

# A Note on the Impact of Economic Freedom on Life Satisfaction

Bodo Knoll\* (University of Hohenheim, Stuttgart, Germany)

Hans Pitlik (Austrian Institute of Economic Research, Vienna, Austria)

Martin Rode (University of Cantabria, Santander, Spain)

\* Corresponding author:

Department of Economics 520D, 70593 Stuttgart

e-mail: [bodo.knoll@uni-hohenheim.de](mailto:bodo.knoll@uni-hohenheim.de)

phone: +4971145922989

**Abstract:**

Are people more satisfied with their lives if they experience economic freedom, and how do individual policy attitudes towards more or less policy liberalization influence personal life satisfaction? Our paper empirically addresses the question of economic freedom's influence on subjective well-being from an individualistic perspective, taking into account personal preferences for freedom policies. Based on data from the World Values Survey and the Economic Freedom of the World-dataset we find some empirical evidence that the effects of economic freedom on life satisfaction depend on people's attitudes towards economic freedom. In general, people with high preferences for economic freedom tend to benefit more from actually living in an economically free country. Paradoxically, for some sub-categories like government consumption freedom preferences have the opposite effect.

## 1 Introduction

Are people more satisfied with their lives if they experience economic freedom? One might be tempted to reply quickly with a simple 'yes', due to the positive effects of economic freedom on GDP growth and overall prosperity. Empirical evidence on growth-enhancing effects of economic freedom and good governance is overwhelming (e.g. Knack and Keefer 1995, Clague et al. 1999, Gwartney et al. 1999, de Haan and Sturm 2000, Pitlik 2002, Dawson 2003; Gwartney et al. 2006; Justesen 2008; Rode and Coll (forthcoming); see also surveys by Berggren 2003; de Haan et al. 2006, and a meta-analysis by Doucouliagos and Ulubasoglu 2006). Provided that people expect to benefit from increasing average incomes caused by economic freedom, we should also expect them to be happier in general.

Recent research also provides substantial evidence that economic freedom and good governance raise life satisfaction *on average*. For example, Helliwell (2003), Helliwell and Huang (2008), Ovaska and Takashima (2008), Bjørnskov et al. (2010), Samanni and Holmberg (2010), and Gropper et al. (2011) all find that life satisfaction is significantly enhanced by good economic institutions. Berggren and Jordahl (2006) further show that citizens in economically free countries are also more likely to trust in one another, while most recently Rode (2011) reports that life satisfaction is increased by three out of five dimensions of the Economic Freedom of the World-index. Rode also finds economic freedom levels to cause cross-country differences in life satisfaction.

One limitation of these studies is that they only refer to country-averaged values (or the share of 'happy people' in the survey) when measuring life satisfaction. Individual attitudes towards economic policy reform formed by ideological convictions or personal experiences are hence averaged out. Economic freedom is, for example, heavily opposed by many people from the political left, while right-wingers usually have a more positive attitude to policy liberalization. Does this mean that left-wingers are unhappier living in societies with market-oriented policies? In terms of individual life satisfaction, do (ideological) proponents of economic freedom benefit more from such policies than for example followers of the American 'Occupy Wall Street' movement or the Spanish '15<sup>th</sup> of May'?

The present paper addresses the research question of the impact of economic freedom on subjective well-being empirically from an individualistic perspective. To be more precise, we test to which extent personal life satisfaction derived from economic policy liberalization depends on self-declared individual preferences towards such policies. It is not our aim to explain *why* some people prefer or oppose economic freedom; we simply acknowledge that people *do have* different preferences with respect to the desired level of economic freedom, but we are interested in the question how those individual preferences determine personal life satisfaction, given the socio-economic environment they live in. Our approach differs from previous studies, as we test on the individual level for conditional effects of economic freedom on well-being. We proceed as follows. Section 2 works out the main lines of reasoning in some more detail and gives an overview of related research. Section 3 describes the data and hypotheses, while in section 4 we perform empirical tests. Section 5 concludes.

## 2 Economic freedom and life satisfaction

Empirical studies on life satisfaction report individual characteristics (age, health, personal income, marital status, number of children, employment status, education level, etc.), macroeconomic variables (unemployment rates, inflation, GDP, growth) and institutional factors (quality of governance, social capital, democratic participation rights) as important determinants for the subjective well-being of individuals (e.g., Clark et al., 2008; Frey, 2008).

The influence of economic freedom and good governance on life satisfaction has been addressed in a number of empirical research papers. Shyns (1998) and Veenhoven (2000) both report a significant positive correlation of political, economic, and personal freedom (e.g. culture) to happiness for 38 (40) countries using data from the World Values Survey. Controlling for per capita income and dividing the countries into sub-samples indicates that political freedom is more important in rich countries while economic freedom is more important in poor countries. Helliwell and Huang (2008), Ott (2006), and Bjørnskov et al. (2010) find that life satisfaction is more closely linked to the quality of government than to

real per capita income. Using World Bank indicators for good governance these authors all report a significant and positive impact of indicators relating to the delivery of government services and providing the institutional framework to life satisfaction. They additionally find that in rich countries the operation of the democratic process is positively linked to personal utility. Ovaska and Takashima (2006) encounter a positive and significant effect of economic freedom, as measured by the EFW Index by Gwartney et al. (2010), but no significant effect for political freedom. Bjornskov, Dreher and Fischer (2007) report evidence that in a cross-section of 68 to 74 countries, depending on model specification, life satisfaction decreases with higher government consumption. The effects appear to be conditional on the effectiveness of the government sector, the degree of political competition and the political ideology of the government in power. Most recently, Rode (2011) finds that life satisfaction is increased by access to sound money, freedom to trade internationally, and freedom from regulation of credit, labor, and business, as measured by areas three, four, and five of the Economic Freedom of the World-index. Furthermore, Rode finds that life satisfaction across countries seems to be caused by economic freedom, using instrumental variables.

These studies however neglect that individuals have substantially different attitudes towards market-oriented policies. People may like or dislike policies for a number of reasons, apart from its contribution to overall material well-being. Economic freedom contributes to subjective well-being by providing people the opportunity to choose among alternatives and allowing them to enjoy the fruit of their choices without fear of expropriation. From an individualistic perspective, the mere existence of freedom of choice makes people happier as they can follow better their preferences (Veenhoven 2000). Economic freedom may thus provide procedural utility (Frey and Stutzer, 2002a) or satisfy intrinsic values (Sen, 1988).

