

Measuring Individual Freedom

Actions and Rights as Indicators of Individual Liberty

*Peter Graeff**

Introduction—the problem of measuring freedom

The problem with measuring individual freedom begins on the theoretical level. After centuries of debating, theorists still do not agree about what freedom actually is. There are at least two distinct theoretical streams—positive and negative freedom, as discussed later—that claim to provide theoretical foundations for measurement. The measurement problem is becoming more acute as there is also a gap between theory and empirical operationalization, partly because scholars tackling the issue of freedom are mostly interested in theoretical approaches and do not construct their theories or ideas with regard to empirical conditions. Empirical issues also restrict the theory-operationalization fit by the fact that data are not producible for all theoretical ideas. From a measurement perspective, this could be taken as a drawback. In theory, these aspects make theoretical propositions irrefutable.

* Peter Graeff is Assistant Professor of Sociology in the Department of Social Sciences, Goethe-University Frankfurt am Main. He obtained a Ph.D. from the University of Bonn. His research interests focus on the analysis of negative and positive social capital and freedom. He is also interested in the methodology of measurement and on statistical methods for the analysis of social science data. He has coedited several books and has published in the discipline's major journals including the *Journal of Mathematical Sociology*, the *European Sociological Review*, and *Quality and Quantity*.

A previous version of this paper was presented to the International Colloquium on Freedom organized by the Friedrich-Naumann Foundation in Potsdam, June 2010. I'm grateful for helpful comments from the conference participants. The comments by Ian Carter, Jim Gwartney, and Bob Lawson have proven particularly valuable in improving the paper.

As opportunities to act freely or restrictions on acting freely unfold, the question remains open as to whether subjective data about freedom opportunities or restrictions can contribute to the measurement of freedom. It seems obvious that replies to interview questions such as, “How free do you feel?” or “Do you think that you are a free person?” produce self-reported issues that might not correlate with recognizable states of freedom outside the interviewee. Likely most authors would prefer to have “objective” (or non-personal) data with which to test their theoretical propositions about freedom as long they do not have to commit themselves to just psychological ideas about subjective liberty. Their notion of freedom is related to an actual restriction or shaping of freedom, not only to a perceived one. Even if it is assumed that the perception of freedom is positively related to actual freedom, a person’s assessment of freedom will necessarily rely on other psychic factors.

While it hardly seems possible to measure and test propositions of classical theories about freedom using self-reported data, it is also hardly conceivable that we could fully measure restrictions on or opportunities for individual freedom. Moreover, even if indicators or proxies for restrictions and opportunities would be more suitable for an empirical transfer of theoretical freedom propositions, there are, however, no “objective” indicators that would capture the pure content of freedom but nothing else. Measurement theory in the social sciences would demand exactly this for an optimal measurement process, namely, that the indicator or proxy “... measures what it is supposed to measure” (Bollen, 1989: 184) (validity) with a consistent measurement process (reliability). Measuring social phenomena according to these criteria presupposes that their theoretical conceptualization is well-founded. Otherwise, the measurement process is already hindered on the theoretical level.

Theories of freedom could not only be assessed according their logical consistency, but could also be evaluated in their contribution to measuring freedom. A valid measurement presupposes a clear cut, convincing theoretical approach that provides hints for operationalization. A valid and reliable tool to measure freedom must reveal congruence between the theoretical ideas and their measurement, even if the analyzed construct is rather broad and general. Some factors might spoil the theory-operationalization fit in general. First of all, if freedom is defined in such a broad way that its content is mixed up with non-relevant aspects, the development of a reliable measurement is already hindered on the theoretical level (Neumann and Graeff, 2010). As mentioned before, this is likely to happen if indicators or proxies are used to gauge the degree of freedom, which brings in other content as well. Variables or indicators that are derived from vague theoretical concepts typically come up with inappropriate measurement features and do not work properly in

empirical testing. Consider, as an example, that freedom is equated with political conditions such as democratic structures or aspects of wealth (Hanke and Walters, 1997).¹ In this vein, measuring the number of democratic structures in a country could be seen as an attempt to measure political freedom. If indicators of democratic structures are taken as measures of freedom it is no longer possible to empirically separate effects of democracy and effects of freedom from each other. Since the theoretical debate about the notion of freedom was mostly conducted with regard to affairs of the state and the law, it is not unusual in literature to mix up theoretically different things. And because freedom is often considered as a value of great importance for modern societies, theoretical propositions sometimes imply conflicts between values, such as the tradeoff between security and freedom. Take, as a practical example, a situation of national danger brought about by an impending military attack from another state. In such an emergency caused by an outside threat, the government might reduce civil rights in order to improve the national readiness to defend. For sorting out these conflicts between values, normative preferences must be applied. Typically, ideological or political ideas are associated with those and might cause a bias. For the measurement of freedom, the relevance of a political or ideological bias should not be underestimated, as it might suppress relevant content in the measurement process so that necessary information is not taken into account or is misinterpreted. Measurements attempts would then remain incomplete and comparisons with other measurement tools become complicated due to their theoretical differences inherent in their construction (Hanson, 2003). An ideological bias could also lead to an overestimation of the importance or effect of sources that restrict or provide the opportunity to act freely. This problem is closely linked to the well-known fact that freedom is often confused with other positively evaluated things (Carter, 1999: 274).

