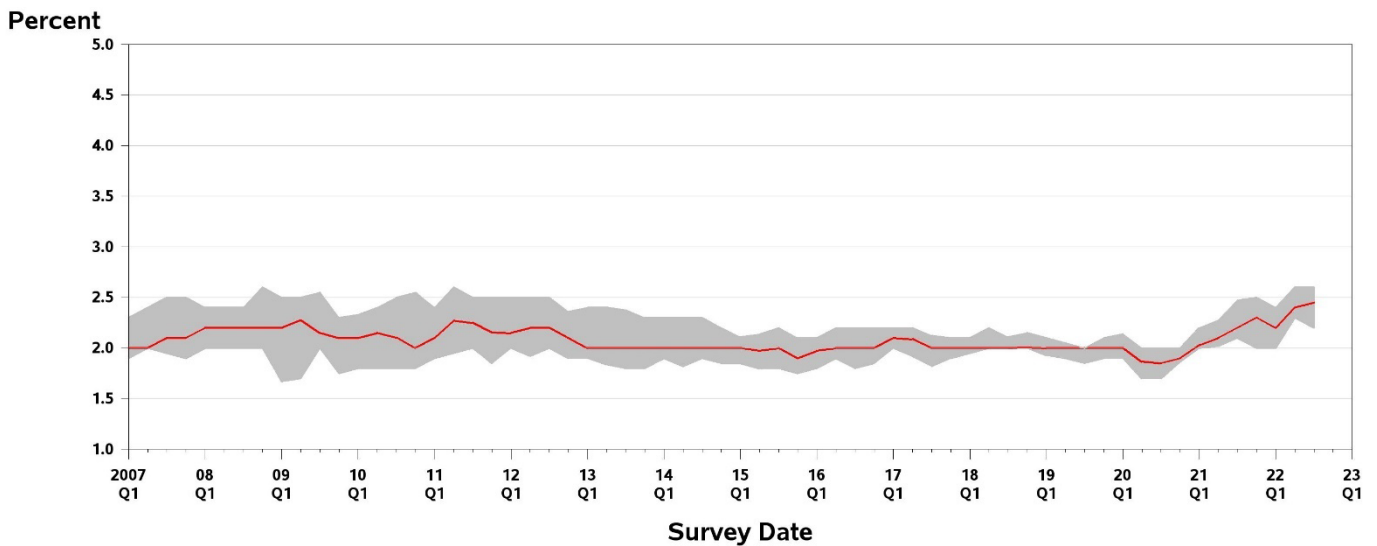
	Headline CPI		Core CPI		Headline PCE		Core PCE	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current
Quarterly								
2022:Q3	4.5	6.7	4.1	5.8	4.1	5.3	3.8	4.6
2022:Q4	3.7	4.3	3.5	4.6	3.0	3.7	3.2	3.5
2023:Q1	3.1	3.6	3.1	3.7	2.7	2.9	2.8	3.1
2023:Q2	3.0	3.4	2.9	3.2	2.6	2.8	2.7	2.8
2023:Q3	N.A.	3.0	N.A.	2.8	N.A.	2.5	N.A.	2.6
Q4/Q4 Annual Averages								
2022	6.1	7.5	4.8	5.9	5.0	5.8	4.1	4.5
2023	2.9	3.2	2.9	3.1	2.5	2.8	2.5	2.8
2024	2.3	2.5	2.5	2.5	2.2	2.3	2.2	2.2
Long-Term Annual Averages								
2022-2026	3.40	3.50	N.A.	N.A.	2.90	3.00	N.A.	N.A.
2022-2031	2.80	2.80	N.A.	N.A.	2.40	2.45	N.A.	N.A.

The charts below show the median projections (the red line) and the associated interquartile ranges (gray areas around the red line) for 10-year annual-average CPI and PCE inflation. The charts provide perspective on the upward trend in 10-year inflation expectations in recent surveys.

Projections for the 10-Year Annual-Average Rate of CPI Inflation (Median and Interquartile Range)

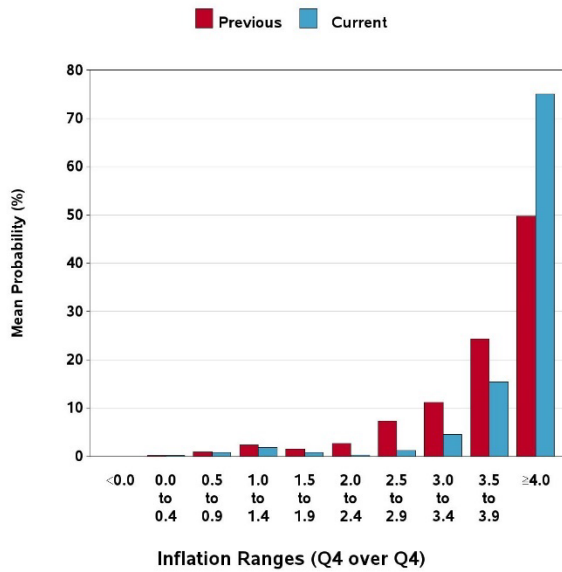


Projections for the 10-Year Annual-Average Rate of PCE Inflation (Median and Interquartile Range)

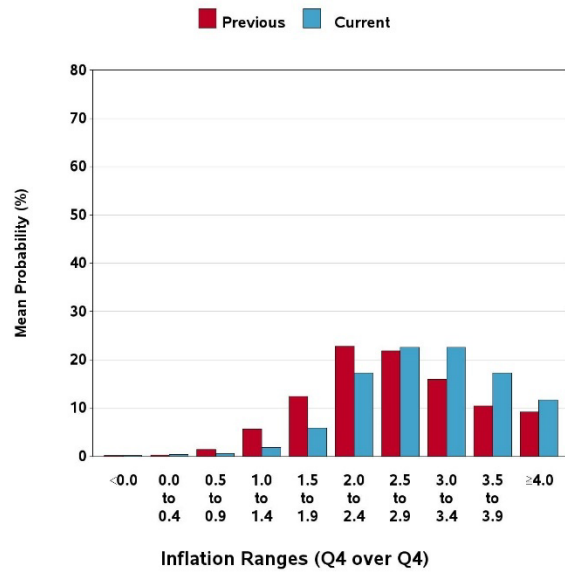


The figures below show the probabilities that the forecasters are assigning to each of 10 possible ranges for fourth-quarter over fourth-quarter core PCE inflation in 2022 and 2023. Notably, the forecasters have significantly increased their estimates for the probability that core PCE inflation in 2022 will be 4.0 percent or more, compared with their prediction in the previous survey.

Mean Probabilities for Core PCE Inflation in 2022



Mean Probabilities for Core PCE Inflation in 2023



Higher Risk of a Decrease in Real GDP

The forecasters see about a one-in-three chance of a contraction in real GDP in any of the next five quarters. The forecasters have increased their estimate of the risk of a downturn this quarter to 33.9 percent, compared with 19.7 percent in the survey of three months ago. The panelists have also raised their probability estimates for the following three quarters.

Risk of a Negative Quarter (%)
Survey Means

Quarterly data:	Previous	New
2022:Q3	19.7	33.9
2022:Q4	22.2	36.0
2023:Q1	28.2	38.0
2023:Q2	25.5	36.5
2023:Q3	N.A.	34.1

Natural Rate of Unemployment Estimated at 4.10 Percent

In third-quarter surveys, we ask the forecasters to provide their estimates of the natural rate of unemployment — the rate of unemployment that occurs when the economy reaches equilibrium. The forecasters peg this rate at 4.10 percent. The table below shows, for each third-quarter survey since 1996, the percentage of respondents who use the natural rate in their forecasts and, for those who use it, the median estimate and the lowest and highest estimates. Thirty percent of the 27 forecasters who answered the question report that they use the natural rate in their forecasts. The lowest estimate is 3.50 percent, and the highest estimate is 4.50 percent.

Median Estimates of the Natural Rate of Unemployment

Survey Date	Percentage Who Use the Natural Rate	Median Estimate (%)	Low (%)	High (%)
1996:Q3	62	5.65	5.00	6.00
1997:Q3	59	5.25	4.50	5.88
1998:Q3	45	5.30	4.50	5.80
1999:Q3	43	5.00	4.13	5.60
2000:Q3	48	4.50	4.00	5.00
2001:Q3	34	4.88	3.50	5.50
2002:Q3	50	5.10	3.80	5.50
2003:Q3	41	5.00	4.31	5.40
2004:Q3	46	5.00	4.00	5.50
2005:Q3	50	5.00	4.25	5.50
2006:Q3	53	4.95	4.00	5.50
2007:Q3	52	4.65	4.20	5.50
2008:Q3	48	5.00	4.00	5.50
2009:Q3	45	5.00	4.00	6.00
2010:Q3	50	5.78	4.50	6.80
2011:Q3	42	6.00	4.75	7.00
2012:Q3	49	6.00	4.75	7.00
2013:Q3	63	6.00	4.75	7.00
2014:Q3	65	5.50	4.50	6.70
2015:Q3	62	5.00	4.25	5.80
2016:Q3	56	4.80	4.50	5.50
2017:Q3	44	4.50	3.50	5.00
2018:Q3	34	4.30	3.80	4.60
2019:Q3	33	4.10	3.88	4.60
2020:Q3	48	4.10	3.50	6.00
2021:Q3	37	3.78	3.00	4.25
2022:Q3	30	4.10	3.50	4.50

Technical Notes

Moody's Aaa and Baa Historical Rates

The historical values of Moody's Aaa and Baa rates are proprietary and, therefore, not available in the data files on the Bank's website or on the tables that accompany the survey's complete write-up in the PDF.

