

**THE DETERMINANTS  
OF PROVINCIAL  
MINIMUM WAGES**

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# The Determinants of Provincial Minimum Wages in Canada

## I. Introduction

In the last few years, prompted largely by the work of Card and Kruger (1995), there have been a flurry of articles investigating the employment consequences of minimum wage legislation. This renewed interest in the employment effects of minimum wage legislation leads naturally to another question: what are the factors that determine what the legislated wage will be? Despite the ubiquity of minimum wage legislation, this is a question that has received surprisingly little attention. One reason may be that in the U.S. there is a national minimum wage that is under federal rather than state jurisdiction. Since this federal wage changes only occasionally, most U.S. studies have been limited to cross-section studies that focus on the characteristics of the states and the legislators ( e.g. Republican or Democrat) voting for or against proposed changes in the federal minimum wage. ( Examples are Silberman and Durbin (1970), Kau and Rubin (1978), Bloch (1980, 1993) and Seltzer (1995).)<sup>1</sup> However as pointed out by Baker, Benjamin and Stranger (1999), Canada offers some unique advantages for minimum wage studies. This applies not only to the employment consequences of minimum wage (their interest), but also to our interest, the determinants of minimum wages. In particular the minimum wage in Canada is under provincial, not federal, jurisdiction and there has been substantial variation in the level and timing of changes in the wage across provinces, providing the opportunity to explore a relatively rich panel data set. To this date, only one other study, by

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<sup>1</sup>There are state legislated minimum wages that extend the coverage of minimum wage legislation, but few states have wages above the federal minimum and the states cannot impose a minimum wage lower than the federal minimum (for workers covered by the federal minimum). A study that does examine differences in state minimum wages is Cox and Oaxaca (1982).

Blais, Cousineau and McRoberts (1989) has looked at the determinants of provincial minimum wages for Canada. They do this for a pooled data set extending across eight years (1975 to 1982) and nine provinces. Our study will cover nine provinces for a longer time period (1977 to 1996) and a more fully specified minimum wage model.<sup>2</sup>

Among our conclusions, are that provinces with right wing governments will have lower legislated minimum wages, relative to average wages in the province, than provinces with left wing governments. For example, Social Credit governments have lower minimum wages than New Democratic governments, *ceteris paribus*. We find no evidence that legislated changes in the minimum wage are timed to exploit the electoral cycle. We do find evidence that higher unemployment rates and increased unemployment insurance generosity lead to lower minimum wages. The results also indicate that increased labor force participation by women and youth lead to lower relative minimum wages. There is also some weaker evidence that increased union membership, as a percentage of the labor force, will lead to higher minimum wages.

In the following, we provide a brief review of the relevant literature and then introduce our model and results.

## **II. A Literature Review**

As already indicated, U.S. studies have usually been cross-sections that examined what variables influenced the votes of congressmen or senators for increases in the federal minimum

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<sup>2</sup>Prince Edward Island is excluded because not all variables were available over the sample period.

wage.<sup>3</sup> For example, Bloch (1993) related state wage levels and proportions of unionized employees to votes by senators to amend the 1977 and 1989 Federal Labor Standards Act and thereby increase the minimum wage. For each year he found only the union variable increased the probability of an in-favour vote, and only for Republicans since Democrats almost universally support minimum wage increases. An important earlier contribution is Silberman and Durden (1976) who examined congressmen's votes for the 1973 amendment to increase the minimum wage. Using variables for each congressional district, they found larger political contributions by unions and larger proportions of low income families increased the probability of an affirmative vote, while larger campaign contributions from small business and larger proportions of teen age workers reduced the probability. Kau and Rubin (1978) expanded Silberman and Durden to five separate cross-sections covering five legislated increases in the federal minimum wage between 1949 and 1974. They found that higher state wages and a measure of the congressperson's liberalism were always positively and significantly associated with votes for, while percentage of blacks in the state was negatively related but not significant in all the cross-sections. Unionization in the state work force and political party of the legislator were never significant; the latter result probably because northern and southern Democrats typically voted on opposite sides.

