

Divorce over the world : why do people get separated?

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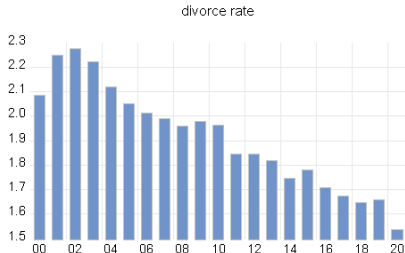
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- 1 Introduction
- 2 Regression model and analysis
- 3 Divorce in different continents
- 4 Conclusion

Purpose

- Analyze why people divorce
- Have a cultural point of view by comparing different countries
- Conclude about universal factors of divorce



Data set

10 Data sets for 5 continents
from 1998 to 2020 (2000 to
2020) :

$$n = 23 (n = 21)$$

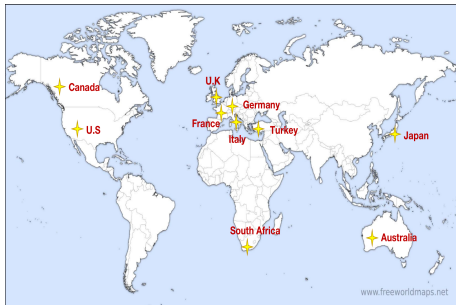


Figure: Researched countries

Tendency

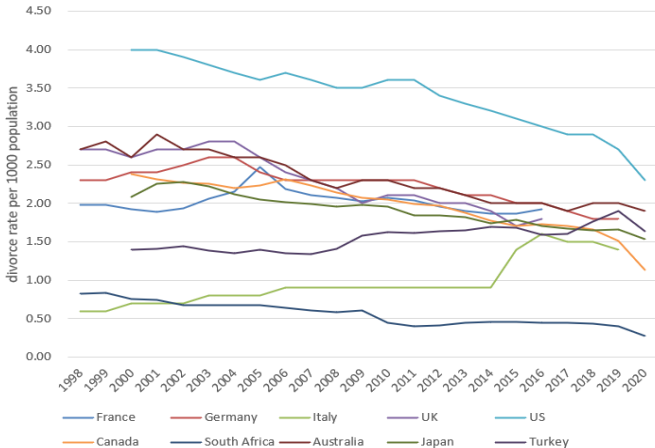


Figure: Divorce rate in different countries (1998-2020)

Variables

Basic Variables

- GNI : Gross National Income per Capita
- UNEMPLOYMENT : unemployment rate in millions
- CRIME : crime rate per 100k population
- BIRTH : birth rate
- FERTILITY : total fertility rate
- SEATS_WOMEN :
number of seats accorded to women in Parliament
- URBAN : urban population(%)
- WOMEN_WORK :
women in labor force rate(% of total labor force)

Europe

Important remark

France, Germany, United Kingdom and Italy were studied.
Only the case of Germany is presented.
Every four countries have each own specificity.

Europe

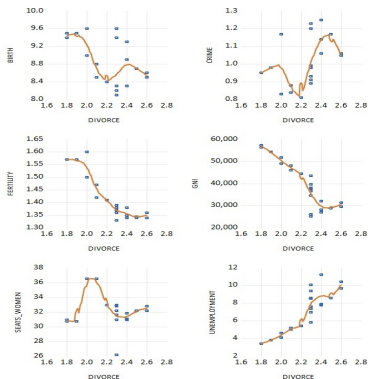


Figure: Divorce against Variables

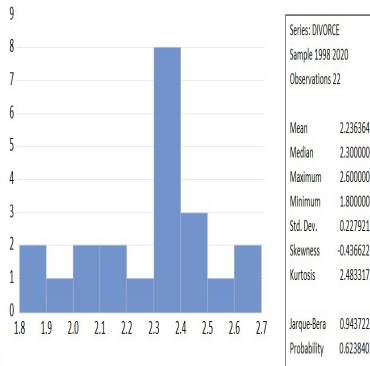


Figure: Histogram for Divorce

Europe

Estimation equation

$$\widehat{DIVORCE} = 2.819784 + 0.054532 * CRIME - 0.289265 * BIRTH \\ + 2.076891 * FERTILITY - 3.14E(-05) * GNI \\ + 0.005685 * SEATS_WOMEN + 0.002375 * UNEMPLOYMENT$$

