UNIVERSITY OF COPENHAGEN

Why Lash Yourself to the Mast?

The Case of the Danish "Budget Law"

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Abstract

The article examines the adoption of the Danish 2012 "Budget Law". The law added spending ceilings, economic sanctions and mandatory balanced budgets. The law was passed to address the lack of cost control in Danish municipalities and asymmetrical preferences concerning public expenditures and can be interpreted as a credible commitment initiative established to ensure public expenditure control independently of the business cycle. Due to the economic crisis, Danish voters preferred lower public expenditures in 2011 than in 2007. This shift in voter preferences made it easier for the Danish Parliament to pass the Budget Law.

INTRODUCTION

In 2012, the Danish Parliament adopted what was probably the most important public spending act ever: the so-called Budget Law.[1] Behind it lies a complex story of budget spending overruns[2], an economic crisis, concomitant crisis awareness and a desire to minimize the scope of expense policy. The law was adopted in order to break with thirty-five years of budget overruns which had resulted in comparatively high public spending growth (Jørgensen and Mouritzen 2005, 19). The shock and aftermath of the 2007 economic crisis, which hit Denmark hard (Goul Andersen 2013), triggered a political paradigm shift in which budget overruns were no longer acceptable.

Theories of public expenditure traditionally point in two important and conflicting directions: They emphasize (1) that political institutions seldom change, and (2) that politicians are myopic and therefore reluctant to commit to long-term objectives (Mueller 2003, 114-127). The Budget Law is an expression of the opposite. Flexible, but suboptimal, economic management has been replaced by strict legislation that limits politicians' current and future spending policy options. Yet despite this, a large majority in the Danish

1. What we term the "Budget Law" in fact comprises several new laws and changes to existing laws.
2. The terms "budget spending overruns" and "budget overruns" refer to situations where actual spending exceeds budgeted spending.

Parliament endorsed the law.

Our research question is how it was possible for a Budget Law to be passed that will force politicians to limit future public spending.

The Budget Law contains the following elements:

- A requirement that the overall budget must be in balance or surplus.[3]
- An automatic correction mechanism is triggered when public finances differ from the balance requirements.
- Four-year spending ceilings for the state, municipalities and regions. Economic stabilizers are exempted from the spending ceilings.
- Economic sanctions to ensure compliance with spending ceilings at all government tiers, including sanctions against individual municipalities and regions.
- The Economic Council[4] is entrusted to continually monitor compliance with fiscal and expenditure requirements.

These five main elements are designed to ensure that politicians stick to the structural budget balance requirement. Balanced budgets are a combined consequence of expenditures and revenues. The focus of the law is to put in place spending ceilings, because in the Danish context spending control has historically been a serious problem. The EU Fiscal Compact imposes similar requirements on Denmark[5]. The Budget Law had already been prepared when the Fiscal Compact was adopted (Ministry of Finance 2011a, 8-10), and although the preparations for the Fiscal Compact influenced the content of the Danish law, some kind of budget law would have been adopted anyway.

By all accounts, Denmark's new fiscal regulations represent a paradigm shift compared to previous models of expenditure management. This article analyses the conditions that made such a historic institutional change possible. The article is structured as follows: the theoretical approach is introduced, followed by the research design and methods, the analysis and, finally, the conclusion.

3. Annual structural deficit may not exceed 0.5 percent of GDP.

4. The Economic Council is chaired by four independent economists and served by a secretariat with approximately 30 employees. The other 25 members of the Council are representatives of labor and business, the Danish Central Bank and government organizations (www.dors.dk).

5. The balance requirement and the correction mechanism represent the implementation of the Fiscal Compact (Budget Act § 2 and 3; Ministry of Finance 2012b, 6-7).

THEORY

The article is based on rationalist theories of political behavior. They assign exogenously determined preferences to actors, whose actions are seen as the consequence of their own cost-benefit analyses, where the alternative with the highest net benefits is chosen (Buchanan and Tullock 1999[1962], 17).

In the following, we present the asymmetry theorem and classic game theory, the idea of credible commitment, the median voter model and finally theory on intertemporal policy choices. After each theoretical section we present a hypothesis.

The Asymmetry Theorem

James Buchanan and Gordon Tullock coined the term “asymmetrical” in their seminal work, *The Calculus of Consent* (1962). Asymmetry stems from a fundamental difference between the economic and political systems. In an economic market, a buyer shows his willingness to pay for a good or service. This implies a symmetrical relation between "supplier" and "demander". In a political system, however, payment and consumption are separate: consumption is individualized, while payment is collectivized (Buchanan and Tullock 1999[1962], 149-200). This makes decision makers vulnerable to organized groups which are able to obtain benefits that far exceed the cost of organizing.

The asymmetry theorem predicts that interest groups will succeed in pushing government expenditure upwards in their area of interest due to the standard common pool problem (e.g. Niskanen 1971; 1973; Dunleavy 1991, 181-209; Wyplosz 2012). Our analysis tests the implications of the asymmetry theorem in two ways in order to take into account expenditure growth generated by stakeholders outside and inside the administrative system.

