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Abstract. International organizations use a bewildering variety of voting rules—with different thresholds, weighting systems, veto points, and other rules that distribute influence unequally among participants. We provide a brief survey of the major voting systems, and show that all are controversial and unsatisfactory in various ways. While it is tempting to blame great powers or the weakness of international law for these problems, we argue that the root source is intellectual rather than political—the difficulty of designing a voting system that both allows efficient collective decisions and protects the legitimate interests of members. We show how a new type of voting system—quadratic voting—could in theory resolve these problems, and while it may be too new or unusual to implement any time soon, it provides insights into the defects of the existing systems.

International organizations—institutions that are established by states to perform functions on their behalf—make collective decisions using a diverse array of voting rules. Some organizations, like the World Trade Organization and the Council of the International Seabed Authority, act (at least on some matters) by unanimity rule or consensus. Others, like the Human Rights Council, act by majority rule. International courts of various sorts—from the International Court of Justice to the International Criminal Court—also make decisions by majority rule. The World Bank and the International Monetary Fund use majority rule plus weighted voting, where some countries may cast more votes than others. Supermajority rule is also common, frequently used by various European decision making bodies. And some voting systems are even more complex, combining different features. For example, the Security Council operates with a 3/5 supermajority rule while the five permanent members have vetoes. Numerous other variations exist.

What accounts for the variety of voting rules? International institutions are established to serve the interests of member countries. They are considered necessary in the first place because of transaction or decision costs: countries can only with great difficulty negotiate resolutions to problems, and if all countries must agree to a solution to every problem or conflict that arises, any single country can hold out for a better deal. But once an international institution exists, it may act contrary to the interests of its members or of some of its members. A particular concern is that one group of countries may use an institution to harm another group of countries or a particular country.

An optimal institution will, in the language of economics, maximize surplus for its members -- the institution should produce (ex ante) efficient outcomes by maximizing the value of cooperation net of the costs of operating the institution, including direct decision costs and any costs associated with decisions that reflect opportunism by a subset of members at the expense of others. Voting rules must be designed in relation to this objective, but no voting rule is likely to

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1 Chicago & NYU. Prepared for a conference sponsored by the Chicago Journal of International Law in the fall of 2013. Thanks to conference participants for their comments, and to Siobhan Fabio for helpful research assistance.
be ideal. Majority rule, for example, greatly mitigates the hold-out problem by enabling the majority to outvote the hold-out, thus reducing the incentive to hold out in the first place. But a majority can also expropriate from the minority, and the fear of such expropriation may deter countries from agreeing to majority rule. Countries can address these problems in various ways: by using a supermajority or unanimity rule, giving vulnerable countries vetoes or weighted votes, narrowing the scope of the decision making body’s authority, limiting membership to countries with closely aligned interests, and so on. In this paper, we explore how these considerations shed light on the voting systems used in international law.

The plan is as follows. Part I provides a brief legal and historical background. Part II provides a framework for thinking about voting issues in international organizations. Part III applies this framework to several examples. Part IV addresses a possible direction of reform.

I. Background and History

Formal international organizations with complex voting structures came into existence in the twentieth century. Before then, countries normally cooperated on a bilateral or ad hoc basis, and almost never set up independent organizations. Countries cooperated diplomatically and entered treaties with each other. From time to time—usually after conflicts that involved multiple states—they would send delegates to an international convention in the hope of either creating a multilateral treaty or (more commonly) a set of understandings for guiding their future interactions. After the Napoleonic Wars, for example, countries met in the Congress of Vienna to establish what would become the Great Powers system of the nineteenth century. Another important conference, the Congress of Paris, met after the Crimean War in 1856. These conventions were ad hoc affairs, and their decisions were made by consensus.

The one nineteenth-century institution that resembled modern international organizations was the arbitration panel. States would on occasion resolve their disputes by appointing arbitrators and giving them the power to render a binding judgment. Arbitration panels always had an odd number of members and decided their cases by majority rule. Like modern international organizations, arbitration panels received a “delegation” of power from the states that set them up. Unlike modern international organizations, they were established to address a single conflict or issue and then disbanded at the conclusion of the dispute. Arbitration was used frequently by the United Kingdom and the United States; by the end of the nineteenth century there had been efforts, largely unsuccessful, to institutionalize it in permanent bodies.2

The pre-twentieth century aversion to international organizations might be attributed to the positivism of the time, which held that a state could not be legally bound without its consent. An international institution that operated by majority rule could bind a state that is outvoted.3 However, there was no reason in theory why positivism couldn’t accommodate ex ante consent to an institution that used majority rule, and indeed the popularity of arbitration suggests that states could reconcile themselves to majority rule if the gains were high enough. More likely, states saw little need for complex international institutions at a time when a handful of great

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powers could cooperate informally while holding spheres of influence over much of the world, and international cooperation was relatively limited.

All this changed in the twentieth century. The turning point was World War I, which convinced statesmen that countries needed to cooperate more closely on security issues, and which gave rise to the League of Nations. Various more specialized organizations were founded in its wake, including the International Labor Organization, which was given the task of setting labor standards. The League of Nations collapsed in the years leading up to World War II, but after that war countries redoubled their efforts to build international organizations. The United Nations was created, along with an International Court of Justice, and an enormous number of committees, commissions, and councils, which were given jurisdiction over health, human rights, and related topics. Western countries created the International Monetary Fund to stabilize exchange rates, and the World Bank to finance European reconstruction. They also negotiated toward the creation of an International Trade Organization which, never approved by the U.S. Congress, was supplanted by the earlier General Agreement on Tariffs and Trade (GATT), and later subsumed into the World Trade Organization (WTO) in 1994. Other important organizations created along the way included the International Seabed Authority, the International Criminal Court, and various European institutions, which were, however, regional rather than international in scope.

The founders of all of these institutions faced basic questions of institutional design, including our topic of the voting system. The premise that all states must consent to all binding decisions was quickly abandoned. Another legal principle—that of sovereign equality—seemed to suggest that all states should have an equal vote, and majority rule is often regarded as the fairest way for groups to make decisions. But for reasons we will discuss, states did not consider themselves bound to this system. Instead, they approached the voting rules in a pragmatic spirit, and hammered out compromises that reflected the functions of the institutions, the goals of the states, and their relative power.

II. Theory

States create international organizations to make or facilitate decisions on their behalf. In some such organizations, a principal or group of principals hire an agent to perform a task for their benefit because the agent has superior information, or can gather information, and thereby make better decisions than the principals can. This framework is perhaps descriptive of the WTO adjudicative system, relying on arbitral “panels” and an Appellate Body. But it is not characteristic of all international organizations (or even all aspects of the WTO). In the United Nations, for example, agents do not make significant decisions on behalf of member states, or at least not the major member states. The UN Security Council and certain other international organizations appear to perform the simpler function of facilitating group decision making by its members—that is, to save decision or transaction costs. The Security Council does nothing independently of its members; it is essentially just a venue for the members to meet coupled with a set of voting rules.

