

1 **WHY ARE CIVIL LIBERTIES MORE IMPORTANT**
2 **THAN EXECUTIVE CONSTRAINTS IN ECONOMIC**
3 **DEVELOPMENT? A PROPERTY RIGHTS**
4 **APPROACH¹**
5
6
7

8 PÁL CZEGLÉDI
9

10 *Associate professor, Faculty of Economics and Business Administration, University of Debrecen*
11 *E-mail: pal.czeglédi@econ.unideb.hu*
12
13
14
15
16
17

18 This paper develops a simple model that helps understand an important fact concerning cross-country
19 pattern of growth and institutions shown by BenYishay and Betancourt (2010). They show that
20 civil freedoms, especially one of their components called Autonomy and Individual Rights, are
21 more important determinants of economic development than constraints on executives, a widely
22 used measure in the literature on institutions and growth. The paper provides an interpretation of this
23 fact through the lense of an argument that puts emphasis on three insights. The first is that civil freedoms
24 can be seen as property rights broadly understood. The second is that with a higher scope of
25 property rights enforced, the government must be able to commit to a lower level of expropriation of
26 income. Third, institutions of freedom are sticky: they must be in line with the culture of the country
27 so that they can be enforced with a reasonable cost. By addressing this specific question of constraints
28 on executives versus civil freedoms the paper joins the literature which emphasizes the importance
29 of culture in economic development.

30 **Keywords:** civil liberties, property rights, development

31 **JEL codes:** P14, P16, O11
32
33
34
35
36

37 ¹ The paper was supported by the János Bolyai Research Scholarship of the Hungarian Academy
38 of Sciences. The author wishes to thank two anonymous referees for their genuinely helpful
39 comments on numerous points of the paper and for their suggestions that substantially improved
40 the paper. Any remaining errors are those of the author.

1. INTRODUCTION: CONSTRAINT ON EXECUTIVES OR CIVIL LIBERTIES?

1 Economists are a long way from agreement on the role of democracy in economic
2 development. There are some widely accepted claims, however. One of them, at
3 least in what I call the mainstream of institutional research,² is that the checks and
4 balances which the democratic institutions are able to create are the fundamental
5 determinants of economic development. That is because these checks and bal-
6 ances constrain political power, and these constraints are able to contain the risk
7 of expropriation, and, so the argument goes, a low risk of expropriation is neces-
8 sary for investment in physical and human capital, and most of all, for innovation.
9 Indeed, Acemoglu and Johnson (2005) found that property rights institutions,
10 measured as the “constraint on executive”, are more important determinants of
11 economic development than “contracting institutions” which in the long run do
12 not even really matter. Since then, “constraints on executives” as documented in
13 the Polity IV database have become the most important measure of the security of
14 property rights, and of institutions in general, especially in the literature searching
15 for institutional causes of economic development.

16 This is why the empirical result derived by BenYishay and Betancourt (2010)
17 is fundamentally important for an understanding of the question as to how politi-
18 cal institutions, market institutions, and economic development relate to each
19 other. They show in a cross-sectional analysis of 60 countries that civil freedoms,
20 and especially the part of it called by Freedom House (2012) Autonomy and Indi-
21 vidual Rights, perform better in terms of explanatory power and statistical signifi-
22 cance than the widely used constraints on executives measure does. This is true
23 even if control variables are included and reverse causation is controlled by a
24 2SLS method.

25 The interpretation of this important fact may not be clear-cut, though. As I will
26 show, in section 2, there are at least three approaches to understanding the causal
27 mechanisms between democratic institutions and economic development. My
28 own interpretation – which is intended to be the contribution of this paper – is in-
29 spired by the insight that, as emphasized by Sobel and Coyne (2011: 121), civil
30 liberties “capture many elements of embedded informal institutions, including
31 traditions, religion, and customs”.

32 Based on this insight this paper is aimed at building an argument that is helpful
33 in understanding BenYishay and Betancourt’s (2010) result concerning the im-
34

35 ² See the next section for a more detailed elaboration of what is meant by this. Kozenkow (2013)
36 provides a brief but very good overview of New Institutional Economics including the main
37 conclusions of the empirical research cited here and the property rights approach applied in the
38 paper.
39
40

1 portance of civil freedoms in economic development as compared to that of execu-
 2 tive constraints. The argument is that this fact can be traced back to three charac-
 3 teristics of institutions of individual freedom. First, a higher level of freedom
 4 means that the government must be able to commit itself to a lower level of expro-
 5 priation. Second, institutions of freedom (civil as well as economic) are sticky,
 6 that is, they have to be in line with culture. Third, civil freedoms can be seen as the
 7 enforcement of a relatively broad scope of property rights. On an abstract level,
 8 economic freedoms and civil freedoms are not really different. The paper shows
 9 that when these three assumptions are put together in a simple model they are able
 10 to explain why civil freedom is a better “predictor” of development than executive
 11 constraints are.

12 This argument will be presented in the following steps. The next section briefly
 13 reviews the literature on the three different explanations concerning the relation-
 14 ship between economic development and civil liberties or democracy, and de-
 15 scribes the broad approach applied in the paper. Section 3, though not intended to
 16 be a literature review, makes an extensive use of the literature on the similar na-
 17 ture of economic and civil freedoms with the help of which I provide an interpre-
 18 tation of civil liberties in the framework of property rights. Using this framework,
 19 in section 4 I develop a very simple model of how constraints on executives, cul-
 20 ture, and technology affect the provision of civil liberties. Section 5 uses this
 21 model to understand the different effect of executive constraints and civil liberties
 22 on development. Section 6 draws some conclusions.

23

24

25 **2. POLITICAL RIGHTS, CIVIL FREEDOM AND ECONOMIC** 26 **DEVELOPMENT – A BRIEF LITERATURE REVIEW**

27

28 Seeing economic development and democracy as two variables³ which are corre-
 29 lated in time as well as across countries, there are logically three possibilities to
 30 model their relationship. The first is to say that it is democracy that causes devel-
 31 opment. The second is to say that it is just the other way around and development
 32 causes democracy. The third possibility is to say that there are third factors that

33

34

35 ³ The work concentrating on this question sees “democracy” as a mix of different institutions pro-
 36 viding political rights and civil liberties. These rights and liberties are theoretically different, but
 37 they are very closely associated empirically. This may be the reason why most of the studies
 38 cited do not really emphasize the difference between political rights, civil liberties, and the insti-
 39 tutions that make them possible. In the studies reviewed below it is often “democracy” that is
 40 used as a variable, which includes civil liberties. That is the reason I will not limit this overview
 only to those works that discuss civil liberties in a narrow sense.

1 make both variables go in step with each other. All the three views are represented
2 in the economics literature (see *Table 1*).

3 The first explanation – the one that can be viewed as the institutional main-
4 stream – claims that as democratic institutions are constraints on the political elite
5 they reduce the risk of expropriation (North – Weingast 1989; Olson 2000;
6 Acemoglu et al. 2005). This view has been given much support in the past decade
7 by showing that the most important institutions in economic development are
8 those that constrain political power (Acemoglu et al. 2001; Acemoglu – Johnson
9

10 **Table 1**

11 Three approaches to the relationship between economic development and democracy

13 Questions	14 Institutional mainstream	15 Lypset hypothesis (modernization thesis)	16 Culture and technology view
17 Interpretation of causality	18 Democratic institutions cause development	19 Development leads to democracy	20 Development and democracy go step by step as a result of third factors
21 Role of civil liberties	22 Civil liberties constrain executives	23 Civil liberties are luxury goods	24 Civil liberties are important for constitutional exchange
25 Role of executive constraints	26 Constraints on executives lower the risk of expropriation	27 Constraints are demanded as a result of better education and higher income	28 Executive constraints can be seen as a result of constitutional exchange fuelled by new elite interest and ideology
29 Role of “culture”	30 Culture has no role	31 Culture may impede the process in which development brings about democracy	32 “Ideology” is needed for liberal economic and political reforms
33 Leading authors and works	34 Acemoglu – Robinson (2012) North – Weingast (1989)	35 Lipset (1959) Barro (1996) Paldam – Gundlach (2008) Gleaser et al. (2004)	36 Congleton (2011) McCloskey (2010) ⁴

37 *Note:* This table summarises the literature review of section 2.

38 ⁴ Although McCloskey (2010) does not directly address the “democracy and development” issue,
39 she emphasizes that modern economic growth was caused by a new ideology giving dignity to
40 bourgeois life. The latter, I think, is a first step towards developing democratic institutions.

1 2005); that it is democracy that comes first, not development or human capital ac-
2 cumulation (Acemoglu et al. 2005a, b); and that in non-democratic societies the
3 elite can block the introduction of new technologies that would lead to economic
4 development because they fear the political uncertainties that it might bring
5 (Acemoglu – Robinson 2006).

6 The view that emphasizes the causality running from development to democ-
7 racy is usually called Lipset’s hypothesis (Lipset 1959; Barro 1996; Paldam
8 2007). According to this view (Paldam – Gundlach 2008) economic development
9 and human capital accumulation closely associated with it will cause an increas-
10 ing demand for democratic institutions. Paldam’s (2007) analysis gives support to
11 this view, also referred to as the “grand transition”, and to some of the accompa-
12 nying cultural approaches, although he does not find it relevant that democracy
13 causes growth. This is broadly the same conclusion reached in several other pa-
14 pers (e.g. Paldam – Gundlach 2008, 2012).

