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Positive Constitutional Economics II—A Survey of Recent Developments

Stefan Voigt¹

Abstract:

Analysis of the economic effects of constitutional rules has made substantial progress over the last decade. This survey provides an overview of this rapidly growing research area and also discusses a number of methodological issues and identifies underresearched areas. It argues that the next logical step of Positive Constitutional Economics is to endogenize constitutional rules.

JEL classification: H11, K10, O17, O43, P51.

Key Words: Positive Constitutional Economics, Constitutional Political Economy, Economic Effects of Constitutions, New Institutional Economics, Endogenous Constitutions.

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Positive Constitutional Economics II—A Survey of Recent Developments

1. Introduction

The economic analysis of constitutions, also known as “constitutional economics” or “constitutional political economy,” is a young research program. Standard economics used to focus on the analysis of choices *within* rules, thus assuming rules to be exogenously given and fixed. Constitutional economics broadens this research program by analyzing the choice *of* rules, using the established method of economics, i.e., rational choice.

Two broad avenues can be distinguished in the economic analysis of constitutions. (1) The normative branch, which is interested in legitimizing the state and its most basic rules by drawing solely on the self-interest of rational individuals. This branch is interested in proposing Pareto-superior rule changes. The normative approach is dominated by adherents to social contract theory. According to Buchanan (1987, 249), the purpose of this contractarian approach is justificatory in the sense that “it offers a basis for normative evaluation. Could the observed rules that constrain the activity of ordinary politics have emerged from agreement in constitutional contract? To the extent that this question can be affirmatively answered, we have established a legitimating linkage between the individual and the state.”

(2) The positive branch, which is interested in explaining (a) the (economic) effects of alternative constitutional rules and (b) the emergence and modification of constitutional rules. Some 25 years ago, two public choice-scholars questioned the relevance of normative theory, stating that “it is extremely doubtful whether such analysis will make a perceptible difference in the character of prevailing institutions. Normative theory is useful in helping us clarify our norms, but it is another question whether such analysis will impact on the pattern of real institutional development” (McCormick/Tollison 1981, 126). These scholars clearly preferred a positive approach, but were rather critical in their evaluation of the state of the art of positive theory: “There is thus a sharp contrast in the two approaches to constitutional-institutional analysis. It is also fair to say, however, that at this point in time the normative approach to constitutional analysis is much better developed in the literature than the positive approach.”

This critique was written more than a quarter-century ago and in my first survey of positive constitutional economics (Voigt 1997), I was forced to agree that

McCormick and Tollison's conclusion still held.² Over the last dozen years, however, this situation has changed dramatically and constitutional political economy (CPE) has been discovered by the mainstream. Ten years ago, many important contributions to the emerging research program appeared in *Public Choice* or in *Constitutional Political Economy*, a journal expressly founded in 1990 to give the research program a push. Today, many important contributions to the field can be found in journals such as the *American Economic Review*, the *Quarterly Journal of Economics*, and the *Journal of Political Economy*, to name three of the most prominent ones.

A number of factors appear to have played a role in the very rapid development of positive constitutional economics (PCE)? The demise of the socialist countries in Central and Eastern Europe and the subsequent need for well-informed policy advice made it very clear that economists had unduly neglected the relevance of institutions. During transition, the importance of institutions simply could not be ignored any longer. Solid and empirically tested knowledge is a necessary prerequisite to sound policy advice. It is no accident that PCE and the new institutional economics (NIE) appeared on the scene almost simultaneously. The failure of socialism made the dichotomy between socialism and capitalism largely irrelevant and led to a more focused look at institutional variation within market-oriented countries. Djankov *et al.* (2003) call for a "new comparative economics" on precisely that basis. Another factor that contributed to the rise of PCE is the availability of data sets covering a wide range of variables, which has been a definite boon for cross-country analyses.

The contributions to the positive branch appear somewhat unbalanced in that most of them deal with the economic effects of constitutions and only a handful speak to the emergence and modification of constitutional rules. In a way, endogenizing constitutions can be considered the core of the research program. To analyze the effects of constitutions first is, however, entirely straightforward: if constitutional rules did not have any significant effect on economic outcomes, expending effort on explaining their emergence would be pointless. However, there is now substantial evidence that constitutional rules do have important economic effects.

² Other more recent surveys include Brennan and Hamlin (2001) as well as Kurrild-Klitgaard and Berggren (2004). Congleton and Swedenborg (2006) describe how constitutional political economy emerged out of the broader public choice research program and relate this root to the other two roots, namely, the new institutionalism and political economy. Voigt (2003) contains a collection of the seminal articles of the last four decades.

It is thus time to take the next step—that is, to endogenize constitutional rules. This might be easier said than done, though, because although constitutions are frequently *rewritten*,³ constitution writing is a rare event and the number of observations on which econometric evidence can be based is correspondingly low. Constitutional choice systematically takes place under very special circumstances and there are dozens of potentially relevant determinants. Although quite a few impressive case studies have been done, we are still a far cry away from a “general” theory that can even be tested empirically. Indeed, some might question the “theorizability” of this issue altogether.

This survey is divided into three main parts: conceptual foundations (Section 2), description of recent trends (Section 3), and some speculation as to future developments (Section 4). Surveys should not only describe the current state of the art, but should also point out shortcomings and desiderata. This paper is therefore not simply a survey, but also an outline of a—subjective—research program.

2. Conceptual Foundations

Prior to addressing the real core of this survey, a number of preliminaries need to be dealt with first. These include (1) showing PCE’s position as part of a broader research program, namely, the NIE, (2) defining some key terms, (3) briefly discussing the variables we would like to explain, and (4) addressing several issues in measuring both constitutional aspects as well as *explananda*.

2.1. Constitutional Political Economy as Part of the New Institutional Economics

Scholars working within the NIE analyze (i) the (economic) effects of alternative institutions and (ii) the determinants of institutional change (see, e.g., North 1981, 1990). Institutions can be defined as commonly known rules used to structure recurrent interaction situations that have a sanctioning mechanism that can be employed in cases of noncompliance or disregard of a rule. Voigt and Kiwit (1998) propose distinguishing between external and internal institutions: external

³ Elkins, Ginsburg, and Melton (2006) count 736 constitutions written and promulgated since 1789, implying an average rate of 3.5 per year. According to the Asian Development Bank (2005), a total of 122 constitutions have been adopted between 1990 and 2004, most of them in Africa (54) and Asia (38).

ones being those where the sanctioning is carried out by the state and internal institutions being those where society does the sanctioning. As long as constitutional rules are viewed as a specific kind of institution, the NIE can be interpreted as the more inclusive research program. Surveys or textbooks on NIE might reasonably be expected to include the economics of constitutions, but they usually do not. Neither the book-length survey by Eggertsson (1990) nor the one by Furubotn and Richter (1997) pays special attention to constitutional rules (both surveys do, however, include a chapter on the theory of the state in which the emergence of states is conceptualized using the economic approach). In short, representatives of both research programs seem to treat each other with benign neglect.

It is argued here that PCE could profit immensely from positioning itself within the broader NIE.⁴ The normative branch of constitutional economics has been dominated by contractarian approaches (e.g., Buchanan 1975), in which a very broad capacity to deliberately set and modify constitutional rules is at least implicitly assumed. Additionally, it is often assumed that the actors choosing the constitution have at their disposal complete and perfect knowledge concerning the consequences of alternative constitutional arrangements. These two assumptions are neither realistic nor adequate for understanding how constitutions do actually evolve. If these assumptions are abandoned, an important issue can be dealt with explicitly, namely, that the enforcement of constitutional rules is precarious and depends on a number of conditions that ought to be identified. Factual enforcement could, e.g., depend on “preconstitutional” internal institutions. These internal institutions could thus constitute hard constraints regarding the enforceability of constitutional rules (for a more complete argument on the relationship between internal institutions and the enforcement of constitutional rules, see Voigt 2008).

⁴ Brennan and Hamlin (1995, 289) apparently argue exactly the opposite: “This account of constitutionalism is broad enough to include the approach to economic and political questions often termed ‘new institutionalism’. Indeed we see very strong links between that approach and CPE. Possible distinctions between CPE and the new institutionalism arise from the new institutionalists’ relative emphasis on institutional evolution rather than constitutional design, their relative emphasis on transactions costs, and the different normative structures employed.”

2.2. Definitions

Economists have analyzed constitutions from many different angles, including, but certainly not limited to, as a social contract, as an incomplete contract, as a principal agent relationship, as a precommitment device, as the result of cultural evolution, and as a bundle of conventions. In this survey, I draw on results from different perspectives, so it seems appropriate to choose a wide definition of “constitution.”

Constitutions are concerned with mechanisms for the production of public goods. By giving themselves constitutions, societies are not deciding in any meaningful detail what sort of public goods they want to provide themselves with;⁵ rather, the constitutions contain provisions that are intended to be used in making those decisions. They therefore constrain the representatives of society in the ways they choose what public goods should be produced. At the same time, they also enable politicians to make choices. If one is interested in analyzing a society’s choice of constitution, one is really interested in analyzing a meta-choice, namely, how a society chooses (on the constitutional level) how to choose later on (on the postconstitutional one). Or, in the words of Peter Ordeshook (1993, 231f.): “A constitution is not a piece of legislation; it is the mechanism people use to guide the formulation of legislation and law.”

Any state that produces a minimum amount of public goods can thus be said to have a *de facto* constitution. This is, however, not the same as having a constitution in the sense of constitutionalism, which is concerned with limited government and thus with constraining government action to certain areas and restricting the means government can employ.⁶ Societies in which the government stays within the limits laid down by the constitution are said to have an effective constitution or, in other words, there is convergence between the society’s *de jure* and *de facto* constitutions.

⁵ Note that, literally, it is always individuals—never societies at large—who choose. We thus are not departing from methodological individualism but simply saving space when we write that “societies choose.”

⁶ Within the (Western) tradition of constitutionalism, much emphasis has been placed on the constraining side of constitutions. Ever since Thomas Hobbes, the state has been portrayed as Leviathan. However, compared to anarchy, the state can also make everyone better off, a view that should lead to equal emphasis on the enabling parts of the constitution.

2.3. Explananda

When constitutional rules are assumed to be exogenously given, they serve to explain different (economic) variables. But what are the variables in which we are specifically interested? For economists, it seems obvious to analyze the relationship between the constitutional-rule system and per capita income or its growth. It has been argued (e.g., by Hall and Jones 1999) that growth fluctuates widely over time within countries and that the results of any study are thus heavily dependent on the time period analyzed. One way to circumvent this problem is to use per capita income as *explanandum* as it reflects aggregate growth over a very long period.

Another way to circumvent the problem is to use labor and/or total factor productivity. Conceptually, this makes a great deal of sense since we are not interested in output increases achieved by augmenting capital or labor input, but in increases in output that are achieved by using constant amounts of these factors in a more productive way. Institutions—including constitutional rules—should thus display their effects primarily via increases in productivity.⁷

Growth, per capita income, and labor, as well as total factor productivity, are “very macro.” Assuming that constitutional rules have a significant impact on these factors, we would be very interested in the transmission channels through which these impacts occur. This means that we are interested in some variables that are a bit “less macro.”

Fiscal policy variables are a natural starting point. The state has the power to tax, but it also has the power to provide public goods. The extent and efficiency of both taxation and the provision of public goods might be affected by constitutional rules. It therefore seems appropriate to add (1) tax revenue and (2) government spending, as well as (3) the structure of government spending (reflecting the kinds of public goods provided) to our list of variables of interest.

Government efficiency in the provision of public goods should also be reflected in low levels of corruption, few political rents handed out via regulation, and so forth. If constitutional rules have a significant impact on these variables, it implies the existence of an indirect channel through which the rules have an effect on income and total factor productivity.

⁷ This is not to deny that adequate institutions will also increase the propensity to invest in both physical as well as human capital.

Table 1: Overview of Dependent Variables

	Dependent Variables	Potential Problems with Most Frequently Used Proxies
I	<i>Macro Outcome Variables</i>	
1	Economic Growth	Often very volatile over time; period of analysis chosen crucial
2	Per Capita Income	
3	Labor Productivity	Both labor and total factor productivity are calculated on a uniform Cobb-Douglas production function for all countries
4	Total Factor Productivity	
II	<i>Fiscal Policy Variables</i>	
1	Government Revenue	
2	Government Expenditures	Focus is often on central government, which might considerably underestimate overall state activity
3	Budget Deficit	
4	Composition of Government Spending	Focus on social and welfare spending; measures that distinguish between general public goods and others highly desirable
III	<i>Governance Variables</i>	
1	Corruption	All the measures available for a large number of countries measure perceptions and are highly subjective
2	Efficiency of Government	Measure based on a variable number of surveys; highly subjective and drivers difficult to determine
IV	<i>Others</i>	
1	Legitimacy of Constitution/State	Subjective indicator; uncertain whether people really act on declared beliefs
2	Propensity to Cheat on Taxes	Subjective indicator; uncertain whether people really act on declared beliefs
3	Reported Life Satisfaction ("Happiness")	Subjective indicator; unclear how systematic collective sentiments (pessimism/optimism) can be controlled for

Finally, there are a number of variables usually treated with some suspicion by economists, including fuzzy concepts such as the legitimacy of the constitution or its “stability.” Nevertheless, we plead for their inclusion as dependent variables in PCE. If it can be shown that some constitutions or the procedure by which they are generated are systematically perceived as more legitimate than others, then this might cause important economic effects: for example, the state’s monitoring costs would be less, which could mean lower taxes and higher income. One might also be interested in the propensity of citizens to cheat on taxes. Likewise, if the stability of a political regime is significantly influenced by its constitution, this would amount to a hitherto neglected transmission channel (from constitutional rules via stability and investment to income). A further explanandum of interest could be the degree to which constitutions enable citizens to form expectations that have a high chance of being correct. Institutional economists stress the uncertainty-reducing function of institutions. Constitutional rules that increase predictability might have important economic consequences, such as citizens acting on longer time horizons and having a higher propensity to make long-term investments. Another variable that promises to be of interest is the level of reported life satisfaction (aka “happiness”).

We have now identified four groups of potentially interesting explananda, which are summarized in Table 1. Two measurement issues will be discussed in the next section: first, issues concerning how to measure the four groups of dependent variables just discussed and, more importantly, (2) issues related to the difficulty of measuring the constitutional rules themselves.

2.4. Measurement Issues

Empirical work in PCE presupposes that both constitutional rules and outcome variables are measurable in a satisfactory fashion. In this subsection, we deal with both types of variables, beginning with the measurability of constitutional rules.

Prima facie, ascertaining currently valid constitutional rules is not a problem, since constitutions (almost) always exist in written form. Yet, a formally unchanged section of the constitution can be subject to very different interpretations over time (Voigt 1999, chapter 7). However, let us assume that we are not dealing with constitutional interpretation, but simply with constitutional basics. The more relevant problem now is the potential divergence between a constitution's formal provisions and their actual implementation.

Many real-world constitutions promise paradise on earth: extensive negative rights (protecting citizens from intrusion by the state) are happily married to extensive positive rights (promising citizens everything from the right to a paid nap at work to the right to housing, employment, and a clean environment). Of course, many of these protections and promises never manifest. Thus, when trying to estimate the consequences of constitutional rules, a formidable problem arises as the economic effects will most likely not be the result of these unenforced constitutional protections and promises, but are far more likely to be due to the way the constitutional rules are actually implemented. Further complicating the issue is that nonenforced constitutional provisions are not confined to human rights but may well involve the organizational structure of the state: for example, the constitution could declare the judiciary independent of the executive but, in actual fact, this is not always the case.⁸

⁸ Of course, one can simply count instances in which *de jure* rules have not been enforced factually: presidents running for a third term although there is a two-term limit, state governments overturned as a consequence of the national government demanding so, and so forth. It is unclear, however, whether this would produce a complete measure of the degree to which *de jure* rules are factually enforced.

