



Banking/Treasury Management For Today and Tomorrow

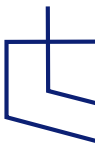
Easier. Optimized. More efficient.

Elyse Trout
Steve Broerman

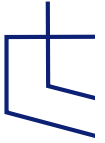
usbank

Evolution of traditional electronic payments

Address end users' needs for efficiency and speed



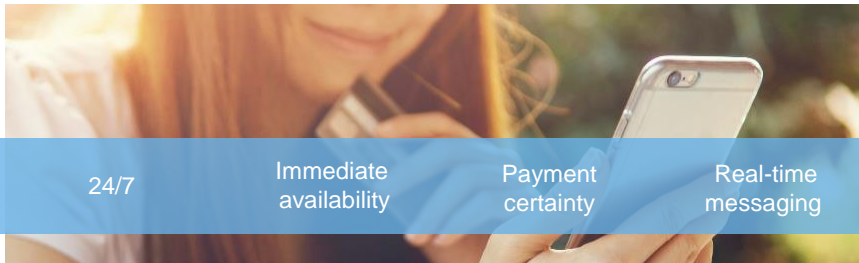
ISO20022 Fedwire	Same Day ACH
<ul style="list-style-type: none"> • Improve efficiency and promote interoperability among high-value payment systems • Federal Reserve migrating to the ISO 20022 standard <ul style="list-style-type: none"> ○ To be completed by late 2023 	<ul style="list-style-type: none"> • Increase speed of ACH payments <ul style="list-style-type: none"> ○ Sign up required for origination service



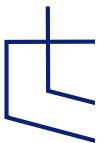
Real-Time Payments (RTP)

First new U.S. payment infrastructure in over 40 years

- Supports extensive messaging
 - Request for Payment
 - Request for Information
 - Payee Payment Acknowledgement
- U.S. Bank participated in 1st Real-Time Payment
- Potential use cases include expedited vendor payments



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Real-Time Payments (RTP)

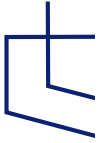
Enhance payment efficiency and control

- Supports extensive messaging to reduce manual exception handling
- U.S. Bank is one of first banks in nation to support this new payment option



Innovate Payments

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Disbursements via Zelle

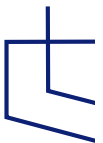
Increase electronic payment usage

- Send payments using email or mobile number
 - Next-day and real-time payments
- Potential use case includes one-time payments such as refunds



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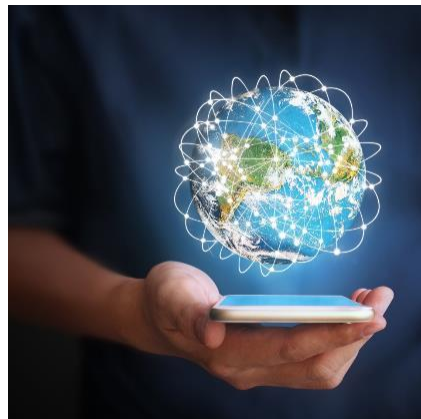
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Disbursements via Zelle

Increase electronic payment adoption

- Uses payees' email and mobile information
- Payments can be next-day or real-time
- Available for direct transmission
 - Additional delivery channels to follow



Innovate Payments

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U.S. Bank Liquidity Advantage



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Put your liquid assets to work

- If you hold significant cash balances in deposit accounts
 - Due to regulatory or investment policy restrictions
 - Because you need daily access to funds
 - As an easy and safe way to manage your liquidity
- You can leverage our Liquidity Advantage solutions
 - Gain a better return
 - Simplify your reporting

