

Inflation and Unemployment in OECD Countries: The Role of Political Ideologies, Central Bank Independence and Industrial Relations

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Abstract

This paper considers the effects of central bank independence, labor market institutions and the political partisanship on economic performance. In particular, we test if the partisanship of the government and the degree of central bank independence affect the relationship between labor market institutions and economic performance. We find evidence of interaction effects between the government's partisanship and the labor market institutions. An increase in union density favors a left-wing government, while an increase in coordination favors a right-wing government. We also find that changes in the partisanship of the government have a larger impact on inflation and unemployment when the labor market is more institutionalized.

JEL classification: E00, E58, E61 and J50

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1. Introduction

The secret of how to improve economic performance continues to intrigue policy makers as well as economists. Many studies have investigated the determinants of inflation and unemployment performance with the aim of finding the optimal economic system that would result in the lowest possible values of both inflation and unemployment at the same time. This has resulted in a vast literature that can be grouped around the following main themes: studies focusing on the structure of the labor market, studies dealing with the role of the central bank, and studies that investigate the role of the government. These strands of literature have run parallel for a long time, and, only recently, some attempts to merge them into an integrated approach were proposed.

The joint consideration of labor, monetary, and political institutions is crucial for a better understanding of their performance since it is thought that not only the institutions as such, but also the interplay between them determines economic performance.

This paper aims to uncover some interaction effects between the institutions that determine economic performance. More specifically, we investigate whether the impact of the variables reflecting labor market characteristics significantly changes with the partisanship of the government. Our empirical findings support the importance of an integrated approach. The rest of the paper is structured as follows. Section 2 gives an overview of the related literature. Section 3 contains the empirical analysis. Section 4 concludes.

2. Some related literature

A first strand of the literature considers the impact of the labor market structure on economic performance. It is commonly thought that a high degree of real wage rigidity causes high unemployment rates. Real wage rigidity is often supported by labor market institutions giving incentives for real wage hikes or preventing a real wage decline in the wake of an adverse supply shock to the labor market (Bean, 1994; Blanchard and Wolfers, 2000). Labor market institutions that are assumed to be crucial determinants are: i) the degree of unionization or union power, corporatism and coordination in the wage bargaining process, ii) employment protection legislation (hiring and firing costs), iii) the level and duration of unemployment benefits, and iv) the share of active labor market policy.¹

¹ This paper focuses on the effect on economic performance of the coordination and unionisation under alternative non-labour market institutions. The other labour market institutions are important to determine economic performance (see e.g. Scarpetta, 1996; Nickell, 1997; Nickell and Layard, 1997 and Elmeskov *et al.*, 1998). However, we omit a description of their impact because, although they affect the level of economic performance, their effect will not be different under different non-labour market institutions.

A second strand of literature focuses on the role of the central bank for economic performance. Seminal work in this area has been done by Rogoff (1985), who highlights the benefits of a conservative central bank that is independent of the government. In the absence of rigidities, it is found that an independent and conservative central bank can maintain lower levels of inflation than the government for a given level of unemployment. In economies characterized by rigidities lower inflation can still be achieved through an independent central bank, but only at the cost of higher unemployment (see e.g. Bleaney, 1996 and Cukierman and Lippi, 1999).

A third strand of literature argues that differences in the partisanship of the government result in differences in economic performance. Leftist parties would systematically choose different combinations of inflation, unemployment and growth than rightist parties. The former are more concerned with growth and unemployment, whereas the latter put more emphasis on low inflation at the cost of higher unemployment (see e.g. Hibbs, 1977 and 1992; Alesina, 1988 and Alesina *et al.*, 1997).

Taking account of interaction effects between the different sets of institutions, some economists demonstrate that conservative central banks can only achieve lower inflation when labor markets are corporatist (see e.g. Bleaney, 1996). Other studies show that leftist governments achieve a better performance in terms of inflation and unemployment in countries with strong and centralized unions, whereas rightist parties achieve a better result when unions are weak (see e.g. Alvarez *et al.*, 1991 or Di Bartolomeo, 2001).

3. Empirical investigation

In this section we provide some empirical evidence on the importance of considering labor market institutions, central bank independence and the partisanship of the government jointly. We present panel regressions for 16 OECD countries² with inflation and unemployment as dependent variables. As it is difficult to gather (time-series) data on institutions, corporatism and political influence, we are able to link inflation and unemployment only with central bank independence, coordination in wage bargaining (which may be considered as a proxy for the degree of corporatism), union density and government partisanship.