The Federal Reserve Bank of Philadelphia thanks the following forecasters for their participation in recent surveys:

Ed Al-Hussainy and **Anwiti Bahuguna**, Columbia Threadneedle Investments; **Scott Anderson**, Bank of the West (BNP Paribas Group); **Robert J. Barbera**, Johns Hopkins University Center for Financial Economics; **Peter Bernstein**, RCF Economic and Financial Consulting, Inc.; **Wayne Best** and **Michael Brown**, Visa, Inc.; **Kathy Bostjancic**, Oxford Economics USA, Inc.; **Jay Bryson**, Wells Fargo; **Christine Chmura, Ph.D.**, and **Xiaobing Shuai, Ph.D.**, Chmura Economics & Analytics; **Gary Ciminero, CFA**, GLC Financial Economics; **Rajeev Dhawan**, Georgia State University; **Bill Diviney**, ABN AMRO Bank NV; **Gabriel Ehrlich**, **Daniil Manaenkov**, and **Tereza Ranosova**, RSQE, University of Michigan; **Michael R. Englund**, Action Economics, LLC; **Sacha Gelfer**, Bentley University; **James Glassman**, JPMorgan Chase & Co.; **Jan Hatzius**, Goldman Sachs; **Sam Kahan**, Kahan Consulting Ltd. (ACT Research LLC); **N. Karp**, BBVA Research USA; **Steve Kihm**, Citizens Utility Board of Wisconsin; **Jack Kleinhenz**, Kleinhenz & Associates, Inc.; **Yaniv Konchitchki**, University of California, Berkeley; **Thomas Lam**, Sim Kee Boon Institute, Singapore Management University; **Robert McNab**, Old Dominion University; **R. Anthony Metz**, Pareto Optimal Economics; **R. M. Monaco**, TitanRM; **Michael Moran**, Daiwa Capital Markets America; **Joel L. Naroff**, Naroff Economic Advisors; **Nomura Securities International**; **Brendon Ogmundson**, BC Real Estate Association; **Perc Pineda, Ph.D.**, Plastics Industry Association; **Joel Prakken** and **Chris Varvares**, S&P Global Market Intelligence; **Jason Prole**, Capital Risk Management; **Philip Rothman**, East Carolina University; **Allen Sinai** and **Lu Yu**, Decision Economics, Inc.; **Stephen Stanley**, Amherst Pierpont Securities; **Charles Steindel**, Editor, NABE *Business Economics*; **Susan M. Sterne**, Economic Analysis Associates, Inc.; **James Sweeney**, Credit Suisse; **Maira Trimble** and **Jordan Vickers**, Eaton Corporation; **Mark Zandi**, Moody's Analytics; **Ellen Zentner**, Morgan Stanley.

This is a partial list of participants. We also thank those who wish to remain anonymous.

SUMMARY TABLE
SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS

	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2022	2023 (YEAR-OVER-YEAR)	2024	2025
PERCENT GROWTH AT ANNUAL RATES									
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	1.4	1.2	1.1	1.5	1.5	1.6	1.3	2.3	2.1
2. GDP PRICE INDEX (PERCENT CHANGE)	4.6	3.7	3.2	2.7	2.6	6.9	3.7	N.A.	N.A.
3. NOMINAL GDP (\$ BILLIONS)	6.7	5.0	5.3	3.9	4.4	8.7	5.2	N.A.	N.A.
4. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE)	2.7	1.3	0.7	0.8	0.6	4.0	1.3	N.A.	N.A.
(AVG MONTHLY CHANGE)	342.5	167.9	89.0	96.6	80.7	487.5	167.6	N.A.	N.A.
VARIABLES IN LEVELS									
5. UNEMPLOYMENT RATE (PERCENT)	3.5	3.7	3.8	3.9	4.0	3.7	3.9	3.9	3.9
6. 3-MONTH TREASURY BILL (PERCENT)	2.5	3.1	3.4	3.4	3.3	1.7	3.3	3.0	2.8
7. 10-YEAR TREASURY BOND (PERCENT)	3.0	3.3	3.3	3.3	3.4	2.8	3.4	3.5	3.6
	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2022	2023 (Q4-OVER-Q4)	2024	
INFLATION INDICATORS									
8. CPI (ANNUAL RATE)	6.7	4.3	3.6	3.4	3.0	7.5	3.2	2.5	
9. CORE CPI (ANNUAL RATE)	5.8	4.6	3.7	3.2	2.8	5.9	3.1	2.5	
10. PCE (ANNUAL RATE)	5.3	3.7	2.9	2.8	2.5	5.8	2.8	2.3	
11. CORE PCE (ANNUAL RATE)	4.6	3.5	3.1	2.8	2.6	4.5	2.8	2.2	

Note: The figures on each line are medians of 35 forecasters.

Source: Research Department, Federal Reserve Bank of Philadelphia.
Survey of Professional Forecasters, Third Quarter 2022.

SURVEY OF PROFESSIONAL FORECASTERS

Third Quarter 2022

Tables

Note: Data in these tables listed as "actual" are the data that were available to the forecasters when they were sent the survey questionnaire on July 28, 2022; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before August 9, 2022.

TABLE ONE
MAJOR MACROECONOMIC INDICATORS
MEDIAN OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL		FORECAST			ACTUAL		FORECAST			
		2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2021 ANNUAL	2022 ANNUAL	2023 ANNUAL	2024 ANNUAL	2025 ANNUAL
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	24852	25257	25568	25900	26148	26434	22996	25004	26299	N.A.	N.A.
2. GDP PRICE INDEX (2012=100)	34	126.37	127.79	128.96	129.99	130.86	131.69	118.49	126.70	131.36	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	18	N.A.	2451.2	2464.7	2475.5	2477.0	2474.4	2424.6	2439.2	2479.0	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	33	3.6	3.5	3.7	3.8	3.9	4.0	5.4	3.7	3.9	3.9	3.9
5. NONFARM PAYROLL EMPLOYMENT (THOUSANDS)	27	151604	152641	153145	153412	153702	153944	146102	151952	153963	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2017=100)	27	104.5	105.0	105.5	105.9	106.2	106.5	100.0	104.5	106.2	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	27	1.65	1.59	1.55	1.53	1.55	1.53	1.61	1.63	1.55	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	33	1.08	2.50	3.08	3.35	3.35	3.34	0.04	1.74	3.33	3.00	2.80
9. MOODY'S AAA CORP BOND YIELD * (PERCENT)	21	N.A.	4.10	4.44	4.60	4.70	4.75	N.A.	3.98	4.85	N.A.	N.A.
10. MOODY'S BAA CORP BOND YIELD * (PERCENT)	20	N.A.	5.23	5.62	5.71	5.82	5.84	N.A.	4.98	5.84	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	33	2.93	3.01	3.26	3.32	3.33	3.36	1.44	2.79	3.42	3.50	3.56
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	34	19682	19750	19811	19866	19938	20012	19427	19740	19996	20452	20874
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	31	13916.9	13976.7	14033.1	14097.4	14167.4	14224.0	13624.8	13948.2	14165.6	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	2974.9	3002.7	3027.7	3043.1	3052.1	3073.5	2868.5	2995.8	3070.7	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	30	672.9	659.0	646.3	640.2	641.3	646.2	707.7	669.1	645.7	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	30	1290.7	1290.7	1292.7	1298.8	1300.4	1306.9	1348.8	1294.8	1306.0	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	31	2025.7	2032.8	2038.3	2045.4	2051.7	2058.6	2027.8	2031.9	2055.6	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	30	81.6	81.4	79.5	75.5	63.2	59.3	-32.6	107.6	61.4	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	30	-1474.7	-1468.9	-1460.0	-1458.8	-1474.9	-1461.4	-1284.3	-1486.7	-1460.7	N.A.	N.A.

* The historical values of Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2022.

TABLE TWO
MAJOR MACROECONOMIC INDICATORS
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORECASTERS	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	2021	2022	2023	2024
		TO Q3 2022	TO Q4 2022	TO Q1 2023	TO Q2 2023	TO Q3 2023	TO 2022	TO 2023	TO 2024	TO 2025
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	34	6.7	5.0	5.3	3.9	4.4	8.7	5.2	N.A.	N.A.
2. GDP PRICE INDEX (2012=100)	34	4.6	3.7	3.2	2.7	2.6	6.9	3.7	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	18	-0.9	2.2	1.8	0.2	-0.4	0.6	1.6	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	33	-0.1	0.2	0.1	0.1	0.1	-1.7	0.3	0.0	-0.1
5. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE) (AVG MONTHLY CHANGE)	27 27	2.7 342.5	1.3 167.9	0.7 89.0	0.8 96.6	0.6 80.7	4.0 487.5	1.3 167.6	N.A. N.A.	N.A. N.A.
6. INDUSTRIAL PRODUCTION (2017=100)	27	2.1	1.7	1.7	0.9	1.1	4.5	1.7	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	27	-14.2	-9.7	-6.2	5.2	-4.3	1.6	-5.0	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	33	1.42	0.58	0.27	0.00	-0.01	1.70	1.59	-0.33	-0.20
9. MOODY'S AAA CORP BOND YIELD * (PERCENT)	21	N.A.	0.34	0.16	0.10	0.05	N.A.	0.87	N.A.	N.A.
10. MOODY'S BAA CORP BOND YIELD * (PERCENT)	20	N.A.	0.39	0.09	0.10	0.02	N.A.	0.87	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	33	0.08	0.25	0.05	0.01	0.02	1.35	0.63	0.08	0.06
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	34	1.4	1.2	1.1	1.5	1.5	1.6	1.3	2.3	2.1
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	31	1.7	1.6	1.8	2.0	1.6	2.4	1.6	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	29	3.8	3.4	2.1	1.2	2.8	4.4	2.5	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	30	-8.0	-7.5	-3.7	0.7	3.1	-5.5	-3.5	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	30	0.0	0.6	1.9	0.5	2.0	-4.0	0.9	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	31	1.4	1.1	1.4	1.2	1.4	0.2	1.2	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	30	-0.2	-1.9	-4.0	-12.4	-3.9	140.2	-46.2	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	30	5.8	8.9	1.2	-16.1	13.5	-202.4	25.9	N.A.	N.A.

