

The Benefits of Economic Freedom: A Survey

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Abstract. A new empirical field of research in economics shows that policies characterized by economic freedom produce economic growth. “Economic freedom” means such things as a small government, protection of private property, a well-functioning legal system, free competition and few regulations. The field also shows that under certain conditions, economic freedom improves income equality.

The Benefits of Economic Freedom:

A Survey

The absence of economic growth implies the continued existence of poverty and hardship. The IMF (2001) and others perceive the prospects for global economic growth to be relatively weak.

Neoclassical economic theory explains economic growth as a function of four factors: capital, labour, human capital and technology (Romer 1990). But which economic policies are most favorable to growth? A new line of research on economic freedom answers as Adam Smith did long ago. “Economic freedom” means the degree to which a market economy is in place, where the central components are voluntary exchange, free competition, and protection of persons and property (Gwartney and Lawson 2002, 5). The goal is to characterize the institutional structure and central parts of economic policy.

Economic freedom may constitute an explanatory factor for growth and the distribution of income. In econometric analysis, economic freedom is thus an independent variable. However, economic freedom may also be affected by other variables and thereby constitute a dependent variable, possibly influenced by factors such as political freedom, wealth or democracy.¹

The most ambitious attempt to quantify economic freedom is *The Economic Freedom of the World Index (EFI)* (Gwartney and Lawson 2002).² Since 1996, data updated yearly has been published, now covering the years 1970, 1975, 1980, 1985, 1990, 1995 and 2000.

¹ It may also be the case that economic freedom has an intrinsic value, irrespective of whether economic growth or other economic variables benefit from it, and if this is the case, the second track, with economic freedom as a dependent variable, likewise becomes interesting.

² All the data and other information are available at <http://www.freetheworld.com>.

These data have begun to be used in scholarly research, which has contributed to increasing our knowledge of the importance of economic freedom.

Another economic freedom index is published by the Heritage Foundation in cooperation with the *Wall Street Journal* (O'Driscoll, Holmes and O'Grady 2002).³ The EFI and the just-mentioned index are relatively similar in the overall implications, but since the EFI has been used more extensively in academic contexts (partly because the other index only goes back to 1995 and because it uses more subjective variables), it is the focus of this paper.⁴

This article surveys the recent literature in the field.

The Concept of Economic Freedom

Economic freedom is a composite that attempts to characterize the degree to which an economy is a market economy, that is, the degree to which it entails the possibility to enter into voluntary contracts within the framework of a stable and predictable rule of law that upholds contracts and protects private property, with a limited degree of interventionism in the form of government ownership, regulations and taxes.⁵ Economic freedom is distinct from political freedom (participation in the political process on equal conditions, actual competition for political power and free and fair elections) and from civil freedom (protection against unreasonable visitations, access to fair trials, freedom of assembly, religious freedom and freedom of speech).

³ Data and other information are available at <http://www.heritage.org/research/features/index/>.

⁴ The similarity of the indices is made clear in Caudill, Zanella and Mizon (2000) and de Haan and Sturm (2000), and in a test of the two indices for 1996, their ranking of countries correlate to 85 percent, with a 1 percent confidence interval (Hanke and Walters 1997). An early but less ambitious attempt to construct an economic freedom index is found in Scully and Slottje (1991).

⁵ This is a negative concept of freedom: freedom to do something without being hindered, as opposed to freedom in the sense of having access to actual opportunities to do something (Berlin 1969).

The EFI is an attempt to measure the degree of economic freedom by weighing 37 components divided into 5 groups into an index for the years 1970 (54 countries), 1975 countries), 1980 (105 countries), 1985 (111 countries), 1990 (113 countries), 1995 (123 countries) and 2000 (123 countries). The five groups are 1) size of government: expenditures, taxes and enterprises; 2) legal structure and security of property rights; 3) access to sound money; 4) freedom to exchange with foreigners; and 5) regulation of credit, labor and business.⁶ Each component is measured from 0 (“no economic freedom”) to 10 (“full economic freedom”). The index is calculated using arithmetic averages. It should be noted that the components of the EFI, as well as weighting schemes, have changed in the various editions that have been published. Hence, when comparing studies, one needs to be careful to clarify which editions are used.

