

# Federal Reserve Monetary Intermediation Cost to the American Economy

## Federal Reserve Compounded Monetary Intermediation Cost to Economy 1984 to 2012<sup>1</sup>

### M2M (M2 Less Small Time Deposits) Money Stock Basis

(a)-Net GDP Productivity Growth Rate to economy (GDP Growth Rate (c) minus Intermediation Cost (b)) - ( r<sub>p</sub>)  
 (b)-Intermediation Cost Percentage<sup>2</sup>  
 (c)-GDP Growth Rate (Net GDP + Intermediation Percentage)<sup>2</sup>

Assumptions	%TotalGrowth
(a)	50.1%
(b)	49.9%
(c)	100.0%

GDP EARNINGS WITH FED INTERMEDIATION EXPENSE INCLUDED										
(N)	(A)	(B) = (A) x (c)	(C) = (A) x (b)	(D) = (A)+(B)+(C)	(E)=Σ (C) Compounded					
Period	Year	Net GDP <sup>3</sup> Year(Begin) (\$ Billions)	Productivity Growth (Net) (\$ Billions)	Fed Intermediation Expense <sup>2</sup>	Net GDP Year (End) (\$ Billions)	Compounded Intermediation Expense <sup>4</sup>				
							%			
1	1984	\$3,688.1	\$190.3	(\$95.0)	\$3,783.4	\$95.0	2.4%			
2	1985	\$3,783.4	\$195.2	(\$97.4)	\$3,881.2	\$197.3	4.8%			
3	1986	\$3,881.2	\$200.3	(\$99.9)	\$3,981.5	\$307.4	7.2%			
4	1987	\$3,981.5	\$205.4	(\$102.5)	\$4,084.5	\$425.8	9.4%			
5	1988	\$4,084.5	\$210.7	(\$105.2)	\$4,190.0	\$552.9	11.7%			
6	1989	\$4,190.0	\$216.2	(\$107.9)	\$4,298.3	\$689.3	13.8%			
7	1990	\$4,298.3	\$221.8	(\$110.7)	\$4,409.5	\$835.5	15.9%			
8	1991	\$4,409.5	\$227.5	(\$113.5)	\$4,523.4	\$992.2	18.0%			
9	1992	\$4,523.4	\$233.4	(\$116.5)	\$4,640.4	\$1,159.8	20.0%			
10	1993	\$4,640.4	\$239.4	(\$119.5)	\$4,760.3	\$1,339.1	22.0%			
11	1994	\$4,760.3	\$245.6	(\$122.6)	\$4,883.3	\$1,530.8	23.9%			
12	1995	\$4,883.3	\$252.0	(\$125.7)	\$5,009.6	\$1,735.5	25.7%			
13	1996	\$5,009.6	\$258.5	(\$129.0)	\$5,139.1	\$1,954.0	27.5%			
14	1997	\$5,139.1	\$265.2	(\$132.3)	\$5,271.9	\$2,187.2	29.3%			
15	1998	\$5,271.9	\$272.0	(\$135.7)	\$5,408.2	\$2,435.8	31.1%			
16	1999	\$5,408.2	\$279.0	(\$139.2)	\$5,548.0	\$2,700.7	32.7%			
17	2000	\$5,548.0	\$286.2	(\$142.8)	\$5,691.4	\$2,982.9	34.4%			
18	2001	\$5,691.4	\$293.6	(\$146.5)	\$5,838.5	\$3,283.3	36.0%			
19	2002	\$5,838.5	\$301.2	(\$150.3)	\$5,989.4	\$3,603.0	37.6%			
20	2003	\$5,989.4	\$309.0	(\$154.2)	\$6,144.2	\$3,943.1	39.1%			
21	2004	\$6,144.2	\$317.0	(\$158.2)	\$6,303.0	\$4,304.8	40.6%			
22	2005	\$6,303.0	\$325.2	(\$162.3)	\$6,465.9	\$4,689.2	42.0%			
23	2006	\$6,465.9	\$333.6	(\$166.5)	\$6,633.1	\$5,097.6	43.5%			
24	2007	\$6,633.1	\$342.2	(\$170.8)	\$6,804.5	\$5,531.4	44.8%			
25	2008	\$6,804.5	\$351.1	(\$175.2)	\$6,980.4	\$5,992.0	46.2%			
26	2009	\$6,980.4	\$360.2	(\$179.7)	\$7,160.8	\$6,480.9	47.5%			
27	2010	\$7,160.8	\$369.5	(\$184.4)	\$7,345.9	\$6,999.6	48.8%			
28	2011	\$7,345.9	\$379.0	(\$189.1)	\$7,535.8	\$7,549.9	50.0%			
29	2012	\$7,535.8	\$388.8	(\$194.0)	<b>\$7,730.6</b>	<b>\$8,133.5</b>	<b>51.3%</b>			
Growth Rates		2.58%	2.58%		2.58%	16.59%				
Count (Years)		29	29		29	29				