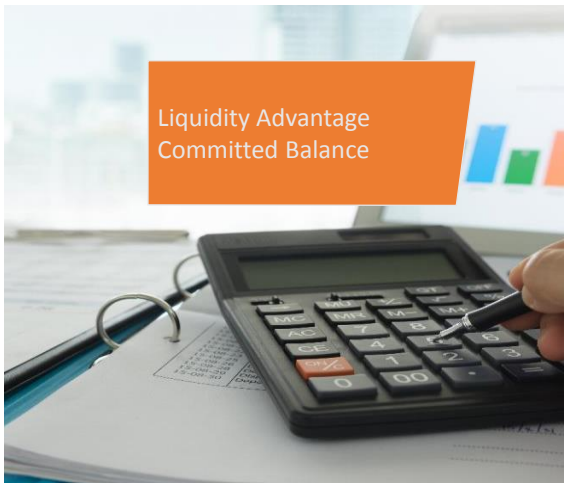


Options include:

- Committed Balance
- Balance Aggregation

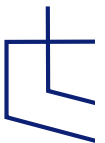


Help optimize your working capital



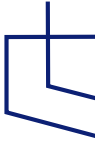
- Increase the power of your checking or money market deposit accounts
- Earn a competitive rate on your deposit relationships
- Retain daily access to funds
 - Leverage the flexibility of checking or money market deposit account transactions while earning interest

Benefit from maximized earnings



- Earn a competitive rate on liquid balances without increased risk when you commit to holding a balance for a specified period of time
- Aggregate your account balances to help gain an advantage you wouldn't receive for an individual/smaller account





Earnings credit offset is applied

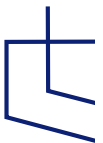
- Earnings credit can be used to offset fees
- Total amount of interest paid is subtracted from earnings credit before it's used to offset fees
- If interest paid is greater than earnings credit, there will be \$0 in net earnings credit to offset analysis fees

Example:	
Earnings Credit Based Service Charges	\$30,000.00
Earnings Credit Eligible Balances	\$100,000,000.00
Earnings Credit @ 0.35%	\$29,726.23
Minus Interest Paid on Balances	(\$88,161.24)
Net Earnings Credit	\$0.00

Rates and terms are used for illustration purposes only.

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Sample customer analysis statement



Consolidated Analysis Summary		
SAMPLE CUSTOMER A		Lead Account Number 1-234-5678-9012
	Negative Collected Rate	7.25%
	Reserve Adjustment Rate †	0.00%
	Settlement Frequency	Quarterly
	Settlement Period	June 201X
	REVISED:	Jun. 4, 201X
Balance Summary		
Average Ledger Balance	\$	14,760,748.65
Average Float	-	0.00
Average Collected Balance	=	14,760,748.65
Interest Payment Detail - Aggregate Level		
Collected Balance Available for Aggregate Level Interest Payment	\$	14,760,770.42
Avg Committed Balance Portion of Collected Balances	\$	9,999,999.00
Interest Calculated for Committed Balances	\$	11,635.61
Avg Daily Liquid Balance Portion of Collected Balances	\$	4,760,771.42
Interest Calculated for Daily Liquid Balances @ 0.24999%	\$	1,010.84
Gross Interest Calculated at Aggregate Level @ 1.00876%	\$	12,646.45
Interest Paid to Related Accounts	\$	674.50
Net Interest Paid at Aggregate Level	\$	11,971.96
Settlement Analysis		
Collected Balance Available for Earnings Credit Services	\$	14,760,748.65
Payment at Aggregate Level	-	11,971.96
Interest Paid On Balances	\$	674.50

- Statement section to show interest payment summary information for balance tranches

- Settlement Analysis section includes interest payment information

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Sample Depository Account Statement

ANALYZED CHECKING WITH INTEREST					
U.S. Bank National Association			Account Number 1-234-5678-9012		
Account Summary					
# Items					
Beginning Balance on May 1	\$	11,971.96	Interest Paid this Year	\$11,971.97	
Other Deposits	1	0.01	Number of Days in Statement Period	31	
Ending Balance on May 31, 201X		\$	11,971.97		
Other Deposits					
Date	Description of Transaction	Ref Number	Amount		
May 1	Payment	Aggregate Level	010000000	11,971.96	
May 29	Interest Paid	0		0.01	
Total Other Deposits			\$	11,971.97	
Balance Summary					
Date	Ending Balance	Date	Ending Balance		
May 1	11,971.96	May 29	11,971.97		
Balances only appear for days reflecting change.					

