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ECONOMIC FREEDOM: THEORY FIRST, EMPIRICISM AFTER

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Economic Freedom: Theory First, Empiricism After

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Abstract

The aim of this paper is to argue in favor of theoretically well-founded empirical examinations on how economic freedom affects economic performance, which is not the case, as we argue, in most of the huge empirical literature developed after the construction of various indexes of economic freedom. In this spirit we develop a concept of economic freedom based on Hayek (1960): absence of coercion except for state coercion to enforce known general rules. Trying to formulate Hayek's ideas on a less abstract level, as a step further we propose a categorization of government actions, which gives us some guidance about which government actions hurt and which do not hurt economic freedom. Our concept of economic freedom allows us to conceptualize the measurement of economic freedom in a different way from the indexes of economic freedom.

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1. Introduction

During the past decade the concept of economic freedom, after being for a relatively long period a subject of little interest among economists, has attracted more attention. This is due to the emergence of indexes ranking countries according to a scale running from the least free to the freest. Now there exist two widely accepted indexes of economic freedom: the one developed by the Fraser Institute (Economic Freedom of the World Index), and another constructed by the Heritage Foundation jointly with the Wall Street Journal (Index of Economic Freedom). These two indexes are quite similar in terms of what they consider as a plus and as a minus when measuring economic freedom.

The Fraser index includes five main areas, namely the extent of government intervention, the security of property rights and the Rule of Law, the stability of the monetary system, the burdens of international trade, and the extent of regulation on different markets. By breaking down each area into several components and subcomponents, it aggregates 38 separate categories of data (Gwartney and Lawson 2006:10). The Heritage's index has ten components that can also be grouped into the above-mentioned five areas (De Haan and Sturm 2000). However, here the data generating process and the index itself are less transparent, and in addition this index evaluates countries over a shorter time scale (from 1995 as opposed to 1970 in the Fraser's case).

Since the construction of these indexes researchers have been using them quite extensively in examining the effects economic freedom has on economic performance and on various measures of human welfare. So far a significant number of econometric papers have been accumulated. However, this body of the literature – by focusing on empirical examinations – completely neglects the discussion of what is precisely understood by economic freedom, the index of which they use so extensively. Furthermore, what is more surprising is the fact that the researchers who came up with the construction of the indexes themselves do not provide theoretical foundations for these indexes (Gwartney et al 1996, Gwartney and Lawson 2003).

While we agree that empirical investigations are important, we argue that these should be based on a coherent theory, that is, our position is 'theory first, and empiricism after'. Contrary to what is often asserted in this empirical literature, we argue that it is not the imperfect econometric and statistical methods that lie at the heart of the major problems regarding the effects of freedom on growth, but the lack of a coherent theory concerning economic freedom itself. In this spirit we will review and criticize this empirical literature

from a theoretical point of view (Section 2) and then in Section 3 we will provide a clear concept of economic freedom based on Hayek (1960), the Rule of Law being a core element of this concept. In Section 4 we will develop a classification of government actions, which is necessary for our conceptualization of economic freedom. Based on this, we evaluate the indexes of economic freedom used in the empirical literature, and then propose a concept for an alternative means of measuring it (Section 5). Section 6 concludes.

2. Review and critique of the literature

We organize our review and critique around what this empirical literature says about three questions: (1) what is the relationship between economic freedom and growth? (2) what is the mechanism of this effect? (3) which component of economic freedom is the most important?

2.1. Relationship: level versus change

The major question of the studies is, of course, whether economic freedom or a change in the degree of economic freedom has an effect on economic growth or on income, and if so, how much. Here the main result is found in the positive correlation between economic freedom and growth. This positive correlation is shown while other “traditional” sources of growth are held constant. For instance, Easton and Walker (1997) consider economic freedom a determinant of the total factor productivity in the production function, and find a positive relationship between economic freedom and income. Gwartney and Lawson (2004) obtain a similar result when holding initial income, the growth rate of human capital, tropical location and coastal population constant.

When it comes to the “how much” question the answer is ambiguous, because different researchers use various model specifications. However, Doucouliagos and Ulubasoglu (2006:66-67) show that when counting the partial correlation from a number of studies, one finds that these estimates in terms of partial correlation occur over very limited intervals. But those researchers who, for various reasons (see below), prefer to use the change in the index estimate this effect differently and usually find that the change has a statistically stronger effect on growth (De Haan and Sturm 2000:231, Gwartney, Lawson and Holcombe 1999). The examinations of the effect of the change in the economic freedom index generally lead to the conclusion that earlier change has a greater effect on the growth rate (Gwartney, Lawson and Holcombe 1999, Gwartney and Lawson 2004), which might be attributed to the fact that

it takes time for the change in the institutional structure to have a full effect on economic performance.

Another very important result of this literature is that the positive relationship between economic freedom and growth is not substantially different for developing countries compared to developed ones. As Gwartney and Lawson (2004) point out, the positive impact of economic freedom on growth is greater in the case of less developed countries, and when it comes to the effect on the productivity of investments there is no difference between the two groups of countries. De Haan and Sturm (2000) draw a similar conclusion from their cross country regression complemented with extreme bound analysis.

It is not only income as a relatively narrow measure of welfare that seems to be in positive relationship with economic freedom, but the broader measures of welfare as well, such as life expectancy or literacy (Esposito and Zaleski 1999).

Besides the consensual substantive results, there are some methodological questions upon which researchers disagree. One controversial issue in the literature about the role of economic freedom on growth is whether the level or the change in the level of economic freedom should be included when examining the effect of economic freedom on economic growth. Those authors who apply sensitivity analysis (e. g., de Haan et al. 2000, De Haan and Siermann 1998) are more sceptical about the effect of the level of economic freedom itself and tend, rather, to highlight the importance of the change in economic freedom, as is also shown in the review article of De Haan et al. (2006) and Doucouliagos and Ulubasoglu (2006).