* The historical values of Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Note: Figures for unemployment rate, 3-month Treasury bill rate, Moody's Aaa corporate bond yield, Moody's Baa corporate bond yield, and 10-year Treasury bond yield are changes in these rates, in percentage points. Figures for change in private inventories and net exports are changes in billions of chain-weighted dollars. All others are percentage changes at annual rates.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2022.

TABLE THREE
 MAJOR PRICE INDICATORS
 MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL		FORECAST (Q/Q)			ACTUAL		FORECAST (Q4/Q4)		
		2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2021 ANNUAL	2022 ANNUAL	2023 ANNUAL	2024 ANNUAL
1. CONSUMER PRICE INDEX (ANNUAL RATE)	34	10.5	6.7	4.3	3.6	3.4	3.0	6.7	7.5	3.2	2.5
2. CORE CONSUMER PRICE INDEX (ANNUAL RATE)	33	6.6	5.8	4.6	3.7	3.2	2.8	5.0	5.9	3.1	2.5
3. PCE PRICE INDEX (ANNUAL RATE)	33	7.1	5.3	3.7	2.9	2.8	2.5	5.5	5.8	2.8	2.3
4. CORE PCE PRICE INDEX (ANNUAL RATE)	33	4.4	4.6	3.5	3.1	2.8	2.6	4.6	4.5	2.8	2.2

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2022.

TABLE FOUR
 YIELD SPREADS
 MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL	FORECAST					ACTUAL	FORECAST				
		2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2021 ANNUAL	2022 ANNUAL	2023 ANNUAL	2024 ANNUAL	2025 ANNUAL	
1. TBOND MINUS TBILL (PERCENTAGE POINTS)	32	1.85	0.42	0.19	0.02	0.05	0.10	1.40	1.02	0.10	0.36	0.60	
2. AAA MINUS TBOND (PERCENTAGE POINTS)	21	N.A.	1.20	1.20	1.22	1.22	1.20	N.A.	1.20	1.21	N.A.	N.A.	
3. BAA MINUS TBOND (PERCENTAGE POINTS)	20	N.A.	2.30	2.30	2.39	2.34	2.31	N.A.	2.18	2.31	N.A.	N.A.	
4. BAA MINUS AAA (PERCENTAGE POINTS)	20	N.A.	1.10	1.10	1.09	1.06	1.08	N.A.	0.98	1.09	N.A.	N.A.	

Notes:

TBOND is the rate on 10-year Treasury bonds.
 TBILL is the rate on 3-month Treasury bills.
 AAA is the rate on Moody's Aaa corporate bonds.
 BAA is the rate on Moody's Baa corporate bonds.

The historical values for interest rate spreads for Moody's Aaa and Baa rates are proprietary and therefore not available to the general public.

Each interest rate spread is computed as the median value of the forecasters' spreads. These median values may differ from those computed as the difference between the median values of each interest rate in the spread.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2022.

TABLE FIVE
 ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	TO Q3 2022	TO Q4 2022	TO Q1 2023	TO Q2 2023	TO Q3 2023
NUMBER OF FORECASTERS					
10 OR LESS	3	2	1	2	3
11 TO 20	6	5	6	3	2
21 TO 30	7	7	4	9	11
31 TO 40	6	7	9	7	5
41 TO 50	3	3	2	2	3
51 TO 60	1	0	4	3	3
61 TO 70	0	1	0	0	0
71 TO 80	1	3	1	1	0
81 TO 90	0	0	1	1	1
91 AND OVER	1	0	0	0	0
NOT REPORTING	7	7	7	7	7
MEAN AND MEDIAN					
MEDIAN PROBABILITY	30.00	31.50	38.00	34.00	30.00
MEAN PROBABILITY	33.90	36.03	38.00	36.51	34.13

Note: Total number of forecasters reporting is 28.

Source: Research Department, Federal Reserve Bank of Philadelphia.
 Survey of Professional Forecasters, Third Quarter 2022.

TABLE SIX
 MEAN PROBABILITIES

MEAN PROBABILITY ATTACHED TO POSSIBLE
 CIVILIAN UNEMPLOYMENT RATES:
 (ANNUAL AVERAGE)

	2022	2023	2024	2025
15.0 PERCENT OR MORE	0.00	0.00	0.00	0.00
12.0 TO 14.9 PERCENT	0.00	0.01	0.00	0.00
10.0 TO 11.9 PERCENT	0.00	0.02	0.00	0.05
8.0 TO 9.9 PERCENT	0.04	0.11	0.06	0.29
7.0 TO 7.9 PERCENT	0.11	0.36	1.11	1.50
6.0 TO 6.9 PERCENT	0.52	1.24	3.33	4.59
5.0 TO 5.9 PERCENT	2.85	12.76	16.73	18.14
4.0 TO 4.9 PERCENT	20.75	40.39	39.54	37.83
3.0 TO 3.9 PERCENT	71.58	40.93	36.10	35.02
LESS THAN 3.0 PERCENT	4.15	4.18	3.13	2.61

MEAN PROBABILITY ATTACHED TO POSSIBLE
 PERCENT CHANGES IN REAL GDP:
 (ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2021-2022	2022-2023	2023-2024	2024-2025
16.0 PERCENT OR MORE	0.00	0.00	0.00	0.00
10.0 TO 15.9 PERCENT	0.04	0.04	0.05	0.00
7.0 TO 9.9 PERCENT	0.21	0.32	0.27	0.29
4.0 TO 6.9 PERCENT	2.36	2.04	4.72	5.14
2.5 TO 3.9 PERCENT	11.01	14.07	20.42	28.85
1.5 TO 2.4 PERCENT	44.05	34.39	41.33	38.19
0.0 TO 1.4 PERCENT	33.58	32.02	23.23	19.94
-3.0 TO -0.1 PERCENT	8.00	15.12	7.93	6.12
-6.0 TO -3.1 PERCENT	0.68	1.75	1.73	1.21
-12.0 TO -6.1 PERCENT	0.07	0.25	0.27	0.26
LESS THAN -12.0 PERCENT	0.00	0.00	0.05	0.00

MEAN PROBABILITY ATTACHED TO POSSIBLE
 PERCENT CHANGES IN GDP PRICE INDEX:
 (ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2021-2022	2022-2023
4.0 PERCENT OR MORE	82.42	23.23
3.5 TO 3.9 PERCENT	10.65	22.67
3.0 TO 3.4 PERCENT	2.46	20.33
2.5 TO 2.9 PERCENT	0.96	16.96
2.0 TO 2.4 PERCENT	1.58	9.23
1.5 TO 1.9 PERCENT	1.73	5.84
1.0 TO 1.4 PERCENT	0.19	0.97
0.5 TO 0.9 PERCENT	0.00	0.46
0.0 TO 0.4 PERCENT	0.00	0.14
LESS THAN 0.0 PERCENT	0.00	0.14

Source: Research Department, Federal Reserve Bank of Philadelphia.
 Survey of Professional Forecasters, Third Quarter 2022.

TABLE SEVEN
 MEAN PROBABILITY OF CORE CPI AND CORE PCE INFLATION (Q4/Q4)

MEAN PROBABILITY ATTACHED TO CORE CPI INFLATION:

	21Q4 TO 22Q4	22Q4 TO 23Q4
	-----	-----
4.0 PERCENT OR MORE	83.22	13.66
3.5 TO 3.9 PERCENT	10.14	22.91
3.0 TO 3.4 PERCENT	2.64	25.19
2.5 TO 2.9 PERCENT	0.25	22.79
2.0 TO 2.4 PERCENT	1.25	9.45
1.5 TO 1.9 PERCENT	0.71	3.75
1.0 TO 1.4 PERCENT	1.25	1.63
0.5 TO 0.9 PERCENT	0.36	0.36
0.0 TO 0.4 PERCENT	0.18	0.22
LESS THAN 0.0 PERCENT	0.00	0.05

MEAN PROBABILITY ATTACHED TO CORE PCE INFLATION:

	21Q4 TO 22Q4	22Q4 TO 23Q4
	-----	-----
4.0 PERCENT OR MORE	75.05	11.62
3.5 TO 3.9 PERCENT	15.44	17.33
3.0 TO 3.4 PERCENT	4.49	22.54
2.5 TO 2.9 PERCENT	1.20	22.62
2.0 TO 2.4 PERCENT	0.30	17.26
1.5 TO 1.9 PERCENT	0.74	5.84
1.0 TO 1.4 PERCENT	1.85	1.78
0.5 TO 0.9 PERCENT	0.74	0.53
0.0 TO 0.4 PERCENT	0.19	0.32
LESS THAN 0.0 PERCENT	0.00	0.17

Source: Research Department, Federal Reserve Bank of Philadelphia.
 Survey of Professional Forecasters, Third Quarter 2022.