Net interest paid at the relationship level

Interest paid at the individual related account level

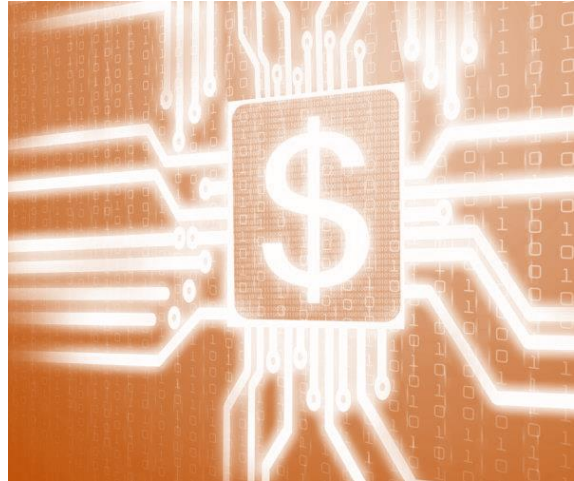
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Sweep Services

Automated liquidity management solutions

How Sweep Services work

- Automatically:
 - Moves excess balances between deposit and investment or savings accounts
 - Transfers between deposit account and loan
- Transfers occur after all transactions have posted to deposit account



Questions to help identify your needs:



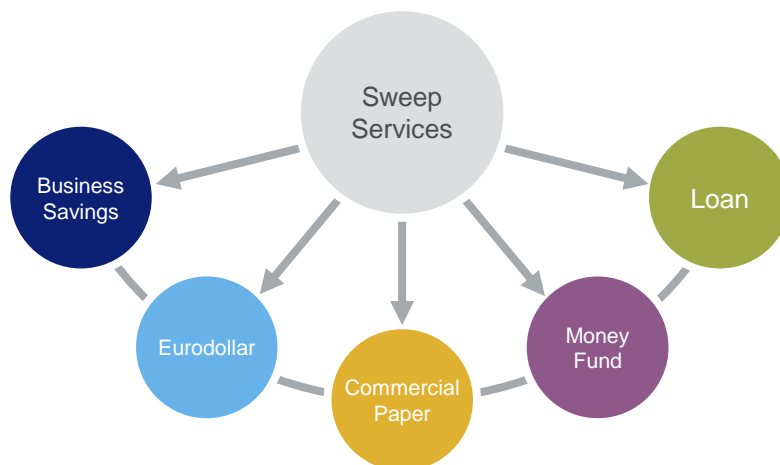
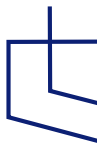
- Do you have an automated approach to meeting your liquidity needs?
- Do you transfer your excess cash to an investment account outside of U.S. Bank?
- Do you want to reduce the deposit coverage fee assessed to your checking account?
- If you have a credit relationship with U.S. Bank...
 - Do you want to ensure your operations are appropriately funded?

Primary features and benefits

- Optimize your working capital
 - Put excess cash to work
 - Ensure operations are appropriately funded
- Save time with automatic transfers
- Streamline by consolidating your investment dollars



Automated liquidity solutions to fit your needs





Prevent, detect and uncover check fraud

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How check fraud impacts us

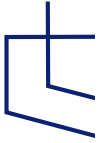
- U.S. businesses loss an estimated \$18.7 billion annually*
- Restitution is unlikely
- Recovery may be possible



