How Money "Printing" Works

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Scenario 1

A Bank Loans Money

Beginning State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T
		R		D		T	D	T	R		T
				D		T	D	T	R		T
				C		T					T
											T
											T

System Deposits = **4D**
System Reserves = **3R**

Assets and **L**iabilities as "A | L"
R - $1000 Reserve
D - $1000 Deposit
T - $1000 Treasuries
C - $1000 Used Car

Intermediate State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
D			R	D		D			R	D		T	R			T
D	L		R	D		D	D		T	D		T	R			T
			L	D		D	D		T	D		T	R			T
						C			T							T
																T
																T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T
D	L	R		D		T	D	T	R		T
C		L	D	D		T	D	T	R		T
				C		T					T
											T
											T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T
D	L	R	D	D		T	D	T	R		T
C		L	D	D		T	D	T	R		T
				C		T					T
				D							T
											T

Ending State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T
D	L	R	R	D		T	D	T	R		T
C		L	D	D		T	D	T	R		T
				C		T					T
				D		R	D				T
											T
											T

System Deposits = **5D**
System Reserves = **3R**

Review

Federal Reserve

A	L
T	R
T	R
T	R

3T 3R

Beginning State

Federal Reserve

A	L
T	R
T	R
T	R

3T 3R

Ending State

- Fine, it was unchanged

Review

U.S. Treasury

A	L
	T
	T
	T
	T
	T
	T

6T

Beginning State

U.S. Treasury

A	L
	T
	T
	T
	T
	T

6T

Ending State

- Fine, it was unchanged

Review

Mary's Bank		Sara's Bank	
A	**L**	**A**	**L**
R	D	R	D
R		T	D
		T	D
		T	

0L 3R 4D 3T

Beginning State

Mary's Bank		Sara's Bank	
A	**L**	**A**	**L**
R	D	R	D
R		T	D
L	D	T	D
		T	
		R	D

1L 3R 5D 3T

Ending State

- The money multiplier ratio increased from 1.33 (**4/3**) to 1.67 (**5/3**)
- More broad money, increased 1D
- More leveraged, increased 1L

Review

- More liquid asserts, increased 1D
- More leveraged, increased 1L

Scenario 2

The Fed Performs QE from Banks

Beginning State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D				T
D		M	D	D		M	D				T
D		L		D		L					T
D				D							T

System Deposits = **8D**
System Reserves = **2R**

C – $1000 Used Car
H – $1000 House

R – $1000 Reserve
D – $1000 Deposit
T – $1000 Treasuries

M – $1000 Mortgage Loan
L – $1000 Car Loan

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D		R		T
D		M	D	D		M	D				T
D		L		D		L					T
D		R		D							T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D	T	R		T
D		M	D	D		M	D				T
D		L		D		L					T
D		R		D							T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D	T	R		T
D		M	D	D		M	D		R		T
D		L		D		L					T
D		R		D							T
		R									

Intermediate State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
H	M		R	D		H	M		R	D		T	R			T
C	L		T	D		C	L		T	D		T	R			T
D			T	D		D			T	D		T	R			T
D			M	D		D			M	D		M	R			T
D			L			D			L							T
D			R			D										T
			R													

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D	T	R		T
D		M	D	D		M	D	M	R		T
D		L		D		L			R		T
D		R		D		R					T
		R									

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D	T	R		T
D		M	D	D		M	D	M	R		T
D		L		D		L		T	R		T
D		R		D		R					T
		R									

Intermediate State

Ending State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
H	M	R	D	H	M	R	D	T	R		T
C	L	T	D	C	L	T	D	T	R		T
D		T	D	D		T	D	T	R		T
D		M	D	D		M	D	M	R		T
D		L		D		L		T	R		T
D		R		D		R		M	R		T
		R				R					