Europe

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/24/22 Time: 23:45
 Sample (adjusted): 1998 2018
 Included observations: 21 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.819784	0.928719	3.036207	0.0089
CRIME	0.054532	0.350931	0.155392	0.8787
BIRTH	-0.289265	0.134438	-2.151650	0.0494
FERTILITY	2.076891	1.750482	1.186468	0.2552
GNI	-3.14E-05	1.52E-05	-2.070216	0.0574
SEATS_WOMEN	0.005685	0.010934	0.519964	0.6112
UNEMPLOYMENT	0.002375	0.021311	0.111465	0.9128
R-squared	0.898737	Mean dependent var	2.257143	
Adjusted R-squared	0.855338	S.D. dependent var	0.211119	
S.E. of regression	0.080298	Akaike info criterion	-1.944940	
Sum squared resid	0.090269	Schwarz criterion	-1.596766	
Log likelihood	27.42187	Hannan-Quinn criter.	-1.869377	
F-statistic	20.70890	Durbin-Watson stat	1.175765	
Prob(F-statistic)	0.000003			

Figure: Least Square Regression (EQ01_GER)

Europe

Wald Test:
Equation: EQ01

Test Statistic	Value	df	Probability
t-statistic	0.155392	14	0.8787
F-statistic	0.024147	(1, 14)	0.8787
Chi-square	0.024147	1	0.8765

Null Hypothesis: C(2)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(2)	0.054532	0.350931

Restrictions are linear in coefficients.

Figure: Wald test example

Significant Variables

- Birth rate
- Gross National Index per Capita

Dependent Variable: DVORICE
Method: Least Squares
Date: 04/25/22 Time: 10:36
Sample (adjusted): 1996 2019
Included observations: 22 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.171179	6.205494	14.33914	0.0000
BIRTH	-0.140085	0.034071	-4.115507	0.0006
GNI	-1.795155	1.725136	-10.37919	0.0000

R-squared: 0.890032 Mean dependent var: 2.238364
Adjusted R-squared: 0.870654 S.D. dependent var: 0.227261
S.E. of regression: 0.075409 Akaike info criterion: -2.92081
Sum squared resid: 0.119803 Schwarz criterion: -1.802212
Log likelihood: 28.11854 Hannan-Quinn criter.: -2.925943
F-statistic: 78.88803 Durbin-Watson stat: 1.95418
Prob(F-statistic): 0.000000

Figure: Least Square Regression
(EQ05_{GER})

