Exchange rates volatility and Industrial concentration: search for empirics.

(First draft, do not quote)

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1. Introduction

The main idea behind this project is to seek for an empirical test of the exchange rates' effect on firms' location decisions. In particular here the focus is on realizing a first empirical attempt to test the effect in terms of countries' industrial agglomeration of the exchange rates volatility. The empirical results do not confirm the prescriptions of the theory so far. The estimation output provides a negative result while theory suggests a positive effect. With respect to the model proposed the relationship between exchange rates volatility and the pattern of economies' specialization, is significant however the specification of the model is still very simple and for this the presented results must be taken as preliminary. In case the further empirics on these variables will confirm the negative effect of exchange rate variance on specialization pattern, this would mean that the creation of a common currency area eliminates a source of countries de-specialization. Hence the common currency areas foster asymmetry and the theory should provide for an economic explanation to this negative effect.

2. The theoretical framework

The relevance of the proposed empirical analysis proceeds mainly from three different branches of the literature: the New Keynesian, the New Economic Geography and the Optimal Currency Area literature (OCA).

The Optimal Currency Area literature in general does not agree on the conclusions about the self-realizing conditions for the symmetry of the country-members' cycles. Part of the researchers remark the endogeneity of the symmetry among countries belonging to the monetary unions[1], they mainly underline the effects of the common currency areas to self-realize the conditions for symmetric responses to common shocks. The other part[2] on the contrary highlight the mechanisms towards asymmetry that the common currency area creates, causing in this case conditions which

[1] L. Fontagné, M. Freudenberg (1999), Endogenous Symmetry of Shocks in a Monetary Union; *Open Economies Review* 10: 263-287.

[2] Sebnem Kalemli-Ozcan, Bent E. Sorensen Oved Yosha, "Economic Integration, Industrial Specialization and the Asymmetry of Macroeconomic Fluctuations", Journal of International Economics), vol.55, 2001, pages 107-137.
Bent E. Sorensen Oved Yosha, 1998." International risk sharing and European Monetary Unification", Journal of International Economics 45, 211-238.

are opposite to the optimal ones. In particular Frankel and Rose[3] (1998) underline theoretically and prove empirically how lowering trade barriers, together with sharing knowledge and spillovers and with the adoption of common policies is likely to determine the required conditions for a common currency area to be optimal i.e. to have an increasing and significant symmetry in their cycles. Despite this, Krugman[4] (1993) has already proved how trade openness by rising competition can be also a source of countries' specialization determining a differentiation among the cycles. On the other hand Kalemli-Ozcan, Sorensen and Yosha (1998 and 2001) (K-OSY) underline theoretically and prove empirically first that industrial specialization is a source of asymmetric responses to common shocks and than that capital market integration can be a source of asymmetry between the integrated economies. Under certain points of view these three apparently divergent considerations, are likely to hold together, as K-OSY stated (2001) in a complex melt of forces of which is not easy to understand *a priori* what will be the final result.

F&R (1996)'s when introducing their theoretical model quote Ricci[5] (1997) to support part of their considerations: *"....Ricci (1997) provides a theoretical analysis which contains many of these elements. His analysis focuses on the relationship between the exchange rate regime and firm location (with consequences for the extent of international trade). Using a static model which incorporates both inter-industry and intra-industry trade, he finds that flexible exchange induce specialization compared with fixed rates, since they automatically dampen the effects of industry-specific (and other) shocks"*.

This is not the place to describe in detail F&R's model while the focus will rather be on the quoted model by Ricci (1997). As they said this is a theoretical model providing evidence for exchange rate regime to affect countries' specialization pattern, in particular flexible exchange rates exacerbate industrial specialization while fixed exchange rates neutralize this force. F&R state basically that whenever the relationship between exchange rates fluctuations and specialization is positive, the common currency areas themselves neutralize one more force towards specialization and asymmetry. Since this theoretical evidence has not been empirically verified yet what this paper proposes is a first attempt for detecting econometrically the existence and magnitude of such effect. The figure below is from K-OSY and describe the main features of the theoretical framework of the OCA literature.

[3] Frankel, J., Rose, A., 1998, "The endogeneity of the optimum currency area criterion." Economic Journal 108, 1009-1025.

[4] Krugman, P., 1993. Lessons of Massachussetts for EMU, in: Giavazzi, F., and Torres, F. (Eds.) the transition to economic and Monetary Union in Europe. Cambridge University Press, New York.

