

Chapter 3 Measuring Global Support for Free Markets, 1990–2014

Pál Czeglédi and Carlos Newland

The purpose of this article is to study the evolution of popular economic thinking between 1990 and 2014 through the Free Market Mentality Index (FMMI), an index that seeks to capture perceptions in favor of a free economy.¹ During this period, we see a strong change from a popular appreciation of the market economy, to a perspective more supportive of the role of government. After describing this trend, and its measurement, we explore some of the possible causes of philosophical differences among the population. This analysis shows that accounting for individual characteristics, such as income, religion or education, can explain a part of the difference but does not eliminate the effect of time and country.

The measurement of free market support

The FMMI seeks to measure pro-free-market mentality in the population of several countries using some of the variables (with their antitheses) in the *World Values Survey* (WVS), an ongoing international poll (WVSA, 1981–2014; see Appendix A for a technical description of three free-market indexes). Those interviewed were asked to assign a value on a ten-point scale to the following statements:

¹ Newland (2018) analyzed this topic using a slightly different index. Before him, Bjørnskov and Paldam (2012) approached the question using only one of the variables included here. Their article was written before the last survey was available. Newland and Czeglédi (2018) also worked on the existence of cultural pro-market conglomerates.

Citation Pál Czeglédi and Carlos Newland (2018). *Measuring Global Support for Free Markets, 1990–2014*. In James Gwartney, Robert Lawson, Joshua Hall, and Ryan Murphy, eds., *Economic Freedom of the World: 2018 Edition* (Fraser Institute, 2018): 189–211.

Authors Pál Czeglédi is an Associate Professor of Economics at the University of Debrecen, Hungary. E-mail: czegledi.pal@econ.unideb.hu. Carlos Newland is Professor of Economic History at the Instituto Universitario ESEADE and Universidad Torcuato Di Tella, Argentina. E-mail: newland@eseade.edu.ar.

Acknowledgments Hans Vogel, Alejandra Salinas, Fred McMahon, and James Gwartney made useful comments on the initial drafts of this article. Czeglédi thanks for its financial support the Hungarian National Research, Development, and Innovation Office (Project No. K-120686).

Question 1 (competition)

Competition is good. It stimulates people to work hard and develop new ideas.

Antithesis Competition is harmful. It brings out the worst in people.

Question 2 (private property)

Private ownership of business and industry should be increased.

Antithesis: Government ownership of business and industry should be increased.

Question 3 (wealth)

Wealth can grow so there is enough for everyone.

Antithesis: People can only get rich at the expense of others.

Question 4 (responsibility)

People should take on more responsibility to provide for themselves.

Antithesis: The government should take more responsibility to ensure that everyone is provided for.

The interpretation given to the answers and values resulting from the first question is straightforward: economic competition generates value creation and increases productivity. The second question captures whether private (and not public) action is considered pivotal to the functioning of free markets.² The third question reflects the opinion about an element that seems to be a central aspect of these markets, that it is not a zero-sum game and that all actors can benefit from the economic process. Finally, question four is concerned with the understanding that individual freedom is inseparable from individual responsibility and independence from interference by governments.

Countries are put into groups based on a common cultural heritage or geographical location, or both. From the results for both periods (1990–1998; 2005–2014), it is clear that the Anglosphere³ and Northern European clusters stand out for their pro-market mentality. The Sinosphere includes states that can be labeled as of a Chinese/Confucian culture.⁴ The rest of groups in the world, like Southern and Eastern Europe, Latin America, and Asia, seem to place relatively similar and lower value on free markets.⁵

The rise of free market thinking

Over the last two centuries, there have been several trends in the global perception of what should be the correct functioning of the economy. Since the early nineteenth century, economic liberalism had been the ascendant paradigm, after

-
- 2 The question could be considered ambiguous as to whether the answers reflect the level of, or the change in, private or government ownership they would like to see. Yet, a look at the data shows convincingly that respondents take this question to asking the level of private ownership they think desirable. Bjørnksov and Paldam (2012) argue that, if this question were really about the desire to change institutions and policies, we should see a convergence toward the middle (neither increase nor decrease) in democratic countries, and probably a stronger preference for private property in those countries where its role is smaller. Neither trend can be observed, however.
- 3 Australia, Canada, Great Britain, New Zealand, and the United States.
- 4 China, Hong Kong, Japan, South Korea, and Taiwan.
- 5 The conglomerates have been studied with more detail in Czeglédi and Newland, 2018.

WWI giving way to socialism, government interventionism, and protectionism. From 1945, the landscape is more diverse: while world trade grew and tariffs fell, this coexisted with a strong presence of state-owned enterprises and a growing government interference inspired partly by the Keynesian paradigm.

During the 1970s and 1980s, the conviction began to grow that the state ought not to intervene in the economy and instead make room for private initiative. Gradually, public opinion began to adopt the point of view that state intervention, notably through big state enterprises, was inefficient. Its slow bureaucracy, overstaffing, low productivity, and chronic deficits required constant inflows of public money, sometimes causing inflation and even hyperinflation. In communist countries, there was a growing awareness of the failure of state economic planning, which went hand in hand with a growing disaffection with the political system and its leaders (Kornai, 1992). Here consumer goods and housing were scarce and many families were living in cramped conditions. People in these countries saw that the system of state production produced scarcity, inefficiency, and only benefited a small privileged class.

The 1980s saw the first major manifestation of support for the free market and private initiative. In Great Britain, Margaret Thatcher, inspired by Friedrich Hayek, began an ambitious program of privatization and deregulation. State enterprises in telecommunications, oil, and automobile manufacturing as well as airlines were privatized. This example was soon followed elsewhere, not only in France and Italy, but also in other developed nations such as Canada, Spain, New Zealand, and Sweden. Meanwhile, in the United States, President Ronald Reagan, one of whose advisers was Milton Friedman, proved himself an opponent of excessive regulation and state intervention and a proponent of free-market principles.

The 1990s probably mark the height of pro-free-market thinking on a global level. In 1989, the US economist John Williamson elaborated a catalog of free-market oriented policies that appeared to be generally accepted, and that would lead to reforms in developing nations, the main focus being Latin America (Williamson, 1989). These measures included the liberalization of financial markets, fostering competitiveness, deregulation, improvement of property rights, reducing state intervention, privatizations, and increasing free trade. Paradoxically, these policies were applied by populists such as Carlos Menem, of the Argentine Peronist Party, traditionally devoted to interventionism and anti-liberal economic policies. In Brazil, Fernando Cardoso, once a leading leftist intellectual, became a defender of the free market upon being elected president in 1995. Cardoso proceeded to introduce deregulation and privatization. In 1992, South Africa's new President Nelson Mandela, a former Marxist, converted to free-market ideas.

The fall of the Berlin Wall in 1989 inaugurated in the ex-communist countries an initial popular sentiment in favor of the market economy and the massive transfer of public property into private hands (Hayo, 1997). Politicians and managers ready to implement the corresponding economic reforms soon emerged. In Russia, the process initiated by Boris Yeltsin was rapid thanks to the use and distribution of vouchers. Most other nations in the region introduced similar policies: the Ukraine, Hungary, Romania, Bulgaria, and, a little later, Poland (Appel, 2004). Even where the Communist Party stayed in power, such as in China, policies were influenced by the new ideas. During the 1990s, an enormous privatization program was carried out, especially at the local and regional

level, as a result of which thousands of firms were privatized. All over the world, by 1999 more than 75,000 enterprises had been turned into private property (Nellis, 2012: 2).⁶

At the same time, world trade was liberalized. While many countries were signing trade agreements and schemes for economic integration, such as NAFTA (1994), the Asian Free Trade Area (1992), and MERCOSUR (1991), average world tariffs fell by more than 50%. World trade doubled between 1990 and 2000, as Asian participation increased markedly, largely as a result of China's increased exports (WTO, 2001: 27–35).

The evolution of the Fraser Institute's index of economic freedom (EFW index) published in *Economic Freedom of the World* (Gwartney, Lawson, and Hall, 2017) is a good indication of the changes in economic institutions. The average index value for the countries for which there exists early data was 5.7 in 1980, increasing to 6.4 in 1990, and 7.3 in 2000.⁷ While the countries of the Anglosphere, Northern Europe, and the Sinosphere grew by similar rates during the 1980s and 1990s, progress in the developing nations was much faster in the 1990s. Thus, it emerges that from 1980 to 1990 there was a global tendency toward a market economy as nations were deregulating, privatizing, and increasing trade. Since we can estimate a comprehensive FMMI only from the 1990s, we have no way of knowing about earlier popular support for competitive markets. However, given its development since then it is likely that popular acceptance of the market economy reached its zenith at that moment. In all regions, the average index was relatively high compared to the next decade, which seems to have paved the way for the election of pro-market political parties to introduce the required legislation and policies.

