



# TOWN OF FOUNTAIN HILLS

## **Investment Performance Review For the Quarter Ended March 31, 2020**

Client Management Team

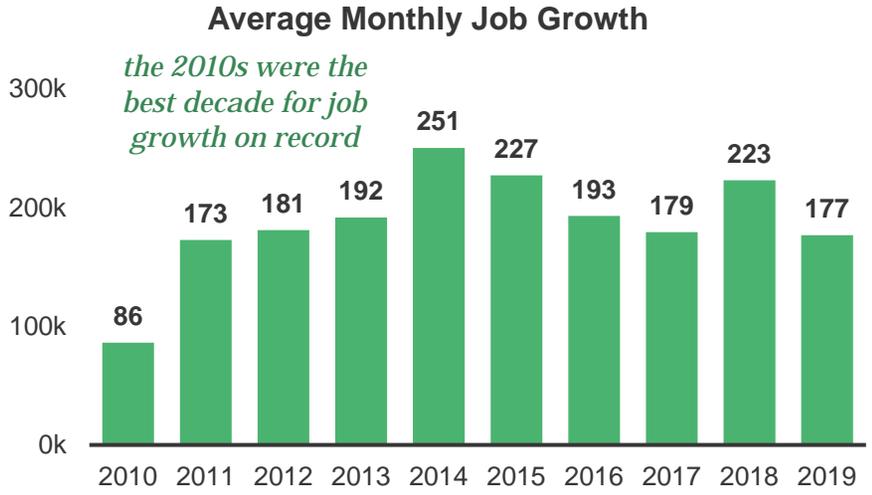
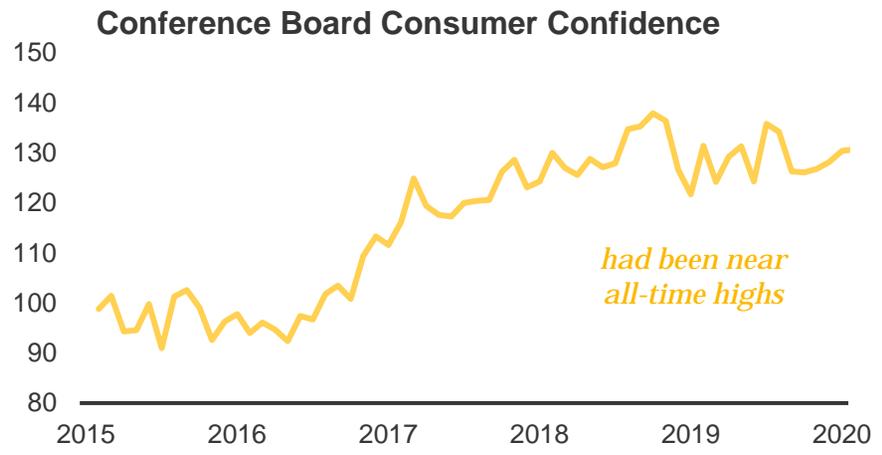
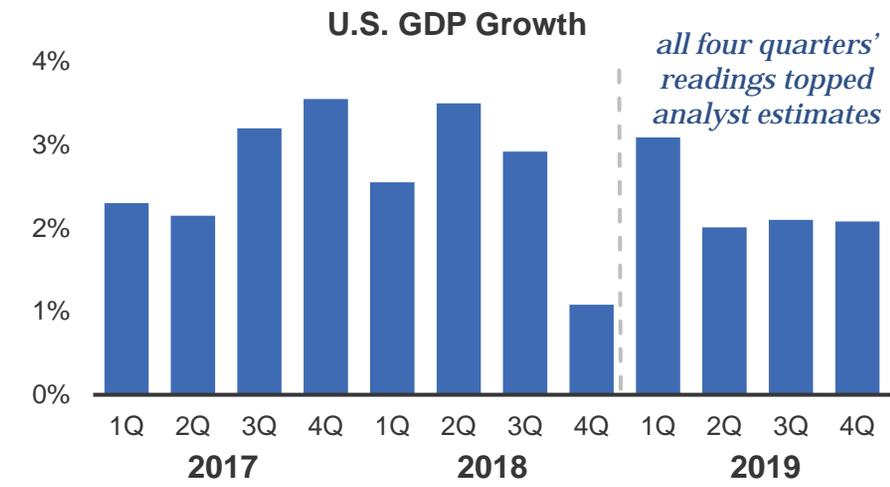
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## Domestic Data Was Strong Prior to Coronavirus Outbreak



Source: Bloomberg, latest data available as of 2/29/2020.

## COVID-19: A Three-Pronged Crisis



### **Health Crisis Pandemic**

*The rapidly spreading coronavirus is overwhelming healthcare facilities around the world as the number of cases and deaths related to the virus continue to grow.*



### **Effects on the Economy**

*With businesses forced to close their doors and consumers stuck at home “social distancing,” the economy has come to a near standstill over a very short period of time.*

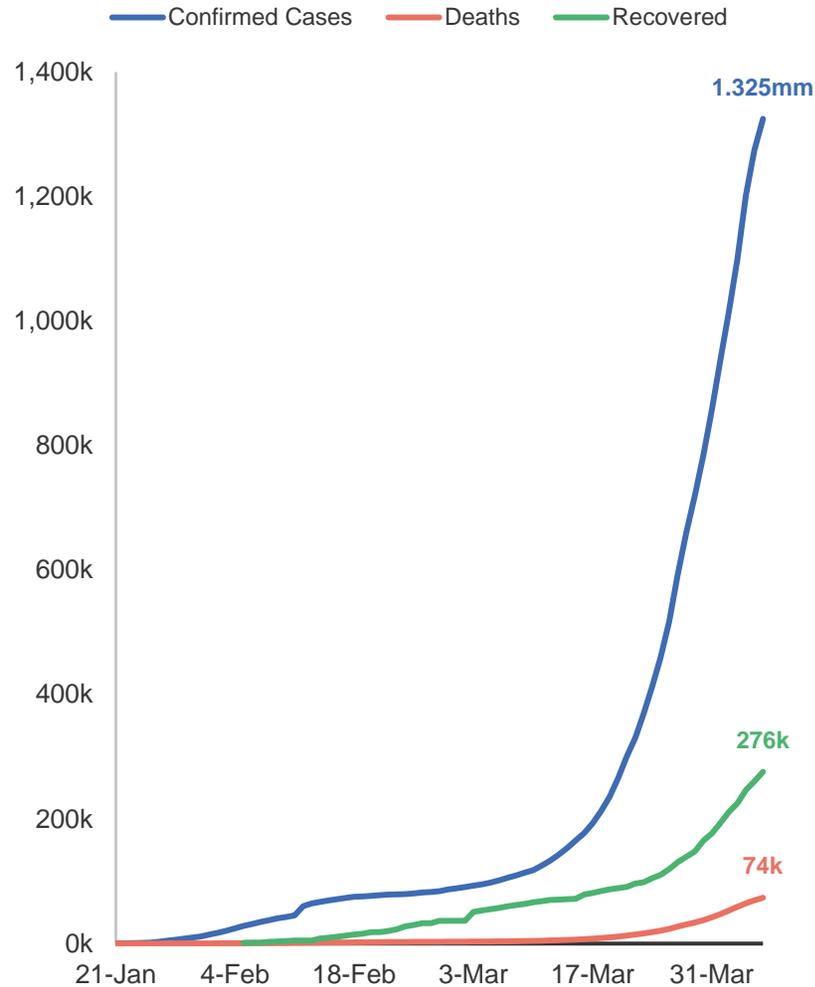


### **Effects on Financial Markets**

*Treasury yields and stock prices have plummeted while credit spreads and volatility have soared in reaction to the uncertainty created by the pandemic.*

## COVID-19 Pandemic Spans the Globe and Is Still Growing

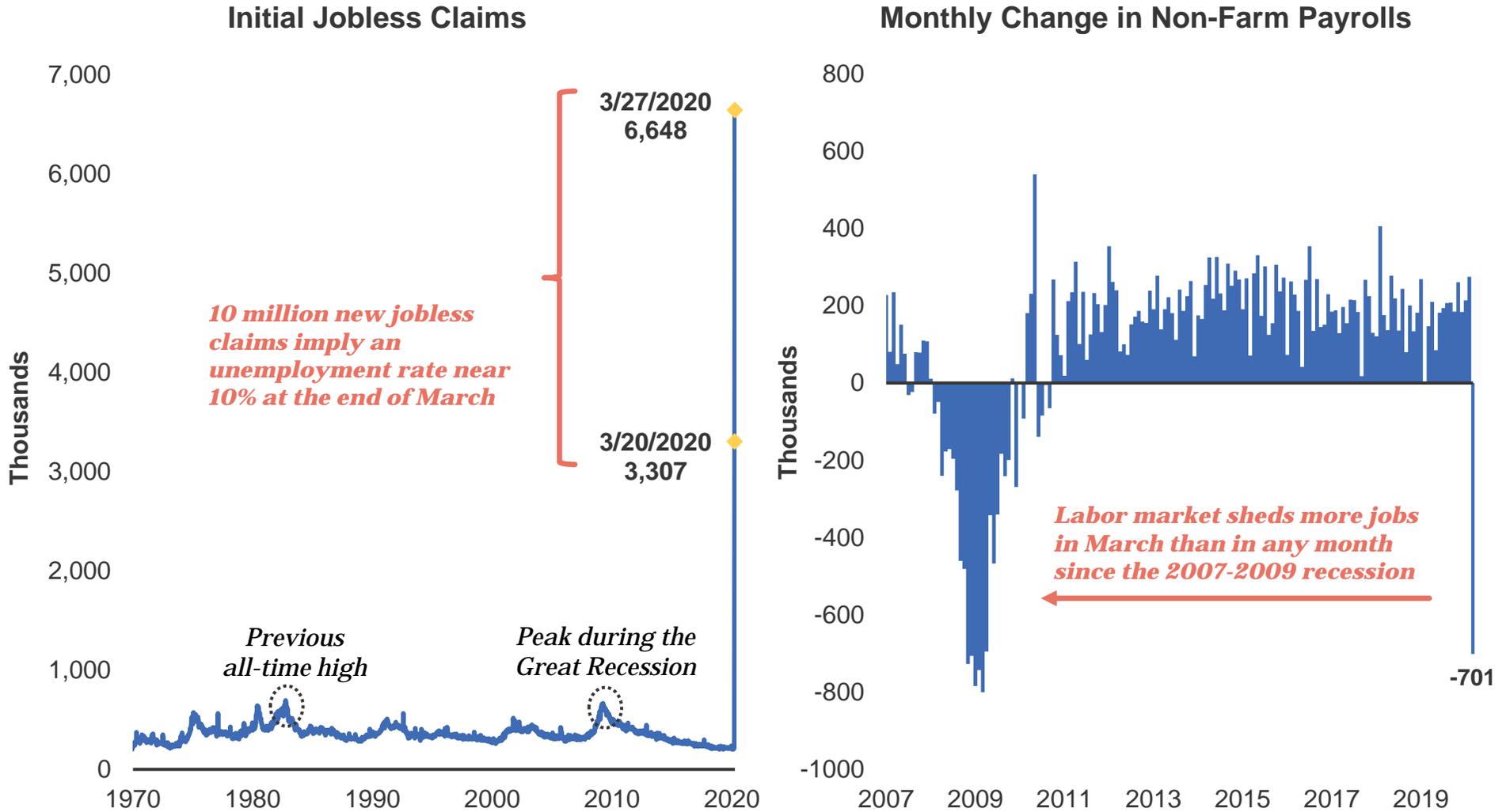
### Coronavirus Cases



Rank*	Country	# Cases	# Deaths	Death Rate
1	United States	352,546	10,389	2.9%
2	China	82,665	3,335	4.0%
3	Japan	3,654	85	2.3%
4	Germany	101,558	1,662	1.6%
5	India	4,778	136	2.8%
6	United Kingdom	52,274	5,383	10.3%
7	France	98,956	8,926	9.0%
8	Italy	132,547	16,523	12.5%
10	Canada	15,940	294	1.8%
12	South Korea	10,284	186	1.8%
13	Spain	135,032	13,169	9.8%
14	Australia	5,797	40	0.7%
15	Mexico	2,143	94	4.4%
20	Switzerland	21,652	762	3.5%
25	Iran	60,500	3,739	6.2%

Source: Bloomberg data compiled from Johns Hopkins University, the World Health Organization, and other sources.  
 \*By size of economy, estimates by IMF for 2019. Data as of 4/6/2020.

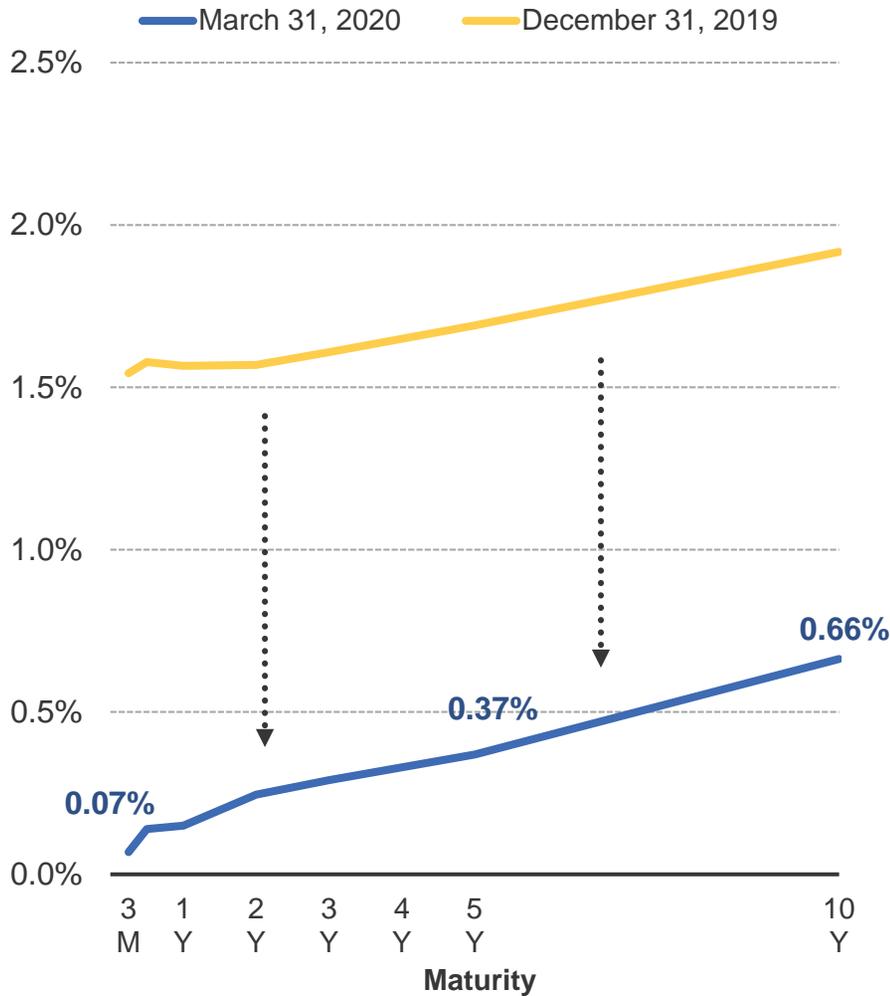
## U.S. Economy Posts Massive Job Losses in March