An effective ceiling on total public expenditure (such as that imposed by the Budget Law) will raise the political costs of increased government spending in one area, because it will entail savings in other areas. Consequently, cost-curbing is likely to weaken expenditure asymmetry (Kristensen 1987, 53), which makes it relevant to examine whether this was one of the objectives of the Budget Law.

The asymmetry theorem predicts that government spending will increase, but it does not offer an explicit theoretical explanation as to why public expenditure growth is often generated by budget spending overruns. However, as argued by Aaron Wildavsky (1975, 7-

10) budget actors can be divided into two types: *advocates* of increased expenditures, and *guardians* of the treasury. Spending advocates are interested in exceeding the budget to obtain more funding, and they are normally more powerful than guardians of the treasury. The result is sub-optimal games where public spending will increase over time. This leads to our first hypothesis:

> Hypothesis 1: The Budget Law was adopted in an attempt to rein in dynamics that were driving spending upwards in the Danish political and administrative system.

Credible Commitment

The credible commitment literature points out that efficient policy outcomes require that political actors limit pursuit of their own short-term interests (North 1993; North and Weingast 1989; Schelling 1984). Absolute freedom of decision-makers does not always lead to optimal outcomes because with freedom comes uncertainty and inconsistency (Kydland and Prescott 1977, 473-474) and, in some respects, people have two selves: one short-sighted and one long-sighted (Schelling 1984, 58f.). The classic example of a credible commitment is the story of Ulysses and the Sirens in Homer's Odyssey. When Ulysses allowed himself to be bound to the mast, he obtained the (Pareto) optimal situation, enabling him to hear the Sirens' enticing song and still make it safely home to Ithaca (Homer 1998, 144-148; Pierson 2004, 41-43). Basically, a commitment can be credible in two ways: it can either be "motivationally credible" or "imperatively credible". In the first case, an actor who is willing to be restricted for a limited period of time has no vested interest in more freedom; in the second case, the actor is restricted by credible sanctions (Shepsle 1991, 247).

Credible commitment is a classic way to overcome the problems actors confront in the Prisoner's Dilemma (PD) game (Shepsle 1991, 248). The credible commitment approach considers the formation of budgets as a series of PD games that lead to increasing public spending because all political actors are myopic: politicians want to be re-elected, and voters are more concerned with their own needs than those of future generations (Shepsle 1991, 251; Buchanan 1999, 99-100; Wyplosz 2012: 6). Our second hypothesis is, therefore:

> Hypothesis 2: The Budget Law was adopted in an attempt to tie political actors into pursuing long-term spending objectives by creating credible commitment.

Median Voter Theorem

The third theoretical approach is the median voter theorem, which predicts that parties' spending decisions will correspond to the median voter's preferences. In Downs' classic model, the political system is seen as an "economic" market where voters demand political decisions and politicians supply them. Voters are assumed to be rationally informed and to have consistent preferences (Downs 1957; see also Mueller 2003, 231). When it comes to public budgets, Downs (1957, 52) formulates the rule that guides political party decision-making as follows: "... expenditures are increased until the vote-gain of the marginal dollar spent equals the vote-loss of the marginal dollar financed". Thus, according to the model, total expenditure is determined by the median voter.

The median voter theorem rests on four assumptions. First, it assumes the existence of a two-party system where political parties can move as close to the middle as they wish without losing votes to other parties (Downs 1957, 54). Second, voter turnout is assumed to be 100 percent. Third, the model includes only one political conflict dimension. Finally, the theorem presumes that voter preferences are typically static (Kurrild-Klitgaard 2011: 23). Since these assumptions do not hold water in the case studied here – notably because of the Danish multi-party system (cf. Grofman 2004, 27f.) – the model is used with caution. The third hypothesis is, therefore:

> Hypothesis 3: The Budget Law was adopted because the median voter prefers tighter spending due to the economic crisis.

Theories on Intertemporal Policy Choices

Within rational theory, a standard assumption is that politicians are myopic and prioritize short term gains over long-term objectives (Mueller 2003, 114-127). However, some theories point to circumstances under which governments "enact policies that impose costs on constituents in the short run in order to produce long-run social gains" (Jacobs 2011, 4), and in the real world we do find reforms which ensure that present costs are traded for future gains. Jacobs argues that in cases where (1) the risk of confronting electoral losses is small; (2) the enacting coalition considers that long term gains exceed costs; and (3) when the coalition has the institutional capacity to carry through the desired policy changes, future gains may actually neutralize short-term costs (Jacob 2011, 29; see also 2008, 203ff.). Our fourth and final hypothesis is, thus:

> Hypothesis 4: The Budget Law was adopted because the enacting coalition calculated electoral costs to be small, future gains to be large, and because it possessed the institutional capacity to carry through the reform.