At the dawn of the new millennium, global popular support for the market economy as measured by the FMMI began to decrease. From a high point of 0.64 in the 1990s it fell to 0.48 around 2010, a drop of 25%. In Northern Europe the drop was 22%, and about 30% in Argentina, South Africa, Finland, Russia, Hungary, and India. Many politicians and other leaders grasped this change and accordingly adapted their discourse, putting more emphasis on the role of the state in the economy. Whereas Milton Friedman had been in a sense the iconic economist of the 1990s, his place was now taken by another US Nobel Prize Laureate, Joseph Stiglitz,⁸ who argued that old-style capitalism had died with the Great Recession, caused, he claimed, by the US deregulation of the financial markets. Stiglitz emphasized the key role of the state with respect to regulation and society: the market ought not to be allowed full freedom and without social control and government intervention. On the other hand, Stiglitz was skeptical concerning the benefits of privatization. He felt that its advantages had been frequently overestimated. Stiglitz found an attentive and wide audience, including populist heads of state such as Cristina Kirchner and Hugo Chávez, who believed their interventionist policies vindicated by a prestigious intellectual.⁹

6 As Nellis indicates this is a conservative estimate.

7 Only countries incorporated in the FMMI are included in the average.

8 On Friedman and Stiglitz and their influence, see Shleifer, 2009. On the ideological evolution in Latin America during the same period, see Edwards, 2008.

9 See: ámbito.com, 2007, 2010; Janicke, 2007; Lukin, 2012; MercoPress, 2011. We do not want to imply that Stiglitz supported Chavez or Kirchner's extreme economic policies.

Measurements of free market sentiment

The result of the global shift in discourse was not the reversal of the tendency towards freer economies but rather a slowdown or an obstacle to further change. Thus the Fraser Institute's index of economic freedom since 2000 remained stable until 2015, shedding the previous growth tendency. One result of the paradigm shift was that the privatization process was slowed down and in some cases such as public utilities, even reversed.¹⁰ Argentina constitutes the most extreme case of dropping public support for the market economy (the FMMI fell by 39% since the 1990s) and a dramatic reduction of its score on the EFW index of 33% between 2000 and 2015. The economic policies of presidents Nestor and Cristina Kirchner (2003–2015) were plainly against free markets: renationalization of privatized enterprises and the pension system; import restrictions and export taxes; exchange controls; and a wild growth of civil service employment, much like what one finds in Venezuela, a country not indexed here because of a lack of data. The United States dropped 15%, and Canada 18%, on the FMMI index, while scores for both countries on the EFW index also fell between 2000 and 2015, especially in the areas, 1. Size of Government, 2. Legal System and Property Rights, and 4. Freedom to Trade Internationally.

The evolution of average scores for each of the FMMI components enables us to better understand the nature of the erosion of support for free markets. In the first place, it should be emphasized that the scores for all components dropped in the reviewed periods: competition, private property, wealth, and responsibility. Thus the paradigm shift was general although, as we shall see below, the shift was not homogeneous for each of the categories. The belief in the advantages of competition and the conviction that the increase of wealth is not a zero-sum game between economic actors has fallen least at a global level.

Some of the regional responses show interesting patterns. Eastern Europe and Latin America show in the category of private property a significant drop. In the first case, the fact that circles both close to the former Communist Party and the emerging political class have largely managed or controlled whatever was being privatized has left a bitter taste among the public (Windolf, 1998). For Latin America, it might be a result of the gap between the high benefits expected from privatization and the concrete results that were attained.¹¹ It is interesting that, unlike the case of Eastern Europe, state enterprises in Latin America were generally acquired by multinational corporations. Thus, there was no general feeling that privatization benefited domestic political cliques. The category registering the greatest drop in support for free markets is the responsibility variable, which reflects people's belief in the role of the government as protector and regulator of the lives of its citizens.

To better examine general trends, annual series for each variable have been built for a group of countries¹² for which there is extensive information in the WVS since 1990. Although the data are not annual or complete, and gaps had to

10 For the case of water supply services, see Kishimoto, Lobina, and Petitjean, 2015.

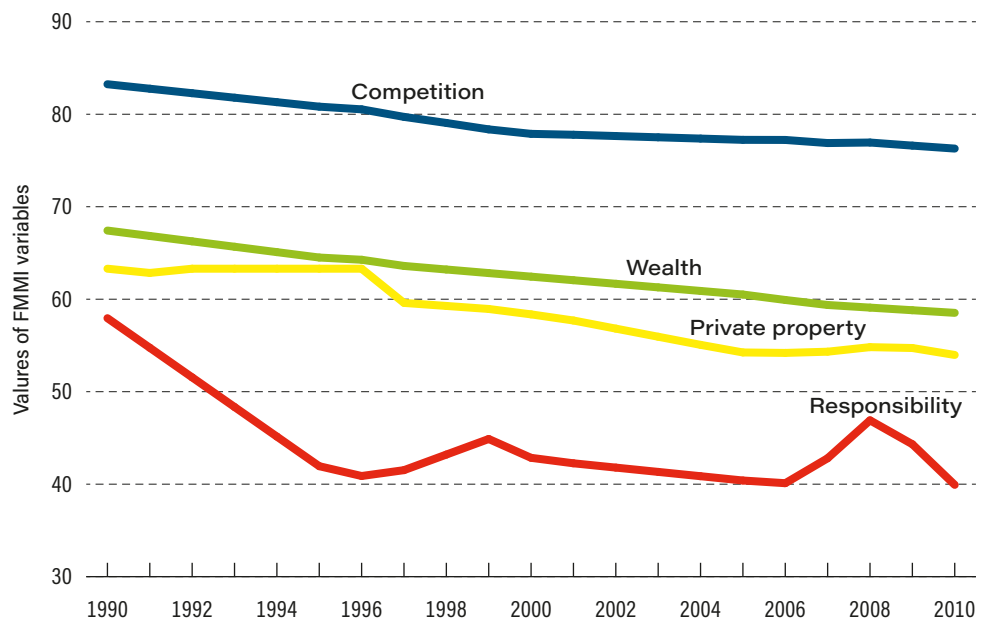
11 Studies in general have shown a general improvement in the performance of privatized companies in terms of the provision of goods, although the picture has been more clearly favorable in competitive industries than in the case of public utilities (Nellis, 2012).

12 Argentina, Belarus, Brazil, Chile, China, Estonia, Germany, India, Japan, Mexico, Netherlands, Nigeria, Poland, Russia, South Africa, South Korea, Spain, Sweden, Turkey, and the United States.

be completed by linear interpolation, the series (Appendix F; figure 3.1) show the fall in the four variables. This decline seems to be continuous for the most part and only the responsibility variable stabilizes, though after a dramatic collapse in the early 1990s. On the other hand, the Great Recession does not seem to have had a structurally negative impact around 2008. Only the responsibility variable shows some diminution, but this occurred after it had experienced a recent upswing.¹³

We can now analyze if the fall in support for free markets could be affected by more general cultural and demographic changes. For this purpose, we will use the individual answers by those interviewed, and not the average scores for each nation.

Figure 3.1: Global evolution of the original values of the FMMI variables, 1990–2010



Determinants of individual free market mentality

In this section, we examine the determinants of free-market mentality at the individual level for two reasons. One is to test some hypotheses about what may make individuals subscribe to free-market ideas. The second is to verify whether the declining trend in free-market support could be explained mainly by some individual characteristics. Do individual factors help to explain a more positive view of free markets? Or does the negative trend persist even if we “discount” the effect of individual characteristics?

To answer such questions we will use the standard statistical technique economists usually apply when trying to isolate the effect of one possible determinant on a variable to be explained by holding the other possible determinants constant. There are three groups of factors we think we should consider as affecting

13 A study that finds, using the WVS and other surveys, that recessions have a relevant impact on beliefs and political preferences (specially during early adulthood) is Giuliano and Spilimbergo (2014). The work by Gonthier (2015) must be also mentioned as a paper that detects a slow but steady increase in the support for interventionism in Western Europe.

the free-market mentality. One includes, of course, the years in which different surveys were conducted. The second group incorporates the countries in which at least one survey¹⁴ was conducted. The third includes the individual characteristics we will explain below in detail and the exact definitions and some summary statistics of which are presented in Appendix C.

The statistical technique we apply makes it possible for us to isolate the effect of the factors in these three groups and ask the question as to how the free market mentality of the average individual in 1990 would compare with that of the average individual in 2010 from the same country and with the same individual characteristics (time effect). Similarly, we can estimate the difference between the free-market mentality of different individuals from different countries but with the same individual characteristics in the same year (country effect). Finally, we can also check how the views of individuals would differ if they lived in the same country in the same year but had different characteristics (personal effect). To put it simply, the free-market mentality of a religious American person in 1990 may be different from that of an atheist Hungarian person in 2014 for three reasons: because they were asked in different years, because they lived in different countries when they were asked, and because they have different religious views. The technique whose results we are about to present in this section¹⁵ makes it possible to isolate and compare the size of the effects of these three reasons.