For both the inflation and unemployment variable we draw upon the data-set of Blanchard and Wolfers (2000). The data are five-yearly averages.³ Unemployment (U) is measured as a percentage in decimal notation. The inflation variable (INF) is created on the basis of quarterly

² Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, The Netherlands, Norway, New Zealand, Sweden, United Kingdom, United States.

³ Periods are: 1965-69, 1970-74, 1975-79, 1980-84, 1985-89, and 1990-94.

inflation rates, which are annualized before taking five-yearly averages. *COORD* is a time invariant measure of the extent of coordination in wage bargaining on the part of both unions and employers. It is also taken from Blanchard and Wolfers (2000). The index of central bank independence (*CBI*) is the GMT-index of Grilli *et al.* (1991), the index is time-invariant and increasing in independence. *UDEN* is a time-varying index of union density taken from Galli and Padovano (1999), the variable is expressed as a percentage, taking values between 0 and 1. This specific index is used because of its time-varying nature. The variable *PARTISAN* is taken from Volkerink and De Haan (1999). The variable takes the value 1 if there is right-wing domination both in government and parliament, 2 if right-wing or centre parties make up between 33.3% and 66.6% of the government, 3 if centre parties make up 50% or more of the government, 4 if left-wing or centre parties make up between 33.3% and 66.6% of government and 5 if left-wing parties dominate the government. Yearly data are transformed into 5-yearly data by averaging. We estimate two specifications of the following form, with *i* indicating country *i* and *t* indicating the time period:

$$INF_{i,t} = c_0 + c_1CBI_i + c_2UDEN_{i,t} + c_3UDEN_{i,t}PARTISAN_{i,t} + c_4COORD_i + c_5COORD_iPARTISAN_{i,t}$$

$$U_{i,t} = c_{10} + c_{11}CBI_i + c_{12}UDEN_{i,t} + c_{13}UDEN_{i,t}PARTISAN_{i,t} + c_{14}COORD_i + c_{15}COORD_iPARTISAN_{i,t}$$

< insert table 1 around here >

Estimation results are given in table 1. The technique used is weighted least squares. Columns 1 and 3 present estimates of the coefficients of *CBI*, *UDEN* and *COORD* in the above equations without interaction effects. A more independent central bank decreases inflation as expected, but increases unemployment. Higher union density increases unemployment, for the inflation estimation we find a positive effect as well, but it is not significant. Coordination reduces both inflation and unemployment significantly. These are well known results in the literature.

In columns 2 and 4 we investigate whether the impact of the variables reflecting labor market characteristics significantly changes with the partisanship of the government. We do this by including interaction effects in the estimation. For both the inflation and unemployment estimation, the interaction effects of the government's partisanship with *COORD* and *UDEN* are significant at least at the 10%-level. We do not consider the interaction between central bank independence and the government's partisanship, because *CBI* is an aggregate index that captures different

dimensions⁴ of central bank independence, which might be differently related to the government's partisanship. Moreover there is no clear theoretical framework available to interpret the results.

Table 2 shows how the impact of a unit change in union density and coordination varies with the ideological nature of government in office. An increase in union density has a positive impact on inflation and unemployment when a right-wing government is in office. On the contrary, an increase in union density has a negative impact on inflation when a left-wing government is in office and a negative impact on unemployment when a fully left-wing government is in office.

A possible interpretation of this result is that unions support left-wing governments, allowing them to influence both inflation and unemployment downwards. By contrast, right-wing governments seem unable to cope with strong unions (i.e. high density in our case), resulting in upward pressure both on inflation and unemployment. The impact of coordination shows somewhat the inverted pattern. An increase in coordination results in larger decreases in both inflation and unemployment when a right-wing government is in office. Except for the fully left government, more coordination allows to achieve lower inflation. Irrespective of the government's partisanship more coordination is associated with lower unemployment. Thus an increase in union density favors the left-wing government, while an increase in coordination favors the right-wing government. The former result is in line with the finding of Alvarez *et al.* (1991). The latter result confirms one of the predictions of the stylized model developed by Di Bartolomeo (2001) and opens a new angle in the evaluation of the impact of labor market institutions on performance.

< insert table 2 around here >

If the level of coordination increases, unemployment decreases more in countries where a right-wing government is in office than in countries where a left-wing government is in office. This can intuitively be understood from figure 1, which gives a stylized representation (linear inflation-unemployment trade-off curves are assumed) of the position of the economy when a rightist (*R*) or a leftist (*L*) government is in office. Note that the government does not exactly choose a point *R* or *L*, but that it rather is an outcome of a model, i.e. the interaction between the different agents in an economy with their specific preferences.

