

# Chapter 3 Economic Freedom as a Driver of Trust and Tolerance

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## Introduction

Few phenomena are as intensely debated as the market economy, which has been the case for centuries.<sup>1</sup> One debate concerns whether a system relying on markets is able to generate economic development (or, rather, if such a system is better able to do so than economic systems that rely on central planning). That debate has, on the whole, been settled—it is by now clear that Adam Smith’s early prediction that the market economy is uniquely capable of creating wealth in nations was and is correct (Acemoglu, Johnson, and Robinson, 2005; Bennett, Faria, Gwartney, and Morales, 2017; Berggren, 2003; Bergh and Karlsson, 2010; Bjørnskov and Foss, 2012; Connors, Gwartney, and Montesinos, 2020; de Haan, Lundström, and Sturm, 2006; Gwartney, 2009; Hall and Lawson, 2014; Hall, Sobel, and Crowley, 2010; North, 1990; Rode and Coll, 2012).<sup>2</sup>

A second debate concerns the distribution of resources. Even if market-economic systems are better at generating material resources than other systems, they may turn out to be characterized by inequality, for example, of income and wealth. If some people are better able to take advantage of the opportunities offered by a market order, they will be able to earn and accumulate more resources than other people—a charge not least launched by Marx in his critique

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- 1 By the “market economy”, we mean an economic system within the rule of law building on private property and the use of both domestic and international markets to satisfy people’s wants.
  - 2 This does not mean that there are not unsettled issues about what kinds of policies, within the framework of a market economy, are best able to stimulate growth. This is not least the case with regard to the size and character of the welfare state (see, *e.g.*, Bergh, 2019) but also, for example, with regard to the efficacy of competition policy (Möschel, 2001).

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of the “capitalist mode of production”, which, according to his analysis, entails grave exploitation of the proletariat by the capitalist class (Foley and Duménil, 2008). More recently, Piketty (2014, 2020) has gone to great lengths to investigate the extent of and reasons for inequality around the world. However, whether elements of the market economy increase or decrease within-country inequality is a contested issue. The literature investigating this particular question has thus far produced mixed results, as illustrated for example, by two of our own studies (Berggren, 1999; Bergh and Nilsson, 2010) reaching somewhat different conclusions. Bennett and Nikolaev (2017) review this literature and conclude that different results emerge depending on the choice of country sample, time period, and the inequality measure used.

Setting aside these two debates—about whether the market economy produces wealth and inequality—the purpose of this chapter is to present our research on how the market economy affects *cultural* traits, in particular trust, tolerance, and antisemitism. This topic relates to a third debate about the consequences of markets. It is not uncommon to associate free markets with characteristics that bring about “immoral” or culturally adverse behavior (cf. Storr and Choi, 2019). For example, Hirschman (1982) outlines arguments to the effect that there is a risk for market-based economies to entail individualism and greed, which could erode civic assets such as social trust that foster the development and sustainability of public goods. Again, Marx makes a central appearance: “[I]n the Communist Manifesto and other early writings, Marx and Engels make much of the way in which capitalism corrodes all traditional values and institutions such as love, family, and patriotism. Everything was passing into commerce, all social bonds were dissolved through money” (Hirschman, 1982: 1467). This tendency for a market-oriented system to “dissolve all social bonds” would even, averred Marx, be a central factor behind the demise of such a system—a mechanism explaining its pending self-destruction.

In a similar vein, Bowles (1988) points out that economists generally assume, following Hume, that preferences are exogenous to institutions. This assumption has a methodological rationale, but it may nevertheless be incorrect. Indeed, he argues that there are good reasons to think that economic institutions “affect preferences through their direct influences on situational construal, forms of reward, the evolution of norms, and task related learning as well as their indirect effects on the process of cultural transmission itself” (1988: 102). To take one example by Bowles, “economic institutions influence the structure of social interactions and thus affect the evolution of norms by altering the returns to relationship-specific investments such as reputation-building, affecting the kinds of sanctions that may be applied in interactions, and changing the likelihood of interaction for different types of people” (1988: 77).

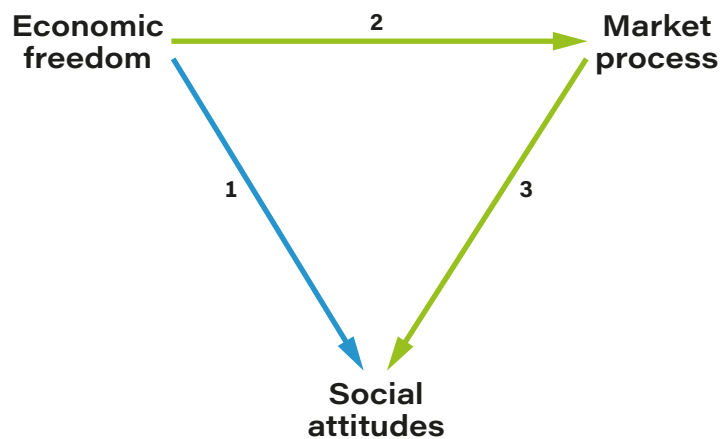
This brings us to our research. We agree with the premise that economic (and legal) institutions have the capacity to influence both preferences and beliefs, and thus that they have cultural consequences. However, we are less convinced than Marx and others that these consequences are detrimental for society. In the following, we will present a theoretical outline of how we perceive market-economic systems to affect cultural outcomes of a kind we refer to as social attitudes. We will stress two channels: one direct (from institutions to attitudes) and one indirect (from the market process enabled by institutions to attitudes). We then proceed to introduce the results of empirical research into how economic freedom (primarily

measured by the index presented in *Economic Freedom of the World*) relates to social trust, tolerance, and antisemitism.<sup>3</sup> In brief summary, our results point to a capacity for economic freedom to generate social trust and tolerance, and to a more complex relationship to antisemitism.<sup>4</sup> What seems clear is that studies of the determinants of the cultural fabric of society need to take economic and legal institutions into account, and to do so in an open-minded way, not least against the background of pronouncements from Marx and others about the culturally harmful influence of the market economy.<sup>5</sup>

## Theoretical framework

Our basic theoretical framework, linking economic freedom to social attitudes, is depicted in figure 3.1. By economic freedom we mean the set of policies and institutions that undergird a market economy—in essence, a small government; a high-quality legal system (protecting, among other things, private property); a stable and anti-inflationary monetary policy; openness for goods, services, and capital; and easy regulation of credit, business, and labor. These are the areas of the index presented in *Economic Freedom of the World* (EFW index). The social attitudes we have in mind and have studied empirically are social trust (trust in

Figure 3.1: Economic freedom and social attitudes



3 Other cultural variables have been related to economic freedom as well: subjective well-being (Gehring, 2013; Graafland, 2020; Knoll, Pitlik, and Rode, 2013; Nikolaev and Bennett, 2017; Rode, 2013); materialism (Teague, Storr, and Fike, 2020); gender equality (Stroup, 2007; Zweimüller, Winter-Ebmer, and Weichselbaumer, 2008); perceived life control (Pitlik and Rode, 2016); violations of human rights (de Soysa and Vadlammanati, 2013; Dreher, Gassebner, and Siemers, 2012); and social conflict (de Soysa and Fjelde, 2010; Steinberg and Saidemann, 2008). For a general survey of studies using economic freedom as an explanatory variable in empirical analysis up until 2014, see Hall and Lawson, 2014.

4 Where appropriate, we will include references to related research by others.

5 It bears noting that, if cultural variables like tolerance and trust are affected by economic freedom, and if the cultural variables affect economic growth (Berggren and Elinder, 2012; Bjørnskov, 2018), they may constitute important mechanisms that explain why economic freedom generates economic growth (Mathers and Williamson, 2011). Still, Williamson and Mathers (2011) find that economic freedom and culture have independent influences on growth.

people in general, in people one does not know), tolerance (an open and accepting attitude towards people who are different from oneself), and antisemitism (a dislike of Jews for being Jews).<sup>6</sup>

### The first mechanism

The first mechanism (arrow 1) linking economic freedom and social attitudes involves a direct influence of legal institutions (a key element of economic freedom). In a setting where people perceive the legal system to be fair, general (or universal), and effective, this directly shapes their attitudes towards other people, most of whom they know little about. Why so? Rothstein (2000) explains how the rule of law can generate one important attitude, social trust:

In a civilized society, institutions of law and order have one particularly important task: to detect and punish people who are “traitors”, that is, those who break contracts, steal, murder and do other such non-cooperative things and therefore should not be trusted. Thus, if you think (i.e., if your cognitive map is) that these particular institutions do what they are supposed to do in a fair and effective manner, then you also have reason to believe that the chance people have of getting away with such treacherous behavior is small. If so, you will believe that people will have very good reason to refrain from acting in a treacherous manner, and you will therefore believe that “most people can be trusted”. (Rothstein, 2000: 491–492)

In a similar vein, tolerance can be expected to emerge if legal institutions are such that people do not fear those who are not known. If there is a formal system of *de facto* protection against exploitation, opportunistic behavior, and harmful activities, there is less reason to harbor suspicious feelings towards those who are different (which is the case for many minorities), and they will be more easily tolerated. The logic applies to antisemitism (which can be regarded as a form of intolerance) as well. If one holds certain stereotypical beliefs about Jews, and some folk-economic beliefs about how the market economy works (perhaps especially that it is a zero-sum game), the stronger the rule of law, the less threatening Jews will be perceived to be, and the less antisemitic people will be.<sup>7</sup>

### The second mechanism

The second mechanism (arrows 2 and 3 in the figure) linking economic freedom and social attitudes is indirect and involves the market process. By the market process we mean the ongoing set of activities pursued by economic actors, be they entrepreneurs, producers, retailers, consumers, financiers, or something else. They innovate, produce, sell, consume, and invest in order to try to satisfy their

6 Figure 3.1 is not intended to show all factors shaping social attitudes; the fact that we focus on economic freedom here does not mean that other determinants do not exist. Nor does the figure provide details that are specific for each type of social attitude. One should view the figure as encapsulating a “least common denominator” approach, illustrating basic mechanisms at work, with additions and modifications in each case.

