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Article Title: An Enabling Mechanism for the Creation, Adjustment, and Dissolution of States and Governmental Units

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Abstract

The article proposes an enabling mechanism for the creation, adjustment and dissolution of governmental units, giving autonomy to each resident as in a direct democracy. Rather than focusing on a narrow model with restrictive and specialized assumptions, and subsequent solutions, as has been common in the literature, the article takes individuals seriously acknowledging that they are best equipped to find their own solutions. The emphasis is on the practical approach of how individuals discover and implement their subjective preferences and how this discovery and implementation process can be facilitated and corresponding costs lowered. Governmental units are subjected to some of the same market forces as ordinary firms, in the spirit of Coase (1988a). This brings the interaction between governmental units closer to a market structure, and serves to eliminate or reduce many of the coercive elements of government.

1 Introduction

Increasing globalization and concomitant flows of people, goods, services, and capital across borders at the superstate, state, regional, and local levels make the regulation or non-regulation of creation, adjustment, and dissolution of states and local territorial governmental units especially relevant. The history of international political and constitutional economy has traditionally assumed borders as exogenously given, despite the fact that borders are continuously redrawn through a variety of mechanisms.

At the turn of the millennium a literature gradually emerges¹ which accounts, in the tradition of recent trends within economic theory, for the endogenous determination of borders.² The literature can tentatively or stereotypically be divided into "American" and "European" approaches, which refers more to funders of research than to where researchers are geographically located. The American approach, starting with Tiebout (1956), recognizes the importance of competitive units at the local level, and focuses, in the spirit of Buchanan and Faith (1987), on a competitive structure's ability to optimize local governmental services and taxes. Extensions are made by Alesina and Spolaore (1997,2003), Glomm and Lagunoff (1998), Casella (2001ab).³ In contrast the European approach centers on trade between nations, and optimization of the number of nations in a trading context. Examples are Bolton and Roland (1997) and Bolton et al. (1996).

A common result is that democratization leads to secessions which, together with international economic integration, imply inefficiently many countries (Alesina and Spolaore 1997), a result we criticize in section 5 since it violates Pareto optimality. Alesina and Spolaore (2003) correctly "argue that the optimal size of a country is determined by a cost-benefit trade-off between the benefits of size and the costs of heterogeneity." ⁴ A variety of other factors, unknown and unknowable to us, and in many cases even unknown to each individual, also play a role. Further, Casella (2001b:83)

¹ In earlier analyses, analyzing the size of nations, Wittman (1991) argues that wealth maximization is determinative. Friedman (1977) shows that nations are shaped to maximize joint revenue, net of collection costs, and that trade should imply large nations, rent should imply small nations, and labor should imply that nations will have closed boundaries or be culturally homogeneous.

² See Hausken (2000) for a treatment of how group size is determined endogenously by intergroup migration.

³ See Dowding et al. (1994) for a survey of the empirical Tiebout literature, noting that Tiebout is quoted in 1000+ articles. See John et al. (1995) for a micro-level test of the behavioral assumptions of the Tiebout model.

⁴ More specifically, "in a large country, per capita costs may be low, but the heterogeneous preferences of a large population make it hard to deliver services and formulate policy. Smaller countries may find it easier to respond to citizen preferences in a democratic way."

argues that "the optimal number of jurisdictions is unique and increases with market size," and Bolton and Roland (1997:1057) argue that "separation occurs in equilibrium" "when income distributions vary across regions and the efficiency gains from unification are small," but that "all incentives for separation disappear" "when all factors of production are perfectly mobile." One deficiency of Bolton and Roland's (1997:1057) result is the assumption that welfare is maximized when the median voter's tax preferences are satisfied (majority voting). In the absence of unanimity there is no guarantee that this is the case, as shown by Wicksell (1896) and Buchanan and Tullock (1962).⁵ Results of these and similar kinds will continue to emerge from this literature, generating a web of models. To allow for analytical tractability and sufficiently specific results, restrictive σ specialized assumptions typically have to be made, often combined with a narrow focus. As Levins (1966,1985) suggests with respect to model building, "truth is the intersection of multiple lies." Care should be exercised when drawing conclusions from the specialized models that emerge.

An unfortunate side effect of the analytical approach is that the focus on a mathematical solution implementable by social economists takes attention away from the practical approach of how to discover and implement the subjective preferences of the people. For a majority of people subjective preferences and beliefs are often not known or not explicitly verbalized. Even when known and verbalized, subjective preferences and beliefs are often not available quantitatively for mathematical treatment. If we could construct a complete preference schedule for all individuals, incorporating future innovations in technology and organization would be difficult. (If we knew about them, they wouldn't be innovations.) Rigorous analytical models frequently lack the flexibility needed to accommodate innovations. This may lead to less adaptation and less expression of new innovations, and lower growth over time. While in the study of a particular market, mathematical models are useful tools in as far as they may allow predicting market action given a specified set of assumptions, they may become impediments to change from the moment the assumptions are taken to be universally valid, and the models are used to prescribe the actions of individual agents.

⁵ Unanimity takes on a special role in Wicksell's (1896) treatment, highly influential on Buchanan and Tullock (1962). Buchanan translated Wicksell to English, Buchanan and Tullock (1962) devoting considerable portions of their book to unanimity, Pareto optimality and decision making rules. Note that what Bolton and Roland (1997:1079) in a normative statement call the "damaging effects of fiscal competition" and "inefficiencies of fiscal competition" does tend to increase the effective majority behind a particular level of taxation, which may assure a more Pareto optimal structure. I.e., while 50% of the population favors a tax rate of 30%, 90% of the population

Neither the American nor European approaches have focused much on what is empirically the most important reasons for state creation; social, cultural, religious and ethnic issues. Lacking is also the welfare benefits like less war, revolution, etc. associated with lower barriers to entry. The focus on narrowly defined economic utility inadequately accounts for utility which is difficult to measure. Frey et al. (2001) attempt to remedy this by "process utility" and "outcome utility", demonstrating empirically that "reported subjective well-being of the population is much higher in jurisdictions with stronger direct democratic rights," deriving utility derived from the political process itself.⁶

This article proposes an enabling mechanism designed to reduce the costs associated with 1) the creation (establishment, birth) of governmental units, 2) the adjustment of unit borders, and 3) the dissolution (termination, death) of units. Optimal solutions can only be achieved through the inclusion of individuals in the decision making process. Given the proper decision making procedures and institutional framework, conflict is not necessary, as has been claimed, between democracy and the optimum size of a governmental unit. The approach is firmly embedded in the economic tradition, but has a broad rather than narrow focus, and avoids restrictive and specialized assumptions. The focus is on the operative side of the mechanisms, and not on the solutions which abound in the literature, often based on a narrow focus with restrictive and specialized assumptions. The autonomy is allocated down to the individual level, which this article argues is the best level to ensure preferred solutions. At the individual level we distinguish between domiciliary⁷, individual citizen⁸, and resident⁹. This article mostly uses the term domiciliary which denotes a higher degree of territorial permanence than citizen or resident. The appropriate term depends on the type of governmental unit (super-national, state, regional or local government, etc.).

may favor a rate of 10%. Thus lower taxes may bring us closer to unanimity, and hence a more optimal solution.