An increase in coordination shifts (and rotates) the initial curve downwards (i.e. an increase in coordination allows more gain on unemployment than on inflation). Under the assumption of reasonable preferences, the economy can be expected to move to the south-west. It can immediately

⁴ For instance, it captures both goal and instrument independence.

be seen that the scope for inflation and unemployment reduction is much larger for the rightist government than for the leftist government. Only for the extreme left government (located further to the right than the left government) the calculations imply a move to the south-east (decrease in unemployment, increase in inflation). This can be interpreted as the result of high weights on unemployment, such that the benefit of the decrease in unemployment more than compensates for the cost of the rise in inflation.⁵

< insert figure 1 around here >

Leaving out the time-invariant variables (institutions), we can estimate a fixed effect specification with the remaining time-variant institutions (*UDEN*, *UDEN*PARTISAN* and *COORD*PARTISAN*). Column 1 and 3 in table 3 report the results for this approach for inflation and unemployment respectively. Both qualitatively and quantitatively earlier results (for the time variant institutions) are confirmed (the only noticeable difference is the drop from the 8%- to the 12%-significance level of the interaction between union density and the partisanship of the government.

In our sample it is difficult to test whether inflation and unemployment are stationary or integrated of order one or two because of the limited time dimension of the dataset. In columns 2 and 4 of table 3 period dummies are used to capture a possible common upward trend/time pattern of unemployment/inflation (notice from figure A.1a-b that there is indeed a relatively strong *common* time pattern).

Results for unemployment are again qualitatively reasonably robust (signs and significance level do not change). Quantitatively parameters are somewhat smaller in absolute value. For the inflation estimation both interaction terms with the government's partisanship are no longer significant at conventional significance levels, *UDEN* itself is also only at the 10%-level significant; i.e. the time-varying variables, reflecting labor market characteristics and the partisanship of the government, seem less robust to the inclusion of period dummies.

The patterns of table 2 are confirmed both in the case of fixed effects and time dummies (see Appendix, Table A.1). Combining fixed effects and period dummies the only (time-varying) variable that remains significant is *UDEN* in the unemployment case.

< insert table 3 and 4 around here >

⁵ This could also be the result from the fact that the two curves (before and after the increase in coordination) have an intersection and the extreme left government is located to the right of this intersection.

Figures 2a and 2b give a graphical representation of the effect of a change of government in countries with different institutional settings. The following three representative countries are considered: Belgium, Sweden and the United States (see table 4). Sweden and the United States represent two *extremes*, with the United States having a very liberal labor market and a strongly independent central bank and Sweden having an “institutionalized” labor market (i.e. strong unions and high coordination) and a weakly independent central bank. Belgium is an in-between case, though closer to Sweden than to the United States.

Figure 2a gives the effect of the government’s partisanship on unemployment. In order to isolate the effect of the government, the values of the unemployment rate⁶ are normalized to equal 100 for a “center” government (i.e. partisanship = 3) in the three countries. In all three countries a more leftist government is associated with a lower unemployment rate. As can be seen from the figure the ideological nature of the government is of less importance to the unemployment outcome with an extremely liberal labor market and a strongly independent central bank, as in the United States. In the more institutionalized countries the type of government has a much larger impact upon the unemployment rate. This result is in line with the assumption that unions support (cooperate with) leftist governments, see Detken and Gärtner (1991) and Di Bartolomeo (2001). In countries with higher union density (i.e. stronger unions), a change in the government’s partisanship has a larger impact on the unemployment rate because left governments are supported by the unions.

Figure 2b concerns inflation and is constructed along the same lines as figure 2a. In the more institutionalized countries with the less independent central bank, a more leftist government can achieve lower inflation in comparison with a more rightist government. This can also be interpreted as strong unions supporting left governments. Cooperation of (sufficiently strong) unions with leftist governments, allows these governments to perform better both with respect to inflation and unemployment.⁷ In the United States, with a strongly independent central bank and a liberal labor market, a move from right to left increases inflation. The reason is probably the absence of the “strong-union” effect (allowing for both lower inflation and unemployment for the left government), such that the polarization left (focusing on unemployment at the cost of inflation) versus right (focusing at inflation at the cost of unemployment) comes to the fore.

< insert figure 2a and 2b around here >

⁶ These values are obtained by using the values in table 5 in specification (4) in table 2.

⁷ Notice, however, by comparing the scaling of the two graphs, that the effect of the government’s partisanship is smaller on inflation than on unemployment. This is probably partly due to the fact that inflation is subject to a logarithmic transformation, but more importantly to the fact that inflation is to a large extent controlled by the central bank.

