

Chapter 5

The Conundrum of the Council: Who is to Tailor the Fiscal Straitjacket?

5.1 Introduction

Early academic proposals for independent fiscal institutes go back to the mid-1990s (see e.g. von Hagen and Harden, 1995).¹ In fact, they have been in place for a much longer time in some countries, including the Congressional Budget Office in the US and - closer to home - the High Council of Finance in Belgium and the Central Planning Bureau in the Netherlands.

More recently, the need for fiscal discipline in the long run has spurred debate on the design of fiscal straitjackets. With this debate came a renewed attention for fiscal councils (see e.g. OECD 2011, Calmfors and Wren-Lewis 2011). For example, in 2010 the Office of Budget Responsibility was created in the UK. Similarly, the Fiscal Compact now requires Euro area member states to have an independent institute monitoring the adherence to the medium term targets. Despite the current omnipresence of fiscal councils, their design is diverse.

While several studies have pointed to the effectiveness of fiscal councils in improving fiscal balances (see e.g. Debrun et al. 2009, Van Meensel and Dury 2008, Hagermann 2011, Nerlich and Reuter 2013), the formal framework underpinning their role and assigned level of authority remains limited. Cases with full authority are absent in practice,

¹The terms independent fiscal institute, independent fiscal agency, independent fiscal authority, fiscal (policy) council and fiscal watchdog have all been used in the literature, sometimes with varying degrees of authority. For conciseness, they are considered interchangeable here and “fiscal council” is used hereafter as it appears to be the most common. A distinction based on authority will be explicitly indicated where necessary.

hinting at the limited political support for this. Nonetheless, as shown by this chapter, even advisory fiscal councils play a useful role.

How to organize political institutions to come to a welfare optimizing fiscal path is in essence a problem of decision making. A problem that is complicated since delegates (i.e. the elected politicians and appointed council) are not necessarily acting in the interest of the electorate. In fact, they may not even know they are not because of uncertainty. Therefore, this chapter takes a political economy approach to implementing fiscal adjustments to derive the optimal role for a fiscal council when there is uncertainty in the different levels of information of the different agents. Consequently, this chapter adds to the literature on the organization of fiscal responsibility as well as the political economy literature focusing on accountability.

The model shows that a more than advisory role for fiscal councils is often desirable. Specifically, a limited informedness of voters about the optimal fiscal policy allows politicians to pander to the public opinion. Consequently, if delegates have superior information, an appointed fiscal council is preferred. Moreover, as the superior information of the delegates becomes more costly (i.e. the policy issue becomes more technical) pandering occurs more often, thereby making a fiscal council preferable more often. Only when the cost of information is small and delegates have weak office-holding motives, a representative democracy is preferred to set fiscal policy.

Finally, if only an advisory council is politically feasible, the public funds attributed to such fiscal councils are found to be below the welfare optimizing level. Yet, an advisory council would increase welfare, either via better informed politicians or as a result of increased fiscal transparency.

The chapter is structured as follows. Section 5.2 gives an overview of the relevant literature. Section 5.3 introduces the model. It stresses the role of information and transparency for the organization of fiscal adjustments under uncertainty. Finally, section 5.4 concludes.

5.2 Literature

5.2.1 Institutionalizing Fiscal Responsibility

Irrespective of the discussion on the size of the fiscal multiplier - and thus the short run desirability of austerity - fiscal sustainability measures make a strong case for fiscal prudence in the medium to long run (e.g. EC 2012a, 2012b). How to institutionalize fiscal responsibility is thus an important question. Therefore, this chapter assesses the role for

different institutions (e.g. a fiscal council) in the implementation of the optimal fiscal adjustment.

A frequently proposed way of achieving fiscal discipline and preventing profligacy is to implement debt brakes or budgetary constraints, also called fiscal rules. Fiscal rules, whether quantitative or not, indicate the public sector's role in macroeconomic processes and the direction in which policymakers aim the public finances to evolve. For instance, the golden rule of public finance previously adopted in Germany and the UK required governments to run an overall balanced budget while allowing for debt-financed investments.

While a vast number of studies have shown the rules' positive fiscal effects empirically (see e.g. Rodden et al. 2003; Debrun et al. 2008; Hallerberg et al. 2007; Krogstrup and Wälti 2008), several others have tried to model the political requirements for their success. Besley (2006) and Besley and Smart (2007), for example, presume a heterogeneous population of politicians that are either benevolent or leviathan. Elections then serve to (i) select the right type of politician despite possible adverse selection problems and (ii) reduce acts out of self-interest due to moral hazard. They show that enforcing various disciplinary restrictions (e.g. limits to the size of government) increases welfare only if the probability of a benevolent incumbent is sufficiently large.

Debrun and Kumar (2009), on the other hand, illustrate the disciplinary role of fiscal rules in a setting resembling that of Tabellini and Alesina (1990), where electoral uncertainty shortens the time horizon of partisan policy makers and creates a deficit bias. They find that the credibility of the rule depends on the existence of sufficiently high costs of ignoring or bypassing the rule. The role of democratic accountability as a mechanism via which deviations from the rule can be made costly, however, is limited by the lack of budgetary transparency.²

Another - often complementary - idea that has therefore been argued to overcome the biases plaguing fiscal policy is the creation of a fiscal council.³ Fiscal councils typically have a mandate to provide independent macroeconomic forecasts, thereby preventing forecasting biases (Hagermann, 2011).⁴ Yet, even in countries where economic fore-

²Even with non-transparent budgets, accountable governments may still benefit from enforcing institutions as a signal of competence rewarded with votes. In that sense, the impact of institutions on the fiscal balance results from the 'carrot' of higher re-election chances.

³Some examples are the Central Planning Bureau in the Netherlands, the Congressional Budget Office in the US and the High Council of Finance in Belgium. Other countries, nonetheless, are following rapidly since the Fiscal Compact requires Euro area members to have an independent institute monitoring the adherence to the medium term targets. Elaborate case studies of fiscal councils are presented by Lebrun (2009) and Coene and Langenus (2013) for the case of Belgium, by Bos and Teulings (2013) for the Netherlands, by Steuerle and Rennane (2013) for the U.S. and by Calmfors and Wren-Lewis (2011) for Sweden and the U.K. Debrun et al. (2009), moreover, present a summary of the most notable proposals for fiscal councils.

⁴See, for example, Jonung and Larch (2006) and Kempkes (2012) for examples of documented fore-

casts by branches of the government are considered to be unbiased, fiscal councils are considered to be an asset. Their mandate typically also requires them to provide analyses related to the budget and possibly normative assessment of fiscal policy targets. Therefore, complementing fiscal rules with fiscal councils may reduce commitment problems.

