



Variable Rate Debt Options: Auction Rate Securities



The **BANK of NEW YORK**[™]

Auction Rate Securities

What are Auction Rate Securities?

- Long-term securities sold to short-term investors
- Variable rate, priced competitively relative to other forms of short-term debt, most notably VRDB's
- Re-priced periodically, most common reset periods are weekly (7 day) or monthly (28/35 day)
- Multi-modal with conversion features at issuer option
- Does not require liquidity facility as the auction process provides liquidity; investors have no "put" option
- Usually insured, most often by a AAA monoline bond insurer

Auction Rate Securities

What is a Dutch Auction?

- Competitive Bidding Process - among Investors who submit bids/orders to buy, sell or hold securities at desired rates
- Reverse Price Concept - orders are filled beginning with the lowest bid submitted until all available securities are allocated
- Clearing Bid - order at which the last available security is allocated; clearing bid becomes the reset rate for all investors for the upcoming period
- Auction Rate Mechanism - can be viewed as an alternative to the Remarketing Agent function in VRDO programs

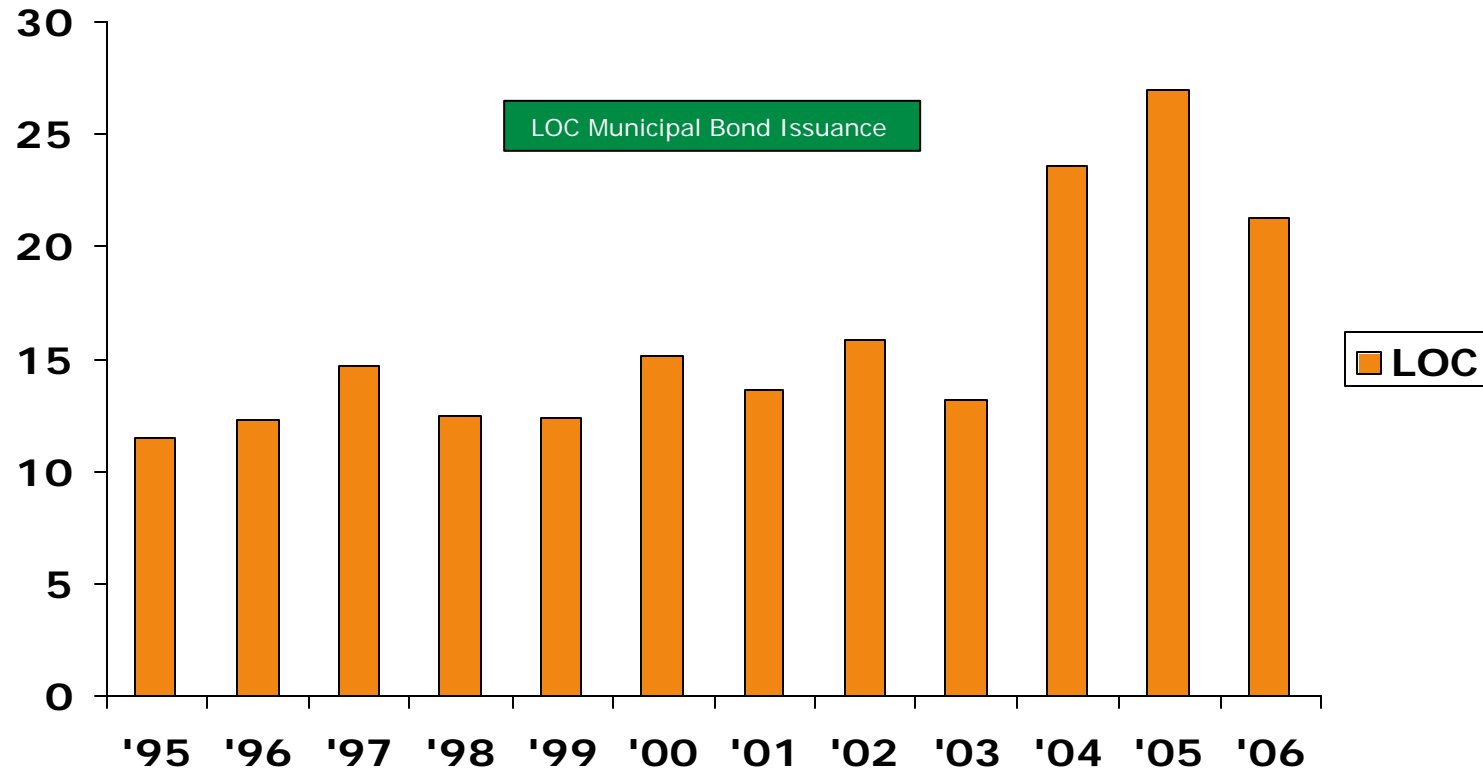
Auction Rate Securities

- Market Size – Approximately \$250 Billion Overall
- Issuers
 - Closed-End Municipal Bond / Equity Funds
 - Student Loan Entities
 - Municipalities
- Investors
 - Corporate Cash Managers
 - Institutional Investors
 - High Net Worth Individuals
- Holding Periods - Daily, Weekly, Monthly, Flex
- Dealers
 - Sole Managed Programs
 - Multiple Dealer Participation

