



Partisan Preferences and Political Institutions: Explaining Fiscal Retrenchment in the European Union

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The Eastward Enlargement of the Eurozone

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Partisan Preferences and Political Institutions: Explaining Fiscal Retrenchment in the European Union

Abstract

Driven by the desire to fulfill the Maastricht fiscal criteria and pressed by mounting debt burdens that have accumulated over the past 30 years, a majority of EU-15 countries attempted to reduce their budget deficits during the 1990s. Yet, these nations have exhibited remarkable differences in their ability to pursue such retrenchment policies. This paper endeavours to illuminate the political and institutional factors that can help explain those differing degrees of fiscal retrenchment in European Union countries for the time period 1990-2001. Several variants of the partisan approach and the veto players framework are elucidated and applied to the question of budgetary consolidation. These elaborations yield four working hypotheses which are empirically tested using a time-series cross-section data set of 14 EU countries. The results lend support to the notion that a low number of institutional veto players increases likelihood and extent of a budgetary retrenchment. Given these findings it is possible to draw some conclusions concerning the effectiveness and deficiencies of the Stability and Growth Pact.

JEL-Classification: C23, D72, D78, H62

Keywords : Deficits, Fiscal Adjustment, Partisan Theory, Veto Players, Time-Series Cross-Section Models

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The progress of the enormous debts which at present oppress, and will in the long-run probably ruin, all the great nations of Europe has been pretty uniform.

(Adam Smith, 1776)

1. Introduction

Since the economic downturn in 2001, major policy debates in Europe have revolved, once again, around the question of fiscal deficits. Several member countries of the European Union¹ have been repeatedly in breach of the provisions of the Stability and Growth Pact (SGP) which spawned not only domestic but also EU-wide discussions on the pros and cons of the pact. The SGP clarifies and enshrines the fiscal convergence criteria originally laid out in the Treaty of Maastricht (TEU) in 1992. It mandates that the fiscal deficit of every country participating in the European Monetary Union (EMU) shall not exceed 3% per year. Repeated breach of this stipulation can result in heavy fines of up to 0.5% of a country's GDP.

While public debates on the SGP usually focus on countries that are about to exceed the deficit ceiling, it has to be pointed out that a great number of EU countries have been highly successful in reducing their deficits. For example, Finland and Great Britain suffered from budget deficits in excess of 7% of GDP in 1993, and both managed to turn these into surpluses by 1998. Other countries such as Germany or Portugal only moderately reduced their deficits in the middle of the 1990s and saw them rise again at the end of the decade. Hence, even though average deficits in the EU have decreased from over 6% of GDP in 1993 to almost zero in 2001, there is still a wide variety of outcomes. The existence of the SGP alone cannot explain these different developments. Rather, instead of being an explanation in itself, the fiscal criteria of the TEU and SGP provide a common external constraint² on the fiscal policies of member states. In conjunction with the recession that hit Europe at the beginning of the 1990s and which led to burgeoning deficits, they provided a strong motivation for all governments to attempt fiscal consolidation.

Therefore, the EU countries in the 1990s and at the beginning of the new millennium provide a unique framework for asking which political and institutional factors determine a country's ability to reduce its deficit. This is the overall question that motivates this paper. Specifically, since much of the literature shows that economic variables, like real growth or the unemployment rate, alone do not suffice to explain divergent deficit outcomes (e.g. Alesina and Perotti 1995; Franzese 2002a; De Wolff 1998; Woo 2003), this paper tries to illuminate which political and institutional factors may account for the observed differences.

¹ France, Germany and Portugal, and, as turned out recently, also Greece

² Even though Denmark, Sweden and the UK are not members of the Eurozone and, thus, do not have to fear the sanctions of the SGP, they still do participate in the annual budgetary review procedure by the European Commission (EC) and would face (non-binding) recommendations by the EC if they were in breach of the SGP-provisions. Hence I assume similar constraints and motivations for these countries.

Note that the focus here is exclusively on determinants of deficit reduction³. In particular, two approaches, the partisan theory and the veto-player approach, are discussed.⁴ It will be shown how these rather general theories can be utilized, so they may hold the promise of explaining why some European countries were more able than others to cut their budget deficits. These elaborations will yield several hypotheses that are then empirically tested using a time-series cross-section data set of 14 EU countries⁵ for the time period 1990-2001. These analyses show that domestic political forces and institutional structures continue to play a decisive role in shaping budgetary outcomes. Hence, from this political economy perspective the Stability and Growth Pact is bound to fail, for in its current shape, it cannot undo nor sufficiently alter these national constraints and incentives.

The paper is organized as follows: Section 2 will provide some basic empirical facts about the long-term development of deficits in the EU and offers two definitions of what constitutes a successful fiscal retrenchment. Section 3 introduces several versions of the partisan theory and applies it to the question of fiscal consolidation. In the 4th section, the veto-player approach is presented. In particular, a spatial and a dynamic variant are discussed. Section 5 then proceeds to the empirical testing of the two theories, employing time-series cross-section analyses. Section 6 reviews the analysis carried out in this paper, sums up the results and draws some conclusions regarding the future of the SGP.

2. Some Empirics and Definitions

2.1 Development of Deficits in the EU

Since WWII, Western European countries⁶ exhibited a clear upward trend in their government spending, which, according to OECD figures, rose from well below 35% of GDP in the 1960s to over 55% of GDP in 1993. Since then, however, a reduction can be discerned. This increase in spending was mainly driven by rising expenditures for social transfers and government consumption. Yet, this overall rise in expenditure was not matched by an equivalent increase in taxation. While tax-to-GDP ratios also grew considerably, fiscal deficits started to rise at the beginning of the 1970s (see Figure 1) as a result of the expansion of the government sector and the occurrence of two oil shocks.

³ As will be shown in section 2.1, successful deficit reduction was mainly achieved by slashing government expenditure, not so much by raising revenues. That is why I also speak of fiscal retrenchment when talking about deficit reduction.

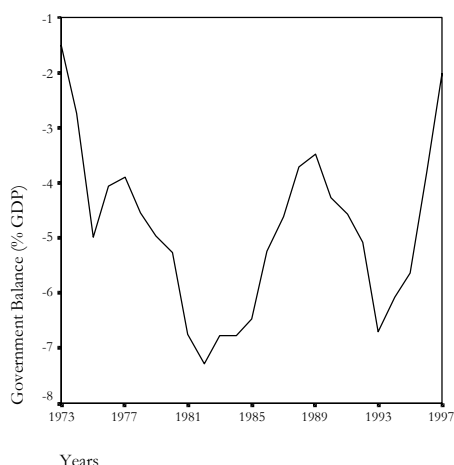
⁴ There is also a rich theoretical and empirical literature that analyses the impact of budget institutions (that is, the procedural rules governing formulation, approval and implementation of the budget) on deficits. Even though the importance of such institutions is not disputed, they will not be analysed here. This approach has already received a rather extensive treatment in the literature. See Hallerberg and von Hagen (1997), Ferejohn and Krehbiel (1987), Weingast, Shepsle and Johnsen (1981). For a survey see Drazen (2000).

⁵ Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, UK. Luxembourg has been and throughout will be omitted, for it is the only EU country that has almost no government debt, high fiscal surpluses throughout the period under consideration and negative interest payments. Therefore, it is an extreme outlier that does not add to the analysis.

⁶ Indeed, this trend was common to all industrialized countries of the OECD.

A closer look at Figure 1 reveals that during the 1990s fiscal policies changed. On average, deficits were substantially reduced. However, significant cross-country variation persisted, not all states were equally able to reduce their deficits.

Figure 1: Development of the Government Balance, (unweighted) EU-14 Average, 1973-1997



Source: World Development Indicators; own calculations

2.2 Definition and Composition of Retrenchment

Before we can proceed, it is necessary to point out how “retrenchment” is measured and defined in this paper. Two indicators are of importance for the further analysis: First, “government outlays” (or “government expenditure”) is the annual expenditure of a country measured in per cent of GDP. Second, to measure the annual (general)⁷ government fiscal deficit, i.e. the difference between revenues and expenditures, the “structural” (“cyclically-adjusted”) deficit⁸ is used.

As a number of studies point out, for a retrenchment to be lasting, i.e. one that is not reversed within a few years, the fiscal adjustment has to “rely mostly (or exclusively) on spending cuts (...), short-lived adjustments rely mostly on revenue increases” (Alesina, Perotti and Tavares 1998, p. 200). Given these insights, a rather strict definition of what constitutes a lasting fiscal retrenchment in the EU countries between 1990 and 2001 will be employed. In doing so, a combination of both the structural deficit and government outlays will be used. The former is needed to control for business cycle movements, the latter is used to detect those consolidations that are exclusively based on increases in revenues. The

⁷ Using the general government deficit (as opposed to central government figures) provides a more complete picture, since it also includes sub-national deficits as well as deficits in social security funds. Hence, differences in welfare state arrangements and the constitutional structure (federal vs. unitary) are accounted for.

⁸ This indicator estimates the fiscal deficit that would prevail if the economy was producing at its full-employment output. This way, the influence of the business cycle can be removed from the data, and revenue losses and expenditure hikes due to recessions are thus accounted for. One has to note, however, that this indicator is not without its problems. In order to calculate the structural deficit, one has to estimate the potential growth rate of an economy which is not directly observable and thus in its calculation very dependent on the assumptions made and the methodology employed (see de Brouwer 1998).

first definition thus stipulates: only those instances in which a country reduced its structural deficit and/or its government outlays (keeping the other variable constant) for at least 5 years in a row shall count as a period of real fiscal retrenchment.

Applying this definition to our EU-14 data for the period 1990-2001 yields the results shown in table 1. The table indicates which countries underwent periods of retrenchment. Furthermore, the third column shows by how much the cyclically adjusted government balance has improved during the period of retrenchment, whereas column 4 depicts by how much government outlays were reduced. By definition, if the improvement in the structural balance is higher than the reduction in government outlays, then the difference between the two indicate an increase in government revenues. For instance, the fact that Belgium's and Italy's reductions in government expenditure were much lower than their increases in their government balances indicates that these two countries consolidated their budgets partly via measures that increased revenues. Conversely, a higher reduction in total outlays than in the overall deficit indicates decreasing government revenues.

Table 1: Periods of Fiscal Retrenchment; Definition I

Country	Period of Retrenchment	Change of the Cyclically Adjusted Government Balance (in % GDP)	Change in Total Government Outlays (in % GDP)
Belgium	1992-1998	+8,2	-0,4
Denmark	1994-2001	+5,1	-7,4
Finland	1996-2001	+4,7	-9,8
Ireland	1991-2000	+5,3	-12
Italy	1991-1999	+10,8	-7,2
Netherlands	1995-2000	+6,4	-11,1
Spain	1995-2001	+4,7	-5
Sweden	1995-2001	+10,4	-9,7
United Kingdom	1995-2000	+6,2	-5,2

Source: OECD, own calculations

As a control, a second definition will be introduced which is related to the one used by Alesina and Ardagna (1998, p. 469). Here, we can speak of a fiscal retrenchment, if in one year a country reduced its cyclically adjusted deficit at least by 2% of GDP, or if it reduced its deficit by at least 1,5% of GDP in two consecutive years⁹. The results of this definition are shown in table 2.