The pattern found in figure 2a (unemployment) is fairly robust to the alternative estimations described above, with the exception of the USA, where the effect of government's partisanship on unemployment is virtually non-existent (see table A.2). The pattern of figure 2b is not stable when using fixed effects or time dummies. This is not surprising given the insignificance of the parameters on the interactions with the variable *PARTISAN*. Note also that the effect of the government's partisanship on inflation is small in comparison with the effect on unemployment. To test whether the government's partisanship does matter only in the case of a weakly independent central bank, we split the sample in two sub-samples according to the score on the CBI-index. This did not reveal any significant differences, however, among the two sub-samples.

Up to now we investigated the effect of the government's partisanship in a "continuous" manner. Another possibility is that the partisanship effect is only present for a sufficiently leftist government, instead of continuously varying with the government's partisanship. To investigate this possibility, we construct two partisanship dummies. The first dummy takes a value of 1 when the partisanship variable is larger than 3.9 (left domination in five year period) and zero otherwise; the second takes a value of 1 only if the partisanship variable is higher than 4.5 (extreme left domination in 5 year period). The results for the unemployment and inflation equations using the respective dummies are presented in table 5.

< insert table 5 around here >

Point estimates are not comparable because of the change in the range of the partisanship variable from [1,5] to a 0-1 dummy. Significance levels generally drop somewhat. We do find confirmation of our finding that unemployment performance seems to be much more affected by the type of government than inflation performance.

4. Conclusions

In this paper, we have attempted to bring together three strands of the literature that focuses on the determinants of inflation and unemployment. Some recent models develop the idea that inflation and unemployment performance cannot be properly understood without an approach that incorporates the labor market, the conservativeness of the central bank, and the partisanship of the government. Our empirical results cautiously confirm the relevance of the integrated approach.

Basic results are in line with those found in the theoretical literature. A more independent central bank results in lower inflation, but higher unemployment. Union density has a significant positive

impact on unemployment, and on inflation conditional upon the presence of the interaction effect with the government's partisanship. By contrast, a more coordinated labor market is associated with both lower inflation and unemployment.

We also find evidence of interaction effects between the government's partisanship and labor market institutions. An increase in union density favors a left-wing government, while an increase in coordination favors a right-wing government. The latter result may be associated with union partisanship, which is assumed in some theoretical models that show results in line with our empirical investigation. However, due to the scarcity of theoretical and empirical works on union partisanship, the relevance of our last finding opens a new angle in the evaluation of the impact of labor market institutions on economic performance. In addition, we find that changes in the partisanship of the government have a larger impact on inflation and unemployment when the labor market is more institutionalized.

Although these preliminary results are promising, they have to be interpreted with caution. Further empirical evaluations have to be carried out to test the robustness of the results. A further task of our research is also improving the available data in order to use more powerful estimation techniques.

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Tables and figures

Table 1 – Results for inflation and unemployment

	<i>Inflation</i>		<i>Unemployment</i>	
	(1)	(2)	(3)	(4)
C	0.1006 (7.62)	0.1202 (8.49)	0.0445 (3.49)	0.0464 (3.47)
CBI	-0.0038 (-4.43)	-0.0035 (-4.47)	0.0020 (2.12)	0.0023 (2.31)
UDEN	0.0237 (1.36)	0.0823 (2.13)	0.0980 (5.67)	0.1954 (6.97)
UDEN PARTISAN		-0.0230 (-1.75)		-0.0487 (-4.48)
COORD	-0.0041 (-2.10)	-0.0120 (-3.63)	-0.0117 (-5.85)	-0.0201 (-6.72)
COORD PARTISAN		0.0027 (2.65)		0.0038 (4.46)
Adj. R ²	0.43	0.48	0.37	0.42
N	102	96	102	96

Table 2 – Impact on inflation and unemployment of a unit change in union density and coordination, split out to different government types

	<i>Inflation</i>		<i>Unemployment</i>	
	UDEN	COORD	UDEN	COORD
Extreme right	0.0593	-0.0093	0.1467	-0.0163
Right	0.0363	-0.0066	0.098	-0.0125
Center	0.0133	-0.0039	0.0493	-0.0087
Left	-0.0097	-0.0012	0.0006	-0.0049
Extreme left	-0.0327	0.0015	-0.0481	-0.0011

Table entries calculated as: $(c_2 + c_3 \text{PARTISAN}_{i,t})$ for UDEN and $(c_4 + c_5 \text{PARTISAN}_{i,t})$ for COORD, where coefficients are taken from specification (2) and (4) in table 2