7 One indication of the capacity of laws to influence social attitudes is provided by Aksoy, Carpenter, De Haas, and Tran (2020). They find that legal recognition of same-sex marriage is associated with improvements in attitudes toward sexual minorities.

preferences in a system characterized by dynamism, voluntariness, competition, and exchange. This process is enabled and shaped by the policies and institutions in place, that is, by the degree of economic freedom. One can typically expect greater economic freedom to facilitate the market process, and hence more economic activities to occur (which generates higher economic value per capita in the end, roughly indicating more satisfied preferences).

How, then, can the market process affect social attitudes? We argue that it can do so by affecting incentives and by providing mechanisms that entail experiences that promote internalization of pro-social norms. Regarding incentives, economic actors have an interest in being perceived as trustworthy in order to engage in voluntary transactions with others. This will be beneficial in securing various partnerships and relationships in the market economy. Likewise, there are incentives for being tolerant in cases where a rejection of people for having a certain characteristic entails getting a workforce with lower productivity or buying goods and services with less preference satisfaction.

The market economy also provides mechanisms for signaling trustworthiness and tolerance, and for holding others responsible if they do not display these traits. For example, information can be obtained and verified through extended dealings/experience, reputation (verbal/online grading), brand names, franchises, test agencies, and so. Together, incentives and mechanisms can induce “good” behavior, which, if observed and experienced continually as a typical feature of economic exchange, can become internalized. This would constitute a beneficial cultural effect from economic freedom. On the other hand, as Bowles (1998) points out, there is a risk that materially oriented incentives weaken people’s intrinsic motivation, that is, to trust, be trustworthy, and tolerate. This theoretical ambiguity makes empirical analysis crucial.<sup>8</sup> Let us therefore now turn to a number of empirical studies to see if the theoretical predictions are consistent with the data.

## Economic freedom and trust

Social trust is among the most important cultural characteristics of a society. By social (or generalized) trust is meant widespread trust in people in general, in people one does not know or have particular information about.<sup>9</sup> It reveals

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- 8 As a precursor to our own findings (reported below), it bears noting that at least three studies indicate that culturally beneficial effects of market interaction exist. Henrich *et al.* (2001) find, after conducting behavioral experiments in 15 small-scale societies, that the higher the degree of market integration, the greater the level of cooperation in experimental games. Baldassarri (2020) suggests that the more Italians engage in market exchange, the more they are forced to interact with unknown others, in turn extending prosocial behavior to outgroup members; a nationwide “dropped-wallet” experiment confirms that, in areas where market exchange is dominant, return rates are high, and prosocial behavior encompasses both ingroup and outgroup members. Bjørnskov (2019) furthermore shows a strong relation between the civic honesty of this kind of experiment and social trust. Lastly, Teague, Storr, and Fike (2020) demonstrate, using cross-country data, that the more economic freedom, the less materialism there is.
- 9 This stands in contrast to particularized trust—trust in people one knows or knows something about—and institutional trust—trust in organizations (mostly political ones, such as the central bank, government and political parties). On the different concepts of trust, see Hooghe and Stolle, 2003.

something fundamental about how people regard others in their society: what they expect from the behavior of more or less random people. It thus likely also affects their own behavior: whether they feel comfortable interacting and engaging with strangers, especially when such interaction and engagement involves uncertainty and risk.

A large but still growing body of empirical research documents that social trust matters for a range of widely valued outcomes (see Uslander, 2018 for a general overview). To mention a few examples, social trust seems conducive to higher economic growth (Zak and Knack, 2001; Berggren, Elinder, and Jordahl, 2008; Algan and Cahuc, 2010; Bjørnskov, 2012), more delegation in companies (Gur and Bjørnskov, 2017), better health (Ljunge, 2014), more education (Bjørnskov, 2009; Papagapitos and Riley, 2009), better governance (Knack, 2002; Bjørnskov, 2010), higher participation in the stock market and peer-platform markets (Guiso, Sapienza, and Zingales, 2008; van der Crujisen, Doll, and van Hoenselaar, 2019), more independent central banks (Berggren, Daunfeldt, and Hellström, 2014), more liberalizing reforms (Heinemann and Tanz, 2008; Berggren and Bjørnskov, 2017; Leibrecht and Pitlik, 2015), and higher rates of subjective well-being (Helliwell, Huang, and Wang, 2018).

Consequently, a central question is what determines social trust. Berggren and Jordahl (2006) test the idea that the character of economic and legal institutions—that is, economic freedom—plays a role. Inspired by the theoretical perspective introduced above (figure 3.1), they advance the hypothesis that economic freedom has a positive effect on trust, through two mechanisms. A direct mechanism stems from the rule of law creating an expectation that those who behave antisocially will be punished and that such behavior will therefore be quite rare. This in turn makes people trust others. An indirect effect stems from participation in the market process that the market institutions enable: such participation makes people trust others because they experience that others are trustworthy in actual interactions, and from this a generalization takes place.<sup>10</sup>

As the measure of social trust, Berggren and Jordahl (2006) use the standard one from the World Values Survey: the share of the population replying “most people can be trusted” to the question, “In general, do you think most people can be trusted or can’t you be too careful?”. In their sample of some 50 countries, the highest social trust, with shares around 2/3, is found in the Scandinavian countries. Three countries have scores below 10%: the Philippines, Uganda, and Brazil. The US score is 36% (position 17).

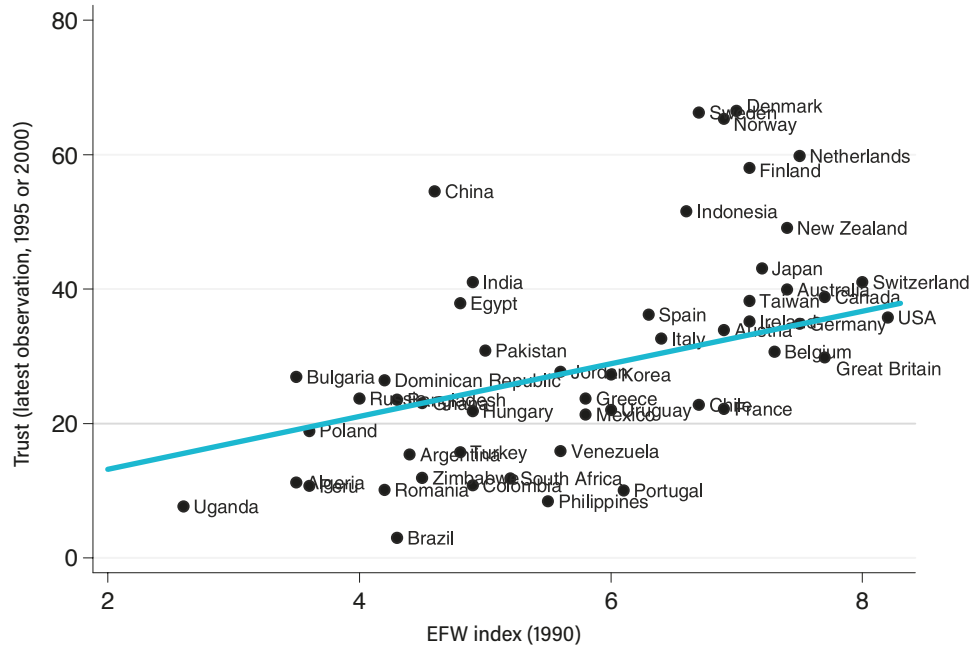
To get a feeling for the relationship, figure 3.2 shows a plot between the score on the EFW index for each country in the sample and the average level of social trust. As can be seen, the overall relationship is positive. However, there are other possible determinants of social trust, which is why regression analysis is called for. Can it be established that economic freedom is related to social trust in a statistically significant way when controlling for other factors and, if so, what elements of economic freedom matters?

When controlling for GDP per capita, the share having completed upper secondary school, income inequality, religious fractionalization, the share of the population that belongs to a hierarchical religion, and the share of people younger

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10 As mentioned above, this is not to say that market-oriented economics could not have negative effects on trust. The net effect is an empirical matter.

Figure 3.2: Economic freedom and social trust



than 35, economic freedom is indeed positively related to social trust in a statistically significant way, as are the following three constituent areas of the index: the legal system and security of property rights, sound money, and (sometimes) regulatory freedom (for details, see table 3.A1, p. 203). The most robust relationship is with the quality of the legal system, indicating that the direct theoretical mechanism is the most important for establishing trust. To get a feeling for the magnitude of the relationship, an increase in economic freedom of one unit (on the ten-unit scale) is related to an increase in social trust of about 5 percentage points, a quite sizable effect. To exemplify (using the version of the EFW index in Berggren and Jordahl, 2006), it would involve Chile increasing its economic-freedom level to the level of Canada or the United Kingdom, and the 5-percentage point increase in social trust would correspond to a 22% increase.<sup>11</sup>

It is always difficult, however, to establish causality in cross-country regressions. To try to ascertain it, an instrumental-variable approach is used, using legal origin (following La Porta, Lopez-de-Silanes, Schleifer, and Vishny, 1999) as instruments. The idea is to relate the rule of law to a variable—the type of historical legal system (Socialist, French, German, or Scandinavian)—that in itself is unrelated to social trust, and consistent estimates can be obtained if such a relationship can be established and if the instrument is not correlated with the error term. Reassuringly, doing so lends support for a causal effect from the rule of law to social trust.<sup>12</sup>

11 This type of country comparison should be interpreted with care, since the regression results reflect average associations.

