parliamentary governance are implicitly ruled out by analysts who neglect the intermediate range of the king and council template. The discrete "all or nothing" models suggest that the emergence of parliamentary rule requires a radical change in governance, because it implicitly rules out the possibility of a gradual reassignment of policymaking power among existing branches of a bipolar government. The bipolar continuum analyzed in this paper allows parliamentary rule to emerge gradually as policy making power is gradually shifted from king to a broadly elected council.

4. Conclusions

A large portion of the public choice literature has analyzed the properties of alternative forms of democratic government to select public policies. A smaller but significant body of research has analyzed the properties of dictatorship and noted advantages and disadvantages of that form of government. This chapter has shown that a convex combination of these two extreme forms of governance may have advantages over either extreme. In economic terms, the king and council template appears to be a concave technology for producing government policy.

Beyond providing an efficiency explanation for why we rarely observe kings without councils or councils without chief executives, the analysis suggests that the balance of policymaking power between king and council will be affected by exogenous political and technological shocks that change the relative bargaining power of the two branches of government. Genetic shocks may place relatively untalented or inexperienced persons at the head of state. Technological or ideological shocks may encourage the formation of new or better organized groups outside of government with enhanced ability to resist or influence policy implementation. These politically relevant shocks may make one or the other branch of government worse off, but the new circumstances will often provide new unrealized gains from trade that can be realized by trading policymaking power for other, perhaps short-term, policy agreements, or in order to reduce losses from conflict.

There is a sense in which the model developed above is contractarian, in the sense that institutions emerge from agreement rather than domination. However, it is not contractarian in the normative sense in which that term is normally used. The normative properties of the bargaining model of policymaking power within the king and council template differ from those of the more studied constitutional convention model. Since many of these agreements involve only a small number of the persons affected by governmental procedures, no claim of general Pareto efficiency can be associated with the fluctuating balance of policymaking power between king and council. All that is claimed is that *shifts in the assignment of power between kings and their councils make those in government better off* than they would have been without them, in the circumstances faced.

On the other hand, the analysis as a whole does suggest that the king and council template is a relatively efficient method of governance. It is for this reason that both rational rulers and constitutional conventions often adopt intermediate collective choice procedures that divide policymaking responsibilities between a single executive (king, president, prime minister, cabinet) and a committee (council, congress, assembly, parliament). And it is partly for this reason, that the king and council constitutional template is so durable and so nearly universal in its application.

Chapter 5: The Medieval Fiscal Constitution and Constitutional Exchange

1. A Fiscal Constitution Fit for a King

The previous chapter discusses in a general way how exchange can operate within a bipolar government. This chapter attempts to explain a particular assignment of power over taxation that was commonplace in medieval governments and explores how that fiscal constitution might have inadvertently facilitate constitutional bargains that shifted power from the king to the parliament. The first section of this chapter explores the incentives for a monarch to provide a council with significant veto power over taxation. Section 2 explores how different assignments of veto and agenda control over other policy domains can affect the feasible range of policy outcomes. Section 3 discusses circumstances in which the king may trade greater control over policy for additional tax revenues or support on other policies, given existing restrictions in the domain of policy choices. Section 4 summarizes the argument and suggests extensions.

To make the prose flow a bit better, I resist the modern "lemma and proof" format and use a parallel structure that interleaves the prose and mathematics. For math averse readers, a parallel structure allows the equations to be ignored without losing the main line of reasoning. For the mathematically inclined, proofs of the most essential technical points are provided in footnotes.

Why an Almost Omnipotent Despot Might Grant Veto Power to a Council

The king and council template has two centers of power. At one center, there is a single agent, the king, who controls the implementation of policy. At the other, there is a group of individuals serving as a committee, the council or parliament, who share responsibility with the king for developing policy. Historically, the council has often been a somewhat representative body insofar as its members were selected from relatively wealthy and powerful interest groups outside of government. In many cases, council members were explicitly selected as representatives by those groups, in others the most powerful members of those groups were selected for the council by the king. In either case, significant economic interests came to be represented by the royal councils, and subsequently by parliaments. These interests were important historically, and play an important role in the analysis developed below.[29]

As a point of departure, consider one of the polar cases of the king and council template, one-man rule with an advisory council. Suppose that the king can collect any taxes that he wishes and spend the money as he sees fit without necessarily taking account of the policy interests of his advisors or others outside government. In this case, the council may be used as a source of information and advice, but plays no direct role in policy formation. For purposes of analysis, assume that the king has a utility function defined over his own private consumption, X, and two government services, guns, G_1, and butter, G_2 :

$$U = u(X, G_1, G_2)$$

The king's budget constraint is determined by his own household wealth, W, which is usually considerable, the taxes that he levies, T, the cost of government services and his personal consumption. Using personal consumption as the numeraire good allows the constraint to be written as $T + W = X + c(G_1,G_2)$, or

$$X = T + W - c(G_1,G_2)$$

where c is a separable convex cost function of the two government services. Substituting for personal consumption and differentiating with respect to the control variables T, G_1, and G_2 yields the following first order conditions that characterize the unfettered king's preferred fiscal policy:

$$U_{G1} - U_x C_{G1} = 0$$

$$U_{G2} - U_x C_{G2} = 0$$

$$U_x = 0$$

The first two first-order conditions imply that the king sets public service levels so that the marginal utility of the service equals its marginal cost in terms of his diminished personal consumption of the private good. This implies that taxes will be collected until the marginal utility of his additional personal consumption falls to zero.

[29] Constitutional exchange involving councils that represent other interests, for example religious or ideological ones, may have yield different outcomes from those developed below.

Note that the latter can be satisfied as an equality only if the king has sufficient household and tax revenue to *achieve satiety in all goods*. ($U_x = 0$, implies that both U_{G1} and U_{G2} also equal zero at the utility maximizing public policy.) Whether this is feasible or not depends both on the king's preferences and the extent to which tax revenue may be "squeezed" from the kingdom. The tax base of the kingdom is clearly constrained by the wealth of the kingdom, which, in most cases, derives from the productive abilities and efforts of the king's subjects as well as the country's endowment of natural resources. If the king's tastes are not such that satiation occurs within the feasible range of the kingdom's output, he will be disposed to tax away the full surplus of the kingdom.[30]

Unfortunately for the king, if every subject in the kingdom expects all of their production above subsistence to be taken by the government, there is no private incentive to produce a taxable surplus, and none will be produced. [31]To obtain the hypothetically maximal tax revenue the king must essentially enslave the entire population of the kingdom. If generalized slavery is not feasible or is very expensive to realize, the king's control over tax revenues will necessarily be less than absolute even though he has complete control over tax instruments and rates.

The possibility of tax resistance creates an opportunity for constitutional exchange between a nearly all-powerful king and those who pay the taxes. In exchange for a commitment to take only a specific fraction of the surplus, the subjects might agree to provide more tax revenue by producing more surplus. To make the promised tax limitation credible (and *creditable* [32]), the king may also promise to seek the approval of those taxed before increasing tax rates in the future. Institutionalized veto power over taxation makes the promise of leviathan credible, because it provides council members who represent the interests of (major) tax payers with a method of avoiding future tax increases.[33] In effect, the king trades veto power over future tax increases for additional tax revenues. The subjects pay greater taxes than they would have in the absence of veto power, but they receive a more creditable promise of lower future tax rates, which allows the subjects a more certain and greater share of their own future surplus production.

The value of this constitutional reform can be demonstrated mathematically. In the case where the council lacks veto power, the process of taxation can be represented as a three-stage game. In the first stage, the king announces a tax rate; in the second, the subjects produce their output; in the third, the king collects his taxes. In a one-shot game, the king would announce a very low tax in period 1, but, subsequently, take the entire surplus produced in period 3 regardless of the tax announced in period 1. Forward looking subjects would anticipate the final confiscatory tax, and produce no taxable surplus. Consequently, the king's tax revenue in period 3 would be zero in equilibrium.