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4 Zamora, supra note.
So let us put aside the information gathering function for now, and consider a simple setup in which a group of states agree at time 1 that they will make decisions according to a certain voting rule at time 2 and later. As noted, we assume that the states create the rule to maximize ex ante joint surplus net of decision making costs and the costs of opportunistic behavior. Let us consider two standard rules: unanimity and majority. Under a unanimity rule, all states must agree to a proposed outcome. The advantage of the unanimity rule is that the outcome must therefore make all states better off than the status quo—the outcome is Pareto-superior.\(^5\)

The disadvantage of the unanimity rule is that decision costs are high. This results from two distinct problems. First, there will often be a range of decisions that increase the aggregate welfare of the states (i.e., that are Kaldor-Hicks efficient – they provide gains to the winners that exceed the losses to the losers) but that do not satisfy the Pareto criterion. They may not receive unanimous support ex post unless transfers are arranged, and it may be expensive for states to arrange transfers to each other. Yet, from an ex ante perspective (subject to a qualification below) states typically want Kaldor-Hicks efficient decisions to be made because they in expectation gain from them, as long as they take turns being winners and losers (or an ex ante transfer is arranged to compensate losers prospectively).

Second, states can hold out under a unanimity rule whether or not they gain from a prospective decision, demanding a payoff in return for their consent. But if many or all states hold out, then there will not be enough surplus generated by the decision to pay all the states off.

Now consider majority rule. The major advantage of majority rule is that decision costs are low. The states that lose from a Kaldor-Hicks efficient outcome are simply outvoted; transfers do not need to be arranged. Any state that threatens to hold out can also be outvoted. But now the problem is that the majority of states can force through a decision that is Kaldor-Hicks inefficient and that transfers value from the minority to the majority. This risk of “exploitation” can make majority rule unattractive from an ex ante perspective: while decision costs are low, the voting rule permits inefficient outcomes as well as efficient outcomes, and so may in aggregate have negative net expected value.

One can also pick a rule between majority and unanimity—a supermajority rule of 3/5, 4/5, or whatever. As the supermajority required by a voting rule increases, the decision costs increase as well (because more states must agree) but the exploitation costs decline (because fewer states can be outvoted). Buchanan and Tullock conclude that the optimal decision rule balances decision and exploitation costs, and so will vary according to these parameters.\(^6\)

But there are other considerations as well that are of special importance in international relations—above all others, the problem of heterogeneity of interests. Consider a proposed international organization that includes a number of like-minded countries, and a minority of outliers. For example, imagine a regional trade organization that includes 7 developing countries and 3 developed countries. Suppose further that the developed countries can gain from entering this organization to the extent that it reduces trade barriers, and protects their investors from

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\(^6\) Buchanan & Tullock, supra note.
foreign expropriation. All of the countries can gain ex ante if the rules on expropriation are developed efficiently (so that they encourage investment and minimize value-reducing expropriation) but the developing countries could gain ex post if they are allowed to engage in unconstrained expropriation. At the outset, the rules are not negotiated and the members simply choose a voting rule for their later adoption.

We can imagine various possible outcomes. The developed countries might agree to majority rule despite the risk of expropriation because they believe that the poor countries will not vote for inefficient expropriation (perhaps because they do not want to deter investment), or that they will do so only in rare circumstances. At the other extreme, the developed countries might demand a unanimity rule or a strict supermajority rule (8/10) so that they can block adverse rules, while in the process giving up some of the decision-cost benefits of majority rule.

Other deals are possible. The developed countries could be given weighted votes. For example, they could be given three votes each (so they can always block the developing countries 9-7) or two votes each (so they can block a majority of developing countries if they can persuade or bribe one of the developing countries to take their side). In this way, a developed country has greater influence over outcomes but cannot veto any outcome that hurts it. Another possibility is that the developed countries could be given agenda-setting power, for example, through the exclusive right to initiate proceedings, or membership on a special body that makes recommendations to a larger body. Yet another possibility is that certain outcomes or decisions can be ruled off limits to the body; or the body’s power to issue binding rulings or interpretations may be limited. When we discuss international organizations in Part III, we will see other examples of rules that protect countries in the presence of heterogeneous interests.

However, the different rules that we discuss all far short of optimality. The basic problem is that the welfare-maximizing decision must take into account both the fraction of states that benefit from it and the extent of the benefit for each state. Simple one-state-one-vote systems account for the fraction of states but neglect the magnitude of the benefit except in the case of unanimity, where states that are hurt by a decision can block its implementation. Weighted voting can protect states that systematically care more about outcomes than other states, but cannot protect a state that happens to care about one decision more than others and is otherwise no different from the other states. We will return to this problem in Part IV.

A final issue of considerable importance in international relations is the problem of enforcement. Because international law is not enforced by external agents, the decisions of international organizations must be self-enforcing. This means that the countries, even those that are outvoted, must do better by complying with a decision ex post than by violating it. In one model by Maggi and Morelli,7 the voting rules used by international organizations are placed in the standard repeated-game framework. Outvoted countries comply with decisions in order to retain the chance of being part of the majority for the next decision. The major implication of the model is that as the discount factors of countries decline (and hence the present value of future payoffs declines), they are less likely to comply with a decision when outvoted, and hence voting rules must be stronger (more toward a supermajority) in order to be incentive compatible (and

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ensure that the members will respect decisions rather than causing the organization to unravel). Maggi and Morelli argue that their model helps explain why voting rules in international organizations are often unanimity or strict supermajority rules. Because wealthier, more developed states have better political institutions than poorer states, and hence are better able to incorporate future payoffs into present decisions, one would predict based on this model that organizations involving only rich states will have weaker voting rules than organizations involving poor states or a mix of rich and poor states.

To sum up, we identify the following factors as playing a role in the determination of voting rules: (1) decision costs; (2) exploitation costs; (3) heterogeneity (meaning that some states gain more from collective decisions than others or lose more from adverse decisions than others); and (4) discount factors (which of course can be heterogeneous as well). Generally speaking, a simple one-state-one-vote majority-rule system will become more difficult to sustain as decision costs decline, exploitation costs increase, heterogeneity increases, and discount factors decline. But as we have already seen, states respond to these problems not just by adjusting the size of the majority needed for a decision; they can also address these problems by adjusting the weight of votes, restricting membership, manipulating agenda control, restricting the scope and bindingness of decision-making, and so on.

III. Examples

A. General Assembly and Security Council

The major organs of the United Nations are the General Assembly and the Security Council. The General Assembly consists of a delegate from each of the member states, of which there are currently 193. The General Assembly issues resolutions of concern to the international community but these resolutions do not have binding legal effect. But it does have some indirect legal power: it elects most of the members of the Security Council and all of the members of the International Court of Justice, institutions that can issue legally binding orders. The Security Council, which has 15 members, has more direct legal power: it can issue resolutions that are legally binding on all UN member states. Of the fifteen countries that have seats on the Security Council, there are five permanent members (the United States, the United Kingdom, France, Russia, and China) and ten rotating members.

The General Assembly uses a simple voting system of majority rule with one vote per member state. The Security Council uses a hybrid supermajority/veto system. A resolution is passed if (1) no permanent member vetoes it, and (2) at least nine members vote in favor of it. This roughly means that a resolution must have the support of the five permanent members and at least four of the rotating members.