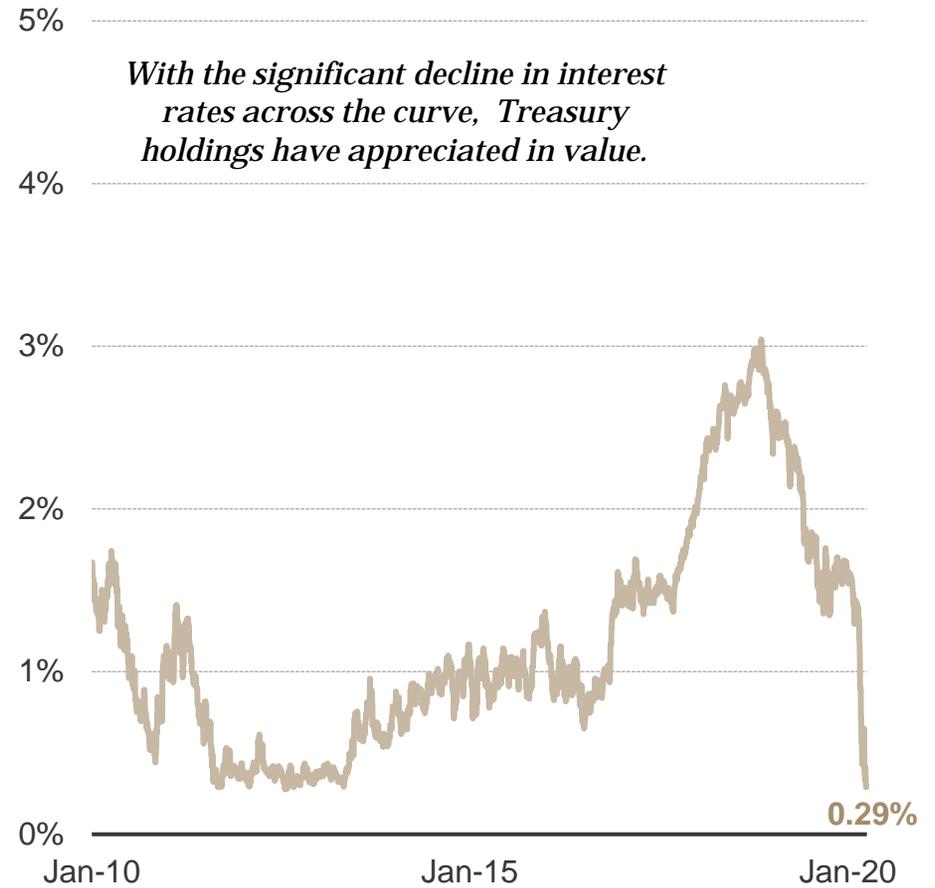
Source: Bloomberg, as of 4/3/2020. Data is seasonally adjusted.

## Interest Rates Plunge; Likely to Stay Ultra-Low Through the Crisis

### US Treasury Yield Curve



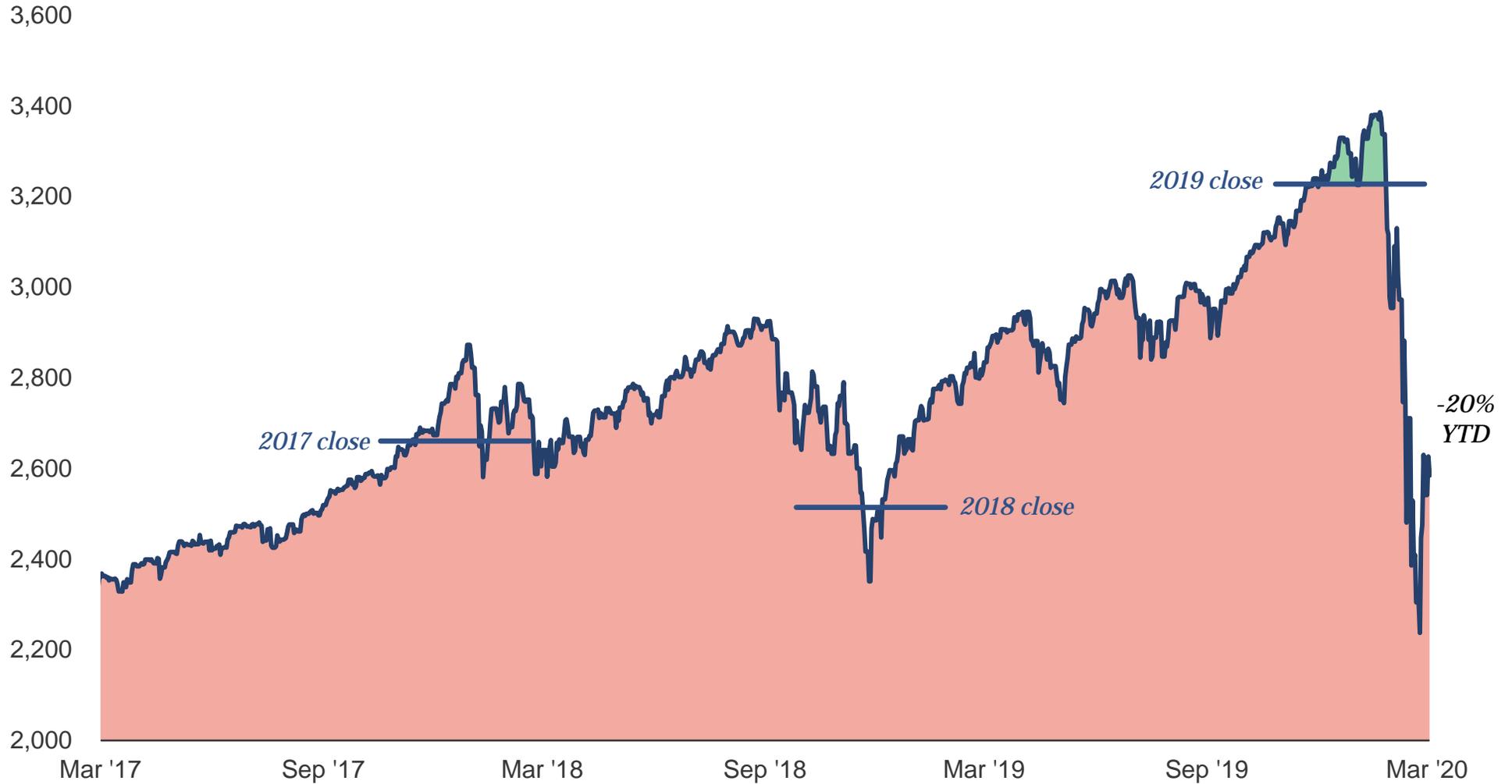
### 3-Year Treasury Yield



Source: Bloomberg as of 3/31/2020.

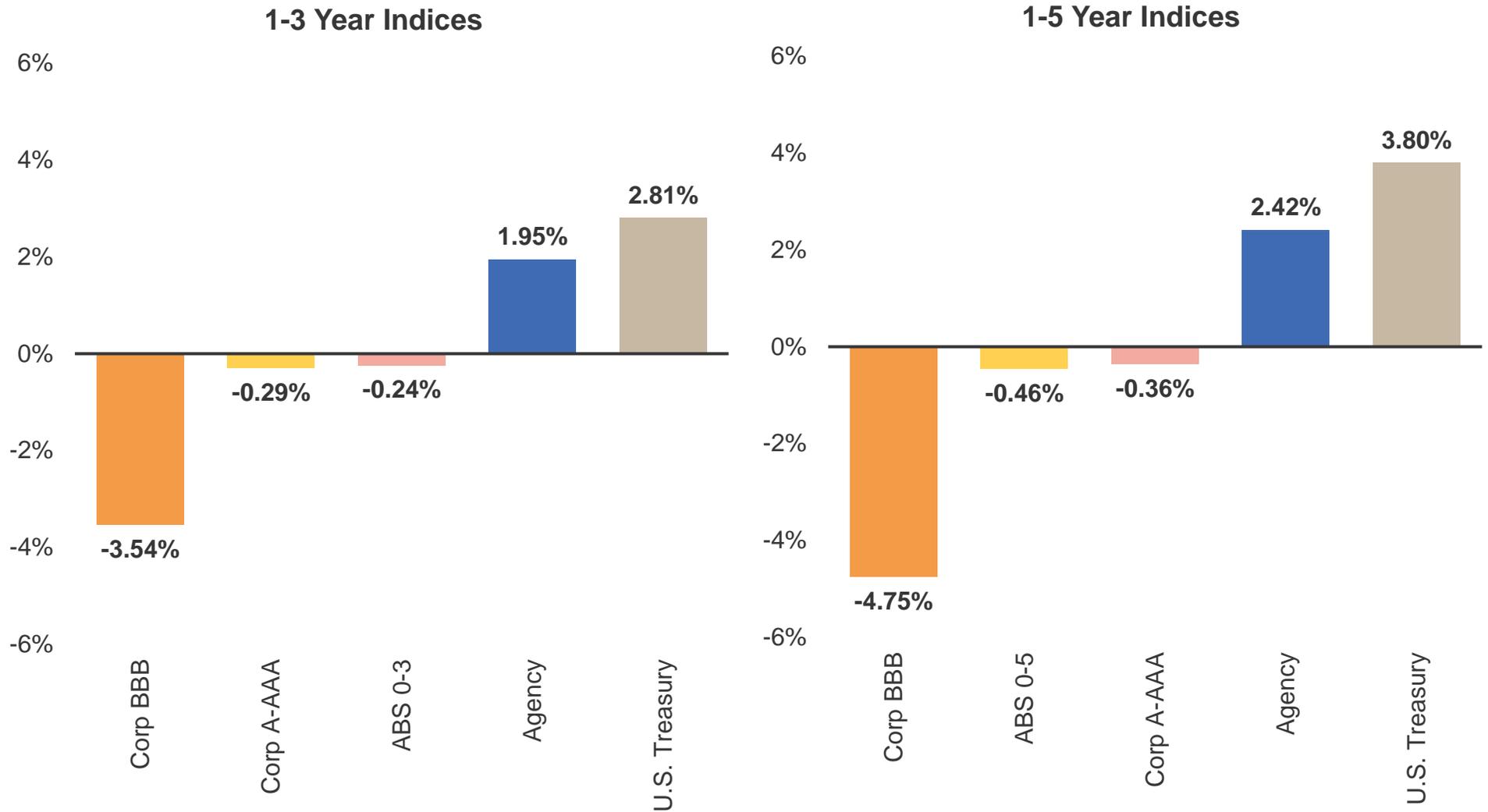
## Stocks Plummet from All-Time Highs During a Volatile Quarter

### S&P Price Change



Source: Bloomberg as of 3/31/2020.

## Government Sectors Outperform in the First Quarter



Source: Bloomberg, as of 3/31/2020.

## Portfolio Recap

- ◆ Our strategy throughout the first quarter included the following elements:
  - PFM took a proactive response to the emerging crisis and fast-moving markets by further emphasizing safety and liquidity in the portfolio's strategy, as well as holding frequent ad-hoc Credit and Investment Committee meetings to assess emerging news and market trends. Our first step was to restrict all new credit and ABS purchases.
  - Portfolio durations were maintained closely in line with benchmarks, which has been an important element in sustaining performance over the past several years.
  - After several quarters of reducing federal agency allocations due to unattractive levels and limited supply, yield spreads widened to levels not seen since 2009. PFM viewed this as an opportunity to capture relative value on a safe haven asset class and therefore increased agency allocations.
  - Entering the quarter, we had a modestly defensive posture on corporate credit, reflective of our eye on narrow yield spreads and concerns about overall increased leverage by issuers in the sector. In prior quarters, we had modestly reduced allocations to the sector but still viewed corporate securities as a core holding in the portfolio.
  - Investment grade corporate bond spreads widened significantly in the second half of the quarter, although not to the same degree as during the 2008-09 financial crisis. The move in spreads resulted in significant negative excess returns in the sector to the tune of 200 to 400 basis points (-2% to -4%), depending on credit quality, industry, and maturity. The unprecedented economic conditions will stress many companies' revenue, profits, liquidity, and credit ratings. PFM has undertaken a wholesale review of all issuers on our approved list and redoubled our ongoing monitoring and due diligence efforts.
  - Asset-backed securities (ABS) also generated significant negative excess returns as spreads widened sharply from recent lows to 10-year wides (again, not reaching 2008-09 levels).

## Investment Strategy Outlook

- ◆ U.S. economic fundamentals are expected to deteriorate significantly in the second quarter as the full effect of COVID-19 materializes. The real question is the duration of the economic shutdown and the speed and trajectory of the eventual recovery. As a result of this uncertainty, we plan to maintain neutral portfolio durations relative to their respective benchmarks into April as we monitor guidance from index vendors regarding future rebalancing.
- ◆ Our outlook for major investment-grade sectors includes the following:
  - Federal agencies currently offer value, materially less credit risk, and better liquidity than most other sectors. Moving into the second quarter, we will likely target increased allocations to agencies. Given low yields, we also find value in callable agencies but will evaluate them on an issue-specific basis.
  - The supranational sector remains underwhelming, even though spreads are wider than the previous quarter. We anticipate increasing allocations as opportunities become available.
  - The investment grade corporate market faces numerous challenges and uncertainties. We believe the prudent action is to remain cautious and vigilant until longer-term economic consequences are better understood and market liquidity stabilizes. While spreads are significantly wider, PFM's view is that under current conditions the risks still outweigh the potential benefits. The late quarter surge in new issues that were easily absorbed by investors is an early, optimistic sign.
  - In ABS, spreads remain wide, and liquidity remains impaired. At the forefront of risks are consumers' and businesses' ability to make timely credit card, auto loan, and equipment lease payments. We plan to avoid new ABS purchases until the outlook is clearer. ABS allocations are expected to naturally decline from principal paydowns.

## Sector Allocation and Compliance

- The portfolio is in compliance with the Town's Investment Policy and Arizona Revised Statutes.