A related problem occurs when constitutions contain provisions that can be exercised, but rarely are (e.g., referendums). Some would argue that simply by being possible, these provisions have an effect on political behavior, and this is certainly plausible. However, this assumption might be proven wrong empirically. This is why it is important to not only measure formal provisions, but also investigate their actual use.

Many of the measures used in the empirical papers discussed in the next section are dummy variables: a country has a presidential or a parliamentary form of government; it has a unicameral or a bicameral legislature; it has a federal or a central structure; and so forth. By necessity, dichotomous variables do not allow taking institutional detail into consideration. But if God (or the devil!) is in the details, perhaps the details are worth a little of our time, and the construction of more precise indicators a worthy pursuit.

Let us now take a look at the outcome variables. Particular emphasis is given to the variables used by Persson, Tabellini, and various co-authors (PT) (e.g., 2003). PT gave PCE a real boost and their approach has already become a sort of standard framework for other studies. It thus seems appropriate to take a critical look at the outcome variables they employ. Estimates of labor and total factor productivity must, by necessity, rest on sweeping assumptions. PT use estimates arrived at by Hall and Jones (1999) and rely on an identical Cobb Douglas production function for all countries. It is assumed that all countries have an identical α ($= 1/3$), that marginal returns from (school) education are decreasing but identical the world over, that the amount of investment is known and that its depreciation is also identical the world over, and, finally, that GDP is known. On this basis, the Solow residual can be calculated. Obviously, a very crude measure results.⁹

For government revenue, PT rely on *central* government revenue. Their chief reason for not relying on total government revenue is “data availability and comparability” (2003, 38). It is conceivable, though, that central government revenue might vary considerably depending on whether the state is federal or unitary. PT control for this with a dummy for federalism but the control can only be as good as the dummy. Similar arguments can be made with regard to (central) government expenditure and budget surplus since the last variable is based on the

⁹ Hall and Jones calculate productivities for 1988. Using their assumptions, we recalculated the measures for the year 2000 (Blume and Voigt 2007). Partial correlations are 0.972 and 0.899 for labor and total factor productivity, respectively.

two previously discussed variables. To analyze the effects of constitutional rules on the structure of the budget, PT construct a variable that captures the amount of central government expenditures on social services and welfare as a percentage of GDP. The same criticism applies.¹⁰

When it comes to the so-called governance indicators, PT's true interest lies in the amount of political rents. However, such a measure is not available so in lieu thereof they rely on various corruption perception indices. Of course, political rents are not identical with perceived corruption and thus constructing political rent indicators remains a desideratum. There is no getting around that the perceptions indicators are subjective and that subjective perceptions can be heavily influenced by recent events, even by recent reports in the press of a long-ago corruption scandal. Objective corruption indicators have been constructed (e.g., road construction in Italy [Golden and Picci 2005] or Indonesia [Olken 2007]), but it hardly seems possible to construct them on a broad basis for many countries, and so this area continues to be a desideratum. To estimate the effect of constitutional rules on the efficiency of government, PT rely on the governance indicators provided by the World Bank Institute. Next to government efficiency, they also include a cluster called "graft." Both indicators have been passionately attacked. The main critique is that they are not based on a thoroughly systematized concept but that the (implicit) definition of the various concepts is based on the availability of surveys. Since the variables employed change over time, so does the underlying implicit definition of the concept purported to be measured, which makes comparison over various years impossible. The indicators are not supplied as absolute values but as rankings. Once the number of included countries changes, the ranking of a country can change without any substantial change having taken place within that country.¹¹

In sum, neither the operationalization of constitutional rules nor that of the potential outcome variables is without problems, a situation that must be kept in

¹⁰ PT choose social and welfare spending as a proxy for broad redistributive programs as opposed to narrow geographical constituencies. They point out (2003, 50) that this interpretation of the variable might not apply to less-developed countries. More fine-grained indicators are certainly desirable: if one thinks of government spending as either allocation-improving or redistributive on the one hand and broad (nation-wide) or narrow (local, geared at particular districts, etc.) on the other, then a 2 x 2 matrix results in which social and welfare spending would cover only one cell.

¹¹ Critics include Arndt and Oman (2006), Knack (2006), Thomas (2006), and Kurtz and Schrank (2007a, 2007b). Kaufmann *et al.* (2007) is a reply to critics.

mind when interpreting the estimation results. However, it is also a situation that should encourage the construction of better variables.

3. Positive Constitutional Economics

3.1. Introductory Remarks

In this section, an overview of research concerning constitutional rules is provided. The presentation is structured so that the constitutional rule is first assumed to be exogenously given (or *explanans*) and only in a second step endogenized (or considered to be the *explanandum*).¹² Within this broad division, theoretical insights are always presented prior to empirical results.

As mentioned above, Persson and Tabellini, and various co-authors, have made a major contribution to PCE, which, although sometimes heavily criticized,¹³ has become almost a standard for analyzing the economic effects of constitutions. They analyze the economic effects of two constitutional institutions, namely, electoral systems and form of government. Since there is a fair amount of evidence available regarding these two institutions, we begin our survey with them. Of course, many other constitutional institutions promise to have important economic effects. The organization of the judiciary, and the effect of same on traditional separation of powers, immediately comes to mind, for example, although, strangely, this is an institution only recently analyzed by scholars. Here,

¹² This is also why the relevance of procedural rules, as well as the relevance of preferences for the choice of constitutional rules, are dealt with only at the end of this section: they are concerned with endogenizing constitutional choice and change.

¹³ PT are remiss about paying tribute to some of their intellectual predecessors, which has led to some controversy (Blankart and Koester 2006, severely criticizing proponents of political economics; Alesina, Persson, and Tabellini, 2006 responding). In his review of PT (2003), Mueller (2007) mentions a “disturbing development” in the literature, namely, “the tendency to re-label public choice and then pretend one has discovered something new.” Mueller extends his criticism to Daron Acemoglu as well as Shleifer and Vishny (who reinvented rent-seeking by calling it “the grabbing hand”). After praising their work, Acemoglu (2005) goes on to criticize PT by discussing the nonexogeneity of constitutional rules as well as the inadequate instruments they chose. Holcombe (2001) is a survey on the relevance of institutions for economic growth from the perspective of a public choice scholar. In his recent overview of “The New Political Economy,” Besley (2007) discusses historical antecedents at length and includes both comparative economic systems and public choice.

the economic effects of judicial organization will be discussed as part of the (horizontal) separation of powers.

The economic effects of both federalism and direct democracy have been dealt with by well-established branches within the public choice field. Although excellent surveys on both topics are available, they are also dealt with here in order to focus specifically on their constitutional aspects. Federalism can be interpreted as a vertical separation of powers; direct democratic institutions as an extension of the traditional notion of the separation of powers. In recent years, traditional government functions have ever more frequently been delegated to independent and specialized domestic or international agencies (monetary policy has often been delegated to independent central banks aiming at price stability, to name only the most prominent example). Additionally, in order to better monitor government, traditional organizations, such as supreme audit institutions, have often been strengthened or entirely new institutions created (e.g., freedom of information acts intended to increase government transparency). These developments may well deserve a heading of their own—“the new separation of powers” (see Ackerman 2000, who uses the term slightly differently). Both factual developments as well as research into these institutions are so manifold that they deserve a survey of their own; however, the most important of these developments are also surveyed here.

The following subsections thus cover electoral rules (Section 3.2), the horizontal separation of powers, including forms of government (presidential vs. parliamentary democracy), bicameralism, and the judiciary (Section 3.3), the vertical separation of powers, or federalism (Section 3.4), the “new” separation of powers (Section 3.5), and direct versus representative democracy (Section 3.6). Subsequently, basic rights are dealt with in Section 3.7, followed by the relevance of procedural rules for effectuating constitutional rules (Section 3.8), the number of (constitutional) veto players (Section 3.9), and the dichotomy between autocracy and democracy (Section 3.10). Section 3.11 contains a summary. Table 3 is a nonexhaustive list of the empirical papers cited in this section.

3.2. Electoral Rules

A distinction is sometimes made between electoral rules and electoral systems. *Electoral rules* refer to the way votes translate into parliamentary seats: under majority rule (also called plurality or first-past-the-post), only the candidate who secured the most votes in a district is elected; all other votes are “lost” or “wasted.” Under proportional representation, parties are allocated seats according

to the proportion of votes they obtain. *Electoral systems* include more dimensions than electoral rules, e.g., district size and ballot structure. District magnitude refers to the number of parliamentarians sent from one district. The ballot structure determines whether citizens can vote only for a party, only for an individual, or some combination thereof. Although theoretically distinct, these dimensions are highly correlated empirically: countries using majority rule (MR) often have minimum district size (single-member districts) and allow voting for individual candidates. Countries relying on proportional representation (PR) often have large districts and restrict the possibility of deviating from party lists.

Political scientists have studied the relationship between electoral rules and party structures as well as types of government (single party or coalition) for a long time. Grofman and Lijphart (1986) contains 19 contributions surveying well-researched areas, as well as pointing out underresearched areas.¹⁴ Their book is aptly entitled *Electoral Laws and Their Political Consequences* as economic consequences of electoral systems are not the central focus. Shugart (2005, 50f.) summarizes the state of the art, writing that the core questions are settled and the main findings incorporated into mainstream political science. This would, however, cease to be the case if electoral systems are endogenized.

It has been known for many years that electoral rules can have a crucial effect on the number of parties. Duverger's (1954) observations that MR is conducive to two-party systems, whereas more parties are apt to arise under PR has even been called "Duverger's law" or "Duverger's hypothesis," which is some measure of their general validity. The analysis of the economic consequences of electoral systems is of a more recent vintage. It has been argued (Austen-Smith 2000) that since coalition governments are more likely under PR than under MR, a common pool problem among governing parties will emerge. Parties participating in the coalition will want to please different constituents, which explains why both government spending and tax rates are, on average, higher under PR than under MR. Lizzeri and Persico (2001) compare the composition of government spending

¹⁴ Drawing on Fishburn (1983), they name five areas that have received considerable attention (electoral formulas, ballot structure, district magnitude, size of legislature, and number of candidates/parties) and no less than 13 areas that deserve more attention (suffrage and registration requirements, ease of voter access to electoral process, ease of party/candidate access to political process, structure of political competition, special features of ballot format, special features for transforming votes into outcomes, districting procedures, campaign financing rules, campaign timing rules, other features of campaigning, number and types of offices subject to electoral choice, degree of "bundling" elections, and mechanisms for voter intervention).

under alternative electoral rules. They distinguish between the provision of a genuine public good on the one hand and pork-barrel projects that serve to redistribute on the other and ask whether incentives to provide these goods differ systematically between MR systems (which they term “winner-take-all systems”) and PR systems. In MR systems, politicians have an incentive to cater to those who can help them obtain a plurality of the votes and they will do so by promising pork-barrel projects. In PR systems, on the other hand, targeting makes less sense because every vote counts, leading politicians to provide more general public goods.

The hypotheses presented so far all refer to the electoral *rules*. In their survey on the economic effects of electoral *systems*, PT (2003) also investigate district size and ballot structure. Suppose single-member districts are combined with plurality rule, which is often the case empirically. In this situation, a party needs only 25% of the national vote to win the elections (50% of half of the districts; Buchanan and Tullock 1962). Contrast this with a single national district that is combined with PR. Here, a party needs 50% of the national vote to win. PT (2000, chapter 9) argue that this gives parties under a PR system a strong incentive to offer general public goods, whereas parties under plurality rule have an incentive to focus on the swing states and promise policies that are specifically targeted at the constituents’ preferences.

Milesi-Ferretti, Perotti, and Rostagno (2002) obtain a similar result. In large districts, legislators will primarily represent socioeconomic groups, whereas in small districts, they will primarily represent geographical interests. Transfers are a suitable instrument for paying allegiance to social constituencies, whereas (local) public goods are better suited for paying for geographical allegiance. The authors assume that in majoritarian systems just one representative is elected in each district, whereas in proportional systems, more than one representative is elected. Given this assumption, governments under proportional systems will spend more on transfers, whereas governments under majoritarian systems will spend more on (local) public goods. They test their model with 20 OECD and 20 Latin American countries and find that, as predicted, transfers are higher under PR. Going beyond the simple dichotomy between majoritarian and proportional systems, they find that higher degrees of proportionality are correlated with higher degrees of transfer spending (as opposed to public goods spending).

The effects of differences in ballot structure are the last aspect of electoral systems to be considered. Often, MR systems rely on individual candidates, whereas proportional systems rely on party lists. Party lists can be interpreted as a

common pool, which means that individual candidates can be expected to invest less in their campaigns under PR than under MR. PT (2000, chapter 9) argue that corruption and political rents should be higher the lower the ratio between individually elected legislators and legislators delegated by their parties.

Persson *et al.* (2004) is based on a game-theoretic model that takes the electoral system as exogenously given and analyzes a direct as well as an indirect causal chain from the electoral system to economic policy. The paper is in line with political science literature on the topic but explicitly adds economic policy as the last element of the chain. The model predicts that government spending will be higher under PR than under MR. In addition, it shows that party fragmentation can persist under MR if voters for different parties are unevenly distributed across districts.¹⁵

PT are to be congratulated for having put these conjectures to an empirical test involving as many as 85 countries over a period of almost four decades (1960–1998). They (2003) find that the electoral system has (economically and statistically) significant effects on a number of economic variables.

1. In majoritarian systems, central government expenditures are some 3% of GDP lower than in PR systems.
2. Expenditures for social services (“the welfare state”) are some 2 to 3% lower in majoritarian systems.
3. The budget deficit in majoritarian systems is some 1 to 2% below that of systems with PR.
4. A higher proportion of individually elected candidates does indeed lead to lower levels of (perceived) corruption.
5. Countries with smaller electoral districts tend to have more corruption.

¹⁵ Recently, Bordignon and Tabellini (2008) took a further step toward the explicit recognition of institutional detail with regard to electoral systems. In some MR systems, citizens are permitted to vote a second time, namely, to determine the winner among the two candidates who received the most votes in the first round (the most prominent example being French presidential elections). The authors ask whether the dual ballot impacts upon the number of parties (candidates) and their positions. They show that the number of parties is, indeed, larger under the dual ballot but that the influence of more extreme positions is reduced under this institution.

6. A higher proportion of individually elected candidates leads to higher output per worker.

7. Countries with smaller electoral districts tend to have lower output per worker.

Blume *et al.* (2009a) replicate and extend PT's analysis, finding that with regard to various dependent variables, district magnitude and the proportion of individually elected candidates is more significant—both substantially and statistically—than the electoral rule itself.

Persson *et al.* (2004) explicitly discriminate between a direct and an indirect effect. Their hypothesis is that the electoral system influences government spending only indirectly, via the party structure and the type of government. They test this idea by using indicators for the electoral system as instruments for party fragmentation. The dependent variable of the second stage is either type of government or (central) government spending. Since the over-identifying restriction that the electoral system variables do not display a direct effect on government spending cannot be refuted, Persson *et al.* consider this as support for their hypothesis. Overall, the district size variable has more significant effects than the electoral rule variable (MAJ), which is accordance with the political science literature. Indeed, Taagepera and Shugart (1993, 455) note that “if one had to give a single major factor [that] determines the number of parties ... it would have to be the district magnitude.”

Iversen and Soskice (2006) deal with the effects of electoral systems on redistribution. They question the Meltzer-Richard (1981) model, according to which nonegalitarian societies redistribute more than egalitarian ones. They notice that three out of four governments under majoritarian systems were center-right between 1945 and 1998, whereas three out of four governments were center-left under PR. However, if that is the case, a closer look at the transmission mechanism between electoral systems to government expenditures is needed because it is unclear if the difference is due to the constitutional rule or due to the different government ideologies. Picking up on Acemoglu and Robinson (2000; see below), they argue that PR can be interpreted as a commitment device in favor of redistribution (which they interpret as a kind of insurance against loss of income in case of unemployment, which would, in turn, increase incentives to make specific investments in human capital).