Table 1 presents the EFI values in 2000 for a number of countries, as well as the percentage change of the index since 1970.

Table 1: Economic Freedom in a Selection of Countries in 2000

Rank	Country	EFI in 2000	Percentage change in the EFI 1970-2000
1	Hong Kong	8.8	+5 %
2	Singapore	8.6	+19 %
3	USA	8.5	+21 %
4	United Kingdom	8.4	+45 %
5	New Zealand	8.2	+28 %
15	Germany	7.5	+3 %
19	Sweden	7.4	+37 %
38	France	7.0	+11 %
122	Myanmar	3.3	-27 % (from 1980)
123	Democratic Republic of Congo	3.2	-35 %

Source: Gwartney and Lawson (2002, 61-183).

Note: These countries (the top five, three European nations of some importance in policy discussions, and the bottom two) were chosen solely to illustrate actual EFI numbers.

⁶ For a presentation of all 37 components, see the appendix.

In absolute numbers, two small Asian countries along with the US and the UK are at the top. At the bottom one finds the Democratic Republic of Congo, along with many other African nations. In relative change, of the countries listed here, the UK and Sweden are at the top, whilst the countries with low initial scores have declined in economic freedom. More detailed data for the US are presented in table 2. The US scores are high across the board. Improvements have been made in all areas over the studied period, especially with regard to the size of government.

Table 2: Economic Freedom in the US 1970-2000

Year	Rank	EFI	Size of government	Legal structure and security of property rights	Access to sound money	Freedom to exchange with foreigners	Regulation
1970	11	7.0	4.0	8.3	9.6	7.0	5.9
1975	3	7.3	4.8	7.9	9.2	7.7	6.7
1980	4	7.5	5.2	8.3	9.2	8.0	6.8
1985	5	7.7	6.0	8.3	9.3	7.8	6.8
1990	3	7.9	6.8	8.3	9.6	7.8	6.8
1995	4	8.3	6.9	8.6	9.7	7.9	8.3
2000	3	8.5	7.6	9.2	9.7	8.0	8.2

Source: Gwartney and Lawson (2002, 165)

The index enables researchers to carry out statistical analyses of the importance of economic freedom. If one looks at the construction of the index, it largely builds on data published in secondary sources and which therefore can easily be verified. Furthermore, it is easy to assign new weights to the components of the index, should one so desire.

As for any composite index, however, one may wonder what is really measured when a great number of separate variables are thrown together. Surely, different variables in an index have different effects on certain dependent variables. Another serious concern is the selection of variables for the index. Some might be regarded as doubtful, and some missing

variables might be important. However, again, one can recalculate and reweight to one's choosing. Also, one may incorporate additional variables. Yet another problem is that some variables of the EFI build on survey data, which can be uncertain and arbitrary. This is not necessarily a reason to exclude them, as they may be better than no data at all. In the final section, I note some of the avenues for further research that these, and related, questions point out as important.

The Importance of Economic Freedom

Economic Growth

That economic freedom is an important factor behind economic growth is probable on purely theoretical grounds. The incentives that economic actors (entrepreneurs, innovators, financiers, industrialists, and others) face are largely determined by the institutions in place, which, as pointed out by North (1990), can be inefficient or efficient. To the extent that the institutions stimulate actions that contribute to the production of things of more positive value, they contribute to economic growth.⁷ Institutions that guarantee economic freedom plausibly have the capacity to provide the growth-enhancing kind of incentives, for several reasons: i) they enable a high return on productive efforts through low taxation, an independent legal system and a protection of private property; ii) they enable talent to be allocated to where it generates the highest value (as argued by Murphy, Schleifer and Vishny 1991); iii) they enable a dynamic, experimentally organized economy where a large amount of business experiments are made possible (Johansson 2001, ch. 2) and where competition between different actors takes places as

⁷ For more of the institutional perspective, see Eggertsson (1990) and Kasper and Streit (1998).

regulations and government enterprises are few; iv) they enable predictable and rational decision-making through a low and stable inflation rate; and v) they enable trade and capital investment where preference satisfaction and returns are the highest.