Prevention is the best option

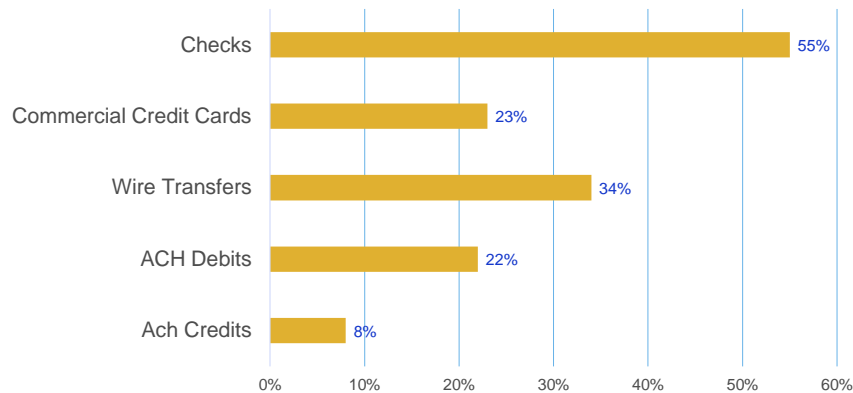
Source: Federal Bureau of Investigation – January 2015

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Attempted or actual payment fraud

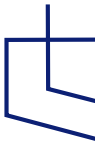
Percent of all organizations by payment method | 2016



Source: 2017 AFP Payments Fraud and Control Survey

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Why is there so much check fraud?



Low risk method

- Too many check fraud reports make it hard to follow up on all of them

Low barriers to entry

- Readily available scanners, printers and software
- Relatively easy access to the banking system

Access to account information

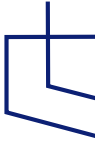
- Online auctions, classified ads and dating services
- Mail theft and phishing

Check fraud schemes

- International aspects of some schemes increase the complexity and severity of fraud

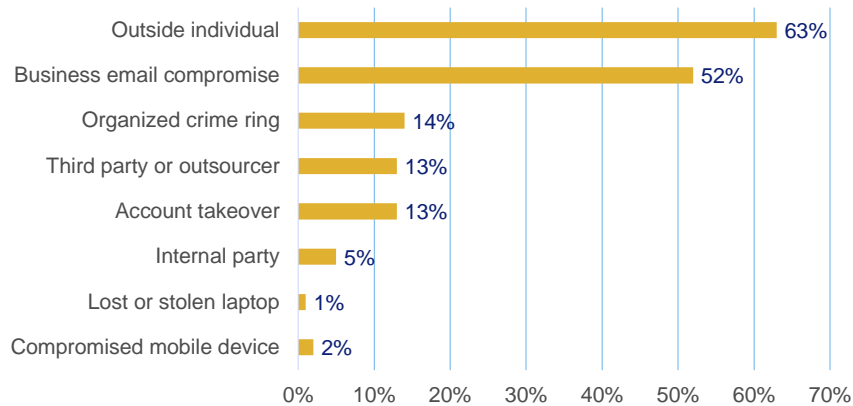
Source: 2017 AFP Payments Fraud and Control Survey

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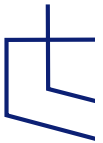
When financial loss occurred

Sources of attempted/actual payments fraud | 2016



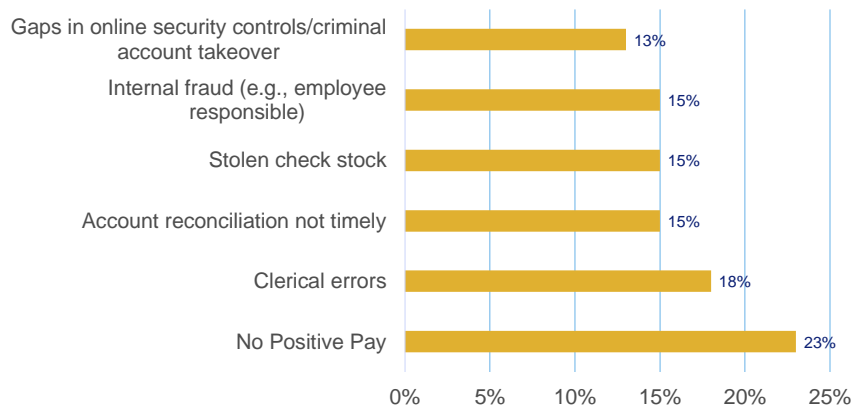
Source: 2017 AFP Payments Fraud and Control Survey

