

Attachment 7

Federal Reserve Monetary Intermediation Cost to the American Economy

Monetary Intermediation Cost Impact on Economy and Jobs

Assumptions

a-Bank Reserve Requirement (From Attachment 1)	10.00%
b-Bank Note Rate Est.(Risk Free Rate(r_f) [Not less than zero] + Risk Premium est. at 25bp)	0.25%
Federal Funds Overnight Rate for Reference Rate	12/28/2017 1.41%
c-Economic Growth Rate (Est.) for Cap Rate	4.00%
d-Capital Value per Job Est. (Adjustable)	\$1,000,000
7-New York Times 7/6/2009 Estimated Job Creation Cost (\$)	\$31,169

Step 1. Estimate Monetary Intermediation Cost

I. Historical Average (2007-2016, Last 10-years)	
	(\$ Billions)
1. Fed Operations (Fiscal 2016 Actual Net) ¹	\$4.34
2. New Money (M2M) Issued times (1 - reserve requirement) ^{1,a}	\$635.58
Total Annual Intermediation	\$639.92
Intermediation Capitalized ^{2,c}	\$15,997.97

II. Fiscal 2016 Actual

	(\$ Billions)
1. Fed Operations (Fiscal 2016 Actual Net) ¹	\$4.34
2. New Money (M2M) Issued times (1 - reserve requirement) ^{1,a}	\$778.41
Total Annual Intermediation	\$782.75
Intermediation Capitalized ^{2,c}	\$19,568.72

III. Monetary Debt Impact^{1,2,3 Notes}

	(as of 9/30/2016) (\$ Billions)
Bank & FED debt to Gov't to cover fractional reserve deposit shortage	\$8,116.32
Commercial Bank Federal Gov.t Securities Holdings Retired ³	\$2,389.30
Federal Reserve Gov't Securities Holdings Retired ³	\$2,463.46
Intermediation Capitalized	\$12,969.08

Step 2. Estimate Monetary Intermediation Cost Impact on Economy and Jobs

There is no economic reward for monetary leverage from M&M Theorem (Corollary, risk free rate (r_f) should be GDP growth rate, not gov't debt rate.)

United States Economic Indicators (as of 12/31/2016 or Fiscal 9/30/2016)

GDP (Calendar 2016) (\$ Billions) ⁴	\$18,624.5
Total Central Government Debt (Fiscal 2016) (\$ Billions) ⁵	\$14,221.1
Unemployment, 2016-12 [une_rt_a] ⁶	7,751,000

Risk Free Rate (r_f) for bank note, not less than 0%

[GDP] - [Monetary Intermediation] (Net % GDP)	
1984 to 2016 (33 Years)	2.33%
2007 to 2016 (10 Years)	-0.94%
2012 to 2016 (5 Years)	-0.39%
Last Year 2016	-1.42%

Source: Attachment 3

Federal Reserve System Monetary Intermediation Cost Economic Impact Estimates

Estimation Basis	Intermediation Cost		Jobs Impact Estimates			Unemployment	GDP %	Federal Debt
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual	Capitalized	Annual	Capitalized	Average	Reduction %	Improvement	Reduction %
I. Last 10 Ave (07-16)	\$639.92	\$15,997.97	20,530,611	15,997,965	18,264,288	235.6%	3.4%	
II. Fiscal 2016 Actual	\$782.75	\$19,568.72	25,113,048	19,568,715	22,340,882	288.2%	4.2%	
III. Monetary Debt Est.	\$518.76	\$12,969.08	16,643,564	12,969,081	14,806,322	191.0%	2.8%	91.2%
Averages	\$647.14	\$16,178.59	20,762,408	16,178,587	18,470,497	238.3%	3.5%	91.2%

The Fed fractional reserve monetary system has an average 90.0% (1 - RR) intermediation cost (wealth transfer effect) of new money creation. This is a loss of capital from the other sectors of the economy to the banking sector. Assuming \$1,000,000 of capital value per job creation, the average \$16.18 trillion capitalized cost represents an estimated 16,178,000 private sector jobs. Per NY Times estimate the \$647.1 billion annual cost would be approximately 20,762,000 jobs. These estimates indicate the approximate cost of monetary intermediation is on the order of sixteen to eighteen million or more jobs.

Notes

- 1-United States government debt holdings by commercial banks expected to be credited and retired for use in funding full reserve deposits.
- 2-Bank & FED debt to U.S. gov't estimated to be first lien at the same interest rate for all banks based on the risk free rate (r_f) for U.S., but not less than zero + a risk premium estimated at 25 basis points (0.25%).
- 3-Ignores interest rate manipulation intermediation cost since primarily funded by monetary expansion.

Sources

- 1-Fed Operations and M2M increases from Attachment 3 Fed Annual Monetary Intermediation Cost 1984 to 2016 using M2M Money Stock.
- 2-Intermediation Capitalized = [Annual Intermediation] ÷ [Economic Growth est. for Cap Rate (c)]
- 3-Bank Note and Treasuries Retired from attachment 5(d) United States Consolidated Balance Sheet.
- 4-GDP from St. Louis Fed economic data at <https://fred.stlouisfed.org/series/GDPA> Last Updated 10/27/2017
- 5-Total Central Government debt from Attachment 6 Federal Debt Securities Held by the Public and Accrued Interest.
- 6-Unemployment data from European Commission eurostat, Harmonised unemployment, Not seasonally adjusted, total of both sexes - total (teilm010) at <http://ec.europa.eu/eurostat/web/products-datasets/-/tipsun20> Last Updated 5/12/2017
- 7-New York Times 7-6-2009 article "The Costs of Entrepreneurial Job Creation" estimated at \$31,169 per job at <http://boss.blogs.nytimes.com/2009/07/06/how-much-does-it-cost-to-create-a-job-by-encouraging-entrepreneurship/>