Europe

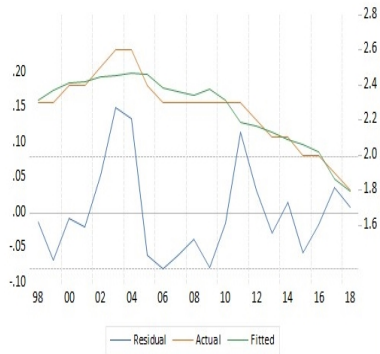


Figure: Fitted Residuals for EQ01_GER

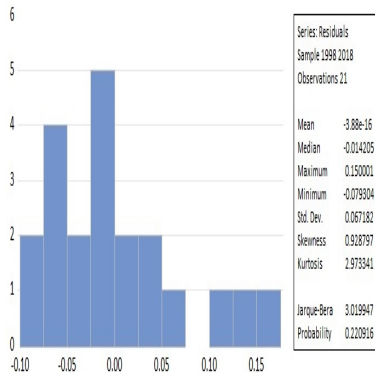


Figure: Residuals Histogram for EQ01_GER

America:Canada

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/23/22 Time: 21:46
 Sample: 2000 2020
 Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.429838	1.601122	4.015832	0.0011
FERTILITY	1.081498	0.589976	1.833123	0.0867
WOMEN_COUNCIL/...	-8.103325	2.061390	-3.931001	0.0013
LOG(GNI)	-0.345696	0.196068	-1.763144	0.0982
CRIME	-0.017321	0.046149	-0.375327	0.7127
UNEMPLOYMENT	-0.065062	0.017523	-3.713051	0.0021
R-squared	0.968027	Mean dependent var	1.976286	
Adjusted R-squared	0.957369	S.D. dependent var	0.321642	
S.E. of regression	0.066410	Akaike info criterion	-2.350975	
Sum squared resid	0.066155	Schwarz criterion	-2.052540	
Log likelihood	30.68524	Hannan-Quinn criter.	-2.286207	
F-statistic	90.82888	Durbin-Watson stat	1.133869	
Prob(F-statistic)	0.000000			

High prob. value(0.7127)
 for CRIME, it's not
 significant, so we do a
 Wald test

Figure: Linear regression output(EQ01) of Canada

America:Canada

Wald Test:
Equation: EQ01

Test Statistic	Value	df	Probability
t-statistic	-0.375327	15	0.7127
F-statistic	0.140870	(1, 15)	0.7127
Chi-square	0.140870	1	0.7074

Null Hypothesis: $C(5)=0$
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(5)	-0.017321	0.046149

Restrictions are linear in coefficients.

- High prob. value(0.7074), so we can remove CRIME

Figure: Wald test result of EQ01 ($C(5)=0$)

America:Canada

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/23/22 Time: 21:53
 Sample: 2000 2020
 Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.917461	0.813861	7.270846	0.0000
FERTILITY	1.103130	0.571173	1.931342	0.0714
WOMEN_COUNCIL/...	-7.729121	1.755136	-4.403717	0.0004
LOG(GNI)	-0.320410	0.179118	-1.788818	0.0926
UNEMPLOYMENT	-0.063183	0.016335	-3.867985	0.0014
R-squared	0.967727	Mean dependent var	1.976286	
Adjusted R-squared	0.959658	S.D. dependent var	0.321642	
S.E. of regression	0.064603	Akaike info criterion	-2.436866	
Sum squared resid	0.066776	Schwarz criterion	-2.188170	
Log likelihood	30.58709	Hannan-Quinn criter.	-2.382892	
F-statistic	119.9412	Durbin-Watson stat	1.055641	
Prob(F-statistic)	0.000000			

All the variables are significant, and the F statistic suggests that the model "explains something"

Figure: Linear regression output(EQ02) of Canada

America:United States

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/23/22 Time: 22:29
 Sample: 2000 2020
 Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.957773	6.196587	0.315944	0.7571
FERTILITY	-0.809401	0.598438	-1.352523	0.1993
CRIME	-0.018281	0.062272	-0.293565	0.7737
LOG(GNI)	0.370668	0.635794	0.583000	0.5699
COLLEGE	-21.81326	7.469695	-2.920235	0.0119
HIGH_SCHOOL	6.744580	8.976874	0.751328	0.4658
UNEMPLOYMENT	0.000854	0.007770	0.109898	0.9142
WOMEN_COUNCIL/...	-0.812869	2.075054	-0.391734	0.7016
R-squared	0.980136	Mean dependent var	3.395238	
Adjusted R-squared	0.969440	S.D. dependent var	0.446628	
S.E. of regression	0.078077	Akaike info criterion	-1.979907	
Sum squared resid	0.079249	Schwarz criterion	-1.581993	
Log likelihood	28.78902	Hannan-Quinn criter.	-1.893549	
F-statistic	91.63497	Durbin-Watson stat	1.649401	
Prob(F-statistic)	0.000000			

We use the same method as for Canada to simplify the regression.