Clearly, the arguments in this “level versus change” debate do not only concern the size of the effect, but also causation; that is, theory, as revealed in the debate between De Haan et al. (2006), De Haan and Sturm (2006), Lawson (2006) and Cole and Lawson (2007). The significance of the level together with the change of the index may be the sign of reverse causality, while without using the concept of level one cannot explain the performance of economies with high growth *and* high economic freedom (De Haan et al. 2006, Lawson 2006, De Haan and Sturm 2006).

We think this debate supports our proposition about the lack of a coherent theory of freedom. It is clear from the above that the literature, again and again, only proves the positive sign of this relationship, but never tries to explain it theoretically. Thus, a reliance on a theory would lead the researchers to derive different specifications concerning the effects of economic freedom, and in this case the debate would not be about whether an effect exists or not, but about how to explain it. Clearly, the “level versus change” debate is about choosing

the proper specification, and it is difficult to imagine how one can do this without any theoretical background. Thus, the lack of a well-articulated theory of freedom is, we think, an obstacle to a further development of this (empirical) literature.

2.2. Mechanisms: causality

The literature in question also examines the channels through which economic freedom affects growth. An important question within this broader area is whether economic freedom deploys its effect directly or indirectly, that is, through some other factors of growth. In this respect the literature asks whether economic freedom improves technology or investment or both. One answer comes from Gwartney, Holcombe and Lawson (2004), who, after comparing three possible models, conclude that economic freedom has direct as well as indirect effects on growth: in those countries where economic freedom is greater (or where it has changed to a greater extent), investment rates are higher, and so is the productivity of investments. Dawson (1998) also supports the view that economic freedom has both direct and indirect effects, Gwartney, Holcombe and Lawson (2006) confirm this conclusion.

The direct effect, i.e., the effect on technology, was demonstrated by Easton and Walker (1997), as we have seen in the previous section. Note however that there are, of course, counterarguments denying the relationship between investment and economic freedom (De Haan and Sturm 2000, De Haan and Siermann 1998). Thus, the direct effect from freedom to growth seems to have sounder empirical underpinnings.

Although the way different components of economic freedom affect growth will be discussed in the next section, the role of property rights should be dealt with here, because the mechanism through which this component affects growth is the best explained in this literature. Barro (2000) for example refers to two main mechanisms when trying to explain the effect of property rights, namely the effect on incentives and that on business activity. His empirical findings (Barro 2000:40-41) show that secure property rights improve growth performance not only by encouraging investments, but by enhancing the productivity of investments. The first channel is analyzed deeper by Torstensson (1994), who highlights the role property rights play in human and physical capital accumulation.

The conclusion is thus that economic freedom and property rights have direct as well as indirect effects on growth. The direct effect refers to those channels through which resources are used in a more efficient way, that is, the allocation takes place on the basis of a better technology and “better prices”. The indirect effect involves the fact that the freer the

economy, the more incentives people have to allocate their resources into (socially) productive activities.

The problem of causality arises, of course, more fiercely here than in the studies reviewed in the previous section. By using the methodology of Granger-causality numerous scholars try to show the direction of causality between economic freedom and growth. What is debated is not only the direction of the causality in general, but whether there is a reverse causality *besides* the causal relationship running from economic freedom to growth. Some argue that economic freedom is purely exogenous as Gwartney, Lawson and Holcombe (1999) and De Haan and Sturm (2000) do, while others, like Dawson (2003), and Farr, Lord and Wolfenberger (1998) find that there is a mutual relationship between growth or income and economic freedom.

Alternatively to investment and technology channels, there are other possible mechanisms. One is the effect through inequality. In his analysis Grubel (1998) sees the change in inequality induced by economic freedom as a channel through which economic freedom affects growth. Scully (2002) analyzes this question in a more sophisticated way, as he argues that economic freedom reduces inequality, given economic growth, but more freedom leads to higher growth, and higher growth leads to more inequality.

Another alternative mechanism for economic freedom to affect growth is the one working through social capital identified as generalized trust in society (Berggren and Jordahl 2006). The main result of the latter article is that economic freedom, as well as three of its components, have a positive relationship with trust. The authors are even able to show that the property rights component is exogenous, while economic freedom as such is not, or at least only weakly so. This latter conclusion, as we will argue in the second part of the paper, might be attributed to the fact that several countries with a high quality legal structure have big governments which reduce economic freedom as usually measured.

An important point to note is that when trying to identify the mechanisms through which economic freedom deploys its effects, the studies are either purely empirical and do not provide any theoretical ground for their examinations except for common sense reasoning, or they use theories which do not refer to economic freedom. In addition, the purely empirically identified mechanisms are not explanations, because they are not framed in terms of human action. For instance, as far as the direct effect of freedom is concerned, what one can know based on this literature is that freedom makes investment more productive, but not the why, and this unanswered question is the result of the absence of a theory of economic freedom.

2.3. Components versus aggregation

The theoretical weakness we have referred to several times may be best observed in those articles that pay attention to the effects of the overall index and its components separately. It seems to be obvious that in order to examine how different components of economic freedom affect growth, one first should have a theory of what makes economic freedom, and second, a theory of how these elements of freedom may effect growth. As we will see below, the main body of this literature is missing at least one of these two.

One problematic issue concerns whether it is useful to aggregate the components of the index of economic freedom (De Haan et al. 2006, Lawson 2006). Another concerns the components themselves; provided that we do not aggregate them, which component(s) should be taken into account, that is, which “part” of economic freedom enhances growth?