⁶ Frey (1996) and Casella and Frey (1992) also propose FOCJ (functional overlapping and competing jurisdictions). These FOCJ are essentially the same as the regional bodies proposed by Knutsen (1992). Unlike Knutsen (1992) and Hausken and Knutsen (2002), Frey (1996) does not propose a specific creation mechanism which is one purpose of this article. As shown by Knutsen (1992) there is no conflict between these regional bodies and the mechanisms for creation of governmental units proposed in this article. That being said, while Frey (1996) elaborates on Knutsen (1992) in the context of why competing units ought to be established, Frey's article does not, in sufficient detail, establish how this should be accomplished.

⁷ Domiciliary: A person who resides in a particular place with the intention of making it a principal place of abode; one who is domiciled in a particular jurisdiction. (Garner 1999)

⁸ Citizen: A person who, by either birth or naturalization, is a member of a political community... Being entitled to enjoy all its civil rights and protections (Garner 1999). The term citizen usually has meaning only at the state level, with extensions e,g, to European Union citizen.

⁹ Resident: A person who has a residence in a particular place. A resident is not necessarily either a citizen or a domiciliary (Garner 1999).

Enabling mechanisms are also present in market based economics e.g. in the corporate world. The world's financial markets owe their existence to the invention of the joint stock company with its fully transferable share of stock. The legal form of ownership may from a theoretical point of view, seem to have limited impact. Partnerships or sole proprietorships would seem to be as efficient as corporations and traditional economics has not focused on the legal form. However, the ease of transfer of ownership and thus the attractiveness of the share of stock has proved to be of major importance in the real world and has powered both the creation of financial markets and the growth of industrial and post-industrial enterprises and the accumulation of real wealth on an immense scale. Thus by creating markets where virtually none existed enabling mechanisms have an immense impact.

The article lets individuals perform a benefit versus cost evaluation and transit through and exit governmental units. Exit is free, but may be reduced by ownership of resources connected with territory, travel costs, cultural barriers, etc. Entry, however, may or may not be free depending on the preferences of the population. It is possible for a governmental unit to maintain higher standards in certain respects, e.g. a higher level of investment in infrastructure and charge new domiciliaries a fee corresponding to a portion of this sunk investment. Such a fee likely prevents or ameliorates free riding. Without a fee, entry likely increases, and investment in infrastructure, social services (e.g. pension rights) and other non-exclusive public goods likely spirals downward and gets reduced below the level desired by the original population. A fee is not common for transits across today's nation states, though there is a flourishing black market fee system where criminals charge would-be emigrants from the third world for possible and risky entry into the first world. Instead of a fee, today's richer countries (e.g. Europe, North America) commonly shut their gates, with few loopholes. This article lets individuals within each governmental unit design a preferred function that determines entry criteria.

Buchanan (1987:1029,1031) suggests that immigration policy will be contentious when incomes differ in the original polity, and that the poor tend to lose out because they remain outside the sharing coalition of each polity. I.e., "those who are poor remain outside the sharing coalition and, because they remain poor, they cannot readily secede. They either remain subject to maximal fiscal

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exploitation or possibly resort to extreme measures such as revolution." Our approach lowers the cost of secession, reducing exploitation by the rich and powerful. Immediate beneficiaries are the poor and/or those currently subject to economic or other exploitation like minority discrimination etc., who can more easily secede. In the longer run the approach benefits everybody as governmental units become more cost effective and responsive. Similarly for firms, some cater to the rich, some to the poor, and some to both, dependent on focus on quality, price, or niche (Porter 1985). As for traditional market based goods and services, there is no reason to believe that the poor will be left out, though the range of goods, services, opportunities, etc available to them may be different. Overall, we believe that the increased welfare benefits everyone Pareto optimally. Furthermore, there is no reason to believe that our approach leads to a completely homogenous set of governmental units even though individual units (notably small scale units e.g. local government) may become more internally homogonous. Complementarities and division of labor, etc. will always exist. A rich country such as Switzerland, equipped with a fragmented and decentralized decision making model also in terms of immigration decisions, have among the largest foreign populations in Europe suggesting that a more decentralized decisionmaking structure may in fact as expected, increase diversity across units.

Externalities come in many shapes and forms, external to each individual, with respect to each governmental unit, and with respect to governmental functions. Since we do not use an idealized model, but deal with messy reality, decisions by individuals and governmental units will affect other individuals and governmental units. This is not a shortcoming of our enabling mechanism, since any mechanism dealing with the real world, as opposed to an idealized theoretical model, will face the same issues. A first-best solution may not be available, but among the second-best solutions in today's literature, the approach in this article represents a viable alternative. Our model is inferior to one imposed by an omnipotent omniscient social scientist, but as we shall never have an omnipotent omniscient social scientist this argument is irrelevant. The question is whether the proposed mechanism is better than the current one, which has a variety of disadvantages described in this article, such as reliance on war, violence, coercion. This article suggests that the answer is yes since it allows more choice than today's model. As in real markets we expect that widespread implementation of our model will enable innovations ameliorating dysfunctional externalities. Within the constraints imposed by the real world, governmental units will likely tend towards their optimal

size as determined by individual preferences. An optimal stationary solution will never be reached, since innovations in technology and organization, changes in culture, demography, population and preferences, and changing birth and death rates of individuals constantly alter what is optimal. Desicionmaking by autonomous individuals, however, jointly assure movement toward an ever changing optimal solution.

The common mechanisms for the creation and growth of states and distribution of wealth through human history have been warfare, violence, appropriation, defense, exploitation, theft, raiding, robbery, etc. Also today, "war can pay", just as robbery and theft can pay in a market economy otherwise based on voluntary exchange. Non-voluntary or non-free exchanges have traditionally been more important than they are today, and have in large parts of today's world been marginalized measured relatively to the total sizes of economies. The last centuries have witnessed a certain shift in emphasis from military warfare to economic warfare. A variety of factors play a role, such as technological progress, the emergence of rule of law, police, etc., but also self-coordination by self-interested individuals. Rather than population groups conquering territory and raiding other groups, global firms compete for market share. Rather than soldiers fighting physically, today lawyers and other professionals 'fight'' through political campaigning, rent-seeking maneuvers for licenses and monopoly privileges (Tullock 1967), commercial efforts to raise rivals' costs (Salop and Scheffman 1983), strikes and lockouts, litigation, etc.

Fortunately, literature emerges describing processes of fighting applying economic concepts, honoring individual decisionmaking. Examples are Grossman and Kim (1995), Hirshleifer (2001), Skaperdas and Syropoulos (2001).¹⁰ This ensures compatibility with the approach in this article applying Coases' (1988a) theory of firms on governmental units, observing that firms and governmental units are subjected to some of the same market forces. Enabling mechanisms for markets and enforcement mechanisms for voluntary exchange can thus emerge for governmental units, just as for firms. Autonomous individuals engage in decisionmaking and voluntary exchange, and may through various mechanisms, as history has shown, endogenously choose to refrain from warfare. E.g., Hausken (2004a) shows how voluntary exchange can emerge in a world of mutual

¹⁰ Whereas political science has traditionally accounted for distribution mechanisms where power, non-voluntary exchange, etc. play a role, classical economics has traditionally confined attention to production, consumption,

raiding, appropriation, and defense, when the appropriated production is less valuable to the appropriator than to the defender and the defense is not too inferior to attack.