Table 3 – Robustness checks for inflation and unemployment

	<i>Inflation</i>		<i>Unemployment</i>	
	Fixed effects	Time Dummies	Fixed effects	Time Dummies
CBI		-0.0047 (-5.29)		0.0020 (2.41)
UDEN	0.1035 (2.48)	0.0563 (1.75) 8%	0.2157 (5.81)	0.1241 (4.20)
UDEN PARTISAN	-0.0226 (-1.57) 12%	-0.0155 (-1.33) 19%	-0.0282 (-2.41)	-0.0286 (-2.67)
COORD		-0.0076 (-2.28)		-0.0135 (-4.44)
COORD PARTISAN	0.0030 (2.66)	0.0014 (1.36) 18%	0.0031 (2.77)	0.0020 (2.13)
Adj. R ²	0.62	0.61	0.54	0.65
N	96	96	96	96

Table 4 – Institutional Statistics for Belgium, Sweden and the United States

	UDEN	COORD	CBI
Belgium	0.55	4	7
Sweden	0.77	6	5
United States	0.21	2	12

Table 5 – Robustness checks for inflation and unemployment

	<i>Inflation</i>			<i>Unemployment</i>		
	Weighted LS	Fixed effects	Time Dummies	Weighted LS	Fixed effects	Time Dummies
CBI	-0.0040 (-4.97)		-0.0045 (-5.05)	0.0026 (2.58)		0.0021 (2.51)
UDEN	0.0332 (1.81) 8%	0.0305 (1.37) 17%	0.0176 (1.10)	0.1137 (6.67)	0.1634 (5.58)	0.0629 (4.29)
UDEN PARTISAN _{3,9}	-0.0665 (-1.62) 11%	-0.0443 (-0.96)	-0.0064 (0.16)	-0.1588 (-3.54)	-0.0540 (-1.40) 16%	-0.0661 (-1.74) 9%
COORD	-0.0064 (-3.17)		-0.0034 (-1.74) 9%	-0.0131 (-6.27)		-0.0093 (-5.12)
COORD PARTISAN _{3,9}	0.0075 (2.34)	0.0064 (1.81) 8%	-0.0014 (-0.38)	0.0117 (3.34)	0.0058 (1.66) 11%	0.0037 (1.11)
Adj. R ²	0.45	0.54	0.61	0.36	0.53	0.65
N	96	96	96	96	96	96

Table 5 *cntd*– Robustness checks for inflation and unemployment

	<i>Inflation</i>			<i>Unemployment</i>		
	Weighted LS	Fixed effects	Time Dummies	Weighted LS	Fixed effects	Time Dummies
CBI	-0.0039 (-4.11)		-0.0046 (-5.19)	0.0028 (2.87)		0.0021 (2.57)
UDEN	0.0311 (1.65) 11%	0.0325 (1.21)	0.0206 (1.31) 19%	0.1141 (6.79)	0.1670 (5.80)	0.0642 (4.41)
UDEN PARTISAN _{4,5}	-0.0564 (-1.19)	-0.0634 (-1.12)	-0.0099 (-0.21)	-0.1731 (-3.56)	-0.0652 (-1.69) 10%	-0.0827 (-1.91) 6%
COORD	-0.0047 (-2.23)		-0.0036 (-1.89) 7%	-0.0127 (-6.36)		-0.0095 (-5.40)
COORD PARTISAN _{4,5}	0.0050 (1.18)	0.0068 (1.37)	-0.0004 (-0.10)	0.0133 (3.43)	0.0073 (2.07)	0.0056 (1.42) 16%
Adj. R ²	0.20	0.20	0.61	0.36	0.54	0.65
N	96	96	96	96	96	96