More recently Seltzer (1995) explored support in both the House and Senate for the 1938 introduction of the federal minimum wage law. He found variables representing small business

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<sup>3</sup>An exception is Cox and Oaxaca (1982) who find that differences in state-set minimum wages are positively related to union employees as a proportion of total employees and average manufacturing wages in the state, and negatively related to the importance of capital as represented by rents, interest and dividends as a proportion of state personal income.

and low wage workers decreased support for the bill, while ideology ( liberals for, conservatives against) was also important. To anticipate future problems, a point emphasized by Seltzer is not only are some variables inevitably theoretically ambiguous ( a low wage worker may rationally support or oppose minimum wage increases depending if job loss is expected) but also the coefficients on some variables must be interpreted with caution. For example, should the coefficient for a variable measuring teen workers in the labor force be interpreted as their demand for higher wages, or does the coefficient better reflect the demands of well-organized firms that disproportionately hire younger workers?

In contrast to the U.S., Canada presents a better opportunity to study variation in minimum wages across jurisdictions and time. Given this, it is perhaps surprising that the only study, to our knowledge, that examines minimum wage determination in Canada is Blais, Cousineau and McRoberts. They relate the minimum wage, measured as the legislated minimum wage divided by the average manufacturing wage, to the percentage of union workers in the labor force, the percentage of women in the labor force, the percentage of 15 to 19 years old in the labor force, the current year unemployment rate, the inflation rate, the percentage of employment in small firms ( under 20 employees) and a ‘convergence’ variable that measures average manufacturing wages in a province divided by average wages in Canada. This model was tested with ordinary least squares for a pooled sample covering nine provinces for the years 1975 to 1982, with no fixed effects for the provinces or years. All of the variables had negative, significant at the five percent level coefficients, except for the union variable which was, unexpectedly, negative and insignificant.

### III. Determinants of the Relative Minimum Wage

Implicit in the literature reviewed is that politicians adjust the minimum wage to maximize their political support or re-election chances. Interest groups provide both direct support (in the form of votes) and indirect support (in the form of funds). Since minimum wage legislation creates winners and losers, the political equilibrium will reflect a balancing by the government of the divergent interests. Specifically, at equilibrium the marginal gain in support from an increase in the minimum wage should offset the marginal loss in support from such an increase. In this context, a crucial question is what groups are likely to be most successful in communicating with government and in delivering political support? An insight provided by the economic theory of regulation is that the largest interest groups may not be the most influential.<sup>4</sup> In particular the argument is made that smaller interest groups with intensely felt preferences, as opposed to larger groups with weakly felt preferences, can more effectively lobby. This is because larger groups have disproportionately bigger organization costs, greater free rider problems, and smaller legislatively produced benefits per person.<sup>5</sup>

One problem with pure interest group models is that politicians have no preferences themselves beyond re-election. To insert ideology we can, following Kalt and Zupan (1984), think of legislators as agents of their constituents, but with some slack in the principal-agent

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<sup>4</sup>Important contributions to this literature are Stigler (1971) and Peltzman (1977).

<sup>5</sup>Another approach to collective decision making is the median voter model where governments follow the preferences of the median voter. As summarized in Mueller (1989), pp. 65 -84, this model applies better when everyone votes, all voters are perfectly informed, and issues are one dimensional. Interest group models apply better when information about issues is costly to obtain, and where many voters are rationally ignorant since the policy has little effect on individual welfare.

relationship produced by imperfect monitoring. Accordingly there can be some ideological shirking as politicians, in a limited manner, follow their preferences.

With this background, we now identify those variables we expect to influence provincial governments minimum wage policies. We will represent their minimum wage stance by the relative minimum wage, that is the legislated hourly minimum wage divided by the average manufacturing wage in the province. We will consider variables representing interest groups, then ideology, and finally some control variables. The interest group variables identify unions, youth, women, small business and big business. The ideological variables are the provincial political parties, and the control variables adjust for unemployment, unemployment generosity, inflation, and the electoral cycle.