[30] Mancur Olson (1993, 2000) uses the residual claimant status of the king to argue that the king has an encompassing interest in the economic output of his kingdom. He will consequently invest in infrastructure, education, and a court system to the extent that these "inputs" lead to greater national output and tax revenue.

[31] This is intuitively obvious. Consider a typical farmer -taxpayer whose utility is $U = u(L, Y)$ where $Y = (1-t)f(H-L, G_1, G_2)$, t is the marginal tax rate, f is a the tax payer's strictly convex production function of farm output, L is liesure, and H is the available hours in the day. H-L = W the hours spent farming. Y can be regarded as income greater than subsistance income. The tax payers works H-L* hours, and L* is such that $U_L - U_Y(1-t)F_W = 0$. Note that given U monotone increasing, twice differentiable, and concave, whenever t = 100%, a corner solution emerges with L* = H. If subsistance output $Y=Y^S>0$, is required to survive, $L^* = H - f^{-1}(Y^s)$.

[32] North and Weingast (1989) demonstrate that the transfer of control over government finances from the King to the British Parliament in the Glorious Revolution made the King substantially more creditworthy.

Veto power over new taxes had existed in England since the signing of the Magna Carta in 1215 which granted such power to an elected council of twenty five barons (section 61). Similar arrangements were commonplace throughout Europe during the late middle ages.

[33] Buchanan and Brennan (1980) analyze tax payer interests in constraining the tax power of leviathan at a time when the fundamental institutions of governance are adopted by a constitutional convention. Although their path-breaking analysis clearly influences the approach taken here, the purpose of their analysis was normative rather than positive. Their research analyzes the properties of durable tax schedules and taxable bases that tax payers might agree to as a means of advancing their own self interests That is to say, Brennan and Buchanan attempt to characterize the fiscal arrangements that should (and perhaps would) be adopted by a society that anticipated government by leviathan.

In the present analysis, the constitutional arrangements that characterize the division of power between the king and council emerge gradually as a consequence of ongoing trades between the king and those taxed. Moreover, taxes are assumed to be "standing" confiscatory taxes rather than a modern income tax. Little would change in the analysis if the tax agreements constrained tax rates in progressive or proportional income taxes instead of lump-sum taxes.

In the polar case of the king and council template, constitutional gains to trade are clear. Any tax institution that can simultaneously achieve positive surplus for the tax payers and positive revenue for the king makes each better off.

One such possibility involves granting the council veto power over tax increases. This institutional change transforms the three stage into a four stage game, where in the fourth stage, the council may veto any increase in taxes in period three above that announced in period one.[34] In a four stage game with a council veto over tax increases, an income maximizing king would announce the revenue maximizing proportional tax rate in period 1, given the productive propensities of his subjects, or perhaps announce a lump-sum or head tax that allows a substantial surplus to be realized by taxpaying subjects. [35]Since the revenue maximizing tax rate is less than 100%, the subjects produce a surplus above subsistence knowing that they will be able to keep a part of it, and the king collects taxes according to the announced tax schedule. In this manner, granting a council veto power, leads to a wealthier king and a wealthier kingdom.

It bears noting that *no vetoes will be observed* when the system is working smoothly, consequently, such councils may well appear to be "toothless.". None the less, in the absence of the council's veto power over new taxes, both the king and the kingdom would have been substantially poorer.

This institutional arrangement is surprisingly stable once in place because the game structure is subgame perfect. The king cannot formally reduce the veto power of the council without substantially undermining his tax base.

For example, the king cannot simply add another stage to the game in which the king can accept or reject the council's veto. In such a game, an income maximizing king's would always be inclined to raise taxes in period three and then overturn the council's veto in period five, taking the entire surplus. Production would again fall to near subsistence levels and the taxable base would again approach zero. Alternatively, the king might occasionally renege on his assignment of veto power to the council, by suddenly calling out the army, his future tax receipts would tend to fall. However, in that case, producers would simply discount the constitutional promise and produce less to be taxed in future time periods. The anticipated increase in the tax implicitly increases the effective rate of taxation. The tax payer response to confiscatory taxation, reduced production, is credible as long as production is a costly activity for the subjects and the king is not able to reduce his subjects to abject slavery.[36] Although the discrete strategy sets of these games tend to exagerate the productivity of medival tax constitutions, it does illustrate the financial advantage that a king may realize from adopting a tax constitution in reasonably stable economic circumstances.

This theoretical possibility appears to have real world counterparts. In order to secure a more predictable or less costly tax revenue stream, medieval kings often agreed to agreed to create councils or parliaments composed of major taxpayers and to vest those councils with (substantial) veto power over taxation. Perhaps the most famous of these formal agreements is the British Magna Carta of 1215, which, among other provisions, established a representative council of 25 barons that made decisions via majority rule and had the power to veto new royal taxes. Similar political arrangements that formally vested veto power in councils representing tax payer interests were also adopted in France, Spain, Germany, and Sweden at around the same time (Palmer and Colton 1965, p. 29-31). These tax constitutions were amazingly stable, lasting for many centuries in most of these countries. Indeed, their tax constitutions in most cases more stable than the territories governed.

Creating a Legislature through Constitutional Exchange

Granting veto power over taxation is a significant shift of power from the king to the council, but the king continues to dominate policy formation in the ensuing regime. The king now has more revenue to spend on public services and royal amenities. We

[34] Taxpayer utility always diminishes in t whenever tax receipts are increased to support additional consumption for the royal household. Given $U = u(L, Y)$ and $Y = (1-t)f(H-L, G_1, G_2)$, after tax utility can be written as $U^* = u(L^*, (1-t)f(H-L^*, G_1^*, G_2^*))$. The envelope theorem implies that $U^*_t = U_Y[-f(H-L^*)] < 0$.

[35] Note that a lump sum tax can not be truly lump sum when it is bounded by production of the taxable base. If no more than is produced can be taken, farmers will produce a surplus only when the net of tax utility realized after tax is greater than that associated with subsistence.

[36] I neglect many aspects of long-term continuous dealings to avoid the ambiguities of the folk theorem which demonstrates that a wide range of equilibria are possible if one or both parties is able to make creditable commitments to particular intertemporal responses.

Note, however, that the equilibria developed above are consistent with the folk theorem. For example, if the tax payers can make a creditable commitment to reduce their surplus output to zero, the behavior assumed above would be equilibrium strategies in infinitely repeated games as well.

now take up circumstances under which a king might voluntarily cede some direct control over government programs to the council. Such transfers of power *transform a tax council into a legislature*.

The first task is to demonstrate that policy making power can be divided between the executive and the committee and that that power can be shifted from one to the other. Four intermediate transfers of policy making power from the king to the council are analyzed below: (i) partial veto power over policy proposals, (ii) complete veto power, (iii) partial agenda control over policy proposals, and (iv) complete agenda control. The focus of section III is the extent to which shifts of power may potentially decrease the king's welfare and increase that of the council. This decline in the king's welfare is the cost of granting the council some control over public policy. It turns out to be smaller than might have been expected. The identification of benefits that might lead the king to agree to such transfers of power are taken up in Section IV.

On the General Disinterest in Constitutional Reform in Stable Political and Economic Circumstances

As a point of departure, suppose that the tax constitution developed above has been adopted, and the king has complete policymaking power. A secure king with complete control over public policy will use "his" revenue to secure his ideal combination of public services, given his veto-constrained tax revenue, T^0, and his household income, Y. Substituting the veto-constrained tax revenue into his budget constraint, and that into his utility function yields:

$$U = u(T^0 + Y - c(G_1, G_2) , G_1, G_2)$$

which has two control variables, G_1 and G_2 , and two first-order conditions similar to those above:

$$U_{G1} - U_x C_{G1} = 0$$

$$U_{G2} - U_x C_{G2} = 0$$

Together the first-order conditions imply that the king's optimal policies are determined by his household income and the constraint imposed by the tax constitution: $G^{1*} = g(Y + T^0)$ and $G^{2*} = h(Y + T^0)$. As long as the king's personal income and the tax constitution are stable, these expenditure policies remain ideal as far as the king is concerned. The subjects may prefer more butter and fewer guns, or perhaps more of each with a more modest level of personal consumption by the king, but, under the existing institutional arrangements, they have no power to influence government services levels.

