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A note on the impact of economic regulation on life satisfaction

B. Knoll^a, Hans Pitlik^{b*}, Martin Rode^c

Abstract

Are people happier if they experience freedom from regulation, and how do individual attitudes towards liberalization influence personal life satisfaction? Based on data from European and World Values Surveys and the Economic Freedom of the World project we find evidence for positive effects of low regulation and pro-market attitudes on life satisfaction. Paradoxically, people who are opposed to market-oriented policies sometimes benefit most from deregulation.

Keywords: government, regulation, life satisfaction, attitudes, ideology

JEL: I31, H50, H11

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I. Introduction

Are people more satisfied with their lives if they experience economic freedom and less government regulation? Ovaska and Takashima (2006), Bjørnskov *et al.* (2008) and Rode (2012) find that life satisfaction is significantly enhanced by market-friendly institutions and policies. A limitation of these studies is the use of country-averages. Attitudes towards policies are averaged out even though they may matter for well-being. Freedom of choice makes people happier if they can follow their preferences. It may also have a negative impact on well-being if decision making involves high psychological cost (Veenhoven, 2000). While conservative voters often have more positive attitudes to liberalization, market-orientation is usually opposed by the political left. We suspect that people with market-averse preferences are less happy when living in societies with market-oriented policies. In terms of individual life satisfaction the question is: Do (ideological) proponents of deregulation benefit more from such policies than, for example, followers of 'Occupy Wall Street'? We investigate the following hypotheses empirically:

Hypothesis 1: Deregulation policies are conducive to life satisfaction.

Hypothesis 1a: Individuals who dislike low regulation levels benefit less from regulatory freedom than those who have stronger preferences for a deregulated economy.

A priori one should not expect individuals with pro-market attitudes to be more or less happy than those with anti-market attitudes. Given the quality of economic policies in a country, policy preferences *per se* should not systematically matter for well-being. In spite of this, the results of Bjørnskov *et al.* (2008) and Dreher and Öhler (2011) imply that conservatives are more satisfied with their lives than left-

wingers. Hence, we also expect:

Hypothesis 2: People with stronger preferences in favour of deregulation and against government intervention are more satisfied with their lives in general.

II. Data and Model

We use data from the European Values Study (EVS, (2011)) and the World Values Survey (WVS, (2009)) to measure subjective well-being and policy opinions. In particular, we use personal views on the benefits of competition, private business ownership versus government ownership and the role of income inequality as incentive for individual effort as proxies. We recoded responses in the EVS/WVS data to a 0-10 scale, such that higher values indicate 'pro-market' preferences. Regulation intensity is measured by Economic Freedom of the World (EFW) data (Gwartney *et al.*, 2011). Regulation of goods and factor markets restrict entry, reduce competition and interfere with freedom of individual choice and voluntary exchange. The deregulation index describes increasing market-friendliness of regulatory policies on a 0-10 scale.

To test our hypotheses, we perform simple Ordinary Least Squares (OLS) regressions of personal *life satisfaction* on the level of economic *deregulation* and individual *attitudes* towards policies. Policy variables are chosen from the year the survey has been conducted or from the closest available year before. To account for effects of policies conditional on personal attitudes, we employ an interaction of *deregulation* and *attitude*. The model is as follows:

$$(1) \textit{life satisfaction} = \beta_0 + \beta_1 \textit{deregulation} + \beta_2 \textit{attitude} \\ + \beta_3 (\textit{deregulationattitude}) + \beta_4 \textit{controls} + \varepsilon$$

Therefore,

$$(2) \frac{\partial \text{life satisfaction}}{\partial \text{deregulation}} = \beta_1 + \beta_3 \times \text{attitude}$$

Controls include a full array of individual characteristics (age, sex, religiousness, trust in people, household income situation personal health, employment, educational and marital status, etc.) and country-wide covariates, i.e. the (log of) real Gross Domestic Product (GDP) per capita (Heston *et al.*, 2012) and the Freedom House (2011) political democracy index from the respective survey year, recoded and normalized to a 0-10-scale. As we control for relative household income and GDP per capita, coefficients β_1 and β_3 show effects of policies beyond income. We additionally include the EFW-index for government size because our attitude variables could also be seen as statements on desired fiscal policy. Higher values on a 0-10 scale indicate less fiscal intervention. Regional dummies for Latin America and Caribbean, tropical and transition countries capture cultural differences that drive institutions, the perception of institutions and the subjective perception of one's own life. Survey wave dummies depict unexplained heterogeneity over time and across surveys. Descriptive statistics of all variables can be found in Table 1.

Insert Table 1 about here

III. Results

Models (1)–(4) do not employ policy attitude measures. In all specifications, the *deregulation* index presents a strong and significantly positive relationship with life satisfaction.

Insert Table 2 about here

Inclusion of the government size-index in equation (2) increases the *deregulation*

index from +0.30 to +0.34. Reduced fiscal size is always associated with lower life satisfaction. One explanation may be that income redistribution through the transfer system is valued positively. If GDP per capita is added (column (3)), the *deregulation* coefficient drops to +0.22, indicating that a substantial effect of deregulation works through the income channel. Accordingly, Dawson (2006) finds that extensive regulation has a negative impact on growth and investment.

Adding policy preference indicators in (5)-(8) does not affect our results regarding the positive impact of deregulation on life satisfaction. Unexpectedly, interaction effects are negative in three out of four specifications. A negative sign of the interaction term indicates that individuals who value market-orientation benefit less from deregulation than people who claim to dislike market-friendly policies.