Security Type	Market Value	% of Portfolio	% Change vs. 12/31/19	Permitted by Policy	In Compliance
U.S. Treasury	\$6,785,938	73.0%	-4.6%	100%	✓
Federal Agency	\$128,144	1.4%	+1.4%	100%	✓
Supranationals	\$180,200	1.9%	+1.9%	100%	✓
Negotiable CDs	\$350,551	3.8%	+1.2%	30%	✓
Corporate Notes	\$1,716,796	18.5%	+3.8%	30%	✓
Asset-Backed Securities	\$122,993	1.3%	+1.3%	30%	✓
<b>Securities Sub-Total</b>	<b>\$9,284,622</b>	<b>99.8%</b>			
Accrued Interest	\$40,355				
<b>Securities Total</b>	<b>\$9,324,977</b>				
Money Market Fund	\$17,512	0.2%	-5.1%	100%	✓
<b>Total Investments</b>	<b>\$9,342,489</b>	<b>100.0%</b>			

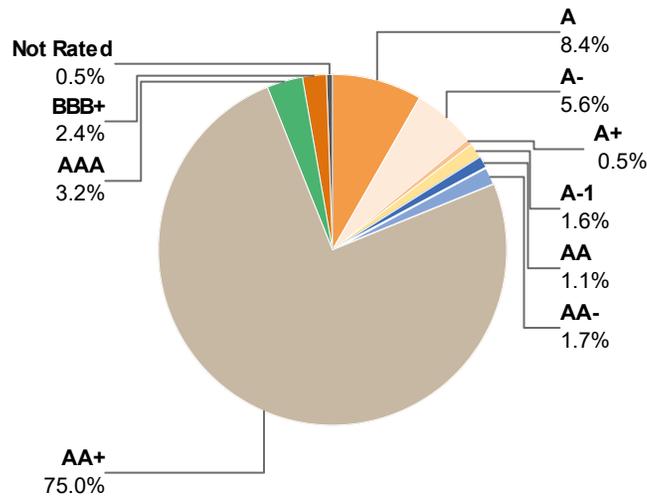
Market values, excluding accrued interest. Detail may not add to total due to rounding. Current investment policy as of April 2017.

**Portfolio Statistics**

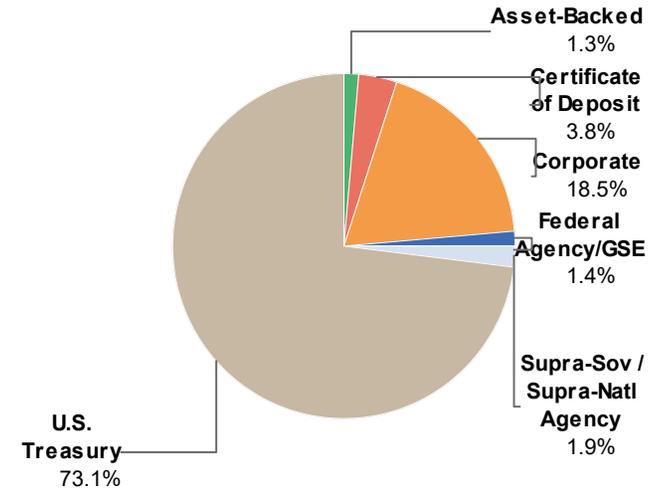
As of March 31, 2020

<b>Par Value:</b>	\$9,105,000
<b>Total Market Value:</b>	\$9,342,490
<b>Security Market Value:</b>	\$9,284,622
<b>Accrued Interest:</b>	\$40,355
<b>Cash:</b>	\$17,512
<b>Amortized Cost:</b>	\$9,147,316
<b>Yield at Market:</b>	0.75%
<b>Yield at Cost:</b>	1.63%
<b>Effective Duration:</b>	1.83 Years
<b>Duration to Worst:</b>	1.84 Years
<b>Average Maturity:</b>	1.92 Years
<b>Average Credit: *</b>	AA

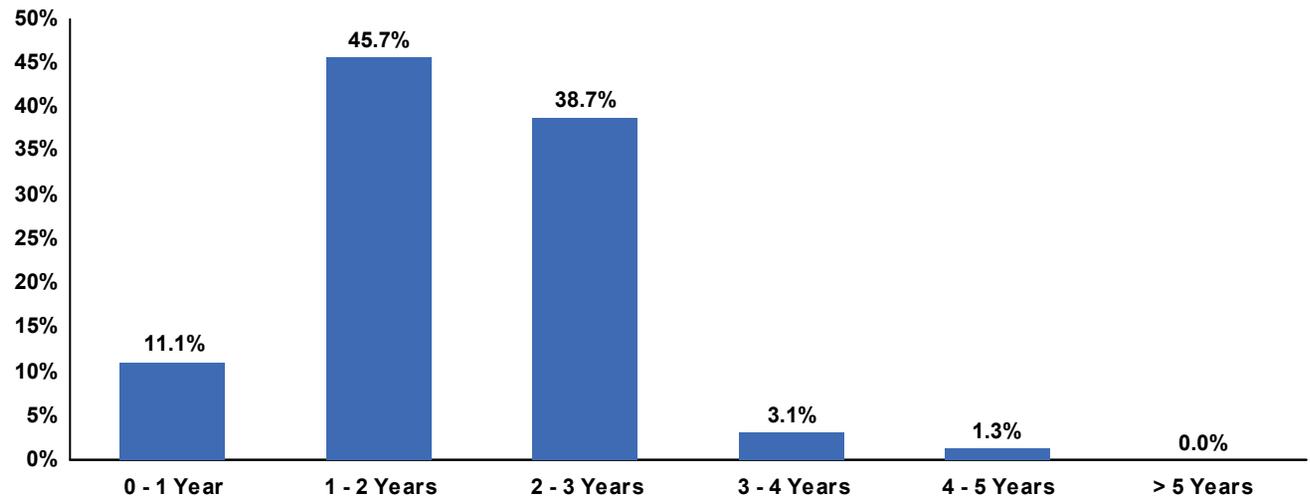
**Credit Quality (S&P Ratings)\*\***



**Sector Allocation**



**Maturity Distribution**

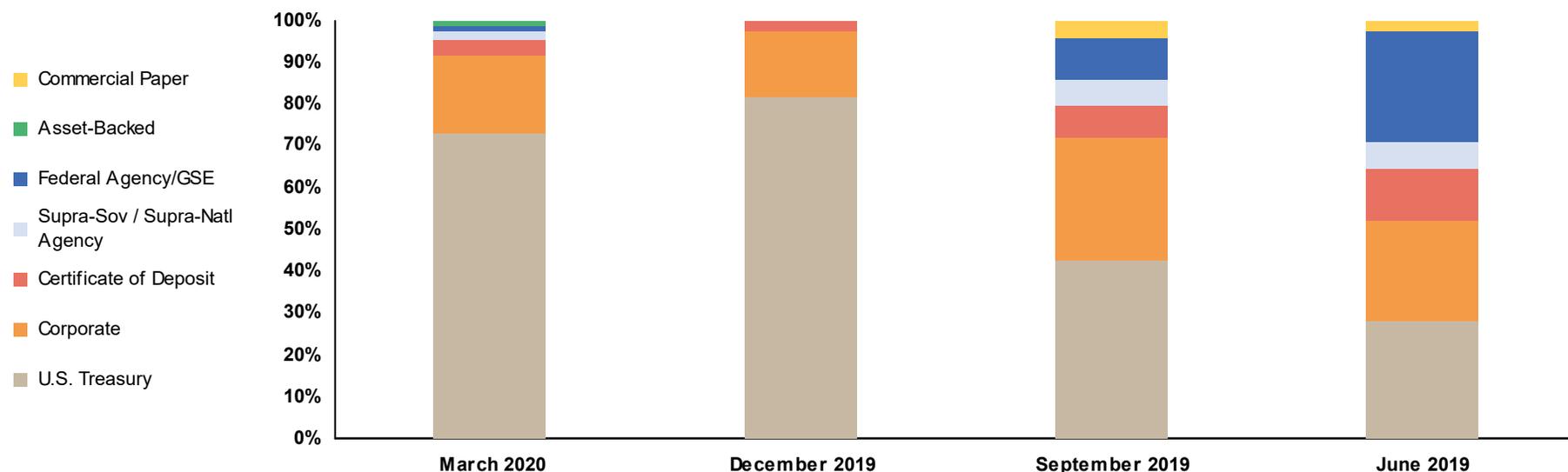


\* An average of each security's credit rating assigned a numeric value and adjusted for its relative weighting in the portfolio.

\*\*Securities held in the Town's portfolio are in compliance with Arizona Revised Statutes and the Town's investment policy dated April 2017.

### Sector Allocation

Sector	March 31, 2020		December 31, 2019		September 30, 2019		June 30, 2019	
	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total
U.S. Treasury	6.8	73.1%	7.4	81.8%	3.7	42.7%	2.5	28.2%
Corporate	1.7	18.5%	1.4	15.4%	2.5	29.1%	2.1	23.7%
Certificate of Deposit	0.4	3.8%	0.3	2.8%	0.7	7.8%	1.1	12.4%
Supra-Sov / Supra-Natl Agency	0.2	1.9%	0.0	0.0%	0.5	6.1%	0.6	6.6%
Federal Agency/GSE	0.1	1.4%	0.0	0.0%	0.9	10.2%	2.4	26.3%
Asset-Backed	0.1	1.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Commercial Paper	0.0	0.0%	0.0	0.0%	0.3	4.1%	0.2	2.8%
<b>Total</b>	<b>\$9.3</b>	<b>100.0%</b>	<b>\$9.1</b>	<b>100.0%</b>	<b>\$8.6</b>	<b>100.0%</b>	<b>\$9.0</b>	<b>100.0%</b>

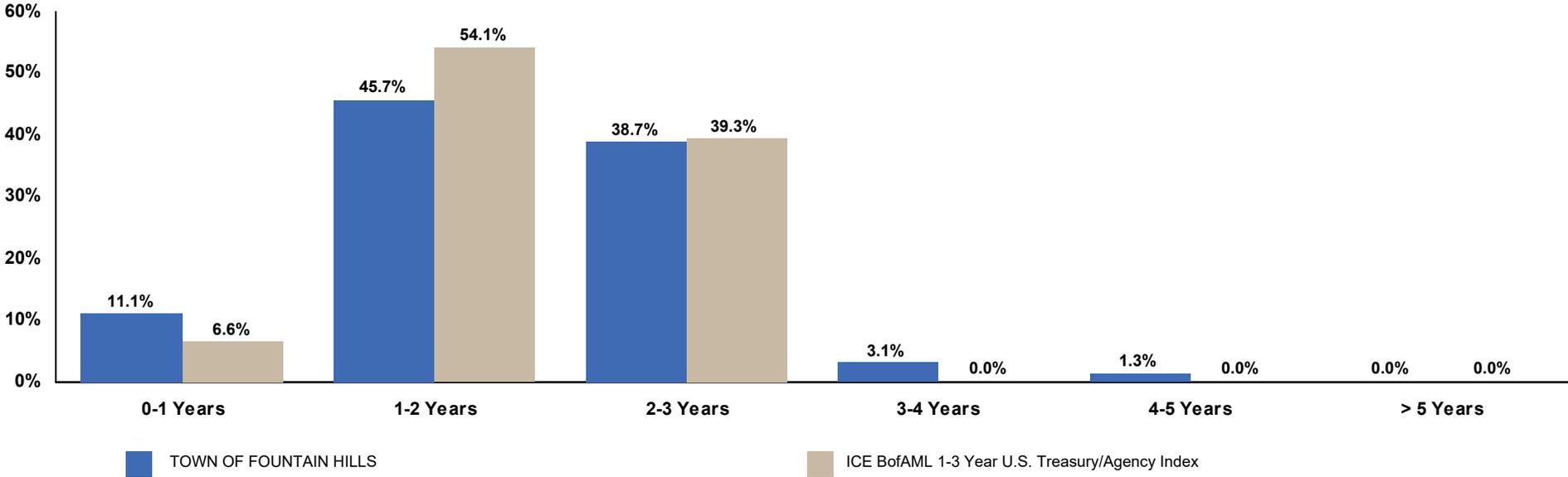


Detail may not add to total due to rounding.

**Maturity Distribution**

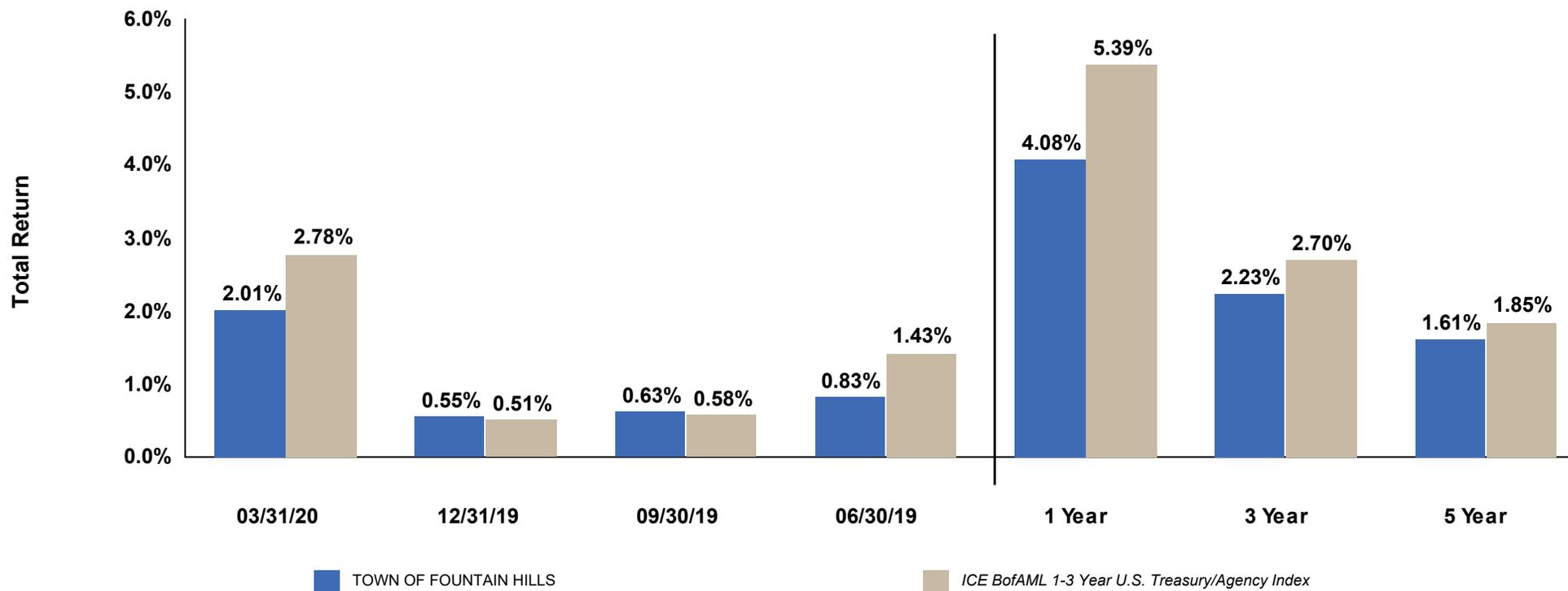
*As of March 31, 2020*

Portfolio/Benchmark	Yield at Market	Average Maturity	0-1 Years	1-2 Years	2-3 Years	3-4 Years	4-5 Years	>5 Years
TOWN OF FOUNTAIN HILLS	0.75%	1.92 yrs	11.1%	45.7%	38.7%	3.1%	1.3%	0.0%
ICE BofAML 1-3 Year U.S. Treasury/Agency Index	0.21%	1.86 yrs	6.6%	54.1%	39.3%	0.0%	0.0%	0.0%



Portfolio Performance (Total Return)

Portfolio/Benchmark	Effective Duration	Quarter Ended				1 Year	Annualized Return	
		03/31/20	12/31/19	09/30/19	06/30/19		3 Year	5 Year
TOWN OF FOUNTAIN HILLS	1.83	2.01%	0.55%	0.63%	0.83%	4.08%	2.23%	1.61%
ICE BofAML 1-3 Year U.S. Treasury/Agency Index	1.80	2.78%	0.51%	0.58%	1.43%	5.39%	2.70%	1.85%
Difference		-0.77%	0.04%	0.05%	-0.60%	-1.31%	-0.47%	-0.24%



Portfolio performance is gross of fees unless otherwise indicated.