[5] L. A. Ricci 1997, "Exchange rates regimes and Location", IMF Working Paper.

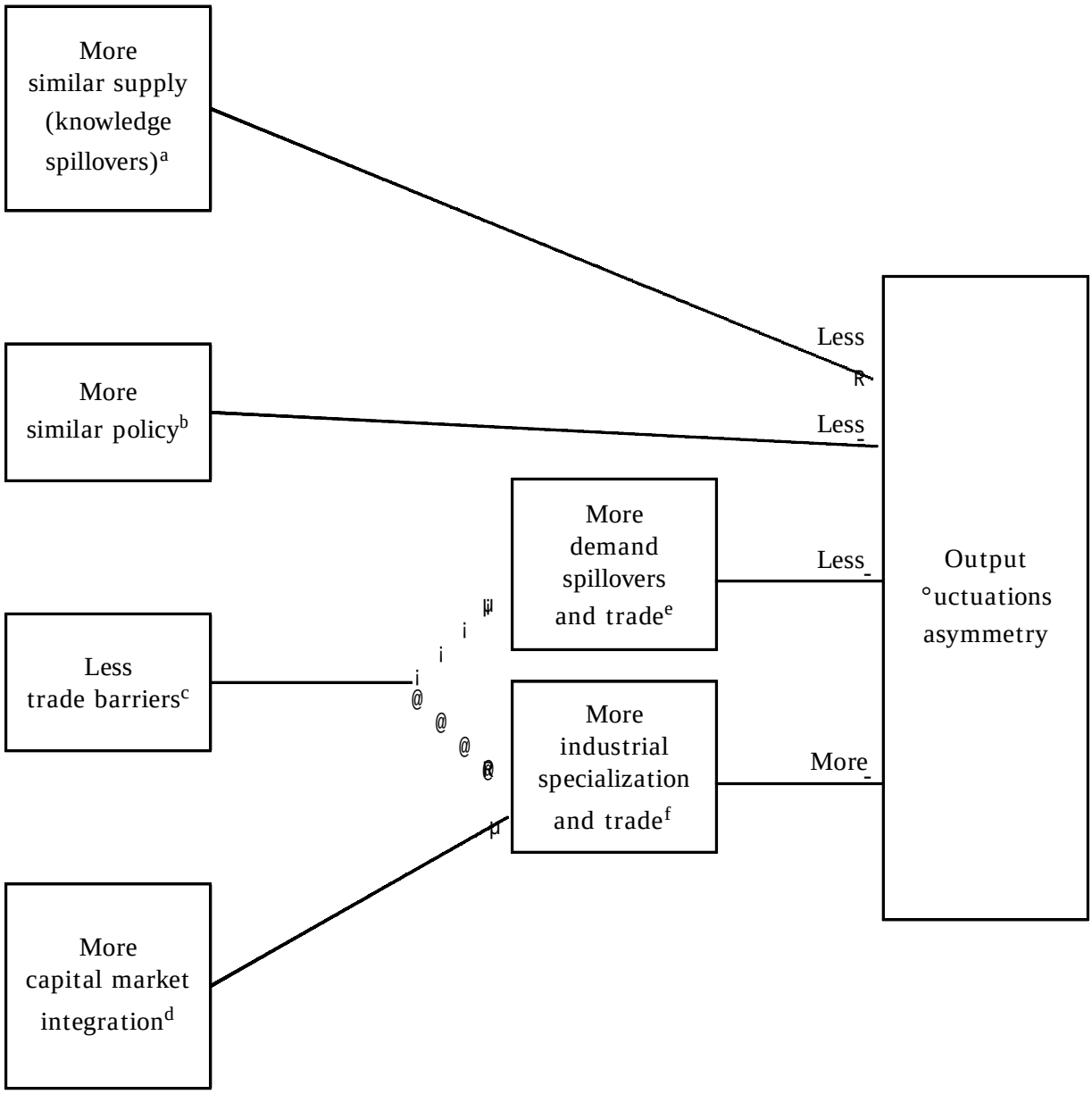

Figure 1: The E®ects of Economic Integration on Fluctuations Asymmetry

[a] Coe and Helpman (1995).
[b] This channel is mentioned by Frankel and Rose (1998).
[c] Frankel and Rose (1998) estimate the overall e®ect on °uctuations asymmetry of lowering trade barriers. They instrument by distance (a trade barrier). Krugman (1993) stresses the e®ect of lower trade barriers on specialization.
[d] Kalemli-Ozcan, Sorensen and Yosha (1999) estimate the e®ect of greater inter-regional income insurance on industrial specialiazation. In the current paper, we estimate the e®ect of greater industrial specialization on °uctuations asymmetry.
[e] Typically, more intra-industry trade.
[f] Typically, more inter-industry trade.