12 Two other studies lend further support for the main result overall: that a certain kind of formal institution can generate social trust. Cassar, d'Adda, and Grosjean (2014) show experimentally, using market and trust games with exogenous variation in institutional quality, that significant increases in trust and trustworthiness followed exposure to better institutions. Bergh and Örhvall (2018) investigate how social trust among emigrants from a high-trust country

## Economic freedom and tolerance

In this section, we present three studies of the relationship between economic freedom and tolerance.

### Economic freedom fosters tolerance across countries

When considering the cultural fabric of a society, social harmony based on tolerance arguably constitutes another valuable characteristic, in addition to social trust. Corneo and Jeanne define tolerance as “respect for diversity” (2009: 691), and Florida defines it as “openness, inclusiveness, and diversity to all ethnicities, races, and walks of life” (2003: 10).<sup>13</sup>

Why is tolerance desirable? Perhaps most importantly, tolerance implies a better life for minorities of various kinds. In a tolerant society, people are assessed on their merits, not on the basis of having a certain characteristic unrelated to their qualities in social and economic life. Inglehart, Foa, Peterson, and Welzel (2008) and Berggren, Bjørnskov, and Nilsson (2017, 2018) also find that subjective well-being is higher in tolerant societies—not only for minorities of various kinds but also for the majority, since it is often the case that most people harbor no ill will towards others, and benefit from allowing those who are different to participate in all kinds of activities. Moreover, tolerance has economic consequences. In his study of historical conditions for economic progress, Mokyr finds that “innovation requires diversity and tolerance. (1990: 12)” Florida gives an account of why openness to people irrespective of group characteristics can entail economic dynamism: “Places that are open and possess *low entry barriers* for people gain creativity advantage from their ability to attract people from a wide range of backgrounds. All else equal, more open and diverse places are likely to attract greater numbers of talented and creative people—the sort of people who power innovation and growth” (2003: 11). This reasoning obtains support from empirical studies examining the relationship between tolerance and economic development, although not all types of tolerance associate with more economic development (Berggren and Elinder, 2012; Das, DiRienzo, and Tiemann, 2008; Florida, Mellander, and Stolarick, 2008; Gani, 2015; McGranahan and Wojan, 2007; Ottaviani and Peri, 2006; Qian, 2013).

To the extent that one cares about these outcomes, it becomes important to investigate what determines how tolerant people in a society are. That is the topic of Berggren and Nilsson (2013). They noted that previous studies on tolerance formation paid scant attention to the potential role of economic-legal institutions and therefore undertook a study relating the EFW index to three types of tolerance.<sup>14</sup> Their idea, building on the theoretical framework presented above, is that economic freedom is able to stimulate tolerance, both through the legal

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(Sweden) adapts to new circumstances and find, at least among those under the age of 30, an influence of institutional quality (measured by the second area of the index in *Economic Freedom of the World*, Legal System and Property Rights) on trust.

- 13 A more classical way of defining tolerance is the non-interference with beliefs, actions, or people that one dislikes or finds objectionable (Von Bergen and Bando, 2009) but, in our way of interpreting the concept, we also include people with a positive attitude.
- 14 Previous research in the social sciences on what makes a society more tolerant has found, for example, that GDP per capita and becoming a member of the EU are positively related to tolerance towards gay people (Corneo and Jeanne, 2009), while income inequality stands in a



institutions that enable the rule of law and through the market process. Market institutions create assurance in dealings with strangers, since the generality of the rule of law guarantees that legal rules apply equally to everyone and since the legal system ensures that, with high probability, violators will be punished, which deters opportunism. This in turn tends to make us less suspicious of others, even those who are different from us. These market institutions also enable the market process, the dynamic functioning of the market economy, which can stimulate tolerance by having people internalize a positive outlook on others through experiences of mutually rewarding interaction and exchange.<sup>15</sup> One can also think of a long-term influence from the market process on tolerance by its ability to transform society over time, from the small, closed group (that exerts pressure on people to conform to one way of life) to the Great Society, to use a Hayekian term, where people are not as inclined to control and dislike those who deviate from majority practices and characteristics. But, as noted in the theory section above, there could also be a negative effect from the market process, if markets bring about greed and a perception that certain groups benefit in an unfair way from market exchange; if markets are anonymous and therefore bring about deceptive behavior; if markets crowd out altruistic sentiments; or if markets result in high inequality (cf. Hirschman, 1982).

To see which effect dominates, the empirical investigation uses three measures of tolerance from the World Values Survey (various years) and the European Values Study (various years). The first, tolerance towards gay people, refers to the share of the population that does *not* pick “homosexuals” in answer to the question: “On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?”. The second measure, tolerance towards people of a different race, refers to the share of the population that does *not* pick “people of a different race” in answer to the same question. The third measure, the importance of teaching kids tolerance, is calculated using the share of the population answering “Important” to the quality “Tolerance” when being asked the question: “Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important?”.

We can first take a look at simple scatter plots showing the relationship between these tolerance measures and the EFW index (figure 3.3a–3.3c). The relationship is positive in all three cases, but for tolerance towards people of a different race, the curve is rather flat, which indicates relatively little variation. However, it may be that other factors than economic freedom shape tolerance. Therefore, the following control variables are used in a regression analysis: GDP per capita, education, the share of the working-age population that is young, the urban population share, family values, religious fractionalization, ethnic fractionalization, a dummy for Catholic religion, a dummy for Muslim religion, civil liberties, political rights, and a set of geographical dummies.

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negative relation to this type of tolerance (Anderson and Fetner, 2008). More recently, Bonick and Farfán-Vallespín (2016, 2018) document institutional origins of racism.

15 To this one can add that there may be incentives for acting as if tolerant in the market process, even though one has not internalized a social attitude of tolerance. This follows from Becker’s (1971) theory of discrimination and the idea that firms that do not hire people because they happen to belong to some group, even if they are more productive, will tend to be out-competed in the market process over time, which tends to discourage discrimination.