DESIGN AND METHOD

The article is a single case study of the adoption of the Danish Budget Law. This means that it is practically impossible to single out individual causal effects. The above hypotheses are therefore neither competing nor mutually exclusive. Rather, we investigate how the interplay between theoretical explanations may have triggered the adoption of the Budget Law.

Since the hypotheses refer to a wide range of empirical phenomena, the article draws on several types of data: descriptive statistics, interviews, data from the Danish election survey, and secondary data. Eight interviews were conducted with six senior civil servants from the Ministry of Finance, the Ministry of Economic Affairs and the Interior, the Danish Economic Council, chief economists representing the Danish municipalities and regions, and two representatives of the two major political parties (Liberals and Social Democrats). The interviewees who acted as informants for the study all played an important role in the adoption of the law. Quantitative data from the Danish election survey is used to assess voters' attitudes towards the government's expenditure policy. The survey, which has been carried out after each general election since 1971, allows us to follow changes in voters' expenditure policy preferences over the years (Stubager et al. 2013, 7). Luckily, general elections were held in 2007 (before the crisis erupted) and in 2011 (when the crisis had been underway for a few years). This coincidence makes it possible to estimate how the economic crisis affected crisis awareness, and whether this made it possible for political decision-makers to pass reforms, though we still cannot single out the effects of individual variables.

ANALYSIS

The analysis consists of four sections. A brief presentation of events preceding the adoption of the Budget Law is followed by three sections in which each hypothesis is analyzed. The conclusion discusses how the factors considered in the analysis explain the institutional changes represented by the Budget Law.

Both the OECD and the IMF have often recommended the introduction of clearer fiscal rules, independent fiscal guardians, and a top-down budgeting system (Davidsen and Jensen 2012, 19). Danish decision-makers were also inspired by the Swedish Budget Law of 1996, which established a spending ceiling for government expenditures at state level

(Ministry of Finance 2010, 238), and by the upcoming debate in the EU on the need for tighter fiscal rules (which eventually led to the Fiscal Compact). The seemingly successful Swedish ceiling model was well known among Danish decision-makers and provided them with crucial inspiration, which is fully in line with the predictions of rationalistic policy learning (Meseguer 2006).

It has been asserted that the Budget Law is a direct result of the Fiscal Compact. This is imprecise. The Fiscal Compact was adopted in December 2011, but the Danish Ministry of Finance's budget statement of May 2010 already referred to the Swedish Budget Law as an example to follow (Ministry of Finance 2010, 235). Immediately after, the Liberal-Conservative government made plans to introduce a budget model that resembled the model in the current Budget Law (Ministry of Finance 2011, 8-10). Because of the upcoming general election in September 2011, the Budget Law was not passed until June 2012. It was passed by a very large majority in Parliament, consisting of the governing parties (Social Liberals, Social Democrats, and Socialist People's Party), the Liberals, and the Conservatives (Ministry of Finance 2012c). Nevertheless, the ongoing debate in EU circles on tighter fiscal rules was part of the backdrop of the Danish Budget law. Had the Budget Law not been adopted, Denmark would have implemented the Fiscal Compact by adopting rules that are equivalent only to part of the present Budget Law.

Hypothesis 1: Asymmetry

The analysis of Hypothesis 1 proceeds as follows. We document the growth in Danish public spending, and we establish its relationship to the asymmetry theorem and the Budget Law; we uncover the relationship between municipal and regional overspending and the adoption of the Budget Law; and we test the implications of the asymmetry theorem with data from the Danish election survey.

The asymmetry theorem can be examined in two ways: by considering whether public expenditure growth can be explained as a response to asymmetrical cost driving dynamics, or by examining whether the players' preferences reflect instrumental self-interest maximizing as prescribed by the theory (Kristensen 1987, 56).

In 1960, public spending made up approximately 25 percent of Danish GDP, which placed Denmark well below other European countries and even below the United States. Over the next 20 years, Denmark underwent a massive public spending growth, and by 1980 the expenditure ratio had increased to 56.9 percent, surpassed only by Sweden. Typically, about half of public spending consists of consumption; the rest is assigned to income transfers, public investments and other expenses. Income transfers and public investment rose sharply until 2010.[6] This was partly due to the fact that GDP declined during the crisis, and partly due to fiscal priorities in advance of investments. Government consumption also rose sharply until 2010 (Ministry of Finance 2010, 31). Ceteris paribus, high growth in public consumption expenditures indicates that growth is driven by asymmetry.

In Denmark, municipalities generally account for 50 percent of public consumption, the state level for 30 percent, and the regions for 20 percent (Danmarks Nationalbank 2012, 78). The central government planned a 1 percent rise per year in public consumption from 1993 to 2001, but in reality this rose by 2.5 percent. This pattern repeated itself between 2002 and 2010, when the planned maximum 0.9 percent real growth in public consumption ended up at 1.6 percent growth. On average, public consumption growth was over twice as high as planned between 1993 and 2010 (see Ministry of Finance 2012b, 4).