When choosing the independent characteristics that may affect economic views we are confined by the variables available in the World Values Survey/European Values Study combined database (WVSA, 1981–2014; EVS, 2015). On the other hand, we want to use variables that are supported by theory, facts, or common sense. We have reason to think that the level of income and education attained by individuals influences their views about the market economy.

Income

In the case of income, there is the possibility of a self-serving “bias”. This means that a person with higher income would tend to look on the society as a fair one. The more affluent in a market economy might therefore consider it to be more reasonable while those who are poorer might find it less so.

Education

In the case of education, Caplan (2006: 50–93) shows that the more educated people are, the more similar their way of thinking is to the reasoning of economists, who tend to be more pro-market than the typical citizen. Higher education and income are then expected to have a positive effect on the IFMMI. It must be noted, however, that both education and income are measured in the WVS with a survey question that asks respondents to report their own education level and income. The scale of income considers the relative position of the individual within society, providing respondents with eleven “steps” from which to choose, while the education question provides eight possible levels of education.

14 In this analysis, we include as many countries as possible, not only those with at least two observations. The reason is that in this analysis, unlike in the one we described in Appendix B, we do not want to describe only the change in free-market mentality. Here we are interested in its determinants, too.

15 The more formal results are presented in Appendix G and Appendix H.

Religious belief

Other, “deeper”, beliefs may arguably be connected to those views about the market economy in which we are interested. One of them is religious belief. The proposition we call the “Buchanan hypothesis” (Buchanan, 2005) indicates that a reason that people may be becoming more interventionist is that God is increasingly replaced by the State in their mind as a moral authority. The empirical results of Guiso, Sapienza, and Zingales (2003) also support the proposition that individuals with stronger religious beliefs—those who go to church more often or who had a religious upbringing or who have a stronger belief in God—have more trust in free markets. To account for this hypothesis, we include a dummy variable that has the value of one for a “convinced atheist”, and zero otherwise.

Individualism

It is not only religious belief that is intertwined with the free-market mentality. The empirical results of Pitlik and Rode give support to their hypothesis that “individualistic cultural traits are negatively related to interventionist attitudes” (2017: 597). The extent to which someone thinks in an individualistic way is very often measured by the answer given to a question of WVS concerned with how much control the respondent thinks she/he has over life. The answer can be placed on a 10-point scale, from having a “great deal of choice” to “no choice at all over the way your life turns out”. This is the variable we use in our analysis. It runs between 1 and 10, where 10 indicates the highest control over one’s life.

Age

The age of the respondent might also shape his or her views about the market economy. First, it is a commonplace that youngsters are more impressed by anti-market ideas than their elder fellow citizens with more real-world knowledge and life experience. Second, many young people do not remember, or did not even live in, the time when the Soviet Bloc was in place, and they hear much less about real-world communism than did members of older generations. The survey of the Victims of Communism Memorial Foundation and YouGov (2017) shows, for example, that “Millennials” in the United States are much more in favor of socialism and communism and their ideologies than the average American, and (or perhaps, because) they know less about it (Sewell, 2016: 10–26). To check the effect of age, we separate those born between 1960 and 1980, from those born after 1980, the Millennials.

Occupation

Finally, we also separate various groups of occupations. Grouping the occupation variable into four categories: [1] manager (employer or manager who is probably the owner, too, in many cases); [2] white collar (middle level non-manual office worker, supervisory non-manual office worker, junior-level non-manual, non-manual office worker); [3] blue collar (skilled manual, semi-skilled manual worker, unskilled manual, agricultural worker), [4] foreman (foreman and supervisor), and [5] other job (farmer with own farm, member of armed forces, other, those who have never had a job). Occupations are sometimes associated with more or less pro-market views. We expect managers and employers to be more supportive of free markets than their employees, as a self justification of their higher economic status or from a better understanding of the power of competition and the efficiency of private initiative.

Culture

To account for possible cultural differences beyond the difference across countries, we conduct the analysis with observations on respondents from eight groups. First, we use as many observations as available. This means the observations on more than 85,000 respondents from all over the world. The analysis is then repeated for seven groups of respondents from the seven groups of countries we identified in the previous section. The number of respondents in these smaller groups is roughly between 1,000 and 12,000.

IFFMI predicted by individual characteristics, time, and country effects

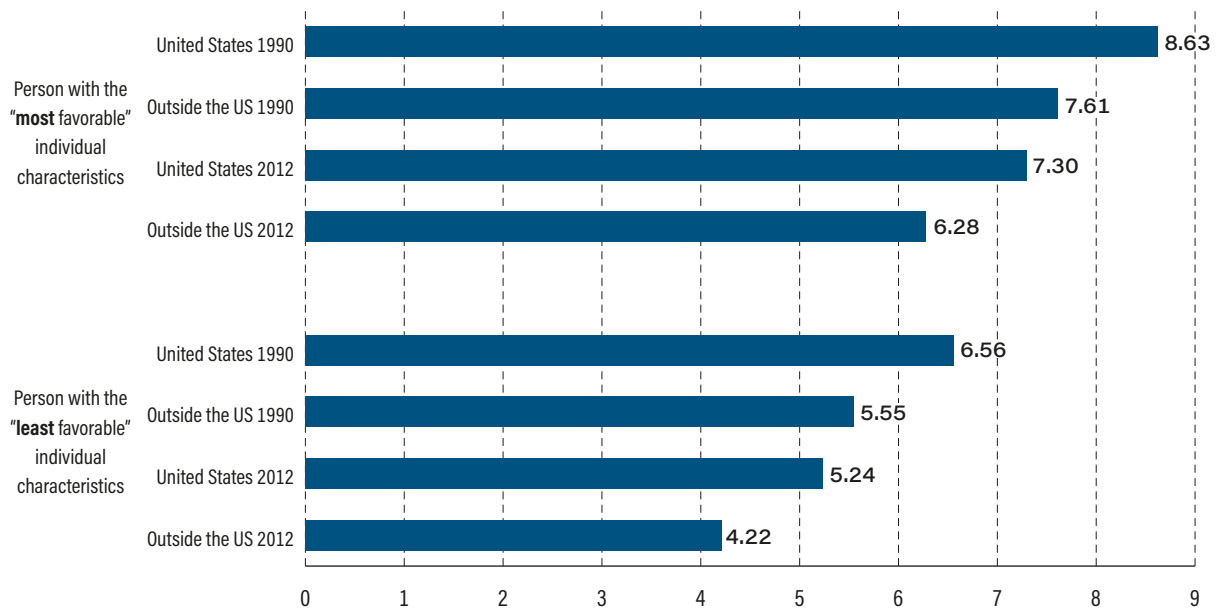
The statistical results of our analysis are reported in Appendix G and Appendix H. In general, we find that the impact of the characteristics described above is as expected. The mentality of more educated people is friendlier towards markets. Income has a similar effect: someone considering himself in the “highest step of income” is found to have a higher free-market mentality than someone considering himself in the lowest “step of income”. Religious convictions as well as control over life matter too, as predicted: atheists are less pro-market while those who think they can control their life are more so. Non-blue-collar employees and employers are also more pro-free-market. Finally, the statistical analysis that includes these individual characteristics show that, when they are included, there is still a pure “time effect” between 1990 and 2012. This is a confirmation of a notable change in global opinion during this interval of time.

Figure 3.2 illustrates how the three factors (individual characteristics, time, and country effects) we raised at the beginning of this section affect IFMMI. The questions are concerned with the role of time, country, and individual characteristics in explaining the differences of IFMMIs. Figure 3.2 shows the IFMMIs of eight hypothetical individuals we calculated from the analysis of the widest possible groups of respondents. It shows the IFMMI of an American person with individual characteristics that are “most favorable” to the market in 1990 and 2012, and that of an American person with characteristics that are “least favorable” characteristics to the market in the same years. In addition, it shows the IFMMI of a person living in the average country outside the United States with characteristics “most favorable” to the market in 1990 and 2012, as well as that of a person in the same average country with characteristics “least favorable” in 1990 and 2012.¹⁶

Describing a person as having characteristics “most favorable” to the market serves as an abbreviation for “a person with the highest levels of those characteristics that the calculations predict increase IFMMI”, while describing them as having characteristics “least favorable” means just the opposite. For example, since we find that people with more education and higher income have a higher IFMMI, the “most favorable” characteristics include the top income level and education level only, compared to the lowest single level of these variables for “least favorable”. Similarly, since being an atheist makes people somewhat less pro-market, the person with the most favorable characteristics is not an atheist. Comparing the hypothetical IFMMIs makes it possible to have a sense of the size of the three effects. Figure 3.2 then makes it possible to compare the isolated effects of the three groups of factors that possibly explain the differences in IFMMIs.