Even if some of these pitfalls cannot be avoided completely,² the measurement of individual freedom must stick to a theoretical foundation, which means that one has to use one of the theoretical approaches

-
- 1 As both Berlin and Hayek argue, democracy and freedom are not the same thing.
 - 2 Researchers who want to apply a theoretical approach for deriving hypotheses and develop measurement tools must opt for one of the existing theories of freedom. The major theories of freedom largely exclude each other. There is no theoretical criterion that would allow one to prefer one theory or another. Deciding upon one theoretical approach is essentially a matter of preference or opportunity for measurement. Normative assumptions and preferences about values will also enter the analysis, even if the researchers are not interested in ideological or political propositions. This set of assumptions and value preferences should be made explicit in order to avoid confusion about the implications of measurement results.

and derive a valid and reliable measure from it. For this, freedom should not be considered as a value, or as Palmer puts it, “Let us not, then, confuse freedom with ability, capability, knowledge, virtue, or wealth. Let us hold up a standard of freedom, expressed in clear and precise terms.... But as we enjoy the blessings of freedom, let us not confuse those blessings with freedom itself, for on that path we are led to lose both freedom and its blessings” (2008, 16). Depending on the intention of applicability, a measure should also come relatively culture-free. At least, it should fulfill the criterion that it is (potentially) applicable to every society in order to measure freedom (see Jackman, 1985, for the issue of comparability).

Besides these demands, there is also a group of conditions that a measurement tool for freedom should accomplish (see, for example, Carter, 2004; McMahon, 2010). The aim of this paper is provide an overview of a suggestion to construct a measurement index of individual freedom with regard to these conditions. For this, classic and newer theoretical approaches to freedom and their operationalization are briefly described in the first and second sections. The theoretical implications of these approaches are discussed in the next section. For theoretical and empirical reasons, a “negative freedom” approach is chosen for further examination. In contrast to existing measures, actions (and their restrictions) are considered to be the point of departure for constructing an index of individual freedom, which is dealt with in the next section. The second source for the index consists of liberty rights. The implications of this approach are analyzed in the following section, which also provides some reasons why this measurement is a potential improvement on previous ones. The last section presents the conclusion.

Theories of freedom

In scientific literature, two theoretical approaches to freedom, the so-called “positive” and “negative” concepts of freedom, dominate the debates (Berlin, 1969; Carter, 2004; Silier, 2005). Even if both approaches can be taken as a theoretical point of departure, they are inherently incompatible and lead to different (practical) consequences. They also need different ways of being operationalized, as will be explained further on.

Positive freedom (or positive liberty) denotes the possibility of acting itself and refers in its broader sense to the fact that actors can realize their goals. It also involves conditions of granting the opportunity to realize the goals. Therefore, it presupposes the existence or presence of situations in which actors can behave in a self-determined and autonomous manner.

In contrast to the positive understanding of freedom, negative freedom (or negative liberty) refers to the absence of obstructions that hinder actors in realizing their actions. Contrary to positive freedom, this

approach does not assume the existence of conditions for providing opportunities for self-realization. Rather, it stresses the point that actors are not hindered in whatever they want to do.

When referring to the “negative” understanding of freedom, scholars plead for restrictions of governmental actions in order to minimize the probabilities of action constraints upon citizens. In contrast to this, adherents of “positive” freedom accept governmental intervention in order to enable people to act according to their own will (given that the people are able to behave in a self-determined way). The different “camps” emphasize different aspects of the freely acting person. Scholars preferring the negative understanding of liberty focus on the degree by which actors or groups face obstruction from external forces (such as a government imposing restrictions); scholars who like the positive understanding of freedom bring more attention to the degree by which actors or groups act autonomously, even if there is a third party that enables them to act.

The biggest theoretical gap between these camps emerges from the assumption that the understanding of negative freedom implies the incapability of a third party (such as the state) of procuring positive freedom. For scholars adhering to the positive liberty camp, the state is able to create conditions for citizens that result in positive liberty, even if there are inherent problems with action rights (Gwartney and Lawson, 2003: 407). If, for instance, all people have the same “positive right” to do something, such as get a medical treatment, then a third party or another person or group that granted this right can be held responsible for procuring it. This is contradictory to the rationale of scholars belonging to the negative freedom camp who say that people or groups are only in charge of their own actions and are not allowed to coerce others (which would mean a violation of their freedom, accordingly). In a strict interpretation of negative freedom, “invasive” rights are therefore considered as not being compatible with the ideas of this concept.

Since both approaches refer to different facets of human life, to obstructing actions or fulfilling self-determination, many attempts have been made in the literature to reconcile these contradicting ideas. MacCallum (1967) made the most prominent effort to do so; he argued that both dimensions of freedom are part of each situation in which freedom is considered. If, for example, one desires to do something, then it is necessary that he or she has the freedom to do it without being obstructed. In this vein, aspects of freedom refer to the absence of prevention measures on the possible actions of a person. However, freedom is only conceivable for people if they have the opportunity to act according to their will, regardless of any obstruction that may get in the way. Therefore, even if the approaches of negative and positive freedom differ substantially in their political and social consequences, their weaknesses

can be partly mended in theory, provided they are combined with each other. According to MacCallum, scholars from the two different camps differ from each other to the degree by which they stress the three variables: “actor,” “freedom preventing conditions,” and “action opportunities.”

In the (philosophical) literature that deals with the general distinction between positive and negative freedoms, recent publications and attempts to measure freedom still distinguish between the objective element of (non-) liberties, such as legal restrictions, and cognitive (partly “psychological”) elements such as attitudes. However, measurement ideas that refer to positive freedom are usually developed and applied in accordance with Social Choice Theory. Those authors call attention to both MacCallum’s integrative view and to postulations by Sen (1988, 1991). This literature deals with axiomatic measures of the availability of choices and seeks to find ranking scores for individual liberties while at the same time making use of measurement issues for negative freedom. Bavetta, for instance, applied MacCallum’s triadic concept to situations in which people have freedom of choice and reviewed the literature according to the correspondence between conceptions of liberty and their measures. He found that the measures used in the freedom of choice literature consist of many dimensions of liberty (such as availability of choices or autonomy) and suffer from a lack of validity, accordingly. His main criticism is directed toward the measurement of individual freedom: “In each and all cases constraints are defined in terms of unavailability of the relevant opportunities. In the literature, they do not provide independent information about how a measure of freedom of choice should be constructed” (Bavetta, 2004: 47). Adherents of Social Choice Theory focus on a person’s capability, which identifies the person’s freedom to be useful and create useful things. In doing so, they explicitly refer to value-based underpinnings of liberty that correspond with several positively evaluated states for people (such as well-being) (see Olsaretti, 2005).