People may yet also oppose economic freedom for both psychological and ideological reasons. Freedom of economic choice can have a direct negative impact on individual well-being as individual decision making generally involves psychological costs, due to feelings of uncertainty and responsibility. Social psychology shows that people sometimes dislike choosing among alternatives (Veenhoven 2000). In contrast to purely economic reasoning,

constraining the set of alternatives may enhance individual well-being by reducing complexity of economic decisions. People also accept restrictions on freedom of choice if they believe that this is beneficial for them or if some other highly valued social goal is promoted. Pitlik et al. (2011) show that ideological convictions often shape perceived subjective self-interest and attitudes towards economic policy issues. People may also be opposed to policies that promote economic freedom because in their view this might create inequalities. Moreover, some people benefit directly from restrictions on economic freedom, as regulation generates and protects political rents. Members of the public administration, for example, obtain more secure and higher incomes than they would obtain in competitive markets. These individuals should be expected to dislike competition and free markets, and they should not be expected to be happier in a world with more economic freedom. In any case, not all individuals *believe* to benefit from more economic freedom (even if they do in reality); some individuals might derive utility losses from market-oriented policies, depending on personal preferences towards certain policies. Thus, it is not clear a priori whether more economic freedom has a positive effect on *subjective* well-being or not.

Taking this into consideration the present paper differs from previous work in that we particularly take into account that people in a certain country consume the same overall level of economic freedom (market-friendly policies) but for some reason often have substantial differences with respect to the desired level of economic freedom. Some people may benefit individually from expanded freedom of choice, but some others may experience a loss of utility due to a violation of individual preferences.

From a methodological point of view, the papers closely related to ours are Alesina et al. (2004), Bjornskov et al. (2010), and Dreher and Öhler (2011). Alesina et al. (2004) investigate the impact of (income) inequality on individual happiness, and ask whether differences in well-being between Americans and Europeans are related to differing preferences for equality. Using a total of over 100,000 answers to survey questions in the US General Social Survey and the Eurobarometer Survey they find that there is a significantly negative impact of inequality on happiness for poor and left-wing Europeans but not so for

Americans. They interpret this as a consequence of a higher perceived social mobility in the US, and therefore poor people in Europe expect to remain poor in the future while poor, while Americans have less reason to draw this conclusion. Bjornskov et al. (2010) address people's attitude towards inequality more directly: They use survey questions in the World Values Survey about the acceptance of inequality in society as proxies for people's preference for income equality. The authors find that the perception of fairness in society matters: People who expect to be economically successful in the labor market perceive a close connection of individual effort and economic outcomes. Hence, they are less likely to report a preference for income redistribution. Those who have a low ex ante fairness perception benefit from a high level of redistribution; they tend to be in favor of income redistribution. Income inequality reduces people's life satisfaction if actual social mobility is low. This effect disappears if the level of actual social mobility is very high.

Most recently, and in many aspects close to our notion of a preference-contingent impact of economic policies on individual well-being, Dreher and Öhler (2011) investigate the impact on life satisfaction of government ideology on left-wing as compared to conservative individuals. In a sample excluding the richest countries left-wing people are happier under the tenure of left-wing governments than under non-left-wing governments. Their analysis however neglects that left-wing (or right-wing) governments often can follow substantially different policies which are at odds with their ideological orientation (or their 'party brand names'). In the present paper we therefore investigate whether the interaction of personal attitudes and ideological convictions with concrete economic policies matter.

### 3 Hypotheses and data

#### 3.1 Hypotheses

The purpose of the present study is to investigate empirically whether economic freedom has a considerable effect on individual well-being beyond its growth and income effects. Our basic hypothesis is that people benefit from freedom of economic choice in general, but

preferences over certain economic policies and the 'gap' to actual policies also matter for individual life satisfaction.

Hypothesis 1:

More economic freedom is conducive to personal life satisfaction as it increases personal choice options.

Hypothesis 2:

Personal preferences for certain economic policies matter for individual life satisfaction. People who prefer to live in an economically free society are more satisfied with their lives in general.

Hypothesis 3:

People who like economic freedom benefit more from actual economic freedom (in terms of life satisfaction) than those who have low preferences for an economically free society.

## 3.2 Data

### 3.2.1 Measuring economic freedom and life satisfaction

Economic freedom in a country is measured using the comprehensive Economic Freedom of the World-index (EFW) by the Fraser-Institute (Gwartney et al. 2010). The EFW-index estimates the degree of market-friendliness of policies on a 10 point scale, employing a multidimensional set of sub-indicators. The overall EFW-index is based on five main policy areas, all weighted equally. The sub-categories include separate measures for

- government size (area 1),
- legal structure and security of property rights (area 2),
- sound monetary policies (area 3),
- openness to international trade and capital movements (area 4), and
- regulation of business and labor markets (area 5).

We normalized the EFW-index (as well as all area sub-indices) on a 0 to 1-scale, with higher values indicating more economic freedom. However, we do not expect all policy areas to be of equal importance with respect to the impact of preference violations on subjective well-being. While preference differences may be substantial in areas 1, 4 and 5, it is much harder to imagine why people should prefer insecure individual property rights or a loose monetary policy with high inflation rates over secure rights and sound monetary policies. Ideological conflict over "the right policy" seems to be much more important when it comes to questions of government size (taxes, expenditure, state owned enterprises, etc.), on international trade restrictions, or the appropriate level of economic regulation. In order to test our hypotheses we therefore constructed a variable *efwpolicies* that consists of the average of the EFW sub-indices for government size, openness to international trade and capital movements, and regulation of business and labor markets, only. In testing our hypotheses we also use all five subindices separately.

For the purpose of this study we use data from the European Values Survey (EVS) and the World Values Survey (WVS) (World Values Survey (2009), European and World Values Surveys (2006)) to measure subjective well-being. The combined dataset includes more than 350,000 observations of individuals in 81 countries. People were asked to respond to the following question on a scale from 1 (dissatisfied) to 10 (satisfied): "All things considered, how satisfied are you with your life as a whole these days?" We normalize life satisfaction on a scale from 0 to 1 and use it as a measure of subjective well-being.