At this equilibrium, there may be unrealized potential gains from fiscal exchange. The council members may wish that a different combination of public services had been provided. Given this, the council (representing tax payers) might wish to exchange higher permanent taxes in exchange for a new pattern of expenditures. However, it is clear that the promise of the king is not entirely creditable. The king may accept a permanent increase in tax revenue, from T^0 to T^1, but fail to change public policies once he has the additional tax receipts.

Note that granting veto power over *public* expenditure policies to the council does not, in this case, necessarily secure the king's promise. The king may accept the additional revenue but use it to build a new wing on his castle rather than to increase either public service. Insofar as no new government service levels are proposed, so *the council has nothing to veto*. The same logic holds for agenda control for cases in which the king retains veto power. Here the council may propose a new pattern of expenditure, and the king may simply veto it, leaving the policy status quo (the king's ideal) in place along with an increase in his personal consumption. Neither veto power nor agenda control are sufficient to secure the king's promise in a setting where existing public policies are already optimal for the king.

Consequently, it is clear that the king can offer veto power or even agenda control to the council in a stable political and economic setting at very low personal cost. However, such partial transfers of "power" would obtain little of value from the council insofar as the council would recognize that these procedural powers are ineffective in stable political and economic circumstances.

As long as the status quo remains in the interest of the king, a transfer of complete or partial veto power or agenda control to the council generates nothing, but, perhaps, additional prestige for council members. Partial or complete veto or agenda control are only of value to the council when either the king's ideal policy combination changes or the status quo ante is no longer be feasible. In a completely stable setting, a shift of veto power or agenda control to the council will neither affect policy nor secure the king's promise of new programs.

2. The Value and Cost of Partial and Complete Veto Power in Unstable Settings

Vesting the Council with Partial Veto Power

The possibility of political shocks increases the value of partial transfers of policymaking power to the council and the cost of such transfers for the king. Consider the case in which the king's ideal combination of government services changes and the council has secured partial veto power over changes in G_2, "butter." In this case, the king faces two constraints, his budget constraint $T^0 + Y - c(G_1, G_2) = C$, and a new *procedural constraint* $W(X^c, G1, G2) - W(X^c, G_1, G^0_2) \geq 0$, where W is the utility level (welfare) of the pivotal council member, X^c is the after tax consumption of the decisive member of the council, and superscripts "*0*" denote the initial status quo policies. The council's veto power over policy G_2 requires the new policies to make the pivotal council member at least as well off as he would have been at the status quo level for the policy over which the council has veto power.

The king realizes this, of course, and so will only propose public policies that satisfy the council in the sense that they will not veto them. Policies that maximize the king's welfare while preserving that of the council be characterized by differentiating the implied Kuhn-Tucker control function:

$$U = u(T^0 + Y - c(G_1, G_2), G_1, G_2) - \lambda [W(X^c, G_1, G_2) - W(X^c, G_1, G^0_2)]$$

The tangency solution(s) requires G_1 and G_2 such that:

$$U_{G1} - U_x C_{G1} - \lambda (W_{G1} - W^0_{G1}) = 0$$

$$U_{G2} - U_x C_{G2} - \lambda (W_{G2}) = 0$$

$$W(X^c, G_1, G_2) - W(X^c, G_1, G^0_2) = 0$$

Figure 1 illustrates the geometry of the partial veto procedural constraint in the $G_1 x G_2$ plane. For purposes of the illustration, the pseudo indifference curves of both the king and pivotal council member in the $G_1 x G_2$ plane are represented as concentric circles, as generally assumed in spatial voting models and in other work relying on quadratic loss functions.[37] These iso-utility lines are not conventional indifference curves insofar as effects of changes in the king's private consumption are implicitly being accounted for. Iso-utility curves denote utility levels associated with policies that differ from their respective wealth-constrained ideal policies. Given values of T^0 and Y, both the pivotal council member and the king have a wealth-constrained ideal policy combination that geometrically resembles the highest point of their respective utility mountains in the $G_1 x G_2$ plane.

Given complete control over public policy, these ideal points characterize the policy combinations that the council and the king would select if they faced no binding procedural constraints. These are the polar outcomes of the king and council constitutional template. However, if the procedural constraint is binding, even partial veto power tends to affect the king's policy decision making. In that case, neither λ nor W_{G2} is equal to zero, and the new first-order conditions clearly differ from those of the tax constrained conditions.

Consider the effect of a change in the king's tastes or circumstances that lead him to prefer the policy combination labeled K to all others including the status quo policy combination 1. If the king has both agenda and veto power over guns and butter, he would adopt the policy combination at K. On the other hand, if he has granted the council veto power over one of the policy dimension, here G_2 , he will not necessarily be able to adopt his ideal policy combination, because any policy proposal that he makes can be partially blocked by the council. Given the council's partial veto power, the king's policy proposal, (G_1, G_2), has to make the pivotal member of the council at least as well off as he (or she) would have been at the status quo level of the service over which they have veto power, (G_1, G_2^0). In the case depicted, the king can only achieve policy combination 2, which is some distance from his new ideal. This policy combination is clearly "veto proof," because G_2 remains at the status quo level, which leaves the council nothing to veto.

The mathematics of the tangency solution appear to suggest that the king can do a bit better than this by proposing a policy combination like 2', which makes the pivotal member of the council as well off as he would have been at policy 2. However, both inspection and mathematics imply that this is not so. Recall that the veto player chooses last. Consequently, policy 2' would be vetoed by the council in order to realize a policy outcome that is a bit better than either 2' or 2 from the point of view of the council, although worse than 2' or 2 for the king. The king, recognizes this, and will

[37] The assumed trace of the King's utility function in the $G_1 x G_2$ plane is $U = U^* - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2$.

propose policy combination 2, which is the best that the king can achieve in this new political setting.[38]

Granting the council veto power over G_2 often makes the king a bit worse off. However, this is not always the case. For example, had the king's preferred policy combination moved to K' rather than to K, his new ideal policy combination, 4, would have been accepted by the council because policy combination 4 is preferred by the council's pivotal member to policy combination 2, the result if G_2 reverts to the status quo level. Partial veto power can interfere with a king's policymaking power, but it does not constrain the king in every case, even in settings where the king's preferred policy changes from time to time.

Vesting the Council with Complete Veto Power

As might be anticipated, the effect of granting the council veto power over both policy dimensions generally has a greater constraining effect on the king's ability to get his preferred policy than granting veto power over one dimension of policy. Mathematically the effect of granting the council veto power over both government policies is very similar to that above. The procedural constraint under complete veto power is: $W(X^c, G_1, G_2) - W(X^c, G^0_1, G^0_2) \geq 0$, and the Kuhn Tucker first-order conditions describing the best feasible policy along the constraint becomes:

$$U_{G1} - U_x C_{G1} - \lambda (W_{G1}) = 0$$

$$U_{G2} - U_x C_{G2} - \lambda (W_{G2}) = 0$$

$$W(X^c, G_1, G_2) - W(X^c, G^0_1, G^0_2) = 0$$

Only the procedural constraint differs, and again, the constraint again may or may not be binding.

In many cases, granting the council veto power will make the king worse off relative to the unconstrained and partial veto power analyzed above. This possibility is also represented in Figure 1. Given complete veto power, the council can now reject any policy combination that makes them worse off than the status quo ante. This implies that the king cannot choose a policy combination outside the decisive council member's iso-utility line passing through the status quo, (G^0_1, G^0_2).