¹⁶ The year 2012 is chosen because that is the most recent year for which we have observations for all the variables we use; 1990 is chosen as the initial year.

Figure 3.2: IFMMI predicted by individual characteristics, time, and country effects



Note: The figures are derived from the results presented in Appendix G and Appendix H and explained in the text. The question these figures answer is: "What would be the IFMMI of the two hypothetical persons with the opposite extreme values for all those characteristics that were found to affect IFMMI in different places and years?"

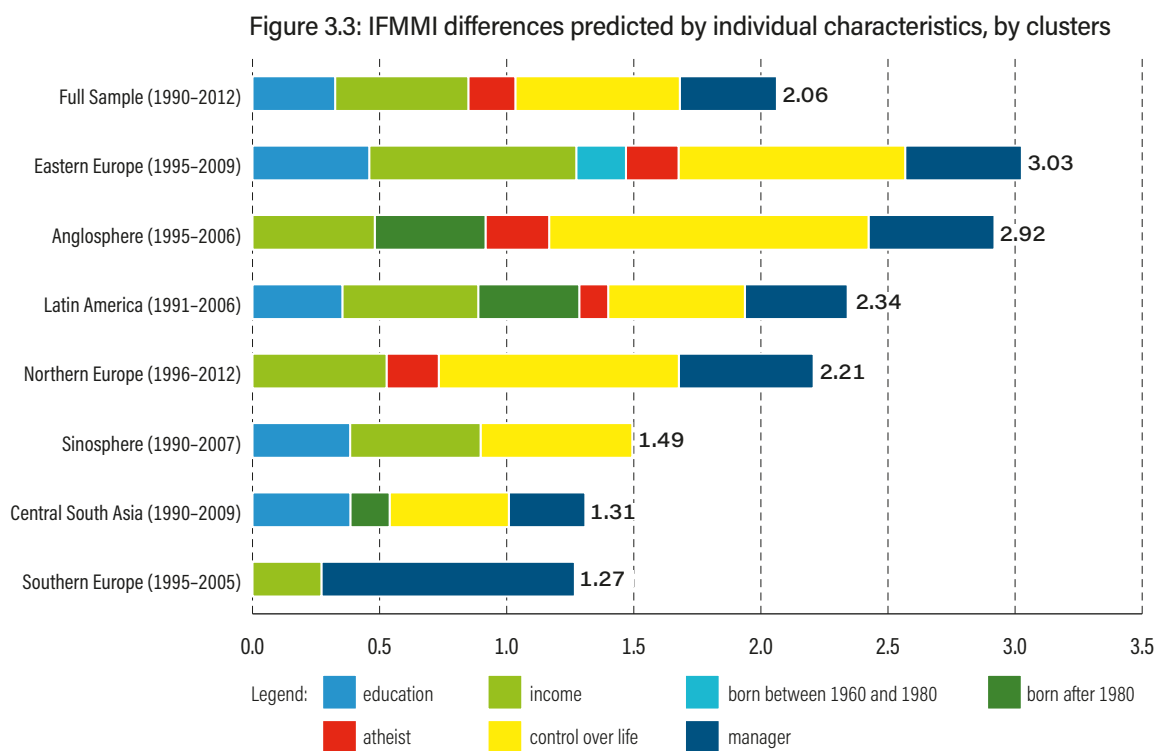
Figure 3.2 shows that the person with the characteristics "most favorable" to the market in the United States in 1990 would have an IFMMI of 8.63, while a person with the characteristics "least favorable" to the market outside the United States in 2012 would have an IFMMI of 4.22. This difference can be broken to the three effects we have mentioned. Time effect can be seen, for example, by comparing the IFMMI of an individual in the United States with the characteristics "most favorable" to the market in 1990 with the same hypothetical US person in 2012. This means comparing 8.63 with 7.30. The country effect can be seen, for example, by comparing the IFMMI of an individual in the United States with the characteristics "most favorable" to the market in 2012 with the same hypothetical person in 2012 who lives outside the United States, which gives a comparison of 7.30 with 6.28. Finally, the personal effect can be seen, for example, by comparing the IFMMI of an individual who lives outside the United States and had the characteristics "most favorable" to the market in 2012 (6.28) with the hypothetical person who also lived outside the United States in 2012 but had the characteristics "least favorable" to the market (4.22).

To put it simply, Figure 3.2 suggests that there are three reasons that an American with the "most favorable" characteristics has a higher IFMMI than someone outside the United States with the "least favorable" characteristics (total effect): first because she/he is surveyed in 1990, not in 2012 (time effect), second because she/he lives in the United States (country effect), and third because of the "favorable" characteristics (personal effect). Taking the total difference as 100%, the time effect explains about 30% of the variation, the country effect explains about 23%, and the personal effect explains the remaining 47%.¹⁷

¹⁷ Using those numbers from figure 3.2 we described in the previous paragraph, total effect = 8.63 – 4.22 = time effect + country effect + personal effect = (8.63 – 7.30) + (7.30 – 6.28) + (6.28 – 4.22).

IFMMI predicted by individual characteristics, by clusters

Figure 3.3 takes the personal effect as starting point and breaks it down to the effects of individual characteristics we identified above. Figure 3.3 also illustrates whether the effects of the individual characteristics differ across cultures. The shades of grey and outlines on the bars of each cluster of countries denote those factors that our statistical analysis finds to matter, while the width of the bars reflects the size of these effects. That is, figure 3.3 shows the extent to which, according to our analysis, various factors account for the difference between the IFMMI of the hypothetical person with characteristics “most favorable” to the market and the one with characteristics that are “least favorable”.



Note: Figure 3.3 takes the personal effect from figure 3.2 and shows how this personal effect is accounted for by those personal characteristics that were found to affect IFMMI in the overall sample and in each of the clusters we identified in the text.

For the full sample, as we saw on figure 3.2, this “personal effect” is 2.06, which is the difference between the width of one of the upper four bars and that of the corresponding one of the lower four bars.¹⁸ Then, the top bar in figure 3.3 shows that over the full sample 0.325 points out of this 2.06 is explained by the educational difference between the person with characteristics that are “most favorable” and the one with characteristics that are “least favorable”. Similarly, 0.524 point of the 2.06 is explained by the fact that the person with characteristics that are “most favorable” is in the highest income category, while the one with characteristics that are “least favorable” is in the lowest category. The fact that the former hypothetical person is not an atheist, while the latter is an atheist explains a 0.185 point difference, and so on. The reason that figure 3.3 does not show the same

18 That is, $8.63 - 6.56$, $7.61 - 5.55$, and so on. These differences are not exactly equal to 2.06 because the numbers on the graph are rounded to two decimals.

factors for each of the clusters is that the estimated effect of a factor is indicated only when it is statistically significant (that is, different enough from zero to call it positive or negative with relatively high certainty).

Figure 3.3 also reveals, first, that the personal effect itself is not the same in every cluster. It is most important in the Anglosphere and in Eastern Europe. Second, the relative importance of these factors is not the same. Being a manager/employer is an important factor nearly everywhere (the exception is the Sinosphere). The control over life is the most important whenever it is one of the determinants that matter (the exception is Southern Europe). These differences in the effects of individual characteristics across clusters of countries suggest that culture may not, or may not only, determine free-market support directly. Figure 3.3 appears to show that a certain culture is a condition for certain individual characteristics to have an effect on perspective, and that culture may also be responsible for the size of its effect. For example, according to figure 3.3, a more educated person usually has a more pro-free-market mentality in Latin America, Eastern Europe, Central/South Asia, and in the Sinosphere, but not in the Anglosphere, Northern Europe, or Southern Europe.

The theories and common-sense arguments we came up with have some explanatory power to account for the difference of free-market mentality, but this explanatory power is significantly different across cultural conglomerates: they work better for the Anglosphere, Northern Europe, Eastern Europe, and Latin America than for Southern Europe and Asia. Even more importantly, the inclusion of these explanatory variables does not eliminate the significantly negative time trend starting after the mid-1990s. This implies that it is not only individual characteristics that have to be taken into account to explain the changes in free-market mentality, but also time trends and local culture and history.

Final remarks

The global support for free markets seems to have been falling continuously since the 1990s. This has been a stable downward trend, affecting most countries and all clusters. This decline is a consistent result of all the approaches to the topic we apply. Using the original values of the variables for the FMMI, we find a roughly 10-percentage point decline in the share of those who chose the “free-market half” of the ten-point scale of the four questions we considered. When looking at the average values of the same answers, we find a half-point decline for all but one (responsibility). Finally, we must mention that the Great Recession, for some the main cause of a global shift in economic opinion, does not seem to have produced a fundamental alteration in what seems a continuous negative trend. With these original values showing a decline, it is no wonder that the aggregated measures we used, the free-market mentality index (FMMI) and the individual free-market mentality index (IFMMI), have declined too. We have also noted that some individual characteristics play a role in explaining differences among individuals. Changes in these characteristics could counterbalance or reinforce the future time trends in the index.