### **Interest Groups**

First we consider unions, measured as union employees as a percentage of the labor force. Unions would likely support increases in the minimum wage for two reasons. First, to the extent to which low-wage workers are unionized, it would be directly in the union's interest to support minimum wage increases. Second, to the extent to which unions represent high-wage workers (not directly affected by minimum wage legislation), unions could be expected to support increases in the minimum wage since this increases the price of substitute labor. Unions are therefore expected to support minimum wage legislation. They should also be effective lobbyists since they are already well-organized and have probably already incurred any set-up costs required for lobbying.

Next we consider youth (15 to 19 years) and women, both measured by their percentage in the labour force. Both groups have a disproportionate number of low wage workers who will

be directly affected by an increase in the minimum wage.<sup>6</sup> How these workers, on average, respond to minimum wage legislation depends on the expected wage and employment effects which work in opposite directions.<sup>7</sup> One could argue the wage effect should be stronger since the demand for unskilled workers is inelastic (Baker *et al* estimate an elasticity of -.25 for young workers). Another complication concerns the ability of these groups to effectively lobby. Both are likely to be diffuse, unorganized, and with serious free-rider effects. In fact, as pointed out in Seltzer, the coefficients on these kinds of variables could measure the demands of other coalitions, for example firms that disproportionately hire youth and women. For these reasons the coefficients should be interpreted cautiously.

The last two groups are small and big business.<sup>8</sup> We represent, imperfectly, big business interests with corporate profits as a proportion of provincial GDP, and small business by non-farm unincorporated income as a proportion of GDP. Small businesses will be more directly affected by increases in the minimum wage since they hire more unskilled labor and are probably less able to substitute towards capital and skilled labor. However because small firms are a diffuse group with free rider problems they may not be able to lobby effectively. In fact, as with women and youth, one could argue that this variable measures indirectly the demands of

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<sup>6</sup> Akyeampong (1989) reports that for 1986 women accounted for 45 percent of paid employees but 60 percent of those earning minimum wage or less, while 40 percent of all workers earning less than four dollars per hour were between 16 and 19.

<sup>7</sup>Blais *et al* ignore the wage effect and, based on the supposed adverse employment effect, assume women and youth should oppose increases in the minimum wage.

<sup>8</sup>An important interest group we do not include is agriculture. The reason is because all provinces, except Newfoundland, had legislated minimum wage exemptions for farm labourers and agricultural workers (Akyeampong). Initial regressions with an agricultural sector variable yielded positive but insignificant coefficients.

another coalition, in this case a coalition of low wage workers. If both small firms and low wage earners have trouble lobbying, then the dominant coalition may be the one with more voters.

The position of big firms is theoretically ambiguous. Big firms may oppose higher minimum wages since they may have more leverage in bargaining with unions when minimum wages are low. However large firms may support higher minimum wages since this would disproportionately increase the cost of small business competitors.<sup>9</sup> Big business, with more resources and smaller free rider problems, may also be effective lobbyists.

### *Ideology*

Beyond serving interests of constituents to gain support, politicians also have their own preferences about policy. We represent ideology by the provincial political parties and our prior is that right wing parties are less sympathetic to increases in the minimum wage. The provincial parties in power during the sample period, identified by a dummy variable for the years when in government, were, moving from right to left in the political spectrum, Social Credit, Progressive Conservative, Liberal, Parti Quebecois and the New Democratic Party.<sup>10</sup>

### *Control Variables*

We have four control variables to capture how interest group demands and government responses may depend on labour market and other conditions. First, the demand for minimum wage increases should be weaker when unemployment is high. We capture this effect with

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<sup>9</sup>This echoes Salop and Scheffman (1983) who argue that capital-intensive firms favour high wage structures as a barrier to labour intensive firms.