- insert Table 1 about here -

### 3.2.2 Measuring individual attitudes towards economic freedom

The focus of our analysis is on the impact of economic freedom on life satisfaction conditional on individual attitudes towards market-friendly policies. For a number of reasons people differ in their personal attitudes towards more liberalized economic policies. These personal opinions are often crudely captured by a political left to right-scale, where a more

rightist position is usually associated with a pro-economic freedom way of thinking. The World Values Survey and the European Values Survey offer a useful alternative to assess individual opinions towards economic freedom more directly. For example, people express a positive evaluation of economic freedom in the questionnaire if they support a statement that "competition is good". Similarly, people who prefer income differences as incentives to work, show a positive attitude for economic freedom. Further questions requested respondents to state personal preferences for private instead of state owned enterprises, or private instead of public responsibility, and competition instead of regulation. All these questions point in a similar direction. Those who are more in favor of a less competitive society, less private responsibility, and extensive regulation of markets seem to prefer to live in a society with less restricted economic freedom.

In order to measure personal attitudes towards economic freedom we constructed the indicator *pref\_econfree* from all available data on these individual assessments in WVS questionnaires. *Pref\_econfree* has then been coded on a 0 to 1-scale, where higher values indicate stronger preferences for economic freedom. See the appendix for details on construction.

The index *pref\_econfree* is a proxy for personal attitudes towards economic competition, redistribution and regulation by the government. Due to a lack of adequate WVS questions in the questionnaires, however, *pref\_econfree* does not indicate preferences for security of property rights or sound monetary policy. We suppose that the perception of restricted individual freedom is predominantly caused by high regulatory burdens on domestic markets as well as on international trade and on government size.

## 4 Econometric evidence

### 4.1 Model

In this section, we present the results of simple regressions of personal life satisfaction on economic freedom as measured by *efwpolicies*, individual preferences for economic policy liberalization as measured by *pref\_econfree* and an interaction term of both variables, in

order to account for possible effects of economic freedom conditional on personal attitudes towards policy liberalization.

Controls include a full array of individual characteristics as well as country-wide economic and policy variables, including the (log of) average real GDP per capita in the five years before the survey has been conducted, the political freedom index from Freedom House, normalized to a 0 to 1-scale, which measures the degree of electoral democracy, as well as our economic freedom EFW-scores. Regional dummies for Latin America and Caribbean States, East-Asia and Pacific, Sub-Saharan Africa, and for transition economies are also employed, as respondents from these country groups regularly report significantly different levels of life satisfaction. We expect these dummy variables to capture some of the cultural and regional differences that may both drive institutions, the perception of institutions and the subjective perception of one's own life. For a full list of controls see our descriptive statistics of included variables.

We report the results of estimations from a linear regression model. In most specifications ordered probit models (not reported) do not change the results qualitatively. Reported p-values are based on standard errors corrected for heteroscedasticity and clustered on the country level.

## 4.2 Basic results

Table 2 shows our baseline specifications using different measures for freedom-preferences. Specification (1) uses *pref\_econfree* (i.e. the mean of all three questions on preferences for economic freedom as described above); specifications (2), (3), and (4) employ one specific question exclusively. In all specifications we find a positive effect of *efwpolicies* (i.e. our composite index for the EFW-areas 1, 4, and 5) on individual well-being even for the most freedom-averse individuals though not statistically significant on a 10 percent confidence level in each regression.

Table 2 reports the marginal effect of *efwpolicies* conditional on personal preferences for economic freedom. We calculated coefficients for  $\text{pref\_econfree} = 0$ ,  $\text{pref\_econfree} =$

0.25,  $\text{pref\_econfree} = 0.5$ ,  $\text{pref\_econfree} = 0.75$  and  $\text{pref\_econfree} = 1$ . Those who report a high preference for economic freedom, observe high and statistically significant gains (up to 0.195 points) in life satisfaction.

Figure 1 depicts how the marginal effect of  $\text{efwpolicies}$  depends on freedom preferences over the entire range, with 10%-confidence bands. Only those individuals with a negative attitude towards economic freedom ( $\text{pref\_econfree} < 0.4$ ) do not experience a statistically significant increase of life satisfaction when economic freedom ( $\text{efwpolicies}$ ) goes up. Only those who are more favourable towards economic freedom also gain from an increase.

Our results in specifications (1), (2), and (3) indicate that economic freedom has a more positive effect on people with high freedom-preferences than on those with low freedom-preferences. Surprisingly, the positive effect of economic freedom on individual well-being becomes smaller if people are in favour of competition (column (4)).

As we control both for individual income categories and GDP per capita, the coefficients show that there are positive effects of economic freedom beyond pure income-enhancing effects. The influence of freedom preferences on life satisfaction tends to be small, and it is not statistically significant.

- insert Table 2 and Figure 1 about here -

In Table 3 we analyze each EFW-policy area separately. In specifications (1)-(5). 'EFW-subindex' denotes the economic freedom-subindex for government size (1), legal structure and security of property rights (2), sound monetary policies (3), openness to international trade and capital movements (4), and regulation of business and labor markets (5), respectively. Again we control for individual freedom-attitudes by using  $\text{pref\_econfree}$ , and we interact freedom preferences with observed economic freedom in the area considered.

For those who totally dislike economic freedom, we nevertheless find empirical evidence for a positive effect of a small government size and low regulation levels of

business activities and labor markets, while this is not the case for EFW-subindices for area 2, 3, and 4. Here, the baseline effect is close to zero. People who value economic freedom for ideological reasons benefit from trade liberalization (4) and a sound monetary policy (3). Paradoxically, the interaction term is negative in specifications (1) and (5). Therefore, if economic freedom is measured by the EFW-subindex on government size, the effect of less government intervention becomes even negative. The baseline effect of the freedom preferences is likewise large for the regressions measuring economic freedom by the EFW-subindices in areas 1 and 5, while being insignificant and close to zero otherwise.

Even if people are very skeptical about competition, private business activities, and private responsibility, their individual life satisfaction seems to be positively related to smaller government interventions. One possible explanation for this result might be that actual regulations and government expenditures rarely correspond to the ideal world that makes some people support state interventions. For example, many redistributive measures in industrialized countries do not appear to actually favor the poor, but rather the politically powerful middle income classes. Therefore, high government spending on social welfare issues does not necessarily lead to the perception of less social hardships in society and more economic security.

Our results could suffer from endogeneity for several reasons: (1) Omitted variables like personal characteristics (e.g. optimism) could account both for someone's freedom preferences and his/her life satisfaction level. If you are an optimistic and risk-loving person, there is no need to call for state interventions. Likewise you are satisfied with your life as you systematically overvalue potential positive future events. As a consequence, our estimations would overestimate the causal effect of freedom preferences on life satisfaction. It is difficult to argue why pro-freedom preferences per se make people more satisfied with their lives. As the paradoxical results occur exactly in the specifications that show a large positive baseline effect of the preference variable, unobserved personal characteristics could drive the preference effects. (2) Reverse causality might be an issue as our preferences are not exogenous but depend on past experiences. Citizens who are more satisfied with their lives

(for whatever reasons) may tend to value economic freedom higher than those who are dissatisfied.