When it comes to the first question, one argument is that there is no sense in separating the components or examining them separately because this is “like asking what the most important ingredient is in a cherry pie” (Lawson 2006:401). The counterargument (De Haan and Sturm 2006:408) is that “there is not a unique recipe for a cherry pie”, that is, we do not measure economic freedom as such, only its proxies: economic freedom is a latent variable, and what we want is the best estimate of this variable, and in order to find the best proxy we must use various measures and components. In fact, what lies at the root of this debate is the question of what economic freedom is and whether economic freedom is an independent concept or only the sum of particular components. Our argument is that without having a theory of economic freedom we do not know what we want to measure, and, accordingly, we cannot resolve the above dilemma.

Another problem concerns the issue of why we need to construct an index at all, taking into account the fact that the literature (Barro 1997, Easterly 2005) has also examined the variables which make up the components of the index (inflation, government consumption)? And if we want to examine the components of economic freedom, why start from the aggregate? However, even if it is accepted that the components must be aggregated, the question still remains, how to do so. That the method of aggregation is not evident is revealed in the debate between Heckelman and Stroup (2000, 2002) and Sturm, Leertouwer and Haan (2002). This debate on whether the procedure of aggregation should be based on the results of the regression shows the lack of a theory on how the components of economic freedom affect growth, as mentioned above.

The fact that the result of the regression is sensitive to the method of aggregation (e.g., De Haan and Siermann 1998) is not a sufficient argument to make us reinterpret what we think economic freedom is, because the theory of freedom and the theory explaining how freedom affects growth are different things. Nevertheless, the authors realize that “a serious problem in this regard is that economic theory does not provide enough guidance for the proper specification of empirical growth models” (Sturm, Leertower and Haan 2002:410), which is an aspect of our argument about the lack of a coherent theory on economic freedom.

When it comes to the second question, which concerns the importance of each particular component, the method of providing an answer is twofold. One method is to run multivariate regressions with all the components and pick out those that survive the usual statistical tests. Another method is to pick out only one component, either on a theoretical basis, just as in the case of property rights discussed in the previous section, or as a proxy for overall economic freedom.

Dawson (2003) as well as Carlsson and Lundström (2002) apply the first method. What makes their results interesting is that they draw some conclusions that are unusual within this literature. Dawson shows that some components (e.g., size of government) may be the result of growth, rather than its cause, while Carlsson and Lundström point out that some components (freedom to trade with foreigners, size of government) may have even negative effects on growth.

An alternative answer to the “which component” question is to pick out and use, on a theoretical basis or as a proxy, only one component. This is the method of those authors who examine the effect of the Rule of Law and property rights on growth, as discussed above. In addition to those mentioned above, Heitger (2004), like many others, shows that property rights have an effect *through and beyond* human and physical capital accumulation. In addition, he also demonstrates the presence of endogeneity in this relationship: the causation does not only run from property rights to income, but from income to property rights, too.

There is no doubt that this literature provides us with a great deal of information on whether and to what extent different components of economic freedom move together with economic growth. But, our theoretical perspective makes us pose one important and – by this literature – still unanswered question: what theories of economic freedom do we falsify or verify by showing that this or that index or component of economic freedom improves or harms economic growth? As we have argued above, this question remains unanswered because this literature does not try to build on any theory of economic freedom. In the next section we will try to propose a clear-cut concept of economic freedom.

3. Towards which concept of economic freedom?

We have reviewed above the empirical literature on economic freedom, organized around three disputed questions: (1) “level versus change in level”, (2) the mechanics through which economic freedoms affect growth or income (cause versus effect), (3) “components versus aggregate”. At a first glance, these problems seem to be methodological or econometric problems, but in fact they are not: this body of literature is missing a coherent theory of economic freedom, and this is precisely what lies at the heart of the problems of various empirical studies analyzing the effects of economic freedom. We clearly argue that the debated questions cannot be solved through empirical examinations; we need a clear-cut concept of economic freedom, that is why our position is ‘theory first, and empiricism after’. In this spirit, in the following part of our paper we propose the major building blocks of the theory of economic freedom.

The lack of a coherent theory of economic freedom is somewhat surprising since the concept of freedom was clearly developed by Hayek in *The Constitution of Liberty*. In what follows we will present the Hayekian concept of freedom, whose usefulness consists in the generality of the concept which, accordingly, can be applied to conceptualize various kinds of freedoms, such as economic, political or civil freedom.¹ Focusing of course on economic freedom and relying on Hayek (1960) we will show that a core element of economic freedom is the Rule of Law.²

In order to avoid those or similar problems that characterize the empirical literature on economic freedom we have to make a clarification before trying to conceptualize economic freedom. Since the state is inevitable (Holcombe 2004, Benson 1999)³, our argument is that economic freedom should be interpreted under the existence of a state (government). To put it differently, in accordance with Hayek (1960), economic freedom should be understood as freedom under governmental law, and not the absence of all governmental actions. Thus, economic freedom does not mean freedom in an absolute sense; some governmental actions must be supposed to exist. The reason for this lies in how the state has emerged in an undesigned, evolutionary process (Barzel 2000, 2002, Benson 1998, 1999, Hayek 1973, Holcombe 2004, Olson 1993): all modern states evolved from extortionist institutions to

¹ We agree with Friedman (1962) in seeing economic and political freedom as components of freedom broadly understood, so both being ends in themselves.

² We argue that additional elements such as freedom of contract, property rights, sound money and political decentralization which were emphasized by Harper (2003) as constituting parts of economic freedom come from and depend on it. Because of a shortage of space we cannot develop this idea here.

³ For a critique see Leeson and Stringham (2005).

secure property rights. And in this evolutionary process the state acquired a monopoly over coercion.