<sup>10</sup> This ranking is based simply on our judgement about the parties positions in the political spectrum. It is also consistent with the results of a survey of 516 academics in Canadian political science, history, sociology and economics departments that asks about the political stance of provincial governments. See Abizadeh and Gray (1992).

provincial unemployment rates. Second, unemployment insurance can provide a strong incentive to be in the labor force and to find even temporary employment in order to qualify for benefits. Unemployment insurance in Canada is a federal program whose generosity has varied considerably across provinces and time. It varies across provinces because eligibility requirements, duration of benefits and rate of wage replacement all depend on local unemployment rates. The theoretical basis for our measure of unemployment insurance generosity was provided by Fortin (1984).<sup>11</sup> We speculate that more generous unemployment insurance compensation would lessen the demands for increases in the minimum wage – specifically because minimum wages have negative employment effects, making it more difficult to qualify for benefits. However, there is a counter argument that since insurance reduces the unemployment burden there should be stronger demand for higher wages, *ceteris paribus*. We think the first effect should be stronger because of the opportunity, for seasonal workers especially, to receive payments year-after-year.

Third, the argument has been made that electoral timing makes it possible to exploit the relatively inelastic short-run labour demand curve [e.g. Sobel (1999)]. The shorter the period of time considered, the more inelastic the demand for labour. Hence, increases in the minimum wage immediately preceding an election allow governments to confer short-run wage benefits to low-wage workers, with a minimum of adverse employment effects. The problem with this argument is that while the short-run benefits to unskilled workers are greater, so too are the short-

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<sup>11</sup> Fortin's variable is  $rD/M$  where  $M$  is the minimum qualifying period in weeks,  $D$  is the maximum duration of benefits in weeks, and  $r$  is wage replacement rate as a percentage of the weekly wage. As an example in 1978-79, whenever the relevant local unemployment rate exceeded 11.5 percent, a qualifying period of 10 weeks triggered benefits of 42 weeks. We thank him for providing us with his series.

run costs to employers. If employers can more effectively communicate their concerns, then governments may be more reluctant to legislate in election years. Against this is the argument that many voters, unaligned with any interest group, are sympathetic to minimum wages as an instrument for the reduction of poverty.<sup>12</sup> We identify election years with a dummy variable whose sign is unclear.

Our last control variable is inflation. If inflation increases then, absent legislation, the relative minimum wage (the legislated minimum wage divided by average hourly earnings) falls automatically. If there are lags in interest groups recognition of background inflation, and in legislated responses, then this variable should have a negative coefficient. We measure inflation as the proportional change in the implicit price index for consumer goods for each province.

#### **IV. The Results**

Summarizing, we want to relate the relative minimum wage to independent variables representing interest group, ideological and other effects.<sup>13</sup> We do this for nine provinces for the years 1977 to 1996 inclusive. Table 1 presents means, standard deviations and abbreviations for

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<sup>12</sup> Simon (1974) reports that a clear majority of the public favours minimum wage laws.

<sup>13</sup>An alternative to the relative minimum wage is the real minimum wage. We use the relative minimum wage in part because the previous Canadian study (Blais *et al*) use it, and also because interest groups probably focus on the price of unskilled labour relative to other labour. In fact both series move together and “tell much the same story”(Baker *et al*). Both generally trend down, with variation among the provinces in timing and degree, but flatten towards the end of the sample period with increases in British Columbia and Ontario. A final problem for the real minimum wage is that it is formed by deflating nominal minimum wages by price indices. As is well known, provincial price indices measure changes in the cost-of-living but not the absolute cost-of-living in the provinces.

the variables. Data sources and construction details are provided in a data appendix.

We first report results in Table 2 without any fixed province or year effects. This matches Blais *et al.* We then introduce provincial fixed effects, year fixed effects and then both together. In the regressions, Progressive Conservative governments are the omitted party variable, and we also instrument the unemployment variable by lagging one year. Finally we report results for the log-linear version for the model.<sup>14</sup>