Figure 3.3a: Economic freedom and tolerance towards people of a different race

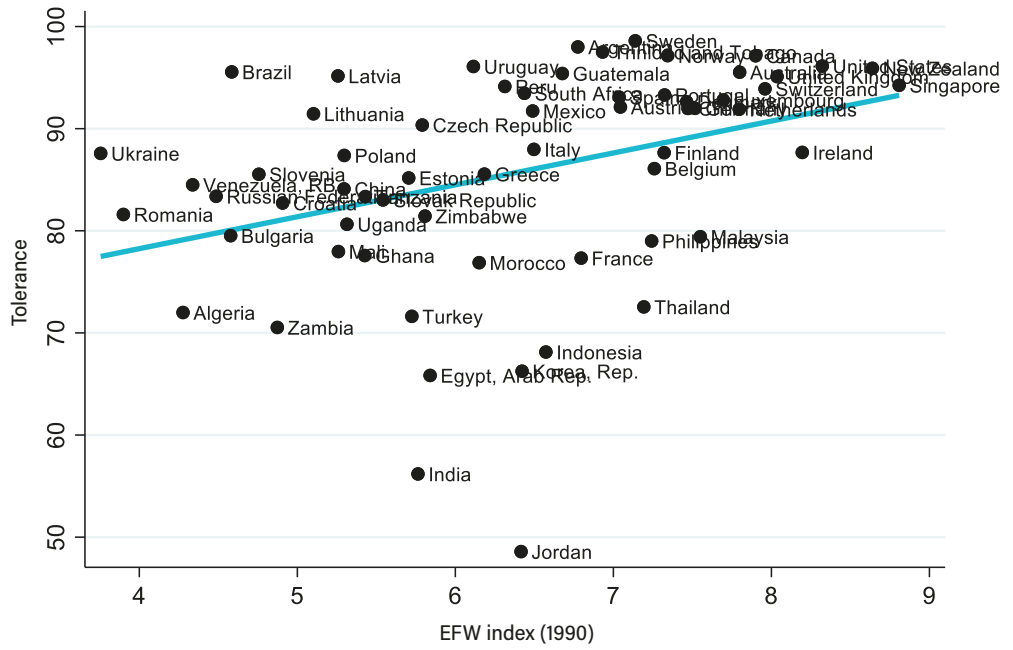


Figure 3.3b: Economic freedom and tolerance towards gay people

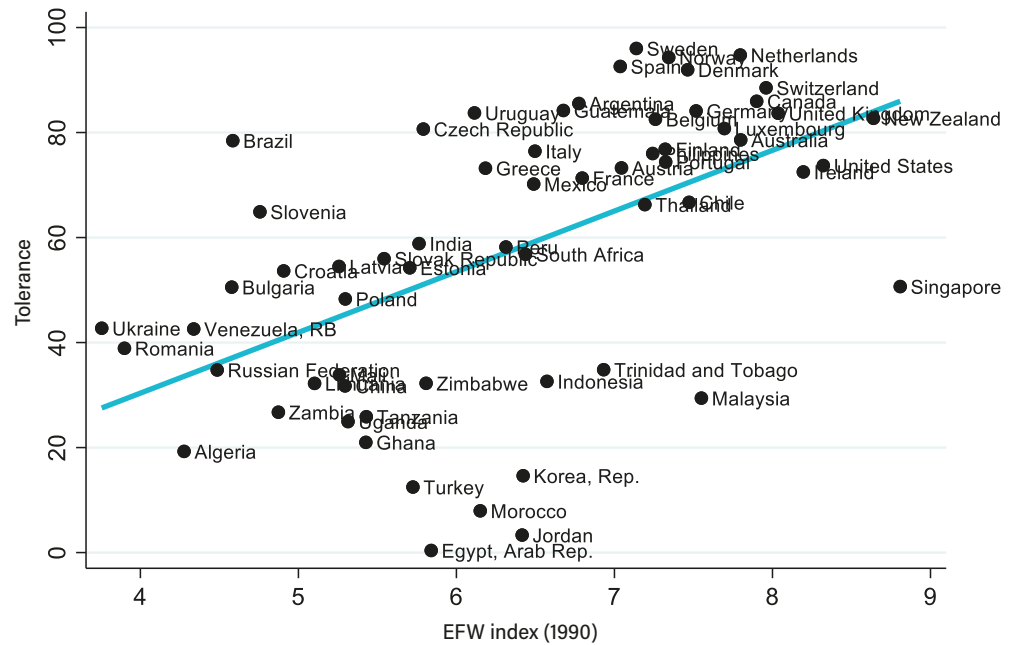
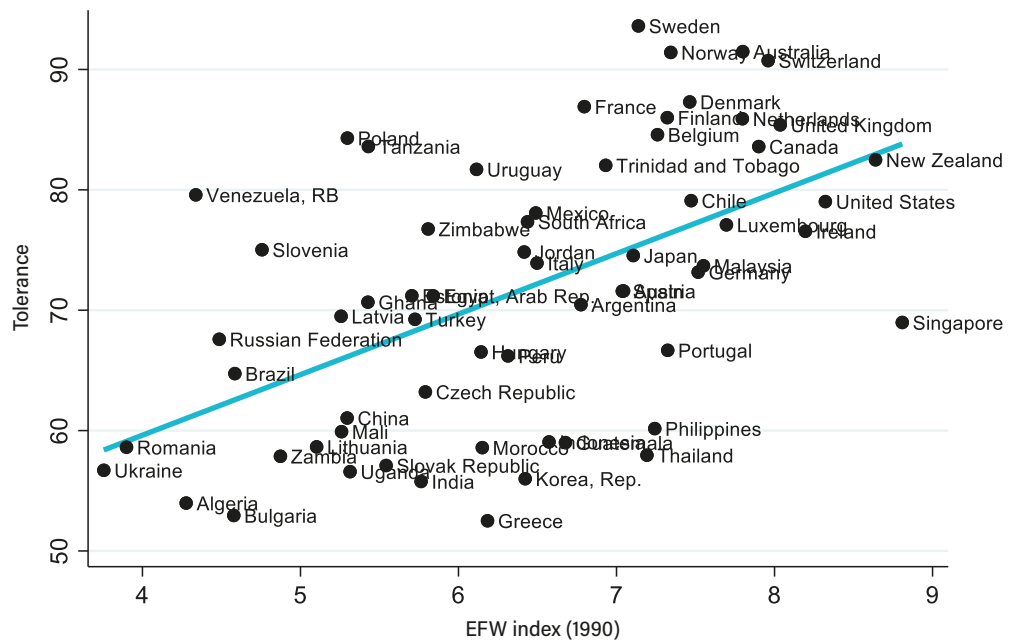


Figure 3.3c: Economic freedom and the share finding it important to teach children tolerance



The analysis, with a sample of almost 70 countries, is presented in table 3.A2 (p. 203) and reveals that economic freedom is positively related to all three tolerance measures in a statistically significant manner, but the strongest relationship, both in terms of significance and magnitude, is the one with tolerance towards gay people. To get a feeling for the size of the effect, an increase in economic freedom of one unit (on the ten-unit scale) entails an increase in tolerance towards gay people of about 7 percentage points. Looking at the five areas of the EFW index, they find that in particular two areas drive the results: the quality of the legal system and a responsible monetary-policy regime. An increase in the quality of the legal system by one unit is related to an increase in tolerance towards gay people of almost 6 percentage points and to an increase in tolerance towards people of a different race, as well as in the importance of teaching kids tolerance, of almost 3 percentage points. The magnitude of the effect from monetary policy is about half the size (but it is not statistically significant for the race measure). To exemplify (using the EFW index in Berggren and Nilsson, 2013), going from the level of quality of the legal system in the United States to that of Austria or Singapore would entail an increase in tolerance towards gay people of 6 percentage points, the equivalent of 29%.

In order to examine if the relationship could be a causal effect, they make use of two instrumental variables that relate to economic freedom but not to tolerance: central-bank independence and a dummy for experience with hyperinflation in the past. The results from the instrumental-variable analysis indicate that the relationship is causal.

To summarize this study, its purpose was to fill a void in the tolerance literature by investigating whether market-oriented institutions were able to partly explain the prevalence of tolerance towards gay people, tolerance towards people of a

different race, and the view that it is important to teach kids tolerance. The result suggests a positive and probably causal effect of economic freedom and two of its areas. This is another indication that economic freedom has the capacity to affect the cultural character of society, and in a way that most people arguably consider beneficial.<sup>16</sup>

### Market institutions bring tolerance, especially where there is social trust

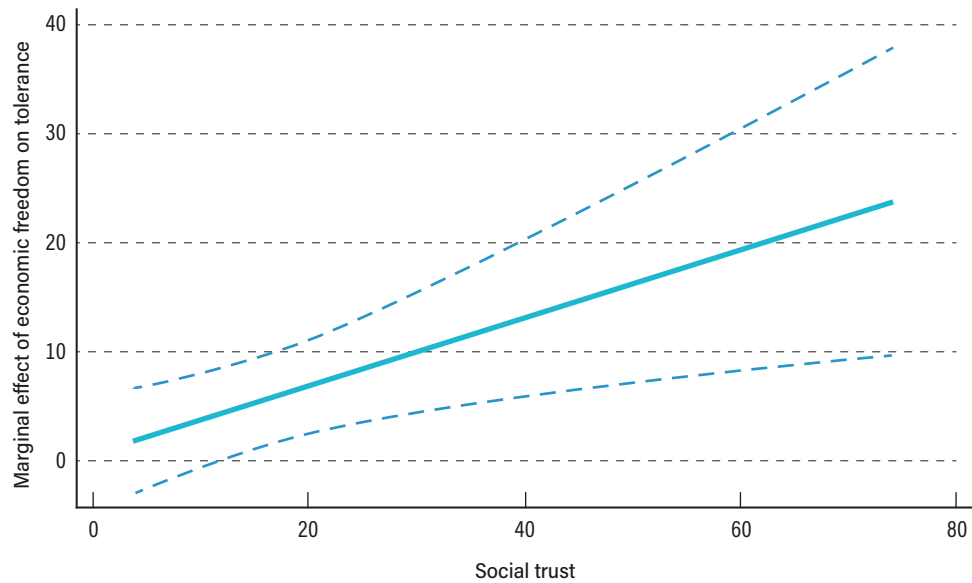
So far, we have established that economic freedom is able to boost both social trust and tolerance in society. Building on those results, Berggren and Nilsson (2014) explore how social trust influences the relationship between economic freedom and tolerance. The idea is that social trust can function as a catalyst: the more there is, the more positive the effect of economic freedom on tolerance. Why so? Referring to the theoretical framework outlined above, the rule of law can bring about more tolerance if there is trust, because this reinforces the expectation that the legal system will treat everyone equally, fairly, and in accordance with the rule of law. As for the market process, the tendency for tolerance to be internalized can be expected to be reinforced by trust, since it makes people less suspicious of others and more relaxed in their attitudes. Furthermore, a free economy is characterized by dynamism and development—and therefore by uncertainty. With trust, people are less prone to fear that they will lose out and that others benefit at their expense.

The empirical analysis applies to 68 countries and uses the indicator of tolerance towards gay people used also in Berggren and Nilsson (2013) and outlined above, the same indicator of social trust as before (from the World Values Survey) and the EFW index and its five areas, and the same control variables. Economic freedom is interacted with social trust in the regressions. What is found? The result can be seen in table 3.A3 (p. 204), but we recommend figure 3.4 in order to see how the EFW effect varies across levels of social trust.

First, social trust is positively related to tolerance, but so is economic freedom when entered in the same regression as social trust. Second, when social trust and economic freedom interact, it turns out that the hypothesis of social trust as a catalyst seems correct for the overall EFW index and, for most values of trust, for the areas measuring the quality of the legal system, monetary stability (especially), and regulatory freedom. We illustrate the interaction effect for the overall index in figure 3.4. The solid line shows the point estimate of a regression with all controls, and the dashed lines show the 95% confidence interval. When both dashed lines are on the same side of the zero line, it implies statistical significance for the relationship—and as can be seen, this applies here, except for very low levels of economic freedom. A move from a trust level of 20 (roughly South Africa) to 40

16 Two other studies lend general support to the findings here, while not using the index of *Economic Freedom of the World*. Berggren and Nilsson (2015) relate the KOF Globalization Index to a willingness to teach children tolerance and find a positive effect of social and economic (but not of political) globalization. This result suggests that openness for people, goods, services, capital, and culture makes people realize the value of tolerating those who are different in the world. Aksoy, Carpenter, De Haas, and Tran (2020) show that the introduction of same-sex marriage made people more positive towards gay people, indicating the power of formal institutions to shape social attitudes.

**Figure 3.4: How the effect of the EFW index on tolerance varies with social trust**



(roughly Ireland) experiences an increase in how economic freedom affects tolerance; in the former case, a one-unit increase in economic freedom is associated with about 8 percentage points higher tolerance, while in the latter case, the corresponding number is about 12 percentage points. To summarize, it seems to be the case that formal institutions can affect cultural outcomes like tolerance, and even more so in a cultural context where people trust each other.