For the negative freedom concept, and in contrast to the value-based measurement attempts of positive freedom adherents, the ongoing debate about the issue of whether this concept can be applied in a value-free manner continues to persist. Recently, Dowding and van Hees made an attempt to partly circumvent a value-laden concept of negative freedom by arguing for an intention-based conception that “... reduces the normative problem that a person can increase his own freedom simply by changing his preferences. Moreover, it is less likely to be the case—although it still cannot be precluded—that a person increases the collective freedom by a mere change of preferences. Hence we conclude that the intention based account of negative freedom satisfies the normative criterion in a more satisfactory manner than the ‘pure negative accounts’ that we have taken as our starting point” (2007: 158). In specific aspects, their

Table 1: Dimensions of freedom

Freedom as	Content	Similar to
Opportunity concept	Availability of opportunities	Negative freedom
Exercise concept	Way people act	Positive freedom
Intention-based concept	Intentions of constraining actors become relevant	Freedom as social relation (Oppenheim, 2004)
Non-intention-based concept	Ignore intentions of constraining actors	Freedom as social relation (Oppenheim, 2004)

ideas counter the arguments made by Carter (2004) and Kramer (2003) (see also Carter and Kramer, 2008; and Dowding and van Hees, 2008). This discussion is not pursued in detail here as it only marginally pertains to methodological or measurement issues but more so to semantic and (philosophically) logical arguments.

However, Dowding and van Hees provided different “dimensions of freedom” (2007: 143) which could be used as a framework in analyzing indices also in accordance with the distinction between positive and negative freedom, even if it is impossible to separate these dimensions in a rigorous way (see table 1).

If freedom is defined within an opportunity concept, attention is given to the availability of opportunities, not to the course of action itself. Usually, there must be some kind of criterion defining options as opportunities and determining their values, too. A working approximation may count relevant opportunities as only those that others do not interfere with. The interpretation of freedom as the absence of common restraints in societies (e.g., legally prohibited actions) also refers to this concept. Opportunity concepts are pertinent to many approaches of negative freedom (Taylor, 1979).

Freedom as an exercise concept, capturing most ideas of positive freedom, touches on the way in which people act. Usually, it is implied that a person’s action is not caused by others, suggesting that there is congruence between the person’s aims and actions. Obviously, problems with the distinction of opportunity and exercise concepts occur if mental states of a person are identified as inherently unfree (which might happen in situations of addictions).

The second dimension of freedom suggested by Dowding and van Hees (2007) is the distinction between intentions of actors. Others can constrain a person’s freedom intentionally or unintentionally. Given that an actor performs an action intentionally and not accidentally, the scope of freedom widens from the person who experiences free and unfree situations to the people who influence these situations. In this sense, a prisoner

in a state prison is made unfree intentionally, but a child that has been unintentionally locked in her parents' home is not unfree, even if the child might not be able to leave the house. As Dowding and van Hees put it: "Whatever one's judgment about such cases, bringing in intentions underlying actions—and inactions or omissions—becomes an important element in assessing freedom, though it also makes the assessment messier than conceptions of freedom that ignore intentions" (2007: 146). The mess is partly caused because the theoretical integration of intentions results in regarding the social relationship between actors. Oppenheim (2004) maintains (by referring to theoretical ideas by MacCallum (1967)) that it is hardly possible to measure "social freedom" that is defined as a relationship between actors. Judged by specific parameters, it could be possible to specify the degree to which an actor is free in respect to another person as long as subjective assessment of the persons could be quantified.

Dowding and van Hees (2007) also introduce a third dimension not listed in table 1: the distinction between value-free and value-laden conceptions of freedom. Since all existing freedom indices necessarily bring in value-based assessments, this idea will not be continued here.

Empirical attempts to measure freedom

With reference to the theoretical approaches, freedom has been scrutinized in different areas of human life, particularly in the economic area (economic freedom), the media (press freedom), and the law (civil liberties). There are also some new measures that capture freedom from a seldom analyzed point of view, such as religion or time.

The indices exemplarily presented in table 2 fulfill, at least, the criterion that they are (potentially) applicable to every society in order to measure elements of freedom. The indices were developed, however, with different aims and applied under different empirical circumstances.

The *State of the World Liberty Index* is the broadest of all freedom indices presented here. It provides country scores that are combined from three sources: the Fraser Institute's economic freedom index, Freedom House's assessments of individual freedom (civil liberties and political rights), and the sizes of governments and their taxes. As an overall measure, the *State of the World Liberty Index* is partly realized as an (inverted) opportunity concept in the sense of negative freedom. Given that the state is perceived as the (negative) opposite to citizens, interfering with their freedom (to spend their own money) by imposing taxes and "crowding out" their consumption opportunity in markets (indicated by the size of government), the intentions of this actor are assumed to be negative for citizens. The remaining two sub-components of the index, "economic freedom" and "individual freedom," however, have to be evaluated differently and are discussed in greater detail below.

Table 2: Cross-country indices of freedom

Area	Index	Some topics or sub-indices
Global Index (2006)	State of the World Liberty Index	<ol style="list-style-type: none"> 1. Economic Freedom (Fraser) 2. Individual Freedom (civil liberties, press freedom) 3. Government Size and Tax
Economic Freedom (1970-ongoing)	Economic Freedom of the World (The Fraser Institute)	<p>Area 1: Size of Government: Expenditures, Taxes, and Enterprises</p> <p>Area 2: Legal Structures and Security of Property Rights</p> <p>Area 3: Access to Sound Money</p> <p>Area 4: Freedom to Trade Internationally</p> <p>Area 5: Regulation of Credit, Labor, and Business</p>
Economic Freedom (1995-ongoing)	Index of Economic Freedom (Heritage Foundation)	<ol style="list-style-type: none"> 1. Business freedom 2. Trade freedom 3. Fiscal freedom 4. Government size 5. Monetary freedom 6. Investment freedom 7. Financial freedom 8. Property rights 9. Freedom from corruption 10. Labor freedom
Civil Liberties (1972-ongoing)	Civil Liberty Index (Freedom House)	<ol style="list-style-type: none"> 1. Political rights 2. Civil liberties
Freedom of media (2006-ongoing)	Worldwide Press Freedom Index 2008	
Religious Freedom (2001)	International Religious Freedom Data	<p>Government Regulation of Religion</p> <p>Government Favoritism of Religion</p> <p>Social regulation of Religion</p>
Time (ca. 2005)	Discretionary time (temporal autonomy)	

