

# The Soft Side of Economic Freedom<sup>1</sup>

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## *1. Introduction*

James Gwartney has made a fantastic contribution to science by developing the Economic Freedom of the World Index (EFW).<sup>3</sup> I will soon describe why I think it is a fantastic contribution and then continue by presenting research results on how economic freedom might affect three variables that many people care about: income equality, social trust and tolerance. Through this choice of variables, I hope to show the *soft* side of economic freedom, how it not only influences economic growth but also some social characteristics of a society.

Before going into that, let me give a background that briefly outlines why James Gwartney's achievements in this area are laudable. Any normative position, e.g., on matters of public policy, consists of two elements: beliefs and values (Ayer, 1936; Buchanan, 2001: 159–160).<sup>4</sup> If I advocate a certain policy, I do so because I believe that it, better than available alternatives, satisfies some goal that I embrace. Of central importance for decisions to turn out satisfactorily, irrespective of whether they are individual or collective (as in the case of policies), is that

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1 I wish to thank Therese Nilsson and Martin Rode for helpful comments and suggestions.

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3 For details about the index, see [www.freetheworld.com](http://www.freetheworld.com), where the annual reports and all data can be found. For a description of how the index emerged, see Gwartney (2009).

4 In Berggren (2004), I apply this distinction in an analysis of whether classical liberalism can be defended if people regard values as subjective. For the discussion here, however, it does not matter if people regard them as subjective or objective.

our beliefs are correct. If we pursue a goal with erroneous information about how to achieve it, chances are very high that we will, in fact, not achieve it. Buchanan (2001: 157) describes the role of science for shaping beliefs:

[S]cience is the process through which individual beliefs about reality are continually corrected, and a process within which individuals are brought into agreement about that which is, at least in the provisional filing cabinet, relatively absolute absolutes ... The social function of “science”, the activity of the specialists, is that of shutting off dialogue and discourse, of resolving conflicts among competing explanations of physical reality, and of allowing provisional truths to be put to everyday usage, at least until more acceptable alternatives emerge.

This description of the scientific process stresses how imperative the generation of knowledge is. People believe various things, whether as private individuals or in positions of power, and on that basis they take normative positions on various issues, not least political ones, given their values. But people (hopefully) realize that they are not in possession of “ultimate truths” and that their beliefs therefore should be open to correction as new scientific findings are produced. Such findings then have the potential of bringing not only scientists themselves but also people in general into (more) agreement on the way the world works, which in turn will also lead to more similar political opinions.<sup>5</sup>

When it comes to the functioning of markets, there is a great number of conflicting and competing views, going back a long time in history and perhaps heightened through the ideological positioning taking place from the late 19th century onwards, with the development of liberalism on the one hand and of socialism on the other.<sup>6</sup> People on the left tended to take a very dim view of markets, while people on the right were prone to hail them. It may not be sufficient but it should at least be necessary with scientific knowledge to bring conflicting views

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<sup>5</sup> It could be that people are not as open-minded as presumed here and that they are unwilling to take in new knowledge and revise their normative positions as a result. One reason could be some ideological conviction. Strangely, some have interpreted the Economic Freedom of the World project as an ideological one – a charge I encountered from some colleagues during my PhD-student days at the Stockholm School of Economics (cf. de Haan et al., 2006). However, for me it is counterintuitive to work to provide data for empirical testing if one is driven by ideology. The open attitude of James Gwartney is also exemplified in the development of the index as a result of various critiques over the years, regarding matters such as which variables to include, how to measure them and how to weight them.

<sup>6</sup> For some academic evaluations of markets, see Hirschman (1982) and Bowles (1998).

of this kind into (more) agreement, to the extent that the conflicts derive from differing beliefs about what markets do and do not do.

It is here that the great benefit bestowed upon the world by James Gwartney becomes clear.<sup>7</sup> Through the EFW there are now data available on the degree to which various economies are market-oriented. Data are needed for scientific knowledge to be produced and for it to fulfill its social function, as explicated by Buchanan in the quote above. However, constructing the EFW was no trivial undertaking, in two senses. First, it must be considered to have been risky career-wise for an economist to engage in a data-producing project, since the generation of data as such is generally not valued very highly and since there is a great opportunity cost in the form of having less time for writing papers which, upon publication, are valued highly.<sup>8</sup> Second, the feat of putting together an index should not be underestimated. Deciding which variables to include, how they are to be transformed into index numbers, how they are to be weighted etc., all of this requires great intellectual effort. Add to that the actual collection and processing of the basic data, which requires conscientiousness and a lot of time, and providing leadership to the team involved, and the undertaking must be considered monumental. This is especially so since the project is of a long-term kind: From the start, it was clear that there would be continual developments and updates, and these have continued until this day.

