

Minority-Rule Budgeting under a De Facto Constructive Vote of No Confidence: A Cure for the Norwegian Illness?

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A formal analysis of a possible adjustment in the present voting institutions of the Norwegian parliament is conducted. The analysis is confined to three unitary players in a minority situation. It is argued that such a set-up represents a fairly accurate description of the present political situation in the Norwegian budget process. The proposed adjustment in the voting institutions leads to something that resembles a de facto constructive vote of no confidence in the budget process. Such an instrument is often said to strengthen a minority government. The formal analysis shows that the adjusted voting institution selects a Condorcet winner if such a winner exists. If, however, no such winner exists, the minority government is *always* defeated. The latter finding implies that if a cycle in preferences is present, the adjusted voting institution will amplify the inherent instability. This is in stark contrast to the common claim that institutions help break cycles.

Introduction

Over the 40 years between 1961 and 2001, Norway held a total of 11 elections to the national assembly (the Storting). It had 16 governments, of which 14 were minority governments.¹ Minority rule accounted for close to 80 percent of ruling time. Minority rule produces weak governments.² In the general debate various costs of such weaknesses are often emphasized. Research in political economy has documented several such costs. Among them we find lack of fiscal discipline,³ myopia,⁴ lack of clarity in the placement of responsibility for policy⁵ and inadequate responses to exogenous shocks.⁶

In principle, electoral law can be reformed in ways that cut down the number of parties and increase the likelihood of having a majority government. However, such reforms are, for obvious reasons, unlikely to muster the qualified majority required by the constitution. An alternative reform strategy is to restructure the workings of parliament in ways that do not

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require constitutional change but may strengthen the power of a minority government.⁷ Such reforms can be reversed by ordinary majority rule at any time. They are therefore less stable than constitutional reforms. Nonetheless they may be of interest.

In this article I conduct a formal analysis of a hypothetical adjustment to the present voting institutions of the Storting. The adjustment leads to something that resembles a *de facto* constructive vote of no confidence in the budget process. A constructive vote of no confidence means that the head of government may only be removed from office by majority vote of parliament if a successor is elected into office at the same time. Such an arrangement is commonly thought to strengthen the position of a minority government.

The analysis is confined to a minority situation with three players: two opposition parties and a governing coalition. Any pair of players constitutes a majority. Arguably this is a very restrictive arrangement. Nonetheless, it is argued that it represents a reasonable abstraction of the actual budgeting situation in the Storting of 2001–2005.

The Budget Institutions, an Inconsistency and a Possible Remedy

In 1997 the Storting reformed its budget procedure by moving from a bottom-up to a top-down approach. Since 1997 each party has formulated a package proposal consisting of an allocation of the fiscal budget on two revenue frames and 21 expenditure frames. The difference between the sum of revenue frames and the sum of expenditure frames defines a balance concept. The package proposals are voted on in the plenary assembly, and the resulting budget ceilings are binding for the detailed appropriation proposals subsequently forwarded by the standing committees (Rules of Procedure 2003, section 19).

Unfortunately, this arrangement does not guarantee consistency with the voting order used. The Storting votes by an open successive procedure.⁸ Each budget package is put to the vote in a specified sequence. The plenary assembly votes for or against each package in the sequence specified. The first package to obtain more than 50 percent of the vote becomes the decision of the assembly. A possibility with such an arrangement is, of course, that no budget package gains majority support. If this happens the plenary assembly has failed to produce the budget ceilings that it has obliged itself to produce. So far, such an outcome has been avoided. This does not mean that it will not be realized in the future. No rules exist for such a contingency.

The inconsistency in the rules of procedure may, however, be easily resolved. It is enough to close the voting order. In a closed successive procedure, two packages are put up against each other in the last voting step,

so one of them must necessarily win majority support, provided no other package has gained majority support at an earlier voting step.

At first sight, a closing of the successive procedure might seem like a rather innocent adjustment of the present arrangement. If, however, the rules stipulate that the budget package proposed by the government must be included as one of the alternatives in the last voting step, it is clearly not innocent. In this case one gets something resembling a constructive vote of no confidence in the budget process. If the government's proposed package is voted down, another party's budget package has gained majority support in the assembly. It is almost unthinkable that a government would go on ruling after such a decision. For this to happen, the government would have to be willing to implement the detailed and encompassing political programme of an opposition party. The likely outcome is for the majority of the assembly to take its own decision seriously, let the winner form a new government and implement the package sanctioned by the majority. If this argument is accepted, closing the voting order leads to a constructive vote of no confidence that is *de facto* but not legally binding.