In 2005, Nobel Prize winner James Buchanan predicted that, although socialist ideas had been discredited globally, they would continue to expand in the future: “maintenance and extension of control over the activities of persons through collective institutions will, in my assessment, be ... important in shaping the patterns

of development during the first half of the new century” (Buchanan, 2005: 23). In his view, people in general demand what he termed a “parentalistic” protection. He argued that religion provided this in the past but with growing secularization God would be replaced by the State as the main protective agency. The measurements shown in this paper tend to agree with the Buchanan hypothesis. In particular, in some nations the growing proportion of atheists appear to be more anti-market than the diminishing number of theists. Also, in general, the younger (Millennial) generations tend to be less supportive of free markets than their predecessors. To this we may add that the continuous weakening of the family as an institution and the growing proportion of smaller (or individual) households may increase the individual’s demands for government protection. However, accounting for personal characteristics does not eliminate the general tendency documented in countries and conglomerates.

The change in the popular views about the benefits of free markets has most probably halted the notable improvement towards economic freedom—as measured by the EFW index—that characterized the 1980s and 1990s, a magnitude that has stagnated since year 2000 at a world level. Should this raise concerns about free markets? First, the declining time trends can also make it less certain that the trend will continue than this finding might first suggest. The presence of these tendencies even when the effects of individual characteristics and country of residence are considered shows that these beliefs are not “hard-wired” in people’s minds and the pendulum may therefore swing back. James Buchanan (2003) is also well known for his memorable phrase “politics without romance”, which describes the approach of public-choice economics and suggests a comparative perspective on government and market. A corollary is that as government becomes larger and more intrusive, the confidence in bureaucracy and state intervention may wane. It well may be the case that the population, and politicians, will become more aware of the negative effects of government expansion and how it affects the optimal allocation of resources. Albert Hirschman (1982), in one of his classic works, also described the long ideological oscillations in the support of the public or private action. Central to ideological mutations was a disappointment on how the economic agents perform and deliver. The 1960s were more favorable to the public sphere, the 1980s to private initiative, and the 2000s swung back to government intervention. It would seem that the following phase, in Hirschman’s model, would see greater support for a competitive free economy.

Appendix A: Technical description of three free-market indexes

We use three indexes to measure and analyze shifting attitudes towards the free market. To avoid confusion, we use different scales for each of these indexes.

1. Free Market Mentality Index (FMMI)

The FMMI is a normalized index on a 0-to-1 scale and is the aggregation of the four questions at the country level. The aggregation is done in the following way.

(a) We started with the data from the individual respondents for each question separately. Then, for each country-year we calculated the percentage of those who had given a “market-friendly” answer, that is, answers running between 6 and 10 or 1 and 5 depending on how the question is asked. Missing and “don’t know” answers were left out. As a result, we received a percentage for every country-year for each of the question.¹

(b) To construct the index, the four variables (competition, private property, wealth, and responsibility) obtained for each country are normalized using the following formula: $(\text{lowest value of the sample} - \text{value of the country}) / (\text{lowest value of the sample} - \text{highest value of the sample})$.² The four variables are then averaged with equal weights to obtain the FMMI, which, as a result, can run between 0 and 1. The results that present measures for two intervals, 1990–1998 and 2005–2014, corresponding to integrated data of the 2nd and 3rd (1990–1998) and to the 5th and 6th (2005–2014) waves of the *World Values Survey* (WVS), are included in Appendix D.

(c) The FMMI is a simple average of the values we received in step (b) for a certain wave (defined by the years covered in that wave). The FMMI and percentage values for regions that include several countries are simply averages of the aggregated values from step (a) or step (b).

(d) Finally, we aggregated wave 2 and 3 (1990–1994, 1995–1998), wave 5 and 6 (2005–2009, 2010–2014) of the WVS and, including the corresponding years of the *European Values Study* (EVS, 2015), and aggregated the two waves by using a kind of “discounting”. The discounting is needed to account for the declining trend in free-market values that occurred in the world from wave 2 to 3, and from wave 5 to wave 6.

To find a “discount factor”, we looked only at those countries that have observations for both waves and calculated the change in the cross-country average normalized value for each question.

2. Individual Free Market Mentality Index (IFMMI)

The IFMMI is based on the data from the individual respondents to which the WVS provides free access. This enables us to know whether an individual who expresses pro-free-market sentiments is also, for example, a manager, data we then use to explore what individual attributes are likely to create support for, or opposition to, free-market policies in our econometric analysis (Appendix C).

To construct the overall IFMMI, we use an average of the answers the individuals have given to the four questions about competition, private property, wealth, and responsibility. As the individual answers run between 1 and 10, we also made this variable, which we call the Individual Free Market Mentality Index, run between 1 and 10 with 10 being the friendliest with free-market principles. IFMMI is defined as: $IFMMI = [(11 - comp) + (11 - private) + wealth + (11 - resp)] / 4$, where *comp*, *private*, *wealth*, and *resp* are the answers given for the four questions above. In the case of *comp*, *private*, and *resp*, an answer with a higher number means the respondent places lower value on free markets. A person will therefore have an IFMMI of 10 only if she/he gives the most market-friendly answer for each question. An individual can have an IFMMI of, say, 5, if she/he gives consistently an answer of 5 or expresses very market friendly views for some questions and very anti-market views for others. The number of observations on individual answers is between a several hundred and two thousand per country.

3. Country-level FMMI

Finally, we use data aggregated at the country level for each of the four questions. Here we simply use the percentage of market-friendly and market-hostile responses in each nation, as discussed above for the FMMI. We calculated the percentage of those who had given a market-friendly answer, meaning the answers running between 6 and 10 or 1 and 5 depending on how the questions are asked. Missing and “don’t know” answers were left out.

1 In each variable, the percentage of answers for the higher five scales was used. Another option that could have been used is a weighted average, which was not chosen because of national cultural differences in response styles, when the interviewed are confronted with scales. Collectivistic countries, like those of the Sinosphere, tend to prefer middle or slightly positive or negative answers. This is not characteristic of Individualistic countries like those of the Anglosphere or the Western countries in general (see Harzing, Brown, and Köster, 2012: 341).

2 This procedure is very similar to the one used by the World Bank in the Doing Business ranking. See World Bank (2016). For question 1 (competition) the higher threshold was 95.5% and the lower 52.5%; for question 2 (private property), 90.3% and 28.5%, respectively; for question 3 (wealth): 90.7% and 28.4%, respectively; for question 4 (responsibility): 85.4% and 8.9%, respectively.

Appendix B: Technical examination of changes in attitudes

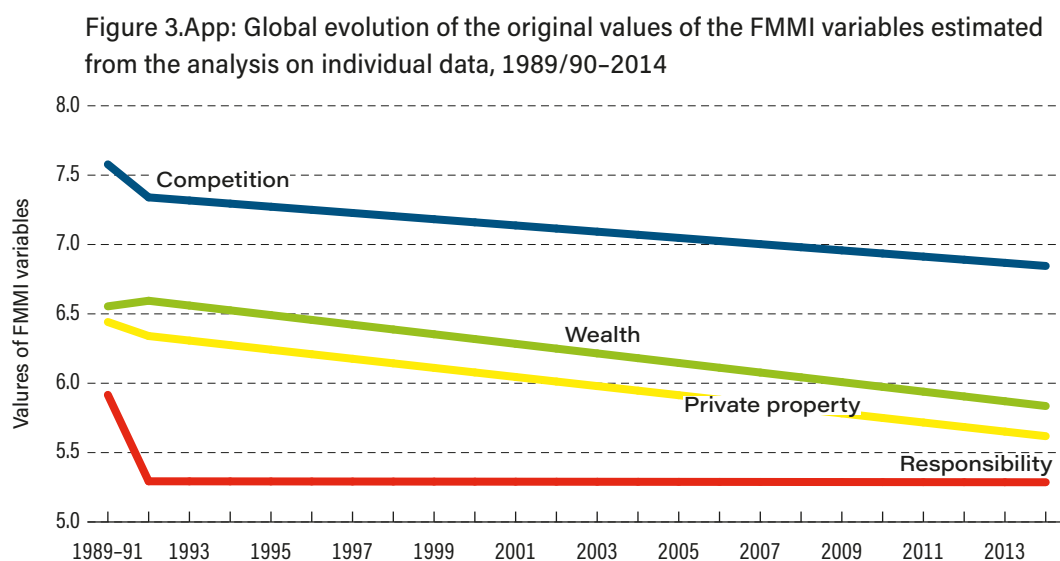
In addition to using country-level aggregates, individual-level data can also be used to confirm that the general opinion about the benefits of free markets has declined since about 1990. With such data, the question is whether the average individual has less market-friendly views in more recent years. What is different between a respondent in 1990 and a respondent in, say, 2014 is not only the year the survey was taken. The survey may have been taken in different countries, in which case the “decline” we might find would not reflect the change in time but the effect of the institutions and possibly the culture of the nations we would implicitly compare.