As can be seen, the two tables exhibit some striking differences. The reason is that the second definition is both less and more strict at the same time. It is stricter because it demands a higher annual deficit reduction than definition I. Therefore, Ireland and Spain are no longer part of the table, since they lowered their deficits by smaller annual amounts. Another result of this stipulation is that in all countries the number of consecutive years of consolidation is now two at most. On the other hand, definition II is less strict in that it also counts fiscal retrenchments that lasted for only one or two years, and which could

⁹ The only difference is that Alesina and Ardagna (1998) use the cyclically adjusted *primary* balance.

therefore have been reversed the next year. As a result, countries like Austria, Greece and Portugal now figure as successful cases of consolidation.

Table 2: Periods of Fiscal Retrenchment; Definition II

Country	Period of Retrenchment	Change of the Cyclically Adjusted Government Balance (in % GDP)	Change in total Government Outlays (in % GDP)
Austria	1996-1997	+3	-2,7
Belgium	1993-1994	+4,5	+2,1
Denmark	1999	+2,1	-1,5
Finland	2000	+3,4	-3
Greece	1991	+4	-3,6
Greece	1994	+3,6	-2,1
Greece	1996-1998	+7,3	-3,8
Italy	1992-1993	+3,3	+1,5
Italy	1997	+4,2	-2,8
Netherlands	1991	+2,9	+0,5
Netherlands	1996	+2,2	-7,1
Portugal	1997	+3,8	+0,5
Sweden	1995-1996	+7,1	-4,9
Sweden	1998	+2,6	-2,5
Sweden	2001	+2	-0,3
United Kingdom	1997-1998	+3,9	-3,2

Source: OECD, own calculations

Note that in none of the two definitions France or Germany are considered to have undergone periods of fiscal consolidation. But still, definition I seems superior to the second one. For one, the latter does rule out important cases like Ireland, which pursued a gradual approach to retrenchment which lasted throughout the 1990s. Yet, Ireland is a prime example of substantial deficit reduction. Indeed, this approach misses many years of gradual retrenchment in all countries. This seems particularly problematic because, as is visible from the data, most states actually pursued such a gradual approach over several years. Furthermore, definition II also considers very short cases, such as Austria and Portugal, whose efforts were quickly reversed in subsequent years. Therefore, they should not be counted as cases of successful budgetary retrenchment. For all these reasons, emphasis will be put on the first definition, which seems more capable of accounting for the gradual character of budgetary consolidation observed in Europe.

In sum, according to definition I, nine out of fourteen EU countries were able to engage in lasting fiscal retrenchment during the 1990s and most did so by reducing expenditures. As has been shown before¹⁰, this was mainly achieved by reducing social transfers and government consumption.

Having framed the issue this way, it is time to introduce two political economy explanations for deficit reduction and derive some testable hypotheses.

¹⁰ See Alesina and Perotti 1997; Alesina and Ardagna 1998; Alesina, Perotti and Tavares 1998

3. The Partisan Approach

3.1 The Traditional Partisan Theory by Hibbs

The partisan theory has been originally formulated by Douglass Hibbs (1977). The model's point of departure is the observation that different socio-economic groups are differently affected by growth, unemployment and inflation. Hibbs (1977, p. 1468; 1987, p.87), presenting evidence for the U.S., shows that inflation actually benefits lower income groups and has an equalizing impact on income distribution. Unemployment, on the other hand, shifts income from the poorest two quintiles to the richest two quintiles. Hibbs (1977, p. 1470) then presents survey evidence which indicates that these socio-economic groups indeed utter subjective preferences over inflation and unemployment that are broadly in line with their objective economic situations. As a result, low and medium wage earners prefer low unemployment (which is brought about by high economic growth) and accept higher inflation in return, whereas asset holders and people with above the average wages prefer low inflation paid for by higher unemployment.

Now, in the political arena low and medium income earners are usually represented by left-wing parties, while upper-middle and upper classes are broadly represented by right-wing parties. As Franzese (2002b, p. 391) summarizes, all in all the left can be associated with a preference for low unemployment, even income distribution, bigger government spending and a greater acceptance of inflation. Right-wing parties, on the other hand, prefer low taxes, low government spending, balanced budgets and trade off higher unemployment for lower inflation. Analysing cross-national evidence for 12 Western countries as well as time-series evidence for the U.S. and the UK, Hibbs (1977, p.1468) arrives at the conclusion "that the macroeconomic policies pursued by left- and right-wing governments are broadly in accordance with the objective economic interests and the subjective preferences of their class-defined core political constituencies." In particular, he finds that the policies of British Labour governments led to an on average 0,62% lower unemployment rate as compared to when the Conservatives were in power. Similarly, ruling Democrats in the U.S. produced a 2,36% lower unemployment rate than Republican administrations (Hibbs 1977, p.1481, 1486).

As should have become clear by now, the economy in Hibbs' model is characterized by a Phillips-curve relationship between inflation and unemployment, which can be stated as follows :

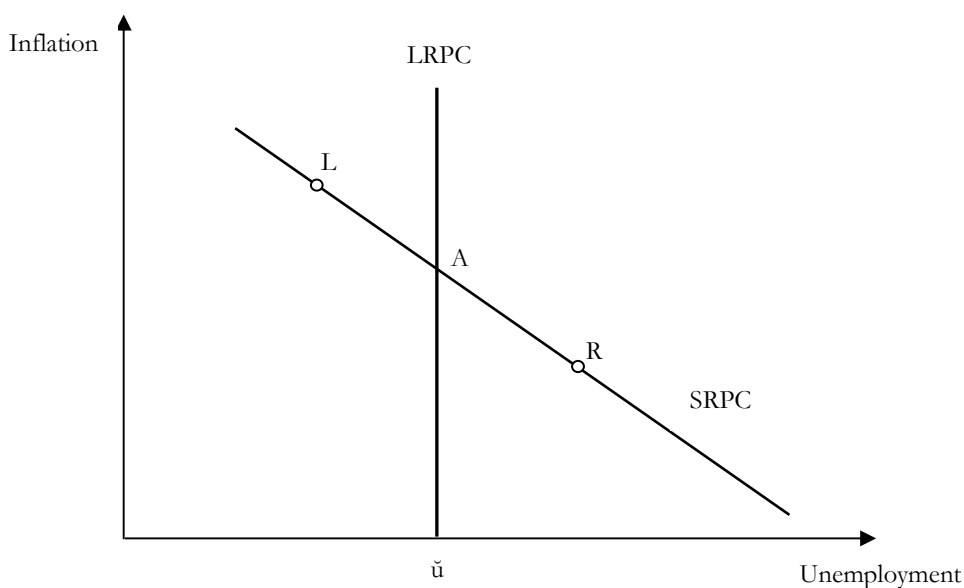
$$y_t = \hat{y} + \pi_t - \pi_t^e \quad (4.1)$$

Expectations are presumed to be adaptive such that $\pi_t^e = \pi_{t-1}$. Macroeconomic policies, thus, follow the logic outlined in figure 2. At point A, the economy is at its full-employment equilibrium ($\bar{u} = \hat{y}$) with the long-run Phillips-curve being horizontal. If the left party L wins the election, then it will, in line with the preferences of its constituency, strive to lower the unemployment rate. Thus, it will move to point L on the downward sloping short-run Phillips-curve. The result will be stronger economic growth and higher inflation. If the right-wing party wins the next election, it will move to point R which embodies its

voters' preferences for low inflation. The consequence will be a recession where unemployment grows and inflation falls. It is important to emphasize that Hibbs does not consider any shifts in the short-run Phillips-curve due to adjustments in expectations. Hence, in his view the short-run is long enough to last for the terms the same party is in office.

So far, we have only looked at economic outcomes but not at fiscal policy and deficit reduction. This will be done in sub-section 3.3. Prior to that, however, the partisan model will be extended, replacing adaptive with rational expectations. This is not because of an empirical weakness of the model. Quite to the contrary, as Franzese (2002b, p. 396) concludes, reviewing the literature: "In sum, evidence for partisan outcome cycles of worsening nominal and improving real and distributional outcomes under left governments generally emerges readily from U.S. and comparative data (...)." Rather the reason is that assuming such a stable short run Phillips curve seems theoretically problematic in light of the advances made regarding the role of expectations (see Friedman 1968; Phelps 1970).

Figure 2: Hibbs' Partisan Model Framework



Note: LRPC = Long-run Phillips-curve; SRPC = Short-run Phillips-curve

Source: Alesina, Roubini and Cohen (1997), p.50

3.2 Rational Expectations Extension of the Partisan Model

Alesina, Roubini and Cohen (1997) formulated a partisan model, again based on a Phillips curve relationship, where voters' expectations about future inflation are not adaptive but rational, such that

$$\pi_t^e = E(\pi_t | I_{t-1}) \quad (4.2)$$

where π_t^e denotes expected inflation for period t and I_{t-1} is the information available to voters at the end of period $t-1$. As in the traditional model, there is a left- and a right-wing party that represent the constituencies laid out above. The parties have the following utility function:

$$U^i = \sum_{t=0}^{\infty} \alpha^t [-(\pi_t - \pi^i)^2 + b^i y_t] \quad 0 < \alpha < 1 \quad (4.3)$$

with the superscript $i=[L,R]$ denoting the left and the right party and α being the discount factor. The term $(\pi_t - \pi^i)^2$ describes the inflation target that a party strives to achieve. As Alesina, Roubini and Cohen (1997, p. 53) point out, this target can be assumed to be positive in any case, since there is clear evidence that inflation has always been used by governments as a tax instrument. Finally, b weighs the benefits of growth against the costs of inflation. As has been shown in the previous sub-section, the left party cares more about growth and low unemployment, while the right is more focused on keeping inflation at low levels. Therefore, $\pi^L > \pi^R \geq 0$, that is, party L has a higher inflation target than R. Furthermore, $b^L > b^R \geq 0$ which means that the left-wing party stronger favours growth, even at inflationary costs, than its right-wing counterpart. As a result, inflation will always be higher under party L than under party R.

Now, voters are assumed to have the same utility function (4.3) as parties. Thus, voters are differing in terms of the amount of inflation they like and how strong they weigh growth against inflation. Yet, the distribution of voters with respect to π and b is unknown. Voters, on the other hand, know exactly the policy preferences of the parties. Thus, they can easily determine the overall inflation rate that will be created if party i is elected by substituting the Phillips curve equation (4.1) into parties' utility function (4.3) and maximizing with respect to π_t , taking voters' inflation expectations π_t^e as given. Hence, a party i will set inflation

$$\pi_t = \pi^i + b^i/2 \equiv \pi^{i*} \quad (4.4)$$

with π^{i*} denoting the overall inflation a party produces, which results from the target inflation rate and the growth considerations. Voters do not only know the policies the respective parties would pursue once elected, but also the probability distribution that the left- or the right-wing party will win the election. Given these probabilities and the above presumption (4.2) that voters are rational, the electorates' overall expected inflation for the time after the election is given by

$$\pi_t^e = p\pi^{L*} + (1-p)\pi^{R*} \quad (4.5)$$

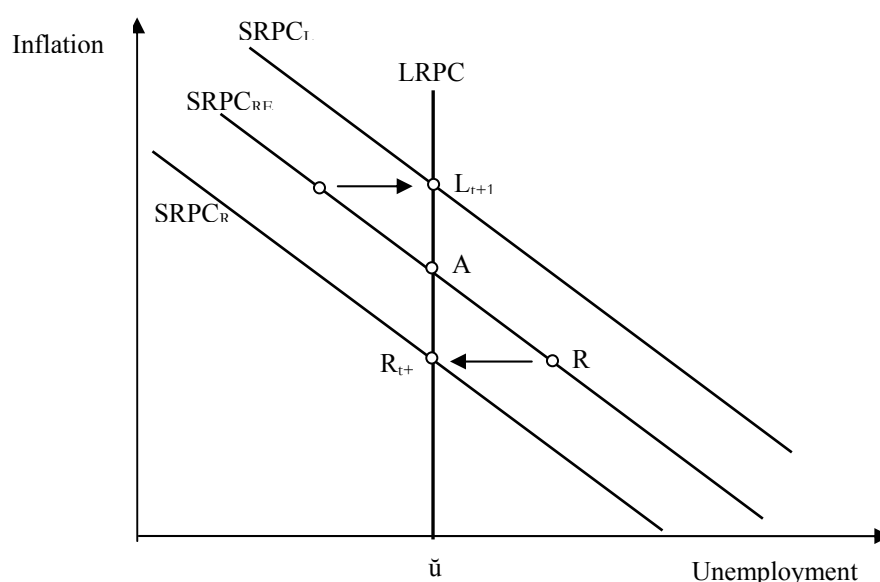
where p is the probability that L wins¹¹ and accordingly $(1-p)$ denotes the probability that R wins the election; π^{L*} and π^{R*} capture the two parties' overall inflation policies. Hence, voters take the average of both parties' policies weighted by their respective probabilities of winning as their expected inflation rate that will occur after the election.