Economic freedom is a frequently analyzed phenomenon in macro data research. Two broad indices are used the most: one developed by the Fraser Institute (which is also a component in the *State of the World Liberty Index*) and one developed by the Heritage Foundation. The Fraser Institute's economic freedom index is divided into five "areas" that reflect freedom, again regarding the absence of economic restraints. The term "economic freedom" is defined in the classical libertarian sense as presented on the home page of the Fraser Institute's Free the World web site (<http://www.freetheworld.com/background.html>): "One would like a definition that says that economic freedom is the voluntary allocation of resources subject to as few constraints as possible—other than those imposed by nature, and those imposed by voluntary, non-coercive associations of others." All areas of economic freedom reflect the idea of a negative opportunity concept. But the role of government is not only assumed to be aversive for the citizens. The government also ensures that property rights are secure and that the meeting of business commitments between private parties is guaranteed. The operationalization is, however, only in the negative sense, e.g., it is registered if there is a lack of property rights or flaws in the legal structure.

The authors of the Heritage Foundation's economic freedom index define economic freedom as "... individuals are free to work, produce, consume, and invest in any way they please, and that freedom is both protected by the state and unconstrained by the state" (<http://www.heritage.org/research/features/index/faq.cfm>). This index is, again, referring to an opportunity concept, still applying an ambivalent intention of state actions. On the conceptual level, the relationship between citizens and the government or state is blurred by such subcomponents as corruption, because corruption sometimes allows citizens to advance their particular interests at the expense of universal ones. In general, one can have reservations about these kinds of composite indices which mix different phenomena in order to measure yet another phenomenon. They typically do not regard the causal links between the variables and are not useful in clarifying the influences between each other.

Freedom House's *Civil Liberty Index* is a composite measure divided into subcomponents of political rights and civil liberties. Political rights pertain to the electoral process and the rights to participate politically. They also refer to the degree of an abuse of administrative positions by corruption. The subcomponents of civil liberties consist of elements like the freedom of expression and beliefs, or the rule of law. The subindices mix exercise and opportunity conceptions because they focus both on the availability of action opportunities and on procedural forms of conduct. The *Civil Liberty Index* is based on surveys that do not explicitly ask who the restraining actor for restrictions of freedom is, rendering this index a non-intentional concept.

Several cross-country indices exist that attempt to measure freedom of the press. Only the *Freedom of Media Index* is presented here, because it is the most influential one and is often used as subcomponent for other composite macro indices (it is also a subcomponent of the *State of the World Liberty Index*). The *Freedom of Media Index* is available in several languages and for several countries. The index is constructed, following a negative opportunity concept with non-intentional features, by summing up (extreme and less extreme) restrictions on journalistic work. It records how often journalists are hindered from doing their work. The survey asks not only about the restraints placed upon journalists by public officials, but also by private citizens, too. Many items deal with state censorship.

The *International Religious Freedom Index* gives information about social and governmental regulations of religious issues (Grim and Finke, 2006). This index consists of three subcomponents that measure governmental or social regulation of religion and how much government favors religion. The authors' aim was to develop an index that reflects specific forms of religious persecution and discrimination. In its construction, the index is non-intentional, focusing on opportunity, not on exercise conceptualization of freedom elements.

The *Index of Temporal Autonomy* tries to view freedom from a different perspective (Goodin et al., 2008). Since time is (different to monetary resources or objects) universal in every society, and because time budgets are comparable across individuals on the same scale, it suggests that in modern societies, temporal autonomy as an indicator of freedom can be measured by the hours people are free to spend as they please. The authors provide “discretionary time” measures for some countries and imply that personal well-being and aggregated welfare are inherently connected to it. Conceptually, these measures are basically non-intentional and refer to the (positive) availability of opportunities, even if, on the measurement level, restrictions come into play.

In sum, there are examples of freedom measurements that apply an opportunity concept and refer to theoretical ideas of negative liberty and to some of the political ideas connected to this concept. Those indices assume that state interventions are more or less negative for citizens if the government does more than necessary in order to create a stable environment for people, firms, and markets. These indices measure the availability of opportunities by counting the restrictions that actions, people, and firms usually face.³ Only rarely do freedom indices consider

3 It is important to distinguish “opportunity” from “freedom,” as noted in other words in the previous quotation from Palmer. Here, we are not talking about describing an “opportunity” that otherwise would not be available as a freedom, but rather about an agent blocking an opportunity that is available—the blocking is the restriction on freedom in the negative sense.

elements of positive freedom. In general, the indices presented here do not aim to put both positive and negative ideas of freedom into practice; the *Human Freedom Index* is the only exception. The indices differ in the way they refer to freedom and the degree to which they address contemporary topics such as terrorism (freedom of religion) or issues of gender (time autonomy).

In their methodologies, all indices come up with aggregated country scores that are weighted or averaged. These scores are designed to be comparable across different countries.

Theoretical implications and previous measurement attempts

Despite their political and social ramifications, classical and new approaches to freedom consider individual freedom as the interplay between individual actors and the opportunities or obstacles in their social environment. Both the positive and negative classical theoretical camps make use of the assumption that this social environment is relatively stable and that decisions, aspirations, or capabilities could fit to the opportunities provided by the environment. While this social environment is taken as an encouraging force in the positive freedom approach because the degree of freedom varies with the reinforcements given by third parties (such as the state), it is mostly considered a source for hindering actions in the negative freedom approach because freedom belongs solely to the individual and in no way depends on the support of others.