Very briefly, the EFW measures the degree to which an economy is market-oriented, the key ingredients of which are personal choice, voluntary exchange, freedom of entry and competition and protection of persons and property. The index consists of five areas, 24 components and 42 variables. Each variable, component and area is measured on a ten-point scale, where simple averages are used to calculate the composite measures. The five areas are: the size of government, the legal system and security of property rights, sound money, freedom to trade internationally and regulation.

Much of the issues analyzed by means of the EFW have concerned “hard” economic variables, in particular economic growth – for surveys, see Berggren (2003), de Haan et al. (2006) and Doucouliagos and Ulubasoglu (2006), and for

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7 James Gwartney also had collaborators, who also deserve praise, not least Robert Lawson and, in later years, Joshua Hall.

8 This is of course not to say that James Gwartney has not made many important contributions to economic science in other ways and areas, which is documented on his web page: <http://mailer.fsu.edu/~jgwartne/garnet-jgwartne/>

some more recent studies, see, e.g., Justesen (2008), Bergh and Karlsson (2010), Hall et al. (2010) and Rode and Coll (2012).<sup>9</sup>

The picture that emerges from most of these studies is that economic freedom (especially increases thereof) is positively related to growth. If one holds the value that increases in prosperity are desirable, then it seems quite clear that a method through which this can be achieved is through reforms of the judicial-economic institutional framework in a market-conducive direction.

In this presentation, I wish to highlight some of my own work making use of the EFW to shed light on how markets relate to three soft variables: income equality, social trust and tolerance.<sup>10</sup> Even if one accepts that economic freedom brings about economic growth, and even if one favors growth, it can still be (and most probably is) the case that one values other things as well, which makes it important to see whether economic freedom affects some of these other things.<sup>11</sup> It is not until we have a fairly complete picture of the overall consequences of something that we can really evaluate it. I will try to provide some selective pieces to the laying of this puzzle.

Buchanan (2001) opines that there are no final truths in empirical science: there are temporary “truths”, around which scientific agreement has emerged, but these are always open to being overturned by new scientific evidence. Notably, throughout this process, no “truths” can be established without data. It is especially interesting to partake of the scientific process when new data come along, as in the case of the EFW: things that could not be demonstrated empirically before now become demonstrable. As empirical results of the consequences of economic

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<sup>9</sup> Viewing economic growth as a “hard” variable is perhaps questionable, since it tends to benefit large segments of the population in many ways, not only in terms of material possessions but also in terms of welfare services of various kinds. For a moral argument in favor of growth as a policy goal, see Friedman (2005).

<sup>10</sup> There are other soft variables that have been related to economic freedom, e.g., happiness (Gehring, 2013; Knoll et al., 2013; Rode, 2013); gender equality (Stroup, 2008; Zweimüller et al., 2008); obesity (Bleich et al., 2008; Ljungvall, 2013); civil war (de Soysa and Fjelde, 2010); ethnic violence (Steinberg and Saideman, 2008); human development (Akhter, 2004); education, health and disease (Stroup, 2007); and human rights violations (de Soysa and Vadlammanati, 2013) – but for reasons of space, I do not present these studies in the present text.

<sup>11</sup> In some cases, economic freedom can affect economic growth through the soft variables: focusing on the latter can clarify the mechanisms at work.

freedom began to be presented, temporary “truths” have come to be established.<sup>12</sup> Still, an early literature like this must always be open to revisions and new insights: I demonstrate this in the first discussion below, about the relationship between economic freedom and inequality, where my own early findings have been challenged in follow-up studies. This teaches us humility and underscores that empirical findings, like the ones presented here, should be regarded as tentative. Later studies may find different results. Still, the scientific approach does entail the temporary acceptance of “relatively absolute absolutes” (Buchanan 2001: 155), so let us proceed to see what I, together with my co-authors, have been able to find. Hopefully, our results constitute new knowledge that can be used to reach (more) agreement about the nature of the world around us. The central point in all of this is that without James Gwartney, nothing could have been accomplished. Without data, the scientific conversation cannot even get off to a start.