As a dysfunctional externality, assume that 100 individuals have read Hausken's (2000) description of the benefits of migrating from groups with high productive efficiency to groups with high fighting efficiency. If these 100 individuals decide to create their own governmental unit and focus on raiding the wealth of all surrounding units, the natural response of the surrounding units is to search for defense and survival mechanisms beyond those considered by Hausken (2000).¹¹ To the extent the defense is superior to attack, as Clausewitz (1832:6.1.2) points out is often the case, the violent governmental unit will lose members. It may alternatively be cut off from various kinds of between-unit affairs, such as trade, humanitarian aid, etc. as often happens for nation states that do not follow UN resolutions. A violent governmental unit may not get dissolved, but it may lose significance. Emigration may occur, and remaining inhabitants may endogenously find an interest in redesigning its function from within to regain the trust and be welcome within the community of governmental units.

Alternatively, assume that 100 individuals either within a new or existing unit engage in wasteful political processes, e.g. as described by Congleton (1980). Individuals may engage in dysfunctional bargaining, individual rent seeking, bribery, political wheeling and dealing, etc. Individuals losing out in this battle may either choose the "exit" option, leaving those left behind worse off since they have fewer to exploit. Alternatively, individuals losing out may redesign their governmental function, thus shaping themselves up.¹² History suggests that marginalizing violent groups has been more successful than marginalizing groups engaged in political wasteful processes, which is common today.

Well designed enabling mechanisms for the creation, adjustment and dissolution of governmental

exchange, ignoring, as Hirshleifer (2001) puts it, "the dark side of the force".

¹¹ Similarly, having earlier focused on the IRA and spies from the cold war era, a democracy such as the UK currently expands its MI5 to meet the Al Queda threat.

¹² Note in this regard Hirschman's (1970) 'distinction between alternative ways of reacting to deterioration in business firms and, in general, to dissatisfaction with organizations: one-exit-is for the member to quit the organization or for the customer to switch to the competing product, and the other-voice-is for members or customers to agitate and exert influence for change 'from within'.... Hirschman's (1970) questions "the efficiency of the competitive mechanism, with its total reliance on exit.... As exit often undercuts voice while being unable to counteract decline, loyalty is seen in the function of retarding exit and of permitting voice to play its proper role."

units may, if successful, replace the current mechanisms and result in major advances in human welfare. A view gradually emerges that competition between governmental units is desirable, just as competition between firms is desirable. Early research in this direction has been made by Knag and Knutsen (1990), Knutsen (1992), Casella and Frey (1992), Frey and Eichenberger (1996), and Frey (2001). The main differences between the three latter articles and the current article are, first, a more carefully worked out and consistent definition of a governmental unit. Second, for a governmental unit we introduce an enabling mechanism which consists of a creation mechanism, adjustment mechanism, and dissolution mechanism. Our enabling mechanism provides a specific and straightforward account of the relevant processes. Since the purpose of this paper is to present an enabling mechanism for competitive governmental units, we do not seek to "prove" our assertions in a narrow sense. In our opinion, a well designed and articulated enabling mechanism is the key to success, just as the joint stock company (corporation) provided the nucleus for the financial markets. Most markets require some form of enabling mechanism to function. The world's financial markets were only able to develop with the invention of shares of stock. Thus the invention of the limited liability share based company provides the foundation for all of the world's stock markets. The "governmental unit" market, however, is as undeveloped or underdeveloped today as the equity markets where prior to the limited company invention. Even though "applied" constitutional economics may not carry the same prestige as more theoretical work, though this remains to be seen, the benefits to society may be greater. Knutsen (1992) provides a more comprehensive set of mechanisms and discussions beyond the scope of a single article.

Section 2 provides the disadvantages of the present (i.e. today's) constitutional model. Section 3 defines a governmental unit. Section 4 provides an alternative constitutional model, with advantages and limitations in section 5. Section 6 concludes.

2 Disadvantages of the present constitutional model

We distinguish between the temporary direct disadvantages of the present mechanisms associated with the methods for the creation, adjustment, and dissolution of units, and various permanent or semi-permanent indirect disadvantages caused by the lack of competition between units.

1. Present mechanisms rely to a large extent on coercion and violence, with substantial human and material loss in the creation, destruction, altering of boundaries, and also change of function of units.^{13 14 15}

- Many units do not have the kind of governmental, legal or social institutions that the population wants. Citizens often feel alienated from governmental affairs, and a lack of ability to influence.
- 3. Many units do not efficiently provide the population with the services it wants, i.e. resources are squandered and growth hampered by a dysfunctional (e.g. large and inefficient) public sector.¹⁶
- 4. Many units have a consistent majority/minority issue due to ethnic, religious or other factors.
- 5. The artificially determined sizes and boundaries of units cause unit dysfunctionality.
- Artificially determined exit and entry barriers, often combined with the "tyranny" of the majority over the minority, causes at least some residents to be located in a unit against their will.
- Present mechanisms often cause the emergence and/or continuance of units which are either dysfunctionally large or small with respect to geographical dispersion or the numbers of residents within their borders.¹⁷
- 8. Unit size is not presently dynamic so innovations in organization or technology are not

¹³ The total number of people dying from war in the 20th century equaled 10% of the world population in 1913. While it is clear that war and violent revolution reduce the general welfare immeasurably in the short term, the fact that these hardships are tolerated points to important perceived welfare benefits in the long term. To put it simply, if there hadn't been important perceived long-term benefits, there wouldn't have been so many wars, uprisings and revolutions.

¹⁴ See Congleton (1980) for an interesting model explaining why anarchy or "state of nature" (which is the present state in most cases for the creation, adjustment, and dissolution of borders) leads to waste of resources on non-productive processes such as bargaining, monopolizing, conquest, bribery, etc.

¹⁵ For example, a new unit may be created by local government reorganization initiated by a central authority, or in a state context, through "liberation", war, revolution, violent partition or UN Resolution. A unit may go extinct by losing a war (extinguished from without) or by revolution (extinguished from within). In a nation state or country context most creations and dissolutions of territorial units dysfunctionally take place in a context of violence and coercion. The creation of new states within the US was to some extent peaceful, aside from some Indian opposition. Opposition from original habitants is common, though there are examples especially in early human history of peaceful colonization of newly discovered uninhabited territories.

¹⁶ The public sector within the OECD member countries controls about 37% of GDP ranging from about 31% in the U.S. to about 60% in Sweden (tax revenues as % of GDP, 1998 figures from OECD website except US and Sweden figures which are preliminary 2003 figures) in OECD countries and has significantly lower productivity growth (in some cases negative) than the rest of the economy.