At the time that the UN system was established, it was believed that the five permanent members would be the world’s policemen—they would use force to keep the peace. These countries were too powerful to be compelled to use force by others; and they simply refused to be subject to adverse legal orders -- hence their veto. Some commentators feared that unanimity would lead to gridlock, and a 3/4 rule was briefly considered, but rejected. The only question
was whether the rule for all members would be majority or supermajority. At the time, there were to be 10 members, so a majority rule (requiring 6) would mean that the consent of only one rotating member would be necessary to authorize a resolution. Many small countries feared that under this system the rotating members would have insufficient influence, so eventually a supermajority rule of 7/10 was established. When the Security Council was later expanded to 15, that rule became 9/15.8

Thus, fears that the large countries would be compelled to act against interest by the majority of small countries led to the veto; and fears that the small countries (representing by the rotating members) might be bullied by the large countries led to an additional supermajority requirement. The upshot was that the UN Security Council had a voting threshold that was very high. It might have been thought that by keeping membership small, agreements could be reach by deliberation and consensus. Indeed, there is evidence that the permanent members (above all, the United States) obtain the votes of rotating members by paying them off with foreign aid and other benefits.9 But gridlock was the pattern until the end of the polarization of the cold war. Even since 1991, the Security Council has had trouble reaching agreement on major issues.

By contrast, the General Assembly has, thanks to majority rule voting, issued hundreds of resolutions on numerous controversial issues. The history of the General Assembly illustrates the two features of majority voting that we have emphasized: (1) that it makes decision-making easy; and (2) it enables the majority to choose outcomes that the minority of powerful states oppose. Although the story is complex, at various times poor developing countries have been able to form blocs that outvoted the powerful countries.10 The powerful countries effectively anticipated this development and protected their interests by denying legal power to General Assembly resolutions.

The inadequacies of the voting systems in both the General Assembly and the Security Council are widely acknowledged. In the General Assembly, Iceland has a population of 320,000 and China has a population of 1,351,000,000, and yet they have equal voting power. One might think that more populous countries should have greater voting power than less populous countries because decisions will affect more people. In the Security Council, it seems unfair that a single country could block a decision that would benefit all other countries in the world. Moreover, the five veto-holding permanent members are no longer the most important or most powerful countries, nor are they representative of regional interests. France has a population of 66 million and the UK has a population of 64 million. Numerous other countries—including Indonesia (population of 238 million), Brazil (201 million), Germany (81 million), the Philippines (99 million), India (1.2 billion), Japan (127 million), Nigeria (174 million), and Pakistan (185 million)—are larger, and several are richer.

Proposals for reform have proliferated. These reforms include giving the General Assembly greater power or restructuring the Security Council, so that more countries belong to it or can exercise the veto. But a larger Security Council—along with the strict voting rules, which the permanent members will continue to insist on—will surely increase gridlock, with the result that the Security Council will be even more ineffectual than it currently is. A weaker voting rule would help reduce gridlock, but it would open up members to exploitation at the hands of the majority. Is there a better way?

One proposal that has received some attention is weighted voting. Under weighted voting, some countries receive more votes than other countries do. For example, countries could receive votes in proportion to their population, their wealth, their contribution to global public goods (represented by their UN contributions), and other factors. Consider how population-weighted voting might work. Every country could be given a vote for every 1 million in population. China would then have 1,351 votes; India would have 1,237 votes; and the United States would have 314 votes. The UK would have only 64 votes. Many countries would have only one or two votes. As noted, voting could also be based on wealth (in which case the United States would have the most votes), UN contributions, or other factors.

An attractive feature of weighted voting is that it (very roughly) gives countries votes in proportion to which a global public good affects them. If the UN fails to prevent international conflict, then it might seem that more populous countries would suffer more than less populous countries just because the more populous countries contain more people who would suffer from the ravages of war. Moreover, the larger and more powerful countries must participate in the provision of any global public good, and so for this reason they should have disproportionate voting power. In addition, because weighted voting uses (or can use) majority rule, the risk of gridlock is diminished.

On the other hand, it could be argued that more populous countries would suffer less because they are more powerful; they, in fact, do not need international organizations as much as small countries, which depend on international peace for trade and prosperity. And, as argued at the time of the UN founding, the more powerful countries will refuse to participate in an international organization when they do not have veto power. Under population-weighting, China could outvote all other four members of the Security Council; or if all countries were invited into the Security Council, then a coalition consisting of China and India could outvote almost all the other 190+ countries in the world. So weighted voting may be worse than the current system, or simply infeasible.

B. WTO

Formal voting rules in the WTO are complex and depend on the issue at hand. Some decisions are taken by majority vote, some by two-thirds or three-fourths vote, some by “consensus” (unanimity), and some are automatic barring a consensus against them (“reverse

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consensus”). A complete discussion of all possible permutations is beyond the scope of this paper, and we will focus on the procedures that predominate with respect to most decisions.

The evolution of WTO rules is best understood by considering the history of GATT, its predecessor. Article XXV of the original GATT, concerning “Joint Action by the Contracting Parties,” provided that decisions of the membership would be taken by majority vote unless other parts of the Agreement provided otherwise. Each GATT member had one vote. The same article allowed for “waivers” of obligations if requested by a member when approved by a two-thirds vote. Article XXX, concerning “Amendments,” states that amendments to Part I of GATT – which contains the most-favored nation obligation and the negotiated tariff commitments – take effect only “upon acceptance by all contracting parties.” Amendments to other provisions of GATT (for example, the national treatment obligation and rules on subsidies and antidumping measures) take effect on acceptance of two-thirds of the contracting parties, but only for the parties that accept the amendment. Likewise, under Article XXXV, no member of GATT is obligated to accept another party as a member unless it consents. Thus, a new member might be admitted to GATT under Article XXXIII (by two-thirds vote), but an existing member might nevertheless decline to extend the benefits of membership to the new member.

At first blush, this structure suggests that at least some important changes to GATT could come about by a simple majority vote under Article XXV. Changes that were neither amendments nor waivers could occur following only a majority vote and seemingly would bind all members – an example might have been a definitive interpretation of an existing but ambiguous obligation by the contracting parties.

In fact, however, this problem never arose under GATT, because of the implicit “repeat game” in the background. Any member could withdraw from GATT, and so a member believing itself to be exploited could just quit. Likewise, a member could simply deviate from its obligations and tell the rest of the members to go soak their heads. The remaining members might retaliate by deviating from their own obligations, in which case all pertinent parties would effectively opt out and return to their pre-GATT trade policies. But those policies were perceived to have been economically undesirable, and the negotiated commitments of GATT were a joint improvement. Thus, no party wanted to trigger a process by which GATT would unravel, and whatever potential may have existed in principle for opportunistic use of the voting rules was checked by the essentially self-enforcing nature of the bargain.

The general lesson here is that the voting rules in international organizations are not always determinative of how its members will actually behave and take decisions. This proposition is similar to the notion in the formal model of Maggi and Morelli that voting rules must be incentive compatible. What their model obscures, however, is the fact that formal voting rules and actual practice may diverge in such a way as to ensure incentive compatibility regardless of the formal rules.