If the king's new circumstances lead him to prefer policy combinations like K, the best that he can achieve is policy combination 3, which is inferior to policy combination 2 for the king. Policy 2 is no longer feasible. The council would now reject policy combination 2 because they prefer the original combination of services to that offered. In the case where the council is granted complete veto power, the council also constrains the king at K', whereas, as shown above, he would not have been constrained by a council with partial veto power. The king will be blocked by the council's veto power in all cases in which his new ideal point lies further from the

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[38] The Kuhn-Tucker conditions for this case are derived from the following maximand:

$$K = U^* - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2 - \lambda [(G^C_2 - G^0_2)^2 - (G^C_2 - G_2)^2]$$

Differentiating with respect to G_1, G_2, and λ, yields the following first-order conditions:

$$-(G^K_1 - G_1) <= 0 \quad \text{with } G_1 \geq 0 \text{ and } G_1 [(G^K_1 - G_1)] = 0$$

$$-(G^K_2 - G_2) + \lambda (G^C_2 - G_2) <= 0 \quad \text{with } G_2 \geq 0 \text{ and } G_2 [(G^K_2 - G_2) + \lambda (G^C_2 - G_2)] = 0$$

$$[(G^C_2 - G^0_2)^2 - (G^C_2 - G_2)^2] >= 0 \quad \text{with } \lambda \geq 0 \text{ and } \lambda [(G^C_2 - G^0_2)^2 - (G^C_2 - G_2)^2] = 0$$

The first of the first-order conditions imply that $G_1^* = G^K_1$ or $G_1^* = 0$. Whether the constraint is binding or not, the king sets service level one equal to his ideal level, G^K_1, or equal to zero. The second of the first-order conditions implies that if $\lambda = 0$, then $G_2^* = G^K_2$ or $G_2^* = 0$. If the constraint is non-binding then either the king sets service level one equal to his ideal or equal to zero. In the case in which the constraint is binding, that is to say the threat of veto affects his policy options, $\lambda \neq 0$, and the third conditions imply that $G^C_2 = G_2$. Consequently, there are just two equilibrium strategies for the king in this setting away from the lower bound. The king always sets $G_1^* = G^K_1$. If the veto power threat is not binding he sets the veto constrained service at his ideal level, G^C_2, otherwise he sets service level 2 equal at the status quo level, $G^C_2 = G^0_2$.

council's ideal than the status quo ante.

[39] The Kuhn-Tucker conditions for King in this case are derived from the following KT maximand:

$$K = U^* - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2 - \lambda[(G^C_1 - G^0_1)^2 + (G^C_2 - G^0_2)^2 - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2]$$

Differentiating with respect to G_1, G_2, and λ, yields the following first-order conditions:

$$-(G^K_1 - G_1) + \lambda(G^C_1 - G_1) <= 0 \quad \text{with } G_1 \geq 0 \text{ and } G_1 [(G^K_1 - G_1) + \lambda (G^C_1 - G_1)] = 0$$

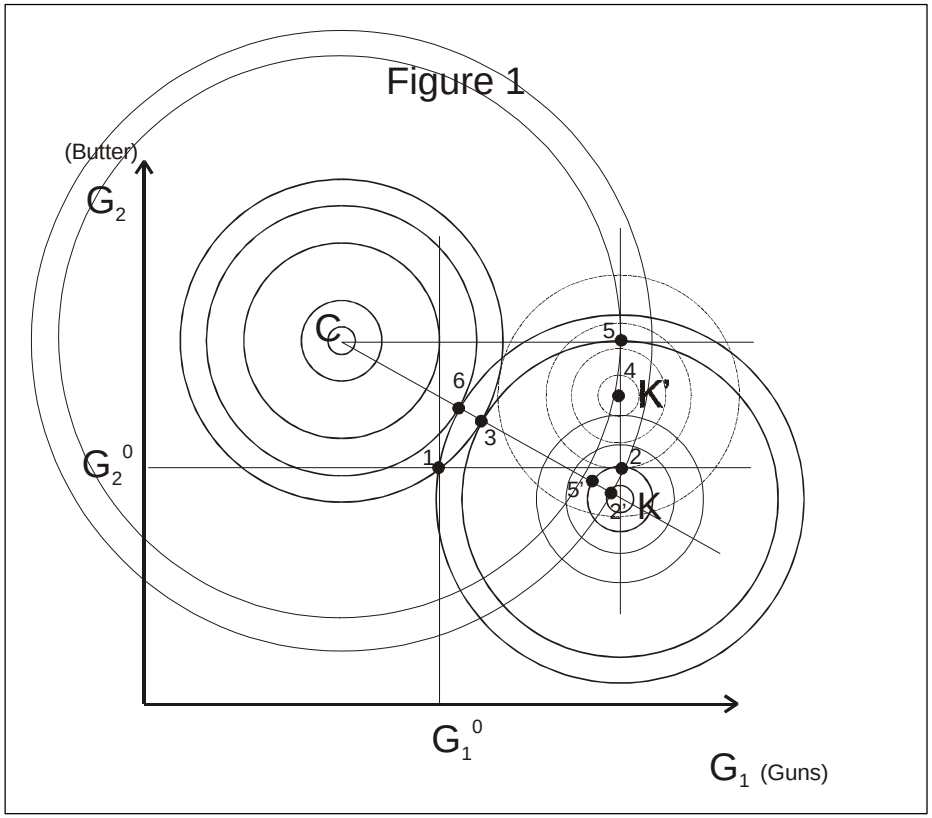
$$-(G^K_2 - G_2) + \lambda(G^C_2 - G_2) <= 0 \quad \text{with } G_2 \geq 0 \text{ and } G_2 [(G^K_2 - G_2) + \lambda(G^C_2 - G_2)] = 0$$

$$[(G^C_1 - G^0_1)^2 + (G^C_2 - G^0_2)^2 - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2] >= 0$$

$$\text{with } \lambda \geq 0 \text{ and } \lambda [(G^C_1 - G^0_1)^2 + (G^C_2 - G^0_2)^2 - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2] = 0$$

The first of the first-order conditions imply that if $\lambda = 0$, then $G_1^* = G^K_1$ or $G_1^* = 0$. If the constraint is nonbinding, either the king sets service level one equal to his ideal or equal to zero. In the case where the constraint is binding, $\lambda \neq 0$, and either the status quo is chosen, $G_1 = G^0_1$ and $G_2 = G^0_2$, or both policies G_1 and G_2 lie along the indifference curve passing through the initial policy position (G^0_1, G^0_2).

The second of the first-order conditions implies that if $\lambda = 0$, then $G_2^* = G^K_2$ or $G_2^* = 0$. If the constraint is non-binding than either the king sets service level one equal to his ideal or equal to zero. In the case in which the constraint is binding, $\lambda \neq 0$, and the third constraint implies that either the status quo is chosen, $G_2 = G^C_2$, or both G_1 and G_2 lie along the indifference curve passing through the initial policy position (G^0_1, G^0_2). There are, thus, three possible equilibrium strategies for the king in this setting according to the location of the king's new ideal point. If the veto power threat is not binding because his new ideal point is closer to the Council's ideal than the original policy combination, he proposes service levels at his ideal levels, (G^C_1, G^C_2). If the procedural constraint is binding, that is to say proposing his ideal point would be vetoed, the king may choose a combination of G_1 and G_2 such that one of his iso-utility curves is tangent to that of the Council's iso-utility line passing through the original policy combination. Alternatively he may set both service levels at their status quo levels, (G^0_1, G^0_2).



The council is clearly better off with complete veto power than with partial or no veto power, in such cases. They cannot be worse off. Thus, the king would demand a higher price for complete veto power than for partial veto power, and the council would be willing to pay a higher price for complete than for partial veto power in times where the kings policy preferences or circumstances are unsettled. (The circumstances in which such constitutional trades may take place are taken up below in section III.)

3. Partial and Complete Agenda Control

Granting the Council Partial Agenda Control

Agenda control is another transferable policymaking power by which gains from constitutional exchange may be realized. Veto power allows the empowered party to determine whether particular departures from the status quo will be undertaken. Agenda control allows the empowered party to suggest departures from the status quo that might be adopted. As in the case of veto power, the value of agenda control to the council depends upon future changes in the kings policy preferences. Without changes in the kings policy preferences, as noted above, the king can costlessly shift agenda control to the council, and defend the status quo by vetoing all proposed changes. The king is not always constrained by a council with agenda control, but there are many cases in which he will be, and it is because of these that a council may have an interest in securing agenda power.