15 Put differently, it is absolutely not clear that there is any causality running from
16 political or civil freedom towards development. Paldam and Gundlach (2012) use
17 Granger regressions and different instrumental variables to compare short- and
18 medium-run effects with long-run effects and find that in the long run the causal-
19 ity that runs from income to democracy is almost overwhelming, while the reverse
20 effect can only be detected in the short run (3 years). They also use variables of the
21 cultural kind and conclude that some of them – such as the share of Protestants and
22 Muslims within the population – matter. Using historical data on schooling
23 Murtin and Wacziarg (2012) also reaffirm the Lipset hypothesis and find no evi-
24 dence of a causality running from democracy to development.

25 This grand transition thesis is also echoed by those theories and empirical stud-
26 ies of economic development (Gleaser et al. 2004; Easterly – Levine 2012) that
27 show that long-run economic development was determined to a large extent by
28 human capital and probably culture and not by the strategies of colonization (or
29 the initial natural conditions by which it was affected) and by the different politi-
30 cal institutions they resulted in, as is suggested by the first view.

31 It is possible to formulate a third view emphasizing different third factors when
32 explaining the co-movement of democratic institutions and development. Some
33 researchers have done so. As we have just seen, Paldam (2007) cannot reject en-
34 tirely the idea that culture can account for the development of democracy at least
35 partially, and on the other hand some economists (e.g. Tabellini 2010) also em-
36 phasize the role of culture in economic development. Indeed, Sobel and Coyne
37 (2011) show, as we saw in section 1, that different institutions are closely related
38 and civil liberties most probably reflect some deep-seated cultural element.

39 In his book on constitutional development in the West, Congleton (2011) ex-
40 plains that a liberal ideology was one of the driving forces of democratization, to-

1 together with the new economic interests and political pressures created by eco-
2 nomic development which were made possible by the liberal economic reforms.
3 Beside detailed historical case studies of the countries in question he applies
4 Granger causality tests of the time series data of these countries (Congleton 2011:
5 573–610) and his conclusion of the “bootstrapping” nature of political and eco-
6 nomic processes are supported by the mutual determination of development and
7 democracy.

8 The three assumptions made in the introduction are echoed in these approaches
9 – although not all of them are embraced. The first one is included in all three ap-
10 proaches: no one denies that for innovation to happen a low risk of expropriation
11 is needed. The role of culture or ideology is considered in the third approach as a
12 condition of a constitutional exchange the result of which is a higher level of free-
13 dom. The third assumption is, however, not really emphasized by any of these ap-
14 proaches. This is why I consider the application of the property rights view to be
15 the contribution made by this paper. The next section elaborates on this third as-
16 sumption.

17

18

19

20

21

3. FREEDOM AS THE SCOPE AND ENFORCEMENT OF PROPERTY RIGHTS⁵

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

My interpretation of the fact described in the introduction rests on three assump-
tions. Namely I assume that (1) a higher level of freedom means that the govern-
ment must be able to commit itself to a lower level of expropriation, but (2) the in-
stitutions of freedom (civil as well as economic) have to be in line with culture,
and (3) civil freedoms can be seen as the enforcement of a relatively broad scope
of property rights. In this section I will try to show how these assumptions can be
integrated by applying the approach of the so called property rights school.

Assumption (3) can be derived by recognizing that labelling some rights “prop-
erty” and others “civil” is an arbitrary way of thinking in this approach. Hence an
application of this way of thinking makes it possible to see “economic freedoms”
and “civil freedoms” in a unified framework.

In this classical liberal interpretation there is no fundamental difference be-
tween economic freedom and civil freedom. In accordance with my assumption
(1) freedom is defined as an absence of coercion (Hayek 1960: 11–21). More pre-
cisely, some level of coercion is always present, because some coercion is needed
to enforce the rules ensuring freedom. Freedom is at its maximum, when coercion

⁵ This section develops further the argument I present in Czeglédi (2012) where I propose that the
difference between economic and civil freedom are vague and arbitrary and this has implica-
tions when we look at these freedoms as determinants of the wealth of countries.

1 – including private coercion – is at its minimum. While, for example F. A. Hayek
 2 is generally seen as a champion of economic freedom, in one of his magnum
 3 opuses he came to the conclusion that

4 [t]he importance of freedom [...] does not depend on the elevated character of the activities it
 5 makes possible. Freedom of action, even in humble things, is as important as freedom of
 6 thought. It has become a common practice to disparage freedom of action by calling it “eco-
 7 nomic liberty”. But the concept of freedom of action is much wider than that of economic lib-
 8 erty, which it includes; and what is more important, it is very questionable whether there are
 9 any actions which can be called merely “economic” and whether any restrictions on liberty
 10 can be confined to what are called merely “economic” aspects. Economic considerations are
 11 merely those by which we reconcile and adjust our different purposes, none of which, in the
 12 last resort, are economic (excepting those of the miser or the man for whom making money
 has become an end itself) (Hayek 1960: 35).

13 The same view is formulated by Knight (1922: 472) when he says that

14 [t]he idea of a distinction between economic wants and other wants must be abandoned.
 15 There is no definable objective, whether subsistence, gratification of fundamental impulses
 16 or pleasure, which will serve to separate any of our activities from the body of conduct as a
 17 whole.
 18

19 That is, there is no way to decide whether a certain kind of human action is “eco-
 20 nomic” or not. However, if this decision is impossible, it is also impossible to de-
 21 cide whether a certain kind of freedom is “economic” or not, since this label
 22 should describe the action that it makes possible.

23 Instead of talking about economic and civil freedom, it makes more sense to
 24 talk about two dimensions of freedom, the enforcement of rights and the scope of
 25 rights. The difference between these two dimensions of property rights can be de-
 26 rived from the “property rights approach” (Alchian and Demsetz 1973). Alchian
 27 and Demsetz (1973: 17) give a very concise description of what is meant by prop-
 28 erty rights in this tradition when they say that “[w]hat are owned are socially rec-
 29 ognized rights of action”, that is, “[w]hat is owned are *rights to use* resources, in-
 30 cluding one’s body and mind, and these rights are always circumscribed, often by
 31 the prohibition of certain actions” (emphasis in original). It is clear that from this
 32 perspective civil rights are property rights. As Barzel (1989: 2, footnote 1) makes
 33 it explicit, “[h]uman rights are simply part of people’s property rights. Human
 34 rights may be difficult to protect or to exchange, but so are rights to many other as-
 35 sets.”⁶
 36
 37

38 ⁶ BenYishay and Betancourt (2010: 284) mention as well that “the protection of human rights
 39 [...] follows the same logic” of property rights defined as the “right to consume services of, the
 40 right to generate income from and the rights to alienate an asset”.

1 From this point of view it would require us to define those rights that are eco-
2 nomic to get a measure of economic freedom, and, similarly one should be able to
3 define “civil use” of an asset to get a measure of civil liberties. It is not clear
4 whether there is a general criterion to make this categorization. Gwartney and
5 Lawson (2003: 408) argue that economic freedom reflects a “different sphere of
6 human interaction”, although “the foundation of political and civil liberty is iden-
7 tical to that of economic freedom.” But they do not provide the reader with a gen-
8 eral concept to establish a difference.

9 Such a criterion might come from Vanberg (2001: 23). He proposes that the
10 definition of property rights given above confuses two different dimensions of
11 property rights which he calls “the issue of assigning rights” which answers the
12 question “who owns what?” and the “issue of defining rights” which answers the
13 question of “what does it mean to own something?”. By this taxonomy Vanberg
14 (2001) is clarifying the difference between the view of laissez faire liberalism and
15 that of constitutional liberalism. Laissez faire liberals put great emphasis on the
16 assigning issue, most importantly, that of assigning rights between the state and
17 private players. This is roughly the way Gwartney and Lawson (2003: 406) argue,
18 too, writing that “[i]nstitutions and policies are consistent with economic freedom
19 when they provide an infrastructure for voluntary exchange, and protect individu-
20 als and their property from aggressors seeking to use violence, coercion, and fraud
21 to seize things that do not belong to them”. Clearly this definition is based on the
22 question “who owns what?” and not on the meaning of ownership, since one is
23 supposed to know what it means that something “belongs to someone”. This al-
24 lows us to interpret economic freedom as a measure of the extent to which the
25 government in a country is reallocating property rights from its original owner to
26 someone else. As shown by the construction of the Economic Freedom of the
27 World index (Gwartney et al. 2012) or the Index of Economic Freedom (Miller et
28 al. 2012) this could happen through direct redistribution, by a legal system and
29 regulation that discriminates or that works with high transaction costs, by infla-
30 tion, by restrictions on international trade, and on business inside the borders.⁷

31 The two Vanbergian dimensions are, however, implicitly included in the clas-
32 sical article by Alchian (1977[1965]: 130) which claimed that (emphasis added)

34 ⁷ The Fraser Institute’s Economic Freedom of the World Index has five areas: (1) size of govern-
35 ment, (2) legal structure and the security of property rights, (3) access to sound money, (4) free-
36 dom to trade internationally, and (5) regulation of credit, labour and business. See Gwartney et
37 al. (2012) for a more detailed exposition of these areas. The Index of Economic Freedom of the
38 Heritage Foundation aggregates ten freedoms: property rights, freedom from corruption, fiscal
39 freedom, government spending, business freedom, labour freedom, monetary freedom, trade
40 freedom, investment freedom, financial freedom. See Miller et al. (2012) for a more detailed ex-
position of these areas.

1 [b]y a system of property rights I mean a method of assigning to particular individuals the
 2 “authority” to select for specific goods, any use from a nonprohibited class of uses. ... the
 3 concepts of “authority” and “non-prohibited” rely on some concept of enforcement or in-
 4 ducement to respect the assignment and scope of prohibited choice.