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Hence, despite the formal voting rules under GATT, its history reveals a steady and fairly rapid progression toward decision making by consensus on most issues. This practice continues into the WTO. Article IX of the Treaty Establishing the WTO, concerning “Decision-Making,” opens with the recital that “[t]he WTO shall continue the practice of decision-making by consensus followed under GATT…” Like GATT, however, it goes on to state that decisions can be taken by majority vote failing consensus, unless otherwise provided. Waivers now require a three-fourths majority, and any “amendment” that “would alter the rights and obligations of the Members” is not binding on any member that does not accept it. (Article X). “Interpretations” of obligations require three-fourths approval. (Id.) New members can join with two-thirds approval, but no member is obligated to extend its obligations to the new member without consent. (Article XIII)

In the shadow of these rules, the WTO continues to operate by consensus on most matters of major importance, and any “amendment” to “rights and obligations” binds no member that does not consent. Members thereby insulate themselves from the risk that their commitments will be measurably altered through an adverse vote. The unsurprising result, as suggested by Section I, is that the organization exhibits a considerable degree of paralysis with respect to potentially valuable modifications in the treaty rules, and with respect to the creation of new commitments. The now stalled Doha Round of negotiations reflects this problem. We will return to this issue, but first consider another aspect of the WTO that has been effectively removed from voting – dispute resolution.

A member aggrieved by an alleged violation of the GATT/WTO treaty can pursue a claim, pursuant to GATT Article XXIII and now the WTO Dispute Settlement Understanding (DSU), that benefits owing to it have been “nullified or impaired.” Under the original GATT, absent a negotiated solution, the contracting parties acting collectively were authorized to adjudicate the dispute and, if “the circumstances are serious enough,” they could pursuant to Article XXIII authorize a complaining party to sanction a violator by suspending appropriate trade concessions otherwise owed to the violator. Because of Article XXV, a vote to allow sanctions in principle required only a bare majority.

But majority voting on dispute issues never came to pass, and again GATT practice involved toward consensus decision-making. The consensus rule became a serious problem for the dispute resolution process. Until 1989 when the members agreed on a rule change, a consensus had to exist before an arbitral panel could be established to consider a claim that that the agreement had been violated. After 1989 panels could be established as a matter of right, but a consensus was still required for the membership to “adopt” the findings of an arbitral panel -- adoption by the contracting parties was necessary before a decision had legal force. Likewise, despite the nominal authority in Article XXIII for sanctions to be authorized by majority vote, the understanding was that they required consensus as well. Collectively authorized sanctions accordingly played no role in GATT.

Toward the end of GATT, the ability of disputants to block claims against them grew into a significant problem, especially with respect to some intransigent disputes between the Untied

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14 See the discussion in John H. Jackson, Restructuring the GATT System 22-23 (Pinter Publishers 1990) (“in much GATT practice there is a decided preference for consensus approaches. There is in fact some fear of voting...”).
States and Europe. And because collective sanctions were non-existent, aggrieved members (especially the United States) began to “take the law into their own hands” by retaliating unilaterally against practices alleged to violate GATT. The situation was widely regarded as unsatisfactory and, with the creation of the WTO, the members agreed to a radical change in the dispute process. As under GATT, members can seek arbitral panels as a matter of right, but their findings may be now be reviewed by a standing Appellate Body. Most importantly, final decisions by adjudicators, as modified on appeal, are automatically “adopted” and gain the force of law absent a (reverse) consensus against their adoption (which would have to include both the complainant and the respondent in the dispute). If a violator does not cure the violation within a “reasonable time,” the complaining nation has a right to impose retaliation that cannot be blocked, subject to an arbitration to ensure that its magnitude is commensurate with the violation.

The modern WTO thus presents a rather striking dichotomy. Significant changes to obligations (outside of the dispute resolution process) require something approaching unanimous consent as a practical matter. Yet, in the case of a dispute over the meaning of an existing obligation, the membership foregoes any opportunity to “vote” on the interpretation handed down by adjudicators, as well as any opportunity to vote on an authorization for sanctions.

This evolution, we suggest, is crudely explicable in relation to the considerations developed in Section I. Entirely “new” obligations can take any form, and members do not wish to be subject to dramatic changes in their commitments without their own consent. The risks of other parties foisting joint welfare-reducing obligations on the minority under a one-country one-vote system is simply too great. With regard to the obligations already in the agreement, and to which unanimous consent has already been given, the potential for surprise and opportunism is much less. Moreover, the costs of a dispute resolution process that grinds to a halt if any party objects to it are considerable – disputed legal issues never resolve, and the system devolves into unilateral retaliation with a potential for escalating counter-retaliation. Arbitral panels can err, of course, but the appellate process created under the WTO provides some check on mistakes. The decision to create an automatic and “binding” dispute process thus poses only a small threat of foisting an important and objectionable obligation on a member that does not wish it.

Outside of the dispute settlement process, the consensus practice still applies and, as noted, the consensus requirement makes it extremely difficult to modify or add to basic treaty commitments. The problem has only grown as WTO membership has expanded – from the original 23 members of GATT in 1947 to 159 WTO members today. We have seen two types of responses to the problem, neither entirely satisfactory.

The first response came at the creation of the WTO. Holdout issues were significant, and some GATT members balked at some of the proposed new commitments. In response, the major players agreed on a novel strategy – they would formally withdraw from the GATT, and enter a new treaty creating the WTO. Any GATT member who wished to retain the benefits of GATT membership in relation to the major players had to do the same even if they did not like aspects of the new WTO regime. Some members complained that the process was coercive, but they had little choice but to capitulate.
The second response was seen before the creation of the WTO, and remains an important feature of the international trade landscape presently. The Tokyo Round of GATT negotiations in the 1970’s, for example, yielded a number of side agreements negotiated among subsets of GATT members – a “Subsides Code,” a “Standards Code,” and various others. These side agreements bound only the signatories that elected to join them. Concurrently, many GATT members pursued separate free trade agreements with other nations (for example, NAFTA) that were completely separate from the GATT system, pursuant to authority for such agreements contained in GATT Article XXIV.

More recently, in light of the apparent impasse in the WTO Doha negotiations, the trend toward separate agreements with smaller numbers of countries seems to be accelerating. The United States, in particular, is engaged in a major Trans Pacific Partnership initiative along with a newer Transatlantic Trade and Investment Partnership Initiative. Within the WTO, the possibility of sub-agreements (“plurilaterals”) binding only a subset of members has again been explored, particularly with reference to service sectors.15

Thus, practice is once again evolving to address issues associated with voting. Consensus decision-making protects against the oppression of the majority, but creates holdout problems in negotiations that force concerned nations to split off on their own. The result is not ideal, because agreements that bind only some WTO members create obligations that are discriminatory against non-signatories and that run the risk of inefficient trade diversion (whereby production is diverted to less efficient nations that receive some form of trade preference). Nevertheless, the general principle of consensus within the WTO before important obligations can be modified, coupled with the opportunity for nations to create sub-agreements or separate free trade agreements in response to holdouts, may be the best that the parties can do and may dominate any changes in formal voting procedures.

C. International Monetary Fund and World Bank

Both the IMF and the World Bank grew out of the Bretton Woods conference at the end of World War II. They were conceived simultaneously and are both lending institutions, so it is not surprising that their voting rules and practices are quite similar. We take them together in this section.