- insert Table 3 about here –

Table 4 tests our hypotheses by measuring political attitudes on a left-right scale in a range from 0-1, with lower values indicating a more leftist political attitude. Usually rightist positions are associated with a preference for economic policies promoting economic freedom; leftist positions are connected with a positive valuation of high regulatory powers of the state, high taxes, less rigid monetary policy, and high government spending. In the first place, our results confirm findings of previous studies (e.g. Bjornskov et al. (2008); Dreher and Öhler (2011)): Left-wing people are less happy than right-wing people in general. Depending on the measurement of economic freedom, we find a positive effect on individual well-being which is large and significant for our combined index *efwpolicies* and for the EFW-sub-index for the regulation of business and labor markets. Analogously to the estimations in Tables 1-3, we interact the EFW-subindices with the political attitudes measured on the left-right-scale. Remarkably, the interaction term of political attitudes and economic freedom has a negative sign in all specifications which means that people with a more pronounced right-wing political attitude seem to derive a lower utility from increased economic freedom. Figure 2 demonstrates the negative interaction effect of *efwpolicies* and the rightist position of respondents.

- insert Table 4 and Figure 2 about here –

As regressions with the EFW-subindex for government size provide paradoxical results we checked robustness with government consumption relative to GDP as an alternative and more direct measure for government size in Tables 5. As in Table 2 the specifications refer to alternative questions for freedom preferences. A higher of share of government consumption

relative to GDP does not show the expected (negative) sign in most regressions, but it is not significant.<sup>1</sup> The base effect of freedom preferences is either close to zero or even negative. Furthermore, the interaction term shows a large positive effect. People who prefer economic freedom tend to be more satisfied with their lives if government consumption increases, i.e. if there is less economic freedom in society.

- insert Table 5 and Figure 1 about here –

## 5 Conclusions

Are people more satisfied with their lives if they experience economic freedom, and how do individual policy attitudes towards more or less policy liberalization influence personal life satisfaction? Our paper empirically addresses the question of economic freedom's influence on subjective well-being from an individualistic perspective, taking into account personal preferences for market-oriented policies. Based on the World Values Survey and the Economic Freedom of the World-datasets we find strong and positive effects of both economic freedom and positive individual attitudes towards economic freedom on life satisfaction, which go beyond the positive impact of market-friendly policies and governance structures on per capita income.

Individual preferences for economic freedom also matter for individual life satisfaction. People who wish to live in a society with more economic freedom are more satisfied with their lives if they actually 'consume' these liberties. Those who think that competition is harmful, government should take on more responsibility for its citizens, and government ownership of firms should be increased nevertheless still benefit from higher economic freedom, but to a smaller degree. Although many of our specifications show this pattern, some regressions provide paradoxical results, depending on the sub-category of economic freedom. For example, if market-orientation of actual policies is measured by the size of

---

<sup>1</sup> Note that the EFW-subindex for government size is 0 for countries with a large public sector and 1 for countries with a small public sector. Therefore, high government consumption should be interpreted as a high level of economic freedom in area 1 of the EFW-classification.

governments, freedom-preferring individuals seem to suffer from more economic freedom while freedom-skeptical people appear to benefit stronger from enhanced economic freedom. The same holds true for the effect of government consumption on individual life satisfaction.

Although in this respect some of our results appear to be inconsistent and even paradoxical to some extent, our approach yet clearly indicates that individual attitudes towards certain policies – be they based on ideology, fundamental beliefs or rational economic calculus – matter for the impact of actual policies on individual well-being. Future research on the 'macro' determinants of life satisfaction has to take individual preference differences into account more seriously.

## References

- Alesina, A., DiTella, R., and MacCulloch, R. (2004): Inequality and Happiness: Are Europeans and Americans Different? *Journal of Public Economics* 88, 2009-2042.
- Berggren, N. (2003): The benefits of economic freedom: A survey. *Independent Review* 8, 193-211.
- Bjørnskov, C. (2003): The Happy Few: Cross-Country Evidence on Social Capital and Life Satisfaction, *Kyklos* 56, 3-16.
- Bjørnskov, C., Dreher, A., Fischer, J. (2007): The bigger the better? Evidence of the effect of government size on life satisfaction around the world, *Public Choice* 130, 267-292.
- Bjørnskov, C., Dreher, A., Fischer, J. (2008): Cross country determinants of life satisfaction: exploring different determinants across groups in society, *Social Choice and Welfare* 30, 119-173.
- Bjørnskov, C., Dreher, A., Fischer, J. (2010): Formal institutions and subjective well-being: revisiting the cross country evidence, *European Journal of Political Economy* 26, 419-430.
- Bjørnskov, C., et al. (2010): Inequality and happiness: When perceived social mobility and economic reality do not match, *CEIS Tor Vergata, Research Paper Series*, Vol. 8, Issue 5.
- Clague, C., Keefer, P., Knack, S., and Olson, M (1999): Contract-Intensive Money, *Journal of Economic Growth* 4, 185-211.
- Clark, A., Frijters, P., Shields, M.A. (2008): A survey of the income happiness gradient, *Journal of Economic Literature* 46, 95-144.
- Dawson, J.W., (2003): Causality in the freedom–growth relationship. *European Journal of Political Economy* 19, 479–495.
- de Haan, J., and Sturm, J.E. (2000): On the Relationship Between Economic Freedom and Economic Growth, *European Journal of Political Economy* 16, 215-241.
- de Haan, J., Lundström, S., Sturm, J.E. (2006): Market-oriented institutions and policies and economic growth: A critical survey. *Journal of Economic Surveys* 20, 157-191.
- Di Tella, R., MacCulloch, R., and Oswald, A. (2001): Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness, *American Economic Review* 91, 335-341.
- Di Tella, R., MacCulloch, R.J., and Oswald, A.J. (2003): The Macroeconomics of Happiness, *Review of Economics and Statistics* 85, 809-827.
- Diener, E., Suh, E.M., Lucas, R.E., and Smith, H.L. (1999): Subjective Well-Being: Three decades of Progress, *Psychological Bulletin* 125, 276-302.
- Doucouliaagos, C., Ulubasoglu, M.A. (2006): Economic freedom and economic growth: Does specification make a difference? *European Journal of Political Economy* 22, 60-81.
- Dreher, A., Öhler, H. (2011): Does government ideology affect personal happiness? A