In the next section, I present my research on how economic freedom relates to equality (as well as some later research with different findings). In section 3, I present joint work (with Henrik Jordahl) on economic freedom and social trust. Then I continue to introduce results (produced with Therese Nilsson) on economic freedom and tolerance. I conclude, lastly, that economic freedom does seem able to stimulate at least some softer goals, in addition to economic growth.

## *2. Economic Freedom and Equality*

A classic trade-off in economic analysis, especially following Okun (1975), is that between equity and efficiency. The idea is that the more one has of the one, the less one will have of the other, since equity can only be pursued through policies, such as taxation and regulation, that reduce incentives for and, therefore, the prevalence of productive and innovative behavior. As shown by studies referred to in the preceding section indicate, economic freedom entails economic efficiency as measured by economic growth, which suggests that economic freedom stands

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<sup>12</sup> In a recent overview of the literature, Hall and Lawson (2014: 1) write: “Of 402 articles citing the EFW index, 198 used the index as an independent variable in an empirical study. Over two-thirds of these studies found economic freedom to correspond to a ‘good’ outcome such as faster growth, better living standards, more happiness, etc. Less than 4% of the sample found economic freedom to be associated with a ‘bad’ outcome such as increased income inequality. The balance of evidence is overwhelming that economic freedom corresponds with a wide variety of positive outcomes with almost no negative tradeoffs.”

in a negative relation to income inequality.<sup>13</sup>

I was not convinced by this story as I began thinking, in the mid-1990s, about how economic freedom might affect inequality. The importance of sorting this out stems from policy-making concerns: even if economic freedom is positive for growth, if people also value equality, the desirability of economic freedom could be questioned if it entails more inequality. On theoretical grounds, I argued (in Berggren, 1999) that the relationship between economic freedom and net income inequality is theoretically ambiguous. On the one hand, the first area of economic freedom relates to redistribution, and there one would indeed expect a positive relationship: more redistribution implies less economic freedom and lower net income inequality. However, on the other hand, economic freedom, through all its five areas, affects the gross income developments of both high- and low-income earners, and here it is theoretically unclear if these effects taken together benefit the income growth rates of which income group more. It could, e.g., be that lower and more stable inflation, a liberalization of trade or a strengthening of property rights benefit low-income earners relatively more than high-income earners. To take an example: If trade liberalization makes it possible for an industry in which many low-income earners work to export their goods to a higher extent, this can stimulate growth of their gross incomes. Hence, what we can say is that economic freedom is related to net income inequality, but we cannot say on theoretical grounds what the sign of that relationship is. There may be a trade-off, but this is not necessarily the case.

In Berggren (1999), I went about trying to find out more about this issue through empirical testing, and as such I contributed to initiating a small research field. I looked at how both levels of and changes in economic freedom (over ten years) related to income inequality in a sample of 66 countries. The results indicated that the levels of (changes in) economic freedom were negatively (positively) related to inequality, but the changes generally displayed more statistical significance and were especially valid for developing countries. The results also suggested that the short-term negative relationship could primarily be understood as a result of less redistribution, while the long-term positive relationship could be interpreted as low-income earners being able to benefit relatively more from trade liberalization. Scully (2002), on the other hand, found that the level of eco-

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13 Inequality is a multifaceted concept and can refer to the distribution of a number of things, such as income, consumption, wealth, education and subjective well-being. Here, the focus is on income inequality.

conomic freedom is beneficial for income equality, by having a significant negative effect on the Gini coefficient. There is hence a tension here, as my finding for the level of economic freedom had the opposite sign. Admittedly, my finding was non-existent for developed countries and rather weak, statistically, for developing countries. Scully did not include developing countries (the sample contained only 26 countries), which could be one explanation for the seemingly opposite results (in addition to different modeling and different weighting of the EFW).

Unlike the two preceding studies, which used cross-sectional data, Carter (2007) used panel data and a fixed effects model to investigate the relationship for 39 countries over five-year periods from 1975 until 2004. The results indicate that the relation between economic freedom and Gini coefficients is generally positive and statistically significant, i.e., the more economic freedom, the more inequality. In terms of the size of the estimated effect, a one-percent increase in economic freedom is associated with an increase of the Gini coefficient of slightly less than one-half percent.<sup>14</sup> There are good reasons to regard these results as more credible for the included countries, not least because of the panel approach and the related ability to use the same inequality measure within countries at different points in time. Some other reasons for the differences in results can be Carter's use of fixed effects, other control variables, a different sample and a different time period.

