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Abstract

This paper aims at identifying the effects of divorce alongside on corruption controlling. We find no significant effect of divorce on corruption. The same conclusion is found in cross-section and panel data.

Keys-words: Divorce, corruption, Europe

1. Introduction

Economists have proposed what can be referred to as the traditional causes of corruption (Lambsdorff, 2006; Kodila Tedika, 2012). However, the interest in nontraditional has been increasing more and more, recently. These include factors such as age (Torgler & Valev, 2006), gender (Swamy et al., 2001; Dollar & al, 2001; Sung & Chu, 2003; Sung, 2003; Cheung and Hernandez-Julian, 2006; Lavallée & al., 2010), level of intelligence (Potrafke, 2011), trust (Uslaner, 2004), etc. In the tread, Mocan (2008) documents the bond between corruption and civil status on microdata. It is considered in the framework of married, divorced, the widows, the single and the living room together. The fact of being unmarried appears significant, and the fact of being widowed appears significant in certain regressions.

The question that we put forth in this study is whether one can find any significant relationship between divorce and corruption. Beyond the need of confirming or disagreeing with the results in Mocan (2008), this question seems legitimate since it is estimated that people who want to divorce to be eager to accelerate the things by lubricating the legal machine. Also, psychological work insinuates a rather significant relation between the divorce and the level of stress (Lazarus, 1984; Lazarus & al., 1985; Holmes & Rahe, 1967; Kanner & al, 1981). In such a case, one can insinuate an effective perturbation to scramble reference. Thus, a relation divorce-marriage could appear. What interests us is the direct effect of the divorce on corruption.

In this paper we intend to focus more on divorce, better than the above mentioned article. In

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addition, this article uses different data, such as European data. And then the sample is relatively homogenous. The availability of data conditioned the use of this sample. This focus on social norms that fit better the interdisciplinary literature on divorce.

The remainder of the paper is structured as follows. Section 2 presents the data and gives suggestive evidence. Section 3 describes the empirical specification and estimation strategy. Section 4 examines marriage effect of corruption and the conclusions are given in section 5.

2. Data and Descriptive Evidence

To examine the relationship between divorce and corruption we collected a cross-section from to average 2002-2009 and panel data over the period from 2002 to 2009 for 25 europeans countries . The selection of countries as well as the time period is driven by concerns of data availability. In addition, we try to follow Kalonda-Kanyama and Kodila Tedika (2012) use relatively the same control variables. The variables used are summarized in Tables 1, 2 and 3. We describe each variable in turn as following.