Figure: Linear regression output(EQ01) of US

America:United States

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/24/22 Time: 16:55
 Sample: 2000 2020
 Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.59229	3.510621	4.441463	0.0004
FERTILITY	0.788544	0.337589	2.335810	0.0328
CRIME	-0.107323	0.056691	-1.893137	0.0766
WOMEN_COUNCIL/...	-4.708359	1.907398	-2.468472	0.0252
LOG(GNI)	-1.138293	0.326321	-3.488259	0.0030
R-squared	0.963722	Mean dependent var	3.395238	
Adjusted R-squared	0.954652	S.D. dependent var	0.446628	
S.E. of regression	0.095110	Akaike info criterion	-1.663318	
Sum squared resid	0.144733	Schwarz criterion	-1.414622	
Log likelihood	22.46484	Hannan-Quinn criter.	-1.609345	
F-statistic	106.2587	Durbin-Watson stat	1.822032	
Prob(F-statistic)	0.000000			

All the variables are significant, and the F statistic suggests that the model "explains something"

Figure: Linear regression output(EQ02) of US

Asia (Japan)

Estimation equation

$$\widehat{DIVORCE} = C(1) + C(2) * CRIME + C(3) * AGE_50 + C(4) * ENROLMENT_TERTIARY + C(5) * FERTILITY + C(6)*GNI + C(7)*PARLIAMENTS + C(8)*UNEMPLOYMENT + C(9)*URBAN + C(10)*WOMEN_IN_LABOR_FORCE$$

Asia (Japan)

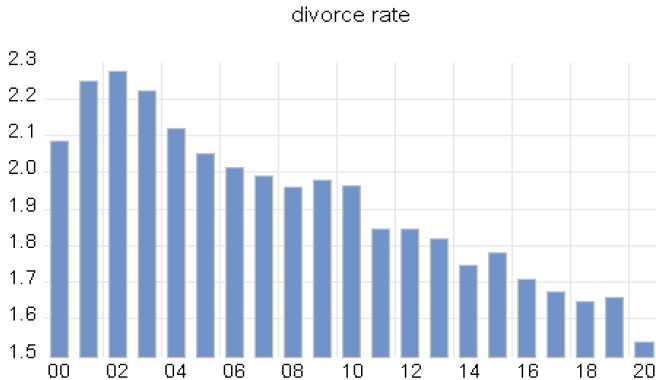


Figure: Divorce rate histogram

Asia:(Japan)

Dependent Variable: DIVORCE_RATE
 Method: Least Squares
 Date: 04/24/22 Time: 11:54
 Sample: 2000 2020
 Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.75169	2.529238	4.250961	0.0014
CRIME	0.527215	0.506458	1.040984	0.3202
FERTILITY	-0.530757	0.421191	-1.260132	0.2337
GNI	3.51E-05	1.76E-05	1.994235	0.0715
PARLIAMENTS	0.018671	0.017363	1.075342	0.3052
TERTIARY	0.028385	0.037181	0.763429	0.4613
UNEMPLOYMENT	0.104611	0.065552	1.595841	0.1388
URBAN	-0.057440	0.030583	-1.878205	0.0871
WOMEN_50	0.205677	0.079123	2.599450	0.0247
WOMEN_IN_LABOR_FORCE	-0.188457	0.059014	-3.193401	0.0086
R-squared	0.978983	Mean dependent var	1.912223	
Adjusted R-squared	0.961787	S.D. dependent var	0.211815	
S.E. of regression	0.041406	Akaike info criterion	-3.225016	
Sum squared resid	0.018859	Schwarz criterion	-2.727625	
Log likelihood	43.86267	Hannan-Quinn criter.	-3.117070	
F-statistic	56.93067	Durbin-Watson stat	1.875149	
Prob(F-statistic)	0.000000			

some of the variables are insignificant, so we will do the wald test

Figure: Linear regression output(EQ01)

Asia:(Japan)

Wald test: Prob > 0.05

We can drop

ENROLMENT_TERTIARY

Wald Test:
Equation: EQ01

Test Statistic	Value	df	Probability
t-statistic	0.763429	11	0.4613
F-statistic	0.582824	(1, 11)	0.4613
Chi-square	0.582824	1	0.4452

Null Hypothesis: C(4)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(4)	0.028386	0.037181

Restrictions are linear in coefficients.