While it is the case that certain types of institutional *change* can be expected to have distinctly positive growth effects by introducing the kind of incentives just mentioned, it is also to be expected that institutions *per se*, in place over time, exert an influence not only on the level of wealth but also on growth rates, all else equal. In any given period of time, given institutions set the economic incentives and influence what economic actors do. Very high and stable economic freedom presumably enables a dynamic economy to function and grow, even though it may very well be that an increase in economic freedom from a low level exerts a much more distinct influence on the growth rate for a certain period of time. Furthermore, sustained high growth rates imply high wealth, and so, in the long term, the economic freedom that incurs growth can also be expected to incur high accumulated wealth.

If there are theoretical reasons to expect a positive relationship between economic freedom and economic growth, the question is if there is empirical evidence to this effect.

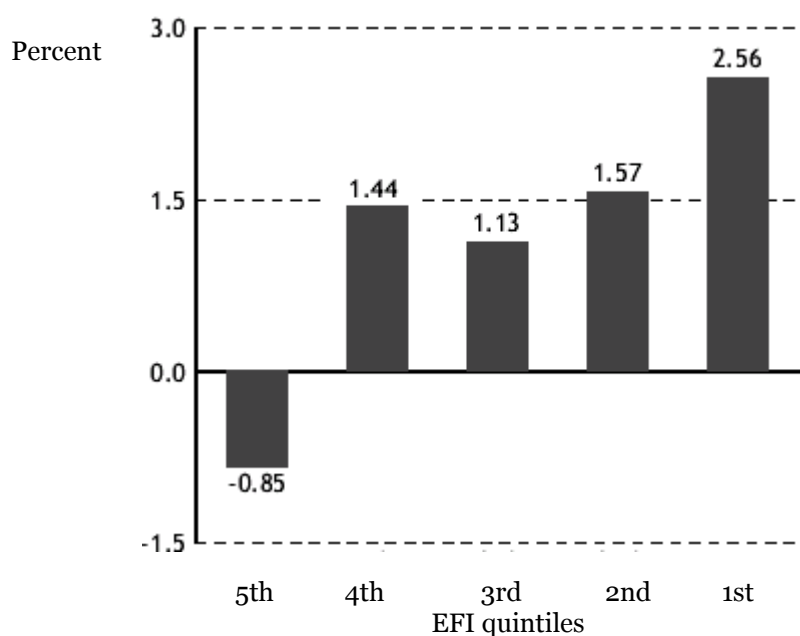
Bhagwati (1999, 4) thinks there is:

[I]t is not difficult to assert that economic freedom is likely to have a favorable effect on economic prosperity, for the simple reason that the last fifty years of international experience more or less confirms the fact that wherever governments used markets more and engaged in more open policies in foreign trade and investment, indeed in more economic freedom of different kinds, their countries have tended to prosper. By contrast, those countries that turned inward and had extensive regulations of all kinds on domestic economic decision-making in

production, investment and innovation, are the countries that have really not done too well.⁸

A simple mapping by Gwartney and Lawson (2000) to a large extent supports this position, as is clear from figure 1.⁹ According to the figure, the one-fifth of countries that have had the highest economic freedom have grown considerably faster than other countries, whereas the one-fifth of countries with the lowest economic freedom have, in fact, had negative growth.

Figure 1: Economic Freedom and Annual GDP/Capita Growth, 1990-2000



Source: Gwartney and Lawson (2002, 20)

A number of econometric studies corroborate this conclusion, with varying strengths and in different forms. The results should be interpreted with the usual carefulness.

⁸ Cf. Barro (2000).

⁹ Cf. World Bank (2000).

Gwartney, Lawson and Holcombe (1999), like de Haan and Sturm (2000, 2001) and Adkins, Moomaw and Savvides (2002) find that the level of economic freedom in the beginning of the growth period studied does not contribute significantly to explaining growth but that positive changes in economic freedom do so. The latter result is also obtained by Dawson (1998), Pitlik (2002) and by Weede and Kämpf (2002). Others, however, have found that the level of the EFI is positively related to growth (Ali 1997, Easton and Walker 1997, Goldsmith 1997, Dawson 1998, Wu and Davis 1998, Hanson 2000, Heckelman and Stroup 2000¹⁰, Ali and Crain 2001, Ali and Crain 2002, Carlsson and Lundström 2002, Pitlik 2002, Scully 2002, and Weede and Kämpf 2002). Even so, the results for there being a positive effect of the level of the EFI are generally weaker than those indicating a positive effect of increases in the EFI and in several cases, the level effect only appears as statistically significant if the change in the EFI is also included as a variable.