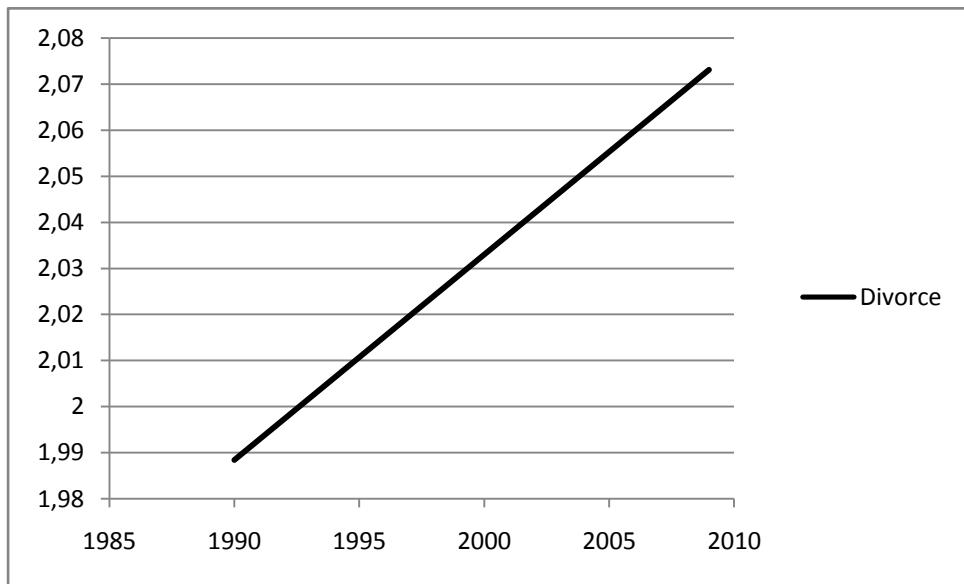
2.1 Divorce and corruption

The dependent variable is the yearly corruption level from the Transparency International and interest variable is the Crude divorce rate (divorces per 1,000 inhabitants), the same data as used in Kodila Tedika (2012). To measure corruption, I use the Transparency International's Perception of Corruption Index (CPI) for the year 2010. The index assumes values between 10 (no corruption) and 0 (extreme corruption). The CPI has often been used in empirical research on corruption (see i.e. the studies mentioned in section 1).

The source is Demography report of Eurostat (to see figure 1 to identify the evolution of the divorce in time within EU-27). These data have the advantage that they are available for the whole time period under consideration and for all UE-27 member countries. In addition, the EuroStat has ensured that divorce rates are comparable across the countries. Divorce is not legal in Malta. Germany misses certain control variables. Therefore, our estimates are made on 25 countries.

In 2007, 1.2 million divorces took place in the EU-27. The crude divorce rate was 2.1 per 1 000 inhabitants Eurostat (2011). Regarding the reality of divorce, Ireland (0.8 per 1 000 inhabitants) and several southern European Member States, including Italy (0.9), Slovenia (1.1) and Greece (1.2) have significantly lower crude divorce rates than Belgium (3.0 per 1 000 inhabitants), Lithuania and the Czech Republic, both with 2.8. According to Figure I, the rate of divorce for UE-26 was 1,99 in 1990. In 2009, the trend is positive: it is gone to 2,07. There are thus more divorces.

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



On average, UE-25 behaves well in terms of corruption, because it represents an average note of 6,35. There are nevertheless problematic cases: on the whole, there are 8 nations which have a note lower than 5, whereas the best note is 10. Denmark has the highest score, while Greece and Romania divide both the note of 3,8/10.

Table 1: List of countries

This study uses the data from 25 countries : Belgium; Bulgaria; The Czech Republic; Denmark ; Estonia ; Ireland ; Greece ; Spain ; France, including overseas territories; 'Metropolitan France' excludes overseas territories; Italy ; Cyprus ; Latvia ; Lithuania ; Luxembourg ; Hungary ; The Netherlands ; Austria ; Poland ; Portugal ; Romania ; Slovenia ; Slovakia ; Finland ; Sweden and The United Kingdom.

Table 2. Summary statistics (Cross-section)