**Portfolio Earnings**  
**Quarter-Ended March 31, 2020**

	<b>Market Value Basis</b>	<b>Accrual (Amortized Cost) Basis</b>
<b>Beginning Value (12/31/2019)</b>	\$9,093,428.18	\$9,086,645.66
<b>Net Purchases/Sales</b>	\$48,733.85	\$48,733.85
<b>Change in Value</b>	\$142,460.46	\$11,936.61
<b>Ending Value (03/31/2020)</b>	\$9,284,622.49	\$9,147,316.12
<b>Interest Earned</b>	\$41,972.14	\$41,972.14
<b>Portfolio Earnings</b>	\$184,432.60	\$53,908.75

## Sector/Issuer Distribution

As of March 31, 2020

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
<b>Asset-Backed</b>			
CARMAX AUTO OWNER TRUST	29,833	24.3%	0.3%
HARLEY-DAVIDSON MOTORCYCLE TRUST	25,581	20.8%	0.3%
JOHN DEERE OWNER TRUST	43,981	35.8%	0.5%
VERIZON OWNER TRUST	23,599	19.2%	0.3%
<b>Sector Total</b>	<b>122,993</b>	<b>100.0%</b>	<b>1.3%</b>
<b>Certificate of Deposit</b>			
DNB ASA	102,311	29.2%	1.1%
SOCIETE GENERALE	97,212	27.7%	1.0%
SWEDBANK AB	151,028	43.1%	1.6%
<b>Sector Total</b>	<b>350,551</b>	<b>100.0%</b>	<b>3.8%</b>
<b>Corporate</b>			
ADOBE INC	35,407	2.1%	0.4%
AMAZON.COM INC	52,018	3.0%	0.6%
AMERICAN HONDA FINANCE	88,368	5.1%	1.0%
APPLE INC	46,958	2.7%	0.5%
BANK OF AMERICA CO	148,394	8.6%	1.6%
BANK OF NOVA SCOTIA	99,945	5.8%	1.1%
BB&T CORPORATION	135,210	7.9%	1.5%

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
BP PLC	49,538	2.9%	0.5%
CATERPILLAR INC	54,732	3.2%	0.6%
CHEVRON CORPORATION	52,172	3.0%	0.6%
CITIGROUP INC	74,807	4.4%	0.8%
DEERE & COMPANY	24,472	1.4%	0.3%
EXXON MOBIL CORP	50,886	3.0%	0.5%
HOME DEPOT INC	41,322	2.4%	0.4%
IBM CORP	102,679	6.0%	1.1%
JOHNSON & JOHNSON	35,010	2.0%	0.4%
JP MORGAN CHASE & CO	45,712	2.7%	0.5%
MORGAN STANLEY	145,504	8.5%	1.6%
NATIONAL RURAL UTILITIES CO FINANCE CORP	50,113	2.9%	0.5%
PACCAR FINANCIAL CORP	49,177	2.9%	0.5%
ROYAL BANK OF CANADA	44,516	2.6%	0.5%
THE BANK OF NEW YORK MELLON CORPORATION	45,221	2.6%	0.5%
TORONTO-DOMINION BANK	99,892	5.8%	1.1%
UNITED PARCEL SERVICE INC	99,857	5.8%	1.1%
WELLS FARGO & COMPANY	44,886	2.6%	0.5%
<b>Sector Total</b>	<b>1,716,796</b>	<b>100.0%</b>	<b>18.5%</b>
<b>Federal Agency/GSE</b>			
FEDERAL HOME LOAN BANKS	128,144	100.0%	1.4%
<b>Sector Total</b>	<b>128,144</b>	<b>100.0%</b>	<b>1.4%</b>
<b>Supra-Sov / Supra-Natl Agency</b>			

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
AFRICAN DEVELOPMENT BANK	80,291	44.6%	0.9%
ASIAN DEVELOPMENT BANK	99,909	55.4%	1.1%
<b>Sector Total</b>	<b>180,200</b>	<b>100.0%</b>	<b>1.9%</b>
<b>U.S. Treasury</b>			
UNITED STATES TREASURY	6,785,938	100.0%	73.1%
<b>Sector Total</b>	<b>6,785,938</b>	<b>100.0%</b>	<b>73.1%</b>
<b>Portfolio Total</b>	<b>9,284,622</b>	<b>100.0%</b>	<b>100.0%</b>

## Quarterly Portfolio Transactions

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amt (\$)	Yield at Market	Realized G/L (BV)
<b>BUY</b>									
1/2/20	1/6/20	275,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	278,196.50	1.61%	
1/7/20	1/10/20	40,000	02665WDH1	AMERICAN HONDA FINANCE	1.95%	5/10/23	39,985.20	1.96%	
1/9/20	1/13/20	55,000	14913Q3C1	CATERPILLAR FINL SERVICE	1.95%	11/18/22	54,974.70	1.97%	
1/13/20	1/17/20	45,000	78015K7D0	ROYAL BANK OF CANADA	1.95%	1/17/23	44,972.55	1.97%	
1/14/20	1/22/20	30,000	14315XAC2	CARMX 2020-1 A3	1.89%	12/15/24	29,994.11	1.90%	
1/17/20	1/22/20	45,000	46647PBB1	JPMORGAN CHASE & CO BONDS	3.20%	4/1/23	46,564.12	2.39%	
1/21/20	1/28/20	45,000	06406RAM9	BANK OF NY MELLON CORP	1.85%	1/27/23	44,968.50	1.87%	
1/21/20	1/29/20	25,000	41284UAD6	HDMOT 2020-A A3	1.87%	10/15/24	24,994.55	2.36%	
1/21/20	1/29/20	25,000	92348TAA2	VZOT 2020-A A1A	1.85%	7/20/24	24,997.07	1.86%	
1/22/20	2/5/20	50,000	63743HET5	NATIONAL RURAL UTIL COOP CORP NOTE	1.75%	1/21/22	49,956.00	1.80%	
1/23/20	2/3/20	35,000	00724PAA7	ADOBE INC CORP NOTE	1.70%	2/1/23	34,991.95	1.71%	
2/14/20	2/19/20	100,000	83369XDL9	SOCIETE GENERALE NY CERT DEPOS	1.80%	2/14/22	100,000.00	1.80%	
2/20/20	2/21/20	125,000	3130AJ7E3	FEDERAL HOME LOAN BANKS NOTES	1.37%	2/17/23	124,770.00	1.44%	
2/25/20	2/27/20	50,000	166764AH3	CHEVRON CORP	3.19%	6/24/23	52,815.71	1.62%	
2/26/20	2/28/20	50,000	10373QAL4	BP CAP MARKETS AMERICA CORP BONDS	2.75%	5/10/23	52,137.50	1.64%	
2/26/20	3/2/20	50,000	30231GAR3	EXXON MOBIL CORPORATION CORP NOTES	2.72%	3/1/23	51,789.79	1.50%	
3/2/20	3/4/20	500,000	912828Z86	UNITED STATES TREASURY NOTES	1.37%	2/15/23	509,031.38	0.78%	
3/4/20	3/6/20	50,000	023135AW6	AMAZON.COM INC BONDS	2.40%	2/22/23	51,966.67	1.08%	
3/4/20	3/9/20	25,000	24422EVE6	JOHN DEERE CAPITAL CORP CORP NOTES	1.20%	4/6/23	24,994.00	1.21%	
3/4/20	3/11/20	45,000	47789KAC7	JOHN DEERE OWNER TRUST	1.10%	8/15/24	44,997.25	1.10%	
3/5/20	3/9/20	45,000	037833BF6	APPLE INC CORP NOTES	2.70%	5/13/22	47,105.55	0.93%	
3/5/20	3/9/20	45,000	05531FBG7	BRANCH BANKING & TRUST CORP NOTES	3.05%	6/20/22	47,134.94	1.23%	
3/6/20	3/10/20	40,000	437076BV3	HOME DEPOT INC	3.25%	3/1/22	41,833.70	0.94%	
3/26/20	4/3/20	80,000	008281BC0	AFRICAN DEVELOPMENT BANK SUPRANATL	0.75%	4/3/23	79,888.80	0.80%	
3/31/20	4/7/20	100,000	045167ET6	ASIAN DEVELOPMENT BANK SUPRANATL	0.62%	4/7/22	99,909.00	0.67%	

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amt (\$)	Yield at Market	Realized G/L (BV)
<b>Total BUY</b>		<b>1,975,000</b>					<b>2,002,969.54</b>		
<b>INTEREST</b>									
1/2/20	1/2/20	0	MONEY0002	MONEY MARKET FUND				16.58	
1/15/20	1/15/20	465,000	912828Y20	UNITED STATES TREASURY NOTES	2.62%	7/15/21	6,103.13		
1/26/20	1/26/20	45,000	949746SA0	WELLS FARGO & CO CORP NOTES	2.10%	7/26/21	472.50		
1/31/20	1/31/20	135,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	1,181.25		
1/31/20	1/31/20	160,000	912828B58	US TREASURY NOTES	2.12%	1/31/21	1,700.00		
1/31/20	1/31/20	350,000	912828P4	US TREASURY NOTES	1.87%	7/31/22	3,281.25		
1/31/20	1/31/20	750,000	912828V72	US TREASURY NOTES	1.87%	1/31/22	7,031.25		
2/1/20	2/1/20	20,000	05531FAZ6	BRANCH BANKING & TRUST (CALLABLE) NOTES	2.15%	2/1/21	215.00		
2/1/20	2/1/20	70,000	05531FAZ6	BRANCH BANKING & TRUST (CALLABLE) NOTES	2.15%	2/1/21	752.50		
2/3/20	2/3/20	0	MONEY0002	MONEY MARKET FUND				26.76	
2/7/20	2/7/20	50,000	69371RQ41	PACCAR FINANCIAL CORP NOTE	1.90%	2/7/23	237.50		
2/15/20	2/15/20	250,000	912828RC6	US TREASURY NOTES	2.12%	8/15/21	2,656.25		
2/15/20	2/15/20	30,000	14315XAC2	CARMX 2020-1 A3	1.89%	12/15/24	36.23		
2/15/20	2/15/20	75,000	912828RC6	US TREASURY NOTES	2.12%	8/15/21	796.88		
2/15/20	2/15/20	750,000	912828RC6	US TREASURY NOTES	2.12%	8/15/21	7,968.75		
2/15/20	2/15/20	25,000	41284UAD6	HDMOT 2020-A A3	1.87%	10/15/24	20.78		
2/29/20	2/29/20	650,000	912828S8	US TREASURY NOTES	1.62%	8/31/22	5,281.25		
3/2/20	3/2/20	0	MONEY0002	MONEY MARKET FUND				25.83	
3/15/20	3/15/20	30,000	14315XAC2	CARMX 2020-1 A3	1.89%	12/15/24	47.25		
3/15/20	3/15/20	25,000	41284UAD6	HDMOT 2020-A A3	1.87%	10/15/24	38.96		
3/20/20	3/20/20	25,000	92348TAA2	VZOT 2020-A A1A	1.85%	7/20/24	65.52		
3/31/20	3/31/20	725,000	912828Q37	US TREASURY NOTES	1.25%	3/31/21	4,531.25		
<b>Total INTEREST</b>		<b>4,630,000</b>					<b>42,486.67</b>		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amt (\$)	Yield at Market	Realized G/L (BV)
<b>SELL</b>									
1/2/20	1/6/20	150,000	30231GAG7	EXXON MOBIL (CALLABLE) CORP NOTE	1.91%	3/6/20	150,948.50	1.93%	(17.19)
1/2/20	1/6/20	60,000	05531FAZ6	BRANCH BANKING & TRUST (CALLABLE) NOTES	2.15%	2/1/21	60,706.62	1.91%	160.74
1/2/20	1/6/20	70,000	36962G4R2	GENERAL ELECTRIC CAPITAL CORP CORP NOTE	4.37%	9/16/20	71,989.26	2.18%	(166.87)
1/7/20	1/10/20	40,000	912828B58	US TREASURY NOTES	2.12%	1/31/21	40,599.93	1.59%	38.43
1/9/20	1/13/20	50,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	50,625.17	1.59%	28.52
1/13/20	1/17/20	45,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	45,571.21	1.59%	26.27
1/14/20	1/22/20	25,000	912828B58	US TREASURY NOTES	2.12%	1/31/21	25,383.49	1.61%	18.72
1/17/20	1/22/20	45,000	912828M7	UNITED STATES TREASURY NOTES	2.25%	4/15/22	45,950.63	1.56%	34.55
1/21/20	1/28/20	45,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	45,680.88	1.53%	114.05
1/22/20	1/27/20	75,000	61761JB32	MORGAN STANLEY CORPORATE NOTES	2.80%	6/16/20	75,500.17	1.89%	131.19
1/23/20	2/3/20	35,000	912828B58	US TREASURY NOTES	2.12%	1/31/21	35,193.43	1.58%	35.23
2/14/20	2/19/20	125,000	912828B58	US TREASURY NOTES	2.12%	1/31/21	125,846.66	1.52%	188.88
2/20/20	2/21/20	135,000	912828P38	US TREASURY NOTES	1.75%	1/31/23	136,565.40	1.38%	902.09
2/26/20	2/28/20	50,000	912828YK0	UNITED STATES TREASURY NOTES	1.37%	10/15/22	50,554.29	1.14%	511.88
2/26/20	3/2/20	50,000	912828YK0	UNITED STATES TREASURY NOTES	1.37%	10/15/22	50,550.16	1.15%	501.46
3/2/20	3/4/20	500,000	912828R77	US TREASURY NOTES	1.37%	5/31/21	504,733.71	0.90%	4,517.10
3/4/20	3/6/20	50,000	912828YK0	UNITED STATES TREASURY NOTES	1.37%	10/15/22	51,161.19	0.68%	1,104.11
3/4/20	3/11/20	50,000	912828U65	US TREASURY NOTES	1.75%	11/30/21	51,171.58	0.66%	800.75
3/4/20	3/9/20	25,000	912828Q37	US TREASURY NOTES	1.25%	3/31/21	25,283.95	0.69%	250.13
3/5/20	3/9/20	45,000	912828M7	UNITED STATES TREASURY NOTES	2.25%	4/15/22	46,947.25	0.60%	937.48
3/5/20	3/9/20	45,000	912828M7	UNITED STATES TREASURY NOTES	2.25%	4/15/22	46,938.46	0.61%	928.69
3/6/20	3/10/20	45,000	912828V72	US TREASURY NOTES	1.87%	1/31/22	46,229.46	0.53%	902.45
3/26/20	4/2/20	75,000	912828Q37	US TREASURY NOTES	1.25%	3/31/21	75,828.36	0.15%	1,115.14
3/31/20	4/7/20	95,000	912828M7	UNITED STATES TREASURY NOTES	2.25%	4/15/22	99,836.87	0.26%	2,583.09
<b>Total SELL</b>		<b>1,930,000</b>					<b>1,959,796.63</b>		<b>15,646.89</b>