5 Vanberg’s (2001) two dimensional theoretical structure may be useful to differen-
 6 tiate civil liberties from economic freedom. I suggest applying a simple structure
 7 according to which economic freedom refers to the allocation of rights between
 8 the state and the private players while civil liberties are mainly about the scope of
 9 rights that are “socially recognized”. For example, by putting heavy restriction on
 10 business, the government is re-allocating income from consumers to some privi-
 11 leged group. But if it is the freedom of expression that is restricted then no private
 12 player can use their own asset to express ideas which government officials do not
 13 like. This is in line with the general expression of human rights according to
 14 which “human rights as we know them today are mainly political norms dealing
 15 with how people should be treated by their governments and institutions” (Nickel
 16 2013). I do not claim that every kind of human right fits the property rights ap-
 17 proach. It is only individual and negative rights that do. This is why I confine the
 18 discussion to civil liberties and not human rights.⁸

19 Freedom of expression seems to be a good example to explain the idea that the
 20 enforcement of freedom (assignment of rights) is a separate decision from the def-
 21 inition of rights. As it is expressed in the United Nations’ Universal Declaration of
 22 Human Rights (1948), “[e]veryone has the right to freedom of opinion and ex-
 23 pression; this right includes freedom to hold opinions without interference and to
 24 seek, receive and impart information and ideas through any media and regardless
 25 of frontiers”. Regarding that some persuasion is included in every sector of the
 26 economy, some persuasion is needed for every market transaction (McCloskey –
 27 Klamer 1995).⁹ The market can be seen as a social space with perpetual conversa-
 28 tion between the players (Storr 2008). As Storr (2008: 148) concludes “erecting
 29 trade barriers also locks off potential conversations and access to potential
 30 dialogical partners”. This means that you cannot weaken the enforcement of eco-
 31 nomic freedom alone, because the market is a “social space” where both “com-
 32 mercial” and “non-commercial” activities take place. By preventing some trading

33 ⁸ In addition, civil liberties must be seen as different from political rights. The fact that these two
 34 sets of rights are conceptually different is expressed, for example, in the views held by some
 35 great classical liberal thinkers who supported civic freedom fully but were not democrats at all
 36 (Director 1964: 3-4).

37 ⁹ Note also, that Sen (1999: 6.) uses a similar example to illustrate the point of a freedom-centred
 38 normative argument when he writes that “[t]he freedom to exchange words, or goods, or gifts
 39 does not need defensive justification in terms of their favourable but distant effects; they are part
 40 of the way human beings in society live and interact with each other (unless stopped by regula-
 tion or fiat)”.

1 you will prevent some talking. Once it is decided what scope of rights are non-pro-
2 hibited, it becomes very hard to enforce various groups of property rights vari-
3 ously.

4 The “socially recognized” nature of property rights as required by the defini-
5 tion above allows us to incorporate the role of those factors that are usually de-
6 scribed vaguely as informal, or generally, as cultural. My assumption (2) rests on
7 the idea that the greater the extent to which a right is accepted culturally, the less
8 costly it is to enforce that right.

9 The notion that constitutional rules are formed by informal rules has been for-
10 mulated by some of the economists trying to understand constitutions as they are
11 broadly understood. For example, Hayek (1944 [1991]: 159) was greatly worried
12 by the decline of the virtues of “independence and self-reliance, individual initia-
13 tive and local responsibility, the successful reliance on voluntary activity, non-in-
14 terference with one’s neighbour and tolerance of the different and queer, respect
15 for custom and tradition, and a healthy suspicion of power and authority”. He saw
16 these values as the foundations of the freedom of the West. Indeed, in Hayek
17 (1960: 139) he explains that the “recognition” of “individual spheres” is necessary
18 so that individual freedom can be enforced, and this happens through the “accep-
19 tance” of general rules. This means, as he (Hayek 1960: 217–218) concludes, that
20 the procedural safeguards of liberty “presuppose for their effectiveness the accep-
21 tance of the rule of law”, a “political creed which people will defend even when
22 they do not fully understand its significance”.

23 Buchanan (1975 [2000]: 97) also points out the relationship between enforce-
24 ment costs and the willingness to follow the rules, when saying that “there is a re-
25 lationship between potential voluntary compliance independent of enforce-
26 ment-punishment and the resource investment that will be required to attain speci-
27 fied behavioural limits”.¹⁰

28 The argument of this section breaks down to what can be summarized as a
29 Property Rights Possibility Frontier as illustrated in *Figure 1*:¹¹ there is a trade-off
30 between the scope of a nonprohibited class of uses and the level of expropriation
31 which is provided by the government. The rate of this trade-off is set by informal
32 factors. Enforcing a larger scope of the nonprohibited class of uses will require
33

34

35 ¹⁰ An interesting example of how ethical rules may affect constitutional choice can be found in
36 Buchanan and Tullock (1962[1999]: 208). They argue that when ethical rules prevent vote trad-
37 ing, the average citizen – behind the veil of uncertainty – will choose a constitution that puts
38 more constraints on the majority. The reason is that as a possible member of some minority she
39 will find it more difficult to make a bargain over her individual rights with the majority that tries
40 to violate them if ethical rules preventing that bargain are in place.

¹¹ I thank an anonymous referee for suggesting the development of *Figure 1* as well as *Table 1*.

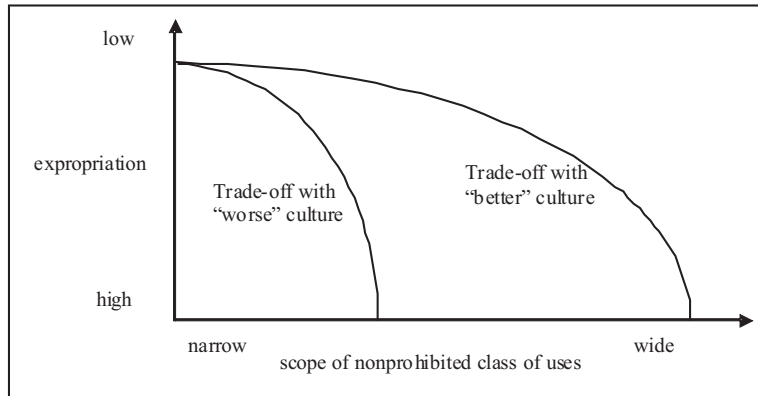


Figure 1. Property Rights Possibility Frontier: Trade-off between expropriation (enforcement of rights) and the scope of rights

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

more resources which will, of course, require some kind of a tax broadly understood and will increase the level of expropriation. This increase in enforcement costs will be lower if the “social recognition” of the rules to be enforced is larger.

4. A SIMPLE THEORY OF THE ENFORCEMENT AND THE SCOPE OF PROPERTY RIGHTS

In the following three subsections I will present a model that is built on the insights acquired in previous sections in the spirit of the property rights school. The argument builds on what was said in the previous two sections. In this spirit the government is modelled as making a decision concerning the scope of nonprohibited class of uses to be enforced and the level of enforcement. It will be demonstrated that whether or not a wide scope of rights are enforced depends on the cost of limiting rent-seeking.¹² This cost is deemed to result from cultural factors.

¹² The cost of enforcement plays an important role in Barzel’s (1989: 84) insights on the abolition of slavery when he says that “[b]y the end of the nineteenth century, slavery had largely been abolished, perhaps because the costs of policing the institutions exceeded its gains.” That is, the cost of enforcing the property rights of the slave owners became so high that it did not pay off to enforce them. This suggests that the cost of enforcement is the most important determinant of whether or not an activity is protected by force. However, this quote does not specify whose gain and whose cost matter. In the model discussed in the following three subsections it depends on whether the government is constrained or not. In a somewhat similar argument examining religious liberty Gill (2005) also emphasizes – among other things – on the enforcement costs of religious hegemonies and regulations of entry to the religious market.

1 **4.1. Rent seeking and the enforcement of rights**

2

3 In what follows I will use different extensions of Murphy et al.'s (1993) model
4 (MSV). The main modification of the MSV model is an introduction of a govern-
5 ment which must incur some costs to enforce rights.

6 There are two types of activities: production and rent seeking. The return on
7 production is a but only an $a - \gamma$ share of it is expropriable by the government.
8 Rent seeking yields a return of β and reduces the net return on production by the
9 same amount. In the original MSV model there are three different kinds of equi-
10 libria depending on the size of β : one with a unique good equilibrium, one with a
11 stable bad and a stable good, and an unstable intermediate equilibrium, and one
12 with a unique bad equilibrium.

13 For the sake of simplicity I drop the second case and assume that $\gamma = 1$ and con-
14 tinue with only two possible cases: strong enforcement of property rights ($a > 1 >$
15 β_s) and weak enforcement of rights ($\beta_w > a > 1$). Further I suppose that weak en-
16 forcement requires the state to incur a cost c , while strong enforcement requires it
17 to incur a cost of $2c$.

18 This cost is the key parameter of the model and also the one I interpret as a mea-
19 sure of culture. Boettke (2012: 150–151) writes for example that,

20

21 we must also address the question of enforcement of the rules of the game. In a world where
22 the informal rules (norms) legitimate the formal rules, the costs of enforcement will be lower,
23 and in a world where the informal rules are in conflict, the costs of enforcing the formal rules
24 may often be prohibitive.