The IMF was created to oversee a system of fixed exchange rates. Members initially agreed to “peg” their currencies to the dollar (i.e., maintain a fixed relationship), while the United States agreed to peg the dollar to gold. If this system resulted in disequilibrium, whereby a nation found itself spending down its foreign exchange reserves to support the value of its currency, the IMF would lend reserves to that country.

The system was abandoned in 1971 when the United States faced a shortfall of gold reserves and “closed the gold window,” abandoning the fixed relationship between gold and the value of the dollar. Within a few years the fixed rate system of the IMF was replaced by a system in which most of the major currencies “float” – their relative prices are determined by market forces. Central banks still intervene at times in an effort to affect currency prices, but they have

15 http://www.wto.org/english/news_e/news06_e/serv_28feb06_e.htm
no legal obligation to do so, and the major developed nations no longer have any need to borrow from the IMF because they can borrow in international capital markets. As a result, the function of the IMF has been altered dramatically. Today, it serves as lender of last resort mostly to developing countries and to a few others (such as Greece) that have encountered fiscal problems so severe that they cannot borrow on reasonable terms in the capital markets. Likewise, the major developed economies – originally expected to be the potential borrowers from the IMF – now play the role of the major lenders. They put up the capital that the IMF subsequently lends to nations in economic trouble. We focus our discussion here on the voting rules of the IMF against the backdrop of this modern function.

The formal voting system within the IMF entails “weighted voting” pursuant to Article XXII §5. Each member has the same number of “basic votes,” a tip of the hat to the one-country, one-vote system. But basic votes comprise only a tiny percentage of total votes. Each member has additional votes that are based on its allocation of “special drawing rights” (SDRs), a reserve currency created by the IMF. The SDR allocation is tied to the member’s “quota,” which represents the amount of currency that the member is obliged to contribute to the IMF to support its lending operations (partly in a reserve currency, and partly in its own currency). The quota is determined in accordance with a rather complex and mysterious formula that takes account of various measures of the size of each member’s economy. The larger economies contribute more resources to the IMF, receive more SDRs in return, and thus have a larger number of votes. At present, for example, the largest member (the United States) holds approximately 17% of the votes. The smallest developing country member hold votes equal to a tiny fraction of 1%. In addition, members that are active borrowers from the IMF have their votes reduced.

Different types of decisions are subject to different voting requirements. Decisions on “investment” of funds require a 70% majority. Decisions on most “amendments” to the IMF Agreement require 85% support,16 as do changes in a member’s quota, along with the affected member’s consent.17 On the issues requiring an 85% vote, the United States effectively has veto power (the only such country).

The governing body of the IMF is the Board of Governors, consisting of a representative of each member empowered to cast that member’s votes. The Board of Governors meets occasionally, but the day-to-day operation of the Fund is in the hands of the Executive Board, a professional body that is appointed or elected by the members. The individuals on the Executive Board are Executive Directors, and the chair is the Managing Director. The larger IMF members have their own Executive Director. Smaller members band together to elect an Executive Director to represent them. The Executive Directors each have voting power equal to the votes of the members they represent.

To appreciate the implications of such a system, one must understand the issues that are subject to voting. The typical decision involves a request by a member (say, Greece) for a loan (or “bailout” in the popular press). It is routine under modern IMF practice for the IMF to require certain quid pro quo arrangements in return for a loan (which, by the way, is invariably at below market rates). These requirements are termed “IMF conditionality,” and may require a borrowing

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16 Article XII §6, Article XVIII.
17 Article XVIII and Article III §2.
member, for example, to take fiscal measures to balance its budget, or to reform some other aspect of its macroeconomic policies. Negotiations between the IMF and the would-be borrower address these matters, and the IMF will eventually settle on the amount that it is willing to lend and the conditions that it wishes to impose. Such a matter would be classed as an “investment” decision subject nominally to the 70% voting rule.

In fact, however, formal votes are rarely taken. Instead, the Executive Board strives for consensus. Negotiations generally proceed until all concerned are satisfied. The Managing Director will continue the process until consensus arises, or at least to the point that any apparent dissent could be outvoted in a formal vote – the Managing Director thereby takes decisions based on the “sense of the meeting.” Despite the absence of formal voting, however, everything proceeds in the shadow of the voting rules and may be presumed to be consistent with the outcome that would arise if a formal vote were to be held.

Turning to the World Bank, it also serves as a lending institution, albeit with a different focus. Originally conceived to aid in reconstruction after World War II, the Bank now focuses exclusively on lending to promote “development.” The borrowers are developing countries, and all members contribute capital in relation to their economic capacity. The vast majority of the capital comes from high-income members and larger middle-income countries such as China, Brazil, Mexico and so on. The typical issue that arises in the day to day operation of the Bank concerns which development projects to fund in which countries, and the terms of the loans. Staff members develop recommendations that proceed through channels to an Executive Board that must ultimately approve loans, and may impose various conditions that are somewhat akin to IMF conditionality. As with the IMF, loans are made at below market rates out of Bank capital, or out of additional funds that the Bank can borrow much more cheaply in the capital markets than the developing countries that receive the loans.

The formal decision-making process is so similar to that of the IMF that we can be very brief. Weighted voting is used, based on each member nation’s “quota,” the amount that it is required to provide to the Bank in lending capital. Member quotas at the Bank are based on the same criteria as IMF quotas. Each member has equal “basic votes,” but the allocation of additional votes based on quota means that the major lending nations have the bulk of the votes. The so-called G-10 nations have about 50% of the votes, for example. As with the IMF, formal votes are uncommon, and decisions are instead based on the “sense of the meeting” as interpreted by the chair, with an effort made to reach consensus. Nevertheless, members act in the shadow of the voting rules and decisions are generally consistent with the outcome that voting would produce: “Ultimately, the ‘sense of the meeting’ cannot but be reflective of the respective voting powers of those who favour and those who oppose a given proposal…Voting power does determine each member’s influence in each decision. The fact that this structure doesn’t have to be externalised in formal voting on most occasions testified to its strength not to its unimportance.”

Plainly, the effect of this system is to confer much of the leverage on the larger, creditor nations at both the IMF and the Bank. This is hardly surprising. As Margaret Thatcher famously

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remarked with particular reference to the IMF: “There was no way in which I was going to put British deposits into a bank which was totally run by those on overdraft.”19

Lenders at both institutions wish to have reasonable confidence that loans will be paid back, and that the subsidy they confer through a below-market loan will go to some useful purpose. A high-minded purpose might be a desire to create economic stability and prosperity in the global economy or to promote economic growth in poor countries. Lender nations may also have more self-interested reasons for loans, such as to reward or support an important strategic ally, or to transfer resources to countries that owe money to their own banks and may default absent international assistance. Whatever the underlying rationale for subsidized lending, it comes as no surprise that creditors wish to retain control over who can borrow and on what terms. Were the system designed otherwise, lenders would opt out or at least refuse to fund further borrowing, and the institution would have no useful function to serve.