The role of the state as the factor of greatest general influence on the social environment has been discussed extensively in the literature. Adherents of positive freedom usually consider the state to be a positive factor influencing freedom. Theorists who approve of the idea of negative freedom usually plead for the existence of a small (minimum) state, e.g., a minimal amount of normative regulation. In the special area of economic freedom, Gwartney and Lawson put it this way: “Institutions and policies are consistent with economic freedom when they provide an infrastructure for voluntary exchange, and protect individuals and their property from aggressors seeking to use violence, coercion, and fraud to seize things that do not belong to them” (2003: 408). While this idea might earn merit in economic areas given previous empirical results, it must be scrutinized further in other areas of freedom. Even theorists who adhere to the precepts of the negative freedom camp accept violations of freedom in certain situations, such as when national threats or global crises arise. In a strict sense, they accept interference by a third party that is not compatible with the ideal conditions of negative freedom, as coercion implies the absence of freedom. But in some situations, coercion (e.g., by the state) seems to be justified when other values that are more highly

regarded (such as human life) are in jeopardy. Then, “invasive” interventions are considered compatible with negative freedom. Then, the matter of freedom becomes a matter of values.

For the measurement of freedom that refers to more than just economic freedom, those observations imply that a measurement tool for freedom should not contain the idea that the state is a threat to freedom *per se*. The state is only one of many potential parties in the social environment. For operationalization, it would be best to separate and to name these parties (such as the state or social groups) that are able to restrict or reinforce individual freedom. Whether these parties support or restrict certain areas of freedom is ultimately an empirical issue.

So far, the theoretical background and the ramifications of negative and positive freedom approaches have been discussed together. For a specific measurement, though, these approaches cannot be combined because negative freedom does not contain any theoretical contribution about the preferences and aims of individuals that are at the center of positive freedom. The measurement of positive freedom involves assumptions about aims and preferences so that theoretical inconsistencies do not occur. Otherwise, it seems possible that “... a person can increase his own freedom simply by changing his preferences. Moreover, it is less likely to be the case—although it still cannot be precluded—that a person increases the collective freedom by a mere change of preferences” (Dowding and van Hees, 2007: 158).

In the following sections, I will therefore focus on the measurement conditions for negative freedom concepts. By doing this, necessary assumptions about preferences and aims for maintaining theoretical consistency can be avoided. Furthermore, a suitable theory-measurement fit becomes more likely if theoretical propositions clearly indicate which content should be measured and which should not. By choosing a negative freedom approach, several aspects associated with positive freedom can be removed from the agenda, such as possible becomings (such as becoming rich and independent), obstacles for which no agent is responsible (such as external shocks or natural disasters) or indicators of self-realization (see Carter, 2004).

Freedom as an individual feature

What can be learned from both classic approaches to freedom (and the attempts to combine them theoretically) is that freedom is associated in the first degree with real persons only. What might appear as trivial at first sight is actually important for operationalizing and measuring. The classic theories of freedom pick up the assumption that freedom belongs to individuals, not to collective or amorphous entities such as nations or organizations. As such, freedom is linked to the *actions* of individuals which

can be observed, assessed, and hindered. In this vein, freedom is neither a personality trait, nor merely a thought, nor a state. Freedom refers to the conducting of actions, committed by individuals.

The implication of measuring freedom is evident: ideally, the measurement of individual freedom starts with actions of people. For negative freedom, the free processing of actions, or the degree of their hindrance, could count as indicative information.⁴ Freedom is present as long as actions are not hindered. This concept of freedom becomes explicitly visible if obstacles occur that block opportunities for action. Regarding actions as the basis for measuring freedom is in accordance with Carter's proposition to measure freedom as a "non-specifically valuable quantitative attribute" (2004: 68). The previous attempts to measure freedom that have been presented earlier demonstrate that there is no uniform basis for constructing a freedom index. But without that uniform basis there might be no certain criterion for choosing the ingredients of a tool for measuring freedom.

If individuals act in situations in which they relate to others or in which others relate to them, an action has an effect on the actions of others. Due to this, actions of people (or their hindrance) are typically regulated by other people, communities, or the state. Consider, as an example, drinking alcohol in public. According to Berlin, this action becomes relevant in terms of freedom if restrictions are imposed by others that affect one's liberty to consume alcoholic beverages in public (1969: 121). By their nature, such social regulatory mechanisms (and other laws or norms) exist separately from the specific action itself. In this special example, one might think of a norm or law that prohibits drinking alcohol in the public sphere. Here, a norm might be established to ensure that drinkers do not become role models for children (among other reasons). Children's well-being might be considered to have a higher value than the individual pleasure that comes from consuming alcohol in public.

Even if all actions that affect others can be linked to social values, and even if it is necessary to make assumptions about values if freedom issues are considered, it is questionable whether certain values must be taken as a prerequisite for freedom. Take the idea of property rights as an example. Adherents of negative freedom, economists for example, would assume that the existence of property rights (and their protection) is a necessary condition for the existence (and restriction) of individual freedom. While this assumption earns some merit when it comes to the explanation of the efficiency of economic processes, freedom is equated with other (political) ideas on the theoretical level. The idea of freedom is "moralized" which has theoretical implications (that also affect the measurement

4 For positive freedom concepts, capturing positive features would mean that elements of self-determination and the fulfilling of aims must be applied.

of freedom). Carter puts it this way: “By ‘moralizing’ the notion of freedom—by making the meaning of freedom depend wholly on that of another good—one indeed disposes completely of the need to talk about freedom in any literal sense” (2004: 71).

There is no doubt that theoretical assumptions and assessments always enter the construction of a measurement tool for freedom. But if one is interested in a measure of freedom but not in a measure of a political idea about freedom and some other prerequisites and consequences, the measurement tool should reduce the dependence of other political and ideological assumptions.