TABLE EIGHT
 LONG-TERM (5-YEAR AND 10-YEAR) INFLATION FORECASTS

ANNUAL AVERAGE OVER THE NEXT 5 YEARS: 2022-2026
 =====

CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	2.00	MINIMUM	1.50
LOWER QUARTILE	3.30	LOWER QUARTILE	2.70
MEDIAN	3.50	MEDIAN	3.00
UPPER QUARTILE	3.89	UPPER QUARTILE	3.21
MAXIMUM	6.80	MAXIMUM	4.90
MEAN	3.62	MEAN	2.97
STD. DEVIATION	0.84	STD. DEVIATION	0.64
N	28	N	28
MISSING	7	MISSING	7

ANNUAL AVERAGE OVER THE FOLLOWING 5 YEARS: 2027-2031
 =====

CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	1.27	MINIMUM	0.96
LOWER QUARTILE	1.96	LOWER QUARTILE	1.70
MEDIAN	2.12	MEDIAN	2.04
UPPER QUARTILE	2.50	UPPER QUARTILE	2.11
MAXIMUM	2.93	MAXIMUM	3.00
MEAN	2.12	MEAN	1.96
STD. DEVIATION	0.40	STD. DEVIATION	0.38
N	27	N	27
MISSING	8	MISSING	8

ANNUAL AVERAGE OVER THE NEXT 10 YEARS: 2022-2031
 =====

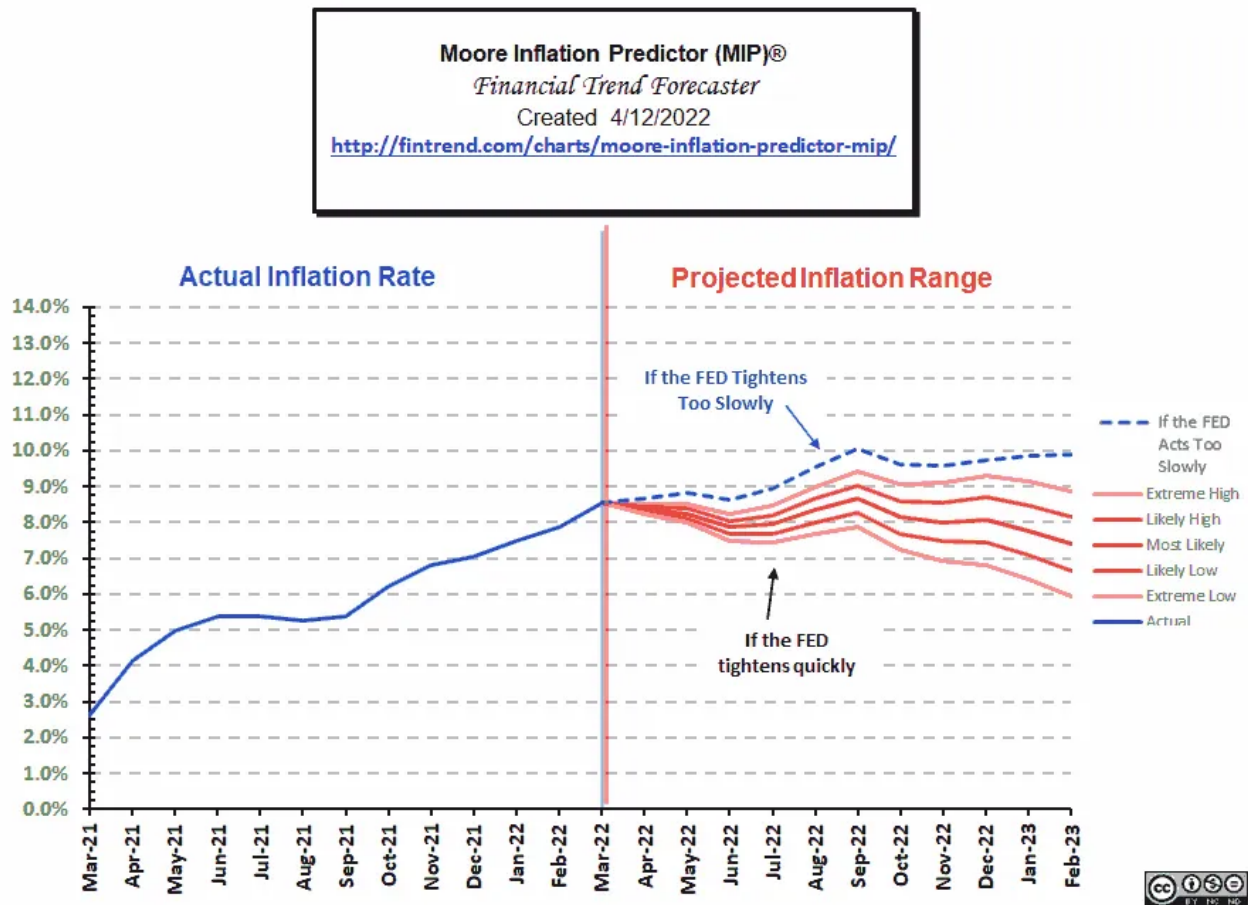
CPI INFLATION RATE		PCE INFLATION RATE	
-----		-----	
MINIMUM	2.10	MINIMUM	1.80
LOWER QUARTILE	2.60	LOWER QUARTILE	2.20
MEDIAN	2.80	MEDIAN	2.45
UPPER QUARTILE	3.20	UPPER QUARTILE	2.60
MAXIMUM	4.50	MAXIMUM	3.60
MEAN	2.89	MEAN	2.48
STD. DEVIATION	0.49	STD. DEVIATION	0.42
N	27	N	27
MISSING	8	MISSING	8

Note: The summary statistics for each forecast horizon are computed on a sample of panelists that may differ from one horizon to the next. The usual identity linking the 10-year horizon to the two underlying five-year horizons may not hold in the results.

Source: Research Department, Federal Reserve Bank of Philadelphia. Survey of Professional Forecasters, Third Quarter 2022.

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Inflation Forecast: Moore Inflation Predictor (MIP) ©



Inflation Forecast: Moore Inflation Predictor (MIP) ©

Forecasting Inflation: Using the Moore Inflation Predictor©

By Tim McMahon, editor

[Skip to Current Inflation Forecast](#)

The Moore Inflation Predictor© (MIP) is a highly accurate graphical representation designed to forecast the inflation rate. By watching the turning points, we can profit from inflation hedges (like Gold, Real Estate, and Energy Producers) when the inflation rate is trending up and from Bonds when the inflation rate is trending down. See the Current Commentary below.

In addition, the Moore Inflation Predictor forecast can be used to judge whether to lock in a mortgage rate or wait a month or two for a better rate since interest rates tend to track inflation rates fairly closely.

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Inflation Forecast: Moore Inflation Predictor (MIP) ©

Inflation has had a wild ride over the last 20 years. In July 2008, inflation was at 5.6%, but only a year later, it had fallen to a negative **-2.10%**, a fall of 7.7% in twelve months. Six months later, by January 2010, it was back at 2.63%, but it spent most of the end of 2010 around 1.15%, coinciding with a low in mortgage rates of about 4.55% in November. Due to QE1 & 2, by August 2011, the inflation rate had worked its way up to 3.77%, but from then through July 2012, both inflation and mortgage rates fell, with Inflation hitting 1.41% and mortgage rates falling below 3%. From 2017 through early 2020 you would think the Central Planners actually knew what they were doing as inflation hovered around their 2% target. But then in May of 2020, annual inflation bottomed at 0.12%, and 20 months later it was at 7.48%.

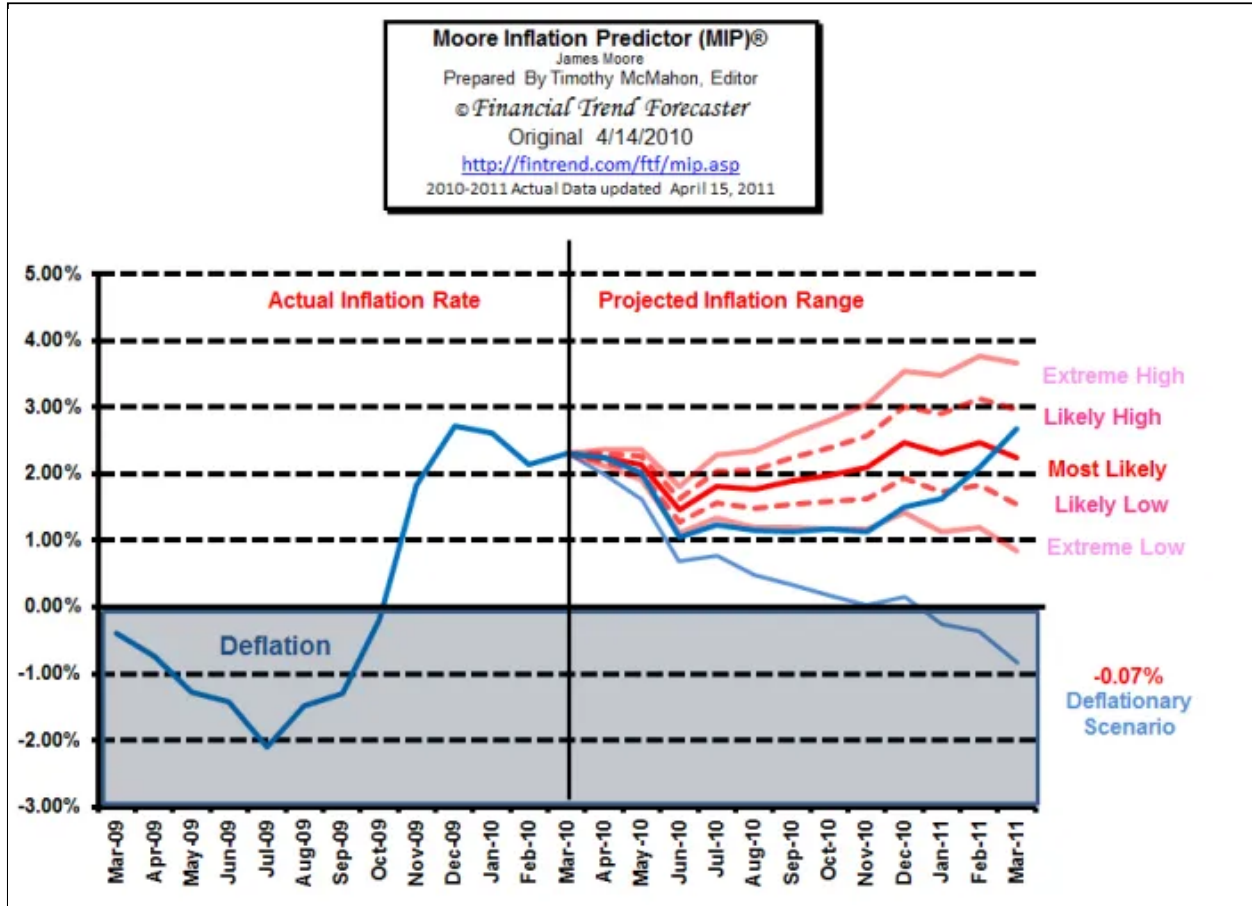
You would think forecasting the inflation rate would be difficult under those conditions, but the Moore Inflation Predictor did fairly well (except on a couple of rare occasions).