We first analyze the extent to which a partial transfer of agenda control might constrain the king's future policies. Given partial agenda control, the council will attempt to maximize its own welfare given the king's veto power. Consequently, the mathematics of shifting agenda control from the king to the council while the king retains partial veto power can be explored using mathematics similar to that developed above for the king. Granted agenda control over G_2, the council will choose G_2 to maximize "its" utility given the veto power of the king, and the king's choice of G_1.

$$W = w(X^c, G_1, G_2)$$

$$-\lambda[u(T^0 + Y - c(G_1, G_2), G_1, G_2) - u(T^0 + Y - c(G_1, G_2^0), G_1, G_2^0)]$$

The Kuhn-Tucker tangency solution requires:

$$W_{G2} - \lambda [U_X(-C_{G2}) + U_{G2}] = 0$$

while the king sets the policy that he fully controls, G_1, to maximize:

$$U = u(T^0 + Y - c(G_1, G_2), G_1, G_2)$$

which requires:

$$U_{G1} - U_X C_{G1} = 0$$

given G_2. Policy combinations that satisfy both first-order conditions simultaneously are analogous to Nash equilibria in noncooperative games.

The geometry of granting partial agenda control to a noncooperative council is also represented in Figure 1. As in the previous cases, the vetoer goes last in full knowledge of the proposal of the agenda setter. Were it not for the veto power of the King, the Nash solution to this policymaking game would resemble policy combination 5 in Figure 1, where both the king and the council secure their preferred level of the service over which they exercise agenda control. However, given complete veto power,

the king can do better than policy combination 5 by vetoing the council's proposed level of "butter." The result in this case is policy combination 2, which combines the king's ideal level of "guns" with the status quo level of "butter."

Anticipating this, the council might be tempted to moderate its proposal for "butter" service levels, but no proposal that it makes above G_2^0 would be accepted by the king, and no service level below G_2^0 would lead to a better policy combination for the council than that of 2 because the king can keep G_1 at his preferred level (under the assumed geometry, this is a dominant strategy). In this case, granting agenda control to the council leads to the same policy as a grant of partial veto power to the council.[40] This equivalence is not universal, but depends on the preference shift of the king. Had the king's ideal point shifted to K', policy combination 5 would have been veto proof and agenda control would have made the council better off than partial veto power.[41]

The king is somewhat worse off and the council is somewhat better off with partial agenda control than partial veto power. Policy combination 2 is a possible outcome under both institutions, but policy combination 4 is preferred by the king to policy combination 5. The pivotal council member prefers policy combination 5 to policy combination 4.

Vesting the Council with Complete Agenda Control

Granting complete agenda control to the council while retaining complete veto power makes the king worse off than granting complete veto power to the council. Given complete agenda control, the council would propose a policy combination that maximizes:

$$W = w(X^c, G_1, G_2) - \lambda[u(T^0+Y - c(G_1, G_2), G_1, G_2) - u(T^0+Y - c(G_1^0, G_2^0), G_1^0, G_2^0)]$$

and the Kuhn-Tucker tangency solution requires:

$$W_{G2} - \lambda [U_X(-C_{G2}) + U_{G2}] = 0$$

$$W_{G1} - \lambda [U_X(-C_{G1}) + U_{G1}] = 0$$

---

[40] Again gains to fiscal exchange exist at policy combination 2. However, in this case the agenda setter cannot capture these potential gains to trade. If the council suggests the "butter" service level required for policy 5', the king would accept this, but still opt for his preferred level of "guns." Under the procedural institutions in place, the gains from fiscal exchange would be unrealized.

[41] The Kuhn-Tucker conditions for the council are derived from the following KT maximand:

$$K = W^* - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2 - \lambda[(G^K_2 - G^0_2)^2 - (G^K_2 - G_2)^2]$$

Differentiating with respect to G_2, and λ, yields the following first-order conditions:

$$-(G^C_2 - G_2) + \lambda(G^K_2 - G_2) <= 0 \quad \text{with } G_2 \geq 0 \text{ and } G_2[(G^C_2 - G_2) + \lambda(G^K_2 - G_2)] = 0$$

$$[(G^K_2 - G^0_2)^2 - (G^K_2 - G_2)^2] >= 0 \quad \text{with } \lambda \geq 0 \text{ and } \lambda[(G^K_2 - G^0_2)^2 - (G^K_2 - G_2)^2] = 0$$

The first of the first-order conditions imply that if $\lambda = 0$, then $G_2^* = G^C_2$ or $G_2^* = 0$. If the constraint is non-binding than the council sets service level two equal to its ideal level (or equal to zero if that is less than or equal to zero). In the case in which the constraint is binding, $\lambda \neq 0$, the second constraint implies that the status quo is chosen, $G_2 = G^0_2$.

The kings optimization problem is unconstrained in for service level one, and constrained by the agenda chosen by the council in stage one, which he can choose to veto or not. He chooses G_1 to maximize:

$K = U^* - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2$

which requires:

$-(G^K_1 - G_1) = 0$ or $G^K_1 = G_1$.

The king sets service level one at his ideal level regardless of what the Council chooses for service level 2.

There are, thus, two possible equilibrium budgets in this setting according to the location of the king's new ideal point. If the king's veto power threat is not binding, the council's proposes its own ideal service level for G_2, $G_2^* = G^C_2$. If the king's veto power is binding, the council proposes the status quo level, than the original level of service two is proposed, $G_2^* = G^0_2$. The severability of spatial utility functions implies that the king always chooses his ideal level of service 1, $G^K_1 = G_1$, and given the above option, never veto's the council's proposal.

At the tangency solution, the council chooses its utility-maximizing combination of guns and butter along the king's iso-utility line passing through the initial policy combination. The geometry of this solution is represented in figure 1 as policy combination 6. This is the most favorable of the policies examined for the council and the least favorable to the king. Essentially this is the mirror image of the case in which the king had agenda control and the council veto power.[42]

Given complete agenda control, *nearly all changes in the king's policy preferences make the council better off* . Moreover, because the council can now assure the status quo ante, changes in the king's preferences can no longer make the pivotal member of the council worse off.

Overall, it is clear that ever more favorable policy outcomes tend to be obtained by the council as power over public policy is transferred to it. In principle, this process can continue until policymaking power is entirely transferred from the king to the council. At that point, the king would be reduced to an advisory post and government policies would be those which are ideal for the pivotal member of the council.

4. The Domain of Public Policy with Intermediate Divisions of Policy Making Power

The mathematical analysis above and in the footnotes demonstrates that the range of policies that are feasible for the king varies with the division of policy making powers. However, since the results do not lead to simple convex feasible sets, the relationships of the feasible policy domains to one another are not intuitively obvious. Figures 2A illustrates the feasible set for complete and partial assignments of veto power to the committee. Figure 2B depicts the feasible sets of policy outcomes for complete and partial agenda control. Together these allow the restrictiveness of the four assignments of policymaking power to be readily compared.

[42] The Kuhn-Tucker conditions for council in this case are derived from the following KT maximand:

$$W = W^* - (G^C_1 - G_1)^2 - (G^C_2 - G_2)^2 - l[(G^K_1 - G^0_1)^2+(G^K_2 - G^0_2)^2 - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2]$$

Differentiating with respect to G_1, G_2, and λ, yields the following first-order conditions:

$$-(G^C_1 - G_1) + l(G^K_1 - G_1) <= 0 \quad \text{with } G_1 \geq 0 \text{ and } G_1 [-(G^C_1 - G_1) + l(G^K_1 - G_1)] = 0$$

$$-(G^C_2 - G_2) + l(G^K_2 - G_2) <= 0 \quad \text{with } G_2 \geq 0 \text{ and } G_2 [-(G^C_2 - G_2) + l(G^K_2 - G_2)] = 0$$

$$[(G^K_1 - G^0_1)^2 + (G^K_2 - G^0_2)^2 - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2] >= 0$$

$$\text{with } l \geq 0 \text{ and } l [(G^K_1 - G^0_1)^2 + (G^K_2 - G^0_2)^2 - (G^K_1 - G_1)^2 - (G^K_2 - G_2)^2] = 0$$

The first of the first-order conditions imply that if $\lambda = 0$, then $G_1^* = G^C_1$ or $G_1^* = 0$. If the constraint is non-binding than either the council sets service level one equal to its ideal or equal to zero. In the case in which the constraint is binding, $\lambda \neq 0$, and the procedural constraint implies that either the status quo is chosen, $G_1 = G^0_1$ and $G_2 = G^0_2$, or both G_1 and G_2 lie along the indifference curve passing through the initial policy position (G^0_1, G^0_2).