If the choice of electoral systems has important economic consequences, it seems only natural to ask what factors determine this choice. This is exactly what will be done next. PT use instrumental variables to explicitly take account of the fact that

institutions are never truly exogenous, but their instruments (time period during which the constitution was written, distance of the country from the equator, percentage of population speaking English or another European language as the mother tongue, ethno-linguistic fractionalization, and population size) cannot comprise a fully fledged theory.

Colomer (2005) argues that it is the number of parties that determines the electoral system and not vice versa. In other words, he turns Duverger's law upside down.¹⁶ He assumes that "the presumed line of causality is double." His empirical test covers 87 countries and 219 elections. He observes 37 changes from MR to PR. He states (ibid., 12) that "multi-party systems occur before and not only subsequent to the adoption of PR." He also finds support for a long-term trend toward PR, a finding previously made by Lijphart (1994, 52–56).

Boix (1999) asks under what circumstances incumbent parties will change electoral systems. He starts from the assumption that incumbents are interested in maximizing their parliamentary representation (as well as government positions). The emergence of new parties is modeled as an exogenous shock that can, e.g., be caused by a move toward universal suffrage. If the newly emerging parties (usually leftist) are perceived as weak, the electoral system remains unchanged; if, on the other hand, the new parties are perceived as strong, electoral systems change from majoritarian to proportional rule. Boix tests this hypothesis for the electoral systems of 22 countries between 1875 and 1990 and finds it broadly confirmed. Further, he shows that the consequences of a country's internal fragmentation (measured by ethnic as well as religious fragmentation) depend on the size of the country: in small countries, high levels of fragmentation are one factor leading to PR. Large countries can be highly fragmented at the national level, yet quite homogenous at the local or regional level. If this is the case, federalism serves as a substitute for PR.¹⁷ To model the emergence of new parties as an exogenous shock even though it is the consequence of a move toward universal suffrage, and hence an endogenous choice, is somewhat unconvincing.

Cusack *et al.* (2007, 373) attack this argument as "wrong in terms of the logic, the interpretation of the historical record and the cross-national evidence." They

¹⁶ Additionally, he conjectures that there is a long-term trend toward PR.

¹⁷ Aghion *et al.* (2005) endogenize the choice of electoral rules in U.S. cities in a very similar fashion. Here, the external shock is the general enlargement of the franchise to minorities. The authors show that small minorities will induce the majority to keep first-past-the-post systems, whereas large minorities will induce the majority to switch to proportional representation.

endeavor to show that “PR cannot be the equilibrium choice of right parties under the assumptions of the model.”

Benoit’s (2004) intention is to develop a rational choice model of electoral system change, which will, according to the model, occur if a coalition of parties not only expects to be better off under alternative rules but also has the power to modify the currently valid rules. However, his model comprises so many potentially relevant determinants that an empirical test of it would be extremely difficult.

Ticchi and Vindigni (2003) are interested in an even broader question, namely, the factors determining the choice between “majoritarian” and “consensual” constitutions (the dichotomy having been introduced by Lijphart 1999). “Majoritarian” constitutions are characterized not only by having a plurality rule, but by a number of other characteristics, *inter alia*, that government is dominated by the executive and that governments are usually one-party governments. “Consensual” constitutions, on the other hand, are characterized not only by having PR but also by the fact that the legislative and executive powers are more balanced and that governments are usually coalition, i.e., more-party, governments. Ticchi and Vindigni hypothesize that the factor driving the choice between majoritarian and consensual systems is the *ex ante* degree of income inequality: if it is relatively high, a majoritarian constitution is more likely, if it is relatively low, a consensual constitution is more likely.

Boix (1999) shows that changes in electoral systems can be explained as the consequence of franchise extensions that are assumed to be exogenously given. However, changes in the franchise are also chosen. The question thus becomes: Why—and under what circumstances—does the elite (those who are able to vote and who also have the competence to extend the franchise) decide to extend the franchise to larger parts of the population, given that an extension can lead to an alteration of the extant electoral system? Voigt (1999, chapter 6) proposes thinking of constitutional change as the outcome of a bargaining game in which a variable number of interest groups participate. Only powerful groups will bargain over a constitutional contract, which is interpreted as a real contract between an identifiable number of parties. This notion of the contract is thus more similar to a private law contract than to a social contract. The bargaining power of a group is determined by its ability and willingness to inflict costs on others and thereby reduce the net social product and the resulting rents. Due to, e.g., technological change, the relative bargaining power of the various groups can change over time, which means that the number and identity of the parties that bargain over a constitutional contract can change over time. It further means that those groups

whose relative bargaining power has increased will demand constitutional renegotiation. Voigt (1999, chapter 6) contains a number of examples.

Acemoglu and Robinson (2000) also deal with the issue of franchise extension. According to them, the franchise will be extended if the hitherto disenfranchised are able to credibly threaten a revolution if they are not granted the franchise. Extending the franchise is interpreted as a commitment to future redistribution that will prevent social unrest.

Lizzeri and Persico (2004) propose a complementary explanation for extension of the franchise. Based on a case study of 19th century Britain, they argue that the franchise was extended even though—contrary to Acemoglu and Robinson (2000)—no serious threat to the established order could be identified. In their model, a narrow franchise can lead to pork-barrel politics that serve only a minority of the elite. If a majority of the elite expects to be better off if general public goods are provided in higher quantity and better quality, then it might be in favor of an extension. The authors show that as a consequence of the three franchise extensions that occurred in Britain during the 19th century, total government spending as a fraction of GDP remained roughly constant but the composition of government spending changed in the way predicted by their model, namely, a drop in welfare spending was accompanied by a huge increase in spending on what the authors call public health infrastructure, such as sewerage systems and filtered water, as well as paved and drained roads.

In sum, the estimated size of the effects of differences in electoral systems on a number of economic variables is often very significant. It is noteworthy that institutional detail matters a great deal. When electoral systems are discussed, the electoral rule is often attributed pride of place, but the empirical results show that district magnitude must not be overlooked. As soon as electoral institutions are not assumed to be exogenously given, but are instead assumed to be the result of political power games, it becomes unclear whether the connection between electoral rules and economic outcomes is causal or primarily a correlation. It appears plausible that strong actors can influence both electoral institutions and policy choices. More research concerning the precise transmission channels is thus needed.

3.3. Horizontal Separation of Powers

3.3.1. Introductory Remarks

The term “separation of powers” is inseparably linked to Montesquieu’s *De l’esprit des loix* (1748), in which he describes a functional separation between the legislature, the executive, and the judiciary.¹⁸ Although Montesquieu’s account is based on a misinterpretation of the British system, it formed the basis for constitutional thinking in what was to become the United States of America (see Hamilton, Madison, and Jay 1788/1961). The term has been used with different connotations. Governments structured so that different branches can decide independently of the other branches in different areas (a rigid separation of powers) are very different from governments structured so that a joint decision is needed (a model of checks and balances).¹⁹ This latter type has been interpreted as a constraint on politicians for the benefit of the citizens.

The horizontal separation of powers is a very broad area, which is why we deal with it in small portions. We start with the most general consequences of having two or three branches, instead of just one (Section 3.3.2). We then inquire into different forms of government, more specifically into the question of whether there are systematic differences between presidential and parliamentary systems. This is an aspect of the separation of powers because presidential systems have a higher degree of separation of powers than do parliamentary ones (Section 3.3.3). The following subsection takes a closer look at the various ways of organizing legislatures. More specifically, the consequences of bicameral systems are inquired into (Section 3.3.4). The economic consequences of the judiciary—and the reasons behind different ways of organizing the judiciary—were almost entirely neglected by economists for a long time, but this has changed during the last few years and Section 3.3.5 provides an overview of recent insights concerning this topic.

¹⁸ However, the idea of separation of government power finds its roots in the writings of Aristotle (1932, 1297b–1298a). In the modern context, it was in 17th-century England that the doctrine emerged for the first time as a coherent theory of the state.

¹⁹ Brennan and Hamlin propose calling this second version “division of power,” meaning that one particular power can be exercised only if various agents cooperate (2000, chapters 11, 12).

3.3.2. Horizontal Separation in General

Brennan and Hamlin (1994) develop a “revisionist view” of the separation of powers and set out to show that the functional separation of powers can systematically work against the interests of the citizen-voters. They distinguish between a horizontal and a vertical separation of powers but use the terms differently than proposed here. In their delineation, horizontal means that the same good is supplied by more than one actor, whereas vertical refers to a value chain in which different actors have different functions. What Brennan and Hamlin call horizontal can be thought of as the states that make up a federation, provide similar goods, and compete for taxpaying citizens.

To make their point, they draw on standard monopoly models. Compared to a monopoly, the introduction of a horizontal separation results in two (or more) suppliers competing for demand and thus to a duopoly (or oligopoly). The equilibrium price will then be below the monopoly price and consumer rent will subsequently increase. A vertical separation of powers also entails a division of the original monopoly, albeit in a different way: Now, single functions of the process are divided; there is, e.g., one monopolistic firm that produces a good and a second monopolistic firm that distributes it. The (individually) maximizing strategies of the vertically separated firms will at best lead to the monopoly price, but usually the price will be even higher and the accruing consumer rent will thus be lower than in the original monopoly. Brennan and Hamlin argue that the separation of powers doctrine as conventionally understood is equivalent to the functional separation of powers and will therefore not protect citizens from being exploited by the governing. The next logical step in the argument, albeit not made by Brennan and Hamlin, would be to claim that vertical separation of powers is the result of politicians attempting to increase their rents at the cost of citizens.

Brennan and Hamlin further argue (*ibid.*) that a horizontal separation of powers could also have beneficial results. In order for these to occur, though, there needs to be an “exit”-option for citizens as well as the absence of strong externalities between competing states. Their argument is, indeed, revisionist; however, it has had only limited impact on subsequent research. Persson, Roland, and Tabellini (1997), e.g., argue that politicians have two possibilities for enriching themselves to the detriment of citizens, the first being based on the misuse of power, the second on exploiting information advantages. The authors show that both possibilities can be reduced by implementing checks and balances between the legislature and the executive. This was one of the first models dealing with the (horizontal) separation of powers. However, it falls short of the traditional notion

going back to Montesquieu as it is based on two government branches only and does not take a third branch (the judiciary) into consideration.²⁰

3.3.3. Form of Government: Presidential vs. Parliamentary Regimes

The degree of separation of powers is greater in presidential than in parliamentary systems as the head of the executive (the president) does not depend on the confidence of the legislature (parliament) to survive. Persson, Roland, and Tabellini (1997, 2000) argue that it is easier for legislatures to collude with the executive in parliamentary systems, which is why they expect higher corruption levels and higher taxes in those systems than in presidential systems. They further argue that the majority (of both voters and legislators) in parliamentary systems can pass spending programs whose benefits are clearly targeted at themselves, implying that they are able to make themselves better off to the detriment of the minority. This is why Persson, Roland, and Tabellini (2000) predict that both taxes and government expenditures will be higher in parliamentary than in presidential systems.

To test their hypotheses, PT (2003) needed to code presidential as opposed to parliamentary systems. If there was no vote of no confidence, they coded the country as presidential.²¹ They derive the following results.

1. Government spending is some 6% of GDP lower in presidential compared with parliamentary systems.²²
2. The size of the welfare state is some 2–3% lower in presidential systems.
3. The influence of form of government on the budget deficit is rather marginal; the binary variable explains only a small proportion of the variation in budget deficits.
4. Presidential systems seem to have lower levels of corruption.

²⁰ Padovano, Sgarra, and Fiorino (2003) add the judiciary to the Persson *et al.* model. Their paper is discussed in the subsection on the judiciary below.

²¹ This means that Switzerland is coded as “presidential” although it does not have a directly elected president, whereas France is coded as “nonpresidential” because for his or her survival, the French prime minister depends on a confidence vote of parliament.

²² If a country with a proportional and parliamentary system is compared to a country with a plurality and presidential system, government expenditures of the latter are predicted to be some 10 percent of GDP lower than the former, *c.p.!*

5. There are no significant differences in the level of government efficiency between the two forms of government.

6. Presidential systems appear to be a hindrance to increased productivity, but this result is significant at the 10%-level only.

These results are impressive and intriguing. Although government spending is less in presidential systems and they suffer less from corruption than parliamentary systems, parliamentary systems have an advantage over presidential systems in terms of productivity, if only at a low level of significance.

This result is reinforced by Persson (2005), who asks whether changes in the form of government matter for the likelihood that governments will implement structural policies conducive to economic growth. He finds that reforms of parliamentary constitutional arrangements have an important growth-promoting effect. Introducing parliamentary democracy in a nondemocracy or in a presidential democracy improve structural policy such that the long-run productivity growth increases a stunning 50%.²³

In a study replicating and extending the PT estimates, Blume *et al.* (2009a) pour some water into PT's wine. It turns out that PT's results are not robust, even to minor modifications. Increasing the number of observations from 80 to 92 makes the presidential dummy insignificant in explaining variation in central government expenditure. This is also the case as soon as a slightly different delineation of presidentialism is used. If the dependent variable is changed to total (instead of central) government expenditure, the dummy also becomes insignificant. PT's estimates of the effects of form of government on "graft" are based on data from 1997/98. If data for the period 1996 to 2004 are used instead (or the number of observations is increased, or a slightly different definition of presidentialism used, or a combination thereof), the dummy becomes insignificant. For total factor productivity, PT did not find the presidentialism dummy significant. Interestingly, if a slightly different delineation of presidentialism or estimates of total factor productivity for 2000 (instead of 1988) are used, presidentialism becomes significantly (negatively) correlated with total factor productivity.

²³ In an offshoot, PT (2002) ask whether the form of government has any consequences on electoral cycles, i.e., fiscal policy over time. They find that preelection tax cuts are a universal phenomenon, whereas postelection adjustments, such as spending cuts and tax hikes, only occur in presidential systems. In the long run, parliamentary systems should, hence, suffer from higher levels of debt.

Gerring and Thacker (2004) find that parliamentary systems suffer from significantly less corruption than do presidential ones. They argue (*ibid.*, 314) that “effective accountability arises from a highly structured relationship between voters and political parties and from the relatively clear lines of authority instituted by a centralized political apparatus.” Lederman *et al.* (2005) also find that parliamentary systems suffer less from corruption than do presidential ones and also draw on the concept of accountability to explain why. Their argument is that parliamentary systems “allow for a stronger and more immediate monitoring of the executive by the legislature” They conclude that after “political institutions are accounted for, variables usually found to be important determinants of corruption ... lose virtually all their relevance.” In his recent survey, Treisman (2007) replicates these results but finds that presidentialism becomes insignificant as soon as one controls for Catholicism or when a dummy for South America is included.

The differences in these results clarify an important point: to date, many of the effects supposedly induced by constitutional rules are not very robust but crucially hinge upon the exact specification of the variables, the years considered, the control variables included, and so on. What this suggests is that further research needs to be as specific as possible in trying to identify possible transmission channels as well as needs to take into consideration the possibility that small differences in institutional details can have far-reaching effects.

The economic literature on the horizontal separation of powers is still in its infancy and many potentially relevant aspects have yet to be studied. If one is interested in the ability of constitutional rules to constrain politicians, one could, e.g., ask whether governments display systematic differences in complying with—or renegeing upon—constitutional rules depending on the form of government or, in other words, whether the congruence between formal constitutional rules and their factual implementation is influenced by particular traits of the constitution itself. It could be that presidential systems suffer from a higher likelihood of politicians breaking with the rules of the game, *even though* the formal degree of separation is higher in these systems.