GDP EARNINGS WITH FED INTERMEDIATION EXPENSE REMOVED										
(N)	(A)	(B) = (A) x (c)	(C) = (A) x (b)	(D) = (A)+(B)+(C)						
Period	Year	GDP <sup>3</sup> Year(Begin) (\$ Billions)	Productivity Growth(Total) (\$ Billions)	Fed Intermediation Expense <sup>2</sup>	GDP Year (End) (\$ Billions)					
1	1984	\$3,688.1	\$190.3	\$0.0	\$3,878.4					
2	1985	\$3,878.4	\$200.1	\$0.0	\$4,078.5					
3	1986	\$4,078.5	\$210.4	\$0.0	\$4,288.9					
4	1987	\$4,288.9	\$221.3	\$0.0	\$4,510.2					
5	1988	\$4,510.2	\$232.7	\$0.0	\$4,742.9					
6	1989	\$4,742.9	\$244.7	\$0.0	\$4,987.6					
7	1990	\$4,987.6	\$257.3	\$0.0	\$5,245.0					
8	1991	\$5,245.0	\$270.6	\$0.0	\$5,515.6					
9	1992	\$5,515.6	\$284.6	\$0.0	\$5,800.2					
10	1993	\$5,800.2	\$299.3	\$0.0	\$6,099.4					
11	1994	\$6,099.4	\$314.7	\$0.0	\$6,414.1					
12	1995	\$6,414.1	\$330.9	\$0.0	\$6,745.1					
13	1996	\$6,745.1	\$348.0	\$0.0	\$7,093.1					
14	1997	\$7,093.1	\$366.0	\$0.0	\$7,459.1					
15	1998	\$7,459.1	\$384.9	\$0.0	\$7,843.9					
16	1999	\$7,843.9	\$404.7	\$0.0	\$8,248.6					
17	2000	\$8,248.6	\$425.6	\$0.0	\$8,674.2					
18	2001	\$8,674.2	\$447.6	\$0.0	\$9,121.8					
19	2002	\$9,121.8	\$470.6	\$0.0	\$9,592.4					
20	2003	\$9,592.4	\$494.9	\$0.0	\$10,087.3					
21	2004	\$10,087.3	\$520.5	\$0.0	\$10,607.8					
22	2005	\$10,607.8	\$547.3	\$0.0	\$11,155.1					
23	2006	\$11,155.1	\$575.6	\$0.0	\$11,730.7					
24	2007	\$11,730.7	\$605.3	\$0.0	\$12,335.9					
25	2008	\$12,335.9	\$636.5	\$0.0	\$12,972.4					
26	2009	\$12,972.4	\$669.3	\$0.0	\$13,641.7					
27	2010	\$13,641.7	\$703.9	\$0.0	\$14,345.6					
28	2011	\$14,345.6	\$740.2	\$0.0	\$15,085.7					
29	2012	\$15,085.7	\$778.4	\$0.0	<b>\$15,864.1</b>					
Growth Rates		5.16%	5.16%	N.A.	5.16%					
Count (Years)		29	29	29	29					

**Notes/Sources:**

- 1-Format adapted from "The Tyranny of Compounding Costs" at <http://www.pbs.org/wgbh/pages/frontline/retirement/etc/tyranny.html>
- 2-Intermediation and GDP growth rate estimates from Attachment 3.
- 3-Initial GDP from Attachment 3 via St. Louis Fed economic data at <http://research.stlouisfed.org/fred2/series/GDP>
- 4-Fed M2M Intermediation expenses compounded at total growth rate.

Fed Monetary Intermediation Cost 1984-2012	\$ Billions	% Percent
Economic (GDP) earnings 2012 w/o Fed intermediation expense	\$15,864.1	100.0%
Economy earnings with Fed Intermediation expense deducted	\$7,730.6	48.7%
Fed Intermediation Expense from Non Bank Economy since 1984	<b>\$8,133.5</b>	<b>51.3%</b>
Fed Intermediation costs, primarily monetary expansion inflation, estimated to have wealth transferred approximately 51.3% of economic system returns to banking sector from 1984 to 2012.		