- test. *Economics Letters* 111, 161-165.
- Frey, B.S. (2008): *Happiness: A revolution in economics*. Cambridge: MIT Press.
- Frey, B.S., and Stutzer, A. (2000): Maximising Happiness?, *German Economic Review* 1, 145-167.
- Frey, B.S., and Stutzer, A. (2002a): *Happiness and Economics: How the Economy and Institutions Affect Well-Being*. Princeton, Oxford: Princeton University Press.
- Frey, B.S., and Stutzer, A. (2002b): What Can Economists Learn from Happiness Research?, *Journal of Economic Literature* 40, 402-435.
- Frey, B.S., and Stutzer, A. (2005): Happiness Research: State and Prospects, *Review of Social Economy* 62, 207-228.
- Frey, B.S., Luechinger, S., and Stutzer, A. (2004): *Valuing Public Goods: The Life Satisfaction Approach*. Institute for Empirical Research in Economics, University of Zurich, Working Paper no. 184.
- Gwartney, J.D., Holcombe, R.G., Lawson, R.A. (2006): Institutions and the impact of investment in growth. *Kyklos* 59, 255–273.
- Gwartney, J.D., Lawson, R., and Holcombe, R. (1999): Economic Freedom and the Environment for Economic Growth, *Journal of Institutional and Theoretical Economics* 155, 641-663.
- Gwartney, J.D., Lawson, R., Hall, J. (2010): *Economic Freedom of the World: 2010 Annual Report*, Vancouver.
- Helliwell, J.F. (2003): How's life? Combining individual and national variables to explain subjective well-being, *Economic Modelling* 20, 331-360.
- Helliwell, J.F., and Huang, H. (2008): How's Your Government? International Evidence Linking Good Government and Well-Being, *British Journal of Political Science*, 38, 595-619.
- Heston A., Summers, R., and Aten, B. (2002): *Penn World Table, Version 6.1*, Center for International Comparisons at the University of Pennsylvania (CICUP), October 2002.
- Inglehart, R.M. et al. (2004): *Human Beliefs and Values*. Ann Arbor: University of Michigan Press.
- Justesen, M., 2008. The effect of economic freedom on growth revisited: New evidence on causality from a panel of countries 1970–1999. *European Journal of Political Economy* 24, 642–660.
- Kahneman, D., Diener, E., and Schwarz, N. (ed.): *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Foundation, 1999.
- Knack, S. and Keefer, P. (1995): Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures, *Economic and Politics* 7, 207-227.
- Moulton, B. R. (1986): Random Group Effects and the Precision of Regression Estimates, *Journal of Econometrics*, 32, 385-397.
- Moulton, B. R. (1990): An illustration of a pitfall in estimating the effects of aggregate variables on micro units, *Review of Economics and Statistics*, 72, 334-338.

- Olson, M., Sarna, N., Swamy, A., 2000. Governance and Growth: A Simple Hypothesis Explaining Cross-Country Differences in Productivity Growth. *Public Choice* 102, 341-364.
- Ovaska, T., and Takashima, R. (2006): Economic policy and the level of self-perceived well-being: An international comparison, *Journal of Socio-Economics*, 35, 308-325.
- Pitlik, H. (2002): The Path of Liberalization and Economic Growth, *Kyklos* 54, 57–80.
- Pitlik, H., Schwarz, G., Bechter, B., and Brandl, B. (2011): Near Is My Shirt But Nearer Is My Skin: Ideology or Self-Interest as Determinants of Public Opinion on Fiscal Policy Issues, *Kyklos* 64, 271-290.
- Rehdanz, K., and Maddison, D. (2003): Climate and Happiness. Research Unit Sustainability and global Change. Centre for Marine and Climate Research, Hamburg University, Working Paper FNU-20.
- Rode, M., and Coll, S. (forthcoming): Economic Freedom and Growth. Which policies matter the most?, *Constitutional Political Economy*.
- Schyns, P. (1998): Crossnational differences in happiness: economic and cultural factors explored. *Social Indicators Research* 43, 3-26.
- Sen, A. (1988): Freedom of Choice, in: *European Economic Review*, 32, 269-294.
- Tabellini, G. (2005): The Role of the State in Economic Development, *Kyklos* 58, 283-303.
- Van Praag, B.M.S., Baarsma, B.E. (2004): Using Happiness Surveys to Value Intangibles: The Case of Airport Noise, *Economic Journal* 115, 224-246
- Veenhoven, R. (2000): Freedom and Happiness: A Comparative Study in Forty-four Nations in the Early 1990s, in: Diener, E., Suh, E.M. (ed.): *Culture and Subjective Well-Being*. Cambridge: MIT Press.
- Welsch, H. (2002): Preferences over Prosperity and Pollution: Environmental Valuation Based on Happiness Surveys, *Kyklos* 55, 473-494.
- World Values Survey 1981-2008, official aggregate v.20090901, 2009. World Values Survey Association ([www.worldvaluessurvey.org](http://www.worldvaluessurvey.org)). Aggregate File Producer: ASEP/JDS, Madrid.
- Zak, P., and Knack, S. (2001): Trust and Growth, *Economic Journal* 111, 295-321.

## Appendix 1: Descriptive Statistics and Regression Tables

Table 1: Descriptive Statistics

	Obs. count	mean	sd	min	max
Life satisfaction	98788	.6434385	.2641663	0	1
Male (d)	98788	.4982589	.4999995	0	1
Age	98788	40.50927	15.65098	15	98
Age^2	98788	1885.952	1437.628	225	9604
Married (d)	98788	.6583593	.4742622	0	1
Separated (d)	98788	.1034134	.3044996	0	1
Unemployed (d)	98788	.0957404	.2942364	0	1
Middle income (d)	98788	.290349	.4539257	0	1
High income (d)	98788	.3444244	.4751826	0	1
Trust (d)	98788	.2562659	.4365726	0	1
God important (d)	98788	.529457	.4991341	0	1
1 or 2 children (d)	98788	.4050087	.4908962	0	1
More than 3 children (d)	98788	.3260619	.4687726	0	1
Education middle (d)	98788	.3299591	.4702003	0	1
Education high (d)	98788	.2304835	.4211444	0	1
Good health (d)	98788	.6952768	.4602924	0	1
Fair health (d)	98788	.247935	.4318161	0	1
Efwpolicies	98788	.6158643	.0876913	.3166667	.7756667
Efw: government	98788	.6064476	.1353457	.234	.8606
EFW: legal	98788	.6064033	.2044061	.1596	.989
EFW: money	98788	.7179191	.2230854	.01	.976
EFW: trade	98788	.6579326	.1378636	.184	.847
EFW: regulation	98788	.5832172	.1089023	.1982	.829
Freedom preference: pref_econfree	98788	.5664952	.1938569	0	1
Freedom preference: priv. business	98788	.5307235	.3215185	0	1
Freedom preference: priv. responsibility	98788	.4510737	.3367303	0	1
Freedom preference: competition	98788	.7176884	.2805105	0	1
Log(real GDP per capita)	98788	9.014112	.9819824	6.459283	10.65973
Political Freedom	98788	.7133727	.2955341	0	1