Presidents often claim that they are the only ones who represent the people as a whole.²⁴ This might make them more audacious than, e.g., prime ministers in

24 De Gaulle declared in 1964 “that the indivisible authority of the State is entrusted completely to the president by the people who elected him, that there existed no other authority, either ministerial, civil, military or judiciary which has not been conferred and was not being maintained by him, and

reneging upon constitutional constraints. Political parties are regularly weaker in presidential than in parliamentary systems,²⁵ which might further increase the incentive for a president not to take constitutional rules too seriously: if parties are weak, the possibility of opposition against a president who reneges upon the constitution might be less than in systems with strong political parties. A reduced likelihood of opposition does, of course, make reneging upon constitutional rules more beneficial. There might be yet another transmission mechanism concerned with political parties. Brennan and Kliemt (1994) show that organizations such as political parties often have longer time horizons than do individual politicians: whereas presidents will be out of office after one or two terms (as in Mexico or the United States), political parties might stay in power indefinitely (like in Japan). If the discount rate of presidents is indeed higher than that of, say, prime ministers or party leaders, offenses against formal constitutional rules may appear more beneficial to presidents than to prime ministers.

PT (2003) call their book *The Economic Effects of Constitutions*. Thus, they do not try to explain the emergence of different forms of government in any detail. Yet, they do note that differences seem to be highly correlated with geographical variables: for example, presidential systems are more likely to be found in Latin America and closer to the equator. Acemoglu *et al.* (2001) argue that settlers brought (good) European institutions to colonies where their mortality was low. Settler mortality rates could thus serve as an instrument predicting the quality of institutions today.²⁶ Persson (2005) endogenizes the choice of parliamentary as

finally that it was his duty to adapt the supreme domain, which is his alone, to fit in with those, the control of which he delegates to others” (quoted in Duverger 1980). Although this quote is certainly illustrative, it may not be representative of presidents.

²⁵ “Strong” and “weak” refers to the organizational structure of parties; they are “strong” if they have many paying members who are active in political office and also follow political events closely. Due to the organizational structure, strong political parties have the capacity to mobilize many people within a short period of time, which might allow them to produce focal points different from those the executive would prefer. Executives in an environment with strong parties are expected to be more likely to play by the constitutional rules than executives in an environment with weak parties.

²⁶ Their measure has been heavily criticized. Albouy (e.g., 2008) argues that 36 out of 64 countries are assigned mortality rates from other countries; these would frequently be based on mistaken or conflicting evidence. Also, Albouy accuses the authors of choosing data that would favor their hypothesis.

Acemoglu *et al.* (e.g., 2006) have repeatedly replied to Albouy’s reproaches. They state that their results are robust when African data, those most heavily criticized by Albouy, are not included in the sample or when a maximum cap is introduced for African mortality rates. Acemoglu *et al.* (2005) confirm most of their previous mortality rates drawing on different sources.

opposed to presidential regimes by using this variable as well as different periods of constitution-making (1921–1950 vs. 1951–1980) as exogenous variables and finds that settler mortality is correlated in a negative and significant way with parliamentary regimes.²⁷ Constitutional birth between 1951 and 1980 is positively correlated with parliamentary democracy, and constitution-making between 1920 and 1950 negatively (but insignificantly) so.

Robinson and Torvik (2008) explicitly endogenize presidentialism. They are particularly intrigued by the observation that most African countries chose a parliamentary system for their first postcolonial constitution. By now, however, most African states have switched to presidential systems, regardless of the identity of the former colonial power. Based on a model with two groups (each consisting of citizens, politicians, and political leaders), they show that presidentialism is more attractive when the preferences of the two groups with regard to public goods are more polarized, when ideological differences are more extreme, and when the government budget is low, which Robinson and Torvik equate with poor societies.

For Aghion, Alesina, and Trebbi (2004), the choice between presidential or parliamentary form of government plays a prominent role. They ask how much “unchecked power” a society should optimally delegate to its leaders, then proceed to ask under what conditions societies can be expected to choose that optimal degree of delegation, and, finally, turn to some cross-country analysis. They equate “insulation” with unchecked power. Drawing on the dichotomy between autocracy and democracy, autocrats are more insulated than democratically elected governments. Within democracy, presidential systems have a higher degree of insulation than parliamentary ones. What is the central driving force explaining the variation in insulation as defined here? Aghion *et al.* (ibid.) find that insulation is positively and significantly correlated with both ethnic and linguistic fractionalization, meaning that highly fragmented societies are less democratic. However, if they are democratic, they can be expected to be presidential rather than parliamentary. These findings are one small first step toward endogenizing forms of government.

²⁷ In his review essay of PT (2003), Acemoglu (2005) makes clear that settler mortality (and also distance from the equator) are inadequate as instrumental variables for specific institutions such as form of government.

3.3.4. The Structure of the Legislature: Bicameralism

Presidentialism increases the separation of powers by separating the executive from the legislature; bicameralism does the same by dividing the legislature. Although bicameralism is a frequently found constitutional setting (according to Tsebelis and Money 1997, it can be found in approximately one-third of all legislatures), its economic effects remain underresearched. In their survey paper on bicameralism, Cutrone and McCarty (2006) note that it “has not received the scholarly attention that other legislative institutions have.” Similarly, Bradbury and Crain (2002) find that, in contrast to the 19th century when it was subject to heated discussion, bicameralism “receives scant attention in modern political economy.”

The differential effects of unicameral and bicameral legislatures were first analyzed from an economic point of view by Buchanan and Tullock (1962, chapter 16). In their analytical frame, that decision-rule is optimal that leads to a minimum of interdependence costs.²⁸ They conjecture that in comparison with unicameral systems, bicameral systems have higher decision costs, and then go on to state that “[o]n the other hand, if the basis of representation can be made significantly different in the two houses, the institutions of the bicameral legislature may prove to be an effective means of securing a substantial reduction in the expected external costs of collective action without incurring as much added decision-making costs as a more inclusive rule would involve in a single house” (ibid., 235f.). The larger the majority required to reach a certain decision, the lower the external costs connected with that decision because the number of opponents is negatively correlated with the required majority. On the other hand, it will become increasingly difficult to reach a decision at all because the decision costs are positively correlated with the required majority. One possibility for keeping external costs down is to require a supermajority (say of 3/4 or 5/6) in the single-house system. Supermajorities in a single-house system and simple

²⁸ Buchanan and Tullock introduce three cost categories. *External costs* are those costs the individual expects to bear as a result of the actions of others over which he or she has no direct control. Second, there are *decision-making costs*, which the individual expects to incur as a result of the individual's own participation in an organized activity. These costs only include the estimated costs of participating in decisions when the agreement of two or more individuals is required. The sum of these two cost categories is the third category, *costs of social interdependency*, or simply *interdependence costs*. For purely private activity, these will be zero. According to Buchanan and Tullock, a rational individual confronted with questions of constitutional choice will opt for minimization of interdependence costs.

majorities in a two-house system can thus be considered as alternatives. Buchanan and Tullock conjecture that—given identical external costs—decision costs will be lower in a bicameral than in a unicameral system.

Miller and Hammond (1989) inquire into the effects of bicameralism and the executive veto, sometimes considered the third chamber, on stability in the sense of reducing the probability of cycling majorities à la Condorcet or Arrow (1951). They conclude that bicameralism and the executive veto increase stability. The stability-enhancing effect of bicameralism depends on some preference difference between the two chambers. Levmore (1992) changes the focus of the analysis somewhat when he conjectures that a bicameral system might be better than a corresponding qualified majority in a unicameral system at reducing the power of the agenda setter. Bicameral systems are often interpreted as a check against overly active legislatures.

In sum, then, it is argued that bicameralism protects minorities, reduces cycling, and curbs the power of the agenda setter. There are conflicting hypotheses regarding the potential effects of bicameralism on fiscal policies. Heller (1997) argues that the higher number of veto players in bicameral systems leads to higher budget deficits. To secure the consent of an additional veto player, additional expenditure needs to be agreed upon, which will lead both to higher spending and deficits. But frequently—and following the early advances by Buchanan and Tullock just discussed—the exact opposite is argued. Bradbury and Crain (2002) focus on the composition of government spending and theorize that bicameralism influences the structure of the budget in a two-fold manner: on the one hand, spending on redistribution should be lower (minorities being protected against expropriation) and, on the other, spending on potentially productivity-enhancing public goods should be higher than in unicameral legislatures.

Levmore (1992) argues that bicameralism should curb corruption. Diermeier and Myerson (1999) show that the cost of lobbying increases when it is harder to pass fresh legislation, which is systematically more difficult under bicameralism than under unicameralism. This implies that there should be less lobbying, as well as less rents and corruption, under bicameralism.

Empirical evidence on the effects of bicameralism is sparse. Congleton (2003, 2006) deserves special mention because he tries to isolate the specific effects of bicameralism by running simulation models. He conjectures that bicameral legislatures can also affect legislation if representation is unbiased, i.e., no group has special representation. Based on his simulation model, he finds that bicameral legislatures are more faithful to the median voter, at least in the long run. The

model is complemented by an analysis of the effects generated when two countries switched from bicameralism to a single chamber (Sweden and Denmark). In these two cases, policy predictability indeed decreased as a consequence of constitutional change. It is certainly a desideratum to analyze the reverse case and investigate whether policy predictability would, indeed, increase.

Bradbury and Crain (2002) construct a continuous variable (based on the degree of constituent heterogeneity) for bicameralism across U.S. states and find that higher levels of bicameralism (in terms of redistributive coalitions) reduce government expenditures. In their cross-country study, Bradbury and Crain (2001) find that government spending increases with the number of electoral districts but that this effect can be curbed by a second chamber. Plümper and Martin (2003) also find that bicameralism is highly significantly and robustly correlated with lower government spending. Their universe comprises 83 countries and the period analyzed dates from 1975 to 1997. Regarding the effects of bicameralism on governance indicators, Testa (2007) uses a panel of 34 democracies for the period 1996 to 2000. She finds that bicameralism as such is not significant in explaining differences in corruption levels, but that if bicameralism is interacted with both party alignment across the two chambers as well as the polarization between the incumbent and the challenging party, it turns out that aligned and polarized chambers reduce corruption. Note, however, that this study is confined to 34 countries and comprises only five years.

Here, bicameralism is analyzed as one aspect of the separation of powers. An analysis of potential interactions between bicameralism and the form of government on the one hand, and federalism on the other, is an obvious starting point.

3.3.5. A Forgotten Branch: The Judiciary

The judiciary has frequently been called “the least dangerous branch” (e.g., Hamilton 1787/1961, Federalist Paper #78), which may be one reason it has been dealt with only marginally in constitutional economics. For example, in his treatise on “Comparative Constitutional Engineering,” Sartori (1994) deals extensively with electoral systems as well as with form of government, but the term “judiciary” does not even appear in the index.

In regard to the separation of powers, independence of the judiciary vis-à-vis the other two government branches is crucial. However, early models of the separation of powers, as discussed above, do not contain the judiciary as an actor.

Padovano, Sgarra, and Fiorino (2003) is an extension of the Persson *et al.* (1997) model that does incorporate the judiciary as a third actor. The judiciary is modeled as another agent that functions as a constraint on the executive or the legislature. They find that an independent judiciary improves accountability but that this is not true of an accommodating judiciary. They conjecture that the likelihood of the three branches colluding (with the result that accountability will suffer) depends on term lengths. With regard to the judiciary, they expect longer term lengths to lead to lower accountability—and less welfare. That the effects of an independent judiciary are different from those of an accommodating judiciary is intuitively plausible, and yet, in order to be interesting, the conditions under which one can expect a judiciary to be independent or accommodating need to be specified. Unfortunately, the authors do not deal with this issue. Likewise, their conjecture on term lengths is debatable: true, shorter term lengths and the option to be reappointed might increase accountability, but this would be accountability to those who have the power to reappoint, not necessarily accountability to the letter of the law.

An independent judiciary can be one means of solving the dilemma of the strong state. On the one hand, a state strong enough to protect private property rights is needed; on the other, a state that is sufficiently powerful to protect private property rights is also sufficiently powerful to attenuate or outright ignore them. This situation is detrimental for all parties. Citizens who anticipate that their property rights might not be completely respected have fewer incentives to create wealth. The state, in turn, will receive a lower tax income and will have to pay higher interest rates as a debtor. An independent judiciary can reduce this dilemma: if its decisions are based on the relevant legislation and are regularly enforced by the other government branches despite not being in their own (short-term) interest, aggregate investment will rise and the economy will grow more quickly.

Is this theoretical conjecture supported by the data? One huge problem, of course, is to make the degree of independence that the judiciary enjoys in various countries measurable and thus comparable. Feld and Voigt (2003, 2006) introduce two indicators, one dealing with *de jure* independence (i.e., the independence of the courts as it can be deduced from legal documents) and the other with *de facto* independence (i.e., the degree of independence that the courts actually enjoy). Estimating the impact of judicial independence (JI) on economic growth, Feld and Voigt (2006) find that while *de jure* JI does not have an impact on economic growth, *de facto* JI positively influences real GDP per capita growth in a sample of 73 countries.

Quite a few questions remain to be answered: What are the transmission channels through which *de facto* JI impacts economic growth? Is the specific organization of courts relevant (e.g., whether a country has a single top court, like the Supreme Court in the United States, or follows the Austrian model, which has a specialized constitutional court)?

Given that JI has significant economic effects, we would like to know its determinants. Conventional wisdom has it that an independent judiciary constrains the other two branches of government. The other two branches would therefore be keen on a judiciary without teeth. Landes and Posner (1975) were the first to question this conventional wisdom from an economic point of view. According to them, the legislature is not controlled by the judiciary, but legislators have an interest in an “independent” judiciary because its existence makes it more valuable to be a legislator as it can prolong the lifespan of legislative deals legislators strike with representatives of interest groups. This prolonged legitimacy of deals increases their value to the interest groups, simultaneously increasing the groups’ willingness to pay the legislators. Landes and Posner define a judiciary as independent if it enforces “existing statutes in accordance with the intent of the enacting legislature” (ibid., 883) and thus produces stable expectations. The legislators have an interest in being able to make credible commitments vis-à-vis interest groups. An independent judiciary enables them to do this by reducing the possibilities for postcontractual opportunism either by themselves or by their successors. According to Landes and Posner, the political branches have various means of imposing costs upon the judiciary (“budgetary harassment, tinkering with the courts’ jurisdiction and altering the composition of the judiciary by the creation of many new judgeships” [ibid., 885]), which—in turn—can maintain its independence best by enforcing the “contracts” earlier legislatures struck with interest groups.

Landes and Posner’s paper can also be interpreted as a theory on choice of JI. Later papers have both challenged and agreed with that view. For Ramseyer (1994), court independence depends on the expectations of politicians: if they expect their own party to remain in power, they will have less incentive to create an independent judiciary than if they expect to lose power to a competing party soon. Ginsburg (2002) can be interpreted as a broadening of Ramseyer’s approach: for him, politicians are likely to choose a higher degree of judicial review (as one important aspect of JI), the higher the degree of political uncertainty at the time of constitutional design.

The interest group theory of JI can be criticized on various grounds. First, the concept of “independence” seems shaky. Landes and Posner equate JI with “enforcing the original intent of legislative deals,” which is supposed to result in predictability. However, it needs to be explained why the judiciary would enforce deals made by previous legislatures and not by the current one seeing as their salaries depend on the current legislature.²⁹

Hanssen (2004) tests two predictions first generated by Ramseyer (1994), namely, that JI will be higher (i) if politicians fear losing power and (ii) the farther apart the ideal points of the rival parties. Using judicial retention procedures as a proxy for JI, he finds empirical support for these hypotheses in his analysis of panel data covering the U.S. states between 1950 and 1990. Besley and Payne (2003) have used a similar approach to explain differences in judicial behavior: they find that judges make decisions that favor important sectors of the electorate as this can increase their chances of reelection. These empirical studies deal with the United States; cross-country studies are clearly a desideratum.

