

Supplement 4(c)
European Central Bank Monetary Intermediation Cost

Assumptions

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Conversion Economic Impact Economy and Jobs

EU Non-eurozone (10) Member States
 December 31, 2011

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

a-Basel II Bank Reserve Requirement (From Attachment 1(b))	8.00%
b-Bank Note Rate Est.(EU Risk Free Net GDP Growth(r _f)+25bp Risk Premium)	0.88%
c-Economic Growth Rate (Est.) for Cap Rate	4.00%
Exchange Rate \$1 U.S. Dollar to Euro	12/31/2011 €0.7717
7-New York Times 7/6/2009 article \$31,169 job creation cost converted to Euros (€)	€24,052

Country	1	2	3	4	5	6	7	8	9	10	
Native English	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom	
Economic Indicators (as of 12/31/2011)	Total EU NEZ	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
GDP 2011 by Country (€ Billions) ¹	€3,225.41	€38.48	€154.91	€239.24	€20.21	€30.71	€100.51	€370.01	€136.48	€387.89	€1,746.96
Central Government consolidated total liabilities [F_TOT] (€ Billions) ²	€2,461.34	€8.48	€64.07	€121.40	€9.33	€12.86	€71.80	€198.77	€49.63	€150.40	€1,774.60
Unemployment, 2011-12 [une_nb_m] ³	7,272,000	402,000	350,000	213,000	155,000	227,000	475,000	1,788,000	764,000	353,000	2,545,000

I. Historical Average (2005-2011)	Total EU NEZ	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
(Domestic currency in terms of Euros)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)
1. NCB Operating Costs Ignored	€0.00										
2. New Money (M1) Issued times (1 - reserve requirement) ^{5a}	€78.45	€0.72	€6.53	€4.23	€0.44	€0.62	€0.84	€8.14	€1.85	€9.78	€45.31
Total Annual Intermediation	€78.45	€0.72	€6.53	€4.23	€0.44	€0.62	€0.84	€8.14	€1.85	€9.78	€45.31
Intermediation Capitalized ^c	€1,961.30	€18.03	€163.19	€105.67	€11.05	€15.38	€20.99	€203.56	€46.18	€244.47	€1,132.79
GDP % Improvement ([Annual Intermediation] / [GDP])	2.4%	1.9%	4.2%	1.8%	2.2%	2.0%	0.8%	2.2%	1.4%	2.5%	2.6%
Jobs Estimate (assuming €750,000 Capitalized Value per Job)	2,615,068	24,034	217,593	140,891	14,733	20,503	27,981	271,413	61,570	325,959	1,510,390

II. 2011 Actual	Total EU NEZ	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
(Domestic currency in terms of Euros)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)
1. NCB Operating Costs Ignored	€0.00										
2. New Money (M1) Issued times (1 - reserve requirement) ^{5a}	€31.87	€1.24	€2.47	(€5.81)	€0.84	€1.04	(€0.49)	(€7.39)	€0.66	€2.58	€36.73
Total Annual Intermediation	€31.87	€1.24	€2.47	(€5.81)	€0.84	€1.04	(€0.49)	(€7.39)	€0.66	€2.58	€36.73
Intermediation Capitalized ^c	€796.76	€31.05	€61.76	(€145.18)	€21.00	€25.90	(€12.28)	(€184.69)	€16.47	€64.41	€918.32
GDP % Improvement ([Annual Intermediation] / [GDP])	1.0%	3.2%	1.6%	-2.4%	4.2%	3.4%	-0.5%	-2.0%	0.5%	0.7%	2.1%
Jobs Estimate (assuming €750,000 Capitalized Value per Job)	1,062,341	41,400	82,340	(193,568)	27,999	34,531	(16,376)	(246,253)	21,957	85,884	1,224,428