Table 2: Baseline estimates

	(1) aggregated preferences	(2) private business	(3) private responsibility	(4) competition
efwpolicies				
at PREF_FREE = 0	0.147 (0.318)	0.156 (0.105)	0.133 (0.149)	0.240* (0.011)
at PREF_FREE = .25	0.159 (0.167)	0.165+ (0.051)	0.149+ (0.053)	0.227** (0.009)
at PREF_FREE = .5	0.171+ (0.057)	0.174* (0.024)	0.165* (0.013)	0.213** (0.009)
at PREF_FREE = .75	0.183* (0.019)	0.183* (0.014)	0.181** (0.004)	0.199* (0.012)
at PREF_FREE = 1	0.195* (0.022)	0.192* (0.014)	0.196** (0.004)	0.185* (0.023)
PREF_FREE	0.0363 (0.731)	-0.0255 (0.636)	0.0163 (0.790)	0.0447 (0.300)
_cons	0.115 (0.232)	0.0780 (0.290)	0.0851 (0.365)	0.0680 (0.322)
indiv. controls	Yes	Yes	Yes	Yes
macro controls	Yes	Yes	Yes	Yes
region dummies	Yes	Yes	Yes	Yes
wave dummies	Yes	Yes	Yes	Yes
<i>N</i>	99515	114893	124623	107557
<i>R</i> <sup>2</sup>	0.192	0.191	0.193	0.193
<i>N</i> _clust	54	58	62	58

*p*-values in parentheses

Heteroscedasticity robust *p*-values adjusted for country clusters in parentheses. The dependent variable is life satisfaction. Individual control variables contain dummy variables for health status, income, education, family status (being separated, being married), number of children (1 or 2 children, more than 3 children), unemployment, sex, trust, importance of god. We further control for a quadratic age effect. Country level controls are the natural logarithm of real GDP per capita and political freedom (Freedom House), the EFW-subindices for legal structure and security of property rights (area 2) and for sound monetary policies (area 3). Region dummies for Latin America, East Asia & Pacific, and Subsaharan Africa are also included

+ *p*<0.10, \* *p*<0.05, \*\* *p*<0.01, \*\*\* *p*<0.001

Figure 1: Marginal effect of Economic Freedom (efwpolicies)