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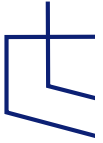
Reasons for financial loss due to check fraud

Results | 2016



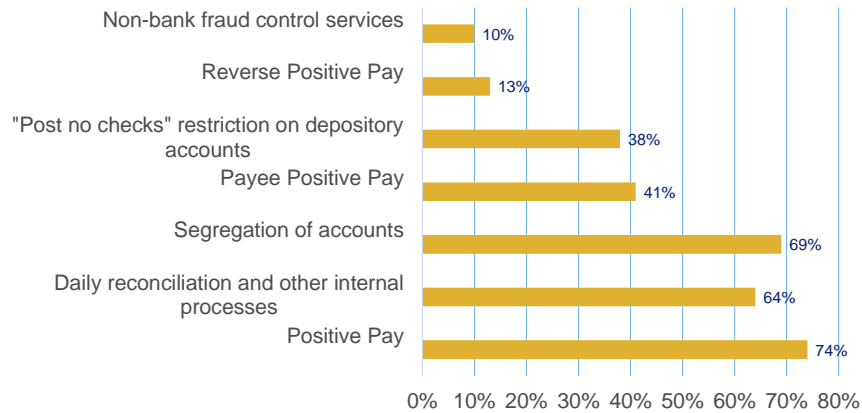
Source: 2017 AFP Payments Fraud and Control Survey

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Procedures used to guard against check fraud

Results | 2016



Source: 2017 AFP Payments Fraud and Control Survey

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Use bank fraud prevention services



- Positive Pay
 - Payee verification
 - Issue maintenance
- Reverse Positive Pay
- Check filter
- ACH blocks and filters
- ACH Positive Pay
- Electronic alternatives