Bergh and Nilsson (2010) also employ a panel data approach, with around 80 countries for the period 1970–2005. It extends the Carter (2007) study by looking at a larger set of countries at different development levels and by examining the effects of the different areas of the EFW (in these two respects, this study bears some resemblance to my earlier study). They also primarily find that economic freedom brings about more income inequality, paying careful attention to using high-quality and consistent inequality data within countries. The magnitude is similar to the one found by Carter. It is especially area four of the EFW that seems to drive this result: i.e., liberalization of trade and capital flows. On the other hand, they find the opposite sign for area two, legal structure and security

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<sup>14</sup> Aside from differences in methodology and data, Carter (2007) also criticizes me for misinterpreting the results in Berggren (1999). I recognize that this critique is correct. By including both the level of economic freedom in 1985 and the difference between the levels of economic freedom in 1975 and 1985 in the same regressions, I in fact had two coefficients for economic freedom in 1985, which should be interpreted jointly. This in itself renders my conclusions uncertain: if anything, taking this into account seems to yield opposite signs of the short- and the long-term effects.

of property rights, although statistical significance is not attained in most regressions. The results mostly pertain to developed countries.<sup>15</sup>

This research field is still ongoing. It demonstrates, first of all, that economic freedom has a soft side to it, in the sense of influencing a widely held social goal concerning the relationship between those who earn high and those who earn low incomes. But it also demonstrates the scientific value of the EFW. Without it, there could have been no empirical studies. The process, with several studies being produced and presenting new (and sometimes contradictory) results, also illustrates that the data do not, as such, give “true” information about how variables relate to each other. The choice of methodology is always open to discussion. But without the data, the discussion is not possible. I trust it shall continue.

### *3. Economic Freedom and Social Trust*

Social trust is among the most important socio-cultural characteristics a society can have. 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>16</sup> It reveals something fundamental about how people regard others in their society: what they expect from the behavior of random people. It thus 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 society in which there is high social trust can be expected to function differently than if it had consisted of distrustful people.

There is a growing body of empirical research that documents this to be the case. Social trust does matter for important social, economic and political outcomes – it seems conducive to, among other things, higher economic growth (Knack and Keefer, 1997; Zak and Knack, 2001; Berggren et al., 2008; Bjørnskov,

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<sup>15</sup> For two studies on the relationship within the United States, see Ashby and Sobel (2008) and Apergis et al. (2014). The former study identifies a negative effect of economic freedom on income inequality, which the latter also does for the long-term equilibrium case. But results from the panel error correction model used by Apergis et al. also suggest a bicausal relationship, such that high income inequality can generate redistribution that reduces economic freedom. Then, as economic freedom declines, income inequality increases further. This dynamic analysis may be promising also for future cross-country analysis.

<sup>16</sup> This stands in contrast to particularized trust, which refers to trust in people one knows or knows something about, and institutional trust, which refers to 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) and Naef and Schupp (2009).

2012; Horváth, 2013), more education (Bjørnskov, 2009; Papagapitos and Riley, 2009), better governance (Knack 2002; Bjørnskov, 2010), higher participation in the stock market (Guiso et al., 2008), more independent central banks (Berggren et al., 2014), more liberalizing reforms (Heinemann and Tanz, 2008), higher democratic stability (Uslaner, 2003), more comprehensive and stable welfare states (Bergh and Bjørnskov, 2011), smaller underground economies (D'Hernoncourt and Méon, 2012), faster increases of human development (Özcan and Bjørnskov, 2011) and higher rates of subjective wellbeing (Bjørnskov, 2006; Helliwell and Wang, 2011).

Consequently, a central question is why the populations in some countries are more trusting than in others.<sup>17</sup> Since trust is a deeply embedded cultural trait that changes slowly (Bjørnskov, 2007), it is arguably not a variable that is easily affected by policy measures. Still, Henrik Jordahl and I came up with the idea that the character of economic and legal institutions, which also tend to be fairly stable over time and which also affect and structure people's ways of interacting with and regarding others, could play a role. We therefore undertook an empirical study that looked into this (Berggren and Jordahl, 2006), the main features of which I will now present.

We advance the hypothesis that there is a positive effect of economic freedom on trust. The basis for this hypothesis is a direct and an indirect effect of market institutions – the legal system and the protection of property rights. *The direct effect* 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. *The indirect effect* stems from participation in the market process which the market institutions enable: such participation makes people trust because they experience that others are trustworthy in actual interactions, and from this a generalization takes place.