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>U.S. Treasury Bond / Note</b>											
US TREASURY NOTES DTD 03/31/2016 1.250% 03/31/2021	912828Q37	650,000.00	AA+	Aaa	10/23/2019	10/25/2019	646,369.14	1.65	22.20	647,463.28	656,601.53
UNITED STATES TREASURY NOTES DTD 07/16/2018 2.625% 07/15/2021	912828Y20	465,000.00	AA+	Aaa	8/27/2019	8/28/2019	474,154.69	1.56	2,582.09	471,302.16	479,022.63
US TREASURY NOTES DTD 08/15/2011 2.125% 08/15/2021	912828RC6	75,000.00	AA+	Aaa	9/16/2019	9/20/2019	75,454.10	1.80	201.41	75,329.78	76,839.84
US TREASURY NOTES DTD 08/15/2011 2.125% 08/15/2021	912828RC6	250,000.00	AA+	Aaa	9/16/2019	9/16/2019	251,484.38	1.81	671.36	251,071.90	256,132.80
US TREASURY NOTES DTD 08/15/2011 2.125% 08/15/2021	912828RC6	750,000.00	AA+	Aaa	10/17/2019	10/17/2019	756,855.47	1.62	2,014.08	755,172.02	768,398.40
US TREASURY NOTES DTD 10/31/2016 1.250% 10/31/2021	912828T67	450,000.00	AA+	Aaa	12/2/2019	12/4/2019	446,572.27	1.66	2,364.35	447,153.89	456,609.38
US TREASURY NOTES DTD 10/31/2016 1.250% 10/31/2021	912828T67	275,000.00	AA+	Aaa	11/8/2019	11/12/2019	272,679.69	1.69	1,444.88	273,131.16	279,039.06
US TREASURY NOTES DTD 11/30/2016 1.750% 11/30/2021	912828U65	700,000.00	AA+	Aaa	10/23/2019	10/24/2019	702,160.15	1.60	4,116.80	701,719.33	717,062.50
US TREASURY NOTES DTD 01/31/2017 1.875% 01/31/2022	912828V72	705,000.00	AA+	Aaa	10/17/2019	10/17/2019	709,461.32	1.59	2,215.23	708,590.08	725,048.44
UNITED STATES TREASURY NOTES DTD 04/15/2019 2.250% 04/15/2022	9128286M7	520,000.00	AA+	Aaa	10/17/2019	10/17/2019	528,287.50	1.60	5,402.46	526,795.79	540,312.50
US TREASURY NOTES DTD 07/31/2017 1.875% 07/31/2022	9128282P4	350,000.00	AA+	Aaa	10/25/2019	10/29/2019	352,187.50	1.64	1,099.76	351,860.53	362,687.50
US TREASURY NOTES DTD 08/31/2017 1.625% 08/31/2022	9128282S8	650,000.00	AA+	Aaa	10/17/2019	10/17/2019	650,939.45	1.57	918.48	650,795.70	670,210.97
UNITED STATES TREASURY NOTES DTD 10/15/2019 1.375% 10/15/2022	912828YK0	275,000.00	AA+	Aaa	11/1/2019	11/4/2019	273,689.45	1.54	1,745.99	273,867.69	282,347.67
UNITED STATES TREASURY NOTES DTD 02/18/2020 1.375% 02/15/2023	912828Z86	500,000.00	AA+	Aaa	3/2/2020	3/4/2020	508,691.41	0.78	597.83	508,469.65	515,625.00
<b>Security Type Sub-Total</b>		<b>6,615,000.00</b>					<b>6,648,986.52</b>	<b>1.55</b>	<b>25,396.92</b>	<b>6,642,722.96</b>	<b>6,785,938.22</b>

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Supra-National Agency Bond / Note</b>											
ASIAN DEVELOPMENT BANK SUPRANATL DTD 04/07/2020 0.625% 04/07/2022	045167ET6	100,000.00	AAA	Aaa	3/31/2020	4/7/2020	99,909.00	0.67	0.00	99,909.00	99,909.00
AFRICAN DEVELOPMENT BANK SUPRANATL DTD 04/03/2020 0.750% 04/03/2023	008281BC0	80,000.00	AAA	Aaa	3/26/2020	4/3/2020	79,888.80	0.80	0.00	79,888.80	80,291.12
<b>Security Type Sub-Total</b>		<b>180,000.00</b>					<b>179,797.80</b>	<b>0.73</b>	<b>0.00</b>	<b>179,797.80</b>	<b>180,200.12</b>
<b>Federal Agency Bond / Note</b>											
FEDERAL HOME LOAN BANKS NOTES DTD 02/21/2020 1.375% 02/17/2023	3130AJ7E3	125,000.00	AA+	Aaa	2/20/2020	2/21/2020	124,770.00	1.44	190.97	124,778.39	128,144.00
<b>Security Type Sub-Total</b>		<b>125,000.00</b>					<b>124,770.00</b>	<b>1.44</b>	<b>190.97</b>	<b>124,778.39</b>	<b>128,144.00</b>
<b>Corporate Note</b>											
MORGAN STANLEY CORPORATE NOTES DTD 06/16/2015 2.800% 06/16/2020	61761JB32	100,000.00	BBB+	A3	7/19/2019	7/23/2019	100,399.00	2.35	816.67	100,093.39	100,000.00
JOHNSON & JOHNSON CORP NOTE DTD 11/10/2017 1.950% 11/10/2020	478160CH5	35,000.00	AAA	Aaa	11/8/2017	11/10/2017	34,962.55	1.99	267.31	34,992.23	35,010.08
BRANCH BANKING & TRUST (CALLABLE) NOTES DTD 10/26/2017 2.150% 02/01/2021	05531FAZ6	70,000.00	A-	A3	11/16/2017	11/20/2017	69,636.00	2.32	250.83	69,902.44	69,915.30
BRANCH BANKING & TRUST (CALLABLE) NOTES DTD 10/26/2017 2.150% 02/01/2021	05531FAZ6	20,000.00	A-	A3	10/23/2017	10/26/2017	19,990.80	2.17	71.67	19,997.52	19,975.80
UNITED PARCEL SERVICE CORPORATE BOND DTD 11/14/2017 2.050% 04/01/2021	911312BP0	100,000.00	A	A2	11/9/2017	11/14/2017	99,842.00	2.10	1,025.00	99,951.80	99,857.00
WELLS FARGO & CO CORP NOTES DTD 07/25/2016 2.100% 07/26/2021	949746SA0	45,000.00	A-	A2	10/17/2019	10/21/2019	45,041.40	2.05	170.63	45,031.54	44,885.97

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Corporate Note</b>											
BANK OF AMERICA CORP (CALLABLE) DTD 09/18/2017 2.328% 10/01/2021	06051GGS2	150,000.00	A-	A2	11/27/2017	11/29/2017	149,293.50	2.46	1,746.00	149,716.97	148,393.50
NATIONAL RURAL UTIL COOP CORP NOTE DTD 02/05/2020 1.750% 01/21/2022	63743HET5	50,000.00	A	A2	1/22/2020	2/5/2020	49,956.00	1.80	136.11	49,959.41	50,113.35
HOME DEPOT INC DTD 12/06/2018 3.250% 03/01/2022	437076BV3	40,000.00	A	A2	3/6/2020	3/10/2020	41,801.20	0.94	108.33	41,748.38	41,322.44
IBM CORP DTD 05/15/2019 2.850% 05/13/2022	459200JX0	100,000.00	A	A2	10/30/2019	11/1/2019	102,084.00	2.00	1,092.50	101,748.43	102,679.30
APPLE INC CORP NOTES DTD 05/13/2015 2.700% 05/13/2022	037833BF6	45,000.00	AA+	Aa1	3/5/2020	3/9/2020	46,714.05	0.93	465.75	46,666.50	46,958.45
MORGAN STANLEY CORP NOTES DTD 05/19/2017 2.750% 05/19/2022	61744YAH1	45,000.00	BBB+	A3	10/25/2019	10/29/2019	45,616.05	2.20	453.75	45,516.78	45,504.27
AMERICAN HONDA FINANCE CORP NOTES DTD 11/21/2019 1.950% 05/20/2022	02665WDF5	50,000.00	A	A3	11/18/2019	11/21/2019	49,983.00	1.96	352.08	49,985.40	49,167.80
BRANCH BANKING & TRUST CORP NOTES DTD 03/18/2019 3.050% 06/20/2022	05531FBG7	45,000.00	A-	A3	3/5/2020	3/9/2020	46,833.75	1.23	385.06	46,785.31	45,318.78
CITIGROUP INC DTD 11/04/2019 2.312% 11/04/2022	17308CC46	75,000.00	BBB+	A3	10/28/2019	11/4/2019	75,000.00	2.31	708.05	75,000.00	74,806.80
BANK OF NOVA SCOTIA HOUSTON CORP NOTES DTD 10/15/2019 2.000% 11/15/2022	064159SH0	100,000.00	A-	A2	10/17/2019	10/21/2019	99,641.00	2.12	922.22	99,692.43	99,944.50
CATERPILLAR FINL SERVICE DTD 01/13/2020 1.950% 11/18/2022	14913Q3C1	55,000.00	A	A3	1/9/2020	1/13/2020	54,974.70	1.97	232.38	54,976.27	54,731.82
TORONTO-DOMINION BANK DTD 10/10/2019 1.900% 12/01/2022	89114QCD8	100,000.00	A	Aa3	10/17/2019	10/21/2019	99,467.00	2.08	633.33	99,540.54	99,891.80
ROYAL BANK OF CANADA DTD 01/17/2020 1.950% 01/17/2023	78015K7D0	45,000.00	A	A2	1/13/2020	1/17/2020	44,972.55	1.97	180.38	44,974.39	44,516.25

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Corporate Note</b>											
BANK OF NY MELLON CORP DTD 01/28/2020 1.850% 01/27/2023	06406RAM9	45,000.00	A	A1	1/21/2020	1/28/2020	44,968.50	1.87	145.69	44,970.29	45,220.64
ADOBE INC CORP NOTE DTD 02/03/2020 1.700% 02/01/2023	00724PAA7	35,000.00	A	A2	1/23/2020	2/3/2020	34,991.95	1.71	95.86	34,992.37	35,406.74
PACCAR FINANCIAL CORP NOTE DTD 11/07/2019 1.900% 02/07/2023	69371RQ41	50,000.00	A+	A1	10/31/2019	11/7/2019	49,997.50	1.90	142.50	49,997.81	49,176.80
AMAZON.COM INC BONDS DTD 06/06/2018 2.400% 02/22/2023	023135AW6	50,000.00	AA-	A2	3/4/2020	3/6/2020	51,920.00	1.08	130.00	51,875.59	52,018.30
EXXON MOBIL CORPORATION CORP NOTES DTD 03/03/2016 2.726% 03/01/2023	30231GAR3	50,000.00	AA	Aaa	2/26/2020	3/2/2020	51,786.00	1.50	113.58	51,738.89	50,886.20
JPMORGAN CHASE & CO BONDS DTD 03/22/2019 3.207% 04/01/2023	46647PBB1	45,000.00	A-	A2	1/17/2020	1/22/2020	46,119.15	2.39	721.58	46,055.27	45,712.40
JOHN DEERE CAPITAL CORP CORP NOTES DTD 03/09/2020 1.200% 04/06/2023	24422EVE6	25,000.00	A	A2	3/4/2020	3/9/2020	24,994.00	1.21	18.33	24,994.12	24,472.18
AMERICAN HONDA FINANCE DTD 01/10/2020 1.950% 05/10/2023	02665WDH1	40,000.00	A	A3	1/7/2020	1/10/2020	39,985.20	1.96	175.50	39,985.91	39,200.00
BP CAP MARKETS AMERICA CORP BONDS DTD 12/14/2018 2.750% 05/10/2023	10373QAL4	50,000.00	A-	A1	2/26/2020	2/28/2020	51,725.00	1.64	538.54	51,677.08	49,537.75
CHEVRON CORP DTD 06/24/2013 3.191% 06/24/2023	166764AH3	50,000.00	AA	Aa2	2/25/2020	2/27/2020	52,536.50	1.62	429.90	52,466.37	52,171.95
<b>Security Type Sub-Total</b>		<b>1,710,000.00</b>					<b>1,725,232.35</b>	<b>1.95</b>	<b>12,529.53</b>	<b>1,725,033.43</b>	<b>1,716,796.17</b>
<b>Certificate of Deposit</b>											
SWEDBANK (NEW YORK) CERT DEPOS DTD 11/17/2017 2.270% 11/16/2020	87019U6D6	150,000.00	A-1	P-1	11/16/2017	11/17/2017	150,000.00	2.30	1,276.88	150,000.00	151,027.95

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Certificate of Deposit</b>											
SOCIETE GENERALE NY CERT DEPOS DTD 02/19/2020 1.800% 02/14/2022	83369XDL9	100,000.00	A	A1	2/14/2020	2/19/2020	100,000.00	1.80	210.00	100,000.00	97,212.00
DNB BANK ASA/NY LT CD DTD 12/04/2019 2.040% 12/02/2022	23341VZT1	100,000.00	AA-	Aa2	12/4/2019	12/6/2019	100,000.00	2.04	663.00	100,000.00	102,310.60
<b>Security Type Sub-Total</b>		<b>350,000.00</b>					<b>350,000.00</b>	<b>2.09</b>	<b>2,149.88</b>	<b>350,000.00</b>	<b>350,550.55</b>
<b>Asset-Backed Security</b>											
VZOT 2020-A A1A DTD 01/29/2020 1.850% 07/20/2024	92348TAA2	25,000.00	AAA	Aaa	1/21/2020	1/29/2020	24,997.07	1.86	14.13	24,997.22	23,598.57
JOHN DEERE OWNER TRUST DTD 03/11/2020 1.100% 08/15/2024	47789KAC7	45,000.00	NR	Aaa	3/4/2020	3/11/2020	44,997.25	1.10	27.50	44,997.29	43,981.11
HDMOT 2020-A A3 DTD 01/29/2020 1.870% 10/15/2024	41284UAD6	25,000.00	AAA	Aaa	1/21/2020	1/29/2020	24,994.55	2.36	20.78	24,994.71	25,580.62
CARMX 2020-1 A3 DTD 01/22/2020 1.890% 12/15/2024	14315XAC2	30,000.00	AAA	NR	1/14/2020	1/22/2020	29,994.11	1.90	25.20	29,994.32	29,833.13
<b>Security Type Sub-Total</b>		<b>125,000.00</b>					<b>124,982.98</b>	<b>1.70</b>	<b>87.61</b>	<b>124,983.54</b>	<b>122,993.43</b>
<b>Managed Account Sub Total</b>		<b>9,105,000.00</b>					<b>9,153,769.65</b>	<b>1.63</b>	<b>40,354.91</b>	<b>9,147,316.12</b>	<b>9,284,622.49</b>
<b>Securities Sub-Total</b>		<b>\$9,105,000.00</b>					<b>\$9,153,769.65</b>	<b>1.63%</b>	<b>\$40,354.91</b>	<b>\$9,147,316.12</b>	<b>\$9,284,622.49</b>
<b>Accrued Interest</b>											<b>\$40,354.91</b>
<b>Total Investments</b>											<b>\$9,324,977.40</b>

Bolded items are forward settling trades.