System Deposits = **8D**
System Reserves = **6R**

Review

Federal Reserve

A	L
T	R
T	R

Federal Reserve

A	L
T	R
T	R
T	R
M	R
T	R
M	R

2R 2T 0M

6R 4T 2M

Beginning State

Ending State

- More base money, increased 4R
- More leveraged, increased 2T and 2M

Review

U.S.
Treasury

A	L
	T
	T
	T
	T
	T
	T

6T

Beginning State

U.S.
Treasury

A	L
	T
	T
	T
	T
	T
	T

6T

Ending State

- Fine, it was unchanged

Review

Mary's Bank — Beginning State

A	L
R	D
T	D
T	D
M	D
L	

Sara's Bank — Beginning State

A	L
R	D
T	D
T	D
M	D
L	

2L 2M 2R 8D 4T

Beginning State

Mary's Bank — Ending State

A	L
R	D
~~T~~	D
T	D
~~M~~	D
L	
R	
R	

Sara's Bank — Ending State

A	L
R	D
~~T~~	D
T	D
~~M~~	D
L	
R	
R	

2L ↓0M ↑6R 8D ↓2T

Ending State

- The money multiplier ratio decreased from 4.00 (**8/2**) to 1.33 (**8/6**)
- Broad money was unchanged
- Much better capitalized, decreased 2M and 2T
- More lending power, increased 4R

Review

Mary		Sara	
A	**L**	**A**	**L**
H	M	H	M
C	L	C	L
D		D	
D		D	
D		D	
D		D	

2H **2C** **2L** **2M** **8D**

Beginning State

Mary		Sara	
A	**L**	**A**	**L**
H	M	H	M
C	L	C	L
D		D	
D		D	
D		D	
D		D	

2H **2C** **2L** **2M** **8D**

Ending State

- Fine, it was unchanged

Scenario 3

The Fed Performs QE from Non-Banks

Beginning State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T T
		R		D		T	D	T	R		T
				D		T	D	T	R		T
				T		T					T
											T
											T

System Deposits = **4D**
System Reserves = **3R**

R - $1000 Reserve
D - $1000 Deposit
T - $1000 Treasuries

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T
		R		D		T	D	T	R		T
				D		T	D	T	R		T
				T		R			R		T
						R					T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T T
		R		D		T	D	T	R		T
				D		T	D	T	R		T
				T		R			R		T
				D		R	D				T
											T

Ending State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
D		R	D	D		R	D	T	R		T T
		R		D		T	D	T	R		T
				D		T	D	T	R		T
				T̶		T		T̲	R		T
				D		R	D				T
											T

System Deposits = **5D**
System Reserves = **4R**

Review

Federal Reserve	**Federal Reserve**

A	L
T	R
T	R
T	R

3T **3R**

Beginning State

A	L
T	R
T	R
T	R
T	R

4T **4R**

Ending State

- More base money, increased 1R

- More leveraged, increased 1T

Review

A	L

U.S. Treasury

T T

T

T

T

T

T

7T

Beginning State

A	L

U.S. Treasury

T T

T

T

T

T

T

7T

Ending State

- Fine, it was unchanged

Review

- The money multiplier ratio decreased from 1.33 (**4/3**) to 1.25 (**5/4**)
- More broad money, increased 1D (Fed did it directly)
- More lending power, increased 1R

Review

- More liquid asserts, changed from 4D1T to 5D

Scenario 4

Nonbank-Financed Helicopter Money

Beginning State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
C	L		R	D		D			R	D		T	R			T
D			L			D			R	D		T	R			T
						D			T	D		T	R			T
									T							T
																T

System Deposits = **4D**
System Reserves = **3R**

C - $1000 Used Car
L – $1000 Car Loan

R - $1000 Reserve
D - $1000 Deposit
T - $1000 Treasuries

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R		T
D		L		D		R	D	T	R		T
				D		T	D	T	R		T
						T					T
											T
											T
											T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R		T
D		L		D		R	D	T	R		T
				D		T	D	T	R		T
				T		T					T
				T							T
											T
											T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T
D		L		D		R	D	T	R	R	T
				D		T	D	T	R		T
				T		T					T
				T							T
											T
											T