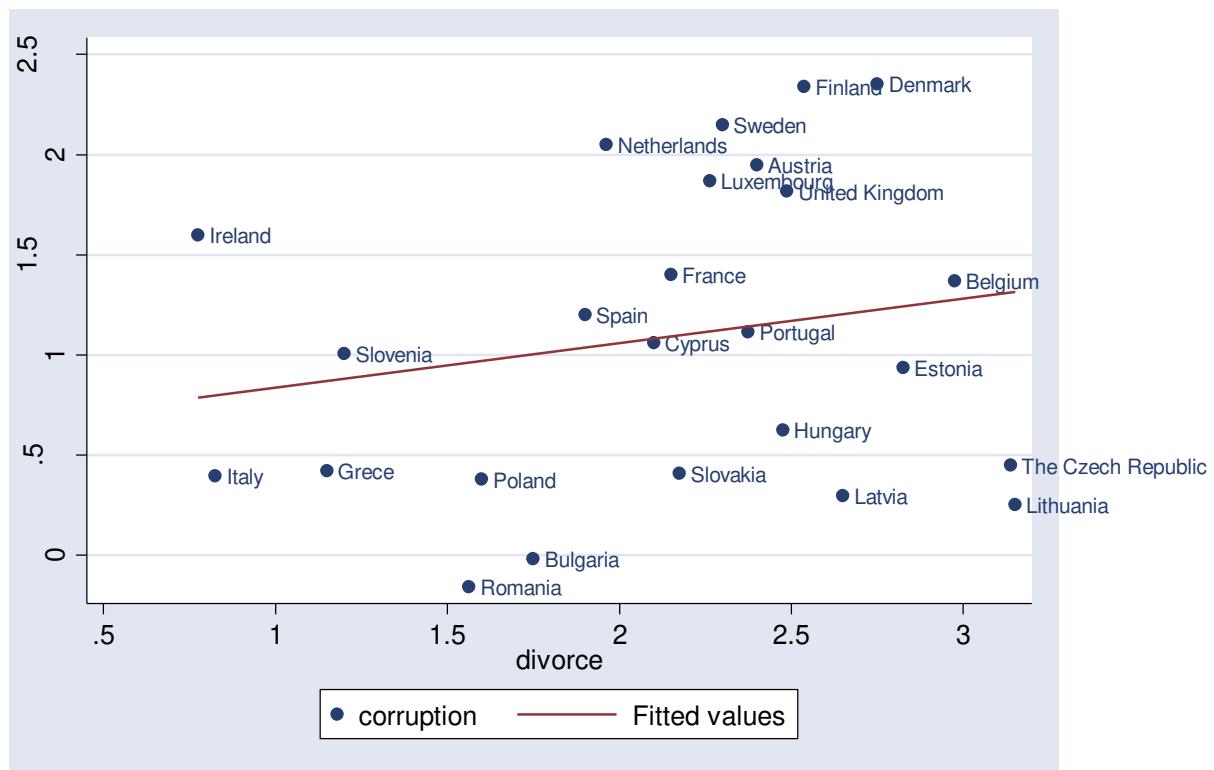
Variable	Obs	Mean	Std. Dev.	Min	Max
Divorce	25	2.139	0.6675059	0.775	3.15
Corruption	25	1.089723	0.7686955	-0.1574431	2.35022
UE	25	7.711	2.8678	3.6	14.55
Gender	25	2.248	0.9117697	0.825	4.85
Infla	25	3.283205	2.061051	1.428242	10.44169
Helath	25	77.08036	3.186208	71.6244	80.80093
Density	25	127.1663	103.9401	17.29225	483.9098
Edu	25	59.98888	16.58317	11.27159	90.95385
Log GDP per capita	25	10.05355	.4774529	9.174291	11.13314

Table 3. Summary statistics (Panel data)

Variable		Mean	Std. Dev.	Min	Max		Observations
Divorce	overall	2.139	.6922246	.7	3.8	N =	200
	between		.6675058	.775	3.15	n =	25
	within		.2219998	1.239	3.139	T =	8
Corruption	overa	1.089723	.7648346	-.343059	2.46656	N =	200
	between		.7686955	-.1574431	2.35022	n =	25
	within		.1219193	.7482431	1.418254	T =	8
UE	overall	7.711	3.527135	2.6	19.9	N =	200
	between		2.8678	3.6	14.55	n =	25
	within		2.122664	.4484998	15.536	T =	8
Gender	overall	2.248	.972122	.7	7.6	N =	200
	between		.9117697	.825	4.85	n =	25
	within		.3780737	1.098	4.998	T =	8
Infl	overall	3.283205	2.959149	-4.47994	22.5372	N =	200
	between		2.061051	1.428242	10.44169	n =	25
	within		2.158253	-3.840562	15.37872	T =	8
Health	overall	77.08036	3.195432	70.8659	81.4756	N =	200
	between		3.186208	71.6244	80.80094	n =	25
	within		.6449525	75.32898	79.3046	T =	8
Density	overall	127.1663	102.1248	17.0741	490.08	N =	200
	between		103.9401	17.29225	483.9097	n =	25
	within		2.440584	117.9613	137.8873	T =	8
Eud	overall	59.98888	17.15624	10.3403	95.0721	N =	200
	between		16.58317	11.27159	90.95385	n =	25
	within		5.385976	42.89731	75.69702	T =	8
Log GDP	overall	10.05355	.4767319	8.964354	11.21336	N =	200
	between		.4774529	9.174291	11.13314	n =	25
	within		.0856203	9.789101	10.28187	T =	8