24

25 Stringham (2011) explains carefully why internal moral constraints are important
26 to maintain a market economy giving this proposition a corroboration that is
27 based on theory, empirical research, and common sense. External constraints, he
28 argues, are not enough to maintain a well functioning market which means that the
29 rules of the market will be more costly to enforce if they are not backed by morals.
30 That is, formal constraints aimed at enforcing market rules will have an easier task
31 if these formal constraints are in line with the moral ones. The parameter c can
32 thus be seen as a measure of the extent to which social norms legitimate the rules
33 of private property by attributing a low payoff to rent seeking.

34

35 This relationship between enforcement cost and the attitude toward market ex-
36 change can also be derived from Buchanan (1994: 127) whose main point is that
37 “[t]he ordering over goods cannot be separated from the means through which
38 goods are expected to be secured”. As a result, once rent seeking as a means is
39 condemned to a larger extent than market exchange as a means, enforcing market
40 rules will be less costly.

40

1 The government can be of two types. It may be a net revenue (rent) maximizing
 2 (unconstrained) government that seeks to maximize net total tax and rent, or it
 3 may be of a constrained type, in which case it will seek to maximize net income
 4 (production minus enforcement cost) of the median voter.

5 Civil liberties are incorporated through two key assumptions:¹³ providing and
 6 enforcing civil liberties (1) increases income and the cost of enforcement in the
 7 same proportion and (2) reduces the expropriability of income. These assump-
 8 tions are of course simplifying but not unreasonable. What underpins the first is
 9 the fact that a stronger enforcement of property rights will increase income by pro-
 10 viding incentives to apply a better technology and increase productivity. A rise in
 11 productivity will increase the marginal product of factors of production, too, by
 12 the same proportion if the technological improvement is imagined as an increase
 13 in total factor productivity. The second assumption is simply a description of what
 14 stronger incentives mean.

15 A simple way to formulate this is to assume that when providing and enforcing
 16 civil liberties, the return on productive activities grows by a factor of $\delta > 1$, and so
 17 does enforcement cost: it becomes $c\delta$ in the case of weak enforcement and $2c\delta$ in
 18 the case of strong enforcement. However, as a formulation of narrowing exprop-
 19 riability, I assume that when civil liberties are introduced, the non-expropriable
 20 level of income increases from 1 to δ^2 .

21 The idea behind this assumption is that providing civil liberties means a higher
 22 level of commitment to secure property rights by the government. The enforce-
 23 ment of civil liberties – a wide scope of rights – will only be credible if the govern-
 24 ment can promise not to expropriate such a large share of income as it could with a
 25 narrow scope of rights.

26 Note that all these specifics of the model include the core assumptions I made
 27 in section 3. The fact that $\delta > 1$ reflects assumption (1) by formulating the idea that
 28 a stronger enforcement, which means a lower level of expropriation, provides in-
 29 centives to produce more. Assumption (2), regarding the stickiness of formal in-
 30 stitutions, is captured by the fact that the cost of enforcement is a parameter which
 31 can be larger or smaller. Finally, assumption (3) is incorporated by giving the gov-
 32 ernment the possibility to choose between a wide and a narrow scope of rights.

33

34

35 **4.2. Unconstrained government and civil rights**

36

37 In this model the government has four options to choose from: strong and weak
 38 enforcement of rights which do, or do not, include civil liberties. The provision of
 39

40

¹³ For the basic model in which civil liberties are not modelled see the Appendix.

1 civil liberties is equivalent with the provision of a wide scope of rights. The pay-
 2 offs of these four options open to the revenue maximizing government are the fol-
 3 lowing:¹⁴

4
 5 (1) civil liberties with strong enforcement:

$$6 \quad U_{CL}^S = a\delta - \delta^2 - 2\delta c; \quad (1)$$

8
 9 (2) civil liberties with weak enforcement:

$$10 \quad U_{CL}^W = \frac{\delta^2(a - \delta)}{a} - \delta c; \quad (2)$$

13
 14 (3) no civil liberties with strong enforcement:

$$15 \quad U_0^S = a - 1 - 2c; \quad (3)$$

17
 18 (4) no civil liberties with weak enforcement:

$$19 \quad U_0^W = \frac{a - 1}{a} - c. \quad (4)$$

21
 22 The key conclusion of the examination of these options is that the unconstrained
 23 government will never choose the option of weak enforcement with civil liberties,
 24 but the other three options are possible depending on the cost of enforcement (c)
 25 and productivity (a).

26
 27 **Proposition 1** The unconstrained government will choose

28 (1) civil liberties with strong enforcement if

$$29 \quad c \leq C_1 \text{ and } \delta + 1 < a;$$

31 (2) no civil liberties with strong enforcement if

$$32 \quad C_1 \leq c \leq C_0^{S0} \text{ and } \delta + 1 < a \text{ or}$$

$$33 \quad c \leq C_0^{S0} \text{ and } 2 < a \leq \delta + 1 \text{ or}$$

$$34 \quad 0 \leq c \leq C_2 \text{ and } a \leq 2;$$

35
 36
 37
 38
 39 ¹⁴ Remember that the payoff of the government is net tax and rent in this case. See the Appendix
 40 for the details of the calculation.

1 (3) no civil liberties with weak enforcement if

$$2 \quad 3 \quad C_2 < c < C_0^{W0} \text{ and } a \leq 2,$$

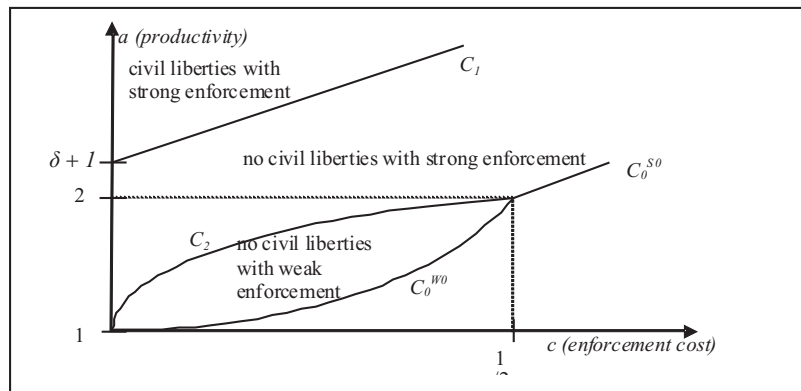
$$4 \quad 5 \quad \text{where } C_1 \equiv \frac{a - (\delta + 1)}{2}, C_2 \equiv \frac{(a - 1)^2}{a}, C_0^{S0} \equiv \frac{a - 1}{2}, C_0^{W0} \equiv \frac{a - 1}{a}.$$

6
7 Otherwise the government will not incur any cost to enforce the rules of private
8 property.
9

10 **Proof** See the Appendix.

11
12 What makes understanding proposition 1 somewhat difficult is that the threshold
13 enforcement cost itself is a function of productivity. *Figure 2*, an illustration of the
14 proposition, clarifies this. As is clear from *Figure 2*, below a certain income the
15 unconstrained government will not choose the option of a strong enforcement
16 with civil liberties even if the cost of enforcement is low – a certain level of pro-
17 ductivity is needed, too. But the lower the cost of enforcement, the lower is the
18 threshold productivity. If productivity is higher than $\delta + 1$, it is only the cost of en-
19 forcement that makes the government provide civil rights enforcement.

20 The main conclusion is that informal institutions (the cost of enforcement) and
21 productivity together determine whether civil liberties will be provided even
22 when the protection of civil liberties is assumed to lead to higher income. The key
23 assumption is the decreasing expropriability of this higher income.
24
25



26
27
28
29
30
31
32
33
34
35
36
37 **Figure 2.** Illustration of proposition 1

38 *Note:* The figure incorporates the assumptions that $a > 1$ and $\delta > 1$ ($\delta + 1 > 2$). The curves are the
39 graphs of $C_1, C_2, C_0^{W0}, C_0^{S0}$ as defined in proposition 1.
40

1 **4.3. Constrained government**

2

3 In the case of a constrained government the payoffs are the following:¹⁵

4

5 (1) civil liberties with strong enforcement:

6

$$7 \quad U_{CL}^S = a\delta - 2\delta c; \quad (5)$$

8

9 (2) civil liberties with weak enforcement:

10

$$11 \quad U_{CL}^W = \delta^2 - \delta c; \quad (6)$$

12

13 (3) no civil liberties with strong enforcement:

14

$$15 \quad U_0^S = a - 2c; \quad (7)$$

16

17 (4) no civil liberties with weak enforcement:

18

$$19 \quad U_0^W = 1 - c. \quad (8)$$

20

21

22 **Proposition 2** The constrained government will choose

23 (1) civil liberties with strong enforcement if

24

$$25 \quad a > 2\delta \text{ and } c < K_0^{SCL} \text{ or}$$

26

$$27 \quad 2\delta > a > 1 \text{ and } c < K_1;$$

28

29 (2) civil liberties with weak enforcement if

30

$$31 \quad 2\delta > a > 1 \text{ and } K_1 < c < \delta;$$

32

$$33 \text{ where } K_1 \equiv a - \delta, K_2 \equiv \frac{a\delta - 1}{2\delta - 1}, K_3 \equiv \frac{a - \delta^2}{2 - \delta}, K_0^{SCL} \equiv \frac{a}{2}.$$

34

35 **Proof** See the Appendix.

36

37

38 ¹⁵ Remember that the constrained government is assumed to be as “democratic” as possible and it
39 is assumed to maximize the net income of the median voter which, in this simple model, is equal
40 to the average net income. “Net” here means net of enforcement costs.