¹⁷ In the US with its relatively homogenous culture there is a very significant size difference between Rhode Island and California. Even though we do not know the "optimal" state size, the current span in units with similar functions and organization suggests that there may be room for optimization. Similarly Casella and Frey (1992:644) argue non-mathematically when discussing legal subdivisions of government within the US, that "no mention is made of the obvious fact that traditional legal subdivisions have become obsolete." This obsoleteness is largely due to the assumption of fixed borders. Casella and Frey (1992) do not provide a solution to the dysfunctionality of fixed borders, which of course is the purpose of this article.

reflected in changes to unit size and organization.¹⁸

- 9. The prevalence of rent seeking often incurs costs equaling or superceding the value of the rent (Krueger 1974, Posner 1975, Tullock 1980). There is widespread rent seeking among groups within units and also cross-border rent seeking, e.g. where units try to tax activities beyond their own borders.¹⁹
- 10. The lack of resource mobility between units is dysfunctional related to rent seeking²⁰ and for other reasons. Even though financial assets may move quite freely between units, the most important real factors are severely restricted in their mobility. The two most important examples are 1) land, including the natural and man-made resources associated with the land (oil and gas resources, ores, minerals, timber, agricultural products, factories, buildings, mines, residential housing etc.) and 2) people. Land in general "moves" only by war, and people mobility is restricted by natural, cultural, social, and institutional barriers.²¹
- 11. Although collective action has advantages, e.g. lower cost than the market price for certain activities, there are also disadvantages, as the literature has demonstrated. Even with democracy, there are still issues related to collective decision making that are unavoidable. Although representative democracy with majority decision making of some sort in many respects is superior to e.g. dictatorial decision making, there are imperfections related to the recording of each individual's preference function and methodological issues related to the weighing of each individual's function with respect to all other individuals in the collective

¹⁸ It may ease the understanding of this issue to consider that many state borders in the Eastern part of the United States have remained essentially unchanged for more than 200 years. Even assuming that borders were optimal at the time they came into existence, it is reasonable that not all of them are optimal today taking into account the considerable changes in technology the last 200 years.

¹⁹ Many countries, the U.S. included, tax their citizens on worldwide income independent of their residence and the source of the income.

²⁰ Caplan (2001) has shown that when borders are set exogenously, it is possible even for local governmental units to extract significant rent from citizens through property taxation. Caplan's (2001:101) conclusion is that "the only check on local governments comes through imperfectly functioning electoral channels." If borders are not exogenous, as is the case in this article, the rent extraction indicated by Caplan is no longer possible since citizens can exit together with their real property (housing).

²¹ Examples limiting people mobility, especially across higher order governmental units, are immigration law, language barriers and lack of cross-border skill recognition. If e.g. a Frenchman is dissatisfied with his government's policies and wants to move, he has to deal with more commuting or abandonment of contact with friends and family, most likely a new language (e.g. Spanish, English or German), a new social code requiring possibly years of effort to gain new social skills appropriate to his new abode, having to find a new place to live and work involving large transaction costs, and much time and effort with the task of just finding his way about his new place of residence. As the US has few formal internal barriers to the movement of people, and as academics are given highly preferential treatment in most countries' immigration law, share a common language (English) and to a large extent a common culture, the substantial real and mental barriers to general people mobility may not be fully appreciated. It is easy to confuse one's own position within a small economic and

preventing the achievement of a clearcut optimal solution.²²

3 A Governmental Unit

Our alternative constitutional model in section 4 provides an enabling mechanism for a governmental unit which we define with three necessary and sufficient characteristics

1. A territorial unit or area with a specified geographical extent at the local, regional, or global level.

2. At least one governmental function which specifies a set of rules which can only be set aside through collective decision making.

3. A population of domiciliaries (at least one) which lays a foundation for collective decision making.

A governmental unit presumes a territory, which is essential for the phenomena analyzed in this article. The territory need not be contiguous or large, but its extent must be non-zero.²³ The crucial aspect of territory is that it cannot be physically moved.²⁴ In contrast, individuals perform a benefit versus cost evaluation when moving across territories and between governmental units, bringing with them portable assets. Owners of resources connected with territory²⁵ can also theoretically bring these with them, for better utilization elsewhere, or to bring "out of harm's way". But, in reality, this is often excessively costly, making these owners uniquely vulnerable. Ownership of resources connected with territory, costs of changing permanent residence, travel costs, language barriers, cultural barriers, possession of specific competencies, etc. reduce movement across governmental units. These factors influence entry and exit of governmental units, which is otherwise free or as specified in the governmental function. I.e., to establish a benchmark, we purify our argument excluding from consideration entry versus exist systems based on force or threat of force.

intellectual elite (perhaps 0,5% on a worldwide basis) with that of the general public.

²² One example is that the majority gets its way and the minority loses out. Another example is e.g. the problem of cyclic majorities described by Black (Black 1958) and Condorcet (see Black 1958). Consider a three-person village using majority voting as a means of ranking each pair of alternatives. A clear-cut social ordering need not emerge. If Ann's preferences are I,II,III, Ben's are II,III,I, and Bill's are III,II, then, in pairwise votes, I beats II, II beats II, and III beats I.

²³ Territory has a fixed three-dimensional extent consisting of a surface area, proceeding inwards toward the center of the earth, and proceeding outwards into the atmosphere and beyond. Governmental units, which may overlap each other, cover the entire universe. Since each individual has a physical extent, it is impossible for an individual to avoid governmental units altogether.

²⁴ In principle, a slice of the earth can be cut off and moved to another location, leaving empty space. This empty space cannot be moved, and is thus different from portable assets.

²⁵ Examples are permanent structures on, below, or above a surface area, masses of earth, stone, mineral ores, trees, lakes, and to some extent equipment and machinery, household animals, etc.

A governmental unit differs from a geographical unit through assuming at least one governmental function which specifies a set of rules. This function is neither market based nor based on voluntary exchange. This introduces an inevitable coercive element agreed upon by domiciliaries through collective decision making. The governmental function can be set aside neither by individual nor collective market participants. Examples of governmental functions are tax collection and compulsory garbage removal.²⁶

A governmental unit presuming a territory makes it different from a club or a firm, which may have functions and some form of management or government, but need not have a territory. (Re firms, see Coase 1988c.) Our definition does not specify any particular form of the governmental function(s). We seek to establish a benchmark, allocate maximum autonomy to each individual, and avoid constraining collective decision making by factors above the individual level. Contrary to many theorists and practitioners within economics and political science, this article suggests that one cannot be certain as to what governmental units ought to concern themselves with. Hence our approach is similar to Coase's (1988b) approach. I.e., we apply Coase's (1988a) theory for firms, and develops it for governmental units. Individual market participants optimize themselves governmental functions just as individual firms optimize the boundary between internal and external market transactions. This gives a flexible state of affairs where decision making is driven from below. Alienation from governmental affairs is eliminated. Each individual agent is given autonomy, respect, and dignity to engage in decision making.

Flexibility in the design of governmental functions generalizes our enabling mechanism ensuring applicability to all kinds of governmental units with a territory, e.g. at the local, regional, state and national levels. The domiciliaries, which may be members of multiple governmental units embedded within each other, determine through collective decision making the governmental function for each unit. A governmental function e.g. at the regional level may or may not be constrained by the kind of governmental unit it is applied to, and this unit's interactions with other governmental units at the same, higher, or lower levels.