Some parts of the EFI might promote growth more than others. Carlsson and Lundström (2002) establish that of the seven EFI groups (in the version published in 2000), four of them are positively and statistically significantly related to growth (economic structure and use of markets, freedom to use alternative currencies, legal structure and security of ownership and freedom of exchange in capital markets), two of them are negatively and statistically significantly related to growth (the size of government, and international exchange/freedom to trade with foreigners) and one of them is not statistically significantly related to growth (monetary policy and price stability).¹¹ The most surprising of these results,

¹⁰ This study identifies and uses a different weighting scheme for the EFI components, resulting in a finding that “differences in economic freedoms between nations can explain almost half of the variation in growth” (542). It does not, however, find such a result when the regular weighting schemes used to generate the EFI are used. For a critique and a defense of this study, see Sturm, Leertouwer and de Haan (2002) and Heckelman and Stroup (2002).

¹¹ Yet another study which decomposes the index is Ayal and Karras (1998), which finds that six components has a positive and significant effect in all or some model specifications and that this effect comes about through increased total factor productivity and increased capital accumulation. Cf. Heckelman and Stroup (2000).

both from a theoretical perspective and compared to other empirical results¹², are the two negative relationships that were detected. They imply that the smaller the size of government and the more freedom to trade with foreigners, the slower the growth rate. One difficulty with aggregated measurements of this kind is that certain public undertakings may have positive growth effects whereas others have negative effects. Hence, more studies that contain studies of the individual components seem called for before detailed policy conclusions are drawn, especially when conclusions are presented that are at odds with many previous studies. Also, public undertakings below, as well as above, a certain level may be growth-impeding, whilst being growth-enhancing in between. That is, the relationship could very well be non-linear.

Other studies look at growth or GDP/capita as a function of economic freedom or its components. Overall, the results are compatible with those mentioned above, and here, a selection is presented.

Hanke and Walters (1997) study the relationship between the EFI and GDP per capita and find it to be significant and positive. Leschke (2000) shows that, in particular, the framework within which the market economy functions and the degree of interventionism in the political process are of great importance for the wealth of nations.

De Haan and Siermann (1996, 1998) make clear that the freedom index constructed by Scully and Slottje is related to growth, but only in some of the nine weighting schemes developed. Clearly, the construction of an index needs to be scrutinized. Goldsmith (1997) uses the EFI and shows that developing countries that protect economic rights better tend to grow faster, have a higher average national income and have a higher degree of human well-

¹² As far as public-sector size and growth is concerned, Knack and Keefer (1995), Barro (1997), Gwartney, Lawson and Holcombe (1998) and Fölster and Henrekson (2001) find a negative relationship. Ayal and Karras (1998) and Nelson and Singh (1998) find no relationship, and Agell, Lindh and Ohlsson (1997) find the negative results at the time dubious. As far as the effects of trade on growth, see, for example, Sachs and Warner (1995) and Srinivasan and Bhagwati (2001).

being. Wu and Davis (1998) investigate the relationship between economic and political freedom and growth. They find that economic freedom is important for growth and that a high income level is important for political freedom.

De Vanssay and Spindler (1994) use a version of the Scully-Slottje economic freedom index, which is included in a solovian growth model, and find a positive relationship between it and economic growth. It is shown that positive rights hamper growth and that negative rights enhance it.¹³ De Vanssay and Spindler (1996) study how different constitutional factors and economic freedom (in the form of the Scully-Slottjes index) affect economic convergence, and of the studied variables, economic freedom is found to have the strongest effect.¹⁴

As noted, one needs to be careful when interpreting empirical studies, especially when sensitivity analyses are lacking and when panel data are not used. Another thing to keep in mind is that the causal relationship between variables can be unclear. For instance, if a correlation between economic freedom and growth can be established, does this imply that economic freedom causes growth or the other way around? On this issue, Gwartney, Lawson and Holcombe (1999) find that economic growth is not capable of predicting future increases in economic freedom in a significant manner. Wu and Davis (1999) and Heckelman (2000) reach a similar causality result. The latter study uses the economic freedom index from the Heritage

¹³ By "positive right" is meant a right *to* something, an entitlement (for example, a grant, a house or a job), whilst "negative right" denotes a right to do something without being hindered (for example, to start a company or to say something).