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**IMPORTANT DISCLOSURES**

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- Market values that include accrued interest are derived from closing bid prices as of the last business day of the month as supplied by Refinitiv, Bloomberg, or Telerate. Where prices are not available from generally recognized sources, the securities are priced using a yield based matrix system to arrive at an estimated market value.
- In accordance with generally accepted accounting principles, information is presented on a trade date basis; forward settling purchases are included in the monthly balances, and forward settling sales are excluded.
- Performance is presented in accordance with the CFA Institute's Global Investment Performance Standards (GIPS). Unless otherwise noted, performance is shown gross of fees. Quarterly returns are presented on an unannualized basis. Returns for periods greater than one year are presented on an annualized basis. Past performance is not indicative of future returns.
- Bank of America/Merrill Lynch Indices provided by Bloomberg Financial Markets.
- Money market fund/cash balances are included in performance and duration computations.
- Standard & Poor's is the source of the credit ratings. Distribution of credit rating is exclusive of money market fund/LGIP holdings.
- Callable securities in the portfolio are included in the maturity distribution analysis to their stated maturity date, although, they may be called prior to maturity.
- MBS maturities are represented by expected average life.

## GLOSSARY

- **ACCRUED INTEREST:** Interest that is due on a bond or other fixed income security since the last interest payment was made.
- **AGENCIES:** Federal agency securities and/or Government-sponsored enterprises.
- **AMORTIZED COST:** The original cost of the principal of the security is adjusted for the amount of the periodic reduction of any discount or premium from the purchase date until the date of the report. Discount or premium with respect to short-term securities (those with less than one year to maturity at time of issuance) is amortized on a straight line basis. Such discount or premium with respect to longer-term securities is amortized using the constant yield basis.
- **BANKERS' ACCEPTANCE:** A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the insurer.
- **COMMERCIAL PAPER:** An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory.
- **CONTRIBUTION TO DURATION:** Represents each sector or maturity range's relative contribution to the overall duration of the portfolio measured as a percentage weighting. Since duration is a key measure of interest rate sensitivity, the contribution to duration measures the relative amount or contribution of that sector or maturity range to the total rate sensitivity of the portfolio.
- **DURATION TO WORST:** A measure of the sensitivity of a security's price to a change in interest rates, stated in years, computed from cash flows to the maturity date or to the put date, whichever results in the highest yield to the investor.
- **EFFECTIVE DURATION:** A measure of the sensitivity of a security's price to a change in interest rates, stated in years.
- **EFFECTIVE YIELD:** The total yield an investor receives in relation to the nominal yield or coupon of a bond. Effective yield takes into account the power of compounding on investment returns, while nominal yield does not.
- **FDIC:** Federal Deposit Insurance Corporation. A federal agency that insures bank deposits to a specified amount.
- **INTEREST RATE:** Interest per year divided by principal amount and expressed as a percentage.
- **MARKET VALUE:** The value that would be received or paid for an investment in an orderly transaction between market participants at the measurement date.
- **MATURITY:** The date upon which the principal or stated value of an investment becomes due and payable.
- **NEGOTIABLE CERTIFICATES OF DEPOSIT:** A CD with a very large denomination, usually \$1 million or more, that can be traded in secondary markets.
- **PAR VALUE:** The nominal dollar face amount of a security.

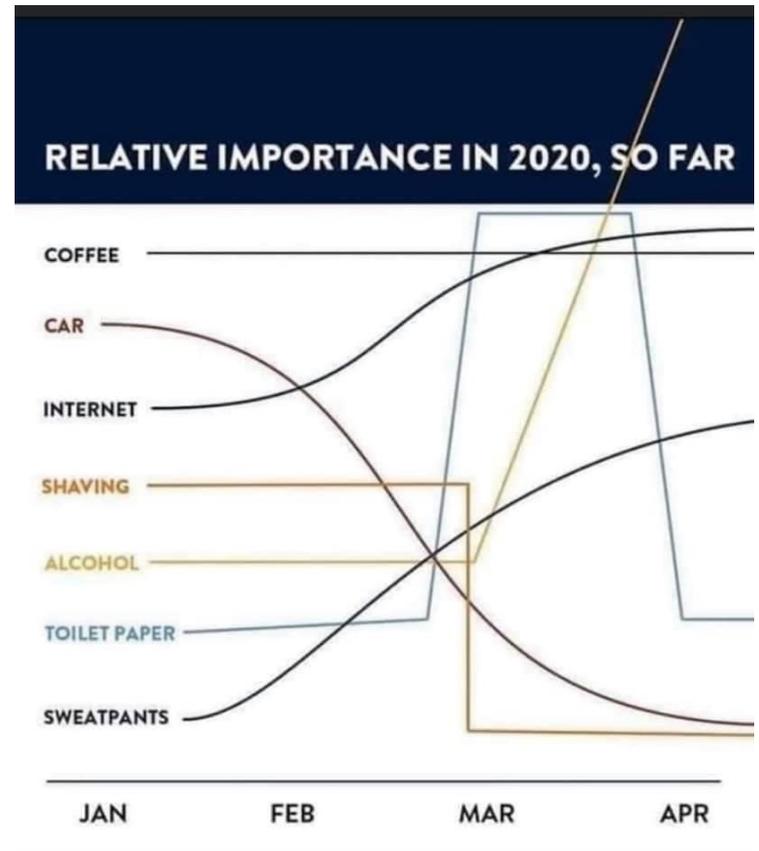
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## GLOSSARY

- **PASS THROUGH SECURITY:** A security representing pooled debt obligations that passes income from debtors to its shareholders. The most common type is the mortgage-backed security.
- **REPURCHASE AGREEMENTS:** A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date.
- **SETTLE DATE:** The date on which the transaction is settled and monies/securities are exchanged. If the settle date of the transaction (i.e., coupon payments and maturity proceeds) occurs on a non-business day, the funds are exchanged on the next business day.
- **TRADE DATE:** The date on which the transaction occurred; however, the final consummation of the security transaction and payment has not yet taken place.
- **UNSETTLED TRADE:** A trade which has been executed; however, the final consummation of the security transaction and payment has not yet taken place.
- **U.S. TREASURY:** The department of the U.S. government that issues Treasury securities.
- **YIELD:** The rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.
- **YTM AT COST:** The yield to maturity at cost is the expected rate of return based on the original cost, the annual interest receipts, maturity value, and the time period from purchase date to maturity, stated as a percentage on an annualized basis.
- **YTM AT MARKET:** The yield to maturity at market is the rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.



# Economic Update



Source: Facebook



# Managing Portfolios in a Crisis Environment

## ◆ Safety

- Reinvest new money in government securities until market volatility subsides
- Increase surveillance of all corporate and asset-backed securities
- Expect prolonged effects as the current health crisis continues to develop

## ◆ Liquidity

- Monitor and update cash flow forecasts as revenue and expenses will change
- Maintain above-average daily, weekly, and monthly liquidity in addition to allocations to Treasuries
- Attempt to avoid the need to sell securities before maturity

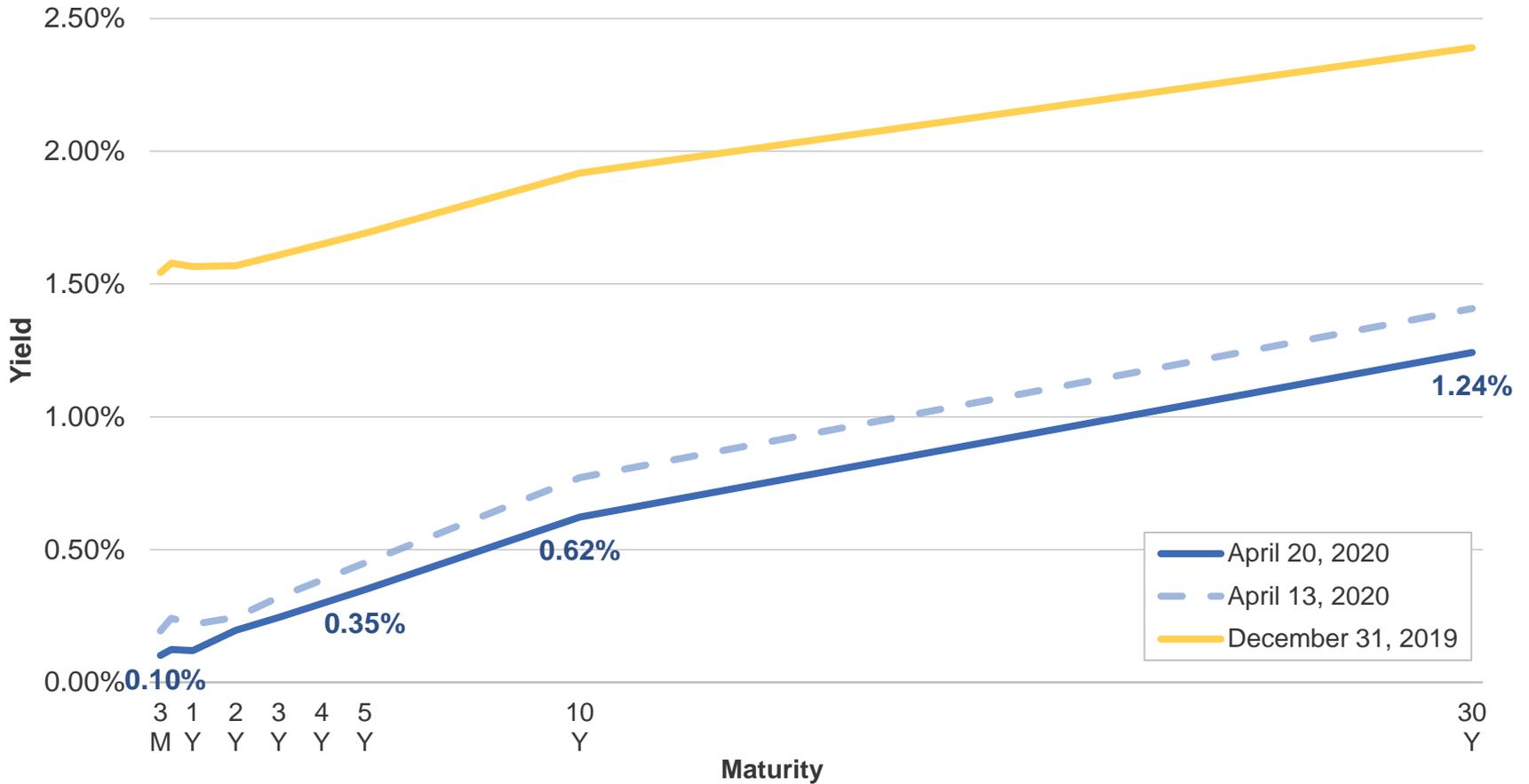
## ◆ Diligence & Communication

- Enhance the frequency and depth of portfolio monitoring
- Perform enhanced stress testing
- Prioritize communication with stake-holders



# Treasury Yield Curve Drifts Lower

## U.S. Treasury Yield Curve

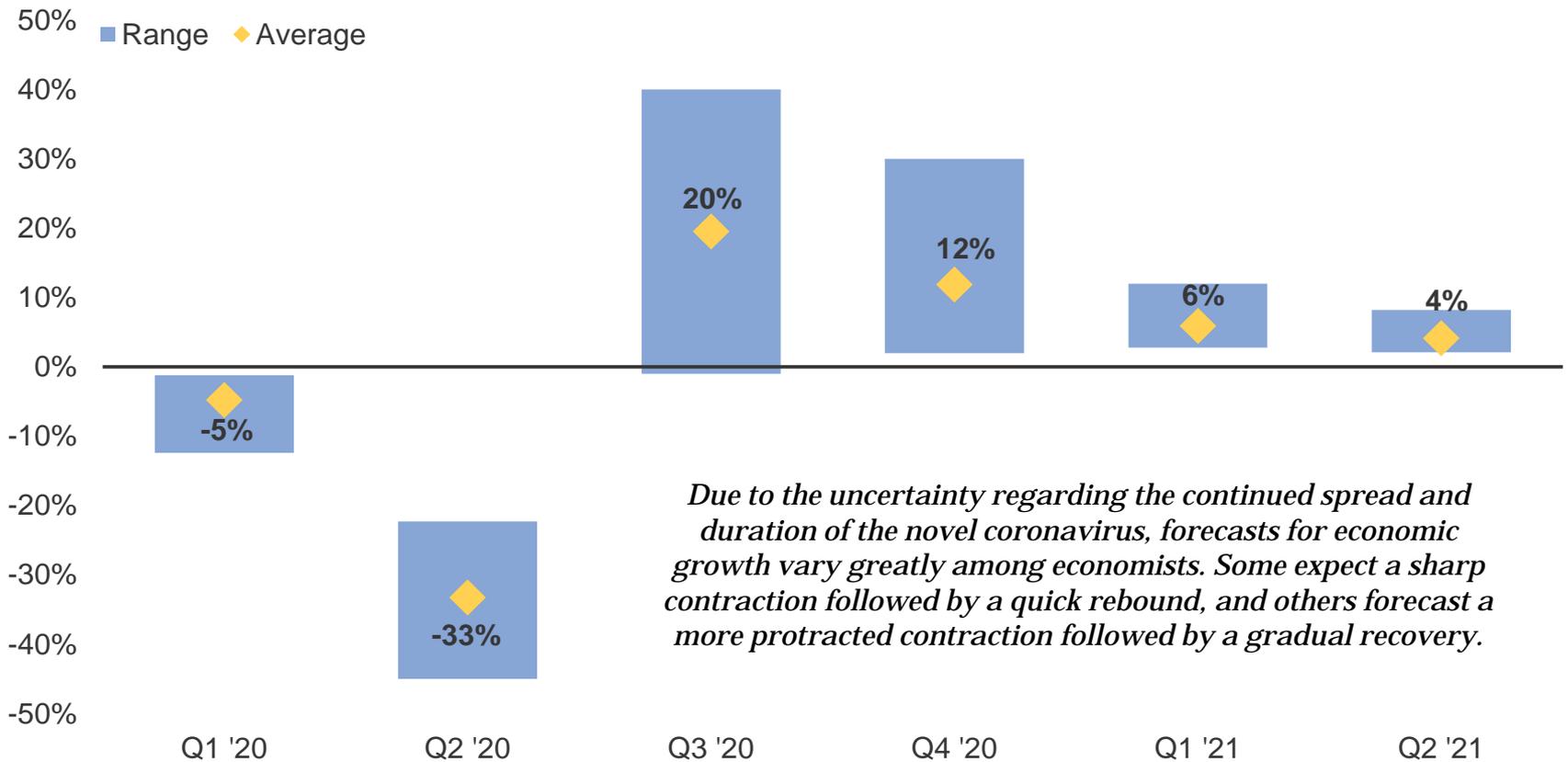


Source: Bloomberg, as of 4/20/2020.