²⁶ The physical operation of a function may be contracted out, but the governmental unit determines e.g. how tax liability is computed or whether or not there should be compulsory garbage removal.

One characteristic of a state, it is often argued, is monopoly on the use of force within its territory. Both Frey (2001) and this article disagree. Multiple layers of government common throughout the world suggest otherwise. E.g. within the US, local, state and federal police forces usually operate within the same physical territory. Domiciliaries are usually members of multiple governmental units and determine through collective decision making the governmental function for each unit. This function determines what kind of coercive power can be exercised within each unit, concurrent with other governmental units at higher or lower levels. Without domiciliaries collective decision making reverts to residents and citizens and eventually to the owners of the territory. The unit is dissolved when the last remnants of the territory is accepted by another unit on the application of its owner.

Examples of governmental units are local communes, towns, cities, counties, regions, other regional governmental bodies, states, countries, nations, and certain super-national governmental units (e.g. EU, UN). Frey (2001:163ff) claims to discuss "government without territorial monopoly". He is correct that governments perform a variety of different functions, but ignores the fact that all his examples of "quasigovernmental organisations" actually control a territory. Let us consider his and some other examples. First, Frey (2001:164) claims that the United Nations and the International Court in Hague "do not have any monopoly power over a territory." He is correct that the function is designed in this manner, but the function also requires acceptance of the UN Charter, and these supernational units consist of a collection of member countries with a territorial extent. Second, the Catholic church's territory is the Vatican state. Its function relates partly to this territory, which it controls sovereignly, though mainly to member allegiance, etc. Third, sports associations (e.g. FIFA) are different from the UN. Although these have members from several countries, these countries as such are not members. Associations for sport, culture, religion, etc., action groups (e.g. Greenpeace), so-called NGOs, non-profit making and profit-making global firms, factories, mines, individual business owners, homeowners, etc. own territories of non-zero extent, e.g. with an administration or sales office. A "No trespassing" sign satisfies the governmental function requirement. Although these are governmental units, the governmental function typically pertains to a variety of non-territorial characteristics, e.g. mandatory rituals or donations, in addition to voluntary exchange not specified by any function. Furthermore, the scope of allowed governmental functions is tightly circumscribed by higher order or lower order governmental units. These examples would

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cease to be governmental units if they were to sell all their territory, and e.g. rent or lease it back. We exclude, as outside the scope of our analysis, governmental units without a territorial extent.

Among these examples, governmental units at the highest level, such as the UN with a charter, and at the lowest levels, such as a homeowner owning a few square feet, have the most limited governmental functions. The UN has no influence on welfare and power distribution, education levels, tradeoffs between economics and environment, etc. within each member country, and a homeowner is easily invaded by the police, is subject to taxation and other regulations, etc. These functions are usually severely constrained by governmental units at intermediate levels, such as nations, states, regions and local governments. These intermediate level governmental units are our main focus in this article. The nature of our argument is such that we see no clean-cut way, and also no reason, of excluding lower or higher level units from our definition. Frey (2001) attempts such exclusion through focusing on the building blocks of each governmental function, suggesting that some functions are more related to territory than others. They certainly are, but the design of each function is determined by domiciliaries through collective decision making. As researchers, we should refrain from dictating how domiciliaries within a territory should design their governmental function.

Unfortunately, Frey (2001) does not provide a clear definition of a governmental unit. He seems to suggest that if a unit has sufficiently many resources, and/or is sufficiently powerful, and seems to be involved in governing in some sense by having a function, then it is a governmental or quasi-governmental unit. Frey (2001) thus suggests that "there are meaningful governmental units, whose major characteristic is not the territorial extension of government but its function." This, he suggests, allows for the emergence of functional, overlapping, and competing jurisdictions, with a variable territory, over which they do not have territorial monopoly. In contrast, this article provides a clear definition of a governmental unit in terms of three characteristics. We agree with Frey (2001) that there are important organizations that do not have a territory, but think these should be distinguished from governmental units that do have a territory. Domiciliaries design through collective decisionmaking governmental functions, and may well assign labels such as functional, overlapping, competing, etc. to the various governmental units they are members of. To the extent governmental units at the same level or with similar functions, overlap, territorial monopoly gets divided between

governmental units as determined autonomously by each individual, i.e. "as the people want it".

4 An alternative constitutional model

The critique of mathematical models in the introduction does not mean that this section succumbs to a non-specific, qualitative, or sociological alternative constitutional model. Quite the contrary; the proposal falls firmly within the economic tradition where each individual maximizes his own welfare, but he does so in a manner where preferences and beliefs are not given in the traditional economic sense. Preferences and beliefs are partly and differentially known to the individuals, and they engage in bounded rationality and trial and error in attempts to increase welfare.²⁷ We recognize that it is never possible to fully know every individual's set of preferences, i.e. omniscience is impossible.²⁸ Thus our task is not to prescribe each individual's actions, but rather to help each individual express his preferences in a more efficient manner.

Most units today do not have formal mechanisms for the creation, termination, amendment, altering, redrawing of boundaries, and change of function of units. Instead many units (e.g. states) are assumed to exist unchanged for eternity. There may be benefits of loosening up this rigid structure, e.g. by introducing an enabling mechanism consisting of the following Creation Mechanism,²⁹ Adjustment Mechanism, and Dissolution Mechanism.^{30 31}

²⁷ Elster (1983) distinguishes between the "thin theory of individual rationality" (where preferences and beliefs are given) and the "broad theory of individual rationality" (looking at how preferences and beliefs are shaped, through judgment and satisficing). There exists much literature on this subject outside the scope of this article, initiated by Simon's (1955) argument that man has limited capacity for processing information and preferences.

²⁸ Assuming quantitatively given and one-dimensional preferences, Alesina and Spolaore's (1997:1030) model assumes that "the world population has mass 1, and we assume a continuum of individuals with ideal points distributed uniformly on the segment [0,1]." In contrast, we assume neither quantitative and one-dimensional preferences, nor specific citizens' distributions.

²⁹ The Creation Mechanism functions through a self defining referendum thereby eliminating the need for apriori judgments, i.e. judgments external to the model itself, about the necessity of unit creation, the proposed borders, etc. A priori judgments, unfortunately, depend on the opinions, wisdom, knowledge, and the inherent biases of those individuals or that group making the judgment.

³⁰ Assumptions 1 and 2 are fundamental, and may by themselves imply 3 and 4 since any single citizen may achieve 3 and 4 by going via 1 and 2. However, we prefer to set up Assumptions 3 and 4 explicitly, as a shortcut, since the indirect implication is more cumbersome for the citizens and thus involves higher costs. Also note that 1 and 2 presuppose collective action (even though N may be 1), while 3 and 4 are related to individual decisions. Collective action involving any number of possibly conflicting proposals and any number of decision makers rapidly increases complexity and may not have an easily agreed upon optimum solution (Black 1958). This article argues, however, that it is more important that there is a solution rather than whether or not it is the "optimum" solution. The reason for this relative lack of concern for reaching an optimum unit size (in terms of population and geographical extent) at the first iteration has to do with the self adjustment that may take place afterwards through the Adjustment Mechanism or, in a more cumbersome fashion, through repeated applications of the Creation Mechanism.