¹⁴ There is an extensive literature that looks at the importance of various institutional and policy variables for economic growth without necessarily relating to an economic freedom index – where a strong protection of private property and a well-functioning judicial system may be regarded as the most important ones. See, for example, Torstensson (1994), Goldsmith (1995), Barro (1997, 1999), Nelson and Singh (1998), Norton (1998a), Hall and Jones (1999), Keefer (1999), Kneller, Bleaney and Gemmell (1999), Olson, Sarna and Swamy (2000), Vijayaraghavan and Ward (2001) and Feld and Voigt (2002).

Foundation/*The Wall Street Journal* and finds that the average level of economic freedom precedes growth. Farr, Lord and Wolfenbarger (1998) identify joint causation of economic freedom and economic wealth but do not look at the causal relationship between economic freedom and growth. The most extensive test of the causal relationship between economic freedom and growth is found in Dawson (2003). Among other things, he claims that existing studies are capable of establishing a correlation between the EFI and growth but not causation. Using a Granger-causality technique, he finds that the level of EFI seems to cause growth whereas EFI increases are jointly determined with growth. The complexity of the relationship is made clear in the study, with some EFI components causing growth (in particular, the use of markets and property rights), with some EFI components being caused by growth, and with some EFI components being jointly determined with growth.

The most important results are summarized in table 3.

Table 3: The Effect of Economic Freedom on Growth and GDP/Capita

Studies	Dependent variable	Independent variable	Effect
Dawson (1998), Gwartney, Lawson and Holcombe (1999), de Haan and Sturm (2000, 2001), Adkins, Moomaw and Savvides (2002), Pitlik (2002), Weede and Kämpf (2002), Dawson (2003)	Growth	Change in the EFI	Significant, positive
Gwartney, Lawson and Holcombe (1999), de Haan and Sturm (2000, 2001), Heckelman and Stroup (2000), Adkins, Moomaw and Savvides (2002)	Growth	Level of the EFI	Not significant
Ali (1997), Easton and Walker (1997), Goldsmith (1997), Dawson (1998), Wu and Davis (1998), Hanson (2000), Ali and Crain (2001, 2002), Carlsson and Lundström (2002), Pitlik (2002), Scully (2002), Weede and Kämpf (2002), Dawson (2003) ¹⁵	Growth	Level of the EFI	Significant, positive
Hanke and Walters (1997), Leschke (2000)	GDP/cap	Level of the EFI	Significant, positive
Heckelman and Stroup (2000)	Growth	Level of a version of the EFI with different weights	Significant, positive
De Vannsay and Spindler (1994)	Growth	Level of the Scully-Slottje economic freedom index	Significant, positive
de Haan and Siermann (1996, 1998)	Growth	Level of the Scully-Slottje economic freedom index	Mixed results

Note: EFI denotes the economic freedom index published by the Fraser Institute: see Gwartney and Lawson (2002) for the latest version. Note that some studies use earlier versions in which the components and weighting schemes are different. For information about the Scully-Slottjes index, see Scully and Slottje (1991).

Note: The results reported above may not hold in every specification of the empirical tests presented in the studies.

Note: In this table, only studies that look at the growth effects of aggregated economic freedom indices are included; for reasons of limited space, studies looking at individual components of such indices are not mentioned. See the text above for such references.

¹⁵ This study suggests joint causation.