In the following chart, we can see how the Moore Inflation predictor has done over some of the crazy years we've just been through. The first chart is from April 2010 based on the March 2010 data. This chart was created in the midst of a Deflationary panic (thus the hypothetical thin blue line). Even though there was a sharp drop in the inflation rate, the MIP did a good job of forecasting it, as the actual (thick blue line) shows. The actual inflation rate tracked the extreme low almost exactly and held it consistently for nine months. In the tenth month, inflation moved back into the most likely territory.

[Jump to Current Inflation Forecast](#)

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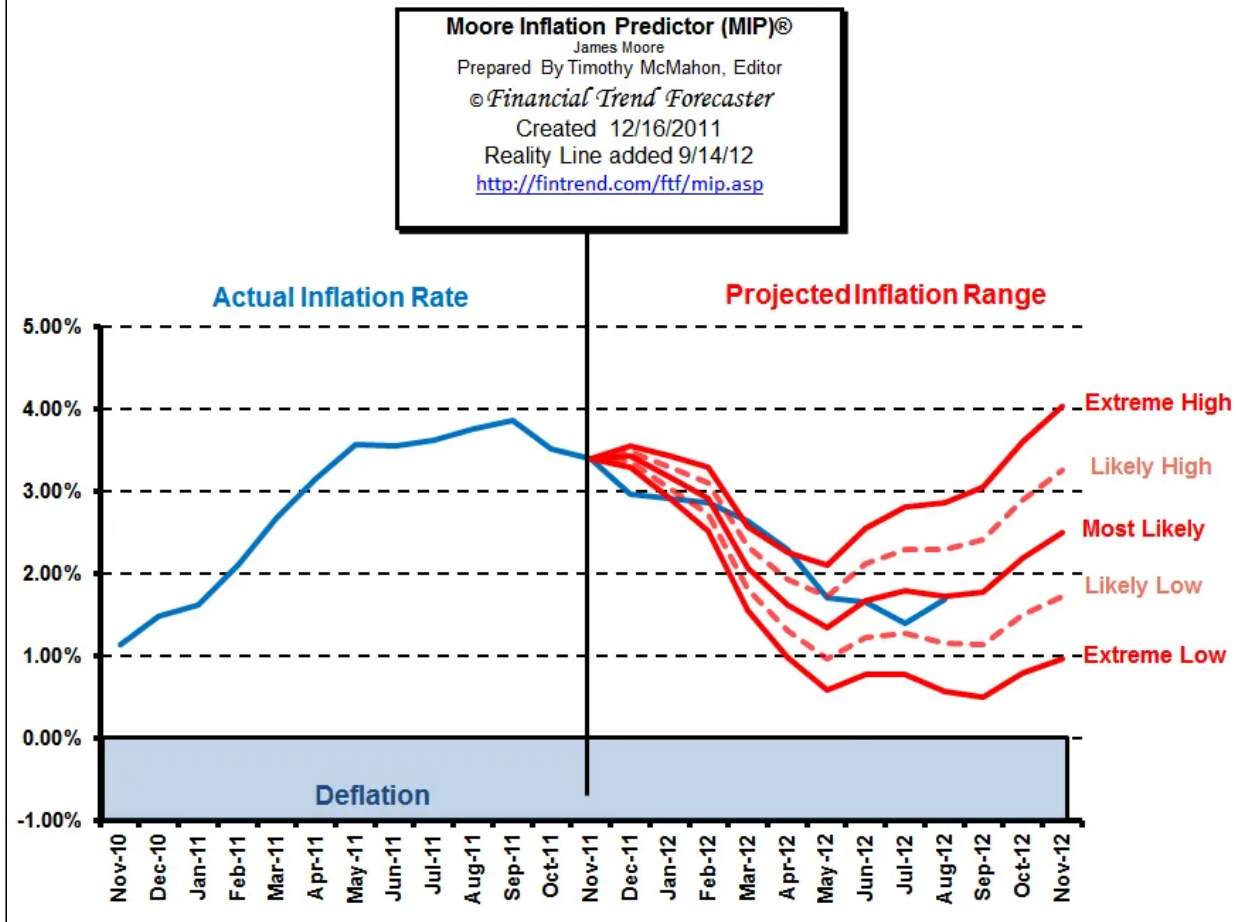
Inflation Forecast: Moore Inflation Predictor (MIP) ©



The next chart is from December 2011, with the blue reality line added ten months later in September.

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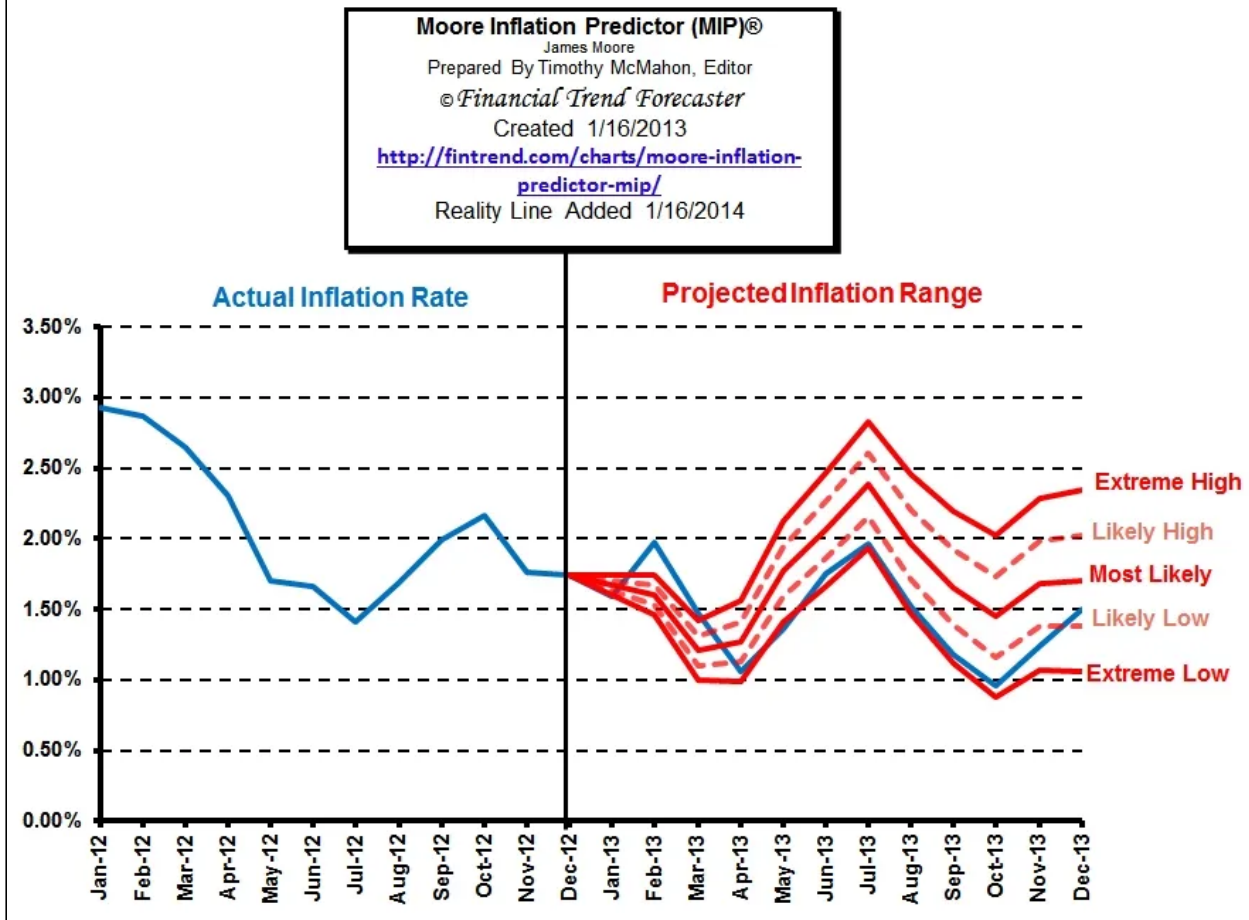
Inflation Forecast: Moore Inflation Predictor (MIP) ©



Here we have a chart from January 2013 where we can see the performance over the year. We can see that the actual inflation rate has tracked the extreme low prediction almost precisely, which fits well with the fact that Inflation has been lower than most economists and even the FED have expected. The one exception is Robert Prechter, who has been touting Deflationary pressures. You can get Robert Prechter's 90-page deflation survival guide free [here](#).