Figure 1: An increase in coordination in the inflation-unemployment trade-off

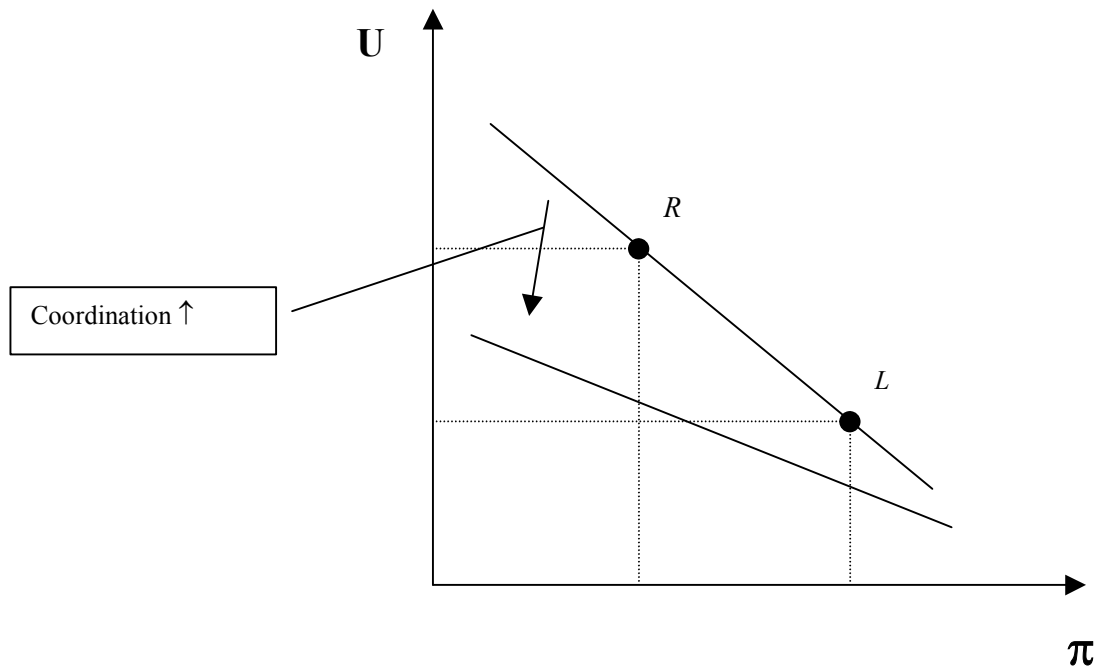


Figure 2a – The effect of government’s partisanship on unemployment (normalized to be equal for a neutral government) in Belgium, Sweden and the USA

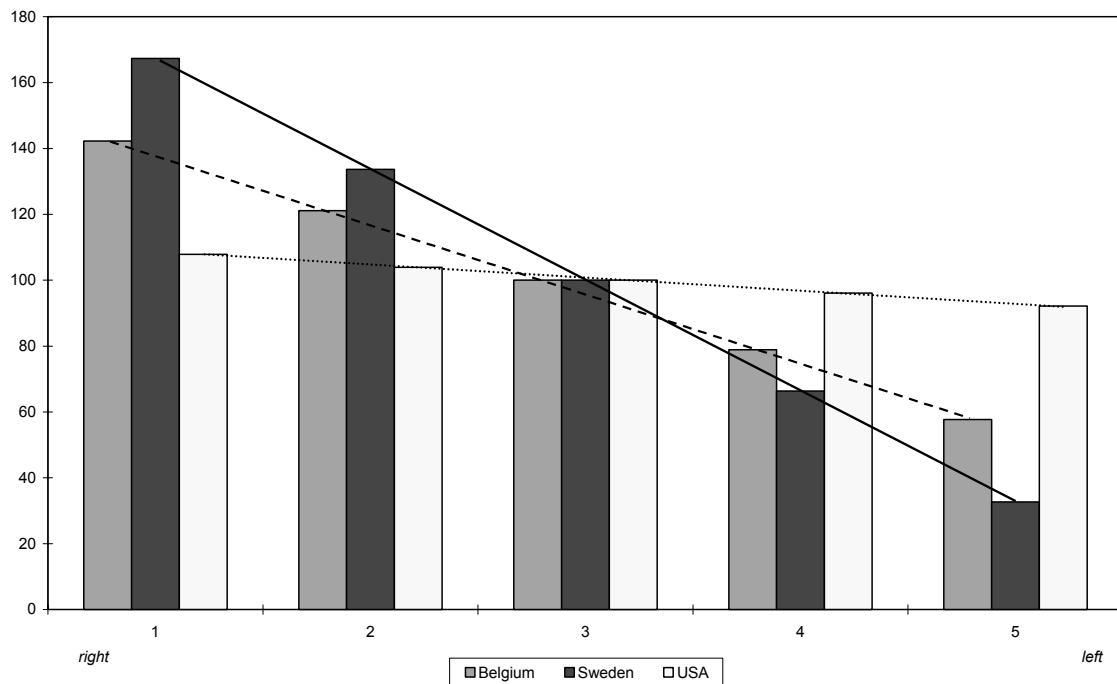
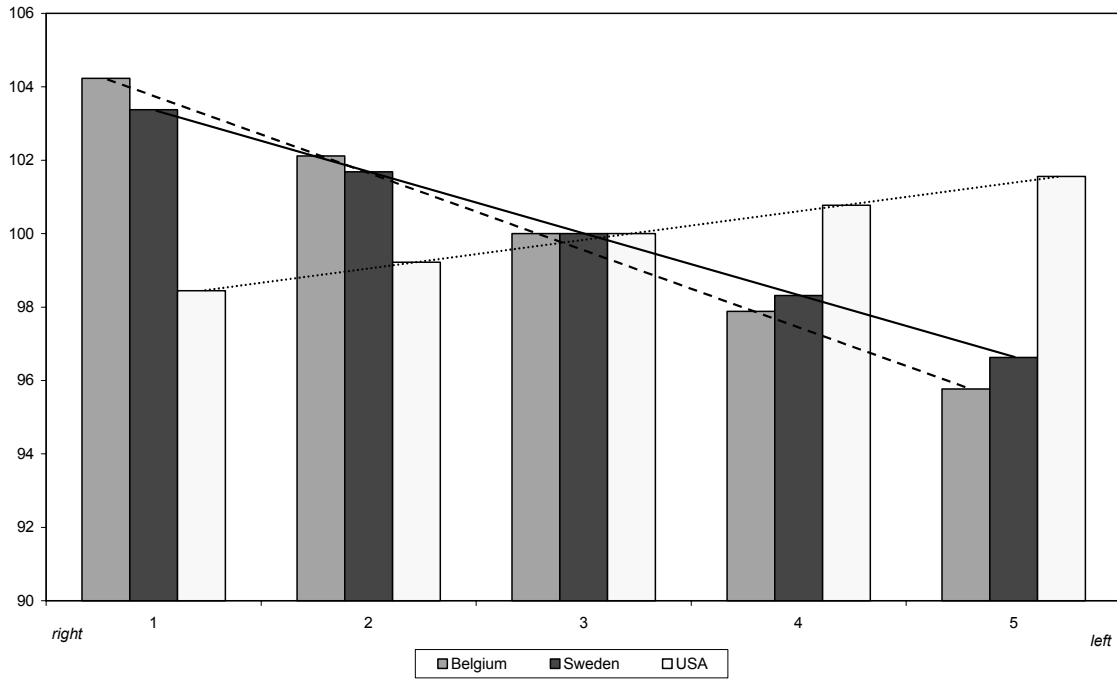