Furthermore, fiscal rules do not necessarily accommodate for the optimal gradual transmission to a debt target and accommodate even less for shocks in the short run. In federal countries fiscal councils moreover provide useful guidance on the distribution of the general government's fiscal stance over the regions. In brief, their role thus is to gather information to make better decisions on, among other things, the fiscal path and the evaluation of its progress. Consequently, the watchdog increases the political cost of 'bad' fiscal behavior and improves transparency of fiscal policy making.

Empirical studies point to the effectiveness of fiscal councils in improving fiscal balances: Debrun et al. (2009), Van Meensel and Dury (2008), Hagermann (2011) and Nerlich and Reuter (2013). Theoretical research elaborates on the suggested explanation, i.e. a signaling role for the fiscal council under incomplete information and a fiscal target. Stéclébout-Orseau and Hallerberg (2009) use a principal-agent framework to emphasize that efficient budgetary monitoring enables populations to enforce fiscal discipline.⁵ What follows in this chapter extends these results. In particular, it stresses why elected officials are likely to lack incentives to fund an advisory council. Moreover, it derives the conditions under which a more extensive role for a fiscal council is preferable.

5.2.2 Accountability and Information

Fiscal councils are thus found to increase the cost of fiscal irresponsibility. In particular, they are expected to overcome informational issues. Consequently, fiscal councils are expected to enhance political accountability.

Nonetheless, Maskin and Tirole (2004) showed that political accountability may also cause politicians - even benevolent ones - to pander to popular opinion.⁶ Decisions by appointed officials (e.g. a council with decision power), on the other hand, do not reflect

casting biases in Europe.

⁵Additionally, they show that in case of multilateral fiscal surveillance (e.g. the EMU) signaling bad pupils can have counterproductive implications on the behavior of other countries if they find sufficient support for behaving badly. Therefore, a strategic council will choose to send signals only when it is certain that they will be effective.

⁶Based on this, Calmfors and Wren-Lewis (2011) argue that a deficit bias and a political business cycle will arise, as there is no similar incentive to raise taxes or cut spending. Nonetheless, Brender and Drazen (2008) find no evidence that larger deficits actually enhance the chances of re-election. Such lack of information on behalf of the electorate may actually help explain why Alesina et al. (1998) find that successful fiscal adjustments do not appear to jeopardize government popularity.

such pandering. They in their turn, however, are less accountable as they do not face end-of-period re-election concerns. Given the trade off between the decisions of elected politicians and appointed officials, it is important to assess which type of official is preferred. The model presented in section 5.3 does so for the case of fiscal adjustment decisions.

Furthermore, given fiscal councils' role in correcting informational issues, incorporating varying levels of information of different agents therefore is a logical next step. Especially, for technical issues such as austerity it is not unlikely that there are large differences and uncertainty in informedness.

In the model by Stéclébout-Orseau and Hallerberg (2009), for example, accountability is simply impeded as the result of some random error in the estimation of economic performance. Maskin and Tirole (2004) also do not consider directly the informedness of the officials on the actual issue at hand. Instead, they consider officials that have to decide whether to be congruent with a well-informed electorate or not, while facing a cost for gathering information about the payoffs of being congruent. Nonetheless, as shown in section 5.3, the optimality of a fiscal decision is also driven by the informedness of the official about the fiscal issue. Moreover, the electorate itself may be ill-informed, thereby distorting electoral accountability.⁷

The model presented in this chapter therefore extends the previous results in two directions. Firstly, it accounts for the effect of uncertainty in the degree of informedness of agents in case of decisions on fiscal adjustment. In particular, it illustrates the limitations of fiscal adjustment decisions by elected politicians. Secondly, given that fiscal councils often only have an advisory role in practice, subsection 5.3.4 investigates the importance of fiscal transparency. Specifically, it focuses on the impact of transparency and the corresponding increase in accountability on pandering behavior.

5.3 The Model

5.3.1 Setup

Consider a two period model building on that of Maskin and Tirole (2004). Each period there is a possible policy a to be implemented. In the context at hand, this policy may be the decision to either consolidate or not. Alternatively, if one forgoes implementing policy a this is denoted by \emptyset , i.e. the status quo.

The electorate's utility is a function of the optimality of the policy actions chosen

⁷For example, De Borger and Proost (2012) argue that voters' uncertainty is to account for the shift from widespread opposition to road pricing before its introduction toward public support afterward.

in both periods. In each period it obtains a utility of 1 if the implemented fiscal plan is found to be optimal ex post and zero otherwise. The electorate thus obtains a payoff of 2 if the actions chosen in both periods are optimal. Thus, maintaining the status quo may result in a payoff of 2 if it turns out to be optimal in both periods. Nevertheless, since the electorate is not fully aware of the optimality ex ante, utility ex post is not necessarily in line with the electorate's ex ante preferences over both actions.

The exogenous parameter p ($> \frac{1}{2}$) is the probability that a is the optimal action, i.e. it determines the ex post optimal policy to have been implemented.⁸ Moreover, parameter p is unknown to the electorate at the moment an action is to be chosen (i.e. when fiscal policy is set).

The model accounts for differing degrees of informedness on the policy issue at hand. In general, uncertainty surrounds fiscal policy as the optimality of action a is uncertain. Therefore, agents in the model have to rely on their own information about the optimality of fiscal policy. Specifically, in the model this level of information is expressed as a probability. For example, parameter κ ($< p$) is the probability that the majority of the electorate thinks that action a will be optimal. Given majority voting, κ thus is the probability that the electorate would choose to implement action a if direct democracy was in place. Hence, it captures how much the electorate is expected to know about the issue at hand.

In addition to the assumption that agents do not know p , the actual optimal outcome is only revealed at the end of the period. Consequently, there is no certainty that the electorate its ex ante preference is in line with its ex post preferences (i.e. optimality). In particular, with a probability $p\kappa$ the majority of the electorate thus is informed correctly. On the other hand, with a probability $(1-p)(1-\kappa)$ the majority vote in favor of the status quo is the right decision, as the status quo turns out to be optimal. By contrast, in $[p(1-\kappa) + (1-p)\kappa]$ per cent of all cases the ex ante preferred action of the majority of the electorate will not turn out to be optimal, i.e. the majority of the electorate is informed incorrectly.

The responsibility over the fiscal policy path - i.e. to implement action a or not - is delegated to an institution. The delegate can be either (i) an elected politician (i.e. in a representative democracy) or (ii) an appointed fiscal council. The difference between both is that the fiscal council is not up for re-election after the first period. Hence, the council is less accountable, but also less inclined to follow public opinion.

⁸Since the definition of action is kept general the model does not include any call of judgment. For example, the model does neither assume that more austerity has a higher nor a lower probability of being optimal. It only assumes that diverting from the status quo will have a higher probability of being optimal in practice. The proposed action could, however, just as well concern an investment program.