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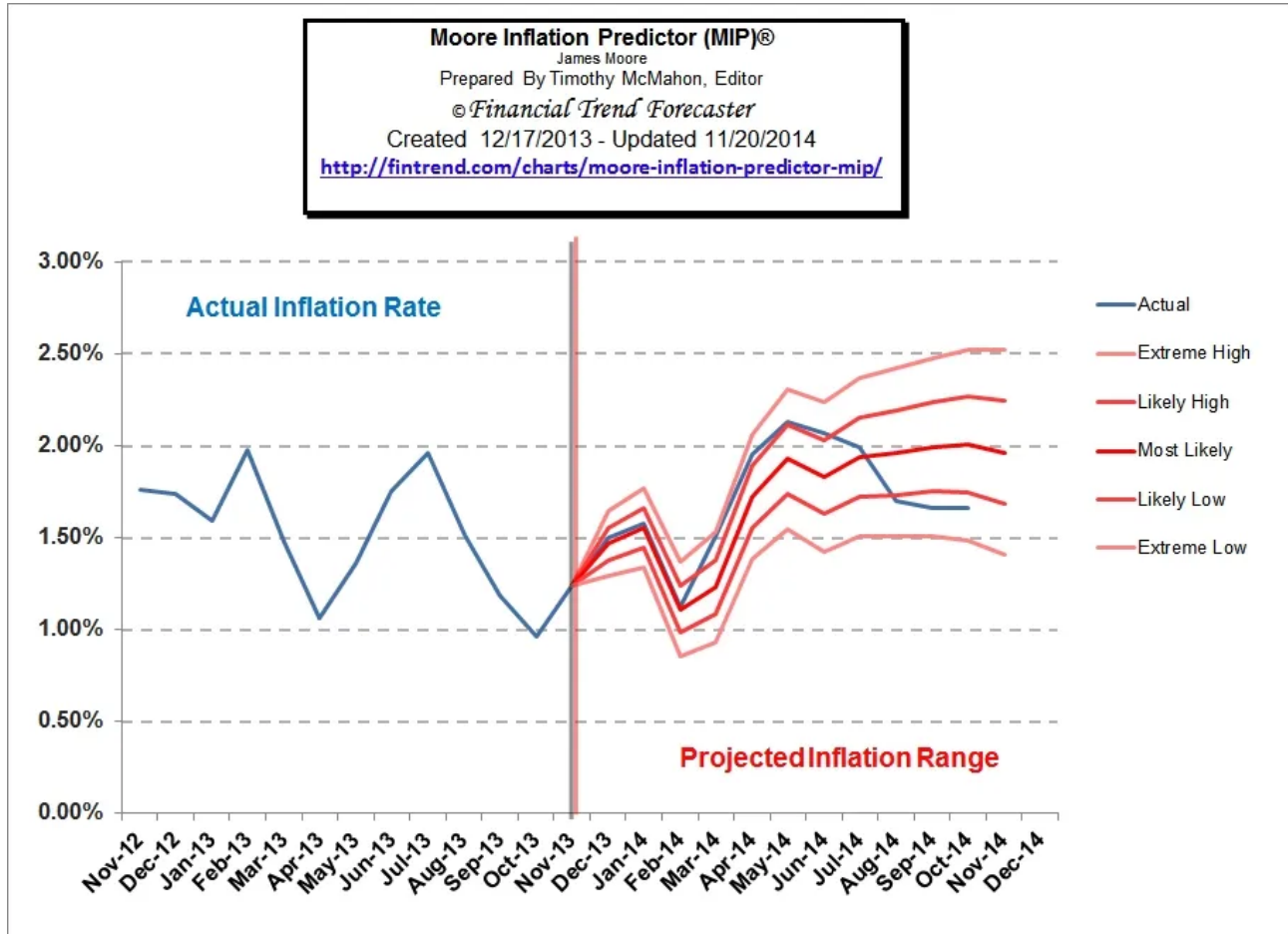
Inflation Forecast: Moore Inflation Predictor (MIP) ©



This chart is from December 2013, with the blue reality data line added through October.

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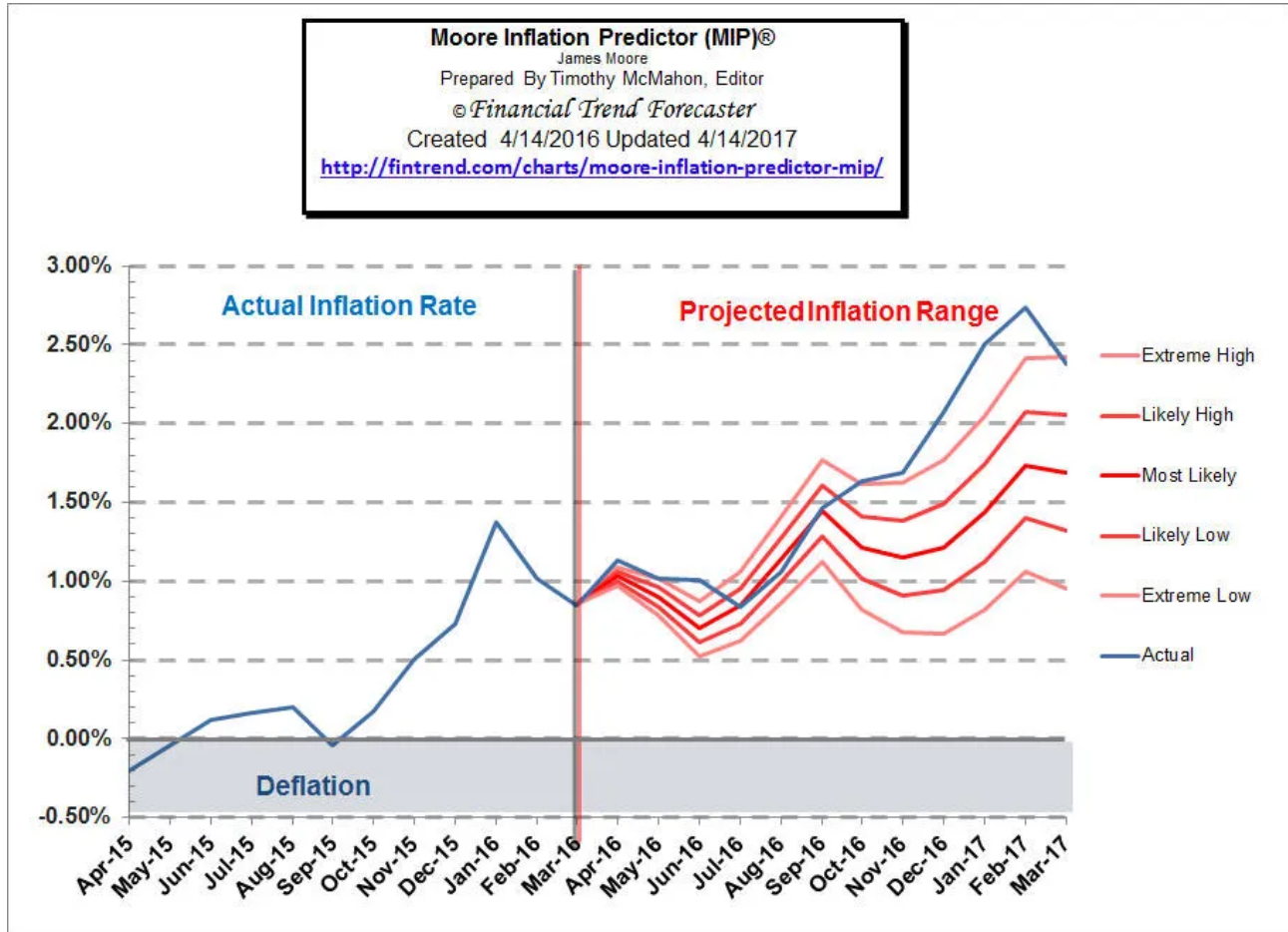
Inflation Forecast: Moore Inflation Predictor (MIP) ©



This chart shows the projection from March 2014 with the reality line through March 2017. For the first six months, the MIP did pretty well, but then the actual inflation rate took off like a rocket zooming above our extreme high projection and then, at the last moment falling back into the zone.

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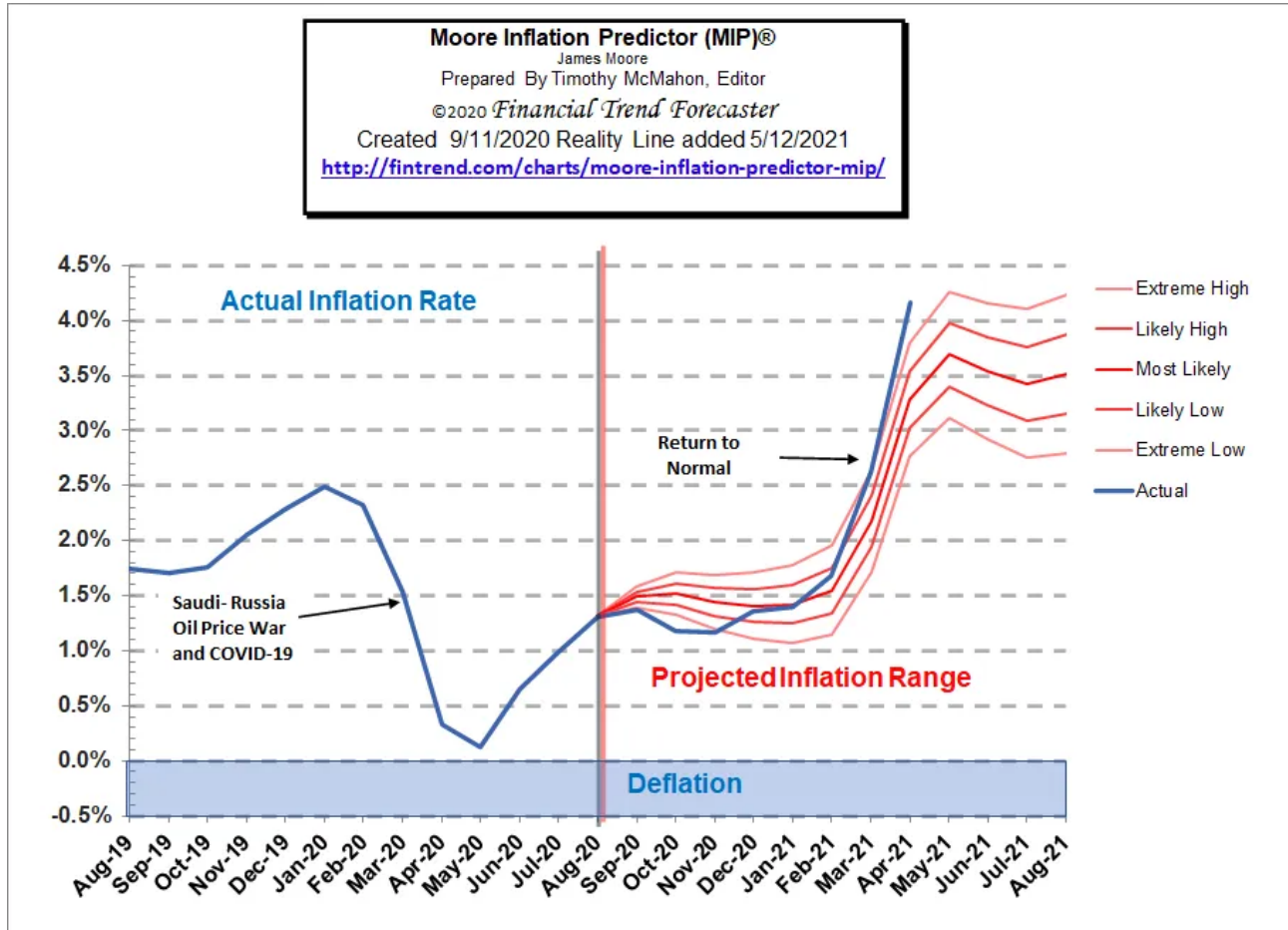
Inflation Forecast: Moore Inflation Predictor (MIP) ©