To avoid the problem of identifying the differences between countries as the effect of time, we considered only those countries that have at least two observations, with one of them in 1989, 1990, or 1991 and the other in at least one more recent year. For each country, this exercise allows us to estimate the effect of time on the four WVS variables in which we are interested. To arrive to one global estimate of the changes between the period 1989–1991 and each year possible, we calculated the cross-country averages of the in-country changes. With the use of these global estimates we can then see whether the global change between the period 1989–1991 and a more recent year is higher than that between the period 1989–1991 and a less recent year.

To put it more technically, the data we use to construct figure 3.App comes from a three-step process. As the first step we run regressions with the individual level responses given to the four questions we explained in section 1. These regressions are run country by country. Only countries were included that have at least two observations, with one of them in 1989, 1990, or 1991. The regressions included only year dummies as

explanatory variables. This gives us an estimate of the extent to which one dimension of free market mentality changed as compared to the beginning of the period in question. As a second step, we estimated the time trends in these fixed effects. The question is, then, whether the coefficient of a year dummy in a more recent year tends to be larger than is the coefficient of a time dummy for a less recent year. Third, we used these trends to finally arrive to estimated time paths of the four original variables of FMMI, taking the means for the period 1989–1991 as their initial value.

The global change is made visible in figure 3.App. To construct this graph, we took the average answers in the time period between 1989 and 1991 as the starting point and use the global changes (estimated in the way just explained) to get a global time series for each of the survey questions. Estimated in this way, the lines on figure 3.App reflect the evolution of the individual views (the scale runs from 1 to 10, which is the most market-friendly extreme). Respondents from those countries on which this graph is based tend to give more and more anti market answers to these questions as we move away from 1989–1991. In the case of competition, private property, and wealth the decline is clear and similar to what is seen in figure 3.1. However, there is little decline in the case of responsibility. This difference might be caused by the smaller number of countries we use in the case of figure 3.App. In addition, the difference might also lie in the differences in the method of calculation applied for figure 3.1 and figure 3.App. While figure 3.1 informs us about the changes in the distribution of the answers, figure 3.App is concerned with the change in the average answers. In any case this statistical approach tends to give a similar picture than a simpler and straightforward calculation.



Note: This analysis includes those countries that have an observation for either 1989, 1990, or 1991 and for at least another year. Responsibility: 40 countries, 141 observations; competition: 40 countries, 140 observations; private property: 40 countries, 128 observations; wealth: 32 countries, 74 observations.

Appendix C: Dependent and independent variables used in the regressions

| variable | Mean | | | | | | | |
|--|-------------|--------------|--------------------|----------------|---------------|-----------------|-------------|-----------------|
| | Full sample | Anglo-sphere | Central South Asia | Eastern Europe | Latin America | Northern Europe | Sino-sphere | Southern Europe |
| Individual free market mentality index: 1 = least friendly with market principles; 10 = most friendly with market principles. | | | | | | | | |
| IFMMI | 6.167 | 6.770 | 6.042 | 5.806 | 6.127 | 6.418 | 6.441 | 5.889 |
| What is the highest educational level that you have attained? | | | | | | | | |
| 1: Inadequately completed elementary education | | | | | | | | |
| 2: Completed (compulsory) elementary education | | | | | | | | |
| 3: Incomplete secondary school: technical/vocational type/(Compulsory) elementary education and basic vocational qualification | | | | | | | | |
| 4: Complete secondary school: technical/vocational type/Secondary, intermediate vocational qualification | | | | | | | | |
| 5: Incomplete secondary: university-preparatory type/Secondary, intermediate general qualification | | | | | | | | |
| 6: Complete secondary: university-preparatory type/Full secondary, maturity level certificate | | | | | | | | |
| 7: Some university without degree/Higher education — lower-level tertiary certificate | | | | | | | | |
| 8: University with degree/Higher education — upper-level tertiary certificate | | | | | | | | |
| education | 4.864 | 5.529 | 5.667 | 5.051 | 4.183 | 4.925 | 5.124 | 4.160 |
| On this card is a scale of incomes on which 1 indicates the "lowest income decile" and 10 the "highest income decile" in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in. 1: lower step; 2: second step; 3: third step; 4: fourth step; 5: fifth step; 6: sixth step; 7: seventh step; 8: eighth step; 9: ninth step; 10: tenth step; 11: highest step. | | | | | | | | |
| income | 4.739 | 5.936 | 3.610 | 4.680 | 4.170 | 5.193 | 4.672 | 4.239 |
| Can you tell me your year of birth, please? | | | | | | | | |
| born 1960–1980 | 0.441 | 0.375 | 0.483 | 0.401 | 0.430 | 0.385 | 0.434 | 0.403 |
| born after 1980 | 0.077 | 0.049 | 0.036 | 0.062 | 0.074 | 0.046 | 0.071 | 0.020 |
| Independently of whether you attend religious services or not, would you say you are: (1) a religious person; (2) not a religious person; or a (3) convinced atheist. atheist = 1 if the answer is (3) and 0 if it is (1) or (2). | | | | | | | | |
| atheist | 0.044 | 0.057 | 0.022 | 0.038 | 0.036 | 0.103 | 0.088 | 0.041 |
| Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 = "no choice at all" and 10 = "a great deal of choice" to indicate how much freedom of choice and control you feel you have over the way your life turns out. | | | | | | | | |
| control over life | 6.867 | 7.707 | 6.200 | 6.062 | 7.431 | 7.259 | 7.205 | 6.473 |
| In which profession/occupation does he/she work (or did work)? If more than one job, the main job? What is/was his/her job there? | | | | | | | | |
| manager = 1 if the answer is "employer/manager" | | | | | | | | |
| white collar = 1 if the answer is "middle level non-manual office worker" or "supervisory non manual -office worker" or "junior level non manual" or "non-manual office worker" | | | | | | | | |
| blue collar = 1 if the answer is "skilled manual" or "semi-skilled manual worker" or "unskilled manual" or "agricultural worker" | | | | | | | | |
| foreman = 1 if the answer is "foreman and supervisor" | | | | | | | | |
| other job = 1 if the answer is "farmer: has own farm" or "member of armed forces" or "other" or "never had a job" | | | | | | | | |
| manager | 0.088 | 0.151 | 0.067 | 0.053 | 0.082 | 0.095 | 0.114 | 0.077 |
| white collar | 0.333 | 0.451 | 0.292 | 0.326 | 0.267 | 0.479 | 0.311 | 0.355 |
| foreman | 0.023 | 0.040 | 0.022 | 0.029 | 0.013 | 0.032 | 0.015 | 0.016 |
| other job | 0.165 | 0.065 | 0.331 | 0.079 | 0.182 | 0.054 | 0.095 | 0.151 |
| no of obs. | 85,576 | 7,279 | 9,711 | 12,145 | 9,288 | 9,151 | 5,209 | 1,174 |

Notes: The numbers mean the sample averages of the variables we use in the statistical analysis to derive the results presented in Appendix G and Appendix H and analyzed further by figure 3.2 and figure 3.3. The scale and the wording of the questions are the original ones from the official questionnaire of wave 6 and wave 5 of the *World Values Survey* (Inglehart et al., 2014a, b) and from the official codebook of the longitudinal file (*World Values Survey 1981–2014*). The number of observations shows, therefore, the number of people whose survey responses were considered.