The results for the stripped-down version without fixed effects are given in column 1 of Table 2. The political party variables indicate, that Social Credit governments, compared to Progressive Conservative governments, have 28.3 percent lower relative minimum wages, while Liberal (significant only at 8.1 percent level), New Democrat and Parti Quebecois governments legislate relative minimum wages that are respectively 3.6, 4.3 and 18 percent higher. Looking at the interest group variables, small business, youth and unions are all associated with higher minimum wages, while women are associated with lower minimum wages. Finally, for the control variables, the results indicate the unemployment rate and insurance generosity are significant negative variables, while the inflation rate is not. There is no evidence of an electoral effect.<sup>15</sup> Further comment on these results will be postponed until the more complete specifications are introduced. For now we note how our results differ from Blais *et al* whose variables (union, small business, women, youth, unemployment rate, Progressive Conservative government, inflation and a convergence variable) were all negative and, except for unions,

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<sup>14</sup>The log-linear versions passed all Ramsey reset tests at the five percent level whereas the linear version frequently did not. However the results from both versions were very similar.

<sup>15</sup>Experiments with electoral dummies for the year before and after an election year did not produce significant coefficients.

Table 1. Summary Statistics

Variable		Mean	Standard Deviation
Relative Minimum Wage	MW	.395	.057
Social Credit government dummy	SC	.094	.293
Progressive Conservative dummy	PC	.506	.501
Liberal dummy	LIB	.183	.388
Parti-Quebecois dummy	PQ	.067	.358
New Democratic dummy	NDP	.150	.358
Union workers in labour force	UN	.276	.048
Women in labour force	WOM	.421	.028
Youth (15-19 yrs) in labour force	YOUTH	.089	.019
Corporate profits/provincial GDP	BBUS	.083	.035
Unincorporated business income/GDP	SBUS	.054	.96
Election Year Dummy	EY	.261	.44
Inflation Rate	INFL	.053	.032
Unemployment Insurance Generosity	UIG	1.675	.731
Unemployment rate, lagged	UR	.103	.038

Table 2 Regression Results								
Name	version 1		version 2		version 3		version 4	
	Coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
SC	-0.283	-12.05	-0.086	-2.75	-0.284	-12.26	-0.060	-2.13
LIB	0.036	1.75	-0.010	-0.60	0.018	0.80	-0.026	-1.58
PQ	0.179	6.10	0.040	1.29	0.166	5.43	0.037	1.29
NDP	0.043	2.15	0.074	4.72	0.051	2.59	0.077	5.60
UN	0.211	4.02	0.221	2.12	0.159	2.84	0.113	1.20
WOM	-0.876	-4.21	-1.505	-6.75	-0.459	-1.89	-0.838	-2.58
YOUTH	0.195	2.47	-0.031	-0.32	0.039	0.37	-0.245	-2.14
BBUS	-0.0004	-0.02	0.020	1.16	0.013	0.38	0.072	2.64
SBUS	0.219	4.42	0.155	2.44	0.241	4.16	0.318	3.74
EY	-0.013	-0.98	-0.011	-1.08	-0.014	-1.03	-0.007	-0.82
INFL	-0.009	-0.87	-0.008	-1.00	0.001	0.04	0.006	0.67
UIG	-0.038	-1.54	-0.092	-4.38	-0.060	-1.57	-0.080	-1.66
UR	-0.128	-3.97	-0.161	-4.97	-0.066	-1.65	-0.103	-2.89
PROV	no		yes		no		yes	
YEARS	no		no		yes		yes	
R-sq (adj)	0.72		0.85		0.74		0.89	
LLF	213.5		275.2		232.3		315.6	

significant at the 10 percent level. In particular our union, and small business variables contradict theirs and our inflation variable is not significant<sup>16</sup>

In column 2 of Table 2 the specification incorporating provincial fixed effects is given. This adjusts for unmeasured social, economic and political conditions which might influence minimum wage legislation and be correlated with the other regressors. Including fixed effects, changes the size of some coefficients, gives the Liberal party a negative but insignificant coefficient, and converts a significant youth coefficient to clearly insignificant. We also note that since the Social Credit and Parti Quebecois governments are each observed in only one province, British Columbia and Quebec respectively, it is not surprising that inclusion of provincial dummies weakens these variables.

Column 3 in Table 2 reports specifications with fixed year effects which accounts for unmeasured cyclical effects and secular changes in the political and economic climate. With year effects only, the political party effects are closer to the first specification. A second pattern is that the interest group variables for unions, women and youth, as well as the unemployment rate and employment generosity are all, compared to the first specification, weaker in terms of coefficients and t statistics.