Both types of delegate will, however, not necessarily act in the best interest of the electorate. First, just as the electorate, the delegate does not know the value p . It does have the possibility to acquire useful information on the probability that policy a will be optimal. For example, they have to spend time getting down to the nitty-gritty of a file or order external research to obtain knowledge of the subject at hand. Therefore, delegates have the choice to invest time and resources in the form of cost c in order to gather information. In particular, if the delegate incurs the cost c , she obtains knowledge of probability π , for which $\frac{1}{2} < \pi < p$ and $\kappa < \pi$ hold. The informedness of the delegate is then superior to that of the electorate by a margin ε , where $\varepsilon = \pi - \kappa$.⁹ Hence, if the delegate chooses to incur the cost, π will indicate the preferred action of the delegate. If the delegate chooses not to incur the cost, her knowledge remains limited to that of the electorate. Consequently, uncertainty about the optimal policy may result in the implementation of suboptimal policies.

Second, the delegate's objective function diverges from that of the electorate. On the one hand, in any period the delegate puts value (G) on choosing her preferred action (i.e. the action based on her own knowledge). Specifically, she wants to leave a legacy by implementing great fiscal plans.¹⁰ Note that the delegate's perception of what action is "great" may differ from that of the average citizen. Additionally, the delegate values being in office (R) for her own sake as the result of perks or a taste for wielding influence.¹¹ In sum, the delegate's decision is conditional on the strength of its office-holding motives, expressed as the function $\delta(G, R)$, for which a more formal definition follows later.

Figure 5.1 summarizes the decision process. In addition to the timing of the actions, it reports the conditional probability that each of the agents will implement policy a .

5.3.2 The Informedness of the Electorate

First, to focus on the importance of κ , consider the case where the cost of information gathering is zero.

Fiscal Council The appointed fiscal council chooses her preferred action in any period. It does so to optimize her own payoffs. Hence, the electorate's expected welfare if a fiscal

⁹It is easy to show that a social planner with information π is more likely to select the optimal outcome than if he only had information κ since $\kappa p + (1 - \kappa)(1 - p) < \pi p + (1 - \pi)(1 - p)$ when $\kappa < \pi$. Therefore, the margin ε is an objective measure of how much better π is as information.

¹⁰A legacy motive was introduced by Maskin and Tirole (2004), but has since been used frequently in a political setting (see e.g. Mishra and Anant 2006). For private sector applications it was already referred to as 'ambition' (Soskice et al., 1992) or 'power hunger' (Rauch, 2001).

¹¹The desire to hold office is a commonly assumed motive in the political economy literature. It dates back to Barro (1973) and Ferejohn (1986).

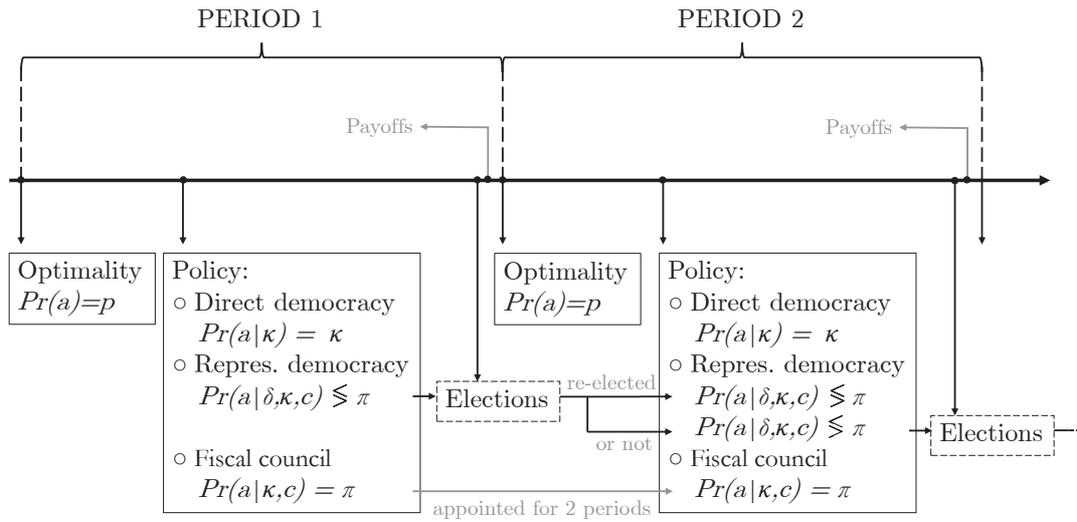


Figure 5.1: Timing of the actions by each of the agents in the model

council is in place will be:

$$W^{FC} = 2 [p\pi + (1 - p)(1 - \pi)]$$

Representative Democracy The outcome in case of an elected politician will depend on how strong the politician’s incentives are to act in the interest of the electorate. In particular, depending on the strength of her office-holding motives, the incumbent might want to please the electorate and ascertain herself of another period in office.

(a) Strong office-holding motives: Both if the electorate would have chosen a or the status quo, the politician considers pandering to the public opinion in order to stay in office longer. At the end of the period, the electorate is either to re-elect or to oust the incumbent based on its choice in the first period. If the electorate believes that the incumbent chose the optimal action (i.e. the quality of the politician is believed to be good), it will re-elect him. Therefore, pandering is found to be an equilibrium strategy for the incumbent when her office-holding motives are strong.¹² For example, in case the majority of the electorate is most likely to prefer a (i.e. $\frac{1}{2} < \kappa$), the electorate is expected to re-elect any politician who chooses a . The politician can act on this. In particular, a politician who prefers the status quo herself, her payoffs from pandering and being re-elected exceed those of choosing her own preferred action:

$$\beta(G + R) > G \tag{5.1}$$

¹²Appendix C.1 shows that this is the only viable equilibrium as long as the delegates their knowledge about the electorate their ex ante preferences remains limited to the probability κ .

if and only if the office-holding motive of the politician is strong

$$\delta = \frac{\beta(G+R)}{G} > 1 \quad (5.2)$$

where β denotes the discount rate. A similar point can be made in case the politician observes an electorate which prefers the status quo.

The electorate's expected welfare, however, differs in both cases:

$$W_{\delta>1}^{RD} = \begin{cases} \overbrace{(1-p)}^{\text{period 1}} + \overbrace{\pi p + (1-\pi)(1-p)}^{\text{period 2}} & \text{if } \kappa < \frac{1}{2} \\ p + \pi p + (1-\pi)(1-p) & \text{if } \frac{1}{2} < \kappa \end{cases} \quad (5.3)$$

In cases where the electorate prefers the status quo the office-holding motives make politician choose a first period action with a smaller probability of being optimal - even though they are aware of this - in order to stay in office.