Creation Mechanism (Assumptions 1 and 2):

Assumption 1. Each individual has the right, in collaboration with that subset of the individuals domiciled within the boundaries of a proposed unit, to create a new unit either within the boundaries of an existing unit, or by the amalgamation of two or more units or parts of units.

Assumption 2. Any domiciliary³² qualified to vote may sponsor a draft proposal for the creation of a new unit. The draft shall describe the boundaries of the proposed new unit, which must be a territorial unit and thus have a size at least marginally larger than zero.

Adjustment Mechanism (Assumptions 3 and 4):

Assumption 3. Each individual has the right to leave or to transit³³ through any unit and bring with him property of any kind.

Assumption 4. Each individual has the right to withdraw from any unit's territory any of his noncontested real estate that has been accepted by another unit or retain his existing domicile or citizenship and the territorial affiliation of his non-contested real estate in the case of creation of a new unit.

Dissolution Mechanism (Assumption 5):

Assumption 5. A unit must at all times have a non-zero territorial extent, and is dissolved otherwise.

The Creation mechanism is a considerable transition toward individual freedom and direct democracy. Assumption 1 lets each individual choose where to be a domiciliary or citizen.³⁴

³¹ The basis for these assumptions may be found in a prior work of one of the authors, see Knutsen (1992) or www.basiclaw.net.

³² We are using the term "domiciliary" to indicate that the person must have more than temporary residency within the unit. We could also have used the term citizen without significantly altering the overall result. In fact for most individuals and thus most of the time, for the overall result, it would not make a difference whether we used the term resident, domiciliary or citizen. There may, however, be occasions where due to rapid population shifts these slight differences may matter, and thus we have settled for the definition that most closely signifies a permanent attachment to the territory.

³³ Transit is relevant in terms of practical implementation of the model, e.g. when proceeding from one unit to another requires passing through a third unit.

³⁴ Just as stock exchanges pose requirements such **a** minimum amounts of capital, trading, and other requirements for stock companies, as part of an actual implementation individuals may determine minimum or

Assumption 2 allows each individual to take the initiative to create a new unit. Requiring unit size at least marginally larger than zero is done to rule out units without territory, as discussed in section 3 related to Frey (2001), and to ensure that each citizen/domiciliary has a location to "place his feet".

The Adjustment mechanism is a considerable transition toward freedom of movement. Assumption 3 provides the usual personal exit mechanism, but includes "property of any kind". This includes both portable assets and resources connected with territory, discussed in section 3, which, through physical movement or re-drawing borders, can be transferred to another unit. While the freedom of traditional "free" exit mechanisms are limited by ownership of resources connected with territory, travel costs, cultural barriers, etc., our mechanism reduces the exit costs associated with traditional immovables, cultural barriers etc.. Assumption 4 clarifies what is meant by the "movement" of real property and provides a mechanism that is independent of the actual movement of the physical person, i.e. a citizen's property may move even though the citizen stays put. For the purpose of Assumptions 3 and 4, real estate is meant to include any other property interests associated with real estate, i.e. not only the land and buildings themselves, but also ores and minerals located below ground, or timber and agricultural products located above ground. The Creation and Adjustment mechanisms tie together citizens and real property owners. Individuals decide whether to create a new unit, but need at least one property owner or they need to purchase territory. The passage "that has been accepted by another unit" in Assumption 4 is essential since a governmental function for a unit may place restrictions on real estate that can be imported. A governmental function may also specify entry criteria for new members, e.g. specifying a fee, requesting certain competence levels, personal characteristics, family relationships, or denying entry if a desired size has been reached.

The Dissolution mechanism in Assumption 5 allows units to dissolve. Just as a factory may be empty at night, even if all residents leave a unit temporarily, or permanently, the unit's territory is still owned by someone.³⁵ Without domiciliaries collective decision making reverts to residents and citizens and

maximum numbers of domiciliaries for the creation of certain governmental units.

³⁵ As a tentative hypothesis, the authors suggest that the UN may claim ownership to territory not claimed by anyone else. However, there appears to be a belief that no one owns the North Pole (http://members.tripod.com/90north/northpole.htm), although Canada at various times claims sovereignty, and Greenland (Denmark) has neighboring interests. The continent surrounding the South Pole (http://www.globalclassroom.org/antarct9.html) constitutes nearly a tenth of the world's territory. Argentine, Australia, Chile, France, Norway, Russia, the UK, the US claim pie-slice sections, but the 1959 Antarctic Treaty freezes such territorial claims. No one has yet claimed ownership for the moon, Mars, etc. For disputed territory,

eventually to the owners of the territory. The unit is dissolved when the last remnants of the territory is accepted by another unit on the application of its owner.

To see how the Creation, Adjustment, and Dissolution mechanisms may operate, consider the following statement by the 1991 Nobel prize winner Coase (1988d:117):

"The government is, in a sense, a super-firm (but of a very special kind) since it is able to influence the use of factors of productions by administrative decision. But the ordinary firm is subject to checks in its operations because of the competition of other firms which might administer the same activities at lower cost, and also because there is always the alternative of market transactions against organization within the firm if the administrative costs become too great."

In Coase's spirit, the proposed remedy of this article is to subject units to some of the same market forces as ordinary firms. The expectation is that this will materially lower the cost of government, or what amounts to the same thing, increase the benefits or welfare associated with governmental units. However, the definition of costs and benefits is much broader than Coase's. I.e., we include not only the tangibles measurable by income, gross domestic product and the like, but also the more difficult to measure intangibles like lack of coercion, peace, subjective happiness, etc.

Consider a given level (local, regional, global) with a certain number of governmental units and a certain number of domiciliaries within each unit. The utility or welfare u for each individual in a given unit³⁶, defined as benefits minus costs, can be defined as

u = u(g, s, o, p, r, t),

where g=geography (size, shape, etc of unit) s=Social factors (language, ethniticity, religion etc.) o=politics, social organization and legal system (1)

we let the appropriate court settle the issue. For territory that is abandoned or not yet claimed, we assume that the first individual who claims it as his, is the owner, possibly through court settlement.

³⁶ The collective welfare function is a pure aggregate of the individual welfare functions, and is thus determined by the same variables.

p=population of unit

r=resources, natural and man-made available to unit

t=technology or knowledge available to unit

The welfare function u has several important characteristics. First, it consists of many variables. The exact number will vary from case to case as any individual variable may be fixed (constant) for some units and variable for others. Additionally, there is no immediate and clear distinction between benefits and costs. E.g., particular values for social factors may be subjectively perceived as benefits by some individuals, and perceived as costs by other individuals. (In general whether any particular quantity is a cost or benefit depends on where we take our reference level, 0-level, to be.) If units are relatively large in terms of population and geographical size, each individual's decision as to which unit to adhere to has only negligible impact on the character of the unit itself.³⁷ Thus we have a market-like structure, provided that transaction costs of all kinds (including discovery costs, decision making costs, etc.) are relatively low, which it is the purpose of the Creation Mechanism and Adjustment Mechanism to provide. This article does not propose to abolish government. Thus the benefits of administrative decisions noted by Coase will still be available to the extent that the costs in the aggregate are lower than what may be obtained in the market.