Auction Rate Securities

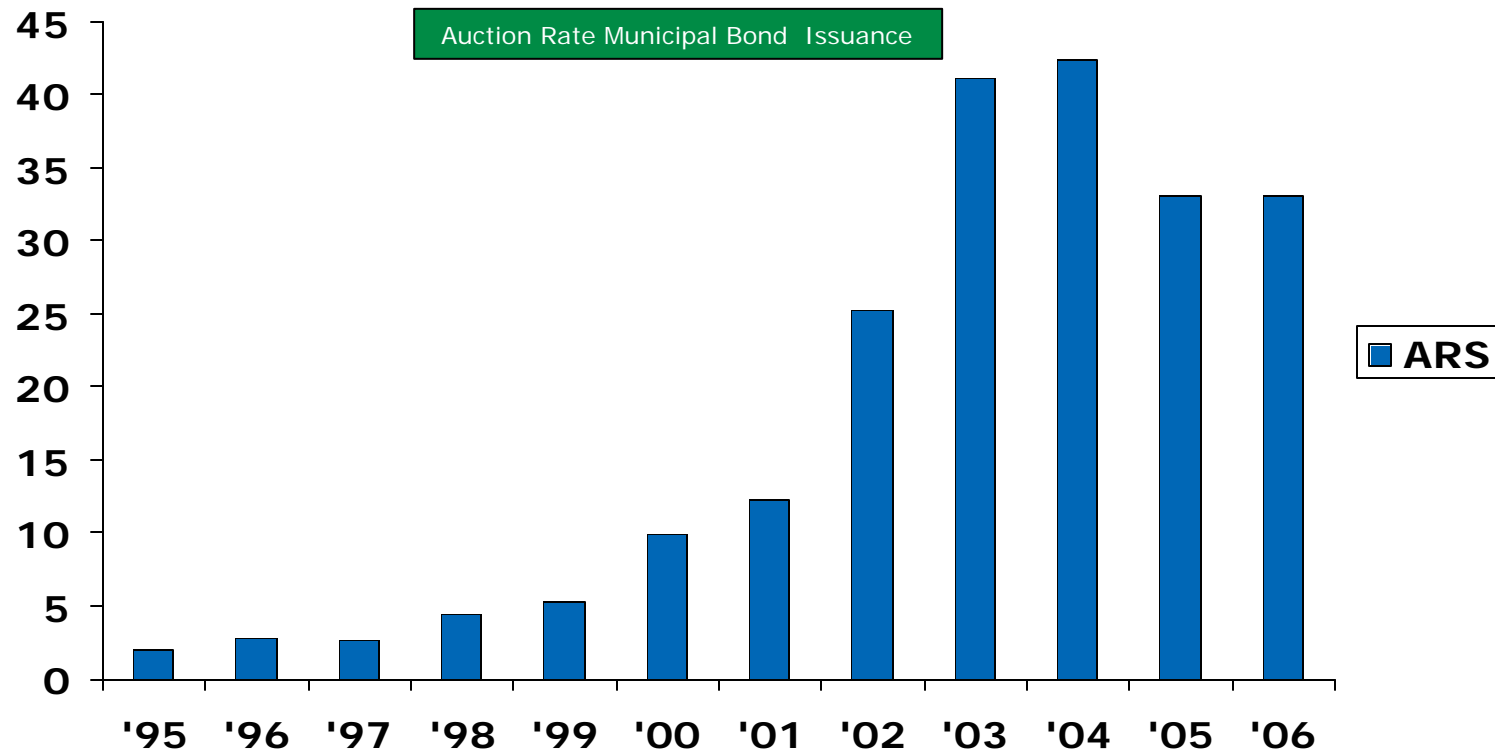
- Product Introduction - 1984
- Closed End Bond Funds - 1988
- Private Placements & Secondary Market Programs - 1990
- Student Loan Industry - 1993
- Municipal Notes - 1997
 - Health Care Issuers
 - Utility and Power Companies
 - Educational Issuers
 - Other Municipal Bond Sectors
- Asset Backed Programs - 2000
- Closed End Equity Funds - 2002