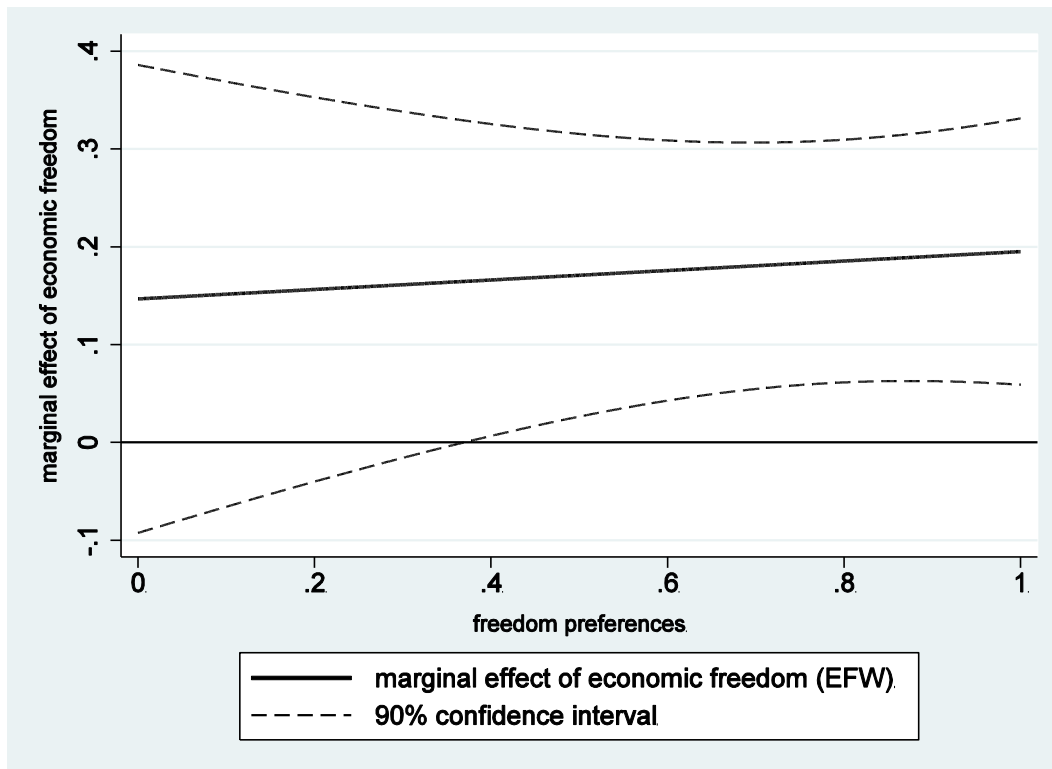


Table 3: Interactions with EFW-subindices

	(1) government	(2) legal	(3) money	(4) trade	(5) regulation
EFW_subindex					
at PEF_FREE = 0	0.159 (0.126)	-0.0849 (0.247)	0.0112 (0.837)	0.0315 (0.754)	0.308*** (0.000)
at PEF_FREE = .25	0.0852 (0.293)	-0.0466 (0.443)	0.0291 (0.513)	0.0709 (0.369)	0.282*** (0.000)
at PEF_FREE = .5	0.0114 (0.851)	-0.00839 (0.870)	0.0469 (0.198)	0.110+ (0.074)	0.256*** (0.000)
at PEF_FREE = .75	-0.0624 (0.187)	0.0299 (0.523)	0.0648* (0.042)	0.150** (0.005)	0.230*** (0.000)
at PEF_FREE = 1	-0.136** (0.003)	0.0681 (0.160)	0.0827* (0.010)	0.189*** (0.001)	0.204** (0.004)
PEF_FREE	0.253*** (0.000)	-0.0229 (0.648)	0.0350 (0.397)	-0.0322 (0.665)	0.133* (0.020)
_cons	0.0578 (0.563)	0.199** (0.006)	0.175** (0.009)	0.229** (0.008)	0.0984+ (0.092)
indiv. controls	Yes	Yes	Yes	Yes	Yes
macro controls	Yes	Yes	Yes	Yes	Yes
region dummies	Yes	Yes	Yes	Yes	Yes
wave dummies	Yes	Yes	Yes	Yes	Yes
<i>N</i>	101110	100325	106315	98788	105310
<i>R</i> <sup>2</sup>	0.199	0.190	0.218	0.188	0.220
<i>N</i> _clust	55	55	59	54	58

*p*-values in parentheses

Heteroscedasticity robust *p*-values adjusted for country clusters in parentheses. The dependent variable is life satisfaction. Individual control variables contain dummy variables for health status, income, education, family status (being separated, being married), number of children (1 or 2 children, more than 3 children), unemployment, sex, trust, importance of god. We further control for a quadratic age effect. Country level controls are the natural logarithm of real GDP per capita and political freedom (Freedom House). Region dummies for Latin America, East Asia & Pacific, and Sub-Saharan Africa are also included

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 4: Interactions of political left-right-preferences with EFW-subindices

	(1) efwpolicies	(2) government	(3) legal	(4) money	(5) trade	(6) regulation
EFW_subindex						
at PREFER_RIGHT = 0	0.251*** (0.000)	0.0387 (0.467)	0.0585 (0.388)	0.0673+ (0.056)	0.0990 (0.135)	0.265*** (0.000)
at PREFER_RIGHT= .25	0.228*** (0.000)	0.0263 (0.600)	0.0334 (0.598)	0.0459 (0.171)	0.0786 (0.191)	0.265*** (0.000)
at PREFER_RIGHT = .5	0.205** (0.002)	0.0138 (0.788)	0.00821 (0.891)	0.0246 (0.461)	0.0582 (0.313)	0.264*** (0.000)
at PREFER_RIGHT=.75	0.182* (0.014)	0.00137 (0.981)	-0.0169 (0.769)	0.00324 (0.926)	0.0378 (0.526)	0.264*** (0.000)
at PREFER_RIGHT = 1	0.159+ (0.061)	-0.0111 (0.866)	-0.0421 (0.462)	-0.0181 (0.627)	0.0175 (0.790)	0.264*** (0.001)
PREFER_RIGHT	0.129* (0.013)	0.105* (0.010)	0.132*** (0.000)	0.133*** (0.000)	0.126** (0.005)	0.0729 (0.103)
_cons	0.0461 (0.419)	0.101 (0.189)	0.0854 (0.187)	0.0981+ (0.063)	0.100+ (0.074)	0.104* (0.026)
indiv. controls	Yes	Yes	Yes	Yes	Yes	Yes
macro controls	Yes	Yes	Yes	Yes	Yes	Yes
region dummies	Yes	Yes	Yes	Yes	Yes	Yes
wave dummies	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	100603	97332	97116	101400	95642	100603
<i>R</i> <sup>2</sup>	0.208	0.193	0.189	0.209	0.186	0.212
<i>N</i> _clust	63	60	60	64	59	63

*p*-values in parentheses

Heteroscedasticity robust *p*-values adjusted for country clusters in parentheses. The dependent variable is life satisfaction. Individual control variables contain dummy variables for health status, income, education, family status (being separated, being married), number of children (1 or 2 children, more than 3 children), unemployment, sex, trust, importance of god. We further control for a quadratic age effect. Country level controls are the natural logarithm of real GDP per capita and political freedom (Freedom House). Region dummies for Latin America, East Asia & Pacific, and Sub-Saharan Africa are also included  
 +  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Figure 2: Marginal effect of Economic Freedom (efwpolicies)