No results showing that economic freedom hampers growth or that it is associated with lower GDP/capita have been presented. To the contrary, the main part of the results show that, in particular increases of, economic freedom exerts a positive influence on the development of economic wealth.¹⁶

Income Equality

Even if it can be demonstrated that economic freedom contributes to economic growth, some may resist policy changes that increase this sort of freedom on the basis of a fear that they would entail bigger income differences.¹⁷

Theoretically, it is an open question how the disposable incomes of different individuals and groups are affected by an increase in economic freedom. On the one hand, economic freedom is negatively related to income equality – in a static sense (i.e. if one looks at the partial, immediate effect of a policy change) and if the income measure is disposable incomes (as the lower taxes and welfare expenditures generally associated with more economic freedom can be expected to reduce the relative position of low-income earners). On the other hand, increases in economic freedom affect the growth of gross incomes positively, and if low-income

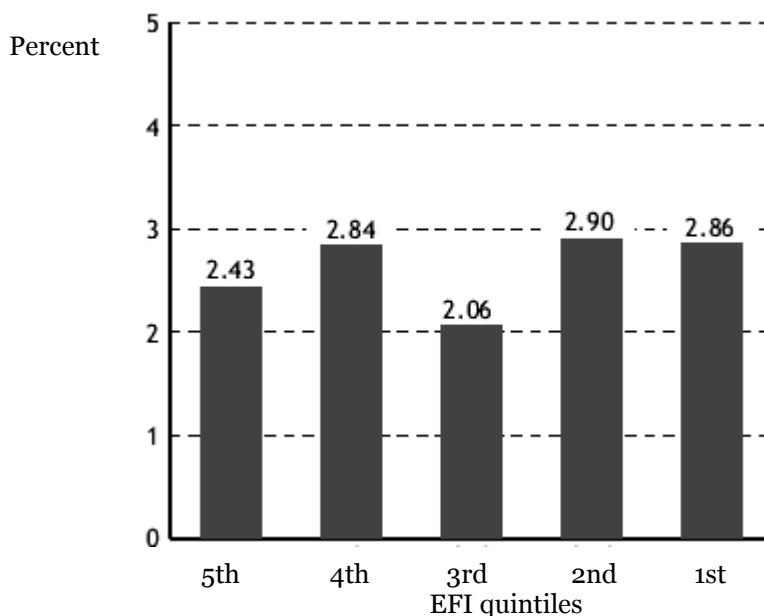
¹⁶ Note that individual components of economic freedom indices can have a negative effect, in accordance with results noted in the text above, but these are not dominating.

¹⁷ Two possible objections to this discussion: 1) it is based on static measures of income dispersion (the relationship between certain people at a certain point in time) rather than on a dynamic one (the relationship between certain people over time, for example, between lifelong incomes, or the possibility for a given person to improve her income through individual actions); and 2) it presupposes that it is meaningful to talk about “social” or distributive justice, something that, among others, Hayek (1978) asserts is not the case.

groups have a higher growth rate as a result of greater economic freedom than others, income distribution may be made more equal.¹⁸

A simple mapping by Gwartney and Lawson (2002) shows that no clear-cut relationship between economic freedom and the relative situation of the poorest seems to exist, as is clear from figure 2.

Figure 2: Economic Freedom and the Income Share of the Poorest 10 Percent



Source: Gwartney and Lawson (2002, 20)

Three empirical studies imply that, under certain conditions, the relationship is actually statistically positive. Berggren (1999) finds that the more economic freedom increased between 1975 and 1985, the higher that country's degree of income equality around 1985. In particular, this result holds for developing countries and when the policy changes brought about liberalized trade and deregulated the financial system. Equality is measured as gini coefficients and comparisons between the income or consumption shares of low- and high-income earners. At

¹⁸ For an elaborated theoretical presentation, see Berggren (1999, 206-208).

the same time, the level of economic freedom in 1985 seems negatively related to income equality, which is probably an effect of reduced redistribution. Grubel (1998) turns the issue around and studies how income equality affects GDP per capita, economic growth and economic freedom in 17 countries with a GDP per capita exceeding \$17,000. The results suggest that increased income equality is related to a lower GDP per capita, lower growth, and lower economic freedom. Scully (2002) estimates a structural model and reduced-form models and shows that economic freedom is beneficial for both economic growth and equality, as economic freedom has a significant and negative effect on gini coefficients. In addition, it is shown that increased equality decreases growth, but by only a small amount.¹⁹

Other results

In addition to the variables growth, wealth and equality, the effect of economic freedom on certain other factors has been studied. Esposto and Zaleski (1999) find that the quality of life, in terms of being able to read and life expectancy, increases as economic freedom is increased, both if one compares nations and if one looks at the same countries over time. Norton (1998a) shows that countries with a stronger protection of private property, as measured in the EFI, rank higher on the UN Human Development Index. Goldsmith (1997) uses the EFI and shows that developing countries that protect economic rights have a higher level of human well-being.