Auction Rate Securities



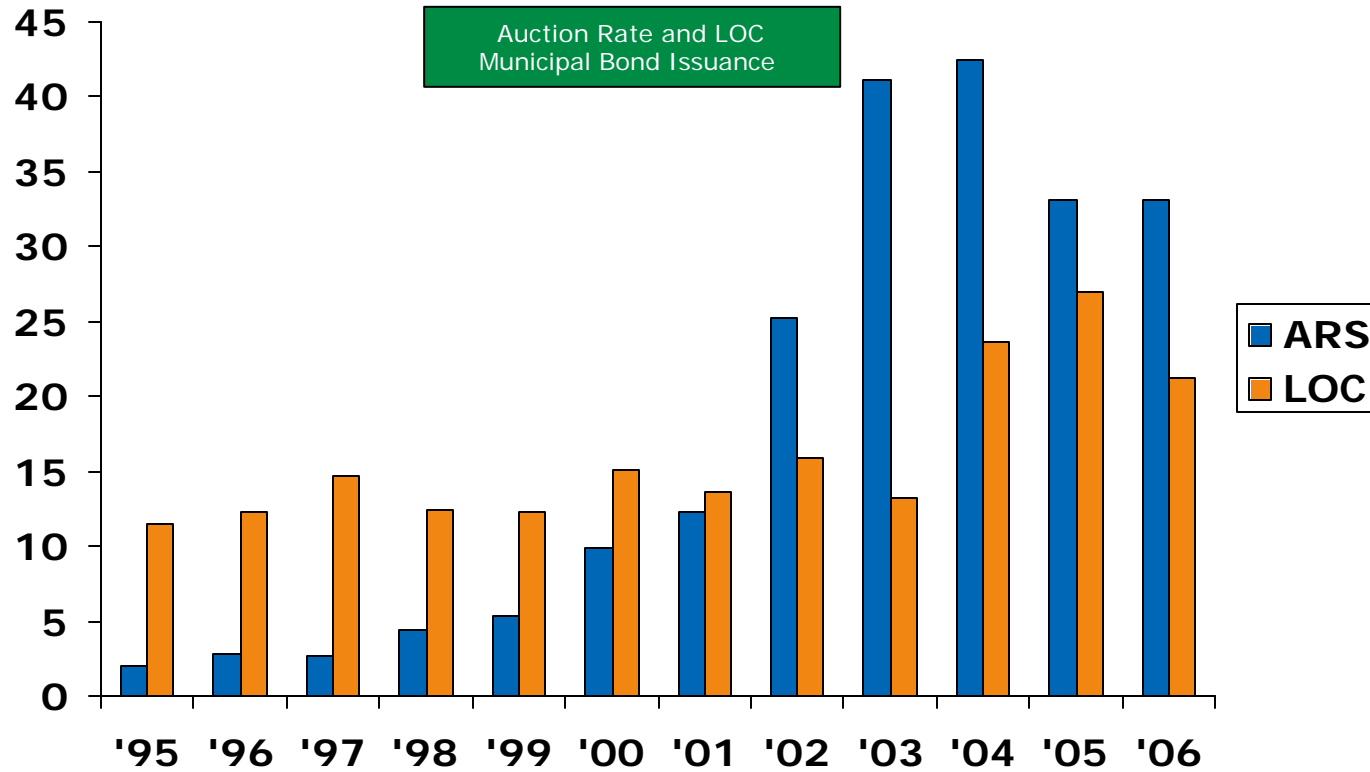
A Decade of Municipal Bond Finance
(Source: Thomson Financial 2/6/2007)

Auction Rate Securities



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What was Behind the Surge in ARS?

- Lower Cost of ARS vs. LOC-backed VRDB's
 - Increased cost of L/C's
 - Fewer providers of L/C's; German bank liquidity rule changes in 2005
- Legislative changes at state and local levels have greatly increased the pool of potential issuers of ARS
 - Issuers ability to float ARS debt
 - Issuers ability to enter into swaps and other derivative transactions
- Demand from investors as they redirect capital from money market funds and other ST investments to ARS
 - Increase in retail investors
 - Increased usage of weekly reset vs. monthly reset

BNY as Your Auction Agent

- 250 + Auctions per day
 - 800 Issues / 1,814 Series (CUSIPS)
 - \$100.9 Billion Principal Administered
 - Municipal T/E Debt: \$ 52.32 Billion
 - Student Loan Debt: \$ 13.59 Billion
 - Closed End Funds - Taxable \$ 15.4 Billion
 - Closed End Funds - Tax-Ex \$ 9.73 Billion
 - Taxable Pfd (Corp / DRD) \$ 2.98 Billion
 - Other Debt: \$ 6.88 Billion
- Total \$ 100.9 Billion

