Marriage and Corruption : An empirical analysis on european data

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Abstract

In recent years the topic of corruption has attracted a great deal of attention. However, there is still a lack of substantial empirical evidence about the determinants of corruption. Despite an increasing interest of economists in the determinants of corruption, the factor of marriage has been widely neglected in the literature. The results suggest a positive but ambiguous effect marriage on corruption.

Keys-words: corruption, marriage, vulnerability, Europe

JEL : D73, J12, Z13

1. Introduction

In recent years the topic of corruption has attracted a great deal of attention. Research has recently focused on the determinants of corruption (KodilaTedika, 2012; AbdiweliandIsse, 2003; Lambsdorff, 2006; Montinola andJackman, 2002; Park, 2003; Seldadyoand de Haan, 2006; Shabbirand Anwar, 2007; Treisman, 2000) which include political institutions, global economic integration, the size of the shadow economy, business cycles, social trust and others variables (gender, age, intelligence, family, etc.). Only recently were nonconventional variables introduced into the regressions.

Despite an increasing interest of economists in the determinants of corruption, the factor of marriage has been widely neglected in the literature. From the data of investigation in the Congolese (DRC) magistrates, taxi drivers and police officers and probit model, Nakamwambila Kiadiamuyika and Kabanga Kazadi (2007) find that, ceteris paribus, married people have a higher probability to agree to be corrupted than the non-married, given the costly family burden. Mocan (2008) uses microlevel data set from 49 countries to create a direct measure of corruption, which portrays the extent of bribery as revealed by individuals who live in those countries to show an effect of civil status on corruption. It confirms that the marital status is a cause of corruption, but one does not find an effect statistically significant for the case of the marriage. In this paper we focus more on marriage1, better than the above mentioned articles. We thus try to disentangle these two results. In addition, this article uses different data, such as European data over the period from 2002 to 2009. This focus on social norms fits better the interdisciplinary literature on marriage.

The rest of this paper is organized as follows. Section II presents the data and estimation strategy. Section III examines marriage effect of corruption and the conclusions are given in

[1]In Kodila-Tedika, O. , Azia-Dimbu, F. and Kalemany, C. (2012), "Divorce and Corruption: analyze empirical on European data", Kinshasa University Working paper; we are interested in the relation corruption and divorce.

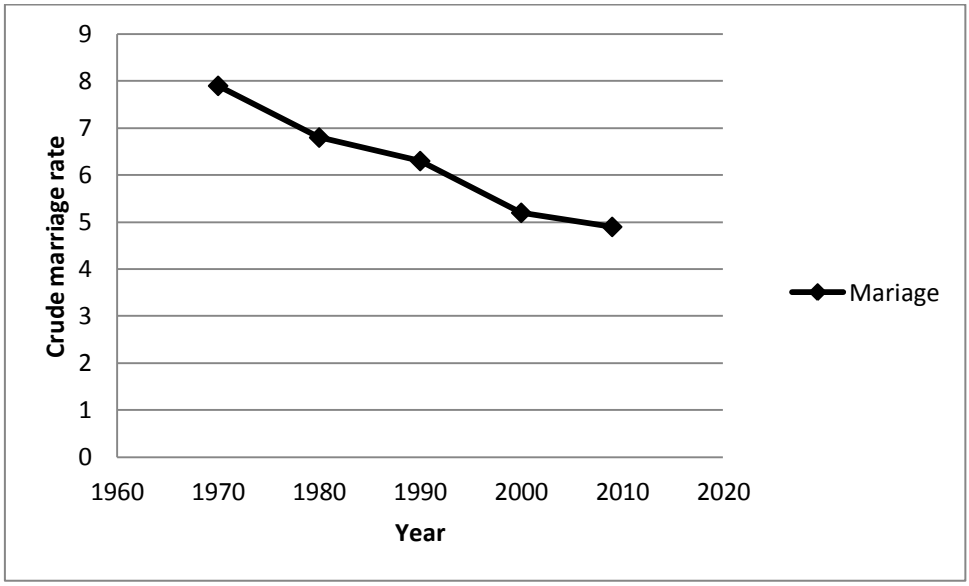
section 4 .

2. Data and estimation strategy

The base-line econometric model has the following form:

With Cor denotes the corruption, Mar indicate the marriagewe measure marriage using crude marriage rate in EU-27 (marriages per 1,000 inhabitants). The source is Demography report of Eurostat (to see figure 1 to identify the evolution of the marriage in time within EU-27).