All interviewees mentioned the apparently uncontrollable growth in spending from the 1990s onwards as one of the key reasons why the Budget Law was adopted. Hence, the adoption of the Budget Law can be interpreted as an attempt to reduce the asymmetrical pressure on government spending. Our informants emphasised that the municipal budget overruns were decisive in this regard. Below, we conduct a game theoretical analysis of budget overruns in relation to the adoption of the Budget Law.

Hypothesis 1: Before and after the Budget Law

The first part of the analysis in the remainder of this section focuses on the dynamics that enabled the municipal budget overruns prior to the enactment of the Budget Law. The second part examines the process that led to the adoption of the Budget Law.

We focus on the Danish municipalities since all our informants mentioned municipal budget overruns as one of the key reasons behind the adoption of the Budget Law; however, the analysis could also be applied to the Danish regions as they are subject to the same bargaining system.

Three features of the former agreements between central and local government are of particular importance for the analysis. First, the annual agreements were not legally binding for municipalities and regions. Second, the agreements applied to municipalities and regions

6. Since the Danish crown is pegged to the euro, Denmark can only use fiscal policy to stimulate the economy.

as a whole. Thus, for example, if one municipality increased spending but another reduced it by the same amount, the agreement was still respected. Third, the government (with a majority in Parliament) had the formal power to impose collective economic sanctions on municipalities and regions if they exceeded their budget. However, successive governments refrained from doing so on numerous occasions (Serritzlew and Blom-Hansen 2008, 168).

The Budget Law reverses the above as it introduces spending ceilings for operational expenses, which comprise approximately 70 percent of municipal expenditure (Budget Law § 5). Contrary to previously, municipalities are now sanctioned individually if they exceed spending limits.

From the perspective of public choice theory, the problem is that without spending ceilings both local politicians and their employees have incentives to expand public services (Howlett and Ramesh 1995, 19-20; Buchanan 1984, 133). In addition, individual municipalities have no incentive to save money due to the collective character of the annual economic agreements. Thus, the n-player game "Tragedy of the Commons" arises because municipalities maximise their own spending, resulting in a suboptimal outcome: the total budget is exceeded. The "Tragedy of the Commons" is a version of the individualistic PD with more players (all municipalities, i.e. n > 2) (Ostrom et al. 2006, 5; Ostrom 1990, 2-5). Figure 1 illustrates the game with two municipalities; however, the logic is the same as with the n-player game.

FIGURE 1

Individualistic game: Municipals exceeding budget

		Municipality 2	
		Does not exceed the budget	Exceeds the budget
Municipality 1	Does not exceed the budget	B B	A D
	Exceeds the budget	D A	C C (equilibrium)

All municipalities have an incentive to exceed their budget. This is empirically supported. Between 1980 and 2010, the municipalities as a whole complied with their budget agreements in only nine out of thirty years (Serritzlew and Blom-Hansen 2008, 170;

Danmarks Nationalbank 2012, 78-79). This pattern is reinforced by the fact that budgets are exceeded by greater amounts when a local election is approaching. This political business cycle is a well-known problem (Mouritzen 1989). Furthermore, budget overruns are exceeded by the largest amounts over issues where voters and local government employees have the strongest preferences, i.e. those related to pre-school children, the elderly and schools (Serritzlew and Blom-Hansen 2008, 152).

Why have the above dynamics among municipalities been permitted to develop without sanctions from incumbent governments? We may find answers to this in the interplay between the government and the opposition. The economic sanctions 'game' can be considered as a competitive PD (Suenson 2013, 128). It follows logically from the asymmetry theorem that the political parties both in government and in opposition have only a modest interest in sanctioning budget overruns, as this could be interpreted as an unacceptable reduction in citizen-related welfare (Houlberg and Mouritzen 2011). Our interviewees confirmed this and emphasized that before the economic crisis, welfare state services were politically important, making cost control difficult. Successive governments did not sanction municipalities because they were playing the ongoing zero-sum game for seats in Parliament (zero-sum since there are only 179 seats in the Danish Parliament).

The game's simplified logic illustrates why it has historically been difficult for the central government to sanction municipalities while simultaneously playing the eternal zero-sum game to secure votes from the opposition in Parliament (Figure 2).

FIGURE 2.

Competitive game: Municipals exceeding budget – BEFORE the Budget Law

		Opposition	
		Sanctioning	No sanction
Incumbent government	Sanctioning	0 0	A -A
	No sanction	-A A	0 0 (equilibrium)

The games illustrate two mutually reinforcing dynamics: the municipalities have an incentive to exceed their budgets, which they have done; and the government has little incentive to sanction them. This is supported empirically as budget overruns became more frequent, and larger, towards 2009 (Holdt-Olesen and Panduro 2010, 1). The analysis thus illustrates why it was possible for municipalities to exceed their budgets year after year without being sanctioned by the government. The next section addresses how the Budget Law was most likely adopted in an attempt to stop these dynamics.