Auction Mechanics

- Step 1: Preparing for the Auction
 - Confirm “Bidding Rights” with each Participating Broker-Dealer
 - Establish the Band
 - Input Transaction Reference Rate
 - BMA Municipal Swap Index
 - CP Rate
 - LIBOR Rate
 - Net Loan Rate
 - Calculate Minimum and Maximum Rates

Auction Mechanics

- Step 2: Receipt and Compilation of Orders
 - Order Types:
 - Hold Order
 - Sell Order
 - Bid to Hold Order
 - Potential Bid Order
 - Determine if Sufficient Clearing Bids Exist
 - If Demand > Supply = Successful Auction
 - If Demand < Supply = Failed Auction
 - If No Supply = All Hold Auction

Auction Mechanics

- Step 3: Running the Auction
 - Calculate Winning Rate
 - Allocate units among Broker-Dealers
 - Calculate Interest/Dividend Amounts to Investors and Commission Amounts to Broker-Dealers
 - Distribute funds as necessary
 - Notify Parties-in-Interest including Issuer, Borrower, Trustee, Broker-Dealers, DTCC, etc.

Auction Mechanics - Example

Issue Summary

100 Bonds	Multi-Broker	Index = 7 day CP	Issue Rating AAA
\$100,000 / Bond	Weekly Reset	Insured	Issuer Rating AA

Step 1: Set Parameters

Ref Rate	Multiplier	=	Band	
	125%	=	2.50%	Maximum
7 Day CP 2.00%				
	70%	=	1.40%	Minimum



Confirmation of Bidding
Rights & Auction Parameters to
Broker / Dealers

Auction Mechanics - Example

Step 2: Bid Submission

Broker	Units	Existing	Potential
B1	50	Hold	
B2	20	Sell	25@ 2.10%
B3	20	Bid @ 2.00%	15@ 2.20%
B4	<u>10</u>	Bid @ 2.25%	
	100		

Step 3: Calculate Available Units



Total Units 100
 Hold Orders 50
 Available 50

Step 4: Do Sufficient Clearing Bids Exist?

Demand 70 > **Supply** 50 = Successful Auction

Auction Mechanics - Example

Bid Submissions

Broker	Units	Existing	Potential
B1	50	Hold	
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	100		

Step 5: Determine Winning Rate

Available	Bids	Rate	Type	Result
50	20	2.00%	Existing	Filled
30	25	2.10%	Potential	Filled
5	15	2.20%	Potential	Partial
-10	<u>10</u>	2.25%	Existing	Reject
70				