Hayo and Voigt (2007) is a first attempt at explaining variation in *de facto* JI across countries. They find that high levels of *de jure* JI, the extent of democratization, and higher degrees of press freedom are good predictors for high levels of *de facto* JI.

More work is needed that inquires into the utility functions of as well as the (perceived) constraints on judges. It is interesting that Mueller (1996, chapter 19) does not think that formal institutions could be sufficient to ensure a judiciary that is not only independent but also accountable. For incentives to make judges decide impartially (*ibid.*, 284), “one has to rely on ‘the culture of the judiciary’ and the great status (and possibly financial rewards) that surround it.” This statement gives rise to at least two implications. First, an independent and accountable judiciary might simply be impossible if the respective culture does not support it. Second, informal institutions might be an important factor in the actually realized level of JI. Hayo and Voigt (2007) test for a number of potentially relevant informal factors, such as the capacity to overcome the problem of collective action, religious affiliation, ethnolinguistic fractionalization, and the level of trust found among the members of society, and find that none of

²⁹ A number of scholars, mostly from the Virginia tradition of public choice, try to test the Landes and Posner hypothesis empirically (e.g., Crain and Tollison 1979; Anderson, Martin, Shugart II, and Tollison 1989; Anderson, Shugart II, and Tollison 1990); their results are summarized in Voigt (1997).

these factors survives the rigorous model reduction process they employ. More research with a greater number of countries and better proxies seems warranted.

3.4. Vertical Separation of Powers: Federalism

We now turn to federalism, i.e., the vertical separation of powers, which is known in mainstream economics as “fiscal federalism.” Except for incorporating a second—and possibly a third—layer of government into their analyses, scholars working within this approach largely remain within the traditional model, i.e., they assume government to be efficiency maximizing. They then ask on what governmental level public goods will be (optimally) provided taking externalities explicitly into account. This approach need thus not concern us here (for surveys, see Inman/Rubinfeld 1997; Oates 1999, 2005).³⁰ Further, as we are interested in the economic effects of constitutions, we propose to distinguish between federalism on the one hand and (fiscal) decentralization on the other. Federalism is a constitutional-level trait; decentralization describes policy choices made at the postconstitutional level. This implies that decentralization can also occur in nonfederally structured states.³¹

In a nutshell, the conjectured economic benefits of federalism are expected to arise from the competition between constituent governments (i.e., from noncooperation), its costs are based in the necessity of cooperating on some issues (i.e., from cooperation). Thus, Hayek (1939) argues that competition between governments will reveal information on efficient ways to provide public goods. Assuming that governments have incentives to make use of that information, government efficiency should be higher in federations, *c.p.* In Tiebout’s (1956) famous model, the lower government levels compete for taxpaying citizens, thus giving lower governments an incentive to cater to these citizens’ preferences.

Turning to possible costs of federal constitutions, if the number of states is high, economies of scale in the provision of public goods could remain unrealized. For example, Tanzi (2000) suspects that those providing public goods will be

³⁰ Gerring *et al.* (2006, 7) make the point succinctly: “Fiscal federalism is a theory of public administration, not of constitutional structure.” In the language of constitutional economics, it deals with the optimal allocation of specific government tasks on the various government levels but all this at the postconstitutional stage.

³¹ Blume and Voigt (2008) have collected more than two dozen indicators of both federalism and decentralization and use factor analysis to test whether the latent variables neatly separate between the two concepts. They find that more than two factors emerge.

insufficiently specialized. Also, federal states need to deal with a moral hazard problem that is not an issue in unitary states.³² The federal government will regularly issue “no-bail-out clauses” but they will not always be credible.³³ With regard to the issue of overborrowing, Wildasin (1997) argues that large states can become “too big to fail.” On the other hand, it has been argued (Rodden and Wibbels 2002) that large member states can internalize more of the benefits generated by responsible fiscal policies.

A number of factors might mitigate this free rider problem: if strong, disciplined parties are active throughout most of the federation and one party is in charge of the federal as well as most of the constituent governments, then party leaders may be able to prevent state officials from externalizing the negative effects of overborrowing (Rodden and Wibbels 2002). Notice that this mitigating effect is comprised of institutional as well as noninstitutional aspects: the structure of the party system is a consequence of the heterogeneity of the country as well as of its electoral institutions, whereas dissimilitude between federal and constituent governments is result of voter choice.

To the question of whether corruption levels will be higher under federal or unitary constitutions, there is one standard answer: constituent governments are closer to the people, play infinitely repeated games with local constituents, and hence are subject to local capture (see, e.g., Tanzi 2000). Therefore, corruption levels will be higher under federal than under unitary constitutions. The standard argument against the local capture hypothesis is that the behavior of constituent governments is more transparent in federations and politicians are, hence, more accountable for their actions. This would imply that corruption is lower under federal constitutions. Additionally, corruption can signal an inadequacy in the relevant rule system; under dysfunctional rules, even welfare-enhancing activities will often require corrupt behavior. This assumption leads to the argument that since the constituent units of federal states are closer to the people, it is likely that their rules will be more adequate than those in unitary states.

Regarding the stability of government action, policy swings will be less pronounced when there are changes in the national government. This near

³² The relationship between the central government and the lower units in unitary states might be more aptly described drawing on principal-agent theory with its familiar monitoring problems. For such a view, see Seabright (1996).

³³ Rodden (2002, 672) points out that the creditworthiness of the federal level might be jeopardized if it does *not* bail out the constituent governments.

predictability of government policy allows private actors to form expectations over a longer period of time, which might, in turn, increase overall productivity. On the other hand, the existence of a number of power centers always entails the possibility of power struggles and instability. This might mean that, *c.p.*, federal constitutions will result in lower levels of productivity than unitary states. Empirical tests are necessary to resolve these contradictory theories.

Estimating the effects of federalism presupposes the possibility that such can be ascertained. Depending on the specific research question, different dimensions might be desirable. Blume *et al.* (2008) collect and compare no less than 26 different indicators for federalism and fiscal decentralization and discuss the various strengths and weaknesses of each. Instead of repeating that exercise here, we focus on just one indicator. Stegarescu (2004) proposes a new indicator that is not based on the expenditure shares at the central and state level, but on the revenue side, arguing that the autonomy in determining tax levels or even in introducing entirely new taxes is the single most important criterion for assessing the degree to which a country is factually federal. Based on the OECD Revenue Statistics, he shows that countries such as Austria and Germany score much worse with regard to decentralization in his indicator than they have in previous ones and reports that his indicator contradicts the common claim that federal countries are more decentralized than unitary ones. More generally, it is shown that measurement errors can lead to erroneous conclusions, particularly with regard to the effects of fiscal decentralization.

Given these reservations as to commonly used indicators, what can we learn from existing empirical studies? For a long time, the evidence concerning the effects of federalism on overall government spending was mixed. Over the last several years, though, this appears to have changed. Rodden (2003) shows for a cross-country study covering the period 1980 to 1993 that countries in which local and state governments have the competence to set the tax base total government expenditure is lower. Feld, Kirchgässner, and Schaltegger (2003) find that more intense tax competition leads to lower public revenue.

In a number of early papers, Philip Grossman deals with the effects of fiscal decentralization on public sector size: following the theoretical lead of Brennan and Buchanan (1980), he shows that governments have an incentive to circumvent the pressures of competitive federalism by colluding. He hypothesizes that they will use intergovernmental grants toward this end. These grants, in turn, expand overall government size. He finds evidence in support of his thesis for the United

States (Grossman 1989), Australia (Grossman 1992), and Canada (Grossman 1994).

Treisman (2000) finds that federal states have, *c.p.*, higher corruption levels than unitary states, drawing on a dummy variable for federalism first introduced by Daniel Elazar. However, employing data that have become available since, he (2007, 235) now finds that the correlation between perceived corruption and federal structure is not at all robust. PT (2003, 61) find that federalism is not a significant variable in explaining rent extraction (which they use as a proxy for corruption). The evidence is thus inconclusive, warranting more fine-grained research. With regard to productivity, PT (2003, 71) find that the federalism variable is highly significant for explaining differences in both labor and total factor productivity, with federations having higher levels of each.

The available evidence concerning the effects of federalism (or decentralization) on economic growth is just as ambiguous as the theoretical conjectures. There are only half a dozen studies with cross-country evidence and these are often limited to the OECD member states. Enikoplov and Zhuravskaya (2006) is an exception, with a cross-section of as many as 73 countries. They find that higher decentralization of revenue as such does not have a significant effect on growth, but that if decentralization is interacted with the age of the parties (or the fractionalization of government parties), things change: having older parties significantly improves the effect of decentralization, whereas fractionalization significantly worsens growth prospects. Davoodi and Zou (1998) report similar results based on decentralization of spending in 46 countries. Thießen (2003a, 2003b) finds the opposite for both a cross-section of 21 developed countries and a panel of 26 countries. Feld *et al.* (2004) survey the literature in more detail, including empirical results for individual countries that are equally ambiguous as those mentioned here.

Based on the various factors that they produce on the basis of indicators for both federalism and decentralization, Blume and Voigt (2008b) conclude that institutional detail clearly matters. They find that with regard to a number of dependent variables (budget deficit, government expenditures, budget composition, government effectiveness, and two measures of corruption), frequently used federalism dummies turn out to be insignificant in explaining variation, whereas particular aspects of federalism are significant, some of them very much so.

One problem for this research strategy is the low number of observations as the number of federal states is rather small (some 20 countries worldwide). One

possible way of circumventing this problem is to draw on case studies instead of econometric estimates, which is exactly what Blankart (2000) does. Blankart compares the development of two federally organized states over time, namely, Switzerland and Germany. It is often presumed that there are inherent centralizing tendencies even in federal states. Blankart asks whether the so-called law of the attracting power of the highest budget (also called Popitz's law) is a law in the sense of natural sciences, or whether it is a consequence of constitutional choices. He conjectures that centralization is a function of the cartelization tendencies between federal and state government levels, which, in turn, would be a function of constitutional rules. He then shows that the competence of the federal level to appropriate tax competence from the state level is crucial for explaining differences in the centralizing tendencies of different federations.

Vaubel (1996) analyzes the process of centralization in federal states empirically. His first result is that federal states are indeed less prone to centralization than states with a nonfederal constitution. Centralization is measured as the share of central government expenditure in total government spending. If one replaces the binary dummy variable for federalism by quantitative constitutional variables, the most powerful single explanatory variable is the age of the constitutional court (for the entire sample) or the independence of the constitutional court from the organs of central government (for the industrialized states). If one takes into account (a) the degree of control that the lower-level governments have over changing the federal constitution and (b) whether tax increases require a popular referendum, the explanatory power can be raised further. It thus seems that some constitutional provisions can make a difference in constraining centralization.

Our knowledge concerning the conditions under which constitutional assemblies choose federal, rather than unitary, structures leaves much to be desired. Figueiredo and Weingast (2005) deal with the issue of how the institutions of federalism can be sustained. They introduce a two-stage game: in the first stage, the institutions of federalism are determined ("institutional game"); in the second stage, a repeated game is played in which participants can either act in accordance with the institutions established in the first stage or renege upon them. Figueiredo and Weingast (*ibid.*) stress the need of federal institutions to be self-enforcing; they show that constitutional rules can serve as a coordination device that allows the members of a federation to act collectively in case the center tries to exploit rents from one or more members. Figueiredo and Weingast demonstrate that sustained federalism can be an equilibrium of their game. Although they look at a few countries to demonstrate some of the implications of their model, their focus is chiefly theoretical.

Still lacking, then, are empirical insights dealing with the question of under which conditions constitutional assemblies choose federal structures in the first place. It is very plausible that countries with a rather high degree of internal diversity along geographical lines (such as ethnic, religious, or linguistic) and that simultaneously need to stay intact due to external threats will be more likely to choose federal structures than will countries without these conditions. The identity of the former colonial power could also be relevant as quite a few former British colonies have a federal structure today (Australia, Canada, India, Malaysia, Nigeria, South Africa, and the United States) but very few former French colonies do. It is further noteworthy that—with the exception of Russia—none of the newly passed constitutions of central and eastern Europe have a federal structure, which means that age of constitutions could be worth exploring. However, these are nothing more than ad hoc observations and the issue surely deserves rigorous analysis.

3.5. The New Separation of Powers: Increasing the Number of Veto Players

Traditionally, the separation of powers is thought of as involving three branches of government—legislature, executive, and judiciary. When distinguishing between horizontal and vertical separation of powers, vertical separation refers to the different layers of government, in particular federalism. A modern view of the separation of powers, however, could encompass even more aspects. For example, it could be investigated whether delegation of decision-making competence to independent agencies has any significant economic impact. Usually, this sort of delegation is thought of as domestic delegation, but in recent years, more and more competence has been delegated to international organizations. Monetary policy is a good example of both domestic and international delegation. The effects of independent central banks on inflation rates have been analyzed extensively (for surveys, see Berger, de Haan, Eijffinger 2001; Hayo and Hefeker 2002). But monetary policy is also a good example of delegation at a level beyond the nation-state: the European Central Bank is only the most striking example. Others include currency boards and the recognition of foreign currencies as legal tender, as in some Latin American countries. It seems justified to analyze the economic effects of delegated powers within constitutional economics as at least some of the delegated powers are dealt with on the constitutional level.³⁴

³⁴ In some nation-states, international law even trumps domestic constitutional law.

Epstein and O'Halloran (1999) focus on the United States and are interested in identifying the issues that are subject to delegation. Voigt and Salzberger (2002) deal with the question of under what circumstances legislatures prefer international over domestic legislation if both are feasible, and derive a number of hypotheses in which type and extent of delegation are a function of the given constitutional structure.

A first step toward making this broader concept of the separation of powers measurable is taken by Henisz (2000), who is concerned with the capacity of governments to credibly commit to their policy announcements. He constructed an indicator based on the idea that the higher the number of (political) actors whose consent is necessary to change a given policy, the less likely are unforeseen policy reversals. However, changes in rules and/or policies remain possible even when there are a great many chambers or veto players if a sufficient number of relevant actors have similar preferences. Henisz takes this possibility explicitly into account by recognizing the factual distribution of the preferences the relevant actors hold. This implies that his indicator contains a mixture of institutional and noninstitutional factors, namely, the formal separation of powers on the one hand, and the political majorities in the respective chambers on the other. Henisz finds that his indicator has a significant impact on economic growth both statistically and economically. Beck *et al.* (2000) develop a similar indicator (called CHECKS in their database of political institutions). The number of veto players has been identified as a significant determinant with regard to a number of dependent variables: Henisz (*ibid.*) himself finds it to have both a statistically and economically significant impact on economic growth, using various estimation techniques. Panizza (2001) asks whether the number of veto players (as calculated by Henisz) has a bearing on institutional quality (proxied for mostly by the Worldwide Governance Indicators) and finds the impact to be statistically significant, while its substantial effect is limited. Keefer and Stasavage (2003) argue that the number of veto players is crucial for central banks to be able to determine monetary policy independently from government interventions.

3.6. Representative vs. Direct Democracy

A broad understanding of the separation of powers could encompass direct democratic institutions, in which it is the citizens who act as an additional veto player. It has been hypothesized that direct democratic institutions make politicians more accountable and result in policy choices that more closely match citizen preferences. As with regard to federalism, it is unclear *ex ante* whether that

should mean lower taxes, budgets, and deficits, although most of the literature appears to assume that this should be the case.