1 The case of the constrained government is simpler than that of the uncon-
 2 strained one but again the thresholds are not independent of the income of produc-
 3 tive activities, as illustrated in *Figure 3*. The constrained government will always
 4 provide civil rights but will not always enforce them strongly. Whether it does or
 5 not depends on the cost of enforcement and productive income at the same time.
 6 Below a certain level of income (δ) the government will not choose the option of a
 7 strong enforcement, while above that the informal factors represented by the cost
 8 of enforcement are the key.

9
10
11
12
13
14
15
16
17
18
19
20
21

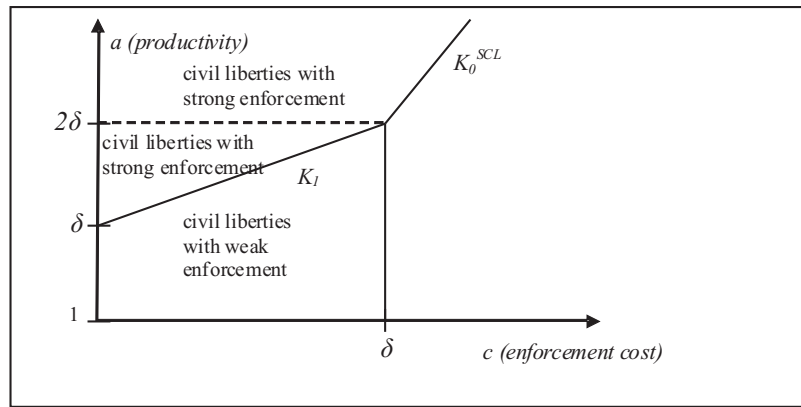


Figure 3. Illustration of proposition 2

22
23
24
25
26

Note: The figure incorporates the assumptions that $a > 1$ and $\delta > 1$ ($\delta + 1 > 2$). The curves are the graphs of K_1, K_0^{SCL} as defined in proposition 2.

5. PREDICTIONS CONCERNING INCOME DIFFERENCES

27
28
29
30
31

The model predicts that income levels will depend on the scope of rights and the enforcement of rights as shown in *Table 2*.

Table 2

Predictions of the model concerning per capita income with different definition and assignment of rights

		Enforcement of non-prohibited class of uses	
		weak	strong
Scope of non-prohibited class of uses	narrow	1	a
	wide	δ^2	$a\delta$

32
33
34
35
36
37
38
39
40

1 Because of the assumptions of the model $\delta^2 > 1$ and $a > 1$ (see section 4.1), and
 2 it is reasonable to assume, that $a\delta > \delta^2$ ($a > \delta$). These three assumptions simply
 3 mean that gross income (which includes the cost of enforcement) increases if a
 4 wider scope of rights are enforced with the same level of enforcement (level of ex-
 5 propriation), or if the same scope of rights are enforced with a stronger enforce-
 6 ment. To put it differently, when costs of enforcement are not considered, a wider
 7 scope of rights or a higher level of their enforcement will increase income.

8 Propositions 1 and 2 in section 4 give some guidance regarding the probabili-
 9 ties with which a country will provide a wide or narrow scope of rights and
 10 whether it will enforce it weakly or strongly. The main messages of the two propo-
 11 sitions are included in *Tables 3* and *4*. *Table 3* shows these probabilities for the un-
 12 constrained government while *Table 4* shows the same for the constrained one.

13
 14 **Table 3**

15 Probabilities of providing narrow/wide scope of rights with weak/strong enforcement
 16 for the unconstrained government

		Enforcement of non-prohibited class of uses	
		weak	strong
Scope of non-prohibited class of uses	narrow	$1 - \pi_{NS}^U - \pi_{WS}^U$	π_{NS}^U
	wide	0	π_{WS}^U

22 **Table 4**

23 Probabilities of providing narrow/wide scope of rights with weak/strong enforcement
 24 for the constrained government

		Enforcement of non-prohibited class of uses	
		weak	strong
Scope of non-prohibited class of uses	narrow	0	0
	wide	$1 - \pi_{WS}^C$	π_{WS}^C

31 *Table 3* includes the result of proposition 1 according to which an uncon-
 32 strained government will not provide a wide scope of rights with weak enforce-
 33 ment, while *Table 4* includes the result of proposition 2 according to which a con-
 34 strained government will always provide a wide scope of rights.

35 Using the probabilities in *Tables 3* and *4* it is possible to derive the condition
 36 under which the provision of civil liberties have a larger “effect” on income than
 37 the constraint on executives does. Consider the expected income in a country with
 38 a constrained and an unconstrained government:

1 $E(y|government\ is\ constrained) = \pi_{WS}^C a\delta + (1 - \pi_{WS}^C)\delta^2,$ (9)

2
3 $E(y|government\ is\ unconstrained) = \pi_{WS}^U a\delta + \pi_{NS}^U a + (1 - \pi_{WS}^U - \pi_{NS}^U) \times 1.$ (10)

4
5 The difference between the two expected incomes above gives the prediction
6 concerning the effect of constraint on executives:

7
8 $\Delta_{EC} = E(y|government\ is\ constrained) - E(y|government\ is\ unconstrained) =$
9
10 $= (\pi_{WS}^C - \pi_{WS}^U)a\delta + (1 - \pi_{WS}^C)\delta^2 - \pi_{NS}^U(a - 1) - (1 - \pi_{WS}^U).$ (11)

11
12 Similarly, it is possible to derive the expected income difference that is associ-
13 ated with the presence of civil liberties as opposed to the lack of it by considering
14 first the conditional expectations of income:

15
16 $E(y|civil\ liberties\ are\ provided) = \pi_{U/W} [\pi_{WS}^U a\delta + 0\delta^2] +$
17
18 $+ (1 - \pi_{U/W}) [\pi_{WS}^C a\delta + (1 - \pi_{WS}^C)\delta^2],$ (12)

19
20 $E(y|civil\ liberties\ are\ not\ provided) = \pi_{U/W} [\pi_{NS}^U a + (1 - \pi_{NS}^U - \pi_{WS}^U) +$
21
22 $+ (1 - \pi_{U/N}) [0 \times a + 0 \times 1],$ (13)

23 where $\pi_{U/W}$ is the probability that the government is unconstrained if civil liber-
24 ties are provided, while $\pi_{U/N}$ is the probability that the government is uncon-
25 strained if civil liberties are not provided. The Bayes rule allows us to derive that

26
27
28 $\pi_{U/W} = \frac{\pi_{WS}^U \pi_U}{\pi_{WS}^U \pi_U + (1 - \pi_U)}$ and $\pi_{U/N} = 1,$ (14)

29
30 where π_U is the probability that a country has an unconstrained government.
31 Using (12), (13), and (14) gives the “prediction” concerning the “effect” of
32 civil liberties:

33
34
35 $\Delta_{CL} = E(y|civil\ liberties\ are\ provided) - E(y|civil\ liberties\ are\ not\ provided) =$
36
37 $= [\pi_{W/U} \pi_{WS}^U + (1 - \pi_{W/U}) \pi_{WS}^C] a\delta + (1 - \pi_{W/U})(1 - \pi_{WS}^C)\delta^2 - \pi_{NS}^U(a - 1) - (1 - \pi_{WS}^U).$ (15)

38 Comparing (15) and (11) leads to the following proposition.
39
40

1 **Proposition 3** if

$$2 \quad 3 \quad \pi_U (a + \delta + (a - \delta) \pi_{WS}^C - 2a \pi_{WS}^U) < a \quad (16)$$

4
5 then $\Delta_{CL} > \Delta_{EC}$.

6
7
8 **Proof** See the Appendix.

9
10 Proposition 3 says that civil liberties provision will have a larger effect on expected income than executive constraints if the probability that a country has an unconstrained government is below a threshold level. The threshold is set by the parameter of the model. Most importantly, bearing in mind that $a > \delta$, the threshold is decreasing in π_{WS}^C and increasing in π_{WS}^U . That is, the threshold is lower if the constrained government is more probable to provide a wide scope of rights with strong enforcement and it is higher if the unconstrained government is more probable to provide a wide scope of rights with strong enforcement.

11
12
13
14
15
16
17
18 It is also interesting to note that the provision of wide scope of rights (civil liberties) is a better predictor of a strong enforcement of rights than constraints on executives are. To see this, consider that the probability that a constrained government will apply a strong enforcement is π_{WS}^C , while the probability that a government that provides a wide scope of rights will apply a strong enforcement is

$$19 \quad 20 \quad 21 \quad 22 \quad 23 \quad 24 \quad 25 \quad (1 - \pi_U) \pi_{WS}^C + \pi_U = \pi_{WS}^C + \pi_U (1 - \pi_{WS}^C).$$

26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
Clearly, this latter probability is larger than the former until $\pi_{WS}^C < 1$. This conclusion is in line with BesYishay and Betancourt's (2010) suggestion according to which the provision of civil liberties is a better indicator of the government's commitment to maintain the rule of law than is the constraint on executives.

6. CONCLUSION

34 Individual freedom is the most important determinant of economic development. It is not only a libertarian conviction but a fact supported by a large number of empirical results. However, as I argued in this paper individual freedom includes two constitutional decisions. Property rights need to be defined first, and then they need to be enforced. A strong enforcement of a wide scope of property rights is what possibly leads to the highest development as opposed to a weak enforcement or a narrow scope of rights.

1 There are two reasons why constraints on executives are an imperfect indica-
 2 tors of providing and strongly enforcing a wide scope of rights. One reason is that
 3 even an unconstrained government can decide to provide and to strongly enforce a
 4 wide scope of property rights. The second is that even if the government is con-
 5 strained, it may not strongly enforce a wide scope of property rights.