Appendix D: Estimates of FMMI for periods 1990–1998 and 2005–2014

| | 1990– 1998 | 2005– 2014 | % change | | 1990– 1998 | 2005– 2014 | % change |
|------------------------|---------------|---------------|-------------|---------------------------|---------------|---------------|-------------|
| Australia | 0.86 | 0.60 | 0.26 | Belarus | 0.54 | 0.51 | 0.03 |
| Canada | 0.80 | 0.62 | 0.18 | Bulgaria | 0.62 | 0.45 | 0.17 |
| Great Britain | 0.57 | 0.60 | -0.03 | Estonia | 0.68 | 0.41 | 0.27 |
| New Zealand | 0.81 | 0.69 | 0.12 | Hungary | 0.58 | 0.30 | 0.28 |
| United States | 0.85 | 0.70 | 0.15 | Moldova | 0.37 | 0.44 | -0.08 |
| Anglosphere | 0.78 | 0.64 | 0.14 | Poland | 0.62 | 0.36 | 0.26 |
| Finland | 0.84 | 0.55 | 0.29 | Romania | 0.66 | 0.55 | 0.12 |
| Germany | 0.79 | 0.52 | 0.26 | Russia | 0.52 | 0.24 | 0.28 |
| Netherlands | 0.75 | 0.50 | 0.26 | Slovenia | 0.63 | 0.47 | 0.16 |
| Norway | 0.80 | 0.62 | 0.18 | Ukraine | 0.51 | 0.28 | 0.23 |
| Sweden | 0.78 | 0.61 | 0.17 | Eastern Europe | 0.57 | 0.40 | 0.17 |
| Switzerland | 0.85 | 0.67 | 0.18 | Armenia | 0.45 | 0.41 | 0.04 |
| Northern Europe | 0.80 | 0.58 | 0.22 | Azerbaijan | 0.58 | 0.51 | 0.07 |
| China | 0.66 | 0.50 | 0.16 | India | 0.63 | 0.36 | 0.27 |
| Japan | 0.55 | 0.54 | 0.01 | Georgia | 0.60 | 0.50 | 0.09 |
| South Korea | 0.62 | 0.39 | 0.23 | Central/South Asia | 0.56 | 0.45 | 0.12 |
| Taiwan | 0.66 | 0.65 | 0.02 | Nigeria | 0.51 | 0.39 | 0.13 |
| Sinosphere | 0.62 | 0.52 | 0.10 | Philippines | 0.63 | 0.42 | 0.21 |
| France | 0.67 | 0.49 | 0.18 | South Africa | 0.73 | 0.39 | 0.34 |
| Italy | 0.61 | 0.49 | 0.12 | Turkey | 0.55 | 0.35 | 0.20 |
| Spain | 0.49 | 0.40 | 0.09 | Other | 0.61 | 0.39 | 0.22 |
| Southern Europe | 0.59 | 0.46 | 0.13 | | | | |
| Argentina | 0.71 | 0.32 | 0.39 | World | 0.64 | 0.48 | 0.25 |
| Brazil | 0.60 | 0.48 | 0.11 | | | | |
| Chile | 0.49 | 0.32 | 0.18 | | | | |
| Mexico | 0.61 | 0.50 | 0.11 | | | | |
| Peru | 0.68 | 0.51 | 0.17 | | | | |
| Uruguay | 0.45 | 0.42 | 0.02 | | | | |
| Latin America | 0.59 | 0.43 | 0.16 | | | | |

Appendix E: Evolution of the index in *Economic Freedom of the World*, 1980–2015

| | 1980 | 1990 | 2000 | 2015 | | 1980 | 1990 | 2000 | 2015 |
|------------------------|------------|------------|------------|------------|-----------------------|------------|------------|------------|------------|
| Australia | 6.9 | 7.7 | 8.2 | 8.0 | Argentina | 4.3 | 4.5 | 7.3 | 4.9 |
| Canada | 7.8 | 8.2 | 8.3 | 7.9 | Brazil | 3.9 | 4.2 | 6.0 | 5.8 |
| Great Britain | 6.7 | 8.2 | 8.5 | 8.1 | Chile | 5.1 | 6.6 | 7.4 | 7.8 |
| New Zealand | 6.4 | 7.9 | 8.6 | 8.5 | Mexico | 5.2 | 6.3 | 6.6 | 7.0 |
| United States | 8.1 | 8.5 | 8.6 | 7.9 | Peru | 3.6 | 3.9 | 7.5 | 7.4 |
| Anglosphere | 7.2 | 8.1 | 8.4 | 8.1 | Uruguay | 6.3 | 6.6 | 7.1 | 7.2 |
| Finland | 6.5 | 7.0 | 8.0 | 7.8 | Latin America | 4.7 | 5.3 | 7.0 | 6.7 |
| Germany | 7.2 | 7.6 | 7.8 | 7.7 | Bulgaria | | 4.2 | 5.6 | 7.4 |
| Netherlands | 7.3 | 7.6 | 8.0 | 7.7 | Hungary | 4.1 | 4.9 | 7.0 | 7.3 |
| Norway | 5.7 | 7.0 | 7.4 | 7.7 | Poland | | 3.5 | 6.6 | 7.3 |
| Sweden | 5.7 | 7.0 | 7.7 | 7.7 | Romania | | 5.0 | 5.5 | 7.7 |
| Switzerland | 7.6 | 8.2 | 8.7 | 8.4 | Eastern Europe | | 4.4 | 6.1 | 7.4 |
| Northern Europe | 6.7 | 7.4 | 7.9 | 7.8 | India | 5.0 | 4.8 | 6.2 | 6.6 |
| China | 3.6 | 4.1 | 5.8 | 6.4 | Nigeria | 4.6 | 4.7 | 5.0 | 5.7 |
| Japan | 7.4 | 7.9 | 7.9 | 7.5 | Philippines | 5.2 | 5.9 | 7.0 | 7.5 |
| South Korea | 5.4 | 6.4 | 6.9 | 7.5 | South Africa | 5.2 | 5.3 | 7.0 | 6.6 |
| Taiwan | 6.3 | 7.1 | 7.4 | 7.7 | Turkey | 3.6 | 4.7 | 5.8 | 6.8 |
| Sinosphere | 5.7 | 6.4 | 7.0 | 7.3 | Other | 4.7 | 5.1 | 6.2 | 6.7 |
| France | 6.1 | 7.0 | 7.5 | 7.3 | | | | | |
| Italy | 5.6 | 6.8 | 7.6 | 7.3 | World | 5.7 | 6.4 | 7.3 | 7.3 |
| Spain | 5.8 | 6.6 | 7.8 | 7.5 | | | | | |
| Southern Europe | 5.8 | 6.8 | 7.6 | 7.4 | | | | | |

Appendix F: Global evolution of the original values of the FMMI variables, 1990–2010

| | Responsibility | Competition | Private Property | Wealth | | Responsibility | Competition | Private Property | Wealth |
|------|----------------|-------------|------------------|--------|------|----------------|-------------|------------------|--------|
| 1990 | 57.9 | 83.2 | 63.3 | 67.4 | 2001 | 42.3 | 77.8 | 57.7 | 62.1 |
| 1991 | 54.7 | 82.8 | 62.8 | 66.8 | 2002 | 41.8 | 77.6 | 56.8 | 61.7 |
| 1992 | 51.5 | 82.3 | 63.3 | 66.3 | 2003 | 41.3 | 77.5 | 55.9 | 61.3 |
| 1993 | 48.3 | 81.8 | 63.3 | 65.7 | 2004 | 40.9 | 77.4 | 55.1 | 60.9 |
| 1994 | 45.1 | 81.3 | 63.3 | 65.1 | 2005 | 40.4 | 77.2 | 54.2 | 60.5 |
| 1995 | 41.9 | 80.8 | 63.3 | 64.5 | 2006 | 40.1 | 77.2 | 54.2 | 59.9 |
| 1996 | 40.9 | 80.5 | 63.3 | 64.3 | 2007 | 42.8 | 76.9 | 54.3 | 59.4 |
| 1997 | 41.5 | 79.7 | 59.6 | 63.6 | 2008 | 46.9 | 76.9 | 54.8 | 59.1 |
| 1998 | 43.2 | 79.1 | 59.3 | 63.2 | 2009 | 44.3 | 76.6 | 54.7 | 58.8 |
| 1999 | 44.9 | 78.4 | 58.9 | 62.8 | 2010 | 39.9 | 76.3 | 54.0 | 58.5 |
| 2000 | 42.8 | 77.9 | 58.4 | 62.4 | | | | | |

Appendix G: Determinants of individual free market mentality

| | Full sample | Anglosphere | Central South Asia | Eastern Europe |
|----------------------------|----------------------|----------------------|---------------------|----------------------|
| education | 0.046*** (0.008) | -0.026 (0.035) | 0.055** (0.016) | 0.066*** (0.008) |
| income | 0.058*** (0.007) | 0.053*** (0.007) | 0.016 (0.033) | 0.090*** (0.014) |
| born between 1960 and 1980 | -0.027 (0.034) | -0.256*** (0.043) | 0.134 (0.090) | 0.195*** (0.054) |
| born after 1980 | -0.068 (0.042) | -0.436*** (0.043) | 0.155* (0.064) | 0.191** (0.070) |
| atheist | -0.185*** (0.027) | -0.250*** (0.065) | -0.018 (0.103) | -0.207*** (0.050) |
| control over life | 0.072*** (0.009) | 0.140*** (0.017) | 0.052** (0.010) | 0.099*** (0.010) |
| manager | 0.382*** (0.035) | 0.495*** (0.049) | 0.301*** (0.041) | 0.459*** (0.065) |
| white collar | 0.103*** (0.019) | 0.082 (0.042) | 0.117* (0.049) | 0.105** (0.045) |
| foreman | 0.177*** (0.040) | 0.081 (0.037) | 0.364 (0.210) | 0.148** (0.056) |
| other job | 0.119*** (0.025) | 0.215** (0.053) | 0.090 (0.063) | 0.326*** (0.044) |
| no. of obs. | 85,576 | 7,279 | 9,711 | 12,145 |
| no. countries | 69 | 4 | 4 | 10 |
| R ² | 0.1328 | 0.1230 | 0.0830 | 0.1421 |

Note: The coefficients are estimated by a simple OLS regressions on the individual-level data. Dependent variable: individual free market mentality index (see the text for a definition). Year and country dummies are included in each case. Heteroscedasticity robust standard errors are in parentheses. * = statistically significant at the 10% level; ** = statistically significant at the 5% level; *** = statistically significant at the 1% level.