In 2009, the municipalities registered the largest budget overrun ever. As pointed out by all informants, the economic crisis fundamentally changed the political agenda with regard to public expenditure management. Previous marginal budget spending overruns were replaced by large overruns in the midst of a serious economic crisis. In game theory jargon, a new equilibrium in the competitive game was established after the crisis, which encouraged the government and some of the opposition parties to work towards a solution to the seemingly ever increasing public expenditures; i.e. the Budget Law was made part of the decision making arena, cf. Figure 3.

FIGURE 3.

Competitive game: Municipals exceeding budget – AFTER the Budget Law

		Opposition	
		Cooperation	Non-cooperation
Incumbent government	Cooperation	0 0 (new equilibrium)	-A A
	Non-cooperation	A -A	0 0

All informants mentioned that the equilibrium of the game changed after the economic crisis because politicians were able to adopt the Budget Law without facing massive resistance from voters and interest groups. Changes in voter preferences therefore arguably constituted a key causal mechanism in the adoption of the Budget Law, an assumption that will be further verified below.

According to the asymmetry theorem, public spending will increase if groups with focused interests push decision-makers to furnish them with private goods. In the election survey, voters were asked whether too little, adequate or too much money was spent on selected expenditure items. It is possible to isolate the voters who receive the benefits in question under four items: education, old age pensions, unemployment benefits, and welfare benefits. A multiple regression analysis (robust OLS and ordered logistic regression) can test whether recipients of one of these benefits prefer higher spending on the various items than non-recipients. Further, we can control for relevant background variables such as gender, age, income, and left/right self-location[7] and thus test whether the beneficiaries have “self-interest maximising” preferences in 2007 and 2011 as the asymmetry theorem prescribes.

The dependent variable in the regression analyses ranges from -1 (too much money) to 1 (too little) and the intermediate category is 0 (adequate).[8] A positive beta estimate/coefficient indicates that the beneficiaries prefer higher spending on these items; a negative indicates the opposite. Since we will not comment on other control variables, they do not appear below.

Overall, the 2007 regression models support the asymmetry theorem’s assumptions about actors’ preferences. Beneficiaries of education, unemployment benefits and welfare benefits all prefer significantly higher spending on their “own” welfare benefits than the general population. Only the 2007 models regarding old age pensions are insignificant. Furthermore, it appears from the models’ R^2 that none of the models can explain more than 16.2 percent of the variation in the dependent variable, indicating that voters’ expense policy preferences are more complex than the asymmetry theorem prescribes. The figures suggest that it is plausible that the recipients’ preferences constituted an upward pressure on spending levels in 2007, and as shown above, public consumption in particular rose until the crisis erupted.

The Budget Law can be interpreted as an attempt to combat this upward pressure. The Law made it harder for politicians to fulfill everyone’s spending preferences as this would lead to an overrun of spending ceilings. Hence, the adoption of the Budget Law can be seen as an attempt to reduce the fragmentation of decision-making and the resulting asymmetry in order to stop growth in public spending.

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7. It is not possible to control for education because of differences in the survey questions in 2007 and 2011. Age is not used as a control variable in the regression models regarding old age pensions since eligibility is dependent on age.

8. The dependent variable only has three categories and is not interval scaled. Still, robust OLS results are reported because they are easily interpretable (robust OLS models are used since the dependent variable with three categories results in heteroscedasticity). The results are basically the same when the regression analysis is performed as ordered logistic regressions. N is larger in 2007 than in 2011, which all else equal makes the 2007 models more significant than the 2011 models. However, n is over 770 in every model, so this anti-conservative effect is relatively unproblematic.

TABLE 1

Users'/beneficiaries' estimation of actual consumption of the selected items of expenditures, 2007 and 2011

Results	Constant	Beta estimates (robust OLS regression)	R^2	Ordered logistic regression coefficient	N
Education 2007	.886 (.076)***	.231 (.057)***	.083	1.181 (.341)***	2374
Education 2011	.835 (.101)***	.060 (.069)	.059	.336 (.339)	834
Old age pensions 2007	.956 (.052)***	-.025 (.029)	.063	-.120 (.119)	2362
Old age pensions 2011	.460 (.071)***	.258 (.053)***	.030	.575 (.198)***	820
S					
Unemployment benefits 2007	.456 (.067)***	.292 (.104)***	.118	1.303 (.484)***	2347
Unemployment benefits 2011	.318 (.091)***	.117 (.101)	.108	.439 (.479)	818
Welfare benefits 2007	.483 (.074)***	.426 (.270)*	.162	1.639 (1.031)*	2338
Welfare benefits 2011	.250 (.102)***	.176 (.188)	.143	.507 (.772)	770

Note: Standard errors in brackets, *significant at 0.1 level, **significant at 0.05 level, ***significant at 0.01 level. All models showed weaknesses in terms of normally distributed errors and homoscedasticity.