6 The imperfect association between constrained government and strong en-
 7 forcement of a wide scope of rights can be explained by, as I have argued in the
 8 paper, culture and technology. Culture determines the cost of enforcing, and tech-
 9 nology determines the income that can be generated by a strong enforcement of
 10 property rights. As a result, culture and technology determines the payoffs of
 11 strongly enforcing a wide scope of rights for the rent seeking government as well
 12 as for the median voter.

13 Putting these pieces together we have an explanation that helps us understand
 14 the fact that the level of civil freedoms is a better predictor of development than is
 15 the level of the constraint on executives.

16 This paper has thus given an explanation for the cross-country pattern identi-
 17 fied by BenYishay and Betancourt (2010). No very specific, if any, policy conclu-
 18 sions can be derived from such a result. I would rather emphasize three broad
 19 ones. First, the argument suggests that the (political) argument for economic and
 20 civil freedoms should not be separated in the sense that economic freedom is im-
 21 portant for material welfare while civil freedoms are important from an immate-
 22 rial (moral) point of view. Rather the same moral or instrumental argument can be
 23 used in both cases.

24 Second, culture has been defined here as those informal factors that determine
 25 the costs of enforcement of the rules of freedom. This does not imply that such
 26 factors can only change in the very long run, although culture is usually under-
 27 stood in this way. Whether the informal factors behind civil freedoms and growth
 28 can change relatively quickly is a very interesting question for possible future re-
 29 search which seems to be crucial for answering the “big question” as to how eco-
 30 nomic development can be fostered.¹⁶

31 Third, this paper casts some doubt on those theories and especially those policy
 32 proposals (Freedom House 2012) that emphasize the causality running from the
 33 constraints on executives to “good” outcomes, primarily economic development,
 34 and that suggest accordingly that these outcomes can be reached by political pres-
 35 sure from outside.

36

37 ¹⁶ An anonymous referee raised the important issue as to why the cost of enforcement can change
 38 within a country, too. My model does not imply anything that would answer that question if ad-
 39 mitting the possibility of their variability is left aside. The possibility of a relatively quick
 40 change in informal factors can be an answer to that – and a very important and difficult – issue
 for further research.

APPENDIX

1
2
3 **The government's decision in the basic model of section 4**
4 **Unconstrained government**

5
6 In the case of *strong enforcement* ($a > 1 > \beta_s$) the ratio of rent-seekers to producers
7 will be 0 in equilibrium and the government can tax away the income above 1.
8 Consequently its net revenue is

$$9 \qquad a - 1 - 2c. \qquad (16)$$

11 In the case of *weak enforcement* ($\beta_w > a > 1$) rent-seeking has a return of β_w until
12 the return of production ($a - \beta_w n$) reaches its minimum, 1, that is until
13 $n < \frac{a-1}{\beta_w}$. Consequently, in equilibrium the ratio of the number of rent-seekers to
14 β_w
15 that of producers will satisfy the equation

$$17 \qquad \frac{a-1}{n^*} = 1 \qquad (17)$$

18
19
20
21 that is,

$$22 \qquad n^* = \frac{a-1}{1}.$$

23
24
25
26 If the number of the labour force (producers and rent seekers) is normalized to
27 one, then the number of rent seekers is

$$28 \qquad \frac{n^*}{n^* + 1} = \frac{a-1}{a},$$

29
30
31 this is why total rent is

$$32 \qquad \frac{(a-1)}{a} \times 1,$$

33
34
35
36 and the government's payoff is

$$37 \qquad \frac{a-1}{a} - c. \qquad (18)$$

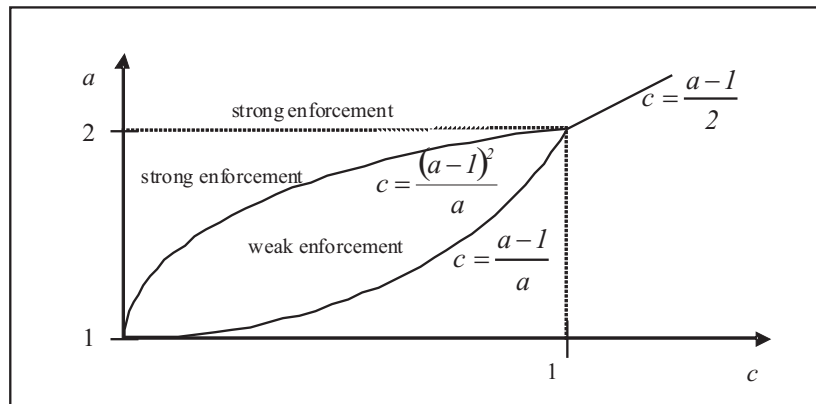
1 **Constrained government**

2
3 The case of the constrained government is straightforward. The payoffs are shown
4 in an organized way in *Table 5*. The payoffs can be calculated in the same way in
5 the more complicated case when civil liberties are incorporated.

7 **Table 5**

8 The payoff of the government under different regimes and enforcement in the basic model

	Constrained government	Unconstrained government
Strong enforcement	$a - 2c$	$a - 1 - 2c$
Weak enforcement	$1 - c$	$\frac{a-1}{a} - c$



27 **Figure 4.** Strong and weak enforcement of rights under unconstrained government
28 in the basic model

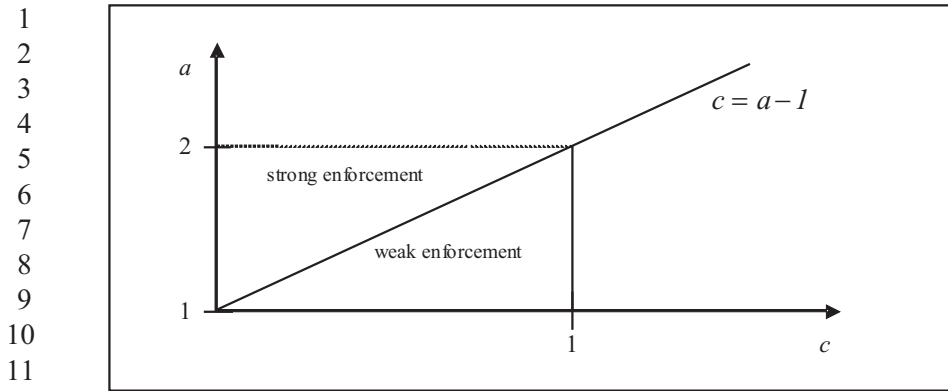
29 *Note:* The figure incorporates the assumptions that $a > 1$.

31 Comparing the payoffs makes it clear that a revenue maximizing government
32 will choose strong enforcement if

33
34
$$c \leq \frac{(a-1)^2}{a} \text{ and } c \leq \frac{a-1}{2},$$

37 otherwise it will choose weak enforcement provided that

38
39
$$c < \frac{a-1}{a}.$$



13 **Figure 5.** Strong and weak enforcement of rights under constrained government
14 in the basic model

15 *Note:* The figure incorporates the assumptions that $a > 1$.

16 A constitutional government will choose strong enforcement if

$$17 \quad c < a - 1.$$

18 Otherwise it will choose weak enforcement until $c < 1$.

19 These results make it clear that the choice between strong and weak enforcement
20 will depend on the type of government, the cost of enforcement, and the income
21 of the productive activities. These solutions are summarized in *Figures 4*
22 and *5*.
23
24
25

26 **Proof of Proposition 1**

27 Consider the four possible cases of property rights enforcement.

28 (1) The government chooses *civil liberties with strong enforcement* (S-CL) if
29 the conditions

$$30 \quad U_{CL}^S > U_{CL}^W, U_{CL}^S > U_0^S, U_{CL}^S > U_0^W, U_{CL}^S > 0$$

31 all hold. These conditions can be summarized as

$$32 \quad c < \min (C_1, C_3, C_6, C_0^{SCL}), \quad (19)$$

1 where $C_1 \equiv \frac{a - (\delta + 1)}{2}$, $C_3 \equiv \frac{(a - \delta)^2}{a}$, $C_6 \equiv \frac{a\delta(a - \delta) - (a - 1)}{a(2\delta - 1)}$, $C_0^{SCL} \equiv \frac{a - d}{2}\delta$.

2
3
4 With some calculation it can be shown that

$$5 \quad C_0^{SCL} - C_1 = \frac{1}{2},$$

$$6 \quad C_6 - C_1 = \frac{1}{2a(2\delta - 1)}[a^2 - (3 - \delta)a + 2],$$

$$7 \quad C_3 - C_1 = \frac{1}{2}[a^2 - (3\delta - 1)a + 2\delta^2].$$

8
9
10
11
12
13
14
15 None of the three differences can be positive because of the assumptions re-
16 garding a and δ . This means that $c < \min(C_1, C_3, C_6, C_0^{SCL}) = C_1$.

17 Obviously it is only possible to satisfy this condition if C_1 is positive, that is, if

$$18 \quad a > \delta + 1.$$

19
20
21 (2) The government will never choose *civil liberties with weak enforcement*.

