Most theoretical research on federations focuses attention on the efficiency gains from federating (Weingast, 1995; Alesina and Spolaore 1997; Persson and Tabellini 2003; Bolton and Roland 1995; Bednar 2006). Goals, either of specific individuals or of collectives, to improve efficiency are of course extremely important in explaining decisions to migrate authority. In deciding whether to federate at all, for example, subunit leaders will be considering the returns to scale from jointly providing public goods. They will see benefits from coordinating policies. And they will see the need to establish enforcement mechanisms to overcome free-riding temptations by subunits.

Others have devoted attention to explaining variation in the success or failures of federations: how and why federations remain stable or sustain robustness in their provision of public goods (Bolton and Roland 1997; Bednar 2006), the redistributive effects of federation (Dixit and Londregan 1996; Peterson 1995), the democratic responsiveness of federations (Cremer and Palfrey 1996), and the ability of federations to prevent corruption (Myerson 2006).

I shine the light elsewhere, on the extent to which decisions about authority migration are influenced by calculations by rational actors about the likelihood of having control over a policy area. In doing so, I am relying on one of the fundamental assumptions from political science—that people seek to aggrandize their power—and seeing where it takes us in explaining important aspects of federations.

So far I have made limited progress on a model of authority migration in a democratic institutions, and describe where I am below. A summary of the basic ideas (so far) runs as follows. Decisions over authority migration derive from a combination of ambition for power and policy goals. To focus for the moment on upwards migration of authority (to a higher level government), subunit leaders will agree to federalize a policy, even doing so unanimously, if the probability of being in a leadership position in the federation for each of the subunit leaders is high enough relative to the costs of losing authority over the policy at the subunit level. However, the model shows that the more the federal leader
has discretion over the policy area, the less political ambition plays a role in the decision to allow for federalizing by the subunits. There are even instances where subunits vote to allow for federalization of a policy, and then once at the top of the federation a subunit leader decides to keep a policy devolved.

The ideas in this research are general enough that they can be applied to federations or federated political or organizational structures. Because the focus of attention will be on the leaders who make it to the top of a hierarchy through (more or less) democratic means, the natural set of applications is political systems like federal nation-states, or multi-national systems or organizations like the US, Germany, the EU, or the UN. However, the insights can also apply to industrial conglomerates and multi-national corporations, and to any federated structures, such as confederated unions, as long as there is some process of choosing leaders that involves collective decision-making. Moreover, I have in mind any conflict over whether to centralize the authority over a policy or whether to keep in devolved. This obviously applies to many policies across many federations or federated organizations.

Beginnings of a Model of Federalizing Policy

In a federated organization or government, authority over policies can be structured in a multitude of ways. At the extremes, policies can be fully centralized or fully devolved, with decision-making and implementation processes occurring either at the central level or local level. Naturally, there are many variations on these two extremes such that in combination it can be reasonably understood that a policy is “in between” fully centralized or full devolved. For instance, there are many policies in the U.S. that are decided at the federal (national) level and implemented at the state or local level. Or, to take another example, many policies are funded at the federal level but decided upon both in policy direction and in implementation at the state or local level (highway construction).

For my purposes here, I will keep matters simple and model the extreme versions. In the model, policies are either fully centralized (i.e., federalized) or fully devolved. The only possible exception to this is where the subunits agree to allow for federalizing but it is up to the leader of the federation to decide whether to federalize or not. This would be reminiscent of a situation where the U.S. Constitution permits federalizing a policy, but the national government (Congress or the president or both) has to make a decision about whether to federalize or keep policy authority at the state level.

The current version of the model depicts a set of stages that is more directly relevant to the situation that presently exists in the EU. The members states of the EU decide unanimously whether to make a policy area part of the EU treaty process and thus opening to door to Europeanization of the policy. Then later, after a policy area is included in the treaties, they decide by non-unanimous decision rules whether actually to federalize (Europeanize) the policy and what policy to adopt. Furthermore, they decide which part of the Commission will control the policy area (thus choosing which country
will have substantial authority over executing the policy). So in the abstract, we can represent this as three stages: deciding to open the door to federalizing, deciding to federalize, and then deciding what policy to adopt if the decision was made to federalize. The second and third stages are really taken all at once. Since the status quo is having the policy devolved to the member states, deciding upon a Europeanized policy is akin to federalizing. Absent the decision over which policy to adopt at the European level, there is no Europeanization of policy.

In the model, governments in a federation must decide on a policy on some issue, and policy options for the issue are represented by the portion of the real line. There are 1 to N (N is odd) subunits of the federation, each with a leader. I assume the leader represents the median voter in each subunit, and the preference of a leader of a subunit is simply an ideal point location on the portion of the real line. For ease of presentation I will sometimes refer to the leader’s preferences as the “subunit’s preferences.” Also, for simplicity, the ideal points of the subunits are numbered in sequence of their preferences on the policy, as shown in Figure 1.