Table 1 also shows the corresponding preferences measured in 2011 after voters had experienced a severe economic crisis over the past three years. Unlike the 2007 figures, the 2011 figures do not support the asymmetry theorem since the correlations for education, unemployment and social welfare are insignificant. Only recipients of old age pensions prefer significantly more spending in this area. The asymmetry theorem can therefore not be corroborated in three out of four models. This is interesting for two reasons.

First, it matches previous research which shows that self-interest maximizing preferences decrease in times of crisis (Christiansen 1990, 443; Goul Andersen 1993, 173; Stubager et al. 2014). Second, it was probably easier to adopt the Budget Law because of this change in preferences. The political problems associated with implementing spending ceilings are invariably smaller when pressure from users and interest groups decreases.

In conclusion, the Budget Law appears to have been adopted to limit the common pool problems which led to budget overruns, and to rectify political asymmetry. Overall, therefore, we find support for Hypothesis 1.

Hypothesis 2: Credible Commitment

This section analyses the motives behind the Budget Law from the point of view of the credible commitment literature. It examines whether the Budget Law was passed in order to ensure long-term, credible control over public expenditure.

Most informants mention the Budget Law as an initiative taken to deprive national, municipal and regional politicians of fiscal discretion. All informants further note that existing fiscal priorities have not been consistent. The Budget Law is seen as an attempt to create a credible binding of expenditure policy to ensure that the development of public expenditure remains within the planned framework when the business cycle turns around and crisis awareness fades. The Budget Law lashes politicians to the mast before the (asymmetrical) sirens' song begins again and public spending growth becomes difficult to control.

The consumption objectives and economic agreements between the government and the municipalities were actually met as of 2011 (Ministry of Economic Affairs and the Interior 2012). At first glance, it is surprising that the Budget Law was introduced at a time when expenditure policy objectives were being respected and when pressure on spending was limited. 2011 was the first year since 1990 that government spending had dropped, and one must go as far back as 1984 to find a larger decrease in government spending (Ministry of Finance 2012d: 48).

The Budget Law's adoption in 2012 can be seen as a sign that the government and the opposition wished to stop playing the ongoing competitive PD. As budget overruns grew in the years up to 2009, and because the municipalities also overran their budgets in 2010, the idea of a new budget regime to stop overruns gained force in the years that followed. Under the Budget Law, penalties are no longer adopted by discretion in Parliament. Instead, sanctioning mechanisms and spending ceilings are automatized, which makes it much easier to adopt and adhere to strict spending ceilings. The Budget Law may be interpreted as an institutional blame avoidance mechanism that the major political parties in Parliament, in particular, can refer to when the spending cut debate rages (Jensen et al. 2008, 117).

Overall, the Budget Law can be seen as a classic credible commitment initiative. The Law limits fiscal discretion by political actors and thereby constrains the competitive PD in Parliament. The analysis has shown that spending ceilings and sanction mechanisms in the Budget Law were enacted in order to bind political actors.

Several countries have adopted fiscal rules as a response to the crisis to ensure a balanced budget in the long term (Budina et al. 2012). The Danish Ministry of Finance

(2012a) has explicitly stated its desire to avoid the problems created by a large, interest-bearing debt. Thus, for two reasons, the balance requirements of the Budget Law can be seen as emanating from the credible commitment idea.

First, the Budget Law is aligned with Buchanan's recommendation – which operationalizes the credible commitment concept – to subscribe to the U.S. Constitution ideal, which does not allow government budget deficits (Buchanan and Wagner 2000, 187).

Second, the credible commitment literature underlines that actions are influenced by expectations about the future. If investors fear that public debt will increase, they will demand a higher yield on Danish government bonds (see Breen and McMenamin 2013). The credibility of the balance requirement was significantly strengthened by a large majority in Parliament which endorsed the passing of the Budget Law, reducing the likelihood that the law will be abolished after a general election, and thereby keeping Denmark in line with the requirements of the Fiscal Compact.

All credible commitment initiatives in politics involve a trade-off between discretion and commitment. Several informants argued that the constraints introduced by the Budget Law also entail political costs. For example, the four-year budget ceilings make it harder to both ease and tighten fiscal policy in forthcoming years.

The balance between discretion and commitment is addressed by exempting most cyclical spending, such as unemployment benefits, from spending ceilings. The Budget Law allows most expenditure to be tied while allowing automatic stabilizers to operate freely (Ministry of Finance 2012b: 2).

Overall, we find support for Hypothesis 2: our informants see the Budget Law as an attempt to limit politicians' future room for fiscal maneuver. It is also seen as an attempt to avoid the sub-optimal Nash equilibrium in the PD game (even though the informants did not express it in these terms).

Hypothesis 3: Median Voter Theorem

In this section, the median voter theorem is used as a theoretical guideline to empirically test whether the economic crisis resulted in changes in voter preferences. We use data from the Danish election survey. The basic premise of the following part of the analysis is that if the median voter prefers tighter spending after the crisis, the Budget Law will be easier to pass. The median voter theorem provides a simple foundation to analyze the consequences of changes in voter preferences regarding public spending.