In real-world societies of a size too large to efficiently vote directly on all issues, representative and direct democracy are complementary institutions. In these societies, a different degree of direct democratic institutions is combined with representative institutions. With regard to direct democratic institutions, referendums are usually distinguished from initiatives.³⁵ The constitution can prescribe the use of referendums for passing certain types of legislation, in which case agenda-setting power remains with parliament, but citizen consent is required. Initiatives, in contrast, allow citizens to become agenda setters: the citizens propose a piece of legislation that will then be decided upon, given that they manage to secure a certain quorum of votes in favor of the initiative. Initiatives can be aimed at different levels of legislation (constitutional vs. ordinary legislation), and their scope can vary immensely (e.g., some constitutions prohibit initiatives on budget-relevant issues).³⁶

In their paper on the effects of direct democratic institutions on total factor productivity in Switzerland, Feld and Savioz (1997, 515) argue that due to the lack of theoretically convincing transmission channels, it makes sense to look at the big picture, namely, to inquire whether the presence of direct democratic institutions leads to higher total factor productivity.³⁷ In other papers (e.g., Matsusaka 2005), the principal-agent problem plays a central role.

In a principal-agent framework, citizens are the principals and can only very imperfectly control their agent—the government. In this situation, direct democratic institutions can have two effects, namely, a direct effect, which enables the principals to override the decisions of an unfaithful agent, and an indirect effect, where simply the threat of override is sufficient to compel the agent to behave according to the principal’s preferences. Potentially, reducing the

³⁵ We follow the convention of the literature here and talk of referendums instead of referenda.

³⁶ A third variant is plebiscites, which are often used by the governing to have their policies confirmed. Frequently, they have no binding effect, which is why they do not play an important role in the literature on the economic effects of direct democracy.

³⁷ They write: “there seems to be no simple theoretical reason how direct democracy should affect economic performance. It seems to be more interesting to analyze the contribution of political decision making mechanisms in terms of efficiency. This hints towards the composition of revenue and expenditure, the efficiency of the revenue system in terms of tax evasion as well as the efficiency of the provision of public services.”

principal-agent problem by way of direct democratic institutions could affect all the economic variables discussed in this paper: if citizens prefer an expenditure level that is higher/lower than that preferred by the government, they should be able to achieve it via direct democratic institutions. It is often assumed that governments prefer higher expenditure levels than do citizens; in this case, we would expect expenditure levels to decrease with increasing importance of direct democratic institutions in the country.

Matusaka (1995, 2004) estimates the effects of the right to an initiative on fiscal policy among all U.S. states except Alaska. States with the right to an initiative have lower expenditures and lower revenues than states without that institution. With regard to Switzerland, Feld and Kirchgässner (2001) deal with the effects of a mandatory fiscal referendum on the same variables. They find that in cantons with the mandatory referendum, both expenditure and revenue are lower by about 7 and 11 percent compared to cantons without mandatory referendums. Matusaka (2004, chapter 4) also deals with the question of whether initiatives have any effect on the distribution of government spending between the state and the local level and finds that initiative states spend 13 percent less per capita at the state level than noninitiative states, but spend 4 percent more on the local level.

Proponents of direct democracy would interpret this finding as evidence in favor of the hypothesis that under direct democracy, government spending is more in line with citizen preferences. Feld *et al.* (2008) ask whether government spending really is more in line with citizen preferences in a direct democracy and answer it by analyzing the Swiss case. Drawing on panel data for Swiss cantons for the years from 1980 to 1998, they find that fiscal referendums at the cantonal level lead to less centralization of both cantonal spending and revenue. However, citizen fiscal preferences are not necessarily always more conservative than those of their representatives: Matusaka (2000) finds that during the first half of the 20th century, voters in U.S. initiative states were frequently less conservative fiscally than their elected representatives. Funk and Gathmann (2005) identify preference heterogeneity among voters in different Swiss cantons as a significant variable explaining differences in cantonal spending.

The next question we are interested in is whether direct democratic institutions have any effect on rent extraction, i.e., the perceived level of government corruption as well as the efficiency with which public goods are provided. With regard to U.S. states, Alt and Lassen (2003) find that initiative states have significantly lower levels of perceived corruption than noninitiative states. Pommerehne (1983, 1990) deals with the effects of direct democracy on the

efficiency with which government services are provided. More specifically, he finds that waste collection in Swiss towns having both a private contractor for the service and direct democratic elements is provided at lowest cost. Some of the cost effectiveness is lost when waste collection is provided by the town itself and additional efficiency losses materialize if waste collection is provided in towns without direct democratic elements. Blomberg *et al.* (2004) ask whether there is any significant difference in the effective provision of public capital between initiative and noninitiative states among the 48 continental U.S. states during the period 1969 to 1986. They find that noninitiative states are some 20 percent less effective in providing public capital than are initiative states.

Dalton (forthcoming) looks into the possible effects of direct democracy on the quality of governance and asks whether the availability and the actual use of initiatives across U.S. states between 1960 and 1998 is significantly correlated with a number of proxies for good governance, such as tax policies (reflecting an input into government performance), government management (reflecting the process), and education policies (as a government output). Controlling for a number of standard variables, he finds that the frequent use of initiatives seems to impede state government performance, rather than improve it.

Finally, do direct democratic institutions have any discernible effect on productivity and thus on per capita income? Feld and Savioz (1997) find that per capita GDP in cantons with extended democracy rights is some 5 percent higher than in cantons without such rights.

Frey and co-authors argue that one should not look only at the outcomes that direct democratic institutions produce, but also at the political processes they induce (e.g., Frey and Stutzer 2006). Kirchgässner and Frey (1990) speculate that the readiness of voters to incur information costs would, *ceteris paribus*, be higher in democracies with direct democratic institutions because the voters participate more directly in the decisions (*ibid.*, 63).

Smith and Tolbert (2004) investigate the effects of the initiative on voting levels, civic engagement, and confidence in government. They compare initiative with noninitiative U.S. states and find that the frequent use of initiatives has positive effects on all three aspects. Benz and Stutzer (2004) provide evidence in favor of the conjecture that citizens in states with direct democratic institutions are better informed than citizens in purely representative states. Some European states used referendums to pass the Maastricht Treaty, whereas others did not. Relying on Eurobarometer data, Benz and Stutzer find that citizens in countries with a referendum were indeed better informed both objectively (i.e., knowledge about

the EU) as well as subjectively (i.e., feelings about how well they were informed). The paper is also interesting because it is one of the very few that deals with the effects of direct democratic institutions in a cross-country setting.

Based on micro data controlling for a host of relevant variables such as occupational status, marital status, health conditions, and so forth, Frey and Stutzer (2000) find that Swiss citizens who live in cantons with a high degree of direct democracy are happier. Lascher and Wassmer (2007) quarrel both with the logic underlying the conjecture that broader direct democratic rights could be conducive to happiness and with the empirical evidence. Using data from the General Social Survey for the U.S. states and controlling for variables significant in previous studies, they conclude that in none of their models do the direct democracy proxies approach statistical significance.

Blume *et al.* (2009) is the first cross-country study to analyze the economic effects of direct democracy and their findings only partially confirm previous results. They do find a significant influence of direct democratic institutions on fiscal policy variables and government efficiency, but no significant correlation between direct democratic institutions and productivity or happiness. Institutional detail matters a great deal: while mandatory referendums appear to constrain government spending, initiatives seem to increase it. The actual use of direct democratic institutions often has more significant effects than their potential use, implying that—contrary to what economists would expect—the direct effect of direct democratic institutions is more relevant than its indirect effect. It is also noteworthy that the effects are usually stronger in countries with weaker democracies.

To my knowledge, there have been no systematic attempts at explaining the emergence of direct democratic institutions.³⁸ Lijphart (1984, 206) even admitted “defeat in the search for general propositions and theories” with regard to the presence or absence of a referendum right. This was a quarter-century ago and it seems highly desirable to make another attempt at endogenizing direct democratic constitutional rules.

³⁸ See also Matsusaka (2005, 197), who writes: “A difficulty in developing instruments is that we do not yet understand why certain states adopted the process and others did not.”

3.7. Basic Rights

Many constitutions contain an elaborate catalogue of basic rights, which are often separated into positive or negative rights. Negative rights can further be delineated into rights establishing *freedom from* state or third-party interference (such as torture, imprisonment without trial, etc.) and *freedom to* do something (assemble with others, criticize the government in public, etc.). Examples of positive rights are rights to food, housing, paid jobs, and so forth. Negative rights create a protected domain that not even the state is allowed to trespass. For democratically organized states, this implies that negative rights limit the possible scope of majority decision making: if rights are really basic, even large majorities are bound by them and cannot simply ignore them. Negative rights can thus protect minorities against current majorities and can be thought of as “veto rights,” as they give their holders the right to behave in a certain way, even if a huge majority would like the right holders to behave differently.

When it comes to basic rights, the congruence between formally granted rights and their actual enforcement is especially crucial. It is even plausible to assume that the degree of factual enforcement is a function of other constitutional characteristics. For example, a greater degree of separation of powers—be it horizontal, vertical, new, or a combination thereof—would appear conducive to a high degree of factual enforcement. In the literature, basic rights are usually sorted into three categories: (1) economic rights, which include primarily private property rights broadly defined; (2) civil and political rights, which include unrestricted travel, the possibility of participating in political life, freedom from government censorship, and so forth, although it is not uncommon for political rights to be explicitly separated from civil rights; and (3) social or emancipatory rights, which endow the individual with positive rights vis-à-vis the state.³⁹ Blume and Voigt (2007) propose a fourth category, namely, basic human rights, which includes the absence of torture, the absence of political killings, the absence of people who disappear, etc.

Economists have traditionally argued that secure property rights (i.e., economic rights) lead to higher income levels and that social and emancipatory rights have just the opposite effect. It has been pointed out that the two types of rights are in competition as any—factually enforced—promise of the state as to positive social

³⁹ Often, these rights are also called “economic, social, and cultural rights” as in the International Covenant. We prefer to refer to them as social or emancipatory rights here as economic rights will be used in a different context and will indicate primarily the security of private property rights.

rights must be paid for by someone (see, e.g., Hayek 1976). With regard to civil rights, their positive potential to constrain government is often discussed. A free press, for example, provides a safe way of criticizing government behavior (e.g., Sen 1999). On the other hand, many economists are skeptical that democracy (the most important aspect of political rights) is conducive to income and growth (e.g., Barro 2000; see also Section 3.10 below). Further complicating the issue is that the economic effects of basic human rights have rarely been systematically analyzed. Blume and Voigt (2007) argue that talk of various kinds of human rights makes little sense in the absence of basic rights. For example, discussing the effects of secure economic rights is inane if persons can be imprisoned without a fair trial, tortured into pleading guilty, and further so abused that the existence of “rights” is a hypocrisy of the first level.

Farber (2002) argues that a government’s respect for basic human rights is a good indicator of how seriously that same government will take its promises as to other rights, such as property rights. If government does not refrain from discrimination and physical harm vis-à-vis its citizens, why should it respect private property rights of foreign investors? If government respect for basic human rights is indeed a signal of its credibility in general, the abuse of basic human rights should have consequences for (i) the country’s creditworthiness as well as (ii) the amount of foreign direct investment it will attract. Additionally, (iii) the general propensity to invest should be lower in an abusive country than in one where the government respects basic human rights.

There is a sizable literature inquiring into whether economic rights have a significant effect on economic growth, Knack and Keefer (1995) being a pathbreaker on this topic. Their paper, for the first time, uses data from the International Country Risk Guide and Business Environment Risk Intelligence as proxies for the security of property rights and finds that the security of these rights is significant for explaining both investment and growth. Around the same time, the Economic Freedom Index first appeared (Gwartney, Lawson, and Block 1996), as did the Index of Economic Freedom, which was produced jointly by the Heritage Foundation and the *Wall Street Journal*. These data sets gave rise to an entire cottage industry focusing on the interrelations between various aspects of economic freedom and prosperity.

This literature is extremely interesting but only marginally relevant for this survey because the explanatory variables found therein often have only a very indirect

basis in the constitution.⁴⁰ Sometimes, the variables are not even proxying for institutions, but simply for policies. Moreover, they are often subjective indicators. Thus, the impact on economic growth of rights that are not only

⁴⁰ It would, however, be very interesting to see whether specific constitutional rules are more (or less) conducive to economic freedom. Spindler and de Vanssay (2002) is a first attempt in this direction. They find that a higher number of veto players is correlated with higher levels of economic freedom.

The homepage of the Fraser Institute, which administers the Economic Freedom Index (EFI), contains a section that lists all the academic papers that rely on the data of the Index (see <http://www.freetheworld.com/papers.html>). Scully (2001) is an early survey that discusses some econometric issues, but relies primarily on indicators antedating the EFI. Berggren (2003) is a very accessible survey. De Haan and Sturm (2000) find that changes toward greater economic freedom do indeed foster economic growth, but that the level of freedom is not related to growth. A number of empirical studies dealing with the relationship between economic freedom and growth have analyzed the impact of the single components that make up the EFI based on the assumption that different variables might have different impacts on growth rates. Carlsson and Lundström (2002), e.g., test the sensitivity of the components. They find that four components are positively related to growth: (i) the use of markets, (ii) the freedom to use alternative currencies, (iii) the legal structure and security of private ownership, and (iv) the freedom to exchange in capital markets. Of these, only (iii) unequivocally survives the robustness test but (ii) almost does. Monetary policy and price stability are insignificant, whereas increased freedom to trade with foreigners actually decreases growth rates. This finding is not only significant but also robust. Further, lower levels of government consumption and transfers decrease growth rates below a certain threshold. In other words, increasing government consumption can increase growth up to a certain level. Past that point, however, growth rates will decrease.

The result that increased freedom of trade is detrimental to growth is counterintuitive and has provoked further analysis. Berggren and Jordahl (2005) decompose this subindicator into its single components and find that the result is driven by a single variable, namely, “taxes on international trade.” Analyzing the sensitivity of this result with regard to both model specification and sample composition, they find that it is not robust. In fact, they find that when outliers are ignored, the entire subindicator exerts a positive influence on growth. More recently, Justesen (2008) uses Granger causality analysis to discuss whether economic freedom causes growth. Apart from the composite EFI, only two of its components—government size and regulatory policies—have a robust effect on both economic growth and investment.

There is no consensus as to the effects of political and civil rights on economic outcomes. Barro (1997, 2000) finds that the degree of democracy has little significance for explaining the variation in growth rates. Blume and Voigt (2007) find that social or emancipatory rights are not conducive to investment in physical capital but are correlated with higher levels of productivity and basic human rights, which, in turn, have a positive effect on investment, but do not seem to contribute to productivity. None of the four groups of rights ever has a significant negative effect on any of the economic variables included here.

guaranteed by the constitution but also actually enforced is yet to be conclusively determined.⁴¹ In an early paper, de Vanssay and Spindler (1994) conclude that the entrenchment of any single right in the constitution seldom has any significant economic effect on growth.

Two follow-up questions suggest themselves. (1) What about the effects of constitutional entrenchment on other variables, such as government spending or corruption? After all, a long list of positive rights means that resources will be needed for their implementation. This should be reflected in the structure of the budget and—most likely—also in the overall level of government spending. (2) What factors determine whether constitutionally guaranteed rights will be factually enforced?

3.8. The Relevance of Procedural Rules

3.8.1. Introductory Remarks

The previous subsections were chiefly concerned with the economic effects of specific constitutional arrangements, which were assumed to be exogenously given, and it was noted that we have very little knowledge as to how the choice of arrangement is made. However, we do know that constitutional rules change over time and explaining their change is one of the foremost tasks of constitutional economics. Therefore, the literature that deals with the procedural rules used to choose and to change constitutional rules is briefly surveyed in this section. More specifically, this subsection deals with two situations in which procedural rules could be relevant: (1) the procedures used to choose constitutional rules and (2) the procedures used to amend the constitution.