On closer inspection, it is obvious that a lot of actions happen in almost every society without restrictions. This is particularly true if these actions refer to the functioning of society, such as in the area of economics or religion. In accordance with the theoretical approaches mentioned above, the measurement of freedoms should focus first and foremost on actions *as they are realizations of freedom*.

In many cases, actions are not available for quantification. The *space* for freedom opportunities (regarding actions) is (theoretically) infinite, while the *experience* of freedom is very real for people, and involves more than the absence of obstacles. For the conceptualization of freedom measures (concerning choices between actions), real world examples correspond to the experience of liberty in people’s lives (Rosenbaum, 2000). A theoretical distinction that implies a separation of experiences and constraints artificially cuts a good part of freedom out. If one accepts that freedom is always and necessarily from restraint (McCallum, 1968), action opportunities and restrictive incidents are interrelated. For measurement, this leads to the suggestion that external and internal obstacles erected by responsible agents are a complement of actions. It turns out that we get complementing results when we measure real freedoms in the way an action is conducted, or the way it is constrained. Take, for example, the prominent economic freedom category, “starting a business.” This action opportunity is usually measured on a scale ranging from “0 days” to “x days.” Higher values indicate less freedom.⁵ Increasing restraints correspond to less freedom.

Treating of the degree of restraint as a corresponding restriction on possible freedom allows the operationalization of freedom areas that can be summarized to an overall freedom score. By this, overall freedom “... ‘generalized comparisons’ purely in terms of empirical freedom are meaningful given that overall freedom is an attribute of agents and given that it has non-specific value” (Carter, 1999: 274).

5 It is debatable what a general prohibition around starting a business means. If a country does not allow anyone to start a business, the number of days would become infinite.

The indices presented earlier partly consist of quantification of action. Since they list those as one indicator among others, they are not able to separate the actions from other operationalizations of freedom (e.g., rights).

Rights as measurement indicators

Theories of freedom have been primarily developed and discussed in philosophy and political science. In discussions about rights, freedom does play an important role, if only because formal law does not prohibit all actions and leaves some residuum, which includes opportunities to act freely. One might, however, posit that there is necessarily a loss of freedom whenever law is imposed (Brenkert, 1991: 71). In accordance with the arguments made earlier, this point underlines the fact that law is required in situations of social coordination or (potential) conflict. There remains, however, an unregulated public space. If smoking in public is not prohibited, one might feel free to have a cigarette anywhere. One might consider this unregulated social space as a (rightfully claimed) liberty that derives its existence from formal regulations that do not affect this space. There are also rights that provide action opportunities by guaranteeing that no one is allowed to interfere. If some religious practices, such as attending mass on Sunday, are protected by freedom of worship laws, these rights provide the basis for one to act freely.

These scientific roots become evident if one looks at attempts to measure liberty. The actual measurement of liberties that produce indices (such as those coming from Freedom House or the Heritage Foundation) do not rely on the assumption that freedom belongs only to human beings. On the contrary, freedom is only seldom related to actions; it is rather connected to *rights* (Hanke and Walters, 1997: 120). In fact, confusion about the applicability of the terms “freedom” and “rights” exists in the literature. As McMahon puts it: “Humans may have a right to democratic governance, but democratic governance is not a freedom.... However, many such claims are no longer merely labeled as ‘rights’; they have been recast as freedoms” (2012: 30). Even on the theoretical level, rights are distinguishable from freedom (Jones, 1994), particularly when it comes to the measurement of freedom (Carter, 2004). In contrast to this, existing rights are often treated as indicators of freedom.

For reasons of measurement, there might be a simple explanation for this: rights are more easily observable than individuals’ actions and are, more or less, valid for all citizens. Another reason might be that the field of discussion in which classic theories were developed was related to political matters, that is, freedom was scrutinized particularly in its theoretical implications for people living under certain political conditions, such as democratic or autocratic regimes. Beside this, depicting the content of freedom as rights comes with the interesting feature that

rights usually exist and are valid for all citizens in a country. In practice, this assumption might often be violated as rights necessarily need an institution that provides, supports, and maintains them. Rights are similar to norms as they coordinate social action, but differ from them in that their enforceability depends on the actual presence of the providing institution. A state may grant the right to vote, but might not be able to enforce this right in all areas of the country.

Another drawback of rights as indicators of freedom is their potential to interfere with each other. Typically, rights guarantee a person or organization's specific claim. But, for instance, libel laws intended to enable the prosecution of corrupt actors usually interfere with the right of social integrity. One may justify the application of libel laws on the basis of the more highly regarded benefit of curbing corruption, but doing so contradicts other rights that are commonly held in Western societies. Since the assessment of the ordinal order of rights (and norms) is a political and social matter of jurisdictional and public negotiation, rights are sometimes changed quickly as a result of circumstances (Döring, 2009: 32). The temporal stability of rights might be stronger the more basic the rights become. Among all others, human rights can be considered fairly stable, at least in Western nations. This argument is only partly true for matters of freedom, as areas where people freely conduct their social lives typically touch upon facets other than human rights, for instance, upon specific issues of education or communication.

However, the relationship between rights and free actions is a close one, both in theoretical and empirical research. Existing freedom scales (such as the Fraser Institute Index of Economic Freedom) usually confuse rights and actions, that is, treat them as equal sources for scale construction. In situations of social interdependence, rights constitute a social sphere in which action takes place. By this, action presupposes a social environment regulated by rights and norms. For social coordination, rights and norms can be considered as having a supply and a demand, implying that there is an optimum situation in which both meet each other (Coleman, 1990; Walker, 2012). A measurement tool for freedom that refers to actions or their obstacles can take advantage of this information. A freedom measurement consisting of rights necessarily reflects other factors that are not directly related to freedom. Usual aspects of the political system (democratic, autocratic), the quality of the governmental infrastructure, and a country's development level are more or less part of the measurement score. This mix-up implies a high correlation between the freedom scale and variables or indicators that measure political or economic aspects (such as the degree of democracy) and it also implies collinearity in multivariate approaches (Xu and Haizheng, 2008: 183). One may also state that the theory-operationalization link must be weaker

compared to the scales dealing with actions because making rights amenable to empirical research comes only at the expense of bringing other aspects in as well. The validity of such a rights measure can be assumed to be lower, accordingly (Neumann and Graeff, 2010).