Back in September 2020, we created this chart projecting a massive spike coming in March and April. Up through March, the projection was pretty close, with December, January, and February tracking almost exactly on the “most likely” line and March on the extreme high line. But April overshoot even our high projections.

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Inflation Forecast: Moore Inflation Predictor (MIP) ©



To see how well the MIP has done in predicting inflation see some other previous MIP inflation forecasts with a reality line added.

Don't miss next month's ***MIP Inflation Forecast!***

Sign up for our Free E-zine, and we will notify you when the new Charts are released!

Yes, Notify Me when the new inflation forecast or article comes out!

Updated May 11, 2022

Current Inflation Situation

The **April CPI is 289.109** up sharply from **February's** Index of **283.716** and from **281.148** in **January**. That increase resulted in a **0.56%** increase in **April** after a **1.34%** increase in **March** and **0.91%** increase for **February** on top of the **0.84%** increase for the month of **January**. Typically December is a very low inflation month and January is higher but this was the largest January since 1990.

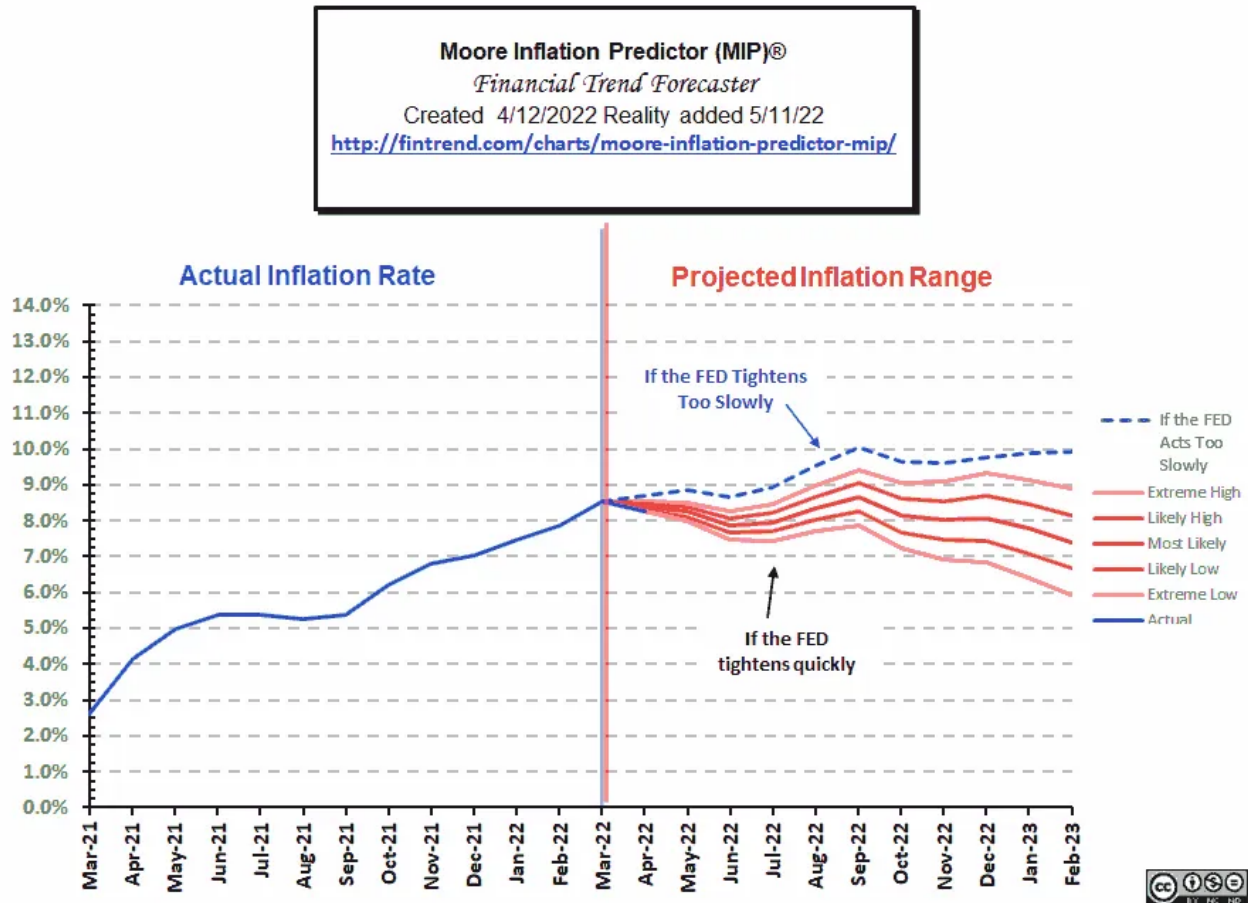
It's hard to imagine now, but **ANNUAL** inflation in **December 2020** was only **1.36%** and in **January 2021** was only **1.40%** (for the entire year), so **March 2022** inflation was almost as

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Inflation Forecast: Moore Inflation Predictor (MIP) ©

much as the entire year from **February 2020** through **January 2021**.

But in April the government released some of the strategic oil reserves which artificially drove oil prices down, lowering the inflation rate temporarily and putting the inflation rate at the low end of our projection.



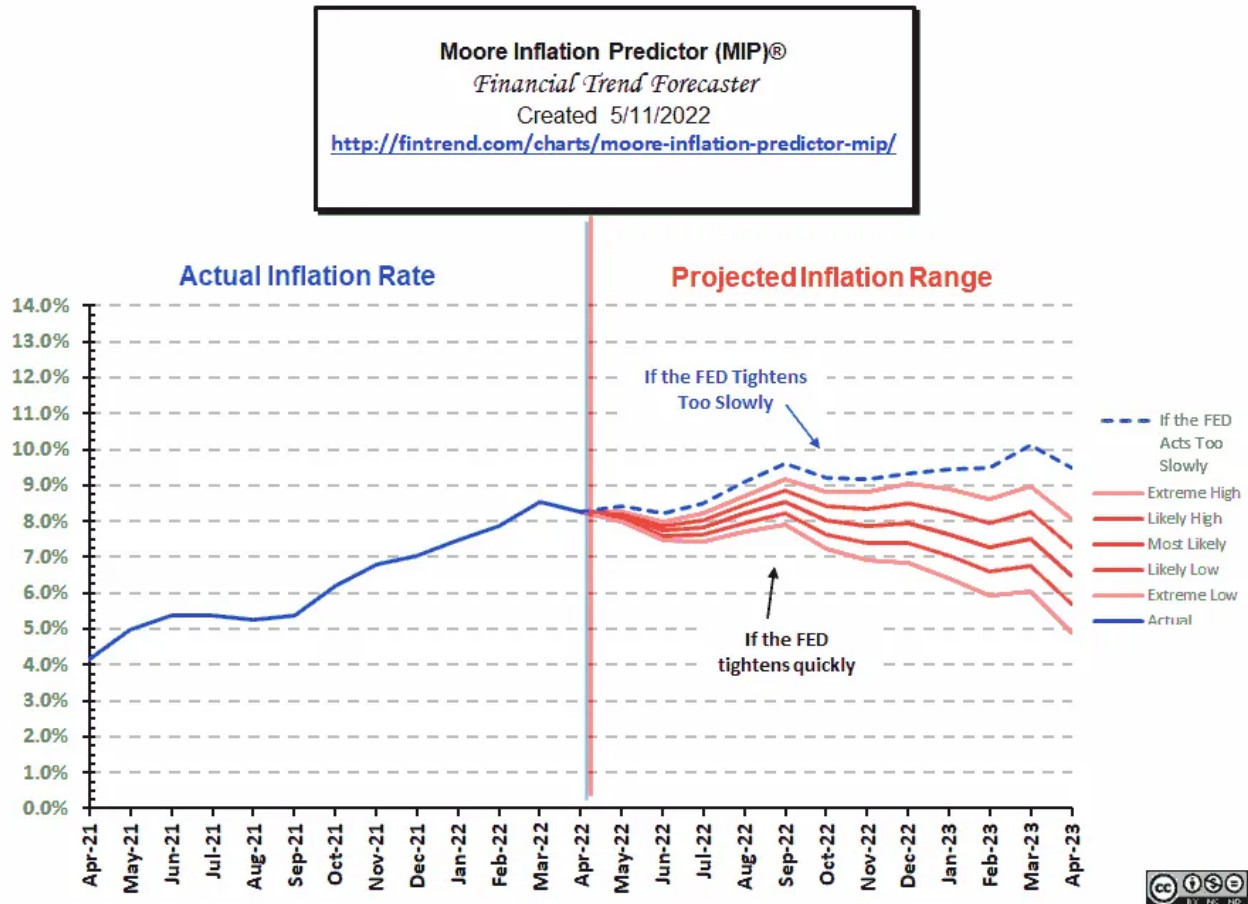
Current MIP Projection

At its March meeting, the Fed signaled that it will be reducing its massive bond holdings at a maximum pace of \$95 billion a month, in an effort to cool inflation. This is set to begin in May.