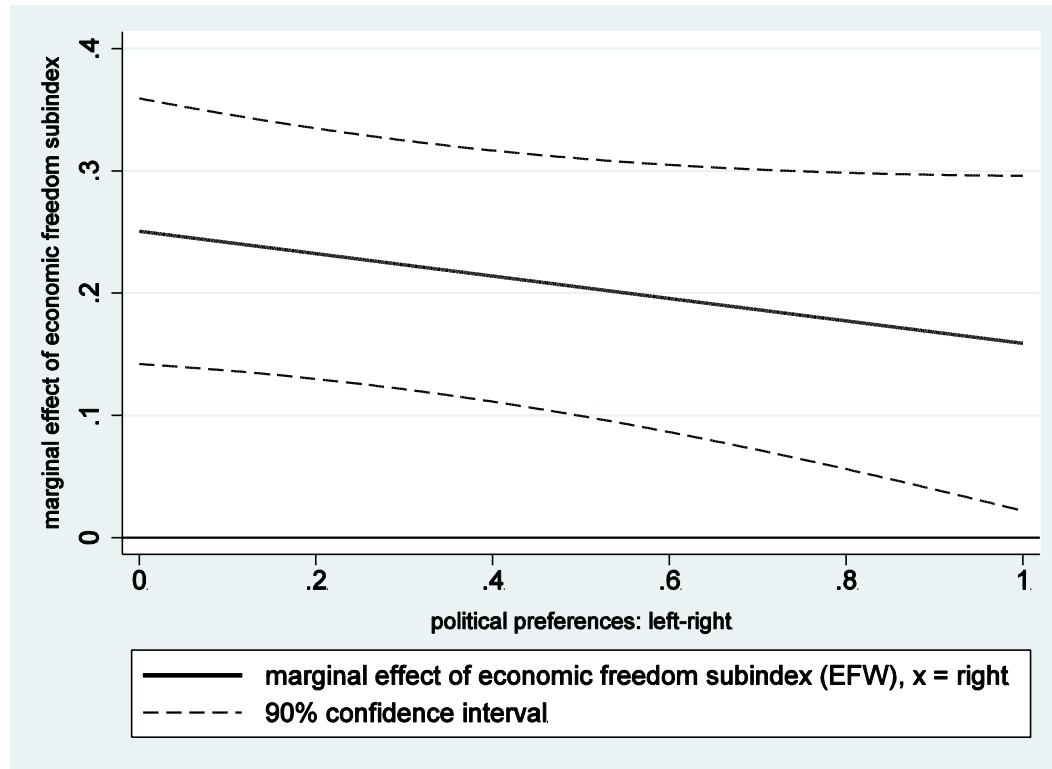


Table 5: Dependent variable: Government consumption/GDP

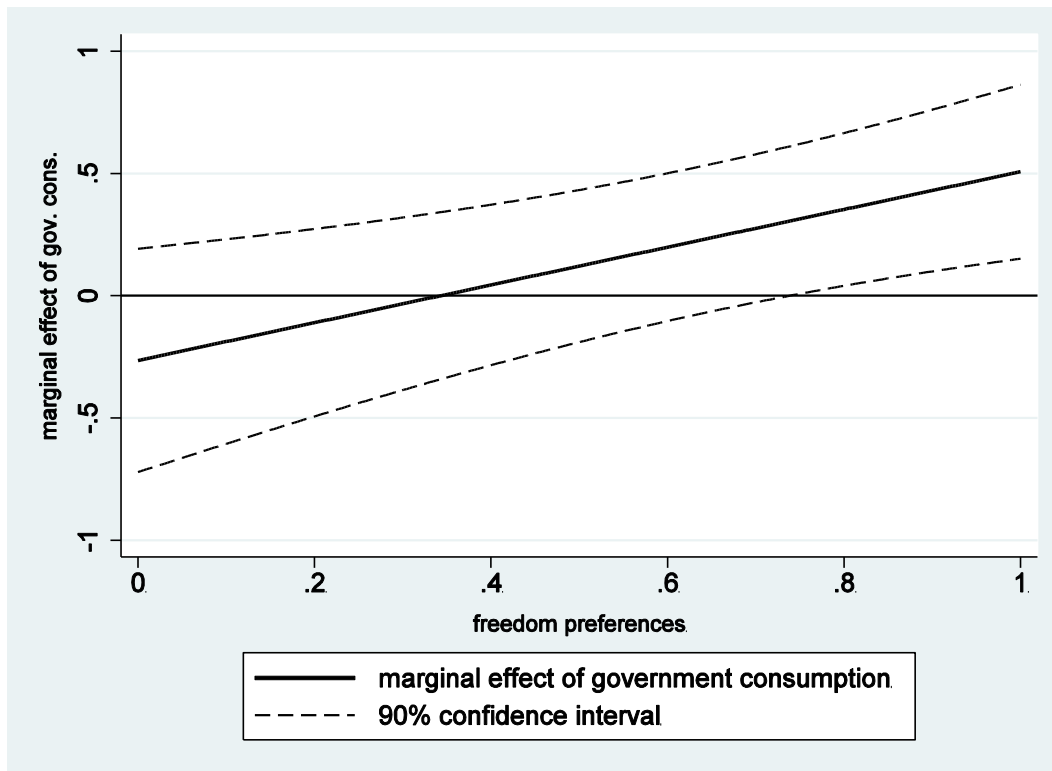
	(1) aggregated preferences	(2) private business	(3) private responsibility	(4) competition
GOV_CONS				
at PREF_FREE = 0	-0.265 (0.345)	-0.168 (0.376)	-0.0544 (0.760)	0.0875 (0.660)
at PREF_FREE = .25	-0.0720 (0.749)	-0.0304 (0.866)	0.0348 (0.832)	0.123 (0.520)
at PREF_FREE = .5	0.121 (0.525)	0.107 (0.548)	0.124 (0.436)	0.158 (0.400)
at PREF_FREE = .75	0.314+ (0.098)	0.245 (0.189)	0.213 (0.194)	0.193 (0.311)
at PREF_FREE = 1	0.507* (0.023)	0.382+ (0.059)	0.302+ (0.089)	0.228 (0.250)
PREF_FREE	-0.0367 (0.490)	-0.0764** (0.002)	0.00946 (0.708)	-0.00745 (0.719)
_cons	0.212** (0.005)	0.152* (0.046)	0.0969 (0.161)	0.164* (0.028)
indiv. controls	Yes	Yes	Yes	Yes
macro controls	Yes	Yes	Yes	Yes
region dummies	Yes	Yes	Yes	Yes
wave dummies	Yes	Yes	Yes	Yes
<i>N</i>	93450	108729	116489	101345
<i>R</i> <sup>2</sup>	0.192	0.191	0.199	0.191
<i>N</i> _clust	51	55	59	55

*p*-values in parentheses

Heteroscedasticity robust *p*-values adjusted for country clusters in parentheses. The dependent variable is life satisfaction. Individual control variables contain dummy variables for health status, income, education, family status (being separated, being married), number of children (1 or 2 children, more than 3 children), unemployment, sex, trust, importance of god. We further control for a quadratic age effect. Country level controls are the natural logarithm of real GDP per capita and political freedom (Freedom House), the EFW-subindices for legal structure and security of property rights (area 2) and for sound monetary policies (area 3). Region dummies for Latin America, East Asia & Pacific, and Subsaharan Africa are also included

+ *p*<0.10, \* *p*<0.05, \*\* *p*<0.01, \*\*\* *p*<0.001

Figure 3: Marginal effect of Government Consumption/GDP



## Appendix 2: Preferences for economic freedom (pref\_econfree)

In order to construct an indicator for personal attitudes towards economic freedom, we used up to three variables from the World Values Surveys questionnaire. Respondents were asked to respond to questions about their valuation of income inequality, competition, and individual responsibility. The following summary reports the exact wording of the WVS questions and the extreme answer categories. We normalized all variables on a scale from 0 to 1 such that higher values indicate stronger preferences for economic freedom. Pref\_econfree is the unweighted mean of normalized variables. As not all questions have been answered by all respondents, the number of included questions differs individually.

Original question in World Values Survey:

“Now please indicate your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.”

(1) Private vs. state enterprises:

- 1: Private ownership of business and industry should be increased
- 10: Government ownership of business and industry should be increased

(2) Private responsibility vs. government responsibility

- 1: People should take more responsibility to provide for themselves
- 10: The government should take more take more responsibility to ensure that everyone is provided for

(3) Competition

- 1: Competition is good. It stimulates people to work hard and develop new ideas
- 10: Competition is harmful. It brings out the worst in people