The ensuing dynamic is illustrated in figure 3. Before the elections voters form their expectations about future policies according to (4.5). Point A marks the inflation rate that

¹¹ As Alesina et al. (1997, p 569) show, a representative voter will vote for party L if the expected utility he receives from an electoral victory of L is higher than if R wins. Formally this can be stated as follows: $-(\pi^{L*} - \pi^v)^2 + b^v y_t^L + \beta[-(\pi^{L*} - \pi^v)^2 + b^v \hat{y}_t^L] > -(\pi^{R*} - \pi^v)^2 + b^v y_t^R + \beta[-(\pi^{R*} - \pi^v)^2 + b^v \hat{y}_t^R]$, with the superscript v denoting the representative voter. Thus, p stands for the probability that this inequality holds for more than 50 percent of the voters.

voters expect. Consequently, wage and credit contracts are made assuming this inflation rate. Yet, this is an average expectation. If party L wins, realised inflation will be higher than expected. Therefore, unemployment will be temporarily lower and the economy will reach point L on the short-run Phillips curve. Given rational expectations, however, voters will adjust wage and credit contracts in the next period to the higher inflation rate, thus the short-run Phillips curve will shift upwards bringing the economy back to the long-run equilibrium unemployment rate. Overall inflation will have risen though and the economy is now at point L_{t+1} . The logic in case of a right-wing electoral victory is analogous. If party R wins, actual inflation will be lower than expected. The economy will enter a recession with unemployment rising, thus point R on the short-run Phillips curve will be approached. In the next period expectations will have adjusted and the curve will shift downwards to point R_{t+1} where full-employment output is restored but inflation will be lower.

Figure 3: Partisan Dynamics in a Model with Rational Expectations



Note: LRPC = Long-run Phillips-curve; SRPC = Short-run Phillips-curve
Source: own illustration

It becomes immediately clear that in the rational model, partisan effects on growth and unemployment are only short-lived. Once expectations have adjusted, the only thing that distinguishes left- from right-wing parties is the level of inflation. From (4.5) it follows that the post-electoral economic effects depend on the degree of electoral surprise. If, for instance, expected inflation is derived by assuming a high probability of a left-wing victory, then a surprise win by R will cause the realised inflation rate to be much lower than expected, hence leading to a severe recession. Furthermore, the greater the difference between the desired overall inflation of L and R, the bigger will be the post-electoral effects.

In sum, the difference between the traditional Hibbs model and the rational expectations variant lies in the persistence of partisan effects, with the latter approach predicting a much shorter duration of post-electoral expansions and recessions. Empirical studies have not yet decided though, which of the two approaches describes reality more accurately. While

Alesina, Roubini and Cohen (1997, p. 108, 174) find evidence that favour the rational model, Franzese (2002b, p. 401-405) is more sceptical, arguing that in most cases the traditional model can explain observed patterns equally well.

So far, however, only partisan effects on economic outcomes have been considered. In the next sub-section, it will be shown how fiscal policy and budget deficits can be incorporated.

3.3 Incorporating Fiscal Policy and Retrenchment

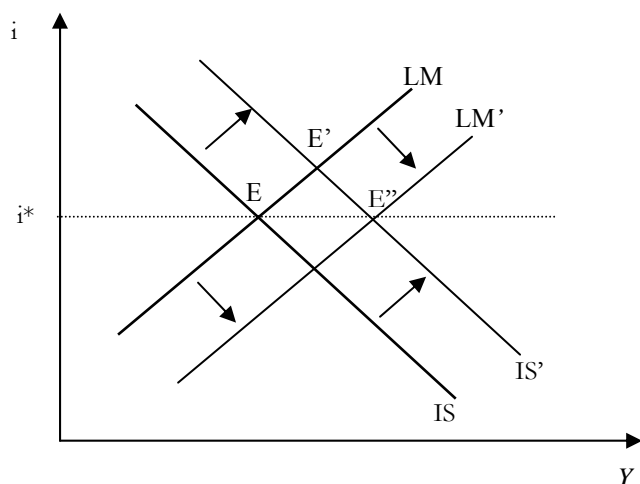
In principle, a government can use monetary and/or fiscal policy to implement its partisan goals regarding output, inflation and unemployment. A large body of literature, emerging in the 1990s, argued however, that given a continuing strong integration of capital markets and unconstrained capital mobility, partisan fiscal and monetary policy was no longer feasible (e.g. Garret and Lange 1991; Kurzer 1993; Scharpf 1991; Simmons 1998). Yet, this conclusion seems theoretically dubious. Rather, as the Mundell-Fleming model predicts and as several authors have pointed out recently (Boix, 2000; Oatley 1999; Clark and Hallerberg 2000), in an open economy with free capital flows, the choice of the exchange rate regime becomes crucial in determining which policy instruments are still viable. Under fixed exchange rates, fiscal policy is still effective in managing the economy while under floating exchange rates, it is not. The reverse is true for monetary policy.

The logic behind this can be briefly illuminated in an IS/LM framework. Assuming an open economy with fixed exchange rates, an expansionary fiscal policy would result in an increase of aggregate demand. As is illustrated in figure 4, this means that the IS curve will shift upwards to IS'. As a result of the greater output, money demand will have increased and interest rates will have risen above the world interest rate i^* . This entails an increased demand for the domestic currency and thus an appreciation of the currency. Since the exchange-rate is fixed, the central bank has to intervene and purchases foreign currencies to keep the exchange rate stable. This will increase the domestic money supply and push the LM curve downwards to LM'. Interest rates will thus be reduced back to the initial level. Moreover, as a result of the increased money supply, output will have increased even further, moving the economy from E' to its new equilibrium E''. Therefore, a government is still able to pursue an independent fiscal policy. Under free floating exchange rates, on the other hand, the central bank would not need to intervene, the LM curve would remain stable. As a consequence, the exchange rate would appreciate, making domestically produced goods and services more expansive vis-à-vis foreign ones. Hence, demand for domestic goods (from inside and outside the country) will be reduced, shifting the IS curve back to its initial position. As a result, the fiscal stimulus will have been rendered ineffective.

That governments try to take advantage of these opportunities has been empirically corroborated. Boix (2000, p. 66) presents evidence for a sample of OCED nations covering the period 1960-1993, which shows that under unrestricted capital mobility countries with fixed exchange rate regimes had on average significantly higher fiscal deficits than countries with a floating currency. There is also some tentative empirical evidence that governments

dominated by the left run larger deficits under fixed exchange rate regimes than right-wing governments (Boix 2000, p. 66; Oatley 1999, p. 1014).

Figure 4: Effects of a Fiscal Expansion with Fixed-Exchange Rates



Note: i = interest rate; i^* = equilibrium (world-) interest rate; Y = output
 Source: Own illustration.

Applying the same reasoning to monetary policy would show that independent monetary policy is only feasible under flexible exchange rates. Under a fixed regime, independent monetary policy, which leads to capital flows that put up- or downward pressure on the exchange rate, forces the central bank, which is committed to retain a stable exchange rate, to reverse its policy move until interest rates are back at their initial (world-) level. Yet, monetary policy is not the focus of this paper and therefore it will not be elaborated any further.

In sum, partisan fiscal policy is possible even under perfect capital mobility, given that exchange rates are fixed. This applies to most of the countries and the time period considered in this paper. In particular, the Eurozone can be considered such a fixed exchange rate regime. However, three countries in our sample do not take part in the common currency area: Denmark, whose currency is pegged to the Euro via the European Exchange rate Mechanism (ERM), using a fluctuation band of 2,25%, and the UK and Sweden which have free floating exchange rates. Moreover, before the creation of the Euro in 1999, almost all Eurozone members had their exchange rates pegged within the ERM. After the ERM crisis in 1992-1993, the fluctuation bands were widened from 2,25% to 15%, and Italy and the UK left the system (for a lengthy discussion see Tsoukalis 1997, p. 152-162). Yet, even with the wide fluctuation bands, the system could still be considered a fixed exchange rate regime, since “the nine countries which remained in the ERM plus Austria which joined in January 1995 and Finland in October 1996 (followed by Italy one month later), chose not to take advantage of the wider margins of fluctuation in their monetary policy” (Tsoukalis 1997, p. 160). From this and from the prior discussion about the two partisan models, we can conclude that different parties once elected not only have different preferences, but we can also assume that they have, at least theoretically, the fiscal policy means available to pursue their ends.

Furthermore, even though the UK and Sweden have flexible exchange rates, independent fiscal policies are still possible if central banks accommodate the government policy by increasing the money supply. One needs to remember that the Bank of England became independent only in 1997, whereas the Swedish Riksbank has a comparably low degree of independence (Daniels, Nourzad and van Hoose 2004). Also, the fact that a policy proves ineffective may not prevent a government from trying it. Hence, we should also expect partisan fiscal policies in Sweden and the UK.

We are now in a position to formulate the first hypothesis regarding the impact of partisanship on fiscal retrenchment. The traditional as well as the rational partisan model hold that left-wing parties care more about growth and unemployment, whereas right-wing parties are more concerned about inflation. Therefore, given that with fixed exchange rates and free capital flows, only fiscal policy remains as a viable option, we can expect left governments to pursue a more expansionary fiscal policy, to run bigger fiscal deficits and to reduce deficits less than their right-wing counterpart. Thus:

H₁: The higher the share of left-wing party seats in a government, the less likely is that government to engage in fiscal retrenchment.

The reason is that even with an external constraint such as the SGP, the left's preference is always to increase output as much as possible. The right-wing party, on the other hand, likes low inflation and is thus much more ready to retrench the budget. Note that we need not to distinguish between the traditional partisan model and the rational one because we are only concerned here with policy instruments, not with economic outcomes. Hence, the extent and duration of the real economic effects of these fiscal policies are of no concern here.

This hypothesis has been derived from the traditional and rational partisan model, which are both based on the notion of an exploitable Phillips curve. The next sub-section will present a different partisan approach that yields quite a contrary hypothesis.