Similarly, the second of the first-order conditions implies that if $\lambda = 0$, then $G_2^* = G^C_2$ or $G_2^* = 0$. If the constraint is non-binding than either the council sets service level one equal to its ideal or equal to zero. In the case in which the constraint is binding, $\lambda \neq 0$, and the third constraint implies that either the status quo is chosen, $G_2 = G^C_2$, or both G_1 and G_2 lie along the indifference curve passing through the initial policy position (G^0_1, G^0_2).

There are, thus, three possible equilibrium strategies for the council in this setting according to the location of the king's new ideal point. If the king's veto power threat is not binding because his new ideal point is closer to the Council's ideal than the original policy combination, the council proposes service levels at their ideal point, (G^C_1, G^C_2) If the procedural constraint is binding, that is to say proposing their ideal point would be vetoed, and away from the lower bound (0, 0), the council may choose a combination of G_1 and G_2 such that pivotal member's iso-utility curves is tangent to the king's iso-utility line passing through the original policy combination. Alternatively the council may set both service levels at their status quo levels, (G^0_1, G^0_2).

Figure 2A depicts the range of policies that may arise for the council under complete and partial veto power. In the case of complete veto power, the council can block any move that will make it worse off than the status quo ante (again labeled policy combination 1). Thus, the range of possible policy outcomes under complete veto power consists of those policy combination that lie inside the decisive council member's indifference curve through the status quo policy. This is the shaded circular area in Figure 2A. In the case of partial veto power, the council will also accept all these policies, but can not block some policies that make it worse off. The council will veto any policy proposal made by the king in which the status quo level of the service over which it exercises veto power is preferred to that of the policy proposed by the king. For the spatial preference ordering used in the figures, this implies that only policies within the trapezoid will be accepted. (The budget constraint of the king determines the upper bound of the trapezoid in the uncontrolled dimension.)

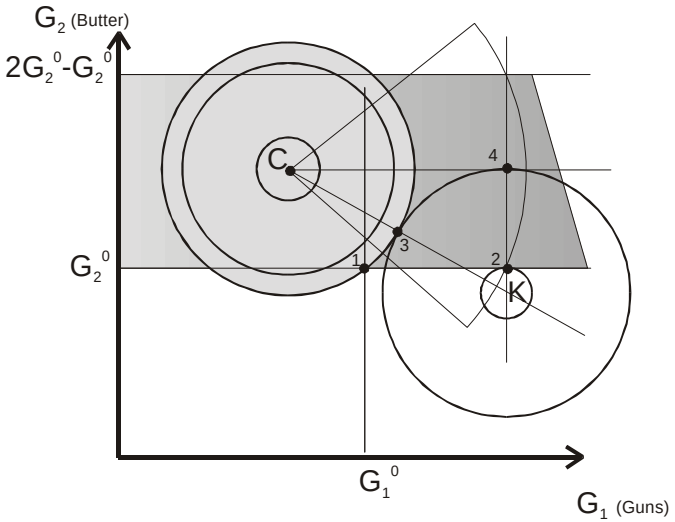
Figure 2B depicts the range of policies that may arise under complete and partial agenda control. In the case of complete agenda control, the council will only propose policies that make it better off relative to the status quo ante. (If none of these are veto proof, the council would propose the status quo ante!) Consequently, the range of possible policies is again limited to those within the council's indifference curve passing through the initial policy position. For spatial preferences used in our illustrations, the feasible set is circular shaded area similar to that shaded in Figure 2B. The solutions to partial agenda control include that area plus other policy combinations that may emerge from the King's area of control given the council's proposals for the policy over which it exercises agenda control. The geometric and mathematical results above suggest that the council will either propose its own ideal service level or the service level of the status quo. Consequently, the range of policy outcomes that can arise under partial agenda control is the circular area plus two line segments. (The upper bound of the line segments in the uncontrolled dimension is again determined by the king's budget constraint.)

Note that the more restrictive the procedural constraints are, the smaller average distances to the council's ideal point tend to be, and the larger they tend to be for unfortunate kings. In this case, the council's reservation offer is least for partial veto power, followed by partial agenda control, followed by complete veto power, followed by complete agenda control. The king's reservation prices have the same rank order, with the least binding also being the least costly of the policymaking powers turn over to parliament. Moreover, given these rank orders, the marginal reductions in the feasible domain of policy become smaller, which suggests that marginal cost of ceding

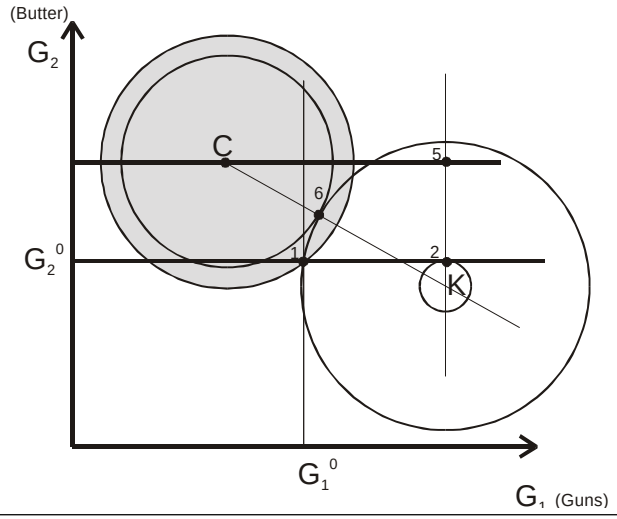
additional powers to the parliament declines.

Figure 2

(A: Partial and Complete Veto Power)



(B: Partial and Complete Agenda Control)



5. Mutual Gains from Trading Policy-Making Power

The above analysis demonstrates that, in general, the value and cost of partial shifts of policymaking power to the council, whether veto or agenda control, depends on the anticipated political environment in which the new division of policy making power will be applied and the extent of the power transferred. We now characterize the willingness of the council or parliament to pay for additional control over public policy and the reservation price that the king or president requires for such reallocations of policymaking power.

Part of the council's demand for policymaking power is analogous to a demand for insurance. If the political environment is static and well understood, a shift of either veto power or agenda control to the council can be done without cost to the king, and without value to the council. Some uncertainty about the future course of policy is necessary for such constitutional trades to be worthwile. Policy making powers reduce policy risks for those who hold them in an uncertain world. As true of most insurance policies, the above analysis suggests that insurance is more valuable in some political and economic environments than in others. If the anticipated policy changes are minor, the value of veto and agenda control also tend to be minor. When times are more uncertain, policy making power becomes more valuable insurance. In addition to the insurance demand for additional policymaking powers, both the king and the council have a direct interest in institutional arrangements that allow them to secure policies that advance their own interests, irrespective of risks. Although, demands for control over policy tend to be mutually opposed in stable circumstances, changes in policy interests may generate opportunities for mutually advantageous trades of policy making power between king and council to arise. Given an intermediate initial distribution of policy making power and differences over policy priorities, policy making power to be given up in one area in exchange for greater power in others.

6. The Value and Cost of Restricted Policy Domains

The procedural constraints, together with the royal budget constraint, bound the range of policies that can emerge as time passes. This property can be used to assess the expected value of alternative procedural rules for given expectations about the future political environments.

