

**Attachment 3**  
**Federal Reserve Monetary Intermediation Cost to the American Economy**  
**Fed Annual Monetary Intermediation Cost 1984 to 2012 using M2M Money Stock<sup>1</sup>**

**Assumptions**

Fed Reserve Requirement (RR)

Intermediation Cost Federal Reserve System (\$)										Intermediation Cost Federal Reserve System (% Est.)						Comparison Analysis	
(N)	(A)	(B) = (A <sub>N</sub> ) - (A <sub>N-1</sub> )	(C) = (B <sup>4</sup> ) x (1-RR)	(D)	(E) = (C) + (D)	(F)	(G) = (F <sub>N</sub> - F <sub>N-1</sub> ) / F <sub>N-1</sub>	(H) = (E) / (F)	(I)	(J) = (G) - (H)	(K) = (G) - (I)	(L) = (J) - (K)					
#	Year	MoneyStock M2M-NS <sup>1</sup> (\$ Billions)	\$ Increase Prior Year (\$ Billions)	Money Stock Change Intermediation Cost (\$ Billions)	Actual (Net) Budget <sup>2</sup> (\$ Billions)	Total Annual Intermediation Cost (\$ Billions)	GDP <sup>3</sup> (\$ Billions)	GDP <sup>3</sup> (% Growth)	Intermediation (% GDP Cost)	Inflation % CPI-U (EOY) <sup>4</sup>	GDP-Intermediation Net (% GDP) (r <sub>i</sub> )	GDP-Inflation Net (% GDP)	Real r <sub>i</sub> GDP - Nominal GDP	Reported Growth	Difference w/Real		
0	1983	\$1,349.9					\$3,688.1										
1	1984	\$1,429.7	\$79.8	\$71.82	\$0.607	\$72.427	\$4,034.0	9.379%	1.795%	3.949%	7.583%	5.430%	2.153%				
2	1985	\$1,618.6	\$188.9	\$170.01	\$0.487	\$170.497	\$4,318.7	7.058%	3.948%	3.799%	3.110%	3.259%	-0.149%				
3	1986	\$1,883.9	\$265.3	\$238.77	\$0.504	\$239.274	\$4,543.3	5.201%	5.267%	1.098%	-0.066%	4.103%	-4.169%				
4	1987	\$1,921.2	\$37.3	\$33.57	\$0.504	\$34.074	\$4,883.1	7.479%	0.698%	4.434%	6.781%	3.045%	3.737%				
5	1988	\$1,968.6	\$47.4	\$42.66	\$0.564	\$43.224	\$5,251.0	7.534%	0.823%	4.419%	6.711%	3.115%	3.596%				
6	1989	\$2,019.8	\$51.2	\$46.08	\$0.582	\$46.662	\$5,581.7	6.298%	0.836%	4.647%	5.462%	1.651%	3.811%				
7	1990	\$2,115.3	\$95.5	\$85.95	\$0.604	\$86.554	\$5,846.0	4.735%	1.481%	6.106%	3.255%	-1.371%	4.626%				
8	1991	\$2,323.1	\$207.8	\$187.02	\$0.685	\$187.705	\$6,092.5	4.217%	3.081%	3.064%	1.136%	1.152%	-0.017%				
9	1992	\$2,574.3	\$251.2	\$226.08	\$0.771	\$226.851	\$6,493.6	6.584%	3.493%	2.901%	3.090%	3.683%	-0.593%				
10	1993	\$2,713.7	\$139.4	\$125.46	\$0.894	\$126.354	\$6,813.8	4.931%	1.854%	2.748%	3.077%	2.183%	0.894%				
11	1994	\$2,691.2	(\$22.5)	(\$20.25)	\$0.958	(\$19.292)	\$7,248.2	6.375%	-0.266%	2.675%	6.641%	3.700%	2.941%				
12	1995	\$2,721.2	\$30.0	\$27.00	\$1.029	\$28.029	\$7,542.5	4.060%	0.372%	2.538%	3.689%	1.522%	2.167%				
13	1996	\$2,880.9	\$159.7	\$143.73	\$1.084	\$144.814	\$8,023.0	6.371%	1.805%	3.322%	4.566%	3.048%	1.517%				
14	1997	\$3,073.9	\$193.0	\$173.70	\$1.124	\$174.824	\$8,505.7	6.016%	2.055%	1.702%	3.961%	4.314%	-0.353%				
15	1998	\$3,430.1	\$356.2	\$320.58	\$1.192	\$321.772	\$9,027.5	6.135%	3.564%	1.612%	2.570%	4.523%	-1.952%				
16	1999	\$3,687.8	\$257.7	\$231.93	\$1.214	\$233.144	\$9,607.7	6.427%	2.427%	2.685%	4.000%	3.742%	0.258%				
17	2000	\$3,881.7	\$193.9	\$174.51	\$1.245	\$175.755	\$10,129.8	5.434%	1.735%	3.387%	3.699%	2.047%	1.652%				
18	2001	\$4,458.9	\$577.2	\$519.48	\$1.411	\$520.891	\$10,373.1	2.402%	5.022%	1.552%	-2.620%	0.850%	-3.470%				
19	2002	\$4,875.3	\$416.4	\$374.76	\$1.534	\$376.294	\$10,766.9	3.796%	3.495%	2.377%	0.301%	1.419%	-1.118%				
20	2003	\$5,246.6	\$371.3	\$334.17	\$1.655	\$335.825	\$11,414.8	6.018%	2.942%	1.879%	3.076%	4.138%	-1.063%				
21	2004	\$5,587.1	\$340.5	\$306.45	\$1.498	\$307.948	\$12,123.9	6.212%	2.540%	3.256%	3.672%	2.957%	0.716%				
22	2005	\$5,681.9	\$94.8	\$85.32	\$1.476	\$86.796	\$12,901.4	6.413%	0.673%	3.416%	5.740%	2.997%	2.743%				
23	2006	\$5,857.2	\$175.3	\$157.77	\$1.613	\$159.383	\$13,584.2	5.292%	1.173%	2.541%	4.119%	2.752%	1.367%				
24	2007	\$6,195.2	\$338.0	\$304.20	\$2.411	\$306.611	\$14,253.2	4.925%	2.151%	4.081%	2.774%	0.844%	1.930%				
25	2008	\$6,743.6	\$548.4	\$493.56	\$2.536	\$496.096	\$14,081.7	-1.203%	3.523%	0.091%	-4.726%	-1.295%	-3.432%				
26	2009	\$7,326.9	\$583.3	\$524.97	\$2.914	\$527.884	\$14,133.6	0.369%	3.735%	2.721%	-3.366%	-2.353%	-1.014%				
27	2010	\$7,894.8	\$567.9	\$511.11	\$3.211	\$514.321	\$14,735.9	4.261%	3.490%	1.496%	0.771%	2.766%	-1.995%				
28	2011	\$8,924.8	\$1,030.0	\$927.00	\$3.398	\$930.398	\$15,321.0	3.971%	6.073%	2.962%	-2.102%	1.008%	-3.110%				
29	2012	\$9,843.6	\$918.8	\$826.92	\$3.737	\$830.657	\$15,864.1	3.545%	5.236%	1.741%	-1.691%	1.804%	-3.495%				
TOTALS		\$9,843.6	\$8,493.7	\$7,644.33	\$41.443	\$7,685.773	\$273,495.9	5.16%	2.57%	2.86%	2.55%	2.30%	0.25%				
Averages (1984-2012)			\$292.89	\$263.60		\$265.03	Count(Years)	29	29	29	29	29	29				
Ave Last 10 Years (2003-2012)			\$496.83	\$447.15	\$2.45	\$449.59	Last 10 Yrs	3.95%	3.14%	2.41%	0.77%	1.54%	-0.76%				
							Count(Years)	10	10	10	10	10	10				
							Last 5 Yrs Annual	2.16%	4.41%	1.80%	-2.24%	0.37%	-2.61%				
							Count(Years)	5	5	5	5	5	5				
							2012 Economy to 2008 (Last 5 Compounded)	111.3%	124.1%	109.3%	89.3%	101.9%	87.6%				
							Change since 2008 (Last 5 Compounded Net Change)	11.3%	24.1%	9.3%	-10.7%	1.9%	-12.4%				
							Nominal GDP Growth w/Inflation	Compounded Intermediation	Compounded Inflation	Real r <sub>i</sub> GDP Growth	Nominal GDP - Inflation	Real r <sub>i</sub> GDP - Nominal GDP					