Figure: wald test for c(4)

Asia:(Japan)

Second model:

Dependent Variable: DIVORCE
Method: Least Squares
Date: 04/24/22 Time: 23:15
Sample: 2000 2020
Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.26019	2.399611	4.271606	0.0011
CRIME	0.283879	0.386677	0.734151	0.4770
AGE_50	0.180206	0.070487	2.556590	0.0252
FERTILITY	-0.586771	0.407478	-1.440005	0.1754
GNI	3.76E-05	1.70E-05	2.214240	0.0469
PARLIAMENTS	0.008255	0.010561	0.782437	0.4491
UNEMPLOYMENT	0.080308	0.056299	1.426464	0.1792
URBAN	-0.036005	0.011910	-3.023052	0.0106
WOMEN_IN_LABOR_FORCE	-0.172120	0.054034	-3.185425	0.0078
R-squared	0.977869	Mean dependent var	1.912223	
Adjusted R-squared	0.963115	S.D. dependent var	0.211815	
S.E. of regression	0.040680	Akaike info criterion	-3.268626	
Sum squared resid	0.019858	Schwarz criterion	-2.820974	
Log likelihood	43.32058	Hannan-Quinn criter.	-3.171474	
F-statistic	66.27829	Durbin-Watson stat	1.896491	
Prob(F-statistic)	0.000000			

Figure: New model output(EQ02)

Asia:(Japan)

Breusch-Godfrey Serial Correlation LM Test

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.158726	Prob. F(2,10)	0.8553
Obs*R-squared	0.646137	Prob. Chi-Square(2)	0.7239

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 04/25/22 Time: 01:31

Sample: 2000 2020

Included observations: 21

Presample missing value lagged residuals set to zero.

Figure: Autocorrelation test for EQ02

Heteroskedasticity Test: White

Null hypothesis: Homoskedasticity

F-statistic	3.281368	Prob. F(8,12)	0.0316
Obs*R-squared	14.41193	Prob. Chi-Square(8)	0.0716
Scaled explained SS	5.319999	Prob. Chi-Square(8)	0.7229

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 04/25/22 Time: 01:32

Sample: 2000 2020

Included observations: 21

Figure: Heteroskedasticity test for EQ02

Asia:(Japan)

high R square value,
hypothesis verified
residual limited
Our model explains
"something"

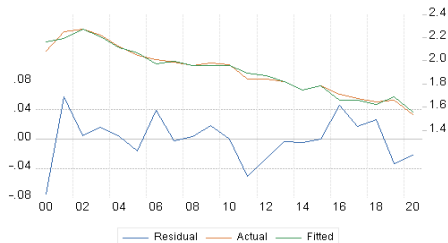


Figure: Actual,fitted,residual graph

Africa:South Africa

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/25/22 Time: 00:39
 Sample (adjusted): 2000 2017
 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.966024	1.740693	1.703934	0.1192
BIRTHRATE	0.183016	0.062115	2.946394	0.0146
CRIME	0.025615	0.007576	3.381096	0.0070
GNI	-7.25E-05	3.46E-05	-2.098661	0.0622
HOMOSEX	-0.050365	0.049527	-1.016921	0.3332
FERTILITY	-2.429941	0.940602	-2.583390	0.0273
UNEMPLOYMENT	-0.022284	0.008829	-2.523948	0.0302
WOMEN_SEATS	0.004537	0.004442	1.021386	0.3311
R-squared	0.957998	Mean dependent var	0.564880	
Adjusted R-squared	0.928597	S.D. dependent var	0.123410	
S.E. of regression	0.032977	Akaike info criterion	-3.684925	
Sum squared resid	0.010875	Schwarz criterion	-3.289204	
Log likelihood	41.16432	Hannan-Quinn criter.	-3.630360	
F-statistic	32.58378	Durbin-Watson stat	2.873020	
Prob(F-statistic)	0.000004			

Figure: Linear regression output(EQ01)

Africa:South Africa

Wald Test:
Equation: EQ01

Test Statistic	Value	df	Probability
t-statistic	-1.016921	10	0.3332
F-statistic	1.034129	(1, 10)	0.3332
Chi-square	1.034129	1	0.3092

Null Hypothesis: C(5)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(5)	-0.050365	0.049527

Restrictions are linear in coefficients.