Nonetheless, the voting rules at both the IMF and the Bank have come under extensive criticism in recent years, mainly from the standpoint of developing countries, which argue that their interests are under-represented. Because of such under-representation, the argument runs, IMF conditionality is too restrictive and developing country borrowers do not receive as much benefit from their loans as they should. Likewise, World Bank lending is thought to favor certain nations with friendly ties to the major creditors, and to come with conditions that are counterproductive. Various proposals have surfaced to reduce the voting power of developed country lenders and strengthen the hands of developing country borrowers. These include a modest reform in the voting weights at the IMF in 2010 that was never implemented, and some modest changes in voting weights at the Bank that were put into effect around the same time. Despite the calls for reform, however, it seems that the major lenders are not inclined to make any dramatic changes, and the balance of power remains with them. This is unlikely to change significantly in the future.

D. The International Seabed Authority

The UN Convention on the Law of the Sea regulates the oceans and the other bodies of water that connect states. In addition to providing an elaborate set of rules governing navigation rights, deep-seabed mining, and related activities, the Convention sets up an international institution called the International Seabed Authority, which has jurisdiction over mining-related activities in the seabed.

The seabed contain valuable minerals, which currently cannot be extracted in an economically viable way, but may be in the future. Fearing that mining companies will race to stake claims, resulting in conflicts over property rights and overextraction, countries established the Authority to issue regulations governing the mining of minerals, to issue licenses to mining companies, and to supervise their activities. It was anticipated that the Authority would earn royalties from the licensing scheme, which would be redistributed to the states.

The Authority is composed of two main bodies: the Assembly and the Council. The relationship between the two bodies is somewhat ambiguous. The Council is described as an

executive agency but it also sets policy, which is one of the functions given to the Assembly as well. The Council also issues regulations governing seabed mining and evaluates and approves applications for mining licenses. The Council proposes the budget, which the Assembly must approve. The Assembly has authority to distribute financial benefits from the Authority’s activities, which may include royalties received from seabed miners.

The Assembly consists of delegates from every state that is a party to the Convention. The Assembly makes procedural decisions by a simple majority of states present and voting, and makes substantive decisions by two-thirds supermajority. A 1994 Agreement subsequently provided that decisions “should” be made by consensus, but it did not change the original voting rules. The Assembly currently has 166 members (including the European Union, which possesses one seat).

The Council has 36 members, who are elected by the Assembly. The voting rules for the Council are complex. The original treaty provided that the Council decides procedural questions by majority rule; questions relating to communications and agreements among LOS bodies and UN organizations by a two-thirds majority; policy questions, including certain financial questions, by a three-fourths majority; and issues respecting the protection of developing nations and the equitable distribution of profits by consensus.

These rules were amended in 1994 in order to address objections by the United States. Under the amendment, two major changes were made. First, the members of the Council are divided into four groups or “chambers”: (1) four members are states that are the largest consumers of the minerals of the type derived from the seabed; (2) four members are states that have the largest investments in deep seabed mining; (3) four members are states that export minerals of the type derived from the seabed, two of which must be developing states; and (4) 24 members are developing states, of which six are states with other “special interests” (including states with large populations or are land-locked), and 18 are states whose inclusion ensure an “equitable distribution” and regional representation. This, of course, implies that the selection of members by the Assembly is subject to these constraints.

Second, the voting rule for all of the substantive decisions aside from the provision governing division of resources was changed to two-third majority provided that the majority of no chamber votes against the decision. Effectively, this means that all decisions require a majority or tie vote in each chamber, plus two-thirds of all members in the aggregate.

The Authority was set up to solve a classic public good problem—the problem of overexploitation of a common pool. By giving the Authority the power to control access through a licensing system, states enable it to prevent overexploitation, while giving it the discretion to react to changes in technology, scientific knowledge, demand and supply, and so on. But this

20 In 2013, the members of the council corresponding to the groups numbered in the text were: (1) China, Italy, Japan, Russia; (2) France, Germany, Italy, South Korea; (3) Australia, Chile, Canada, South Africa; (4) Bangladesh, Brazil, Egypt, Fiji, Jamaica, Uganda; (5) Mozambique, Argentina, Cameroon, Indonesia, Cote d’Ivoire, Czech Republic, Guyana, Kenya, Mexico, Namibia, Netherlands, Nigeria, Poland, Sri Lanka, Senegal, Spain, Trinidad and Tobago, United Kingdom, Vietnam. http://www.isa.org.jm/en/about/members/council/composition. The United States is not a member of the Authority because it never ratified the treaty.
discretion also gives the Authority the power to favor some states over others. It could be used in many ways: most explicitly, to distribute royalties to favored states, but also (for example) to delay or deny license applications so as to avoid harming exporting countries, to demand high royalties from mining companies which would harm the countries in which the mining companies are located, and so on.

To address these problems, the states used a series of majority and supermajority rules of increasing severity. In both the Assembly and the Council, majority rule was available for procedural decisions; supermajority rules were used for substantive decisions. The variation in the level of the supermajority can be explained in the following way. Because procedural decisions rarely have a direct impact on substantive outcomes, they will rarely threaten the interests of any particular state, and thus cannot by themselves be used to effect major wealth transfers from one state to another. The weakest rule—majority rule—thus minimizes gridlock without exposing any state to significant risk of expropriation.

States established the Assembly to ensure that all states have a voice in decisions but the major decision-making authority was lodged in the Council. The Assembly’s use of two-thirds supermajority rule for substantive decisions ensures that a small majority cannot expropriate from minorities but does allow a supermajority to expropriate from a small minority—as could happen, for example, if poor states gang up on rich states. But that will not happen because any major decision must be taken by the Council, which is set up to minimize the risk of expropriation.

The original treaty provided that the Council would use supermajority rules of increasing severity, and it is evident that the scheme reflects the danger that purely distributive decisions pose to states. Communications—which are unlikely to harm anyone—require a supermajority of two thirds. General policy decisions, which involve a mix of efficiency and distributive issues, pose greater harm, and thus require a greater supermajority of three fourths. The purely distributional decisions require a consensus. There is logic to this scheme: as the decision becomes more purely distributional, the risk of expropriation increases while the cost of inefficient gridlock—in this sense of lost opportunities to exploit resources—declines.

To illustrate, consider two decisions. The first is whether to grant a license to an American mining company. Congo objects to the license because it fears that mining will reduce the price of a commodity it exports. It is imaginable that other developing companies would line up with Congo out of solidarity but if they do so, they also lose the opportunity for a share of the royalties. The two thirds majority rule gives the developing companies some power to extract concessions but it is unlikely to block licenses. The second is how to distribute royalties. It is easy to imagine that developing countries would argue that all royalties should be distributed to them because they are poor. The consensus rule enables the rich countries to block such a decision. The strict decision rule may make it difficult to reach a decision, but gridlock does not block any efficient outcomes in this case. Eventually, the wealth will be distributed and the cost of delay in the meantime will be relatively low—just the difference between any interest that can be earned on the money and the foregone time value of the money. Note that the small size of the Council—relative to the Assembly—also reduces the risk of gridlock because bargaining is easier in small groups, although by the same token it also raises the risk that some countries will
be frozen out of negotiations and able to affect outcomes only by threatening to form a blocking coalition in the Assembly.