3.4 Debt as a Strategic Variable

Another partisan approach emphasizes the strategic role that debt may play in constraining future governments' latitude (Aghion and Bolton 1990; Alesina and Tabellini 1990; Milesi-Feretti and Spalore 1994; Persson and Svensson 1989). The basic notion of this approach is that a government with rational foresight might expect electoral defeat. Given that it does not like the policies that the successor government will implement, it may choose to accumulate debt and thus forces the future government to spend resources on servicing the debt instead of pursuing its ideological goals. Whereas Alesina and Tabellini (1990) are considering a model with two different parties that have different preferences over how to spend the budget, Persson and Svensson (1989) present a model with two parties that prefer different levels of spending. Given that Persson and Svensson make clearer predictions about the role of partisanship, their model shall be briefly illuminated.

The authors consider a two-period model, with a right-wing government being in power in the first period. After this period, elections are held and the left wins, thus holding office in period 2. The right is assumed to prefer low spending, while the left likes high government spending. This is fairly in line with the behavioural assumptions made above, where we presumed that the left is expansionary in order to achieve lower unemployment and higher growth, while the right is more concerned about inflation and likes low taxation. As Persson and Svensson (1989) show, if the right-wing government expects to be replaced after the next election, then it has an incentive to lower taxes and take on debt, i.e. to run deficits, to burden its left-wing successor with the need to service the debt. As a result, the left, once in power, has fewer resources available to spend, since “government consumption is a decreasing function of the inherited debt” (p. 333).

Note, that the right actually dislikes deficits, yet it also dislikes high spending. Thus, the extent to which the right-wing government runs deficits depends on how “stubborn” it is. “Stubbornness” refers to how the government weighs the disutility of higher future spending by its successor against the disutility from the ensuing tax distortion. This distortion emerges because the right lowers taxes in the current period more than it would, remained it in power. To service the debt, the left will raise taxes more than it would without the debt. As a consequence, taxation will not be stable as is prescribed by the tax smoothing model. The more “stubborn” the right-wing government is, the more ready it is to accumulate debt and to bear the losses caused by tax distortions in order to prevent the successor from high spending. Persson and Svensson (1989, p. 341) emphasize that the logic of this argument is perfectly symmetric: “a ‘stubborn’ liberal would choose to borrow less if it knew it would be succeeded by a more conservative government.” This way, the left government could lower debt servicing costs or even create additional funds if it leaves surpluses to the future government, thus increasing future government spending.¹²

Governments are all the more inclined to act according to the model’s predictions, the more likely it is that they will be replaced after the next election. However, governments might very well also behave this way, even if they do not expect to be replaced soon but simply have a long time horizon, since sooner or later in a democracy the opponent will come to power. The large deficits accumulated by U.S. president Reagan in the 1980s can be considered an example for a right-wing government trying to tie the hands of successors for a long time to come¹³ (Persson and Svensson 1989, p. 337-339).

As a result, this model yields the rather counterintuitive prediction that the right is more likely to run deficits, while the left is more prone to reduce them. It follows as a second hypothesis:

¹² Note that if the right uses these surpluses for tax cuts, then this is also in the interest of the left, since it means an expansionary fiscal policy that furthers the left-wing party’s goals regarding growth and employment.

¹³ As a New York Times article (25th January 1987) read, citing Reagan’s Budget Chief David Stockmann: “This deficit is no despised orphan. It is President Reagan’s child and secretly he loves it (...) The deficit rigorously discourages any idea of spending another dime for social welfare.”

H₂: *The higher the share of right-wing party seats in a government, the less likely is that government to engage in fiscal retrenchment.*

Having explicated the predictions that follow from the partisan theory, it is now time to turn to the potential role that political institutions may play in determining the possibility of fiscal retrenchment.

4. The Veto Players Approach

4.1 The Basic Framework

The fundamental goal of the veto players theory is to explain policy stability and policy change, employing the tools and intuition of spatial models of voting. The focus lies on the decision-making process of political actors. Hence, this approach assumes policy oriented actors. As a result, strategic interaction between them is largely neglected. In contrast to other approaches such as political business cycle models, this theory presumes therefore that policy makers care about implementing their desired policies, but not to win elections per se. Given a certain amount of information, this approach aims at enabling the researcher to predict specific legislative outcomes of the political process.

Veto players are all those actors that have the constitutionally assigned power to veto a policy proposal in the legislative process. They can be either institutional (e.g. different chambers of parliament) or partisan (e.g. different parties in parliament or in government) in nature. Moreover, veto players can be individual (such as a president or a monolithic party controlling the parliament) or collective (such as a parliament or a government composed of several parties that have to determine their position by using some kind of decision rule). Other actors, like interest groups for instance, that have no formal veto power assigned to them by a country's constitution but do exhibit informal influence on the political process are excluded from the analysis.

Tsebelis presents his argument in one- and two-dimensional policy spaces. Yet, he claims that his arguments and findings can be generalized “in any number of dimensions” (p. 28). Moreover, in presenting his argument, he throughout assumes that actors weigh different issues equally strong, that is, different issues in the policy space have the same salience. In addition, Tsebelis assumes actors' preferences to be separable between different issues at stake. As a result, actors' indifference curves around their ideal points in the policy space are taken to be circular. Any point on such a curve is equally valued by an actor, since the simple Euclidean distance¹⁴ to the ideal point is the same for every point on this curve. If we allowed for non-separable preferences and dissimilar salience, then indifference curves would be no longer circular but could take on a variety of elliptic forms, making the analysis much more complicated.

¹⁴ For any number of dimensions n , the simple Euclidean distance (SED) between two points x and y can be calculated as follows (Hinich and Munger 1997, p. 78):

$$SED(x,y)=\sqrt{\sum_{j=1}^n(x_j - y_j)^2}$$

However, given these assumptions, policy stability and policy change depend crucially on the size of the win set¹⁵ and the core¹⁶. The bigger the size of the win set, the more feasible alternatives exist to the status quo, and consequently, the more likely is a policy change. On the other hand though, the bigger the size of the core, the more policy positions exist that cannot be changed, and hence the less likely is a policy change¹⁷. As a result, policy stability and policy change are functions of the sizes of the core and the win set.¹⁸ Tsebelis identifies those factors that influence the size of core and win-set, and thus, the likelihood and the extent of policy changes. These shall be briefly presented in turn.

Figure 5 depicts a two-dimensional policy space (for two arbitrary issues) with four veto players, whose bliss points are indicated by A, B, C, and D. First, let's ignore D and only consider the other three actors. Given that the status quo is SQ1, the win set is the hatched area. All points inside this region can beat SQ1 and can thus constitute a new policy. Therefore, policy change is possible. The triangle ABC represents the unanimity core that comprises all policy positions that cannot be changed. If SQ2 was the status quo, then there would be no win set, since the intersection of the three indifference curves yields no hatched area. In this case the win set is empty ($W(SQ2) = \emptyset$) and policy change is impossible.

Now, Tsebelis' (1995; 2002) most fundamental finding is that the size of the core and the win set depend on the ideological distance between the veto players, their number, and their cohesion. These three variables have the potential to explain not only the occurrence of policy change but also its direction and its extent. Let's again assume that SQ1 is the status quo and that there are three actors A, B, C. If C moves up and to the left, that is, further away from A and B (as is indicated by the arrow), then the win set shrinks. The new indifference curve of C is the dotted one, and the win set has shrunk by about a third as this new indifference curve has moved upwards¹⁹. Therefore, policy stability increases with the ideological distance of the veto players.

Similarly, an increase in number of veto players also increases stability and hinders policy change. This effect can be illustrated by adding a fourth actor D in figure 5. Once we do not only consider A, B, and C but also take D into account, the win set again

¹⁵"The win set of a given status quo z (written $W(z)$) is the set of alternatives that will garner more votes than z in a pairwise majority rule election" (Hinich and Munger 1997, p. 62). Put simply, the win set contains all policy positions that are preferred by a majority (however defined) of actors to the status quo.

¹⁶The core contains all policy positions that cannot be defeated employing a given decision-making rule. Note, that the core is only equal to the pareto set, if the employed decision-making procedure is unanimity (then, we speak of the unanimity core). Once, some other form of majority voting is used, the core is different from the pareto set. However, most of the time the unanimity core will be used given that the very concept of a veto player entails that he cannot be overruled.

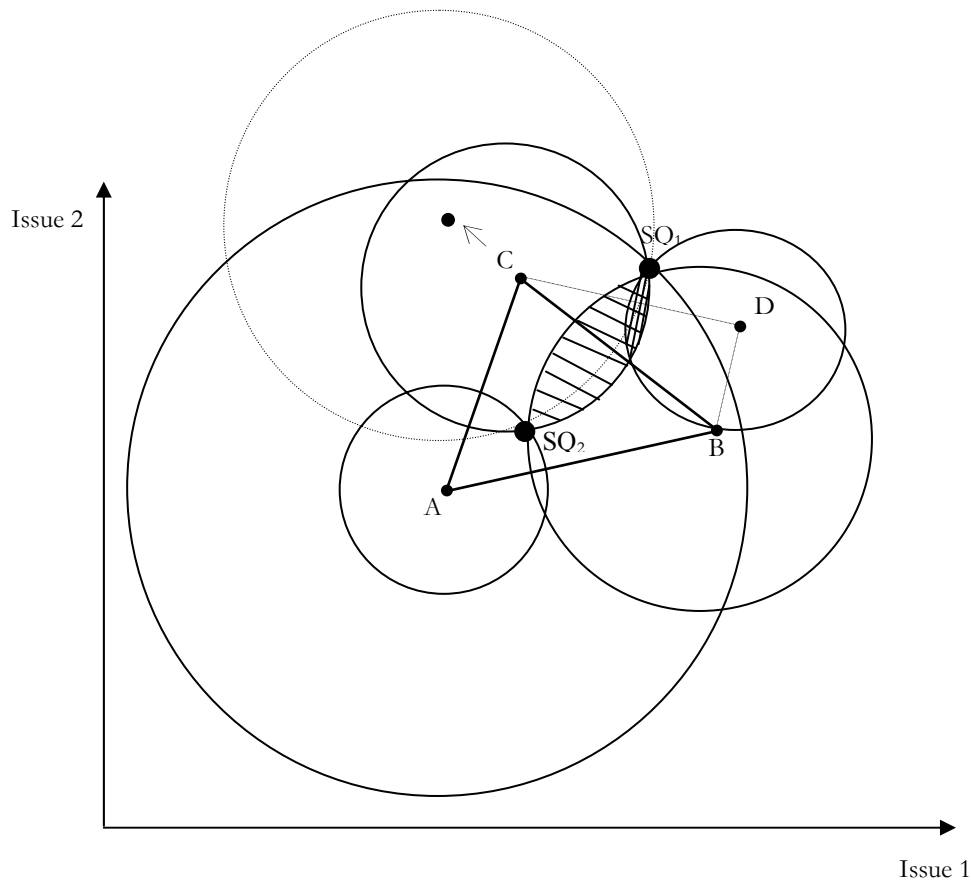
¹⁷Note, however, that the size of the win set and the core are "a necessary but not sufficient condition for proximity of the new policy with the status quo" (Tsebelis 2002, p.32) Hence, even though a large win set makes a policy far away from the status quo possible, it does not rule out that the new policy represents only an incremental change from the status quo.

¹⁸ Note that core and win set almost always behave equivalently, with the win set shrinking as the core expands and vice versa (Tsebelis 2002, p. 29).