Consequently, coercion⁴ is a crucial concept for making sense of freedom. Based on this consideration, as Hayek argues, “[f]reedom demands no more than that (the coercion of other individuals’ – *authors’ addition*) coercion and violence, fraud and deception, be prevented, except for the use of coercion by the government for the sole purpose of enforcing known rules intended to secure the best conditions under which the individual may give his activities a coherent, rational pattern” (Hayek 1960:144). Nevertheless, as Hayek (1960) points out, a paradox is that the only means whereby the state can prevent the coercion of one individual by another is the very threat of coercion, i.e., the only way to prevent one act of coercion is by the threat of another. However bear in mind that the state, by having a monopoly over coercion, remains the primary threat to freedom. Accordingly, as we will discuss at a greater length below, the major question is in which field(s) government monopoly over coercion is allowed and what kinds of governmental actions are not harmful to economic freedom.

Although here Hayek (1960, 1973) does not differentiate between various types of freedom, such as political or economic freedom, his concept still provides a coherent basis for making sense of economic freedom. We argue that the adjective “economic” or “political” determines the fields in which we should narrow or specify the meaning of freedom understood broadly as absence of coercion except for state coercion to enforce known rules. In this spirit, when it comes to economic freedom, state monopoly over coercion should be understood as concerning the economic activities of individuals; more precisely their entrepreneurial acts. Economic freedom permits individuals to exploit their productive potential by following their own plans and the opportunities to amass wealth safeguarded against confiscation (Barzel 2000). That is, in an economically free society individuals are allowed to realize their plans on the market. If state coercion goes beyond the limits defined above, economic freedom is hurt. Accordingly, state coercion must be limited: normative restrictions should be imposed on the coercive power of the government and on the manner in which it exercises its power (Hayek 1960).⁵

⁴ “Coercion occurs when one man’s actions are made to serve another man’s will, not for his own but for other’s purpose” (Hayek 1960:133). The coercer can determine the alternatives for the coerced so that the latter will choose what the coercer wants: “in order to avoid greater evil, he (the coerced – *authors’ addition*) is forced to act not according to a coherent plan of his own, but to serve the ends of another (the coercer – *authors’ addition*)” (Hayek 1960:21).

Of course, there are several forms of coercion, the threat of violence or physical force is the most important form of this, and even in this form there are many degrees of coercion.

⁵ Here it is worth noting that the concept of “limited government” should not refer to the size of the government *per se*, but rather, to in what fields the state exercises its coercive power. This idea will be developed in a more

The principle that provides us with a criterion according to which we can evaluate freedom is the Rule of Law.⁶ This ideal of freedom is best described in Hayek (1960) and in Leoni (1961), and refers to a situation where governmental coercive actions conform to general abstract rules laid down beforehand. In fact, the Rule of Law is a doctrine of what the law should be: “The rule of law is therefore not a rule of the law, but a rule concerning what the law ought to be, a meta-legal doctrine or a political ideal” (Hayek 1960:206). Clearly, the Rule of Law restricts government in its coercive activities.⁷

The Rule of Law includes three principles: (1) the certainty, (2) the generality and (3) the equality of the law. The certainty of law is probably the most important requirement for economic activities; according to Leoni (1972:95) it refers to the fact that individuals can make long-term plans, which necessitates that the law is not subjected to sudden and unpredictable changes.⁸ The generality of law means that the law never concerns particular individuals, i.e., law is abstract from the specific circumstances of time and place.⁹ In other words, to be abstract the law must consist of purpose-independent rules governing the conduct of individuals towards each other, and apply to an unknown number of further instances by enabling an order of actions (Hayek 1973). Equality of the law means that all legal rules apply to everybody including to those in power. That is, every individual, whatever his rank, is subject to the ordinary law of the realm. More importantly, laws apply both to those who lay them down and those who apply them. As a result, the state is limited in the same manner as any private person.

In addition to these three principles, as Leoni (1971) proposes we should add another one, although Hayek (1960) itself does not qualify it as a principle. This is (4) the fact that administrative discretion in coercive power must always be subject to review by independent courts. What is required under the Rule of Law is that a court should have the power to decide not only whether a particular action of the government agency was *intra vires* or *ultra vires* but whether the substance of the administrative decision was as the law demanded (Hayek

detail later. Here we would just like to emphasize that, as opposed to what is suggested in a large part of the literature, the size of the government *per se* does not reduce economic freedom.

⁶ “Nothing distinguishes more clearly conditions in a free country from those in a country under arbitrary government than the observance in the former of the great principles known as the Rule of Law” (Hayek 1944:54).

⁷ Note, however, that the Rule of Law is concerned *only* with the coercive activities of the government. It limits the functions of governments to those that can be carried out by means of general rules, but it does not tell anything as regards the non-coercive activities of the government.

⁸ As Leoni (1971) argues, as opposed to this Anglo-Saxon concept of the certainty of law the Continental idea of the certainty of the law was equivalent to the idea of a precisely worded, written formula. Note however that this does not guarantee that individuals would be free from interference by authorities.

⁹ British common law is this type of an abstract law, evolved in a spontaneous process. For an overview of its emergence and evolution see, among others, Benson (1998).

1960:214). To ensure this there must be some authority which is concerned with the rules, and not with any temporary aims of the government and which has the right to say whether another authority had the right to act as it did, and whether what it did was required by the law.

We consider the Rule of Law a core element in economic freedom since it is this principle that gives us guidance to determine what kinds of actions the government can take in an economically free country.¹⁰ Below, following the Hayekian line but going a step further, we will develop a categorization of government actions on which our conceptualization of economic freedom is based.