### Economic freedom and tolerance in the United States

So far, the presented studies have looked at the cross-country pattern. In an extension of the literature, Berggren and Nilsson (2016) examine the relationship between economic freedom and tolerance in the United States. They use the index published in the Fraser Institute's *Economic Freedom of North America*, which measures the size of government, the tax burden, and the degree of labor-market regulation in each state, to see whether economic freedom in US states affects classical tolerance indicators as reported in the General Social Survey. The indicators ask whether people think that different groups should be allowed to make public speeches, keep books in the library, and teach college students. The study covers the years from 1982 to 2008, a period when tolerance increased quite substantially throughout the country, but with varying levels among states. The empirical analysis focuses on four tolerance measures: tolerance towards racists, gays, atheists, and communists. The results (in Table 3.A4, p. 205) show that more economic freedom is related to more tolerance towards gay people (marginally) and, with a higher degree of statistical significance, to tolerance towards atheists and communists. To get a feeling for the magnitude of the relationship, another unit of change in economic freedom (on the ten-unit scale) is related to about 7 percentage-points higher tolerance towards atheists. There is no such effect for tolerance towards racists, however, indicating a deep-seated reluctance to tolerate that group. A more fine-grained analysis of the different variables of the index in *Economic Freedom of North America* suggests that the driving factor behind

more tolerance towards atheists, communists, and gay people is reduced top marginal tax rates. This implies that more general taxation that does not single out particular income earners seems able to affect attitudes towards minorities positively.

### Tolerance among second-generation immigrants in Europe

The analyses presented above are all of a cross-country or cross-state kind. A recent study by Berggren, Ljunge, and Nilsson (2019) takes a different approach and uses individual-level data to examine the roots of tolerance for second-generation immigrants in Europe. They use the epidemiological method, which helps rule out reverse causality, relating the individual tolerance levels of these immigrants to 46 different characteristics of the countries from which their parents migrated (from all over the world). To this end, they use data on tolerance towards gay people from the European Social Survey 2004–2012, the indicator being the degree (on a four-point scale) to which they agree with the statement: “gay men and lesbians should be free to live their own life as they wish”. They also use information about their countries of origin with respect to, for example, economic, cultural, and institutional factors. As one of the institutional measures, they use the index from *Economic Freedom of the World* and its five areas. The findings (in Table 3.A5, p. 205) are in line with the results in Berggren and Nilsson (2013), to the effect that the second area of the EFW index, the quality of the legal system, relates positively to more tolerance. However, the size of the effect is quite small: one more unit, on the ten-unit scale, of quality of the legal system is associated with more tolerance towards gay people of about 0.07, which is a quite small effect, given the average value of 3.75 (but note that the model construction is such that the index values are from 1970 and are related to the present-day attitudes of individuals residing in another country). Other factors that appear to matter are the share of Muslims, two attitudes among people in the country of origin (valuing children being tolerant and respectful, and valuing children taking responsibility), and impartial institutions. The last one is conceptually closely related to the quality of the legal system. These findings thus point to an important role for both formal- and informal-institutional background factors in shaping tolerance.

### Economic freedom and antisemitism

One of the oldest forms of intolerance and hatred is directed against Jews for being Jews. It is still highly present in the world (Lipstadt, 2019), but its prevalence varies among countries.<sup>17</sup> Might economic freedom provide part of the explanation of this variation? That is explored in new, preliminary work by Berggren and Nilsson (2020). They argue that the ability of economic freedom to explain the level of antisemitism is especially plausible, since this kind of intolerance has a strong economic component. According to theory, antisemitism builds on stereotypes of Jews, many of which emanate from the historical role of Jews as money-lenders (Johnson and Koyama, 2019), and on folk-economic beliefs, especially the perception of the economy as a zero-sum game, which implies that, if some people

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17 According to the indicator ADL GLOBAL 100 (see description below), Scandinavian countries and North America have low levels of antisemitism, while high levels are reported in the countries of the Maghreb and parts of the Middle East. Also within Europe, there are sizable differences in people’s perceptions of Jews—the share of antisemites ranges from 4% in Sweden to 67% in Greece.

benefit financially, it comes at the expense of others. These two elements combine to produce antisemitism (which is not to say there are not other bases for antisemitism that are unrelated to economic factors, for example, religious antisemitism).

Against this background, and in line with the theoretical framework outlined above, Berggren and Nilsson hypothesize that antisemitism can be influenced by economic freedom in two primary ways. First, the rule of law affects the character of the stereotypes people hold about Jews: if they are positive or negative and the strength with which they are held. With a legal system of high quality, people do not feel threatened in the same way, or not at all, by a certain overgeneralized conception of a minority, since the system of rules in place and their enforcement ensures that economic life proceeds in an honest and mutually beneficial manner. This entails less antisemitism. Second, the market process, enabled by the institutions of economic freedom, leads to certain outcomes and, if these outcomes are perceived to be detrimental, this can lead people to find scapegoats. Given the historical stereotype of Jews as interested in acquiring and possessing wealth, coupled with the folk-economic belief of the economy being zero-sum in character, it can be expected that many of those who are skeptical of economic openness for capital, goods, and services and dislike its perceived outcomes can blame the Jews for it. Hence, the hypothesis is that openness will lead to more antisemitism.<sup>18</sup>

The preliminary empirical analysis is carried out using the Anti-Defamation League's indicator of antisemitism, ADL GLOBAL 100 (various years), which is the share of people in a country who choose at least six out of eleven negative statements about Jews as being "probably true". To take one example, a statement reads: "Jews have too much power in international financial markets". The main explanatory variable of interest is the EFW index and its five areas.<sup>19</sup> Up to 106 countries are studied.<sup>20</sup>

The results are compatible with the theoretically derived hypotheses. The quality of the legal system is negatively related to antisemitism, while openness is positively related to antisemitism. To get an idea of the size of the effect, an increase of openness by one unit on the ten-unit scale is associated with an increased share of antisemites of 5.5 percentage points, while a one-unit increase of the quality of the legal system is related to a lower share of antisemites of about 3.5 percentage points. To exemplify (using the version of the EFW index in Berggren and Nilsson, 2019), this would involve Japan increasing its openness level to the level of Ireland, and the 5.5 percentage-point increase in antisemitism corresponds to

18 The positive "experience effect" of the market process can be expected to be small with regard to Jews, since they constitute a small and often not identifiable minority in almost all societies.

19 The following control variables are used: log GDP per capita, average years of schooling, share of Christians, share of Muslims, religious diversity, ethnic diversity, a dummy if there is a relatively large Jewish population, dependency ratio, urban population share, political and civil rights, a set of geographical dummy variables (for the regions Eastern Europe, North Africa, Sub-Saharan Africa, and the Middle East), and a year dummy variable for 2015. Some further variables are used in a sensitivity analysis.

20 Previous research on determinants of antisemitism has primarily been conducted with individual-level data (*e.g.*, Bilewicz, Winiewski, Kofta, and Wójcik, 2013; Cohen, Harber, Jussim, and Bhasin, 2009; Jikeli, 2015), or on the national, regional, or municipal level within single countries (*e.g.*, Grosfeld, Orcan Sakalli, and Zhuravskaya, 2020; Voigtländer and Voigt, 2012), while cross-country studies are very sparse because of a lack of comparable data.

a 7% increase. For the quality of the legal system, a one-unit change would mean that Belgium improved its quality to the level of Denmark, in which case the 3.5 percentage-point reduction in antisemitism corresponds to a decrease of about 17%. The results hold quite well in an instrumental-variable analysis as well, suggesting a causal relationship; and an interaction analysis indicates, for example, that countries that make their economies more open can counteract the effect on antisemitism by strengthening the rule of law (at least if the initial rule of law is below six).

To sum up, the analysis of how economic freedom relates to antisemitism reinforces previous findings to the effect that the character of economic institutions and the market process are able to shape social attitudes and hence the cultural fabric of society. However, the results give reason for caution with respect to attitudes towards Jews: more openness risks making negative attitudes more widespread.

## Conclusion

Economic freedom has been shown to entail a number of material benefits. However, this chapter has shown that the character of economic-legal policies and institutions—how free they are—is also able to affect non-material or cultural outcomes that many people care about. In economically freer countries with a strong rule of law, people tend to be more trusting and tolerant towards gay people and people of another race, while the relationship to antisemitism is more complex. While a stronger rule of law is associated with less hostile attitudes towards Jews, a more open economy is related to more antisemitism. A policy implication of the research presented in this chapter is that policy makers should consider strengthening the institutions undergirding the market economy, especially the rule of law, if they wish to improve chances for both economic growth and a stronger presence of trust and tolerance. Also, they need to consider measures to counteract possible increases in antisemitism in conjunction with liberalization of trade and capital flows. For social scientists trying to discern what determines how trusting and tolerant societies are, it bears noting that economic freedom is an important factor to include in empirical studies.<sup>21</sup>

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21 Still, it bears noting that one area of the index in *Economic Freedom of the World*—the size of government—is almost never significantly related to social trust or tolerance.



Table 3.A1: Economic freedom and social trust

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EFW	4.989*** (1.820)						
EFW <sub>1</sub> Size of government		-0.424 (1.256)	0.667 (1.171)				
EFW <sub>2</sub> Legal structure and security of property rights		3.811** (1.483)		3.446** (1.532)			
EFW <sub>3</sub> Access to sound money		1.894** (0.839)			1.872** (0.852)		
EFW <sub>4</sub> Freedom to exchange with foreigners		-1.051 (1.458)				1.044 (1.469)	
EFW <sub>5</sub> Regulation of credit, labor, and business		3.046 (2.364)					4.033** (1.939)
GDP90	-0.070 (0.556)	-0.371 (0.572)	0.925** (0.445)	0.570 (0.461)	0.414 (0.490)	0.800 (0.502)	0.313 (0.539)
Schooling	0.135 (0.194)	0.211 (0.197)	0.089 (0.210)	0.166 (0.205)	0.009 (0.202)	0.074 (0.208)	0.133 (0.204)
Gini	-0.660*** (0.201)	-0.474* (0.239)	-0.664*** (0.236)	-0.636*** (0.207)	-0.306 (0.222)	-0.653*** (0.224)	-0.658*** (0.211)
Fractionalization	-19.737** (7.873)	-18.779** (7.720)	-21.741** (8.517)	-22.165*** (8.019)	-23.243*** (8.114)	-21.302** (8.461)	-21.677** (8.096)
Religion	-0.235*** (0.058)	-0.208*** (0.058)	-0.266*** (0.062)	-0.247*** (0.060)	-0.263*** (0.060)	-0.258*** (0.062)	-0.248*** (0.060)
Young	0.145 (0.242)	0.344 (0.293)	0.214 (0.263)	0.586** (0.290)	0.071 (0.256)	0.258 (0.259)	0.041 (0.268)
Adjusted R <sup>2</sup>	0.69	0.74	0.64	0.66	0.66	0.64	0.66
Observations	51	51	51	52	52	51	52

Note: The dependent variable is social trust; for each country the last non-missing of the 1995 and 2000 observations. EFW and EFW1-5 are values from 1990. The regressions include a constant term. Standard errors in parentheses. \* Significant at 10%, \*\* at 5%, and \*\*\* at 1%. For variable definitions and further details, see Berggren and Jordahl (2006).