The 1994 agreement gave the United States near-veto power by assuring it that it would belong to a chamber with three other similarly situated countries and the ability to block decisions as long as it could obtain the support of two of those other three. It is not clear why this system did not satisfy the United States but one reason may be that the U.S. government believes that agreement will be so hard to reach that it will become impossible to exploit the seabed resources, in which case overexploitation may be a less bad outcome than non-exploitation. On the other hand, a weaker voting system might force the United States to share revenues more than it is willing to do, given its presumed technological and economic advantages. It is puzzling that a deal cannot be reached given that the all countries have an interest in the efficient exploitation of resources but an explanation may be that since it is not yet economically feasible to extract those resources, the U.S. government has a strong interest in holding out for a better deal.

E. European Union

Voting within the European Union follows highly complex rules that depend on exactly who is doing the voting (the European Commission or the Parliament) and what issues are on the table. The voting rule sometimes depends on whether the staff of the European Commission (the central bureaucratic arm of the EU) has proposed the policy or not (the voting rule requires less support for Commission proposals in some areas). Moreover, the voting rules have changed at many points in time with successive EU treaties. A complete account of the rules, much less a theoretical treatment of all the subtle differences and changes over time, is well beyond what we can provide in this brief contribution. Instead, we focus on a few key features of the system that highlight issues noted in Section I.

As the EU has expanded to a total of 27 members through the years, a recurring tension arises between the interests of the larger and smaller countries. The larger economies (especially Germany, France, the United Kingdom and Italy) wish to maximize their influence and have a reasonable claim to greater influence based on their larger populations and GDP. The smaller countries, however, do not wish to be at the mercy of the larger countries and have sought voting power to protect their interests. The familiar problems from Section I arise in this setting – as each member gains power through a voting rule that approaches unanimity, it becomes more and more difficult to make policy decisions. Also, each member’s participation constraint must be satisfied. Large countries will not submit themselves to a prospect of being outvoted by a majority of small countries (particularly as many of the smaller countries have lower per capita incomes and somewhat different interests), while smaller countries are not willing to cede all the power to the large countries.

No simple solution to the challenges exists, which no doubt explains why the details of the voting rules keep changing with time and with the expansion of the union. The current voting

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21 For a nice summary of the details and the changes in successive treaties, see George Berman, Roger J. Goebel, William J. Davey & Eleanor Fox, Cases and Materials on European Union Law chs. 2-3 (Thomson West, 3d ed. 2011).
rules, which remain in effect until 2014 under the Treaty of Nice, involve two key dimensions. The first involves a number of issue areas (such as collective security policy, and tax harmonization) with respect to which policy changes require unanimity. These may be viewed as the most important issues on which each member wishes to retain a veto. For a range of other, less sensitive issue areas, the rule is qualified majority voting. Under the Treaty of Nice, voting in the Council on the issues that do not require unanimity requires three conditions to be satisfied: the measure must be supported by a majority of member states (one-state one vote) if proposed by the Commission, or 2/3 if not proposed by the Commission; the measure must receive at least 74% of the weighted votes; and it must be supported by members comprising 62% of the population of the EU. Weighted voting is based on negotiated voting power, which gives the four largest countries (Germany, France, UK, Italy) 29 votes each, Spain and Poland 27 votes each, with lesser weights for the smaller countries (Malta has only 3). This system prevents a group of the larger countries from pushing through policies over the objection of a large number of smaller countries, while giving the larger countries considerable power to block initiatives if they band together. At the same time it avoids the possible gridlock of unanimity rules.

The Treaty of Lisbon, which takes effect in 2014 (with a transition period through 2017), tweaks this system. It eliminates the voting weights, and instead provides that policy changes subject to qualified majority voting must have the support of 55% of the EU member states (if proposed by the Commission, 72% otherwise), and the support of states representing 65% of the population of the EU. Further, if the second condition is not met, the proposal can still go through unless at least four members vote against the proposal. The latter change prevents a group of three large countries from blocking policy changes, and in that sense represents a modest concession by the larger members to the smaller members.

Another important change under the Treaty of Lisbon involves a substantial reduction in the number of subject areas that require unanimity. Immigration and asylum policy initiatives, for example, and intellectual property initiatives, will require only a qualified majority. As the voting rule in the Council has moved toward qualified majority in more and more issue areas, however, the role of the European Parliament has expanded. Under the Treaty of Lisbon, the so-called “ordinary legislative procedure,” also termed the co-decision procedure, under which initiatives must be approved by both the Council and the Parliament, becomes more predominant. This procedure somewhat resembles the bicameral process in the United States, in which both the House and the Senate must approve legislation, with differences resolved in a conference committee. The EU co-decision procedure does not apply in all issue areas, however, such as taxation, where the unanimity requirement survives in the Council. But to a significant degree, unanimity requirements in the Council are being replaced with a co-decision procedure that requires non-unanimous approval in both the Council and the Parliament.

The movement away from unanimity has its roots in a desire to promote greater policy flexibility. But the enhanced role of Parliament limits the importance of that change. In addition, the Parliament is directly elected and thus contains more representation of minority viewpoints than the Council, where the members are representatives of the government in power in each member state. The Parliament thus allows minority viewpoints within member states to have greater influence on policy.
G. Committees, Commissions, Councils, and Courts

Many international organizations use simple majority rule. We can divide them into two groups. First, a huge number of committees, commissions, councils, and organizations of other types have the power to make recommendations, collect and analyze information, issue non-legally binding interpretations of the law, and launch investigations. These organizations are especially common in the area of human rights, but also include (among many others) the International Labor Organization and the World Health Organization. Second, there are a large number of courts and arbitral bodies—including the International Court of Justice, the International Criminal Court, and the WTO dispute settlement system—which use majority rules in order to resolve cases. These courts have the power to issue legally binding judgments.

What explains the prevalence of majority rule in these organizations? The simplest explanation for the first group is that because they cannot issue legally binding orders, their impact on states is minimal, and thus states need not worry that they will cause significant harm. Thus, these organizations follow the model of the General Assembly, which also does not have the power to issue legally binding orders.

As for the second group, while courts can issue legally binding orders, states can almost always escape their jurisdiction by refusing to consent to it. And the powers of international courts tend to be highly limited. For example, the WTO can only authorize countries to erect trade barriers in retaliation, and this is not a remedy that small countries can effectively use against large countries. One possible reason for the ubiquity of majority rule for courts is that (outsider international criminal law and the WTO) judicial or arbitral proceedings usually commence only with the consent of both states, and supermajority rule, weighted voting, or any other system aside from majority rule would give the advantage to one state, eliminating the incentive of the other state to consent to legal process.

IV. A Thought Experiment: Quadratic Voting

Our discussion so far raises the obvious question whether a superior voting system may improve the functioning of international organizations. As we have seen, the problem with existing voting systems is that they do not guarantee efficient outcomes. This may make countries reluctant to enter international organizations or give them substantial powers. Thus, an interesting hypothesis is that the weakness of international organizations is not (or not entirely) due to the anarchical condition of international relations, mistrust among countries, or power-related considerations, but the absence of a system that can reliably translate countries’ hidden preferences into efficient outcomes.