The reservation price for the executive to shift policymaking power to the council and the reservation value to the council for shifts of power to the council can be

assessed given a probability density function that describes likely shifts in the king's preferences (or political circumstances) and/or policy outcomes with and without procedural bounds on policies. Let $j(G_1,G_2)$ be the probability function that describes the range of policies that the king may wish to pursue if not constrained, and $k(G_1,G_2, R_i)$ be the probability function describing the range of policies that the king may wish to pursue under procedural restraint R_i, where the domain in which *k* has non-zero values is a subset of that of *j*. The lowest offer that the king would accept to adopt R_i is O^{k*} such that:

$$\int\int j(G_1,G_2)\, u(T^0 + Y^k - c(G_1^{**}, G_2^{**}) , G_1^{**}, G_2^{**}) \, dG_1 \, dG_2 \; -$$
$$\int\int k(G_1,G_2, R_i)\, u(T^0 + O^{k*} + Y^k - c(G_1^{*}, G_2^{*}) , G_1^{*}, G_2^{*}) \, dG_1 \, dG_2 \; = 0$$

Similarly, the highest offer that the council would be willing to make

$$\int\int j(G_1,G_2)\, w(Y^c - T^0 - c(G_1^{**}, G_2^{**}) , G_1^{**}, G_2^{**}) \, dG_1 \, dG_2 \; -$$
$$\int\int k(G_1,G_2, R_i)\, w(Y^c - T^0 - O^{c*} - c(G_1^{*}, G_2^{*}) , G_1^{*}, G_2^{*}) \, dG_1 \, dG_2 \; = 0$$

where policies are set at the king's ideal for the cases of interest, as developed above. For bounded and continuuous probability and utility functions, the implicit function theorem applied to equation 23 implies that lowest offer that the king will be willing to accept can be written as:

$$O^{k*} = s(R_i , T^0 + Y^k)$$

and, from equation 24, the highest that the council is willing to be make as:

$$O^{c*} = d(R_i , T^0 + Y^c)$$

As in ordinary markets the exchange occurs when the reservation price of the party demanding more power exceeds that of the party that currently possesses the power of interest.

For a wide range of probability functions, it is also clear that the rank order of these prices will parallel the restrictiveness of the procedural constraints. The equilibrium allocation of power can be represented geometrically as the intersection of the reservation price schedules of the king and council. In the initial position assumed here, the king possesses complete power over spending, which implies that the reservation price for transfers of power to the king is too great for the council to compensate the king for his losses, whether by increasing tax payments or through providing other in-kind services, as at S^k_0 and D^C_0. In order for constitutional bargaining between the king and council to be mutually beneficial there must be a shock of some kind that alters the positions of one or both reservation price schedules.

For example, the supply and demand curves for political authority are systematically affected by changes in wealth. A decline in the king's wealth causes his reservation price to fall.

$$O^{k*}_{Yk} = [\int\int j(G_1,G_2)\, u_{Yk} - k(G_1,G_2, R_i)\, u_{Yk} \, dG_1 \, dG_2] \; / \; -[U^{e}_{OO}] \; < 0$$

Similarly, an increase in the council's wealth causes its reservation price for political power to increase.

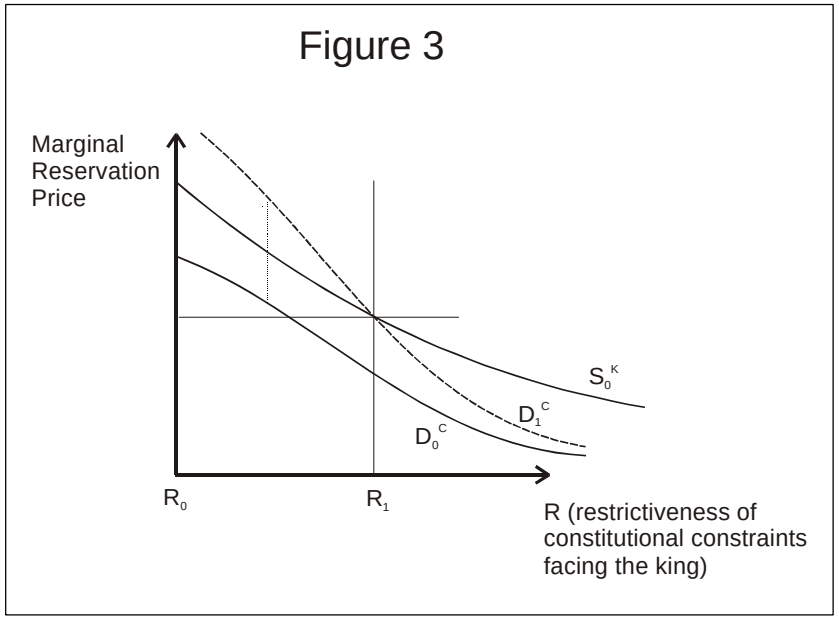
$$O^{c*}_{Yc} = [\int\int j(G_1,G_2)\, w_{Yc} - k(G_1,G_2, R_i)\, w_{Yc} \, dG_1 \, dG_2] / - [W^{e}_{OO}] \; > 0$$

Constitutional exchange takes place when $O^{c*} > O^{k*}$.

Figure 3 illustrates how a change in demand for policymaking power can lead to a partial transfer of power from the king to the council. A sufficient increase in the reservation price of council can make the council willing to purchase partial policymaking power from the king, and, as illustrated, the king may be willing to sell it. The council's demand shifts from D^C_0 to D^C_1 with the result that R_1 powers are transferred to the council, perhaps complete veto power over policy. Within the context of the model, such exchanges also involve amendment of the tax constitution, but, in practice, other forms of support might be accepted in exchange for new procedural powers, particularly in relatively stable times or at the end or beginning of a king's reign.

The king may also "buy back" some or all of the council's constitutional powers, in cases where his wealth increases relative to that of the council. Even in peaceful and lawful political circumstances, the road to parliamentary democracy is not a one-way street, nor one that always leads to full parliamentary rule. In the absence of systematic trends favoring one or the other center of policymaking power, a random walk of power-sharing arrangements between king and council may arise, with periods during which the council increases its power and others during which the king becomes less subject to council vetoes and agenda control.[43]

[43] The shift in power from king to council is not always irreversible, nor is it always the case that the bulk of policymaking power initially is vested in the king. For example, the shift from the first U. S. constitution, the Articles of Confederation, to the modern one can be interpreted as a peaceful shift of power from a council dominated system—the congress—to a mixed system with an executive



7. An Application: Increases in General Prosperity and the Transition from Monarchy to Parliamentary Democracy

Among the systematic trends that have occasionally been observed in rapidly industrializing countries those affecting the extent and distribution of wealth.[44] Consider the effect of tax-payer income or wealth on the level of taxation incorporated into the tax constitution. The council realizes that public services are set at $G^{1*} = g(Y + T^0)$ and $G^{2*} = h(Y + T^0)$ by the king after a tax limitation is adopted. If the council knows the king's objective function, is assured of veto power over taxes and the pivotal member must pay a given share of the taxes agreed to, s(T), the council will negotiate a tax limitation that maximizes:

$$W = w[Y^{C0} - s(T), g(Y + T), h(Y + T)].$$

when this level exceeds the pre-constitutional level of taxation. Consequently, the council's preferred level of taxation in this constitutional environment requires:

$$- W_C s_T + W_{G1}\, g_T + W_{G2}\, h_T = 0$$

which implies that the tax agreed to is:

$$T^0 = t(Y^{C0})$$

and the pivotal council members welfare is:

$$W^* = w[Y^{C0} - s(T^0), g(Y + T^0), h(Y + T^0)].$$

Of interest here is the extent to which the council's willingness to pay for additional public policymaking power is affected by a subsequent increase in the wealth of the groups represented by the council. It is clear that any move from the service levels initially set by the king toward the ideal policy combination of the council makes the council better off whenever function w is continuous and concave. Moreover, it is clear that as council income increases, the council's optimal tax constitution becomes less restrictive in that it implies greater taxation:

$$T^*_{Yc} = [- W_{CC} s_T - W_C s_{TT}] / - [W_{TT}] > 0$$

Given W concave and $s_T > 0$ and $s_{TT} >= 0$.