Figure 2b – The effect of government’s partisanship on inflation (normalized to be equal for a neutral government) in Belgium, Sweden and the USA



Appendix

Table A.1 – Impact on inflation and unemployment of a unit change in union density and coordination, split out to different government types

	<i>Inflation</i>		<i>Unemployment</i>	
Weighted Least Squares	UDEN	COORD	UDEN	COORD
Extreme right	0.0593	-0.0093	0.1467	-0.0163
Right	0.0363	-0.0066	0.098	-0.0125
Center	0.0133	-0.0039	0.0493	-0.0087
Left	-0.0097	-0.0012	0.0006	-0.0049
Extreme left	-0.0327	0.0015	-0.0481	-0.0011
	<i>down</i>	<i>up</i>	<i>down</i>	<i>up</i>
Fixed Effects	UDEN	COORD* PARTISAN	UDEN	COORD* PARTISAN
Extreme right	0.0809	0.0030	0.1875	0.0031
Right	0.0583	0.0061	0.1593	0.0062
Center	0.0357	0.0091	0.1310	0.0092
Left	0.0131	0.0122	0.1028	0.0123
Extreme left	-0.0095	0.0152	0.0746	0.0154
	<i>down</i>	<i>up</i>	<i>down</i>	<i>Up</i>
Time Dummies	UDEN	COORD	UDEN	COORD
Extreme right	0.0407	-0.0061	0.0955	-0.0115
Right	0.0252	-0.0047	0.0669	-0.0094
Center	0.0097	-0.0033	0.0382	-0.0074
Left	-0.0058	-0.0019	0.0096	-0.0053
Extreme left	-0.0214	-0.0005	-0.0190	-0.0033
	<i>down</i>	<i>up</i>	<i>down</i>	<i>Up</i>

Table entries calculated as: $(c_2 + c_3 \text{PARTISANSHIP}_{i,t})$ for UDEN and $(c_4 + c_5 \text{PARTISANSHIP}_{i,t})$ for COORD, where coefficients are taken from specification (2) and (4) in tables 2 and 4; COORD is not included in the fixed effects estimation, only the interaction effect is taken up.

Table A.2 – The effect of government’s partisanship on unemployment and inflation in Belgium, Sweden and the USA (normalised to 100 for a ‘center’ government)