At first glance, this chart doesn't look too bad. After all, it is declining. But when you look closer you realize that a year from now the best we can hope for is 5% inflation and 9% isn't out of the realm of possibility.

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Inflation Forecast: Moore Inflation Predictor (MIP) ©



So even if the FED is right that is still almost **TRIPLE** the FED's target 2% range. Federal Reserve Bank of Cleveland President Loretta Mester doesn't expect inflation to get back down to the target range for at least another year. And the MIP says even that is a pipe dream.

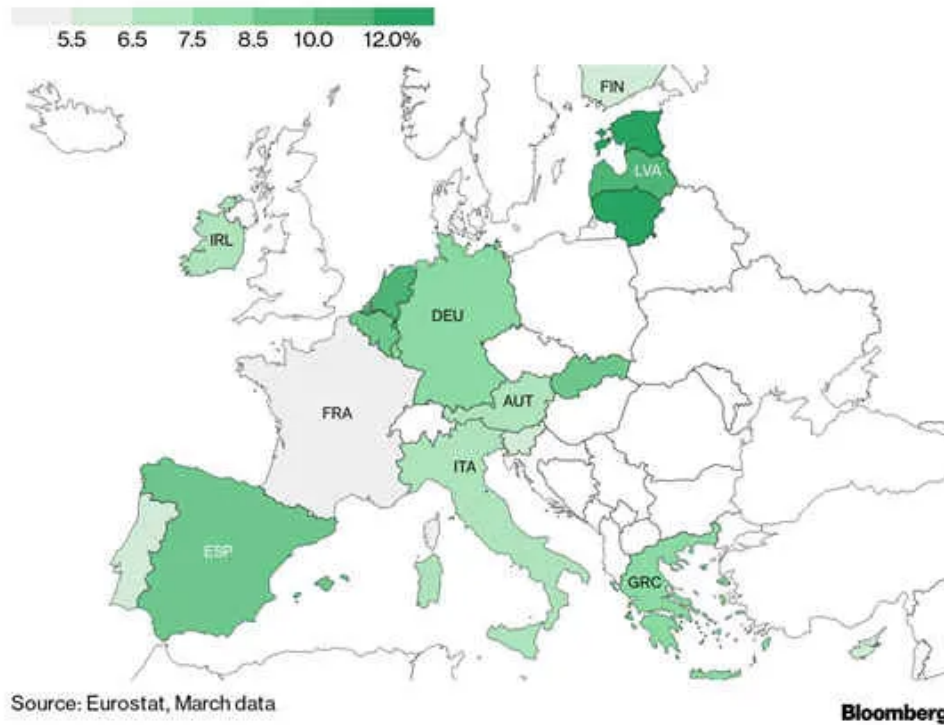
It isn't just our Central Bank that has been printing money for too long European Central Banks have followed our lead and are now in the same situation as we are. Ex-Fed Vice Chair Richard Clarida Says FED Rates Must Rise to at Least 3.5% to get inflation under control. That is a long way from the current 1/3rd of a percent. Jeffrey Tucker tells us that "real short-term rates need to be positive," i.e., you can't be investing at a lower rate of return than inflation. So if inflation somehow magically falls to 5%, interest rates have to be more than that! So even 3.5% is too low. Other former FED officials are also saying that the FED is probably not doing enough and didn't act quickly enough to prevent major problems.

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Inflation Forecast: Moore Inflation Predictor (MIP) ©

Price Watch

The euro area is enduring the worst bout of inflation in its history



Distribution Expense

	Allocator	Corporate Amount	Minnesota Allocator Amount	Minnesota Amount	Michigan Allocator Amount	Michigan Amount	Allocator Check
870	ALL	-	100.0000%	-	0.0000%	-	100.0000%
871	ALL	400	100.0000%	400	0.0000%	-	100.0000%
872	System Sales	-	100.0000%	-	0.0000%	-	100.0000%
873	System Sales	-	100.0000%	-	0.0000%	-	100.0000%
874	376 & 380	4,329	100.0000%	4,329	0.0000%	-	100.0000%
875	378	336	100.0000%	336	0.0000%	-	100.0000%
877	379	-	100.0000%	-	0.0000%	-	100.0000%
878	381, 383, 385	491	100.0000%	491	0.0000%	-	100.0000%
879	381, 383, 385	78	100.0000%	78	0.0000%	-	100.0000%
880	ALL	4,057	100.0000%	4,057	0.0000%	-	100.0000%
881	ALL	27	100.0000%	27	0.0000%	-	100.0000%
		<u>9,717</u>		<u>9,717</u>		<u>-</u>	
885	ALL	23	100.0000%	23	0.0000%	-	100.0000%
886	375	-	-	-	-	-	-
887	376	1,085	100.0000%	1,085	0.0000%	-	100.0000%
888	System Sales	-	100.0000%	-	0.0000%	-	100.0000%
889	378	386	100.0000%	386	0.0000%	-	100.0000%
891	379	253	100.0000%	253	0.0000%	-	100.0000%
892	380	1,433	100.0000%	1,433	0.0000%	-	100.0000%
893	381, 383, 385	986	100.0000%	986	0.0000%	-	100.0000%
894	ALL	101	100.0000%	101	0.0000%	-	100.0000%
		<u>4,266</u>		<u>4,266</u>		<u>-</u>	
Total		<u>13,983</u>		<u>13,983</u>		<u>-</u>	

100.0000%

	Allocator	Corporate Amount	Minnesota Allocator Amount	Minnesota Amount	Michigan Allocator Amount	Michigan Amount	Allocator Check	Allocator
	ALL	-	100.0000%	-	0.0000%	-	100.0000%	ALL
	ALL	412	100.0000%	412	0.0000%	-	100.0000%	ALL
	System Sales	-	100.0000%	-	0.0000%	-	100.0000%	System Sales
	System Sales	-	100.0000%	-	0.0000%	-	100.0000%	System Sales
	376 & 380	4,881	100.0000%	4,881	0.0000%	-	100.0000%	376 & 380
	378	350	100.0000%	350	0.0000%	-	100.0000%	378
	379	-	100.0000%	-	0.0000%	-	100.0000%	379
	381, 383, 385	509	100.0000%	509	0.0000%	-	100.0000%	381, 383, 385
	381, 383, 385	81	100.0000%	81	0.0000%	-	100.0000%	381, 383, 385
	ALL	4,271	100.0000%	4,271	0.0000%	-	100.0000%	ALL
	ALL	29	100.0000%	29	0.0000%	-	100.0000%	ALL
		<u>10,532</u>		<u>10,532</u>		<u>-</u>		
	ALL	25	100.0000%	25	0.0000%	-	100.0000%	ALL
	375	-	-	-	-	-	-	375
	376	1,336	100.0000%	1,336	0.0000%	-	100.0000%	376
	System Sales	-	100.0000%	-	0.0000%	-	100.0000%	System Sales
	378	407	100.0000%	407	0.0000%	-	100.0000%	378
	379	439	100.0000%	439	0.0000%	-	100.0000%	379
	380	1,497	100.0000%	1,497	0.0000%	-	100.0000%	380
	381, 383, 385	1,046	100.0000%	1,046	0.0000%	-	100.0000%	381, 383, 385
	ALL	108	100.0000%	108	0.0000%	-	100.0000%	ALL
		<u>4,857</u>		<u>4,857</u>		<u>-</u>		
Total		<u>15,390</u>		<u>15,390</u>		<u>-</u>		Total

100.0000%

Corporate Amount	Minnesota Allocator	Minnesota Amount	Michigan Allocator	Michigan Amount	Allocator Check
-	100.0000%	-	0.0000%	-	100.0000%
426	100.0000%	426	0.0000%	-	100.0000%
-	100.0000%	-	0.0000%	-	100.0000%
-	100.0000%	-	0.0000%	-	100.0000%
5,114	100.0000%	5,114	0.0000%	-	100.0000%
361	100.0000%	361	0.0000%	-	100.0000%
-	100.0000%	-	0.0000%	-	100.0000%
606	100.0000%	606	0.0000%	-	100.0000%
84	100.0000%	84	0.0000%	-	100.0000%
5,304	100.0000%	5,304	0.0000%	-	100.0000%
29	100.0000%	29	0.0000%	-	100.0000%
<u>11,925</u>		<u>11,925</u>		<u>-</u>	
26	100.0000%	26	0.0000%	-	100.0000%
1,378	100.0000%	1,378	0.0000%	-	100.0000%
-	100.0000%	-	0.0000%	-	100.0000%
911	100.0000%	911	0.0000%	-	100.0000%
453	100.0000%	453	0.0000%	-	100.0000%
4,569	100.0000%	4,569	0.0000%	-	100.0000%
1,780	100.0000%	1,780	0.0000%	-	100.0000%
112	100.0000%	112	0.0000%	-	100.0000%
<u>9,228</u>		<u>9,228</u>		<u>-</u>	
<u>21,153</u>		<u>21,153</u>		<u>-</u>	
		100.0000%		0.0000%	