This is not to say that there could not be negative effects of market-oriented economics on trust. For example, Hirschman (1982) argues that there is a risk for market-based economies to entail commercialism, greed and adverse distributional patterns, which could erode civic assets such as social trust. In the end, it is an empirical issue whether economic freedom is beneficial or detrimental for the development of trust and to what degree.

More specifically, we make use of the EFW and its five areas to see how

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<sup>17</sup> This question is important irrespective of whether one approves or disapproves of these outcomes.

economic freedom affects social trust. We summarize our expectations in Table 1. As can be seen, there could be both positive and negative effects (although, as mentioned, we expect the former to dominate).

**Table 1**

Hypotheses on the Relationship between the EFW and Social Trust

Type of economic freedom	Expected effect	Motivation
EFW Economic freedom	-/+	incentives and mechanisms in a free economy tend to generate trust; but countervailing effects, as specified for EFW1, EFW4 and EFW5, may exist
EFW <sub>1</sub> Size of government	-/+	hinder trust-building market mechanisms through taxation; provide trust-enhancing goods such as judicial system and education
EFW <sub>2</sub> Legal structure and security of property rights	+	provide assurance that opportunists are punished
EFW <sub>3</sub> Access to sound money	+	stimulate voluntary contracts and the trust that stems from such voluntary activities
EFW <sub>4</sub> Freedom to exchange with foreigners	-/+	make citizens segmented and suspicious; make citizens realize that others are capable of displaying the same good behavior as domestic people
EFW <sub>5</sub> Regulation of credit, labor, and business	-/+	could dampen opportunistic behavior; could hamper competition and breed rent-seeking

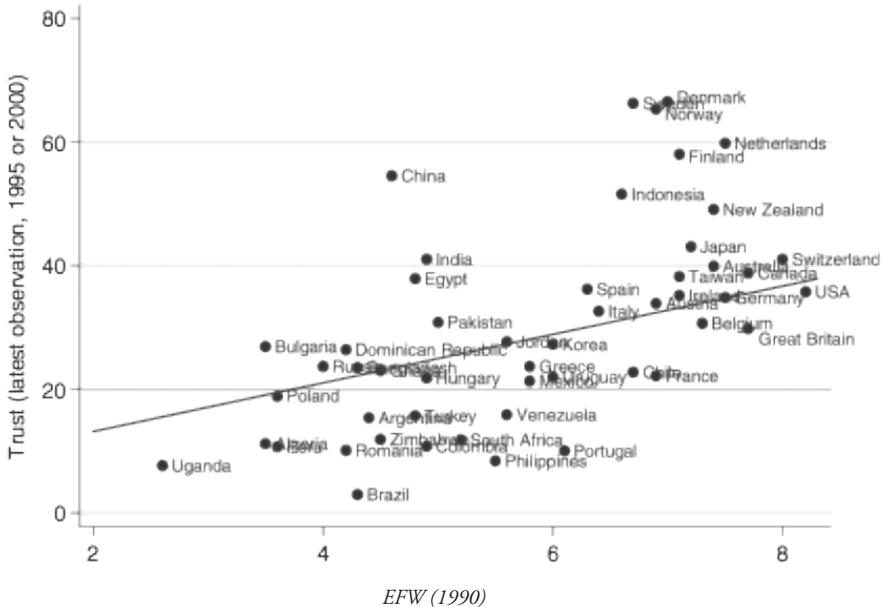
Source: Berggren and Jordahl (2006: 149).

As our measure of social trust, we use the standard one from the World Values Survey: the share of the population of a country or state which answers “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 our sample of some 50 countries, the highest social trust, with shares slightly above 65 percent, is found in the Scandinavian countries. Three countries have scores below 10 percent: the Philippines, Uganda and Brazil. The U.S. score is 36 percent (position 17).

To get a feeling for the relationship, Figure 1 displays a simple plot between the aggregate EFW and social trust. As can be seen, the overall relationship is positive. However, we need to control for other possible determinants of social trust in order to isolate the effect of economic freedom. For that, we need to undertake regression analysis.

**Figure 1**

The Economic Freedom of the World Index and Social Trust



When we control for other possible determinants of social trust (GDP per capita, schooling, income inequality, religious fractionalization, the share of the population that belongs to a hierarchical religion and the share of people younger than 35), we find that the aggregate EFW is *positively* related to social trust in a statistically significant way, as are EFW areas 2 (the legal system and security of property rights), 3 (sound money) and (sometimes) 5 (regulation). 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.