Intermediate State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
C	L		R	D		D			R	D		T	R		R	T
D			L			D			R	D		T	R		R	
D			R	D		D			T	D		T	R			T
						T			T							T
						T										T
																T
																T

Ending State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T
D		L		D		R	D	T	R	R	T
D		R	D	D		T	D	T	R		T
				T		R	D				T
				T							T
				D							T
											T

System Deposits = **4D**
System Reserves = **3R**

Review

Federal Reserve	
A	**L**
T	R
T	R
T	R

3T **3R**

Beginning State

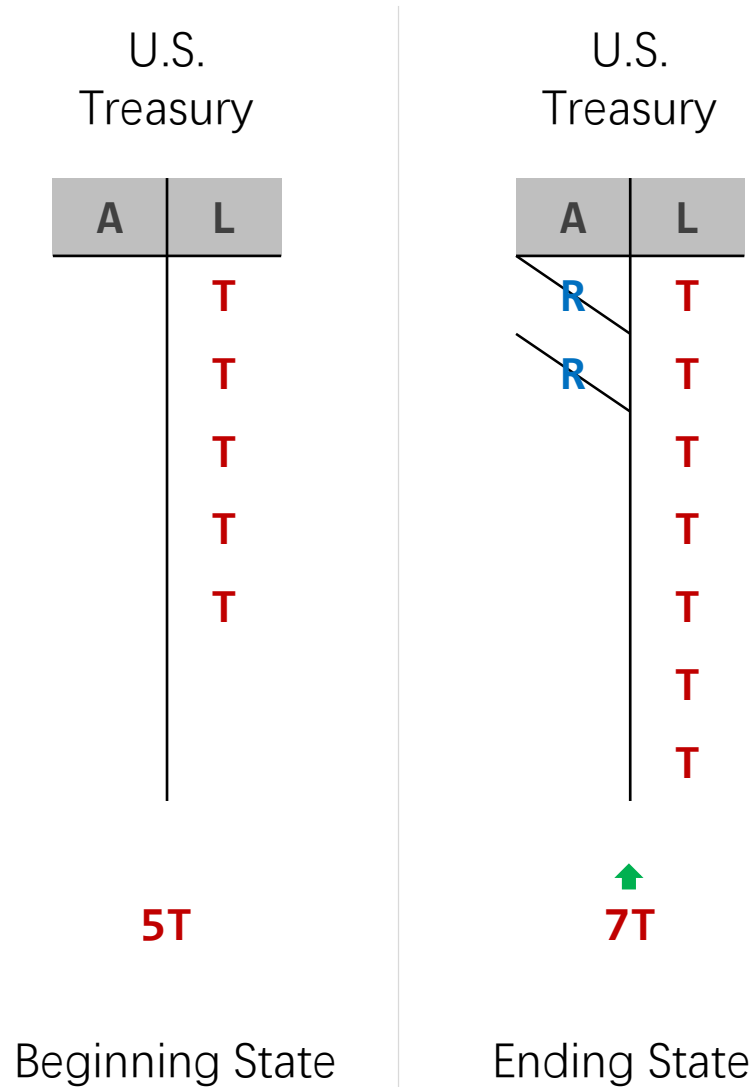| Federal Reserve	
A	**L**
T	R
T	R
T	R

3T **3R**

Ending State

- Fine, it was unchanged

Review

- More leveraged, increased 2T

Review

Mary's Bank   Sara's Bank   Mary's Bank   Sara's Bank

Beginning State   Ending State

- Fine, it was unchanged

Review

	Mary			Sara	
	A	L		A	L

Mary

A	L
C	L
D	

Sara

A	L
D	
D	
D	

Mary

A	L
C	L
D	
D	

Sara

A	L
D	
D	
D	
T	
T	
D	

1C 1L 4D 0T

Beginning State

1C 1L 4D 2T

Ending State

- More assets, increased 2T

Scenario 5

Fed-Financed Helicopter Money

Beginning State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R		T T
D		R	D	D		T	D	T	R		T
D			L	T		T		T	R		T
											T
											T