5 Advantages of the alternative constitutional model with limitations

The advantages of the Creation Mechanism and Adjustment Mechanism are as follows:

- 1. All decision making is delegated down to each autonomous individual where no majority voting allows for the "tyranny" of the majority over the minority.
- 2. The absence of exit and entry barriers causes sizes of units to be optimally adjusted as each individual maximizes his welfare. This self-adjustment feature has many advantages.
- Although there are differences in the impediments to the creation and destruction of units, and although violence may play a role, this article suggests that benefits may be realized by lowering those many and diverse barriers to entry that do exist.
- 4. The benefits of loosening up the rigid structure in sections 2 and 3 may be of the quantifiable kind, e.g. better services at a lower cost, and thus better operational resource utilization.
- 5. The benefits may also be of the less easily quantifiable kind, e.g. better allocation of resources in

the sense of more closely adhering to the subjective preferences of the individuals.

- 6. If the end result of the present mechanisms described in sections 2 and 3, and the Creation Mechanism and Adjustment Mechanism is the same, e.g. a new unit, substantial welfare benefits and other benefits may be gained by having the issue settled peacefully rather than violently.
- 7. Even if the end result is not the same, e.g. because the alternative constitutional model allows for the creation of units that would not have been created otherwise or for the non-creation³⁸ of units that would have been created through a more violent method (certainly not a very common occurrence), there may still be welfare benefits. Such benefits arise from the rational behavior hypothesis where one of the postulates is that more choice is preferable to less choice.³⁹ Recent econometric results by Frey et al. (2001:2) support the hypothesis that more choice, from the individual's point of view, is better than less choice. I.e., there may be benefits associated with the process itself, referred to by Frey et al. (2001) as process utility, quite independent of the final result. Even without evident benefits,⁴⁰ there would still be a welfare benefit associated with having the option of creating a new unit whether that option is exercised or not.
- The mechanisms tend to optimize governmental units independently of how units are modeled, as shown below.

Further advantages of the Creation Mechanism are as follows:

- 9. No a priori judgment by the individuals or anyone else is necessary, since the mechanism is self defining (a self defining referendum). It is self defining because it is the proposal itself that defines the boundaries of the proposed new unit, which implicitly defines who are the decision makers (voters).
- 10. The mechanism is also self-limiting, and self-adjusting with respect to geographical size and population. If the proposed geographical size or population is too large or too small, the proposal will fail as the individuals will no longer believe it to be in their interest to vote in favor

³⁷ As is always the case, if the number of participants is low, we no longer have a marketlike structure.

³⁸ Non-creation applies to the actual process. Non-creation means absence of creation. I.e., it applies to a unit that might have existed, but never was created. Non-creation is thus distinct from abolishment which applies to an existing unit. More specifically, non-creation applies to men living in Hobbes' (1651:chap. XIII-XIV) "state of war", without "natural laws" to govern them, thus not creating a new unit, and not abolishing a unit since no unit exists.

³⁹ I.e., expanding the opportunities for peaceful voluntary unit creation or non-creation by itself increases welfare, if for no other reason than because of the expanded choice itself.

⁴⁰ Benefits would not be evident if the unit in question had perfect knowledge of each citizen's preferences and was perfectly responsive; a somewhat tall order.

of the proposal. Thus it is in the interests of the sponsors of the proposal to adjust the proposal to what they believe to be an optimum value.

11. When optimizing with respect to size, keeping the other variables constant, the Creation Mechanism makes possible moves to the global maximum of the welfare function, since the people do not have to pass through valleys between local maxima in cases when the welfare function is not single peaked. While the Adjustment Mechanism is gradual, i.e. individual by individual or lot by lot as far as territory goes, and thus moves you from one point to the next point adjoining on the welfare surface⁴¹, the Creation Mechanism makes possible much more radical changes directly from one point on the surface to virtually any other point.⁴²

Further advantages of the Adjustment Mechanism are as follows:

- 12. Adjustments at the edges give optimal size of government (local optimum).
- 13. Adjustments at the edges give local minimum for the cost function, or local maximum for corresponding welfare function.
- 14. Adjustments in general involve fewer people and less territory and may be made to operate at a lower total cost than referenda. Adjustments, together with the option of the Creation Mechanism, provide an implied unanimity in the adherence to a governmental unit.
- 15. Even if many factors like geography and resources influencing optimal size of government may remain fairly constant, others change, e.g. population, social factors, politics, and above all technology.

Let us illustrate through four different lines of reasoning how the Creation, Adjustment, and Dissolution mechanisms tend to optimize governmental units independently of how units are modeled.

1. Let us use Coase's model of government as a firm, described above. Firms emphasize minimizing

⁴¹ Each citizen's welfare function has a component related to other citizens. When the population is large, the impact of a one-person population change on each of the other citizens is small, approaching zero as the population approaches infinity, but nevertheless facilitates an incremental move from one point on the welfare surface to the next adjoining point.

⁴² Multipeaked utility functions may for instance come about as a consequence of possible shifts in technology. E.g., when sufficiently many citizens decide to move from a small to a large unit, it may e.g. at some point become feasible to build a new subway system or a new highway to increase welfare. This gives a peak at a low population/geographical extent value, and another peak at a high population/geographical extent value that

costs of production. Firms exist because there are costs associated with market transactions that may be eliminated by internalizing the allocation of resources. This internalization creates administrative costs. For any given product or service the firm internalizes those functions where the administrative costs are lower than the corresponding transaction costs in order to optimize (minimize) the sum of costs per unit of output and thus maximize profits. If a firm fails to optimize its cost structure, it may go out of business as customers switch to substitutes from other lower cost firms. The market mechanism thus constrains the firm both on the input side (encouraging the firm to enter into market transactions for those inputs it cannot obtain at a lower cost internally) and on the output side since the price obtainable for its outputs are determined by the market. With the proposed mechanisms, governments will be similarly constrained on the output side. If a unit charges (through taxes or fees) substantially more for the same (or nearly the same) products and services as nearby units, it will find its borders closing in on it as its residents migrate to other units either through the Creation Mechanism or the Adjustment Mechanism. Thus, assuming the managers of governmental units would like to "stay in business", they will have broadly the same incentive as "firm" managers in optimizing their cost structure. (Even if there's no conscious effort on the part of unit managers as such, the end result will anyhow be that the low-cost producers will be the survivors.)

2. The proposed model tends to optimize the size of units. Many typical local governmental tasks have a cost function that is size dependent. If the unit size (in terms of population or area) is too small, costs are high. Cost per unit then falls as size increases until a certain optimum, beyond which costs again rise. To the ultimate customer it doesn't really matter whether the terms of the provided service is competitive because of optimal input selection according to point 1 above or because the governmental unit as such has an optimal size. But if size is non-optimal, an alternative governmental unit may become even more attractive by combining an optimum input selection with optimum size. Thus in a long-term equilibrium situation both size and the proper mix of internal and market transactions will be optimized.