In a recent paper, the economist Glen Weyl proposes a voting system, which he argues will cause a group to produce optimal collective decisions.22 Called “quadratic voting,” this system provides that every member of the group has the right to buy as many votes as they want for or against a proposal, paying a price equal to the square of the number of votes they buy. The

A proposal is accepted if a majority of votes are in favor of it; the money that is collected is returned to group members on a pro rata basis.

The system is designed to force voters to internalize the cost of their voting on third parties. When a person buys a vote, she estimates the probability that it will flip the outcome in her favor (that is, that she is the pivotal voter), and multiplies that probability by the amount in which the outcome benefits her. Typically, each additional vote she buys will improve her well-being, in an expected sense, by an equal amount. The quadratic pricing forces her to pay an amount that increases linearly (and therefore proportionately) with the amount in which the expected outcome benefits her. If everyone votes in this way, then the number of votes cast in favor of an outcome will be proportionate to the amount a person is willing to pay for that outcome—for example, a person who cares twice as much will buy twice the votes. Majority rule then ensures that the people who collectively care the most prevail over people who do not, even if the former group is numerically smaller than the latter group.23

In the context of our discussion of the defects of voting rules used by international organizations, the important thing to see is that quadratic voting enables voters with strong preferences (who thus face high exploitation costs) to vote more than voters with weak preferences, unlike the various voting rules we have discussed. At the same time, it prevents countries with strong preferences from dictating outcomes when enough countries with weak preferences oppose them.

Could quadratic voting be used by international organizations? The theoretical case would be strong. Countries can exert influence in proportion to the intensity of their preferences, leading to efficient decisions. In the case of the International Seabed Authority, for example, a country that gained a great deal from mining operations and a country whose export industry would be severely injured by them, could both exert more influence on the outcome than countries that are indifferent as to whether the operations went forward or not. Meanwhile, gridlock would be impossible because no country exercises a veto.

There are a number of possible objections to quadratic voting. First, countries may object to money playing a role in the decision of international bodies. However, money already plays an influence in the IMF and World Bank, and everyone understands that rich countries have greater influence in every other body, from the United Nations to the WTO. These bodies could not function without the disproportionate monetary contributions of the rich countries. Nor could they produce meaningful outcomes unless rich countries agreed to comply with their decisions. Thus, in one way or another, the bodies disproportionately reflect the interests of rich, powerful countries, or they fail to function. Quadratic voting merely formalizes this influence and in this way ensures that outcomes are more efficient and predictable than they currently are, which benefits rich countries and poor countries alike.

Second, the unfamiliarity of quadratic voting may make states reluctant to use it. This is certainly a reasonable objection, but it is also worth keeping in mind that the voting rules already in existence are pretty strange and elaborate. The byzantine voting rules used by the ISA are a

23 More detailed explanations can be found in Weyl, supra note; Eric A. Posner & E. Glen Weyl, Voting Squared (unpub. 2014).
case in point, and are just a highly inefficient way of approximating the outcomes—allowing efficient decisions while blocking exploitation—that quadratic voting achieves more directly.

Third, one might argue that countries get along fine with ordinary voting rules in their domestic politics; thus, it is unlikely that they would be necessary for foreign organizations. But the voting rules used in domestic politics create endless problems, especially gridlock, which results from the frequent use of supermajority rules and other protections for minorities. In the United States, the judiciary has become deeply involved in politics in order to protect minorities from majority rule, and many political decisions have been delegated from a frequently paralyzed Congress to the executive branch precisely because the executive branch is a unitary institution that does not need to use voting rules in order to make decisions. But these workarounds cannot be used internationally where there is greater distrust across countries.

A fourth concern is roughly the antithesis of the first – that money will not be the determining force in voting outcomes in accordance with the quadratic scheme. Influential countries might “buy” votes through all manner of under the table promises of aid, diplomatic favors and the like, thereby avoiding the need to pay money equal to the square of the number of votes purchased. The efficiency of the voting outcome is then undermined. Whether this problem would prove more serious than the imperfections with current voting mechanisms, however, is anyone’s guess.

Conclusion

It is difficult to produce useful generalizations about optimal international voting systems from international organizations’ experiences with different voting rules, but a few thoughts may be warranted.

One point concerns the different design choices that states have made. We can identify several different dimensions. (1) One-vote-per-state versus weighted voting where different states have a different number of votes. (2) The strength of the voting rule, ranging from majority rule, through various supermajority rules, to consensus. (3) Cameralism, or the clustering of states with similar interests into different bodies that must separately approve a resolution. (4) Variation in the scope of the authority of the voting body—regarding whether it can make a legally binding decision or not, and the importance of the decision that it is permitted to make. (5) Different voting rules or procedures for different types of decisions—procedural versus substantive, for example. Voting bodies with more authority under (4) tend to have stricter voting rules under (2) and (3), and weighted voting favoring more powerful states under (1).

Our other main point concerns the factors underlying the choice of voting rule—decision costs, exploitation costs, heterogeneity, and discount factors. Our examples suggest a few patterns. When international organizations are given substantial authority, the risk of exploitation rises, and so states protect themselves by agreeing to stronger voting rules; related, the risk of non-compliance also rises, and thus a strong voting rule may be needed to ensure compliance. When international organizations are large, and thus decision costs are high, the voting rule should be weaker, all things equal. But all things are rarely equal. A larger body will usually be
more heterogeneous, and will typically involve states with weaker institutions and hence lower discount factors. These considerations will push in favor of stricter voting rules. A body that is large, homogenous, and consisting of only developed states should have weaker voting rules; the EU seems like an apt illustration.

Heterogeneity can also be addressed with cameralism. The distinctive feature of cameralism is that it blocks decisions that would produce significant variance in payoffs for states while maintaining low decision costs when variance is low. The problem is that cameralism can block such outcomes even when those outcomes are desirable for the group as a whole.

We can distinguish heterogeneity—where different states receive different payoffs from a particular decision by a body—and asymmetry, which may be used to refer to cases where a few states identified in advance of the determination of the voting rule can be expected to repeatedly receive payoffs different from the other states. These special states are usually the richest and most powerful states, which are (paradoxically) a tempting target for exploitation by the majority. When a group of states needs a small number of rich or powerful states to join them in an international organization, they will need to assure the larger states that they will not be exploited in the sense of being continually outvoted and hence deprived of the benefits of joining. Weighted voting in favor of the large states is the most obvious solution to this problem.

States always retain the power to exit international organizations; this exit option may compensate them for lack of voting power. When a majority or supermajority can outvote a minority, the majority may refrain from doing so because the organization will fail if the minority exits. This phenomenon may explain not only the widespread use of strict voting rules, as Maggi and Morelli argue, but also the frequency with which states ignore the de jure voting rules that govern an organization and work by consensus instead.

Reform of voting rules in international organizations has been hampered by the absence of a consensus on how best to design voting rules to ensure efficient decisions. Our brief discussion of quadratic voting suggests that an optimal design of voting rules—one that takes into account the intensity of preferences as well as the number of countries that back or oppose an outcome—may exist, and that the prevailing voting rules fall far short of the optimal. Whether quadratic voting itself is a realistic reform proposal is best left for future work.
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eric_posner@law.uchicago.edu
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