3.8.2. Procedural Rules for the Choice of Rules

Procedural rules will never, alone, determine a constitutional arrangement. But assuming given preferences, the question here is what influence the procedures have on the rules actually chosen. Jon Elster focuses on precisely these issues. In his Storrs-lectures, he compares the use of rational discourse as opposed to bargaining strategies in the constitutional conventions that led to the U.S.

⁴¹ In a recent paper, Ben-Bassat and Dahan (2007) note that they did not find a robust effect of the degree of social rights as postulated in a country's constitution on public policy.

Constitution as well as to the first constitution of *Nouveau Régime* France. He is not terribly interested in *what* happened during those conventions, but in *how* and, to some extent, *why* it did (1991, 80; 1993, 194).

Concerning procedures, Elster asks about the consequences of time-limits for constitutional conventions, about how a constitutional convention that is simultaneously serving as the legislature allocates its time between the two functions, about the impact on constitutional negotiations of regularly informing the public of their progress,⁴² and about how certain supermajorities and election rules can determine the outcome of conventions (1991, 30). Riker (1983, 1984) is another major influence in this field. Riker calls for an extension of traditional rational choice theory, pointing to the fact that in its traditional form it is incapable of taking into account the dynamic and creative processes that structure the decision room of the actors. He diagnoses a deficit in the analysis of processes concerning creative adjustments, which he labels *heresthetics* or the art of political strategy (1984, 2). By using rhetoric, one tries to convince others by argument. By using heresthetics, one tries to structure the situation in such a way that others will readily accept it (*ibid.*, 8). He names several categories of heresthetics: strategic voting (the avoidance of “wasted” votes, the creation of a voting cycle, vote-trading) and agenda manipulation (arranging the sequence of decisions in a certain manner, introducing new voting alternatives) (1983, 63f.).⁴³

Elster (1993, 174) deplores the fact that there is not one single paper that describes the process of constitution making from a general perspective. There is, however, a large number of case studies, of which the volume edited by Goldwin and Kaufman (1988) is perhaps the most comprehensive: within a framework of questions developed by the editors, participants in the constitution making-process of nine countries share their experience.⁴⁴ However, by and large, neither

⁴² On the question of whether there is a systematic relationship between public sessions of the constitutional convention and the rules agreed upon, Macey (1986) advances the hypothesis that public deliberations make the obvious use of log-rolling and horse-trading less likely. In this setting, the representatives would at least try to formulate their arguments in terms of the common good.

⁴³ Ulysses, who has himself bound against the mast, is the paradigmatic metaphor of constitutional political economy. In a sense, constitutions are an attempt to deal with societies’ almost inherent inability to take the long-term view, much less act on it.

⁴⁴ Voigt and Wagener (2002) contains some first-hand descriptions of constitution-making processes in central and eastern Europe.

the Elster nor the Riker program has really caught the attention of constitutional economics, possibly because of huge methodological problems.⁴⁵

3.8.3. Procedural Rules for Changing Rules

My earlier survey of positive constitutional economics (Voigt 1997) proposed a taxonomy for constitutional change based on two dimensions, namely, the legality of constitutional change and its formality. Regarding the first dimension, constitutional change can occur within the amendment rules—and thus be legal—or it can ignore the rules – and thus be illegal. Regarding the second dimension, explicit change occurs when the text of the constitution is modified; implicit change occurs over time as the interpretation of the constitution evolves. The taxonomy can thus be put into a simple matrix:

Table 2: Conceptualizing Constitutional Change

	Legality	Legal (constitutional)	Illegal (unconstitutional)
Formality			
explicit		1	3
implicit		2	4

Voigt (1997) surveys the literature connected with each of the four cells. Rasch and Congleton (2006) pick up that taxonomy and deal exclusively with the first cell. They note that almost all constitutions specify procedures for their amendment. A straightforward hypothesis is that the more stringent the amending procedures, the fewer (explicit) constitutional changes will occur. Lutz (1994) appears to confirm this hypothesis. Ferejohn (1997) disaggregates Lutz’s “difficulty-of-ratification index” and finds that the requirement of special majorities or separate majorities in different organs of government are key to explaining amendment rates. Rasch and Congleton (ibid.) now use the number of veto players relevant for bringing about constitutional change as an alternative indicator and find that this number has systematic effects on the amendment rates in 19 OECD countries. The authors themselves point out their amendment counts might be counting “both apples and oranges”: minor amendments and major changes are all counted in an identical fashion.

⁴⁵ Voigt (2004) contains a more detailed and constructive critique of Elster’s program. Carey (2009) and Widner (2007) also emphasize the huge difficulties in dealing with these questions.

A desideratum concerning future research is to deal with the question of whether more stringent amendment rules lead not only to less legal and explicit constitutional change, but also to more implicit and/or illegal constitutional change (i.e., change depicted by Cells 2 through 4 in the matrix). If it costs little to change the constitution, many such changes are to be expected, which will impact the uncertainty-reducing function of the constitution. On the other hand, if legal and explicit change is expensive, it seems more likely that constitutional rules will be ignored altogether, also leading to a low degree of predictability. It thus seems that there is a real tradeoff between rigidity and flexibility. Whether the conjectured relationship really exists remains to be tested empirically.

3.9. Democracy vs. Autocracy

To this point, we have primarily focused on the economic effects of single constitutional rules. For the most part, we have implicitly assumed democracy to prevail and have noted the great institutional variety that “democracy” allows. But during the history of mankind, democracy has been the exception rather than the rule. We thus want to take another step and look at studies that have compared the economic effects of democracies with those achieved in autocracies. Much institutional detail is thus explicitly discarded and the focus is on this simple dichotomy.

The first question to ask is: What meaning does the term “constitution” have in autocracies? Scholars working within constitutional political economy make a conceptual distinction between the choice *of* rules and the choice *within* rules. At least implicitly, it is assumed that it is different organs and/or majority requirements that are characteristic of the two different levels. In autocracies, this distinction is more likely to be blurred than in democracies.

We know very little about the economic effects of autocracy, about the mechanisms that lead to transitions toward democracy, or about the transition from democracy to autocracy. However, during the last 10 years, a number of papers dealing with some of these issues have appeared. The third edition of Dennis Mueller’s survey of public choice (2003) contains, for the first time, an entire chapter on dictatorship. For a long time, Gordon Tullock (1974, 1987) was the only economist seriously concerned with an economic theory of autocracy. His two monographs contain a very interesting collection of theoretical ideas and empirical examples, but lack a systematic theoretical basis.

Is there any reason to expect autocracies to perform systematically differently than democracies? McGuire and Olson (1996) distinguish between “roving” and “stationary bandits” and compare the incentives of both with democracy. Roving bandits plunder area after area. If the likelihood of being plagued by roving bandits is high, incentives to invest in the production of goods that could be stolen is low. Stationary bandits, by contrast, settle in one area and live off that area’s population. Their incentives are thus entirely different from those of roving bandits as they have an interest in protecting “their” area against other bandits in order to increase the population’s incentive to be productive. Utility levels are higher under stationary than under roving bandits. Yet, McGuire and Olson (*ibid.*) show that expected utility is higher still under democracy: any additional unit of public goods provided is costly for the stationary bandit and it can be shown that democracy using a unanimity rule would lead to both a higher level of public goods provision as well as a higher level of income. But all real-world democracies rely on some majority rule that opens up the possibility of redistribution. Although McGuire and Olson argue that democracies should perform better, their theoretical results are heavily dependent on specific assumptions concerning decision rules in effect.

Other arguments for a democracy having a systematic advantage over an autocracy in terms of growth prospects include its insurance function, by which is meant that the citizens are endowed with the ability to peacefully remove a bad ruler, thus making it more likely that there will be a certain degree of political stability, which would, in turn, increase aggregate investment.

Barro (1997, 2000) argues that the rule of law and secure property rights are conducive to economic growth but that the effects of higher levels of democracy are uncertain: pressure to redistribute could compromise property rights and thus reduce the incentive to work hard and invest. He does acknowledge that redistribution can increase stability by making it less attractive to engage in criminal activity, riots, or revolutions, but he argues that even autocrats would be motivated to spend enough on redistribution to prevent such activities. The difference between democracies and autocracies would be that democracies spend too much on redistribution.

A simple comparison between democracy and autocracy might be too coarse. Much of this survey has dealt with institutional variation within democracies, so variation within autocracies might also be noteworthy. Ronald Wintrobe (1990, 1998) deals with different kinds of autocrats and proposes a taxonomy that distinguishes between four “ideal types.” According to his model, dictators

generally have at their disposal two instruments for reaching their goals, namely, repression and loyalty. Whereas totalitarians derive utility from power as such and thus try to maximize it, tinpots choose the level of power that secures them in office. They are more interested in “palaces, Mercedes-Benzes, [and] Swiss bank accounts” (1990, 849).⁴⁶ Wintrobe is now interested in the differential effects of economic growth on the behavior of tinpots and totalitarians. By assumption, tinpots are interested in only that degree of power that allows them to remain in power. Power is “produced” by the “inputs” of repression and loyalty. If economic growth increases, subjects will be more loyal to the autocrat, and less repression is needed to secure the minimum amount of power necessary. Inversely, less growth leads to more repression in tinpot regimes because less loyalty is substituted with more repression. Totalitarians enjoy power as such and thus seek to maximize it. If economic growth increases, subjects will “supply” more loyalty, which enables the totalitarian to be even more repressive. Again, the opposite also holds: if economic growth declines, the totalitarian will reduce the level of repression.

Although Wintrobe’s model is an important step toward a more theoretical foundation of the economic theory of autocracy, attributing different preference functions to different types of dictators is problematic as long as the model does not provide for the conditions under which a particular type will make it to power. The *ex post facto* evaluation of a certain dictator as belonging to one of the categories does not seem especially helpful.

Despite this problem of the taxonomy, Islam and Winer (2004) try to test Wintrobe’s theory. They are interested in the differential effects of economic growth (both positive and negative) on the repression levels engaged in by tinpots and totalitarians. To do so, they first need to define criteria for separating tinpots from totalitarians. They do this by coding the worst-ranked countries of the Gastil indices, which are intended to proxy for civil and political freedoms, as totalitarian, the best ranked as democratic, and those in the middle as tinpots. According to the authors (2004, 315), the theory is “partially confirmed”: positive growth under totalitarians does indeed lead to more repression, whereas negative growth has either a positive impact or no effect on freedom (depending on the concrete estimation equation). With regard to tinpots, Islam and Winer (*ibid.*) find evidence that negative growth reduces freedom, which is in line with Wintrobe’s predictions.

⁴⁶ The other two types are tyrants and timocrats (or benevolent autocrats).

Plümper and Martin (2003) take the inverted u-shape relation between the level of democracy and economic performance found by Barro (1997) as their point of departure. They are interested in identifying possible transmission mechanisms. They basically argue that initial increases in the level of democracy lead governments to spend less on rents and more on public goods, which induces additional growth. When democracy levels further increase, however, governments tend to overinvest in public goods and growth rates begin to fall. Plümper and Martin find empirical support for their model.

Let us now return to the central question of this section and ask whether there are systematic differences between democracies and autocracies regarding our *explananda*. Przeworski and Limongi (1993) collected 18 studies on this issue, discovering 21 different results (some studies thus contained more than one result). Eight results indicate that democratic regimes grow faster, eight of them find the exact opposite, and the remaining five cannot find a significant difference in growth rates. Discussing some of the methodological problems of the studies, Przeworski and Limongi (1993, 64) conclude: “The simple answer to the question with which we began is that we do not know whether democracy fosters or hinders economic growth. All we can offer at this moment are some educated guesses.” Przeworski and Limongi (1993) published their survey over a decade ago and since then quite a few additional studies have been published but the empirical literature remains inconclusive. For example, in their meta-analysis, Doucouliagos and Ulubasoglu (2008, 62) analyze 483 regression estimates from 84 studies: 15 percent of the estimates are negative and significant, another 21 percent are negative but insignificant, 37 percent are positive and insignificant, and 27 percent are both positive and statistically significant.

It would obviously be futile to attempt a complete survey of the results here; however, these inconclusive results have led to a search for advanced or innovative approaches to the problem. Some of the papers proposing novel approaches are briefly mentioned here. De Haan (2007) does not present any new estimates but has some suggestions for how estimates should be run. He would like to see more extreme bounds analyses and suggests that outliers as well as sample heterogeneity should be dealt with by robust regression techniques (he recommends least trimmed squares). Frequently, there is more than one measure for a certain concept (in this case democracy) and the partial correlation between the measures is often low. In such cases, de Haan opts in favor of factor analysis to identify the variation common to all measures. We now discuss several studies employing unusual methods to reach more conclusive results.

Roll and Talbott (2001) find that democracy (or, more precisely, the political rights indicator as published by Freedom House, which focuses on the procedural aspects of democracy) as well as civil rights and freedom of the press are conducive to higher income. But in all studies interested in estimating the effects of institutions, the direction of causality constitutes a serious problem: Is income high because the country is democratic or is the country democratic because income is high? Usually, instrumental variables are used to control for endogeneity. Roll and Talbott (2001) choose a different path: they draw on singular events that made countries either substantially more or less democratic (“democratic event” vs. “anti-democratic event”). They find that democratic events are, on average, followed by a dramatic improvement in country income, whereas anti-democratic events typically lead to substantial reductions.

Tavares and Wacziarg (2001) estimate a system of simultaneous equations that enables them to identify the specific transmission channels through which democracy affects growth. They find that democracy is conducive to growth by improving the accumulation of human capital and, but less robustly so, by lowering income inequality. However, democracy hinders growth by reducing the rate of physical capital accumulation and, again less robustly, by increasing government consumption.

The difference-in-difference approach is used in a number of studies (e.g., PT 2006). PT (2007) combine the difference-in-difference approach with matching estimates based on propensity scores. They conclude that previous estimates might have underestimated the growth effects of democracy. They find that transitions from autocracy to democracy are associated with an average growth acceleration of about 1 percentage point, whereas the transition in the opposite direction slows growth down by almost 2 percentage points.⁴⁷ Finally, the meta-analysis by Doucouliagos and Ulubasoglu (2008) concludes that democracy does not have a direct effect on growth but does have significant and robust indirect effects through higher human capital, lower inflation, higher political stability, and higher levels of economic freedom.

Mulligan *et al.* (2004) ask whether democracies differ from nondemocracies in public policies. Looking at the decades from 1960 to 1990, they find that economic and social policies do not significantly differ between these two

⁴⁷ They classify countries as democratic if they have polity2 values larger than 0. This means that transitions from autocracy to democracy (and vice versa) could take place without any change in a country’s formal constitution.

regimes. They look at various taxes and find that democracies tend to have less redistributive personal income taxes. This is a surprising result as conventional wisdom has it that democracies are prone to redistribution because a poor majority can agree to exploit a wealthy minority. However, the more significant differences between the two regimes involve barriers to entering the political system. Autocracies are more likely to torture, execute, regulate religion, censor the press, and have a large military budget.