# Economists Expect a Significant, Immediate Downturn in the U.S. Economy

## U.S. GDP Forecasts



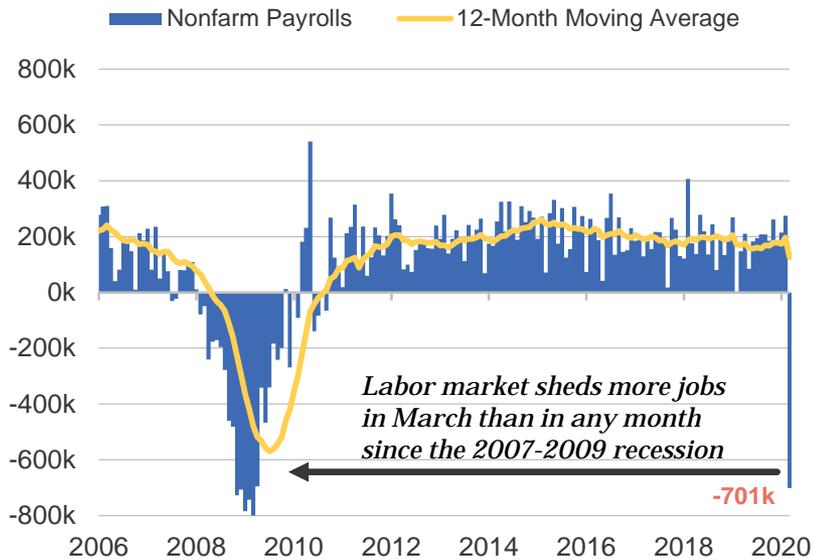
Source: Bloomberg. Forecasts made from 3/25/2020 through 4/20/2020 by ING Group, Morgan Stanley, Deutsche Bank, Goldman Sachs Group, Barclays, JPMorgan Chase, UBS, TD Bank, and Wells Fargo.



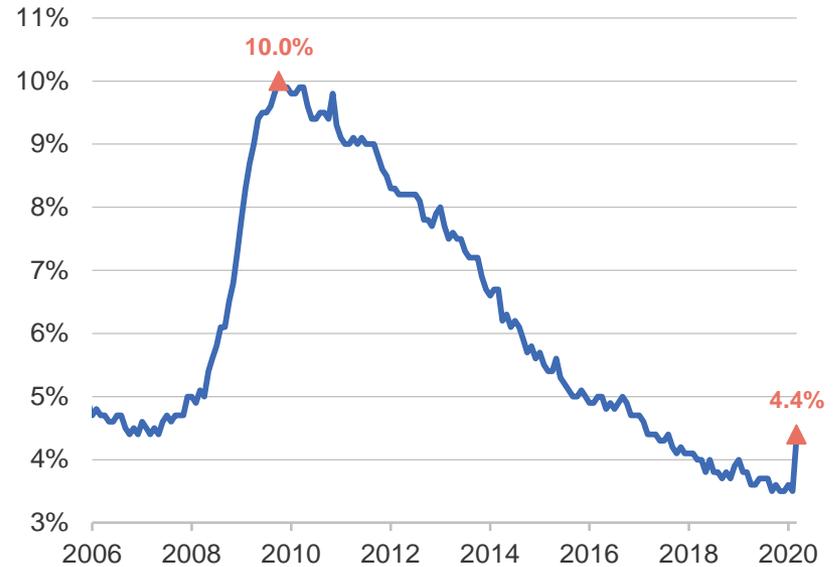
## U.S. Loses 701,000 Jobs in March, but Losses Are Understated

- The U.S. economy lost a record 701,000 jobs.
  - The unemployment rate to 4.4%, the largest one-month increase since January 1975.
  - Wage growth rose slightly to 3.1%.
- Labor participation contracted to 62.7%.

### Monthly Change in Non-Farm Payrolls



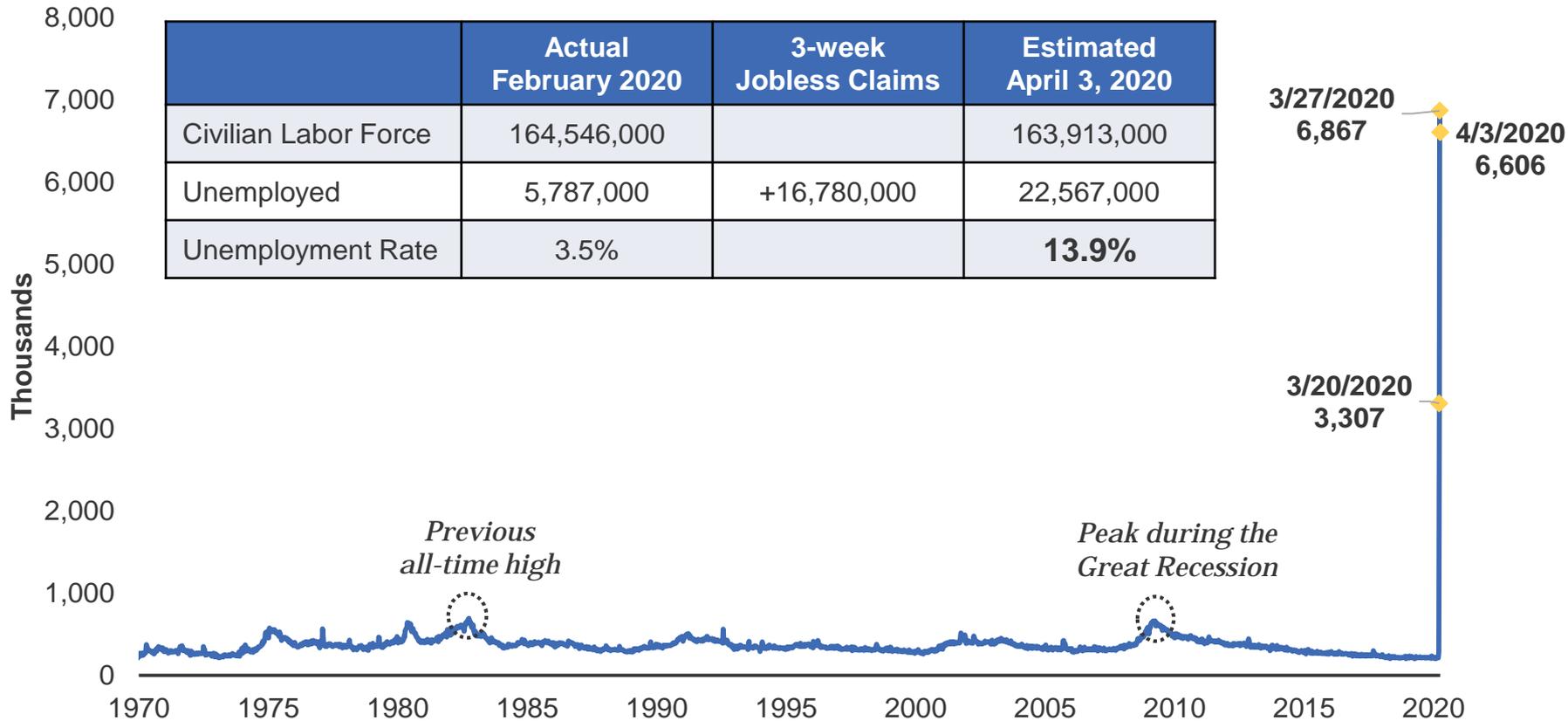
### Unemployment Rate





# Initial Jobless Claims Surge as Businesses Close Their Doors

## Initial Jobless Claims

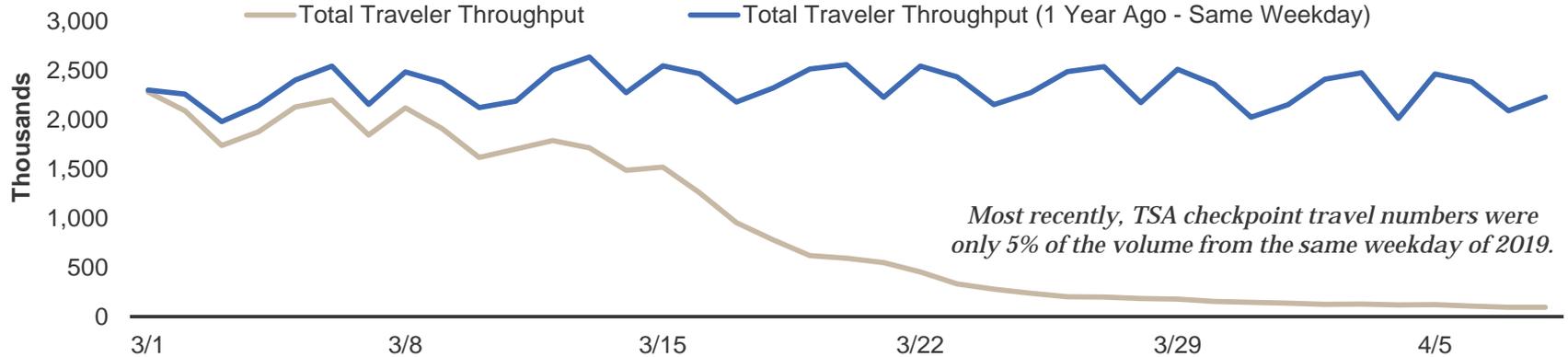


Source: Bloomberg, as of April 9, 2020. Data is seasonally adjusted. \*Not based upon BLS statistics for March 2020 as the April 3, 2020 unemployment report only included information through the first half of March 2020.

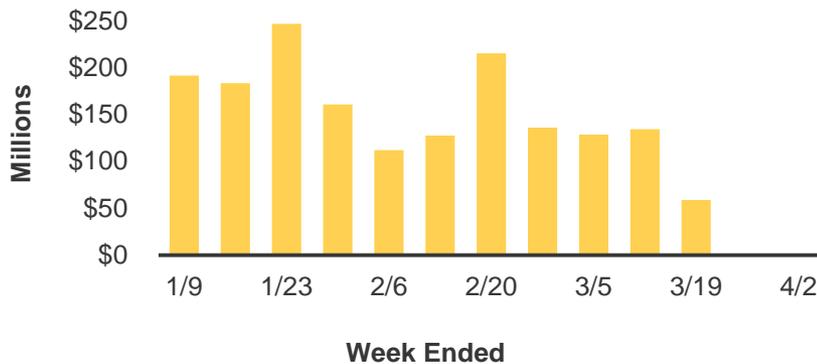


# Coronavirus Weighs Significantly on Service Industry

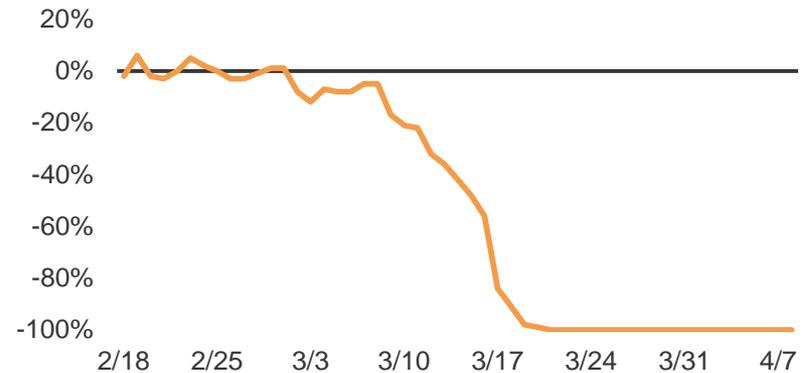
### TSA Checkpoint Travel Numbers for 2020 and 2019



### Weekly Gross Box Office Sales



### YoY Change in Restaurant Reservations

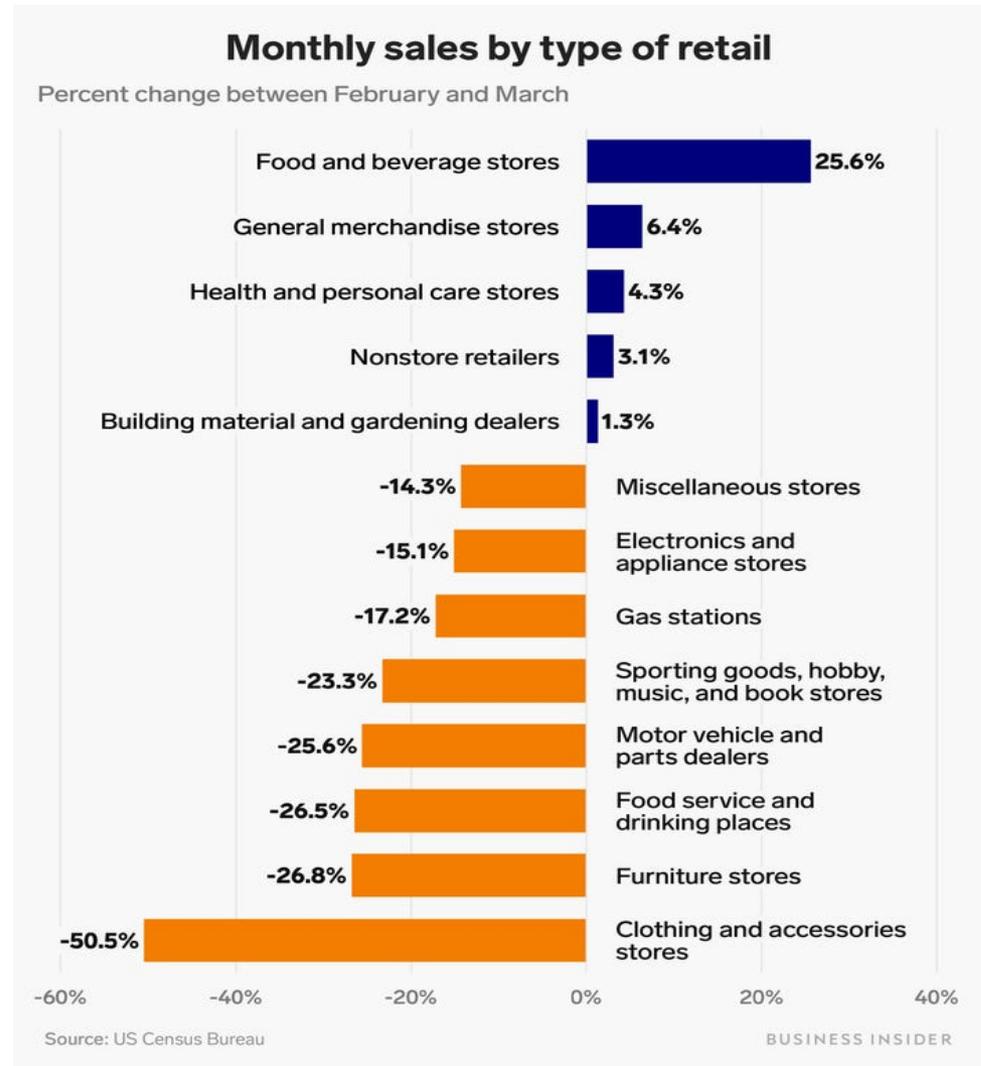


Sources: Transportation Security Administration (top); IMDbPro (bottom left); Open Table (bottom right). Most current data as of April 9, 2020.  
<https://www.tsa.gov/coronavirus/passenger-throughput>