The Political Situation

After the election of 2001 a new minority coalition formed, consisting of the Liberal Party (Venstre), the Christian-Democratic Party (Kristelig Folkeparti) and the Conservative Party (Høyre). Table 1 provides the relevant statistics on the composition of the present Storting.

As can be seen, the ruling coalition commands 38 percent of the representatives in parliament. It can muster a majority if supported by one (or more) of the following opposition parties: the Labour Party, the Progress Party or the Socialist-Left Party. Other majority coalitions are not feasible as long as the government operates as a unitary actor. Due to the encompassing nature

Table 1. The Storting 2001–2005

Players	Mandates	% of mandates
Government coalition ^a	62	38
Progress Party (Fremskrittspartiet)	25	15
Labour Party (Arbeiderpartiet)	43	26
Socialist-Left Party (Sosialistisk Venstreparti)	23	14
Centre Party (Senterpartiet)	10	6
Independent (Jan Simonsen)	1	0.5
Coastal Party (Kystpartiet)	1	0.5
Total	165	100

^a Mandates as follows: Conservative Party (38); Christian-Democratic Party (22); Liberal Party (2).

of the proposals in the budget procedure, and the ideological distance between the government coalition and the Socialist-Left Party, majority support from the Socialist-Left Party on the budget is not viable.⁹ In practice, therefore, parliament operates with three players in the budget process: the government coalition, the Labour Party and the Progress Party. As noted, none of these players commands a majority individually, but any pair of them does.

Voting Analysis¹⁰

Let there be three players, a government coalition g , a labour party l and a progress party p . Each player proposes an encompassing budget packet, G , L and P respectively. No single player constitutes a majority of the assembly, but any pair of players does.

Assume (sensibly) that each player ranks their own proposal first. With three proposals in the majority assembly, it follows that there are altogether six possible (strict) preference orders, two for each of the three parties. These are: $g_1: (G > L > P)$, $g_2: (G > P > L)$; $l_1: (L > G > P)$, $l_2: (L > P > G)$; $p_1: (P > G > L)$, $p_2: (P > L > G)$. The six preference orders can at most be combined in eight different preference profiles, as presented below, where the Condorcet winners (hereafter CWs) are identified in bold type (note that for orderings 2 and 7, no CW exists):

- | | |
|---------------------|---------------------|
| (1) g_1, l_1, p_1 | (5) g_2, l_1, p_1 |
| (2) g_1, l_2, p_1 | (6) g_2, l_2, p_1 |
| (3) g_1, l_1, p_2 | (7) g_2, l_1, p_2 |
| (4) g_1, l_2, p_2 | (8) g_2, l_2, p_2 |

Assume that the majority assembly votes by a closed successive procedure where the government’s proposal is required to compete with the proposal of an opposition party in the final voting stage. That is, a de facto constructive vote of no confidence is introduced in the budget process. This enables a minority government to force a clear binary choice on the majority assembly: accept the present government and its policy, or place a new government with a new policy in office. The ambiguous no-decision contingency is effectively removed from the choice set of the plenary assembly. According to common beliefs, this ought to strengthen the powers of a minority government.

With three players, two voting orders are possible: (i) the order where L is voted on in the first stage – $[L, \{G, P\}]$ – and (ii) the order where P is voted on in the first stage: $[P, \{G, L\}]$.

Assume that the assembly decides on the voting order by simple majority at stage zero. This is in accordance with the majoritarian postulate: ‘Objects of legislative choice in both the procedural and policy domains must be

chosen by a majority of the legislature' (Krehbiel 1992, 16). The postulate is expressed in section 43 of the Rules of Procedure used in the Norwegian parliament: 'The order of voting must be announced and accepted in advance.'

I now carry out a voting analysis on the eight preference profiles and the two voting orders. Both sincere and strategic behaviour is analysed. Strategic behaviour is defined in the following way: at each step in the game the player votes in order to maximize their utility in the final outcome. Sincere behaviour is defined as follows: at each step in the game the player votes for their most preferred alternative and against any other alternatives. Before I continue, two equilibrium concepts should be defined. By a 'voting equilibrium' I understand a set of voting strategies that are best responses against each other at each step of the voting game. By an 'equilibrium institution' I refer to a set of voting strategies that are best responses against each other in the choice of a voting order, given the voting equilibria of the alternative voting orders. Thus, in a voting equilibrium the voting order is taken as exogenously given, while in an equilibrium institution the voting order is treated as endogenous. Voting in step zero is taken to be outcome oriented. That is to say, the representatives do not have preferences on the voting orders per se. Furthermore, full insight into the workings of the voting orders voted on is assumed.