Figure: Wald test for EQ01_C(5)

Wald Test:
Equation: EQ01

Test Statistic	Value	df	Probability
t-statistic	1.021386	10	0.3311
F-statistic	1.043230	(1, 10)	0.3311
Chi-square	1.043230	1	0.3071

Null Hypothesis: C(8)=0
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(8)	0.004537	0.004442

Restrictions are linear in coefficients.

Figure: Wald test for EQ01_C(8)

Africa:South Africa

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/25/22 Time: 00:44
 Sample (adjusted): 2000 2017
 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.521344	1.675163	2.102090	0.0573
BIRTHRATE	0.164044	0.044535	3.683454	0.0031
CRIME	0.020071	0.004870	4.121872	0.0014
GNI	-8.51E-05	3.07E-05	-2.769288	0.0170
FERTILITY	-2.314883	0.777532	-2.977219	0.0115
UNEMPLOYMENT	-0.020352	0.008566	-2.375898	0.0350
R-squared	0.949899	Mean dependent var	0.564880	
Adjusted R-squared	0.929024	S.D. dependent var	0.123410	
S.E. of regression	0.032878	Akaike info criterion	-3.730818	
Sum squared resid	0.012972	Schwarz criterion	-3.434028	
Log likelihood	39.57736	Hannan-Quinn criter.	-3.689895	
F-statistic	45.50351	Durbin-Watson stat	2.427749	
Prob(F-statistic)	0.000000			

Figure: Linear regression output(EQ03)

Africa:South Africa

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	0.770196	Prob. F(5,12)	0.5890
Obs*R-squared	4.373082	Prob. Chi-Square(5)	0.4970
Scaled explained SS	1.502302	Prob. Chi-Square(5)	0.9128

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 04/25/22 Time: 00:53
Sample: 2000 2017
Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011081	0.022947	0.482907	0.6379
BIRTHRATE^2	3.99E-05	2.91E-05	1.372798	0.1949
CRIME^2	1.80E-06	2.07E-06	0.869273	0.4018
GNI^2	-1.65E-11	4.08E-11	-0.403355	0.6938
FERTILITY^2	-0.004358	0.004135	-1.053841	0.3127
UNEMPLOYMENT^2	-3.45E-06	4.53E-06	-0.761864	0.4609
R-squared	0.242949	Mean dependent var	0.000721	
Adjusted R-squared	-0.072489	S.D. dependent var	0.000922	
S.E. of regression	0.000955	Akaike info criterion	-10.80890	
Sum squared resid	1.09E-05	Schwarz criterion	-10.51211	
Log likelihood	103.2801	Hannan-Quinn criter.	-10.76797	
F-statistic	0.770196	Durbin-Watson stat	2.419419	
Prob(F-statistic)	0.588963			

Figure: White test output(EQ03)

Oceania:Australia

Dependent Variable: DIVORCE
 Method: Least Squares
 Date: 04/25/22 Time: 00:29
 Sample (adjusted): 2000 2018
 Included observations: 19 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-15.82013	9.640920	-1.640936	0.1352
BIRTHRATE	-0.020907	0.067508	-0.309703	0.7638
CRIME	0.044219	0.184651	0.239474	0.8161
GNI	-4.35E-05	1.98E-05	-2.195522	0.0557
HOMOSEX	0.177462	0.069648	2.547982	0.0313
LIFE	0.279468	0.121961	2.291451	0.0477
SERVICE	-0.043291	0.019624	-2.206053	0.0548
FERTILITY	-0.208749	0.547851	-0.381033	0.7120
UNEMPLOYMENT	0.106943	0.046051	2.322286	0.0453
WOMEN_SEATS	-0.007552	0.002773	-2.723418	0.0235
R-squared	0.985993	Mean dependent var	2.321053	
Adjusted R-squared	0.971987	S.D. dependent var	0.295483	
S.E. of regression	0.049455	Akaike info criterion	-2.870076	
Sum squared resid	0.022012	Schwarz criterion	-2.373003	
Log likelihood	37.26572	Hannan-Quinn criter.	-2.785951	
F-statistic	70.39488	Durbin-Watson stat	1.950343	
Prob(F-statistic)	0.000000			