(b) Weak office-holding motives: In case politicians only have weak office-holding motives (i.e. the discounted payoffs of staying in office do not exceed the payoffs from choosing the preferred policy now), they will always choose their preferred policy. In contrast to the fiscal council, however, the electorate has to determine whether to keep the incumbent in office or not. With the politicians always choosing their preferred action the electorate draws inferences from an incumbent's choice of action whether to keep the incumbent in office or not.

Let $(.,.)$ denote the outcome combination, where the first argument is the electorate's majority vote and the second argument the politician's preferred action. In order to determine whether to re-elect the incumbent, the electorate compares the probabilities that the incumbent acted in their (perceived) interest

$$\begin{aligned} Pr[(a,a)|(.,a)] &= \frac{\kappa E[\pi]}{\kappa E[\pi] + (1-\kappa)E[\pi]} = \kappa \\ Pr[(\emptyset,\emptyset)|(.,\emptyset)] &= \frac{(1-\kappa)E[1-\pi]}{\kappa E[1-\pi] + (1-\kappa)E[1-\pi]} = 1 - \kappa \end{aligned}$$

to the probability that a newly elected politician will opt for the electorate's preferred action. The probability that a newly elected politician will implement an action in line with the electorate's perception of optimality is: $\kappa E[\pi] + (1-\kappa)E[1-\pi]$. Consequently, when $\frac{1}{2} < \kappa$ the electorate will only re-elect an incumbent if she chose a , since $\kappa > \kappa E[\pi] + (1-\kappa)E[1-\pi]$. If, on the other hand, $\kappa < \frac{1}{2}$, the electorate will oust an incumbent who chose a and only re-elect the delegate if she chose to preserve the status

quo.

Therefore, the electorate's expected welfare in case of a representative democracy with $\delta < 1$ is:

$$W_{\delta < 1}^{RD} = \begin{cases} \overbrace{[p\pi + (1-p)(1-\pi)]}^{\text{period 1}} + \overbrace{\pi [p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi)}^{\text{period 2}} & \text{if } \kappa < \frac{1}{2} \\ [p\pi + (1-p)(1-\pi)] + \underbrace{\pi p}_{\text{re-elected}} + \underbrace{(1-\pi)[p\pi + (1-p)(1-\pi)]}_{\text{newly elected}} & \text{if } \frac{1}{2} < \kappa \end{cases}$$

$$\Rightarrow W_{\delta < 1}^{RD} = \begin{cases} (1+\pi)[p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi) & \text{if } \kappa < \frac{1}{2} \\ (2-\pi)[p\pi + (1-p)(1-\pi)] + \pi p & \text{if } \frac{1}{2} < \kappa \end{cases} \quad (5.4)$$

In the first period the incumbent implements her preferred policy. Hence, the expected payoffs are the same as they would be under a fiscal council. Nonetheless, the second period payoffs differ as the incumbent is not necessarily in office anymore. She is only expected to be re-elected in case she chose action a when $\frac{1}{2} < \kappa$, i.e. in π cases. In those cases, the incumbent will stick to her guns and implement a in period 2 as well. In other words, politicians' behavior is consistent over the periods. In $(1-\pi)$ of all cases a newly elected politician will come into office in period 2. Since it is her first term, she will behave as the politicians did in the first period, i.e. implement her preferred policy. On the other hand, when the electorate prefers the status quo, a newly elected politician will come into office in period 2 in π cases.

Mixed strategy equilibria When the delegate's information about the electorate's preferences, on the other hand, is not restricted to the probability κ , but actually comprises the realized electoral preference, another equilibrium arises for both office-holding motives. In particular, mixed strategy equilibria result as delegates make their behavior conditional on the actual preferences of the electorate. In case of strong office-holding motives, this results in:

$$W_{\delta > 1}^{RD} = \underbrace{\kappa [p + \pi p + (1-\pi)(1-p)]}_{\text{equation 5.3 for } \frac{1}{2} < \kappa} + \underbrace{(1-\kappa) [(1-p) + \pi p + (1-\pi)(1-p)]}_{\text{equation 5.3 for } \kappa < \frac{1}{2}}$$

$$= [p\pi + (1-p)(1-\pi)] + [p\kappa + (1-p)(1-\kappa)] \quad (5.5)$$

The electorate's expected welfare in case of a representative democracy with $\delta < 1$, on

the other hand, is:

$$\begin{aligned}
W_{\delta < 1}^{RD} &= \kappa \left[\overbrace{\left[\pi p + (1 - \pi)(1 - p) + \pi p + (1 - \pi) [p\pi + (1 - p)(1 - \pi)] \right]}^{\text{Voters would have chosen } a} \right] \\
&\quad + (1 - \kappa) \left[\overbrace{\left[\pi p + (1 - \pi)(1 - p) + \pi [p\pi + (1 - p)(1 - \pi)] + (1 - p)(1 - \pi) \right]}^{\text{Voters would have chosen } \emptyset} \right] \\
&\quad \text{equation 5.4 for } \frac{1}{2} < \kappa \\
&\quad \text{equation 5.4 for } \kappa < \frac{1}{2} \\
&= [p\pi + (1 - p)(1 - \pi)] \\
&\quad + \kappa \left[\pi p + (1 - \pi) [p\pi + (1 - p)(1 - \pi)] \right] \\
&\quad + (1 - \kappa) \left[\pi [p\pi + (1 - p)(1 - \pi)] + (1 - p)(1 - \pi) \right] \tag{5.6}
\end{aligned}$$

The implications for the optimality of the different institutions are summarized in proposition 1. While the threshold level of electoral information for an elected delegate to outperform her appointed counterpart is $\frac{1}{2}$ under weak office-holding motives, it is higher in case of strong office-holding motives. In fact, when delegates their information about the preferences of the electorate comprises the actual realized electoral preference, completely rules out the delegation of decision making to an elected delegate in case of strong office-holding motives, as κ would need to exceed π .

Proposition 1. (Mixed strategy equilibria with $\kappa \in [0, \pi]$) *Suppose that delegates are endowed costlessly with information π each period and their information about the preferences of the electorate is not restricted to κ , but comprises the realized electoral preference. Under weak office-holding motives ($\delta < 1$), the delegation of action to a fiscal council will only result in higher expected welfare than delegation to an elected politician if the majority of the electorate is ill-informed ($\kappa < \frac{1}{2}$):*

$$\begin{cases} W_{\delta < 1}^{RD} < W^{FC} & \text{if } \kappa < \frac{1}{2} \\ W^{FC} < W_{\delta < 1}^{RD} & \text{if } \frac{1}{2} < \kappa \end{cases} \tag{5.7}$$

An elected delegate, on the other hand, is expected to outperform a fiscal council if the electorate is well-informed. A representative democracy allows the well-informed electorate to oust an incumbent which is (often correctly) believed to not act in the interest of the electorate.