4. Economic freedom and government actions: towards a clarification

A conclusion from the above is that economic freedom relates to the character of government actions, rather than the volume of government actions. In this respect, we think it is useful to distinguish, on the one hand, between coercive and non-coercive actions, as we have implicitly done above, and on the other hand, between two kinds of coercive activities of a state, those that are compatible with economic freedom (freedom-compatible coercive activities) and those that are not (freedom non-compatible coercive activities). In what follows we characterize government actions at a greater length in this categorization schema.

4.1. Non-coercive activities

Non-coercive government activities, referred to as services by Hayek (1960, 1973), by definition, do not concern economic freedom, while they influence the size of the government. For a coherent framework we propose to differentiate between two kinds of governmental services. On the one hand, there are those services that the government should exclusively provide; that is, it should have a monopoly (services with agreed monopoly). On the other hand, there are those in which in principle the government should not have a monopoly (services provided on competitive grounds).

The former set of services includes those government actions that are imperative for a favorable institutional framework for individuals' free acts. Since the institutions in question

¹⁰ The Rule of Law consists of "rules fixed and announced beforehand – rules which make it possible to foresee with fair certainty how the authority will use its coercive power in given circumstances, and to plan one's individual affairs on the basis of this knowledge" (Hayek 1944:54).

would not emerge spontaneously, i.e., they need governmental design, the government should have a monopoly over them. We call these services services with agreed monopoly. Clearly, these services (e.g., national defence, various official governmental statistics and information) provide the means for a better execution of individuals' plans.¹¹

As far as the second group of services is concerned, here the government should work on the same terms as individuals. These services include most importantly health care, schooling, etc. Of course, it cannot be expected that there will ever be unanimity on the desirability of these services being provided by the government, and there exist counterarguments other than that of economic freedom (e.g., efficiency). The important thing, however, is that one should not confuse the issue of economic freedom with that of efficiency. For instance, if people for whatever reasons prefer public to private schools, and public to private health care and the governments satisfies these wants, this should not be seen as reducing economic freedom *per se*. If so, even the fact that there is an efficiency loss under government provision has nothing to do with economic freedom *per se*. Of course, we do think that efficiency loss has to be seen as an argument against the government, but this is an argument on its own right, which is different from arguing against the government on the grounds of economic freedom. That is why we argue that the size of the government *per se* does not hurt economic freedom.

Nevertheless, this question should not be confused with the question of what method the government adopts to provide these services. Not all methods are acceptable when it comes to economic freedom. For instance monopoly, prohibition or specific orders are not. In a free society the government can have the monopoly only over coercion, and nothing else, and in other respects it has to operate on the same terms as everybody else (Hayek 1960:222-223).

Based on the above, one should be very careful when analyzing the relationship between economic freedom and services provided by the government. Those government activities in which government has a monopoly, but where this monopoly is agreed upon, do not reduce economic freedom. On the contrary, when government has a monopoly in those services that can be provided on the market too (health care, schooling), this reduces economic freedom. However, in this case, in fact, the government uses its coercive power because it prohibits individuals from supplying these services, and so accordingly, this case applies to coercive governmental activities which will be examined in the next section. Thus it may be that

¹¹ We note that the services with agreed monopoly do not coincide with public goods, most importantly because public goods include coercive activities too. But we think that the crucial problem is that the notion itself is dubious because the criterion economists use to qualify a good as a public good is arbitrary, and reflect beliefs rather than objective measures: the criterion of excludability is only a matter of cost, and accordingly a matter of degree. See Block (1983).

people, for various reasons, prefer these services when they are provided by the government to when they are provided by private firms. If so, the government will be bigger than otherwise, but, this does not hurt economic freedom. In Table 1 we summarize non-coercive government activities.

Non-coercive governmental activities
<i>Services with agreed monopoly</i> Services that provide a favorable framework for individuals' decisions (monetary system, statistics, etc.)
<i>Services provided on competitive grounds</i> Services that are provided both by the government and by private firms on the same terms (e.g., schooling, health care, etc.)

Table 1. Non-coercive governmental activities

A conclusion from the above is that while non-coercive government activities do not hurt economic freedom, they have an impact on the size of the government. In principle, one can imagine such a country where for instance many competitive services are provided by the government because people prefer these to those provided by private firms, causing big government, but despite this fact economic freedom is not hurt. That is, as already argued above, big government does not necessary reduce economic freedom. The other thing that supports this assertion is related to services with agreed monopoly. Clearly, up to a certain point the quality of these services depends on financial resources devoted to them: the bigger the government the better the quality of these services.

Note that both cases imply that efficiency also matters. Both services with agreed monopolies and competitive services can and must be analyzed according to the criterion of efficiency. It may be that there are significant efficiency losses as regards these government actions, which is, of course, an argument against the government actions or in favor of small government. But bear in mind that this argument is not based on economic freedom grounds, but rather, efficiency grounds, which is a different thing.

4.2. Coercive activities

As regards the coercive activities of a state, we proposed above to differentiate between freedom-compatible and freedom non-compatible coercive activities. The former, being predictable, are compatible with the functioning of the market because they allow individuals to make plans and realize them on the market. The point is that these government activities

such as taxation or compulsory services or work safety regulations can be accounted for. As opposed to these, non predictable activities make individuals' planning impossible or at least largely uncertain. They are non-compatible with a free market.

Freedom-compatible coercive activities do not hurt economic freedom, provided they conform to the *ideal* of the Rule of Law. This does not mean that one should not evaluate freedom-compatible activities according to further criteria.¹² First of all, as implicitly suggested above, any deviation from the *ideal* reduces economic freedom. Clearly, this issue is related to the quality of the Rule of Law. Furthermore, in most cases (e.g., compulsory military service) efficiency matters also. On the other hand, freedom non-compatible coercive activities reduce economic freedom *per se*; they must be rejected solely on the basis of freedom non-compatibility, and the efficiency criterion does not come into play at all.