III. Monetary Debt Impact ^{1,2 Notes}	Total EU NEZ	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
(Bank Note to Member State from Supplement 2(a))	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)	(€ Billions)
Bank Note to Gov't to cover fractional reserve deposit cash shortage ⁶	€763.61	€26.67	€97.58	€325.35	€18.96	€15.23	€85.72	€150.74	€43.36	€0.00	€0.00
Domestic Circulation Currency Conversion (in terms of Euros) ⁴	€1,832.87	€10.75	€83.36	€104.30	€6.23	€9.06	€23.34	€104.97	€19.87	€178.64	€1,292.36
Intermediation Capitalized	€2,596.48	€37.42	€180.94	€429.65	€25.19	€24.29	€109.06	€255.71	€63.23	€178.64	€1,292.36
GDP % Improvement (([Intermediation Cap'd]x[Growth Cap Rate])/[GDP])	3.2%	3.9%	4.7%	7.2%	5.0%	3.2%	4.3%	2.8%	1.9%	1.8%	3.0%
Jobs Estimate (assuming €750,000 Capitalized Value per Job)	3,461,977	49,895	241,249	572,860	33,585	32,388	145,409	340,952	84,305	238,193	1,723,140

Average GDP % Improvement	2.2%	3.0%	3.5%	2.2%	3.8%	2.8%	1.6%	1.0%	1.2%	1.7%	2.6%
Average Jobs Estimate (assuming €750,000 Capitalized Value/Job)	2,379,795	38,443	180,394	173,394	25,439	29,141	52,338	122,037	55,944	216,679	1,485,986
Average Unemployment % Total/Member State Reduction	32.7%	9.6%	51.5%	81.4%	16.4%	12.8%	11.0%	6.8%	7.3%	61.4%	58.4%

Notes

- 1-It is expected sovereign debt holdings by banks will be credited and retired for use in funding full reserve deposits. The amount of sovereign debt holdings by banks is unknown but should net with reduced bank loan keeping total benefit to people/nations at about the same level. Bank debt to sovereign governments estimated to be first lien at the same market interest rate for all banks based on the credit of the entire Eurozone + a risk premium.
- 2-Bank debt from full reserve deposit conversion appears more than sovereign national debt for most countries. Consideration to divesting excess to European citizens depository accounts or unfunded government liabilities.

Sources

- 1-GDP by country from European Commission eurostat, Gross domestic product at market prices (tec00001) Last Updated 9/22/2012 at <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00001&plugin=1>
- 2-Central Government consolidated total liabilities [F_TOT] from Supplement 3(a) EU Non-eurozone (10) Central Governments Consolidated Balance Sheets - Before Bank Conversion.
- 3-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
- 4-Domestic Circulation Currency Conversion estimated using 2011 M1 numbers from Supplement 1(n) Input Data Summary.
- 5-M1 increases from Supplements 1(d) to (m) Annual & Compound Intermediation Cost to Economy 2005 to 2011 using M1 Money Supply.
- 6-Bank Note amounts from Supplement 2(a) EU Non-eurozone Banks Consolidated Balance Sheet Estimate from ECB EU Banking Data.
- 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/>

Monetary Fractional Reserve NEZ Economic Intermediation Cost Estimate				
Intermediation Cost	(A)		(B)	
	Annual	Capitalized	Annual	Capitalized
Estimation Basis	(€ Billions)	(€ Billions)	=(A)/NYT Est ⁷	=(B)/€750,000
I. Historical Average	€78.45	€1,961.30	3,261,766	2,615,068
II. 2011 Actual	€31.87	€796.76	1,325,055	1,062,341
III. Monetary Debt Est.	€103.86	€2,596.48	4,318,113	3,461,977
Average	€71.39	€1,784.85	2,968,312	2,379,795

The EU/EMU fractional reserve monetary system has an average 92% (1 - RR) intermediation cost (wealth transfer effect) of new money creation. This is a loss of capital to the other sectors of the economy. Assuming a €750,000 Euro of capital value per job creation, the average €1.78 Trillion capitalized cost represents an estimated 2,380,000 private sector jobs. Per NY Times estimate the €71.4 Billion annual cost would be approximately 2,968,000 jobs. These estimates indicate the approximate cost of monetary intermediation is on the order of 3 million jobs.