Before proceeding to the description of Ricci's model and than to the empirical analysis let's describe the connection of this paper with the other two relevant branches of the literature.

The New Keynesians[6] study the effects of monetary variables on real economies over mainly the last 20 years when the dimension, fluctuations and uncertainty financial markets' have been increasing, while real economies registered sluggish rates of growth. Exchange rate as monetary variable has been studied in relation with foreign trade and with its direct and indirect consequences on international capital and goods markets' integration that is the relevant part of the literature for the present analysis.

Finally since New Economic Geography (NEG) is the main source of the theoretical tools for this analysis , a brief introduction to this rather new branch of literature it's worth. Location of firms and workers beside being one of the "main ingredients" of Trade, New Trade and Investment Theory, and in general of International Macroeconomics, it remained "directly" unexplored since ten years ago when New Economic Geography[7] made of it the "main dish" of an interesting and promising new field of research. Defining what causes firms' location is a hard task because of the number of relevant variables, their heterogeneity and endogeneity at a micro and macroeconomic level; workers' behaviour is also relevant and sometimes its explanation requires an historical, anthropological and sociological knowledge by which economists are not generally endowed. The study of location proposed by the New Economic Geography analyses possible location's incentives belonging to the so called "second nature"[8]. Location is one of the variables determining the most persistent effects on real economies; once it is defined according to the utility of the agents (both firms and workers) significant costs are afforded and "vital connections" within the selected environment are built up, making quite "painful" the possibility of changing the decision

[6] Mankiw, Romer 1992 "A contribution to the empirics of economic growth", The Quarterly Journal of Economics. Vol. 107, No. 2 (May, 1992) pp. 407-437.

[7] Fujita M. 1988 "A monopolistic competition model of spatial agglomeration: A differentiated product approach"; Regional Science and Urban Economics 18, 87-124.
Krugman P.R. 1991 "Increasing returns and economic geography", Journal of Political Economy 99, 483-499.
Venables A.J. 1996, "Equilibrium locations of vertically linked industries", Internatioanl Economic Review 37, 341-359.

[8] Ottaviano-Thisse, November 2003: "…first nature refers to exogenously given characteristics of different sites, such as the type of climate, the presence of raw materials, the proximity to natural ways of communication, etc. …is important to explain the location of heavy industries during the Industrial Revolution… However it falls short of providing a reasonable explanation of many other clusters of activities, which are much less dependent on natural advantage ... The aim of geographical economics is precisely to understand what are the economic forces that, after controlling for first nature, account for 'second nature', which emerges as the outcome of human beings' actions to improve upon the first one".

afterwards. Despite the importance of the "first nature" reasons for location, it is therefore important to understand the other, less evident but significant determinants belonging to the "second nature". Approaching from this perspective the proper task of this work, exchange rates affect location in a way that is even a step further with respect to the "second nature", because, even if belonging to human structure, exchange rates, influence location by exacerbating the reaction to temporary shocks generated by exogenous determinants.

Since some NEG's models provide "extreme" solutions, such as perfect industrial agglomeration or dispersion which are not realistic as final statements of convincing theoretical framework hence NEG needs to introduce further more realistic considerations into the models to overcome these "puzzles". In this sense it is definitely appealing the contribute of empirics to test models' statements, to check for their robustness and significance across time, sectors and countries in order to provide interesting concerns to the theory[9] and to better understand the fit with the real world of the theoretical results. This is exactly the kind of contribute that here is provided to the model by Ricci (1996) that although not stating extreme considerations proposes as significant a rather innovative contribute to the theory of location towards industrial specialization.

Every relevant theoretical perspective for this study has been briefly presented and more details on the task of this analysis is now to be clearly defined, first with the description of the model and with the empirical results afterwards.