Appendix H: Determinants of individual free market mentality

| | Latin America | Northern Europe | Sinosphere | Southern Europe |
|----------------------------|----------------------|----------------------|---------------------|--------------------|
| education | 0.050*** (0.012) | 0.000 (0.016) | 0.055** (0.018) | 0.051 (0.010) |
| income | 0.059*** (0.018) | 0.059*** (0.012) | 0.057** (0.017) | 0.030** (0.002) |
| born between 1960 and 1980 | -0.186*** (0.038) | -0.063 (0.050) | -0.028 (0.120) | -0.106 (0.057) |
| born after 1980 | -0.397*** (0.052) | 0.053 (0.085) | -0.216 (0.223) | -0.115 (0.044) |
| atheist | -0.114** (0.034) | -0.205*** (0.043) | -0.023 (0.026) | -0.379 (0.329) |
| control over life | 0.060** (0.019) | 0.105*** (0.011) | 0.066*** (0.002) | 0.042 (0.066) |
| manager | 0.404*** (0.068) | 0.530*** (0.026) | 0.205 (0.122) | 0.997** (0.079) |
| white collar | 0.162*** (0.067) | 0.161*** (0.029) | 0.013 (0.118) | 0.194 (0.086) |
| foreman | 0.168 (0.270) | 0.244*** (0.067) | 0.268 (0.128) | 0.326 (0.160) |
| other job | 0.107 (0.045) | 0.163 (0.098) | 0.088 (0.109) | 0.237** (0.013) |
| no. of obs. | 9,288 | 9,151 | 5,209 | 1,174 |
| no. countries | 6 | 6 | 4 | 2 |
| R ² | 0.0953 | 0.1521 | 0.093 | 0.0673 |

Note: The coefficients are estimated by a simple OLS regressions on the individual-level data. Dependent variable: individual free market mentality index (see the text for a definition). Year and country dummies are included in each case. Heteroscedasticity robust standard errors are in parentheses. * = statistically significant at the 10% level; ** = statistically significant at the 5% level; *** = statistically significant at the 1% level.

References

- ámbito.com (2007). *Chávez Book Critic before Businessmen* (March 11). <<http://www.ambito.com/375830-chavez-book-critic-before-businessmen>>.
- ámbito.com (2010). *Stiglitz a Cristina: “Argentina es un ejemplo para salir de la crisis”* (December 23). <<http://www.ambito.com/560393-stiglitz-a-cristina-argentina-es-un-ejemplo-para-salir-de-la-crisis>>.
- Appel, H. (2004). *A New Capitalist Order: Privatization and Ideology in Russia and Eastern Europe*. University of Pittsburgh Press.
- Bjørnskov, Ch., and M. Paldam (2012). The Spirits of Capitalism and Socialism: A Cross-Country Study of Ideology. *Public Choice* 150, 3-4: 469–498.
- Buchanan, J. M. (2003) What Is Public Choice Theory? *Imprimus* 32 (March): 1–7.
- Buchanan, J. M. (2005). Afraid to Be Free: Dependency as Desideratum. *Public Choice* 124, 1-2: 19–31.
- Caplan, B. (2006). *The Myth of the Rational Voter: Why Democracies Choose Bad Policies*. Princeton University Press.
- Czeglédi, P., and C. Newland (2018). How is the Pro-Capitalist Mentality Globally Distributed? *Economic Affairs* 38, 2: 240–256.
- Edwards, S. (2008). Globalisation, Growth and Crises: The View from Latin America. *Australian Economic Review* 41, 2: 123–140.
- European Values Study [EVS] (2015). *European Values Study Longitudinal Data File 1981–2008 (EVS 1981–2008)*. GESIS Data Archive, Cologne. ZA4804 Data file Version 3.0.0, doi:10.4232/1.12253.
- Giuliano, P., and A. Spilimbergo (2014). Growing Up in a Recession. *Review of Economic Studies* 81: 787–817.
- Gonthier, F. (2015). The Rise of Interventionism in the European Union and its Social Foundations. An Analysis of Economic Attitudes between 1990 and 2008. (Translation by Toby Matthews of: *La montée et les bases sociales de l’interventionnisme dans l’Union européenne. Une analyse des attitudes économiques entre 1990 et 2008.*) *Revue française de sociologie* 56, 1: 7–46.
- Guiso, L., P. Sapienza, and L. Zingales (2003). People’s Opium? Religion and Economic Attitudes. *Journal of Monetary Economics* 50, 1: 225–282.
- Gwartney, J., R. Lawson, and J. Hall (2017). *Economic Freedom of the World: 2017 Annual Report*. Fraser Institute. <<https://www.fraserinstitute.org/studies/economic-freedom>>.

Harzing, A. W., M. Brown, and K. Köster (2012). Response Style Differences in Cross-National Research. *Management International Review* 52: 341–363.

Hirschman, A. (1982). *Shifting Involvements: Private Interest and Public Action*. Princeton University Press.

Hayo, B. (1997). Eastern European Public Opinion on Economic Issues: Privatization and Transformation. *American Journal of Economics and Sociology* 56, 1: 85–102.

Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.) (2014a). *World Values Survey: Round Six - Country-Pooled Datafile Version*: www.worldvaluessurvey.org/WVSDocumentationWV6.jsp. Madrid: JD Systems Institute.

Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.) (2014b). *World Values Survey: Round Five - Country-Pooled Datafile Version*: www.worldvaluessurvey.org/WVSDocumentationWV5.jsp. Madrid: JD Systems Institute.

Janicke, K. (2007). *Joseph Stiglitz, in Caracas, Praises Venezuela's Economic Policies* (October 11). <<https://venezuelanalysis.com/news/2719>>.

Kishimoto, S., E. Lobina, and O. Petitjean (2015). *Our Public Water Future: The Global Experience with Remunicipalisation*. Transnational Institute.

Kornai, J. (1992.) *The Socialist System: The Political Economy of Communism*. Clarendon Press.

Lukin, T. (2012). *Joseph Stiglitz: "Menor dependencia amplía la soberanía"* (August 15). <<http://www.cubadebate.cu/noticias/2012/08/15/joseph-stiglitz-menor-dependencia-amplia-la-soberania/#WmYHPLyWbIU>>.

Mercopress (2011). *Nobel Laureate Praises Argentina; Tells US and EU Spending Is the Way Out of Recession* (August 30). <<http://en.mercopress.com/2011/08/30/nobel-laureate-praises-argentina-tells-us-and-eu-spending-is-the-way-out-of-recession>>.

Nellis, J. (2012). *The International Experience with Privatization: Its Rapid Rise, Partial Fall and Uncertain Future*. SPP Research Papers 5, 3. The School of Public Policy, University of Calgary. <<https://ideas.repec.org/a/clh/resear/v5y2012i3.html>>.

Newland, C. (2018). Is Support for Capitalism Declining in the World? A Free-Market Mentality Index (FMMI) 1990–2012. *Independent Review* 22, 4: 1–15.

Pitlik, H., and M. Rode (2017). Individualistic Values, Institutional Trust, and Interventionist Attitudes. *Journal of Institutional Economics* 13, 3: 575–598.

Sewell, D. (2016). *The Second Time as Farce: The Crimes of Communism, Retro-Bolshevism and the Centenary of the 1917 Russian Revolution*. The New Culture Forum.

Shleifer, A. (2009). The Age of Milton Friedman. *Journal of Economic Literature* 47, 1: 123–135.

Victims of Communism Memorial Foundation and YouGov (2017). *Annual Report on US Attitudes towards Socialism* (October). <<https://www.victimsofcommunism.org/survey/>>.

Williamson, J. (1989). What Washington Means by Policy Reform. In J. Williamson (Ed.), *Latin American Readjustment: How Much Has Happened* (Institute for International Economics): 7–20.

Windolf, P. (1998). Privatization and Elite Reproduction in Eastern Europe. *European Journal of Sociology / Archives Européennes de Sociologie* 39, 2: 335–376.

World Bank (2016). *Doing Business 2017. Equal Opportunity for All*. <<http://www.doingbusiness.org/reports/global-reports/doing-business-2017>>.

World Trade Organization [WTO] (2001). *International Trade Statistics 2001*. Geneva.

World Values Survey Association [WVSA] (1981–2014). *World Values Survey 1981–2014 Longitudinal Aggregate v.20150418*. Aggregate File Producer: JDSystems, Madrid SPAIN. <<http://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>>.