The king's own welfare also increases with tax revenue:

$$U^*_T = U_C + U_{G1}\, g_T + U_{G2}\, h_T > 0$$

Consequently, as wealth broadly increases among the tax payers represented on the council, potential gains to fiscal exchange and constitutional reform tend to arise between the king and council. The council is willing to pay more taxes to secure additional services that it wants, to the extent that the king's future policy agenda is

sharing policy making power—the new constitution created the office of president vested it with substantial powers.

[44] Data for the English experience are developed by Lindert (1986). Lindert's Table 1 inidcates that the value of noble estates averaged 2032£ in 1810 had risen to 9,855£ in 1875. Merchant estates averaged 608£ in 1810, far less, but had risen to 11,804£ in 1875, both in constant 1875 British pounds sterling. Other classes/occupations also had significant increases in wealth, although not as great as that of merchants or the "titled persons." However, overall, it is clear that the fraction of wealth controlled by those *outside the nobility* increased substantially during this period. The population of nobles was essentially stable between 1810 and 1875 (rising from 22 to 25 thousand), while that of merchants, profiessionals and industrial and building trades increased substantially (rising from 42 to 61 thousand, from 638 to 2,835 thousand).

Note that Lindert's analysis focuses on a different point than the one made here. What matters for the purposes of the present paper is the change in royal wealth versus non-royal wealth, rather than changes in the concentration of wealth per se.

uncertain. That is to say, the council's willingness to purchase political insurance increases as its income increases. An relative increase in the wealth of council tends to increase the council's public policy power because it creates new possibilities for mutually beneficial constitutional exchange. In this manner, as often argued by economists, general increases in prosperity throughout a society can give rise to more or less democratic institution through a series of peaceful reassignments of power from the king to a representative parliament.

8. Conclusion: The Continuum Between Dictatorship and Democracy

Economics suggests that bargaining will take place whenever there is a coincidence of wants and of means. Each party must want something that is at least partially in the control of the other. After the "bargain" is struck, at least one of the parties controls something that it previously did not. Constitutional exchange often implies that one other party secures greater income, reduced risks, or other clear compensation, while the other secures new policymaking power within the government.

Opportunities to finely divide policymaking power between the "king" and his "council" suggests that there will be many occasions when both can benefit by changing the balance of power within an existing government. At the national level, constitutional exchange provides an explanation for the gradual shift of power from kings to their Parliaments that took place in many of the countries of Northern Europe during the past two hundred years. In more recent times, many shifts in the balance of power between presidents and their congresses and between prime ministers and their parliaments can also attributed to constitutional exchange. Regarding the former, it is clear that the royal families of the United Kingdom, Sweden, Denmark, the Netherlands, and Norway are clearly much less influential today than they were in 1800, and their parliaments are remarkably more so. A modern king confronting a dominant parliament has to be content with a substantial public pension and extravagant housing until such time as mutually advantageous opportunities for a transfer of power from the council to the king emerge.

Within more recent constitutional democratic "king and council" structures, power has often been transferred to and from the legislature. For example, most elected prime ministers and presidents appear to be somewhat more powerful in 2000 than they were in 1900. In both cases, significant changes in the balance of policymaking power were achieved gradually and without revolution or bloody civil wars.[45]

The result of such constitutional bargains does not necessarily imply that every new division of power within government that is formally codified in constitutional law. Only a subset of the procedures for making decisions within governments are actually written down in constitutional documents or fundamental law. Informal rules for making rules can also be objects of choice and affect policy outcomes in the long run, as with informal conventions for proposing prime ministers. Moreover, in cases in which the council represents regional governments or elites, the exchanges may affect the degree of decentralization rather than central govenment procedures per se. For example, an increase in central control may be "purchased" with a transfer of some authority to the parliament (Congleton, xxxx).

The constitutional exchange model developed in this chapter provides a possible political-economic explanation for the emergence of parliament-dominated systems of governance in rapidly industrializing countries relying on king and council governance. As the interests represented in council become wealthier, they become increasingly able to trade services or income to the king in exchange for greater authority over particular domestic policies. The experience of Northern Europe during the 19th century is broadly consistent with the analysis. As the industrial revolution increased the wealth represented in parliament relative to that of the king, the powers of national

[45] Even in cases where civil wars do take place, the king and council template may simply be adjusted rather than radically transformed. For example, the institutional reforms adopted by the American revolution are often argued to be radical in nature.

However, even prior to the American Revolution, the colonies (states) were largely governed by governments that structurally resembled the subsequent federal government. State and local governments often combined an executive, the governor (appointed by the crown), with a bicameral "council" composed of a locally elected lower chamber and an appointed upper chamber. As early as 1619, the Virginia Assembly met with a representative bicameral "council" and a governor. One chamber of the council, the House of Burgesses was comprised of twenty-two members elected by a broad electorate of male tax payers; the other chamber, with six members, and the governor were initially appointed by the Virginia Company under their royal charter (Johnson 1997, p. 26-27). The American revolution changed the method by which governors were selected rather than the template of governance. There is often a mythical element in modern accounts of constitutional reform that neglect underlying continuities in the fundamental structure of successive regimes.

parliaments tended to increase in scope. This transfer of power continued until parliament rather than monarchs completely controlled power, but essentially through voluntary exchange. Revolution is not a prerequisite for democracy.

In some circumstances, constitutional exchange will increase the representativeness of government as new tax interests are represented on the council, in others the division of power between the king and the council will be renegotiated. For example, the analysis has demonstrated that it can be in the interest of a king or queen to limit his or her own power as a means of increasing the resources at their disposal, as with the adoption of a tax constitution in which a council representing major tax-payer interests is granted the power to veto new or excessive tax increases. The analysis also suggests that increases in the wealth of those represented in council relative to the king, creates opportunities for constitutional exchanges that increase the power of parliaments.

Of course, economic considerations are not the only source of unrealized gains from constitutional exchange. Economic opportunities for constitutional exchange in constitutional monarchies in the 19th century were doubtless reinforced by the wave of democratic ideology that swept through the industrializing societies. Changes in the conceptual bases of government tend to increase the king's propensity to listen to the council and increased the council's demand for policy making authority. Moreover, new methods of selecting members of the "committee" branch of government can change the preferred policy positions of pivotal members of the council in a manner that generate new opportunities for constitutional exchange.[46]

Of course, bargaining postition can also be affected by non-economic chanes as well as economic shifts. For example, a shift in the theoretical basis of governance from devine intention to popular suffrage clearly affects the types of policies that parliament and the king will favor, but may also affect the their assessment of the "proper" distribution of power. A Lockian interpretation may replace Flimer and Hobbes Changes in the procedures for determining the membership of parliament may also change the relative bargaining power of the kings and council on day-to-day fiscal policies and with respect to constitutional reform, but this is not necessary for constitutional gains to trade to emerge.

Economic and ideological theories of change often are difficult to disentangle, because economic interests and ideological interests are often well-aligned as for example the press for a free trade in England was undertaken by persons who were also often interested in constitutional reform as well.

The main focus of the present chapter is on the possibility of voluntary political exchange within the king and council structure of governance. For the purposes of the book, all that is necessary is to demonstrate that policy making power can be bargained for and exchanged without radically transforming government. Such constitutional bargains, by definition, must advantage both the "king" and "council" in the circumstances at hand. Consequently, such bargains are unlikely to end monarchy, per se, although the king may in the end have a luxorious and secure lifestyle, but little effect on a nation's policy making.

Other theories have a more difficult time explaining both the peaceful emergence of democracy, and the continuation of royalty well after democratic reforms have been adopted. Monarchies exist in the parliamentary democracies of Sweden, Norway, Denmark, the United Kingdom, the Netherland, Belgium, and Spain. In ll but the last case, parlimentary rule emerged peacefully and for the most part in the nineteenth century.

[46] The implications of the use of increasingly open and competitive elections to select members of parliament is well analyzed by the existing public choice literature. See, Mueller (1989) for an extensive survey of the mainstream rational choice literature on electoral politics.