$x^m$ refers to the median subunit leader on the policy issue. I assume, for convenience, that preferences of the subunit leaders around the median member are symmetrical. Utility losses are simply linear in the distance between the actually policy adopted and a given agent’s most preferred policy.

At any point in time, the federation is either centralized or devolved on the policy issue. If devolved, then each subunit is free to set its own policy, which will be its own most preferred policy. If centralized, then all subunits will have to adopt a common policy, which will be set by the one leader among all the subunit leaders chosen to be the federation leader. The leader of the federation is chosen after the decision of whether to federalize (or centralize) the policy. Conditional on the value of being leader of the federation, there is a tradeoff between the probability of being leader and the value of doing what you want in your own subunit.

In one version of the model, there are multiple stages. At a generic stage of the game, a decision will be made (either by the group of subunits or by the leader, a difference made clearer momentarily) either to centralize or devolve policy. Figure 2 shows the payoffs to the federation leader and the other subunit leaders if either choice is made. If policy is centralized, then the federation leader gets his own policy (so the utility loss is zero) plus $\alpha_1 > 0$, which is the intrinsic benefit to being chosen leader of the federation if policy is centralized. The other subunit leaders (each of whose preference is depicted $x_i$) get the utility loss associated with adopting the leader’s chosen policy $x^L$. If policy is devolved, the leader gets $\alpha_0 > 0$, the intrinsic benefits from being leader under devolution, plus the utility loss associate with having adopted the median member’s policy. This latter assumption is justified as follows: if one leads a federation that is devolved, then one receives the utility loss as though the entire federation adopted the “average” policy of the subunits. Note also that $0 < \alpha_0 < \alpha_1$, meaning that it is better to be leader under a centralized policy. Finally, if policy is devolved, each subunit leader, other than the leader of the federation, implements his or her own policy and so the policy loss is zero.
As mentioned, these assumptions can be justified for the European context. The members states of the European Union decide whether to Europeanize policy before they know which member state will control the policy area and therefore before the policy is chosen.

I examine two versions of the model here. The first is very simple, and is depicted in Figure 3. Its results are straightforward and provide baselines for the second model. In Model 1, the subunit leaders decide by unanimity whether to federalize the policy, and then choose a leader. The leader then chooses policy if the group in the previous stage had decided to federalize.

Note first of all that if it is known with certainty who will be the leader, then the group will never vote to federalize. This of course holds if the natural assumption is made that the median subunit leader, $x^m$, is chosen to be leader, but also if any other subunit leader will definitely be chosen as federation leader. Instead, if there is a probability $p>0$ that a given subunit leader will become leader, then what does $p$ need to be so that the subunit leader will vote in favor of federalization?

To derive the required value of $p$, note two facts. First, assume that it is equally likely that any of the subunit leaders will become leader of the federation. For example, assume that $p = \frac{1}{N}$. Then it is the case that the further one is from the median, the lower the expected value from centralizing. This is because the expected leader’s preferred policy gets worse for the subunits as their preferences move away from the median. Second, given some value of $p$, it will of course depend upon $\alpha_1$ whether a subunit will vote in favor of federalizing.

It is easy to show that, for any subunit leader $i$ whose probability of becoming leader is $p$, then he or she will vote for federalizing if

$$\alpha_i \geq \frac{1-p}{p} |x^L - x^i|$$

where $x^L$ refers to the expected policy chosen by a leader that has not yet been determined.

Turned around the other way, he or she will vote for federalizing if

$$p \geq \frac{|x^L - x^i|}{\alpha_i + |x^L - x^i|}$$
Does this mean that $\alpha_i$ or $p$ have to be big or small? Well, it of course depends on the various units of analysis. But to get more intuition, consider the example in Figure 4 and Figure 5. If there are seven subunits, each one equally likely to be leader of the federation, and the two most extreme subunits are three units from the median, then $\alpha_i$ must be at least 18 for those two extreme subunit leaders for them to vote in favor of federation. Eighteen utilities must come from leadership “ambition,” as compared to the three utilities lost in expectation from the leadership choice and the policy choice (because the most extreme subunits expect to have to adopt, under centralization, a policy which is three units away from them).

Furthermore, Figure 5 shows what $\alpha_i$ needs to be for each of the subunits in this example for them to vote in favor of federalizing policy, as that subunit’s distance from the median decreases. The slope downward in what $\alpha_i$ needs to be is not linear, but is monotonic downward. Even the median subunit leader needs to reap considerable reward ($\alpha_i$ close to 10) from being subunit leader in order to vote for federation.

Let us now examine a second model, shown in Figure 6. Here there are actually five stages. First, the subunits collectively decide whether to open the door to federalizing the policy. Second, the leader of the federation is chosen by a random process, who then in the third stage chooses whether to federalize or not, and if yes to federalization, which policy to adopt. Fourth, there is another random process to choose the leader in the next stage, who decides whether to federalize and if yes to federalization, which policy to adopt. Note that in this last stage, if the policy is already federalized from the previous round, then the decision is whether to keep the policy federalized. If the policy remained devolved from the previous round, the decision is whether to federalize or keep devolved.