Methodological implications

Up to this point in the argument, suggestions have been aimed at criteria that allow for the construction of a valid and reliable instrument for measuring negative freedom. Actions and obstacles by responsible agents constitute the core meaning of freedom. Rights augment this meaning insofar as they reflect the social environment that is relevant for liberty.

The different ways the term “freedom” can be defined implies that different concepts are associated with it. Instead of concept, we could also use the term “construct” (Cronbach, 1971). Typically for the social sciences, these constructs are not directly measurable. In the words of Nunnally and Durham: “... words that scientists use to denote constructs, for example, ‘anxiety’ and ‘intelligence,’ have no real counterpart in the world of observables; they are only heuristic devices for exploring observables” (1975: 305). If, for instance, the term “freedom” is understood in its negative sense, several items measuring actions or obstacles could operationally define the construct “negative freedom.” Freedom is called a “latent construct” or “latent variable” here because it is not directly observed—only its items on the measurement level are observed.

The application of latent variable approaches for measurement happens differently in social sciences, such as sociology or psychology, than in econometrics. While in economic approaches, unobserved component models or dynamic factor models (Lüdkepohl, 2005) predominate, structural equation models or factor analysis (or multidimensional scaling) are most prominent in other social sciences (which do typically make use of cross-unit information but only seldom use cross-time information).

A statistical advantage of the latent variable approach is that it can be used to assess how tenable the assumed theory-operationalization fit is. A prerequisite for a good fit is a close connection between the latent construct and the items by which it is measured (usually this connection is determined by a correlation between items and latent construct). Furthermore, one would expect, for example, that a straightforward construct derived from theory, such as negative freedom, does in fact measure freedom, but no other constructs such as democracy or wealth. Therefore high correlations between other (valid) measures of freedom are desirable and likely (convergent validity). But low correlations between measures of freedom and, for instance, political or economic indicators, are also necessary (divergent validity).

From this methodological point of view, to be useful, the construct of freedom should not be too general, that is, it should avoid including other variables (such as political conditions). If it does so, factor analysis (or its statistical relatives) will reveal that the components of the freedom measure are contributing to the same latent factor.

Keeping a measurement pure from other influences is not an end in itself. If a construct is used in a multivariate analysis (such as a multiple regression analysis) as an explanatory variable, collinearity is inevitable and typical statistical problems such as endogeneity are harder to tackle (Faria and Montesinos, 2009: 103).

Conclusion

The attempt of this contribution is to reduce the gap between theoretical ideas of freedom (in the negative sense) and operationalization. The empirical input is clearly derived from theory, which allows for a distinction between rights and actions/obstacles on the theoretical level. By doing so, it fits with the idea of “consistency” as McMahon proposes: “The measure should choose one definition of freedom and consistently stick to it” (2010: 30).

On the individual and the aggregated (cross-country) levels, most of the previous attempts in the literature to explicitly measure freedom do not consider action (or obstacles as their counterparts) and liberty rights as separate entities. This is hardly surprising, as for many areas of human life in which freedom was measured (such as the media or the law), actions for citizens do not exist. These areas might be important parts of society, but actions can be conducted in such areas only by special persons (such as journalists or lawyers). It is debatable whether such an area should be integrated into a measure of individual freedom. If it becomes part of these measures, it is at the expense of the idea of freedom as an individual feature, which gets lost.

If a measurement index is developed which makes use both of actions (or obstacles) and (corresponding) liberty rights, a measurement tool with regards to individual freedom (of every citizen) is warranted. Some of the previous freedom indices were developed with the ulterior motive of their being useful for policymakers (Hanke and Walters, 1997). There is also an open question as to how well an index of actions and rights would work here. In contrast to other measurement tools, the relative comparison of different areas of actions (or rights) could be an informative feature. Consider a fictional example of a country in which it is possible to enjoy freedom in economic activities but at the same time have communication activities restricted. This difference must be judged as particularly revealing if the rights of neither freedom area are subject to

extensive interference. The actual communication restriction might be a result of social suppression, which exists outside of the jurisdictional sphere.

This example clearly shows that before the index is generated, it must be determined which areas of social life are to be integrated into it. If these are found, and actions and obstacles and rights are quantified, it is furthermore possible to determine which of these areas are relevant for explaining, for example, democratic stability or social unrest. Here it becomes evident once again how important it is that the explanatory variables simultaneously measure features of freedom (but not of democracy).⁶

The proposed measurement procedure here rests on a micro-macro link, starting from the individuals on the micro-level, but allowing for increasing aggregate measures for countries or nations as well (Coleman, 1990; Wippler and Lindenberg, 1987). In a certain sense, (aggregated) collective freedom is derived from individual freedom (deHaan and Sturm, 2000: 218). As individual actions and rights remain separate parts of the index, these sources of freedoms are still clearly distinguishable.

6 In multivariate regressions, “diluted” indices appear as highly collinear with other explanatory variables. Typically, variance inflation factors become very high which indicates that variables overlap in their explanation of the dependent variable. Usually, test statistics are negatively affected, accordingly.