Figure: Linear regression output(EQ01)

Oceania:Australia

Dependent Variable: DIVORCE

Method: Least Squares

Date: 04/25/22 Time: 00:48

Sample (adjusted): 2000 2020

Included observations: 21 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.867777	0.238509	24.60190	0.0000
HOMOSEX	0.213165	0.049316	4.322464	0.0005
SERVICE	-0.057246	0.003699	-15.47473	0.0000
UNEMPLOYMENT	0.058566	0.022479	2.605348	0.0191
WOMEN_SEATS	-0.008488	0.002880	-2.946770	0.0095
R-squared	0.967953	Mean dependent var	2.285714	
Adjusted R-squared	0.959942	S.D. dependent var	0.302135	
S.E. of regression	0.060471	Akaike info criterion	-2.569049	
Sum squared resid	0.058508	Schwarz criterion	-2.320353	
Log likelihood	31.97501	Hannan-Quinn criter.	-2.515076	
F-statistic	120.8184	Durbin-Watson stat	1.608339	
Prob(F-statistic)	0.000000			

Figure: Linear regression output(EQ05)

Cross-sectional studies

Most significant variables for different continents

For Europe: BIRTH, GNI, UNEMPLOYMENT

For America: GNI, FERTILITY, SEATS_WOMEN

For Asia: WOMEN_IN_LABOR_FORCE, AGE_50, URBAN

For Africa: BIRTH, CRIME

For Oceania: HOMOSEX, SEATS_WOMEN

Panel data studies

Dependent Variable: DIVORCE_RATE

Method: Least Squares

Date: 04/24/22 Time: 22:13

Sample: 1 210

Included observations: 197

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.418534	0.372407	3.809094	0.0002
GNI_PER_CAPITA_DOLLAR	-2.53E-05	2.96E-06	-8.549764	0.0000
UNEMPLOYMENT_RATE_IN_MILLIONS	0.019582	0.008922	2.194813	0.0294
TOTAL_FERTILITY_RATE	0.145640	0.153144	0.950995	0.3429
PROPORTION_OF_THE_WOMEN_IN_...	0.007051	0.004165	1.693009	0.0922
D_US	2.671235	0.113510	23.53305	0.0000
D_CA	1.048552	0.133434	7.858210	0.0000
D_AU	1.301518	0.112115	11.60875	0.0000
D_SA	-1.782594	0.219658	-8.115320	0.0000
D_FR	0.905949	0.093140	9.726754	0.0000
D_GER	1.269534	0.156505	8.111780	0.0000
D_UK	1.222696	0.111195	10.99598	0.0000
D_IT	-0.097921	0.149913	-0.653183	0.5145
D_JP	1.068006	0.170496	6.264100	0.0000
R-squared	0.928018	Mean dependent var	1.915459	
Adjusted R-squared	0.922904	S.D. dependent var	0.806461	
S.E. of regression	0.223923	Akaike info criterion	-0.086616	
Sum squared resid	9.175881	Schwarz criterion	0.146708	
Log likelihood	22.53170	Hannan-Quinn criter.	0.007835	
F-statistic	181.4845	Durbin-Watson stat	0.464528	
Prob(F-statistic)	0.000000			

Figure: Regression equation with dummy variables

Reviewing our hypothesis

- Only 22 years of data
- Only ten countries

Difficult to have an exhaustive conclusion

Problems faced

- Too much ambition ? 10 datasets ...
- Difficult to find data of the same format for different countries : a lot of time spent on looking for data