Under strong office-holding motives ($\delta > 1$), however, the additional information on the realized preference of voters completely rules out delegation of action to an elected

politician being optimal:

$$W_{\delta > 1}^{RD} < W^{FC} \quad (5.8)$$

holds for all $\kappa \in [0, \pi[$.

Proof. The derivation of welfare orders (5.7) and (5.8) is reported in appendix C.2. \square

5.3.3 The Cost of Information

In what follows, it is assumed that the electorate is right in the majority of cases ($\frac{1}{2} < \kappa$), thereby outperforming a randomized choice. Alternative cases would imply a rather harsh view of society. More importantly, however, this assumption restricts attention to those cases where a fiscal council is not already preferred.

Then, a necessary condition for any delegate to buy information at cost c is that the cost in any period is sufficiently small. Specifically, the cost of the information should not exceed the delegate's expected benefit from the information.

A delegate's expected pay off in case she acquires the information is $G - c$. Given the obtained (superior) knowledge, the delegate can always choose her preferred action. Hence, her personal payoff will be G with certainty from which the cost of the acquisition has to be subtracted.

Without information gathering any delegate is limited to the inferior knowledge held by the electorate as a whole. Choosing the majority option therefore gives the delegate the best expected outcome. Hence, the delegate's expected payoff without information is κG if it observes that the electorate prefers policy a . If, on the other hand, the electorate prefers the status quo, the delegate's expected payoff of choosing the popular policy without information is $(1 - \kappa)G$. As delegates are informed on the electorate's preferences and the underlying probability κ , they will act accordingly. Therefore, the resulting necessary condition for costly information gathering is:¹³

$$\begin{array}{ll} \text{If the electorate prefers } a: & \text{If the electorate prefers } \emptyset: \\ \kappa G < G - c & (1 - \kappa)G < G - c \\ \Leftrightarrow c < \underbrace{(1 - \kappa)G}_{\equiv \bar{c}_a} & \Leftrightarrow c < \underbrace{\kappa G}_{\equiv \bar{c}_\emptyset} \end{array}$$

Given $\frac{1}{2} < \kappa < p$ the threshold value for information to be acquired thus is lower if the

¹³On average, the cost of the information will have to be lower than $2\kappa(1 - \kappa)G$ in order to have delegates acquire it. Nonetheless, as delegates are informed on κ (e.g. through polls) they will take this information into account when they make their decision. Hence, they differentiate their behavior, as illustrated below.

electorate prefers policy a to be implemented. Hence, if the electorate's majority choice is a , delegates are less inclined to buy information.

Moreover, note that the delegate's perceived expected payoff without information does not coincide with the actual expected payoff. For example, when the majority of the electorate prefers policy a she perceives the expected payoff to be κG based on her available information, while the actual expected payoff would be pG . Policymakers thus perceive the expected benefit of the information to be higher than it actually is. Therefore, the cost is allowed to be higher than it actually should be.

Fiscal Council Since the fiscal council is an appointed institute, it does not worry about re-election. As a result, it chooses her preferred action in any period. When a fiscal council is to decide on the fiscal actions to be taken, the necessary condition for information gathering to occur thus is also a sufficient one. Consequently, the electorate's expected welfare under a fiscal council and costly information gathering can be straightforwardly summarized to be:

$$W^{FC} = \begin{cases} 2[p\pi + (1-p)(1-\pi)] & \text{if } c < \bar{c}_a < \bar{c}_\emptyset \\ 2[p\kappa + (1-\kappa)[p\pi + (1-p)(1-\pi)]] & \text{if } \bar{c}_a < c < \bar{c}_\emptyset \\ 2[p\kappa + (1-p)(1-\kappa)] & \text{if } \bar{c}_a < \bar{c}_\emptyset < c \end{cases} \quad (5.9)$$

when $\frac{1}{2} < \kappa < p$ holds.

Representative Democracy The overall picture changes in case of an elected politician. A politician is aware of (the probability of) the electorate's majority preference, e.g. through polling. A politician may thus consider using this knowledge to pander to the public opinion in order to stay in office longer. Nonetheless, a pandering politician does not require costly information to do so. She can simply act based on the knowledge of the electorate.

The starting point of an elected politician's strategy is the choice whether or not to buy the information π to supplement her knowledge of κ . First, consider *the cases where the electorate prefers policy a to be implemented*. Consider, for example, the case where a delegate trades off her pay offs of buying the information and acting on it (i.e. choosing her preferred action) with those of choosing not to buy information initially:

$$\underbrace{\underbrace{G - c}_{\text{period 1}} + \underbrace{\kappa\beta[(G + R) - c]}_{\text{period 2}}}_{\text{buy } \pi \text{ in both periods}} > \underbrace{\underbrace{\kappa G}_{\text{period 1}} + \underbrace{\beta[(G + R) - c]}_{\text{period 2}}}_{\text{not buy } \pi \text{ in period 1}} \quad (5.10)$$

In case the incumbent chooses to buy π and act on it in period 1, she expects only a κ probability of being re-elected. If she, on the other hand, does not buy the information and panders to the public opinion in period 1, she is certain of a second term in office. Given $c < (1 - \kappa)G$, equation (5.10) will only hold if

$$c < \frac{1 - \kappa}{\kappa} [G - \beta(G + R)] \quad (5.11)$$

holds. Equation (5.11) can be rearranged to show that an elected politician will buy the information in both periods and act on it as long as

$$\delta < \underbrace{1 - \left(\frac{\kappa}{1 - \kappa} \right) \frac{c}{G}}_{\equiv \bar{\delta}_a} < 1 \quad (5.12)$$

holds. Consequently, there will be no pandering to the public opinion.

As soon as δ exceeds the threshold value $\bar{\delta}_a$ from equation (5.12), the politician will pander in the first period and only buy the information to act on it in the second period. Moreover, if $c > (1 - \kappa)G$ the elected politician stops buying information as a whole. The latter two strategies hold irrespective of the (original) office-holding motives, i.e. irrespective of δ smaller or larger than one. Elected politicians are therefore less inclined to employ the superior information if it is to be acquired at a cost.

The full derivation of this as an equilibrium strategy in case of costly information gathering is included in appendix C.3. In any case, the delegate will not buy the information and then pander. Such a strategy is always dominated, either by acting on the information in her own benefit or by limiting her cost by not buying the information at all.