		<i>Extreme right</i>	<i>Right</i>	<i>Center</i>	<i>Left</i>	<i>Extreme left</i>	
Least Squares							
<i>Unemployment</i>							
	Belgium	142.27	121.13	100	78.87	57.73	<i>down</i>
	Sweden	167.33	133.67	100	66.33	32.67	<i>down</i>
	USA	107.85	103.92	100	96.08	92.15	<i>down</i>
<i>Inflation</i>							
	Belgium	104.23	102.12	100	97.88	95.77	<i>down</i>
	Sweden	103.37	101.69	100	98.31	96.63	<i>down</i>
	USA	98.44	99.22	100	100.78	101.56	<i>up</i>
Fixed Effects							
<i>Unemployment</i>							
	Belgium	108.97	104.48	100	95.52	91.03	<i>down</i>
	Sweden	123.82	111.91	100	88.09	76.18	<i>down</i>
	USA	99.27	99.64	100	100.36	100.73	<i>up</i>
<i>Inflation</i>							
	Belgium	101.07	100.53	100	99.47	98.93	<i>down</i>
	Sweden	97.63	98.81	100	101.19	102.37	<i>up</i>
	USA	94.67	97.34	100	102.66	105.33	<i>up</i>
Time Dummies (calculations based on average value of time dummies)							
<i>Unemployment</i>							
	Belgium	126.96	113.48	100	86.52	73.04	<i>down</i>
	Sweden	142.63	121.32	100	78.68	57.37	<i>down</i>
	USA	105.67	102.83	100	97.17	94.33	<i>down</i>
<i>Inflation</i>							
	Belgium	108.00	104.00	100	96.00	92.00	<i>down</i>
	Sweden	108.98	104.49	100	95.51	91.02	<i>down</i>
	USA	101.64	100.82	100	99.18	98.36	<i>down</i>

Figure A.1a - Unemployment

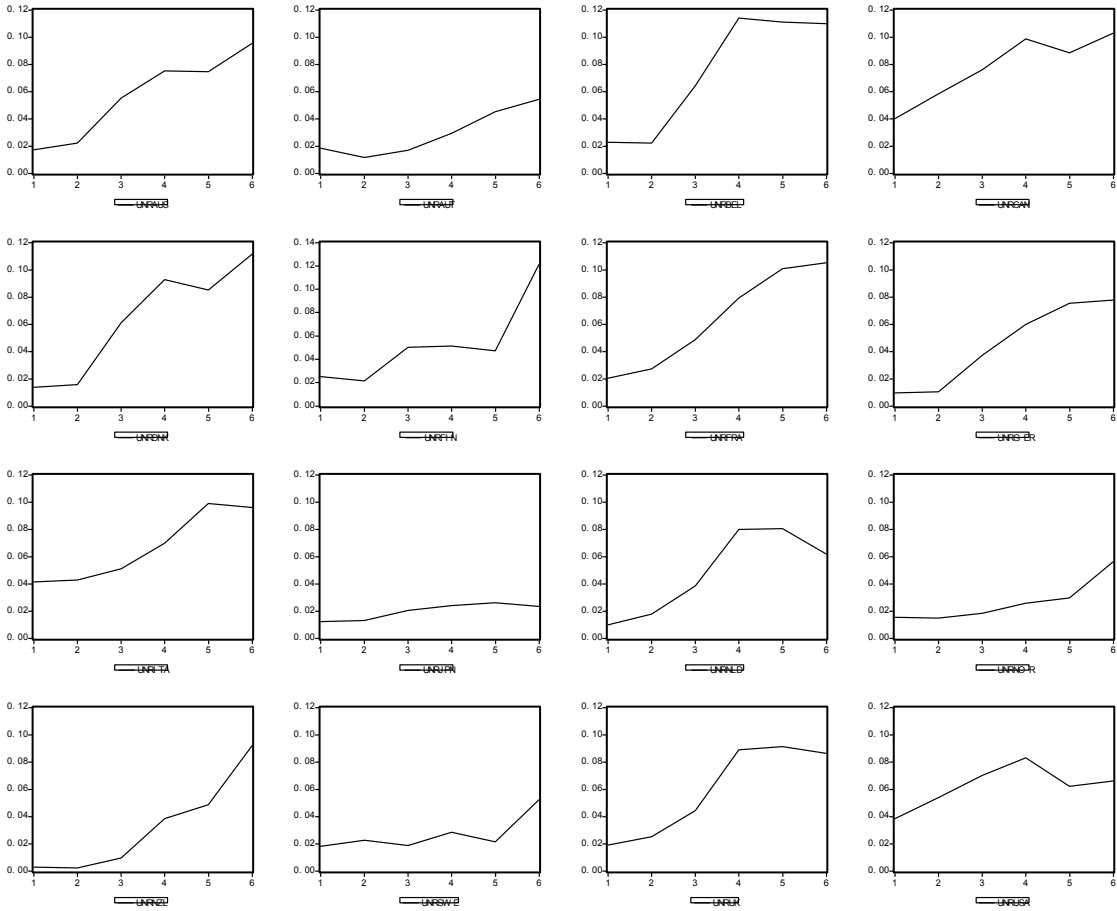


Figure A.1b - Inflation