Difference between reported nominal GDP and real r<sub>i</sub> GDP.

For last five years, [GDP-Inflation] shows misleading higher growth rate than real r<sub>i</sub>. First use new money creation wealth transfer to banks hides economy's contracting GDP.

**Notes**

- 1-M2M-NS Money Stock consists of: 1) currency in circulation, 2) traveler's checks of nonbank issuers, 3) demand deposits, 4) other checkable deposits (OCDs), primarily negotiable order of withdrawal (NOW) accounts, 5) savings deposits (which include money market deposit accounts, or MMDAs), and 6) balances in retail money market mutual funds (MMMFs). NS - Not seasonally adjusted.
- 2-Includes Board of Governors Expenses less recoverable expenses, Table 2 since 2011 Report.
- 3-Ignores interest rate manipulation intermediation cost since primarily funded by monetary expansion

**SOURCES:**

- 1-M2M Money Stock data from St. Louis Fed at <http://research.stlouisfed.org/fred2/series/M2MNS> Last Updated 2/22/2013
- 2-FRS actual budget data from Publications Annual Reports Table 2 at <http://www.federalreserve.gov/publications/budget-review/default.htm>
- 3-GDP numbers from St. Louis Fed economic data at <http://research.stlouisfed.org/fred2/series/GDP> Last Updated 3/28/2013
- 4-Inflation CPI-U (Dec to Dec) data from Bureau of Labor Statistics at <http://www.bls.gov/cpi/> Download Date 2/4/2013