## Percent Change in Monthly Sales by Retail Type

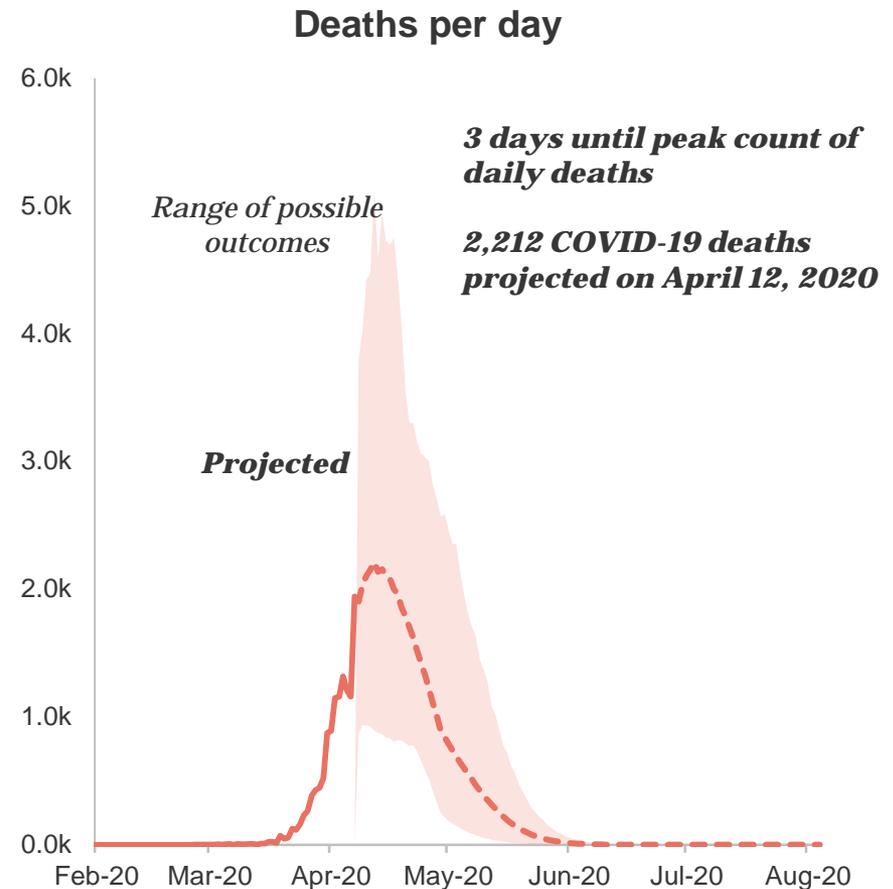
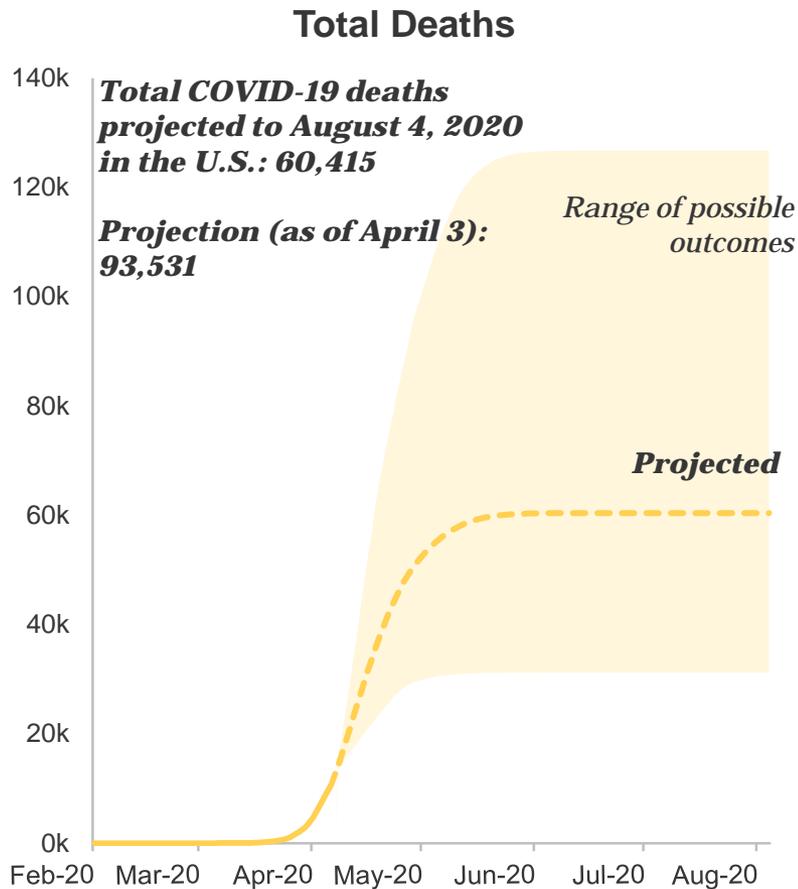
- Consumer discretionary items have been hit the hardest.
  - Sales have rapidly declined due to a nation-wide lockdown.
- Meanwhile, consumer staples have seen the largest positive change in sales.
  - These are the stores that are deemed “essential” and allowed to remain open or have a large online presence.



Source: U.S. Census Bureau.



## U.S. Potential Coronavirus Timeline Scenarios Are Improving



Source: Institute for Health Metrics and Evaluation, as of April 9, 2020. <https://covid19.healthdata.org/projections>



# Federal Reserve Broadens Tool Kit to Support Markets

## **Zero Interest Rates**

*Cut rates by 150 bps at two emergency meetings in March*

## **Liquidity Support**

*Funding for CP, corporate bonds, ABS, MMF, primary dealers, municipal debt, leveraged loans, commercial mortgages, and “fallen angels”*

## **Asset Purchase Programs**

*Treasury and Agency MBS unlimited purchase program*

## **U.S. Dollar Swap Lines**

*Expanded swap lines with additional foreign central banks*

## **Discount Window**

*Decreased rate charged and extended term of loans*

## **Paycheck Protection Program**

*Extending credit to financial institutions that originate PPP loans to small businesses*

## **Repurchase Agreements**

*Increased the amount offered in repurchase operations*

## **Regulatory Relief**

*Moved reserve requirement to 0, extended the filing deadline for 3/31 financial statements, and eased capital liquidity restraints*

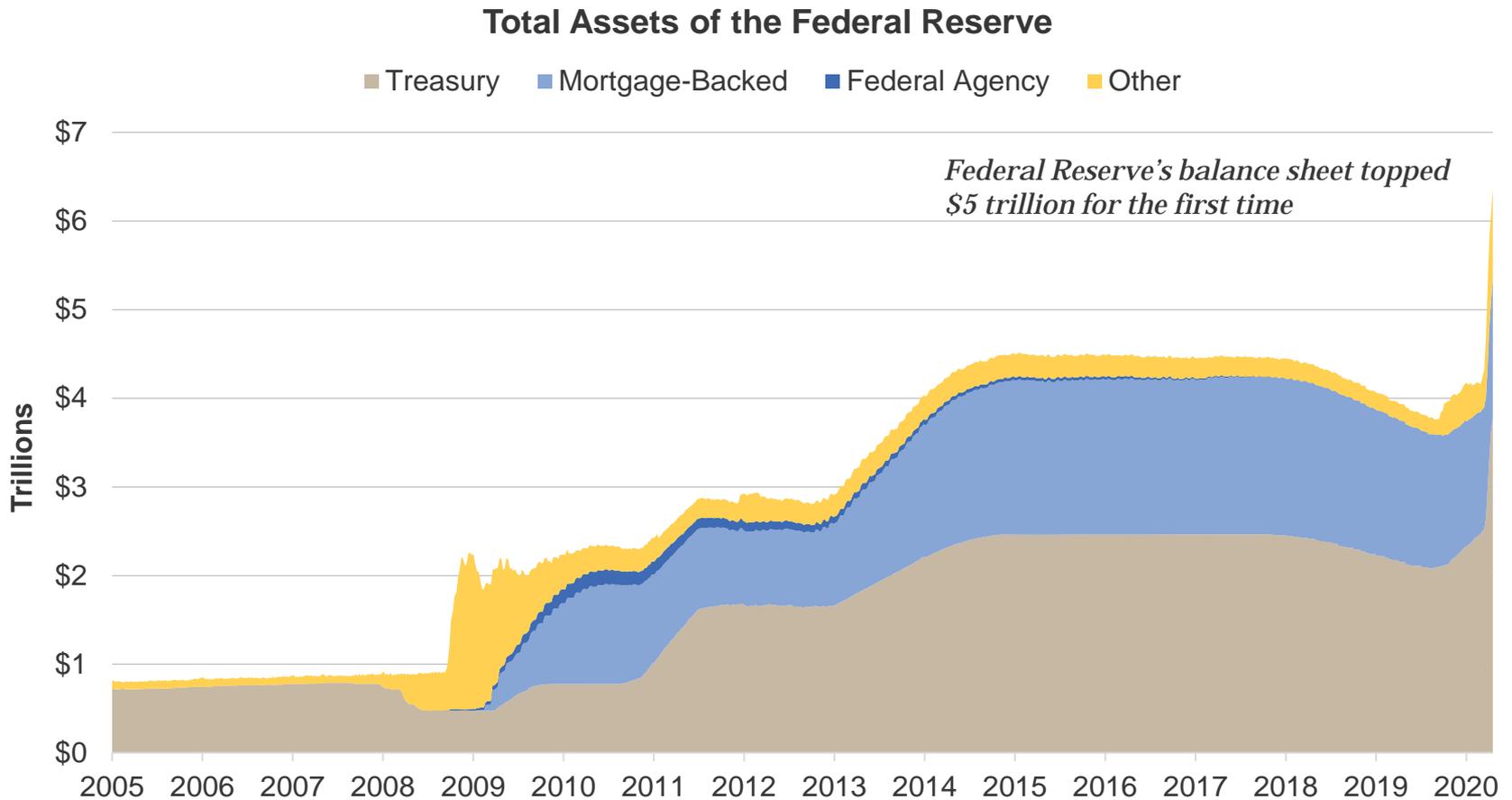
## **Main Street Lending Program**

*Using funding from the CARES Act to purchase loans to small- and mid-sized businesses*

Source: Federal Reserve.



## Fed's Balance Sheet Grows Due to Policies to Support Financial Markets



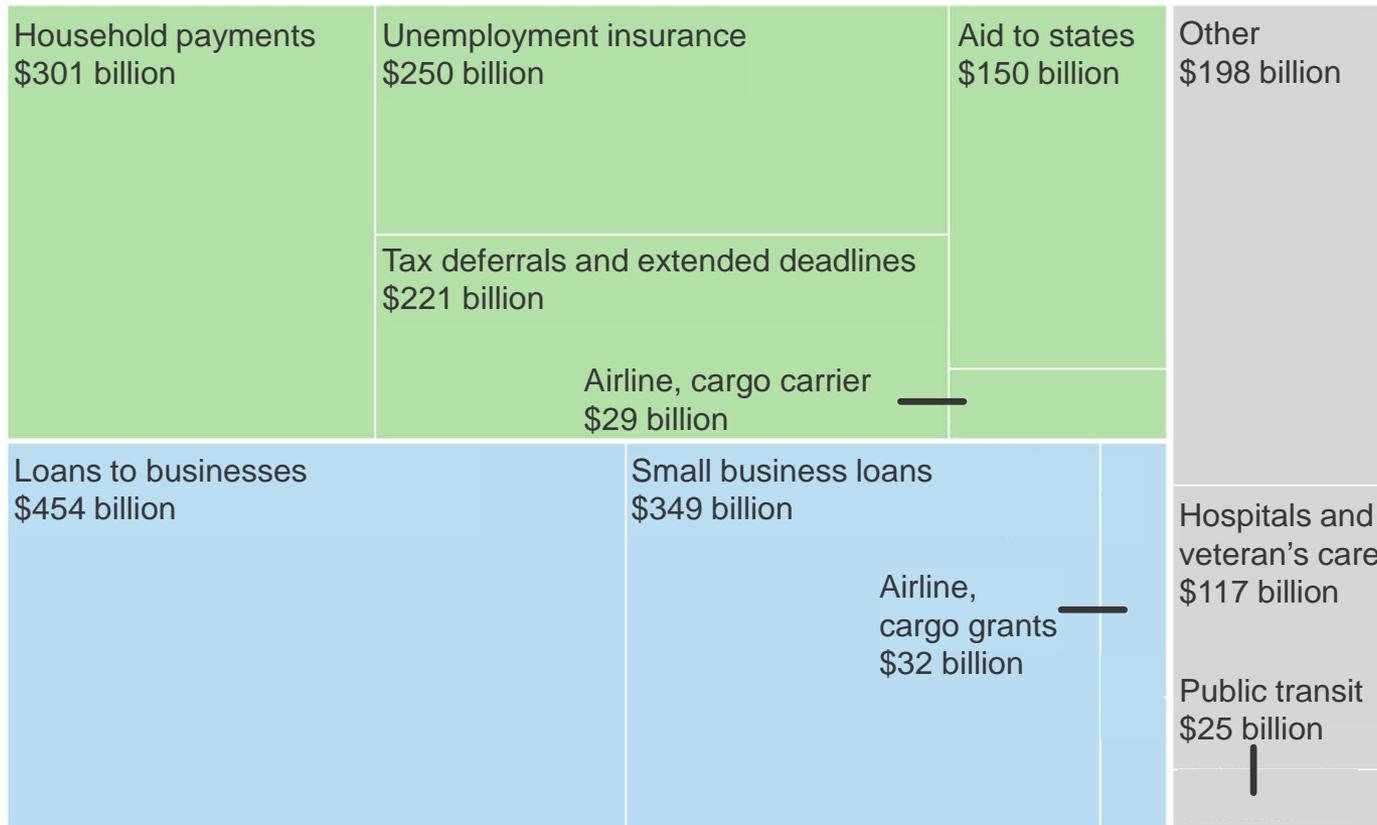
Source: Federal Reserve, as of 4/20/2020.



# Congress Passes \$2 Trillion Stimulus Package

## Coronavirus Aid, Relief, and Economic Security (CARES) Act

■ Direct Relief   ■ Loans   ■ Supplemental





## Corporate Spreads Normalize Amid Fed Stimulus

Corporate Yield Spreads  
1-5 Year A-AAA (OAS)



Source: Bloomberg, as of 4/20/20. Recession period derive from the National Bureau of Economic Research (NBER) based recession indicators.



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