Sector	Par (000)	Identifier	Issuer Name	Mdys	S&P	Coupon	Maturity	Price (Mkt)	YTW	YTM	Eff Dur (Par)	Sector	Avg Life	Conv (Par)	% Held (MV)	Mod Dur	Call Date	Mkt Val (000)
		250 912828SH	UNITED STATES TREAS NTS	TSY	TSY	1.375	02/28/2019	99.328	2.111	2.111	0.911	TSY	0.917	0.008	5.01	0.914	N/A	249
		250 912828D8	UNITED STATES TREAS NTS	TSY	TSY	1.625	08/31/2019	99.176	2.215	2.215	1.402	TSY	1.417	0.013	5.01	1.399	N/A	248
		250 912828VV	UNITED STATES TREAS NTS	TSY	TSY	2.125	08/31/2020	99.453	2.358	2.358	2.354	TSY	2.417	0.035	5.02	2.347	N/A	249
		250 912828RC	UNITED STATES TREAS NTS	TSY	TSY	2.125	08/15/2021	98.859	2.478	2.478	3.247	TSY	3.417	0.054	5.00	3.240	N/A	248
		250 912828L2	UNITED STATES TREAS NTS	TSY	TSY	1.875	08/31/2022	97.176	2.554	2.554	4.227	TSY	4.417	0.103	4.91	4.206	N/A	243
		250 912828M8	UNITED STATES TREAS NTS	TSY	TSY	2.000	11/30/2022	97.520	2.586	2.586	4.421	TSY	4.657	0.112	4.95	4.401	N/A	245
TSY	1,500			Aaa	AA+	1.854	2.871	98.593	2.379	2.379	2.751		2.856	0.056	29.89	2.742		1,482
		250 3133EGBG	FEDERAL FARM CR BKS	AGY	AA+	1.000	08/23/2018	96.677	1.801	1.801	0.365	AGY	0.417	-0.028	5.03	0.402	11/23/2017	249
		250 3134G3K7	FEDERAL HOME LN MTG CORP	AGY	AA+	1.200	09/24/2018	96.641	1.937	1.937	0.485	AGY	0.500	0.008	5.02	0.487	N/A	249
		250 3137EADG	FEDERAL HOME LN MTG CORP	AGY	AA+	1.750	05/30/2019	96.473	2.206	2.206	1.149	AGY	1.167	0.010	5.04	1.152	N/A	250
		250 3133EJDA	FEDERAL FARM CR BKS	AGY	AA+	2.940	02/15/2023	96.873	2.988	2.988	2.354	AGY	4.917	-1.551	5.05	4.503	08/15/2018	251
		250 3137EAEK	FEDERAL HOME LN MTG CORP	AGY	AA+	1.875	11/17/2020	98.526	2.455	2.455	2.548	AGY	2.667	0.041	5.00	2.538	N/A	248
		250 3135G0K6	FEDERAL NATL MTG ASSN	AGY	AA+	1.250	05/08/2021	96.424	2.452	2.452	3.016	AGY	3.083	0.056	4.89	3.005	N/A	242
		250 3130AABG	FEDERAL HOME LOAN BANKS	AGY	AA+	1.875	11/29/2021	97.784	2.510	2.510	3.515	AGY	3.667	0.074	4.95	3.496	N/A	246
		250 3135G0T4	FEDERAL NATL MTG ASSN	AGY	AA+	1.875	04/05/2022	97.331	2.578	2.578	3.823	AGY	4.000	0.085	4.95	3.806	N/A	246
AGY	2,000			Aaa	AA+	1.721	2.547	98.604	2.362	2.362	2.148		2.546	-0.166	39.95	2.418		1,981
		250 83172HDR	SMARTBANK PIGEON FORGE TENN	N/A	N/A	2.100	11/27/2019	99.548	2.386	2.386	1.621	MM	1.671	0.017	5.03	1.617	N/A	249
		250 55266CYJ	MB FINL BK NA CHIC. IL	N/A	N/A	2.250	02/14/2020	99.579	2.490	2.490	1.825	MM	1.887	0.021	5.02	1.821	N/A	249
		250 85916VCH	STERLING BK POPLAR BLUFF MO	N/A	N/A	2.200	05/28/2020	99.265	2.546	2.546	2.102	MM	2.171	0.028	5.01	2.089	N/A	249
		250 61747MK7	MORGAN STANLEY BK N A UTAH	N/A	N/A	2.550	02/16/2021	99.797	2.627	2.627	2.771	MM	2.893	0.049	5.04	2.762	N/A	250
		250 254873MG	DISCOVER BK	N/A	N/A	2.600	02/14/2022	99.620	2.705	2.706	3.675	MM	3.888	0.060	5.04	3.661	N/A	250
		250 795450K9	SALLIE MAE BK SLT LAKE CITY	N/A	N/A	2.700	02/15/2023	99.350	2.846	2.846	4.555	MM	4.890	0.119	5.02	4.533	N/A	249
MM	1,500			N/A	N/A	2.400	2.901	99.527	2.600	2.600	2.759		2.901	0.052	30.17	2.748		1,496
Total:	5,000			Aaa	AA+	1.965	2.751	98.879	2.439	2.439	2.513		2.749	-0.034	100.00	2.515		4,959

*Not A Deposit, Not FDIC Insured, May Lose Value, Not Bank Guaranteed, Not Insured By Any Federal Government Agency

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which would reduce returns.

Information is deemed reliable but may be subject to change.