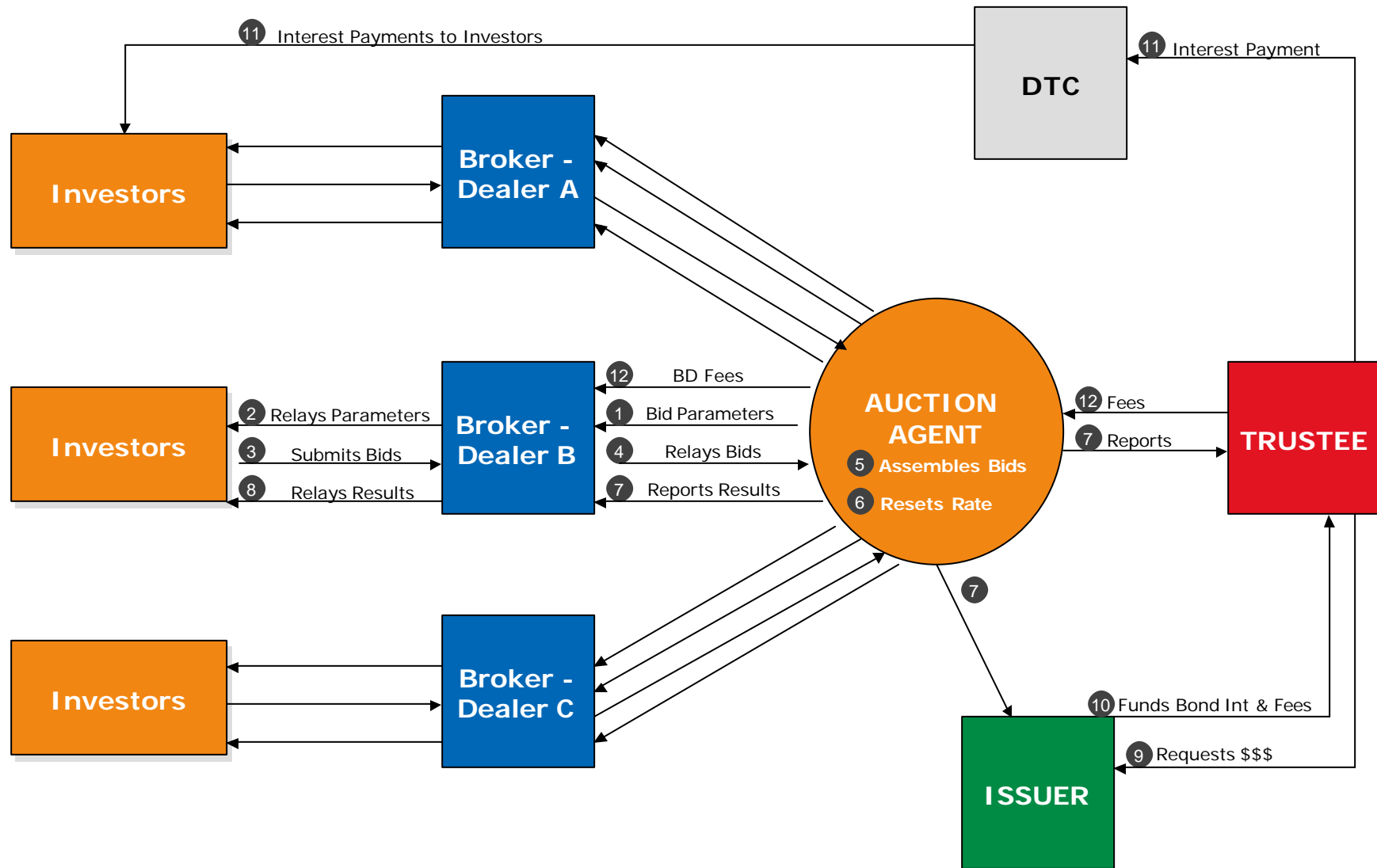
Clearing Bid

Note: The Clearing Bid rate becomes the reset rate for the entire issue for the current interest rate period

Step 6: Allocation of Units

Broker	Beginning Balance	Net Change	Ending Balance
B1	50	0	50
B2	20	5	25
B3	20	5	25
B4	<u>10</u>	-10	<u>0</u>
	100		100

Auction Mechanics



The Trustee's Role Differs Across Rate Structures

■ Fixed Rate Securities

- The rate is established at the time of the original issuance
- After Capitalized Interest Period is over, the Trustee receives monthly deposits into the Bond Fund ($\frac{1}{6}$ th of Interest) and ($\frac{1}{12}$ th of Principal) of the annual amount due
- For each debt service payment the Trustee calculates and confirms Debt Service amount
- Payment amount for each CUSIP does not change unless there is a partial call or redemption

Variable Rate Demand Bonds

- Remarketing agent is responsible for ensuring Trustee receives rates that may be set daily, weekly, monthly, or semi-annually
- Trustee required to calculate blended rate (daily, weekly, or monthly reset) calculate amount required and confirm Debt Service with borrower
- Conforms to computation and Holiday rules
- Trustee draws on the Letter of Credit for Payment of Interest and/or Principal and pays holders
- The Borrower reimburses the Trustee or will make payment to LOC Bank directly in accordance with the Reimbursement Agreement

Auction Rate Securities

- Broker Dealer receives bids from existing holders or potential holders
- Auction Agent receives bids from Broker Dealer or Dealers
- Auction Agent calculates the bids to determine clearing rate (rate at which all bonds are sold)
- Trustee is informed of rate established and pays servicing fees for Broker Dealer and/or Auction Agent
- Trustee makes payment on the established date (weekly, 28 days, 35 days, etc.)
- Issuer establishes a depository account with the trustee to hold and invest funds for future payments. It is necessitated because of the frequent debt service payments

Contact Information

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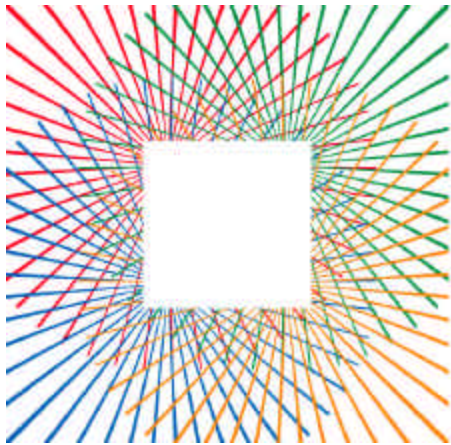
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