

Attachment 11(d)

European Central Bank Monetary Intermediation Cost

Monetary Intermediation Cost Impact on EU Eurozone (17) Economy and Jobs

Assumptions

a-ECB Bank Reserve Requirement (1999-2011) (From Attachment 1(a))	2.00%
b-Bank Note Rate Est.(Risk Free Rate(r_f) [Not less than zero] + Risk Premium est. at 25bp)	0.25%
c-Economic Growth Rate (Est.) for Cap Rate	4.00%
d-Capital Value per Job Est. (Adjustable)	€ 750,000
Exchange Rate \$1 U.S. Dollar to Euro ⁷ 12/31/2011	€ 0.7717
New York Times 7/6/2009 Estimated Job Creation Cost (\$)	\$31,169
8-New York Times 7/6/2009 article \$31,169 job creation cost converted to Euro (€)	€ 24,052

Step 1. Estimate Monetary Intermediation Cost

I. Historical Average (2002-2011, Last 10-years)	
	(€ Billions)
1. ECB Operations (Fiscal 2011 Actual Net) ¹	€ 0.44
2. New Money (M1) Issued times (1 - reserve requirement) ^{1,a}	€ 252.60
Total Annual Intermediation	€ 253.03
Intermediation Capitalized ^{2,c}	€ 6,325.76

II. Fiscal 2011 Actual	
	(€ Billions)
1. ECB Operations (Fiscal 2011 Actual Net) ¹	€ 0.44
2. New Money (M1) Issued times (1 - reserve requirement) ^{1,a}	€ 103.59
Total Annual Intermediation	€ 104.02
Intermediation Capitalized ^{2,c}	€ 2,600.54

III. Monetary Debt Impact ^{1,2,3,4 Notes}	
	(€ Billions)
Bank note to Gov't to cover fractional reserve deposit cash shortage ^{3,b}	€ 13,076.39
Commercial Bank Federal Gov.t Securities Holdings Retired ³	€ 0.00
European Central Bank Euro Currency Conversion ³	€ 888.68
Intermediation Capitalized	€ 13,965.07

Step 2. Estimate Monetary Intermediation Cost Impact on Eurozone 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.)

Eurozone Economic Indicators (as of 12/31/2011)	
GDP Fiscal 2011 (€ Billions) ⁴	€ 9,425.34
Total Central Government Debt (€ Billions) ⁵	€ 7,123.81
Unemployment, 2011-12 [une_nb_m] ⁶	16,934,000

Risk Free Rate (r_f) for bank note, not less than 0%	
[GDP] - [Monetary Intermediation] (Net % GDP)	
1999 to 2011 (13 Years)	0.41%
2002 to 2011 (10 Years)	-0.15%
Last Year 2011	1.56%

Source: Attachment 6 (assuming 2% res requirement)

European Central Bank Monetary Intermediation Cost Economic Impact Estimates								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Intermediation Cost		Jobs Impact Estimates			Unemployment	GDP %	Federal Debt
	Annual	Capitalized	Annual	Capitalized	Average	Reduction %	Improvement	Reduction %
Estimation Basis	(€ Billions)	(€ Billions)	=(A)/NYT Est ⁸	=(B)/€750,000 (d)	=[(C)+(D)]/2	=(E)/[Unemployment]	=(A) / [GDP]	=(B)/[Fed Debt]
I. Last 10 Ave (02-11)	€ 253.03	€ 6,325.76	10,520,142	8,434,352	9,477,247	56.0%	2.7%	
II. Fiscal 2011 Actual	€ 104.02	€ 2,600.54	4,324,860	3,467,386	3,896,123	23.0%	1.1%	
III. Monetary Debt Est.	€ 558.60	€ 13,965.07	23,224,780	18,620,088	20,922,434	123.6%	5.9%	196.0%
Averages	€ 305.22	€ 7,630.46	12,689,927	10,173,942	11,431,935	67.5%	3.2%	196.0%

The ECB fractional reserve monetary system has an average 99% (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 €750,000 Euro of capital value per job creation, the average €7.63 trillion capitalized cost represents an estimated 10,174,000 private sector jobs. Per NY Times estimate the €305.2 billion annual cost would be approximately 12,690,000 jobs. These estimates indicate the approximate cost of monetary intermediation is on the order of 11.4 million jobs.

Notes

- 1-Eurozone sovereign government debt holdings by commercial banks expected to be credited and retired for use in funding full reserve deposits.
- 2-Bank debt to Eurozone governments estimated to be first lien at the same interest rate for all banks based on the risk free rate (r_f) for Eurozone, but not less than zero + a risk premium estimated at 25 basis points (0.25%).
- 3-Amount of sovereign debt holdings by commercial banks and the ECB is unknown but should net with reduced bank loan needed to fund demand deposits 100% keeping total benefit to people/nations at about same level.
- 4-Ignores potential interest rate manipulation intermediation costs.

Sources

- 1-ECB Operating Cost and M1 increases from Attachment 6 ECB Annual Intermediation Cost 1999 to 2011.
- 2-Intermediation Capitalized = [Annual Intermediation] ÷ [Economic Growth est. for Cap Rate (c)]
- 3-Bank Note amount from Attachment 8(a) Eurozone Banks Consolidated Balance Sheet Conversion Estimate and Attachment 9 European Central Bank (ECB) Conversion Estimate.
- 4-GDP by country from European Commission eurostat, Gross domestic product at market prices (tec00001) at <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00001&plugin=1>
- 5-Central Government consolidated total liabilities [F_TOT] from Attachment 10(a) EU Eurozone (17) Central Governments Consolidated Balance Sheets - Before Bank Conversion.
- 6-Unemployment data from European Commission eurostat, Harmonised unemployment by gender - total (teilm010) at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une_nb_m&lang=en
- 7-Historical exchange rate for U.S. Dollar (\$) to Euro (€) from x-rates.com at <http://www.x-rates.com/historical/> Lookup Date 1/24/2013
- 8-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/>

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January 24, 2013