¹⁹ The unanimity core has also expanded. This could be seen if one extended the triangle to the new position of C. This is not done in the figure, in order not to complicate the picture even more.

shrinks significantly. Now only those policy positions that lie within the cross-hatched area can beat SQ1. In addition, the unanimity core expands, as is indicated by the dotted lines, to comprise now the area ABCD. Hence, there are more policy positions that cannot be defeated by any other position. Yet, there is one restriction to this finding. As Tsebelis (2002, p. 28) proves, an increase in the number of veto players does not affect win set and core if the new actor is located inside the already existing unanimity core. In this case his position is “absorbed” by the other veto players and has no effect on policy stability.

Figure 5: Veto Players and Policy Change in a Two-dimensional Policy Space



Source: Own illustration.

Hence, a more precise prediction is to say, that an increase in the number of veto players reduces the win set, or leaves it the same; but it definitely does not increase it.

The final variable that influences the win set is cohesion. Cohesion refers to collective veto players such as a parliament made up of several parties. In particular, the greater the cohesion of a collective veto player, the smaller is the ideological distances between the individual actors that constitute this veto player. In the above example, veto players were monolithic or internally deciding by unanimity and had, thus, clear policy positions and indifference curves. In the case of collective actors, however, policy positions are the result of internal preference aggregation and majority decision-making procedures. This gives rise

to the well-known problem of cycling preferences²⁰, where outcomes solely depend on the order of voting and are unstable (Hinich and Munger 1997, pp. 37-41). Therefore, collective veto players' preferences cannot be expressed through circular curves because the outcome for every possible majority within the collective actor has to be taken into account.

In order to cope with this problem, Tsebelis introduces the concept of the “wincircle”, which is “a circle that contains the winset of the status quo by majority rule” (p.61). This wincircle allows treating collective veto players approximately the same way as the individual ones described above, that is, this way we can create circular indifference curves around them.²¹ Tsebelis distinguishes between simple and qualified majority decision rules and arrives at opposite conclusions. In the case of simple majority voting, increasing cohesion leads to a smaller wincircle and thus to higher policy stability. Hence, in this case policy change is harder to come by and smaller in its extent. However, if decisions within the collective veto player are reached by qualified majority rule, then an increase in the cohesion of this actor leads to a bigger wincircle and therefore to less policy stability. Moreover, given a certain cohesion, the higher the majority threshold of a voting procedure, the smaller the wincircle, and thus, the higher policy stability.

To summarize, policy stability and policy change in a political system depend crucially on the size of actors' win sets and their cores. These are affected by the ideological distance between veto players, their number and their cohesion. However, of these three variables, only the number of veto players can be easily operationalized in empirical studies, since so far there is no data available that measures internal cohesion of parties. With respect to ideological distance, there are some studies (Cusack 1997, 1999; Franzese 2002a) that try to measure this variable by creating indices that capture the “Centre of Gravity” of parties.²² Yet, even these measures rely on expert judgements that try to order parties on a left-right scale. Given that exact distances become crucial for this analysis, it is doubtful that experts can exactly locate parties' positions.²³ Therefore, these indices remain to a considerable extent subjective and, thus, disputable. As a result, the number of veto players emerges as the only variable that can be readily observed by examining a country's constitution and the parties acting within the political system. Moreover, in his empirical analysis, Franzese (2002a, pp. 175-178) finds that once one controls for the number of veto players, their ideological distance becomes statistically insignificant. For these reasons, only the number

²⁰ This is the famous “Condorcet paradoxon”, named after the French mathematician Marquis de Condorcet (1743-1794).

²¹ For a formal derivation of the wincircle see Tsebelis (2002, pp. 45-47, 51-53). This derivation is not replicated here, since for methodological reasons explained below, cohesion cannot contribute to explain the questions raised in this paper.

²² The “Centre of Gravity” index captures a party's position C_i on a left-right scale and its relative numerical strength T_i in parliament or government. Formally (Cusack 1999, p.473),

$$G = \sum_{i=1}^n T_i C_i$$

²³ It is not disputed here, that one can easily distinguish parties concerning their overall ideology and policy goals. What seems highly dubious is to exactly locate their position in a n-dimensional policy space.

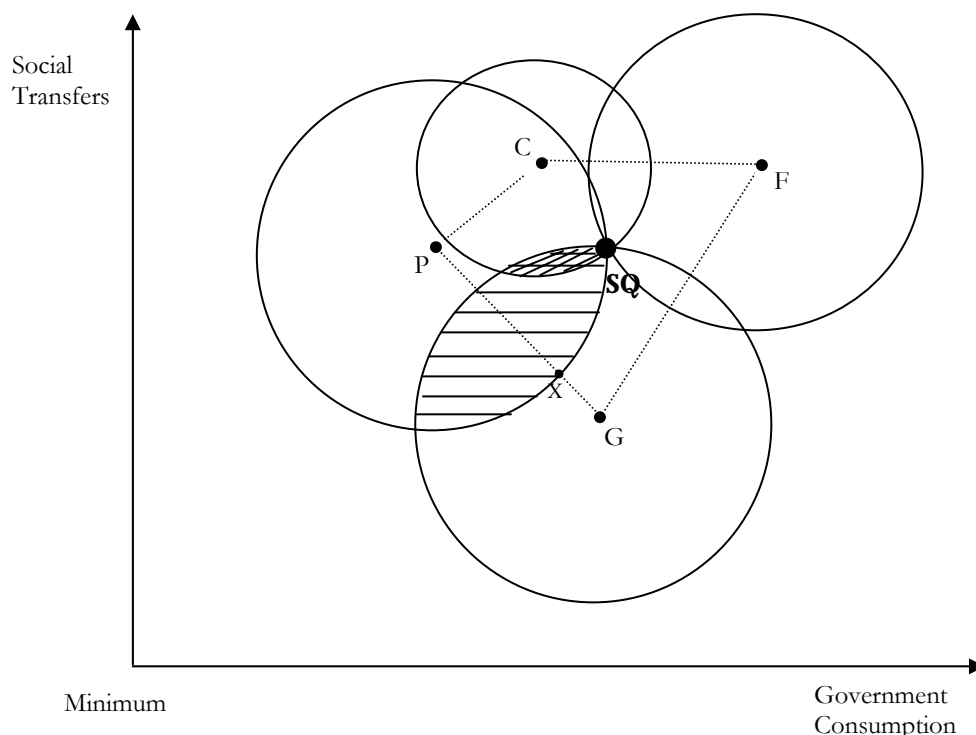
of veto players will be henceforth considered as an explanatory variable for explaining fiscal retrenchment.

4.2 Veto Players and Fiscal Retrenchment

Having explicated the basic veto players framework, it is now time to apply it to the question of fiscal retrenchment and to derive a testable hypothesis. In the analysis that follows, a two-dimensional policy space will again be employed, with the Y-axis denoting spending on social transfers, while the X-axis captures government consumption. It is these two budget items that are considered because as was shown in section 2.1, the vast majority of European countries that were able to engage in successful budgetary retrenchment, did so by slashing mainly these two items. However, the logic applies to any number of dimensions, so that theoretically all budget items could be simultaneously considered, yet, this would make graphical exposition impossible. In the example used here, the status quo is a situation in which the budget is in deficit. Actors choose to retrench the budget (and thus lower the deficit), if they decrease spending on one or both items; or if spending on one item is more rigorously lowered than it is raised on the other one. Hence, actors have to decide whether they want to keep the deficit at current levels, whether they want to increase it, or whether they reduce it. If they choose to lower the deficit, then they must make up their mind how to do so.

The situation is illustrated in figure 6. Note that the point of origin is denoted with minimum instead of 0. The reason is that it is realistic to assume that there are certain minimum floors regarding social spending and government consumption that are constitutionally protected or necessary to run the state and cannot be changed discretely. SQ is the prevailing status quo for spending on social transfers and government consumption, with the overall budget being in deficit. First, the government G makes a proposal which is its bliss point. In this context it makes no difference whether it is a single party or coalition government (the latter case will be dealt with in the next sub-section). As can be seen, it is assumed that the government would like to reduce the deficit by lowering social transfers, but it prefers to keep the level of spending on government consumption stable. If the government was the only veto player, that is, if it would have quasi-dictatorial power, then it could implement its bliss point G. However, in a democracy there is always a parliament, denoted P in the figure, which has to cast a vote on the government's proposal. As the figure illustrates, the parliament also prefers to lower the budget deficit, but it would rather achieve this goal by keeping social spending constant and lowering government consumption instead. The resulting policy outcome is different from G and lies somewhere in the hatched area which is now the win set of the status quo.

Figure 6: Veto Players and Fiscal Retrenchment



Source: Own illustration.

Note that proximity of the parliament's majority bliss point to the one of the government depends on the legislative cohesion of the supporting majority, which in European parliamentary systems is rather high.²⁴ Unlike in pure presidential systems (e.g. the U.S.) where the executive is independent of the parliament, European governments need to be upheld by a majority in parliament because all European states have either a semi-presidential or parliamentary regime²⁵. Hence, the threat of a government break-up will ensure strong legislative cohesion among the governing parties in a parliamentary system (see Diermeier and Feddersen 1998; Persson, Roland and Tabellini 1999) As a result, the government and its majority in parliament are most likely to find a common policy position that is different from SQ but not too far away from the government's ideal point. Since agenda setting power in a parliamentary system is usually exerted by the government (Tsebelis 2002, p. 82), we can expect X to be the policy that will be chosen in this situation, for within the win set it is the point closest to G.

In some European nations, legislation has to be approved by a second chamber of parliament. In figure 6, we assume that the majority in the second chamber C would like to increase social transfer and to lower government consumption. This new veto player dramatically reduces the win set, which is the cross-hatched area. Now, fiscal retrenchment is only possible to a very limited extent (smaller than the government envisioned) and

²⁴ However, in some countries (such as currently Sweden) we frequently observe minority governments. In that case we can expect legislative cohesion to be lower, since the government needs to secure a majority on an issue-by-issue basis.

²⁵ The annex provides an overview of the constitutional structures prevailing in Europe.

mainly via cuts in government consumption. Yet, the story may not end here. Some EU countries (Austria, Belgium, Germany, Italy, and Spain) are federal systems. Here the federal states may have the opportunity to run deficits²⁶ themselves or engage in log-rolling over pork barrel projects due to common pool problems (Weingast, Shepsle and Johnsen 1981). As a result, some federal states may wish to spend more on both dimensions.²⁷ Hence the position of the fourth veto player is F. Now the win set is empty, that is, changing the status quo with four veto players turns out to be impossible. This can also be seen by looking at the unanimity core GCPF, depicted by the dotted lines. SQ lies within the core, and thus cannot be beaten by any other policy position. Hence, the status quo is a pareto-equilibrium²⁸ and the political system turns out to be incapable of fiscal retrenchment.

It needs to be stressed that the case depicted in figure 6 is a theoretical example. Actors may have very different preferences and different distances to each other. Therefore, it may very well be that even with four veto players there is still a win set and a deviation from SQ therefore possible. Also, the win set may already be empty in the presence of only, let's say, three veto players. Policy stability therefore depends to a certain extent on the configuration of preferences. The point to be made here is that, *on average*, we should expect that the likelihood of fiscal retrenchment decreases as the number of institutional veto players increases. Thus, the third hypothesis posits:

H₃: *The higher the number of institutional veto players, the less likely is a country to engage in fiscal retrenchment, and the smaller is its deficit reduction.*

It is worthwhile to emphasize that this hypothesis does not imply that countries with a high number of veto players do necessarily have high deficits and debts. Theoretically, many veto players could lead to low deficits because huge spending increases or tax cuts are prevented by the small win set that may exist in a system with many veto players. But one could also arrive at the opposite prediction: a government may be forced to make huge side-payments to other veto players in order to achieve its goals. This reasoning could lead one to expect that many veto players are associated with high deficits. However, all what is claimed here is that an increasing number of veto players is associated with an increasing stability of the status quo (which is a budget deficit), and therefore makes fiscal retrenchment harder to achieve. This view resonates with Franzese's (2002a, pp. 176) empirical finding, that "veto actors induce inaction."