System Deposits = **4D**
System Reserves = **3R**

C - $1000 Used Car   R - $1000 Reserve
L – $1000 Car Loan   D - $1000 Deposit
                            T - $1000 Treasuries

Intermediate State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
C	L		R	D		D			R	D		T	R			T T
D			R	D		D			T	D		T	R			T T
D			L			T			T			T	R			T T
						T										T
																T
																T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R		T
D		R	D	D		T	D	T	R		T
D		L		T		T		T	R		T
		R				R			R		T
											T
											T

Intermediate State

Intermediate State

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T T
D		R	D	D		T	D	T	R	R	T T
D		L		T		T		T	R		T T
D		R		T		R		T	R		T
		T				T		T	R		T
		R	D								T

Ending State

System Deposits = **6D**
System Reserves = **5R**

Review

A	L
T	R
T	R
T	R

Federal Reserve

3T **3R**

Beginning State

A	L
T	R
T	R
T	R
T	R
T	R

Federal Reserve

5T **5R**

Ending State

- More base money, increased 2R
- More leveraged, increased 2T

Review

- More leveraged, increased 2T

Review

- The money multiplier ratio decreased from 1.33 (**4/3**) to 1.2 (**6/5**)
- More broad money, increased 2D
- More lending power, increased 2R

Beginning State

Ending State

1L 3R 4D 2T

1L 5R 6D 2T

Review

Scenario 6

Bank-Financed Helicopter Money

Beginning State

System Deposits = **6D**
System Reserves = **5R**

C - $1000 Used Car
L – $1000 Car Loan

R - $1000 Reserve
D - $1000 Deposit
T - $1000 Treasuries

Intermediate State

Mary			Mary's Bank			Sara			Sara's Bank			Federal Reserve			U.S. Treasury	
A	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**		**A**	**L**
C	L		R	D		D			R	D		T	R			T T
D			R	D		D			R	D		T	R			T T
D			R	D		D			T	D		T	R			T T
D			L			T			T			T	R			T T
						T						T	R			T T
																T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T T
D		R	D	D		R	D	T	R		T T
D		R	D	D		T	D	T	R		T T
D		L		T		T		T	R		T T
		T		T				T	R		T T
											T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T T
D		R	D	D		R	D	T	R	R	T T
D		R	D	D		T	D	T	R		T T
D		L		T		T		T	R		T T
		T		T		T					T T
											T

Intermediate State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T T
D		R	D	D		R	D	T	R	R	T T
D		R	D	D		T	D	T	R		T T
D		L		T		T		T	R		T T
D		T		T		T		T	R		T T
		R	D								T

Ending State

Mary		Mary's Bank		Sara		Sara's Bank		Federal Reserve		U.S. Treasury	
A	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**	**A**	**L**
C	L	R	D	D		R	D	T	R	R	T T
D		R	D	D		R	D	T	R	R	T T
D		R	D	D		T	D	T	R		T T
D		L		T		T		T	R		T T
D		T		T		T		T	R		T T
		R	D	D		R	D				T

System Deposits = **8D**
System Reserves = **5R**

Review

A	L

Federal Reserve

A	L
T	R
T	R
T	R
T	R
T	R

Federal Reserve

A	L
T	R
T	R
T	R
T	R
T	R

5T 5R

5T 5R

Beginning State

Ending State

- Fine, it was unchanged

Review

U.S.
Treasury

A	L
	T T
	T T
	T T
	T
	T
	T

9T

Beginning State

U.S.
Treasury

A	L
R	T T
R	T T
	T T
	T T
	T T
	T

11T

Ending State

- More leveraged, increased 2T

Review

- The money multiplier ratio increased from 1.20 (**6/5**) to 1.6 (**8/5**)
- More broad money, increased 1D
- More leveraged, increased 2T