References

- Alchian, A.A. (1965). Some economics of property rights. *Il Politico* 30: 816-829.
- Bavetta, Sebastiano (2004). Measuring freedom of choice: An alternative view of the recent literature. *Social Choice Welfare* 22: 29-48.
- Berlin, Isaiah (1969). *Four Essays on Liberty*. Oxford University Press.
- Boko, Sylvain H. (2002). Institutional reform and economic growth in Africa. *Journal of African Finance and Economic Development* 5(2): 57-76.
- Bollen, Kenneth A. (1989). *Structural Equations with Latent Variables*. Wiley.
- Brenkert, George G. (1991). *Political Freedom*. Routledge.
- Carter, Ian (2004). *A Measure of Freedom*. Oxford University Press.
- Carter, Ian, and Matthew H. Kramer (2008). How changes in one's preferences can affect one's freedom (and how they cannot): A reply to Dowding and van Hees. *Economics and Philosophy* 24: 81-96.
- Coleman, James (1990). *Foundations of Social Theory*. Harvard University Press.
- Cronbach, Lee J. (1971). Test validation. In R.L. Thorndike (ed.), *Educational Measurement* (2nd ed.), (American Council on Education): 443-507.
- deHaan, J., and J.E. Sturm (2000). On the relationship between economic freedom and economic growth. *European Journal of Political Economy* 16: 215-241.
- Dowding, Keith, and Margit van Hees (2007). Counterfactual success and negative freedom. *Economics and Philosophy* 23: 141-162.
- Dowding, Keith, and Martin van Hees (2008). Counterfactual success again: Response to Carter and Kramer *Economics and Philosophy* 24: 97-103.
- Döring, Detmar (2009). *Traktat über Freiheit*. Olzog.
- Dreier, James (2006). *Contemporary Debates on Moral Theory*. Blackwell.
- Faria, Hugo J., and Hugo M. Montesinos (2009). Does economic freedom cause prosperity? An IV approach. *Public Choice* 141: 103-127.
- Gwartney, James, and Robert Lawson (2003). The concept and measurement of economic freedom. *European Journal of Political Economy* 19: 405-430.
- Goodin, Robert E., James Mahmud Rice, Antti Parpo, and Lina Eriksson (2008). *Discretionary Time: A New Measure of Freedom*. Cambridge University Press.
- Grim, Brian J., and Roger Finke (2006). International religion indexes: Government regulation, government favoritism, and social regulation of religion. *Interdisciplinary Journal of Research of Religion* 2(1): 3-40.
- Hanke, S., and S. Walters (1997). Economic freedom, prosperity, and equality: A survey. *Cato Journal* 17 (Fall): 117-46.
- Hanson, John R. (2003). Proxies in the new political economy: Caveat emptor. *Economic Inquiry* 41: 639-46.

- Jackman, Robert W. (1985). Cross-national statistical research and the study of comparative politics. *American Journal of Political Science* 29(1): 161-182.
- Jones, Peter (1994). *Rights*. Palgrave Macmillan.
- Kramer, Matthew H. (2003). *The Quality of Freedom*. Oxford University Press.
- Lutkepohl, H. (2005). *New Introduction to Multiple Time Series Analysis*. Springer.
- Mangahas, Mahar (1977). The Philippine social indicators project. *Social Indicators Research* 4: 67-96.
- MacCallum, G.C., Jr. (1967). Negative and positive freedom. *Philosophical Review* 76: 312-34.
- McMahon, Fred (2012). Human Freedom from Pericles to Measurement. In Fred McMahon (ed.), *Towards a Worldwide Index of Human Freedom* (Fraser Institute): 7-54.
- Neumann, Robert, and Peter Graeff (2010). A multitrait-multimethod approach to pinpoint the validity of aggregated governance indicators. *Quality and Quantity*, 44: 849-864.
- Nunnally, J.C., and R.L. Durham (1975). Validity, reliability, and special problems of measurement in evaluation research. In E.L. Struening and M. Guttentag (eds.), *Handbook of Evaluation Research* (Vol. 1) (Sage Publications): 289-352.
- Olsaretti, Serena (2005). Endorsement and freedom in Amartya Sen's capability approach. *Economics and Philosophy* 21: 89-108.
- Oppenheim, Felix E. (2004). Social freedom: Definition, measurability, valuation. *Social Choice and Welfare* 22(1): 175-185.
- Palmer, Tom G. (2008). *Freedom Properly Understood*. Occasional Paper 48. Paper presented at the International Colloquium *Global Freedom? The Future of International Governance* (November 9-11). Friedrich Naumann Foundation.
- Parsons, Talcott (1953). Some comments on the state of the general theory of action. *American Sociological Review* 18(6): 618-631.
- Rosenbaum, Eckehard F. (2000). On measuring freedom. *Journal of Theoretical Politics* 12(2): 205-227.
- Sen, Amartya (1988). Freedom of choice: Concept and content. *European Economic Review* 32: 269-294.
- Sen, Armatya (1991). Welfare, preference and freedom. *Journal of Econometrics* 50: 15-29.
- Sharif, Mohhamed (2003). A behavioral analysis of the subsistence standard of living. *Cambridge Journal of Economics* 27: 191-207.
- Silier, Yildiz (2005). *Freedom: Political, Metaphysical, Negative and Positive*. Ashgate.
- Taylor, Charles (1979). What's wrong with negative liberty? In Alan Ryan (ed.), *The Idea of Freedom* (Oxford University Press): 175-194.

- Veenhoven, Ruut (2004). Happy life years. A measure of gross national happiness. In Karma Ura and Karma Galay (eds.), *Gross National Happiness and Development*. Proceedings of the First International Seminar on Operationalization of Gross National Happiness (Center for Bhutan Studies): 287-318.
- Walker, Michael (2012). A Compact Statement of a Cost-based Theory of Rights and Freedom: Implications for Classifying and Measuring Rights. In Fred McMahon (ed.), *Towards a Worldwide Index of Human Freedom* (Fraser Institute): 137-152.
- Wippler, Reinhard, and Siegwart Lindenberg (1987). Collective phenomena and rational choice. In Jeffrey C. Alexander, Bernhard Giesen, Richard Münch, and Neil J. Smelser (eds.), *The Micro-Macro Link* (University of California Press): 135-152.
- Xu, Zhenhui, and Haizheng Li (2008). Political freedom, economic freedom, and income convergence: Do stages of economic development matter? *Public Choice* 135: 183-205.