To analyze this model, I make two additional assumptions. One, I assume that there is a discount factor, $\delta$, that applies to the utility stream expected from the final stage decision. Two, I assume that there is a cost to changing the location of authority either up or down in the final stage. If policy was federalized in the previous stage, then there is a small cost to devolving, and if the policy remained devolved in the previous stage, then there is the same small cost to federalizing.

A natural first question is, will the subunits ever decide to open the door to federalizing the policy in the first stage? The answer is, yes. In fact, it is straightforward to show that for the same parameter values from Model I, that the required value of $\alpha_i$ to induce subunit leaders to vote for federalization are lower in Model II as compared to Model I. I do not show the mathematics behind the general result here. But note Figure 7, which uses the same parameters as Figure 4, and now $\alpha_i$ need only be 16, not 18.

The intuition is that some subunits, if they ascend to the position of leader of federation, will actually retain devolution. (Note that for this to occur $\alpha_0$ must be large enough, and $p$ must be large enough, for some of the subunits.) This will “lock” in devolution for the second round of policy decision, which will be good for the particular subunit that in the end wants policy to be devolved.
In fact, there are diverse incentives among the subunits in the first stage of this model. Some vote to allow for federalizing on the idea that should they become federation leader they will federalize policy, while others will vote to allow for federalizing, only to keep the policy devolved once in the leadership position. Why does this latter group vote in favor of the potential federalization in the first place? This is because $\alpha_0$ is high enough that they prefer being leader of a federation under devolution than not having that opportunity at all.

To analyze this further, what does $\alpha_0$ need to be for the subunits to vote unanimously in favor of allowing federalizing in the first stage? The answer is as follows in Inequality 1.

$$\frac{-|x^L - x^i| (3p + 3p\delta + p^2\delta - p^2 - 2p^2\delta - 2\delta - 2)}{p + p\delta} < \alpha_0$$

(Inequality 1)

where, once again, $x^L$ refers to the expected policy chosen by a leader that has not yet been determined.

Moreover, what does $\alpha_0$ need to be for a subunit to decide, upon being chosen the leader of the federation, that policy should stay devolved? That answer is as follows in Inequality 2.

$$\alpha_0 < |x^m - x^i| + \delta |x^m - x^i| + (1 - p) |x^L - x^i|$$

(Inequality 2)

Can $\alpha_0$ satisfy both of these inequalities? The answer, once again, is, yes. However, it turns out that $p$ must be quite high for a subunit to vote for opening the door to federalizing but then to devolve once in the leadership position. For the parameters from Figure 7 (and Figure 4), $p$ must equal at least .35 for the most extreme subunits to choose this way.

To finish the analysis of Model II, we can show some comparative static results using an example. Take the parameters in Figure 8. Then we will vary $p$ and the distance from the median subunit and watch how the left hand side of Inequality 1 relates to the right hand side of Inequality 2. As we see by examining the graphs in Figure 9 in sequence, $\alpha_0$ needs to be above the dashed line and below the solid line for a subunit to vote in favor of federalizing but then to keep policy devolved once in the leadership of the federation. As we increase $p$, eventually the lines begin to cross, and for some (and eventually all) policy preferences (relative to the median), we see the counterintuitive behavior.

One interpretation of the graphs in Figure 9 is that they show us how authority migration can move up or down, when it is possible for federation leaders to choose either centralization or devolution. In the model, which they choose depends on where their policy preferences are relative to the median subunit leader, and what the probability is that they will become leader of the federation.
The model, in its current manifestation, helps us to examine the tradeoffs that subunit leaders make in deciding whether to support potential federalizing of a policy. The model bears resemblance to other models in the literature, especially those models of Cremer and Palfrey. But compared to others, here I pay closer attention to the ambition of subunit leaders to ascend to the top of the hierarchy, and how that ambition interacts with other goals, especially policy goals.

What do political adversaries in federations contest? Well, for one, they contest all the usual matters that find their way into the political arena: policy decisions over regulations of commercial, interpersonal, and private conduct, and the distribution, and redistribution of resources. But for another, they contest the boundaries of political authority. The literature on federalism in political science and in political economy reflects a near-consensus that in any federation there exists a constant struggle for power between central and sub-central levels of government. In the terminology adopted here, there is a constant struggle over authority migration. Thus, most research on federalism is fundamentally about describing, explaining, and discovering the consequences of these struggles.

The model described above offers the beginnings of a way to analyze these consequences. I would like to build on this work, to make the model of more value to those studying a broader class of situations, and also richer, to incorporate more realistic elements of political contestation. One direction is to develop and improve how uncertainty is included in the model. For now uncertainty is over who will lead the federation (and thus who will choose policy). It would be valuable to incorporate uncertainty over the policy preferences of fellow subunits, or uncertainty over the number of stages in the game.