Table 3.A2: Economic freedom and tolerance

	Tolerance for gay people	Tolerance for different races	Willingness to teach children tolerance
EFW	-7.286** (2.934)	2.416* (1.217)	2.816* (1.667)
EFW <sub>1</sub> Size of government	-0.149 (1.868)	0.461 (0.689)	-1.274 (1.015)
EFW <sub>2</sub> Legal structure and security of property rights	5.556** (2.367)	2.635** (0.990)	2.929** (1.177)
EFW <sub>3</sub> Access to sound money	3.195*** (1.037)	0.615 (0.487)	1.297** (0.569)
EFW <sub>4</sub> Freedom to exchange with foreigners	3.452 (3.352)	1.244 (1.405)	1.433 (1.585)
EFW <sub>5</sub> Regulation of credit, labor, and business	4.771 (3.667)	1.352 (1.572)	2.963* (1.710)

Note: Robust standard errors in parentheses. All estimated equations include the specified measure of economic freedom, a constant term and the same full set of control variables as before, including the country-group dummies. \* Significant at 10%; \*\* at 5%, and \*\*\* at 1%. For the full specification, variable definitions, and further details, see Berggren and Nilsson (2013).

Table 3.A3: Economic freedom, social trust, and tolerance towards gay people

	Overall EFW index			Area 1			Area 2		
	EFW	EFW	EFW	EFW <sub>1</sub>	EFW <sub>1</sub>	EFW <sub>1</sub>	EFW <sub>2</sub>	EFW <sub>2</sub>	EFW <sub>2</sub>
Economic freedom	7.286** (2.934)	5.991** (2.803)	0.570 (3.129)	-0.149 (1.868)	1.492 (1.913)	3.270 (3.198)	5.556** (2.367)	3.519 (2.433)	0.575 (3.114)
Trust		0.463*** (0.152)	-1.751* (0.968)		0.599*** (0.184)	0.904** (0.422)		0.410** (0.156)	-0.447 (0.736)
Economic freedom × trust			0.312** (0.133)			-0.061 (0.070)			0.114 (0.092)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.729	0.764	0.780	0.674	0.731	0.730	0.724	0.744	0.749
Observations	68	68	68	68	68	68	68	68	68

	Area 3			Area 4			Area 5		
	EFW <sub>3</sub>	EFW <sub>3</sub>	EFW <sub>3</sub>	EFW <sub>4</sub>	EFW <sub>4</sub>	EFW <sub>4</sub>	EFW <sub>5</sub>	EFW <sub>5</sub>	EFW <sub>5</sub>
Economic freedom	3.195*** (1.037)	2.552** (1.022)	0.382 (1.302)	3.452 (3.352)	3.103 (3.079)	-0.882 (4.777)	4.771 (3.667)	3.765 (3.433)	0.118 (3.792)
Trust		0.424** (0.169)	-0.659 (0.607)		0.564*** (0.169)	-1.028 (1.573)		0.509*** (0.150)	-0.680 (0.806)
Economic freedom × trust			0.124* (0.062)			0.206 (0.204)			0.182 (0.121)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.740	0.767	0.778	0.683	0.737	0.740	0.700	0.744	0.748
Observations	68	68	68	68	68	68	68	68	68

Note: The first column for each area of economic freedom shows baseline estimates. The second controls for social trust, while the third also includes an interaction term between social trust and the area of economic freedom of interest. All estimated equations include the specified measure of economic freedom, a constant term, a full set of control variables and regional dummy variables. \* Significant at 10%; \*\* at 5%, and \*\*\* at 1%. For the full specification, variable definitions, and further details, see Berggren and Nilsson (2014).

Table 3.A4: Economic freedom and tolerance in the United States

	$\Delta$ Tolerance racists	$\Delta$ Tolerance homosexuals	$\Delta$ Tolerance atheists	$\Delta$ Tolerance communists
$\Delta$ Economic freedom	0.041 (0.026)	0.048* (0.025)	0.067*** (0.024)	0.087*** (0.028)
Controls	Yes	Yes	Yes	Yes
Observations	101	101	101	101
Adjusted R <sup>2</sup>	0.463	0.551	0.567	0.531

Note:  $\Delta$  denotes “change in.” The regressions contain a full set of controls (as in Table 1, column 6, in Berggren and Nilsson, 2016). Robust standard errors in parentheses. Significant at 10%; \*\* at 5%, and \*\*\* at 1%. For the full specification, variable definitions, and further details, see Berggren and Nilsson (2016).

Table 3.A5: Economic freedom in the ancestral countries of second-generation immigrants in Europe and individual-level tolerance towards gay people

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Economic Freedom Index (EFW), ancestral country	0.057* (0.029)	0.035 (0.023)							
log of GDP per capita, ancestral country		0.044 (0.056)							-0.009 (0.048)
EFW <sub>1</sub> Size of government, ancestral country			0.022* (0.012)					0.035*** (0.013)	0.035 ** (0.013)
EFW <sub>2</sub> Legal structure and security of property rights, ancestral country				0.045** (0.019)				0.065*** (0.022)	0.067** (0.025)
EFW <sub>3</sub> Access to sound money , ancestral country					0.012 (0.008)			-0.021 (0.016)	-0.022 (0.018)
EFW <sub>4</sub> Freedom to exchange with foreigners, ancestral country						0.025 (0.015)		-0.000 (0.012)	0.001 (0.014)
EFW <sub>5</sub> Regulation of credit, labor, and business, ancestral country							0.028 (0.018)	-0.001 (0.018)	-0.000 (0.019)
Individual controls (exogenous)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-by-year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.131	0.131	0.129	0.132	0.129	0.130	0.129	0.132	0.132
Observations	5845	5845	5845	5845	5845	5845	5845	5845	5845

Note: The dependent variable is the individual second-generation immigrant's attitudes to the statement ‘Gays and lesbians free to live life as they wish’, ranging from 1 to 4. All specifications study second-generation immigrants and estimate the effect of factors in the parents’ country of birth. Individual controls include age, age squared and gender. Standard errors in parenthesis, which allow for clustering on the parents’ birth country. Significant at 10%; \*\* at 5%, and \*\*\* at 1%. For the full specification, variable definitions, and further details, see Berggren, Ljunge, and Nilsson (2019).

## References

- Acemoglu, D., S. Johnson, and J.A. Robinson (2005). Institutions as a Fundamental Cause of Long-Run Growth. In P. Aghion and S.N. Durlauf, eds., *Handbook of Economic Growth. Volume 1B*. (Elsevier): 385–396. <[https://doi.org/10.1016/S1574-0684\(05\)01006-3](https://doi.org/10.1016/S1574-0684(05)01006-3)>.
- ADL GLOBAL 100 (various years). Online Database. <<https://global100.adl.org/>>.
- Aksoy, C.G., C.S. Carpenter, R. De Haas, and K.D. Tran (2020). Do Laws Shape Attitudes? Evidence from Same-Sex Relationship Recognition Policies in Europe. *European Economic Review* 124 (May). <<https://doi.org/10.1016/j.euroecorev.2020.103399>>.
- Algan, Y., and P. Cahuc (2010). Inherited Trust and Growth. *American Economic Review* 100, 5: 1060–1092. <<https://doi.org/10.1257/aer.100.5.2060>>.
- Andersen, R., and T. Fetner (2008). Economic Inequality and Intolerance: Attitudes toward Homosexuality in 35 Democracies. *American Journal of Political Science* 52, 4: 942–958. <<https://doi.org/10.1111/j.1540-5907.2008.00352.x>>.
- Baldassarri, D. (2020). Market Integration Accounts for Local Variation in Generalized Altruism in a Nationwide Lost-Letter Experiment. *PNAS* 117, 6: 2858–2863. <<https://doi.org/10.1073/pnas.1819934117>>.
- Bennett, D.L., H.J. Faria, J.D. Gwartney, and D.R. Morales (2017). Economic Institutions and Comparative Economic Development: A Post-Colonial Perspective. *World Development* 96, August: 503–519. <<http://dx.doi.org/10.1016/j.worlddev.2017.03.032>>.
- Bennett, D.L., and B. Nikolaev (2017). On the Ambiguous Economic Freedom–Inequality Relationship. *Empirical Economics* 53, 2: 717–754. <<https://doi.org/10.1007/s00181-016-1131-3>>.
- Berggren, N. (1999). Economic Freedom and Equality: Friends or Foes? *Public Choice* 100, 3–4: 203–223. <<https://doi.org/10.1023/A:1018343912743>>.
- Berggren, N. (2003). The Benefits of Economic Freedom: A Survey. *Independent Review* 8, 2: 193–211.
- Berggren, N., and C. Bjørnskov (2017). The Market-Promoting and Market-Preserving Role of Social Trust in Reforms of Policies and Institutions. *Southern Economic Journal* 84, 1: 3–25. <<https://doi.org/10.1002/soej.12209>>.
- Berggren, N., C. Bjørnskov, and T. Nilsson (2017). What Aspects of Society Matter for the Quality of Life of a Minority? Global Evidence from the New Gay Happiness Index. *Social Indicators Research* 132, 3: 1163–1192. <<https://doi.org/10.1007/s11205-016-1340-3>>.
- Berggren, N., C. Bjørnskov, and T. Nilsson (2018). Do Equal Rights for a Minority Affect General Life Satisfaction? *Journal of Happiness Studies* 19, 5: 1465–1483. <<https://doi.org/10.1007/s10902-017-9886-6>>.
- Berggren, N., S.-O. Daunfeldt, and J. Hellström (2014). Social Trust and Central-Bank Independence. *European Journal of Political Economy* 34, June: 425–439. <<https://doi.org/10.1016/j.ejpoleco.2013.10.002>>.
- Berggren, N., and M. Elinder (2012). Is Tolerance Good or Bad for Growth? *Public Choice* 150, 1–2: 283–308. <<https://doi.org/10.1007/s11127-010-9702-x>>.
- Berggren, N., M. Elinder, and H. Jordahl (2008). Trust and Growth: A Shaky Relationship. *Empirical Economics* 35, 2: 251–274.