For the *cases where the majority of the electorate opts for the status quo*, the same equilibrium strategy holds. Nonetheless, the elected politician will only buy information in the first period when:

$$c < \frac{\kappa}{1 - \kappa} [G - \beta(G + R)] \quad (5.13)$$

As before, the threshold level of the cost for information gathering to occur is lower in case the electorate prefers action a .¹⁴ The corresponding condition to prevent pandering

¹⁴With $\frac{1}{2} < \kappa$ it can easily be shown that

$$\frac{1 - \kappa}{\kappa} [G - \beta(G + R)] < \frac{\kappa}{1 - \kappa} [G - \beta(G + R)]$$

holds.

is

$$\delta < \underbrace{1 - \left(\frac{1 - \kappa}{\kappa} \right) \frac{c}{G}}_{\equiv \bar{\delta}_\emptyset} < 1 \quad (5.14)$$

Proposition 2. (Absence of pandering) *Suppose that delegates can acquire information π at a cost c each period. If they do not acquire the information, they remain endowed with the same information κ as the electorate, where $\frac{1}{2} < \kappa < \pi$. Then, only if $\delta < \bar{\delta}_a < \bar{\delta}_\emptyset$ and $c < \bar{c}_a < \bar{c}_\emptyset$ pandering is excluded.*

Proof. The derivation of the equilibria underlying the more restrictive conditions (5.12) and (5.14) is included in appendix C.3. \square

Interestingly, if c is zero weak office-holding motives take the more lenient form $\delta < 1$. As a result, inequalities 5.12 and 5.14 are more restrictive as c is larger. Politicians are thus more inclined to pander as c increases.

Lemma 1. *Pandering by elected politicians is bound to occur more often when the delegates' information is (more) costly.*

The *electorate's expected welfare* under a representative democracy thus depends on the size of δ and c . In case pandering is excluded (i.e. the politician acquires information in both periods), the electorate's expected welfare equals that under costless information endowment and weak office-holding motives, cf. equation 5.6. On the other hand, when first period pandering is not prevented ($\bar{\delta}_a < \bar{\delta}_\emptyset < \delta$) but delegates do buy information in the second period ($c < \bar{c}_a < \bar{c}_\emptyset$), the electorate can expect a welfare equal to that in case of costless information and strong office-holding motives, cf. equation 5.5.

Intermediately, δ may exceed the more restrictive threshold $\bar{\delta}_a$, while it does not exceed $\bar{\delta}_\emptyset$. If so, the electorate expects welfare

$$[p\pi + (1-p)(1-\pi)] + \kappa p + (1-\kappa) \left[\pi [p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi) \right]$$

when $c < \bar{c}_a < \bar{c}_\emptyset$ and welfare

$$2[p\kappa] + (1-\kappa) \left[(1+\pi) [p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi) \right]$$

when $\bar{c}_a < c < \bar{c}_\emptyset$.

Finally, with $\bar{\delta}_a < \bar{\delta}_\emptyset < \delta$ and $\bar{c}_a < c < \bar{c}_\emptyset$ the equilibrium is expected to result in a welfare of

$$W^{RD} = 2[p\kappa] + (1-\kappa) \left[(1-p) + [p\pi + (1-p)(1-\pi)] \right]$$

Therefore, the electorate's expected welfare in case of in case of a representative democracy with costly information gathering can be summarized as follows:

$$W^{RD} = \begin{cases} [p\pi + (1-p)(1-\pi)] & \text{if } \delta < \bar{\delta}_a < \bar{\delta}_\emptyset \text{ and } c < \bar{c}_a < \bar{c}_\emptyset \\ +\kappa [\pi p + (1-\pi)[p\pi + (1-p)(1-\pi)]] & \\ +(1-\kappa) [\pi [p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi)] & \\ [p\pi + (1-p)(1-\pi)] + \kappa p & \text{if } \bar{\delta}_a < \delta < \bar{\delta}_\emptyset \text{ and } c < \bar{c}_a < \bar{c}_\emptyset \\ +(1-\kappa) [\pi [p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi)] & \\ 2[p\kappa] & \text{if } \bar{\delta}_a < \delta < \bar{\delta}_\emptyset \text{ and } \bar{c}_a < c < \bar{c}_\emptyset \\ +(1-\kappa) [(1+\pi)[p\pi + (1-p)(1-\pi)] + (1-p)(1-\pi)] & \\ [p\pi + (1-p)(1-\pi)] + [p\kappa + (1-p)(1-\kappa)] & \text{if } \bar{\delta}_a < \bar{\delta}_\emptyset < \delta \text{ and } c < \bar{c}_a < \bar{c}_\emptyset \\ 2[p\kappa] & \text{if } \bar{\delta}_a < \bar{\delta}_\emptyset < \delta \text{ and } \bar{c}_a < c < \bar{c}_\emptyset \\ +(1-\kappa) [(1-p) + [p\pi + (1-p)(1-\pi)]] & \\ 2[p\kappa + (1-p)(1-\kappa)] & \text{if } \underbrace{\bar{\delta}_a < \bar{\delta}_\emptyset < \delta}_{\text{buy in period 1?}} \text{ and } \underbrace{\bar{c}_a < \bar{c}_\emptyset < c}_{\text{buy in period 2?}} \end{cases} \quad (5.15)$$

The preferred institution is then given by proposition 3.

Proposition 3. (Preferred institution) *Suppose that delegates can acquire information π at a cost c each period. If they do not acquire the information, they remain endowed with the same information κ as the electorate, where $\frac{1}{2} < \kappa < \pi$. Then, $\delta < \bar{\delta}_\emptyset$ ($\delta \geq \bar{\delta}_a$) and $c < \bar{c}_a < \bar{c}_\emptyset$ is necessary for electoral accountability via a representative democracy to result in higher expected welfare than a fiscal council: $W^{FC} < W^{RD}$.*

Proof. The comparison of the electorate's expected welfare for the different institutions and combinations of δ and c is reported in appendix C.4. \square

Similar to the Governing Council of the ECB and the Federal Reserve Board of Governors for monetary policy, an appointed council buying its own information is likely to outperform elected officials in case of fiscal policy decisions. Putting the decision on fiscal adjustments in the hands of elected officials is only expected to result in the highest expected welfare for the electorate if the cost of information acquisition is small and the office-holding motives of the delegates are below the threshold level identified in inequality (5.14).

This finding is driven by the fact that elected politicians will pander more to the public opinion if information is costly, as is highly likely for technical subjects such as

austerity. Accordingly, more costly information favors an appointed fiscal council, as summarized in lemma 2.

Lemma 2. *Following proposition 3, a representative democracy is relatively more often dominated by a fiscal council in case of costly information than with costless information, where $\delta < 1$ suffices (cf. proposition 1).*

In practice, however, fiscal councils are typically attributed an advisory role (e.g. the Congressional Budget Office in the US). In other words, they are to provide additional information to elected politician who will eventually decide on the action to be taken. In the framework presented here, this can be interpreted in two ways. On the one hand, their role can be seen as the costless provision of information. As shown above, a costless endowment of useful information on the topic at hand will lead elected politicians to choose the optimal action more often.