Kristensen (1982, 40) uses a simple and logically consistent test of the median voter theorem based on voter preferences. The premise is that if spending in a given policy area is close to the median voter's preferences, the same number of voters believes that the government is spending "too much" and "too little". It is possible to test this using data from the Danish election survey, which asked voters whether they believed that money spent on 14 different items was too little, adequate or too much.[9]

The response category "too much money" is assigned the value -1; "adequate" the value 0; and "too little money" the value 1. The three categories can be combined into an overall measure of voters' expenditure preference on each item, which is termed 'PDI values' (Percentage Difference Index), and is obtained by subtracting the share of respondents who answered "too much money" from those who answered "too little money". The index can take values from -1 to 1. PDI values are shown in Table 2 for each expenditure item in 2007 and 2011.

TABLE 2

PDI values for the expenditure items

Expenditure item and year	PDI 2007	PDI 2011	Diff.	Sig.	N 2007	N 2011
Defense	-.373 (.010)	-.492 (.019)	-.119	(.000)***	3913	985
Healthcare	.735 (.007)	.562 (.018)	-.173	(.000)***	3994	1003
Education	.570 (.008)	.650 (.016)	.080	(.000)***	3957	1000
Old age pensions	.474 (.008)	.340 (.017)	-.134	(.000)***	3935	980
Environment	.501 (.009)	.405 (.020)	-.096	(.000)***	3918	974
Culture	-.174 (.010)	-.333 (.020)	-.159	(.000)***	3920	976
Kindergartens and nurseries	.517 (.009)	.603 (.017)	.086	(.000)***	3927	982
Unemployment benefits	.087 (.008)	.132 (.018)	.044	(.016)**	3888	972
Welfare benefits	.084 (.009)	.040 (.022)	-.044	(.046)**	3852	911
Foreign aid	-.019 (.012)	-.189 (.022)	-.170	(.000)***	3927	967
Refugees and immigrants	.037 (.012)	-.127 (.022)	-.163	(.000)***	3917	940
Home care	.701 (.008)	.682 (.016)	-.020	(.257)	3962	971
Motorways and bridges	.122 (.011)	-.101 (.020)	-.222	(.000)***	3927	974
Police	.614 (.009)	.369 (.019)	-.245	(.000)***	3931	973

Note: Standard errors in brackets, *significant: 0.1 level, **significant: 0.05 level, ***significant: 0.01 level.

The median voter theorem is rejected in both 2007 and 2011 as most PDI values are much higher or lower than 0. Only five of the 28 PDI values are closer to 0 than +/-0.1. PDI values are far below 0, and only eight of the 28 PDI values are negative.

9. The response categories refer to public expenditure on different items at the time the election survey is conducted. Since costs may change between elections, different responses may be due to spending changes. However, we interpret changes in response submissions as signs of changing preferences.

According to the median voter theorem, political parties could reap more votes by increasing government spending and thereby wooing the median voter. The theorem can thus help explain the growth in public spending until the crisis. However, the Budget Law cannot be seen as consistent with the median voter theorem. That said, the formulation of the questions could lead to bias because they do not force voters to take into account the tax consequences of higher government spending – the so-called fiscal illusion (Courant et al. 1980; Kristensen 1987, 154). Furthermore, voters often have inconsistent preferences for spending and taxes (Winter and Mouritzen 2001).

Nevertheless, the results are relevant for an analysis of the adoption of the Budget Law because some of the PDI values decreased from 2007 to 2011, indicating that voters preferred lower public spending after the crisis. We assume that the Budget Law – all else being equal – results in tighter public spending, which often leads to negative voter reactions. If voters' preferences for more expenditure eased in 2011 compared to 2007, this may be interpreted as a factor contributing to the adoption of the Budget Law.

Table 2 shows, for each expenditure item, the difference between the PDI values and a test of significance that indicates whether the PDI values for the two years differ significantly. On 10 out of the 14 items, voters prefer significantly lower spending in 2011 than in 2007.[10] Only for three items (unemployment benefits, education and kindergartens/nurseries) do voters prefer significantly higher spending. In conclusion, voters' preferences have changed significantly in 13 out of the 14 expenditure categories.

We cannot conclude unequivocally that voters prefer lower public spending, as some responses may reflect changes in attitudes towards issues not related to expenditure policy; and because aggregate spending preferences must be analyzed separately. A factor analysis has therefore been conducted in order to address these questions (see online appendix at https://nedergaard.wordpress.com). The conclusion in the appendix is that the above result holds true even when changes in values in voter preferences are taken into account and expenditure preferences have been aggregated in indexes.