BondEdge

Sample Lawrence CO 3 Year Portfolio Pricing Date: 3/27/2018

Sector	Par (000)	Identifier	Issuer Name	Mdys	S&P	Coupon	Maturity	Price (Mkt)	YTW	YTM	Eff Dur (Par)	Sector	Avg Life	Conv (Par)	% Held (MV)	Mod Dur	Call Date	Mkt Val (000)
		400 912828RE	UNITED STATES TREAS NTS	TSY	TSY	1.500	08/31/2018	99.816	1.933	1.933	0.421	TSY	0.417	0.007	8.04	0.423	N/A	400
		400 912828RT	UNITED STATES TREAS NTS	TSY	TSY	1.375	11/30/2018	99.559	2.031	2.031	0.664	TSY	0.667	0.009	8.04	0.668	N/A	400
		400 912828SH	UNITED STATES TREAS NTS	TSY	TSY	1.375	02/28/2019	99.328	2.111	2.111	0.911	TSY	0.917	0.008	8.00	0.914	N/A	398
		400 912828D8	UNITED STATES TREAS NTS	TSY	TSY	1.625	08/31/2019	99.176	2.215	2.215	1.402	TSY	1.417	0.013	7.99	1.399	N/A	397
TSY	1,600			Aaa	AA+	1.469	0.865	99.470	2.072	2.072	0.849		0.853	0.009	32.07	0.850		1,595
		400 3137EADG	FEDERAL HOME LN MTG CORP	AGY	AA+	1.750	05/30/2019	99.473	2.206	2.206	1.149	AGY	1.167	0.010	8.05	1.152	N/A	400
		500 3133EJCY	FEDERAL FARM CR BKS	AGY	AA+	2.500	02/16/2021	99.675	2.617	2.617	1.552	AGY	2.917	-1.035	10.05	2.759	05/16/2018	500
		150 3135G0ZY	FEDERAL NATL MTG ASSN	AGY	AA+	1.750	11/26/2019	99.213	2.234	2.234	1.623	AGY	1.667	0.017	3.01	1.620	N/A	150
		150 3137EADR	FEDERAL HOME LN MTG CORP	AGY	AA+	1.375	05/01/2020	98.011	2.354	2.354	2.040	AGY	2.083	0.026	2.97	2.036	N/A	148
		400 3137EAEK	FEDERAL HOME LN MTG CORP	AGY	AA+	1.875	11/17/2020	98.526	2.455	2.455	2.548	AGY	2.667	0.041	7.98	2.538	N/A	397
		400 3135G0K6	FEDERAL NATL MTG ASSN	AGY	AA+	1.250	05/06/2021	96.424	2.452	2.452	3.016	AGY	3.083	0.056	7.80	3.005	N/A	388
AGY	2,000			Aaa	AA+	1.834	2.387	98.609	2.421	2.421	1.998		2.389	-0.236	39.86	2.298		1,982
		250 83172HDR	SMARTBANK PIGEON FORGE TENN	N/A	N/A	2.100	11/27/2019	99.548	2.386	2.386	1.621	MM	1.671	0.017	5.01	1.617	N/A	249
		150 55266CYJ	MB FINL BK NA CHIC. IL	N/A	N/A	2.250	02/14/2020	99.579	2.490	2.490	1.825	MM	1.887	0.021	3.01	1.821	N/A	149
		250 02007GAZ	ALLY BK MIDVALE UTAH	N/A	N/A	2.300	02/18/2020	99.660	2.489	2.489	1.840	MM	1.898	0.022	5.02	1.838	N/A	250
		250 85916VCH	STERLING BK POPLAR BLUFF MO	N/A	N/A	2.200	05/28/2020	99.265	2.546	2.546	2.102	MM	2.171	0.028	5.00	2.089	N/A	249
		250 61747MK7	MORGAN STANLEY BK N A UTAH	N/A	N/A	2.550	02/16/2021	99.797	2.627	2.627	2.771	MM	2.893	0.049	5.03	2.762	N/A	250
		250 56612ACF	NORTHFIELD BK STATEN ISLAND	N/A	N/A	2.350	02/16/2021	99.243	2.627	2.627	2.777	MM	2.893	0.049	5.00	2.769	N/A	249
MM	1,400			N/A	N/A	2.295	2.261	99.511	2.530	2.530	2.180		2.261	0.032	28.07	2.173		1,396
Total:	5,000			Aaa	AA+	1.846	1.864	99.139	2.340	2.340	1.680		1.861	-0.082	100.00	1.799		4,973

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