- Berggren, N., and H. Jordahl (2006). Free to Trust: Economic Freedom and Social Capital. *Kyklos* 59, 2: 141–169. <<https://doi.org/10.1111/1/j.1467-6435.2006.00324.x>>.
- Berggren, N., M. Ljunge, and T. Nilsson (2019). Roots of Tolerance among Second-Generation Immigrants. *Journal of Institutional Economics* 15, 6: 999–1016. <<https://doi.org/10.1017/S1744137419000316>>.
- Berggren, N., and T. Nilsson (2013). Does Economic Freedom Foster Tolerance? *Kyklos* 66, 2: 177–207. <<https://doi.org/10.1111/kykl.12017>>.
- Berggren, N., and T. Nilsson (2014). Market Institutions Bring Tolerance, Especially Where There Is Social Trust. *Applied Economics Letters* 21, 17: 1234–1237. <<https://doi.org/10.1080/13504851.2014.922666>>.
- Berggren, N., and T. Nilsson (2015). Globalization and the Transmission of Social Values: The Case of Tolerance. *Journal of Comparative Economics* 43, 2: 371–389. <<https://doi.org/10.1016/j.jce.2015.02.005>>.
- Berggren, N., and T. Nilsson (2016). Tolerance in the United States: Does Economic Freedom Transform Racial, Religious, Political and Sexual Attitudes? *European Journal of Political Economy* 45 (December): 53–70. <<https://doi.org/10.1016/j.ejpoleco.2016.06.001>>.
- Berggren, N., and T. Nilsson (2020). Economic Freedom and Antisemitism. Mimeo. Research Institute of Industrial Economics (IFN), Stockholm.
- Bergh, A. (2020). Hayekian Welfare States: Explaining the Coexistence of Economic Freedom and Big Government. *Journal of Institutional Economics* 16, 1: 1–12. <<https://doi.org/10.1017/S1744137419000432>>.
- Bergh, A. and M. Karlsson (2010). Government Size and Growth: Accounting for Economic Freedom and Globalization. *Public Choice* 142, 1–2: 195–213. <<https://doi.org/10.1007/s11127-009-9484-1>>.
- Bergh, A., and T. Nilsson (2010). Do Liberalization and Globalization Increase Income Inequality? *European Journal of Political Economy* 26, 4: 488–505. <<https://doi.org/10.1016/j.ejpoleco.2010.03.002>>.
- Bergh, A., and R. Öhrvall (2018). A Sticky Trait: Social Trust among Swedish Expatriates in Countries with Varying Institutional Quality. *Journal of Comparative Economics* 46, 4: 1146–1157. <<https://doi.org/10.1016/j.jce.2018.06.002>>.
- Bilewicz, M., M. Winiewski, M. Kofta, and A. Wójcik (2013). Harmful Ideas: The Structure and Consequences of Antisemitic Beliefs in Poland. *Political Psychology* 34, 6: 821–839. <<https://doi.org/10.1111/pops.12024>>.
- Bjørnskov, C. (2009). Social Trust and the Growth of Schooling. *Economics of Education Review* 28, 2: 249–257. <<https://doi.org/10.1016/j.econedurev.2006.09.013>>.
- Bjørnskov, C. (2010). How Does Social Trust Lead to Better Governance? An Attempt to Separate Electoral and Bureaucratic Mechanisms. *Public Choice* 144, 1–2: 323–346. <<https://doi.org/10.1007/s11127-009-9522-z>>.
- Bjørnskov, C. (2012). How Does Social Trust Affect Economic Growth? *Southern Economic Journal* 78, 4: 1346–1348. <<https://doi.org/10.4284/0038-4038-78.4.1346>>.
- Bjørnskov, C. (2018). Social Trust and Economic Growth. In E.M. Uslander, ed., *The Oxford Handbook of Social and Political Trust* (Oxford University Press): 535–558. <<https://doi.org/10.1093/oxfordhb/9780190274801.013.24>>.
- Bjørnskov, C. (2019). Civic Honesty and Cultures of Trust. Department of Economics, Aarhus University. <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3434957](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3434957)>.

- Bjørnskov, C., and N.J. Foss (2012). How Institutions of Liberty Promote Entrepreneurship and Growth. In J. Gwartney, R. Lawson, and J. Hall, *Economic Freedom of the World: 2012 Annual Report* (Fraser Institute): 247–270. <<https://www.fraserinstitute.org/research/economic-freedom-of-the-world-2012-annual-report>>.
- Bonick, M., and A. Farfán-Vallespín (2016). On the Origin and Consequences of Racism. Working Paper. Department of Economic Policy and Constitutional Economic Theory, University of Freiburg.
- Bonick, M., and A. Farfán-Vallespín (2018). The Reversal of Fortune, Extractive Institutions and the Historical Roots of Racism. Working Paper. Department of Economic Policy and Constitutional Economic Theory, University of Freiburg.
- Bowles, S. (1998). Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions. *Journal of Economic Literature* 36, 1: 75–111.
- Cassar, A., G. d’Adda, and P. Grosjean (2014). Institutional Quality, Culture, and Norms of Cooperation: Evidence from Behavioral Field Experiments. *Journal of Law and Economics* 57, 3: 821–863. <<https://doi.org/10.1086/678331>>.
- Cohen, F., K.D. Harber, L. Jussim, and G. Bhasin (2009). Modern Antisemitism and Anti-Israeli Attitudes. *Journal of Personality and Social Psychology* 97, 2: 290–306. <<https://psycnet.apa.org/doi/10.1037/a0015338>>.
- Connors, J., J.D. Gwartney, and H.M. Montesinos (2020). The Transportation-Communication Revolution: 50 Years of Dramatic Change in Economic Development. *Cato Journal* 40, 1: 153–198. <<https://doi.org/10.36009/CJ.40.1.9>>.
- Corneo, G., and O. Jeanne (2009). A Theory of Tolerance. *Journal of Public Economics* 93, 5–6: 691–702. <<https://doi.org/10.1016/j.jpubeco.2009.02.005>>.
- Das, J., C. DiRienzo, and T. Tiemann (2008). A Global Tolerance Index. *Competitiveness Review* 18, 3: 192–205. <<https://doi.org/10.1108/10595420810905975>>.
- de Haan, J., S. Lundström, and J.-E. Sturm (2006). Market-Oriented Institutions and Policies and Economic Growth: A Critical Survey. *Journal of Economic Surveys* 20, 2: 157–191. <<https://doi.org/10.1111/j.0950-0804.2006.00278.x>>.
- de Soysa, I., and H. Fjelde (2010). Is the Hidden Hand an Iron Fist? Capitalism and Civil Peace, 1970–2005. *Journal of Peace Research* 47, 3: 287–298. <<https://doi.org/10.1177%2F0022343310362167>>.
- de Soysa, I., and K.C. Vadlammanati (2013). Do Pro-Market Economic Reforms Drive Human Rights Violations? An Empirical Assessment, 1981–2006. *Public Choice* 155, 1–2: 163–187. <<https://doi.org/10.1007/s11127-011-9847-2>>.
- Dreher, A., M. Gassebner, and L.-H.R. Siemers (2012). Globalization, Economic Freedom, and Human Rights. *Journal of Conflict Resolution* 56, 3: 516–546. <<https://doi.org/10.1177%2F0022002711420962>>.
- European Social Survey (various years). Online Database. <<http://www.europeansocialsurvey.org>>.
- European Values Study (various years). Online Database. <<http://www.europeanvaluesstudy.eu>>.
- Florida, R. (2003). Cities and the Creative Class. *City & Community* 2, 1: 3–19. <<https://doi.org/10.1111/1540-6040.00034>>.
- Florida, R., C. Mellander, and K. Stolarick (2008). Inside the Black Box of Regional Development—Human Capital, the Creative Class, and Tolerance. *Journal of Economic Geography* 8, 5: 615–649. <<https://doi.org/10.1093/jeg/lbn023>>.