Hypothesis 4: Intertemporal Public Policy

According to the fourth Hypothesis, the Law was endorsed because of (1) low risk of electoral loss, (2) because the enacting coalition considered that the gains exceeded the costs,

[10] Voters may also prefer lower spending on home care, but this result is insignificant.

and (3) because the governing coalition had the institutional means to carry through the reform. As regards electoral losses, we have already shown that, following the economic crisis, the electorate had come to prefer lower public spending than before. To this we can add that the Law was carried through in Parliament by the minority coalition government (Social Democrats, Social Liberals, and Socialist People's Party) parties and two opposition parties: the Liberals and the Conservatives. These two parties are traditionally considered to be government candidates, and have earlier been part of several centre-right governments. The three parties voting against the Law – the Unity List (a left-wing party), the Danish People's Party (a right-wing populist party) and the Liberal Alliance (an ultra-liberal party) are the only political parties represented in Parliament that have never been part of a government coalition. In sum, the Law was carried through by the parties that were (at that time) part of the government, together with the parties that will most likely join the government when the majority in Parliament changes. Potential blame would, therefore, be shared by all government candidate parties.

It is difficult to gain a precise picture of the enacting coalition's assessment of present costs and future gains, because political communication is always strategic. However, when we examine debates about the topic in Parliament, the proponent parties' speakers pointed to such future gains as important in sustaining a strong economy and continued international confidence in the Danish economy. It is fair to interpret these statements as an indication of their genuine faith in the future gains expected as a result of the Law (www.ft.dk/samling/20111/lovforslag/L174). Furthermore, opponents of the Law were deeply divided as to its implications: The Unity List opposed it due to the fact that they wanted a more expansive fiscal policy, whereas Liberal Alliance preferred budget cuts. The Danish People's Party was somewhere in between on this matter. In addition, all the opposition parties were against the Law because in their view it had been forced upon Denmark by the Fiscal Compact. This treaty was, however, strongly supported by the majority of the pro EU parties (Betænkning over Forslag til Budgetlov 2012).

The final condition – that the proponents have the institutional capacity to enact the political investment – is met since the law was voted in by a very large majority in Parliament.

We conclude this section by endorsing Hypothesis 4. It was mainly the possibility of securing a broad majority in support of the Law among the so-called "parties in government" which enabled the enacting coalition to trade present costs for future gains.

CONCLUSION

The analyses show that institutional change, in this case, was driven by a number of concurrent factors. More than one logic of institutional change was at play. Still, the institutional approach can certainly help to explain why the Budget Law was adopted. The adoption of the Budget Law should be seen as a consequence both of endogenous and exogenous factors.

The old public expenditure governance model led to increasingly larger budget spending overruns, especially in the municipalities, and since possible sanctions had to be adopted discretionarily, they often did not materialize. This signaled to the municipalities that budget overruns would not be sanctioned. Hence, the institutional outcome created a need for automatic and individual sanctions. In addition, the economic crisis post 2008 resulted in an exogenous shock. The crisis affected the two main stakeholders: some groups of payment recipients developed more sociotropic preferences; and voters preferred significantly lower public expenditures when the Budget Law was adopted than at the time the economic crisis began.

Hypotheses 1 and 2 – on spending containment and credible commitments – are supported. First, public spending was increasing as the Budget Law was adopted and the objectives for growth in public consumption had been exceeded. This is consistent with the asymmetry theorem. Second, and more importantly, the municipalities had experienced significant budget overruns. In order to put an end to the resulting collective action dilemma, the collective nature of the economic agreements was supplemented by individual financial penalties against municipalities and regions. Hence, the Budget Law can be seen as an attempt to prevent expenditure growth driven both by asymmetry and budget overruns. This conclusion is further strengthened by our quantitative tests of the asymmetry theorem that showed interest groups to have individual utility-maximizing preferences in 2007. However, preferences proved to be dynamic and voters' preferences were less expenditure expansive in 2011 than in 2007.

If the economic scenario improves in the future, crisis awareness is expected to decline, and preferences are predicted to return to a more self-interest maximizing level. Therefore, the Budget Law was adopted – in line with Hypothesis 2 – as a credible commitment initiative to prevent future collapse of spending restraint. Overall, we find support for Hypothesis 2 because the Budget Law restricts politicians' current as well as future fiscal maneuvers.

Hypothesis 3 about the median voter was somewhat corroborated, as the analysis clarified that voters' expenditure policy preferences shifted towards significantly lower public spending in 2011 than in 2007, even when value political changes in voter preferences are taken into account. This shift in voter preferences probably made it possible to introduce the fiscal tightening proposed by the Budget Law.

Hypothesis 4 on intertemporal policy choices was also supported. The coalition that carried through the Law was deliberately broad in an attempt to limit punishment by the electorate. In this way, the politicians sought to reduce the disincentive to trade present costs for future gains that typically prevents decision makers from passing such legislation.

In recent years, Denmark has implemented reforms in areas that previously would have been very difficult to change, including early retirement, unemployment benefits, social welfare, and economic support for students. The economic crisis made otherwise very difficult reforms possible and opened the way for changes elsewhere in Europe, many of them far more radical than those implemented in Denmark. If nothing else, these experiences show that it is possible to intervene radically in hard-to-change political and economic institutions. Time will reveal the long-term effects. It is also too early to tell whether crisis awareness or the Budget Law ultimately ensures budget compliance.

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