3.The model

Before entering in more details about the model it's worth to remark that neither theory nor empirics pretend the exchange rate fluctuations to be one of the main determinants for industrial agglomeration and the whole literature on industrial organization and industrial economics not only still holds but remains the main reference to explain industrial concentration related phenomena. As stated above the main goal here is trying to detect empirically an unlike relationship proposed by the theory, the interest on which takes mainly origin from the possible tendencies it could generate in a common currency area.

[9] Here the interest is particularly focused on the role of empirics in fostering New Economic Geography's realism because that's the approach that will be followed in this proposal but there are also interesting contribute proceeding from other branch of literature that are providing significant improvements in the same worthy way. For example the Bell-shaped curve of spatial development allowing for individual diversity of workers or considering spatial costs holding also for the traditional sector[9] provides a theoretical evidence of the not constant tendency of the economies to agglomeration or dispersion.

According to industrial sectors' agglomeration a static two countries, two goods model shows that in an asymmetric and mirror-image distribution of the sectors' concentration in the two countries under flexible exchange rate, in case of shocks belonging both to monetary and real economy, there is an increasing incentive for firms to locate towards the most industrially agglomerated economies. Here only the relevant features of the model are described for the complete model's function make reference to Ricci 1997.

The model defines countries 1 and 2, producing both goods A and B but in an asymmetric and mirror-image industrial distribution (if country 1 produces 1/3 of goods B and 2/3 of goods A, then country 2 produces 1/3 of goods A and 2/3 of goods B). Country 1 is supposed to be relatively specialized in producing goods A while country 2 is supposed to be relatively specialized in producing goods B. The preferences of the representative consumer are modelled with a typical Blanchard-Kiyotaki utility function with respect to the choice between consumption and saving, and the preferences for different goods belonging to each sector. Prices are fixed (firms play Bertrand) in the short medium run time horizon of this model. This is a general equilibrium formalization and the firms' production function is supposed to be a linear function of the labour costs. Labour is the only factor in the production functions of both sectors that are supposed to be identical, there are not fixed costs.

The main goal consists in the comparative analysis of the equilibrium conditions' behaviour in the cases of real and monetary shocks whether the exchange rates are flexible or fixed. The model is static, but defines a schedule of the decision process that determines an uncertainty framework for firms, that are setting prices according to common and plausible conjectures on the demand, then once prices are fixed, consumers make their consumption choices and firms adjust their supply to the actual demand.

Starting from a situation of equilibrium the model considers the effect of demand and supply sides real shocks and exchange rates and monetary shocks on the location incentive for firms. Only the basic intuition of the exchange rate regime's role on the different adjustment reactions is relevant for the aim of this analysis.
If a shift occurs in the international preferences towards goods belonging to sector A, the increased demand for A will push the currency of country 1 in the direction of an evaluation with respect to the currency of country 2. In case of fixed exchange rate regime the monetary authorities would

intervene in order to rebalance the exchange rate parity so no location incentive are provided by exchange rates' adjustment.

It is in the case of flexible regime that the reaction of the exchange rate to demand's shift carries out some incentives on the firms' setting. The evaluation of the currency of country 1 generates a further increase of demand for goods A produced in country 2 and a shock reduction for firms in country 1: the share of goods A produced in country 1 after the shock becomes less competitive because of the higher exchange rate, while the demand to producers of goods A located in country 2 because of that gets a further increase. So the effect of the shock will be larger for firms producing goods A in country 2 than for the ones located in country 1. Let now consider the market of goods B. The lower demand towards goods B affects both countries, but in country 1 the evaluation of the exchange rate determines a further loss of demand from country 2's consumers, discouraged by the higher exchange rate, while for firms producing goods B in country 2 the effect is the one belonging to the initial shock dampened by the devaluation of the exchange rate that will make more appealing for consumers to buy goods B from country 2, despite the bad conditions of the market.

The basic remark of the model is that in a plausible fixed price short-medium run framework, under flexible exchange rate regime firms producing goods faraway from the specialized countries experiment a higher sells' variability that could generate an incentive of location towards the more industrially concentrated economies. Despite the interesting finding of defining exchange rates' fluctuations as second nature reasons of industrial agglomeration, it is a hard issue to be tested empirically because the first nature, market structure and imperfections reasons in this field play a definitely relevant role for which it would be necessary to control to get realistic econometric results[10].