²⁶ Remember that the general budget deficit also includes the deficits run by sub-national entities.

²⁷ Note that often the second chamber in federal systems represents the interests of the federal states. In this case it may be the case that the position of the second chamber is equal to that of the federal states. Yet, it is also feasible to assume that given a certain degree of fiscal autonomy, the position of federal states is different from the one of the second chamber. Single states may pursue policies that run counter to the ones pursued at the federal level, thus this veto player accounts for fiscal decentralization. Moreover, there are countries with bicameral legislatures that are not federal states.

²⁸ Given unanimity rule, a deviation from the equilibrium is impossible, since any change would at least leave one actor worse off.

4.3 Weak Governments / Delayed Stabilization

The previous sub-section dealt with institutional veto players, considering the government a monolithic actor. However, very often the government is composed of more than one party. Thus, intra-governmental dynamics may have an impact on fiscal retrenchment. Starting with two seminal articles by Roubini and Sachs (1989a, b), a large empirical literature has emerged since the beginning of the 1990s, which examines the impact of government fractionalisation on deficits. Yet, the empirical findings were very mixed. Roubini and Sachs (1989a,b), who used an ordinal variable to distinguish between single-coalition- and minority governments, found that the higher the number of parties in government, the higher the deficits. Edin and Ohlsson (1991) insisted that this finding can be completely attributed to the effects of minority governments. Hence, only minority governments run particularly high deficits. Still other, more recent empirical analyses yielded no significant relationship between the number of government parties and fiscal deficits (de Haan and Sturm 1997; de Haan, Sturm and Beekhuis 1999; Sakamoto 2001). However, most of these studies are largely empirical and do not distinguish properly between levels of deficits and the process of fiscal retrenchment.

Deficit reduction has been explicitly analysed in a more theoretical literature that has also emerged at the beginning of the 1990s (Alesina and Drazen 1991; Spalore 1993). These authors model intra-governmental negotiations between coalition partners over fiscal retrenchment as a “war of attrition”²⁹. The basic notion is that every coalition party would like to shift the burden of fiscal adjustment onto the other parties’ constituencies. As a consequence, every coalition members has an incentive to block a solution and tries to wait the others out. Thus, no fiscal retrenchment takes place, although everyone agrees that it is necessary. This situation is only resolved if one or several partners give in and bear a disproportionate burden of the costs, whereas the winner, the one who did not give in, has to bear the smallest share.

Alesina and Drazen (1991) develop a war of attrition model where two societal groups bargain over who has to bear the costs of fiscal consolidation in a small open economy. Yet, their analysis also holds for coalition partners instead of socio-economic groups, if we assume that different parties represent different groups. At time t , an exogenous shock leads to a fall in government revenues and thus a deficit. The deficit is financed in part $(1-\eta)$ by issuing debt and another fraction η is financed via distortionary taxation (such as an inflation tax for instance). Debt is therefore,

$$d(t) = (1-\eta) [rd(t)+g_{t-1}] \quad (5.1)$$

where d denotes debt, r is the (constant) world interest rate and g_{t-1} describes the level of government spending before the exogenous shock occurs. Note that Alesina and Drazen (1991) assume that fiscal consolidation occurs through increases in taxation. However, their

²⁹ War of attrition models have been extensively used to describe conflict situations between labour unions and central banks (Backus and Driffill 1985a, b; Tabellini 1988), as well as between fiscal and monetary policy makers (Sargent 1986; Tabellini 1987).

arguments and results also hold, if we presume that the deficit will be lowered by reducing government spending, which is the focus of this paper.³⁰ Consequently, a retrenchment takes place when expenditure is lowered to such an extent that the level of debt will remain constant, that is, deficits are reduced to zero³¹:

$$g_t = \tau_t - rd_t \quad (5.2)$$

with subscript t denoting the time when the retrenchment takes place and τ being the tax rate which will remain unchanged. Now, the bargaining between the coalition members starts over who has to bear the expenditure cuts. More precisely, given that all parties have different constituencies, it needs to be decided which societal group will get less of future public spending.³² The utility function u that each party i maximizes is

$$u_{i,t} = c_{i,t} - y - K_{i,t} \quad (5.3)$$

where c is private consumption, y captures income which is assumed to be constant throughout, and K is the cost for every party (and its followers) to live another instant in an economy that is in deficit. K differs between the parties and is given by

$$K_{i,t} = \varphi_i \tau_t \quad (5.4)$$

in which φ captures the utility loss due to the distortionary taxation (the inflation tax) that is partially used to cover the deficit. As becomes clear from (5.4), the welfare costs of an economy in debt increases linearly with the level of taxes one has to pay. Once the fiscal retrenchment takes place, $K_i=0$.

Of course, the longer the coalition members wait to enact a retrenchment, the higher are the costs as the distortionary taxation rises with the debt servicing costs. In addition, there are also political costs associated with fighting for a solution that favours ones own clientele. Now, every party will block a solution as long as the marginal benefit from waiting is higher than the marginal cost of distortions associated with the accumulation of debt. The marginal benefit is defined by the probability that the opponent(s) will give in very soon times the higher utility that is derived from winning the war of attrition, which is the smaller retrenchment costs the winner has to pay compared to the loser(s). It is important to stress that each party only knows its own costs of living in a state of accelerating debt. If everyone knew each others' costs of waiting, then everybody could calculate each others' time until concession takes place, and the war of attrition would not take place, since the "loser" would know from the beginning that he is the loser and would hence immediately give in to save the costs of living in a distorted economy.

Within this framework, Alesina and Drazen derive a number of parameters that determine how long retrenchment is delayed in a political system. First of all, the more unequal the

³⁰ As a result, in contrast to Alesina and Drazen, taxes remain constant while expenditures are the decisive variable here.

³¹ The model assumes for simplicity that there is no economic growth.

³² If different constituencies are geographically defined, this could mean that some group will get less public goods, like new infrastructure, in the future. If they are defined in socio-economic terms, than this could mean that some will get less government transfers in the future.

distribution of fiscal costs associated with deficit reduction, the longer the delay. The reason is that the benefit from waiting, as defined above, increases if the utility from being the “winner” is significantly larger than the utility derived from giving in. The authors interpret the degree of inequity in the distribution of costs as a proxy for political cohesion in a country. Therefore, they conclude that the more unequal this distribution is, the less cohesive is a society. Furthermore, consolidation will also be longer postponed, the lower the distortionary costs of accumulating debts are. Also, in applying a war of attrition model directly to coalition governments, Spalore (1993) finds, that deficit reduction takes longer to be agreed on, the higher the number of coalition partners, whereas single-party governments react much quicker and more decisively. In the context of the model by Alesina and Drazen (1991), this is explained by the fact that a high number of parties increases the probability that there are at least two parties with high marginal benefits derived from waiting, being in a deadlock. This deadlock will only be resolved when all parties but one concede, with the last party holding out being the winner. Moreover, the more parties there are, the higher is fractionalisation, and thus the more unequal is the societal distribution of the costs of retrenchment. As explicated above, this inequity leads, *ceteris paribus*, to a longer delay in deficit reduction. Note, that we can also expect consolidation to be smaller than is prescribed by tax-smoothing because the parties may be tempted to retrench less in order to lower the burden the loser(s) have to bear in an attempt to induce the loser(s) to concede faster. As a result, we can formulate the final hypothesis:

H₄: *The higher the number of parties that participate in government, the less likely is a fiscal retrenchment.*

Modelling intra-governmental conflict over retrenchment as a war of attrition is pretty much in line with the veto players approach. Indeed, parties could be modelled in spatial terms as partisan veto players. If we assume the four actors in figure 6 to be coalition partners, then we see that the win set is empty and retrenchment is infeasible. However, the war of attrition model, in contrast to the veto players theorem by Tsebelis, is dynamic. As time elapses and the cost of accumulating debts rises, actors start shifting their positions. If we assume party G to be the winner in the war of attrition, the other three parties will concede and move their positions toward the ideal point of G. Yet, employing a spatial illustration shows that the losers may not need to surrender completely but only move towards the winner’s bliss point in order to create a non-empty win-set. This stands in contrast to Alesina and Drazen, whose model leaves no room for political compromise, but rather assume total surrender by the loser(s). As a result, both variants of the veto players approach are not mutually exclusive but rather complementary. The war of attrition model adds a dynamic element to the analysis, while the spatial veto players theorem is able to explain the occurrence of political compromise.

In sum, section 4 has applied the veto players approach to the issue of fiscal retrenchment. In doing so, it has derived two hypotheses regarding the role of institutional actors in

general and of partisan veto players within governments. Before we proceed to the next section which empirically tests all hypotheses, we reiterate them in table 3.

Table 3: Hypotheses

Hypothesis	Theoretical explanation
H₁: The higher the share of left-wing party seats in a government, the less likely is that government to engage in fiscal retrenchment.	traditional/rational partisan approach
H₂: The higher the share of right-wing party seats in a government, the less likely is that government to engage in fiscal retrenchment.	partisan / debt as a strategic variable
H₃: The higher the number of institutional veto players, the less likely is a country to engage in fiscal retrenchment, and the smaller is its deficit reduction.	veto players approach / spatial model
H₄: The higher the number of parties that participate in government, the less likely is a fiscal retrenchment.	veto players approach / war of attrition model

5. Testing the Hypotheses

In this section, the hypotheses derived above will be empirically tested employing time-series cross-section (TSCS) analyses of a data set comprising 14 EU countries³³ for the period from 1990-2001. However, since pooled data carry a number of caveats and difficulties (see Beck and Katz 1995; Beck 2001; Plümper, Manow and Troeger 2003), estimation and specification issues have to be discussed thoroughly. But first of all, subsection 5.1 will take a closer look at the data and will specify the variables needed for the empirical examinations.

5.1 Data and Variables

The data has been moulded into two data sets. There is one TSCS set that contains all countries for the whole period under consideration. The other one is also TSCS data, but it only contains those countries and those periods in which retrenchment according to the first definition given in section 2.2 actually took place; in other words, it represents pooled retrenchment periods (see tables 1). The reason for doing so is that the complete TSCS data set may conceal effects of variables that are particularly important only in times of fiscal consolidation. For instance, as has been argued above, veto players may inhibit deficit reduction but their effects on deficit levels are less clear. Thus, pooling only those years in which retrenchment actually took place, might be useful in order to distinguish between the dynamics of deficit expansion and deficit reduction.

Now, it is time to specify dependent and independent variables.³⁴ The dependent variable will be the annual change in government expenditures, named “ Δ OUTLAYS”. A second variable to be tested is a dummy. This dummy assumes the value “1”, if a given country

³³ Luxembourg is still excluded.

³⁴ A full list of definitions and sources of the variables is provided in the annex.

engaged in fiscal retrenchment in a given year, while the dummy assumes the value “0” for all those instances that do not belong to a period of deficit reduction. For our two definitions, there are thus two dummies, “D1” and “D2”. This is the most straightforward way to test for the factors that facilitate or inhibit retrenchment as it is defined in this paper.