Let (2) be the relevant profile. Figure 1(a) depicts the game with strategic behaviour. Consider first the voting order $[P, \{G, L\}]$. In the last step G competes with L. A majority consisting of g and p prefers G to L. Moving one step back, the options are to end the voting in the first step by choosing P, or to move to the last step and get G. A majority consisting of l and p prefers P to G. P is therefore chosen by the majority assembly in the first step, given the voting order $[P, \{G, L\}]$. Consider now the alternative voting order $[L, \{G, P\}]$. In the last step G competes with P. A majority consisting of l and p prefers P to G. Moving one step back, the options are to end the voting in the first step by choosing L, or to move to the last step and get P. A majority consisting of g and l prefers L to P. L is therefore chosen by the majority assembly in the first step, given the voting order $[L, \{G, P\}]$. Lastly, consider the assembly's vote over the alternative voting orders in step zero. The voting order $[P, \{G, L\}]$ selects P as a voting equilibrium, while the voting order $[L, \{G, P\}]$ selects L as a voting equilibrium. A majority consisting of g and l prefers L to P, and the equilibrium institution with strategic voting therefore selects L.

Figure 1(b) depicts the voting game with sincere behaviour. I still assume (2) to be the relevant profile. Consider first the voting order $[P, \{G, L\}]$. Behaviour in the last step is no different from that in the analysis of strategic behaviour, and the majority will pick G. In the first step only p votes for P, and the voting game therefore continues to the last step. G becomes the voting equilibrium of the voting order $[P, \{G, L\}]$ with sincere voting. Consider

Figure 1a. Preference profile (2), strategic voting equilibria.

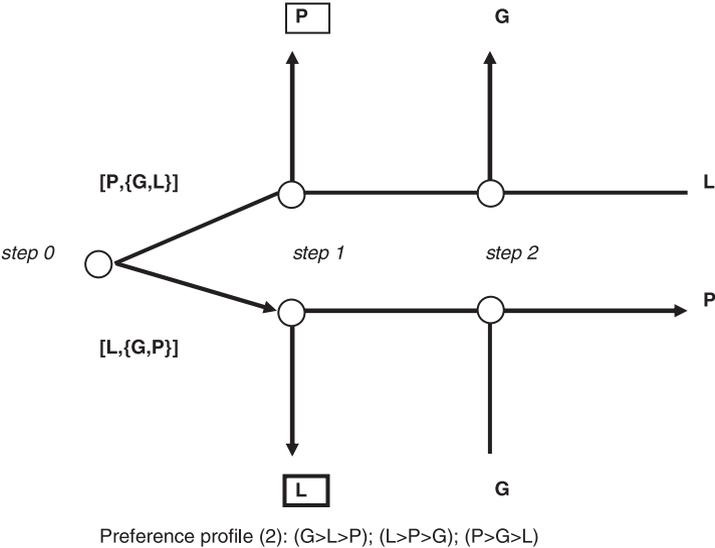


Figure 1b. Preference profile (2), sincere voting equilibria.

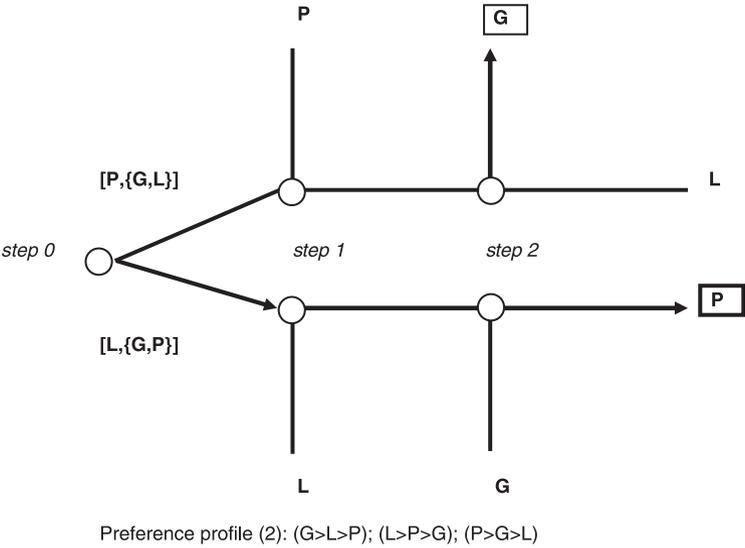


Table 2(a) Voting Equilibria with Strategic Behaviour (outcomes of equilibrium institutions are marked with an asterisk)