Column 4 contains the most complete version with both fixed province and year effects. There are a number of changes here compared to the other versions. These changes, along with the, at the one percent level, clear rejection by likelihood ratio tests of the restrictions imposed by

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<sup>16</sup> Blais *et al* include a “convergence” variable which is the average manufacturing wage in the province divided by the counterpart national average wage. Because this is, by definition, related to the relative minimum wage, and because their convergence argument is in our view questionable, we do not include this variable. Inclusion of the variable does not materially affect the results.

dropping either the province or year effects, lead us to select this specification as preferred. For the ideological variables, the results indicate that a Social Credit government produces a 6 percent lower relative minimum wage than a Progressive Conservative government, while a New Democratic government will have a 7.7 percent higher wage. The Liberal and Parti Quebecois variables are insignificant at the five percent level, but the Liberal dummy has an unexpected, although small, negative coefficient. This last result may indicate that Liberals and Conservatives, as parties that occupy the middle ground of Canadian politics, may not differ much in their preferences.<sup>17</sup> One way to re-cast the results is to simply define a right wing dummy variable beginning with the center-right Conservatives and extending to the Social Credit, while left wing governments cover the center-left Liberals and extend to the Parti Quebecois and New Democrats. The resulting regression produced a negative coefficient of .043 with t-statistic = 3.59.

Next, looking at the interest group variables, we see that the union variable while positive has much lower significance (p-value = .23) than in the earlier specifications. Both the women and youth variables are negative and significant at the 5 percent level with the coefficient, or elasticity, for women over three times that for youth. These negative coefficients imply that women and youth oppose higher minimum wages because of an anticipated adverse employment effect, or that these variables more accurately reflect the interests of those that disproportionately hire youth and women. Both business variables are positive and significantly related, at the one percent level, to the relative minimum wage. In the case of big business, one could interpret this

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<sup>17</sup> One could, in an exercise of *ex post* data massaging, try to identify “red Tory” governments as equivalent to Liberals. For example defining the Hatfield government in New Brunswick as red Tory changes the Liberal coefficient to positive and insignificant.

as support for higher minimum wages as an effective barrier-to-expansion strategy against small business. The small business result is a little surprising. One explanation is that the variable may proxy, better than the women and youth variables, the constituency of low skill workers with a vital interest in the minimum wage. As indicated earlier, the coefficient on some interest group variables can be difficult to interpret; in effect what we are measuring are reduced form relationships where the underlying structural relationships are hard to isolate.

The last group of variables are the control variables. Again there was no evidence of an electoral effect. As expected, the unemployment and insurance generosity variables have negative coefficients, although the latter is only significant at the ten percent level, indicating that increased unemployment and insurance generosity dampen the demand for higher minimum wages. There was no evidence that there was a lag in the adjustment of the relative minimum wage because of inflation. Perhaps since our sample begins in 1977, after a decade of historically high inflation, inflation awareness was high enough to produce quick adjustment of the legislated wage in the political market.

Finally we look at fixed effects for provinces and years. At the five percent level of significance, four provinces had different relative minimum wages compared to Ontario. British Columbia had a 16 percent lower relative minimum wage, while Manitoba, Quebec and New Brunswick had, respectively, 14, 17 and 12 percent higher relative minimum wages. For years, relative minimum wages fall from 1977 until they are about 28 percent lower in 1986, after which they are largely unchanged.

## V. Conclusions

This paper has examined the relative minimum wage policies of provincial governments in Canada from 1977 to 1996. It does so first without fixed effects for provinces and years and then with fixed effects. Both types of fixed effects were statistically significant. Their inclusion did impact on some of the results, especially the youth coefficient which begins as positive and significant in the first specification and ends as negative and significant in the last.