As we find strongest support for a positive effect from area 2 (the legal system and security of property rights), which is also in line with our theoretical expectation, we perform more careful analysis of that area in trying to ascertain whether the effect is causal. For this purpose, we use instrumental variables in the form of legal origin (following La Porta et al., 1999, and Glaeser and Shleifer, 2002). We find support for a causal effect of this area.

To conclude this section, we began by noting that social trust gives rise to important socioeconomic and political outcomes, which in turn merits study into

the determinants of trust. We posited that market-oriented institutions could be such a determinant, and by making use of the EFW we found that they indeed seem to be. Especially one area of the index, the legal system and security of property rights, has a large, statistically significant and probably causal effect on social trust. We consider this an important insight, not least for developing nations lacking in this particular institutional area.

That the rule of law stimulates social trust is not difficult to understand. Through the existence of a legal system that is perceived to be fair and effective, economic actors know that voluntary contracts and rules in general are enforceable and can be relied upon. This enables them to trust other actors. But there is a second mechanism as well in that the economic process of exchange, which relies upon the legal system and property rights, can induce dispositions of trust to emerge.

This is an example of the soft side of economic freedom.

#### *4. Economic Freedom and Tolerance*

Not only social trust is an important feature of any society: social harmony based on tolerance arguably constitutes another valuable characteristic. Corneo and Jeanne (2009: 691) define tolerance as “respect for diversity”, and Florida (2003: 10) defines it as “openness, inclusiveness, and diversity to all ethnicities, races, and walks of life”. These broad definitions form the basis of my usage of the concept here.<sup>18</sup> One important aspect is that they refer to social attitudes without differentiating between underlying motivations. It does not matter for being categorized as tolerant what the opinion of those to whom respect and openness is extended is. They may be liked or disliked, approved or disapproved of, loved or hated – irrespective of which, a tolerant person, as I define him or her, accepts the presence and participation of all kinds of people in society.<sup>19</sup>

Why is tolerance valuable? Not least, tolerance implies a better life for minorities of various kinds. By not being rejected in any active way by the dominant majority, whether in private life or in professional settings, people who are different can still participate in and feel part of the society in which they live. Corneo and

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18 In a way, tolerance forms part of a society’s informal institutions (it entails norms regarding the treatment of others), and it can be compared to the concept of generality or government non-discrimination, as advocated by Buchanan and Congleton (1998), in the realm of formal institutions.

19 In contrast, one can hold that tolerance refers only to cases where someone is putting up with something he or she finds objectionable, but that more narrow definition is not employed here.

Jeanne (2009) note that minorities only enjoy protection against discrimination and full political rights in tolerant societies. Inglehart et al. (2008) also find that subjective well-being is higher in tolerant societies – not only, one can imagine, for minorities of various kinds but also for the majority, which harbors no ill will against others and allows everyone to join in on his or her merits. Part of the story here is that tolerance has economic consequences as well. In his study of historical conditions for economic progress, Mokyr (1990: 12) found that “innovation requires diversity and tolerance”. Florida (2003: 11) makes the following case:

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.

This reasoning largely obtains support from empirical studies looking at the relationship between tolerance and economic development – see, e.g., Ottaviani and Peri (2006), McGranahan and Wojan (2007), Das et al. (2008), Florida et al. (2008) and Berggren and Elinder (2012). To the extent that one cares about these outcomes, it becomes natural to ask what determines the level of tolerance in society.

Therese Nilsson and I began to think about this issue and found that existing studies did not investigate whether economic and legal institutions might play a role. We found this lacuna disconcerting, both since tolerance in our view is desirable and since institutions have been shown, in other areas, to influence social outcomes. We therefore undertook a study relating the EFW to (three types of) tolerance (Berggren and Nilsson, 2013). Previous research found that other factors matter. For example, GDP per capita and becoming a member of the EU were positively related to tolerance towards homosexuals (Corneo and Jeanne, 2009), while income inequality stood in a negative relation to this type of tolerance (Anderson and Fetner, 2008). Spitz (2004) argues that the free-trade agreement NAFTA, and the economic contacts and exchange that it gives rise to, will contribute to making the United States more inclined to accept same-sex marriage. Clearly, there is room for systematic analysis of the role of market-oriented institutions.

Overall, we expected economic freedom to stimulate tolerance, both through the legal institutions that enable the rule of law and private property and through the market process. Market institutions create assurance in dealings with strang-

ers, 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 will deter opportunism. This tends to make people less suspicious of others, even if they are different.