To control for the economic determinants of fiscal retrenchment, a number of economic variables is employed. Partly following the empirical literature (Alesina, Roubini and Cohen 1997; de Haan and Sturm 1997; Franzese 2002a; Sakamoto 2001; Woo 2003), five economic controls are introduced: real GDP growth: “GDP”; the standardized (according to OECD definition) unemployment rate: “UE”; tax revenues in percent of GDP: “TAX”; the overall debt level in percent of GDP: “DEBT”; and the long-term interest rate: “LTERMINT”. Growth, unemployment and tax revenue capture the effects of recessions and booms on deficits. The debt level and the interest rate, on the other hand, control for the debt servicing costs. Since EU-14 nations have a common trade regime and do not differ very much in their demographics, factors such as the old-age dependency ratio or trade openness used in part of the literature (Franzese 2002a; Woo 2003) are neglected. This is also warranted by the rather brief time span considered here, which is too short to reflect the impact of changing demographics on social expenditure.

To test for partisan effects on deficits, several variables are employed. First of all, “GOVLEFT”, “GOVCENTER” and “GOVRIGHT” are the respective percentage shares of left-, centre- and right-wing parties in government.³⁵ Also, their respective share in parliament is captured by “PLEFT”, “PCENTER” and “PRIGHT”.

Two variables are used to capture the effects of veto players on deficits. First of all, the additive indicator “POWER” measures the impact of the federal structure of a country, the number of parliamentary chambers, and the regime type (presidential or parliamentary). The indicator ranges from 0 to six, and increases with the concentration of power in a country. This means that the more veto players there are, the lower is this indicator’s value.³⁶ Hence, the highest value can be found in countries with a unitary structure, no president and a unicameral legislature. A value of “0”, on the other hand, would be found in a country that has a pure presidential system, a federal structure and two chambers of parliament.³⁷ Second, in order to test hypothesis number 4, the variable “NOP”, which denotes the number of parties in government, is included.

³⁵ Centrist (Christian democratic) parties pose a particular problem, since it is not clear whether they should be lumped together with the left or the right regarding fiscal policy preferences. Wilensky (1981) assumes the former because centrist parties have a history of supporting welfare state expansion.

³⁶ For specifics about the coding see the annex.

³⁷ Note that there is no such case in the sample employed here because a pure presidential system does not exist in any EU-14 country.

5.2 Time-Series Cross-Section Analyses

5.2.1 Some Notes on Methodology

TSCS data represent repeated observations of a fixed number of units. However, OLS analysis of TSCS data is far more problematic than cross-sectional regressions. The reason is that pooled data sets commonly violate the OLS assumptions about the error process. In particular, TSCS errors often exhibit panel heteroskedasticity, contemporaneous correlation and serial correlation.

In order to deal with the problems of heteroskedasticity and contemporaneous correlation, I specify an OLS regression with Panel Corrected Standard Errors (PCSE)³⁸ as suggested in the literature (Beck 2001, Beck and Katz 1997) and for the logit model I calculate white heteroskedasticity-robust standard errors (White 1980). In addition, in case of autocorrelation, an error correction model is used which entails a Prais-Winston transformation of the data, employing a common first-order autoregressive process AR(1). For theoretical reasons though, fixed effects are not included. The reason is twofold. First, the variable “POWER” is time-invariant and would thus be controlled away by fixed effects. Second, since a number of partisan variables are of particular interest here, we have to assume that level effects matter. It simply makes no sense to assume that a 10 percent increase in the share of left parties in government has the same effect in a country, where the left already holds 70 percent of cabinet seats and in a country where it had previously no seats. But this is exactly what fixed effects do, since they abstract from differences in levels. This is, of course, a serious caveat, since without fixed effects we cannot really account for unit heterogeneity. However, there simply does not exist a solution to this dilemma of TSCS analyses yet (Wilson and Butler 2004).

5.2.2 Specification and Estimation of the Models

In this sub-section, it will be estimated which factors affected likelihood and extent of fiscal retrenchment. This will be done in two steps. First, the full TSCS data set will be analysed in order to find the variables that determined whether or not a country underwent a period of fiscal retrenchment, as it has been defined in 2.2. Therefore, a logit regression model will be estimated with the dependent variable being a dummy that simply denotes whether a country in a given year engaged in budgetary consolidation. It has been shown that deficit reduction in the EU-14 nations was mainly achieved via cuts in government outlays. Thus, we are interested in isolating those factors that were especially conducive for slashing public expenditures. To do this, a sub-sample of the TSCS data, that pools only all those years in which retrenchment actually took place, is examined. The dependent variable is the change in government outlays “ Δ OUTLAYS”. Note that because only retrenchment periods are included in this TSCS subset, all observations on this variable are by definition either stable or negative. Hence, this variable only captures the extent of reductions in government outlays. This is very useful, since we are solely interested in the determinants

³⁸ For specifics about the estimation of PCSE see Beck and Katz (1995, p. 638).

of retrenchment, whereas fiscal expansion may very well be driven by different political and institutional factors that could potential blur the clarity of the results.

The specification of the logit model is the following:

$$P(D1=1) = \beta_0 + \beta_1GDP_{i,t} + \beta_2OUTLAYS_{i,t} + \beta_3DEBT_{i,t} + \beta_4TAX_{i,t} + \beta_5LTERMINT_{i,t} + \beta_6UE_{i,t} + \beta_7GOVLEFT_{i,t} (GOVRIGHT_{i,t}) + \beta_8PLEFT_{i,t} (PRIGHT_{i,t}) + \beta_9NOP_{i,t} + \beta_{10}POWER_{i,t}$$

$i=1,\dots,14; \quad t=1,\dots,12$

The subscripts i and t denote the country and the year respectively. The results of this model are presented in table 4. As can be seen, this model is estimated employing our first definition (D1) of fiscal retrenchment in the second and third column, while showing the findings for definition II in the fourth and fifth column. Since the Wooldridge test for autocorrelation in panel data (Wooldridge 2002) indicated the existence of first order autocorrelation, the above described error correction is being employed.

Of the economic variables, only the unemployment rate turns out to be significant across all specifications, though only at the 0.1 level. The positive sign indicates that a higher unemployment rate increases the pressure for attempting retrenchment. Tax revenues and the overall debt burden are positively related to the likelihood of budgetary retrenchment. This comes as no surprise, since the former could be interpreted as the tax burden on the population, which, when rising higher and higher, increases the political pressure for reducing it by retrenching the budget. The latter is also quite intuitive, since rising debt burdens make retrenchment ever more likely. Yet, both variables are sensitive to the definition of consolidation employed and lose their significance in Models 3 and 4.

Looking at the two veto players variables, we observe that “NOP” is not significant, which clearly rejects the weak government hypothesis (H4). Yet, “POWER” emerges with a very strong, positive coefficient which is highly significant. This clearly supports H3. The higher the power concentration of a political system, that is, the less veto actors there are, the bigger the likelihood that fiscal retrenchment will take place. The high significance of this variable is not sensitive to the definition of retrenchment employed, only the size of the coefficient is smaller in Models 3 and 4.

Turning our attention to the partisan factors³⁹, we observe that only the strength of right-wing parties in government is significant in both specifications. The negative sign for the right lends credibility to the Persson/Svensson model. The right will use its increasing strength to accumulate debts in order to constrain future left governments’ latitudes. The effect is very small however, and only significant at the 0.1 level. The parliamentary strength of the Left is only significant in the second specification, with the negative sign also supporting the strategic debt model.

³⁹ Note that “GOVLEFT” and “PLEFT” include both, left and centrist parties, whereas “GOVRIGHT” and “PRIGHT” add together right wing and centrist parties.

Table 4: Logit Regression of the Full TSCS Sample

	Model 1 D1	Model 2 D1	Model 3 D2	Model 2 D2
GDP	-0.021 (0.150)	0.032 (0.165)	0.109 (0.153)	0.122 (0.179)
OUTLAYS	-0.160* (0.093)	-0.177 (0.111)	-0.127* (0.072)	-0.139* (0.077)
DEBT	0.030* (0.018)	0.038** (0.019)	0.025 (0.027)	0.029 (0.025)
TAX	0.186*** (0.101)	0.179** (0.088)	0.066 (0.110)	0.032 (0.109)
LTERMINT	-0.169 (0.154)	-0.283 (0.237)	-0.036 (0.089)	-0.035 (0.129)
UE	0.158* (0.094)	0.200* (0.108)	0.125* (0.074)	0.136* (0.080)
NOP	-0.021 (0.255)	-0.174 (0.326)	-0.290 (0.179)	-0.350* (0.201)
POWER	2.432*** (0.933)	2.145*** (0.749)	1.384** (0.576)	1.108** (0.581)
GOVLEFT	0.005 (0.005)		0.001 (0.004)	
PLEFT	-0.030 (0.021)		-0.038** (0.016)	
GOVRIGHT		-0.009* (0.005)		-0.007** (0.004)
PRIGHT		0.002 (0.014)		0.022 (0.017)
N	118	111	118	111
Wald χ^2	82.99***	62.32***	88.41***	195.25***
Error Correction	AR(1)	AR(1)	AR(1)	AR(1)

Notes: TSCS logit regression coefficients with white robust standard errors in parentheses; ***Significant at the 0.01 level, **Significant at the 0.05 level, *Significant at the 0.1 level
Source: own calculations.

In a next step, we further test our hypotheses by pooling all definition I retrenchment episodes and test for the factors that led to reductions in government outlays. Therefore, we now run an OLS regression on “ Δ OUTLAYS” using PSCE as explained above. Since the Wooldridge test for autocorrelation does not indicate the presence of temporally correlated errors⁴⁰, the above error correction model is not being employed here.⁴¹

The OLS model’s full specification is as follows:

$$\Delta\text{OUTLAYS} = \beta_0 + \beta_1\text{GDP}_{i,t} + \beta_2\text{DEBT}_{i,t} + \beta_3\text{TAX}_{i,t} + \beta_4\text{LTERMINT}_{i,t} + \beta_5\text{UE}_{i,t} + \beta_6\text{GOVLEFT}_{i,t} + \beta_7\text{GOVRIGHT}_{i,t} + \beta_7\text{NOP}_{i,t} + \beta_8\text{POWER}_{i,t} + \varepsilon_{i,t}$$

$$i=1,\dots,14; t=1,\dots,12$$

⁴⁰ This should come as no surprise since T is rather small for every country in this sample.

⁴¹ Including an error correction did not change the results.

The estimation results are explicated in table 5 below. Looking at the economic variables first, we observe that “GDP” is significant and negative, which comes as no surprise given that “OUTLAYS” is defined in terms of a percentage share of GDP. As in part of the logit specification above, the overall debt burden is significant and has a positive sign, long term interest rates (LTERMINT) are again not significant. Unemployment has a negative sign now but is no longer statistically significant.

Interestingly, the tax revenue variable is highly significant but now has a negative coefficient. This could be interpreted as follows: a high tax burden creates pressure by the electorate and economic agents on the government to engage in budgetary retrenchment. However, once the government does so, high tax revenues induce it to only moderately reduce expenditures (since this reduction of course creates counter pressure by those groups negatively affected by these cuts). Hence, the level of tax revenues seem to induce governments to engage in retrenching the budget but only moderately so.