Furthermore the model shows also that the amplification of the shocks provided by the exchange rates fluctuation is proportional to the initial asymmetry in the sense that the more specialized countries are, the larger is the magnitude of this further exchange rate effect.

The logic behind the adjustment in case of supply and monetary[11] shocks is almost the same and the same conclusions seem to hold allowing for prices and wages flexibility[12]. For monetary shocks

[10] In the presented empirical model the sample did not consent to control for relevant variable but that's the target for future applications.

also the monetary and financial markets' level of integration matters for the exchange rate effects: the higher it is the market behaviour's correlation the lower it will be the exchange rate adjustment on firms' demand shocks.

It is likely to define the described reaction of the exchange rates like an exacerbation of the sector-specific demand fluctuation, to be insured by which firms tend to agglomerate towards the most specialized markets. It is true that firms react not to be more affected than the foreign competitors in case of unexpected demand fluctuations, in this way they could tend to agglomerate towards the most specialized countries, transferring in so doing their exchange rate risk to the countries.

4.Empirics

The model proposed for the empirical application is a basic panel of 16 OECD countries[13] for the period 1980-1996. The regression is run taking a relative index of specialization as dependent variable and the yearly variance of the monthly real effective exchange rates[14] as unique regressor.

The index of specialization is

$$Y = SPEC^i = \left(\sum_{s=1}^{K} \left(\frac{VA_i^s}{VA_i} \right) - \frac{1}{J-1} \sum_{j=1}^{S} \left(\frac{VA_j}{VA_j} \right) \right)^2$$

it is the same used in K-OSY to detect for the effect of the specialization with respect to the asymmetry of fluctuations, they detect a positive relationship between specialization and fluctuations asymmetry.

The annual variance of the monthly real effective exchange rate is chosen for two reasons. The first one is economic and belongs to the fact that the short-medium run variance of the exchange rates is introduced as stochastic factor in the expected demand function of the firm[15]. The second reason is

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[11] For monetary shocks also the money and financial markets' level of integration matters for the exchange rate effects: the higher it is the market behaviour's correlation the lower it will be the exchange rate adjustment on firms' demand shocks.

[12] Ricci 1997 does not provide any mathematical evidence for prices and wages but describes the achieved results.

[13] Austria, Canada, Denmark, Finland, France, Italy, Japan, Korea, Mexico, Netherlands, Norway, Portugal, Spain, Sweden, UK, US.

[14] For data base description see the Statistical appendix below.

[15] The same variable has been used in L.A. Ricci 1998 "Uncertainty, Flexible Exchange Rates and Agglomeration", IMF Working papers.

econometric, in fact exchange rate is not a differentiable stationary variable[16] and even in the first difference it could have distorted the results of the estimation.

Since the theoretical model of reference is static no dynamic estimation results are presented for which a better specification is necessary together with a wider sample[17].

Dealing directly with the results the effect of the exchange rates' variance on the specialization index results to be small and negative. The same regression is run for all the countries, for the Euroarea countries included in the sample and for the no-Euroarea countries. The results are basically the same in each case, the coefficient estimating the effect of exchange rates variance on the relative concentration index is negative and in the order of 0.07.

Some interesting remarks are worth to be noticed: while the Hausman test for the linear panel estimation including all the countries rejects the null hypothesis of random effects, and the same is true for the outside Euroarea countries, on the contrary for the Euroarea the effects are random and this could be likely interpreted as consequence of the fact that those countries have a more similar specialization pattern. Dealing with European countries it is also to underline that even if the European countries during the years of the sample were members of the SME and their intra-Europe exchange rates fluctuations were controlled, this shouldn't create any problem of estimation as far as the variance belongs to the real effective exchange rates that is calculated on the all over exchange rates weighted for the intensity of the commerce with respect to each country.

Finally the only significant regression including the estimation of the time-dummies belongs to the outside Euroarea countries. This can be likely explained by the lower level of cycles correlation with respect to the European countries.

To control for relevant omitted variable in all the regressions the total value added has been introduced among the regressors but despite significative, it doesn't change the results on the exchange rates' coefficient and significance for this in the showed results it has been omitted.

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[16] Choi, In, "Testing the Random Walk Hypothesis for Real Exchange Rates", Journal of applied econometrics, vol. 14 1999, pages 293-308. "Fixed versus Flexible Exchange Rates: A Panel-VAR Analysis". Mathias Hoffmann, Department of Economics, University of Cologne, 13th of January 2003.