	Preference profile							
Voting order	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
L,{G,P}	G*	L*	L*	L*	G*	P*	L	P*
P,{G,L}	G*	P	L*	L*	G*	P*	P*	P*

Table 2(b) Voting Equilibria with Sincere Behaviour (outcomes of equilibrium institutions are marked with an asterisk)

	Preference profile							
Voting order	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
L,{G,P}	G*	P*	G	P	G*	P*	G	P*
P,{G,L}	G*	G	L*	L*	G*	G	L*	L

now the alternative voting order $[L, \{G, P\}]$. In the last step the majority will pick P. In the first step only l votes for L, and the voting game therefore moves to the last step. P becomes the voting equilibrium of the voting order $[L, \{G, P\}]$ with sincere voting. Consider lastly the assembly's vote on alternative voting orders. The voting order $[P, \{G, L\}]$ selects G in equilibrium, while the voting order $[L, \{G, P\}]$ selects P in equilibrium. A majority consisting of l and p prefers P to G, and the equilibrium institution with sincere voting selects P.

Conducting similar analysis for the other preference profiles identifies the different equilibria of the game. These are given in Table 2.

In profile (2) and profile (7) no CW exists. When no CW exists, the voting equilibrium depends on the specific voting order employed. This is true for both strategic and sincere behaviour and for any binary voting method. In the remaining six profiles a CW exists. With strategic behaviour, one knows that the CW will be the voting equilibrium of every voting order in any binary procedure (McKelvey & Niemi 1978).¹¹ With sincere behaviour the CW will only be a voting equilibrium for specific voting orders. Thus, one observes that for profiles (3), (4), (6) and (8) the voting equilibrium in Table 2(b) (sincere behaviour) depends on the voting order employed, whereas no such dependency exists in Table 2(a) (strategic behaviour) for the same profiles. An interesting observation is that if a CW exists it is selected by an equilibrium institution. With this as a starting point I prove the following:

Theorem 1. In a closed successive procedure with three alternatives, three unitary parties, and two permissible voting orders, if a CW exists it is always selected by an equilibrium institution.

Proof. Strategic behaviour: If a CW exists, it is the voting equilibrium of any voting order in every binary procedure (McKelvey & Niemi 1978). Since players are indifferent about voting orders, the CW is selected by an equilibrium institution. Sincere behaviour: When a CW exists preferences are single peaked on some ordering dimension of the alternatives. If one of the extreme alternatives on this dimension is voted on in the first step, the CW is the voting equilibrium (Hylland 1976). With three alternatives, the alternative on either side of the CW on the ordering dimension is extreme. Since only two of the three possible voting orders are permitted, *at least one* of the permissible voting orders must produce the CW as a voting equilibrium. The choice of voting order gives rise to two cases: (i) both voting orders produce the CW as a voting equilibrium; (ii) only one voting order produces the CW as a voting equilibrium. In the first case both voting orders are equilibrium institutions. In the latter case only the order that produces the CW is an equilibrium institution. This follows directly from the definition of a CW, an alternative that is able to beat any other alternative in pairwise comparison.

Theorem 1 reduces the set of voting equilibria by using a sensible refinement, namely the majoritarian postulate. The reduction in the set of voting equilibria caused by this refinement is normatively attractive. In particular, the refinement excludes other alternatives from being chosen by the assembly if a CW exists.

Theorem 2. In a closed successive procedure with three alternatives, three unitary parties, and two permissible voting orders where the government's proposal is voted over in the last step, if a CW does not exist the government's proposal is *never* selected in an equilibrium institution.

Proof. Use preference profile (2). Let p be the governing party. Permissible voting orders are then $[L, \{P, G\}]$ and $[G, \{P, L\}]$. The equilibrium institution selects G for strategic voting and L for sincere voting. Let l be the governing party. Permissible voting orders are $[P, \{L, G\}]$ and $[G, \{L, P\}]$. The equilibrium institution selects P for strategic voting and G for sincere voting. Use preference profile (7). Let p be the governing party. Permissible voting orders are $[L, \{P, G\}]$ and $[G, \{P, L\}]$. The equilibrium institution selects L for strategic voting and G for sincere voting. Let l be the governing party. Permissible voting orders are $[P, \{L, G\}]$ and $[G, \{L, P\}]$. The equilibrium institution selects G for strategic voting and P for sincere voting. In the last case g is the government. The results in Table 2 demonstrate that G is not selected by an equilibrium institution for profiles (2) and (7).