22
23 To show this, suppose that the government chooses this option. In that case notice
24 first that four conditions would have to be satisfied:

$$25 \quad U_{CL}^W > U_{CL}^S, U_{CL}^W > U_0^S, U_{CL}^W > U_0^W, U_{CL}^W > 0.$$

26
27
28 These would require the cost of enforcement to satisfy the condition

$$29 \quad \max(C_2, C_4) \leq c \leq \min(C_5, C_0^{WCL}), \quad (20)$$

30
31
32 where

$$33 \quad C_2 \equiv \frac{(a - 1)^2}{a}, C_4 \equiv \frac{a(a - 1) - \delta^2(a - \delta)}{a(2 - \delta)},$$

$$34 \quad C_5 \equiv \frac{\delta^2(a - \delta) - (a - 1)}{a(\delta - 1)}, C_0^{WCL} \equiv \frac{\delta(a - \delta)}{a}.$$

1 But this condition cannot be satisfied because one can show that: $C_0^{WCL} < C_4$:

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

$$C_0^{WCL} - C_4 \equiv \frac{1}{a(2-\delta)} \{(a-\delta)[-2\delta(\delta-1) - a(a-1)]\} < 0.$$

That is, the condition (19) above will never hold.

(3) The government will choose *no civil liberties with strong enforcement* if all of the following conditions hold at the same time:

$$U_0^S > U_{CL}^S, U_0^S > U_{CL}^W, U_0^S > U_0^W, U_0^S > 0.$$

These are true if

$$\min(C_1, 0) \leq c \leq \min(C_2, C_4, C_0^{S_0}), \quad (21)$$

where

$$C_1 \equiv \frac{a - (\delta + 1)}{2}, C_2 \equiv \frac{(a - 1)^2}{a}, C_4 \equiv \frac{a(a - 1) - \delta^2(a - \delta)}{a(2 - \delta)}, C_0^{S_0} \equiv \frac{a - 1}{2}.$$

It is possible to show that $\min(C_2, C_4, C_0^{S_0}) = C_0^{S_0}$ if $y > 2$. Consider that both the difference

$$C_2 - C_0^{S_0} = \frac{(a - 1)(a - 2)}{2a},$$

and the difference

$$C_4 - C_0^{S_0} = \frac{1}{2a} (2 - \delta)[a(a - 2) + a\delta^2 + a\delta + 2\delta^3],$$

are positive under the condition $a > 2$.

However, when $a \leq 2$, $\min(C_4, C_6, C_0^{S_0}) = C_2$, because

$$C_2 - C_0^{S_0} = \frac{(a - 1)(a - 2)}{2a} < 0,$$

and the difference

1
$$C_4 - C_0^{S0} = \frac{1}{2y} (2 - \delta)[a^2 + (\delta^2 + \delta - 2a)a + 2\delta^3]$$

2
3 is positive. This implies that

4
5
$$C_2 < C_0^{S0} < C_4.$$

6
7 In addition, if $a \leq 2$, then $C_1 \leq 0$, which implies that the condition (21) will take
8 the form of

9
10
$$0 \leq c \leq C_2.$$

11
12 (4) The government will choose *no civil liberties with weak enforcement* if

13
14
$$U_0^W > U_{CL}^S, U_0^W > U_{CL}^W, U_0^W > U_0^S, U_0^W > 0.$$

15
16 To show that the conditions formulated in the proposition below must hold so
17 that these four inequalities must be satisfied, note that if $\max(C_2, C_5, C_6) < C_0^W$,
18 choosing this option will not pay off under any condition. But with some algebraic
19 manipulation it is possible to derive that

20
21
$$C_0^W - C_2 = -\frac{(a-1)(a-2)}{a}$$
 which is positive if $a < 2$;
22

23
$$C_0^W - C_5 = \frac{\delta(\delta-1)}{a}(\delta+1-a)$$
 which is positive if $a < \delta+1$;
24

25
$$C_0^W - C_5 = -\frac{\delta}{a(2\delta-1)}[a^2 - (\delta+2)a + 2]$$
 which is positive if
26

27
$$a < \frac{\delta+2 + \sqrt{(\delta+2)^2 - 8}}{2} \text{ and } a > \frac{\delta+2 - \sqrt{(\delta+2)^2 - 8}}{2}.$$

28
29

30 All three conditions are satisfied if $1 < a < 2$.

31 On the other hand, it is possible to show that $\max(C_2, C_5, C_6) = C_2$. First, con-
32 sider that

33
$$C_2 - C_5 = \frac{(a-1)^2}{a} - \frac{\delta^2(a-\delta) - (a-1)}{a(\delta-1)} = \frac{(a-1)^2 - (\delta+1)(a-1) + \delta^2}{a},$$

34 that is

35
36
37
$$C_2 - C_5 = \frac{(a-1-\delta)^2 + 2\delta(a-1) - (\delta+1)(a-1)}{a} = \frac{(a-1-\delta)^2 + (\delta-1)(a-1)}{a}$$

38 which is positive under the assumptions we made.
39
40

1 Second, consider that

$$\begin{aligned}
 2 \\
 3 \quad C_2 &= \frac{(a-1)^2}{a} = \frac{a(a-1) - (a-1)}{a} > \frac{a(a-\delta) - (a-1)}{a} = \frac{a(a-\delta) - (y-1)}{a} \frac{\delta}{2\delta-1} = \\
 4 \\
 5 \\
 6 &= \frac{a\delta(a-\delta) - \delta(a-1)}{a(2\delta-1)} > \frac{a\delta(a-\delta) - (a-1)}{a(2\delta-1)} = C_6. \\
 7 \\
 8
 \end{aligned}$$

9 That is, $C_5 < C_2$, $C_6 < C_2$.

11 Proof of Proposition 2

12 Again, we will consider the four possible cases in turn.

13 (1) The government chooses *civil liberties with strong enforcement* (S-CL) if
 14 the conditions

$$16 \quad U_{CL}^S > U_{CL}^W, U_{CL}^S > U_0^S, U_{CL}^S > U_0^w, U_{CL}^S > 0.$$

17 all hold. This implies that the following equalities must hold:

$$18 \quad c < K_1, \delta > 1, c < K_2, c < K_0^{SCL}$$

19 which can be summed up as

$$20 \quad c < \min(K_1, K_2, K_0^{SCL}), \quad (22)$$

21 since $\delta > 1$ is true by definition. Further, seeing that

$$22 \quad K_1 - K_2 = \frac{a\delta - a - 2\delta^2 + \delta + 1}{2\delta - 1},$$

$$23 \quad K_1 - K_0^{SCL} = a / 1 - \delta, \text{ and}$$

$$24 \quad K_2 - K_0^{SCL} = \frac{a\delta - 1}{2\delta - 1} - \frac{a}{2} = \frac{a - 2}{2(2\delta - 1)},$$

25 it follows that

$$26 \quad \min(K_1, K_2, K_0^{SCL}) = \begin{cases} K_0^{SCL}, & \text{if } a > 2\delta, \\ K_1, & \text{if } 2\delta > a > 1 \end{cases}$$

1 (2) The government will choose *civil liberties with weak enforcement* if

2

3

$$U_{CL}^W > U_{CL}^S, U_{CL}^W > U_0^S, U_{CL}^W > U_0^W, U_{CL}^W > 0.$$

4

5 These imply in turn that

6

7

8

$$c > K_1, c > \frac{a - \delta^2}{2 - \delta} \equiv K_3, c < \delta + 1 \equiv K_4, \text{ and } c < \delta \equiv K_0^{WCL}.$$

9

10 Again, it is useful to write the sum of these conditions as

11

12

$$\max(K_1, K_3) < c < \delta. \tag{23}$$

13

14 Using the same method as before, consider the difference

15

16

17

$$K_1 - K_3 = a - \delta - \frac{a - \delta^2}{2 - \delta} = \frac{1}{2 - \delta} [(\delta - 1)(2\delta - a)].$$

18

19 This implies that

20

21

22

$$\max(K_1, K_3) = \begin{cases} K_3, & \text{ha } a > 2\delta, \\ K_1, & \text{ha } 2\delta > a. \end{cases}$$

23

24 Further, since

25

26

27

$$\delta - K_3 = \delta - \frac{a - \delta^2}{2 - \delta} = -\frac{a - 2\delta}{2 - \delta},$$

28

29 this option will not be chosen if $y > 2\delta$, while

30

31

32

$$\delta - K_1 = \frac{1}{2\delta - 1} [-\delta(a + 1) + a - 1 + \delta d^2]$$

33

34 will be positive until $a < 2\delta + 1$.

35

36 (3) The government will never choose *no civil liberties with strong enforce-*
 37 *ment*

38

39 If it were chosen all of the following conditions would have to hold

40

$$U_0^S > U_{CL}^S, U_0^S > U_{CL}^W, U_0^S > U_0^W, U_0^S > 0.$$

1 But the first condition cannot be satisfied because that would apply that $\delta < 1$
 2 which is not possible by definition.

3
 4 (4) The government will never choose *no civil liberties with weak enforcement*.
 5 Again the four conditions

$$6 \quad U_0^W > U_{CL}^S, U_0^W > U_{CL}^W, U_0^W > U_0^S, U_0^W > 0$$

7
 8
 9 cannot hold together because the third one is identical with the condition that $c > \delta$
 10 + 1 while the fourth one is the same as requiring that $c < 1$ which clearly cannot be
 11 true at the same time.

12 **Proof of Proposition 3**

13 Use equations (11), and (15) to derive that

$$14 \quad \Delta_{CL} - \Delta_{EC} = \pi_{W/U} \left[\left(\pi_{WS}^U - \pi_{WS}^C + \frac{\pi_{WS}^U}{\pi_{W/U}} \right) a\delta - (1 - \pi_{WS}^C) \delta^2 \right], \quad (24)$$

15 where

$$16 \quad \frac{\pi_{WS}^U}{\pi_{W/U}} = \frac{1}{\pi_U} - 1 + \pi_{WS}^U \quad (25)$$

17 because of (14).