Figure 1.Evolution of crude marriage rate in EU-27 (marriages per 1,000 inhabitants)



The vector X contains the. we include the Gender, Dev, Inf, Health, Den, Edu and UE. It is necessary to consider table 1 to have the definition of each variable, and theirdescriptive statistics are reported in Table 2 (cf. table 1 and 2 in annexes).All the variables of control are obtained from the World Development Indicators of the World Bank. In addition, we will not comment on the coefficients of variables of control.

To measure corruption, we use the Control of corruption (CC). The index assumes values between 2,5 (no corruption) and -2,5 (extreme corruption). The CC has often been used in empirical research on corruption (see the studies mentioned in section 1).

We estimate the model with ordinary least squares (OLS) and robust standard errors (Eicker-White). We use fixed-effects, after the result of Hausmann test. This empirical study usesuse data from 26 euorpean countries over the period from 2002 to 2009. This study adopts the data from 27 countries : Belgium (BE); Bulgaria (BG); The Czech Republic (CZ);Denmark (DK); Estonia (EE); Ireland (IE) ; Greece (EL); Spain (ES); France (FR), including overseas territories; 'Metropolitan France' excludes overseas territories; Italy (IT); Cyprus (CY); Latvia (LV); Lithuania (LT); Luxembourg (LU); Hungary (HU); Malta (MT); The Netherlands (NL); Austria (AT); Poland (PL); Portugal (PT); Romania (RO); Slovenia

(SI); Slovakia (SK); Finland (FI); Sweden (SE) and The United Kingdom (UK).

3. Empirical Results

3.1 Basic results

Table 3 shows the base-line regression results. The control of variables do not always display the expected signs and are not statistically significant in several cases. Within the framework of the relative relevance of our variable of interest (marriage), one notices that it is significant in all the cases. Its effect becomes significantly since there is interaction between the variable of interest and the vulnerability of variables (unemployment, social contribution and vulnerability of employment). Here, for the all cases, an increase in the vulnerability involves a positive effect of marriage on corruption.

Table 3. Regression Results.

Regressors	**Dependant variable: Cor**			
Intercept	-4,36	-4,54*	-3,82	-4,45*
	(2,55)	(2,47)	(2,57)	(2,48)
Mar	0,03*	0,05*	0,00	0,06
	(0,02)	(0,03)	(0,02)	(0,05)
Mar * Vun				-0,00
				(0,00)
Mar * UE			0,01	
			(0,01)	
Mar * Cont		-0,01		
		(0,00)		
UE	0,01	0,01	-0,03	0,01
	(0,01)	(0,01)	(0,02)	(0,01)
Cont	0,05	0,08	0,04	0,05
	(0,03)	(0,05)	(0,03)	(0,03)
Vun	0,01	0,01	0,01	0,02
	(0,01)	(0,01)	(0,01)	(0,01)
Gender	0,06	0,06	0,06	0,06
	(0,04)	(0,04)	(0,04)	(0,04)
Inf	-0,01*	-0,01*	-0,01*	-0,01*
	(0,01)	(0,01)	(0,01)	(0,01)
Health	-0,03	-0,02	-0,03	-0,03
	(0,03)	(0,03)	(0,03)	(0,03)
Density	0,00	0,00	0,00	0,00
	(0,00)	(0,00)	(0,00)	(0,00)
Edu	-0,01**	-0,01**	-0,01*	-0,01**
	(0,00)	(0,00)	(0,00)	(0,00)
Log PIB per capita	0,72**	0,70**	0,62*	0,69**
	(0,31)	(0,32)	(0,31)	(0,32)
Obs.	207	207	207	207

Notes: Absolute value of Std. Err. in brackets; * significant at 10%; ** significant at 5%;*** significant at 1%.

3.2 Robustness checks

Given the nature of our data and study, to test the robustness of the results is not obvious.In order to check the robustness of the results we divided the sample into two groups: Pov1 and Pov0.The criterion of division being the standard of living in the sample.The countries of the Pov1 group are those whoseLog PIB per capita higher than the average, and the others are naturally in group 2. They are regarded as the poorest of European countries

Table 4.RegressionResults (Robustness)