Theorem 2 demonstrates a fundamental instability in the de facto constructive vote of no confidence procedure. More specifically, if the preference profile contains a cycle, the analysis predicts that the government will fall. Thus, in an unstable situation with three players one would expect a shift in government with the passage of every budget within an election period. In this case, one is inclined to say that the particular institution amplifies the instability inherent in the preference profile. This is in stark opposition to the common claim that institutions help break cycles (starting with Shepsle 1979; Riker 1980).¹²

Conclusions

Constructive votes of no confidence are practised in a number of parliaments, among them the German national assembly (Bundestag), the Spanish

parliament and (since 1995) the Belgian parliament. According to common belief, such procedures are powerful instruments in the hands of minority governments. A de facto constructive vote of no confidence could be introduced through a seemingly innocuous adjustment of the voting institutions in the Storting. More specifically, the open successive procedure presently used may be closed, and the government's budget package obliged to compete with the budget package of an opposition party in the last voting step.

Assuming that the majoritarian postulate is operative, the effects of such an adjustment are twofold. First, it secures that a CW is selected if it exists. This is a highly desirable attribute of a voting arrangement. Secondly, it secures that the government's budget package is never selected if a CW does not exist. This is a highly undesirable attribute of a voting arrangement. In particular, it implies frequent government shifts and a weakening of the government in office. This effect is somewhat surprising, for two reasons. First, according to common belief a constructive vote of no confidence is an instrument that strengthens a minority government. The analysis cast doubt on the soundness of such a belief. Secondly, institutions are in general seen as devices capable of breaking a cycle. In the case analysed, however, it is demonstrated that a cycle is institutionalized.

One may conjecture that the likelihood of cycles must be quite high, given the aggregate nature (likely multidimensionality) of the budget packages. According to an alternative view, one should regard the budget proposals as discrete alternatives (so that questions of dimensionality do not enter). The above analysis identifies eight preference profiles, of which two have no CW. If every profile is equally likely, there is a 25 percent chance of a cycle. Thus, in the absence of empirically founded probabilities, we should expect a non-negligible probability of experiencing cycles. For this reason the analysis should not be written off as a formal exercise devoid of real-world significance.

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Useful comments from Aanund Hylland and two anonymous referees are much appreciated.

NOTES

1. The following are counted as a change of government: (1) a change in the parliamentary basis of the government; (2) a new prime minister takes over; or (3) a change in the party composition of the government.
2. See Strøm (1990), Rasch (1994) and Laver and Schofield (1998) for discussions.
3. The seminal paper is Roubini and Sachs (1989). See Franzese (2002) for further references.
4. In general, minority governments have shorter expected durations than majority governments. This is said to make them more likely to resort to costly debt and deficit financing. See, for instance, Grilli and colleagues (1991) for documentation of tenure effects. See, for instance, Franzese (2002) and Helland (1998) for further exploration and references.

5. See, for instance, Strøm (1990) and Laver and Schofield (1998).
6. See, for instance, Alesina and colleagues (1997).
7. See Rasch (2000) for a thorough discussion of a number of possible reforms.
8. Section 43 of the Rules of Procedure states, 'If there are several proposals in connection with a matter, the President shall put each of them to vote in a logical order.' That the successive procedure should be open when more than two alternatives are put forward does not follow from this wording. The use of an open procedure, however, is an established practice.
9. On issues outside the budget process this coalition might be viable, and has from time to time formed.
10. In what follows, a pure voting analysis is conducted. It does not consider negotiations between the players. Introducing negotiations may make a big difference to the results of an analysis. For this reason it may be objected that a pure voting analysis is far too restrictive (and therefore 'unrealistic'). Counter to this – and as a minimum – one may contend that a voting analysis identifies the no-agreement point (the outcome in the absence of a negotiated settlement) of any majority assembly negotiation. A voting analysis is therefore justified on its own merits. Furthermore, from time to time one observes that majority assemblies actually fail to reach agreement (perhaps because the bargaining set is empty), and proceed to vote on the primary proposals. In such situations a pure voting analysis is not restrictive (and therefore not 'unrealistic').
11. This follows from standard backward analysis of the extensive voting game. The resulting equilibrium forces the players to make a binary comparison between the alternative at hand and one resulting from further equilibrium play, at every decision node of the voting game.
12. It is known that the voting equilibria of the successive procedure are robust to a slacking in the assumption of complete information (Jung 1989; cf. Banks 1991, 82–84). It is not known to what extent the theorems presented in this article are robust to a slacking of this assumption.

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