Norton (1998b) reaches the conclusion that a strong protection of private property rights, as measured in the EFI, has beneficial environmental consequences. Carlsson and

¹⁹ Other studies show, without explicitly mentioning economic freedom, that the poor in general benefit as much from economic growth as others: see Melchior, Telle and Wiig (2000), Lindert and Williamson (2001) and Dollar and Kraay (2002).

Lundström (2001) find that economic freedom has a hampering effect on emissions of carbondioxide.

Lundström (2002) studies how economic freedom – more specifically, its components – are affected by the degree of democracy in developing countries, where democracy is measured by means of the indices of political and civil liberty produced by Freedom House. A positive effect of democracy on the EFI groups Government operations and regulations and Restraints on international exchange can be detected, but no such effect was found for the groups Money and inflation and Takings and discriminatory taxation. Democracy does not seem to have reduced economic freedom in any dimension; in other words, more democracy seems to entail a larger scope for a market economy. De Haan and Sturm (2003) find that the level of political freedom is positively related to increases in economic freedom between 1975 and 1990, a conclusion which is valid for several different measures of democracy. Dawson (2003) confirms these findings but makes clear the complexity of the relationship.

Spindler and De Vanssay (2002) investigate what constitutional components that affect the degree of economic freedom, and they find that only a few have such an effect: bicameralism, freedom of religion and the number of *de facto* veto players, to be more precise.

Implications for Economic Policy

Economic policy is generally said to aim at securing increases in national income, an acceptable distribution of income, human well-being and certain environmental goals. The question is how these goals are best obtained. There is no shortage of policy proposals that purport to regulate, tax, redistribute, intervene and fine-tune, on the assumption that such measures can give rise to a better achievement of the goals. To the contrary, all of these goals seem to be influenced positively, or at least be compatible with, policies that increasingly rely on the processes of the

market economy within the framework of a stable legal system. Above all, the results imply that political decision-makers be very restrictive when it comes to reducing economic freedom, as this seems to bring about significant costs in several central respects.

More specifically:

1. Most studies indicate that the relative size of the public sector is negatively related to growth, which was discussed in more detail above. For countries with large public sectors, such as Sweden, which on this group of the EFI is ranked 120 out of 123 countries in 2000, this implies that a reduction of public undertakings is to be recommended to the extent that growth is a primary goal. At least this holds for those undertakings that have distinctly negative effects on the allocation of resources, such as policies that influence the incentives to work, save and invest. Similarly, countries that have small governments need to be careful not to expand them, at least not in areas with negative growth effects.
2. Free markets are conducive to growth, which is why measures such as privatisations, freedom to establish new businesses, freer pricing, more flexible contract laws, and less regulation of domestic and international trade and of capital transactions are important. For example, schooling, and hospitals are run as government monopolies in many countries and are in most cases heavily regulated. This reduces the scope for a dynamic, growth-enhancing market process where each new business, and each new way of doing something, can be regarded as an experiment trying to achieve better consumer satisfaction than existing alternatives. Furthermore, labor markets are heavily regulated in many countries, with heavily curtailed possibilities to enter into voluntary employment contracts. The scope for reforms is substantial.
3. An impartial and strong judicial system that protects private property rights and upholds contracts and agreements is central for a strong economic development. This factor is particularly problematic in many developing nations.

4. Monetary policy and growth seem to be only weakly connected, but the more detailed studies indicate that the effect of inflation, particularly above certain threshold levels, on growth is negative in the medium and long term (see Khan and Senhadji, 2000). In later years, inflation rates in most developed nations have come down, partly as a result of greater central-bank independence.
5. In order to benefit income equality, more long-term increases in the freedom to trade and carry out financial transactions seem especially useful, especially in developing nations. Protectionism against the developing world is particularly harmful in this regard.