On the other hand, as fiscal councils are most often financed through public funds, their advisory role is the costly provision of information. In that case, the aforementioned results show that the public funds attributed to fiscal councils will be below the welfare optimizing level, i.e. elected officials are insufficiently inclined to buy the information optimizing welfare.

Irrespective of the interpretation, an advisory role for fiscal councils is insufficient to prevent pandering and fully optimize the electorate's welfare. Nevertheless, even if only an advisory council is politically feasible and consulted too little by politicians, it is not without value. As shown below, an advisory council could increase welfare via increased fiscal transparency too.

5.3.4 A Role for Fiscal Transparency?

Another important part of the advisory role of a fiscal council is its contribution to fiscal transparency. The model presumed that the additional information did not trickle down to the electorate. An assumption likely to hold for highly technical issues such as austerity. The fiscal council could, however, be expected to play a role informing the electorate before evaluating the elected incumbent at the end of the period. The desirability of fiscal transparency is also supported by empirical findings. Alt and Lassen (2006) and Broesens and Wierds (2009), for example, show that budget outcomes are more favorable in countries where fiscal policies are more transparent.

The case for transparency can be easily illustrated using the model. First, for illustrative purposes, I include the case where an advisory body eventually provides the electorate with information on whether the implemented policy is optimal. Second, I

show the more realistic case where feedback is provided whether politician followed the available (superior) information.

Full Transparency With full transparency, i.e. if running up to the elections it is revealed whether the delegate actually did what was optimal (as determined by p), only the result in case of an elected delegate changes. The additional transparency does not change the outcomes in case of an appointed delegate, since the electorate cannot hold the delegate accountable for any of its actions any way.

In case of full transparency pandering will be fully prevented. After all, there is no use for it anymore. Once re-election is based on the optimality of the implemented policy, the incumbent optimizes her chances of re-election (and therefore her payoffs) by implementing the action she thinks is most likely to be optimal.

Additionally, one may be concerned whether the elected delegates will still invest in information that may increase the electorate's welfare (i.e. π). It is straightforward that they will not buy the information as it does not increase their chances of re-election. For example, the expected payoffs in case of buying the information in period 1 alone do not outweigh those of simply buying no information at all:

$$G - c + \kappa\beta(G + R) < G + \kappa\beta(G + R) \quad (5.16)$$

Moreover, the delegate's payoff G is the result of her ability to select her initial (i.e. ex ante) opinion, which does not necessarily need to be right. Although pandering would be excluded, a different problem would thus impede optimizing welfare. Despite being the preferred action for the delegate, not buying the superior information results in lower expected welfare for the electorate.

Nonetheless, if we allow for anticipation, policy makers will purchase the information. In addition, the threshold to buy π is lower the more they perceive the information to be valuable, i.e. the larger the difference $E[\pi] - \kappa$ ($\equiv \epsilon$). In particular, in case the elected politician perceives $E[\pi] > \kappa$ instead, the incumbent will buy the information in the first period as long as¹⁵

$$c < \underbrace{\frac{\beta\epsilon(G + R)}{1 + \beta\epsilon}}_{\equiv \tilde{c}} \quad (5.17)$$

with

$$\frac{\partial \tilde{c}}{\partial \epsilon} = \frac{\beta(G + R)}{(1 + \beta\epsilon)^2} > 0 \quad (5.18)$$

¹⁵Another way to make elected officials buy information is to make it result in payoffs (i.e. make it pay) when they actually implement the optimal policy.

Nevertheless, full transparency is quite unrealistic. In reality the optimality of the implemented policy is only known in the medium run. Therefore, without a good proxy one cannot hold them sufficiently accountable.

Limited Transparency Alternatively, consider the case where feedback entails the possible spillover to the electorate of the superior information. Politicians may be inclined to buy information π and then disperse it to convince the electorate they are doing the right thing. Similarly, the information may be dispersed because studies ordered by the government are to be made public by law. Though, the electorate will not necessarily share the preference of the incumbent about the actions as the result of the distribution of the superior information. They will only share the probability that their preferred action is a .

Nonetheless, the outcome is conditional on the electorate its beliefs about politicians. Specifically, it is presumed that the information perceived by the electorate, π^P , is a function $f(\pi, \zeta)$ of both the information distributed by the incumbent π and the electorate's believe in the intentions of politicians ζ :

$$\pi^P = \kappa + \zeta(\pi - \kappa) = (1 - \zeta)\kappa + \zeta\pi \quad (5.19)$$

where $\zeta \in (0, 1)$. Hence, the information of the electorate increases as their belief increases, with a maximum of the superior information held by the incumbent. The magnitude of the electorate's beliefs ζ , in its turn, is co-determined by the position of the advisory fiscal council in society. For instance, the status, public coverage and funding of the advisory body may all influence the electorate's belief in politicians statements about the desirability of fiscal adjustments.

When such a form of transparency exists, it only changes the expected outcomes in case $\kappa < \frac{1}{2}$. Therefore, the discussion that follows limits itself to the case with costless information endowment to illustrate the impact of limited transparency.¹⁶ In case of costly information gathering the decision of the incumbent whether to buy the additional information is not altered by limited transparency since that decision is solely based on its available information at that moment, i.e. κ . Consequently, the outcomes as discussed in propositions 2 and 3 remain intact.

Clearly, as ζ goes to zero the results approach those discussed before, since the electorate does not believe any of the information spread by the incumbent. Nonetheless, as ζ grows larger the probability that the additional information will overturn the electorate's

¹⁶Note that in what follows only pure strategy equilibria are discussed. As a result of the limited transparency, the majority of the voters will always prefer a and thus no mixed strategy equilibria exist.