A crucial question is thus how to separate those coercive activities that are the pre-conditions for freedom from those that harm it. On a conceptual level one can apply Vanberg's (2001) constitutional choice argument as a criterion for what is "laid down beforehand". Given that a constitutional choice means an agreement "on rules", the process of this choice defines whether the coercive activities of the government fit the *ideal* of the Rule of Law. The question to be answered in this case is whether a particular coercive activity of the government passes the test of voluntariness on a constitutional level. Although the practical meaning of voluntariness of the choice of rules is dubious, it is a good conceptual tool for deciding whether a certain government regulation harms economic freedom or not.

Having made these rather general remarks, let us analyze the coercive activities of the government in a more detail. As regards freedom-compatible activities the important thing is that they include not only those government activities that are by definition laws (rules), but those general regulations that are laid down in the form of rules specifying a certain type of activity, conforming ideally to the principle of the Rule of Law. These regulations may concern for instance the techniques of production by limiting the scope of experimentation, or by prohibiting some activities for reasons of health, or by permitting other activities only when certain precautions are taken, and so forth. Clearly, these regulations raise the cost of production and reduce productivity, but they do so equally for all who engage in the particular production activity and can be taken into account when making plans. Note that, of course,

¹² It is worth noting that Hayek himself talks about 'expediency', a concept which is not clearly defined and seems to include such additional criteria as fairness, or justice, or efficiency. Instead of 'expediency' we adhere to the term 'efficiency' for reasons developed in Colombatto (2004).

these regulations must be analyzed, in the second place, according to the criterion of efficiency.¹³

In addition to the above activities, there are those which should be considered necessary implications of government monopoly over coercion. These government activities include most importantly the enforcement of contracts, the security of property rights, or national security. There is no doubt that for instance ensuring the security of property rights, while being a coercive activity, does not harm freedom; on the contrary, it is necessary for the Rule of Law.

As opposed to these freedom-compatible regulations there are those that are not compatible with economic freedom. These latter regulations include all kinds of controls such as price, quantity and wage control. Clearly, these coercive activities of the government represent the kind of infringement of the individual's private sphere which is an obstacle to individuals freely contracting with each others. So do, besides these regulations, all kinds of government monopolies for those goods and services which could be otherwise provided on a competitive basis. The services or goods upon which the government does not have an agreed monopoly should be supplied by the government on the same terms as anybody else, otherwise economic freedom is hurt. If government is only one of the (many) providers of these goods and services, this does not concern the issue of economic freedom. Clearly, it is not enough to examine the extent to which government gets involved in production or services; one should also examine whether it has a monopoly.¹⁴

The third type of freedom non-compatible coercive activities is government subsidies to particular firms (private or state) and various transfers which arbitrarily differentiate between agents. Transfers and subsidies should be seen as coercive actions because those who get particular subsidies are forced to behave not according to their plans but according to the government's will.

To sum up, freedom-compatible coercive activities can be taken into account and refer to everybody, whilst freedom non-compatible ones are those that arbitrarily differentiate between individuals and/or cannot be accounted for. Table 2 summarizes the coercive activities of the government.

¹³ For instance, there is no doubt that compulsory military service or some work regulations must be rejected on an efficiency ground, although these do not hamper individuals in making and following their plans on the market.

¹⁴ Note that the empirical literature we reviewed above, by and large, neglects this latter issue. Big government here relates only to the question of "how much", that is, how much the government reduces economic freedom, and not to "how", which refers to the way the governmental actions are taken.

Coercive governmental activities	
Freedom-compatible activities	Freedom non-compatible activities
General rules and regulations laid down beforehand conforming to the Rule of Law (e.g., laws, work safety and health regulation, etc.)	Controls <ul style="list-style-type: none"> • Price • Quantity • Wage
Services that are necessary implications of the monopoly over coercion (enforcement of contracts and property rights, national security, etc.)	Services or production without agreed monopoly which should be provided on competitive grounds, but over which government has a monopoly
	Government subsidies to firms and transfers

Table 2. Coercive governmental activities

5. Measuring economic freedom

In what follows we will explore how the above framework for an understanding of government actions leads us to propose an alternative concept of the measurement of economic freedom. We have to note that it is not our intention here to elaborate a precise methodology for this measurement, something which is beyond the scope of the present paper. Rather, our aim is to develop this measurement concept theoretically. In order to better highlight our proposition let us briefly summarize the most important critiques we level against the reviewed empirical literature, and more importantly against the indexes of economic freedom themselves.

From our viewpoint both indexes of economic freedom embody a contradiction between the theoretical notion of economic freedom and what is measured. The fact that this contradiction does not cause a problem for most researchers means, in principle, that either they have a notion of economic freedom which is different from ours; or they do not have a theory about economic freedom; instead, they have various theories about the effects of particular economic policies and institutions. If the latter is the case, and we believe this is the case as regards the majority of the literature we have reviewed, economic freedom is nothing else but a label for a collection of certain kinds of institutional or economic policy variables which one individual (the researcher) thinks should be followed. However, all this does not mean that we think that these examinations are of no utility at all. We do think, however, that most of them are about the effects of certain kinds of economic policies, and not about that of economic freedom. The societies defined as economically free by these indexes may or may not be free in the sense we conceptualize economic freedom.

Nevertheless, it is not obvious that mixing economic policy variables with more stable, institutional variables makes sense at all. When looking at this problem from the perspective

of growth regressions, we can come to the conclusion that there are several problems with such a method.¹⁵ We also find it problematic to confuse economic policy variables with institutional variables, but our point is not concerned with empirics, but with the theory of freedom just presented. From the theory previously laid down we can conclude that the indexes of economic freedom are more specific than we would need in order to measure economic freedom, because they try to measure the content of the rules and of economic policy and not just whether the government follows general rules when acting as an economic player.