According to (7) a respondent who totally objects to 'income inequality as incentive for effort' experiences a marginal increase of life satisfaction of +0.26 from deregulation, while a person who supports inequality as an incentive only benefits by +0.17. A similar pattern can be observed for political left-right-orientation in specification (8). These seemingly paradoxical results hold if we employ dummy variables for pro-market attitudes (results not shown). Therefore, one should consider the possibility that individuals systematically miscalculate the value of certain government policies for their own life satisfaction (Stutzer and Frey, 2008).

Employing our indicator for 'pro-private business'-attitudes in model (6) we observe the expected direction of the conditional effect. Respondents who prefer private to government ownership of enterprises appear to benefit more from deregulation by increased life satisfaction.

Some caveats apply. Results could suffer from endogeneity as omitted personal characteristics (e.g. optimism) may account for individual preferences and life

satisfaction level at the same time, leading to an overestimation of causal effects. Moreover, policy attitudes may depend on past experiences.¹

IV. Conclusions

Deregulation shows strong and positive effects on life satisfaction which go beyond pure ‘monetary effects’. Personal preferences for economic freedom also matter. Individuals who wish to live in a society with less regulatory intervention are more satisfied with their lives, in general. To some degree, the positive impact of deregulation is conditional on individual attitudes towards market-friendly policies. People who prefer private business to state owned enterprises benefit more from deregulation than market-skeptics. Paradoxically, proponents of less income inequality and political left-wingers appear to derive a stronger increase in life satisfaction from deregulation than people with market-friendly attitudes.

¹ Note, however, that the results do not change qualitatively in a robustness check with country fixed effects (instead of regional dummy variables and macro control variables). Results are available from the authors upon request.

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Appendix

Table 1. Descriptive statistics

Variable	Obs	Mean	SD	Min	Max
Individual characteristics					
Lifesatisfaction	263 551	6.88	2.37	1	10
Female	263 551	0.53	0.50	0	1
Age	263 551	43.14	16.88	15	108
Married	263 551	0.63	0.48	0	1
No children	263 551	0.22	0.42	0	1
One or two children	263 551	0.35	0.48	0	1
Trust in people	263 551	0.30	0.46	0	1
Religious	263 551	0.68	0.46	0	1
Good health	263 551	0.56	0.50	0	1
Low education level	263 551	0.30	0.46	0	1
High education level	263 551	0.10	0.31	0	1
Education level n.a.	263 551	0.18	0.38	0	1
Low income level	263 551	0.26	0.44	0	1
High income level	263 551	0.12	0.33	0	1
Income level n.a.	263 551	0.24	0.43	0	1
Unemployed	263 551	0.07	0.26	0	1
Individual policy attitudes					
Competition	220 986	6.97	2.75	0	10
Private business	211 271	5.49	3.08	0	10
Inequality	227 982	5.27	3.32	0	10
Left-right ideology	204 686	5.04	2.49	0	10
Macro variables					
Government size index	182	5.49	1.51	1.63	9.10
Deregulation index	182	6.33	1.02	3.08	8.38
GDP per capita (log)	182	9.47	1.01	5.80	11.41
Political freedom	182	8.47	2.51	0	10
Latin America	182	0.09	0.28	0	1
Tropical	182	0.14	0.35	0	1
Transition economy	182	0.23	0.42	0	1

Table 2. Marginal effects of deregulation of credit, business and labor on life satisfaction at various policy attitude-levels

<i>Policy attitude measure</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Pro market-attitude (0-10)	-	-	-	-	0.05 (0.076)	-0.04 (0.422)	0.09 (0.012)	0.14 (0.001)
deregulation*pro market-attitude					-0.00 (0.595)	0.01 (0.201)	-0.01 (0.073)	-0.01 (0.053)
deregulation-index (0-10)	0.30 (0.000)	0.34 (0.000)	0.22 (0.000)	0.21 (0.000)				
at pro market-attitude = 0.0					0.23 (0.000)	0.16 (0.028)	0.26 (0.000)	0.27 (0.000)
at pro market-attitude = 2.5					0.22 (0.000)	0.18 (0.003)	0.24 (0.000)	0.24 (0.000)
at pro market-attitude = 5.0					0.21 (0.000)	0.20 (0.000)	0.21 (0.000)	0.22 (0.000)
at pro market-attitude = 7.5					0.21 (0.000)	0.22 (0.000)	0.19 (0.000)	0.19 (0.000)
at pro market-attitude = 10.0					0.20 (0.000)	0.24 (0.000)	0.17 (0.002)	0.16 (0.002)
government size-index (0-10)		-0.19 (0.000)	-0.12 (0.001)	-0.12 (0.001)	-0.11 (0.002)	-0.12 (0.001)	-0.12 (0.001)	-0.11 (0.001)
GDP per capita (logs.)			0.40 (0.000)	0.38 (0.000)	0.37 (0.000)	0.34 (0.000)	0.37 (0.000)	0.36 (0.000)
Political Freedom (0-10)				0.02 (0.357)	0.01 (0.482)	0.03 (0.258)	0.02 (0.272)	0.03 (0.156)
Observations	263 551	263 551	263 551	263 551	220 986	211 271	227 982	204 686
R-squared	0.179	0.187	0.196	0.196	0.195	0.197	0.199	0.194
Countries	76	76	76	76	72	76	76	74

Notes: OLS. *P*-values adjusted for country clusters in parentheses. Individual control variables not reported. *P*-values of marginal effects calculated according to Brambor, Clark and Golder (2006).