Table 5: OLS Regression of the Pooled Retrenchment Periods (Definition I)

	Model 1 ΔOutlays	Model 2 ΔOutlays
GDP	-0.312*** (0.095)	-0.319*** (0.089)
DEBT	0.019*** (0.007)	0.019*** (0.006)
TAX	-0.143*** (0.046)	-0.124*** (0.043)
LTERMINT	-0.013 (0.102)	-0.010 (0.094)
UE	-0.079 (0.051)	-0.085 (0.055)
NOP	0.266 (0.261)	0.264 (0.254)
POWER	0.583** (0.269)	0.597** (0.259)
GOVLEFT	-0.001 (0.005)	
GOVRIGHT		0.008 (0.005)
N	61	61
R ²	0.274	0.281
Wald χ^2	41.05***	40.02***
Error Correction	None	None

Notes: TSCS OLS regression coefficients with panel corrected standard errors in parentheses; ***Significant at the 0.01 level, **Significant at the 0.05 level, *Significant at the 0.1 level
Source: own calculations.

Of the partisan variables⁴², neither left nor right parties seem to have an impact on the size of budgetary consolidation. One has to bear in mind that the dependent variable in this specification is the *reduction* in government outlays. Hence, the extent of any party's hold on government does not seem to influence the size of retrenchment, qualifying therefore H1 and H2.

Regarding the veto variables, we observe the same picture as in the logit analysis. Again, the actual number of parties in government is not statistically significant, thus rejecting H4. The variable "POWER", on the other hand, is once more strongly positive and significant, suggesting that high power concentration, and therefore fewer veto players, lead to strong cuts in public expenditure. This confirms the robustness of this variable's effects.

5.3 Results

We are now in a position to summarize the important findings and relate them to our four hypotheses. The logit and OLS regressions suggested that higher debt levels induce stronger retrenchment. The other economic variables turned out to be either not robust across all models (UE) or were not significant at all (LTERMINT). The tax revenue variable changed sign in the OLS model as compared to the logit specification. This hints to the possibility that some variables may facilitate a policy change, but once that happens, constrain the extent of this change.

Looking at the partisan variables, none of them exerted a statistically significant impact in both the logit as well as in the OLS model. Whereas the strength of right-wing parties seems to affect the likelihood of consolidations, their extent is not influenced by the strength of the Right. Hence, there is no conclusive evidence on the second hypothesis that right wing parties may behave strategically. However, there was no evidence supporting the notion that an increasing strength of left-wing parties in government lowers likelihood and extent of fiscal consolidation (H1). The variable which captures the number of parties in government was far from significant in all tests. It also changed its sign from being negative in the logit model to being positive in the OLS specification. Therefore, the fourth hypothesis, which holds that retrenchment becomes less likely as the number of parties in government increases, can be clearly rejected. However, the other veto players variable, "POWER", proved to be strongly positive and significant in all specifications. As this variable increases (that is, as the number of veto players decreases) the likelihood of fiscal retrenchment strongly rises. Thus, the third hypothesis, which claims that likelihood and extent of retrenchment decreases as the number of institutional veto players grows, is plainly confirmed here.

⁴² The variables capturing the parties' respective shares in parliament have been omitted since these variables were not significant in the definition 1 models of the logit specification. Also, their inclusion would not change any of the results.

6. Summary and Conclusions

This paper endeavoured to illuminate the political and institutional factors that can help explain differing degrees of fiscal retrenchment in European Union countries for the time period 1990-2001. Applying the partisan perspective it was hypothesized that the success of fiscal retrenchment depends on the ideological orientation of the political parties in power. A second set of hypotheses was derived from the veto players approach. These predicted that successful fiscal consolidation was a function of the number of insitutional veto players and the size of the governing coalition.

In the empirical analyses, it turned out that the overall debt level of a country was one important econmic predictor of retrenchment in our EU sample. The impact of other economic factos was less clear-cut. Of the political and insitutional variables which constituted the focus in this in paper, only the number of insitutional veto players exerted a significant influence that was robust across all specifications. Thus, it turned out that probability and magnitude of deficit reductions crucially depended on the power concentration that a county's political system exhibits. The more power was concentrated in the hands of government, that is, the fewer veto players there were, the more likely was that EU country to engage in retrenchment and the more forceful it pursued this policy.

Note that these statements are by no means normative. It has not been claimed here that deficit reduction is per se economically sensible nor do the statements about power concentration imply that these systems are "better" in all dimensions. Indeed, strong power concentration may come at the cost of fewer checks and balances, and may therefore lead to policies that disproportionately burden minorites which have no insitutional channels to veto such actions.

Returning to the beginning of the paper we can now ask what implications these insights may have for the future of fiscal policy coordination in Europe. First of all, from the political economy point of view employed here, the recent failure of the SGP comes as no surprise. The pact simply imposes numerical targets without paying attention to the different institutional constraints that national policymakers face. Yet, given the fact that the sanctions of the SGP have to be approved by the ECOFIN council, political log-rolling as has happened in the case of Germany and France, is likely to prevent sanctions to be ever enacted. Therefore, when making fiscal decisions, policy makers (regardless of which ideological colour) rationally anticipating this will not have to internalize the fiscal, reputational and electoral costs that may be associated with a sanction. Therefore, fiscal deficits are less costly than would be the case with a well-functioning punishment mechanism. Making sanctions mandatory or at least not subject to political bargaining within the council could offer a solution to this problem.

On the other hand, it is also obvious that institutional barriers to fiscal retrenchment cannot be overcome by simply setting a deficit target. Rather, the SGP should mandate every country to enact a national stability pact that is suited to deal with the idiosyncratic

properties of national fiscal policy making. For instance, in Germany the different layers of government (federal government, Länder, to a lesser extent municipalities) do all run deficits but only the federal government is responsible for keeping the general deficit in line with the SGP, even though it cannot reign into the fiscal decisions of the Länder. Hence, the Länder do not internalize the same costs when running deficits as the federal level does; thus they become a potential veto player since their budgetary preferences will differ. A binding national agreement that allocates permissible deficits to the different layers of government could solve this problem. This is but one example of how such national stability pacts could help making the SGP more effective and deficit reduction feasible. How to design such national pacts for those countries that seemed so far incapable of retrenchment could be a fruitful task for future research.

7. Annex

Constitutional Structures of EU Countries

Number of Chambers		
TYPE OF SYSTEM	DESCRIPTION	COUNTRIES
Bicameral system	two chambers; approval of the second chamber is needed for certain issue areas	Germany
Weak bicameral system	two chambers; second chamber can object	Austria, Belgium, France, Ireland, Italy, Netherlands, Spain, UK
Unicameral system	only one chamber	Denmark, Finland, Greece, Portugal, Sweden
Regime		
TYPE OF SYSTEM	DESCRIPTION	COUNTRIES
Pure presidential	directly elected president; monistic executive with president at the top	
Semi-presidential	directly elected president; dualistic executive with prime minister being either dependent or independent from president	Finland, France, Portugal
Parliamentarian	monistic executive with prime minister	Austria, Belgium, Denmark, Germany, Greece, Ireland, Italy, Netherlands, Spain, Sweden, UK
Decentralization		
TYPE OF SYSTEM	DESCRIPTION	COUNTRIES
Federal system	sub-national regions have legislative competences	Austrian, Belgium, Germany, Italy, Spain
Unitary system	no legislative competences for sub-national regions	Denmark, Finland, France, Greece, Ireland, Netherlands, Portugal, Sweden, UK

Source: "Democratic Systems" data set. WZB.

Definition and Sources of Variables

Variable	Definition	Source
ΔBalance	Cyclically adjusted general government balance minus Cyclically adjusted general government balance of the previous year (in % GDP)	SourceOECD database
ΔOutlays	Total disbursements of government (excluding consumption of fixed capital) minus total disbursements of government (excluding consumption of fixed capital) of the previous year (in % GDP)	SourceOECD database
GDP	Annual growth the in real Gross Domestic Product (in %)	SourceOECD database
DEBT	Goss Government Debt (% GDP)	SourceOECD database
TAX	Total tax revenue (% GDP)	SourceOECD database
LTERMINT	Long term interest rates, 10-year benchmark government bond yields, (in %)	SourceOECD database
UE	OECD Standardized unemployment rate	SourceOECD database
GOVLEFT	Share of social democratic and other left parties in cabinet (in %), weighted by days	Klaus Armingeon, Michelle Beyeler, Sarah Menegale. Comparative Political Data Set 1960-2001, Institute of Political Science, University of Berne 2002
GOVRIGHT	Share of right-wing parties in cabinet (in %), weighted by days	Klaus Armingeon et. al., Comparative Political Data Set 1960-2001
GOVCENTER	Share of centrist parties in cabinet (in %), weighted by days	Klaus Armingeon et. al., Comparative Political Data Set 1960-2001
PLEFT	Share of social democratic and other left parties in parliament (in %)	Klaus Armingeon et. al., Comparative Political Data Set 1960-2001; own calculation
PRIGHT	Share of right-wing parties in parliament (in %)	Klaus Armingeon et. al., Comparative Political Data Set 1960-2001; own calculation
PCENTER	Share of centrist parties in parliament (in %)	Klaus Armingeon et. al., Comparative Political Data Set 1960-2001; own calculation

Variable	Definition	Source																											
NOP	Number of parties in government	Thomas Cusack, Lutz Engelhardt, The PGL File Collection; European Journal of Political Research, various issues																											
Central Government Balance	Balance of the Central Government (in % GDP)	World Development Indicators Online																											
POWER	<p>Additive index called “Fuchs2p“ consisting of three components, that are each coded from 0-3, according to increasing power cocentration (and decreasing number of veto players):</p> <p>1. Chamber System</p> <table border="1"> <tr> <td>Bicameral system</td> <td>two chambers; approval of the second chamber is needed for certain issue areas</td> <td>0</td> </tr> <tr> <td>Weak bicameral system</td> <td>two chambers; second chamber can object</td> <td>1</td> </tr> <tr> <td>Unicameral system</td> <td>only one chamber</td> <td>2</td> </tr> </table> <p>2. Regime Type</p> <table border="1"> <tr> <td>Pure presidential</td> <td>directly elected president; monistic executive with president at the top</td> <td>0</td> </tr> <tr> <td>Semi-presidential</td> <td>directly elected president; dualistic executive with prime minister being either dependent or independent from president</td> <td>1</td> </tr> <tr> <td>Parliamentarian</td> <td>monistic executive with prime minister</td> <td>2</td> </tr> </table> <p>3. Federal-Unitary Index</p> <table border="1"> <tr> <td>Federal system, subsidiary in character</td> <td>strong legislative competencies for sub-national regions</td> <td>0</td> </tr> <tr> <td>Federal system, unitary character</td> <td>weak legislative competencies for sub-national regions</td> <td>1</td> </tr> <tr> <td>Unitary system</td> <td>no legislative competences for sub-national regions</td> <td>2</td> </tr> </table>	Bicameral system	two chambers; approval of the second chamber is needed for certain issue areas	0	Weak bicameral system	two chambers; second chamber can object	1	Unicameral system	only one chamber	2	Pure presidential	directly elected president; monistic executive with president at the top	0	Semi-presidential	directly elected president; dualistic executive with prime minister being either dependent or independent from president	1	Parliamentarian	monistic executive with prime minister	2	Federal system, subsidiary in character	strong legislative competencies for sub-national regions	0	Federal system, unitary character	weak legislative competencies for sub-national regions	1	Unitary system	no legislative competences for sub-national regions	2	“Democratic Systems“ data set. WZB.
Bicameral system	two chambers; approval of the second chamber is needed for certain issue areas	0																											
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