It may be true that following rules will lead to ‘better’ policies than otherwise, but it is one question whether the government follows rules and another whether the policies it applies are ‘good’. In addition, a government that does not abide by rules in general can also follow ‘good’ policies. Accordingly, one should separate the content of economic policy from the way this economic policy is practiced. While economic policy may (and probably should) be questioned on the grounds of efficiency (fairness or justice), in many cases it cannot in itself be questioned on the grounds of economic freedom. To evaluate according to the criterion of economic freedom, one must have information about the way the government realizes economic policy: one has to ask whether these policies are subject to general abstract rules laid down beforehand.¹⁶ By this argument we are not proposing that the content of economic policy is not important; on the contrary, it is extremely important, but from the perspective of economic efficiency. Clearly, these two things are confused in the literature we reviewed in Section 2.

We do not assert that the indexes of economic freedom are completely futile, for at least two reasons: (1) besides economic freedom one still may be interested in measuring any specific content of economic policy, and (2), not all components of the index are contradictory to the notion of economic freedom we develop in this paper. In spite of this, in what follows we will criticize the indexes¹⁷ and we will show that by their help one can answer the question of which or what kinds of policies are ‘good’ for economic growth, rather than whether the country is economically free or not.

¹⁵ First, it does not provide answers for some of the most important normative and positive questions (Rodrik 2005). Second, good policies and good institutions move together across countries, which leads some researchers to say that economic policies do not have any effect on growth beyond institutions, or the institutions define the economic policy that is followed in the long run.

¹⁶ It follows that we have two reasons for arguing against policy-making *per se*: one is on the ground of economic freedom, and the other is on the ground of efficiency.

¹⁷ More precisely, we deal only with the Economic Freedom of the World Index (EFW Index), but because of the similarity of the two indexes the essence of what will be said applies to the Heritage’s index too.

To provide evidence for this assertion, in Table 3 we categorize the variables of the EFW Index according to whether they measure freedom in a sense we have developed above.

Components concerning economic freedom	Components not necessarily concerning economic freedom	Components concerning economic policy
<ul style="list-style-type: none"> 1. B. Transfers and subsidies as a percentage of GDP 2. A. Judicial independence: the judiciary is independent and not subject to interference by the government or parties in disputes 2. B. Impartial courts: a trusted legal framework exists for private businesses to challenge the legality of government actions or regulations 2. C. Protection of intellectual property 2. D. Military interference in the rule of law and the political process 2. E. Integrity of the legal system 3. D. Freedom to own foreign currency bank accounts domestically and abroad 4. B. Regulatory trade barriers 4. D. Difference between official exchange rate and black-market rate 4. E. International capital market controls 5. C. Business regulations 	<ul style="list-style-type: none"> 1. C. Government enterprises and investment as a share of total investment 4. A. Taxes on international trade 4. C. Actual size of trade sector compared to expected size 5. A. Credit market regulations 5. B. Labor market regulations 	<ul style="list-style-type: none"> 1. A. General government consumption spending as a percentage of total consumption 1. D. Top marginal tax rate (and income threshold at which it applies) 3. 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 3. B. Standard inflation variability during the last five years 3. C. Recent inflation rate

Table 3. Components of the Economic Freedom of the World Index according to their relevance to economic freedom

In the spirit of what have been said before, we can categorize the components of EFW Index into three groups. The first one consists of those that embody coercive government actions, and consequently, do concern economic freedom. Amongst them we can find components that refer to freedom-compatible coercive actions. These are the listed components of Area 2, which measure the quality of the Rule of Law. The remaining components belong to freedom non-compatible coercive activities, and accordingly reduce economic freedom. Above we referred to these as controls (3.D., 4.B., 4.D, 4.E., 5.C.) or transfers and subsidies (1.B.).

In the second column there are those components of the index that capture only the result of certain governmental or regulatory activities without referring to the way they are executed. Consequently, they cannot be measures of economic freedom without further qualification.

Certain measures of the size of government fall into this category, such as transfers or the scope of public property. As far as government enterprises are concerned (1.C.), the question of public versus private ownership is, of course, of great importance for efficiency, but to know whether it has something to do with economic freedom, we would have to have more information about the way public ownership is formed. As we explained above, we would have to know whether these state owned enterprises are monopolies.

The other four components in this column are those which have at least one such subcomponent that can not be said to measure the reduction in economic freedom. For instance credit market regulations (5.A.) cannot be clearly categorized in the first (freedom concerning) column because some of its subcomponents (ownership of banks, extension of credit) refer to the size of the private sector in banking, which is important, but does not necessarily tell us anything about economic freedom, while other subcomponents which evaluate credit and interest rate controls, of course, refer to a reduction of freedom. To conclude, these measures (4.A., 4.C., 5.A., 5.B.) do not necessarily reduce economic freedom because, as Vanberg (2001:21-36) argues, they may represent constitutional choices, which means to us that they do not hurt the criteria of the certainty, generality, or equality of the law; consequently they do not reduce freedom.

In the third column we listed those components of the index which do not measure economic freedom; rather, they measure the content of policy and whether the government follows 'good' policies. The level of government spending (1.A.), and of taxes (1.D.) are such kinds of measures. As we have seen, government spending in itself does not have much to do with economic freedom, because it does not exclusively concern coercive activities, although it has a lot to do with efficiency.