These market institutions also enable the *market process*, the dynamic functioning of the market economy, which can stimulate tolerance in three ways:

- People can internalize a positive outlook on others through transactions that demonstrate that those who are different can be trusted.
- If people want to improve their lot, they realize that in a market economy this can come about through treating others on the basis of what they can contribute, not on the basis of characteristics such as race or sexual orientation.<sup>20</sup>
- The market process tends 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, where people need not try to control and dislike those who deviate from majority practices and characteristics.

There could also be a negative effect, 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 (see Hirschman, 1982).

From this general outline, Table 2 indicates what to expect for the five areas of the EFW. As can be seen, the net effect, overall and for several of the areas, is theoretically unclear (although our hypothesis is that the positive effects dominate).

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20 Cf. 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.

**Table 2**

## Hypotheses on the Relationship between the EFW and Tolerance

Type of economic freedom	Expected effect	Motivation
EFW Economic freedom	-/+	incentives and mechanisms in a free economy tend to generate tolerance; but countervailing effects, as specified for EF11, EF14 and EF15, may exist
EFW <sub>1</sub> Size of government	-/+	certain expenditures, e.g., on education, can benefit tolerance; other fiscal variables can reduce it, if they are used to favor some at the expense of others
EFW <sub>2</sub> Legal structure and security of property rights	+	an effective and fair legal system will make exploitative and opportunistic behavior less likely, which will increase tolerance
EFW <sub>3</sub> Access to sound money	+	high and variable inflation causes redistribution that can be seen as unfair, which can create tension and intolerance; it can also entail blaming minorities
EFW <sub>4</sub> Freedom to exchange with foreigners	-/+	can disfavor low-skilled labor and make citizens segmented and suspicious; can make citizens realize that others reliable, which can lead to more tolerance
EFW <sub>5</sub> Regulation of credit, labor, and business	-/+	could dampen opportunistic behavior and thereby increase tolerance; could hamper competition and breed rent-seeking, which can reduce tolerance

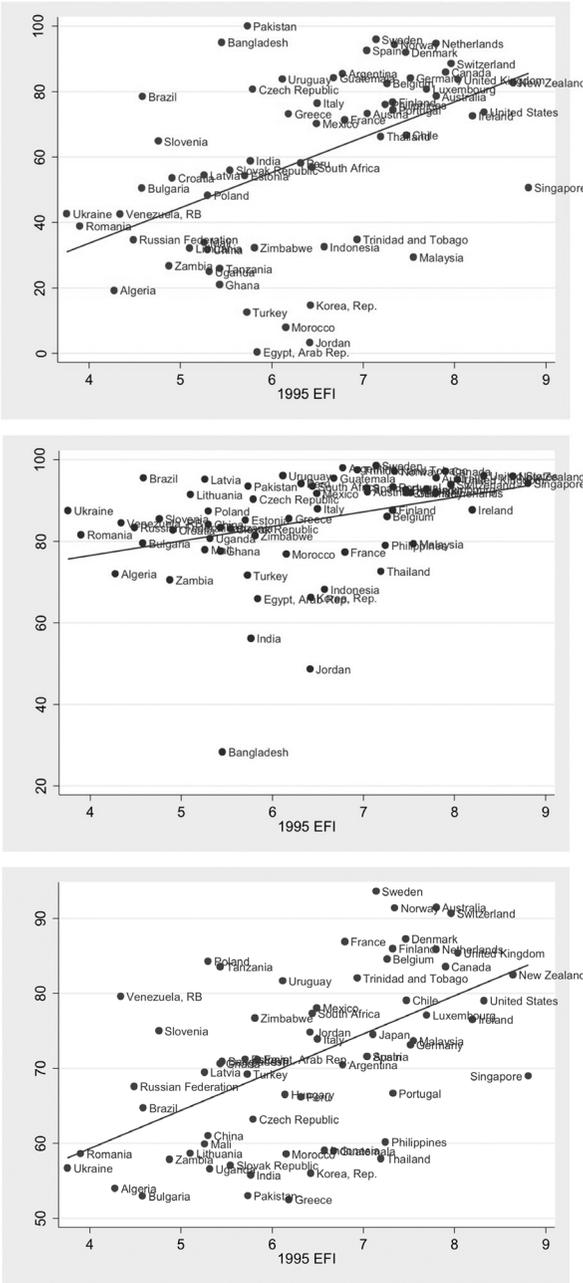
Source: Berggren and Nilsson (2013: 185–187).