Review

Mary		Sara	
A	**L**	**A**	**L**
C	L	D	
D		D	
D		D	
D		T	
		T	

Mary		Sara	
A	**L**	**A**	**L**
C	L	D	
D		D	
D		D	
D		T	
D		T	
		D	

1C   1L   6D   2T

1C   1L   8D   2T

Beginning State

Ending State

- More liquid asserts, increased 2D

Summary

Name	Federal Reserve	U.S. Treasury	Banks	Consumers
A Bank Loans Money			Broad Money 💵 ➡️	➡️
The Fed Performs QE from Banks	Base Money 💵 ➡️		📝 Treasuries/Mortgage	
The Fed Performs QE from Non-Banks	Base Money 💵 ➡️			📝 Treasuries/Mortgage ➡️
Nonbank-Financed Helicopter Money				💵 Broad Money ➡️
Fed-Financed Helicopter Money	Base Money 💵 ➡️	📝 Treasuries		➡️
Bank-Financed Helicopter Money			💵 Broad Money	➡️

Name	Federal Reserve	U.S. Treasury	Banks	Consumers
A Bank Loans Money	-	-	More broad money More leveraged	More liquid asserts More leveraged
The Fed Performs QE from Banks	More base money More leveraged	-	Much better capitalized More lending power	-
The Fed Performs QE from Non-Banks	More base money More leveraged	-	More broad money More lending power	More liquid asserts
Nonbank-Financed Helicopter Money	-	More leveraged	-	More assets
Fed-Financed Helicopter Money	More base money More leveraged	More leveraged	More broad money More lending power	More liquid asserts
Bank-Financed Helicopter Money	-	More leveraged	More broad money More leveraged	More liquid asserts

Name	Federal Reserve	U.S. Treasury	Banks	Consumers	Inflationary Potential
A Bank Loans Money	-	-	More broad money	More liquid asserts	0F 1B 1C
The Fed Performs QE from Banks	More base money	-	More lending power	-	1F 1B 0C
The Fed Performs QE from Non-Banks	More base money	-	More broad money More lending power	More liquid asserts	1F 2B 1C
Nonbank-Financed Helicopter Money	-	-	-	More assets	0F 0B 1C
Fed-Financed Helicopter Money	More base money	-	More broad money More lending power	More liquid asserts	1F 2B 1C
Bank-Financed Helicopter Money	-	-	More broad money	More liquid asserts	0F 1B 1C

Name	Federal Reserve	U.S. Treasury	Banks	Consumers	Risk
A Bank Loans Money	-	-	More leveraged	More leveraged	0F 0U 1B 1C
The Fed Performs QE from Banks	More leveraged	-	-	-	1F 0U 0B 0C
The Fed Performs QE from Non-Banks	More leveraged	-	-	-	1F 0U 0B 0C
Nonbank-Financed Helicopter Money	-	More leveraged	-	-	0F 1U 0B 0C
Fed-Financed Helicopter Money	More leveraged	More leveraged	-	-	1F 1U 0B 0C
Bank-Financed Helicopter Money	-	More leveraged	More leveraged	-	0F 1U 1B 0C

Rank	Name	Inflationary Potential ▼	Risk ▼
1	Fed-Financed Helicopter Money	1F 2B 1C	1F 1U 0B 0C
2	The Fed Performs QE from Non-Banks	1F 2B 1C	1F 0U 0B 0C
3	The Fed Performs QE from Banks	1F 1B 0C	1F 0U 0B 0C
4	Bank-Financed Helicopter Money	0F 1B 1C	0F 1U 1B 0C
5	A Bank Loans Money	0F 1B 1C	0F 0U 1B 1C
6	Nonbank-Financed Helicopter Money	0F 0B 1C	0F 1U 0B 0C

FED + U.S. Treasury =
An Real Money Printing ~~Machine~~ Factory

References

- *https://www.lynalden.com/money-printing/*