The core issue of positive constitutional economics is to explain constitutional choices and thus the relevant question is under what circumstances will democracy be chosen and when is autocracy more likely. Therefore, it is relevant to explain transitions from one kind of regime to the other. Acemoglu and Robinson (2001) explain transitions from nondemocratic to democratic regimes and vice versa by the initial degree of inequality observed in a society. In their model, the function of democracy is limited to redistribution; it is the median voter who determines the tax rate, and the tax revenues are exclusively used for redistributive purposes. Revolutions (attempts to establish democratic regimes) and coups (attempts to establish nondemocratic regimes) are caused by changes in opportunity costs, i.e., by recessions that are exogenous to their model. In times of economic crises, the opportunity cost of threatening a revolution might be low. A nondemocratic government might try to prevent revolutions by broadening the franchise and thereby shifting the median voter toward the poor. However, too much redistribution makes undertaking a coup more attractive to the rich.⁴⁸

Sutter (1995) assumes that a transition from authoritarian to nonauthoritarian government is potentially welfare increasing. Since revolutions waste resources, other transition paths, such as negotiated pacts, are superior. Sutter is now interested in the problems of implementing negotiated pacts. What he calls the “punishment dilemma” is caused by the inability of some actors to credibly commit themselves, in this case, new rulers promising not to sanction the old rulers in the future. An interesting insight of his work is that the optimal policy toward dictators is time-inconsistent: to prevent would-be dictators from

⁴⁸ An important debate on causality was started by Lipset in 1959. He argued that high levels of income would enable countries to implement high-quality institutions (in particular democracy). His argument has recently been endorsed by Glaeser *et al.* (2004). Acemoglu *et al.* (2007) show that the evidence in favor of the so-called modernization hypothesis completely vanishes if country fixed effects proxying for historical influences are taken into account. Gundlach and Paldam (2008), on the other hand, argue that present international income differences have roots in the prehistoric past and find a large long-run causal effect of income on the degree of democracy.

becoming dictators, one wants to threaten them with the worst possible punishment. As soon as they are dictators and one is interested in getting rid of them, one wants to punish them only mildly in order to give them an incentive to step down and let a nonauthoritarian government take over.⁴⁹

Barzel (1997, 2000) discusses the role of parliament as a device autocrats can use to credibly bind themselves, and argues that secure kings deliberately give up some powers, which enables them to credibly commit themselves to promises not to confiscate their subjects' property, which in turn makes possible the realization of additional gains from cooperation. His approach thus flatly contradicts the more conventional one that conceptualizes the emergence of parliament as the consequence of weak autocrats.

The founders of public choice originated mostly from the United States so it is small wonder that they were primarily concerned with explaining the functioning of democracy. Today, we know something about the functioning of democracy, less about the functioning of autocracy, and even less about the transition from autocracy to democracy. To increase our knowledge, it may be necessary to abandon the simple dichotomy between democracy and autocracy. Our knowledge concerning the factors that determine the choice of regime remains very limited.

3.10. Summary

In sum, quite a few constitutional rules appear to have important economic consequences, including electoral rules (proportional vs. majority rule), form of government (presidential vs. parliamentary), and whether a country has a federal structure or direct democratic institutions. These results clearly indicate that endogenizing these institutions is desirable. Yet, it has been argued (Acemoglu 2005) that these results might merely be strong correlations rather than causal effects. It might be (omitted) third variables that determine both institutions and policies. However, even if this argument is correct, it is still necessary to identify the conditions that give rise to different institutions as doing so will also clarify whether these initial conditions have a direct impact on policies.

⁴⁹ This insight has immediate implications for the International Criminal Court, which Sutter deals with in a later paper (2006).

4. Options for Future Development

Constitutional political economy has come a long way since the *Calculus of Consent*. Over the last couple of years, the positive branch has made remarkable progress thanks to the availability of sizable data sets and the development of a host of indicators built thereon. This has made it possible to subject constitutional issues to econometric analyses that would have been impossible just a few years ago. Some scholars report very strong economic effects of constitutional rules; however, upon closer examination, many of these effects are not as robust as initially assumed. It has become evident that with regard to a number of constitutional rules, institutional detail matters a great deal. Therefore, in the years to come, explicit recognition of institutional details should be high on the agenda.

Many consider describing and explaining the choice of constitutional rules as the core task of constitutional political economy. If this course can be agreed upon, there is much work to be done as very few studies endogenizing single constitutional rules or even entire constitutions have been conducted. It may be suspected that endogenizing constitutions is a nearly impossible task. Constitutions are written under very special circumstances that do not lend themselves to generalization.⁵⁰ Furthermore, although constitutions are rewritten far more frequently than often assumed, the overall number of observations is still small. In my first survey of positive constitutional economics, I predicted that laboratory experiments would become one of the standard tools of constitutional economics because the choice of rules could be mimicked in the laboratory under exactly controllable circumstances. Today, experimental economics is a highly successful branch (witness the Nobel prizes awarded to Kahneman and Smith in 2002), but it certainly has not made an inroad into constitutional political economy, possibly because the experiments that are carried out appear too far removed from any real-world constitutional choice process and their external validity is hence doubtful.⁵¹

⁵⁰ See Hume's essay "Of the Original Contract" (1777, 1987, 474): "and were one to choose a period of time, when the people's consent was the least regarded in public transactions, it would be precisely on the establishment of a new government. In a settled constitution, their inclinations are often consulted; but during the fury of revolutions, conquests, and public convulsions, military force or political craft usually decides the controversy."

⁵¹ Several other papers can be viewed as contributions to constitutional economics, most of which deal with public good games experiments that include a sanctioning mechanism (which is the institution). Fehr and Gächter (2000), the initial paper, led to a number of follow up papers. In Sutter *et al.* (2008), subjects decide before the first round of the game under what institutions they

The recent progress in positive constitutional economics has been achieved primarily by drawing on cross-country studies. In Section 3.9, we saw that a discussion concerning the most adequate tools for cross-country analysis is taking place: factor as well as meta-analysis and semi-parametric tools have been discovered only recently by constitutional economists. It appears likely that some of these approaches will also be applied to some of the single constitutional rules described in subsections of Section 3 of this survey.

Recently, cross-country studies as such have come under attack. The main methodological concerns seem to be simultaneity, reverse causality, and omitted variable bias. But behind these technical concerns hides the implicit—and problematic—assumption that one model is sufficient to “explain” various developments in vastly different environments and development stages (see Rodrik’s (2008) recent plea for second-best institutions). Ever more frequently, scholars seem to recommend case studies and yet there are no commonly agreed upon criteria for judging their quality. Whether case studies on constitution making can lead to general insights remains to be seen.

Academic papers often conclude with the policy implications of their results but in the case of this paper, it is questionable whether policy advice, sound or otherwise, can even be derived from the many and various results discussed in Section 3. I believe we should be extremely careful in jumping to conclusions. The effects of many constitutional rules were estimated in isolation, but in the real world, effects will be the result of many interactions. It is, e.g., questionable whether government spending really would decrease by 10 percent of GDP if parliamentary PR systems switched to a combination of MR cum presidentialism. It should make us cautious that it is so difficult to show that democracies have a systematic advantage over autocracies in terms of growth rates. It should also make us wonder how it is possible that a number of constitutional rules have significant effects on fiscal policies and a number of governance indicators but fail to have a significant impact on either labor or total factor productivity.

want to play the public goods game (standard game, with punishment, with reward). The authors explicitly call this preplay round “constitutional choice”. In Gürerik *et al.* (2005), individuals can choose the group to which they wish to belong. Choice thus takes place via “voting with your feet.” Güth *et al.* (2005) ask whether tax morale depends on the centralization/decentralization of the tax system and find that tax morale increases in decentralization.

If constitutions are interpreted as devices that create focal points, laboratory experiments could be used to determine the factors that influence the choice of specific rules (such as experience with specific rules).

So, at the end of the day (and the paper), we come smack up against the question that is at the very core of constitutional economics: Do constitutions really matter? Can societies really improve their lot by agreeing on a specific set of rules? In answering this question, it is not sufficient to point at some empirical evidence that seems to indicate that the answer is yes. We need to be able to explain the difference between *de jure* rules and their *de facto* enforcement: What are the factors that change a couple of printed pages into a document around which collective decision making is organized? What are the factors that prevent the factual enforcement of constitutional rules?

It might well be that the enforcement of some constitutional rules depends on the existence of “preconstitutional” rules. These could be the informal or internal institutions of a society. If such are fairly stable over time and of the sort uncondusive to the implementation of (desirable) constitutional rules, then the factual effect of constitutions could be quite limited.

The recent debate on “institutions vs. geography” could be recast as “constitutions vs. geography” in our context. Based on works such as Diamond (1997), scholars such as John McArthur and Jeffrey Sachs (2001) argue that it is geographical factors, including the climate and the disease environment, that determine the fate of societies. But even if geography is a hard constraint, variation in economic development between geographically similar areas can be substantial, at least in the short and medium term. Just witness the differences in development between North and South Korea or between former East Germany and West Germany. Additionally, it seems plausible to assume that a society’s physical environment is an important determinant of its informal institutions. If these are an important factor in explaining the factual implementation of constitutional rules, as argued above, then “geography” might, indeed, provide at least a partial explanation of the choice of constitutional rules.

Much of CPE research implicitly assumes the nation-state to be the “natural” form of statehood, even though supranational and international agreements are becoming ever more important. There are various possibilities for incorporating these agreements into CPE. One example is to view them as a new level in a multilevel governance structure, as has been done by some social scientists as well as legal scholars. One can then analyze under what conditions politicians of the nation-state level are ready to delegate competence to a supranational or international level (Voigt and Salzberger 2002 is a first attempt at analyzing delegation decisions from a CPE point of view, conceptualizing delegation to national bureaus and to international organizations as an alternative). This

positive approach needs to be complemented by some normative analysis, however, and to date, in the discussions over Europe's constitutional future, contributions by economists have been rather scarce (see, however, the early contribution by the "European Constitutional Group"). The European Union is only the most obvious supranational development. Analyzing international organizations such as the World Financial Organizations or the United Nations from a CPE perspective should also be highly relevant.

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Table 3: Empirical Results at a Glance: Constitutional Rules as Explanatory Variables, Cross-Country Results Unless Otherwise Noted

	Dependent Variables	Constitutional Rule	Source	Result	# of Countries, Method, Period, ...
I	<i>Macro Outcome Variables</i>				
1	Economic Growth				
		(Factual) Judicial Independence	Feld & Voigt (2003)	+, *	OLS, N=73
		Decentralization (of revenue)	Enikopolov & Zhuravskaya (2003)	-,	OLS, N=73
		Decentralization (of revenue)	Thießen (2003b)	-,*	GLS, N=26
		Decentralization (of revenue)	Thießen (2003b)	Hump-shape	Panel, N=26, 1975–95
		Decentralization (of spending)	Davoodi & Zou (1998)	-,*	N=46
		Decentralization (of spending)	Thießen (2003a)	+, *	OLS, N=25
		Number of Veto Players	Henisz (2000)	+, *	OLS, N=82, 1965–90
2	Per Capita Income				
3	Labor Productivity				
		Proportional Representation	PT (2003)	+, (*)	OLS, N=74
		Proportion of Individually Elected Candidates	PT (2003)	+, *	OLS, N=73
		Size of Electoral District	PT (2003)	-,*	OLS, N=73
		Presidential Form of Government	PT (2003)	-,*	OLS, N=74
		Presidential Form of Government	Blume <i>et al.</i> (2009)	-,	OLS, N=79
4	Total Factor Productivity				
		Proportional Representation	PT (2003)	+,	OLS, N=73
		Proportion of Individually Elected Candidates	PT (2003)	+,	OLS, N=72
		Size of Electoral District	PT (2003)	-,*	OLS, N=72
		Presidential Form of Government	PT (2003)	-,	OLS, N=73
		Presidential Form of Government	Blume <i>et al.</i> (2009)	-,*	OLS, N=79
		Direct Democracy (fiscal referendums)	Feld & Savioz (1997)#	+, *	GLS, N=26
II	<i>Fiscal Policy Variables</i>				
1	Government Revenue				
		Proportional Representation	PT (2003)	+,	OLS, N=76
		Proportional Representation	Blume <i>et al.</i> (2009)	+, (*)	OLS, N=78
		Presidential Form of Government	PT (2003)	-,*	OLS, N=76
		Presidential Form of Government	Blume <i>et al.</i> (2009)	-,	OLS, N=78

		Decentralization	Feld <i>et al.</i> (2003)#	-, *	Panel, TSLS, N=26, 1980–98
	State and Local Tax Revenue	Direct Democracy (initiative)	Matusaka (1995)#	-, *	Panel, OLS, N=49, 1960–90
		Direct Democracy (mandatory fiscal referendums)	Feld & Kirchgässner (2001)#	-, *	Panel, OLS, N=26, 1986–97
2	A. Central Government Expenditure				
		Proportional Representation	PT (2003)	+, *	OLS, N=80
		Presidential Form of Government	PT (2003)	-, *	OLS, N=80
		Bicameral Legislature	Bradbury & Crain (2001)	-, *	WLS, N=37, 1971–89
		Bicameral Legislature	Plümper & Martin (2003)	-, *	OLS, N=83, 1975–97
	B. Total Government Expenditure				
		Proportional Representation	Blume <i>et al.</i> (2009)	+, _	OLS, N=77
		Presidential Form of Government	Blume <i>et al.</i> (2009)	-, _	OLS, N=77
		Federalism (“own source” revenue)	Rodden (2003)	-, *	Panel, N=44, 1980–93
		Direct Democracy (mandatory referendums)	Blume <i>et al.</i> (2009)	-, *	OLS, N=62
		Direct Democracy (possibility initiative)	Blume <i>et al.</i> (2009)	+, *	OLS, N=62
	C. State and Local Gov. Expenditure	Direct Democracy (initiative)	Matusaka (1995)#	-, *	Panel, OLS, N=49, 1960–90
		Direct Democracy (mandatory fiscal referendums)	Feld & Kirchgässner (2001)#	-, *	Panel, OLS, N=26, 1986–97
3	Budget Deficit				
		Proportional Representation	PT (2003)	+, *	OLS, N=60
		Direct Democracy (frequency of use)	Blume <i>et al.</i> (2009)	-, *	OLS, N=45
4	Composition of Government Spending				
	A Transfers (Social Security plus Subsidies to Firms)	Proportional Representation (district size)	Milesi-Ferretti <i>et al.</i> (2002)	+, *	OLS, N=40
	B Social Security and Welfare	Proportional Representation	PT (2003)	?, _	OLS, N=56
		Presidential Form of Government	PT (2003)	-, (*)	OLS, N=56/69
III	<i>Governance Variables</i>				
1	Corruption				
		Proportion of Individually Elected Candidates	PT (2003)	-, *	WLS, N=68
		Size of Electoral District	PT (2003)	+, *	WLS, N=68
		Presidential Form of Government	PT (2003)	-, _	
		Presidential Form of Government	Gerring & Thacker (2004)	+, *	WLS, N=125
		Presidential Form of Government	Lederman <i>et al.</i> (2005)	+, *	Probit/OLS, 1987–97
		Bicameral Legislature	Testa (2007)	-, *	Panel, N=34, 1996–2000
		Federalism (fiscal decentralization)	Treisman (2007)	No effects,	OLS, N=54, 2005

		Direct Democracy (initiative)	Alt & Lassen (2003)#	-, *	OLS, N=45
2	Graft				
		Proportion of Individually Elected Candidates	PT (2003)	-, *	WLS, N=78
		Size of Electoral District	PT (2003)	+, *	WLS, N=78
		Presidential Form of Government	PT (2003)	-, *	WLS, N=78
		Presidential Form of Government	Blume <i>et al.</i> (2009)	-,	WLS, N=79
		Number of Veto Players	Panizza (2001)	-, *	TSLs, N=111
IV	<i>Others</i>				
1	Legitimacy of Constitution/State				
2	Propensity to Cheat on Taxes				
		Direct Democracy (mandatory referendums)	Blume <i>et al.</i> (2009)	-, *	OLS, N=49
3	Reported Life Satisfaction (“Happiness”)				
		Direct Democracy (Frey & Stutzer (2006)#	+, *	WLS, N=6,134
		Direct Democracy (various measures)	Lascher & Wassmer (2007)#	No effects,	Various, N = up to 2,324
		Direct Democracy (various measures)	Blume <i>et al.</i> (2009)	No effects,	OLS, N=54

+/- = sign of coefficient in corresponding regression; * = claimed to be significant; (*) = marginally significant; _ = claimed to be insignificant “#” refers to within country studies.