Concluding Remarks

Adam Smith argued that market processes satisfy people's demands spontaneously. Even if he realized that free markets are not perfect he understood that, generally speaking, they, more than alternatives, are able to advance wealth and welfare. Theoretical arguments and empirical results make this clear.

Still, research on economic freedom is just beginning to emerge (in spite of the roots of this approach in the deep insights of classical political economy), and much more remains to be done. Refined statistical tests; a further development of the EFI (both as far as weights and composition are concerned); a continued analysis of which components of the EFI that are important; case studies of both contemporary and historical kinds; studies of what determines the scope of economic freedom (which implies a need for further studies of political institutions and incentives); more carefully designed causality studies; studies of more variables that economic freedom can be expected to affect; and a continuing development of economic theory which puts the role of institutions and politics at the center of the analysis – all of these things largely remain to be done.

Appendix:
EFI components

1 Size of Government: Expenditures, Taxes, and Enterprises

- A General government consumption spending as a percentage of total consumption
- B Transfers and subsidies as a percentage of GDP
- C Government enterprises and investment as a percentage of GDP
- D Top marginal tax rate (and income threshold to which it applies)

2 Legal Structure and Security of Property Rights

- A Judicial independence: The judiciary is independent and not subject to interference by the government or parties in disputes (GCR)
- B Impartial courts: A trusted legal framework exists for private businesses to challenge the legality of government actions or regulation (GCR)
- C Protection of intellectual property (GCR)
- D Military interference in rule of law and the political process (ICRG)
- E Integrity of the legal system (ICRG)

3 Access to Sound Money

- A Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years
- B Standard inflation variability in the last five years
- C Recent inflation rate
- D Freedom to own foreign currency bank accounts domestically and abroad

4 Freedom to Exchange with Foreigners

A Taxes on international trade

- i Revenue from taxes on international trade as a percentage of exports plus imports
- ii Mean tariff rate
- iii Standard deviation of tariff rates

B Regulatory trade barriers.

- i Hidden import barriers: No barriers other than published tariffs and quotas (GCR)
- ii Costs of importing: The combined effect of import tariffs, licence fees, bank fees, and the time required for administrative red-tape raises costs of importing equipment by (10 = 10% or less; 0 = more than 50%) (GCR)

C Actual size of trade sector compared to expected size.

D Difference between official exchange rate and black market rate Economic Freedom of the World: 2002 Annual Report

E International capital market controls

- i Access of citizens to foreign capital markets and foreign access to domestic capital markets (GCR)
- ii Restrictions on the freedom of citizens to engage in capital market exchange with foreigners' index of capital controls among 13 IMF categories.

5 Regulation of Credit, Labor, and Business

A Credit Market Regulations

- i Ownership of banks: Percentage of deposits held in privately owned banks
- ii Competition: Domestic banks face competition from foreign

banks (GCR)

iii Extension of credit: Percentage of credit extended to private sector

iv Avoidance of interest rate controls and regulations that lead to negative real interest rates

v Interest rate controls: Interest rate controls on bank deposits and/or loans are freely determined by the market (GCR)

B Labor Market Regulations

i Impact of minimum wage: The minimum wage, set by law, has little impact on wages because it is too low or not obeyed (GCR)

ii Hiring and Firing practices: Hiring and firing practices of companies are determined by private contract (GCR)

iii Share of labor force whose wages are set by centralized collective bargaining (GCR)

iv Unemployment Benefits: The unemployment benefits system preserves the incentive to work (GCR)

v Use of conscripts to obtain military personnel

C Business Regulations

i Price controls: Extent to which businesses are free to set their own prices

ii Administrative conditions and new businesses: Administrative procedures are an important obstacle to starting a new business (GCR)

iii Time with government bureaucracy: Senior management spends a substantial amount of time dealing with government bureaucracy (GCR)

- iv Starting a new business: Starting a new business is generally easy (GCR)
- v Irregular payments: Irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection, or loan applications are very rare (GCR)

Note: GCR = Global Competitiveness Report; ICRG = International Country Risk Guide

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