Regressors	**Dependant variable: Cor**							
Intercept	-3,58	-3,05	-2,30	-3,20	-3,35	-2,95	-3,51	-2,21
	(3,81)	(2,73)	(4,21)	(2,47)	(3,84)	(2,46)	(3,69)	(3,02)
Mar * Vun					-0,00	-0,00*		
					(0,01)	(0,00)		
Mar * UE							0,00	0,01
							(0,01)	(0,00)
Mar * Cont			-0,03	-0,01***				
			(0,02)	(0,02)				
Mar	0,01	0,07*	0,01	0,16***	0,04	0,10***	0,01	0,05
	(0,01)	(0,04)	(0,06)	(0,03)	(0,10)	(0,04)	(0,03)	(0,06)
UE	0,00	0,01	0,00	0,01	0,00	0,01	-0,00	-0,03
	(0,02)	(0,01)	(0,02)	(0,01)	(0,02)	(0,01)	(0,04)	(0,02)
Cont	0,12*	-0,04	0,26**	0,01	0,12*	-0,04	0,12*	-0,05
	(0,06)	(0,03)	(0,11)	(0,04)	(0,07)	(0,03)	(0,06)	(0,03)
Vun	-0,02	0,03***	-0,00	0,03***	-0,01	0,05***	-0,01	0,04***
	(0,05)	(0,01)	(0,05)	(0,01)	(0,07)	(0,01)	(0,04)	(0,01)
Gender	-0,01	0,11*	0,00	0,10*	-0,01	0,10*	-0,01	0,08
	(0,09)	(0,06)	(0,09)	(0,05)	(0,09)	(0,05)	(0,09)	(0,04)
Inf	-0,01	-0,00*	-0,00	-0,01	-0,01	-0,01	-0,01	-0,00
	(0,01)	(0,01)	(0,02)	(0,01)	(0,01)	(0,01)	(0,02)	(0,00)
Health	-0,05	0,03	-0,03	0,05	-0,04	0,05	-0,05	0,03
	(0,07)	(0,03)	(0,07)	(0,03)	(0,07)	(0,03)	(0,07)	(0,04)
Density	0,00	0,00**	0,01	0,00*	0,00	0,00*	0,00	0,00**
	(0,01)	(0,00)	(0,01)	(0,00)	(0,01)	(0,00)	(0,01)	(0,00)
Edu	-0,01*	0,00	-0,01	0,00	-0,01*	0,00	-0,01*	0,00
	(0,00)	(0,00)	(0,00)	(0,00)	(0,00)	(0,00)	(0,00)	(0,00)
Log PIB per capita	0,84	-0,08	0,46	-0,20	0,76	-0,24	0,83	0,13
	(0,58)	(0,33)	(0,58)	(3,00)	(0,53)	(0,28)	(0,56)	(0,35)
Obs.	123	84	123	84	123	84	123	84
Pov	1	0	1	0	1	0	1	0

4. Conclusion

This article aimed at studying the relation between marriage and corruption. Using panel data of the European countries, we do validate the direct effect of marriage on corruption, at least on our sample. The increase in the number of marriage would push up corruption. Also, it is possible to find an effect of the marriage on corruption in the event of interaction with variables of vulnerability.

But, these results are not also obvious, insofar as the conclusion seems changing since one breaks up the sample into rich group on the one hand and into poor group on the other hand.It is necessary to seek to refine these preliminary results.

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Annexes

Table 1 Variables description

Variables	Definitions
Cor	Transparency International's Perception of Corruption Index (CPI)
Vun	Vulnerable employment, total (% of total employment)
Contr	Contributing family workers, total (% of total employed)
Gender	Employers, female (% of employment)
Mar	Crude marriage rate in EU-27 (marriages per 1,000 inhabitants)
Log GDP per capita	Log GDP per capita PPP (constant 2005 US$)
Inf	Inflation, consumer prices (annual %)
Health	Life expectancy at birth, total (years)
Density	Population density (people per sq. km of land area)
Edu	Schoolenrollment, tertiary (% gross)
UE	Unemployment, total (% of total labor force)

Table 2 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
marriage	207	5.05058	1.22524	2.88	14.48
corruption	208	1.084165	.7506046	-.3430586	2.466556
contr	208	2.050481	2.839899	0	15.1
marcontr	207	11.22059	18.32023	0	110.628
UE	208	7.680288	3.462881	2.6	19.9
marunemp	207	38.10398	17.2046	11.778	100.352
vuln	208	12.31971	6.96197	2.8	36.6
marvuln	207	64.51841	47.30167	12.684	282.716
Gender	208	2.223077	.9624577	.7	7.6
GDPpercapita	208	25718	12103.18	7819.328	74113.94
inf	208	3.251436	2.911372	-4.479938	22.53721
Health	208	77.15333	3.156709	70.86585	81.47561
Density	208	170.9691	241.3267	17.07409	1293.722
Edu	208	58.81242	17.83476	10.34032	95.07212