18 With $\pi_{W/U}$ being positive, $\Delta_{CL} - \Delta_{EC} > 0$ if the expression in square brackets in
 19 (24) is positive.

20 Substituting (25) into (24) and making some algebraic manipulations leads to
 21 proposition 3.

22 **REFERENCES**

- 23 Acemoglu, D. – Johnson, S. (2005): Unbundling Institutions. *Journal of Political Economy* 113(5):
 24 949–995.
 25 Acemoglu, D. – Johnson, S. – Robinson, J. (2005): Institutions as the Fundamental Cause of
 26 Long-Run Growth. In: Aghion, Ph. – Durlauf, S. N (eds): *Handbook of Economic Growth*, Vol-
 27 ume 1A. The Netherlands: Elsevier, pp. 385–472.
 28 Acemoglu, D. – Johnson, S. – Robinson, J. A. (2001): The Colonial Origins of Comparative Devel-
 29 opment: An Empirical Investigation. *American Economic Review* 91(5): 1369–1401.
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40

- 1 Acemoglu, D. – Johnson, S. – Robinson, J. A. – Yared, P. (2005a): From Education to Democracy?
2 *American Economic Review* 95(2): 44–49.
- 3 Acemoglu, D. – Johnson, S. – Robinson, J. A. – Yared, P. (2005b): Income and Democracy. *NBER*
4 *Working Paper* No. 11205.
- 5 Acemoglu, D. – Robinson, J. A. (2006): Economic Backwardness in Political Perspective. *Ameri-*
6 *can Political Science Review* 100(1): 115–131.
- 7 Alchian, A. A. (1977 [1965]): Some Economics of Property Rights. In: Alchian, A. (ed.) *Economic*
8 *Forces at Work. Collected Works by Armen A. Alchian*. Indianapolis: Liberty Press, pp.
9 127–149.
- 10 Alchian, A. A. – Demsetz, H. (1973): The Property Right Paradigm. *Journal of Economic History*
11 33(1): 16–27.
- 12 Barro, R. J. (1996): Democracy and Growth. *Journal of Economic Growth* 1(1): 1–27.
- 13 Barzel, Y. (1989): *An Economic Analysis of Property Rights*. Cambridge: The Cambridge Univer-
14 sity Press.
- 15 Ben-Yishay, A. – Betancourt, R. (2010): Civil Liberties and Economic Development. *Journal of In-*
16 *stitutional Economics* 6(3): 281–304.
- 17 Blume, L. – Voigt, S. (2007): The Economic Effects of Human Rights. *Kyklos* 60(4): 509–538.
- 18 Boettke, P. J. (2012): *Living Economics: Yesterday, Today, and Tomorrow*. Oakland: The Inde-
19 pendent Institute in Cooperation with Universidad Francisco Marroquin.
- 20 Buchanan, J. M. (2000 [1975]): *The Limits of Liberty: Between Anarchy and Leviathan* (The Col-
21 lected Works of James Buchanan, Volume 7). Library of Economics and Liberty. Indianapolis:
22 Liberty Fund.
- 23 Buchanan, J. M. (1994): Choosing What to Choose. *Journal of Institutional and Theoretical Eco-*
24 *nomics* 150(1): 123–135.
- 25 Buchanan, J. – Tullock, G. (1999[1962]): *The Calculus of Consent: Logical Foundations of Consti-*
26 *tutional Democracy*. Indianapolis: Liberty Fund.
- 27 Congleton, R. D. (2011): *Perfecting Parliament. Constitutional Reform, Liberalism, and the Rise of*
28 *Western Democracy*. Cambridge: Cambridge University Press.
- 29 Czeglédi, P. (2012): Szabadságjogok és gazdasági szabadság – a gazdasági növekedés két
30 különböző tényezője? [Civil liberties and economic freedom – Two different factors of eco-
31 nomic development?] *E-conom* 1(2): 2–13.
- 32 Director, A. (1964): The Parity of the Economic Market Place. *Journal of Law and Economics*
33 7(Oct.): 1–10.
- 34 Easterly, W. – Levine, R. (2012): The European Origins of Economic Development. *NBER Working*
35 *Paper* 18162.
- 36 Easton, S. T. – Walker, M. A. (1997): Income, Growth, and Economic Freedom. *American Eco-*
37 *nomics Review* 87(2): 328–332.
- 38 Freedom House (2012): Freedom in the World. Country Ratings and Status. Territory Ratings and
39 Status. <http://www.freedomhouse.org/report-types/freedom-world>
- 40 Gill, A. (2005): The Political Origins of Religious Liberty: A Theoretical Outline. *Interdisciplinary*
Journal of Research of Religion 1(1), Article 1.
- Gleaser, E. L. – La Porta, R. – Lopez-De-Silanes, F. – Shleifer, A. (2004): Do Institutions Cause
Growth? *Journal of Economic Growth* 9(3): 271–303.
- Gwartney, J. – Lawson, R. – Hall, J. (2012): *Economic Freedom of the World 2012 Annual Report*.
Vancouver, Canada: The Fraser Institute.
- Gwartney, J. – Lawson, R. (2003): The Concept and Measurement of Economic Freedom. *Euro-*
pean Journal of Political Economy 19(3): 405–430.
- Hayek, F. A. (1991 [1944]): *The Road to Serfdom*. London: Routledge.
- Hayek, F. A. (1960): *The Constitution of Liberty*. Chicago: University of Chicago Press.

- 1 Knight, F. (1922): Ethics and the Economic Interpretation. *Quarterly Journal of Economics* 36(3):
2 454–481.
- 3 Kozenkow, J. (2013): New Institutional Economics: Foundations and Latest Trends. *Society and*
4 *Economy* 35(1): 87–101.
- 5 Lipset, S. M. (1959): Some Social Requisites of Democracy: Economic Development and Political
6 Legitimacy. *American Political Science Review* 53(1): 69–105.
- 7 McCloskey, D. N. (2010): *Bourgeois Dignity. Why Economics Can't Explain the Modern World*.
8 Chicago: The University of Chicago Press.
- 9 McCloskey, D. N. – Klammer, A. (1995): One Quarter of GDP is Persuasion. *American Economic Re-*
10 *view* 85(2): 191–195.
- 11 Miller, T. – Holmes, K. R. – Feulner, E. J. (2012): *2012 Index of Economic Freedom*. Washington
12 and New York: The Heritage Foundation and Dow Jones & Company, Inc.
- 13 Murphy, K. M. – Shleifer, A. – Vishny, R. W. (1993): Why is Rent-Seeking so Costly to Growth.
14 *American Economic Review* 83(2): 409–414.
- 15 Murtin, F. – Wacziarg, R. (2012): *The Democratic Transition*. WP [http://www.anderson.ucla.edu/](http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/downloads/transition.pdf)
16 [faculty_pages/romain.wacziarg/downloads/transition.pdf](http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/downloads/transition.pdf); accessed: 4 July 2013.
- 17 Nickel, J. (2013): Human Rights. In: Zalta, N. (ed.), *The Stanford Encyclopedia of Philosophy*
18 Spring 2013 Edition. <http://plato.stanford.edu/archives/spr2013/entries/rights-human/>. Ac-
19 cessed 20 December, 2012.
- 20 North, D. C. – Weingast, B. R. (1989): Constitutions and Commitment: The Evolution of Institu-
21 tions Governing Public Choice in Seventeenth-Century England. *Journal of Economic History*
22 49(4): 803–832.
- 23 Paldam, M. (2007): The Big Pattern of Democracy: A Study of the Gastil Index. In: Marciano, A. –
24 Josselin, J.-M. (eds), *Democracy, Freedom and Coercion: A Law and Economics Approach*.
25 Cheltenham: Edward Elgar, pp. 103–129.
- 26 Paldam, M. – Gundlach, E. (2008): Two Views on Institutions and Development: The Grand Transi-
27 tion vs. the Primacy of Institutions. *Kyklos* 61(1): 65–100.
- 28 Paldam, M. – Gundlach, E. (2012): The Democratic Transition: Short-run and Long-run Causality
29 Between Income and the Gastil Index. *European Journal of Development Research* 24(1):
30 144–68.
- 31 Sen, A. K. (1999): *Development as Freedom*. New York: Alfred A. Knopf, Inc.
- 32 Sobel, R. S. – Coyne, C. J. (2011): Cointegrating Institutions: The Time-Series Properties of Coun-
33 try Institutional Measures. *Journal of Law and Economics* 54(2): 111–134.
- 34 Storr, V. H. (2008): The Market as a Social Space: On the Meaningful Extraeconomic Conversation
35 That Can Occur in Markets. *Review of Austrian Economics* 21(2–3): 135–150.
- 36 Stringham, E. P. (2011): Embracing Morals in Economics: The Role of Internal Moral Constraints
37 in a Market Economy. *Journal of Economic Behavior & Organization* 78(1–2): 98–109.
- 38 Tabellini, G. (2010): Culture and Institutions: Economic Development in the Regions of Europe.
39 *Journal of the European Economic Association* 8(4): 677–716.
- 40 United Nations (1948): *Universal Declaration of Human Rights*. [http://www.un.org/en/docu-
ments/udhr/index.shtml](http://www.un.org/en/documents/udhr/index.shtml). Accessed 20 August, 2012.
- Vanberg, V. (2001). Markets and Regulation. The Contrast Between Free-market Liberalism and
Constitutional Liberalism. In: Vanberg, V. (ed.): *The Constitution of Markets*. London:
Routledge, pp. 17–36.