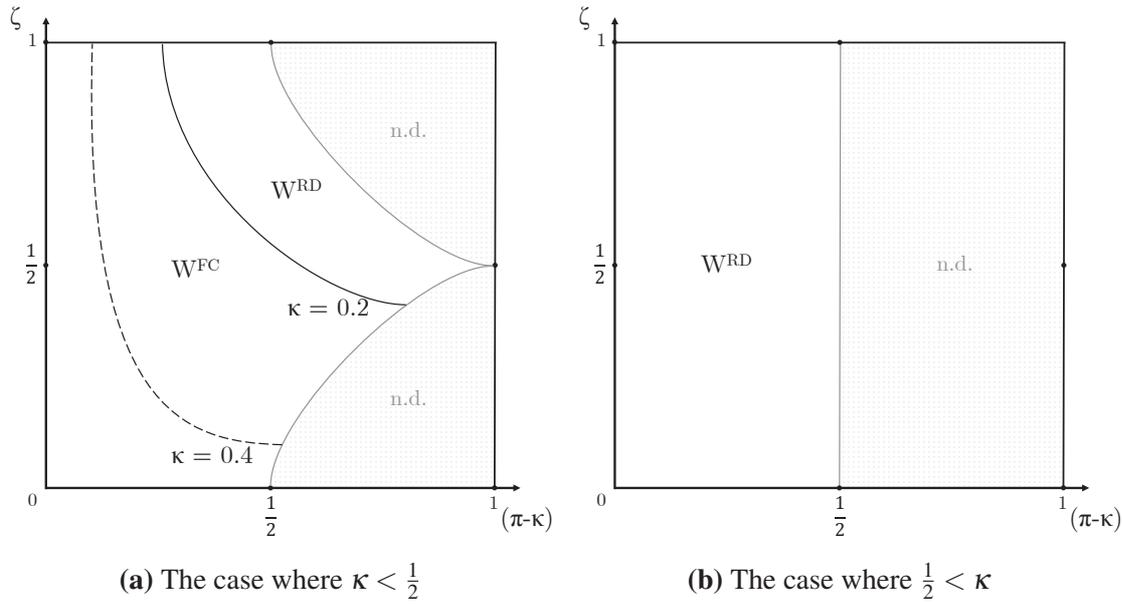


Figure 5.2: Welfare order under limited transparency (in case of costless information)

re-election strategy in favor of action a increases, at least in those cases where $\kappa < \frac{1}{2}$. Specifically, the preferred institution switches as π^p exceeds $\frac{1}{2}$:

$$\begin{aligned} \frac{1}{2} &< \kappa + \zeta(\pi - \kappa) \\ \Rightarrow \zeta &> \frac{1 - 2\kappa}{2(\pi - \kappa)} \end{aligned} \tag{5.20}$$

where inequality (5.20) marks the threshold of the belief the electorate needs to hold for a representative democracy to be preferred. Levels of belief beyond this threshold alter the majority of the electorate her preferred policy action to be implemented from \emptyset to a . As a result, W^{RD} will exceed W^{FC} for the same reason as before: a representative democracy allows the well-informed electorate to oust an incumbent which is (often correctly) believed to not act in the interest of the electorate.

Figure 5.2 illustrates the threshold and the corresponding institutions with the highest expected welfare for the electorate. The beliefs required to overturn earlier results without transparency are expressed as a function of the the gap between the superior and inferior information $(\pi - \kappa)$. The shaded areas consist of cases outside the possible domain, therefore they are non-determined. The threshold belief, for which (5.20) holds with equality, is shown by the bold line. As illustrated in panel (a) of figure 5.2 the threshold is not only a function of the gap between π and κ but also κ itself. In particular, as κ grows larger, the border is pushed downward. Hence, a representative democracy will dominate more often as the electorate’s beliefs (ζ) do not have to be all that high to compensate for

the gap $(\pi - \kappa)$. When $\frac{1}{2} < \kappa$ the electorate's perceived information π^P is larger than one half irrespective of the value of ζ , i.e. there is no threshold (cf. panel (b) of figure 5.2). The dominance of a representative democracy as the optimal institution thus remains.

In sum, even if an advisory council only foresees in limited fiscal transparency the electorate's expected welfare improves. Even though it does not exclude pandering, it does correct for the possibility that the majority of the electorate is badly informed, i.e. is likely to prefer the policy that is least likely to be optimal. Finally, the more such procedures of limited transparency are in place (e.g. if government ordered studies are to be made public by law), the more redundant a fiscal council in the form of an appointed delegate with decision power on the fiscal path becomes.

5.4 Concluding Remarks

This chapter studies the importance of information for the institutional organization of fiscal responsibility. With the necessity of fiscal discipline comes the need for austerity measures. Whether to leave such technical decisions to an elected politician or an appointed fiscal council, is not only a matter of accountability. It is to a large extent a problem of information. Nevertheless, not only the information level of the institutions with respect to the optimal action matters. A limited informedness of voters about the optimal fiscal policy (i.e. uncertainty in their ex ante preference) clouds the delegated decision on the optimal fiscal policy. A problem that is complicated since not all delegates are necessarily acting in the interest of the electorate.

To solve the decision problem how to organize political institutions to come to a welfare optimizing fiscal path, I built on the model by Maskin and Tirole (2004). They already showed that political accountability may cause politicians to pander to popular opinion. I extend their model to directly consider the informedness of the delegates on the issue at hand. Moreover, to better fit the case for technical decisions concerning fiscal responsibility, I loosen the assumption that the electorate is perfectly informed about the probability that a policy will turn out to be optimal.

It is found that the public funds attributed to an (advisory) fiscal council are below the welfare optimizing level. In particular, a limited informedness of voters about the optimal fiscal policy results in politicians pandering to the public opinion. Consequently, if delegates have superior information, an appointed instead of an elected delegate would be preferred. Moreover, as the superior information of the delegates becomes more costly (e.g. if the policy issue becomes more technical) pandering occurs more often, thereby making an appointed council preferable more often. Similarly, elected officials would

lack incentives to fund a public advisory council to gather the welfare improving information. Only when the cost of information is small and delegates have weak office-holding motives, a representative democracy is preferred to set fiscal policy.

Another important part of the advisory role of a fiscal council is its contribution to fiscal transparency. If the council succeeds in informing the electorate about the optimal policy before evaluating the elected incumbent at the end of the period, pandering will be fully prevented. Nevertheless, full transparency is quite unrealistic in reality. In reality the optimality of the implemented fiscal policy is only known in the medium run. Alternatively, when transparency entails the possible spillover to the electorate of the superior information, it strengthens the case for an advisory council to complement a representative democracy too. Although it does not exclude pandering, it improves the electorate's expected welfare in case the electorate is badly informed. Therefore, through enhancing fiscal transparency, the claim for an appointed council reduces.

Finally, several avenues for further research are left open. The strong office-holding motive characterizing some of the politicians entails some form of deficit bias. For example, politicians may pander to a public opinion for re-election purposes in favor of less austerity. Nonetheless, a strong office-holding motive is not entirely the same as an explicit will on the side of the politicians to run deficits. Hence, the model does not parallel the rent-seeking motives often found in the literature on fiscal discipline.¹⁷ In the same vein, the model does not incorporate the time inconsistencies often observed in fiscal decision making. Both, however, are expected to only strengthen the case for a fiscal council.

¹⁷For example, as shown by Besley and Smart (2007), the proportion of benevolent officials in the total pool of officials may shift the welfare effects of fiscal discipline. Limits to the power to tax, are found to increase welfare only if the probability of a benevolent incumbent is sufficiently large, such that the selection effect (i.e. the ability to improve welfare by improving the average quality of office-holders) outweighs the discipline effect. A cap on the deficit, on the other hand, is found to be most valuable when there is a predominance of self-interested politicians. Specifically, in the (limited) range of caps considered by Besley (2006), the equilibrium is only characterized by a discipline effect.