As regards taxes, what one should avoid is to count some components twice when measuring economic freedom. As far as the freedom-compatible coercive and non-coercive activities are concerned, since these actions themselves do not reduce economic freedom, at least when they correspond to the *ideal*, it would be erroneous to regard the taxes financing these actions as hurting economic freedom. As far as the freedom non-compatible government actions are concerned, these reduce economic freedom *per se*, consequently taking into account taxes too would be duplicating. Put differently, asking how much tax revenue the

government needs in order to finance the freedom-compatible coercive and non-coercive activities is a matter of efficiency, not of economic freedom. It follows from the above that the EFW Index cannot avoid the problem of duplication by taking into account both taxes and those components (e.g., various controls) that reduce economic freedom.

The last three components in this column focus on monetary policy (3.A., 3.B., 3.C.). There is no question that bad monetary policy and inflation can cause great social efficiency losses, but, again, reducing efficiency is not reducing freedom. These measures do not say anything about whether monetary policy is conducted on the basis of certain rules. Even the growth of the money supply does not tell us whether the fact that the money supply did not grow very fast was the result of a rule or just an accidental event in an arbitrary monetary policy.

In sum, the mere fact that a particular country follows a different economic policy compared to another country does not imply that the two countries differ in terms of economic freedom, even if the economic policy of one country may be ‘better’ (more efficient).

As shown above there are several problems with the EFW Index: policy variables are mixed with institutional variables, numerous components do not necessarily refer to economic freedom, there is a duplication, etc. We argue that these shortcomings stem from a lack of a theory of economic freedom. In what follows we propose an alternative concept to measure economic freedom, built upon our categorization of government actions, which tries to measure economic freedom in terms of the character of government activities. Here the extent of economic freedom can be reduced from two sides: (1) by the deviation from an *ideal* of the Rule of Law (freedom-compatible government activities), and (2) by freedom non-compatible government activities.

As regards the first point we have to examine the method and nature of forming and reforming constitutional rules, and of course, “how these processes may themselves be subjected to rules” (Vanberg 2001:35). Thus if we want to measure economic freedom, we can hardly avoid constructing a measure of the extent to which the choice between different rules are subject to rules on a higher level.¹⁸ That is, what we need to measure is not only whether the Rule of Law matches the Hayekian *ideal*, but also whether and to what extent rules, once they exist, are followed in practice. This latter is important because the Rule of

¹⁸ We believe that Vanberg’s constitutional choice is just another term for the Hayekian implicit “social contract” concept. Note that a crucial question in this respect is what qualifies a public constitutional contract as voluntary (see also Colombatto 2004).

Law should not necessarily be codified; thus formal rules are not enough for us to decide whether an economy can be said to be governed according to the Rule of Law. We also need *de facto* practice, and in addition, we need *de facto* practice even if, as an extreme case, a country does not have any written rules. Here the problem we face is that written rules do not necessarily become effective constraints: there may be other factors that make the government behave in accordance with the Rule of Law.

Clearly, here we have to analyze the following two aspects of the way governmental actions are taken. The first one concerns whether the government relies on rules when making decisions (rule-following problem), since coercion is admissible only when it conforms to general rules and not when it is a means of achieving a particular aim of current policy. The second one relates to the extent to which the government is committed to follow the rules that it itself laid down beforehand (commitment problem). Thus one can imagine such a situation in which *de iure* the government is bound to rules, i.e., in principle it relies on rules, but in practice it does not keep to these rules in every respect.¹⁹

Besides the deviation from the *ideal* of the Rule of Law, freedom non-compatible government activities hurt economic freedom, too. Based on the analysis of the government activities we have developed above, we argue that economic freedom can be reduced in three respects. First, all price, quantity and wage controls reduce economic freedom. Second, government services and production with a not agreed monopoly also reduce it. And finally when government subsidizes particular firms or gives transfers this is also against economic freedom.

To sum up, non-coercive government activities by definition do not reduce economic freedom, although they may increase the size of the government. So, when measuring economic freedom we should focus our attention only on coercive activities. As argued above, there are two channels through which economic freedom can be hurt: freedom non-compatible activities and as regards freedom-compatible coercive activities, any deviation from the *ideal* of the Rule of Law.

¹⁹ A possible fruitful way of developing indexes of economic freedom understood as governance by the Rule of Law is using *de iure* and *de facto* indexes of judicial independence developed by Feld and Voigt (2003), and Hayo and Voigt (2004). We think that the *de facto* index may be a good proxy for the rule-following problem, whereas the difference of the two indexes may be appropriate for the commitment problem.

6. Conclusions

In this paper we have developed a concept of economic freedom based on Hayek (1960), and as a step further we have proposed a categorization of government actions, which allowed us to conceptualize the measurement of economic freedom in a different way from the indexes of economic freedom. A clear-cut concept of economic freedom is important not only for ranking countries according to a scale, but more importantly, for developing new substantial results as regards how economic freedom affects growth. In other words, we think that empirical investigations may be important, but we argue that these should be based on a coherent theory; that is, our position is ‘theory first, and empiricism after’.

In our view the major problem with the literature on economic freedom lies in a confusion between the criterion of economic freedom and other criteria, such as efficiency, justice or fairness, or whatever. In this spirit, arguing clearly against government intervention is not equivalent to arguing in favor of freedom. Thus an examination of government actions must be based upon a hierarchy of criteria, and in this hierarchy freedom-compatibility comes in the very first place. The criteria of efficiency should be used only in the second place; accordingly, an efficiency loss does not necessary hurt economic freedom. That is, big government is contradictory to freedom only when governmental actions that make it “big” do not derive from general rules laid down beforehand. To put it differently, the size of the government is one thing, and the issue of economic freedom is another. We have put forward the idea that a government action is compatible with the free market system only if it is based on known general abstract rules, which makes us see the Rule of Law as a criterion for economic freedom, and not efficiency or other criteria.

However, further work is needed to develop the details of the measurement of economic freedom in a way we propose, and we do not think this is an easy task.

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