Hence, time to turn to the data. Our empirical investigation makes use of three measures of tolerance from the World Values Survey and the European Values Study. The first, tolerance towards homosexuals, refers to the share of the population that does not pick “homosexuals” in answer to the question “On this list of 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 very 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 plots between these tolerance measures and the overall EFW: see Figure 2.

**Figure 2**

The Economic Freedom of the World Index and Three Measures of Tolerance



*Note: The diagram at the top shows tolerance towards homosexuals and, continuing downward, the others show tolerance towards people of a different race and the importance of teaching kids tolerance.*

As can be seen, 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.

In order to disentangle whether EFW and its five areas are in fact related to the tolerance measures, we need to control for other possible influences. As control variables, we include the following ones: 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. We then perform a number of regression analyses.

In our cross-sectional analysis, with a sample of almost 70 countries, we find that the EFW is positively related to all three tolerance measures in a statistically significant manner, but the strongest relationship, both in terms of significance and magnitude, involves tolerance towards homosexuals. In that case, an increase in the EFW of one unit (on the ten-unit scale) entails an increase in tolerance of about 7 percentage points. Looking at the five areas of the EFW, we find that in particular two areas drive the results: the second, the legal structure and security of property rights, and the third, access to sound money. For example, an increase of area two with one unit is related to an increase in tolerance towards homosexuals 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 the third area is about half the size (but it is not statistically significant for the race measure).

In order to ascertain that we identify a causal effect, we make use of two instrumental variables for the area of economic freedom where such variables could be found: area three, access to sound money; we also find the instruments valid for the overall EFW. As instruments, which seem unrelated to tolerance but related to this area of the index, we use central-bank independence and a dummy for experience with hyperinflation in the past. The results indicate that the relationship is causal, with statistical significance for the overall EFW and area three, access to sound money, and with slightly larger estimates.

In all, this study tried to fill a void in the tolerance literature by investigating whether market-oriented institutions were able to partly explain the prevalence of tolerance towards homosexuals, tolerance towards people of a different race and the view that it is important to teach kids tolerance. We found a positive and probably causal effect of economic freedom and for two of its areas, for reasons

explained briefly above. This is another indication that economic freedom has a soft side and contributes to bringing about a social outcome that is highly valued by many.

### *5. Concluding Remarks*

James Gwartney is a major scientific entrepreneur, and as such he deserves praise. Through the EFW, he not only shaped my own research from the very beginning of my academic career, but also the research of many other scholars around the world. The important result of this influence has been the generation of new knowledge about how important goals, like economic growth, equality, social trust and tolerance, can be better achieved. For example, while it cannot be ruled out that reforms that increase economic freedom can be beneficial for income equality, especially if this takes the form of a better quality of the legal system, the most recent cross-country studies suggest a negative effect, at least for developed countries. A possible exception might be the United States, where a positive relationship has been established by two studies. This knowledge is important, because if one pursues liberalizing reforms, one may wish either to focus on areas where the inequality effects are relatively small or to counter the effects with conscious policy measures. With some other soft variables, economic freedom stands in a more harmonious relationship. Social trust seems to be stimulated by high quality legal institutions, for example; and tolerance, especially towards homosexuals but also towards people of a different race, likewise appears to benefit from economic freedom, especially from monetary stability and high-quality legal institutions. Positive results have also been found for other soft factors, such as subjective well-being, gender equality, civil war, ethnic violence, human development, education, health and human rights violations.

Admittedly, the research field documenting the consequences of economic freedom is still in its infancy. New areas can be investigated, and better methods can be applied. One aspect to look into further is the dynamic and quite possibly bicausal relationship between the soft variables and economic freedom. Just as economic freedom affects inequality, social trust and tolerance, these soft variables could also affect economic freedom. One can envisage virtuous or vicious circles here, where, say, trusting and tolerant societies are more prone to opt for economic freedom and where such societies perhaps also offer better protection of economic freedom through a pattern of mutual reinforcement.

In the meantime, until further research comes about, the EFW project continues to gather data, making it freely available to researchers everywhere, so that they can continue to document policy-relevant results. James Gwartney's commitment to the project makes me think that he is the type of person described by Brennan and Buchanan (1985: 147):

... [a person] alleged to place positive private value on "public good" for the whole community of persons, over and beyond the value placed on their own individualized or partitioned shares.

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