The interest group variables are, on balance, the most difficult to measure and interpret. The union variable is the only one which has its expected sign (positive), although it is insignificant when we include fixed effects. All the remaining variables in this group are significant in an *unexpected* direction. For example, the women and youth variables are significantly negative (rather than positive). This could be interpreted as reflecting the wishes and the lobbying of these groups, as in Blais *et al*; or alternatively, as indirectly capturing the interests of their employers. Furthermore, both business interest variables were (unexpectedly) significantly positive. While large businesses may plausibly have an interest in higher minimum wages as an expansion barrier to smaller firms, the small business result is more difficult to explain – unless one interprets it as picking up the interests of a broad-based coalition of low-wage earners. These rationalizations lead us to the somewhat uncomfortable situation where we find ourselves arguing that the women and youth variables indirectly capture the interests of their employers (business), whereas the business variables indirectly capture the interests of their employees (women and youth). This irony really points up the difficulty of interpreting reduced-form coefficients in exercises of this sort.

The control variables perform rather better. First, we have a clear a priori prediction that

higher unemployment should lead to reduced minimum wages. This prediction is born out, with unemployment having a significantly negative impact. Second, we speculated that unemployment insurance generosity would exert downward pressure on minimum wage ratios. Again, our results confirm a significantly negative influence for this variable. On the other hand, despite evidence for an electoral effect in the United States [Sobel (1999)], we find no evidence for one in Canada. Perhaps, in the Canadian context, firms are able to communicate to governments the short-run costs imposed on them by such policies.

Finally, our strongest results come from the ideology variables. They are strong in the sense that we have quite clear priors about their signs and they survive as significant results across the various specifications. We find that minimum wages are higher when left-wing governments are in power and lower when right-wing governments are in power. It appears that ideology matters. However, of interest to Canadian readers, we find no significant difference in this regard between the Liberals and the Progressive Conservatives.

## Data Appendix

The relative minimum wage is the legislated minimum wage divided by average hourly earnings in manufacturing. The minimum wage is from the Federal Department of Employment and Immigration (until 1990) and from the New Brunswick Department of Training and Employment Development (after 1990). For 1977 - 1982 average manufacturing hourly earnings for the provinces are from Statistics Canada's Cansim matrices 1445, 1455, 1460, 1465, 1470, 1480, 1485, 1490, 1495 and, for Canada, 1435. In 1983 Statistics Canada introduced a revised hourly manufacturing wage series and this is used for the years 1983 to 1996. The two series overlap in the first three months of 1983 and are linked on that basis. The provincial data for the second series are from matrices 4312, 4340, 4354, 4368, 4382, 4396, 4410, 4424, 4438 and, for Canada, 4298.

The Provincial economic Accounts is the source for the big business variable (corporate profits divided by GDP), small business variable (non-farm unincorporated income divided by GDP), and inflation variable (the proportional change in the price index for consumer goods and services). Corporate profits, non-farm income and GDP are from Cansim matrices 2611, 2613, 2614, 2615, 2616, 2617, 2618, 2619 and 6949. The price index is from matrices 2597, 2599, 2600, 2601, 2602, 2603, 2604, 2605 and 2606.

The variables needed to construct women in the labor force, youth in the labour force, the unemployment rate and youth unemployment rate are all from Cansim matrices 3452, 3454, 3456, 3458, 3460, 3462, 3464, 3466, 3468 and 3470.

The data on union membership are from various issues of CALURA Part II (Statistics Canada catalogue number 71-202). In 1983 union membership increased by 11 percent due almost entirely to new reporting rules which meant 99 unions were reporting for the first time. To adjust for this, union membership figures before 1983 were increased by a factor of 1.11.

The political party dummies are based on election results in the Canadian Parliamentary Guide (1997). For years when a change in government occurs, the year is assigned to the party in power for most of the year, unless a legislated change in the minimum wage occurred during the year. In that case, the year is assigned to the party in power when the legislated change occurred.

The election year dummy is one in an election year. Matching the election cycle to the minimum wage is difficult. We would like to identify the 12 month period preceding an election. The best we can do is take the calendar year if the election is in the last two quarters of the year; otherwise take the preceding calendar year as the election year.

The unemployment insurance generosity variable was constructed and provided by Pierre Fortin.

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