- Foley, D., and G. Duménil (2008). Marx's Analysis of Capitalist Production. *The New Palgrave Dictionary of Economics*, 2<sup>nd</sup> edition. Palgrave Macmillan. <[https://doi.org/10.1057/978-1-349-95121-5\\_2164-1](https://doi.org/10.1057/978-1-349-95121-5_2164-1)>.
- Gani, A. (2015). Measures of Tolerance and Economic Prosperity. *International Journal of Social Economics* 43, 1: 71–85. <<https://doi.org/10.1108/IJSE-04-2014-0077>>.
- Gehring, K. (2013). Who Benefits from Economic Freedom? Unraveling the Effect of Economic Freedom on Subjective Well-Being. *World Development* 50 (October):74–90. <<https://doi.org/10.1016/j.worlddev.2013.05.003>>.
- Graafland, J. (2020). When Does Economic Freedom Promote Well-Being? On the Moderating Role of Long-Term Orientation. *Social Indicators Research*, forthcoming. <<https://doi.org/10.1007/s11205-019-02230-9>>.
- Grosfeld, I., S. Orcan Sakalli, and E. Zhuravskaya (2020). Middleman Minorities and Ethnic Violence: Anti-Jewish Pogroms in the Russian Empire. *Review of Economic Studies* 87, 1: 289–342. <<https://doi.org/10.1093/restud/rdz001>>.
- Guiso, L., P. Sapienza, and L. Zingales (2008). Trusting the Stock Market. *Journal of Finance* 63, 6: 2557–2600. <<https://doi.org/10.1111/j.1540-6261.2008.01408.x>>.
- Gur, N., and C. Bjørnskov (2017). Trust and Delegation: Theory and Evidence. *Journal of Comparative Economics* 45, 3: 644–657. <<https://doi.org/10.1016/j.jce.2016.02.002>>.
- Gwartney, J.D. (2009). Institutions, Economic Freedom, and Cross-Country Differences in Performance. *Southern Economic Journal* 75, 4: 937–956.
- Hall, J.C., and R.A. Lawson (2014). Economic Freedom of the World: An Accounting of the Literature. *Contemporary Economic Policy* 31, 1: 1–19. <<https://doi.org/10.1111/coep.12010>>.
- Hall, J.C., R.S. Sobel, and G.R. Crowley (2010). Institutions, Capital, and Growth. *Southern Economic Journal* 77, 2: 385–405. <<https://doi.org/10.4284/sej.2010.77.2.385>>.
- Heinemann, F., and B. Tanz (2008). The Impact of Trust on Reforms. *Journal of Economic Policy Reform* 11, 3: 173–185. <<https://doi.org/10.1080/17487870802405375>>.
- Helliwell, J.F., H. Huang, H., and S. Wang (2018). New Evidence on Trust and Well-Being. In E.M. Uslaner, ed., *The Oxford Handbook of Social and Political Trust* (Oxford University Press): 409–446. <<https://doi.org/10.1093/oxfordhb/9780190274801.013.9>>.
- Henrich, J., R. Boyd, S. Bowles, C. Camerer, E. Fehr, H. Gintis, and R. McElreath (2001). In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies. *American Economic Review* 91, 2: 73–78. <<https://doi.org/10.1257/aer.91.2.73>>.
- Hirschman, A.O. (1982). Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble? *Journal of Economic Literature* 20, 4: 1463–1484.
- Hooghe, M., and D. Stolle (2003). Introduction: Generating Social Capital. In M. Hooghe and D. Stolle, eds., *Generating Social Capital: Civil Society and Institutions in Comparative Perspective* (Palgrave Macmillan): 1–18.
- Inglehart, R., R. Foa, C. Peterson, and C. Welzel (2008). Development, Freedom, and Rising Happiness: A Global Perspective (1981–2007). *Perspectives on Psychological Science* 3, 4: 264–285. <<https://doi.org/10.1111/2Fj.1745-6924.2008.00078.x>>.

- Jikeli, G. (2015). *European Muslim Antisemitism: Why Young Urban Males Say They Don't Like Jews*. Indiana University Press.
- Johnson, N.D., and M. Koyama (2019). *Persecution & Toleration: The Long Road to Religious Freedom*. Cambridge University Press.
- Knack, S. (2002). Social Capital and the Quality of Government: Evidence from the U.S. States. *American Journal of Political Science* 46, 4: 772–785. <<https://doi.org/10.2307/3088433>>.
- Knoll, B., H. Pitlik, and M. Rode (2013). A Note on the Impact of Economic Regulation on Life Satisfaction. *Applied Economics Letters* 20, 9: 916–920. <<https://doi.org/10.1080/13504851.2012.762709>>.
- La Porta, R., F. Lopez-de-Silanes, A. Schleifer, and R. Vishny (1999). The Quality of Government. *Journal of Law, Economics, and Organization* 15, 1: 222–279. <<https://doi.org/10.1093/jleo/15.1.222>>.
- Leibrecht, M., and H. Pitlik (2015). Social Trust, Institutional and Political Constraints on the Executive and Deregulation of Markets. *European Journal of Political Economy* 39 (September): 249–268. <<https://doi.org/10.1016/j.ejpoleco.2015.06.002>>.
- Lipstadt, D.E. (2019). *Antisemitism: Here and Now*. Schocken.
- Ljunge, M. (2014). Social Capital and Health: Evidence that Ancestral Trust Promotes Health among Children of Immigrants. *Economics and Human Biology* 15 (December): 165–186. <<https://doi.org/10.1016/j.ehb.2014.09.001>>.
- Mathers, R.L., and C.R. Williamson (2011). Cultural Context: Explaining the Productivity of Capitalism. *Kyklos* 64, 2: 231–252. <<https://doi.org/10.1111/1/j.1467-6435.2011.00504.x>>.
- McGranahan, D.A., and T. Wojan (2007). Recasting the Creative Class to Examine Growth Processes in Rural and Urban Counties. *Regional Studies* 41, 2: 197–216. <<https://doi.org/10.1080/00343400600928285>>.
- Möschel, W. (2001). The Proper Scope of Government Viewed from an Ordoliberal Perspective: The Example of Competition Policy. *Journal of Institutional and Theoretical Economics* 157, 1: 3–13.
- Nikolaev B., and D.L. Bennett (2017). Economic Freedom and Emotional Well-Being. *Journal of Regional Analysis and Policy* 47, 1: 88–99. <<https://doi.org/10.22004/ag.econ.293619>>.
- North, D.C. (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press.
- Ottaviano, G.I.P., and G. Peri (2006). The Economic Value of Cultural Diversity: Evidence from U.S. Cities. *Journal of Economic Geography* 6, 1: 9–44.
- Papagapitos, A., and R. Riley (2009). Social Trust and Human Capital Formation. *Economics Letters* 102, 3: 158–160. <<https://doi.org/10.1016/j.econlet.2008.12.006>>.
- Piketty, T. (2014). *Capital in the Twenty-First Century*. Belknap Press.
- Piketty, T. (2020). *Capital and Ideology*. Harvard University Press.
- Pitlik, H., and M. Rode (2016). Free to Choose? Economic Freedom, Relative Income, and Life Control Perceptions. *International Journal of Wellbeing* 6, 1: 81–100. <<https://doi.org/10.5502/ijww6i1.390>>.
- Qian, H. (2013). Diversity Versus Tolerance: The Social Drivers of Innovation and Entrepreneurship in US Cities. *Urban Studies* 50, 13: 2718–2735. <<https://doi.org/10.1177/0042098013477703>>.



- Rode, M. (2013). Do Good Institutions Make Citizens Happy, or Do Happy Citizens Build Better Institutions? *Journal of Happiness Studies* 14, 5: 1479–1505. <<https://doi.org/10.1007/s10902-012-9391-x>>.
- Rode, M. and S. Coll (2012). Economic Freedom and Growth: Which Policies Matter the Most? *Constitutional Political Economy* 23, 2: 95–133. <<https://doi.org/10.1007/s10602-011-9116-x>>.
- Rothstein, B. (2000). Trust, Social Dilemmas, and Collective Memories. *Journal of Theoretical Politics* 12, 4: 477–501. <<https://doi.org/10.1177/105849090012004007>>.
- Steinberg, D.A., and S.M. Saideman (2008). Laissez Fear: Assessing the Impact of Government Involvement in the Economy on Ethnic Violence. *International Studies Quarterly* 52, 2: 235–259. <<https://doi.org/10.1111/1/j.1468-2478.2008.00500.x>>.
- Storr, V.H., and G.S. Choi (2019). *Do Markets Corrupt Our Morals?* Palgrave Macmillan. <<https://doi.org/10.1007/978-3-030-18416-2>>.
- Stroup, M.D. (2007). Economic Freedom, Democracy, and the Quality of Life. *World Development* 35, 1: 52–66. <<https://doi.org/10.1016/j.worlddev.2006.09.003>>.
- Teague, M.V., V.H. Storr, and R. Fike (2020). Economic Freedom and Materialism: An Empirical Analysis. *Constitutional Political Economy* 31: 1–44. <<https://doi.org/10.1007/s10602-019-09296-0>>.
- Uslaner E.M. (ed.) (2018). *The Oxford Handbook of Social and Political Trust*. Oxford University Press.
- van der Crujisen, C., M. Doll, and F. van Hoenselaar (2019). Trust in Other People and the Usage of Peer Platform Markets. *Journal of Economic Behavior & Organization* 166 (October): 751–766. <<https://doi.org/10.1016/j.jebo.2019.08.021>>.
- Voigtländer, N., and H.-J. Voth (2012). Persecution Perpetuated: The Medieval Origins of Antisemitic Violence in Nazi Germany. *Quarterly Journal of Economics* 127, 3: 1339–1392. <<https://doi.org/10.1093/qje/qjs019>>.
- Von Bergen, C.W., and D. Bandow (2009). Supporting Genuine Tolerance in Organizations. In R.A. Oglesby and M.G. Adams, eds., *Business Research Yearbook: Global Business Perspectives* (International Graphics): 586–593.
- Williamson, C.R., and R.L. Mathers (2011). Economic Freedom, Culture, and Growth. *Public Choice* 148, 3–4: 313–335. <<https://doi.org/10.1007/s11127-010-9656-z>>.
- World Values Survey (various years). Online Database. <<http://www.worldvaluessurvey.org>>.
- Zak, P.J., and S. Knack (2001). Trust and Growth. *Economic Journal* 111, 470: 295–321. <<https://doi.org/10.1111/1468-0297.00609>>.
- Zweimüller, M., R. Winter-Ebmer, and D. Weichselbaumer (2008). Market Orientation and Gender Gaps: An International Study. *Kyklos* 61, 4: 615–635. <<https://doi.org/10.1111/j.1467-6435.2008.00419.x>>.