[17] It willbe the starting step of the further analysis.

5.Conclusions

As stated in the introduction there is not economic explanation for the exchange rates variance to have a negative effect on the relative specialization rates of the economies, for this reason before concluding for the model by Ricci not to find empirical confirmation, some concerns about the statistical confidence of the present results are due.

Almost all the problems of the presented empirical application belong to the difficulties in finding a wider database including more than 16 countries and for longer than 16 years. In fact asymptotically the estimation of one parameter and 16 fixed effect dummies can be confidently considered with around 250 observations, but the dimension of the sample affects the model specification possibilities. Being specialization a complex phenomenon to detect properly the effect of the exchange rate it is necessary to control for more exogenous explicative variables that a wider sample consents to include into the model.

Concluding, this paper does not provide for any final empirical confirmation or confutation about the existence of an effect of the exchange rates' fluctuations on the index of industrial concentration of the economies. It proposes a first step negative result and suggests some possible ways to better disentangle empirically the exchange rates' effect among all the determinants of the industrial specialization.

References

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L.A. Ricci 1998 "Uncertainty, Flexible Exchange Rates and Agglomeration", IMF Working papers.

Statistical appendix

Data:

Data used in this analysis belong to the OECD data base:

Manufacturing specialization rate (**Y** below): Industry Science and Technology database, OECD STAN database for Industrial analysis, variable disaggregated according to ISIC Rev.3 comparable with NACE rev.1.

Exchange rates yearly variance (**ex** below): Calculated on the monthly real effective exchange rates proceeding from OECD, Economic Indicators, Main Economic Indicators database.

Total Value Added (not included below): value at constant price 1995, from OECD, Economic Indicators, Main Economic Indicators database.

Note: ex has been normalized before regressing.

Tab.1 All countries fixed effect estimation

Regression with robust standard errors **Number of obs = 272**

R-squared = 0.9205

Number of clusters (countries) = 16 **Root MSE = .10286**

y	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ex	**-.0768355**	**.0338665**	**-2.27**	**0.038**	**-.1490202**	**-.0046509**
_I_2	.7038356	.0111022	63.40	0.000	.6801717	.7274994
_I_3	.1807778	.0054246	33.33	0.000	.1692155	.1923401
_I_4	-.0094297	.0086778	-1.09	0.294	-.0279259	.0090666
_I_5	-.0302544	.0038807	-7.80	0.000	-.0385259	-.0219829
_I_6	.6726576	.0064087	104.96	0.000	.6589978	.6863175
_I_7	.4981052	.0170807	29.16	0.000	.4616986	.5345117
_I~8	.32213	.0197362	16.32	0.000	.2800633	.3641966
_*I*_9	.76443	.0244576	31.26	0.000	.7122999	.8165601
*I*_10	.8608593	.0054346	158.40	0.000	.8492757	.8724428
_*I*_11	.0386852	.0062394	6.20	0.000	.0253863	.0519842
_*I*_12	.8757492	.0077455	113.07	0.000	.8592401	.8922583
_*I*_13	-.0383408	.0075502	-5.08	0.000	-.0544337	-.0222479
_*I*_14	.3560695	.0063569	56.01	0.000	.3425201	.369619
_*I*_15	.8274569	.0175468	47.16	0.000	.7900568	.864857
_*I*_16	.7156137	.0216606	33.04	0.000	.6694452	.7617821
_cons	.1292659	.0039285	32.90	0.000	.1208924	.1376393

Tab.2 All countries Radom effect estimation

```
Random-effects GLS regression              Number of obs     =       272
Group variable (i): countries              Number of groups  =        16

R-sq:  within  = 0.0293                    Obs per group: min =        17
       between = 0.2060                                   avg =      17.0
       overall = 0.0659                                   max =        17

Random effects u_i ~ Gaussian              Wald chi2(1)      =      6.86
corr(u_i, X)   = 0 (assumed)               Prob > chi2       =    0.0088

------------------------------------------------------------------------------
           y |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          ex |  -.0727531   .0277758    -2.62   0.009    -.1271926   -.0183136
       _cons |   .5486633   .0819787     6.69   0.000     .3879881    .7093386
-------------+----------------------------------------------------------------
     sigma_u |  .32145424
     sigma_e |  .10285984
         rho |  .90712079   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Tab.3 All countries Hausman Test