Before we present our estimation results, it is interesting to visualize the degree of correlation between corruption and marriage. Figure 2 provides a first look on the divorce corruption nexus. It plots the divorces rates against corruption for the average 2002-2009. As we can see, this figure suggests a positive relationship between divorce and corruption. However, this correlation may be misleading, and even not robust.

Figure 2. Corruption and Divorce in EU-27



2.2 Controls variables

The vector X_m contains several controls variables, which we find in particular at Kalonda-Kanyama and Kodila Tedika (2012).

Table 4 Variables description

Variables	Definitions
Gender	Employers, female (% of employment)
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	School enrollment, tertiary (% gross)
UE	Unemployment, total (% of total labor force)

All the control variables are obtained from the World Development Indicators (2011) of the World Bank.

3. Empirical Results

3.1 Estimation strategy

The baseline econometric model has the following form:

$$\text{Corruption} = \beta_0 + \beta_1 \text{Divorce}_m + \beta_i X_m + \varepsilon_m \quad (1)$$

With $i = 6, \dots, m$ representing the various listed countries.

We estimate the model with ordinary least squares (OLS) and robust standard errors. This empirical study uses European cross-sectional data and panel data. For cross-sectional, the estimate is made for the average enter 2002-2009 and we use the bootstrap. In econometrics, the principal contribution of Bootstrap relates to the improvement of the inference in the methods of regression, in particular in small sample in the sense that the estimated parameters improve.

$$\text{Corruption} = \beta_0 + \beta_1 \text{Divorce}_{m,n} + \beta_i X_{m,n} + \varepsilon_{m,n} \quad (2)$$

With $i = 6, \dots, m$ representing the various listed countries and n represents temporal dimension. 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 uses data from 25 european countries over the period from 2002 to 2009.

3.2 Regression results

Table 5 shows the baseline regression results. The control variables are statistically significant in several cases. Within the framework of the relative relevance of our controls of variable, one notices that it is not significant, except for the shadow.

Within the framework of the absolute relevance of our variable of interest (divorce), one notices that it is not significant in all the cases. 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 uses the same variables in panel and cross-section. But the divorce isn't statistically significant.

Table 3. Regression Results.

Regressors	Dependent variable : corruption	
Divorce	-0,07 (0,04)	0,17 (0,16)
Gender	0,06 (0,02) ***	-0,21 (0,10)**
Log GDP per capita	0,54 (0,21)**	1,18 (0,57)**
Inf	-0,01 (0,01)***	-0,002 (0,09)
Health	-0,03 (0,02)	0,02 (0,06)
Density	-0,00 (0,00)	0,00 (0,00)
Edu	-0,01 (0,00)***	0,01 (0,00)**
UE	0,00 (0,01)	-0,03 (0,04)
Intercept	-1,50 (1,72)	-12,87 (5,52)**
Obs.	200	25
R ²	0,15	0,78
Data	Cross-section	Panel data

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

4. Conclusion

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 civil status was taken into account recently. This article aimed at studying the relation between divorce and corruption.

Using cross-sectional and panel data of the EU-27, we find no statistically significant impact of divorce on the corruption level across a range of specifications, at least on our sample. The increase in the number of divorce would not push up to corruption. Whereas the marriage seems to present a statistically significant effect on the marriage (Nakamwambila Kiadiamuyika and Kabanga Kazadi, 2007; Kalonda Kanyama and Kodila Tedika, 2012). We can say, taking into consideration our result, that the divorce is not determinants of corruption.

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