3. While the two lines of reasoning above is most readily applicable to typical local governmental functions, social, legal and cultural issues may often be more prevalent at higher levels of

enables highway construction, while all intermediate points cause lower welfare.

government. Historically, state creation has come about primarily because of social and cultural issues rather than narrow economic considerations. The mechanisms are not, however, size dependent; they work equally well whether at the county, city or township level or at the state or national level. Neither are the proposed mechanisms dependent on the motivating factor whether it be narrow economic interests or cultural factors. The mechanisms are there to facilitate transactions, they don't ask you why you want to transact. Consequently, the proposed mechanisms take into account not only what can be measured like the cost of services, but also those intangibles like religion, political system, and other social and cultural issues, that are subjectively important, but difficult to measure. The long term equilibrium will be determined by all these factors, and thus may or may not coincide with the results obtainable through a more technocratic long term cost function even if that could be constructed.⁴³

4. The mechanisms may also be analyzed in terms of the unanimity criterion proposed by Wicksell (1896), extended by Buchanan and Tullock (1962). Buchanan and Tullock (1962:64) point out that the expected external costs to each resident of collective decision making reaches zero when the decision requires unanimity. This is because "he will not willingly allow others to impose external costs on him when he can effectively prevent this from happening." The proposed mechanism does not impose a unanimity criterion for all decisions, but it does in a sense require unanimity or very near unanimity, in the context of adherence to a particular territorial unit⁴⁴. The reason is that any resident may at any time propose the creation of a new unit, and a resident landowner may in fact decide as a single resident whether a new unit should be created. This adherence to a particular unit places definite constraints on the aggregate outcome of all decisions. The aggregate outcome must, taken as a whole, confer net benefits on all individuals within that unit. Furthermore, these benefits cannot be less than the benefits any other unit is capable of offering to that particular resident, absent decision making and transaction costs, and assuming equivalent other costs. The implication, over time, is that Pareto optimal solutions are obtained where no resident can be made better off without making somebody else worse off.

⁴³ The emphasis on facilitating market like transactions also eliminates the need for any (a priori) normative judgments about which factors "ought" to be included in any explicit optimization. Thus in a very real sense we bypass much of the current discussion regarding the size of units, optimal level of public goods provisioning, taxation etc. Once we leave these issues directly to the citizens, our own opinions become unimportant.

⁴⁴ If that territorial unit is a sovereign state we do in a sense impose this unanimity requirement on the constitutional makeup of that state as well. This can be made clearer by extending the second sentence of

Regarding point 4 Alesina and Spolaore (1997) do not impose the practical unanimity criterion, which makes their conclusions problematic in terms of the criteria discussed above. Alesina and Spolaore (1997:1035) apply a majority decision making model, which does not assure Pareto optimality. Although they can assure that the aggregate outcome confers net benefits on the majority of individuals within that unit, they cannot assure that net benefits are conferred on all individuals within the unit. This means that disgruntled individuals have nowhere to go in Alesina and Spolaore's (1997) approach, and must accept the tyranny of the majority discussed in section 2. Alesina and Spolaore's (1997) approach thus stands in stark contrast to the approach in this article, which indeed allows each disgruntled individual somewhere to go through individual decisionmaking.

Furthermore, Alesina and Spolaore's (1997) main conclusion, that democratization leads to an inefficiently large number of countries, is only correct for their majority decision making model. When other decision making models are applied, such as the one in this article imposing the practical unanimity criterion, a different conclusion is reached. It is quite possible that democratization leads to a large number of countries, but this number is not necessarily inefficient, and the question is also inefficient for whom. From the individual's point of view, our proposal leads to a number of countries that is reasonably efficient, though we are open to the possibility that an omnipotent and omniscient leader may find an even more efficient number of countries.

Let us contemplate a few limitations. First, Frey (2001:170-171) contemplates whether residents and consumers become overburdened in a drect democracy. We propose that mechanisms for voting can be adequately structured, applying the internet with the advent of electronic signatures. Frey proposes that "a governmental or a private advisory service can be established, which offers information and support for the consumers' decisions."

Second, the mechanisms may create states that are economically inefficient in a narrow sense. The response is that this doesn't really matter. Narrow economic efficiency may not be what the population wants; i.e. it is the subjective welfare of each resident that counts, not an outside observers opinion on what the welfare preferences of the participants ought to look like. Residents

Assumption 2: "The draft shall describe the boundaries of the new state and its constitution."

may legitimately trade monetary income for other intangible subjective benefits.

Third, the mechanisms may create states that are non-contiguous and thereby dysfunctional. The response is that yes, states may be non-contiguous. However, whether such a state is necessarily dysfunctional is a question that has to be answered not by economists or outside observers, but by the residents, which constitute the group that is most directly involved. This is something the population would have to consider in their voting.

Fourth, the mechanisms may impose costs on parties outside the proposed borders, e.g. people suddenly finding that they are located on a border instead of in the middle of a country. This is a general problem, any real consumption or investment decision influences other people. It is only in the idealized world of perfect markets that externalities do not exist. If I decide to move my grocery purchases elsewhere, my current supplier may go out of business and his employees become unemployed. Does this mean that I should be restricted in my choice of where to buy my groceries? The externalities we impose are in many respects needed to get the market mechanism and an efficient resource allocation to function. If our grocery supplier loses customers this provides him with the information he needs to either enhance his product, or, if he goes out of business, releases resources that can be put to better use elsewhere. The real question is not between the mechanisms proposed in this article and a perfect world, but between the mechanisms and the state of affairs as they are today, or between the mechanisms and other less than perfect mechanisms.

Fifth, Higher level governmental units have a legitimate role to play in arbitrating conflicts between lower level governmental units. At the world wide level this would mean that the UN and the International Court of Justice would have a legitimate role in arbitrating conflicts related to the implementation of our mechanism between sovereign nations, and that a national government would have a legitimate role in arbitrating conflicts between component states in a federation and so on down to the lowest level. The function of each higher level governmental unit, however, is determined by the domiciliaries of its members through collective desicionmaking. These domicilaries may delegate desicionmaking authority to experts representing higher level units, but can withdraw such delegation if the experts abuse their power.

6 Conclusion

The article suggests a constitutional model attempting to remedy shortcomings of the contemporary constitutional models, at the local, national, or super national levels. Rather than focusing on a narrow model with restrictive and specialized assumptions, and subsequent solutions, as has been common in the literature, the article defines a governmental unit in a straightforward manner. We thereafter propose a straightforward enabling mechanism consisting of creation, adjustment, and dissolution mechanisms for governmental units. This gives autonomy to each domiciliary as in a direct democracy. Realizing that residents are themselves best equipped to find their own solutions, the emphasis is on the practical approach of how residents discover and implement their subjective preferences and how this discovery and implementation process can be facilitated and corresponding costs lowered.

The article subjects governmental units to some of the same market forces as ordinary firms, in the spirit of Coase (1988a). This brings the interaction between governmental units closer to a market structure, and serves to eliminate or reduce many of the coercive elements of government. Creating a more market like structure reduces or eliminates the need for normative or a priori judgments about the optimum size of units, optimum provision of goods and services, optimum level of taxation, etc. Reduction of barriers to entry also facilitates the introduction of technical and organizational innovations.

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