```
Hausman specification test

             ---- Coefficients ----
           |      Fixed       Random
         y |    Effects     Effects      Difference
-------------+----------------------------------------
        ex |  -.0768355    -.0727531       -.0040824

   Test:  Ho:  difference in coefficients not systematic

               chi2(  1) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
                     =     0.00
               Prob>chi2 =     1.0000
```

Tab.4 EuroArea Countries Random Effect estimation

```
Random-effects GLS regression                   Number of obs     =       119
Group variable (i): countries                   Number of groups  =         7

R-sq:  within  = 0.0718                         Obs per group: min =        17
       between = 0.1009                                        avg =      17.0
       overall = 0.0015                                        max =        17

Random effects u_i ~ Gaussian                   Wald chi2(1)      =      8.53
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =    0.0035

------------------------------------------------------------------------------
           y |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          ex |  -.1015967   .0347846    -2.92   0.003    -.1697732   -.0334203
       _cons |   .3973025   .1489269     2.67   0.008     .1054112    .6891939
-------------+----------------------------------------------------------------
     sigma_u |  .39313556
     sigma_e |  .08907222
         rho |  .95117307   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Tab.5 EuroArea Countries Hausman Test

Hausman specification test

```
             ---- Coefficients ----
           |      Fixed       Random
         y |    Effects     Effects      Difference
-------------+----------------------------------------
        ex |  -.1021307    -.1015967       -.000534

   Test:  Ho:  difference in coefficients not systematic

     chi2(  1) = (b-B)'[S^(-1)](b-B), S = (S_fe - S_re)
               =     0.07
     Prob>chi2 =     0.7919
```

Tab.6 Not EuroArea Countries Cross Section and Time series Fixed Effect estimation

Regression with robust standard errors **Number of obs = 136**

R-squared = 0.8751

Number of clusters (countries) = 8 **Root MSE = .1135**

y	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
ex	**-.0769857**	**.0243825**	**-3.16**	**0.016**	**-.134641**	**-.0193303**
_Icountrie~3	-.5230829	.0040876	-127.97	0.000	-.5327486	-.5134171
_Icountrie~7	-.2057039	.0043042	-47.79	0.000	-.2158817	-.195526
_Icountrie~8	-.3816673	.0062161	-61.40	0.000	-.396366	-.3669686
_Icountrie~9	.0606536	.0096153	6.31	0.000	.0379171	.0833902
_Icountri~11	-.6651719	.003501	-189.99	0.000	-.6734505	-.6568933
_Icountri~15	.1236499	.0046398	26.65	0.000	.1126784	.1346214
_Icountri~16	.0118249	.0076016	1.56	0.164	-.00615	.0297998
_Idate_1981	-.0015468	.0351959	-0.04	0.966	-.0847719	.0816784
_Idate_1982	-.1167221	.0842776	-1.38	0.209	-.316007	.0825628
_Idate_1983	-.0984712	.0871922	-1.13	0.296	-.304648	.1077055
_Idate_1984	.0107198	.0322046	0.33	0.749	-.0654319	.0868715
_Idate_1985	.0184845	.0371781	0.50	0.634	-.0694278	.1063969
_Idate_1986	.0491668	.0424064	1.16	0.284	-.0511083	.1494419
_Idate_1987	.0409359	.0468521	0.87	0.411	-.0698516	.1517234
_Idate_1988	.0191012	.0515291	0.37	0.722	-.1027457	.1409482
_Idate_1989	-.030885	.0385098	-0.80	0.449	-.1219461	.0601761
_Idate_1990	-.0354978	.0440234	-0.81	0.447	-.1395966	.0686011
_Idate_1991	-.0396576	.0637206	-0.62	0.553	-.1903329	.1110177
_Idate_1992	-.1248881	.0797536	-1.57	0.161	-.3134755	.0636992
_Idate_1993	-.0904215	.0730506	-1.24	0.256	-.2631587	.0823158
_Idate_1994	-.0189246	.0729509	-0.26	0.803	-.1914261	.1535769
_Idate_1995	-.0319011	.0709155	-0.45	0.666	-.1995896	.1357873
_Idate_1996	-.0691843	.0748884	-0.92	0.386	-.2462672	.1078986
_cons	.8637382	.0431778	20.00	0.000	.7616388	.9658375

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