

Legislatures as Unions

Robert E. McCormick and Robert D. Tollison

Good fences make good neighbors; so the saying goes. But since the most fertile ground often lies along the fence row, the cost of neighborliness is sometimes too high. So it has been with the modern colonization by economists of subjects usually reserved for other social sciences. Not untypically, the conventional views held by other disciplines have been strongly challenged by the application of economic methodology. While it is interesting that economists tend to generate different conclusions about social processes from those accepted in other social sciences, it suffices to say here simply that we write in this tradition.

We address the problem of how state legislators are paid. Our explanation of legislative pay will seem familiar to economists. Nonetheless, it will contrast markedly with the explanations and approaches to the same problem offered by other expert observers of such matters. The following quotations provide a menu of competing hypotheses:

Despite the fact that in recent years a few states have provided substantial salaries for their legislators, no public servant in relation to his responsibilities is more underpaid. (Maddox and Fuquay 1966, p. 135)

Most states fail to pay their lawmakers anything approximating a living wage. (Straayer 1973, p. 93)

To a large extent, legislators are paid according to the frequency of regular sessions. (Council of State Governments 1968, p. 45)

Legislators in annual session States generally fare better than lawmakers in biennial States. (Council of State Governments 1972, p. 54)

As many analysts have pointed out, the most significant variable in determining the size of legislative salaries appears to be state population. (Council of State Governments 1974, p. 59)

Our explanation of legislative pay is fueled by a completely different mental set than that implied in the initial two quotations. We also provide a more complete model of the determination of legislative pay with which the type of claims made by the last three sources can be evaluated.

In effect, we view legislators as participants in a labor market, and we try

to explain differences in the legal pay of legislators by factors that affect the supply of and demand for their services. We present a model of the legislature as a labor union, where in some states the legislative wage is set in the constitution (the analogue to competition) and in others it is set by the legislators (monopoly). We test the implications of the model with respect to relative legislator wages in the two types of states and with respect to other aspects of the legislature as a union (e.g., size of the legislature). We also test an implication of the model which suggests that, where legislative pay is low, the market for legislator services clears by attracting more legislators, such as lawyers, for whom legislative service can be combined with other outside earning activities. All the implications of the model hold up quite well in empirical tests. We examine state legislators because legislative pay and procedures differ across states, yielding a natural cross section of data on such matters (Council of State Governments 1976). The implications of the model, as such, could be applied to any legislative setting.

Basically, we share Stigler's (1976) concern with modeling the central tasks of representation properly. He states that "the central task of representation is to give efficient representation to the collection of group interests that express the desires of citizens who compose the state" (p. 17). We pose a corollary question, namely, "What is the legal payoff to the representative for performing those tasks?"

In section 1 we present a model stressing the supply of and demand for legislator services under union and nonunion conditions. The model involves the solution of a unique problem of present value maximization. We perform an empirical test of the implications of the model regarding relative legislator wages using data for 1974 on state governments in section 2. In section 3 we test an inference of the model that more lawyers will be present in legislatures when legislative pay is low. Finally, we offer some brief concluding remarks in section 4 on the relation between the pay of legislators and the prospects for malfeasance.

1. No Man is Safe When the Legislature is in Session: Theory and Preliminary Implications

The wide range in legislative pay among the fifty states is illustrated in table 1. Biennial pay for legislators in 1974–75 ranges from \$200 in New Hampshire to \$64,140 in California. Stigler's (1976) remarks about the small range of variation in the size of legislatures are reversed for legislative pay. This is a quite wide range of variation in wages across states, and this article presents an explanation of this variation.

The supply of legislative services is analogous to the supply of any service where labor is extensively used in (roughly) fixed proportions to other inputs. The quantity supplied of legislative services (which we will measure in man-years per year) is therefore determined by the relative wage, the price of inputs other than labor, and technology. Each state has a separate supply

TABLE 1. Estimated Biennial Compensation of Legislators, 1974–75

State	Biennial Compensation	State	Biennial Compensation
New Hampshire	\$ 200	Georgia	\$18,432
Rhode Island	600	Kansas	18,928
Utah	3,200	Arizona	19,170
Wyoming	3,348	Tennessee	19,909
Arkansas	3,600	Oklahoma	19,920
New Mexico	3,600	New Jersey	20,000
Maine	4,250	Oregon	20,010
North Dakota	6,540	Delaware	21,050
Montana	6,954	Indiana	21,420
South Dakota	7,475	Iowa	21,580
Idaho	7,535	Minnesota	23,862
Nevada	8,260	Maryland	25,000
Vermont	8,430	Virginia	25,850
Nebraska	10,000	Mississippi	26,480
Washington	11,200	Florida	27,125
Kentucky	12,350	Massachusetts	27,776
West Virginia	12,600	Hawaii	28,960
Alabama	12,940	Pennsylvania	31,200
Connecticut	13,000	Wisconsin	31,356
South Carolina	14,400	Ohio	35,000
Colorado	15,200	Michigan	38,000
Missouri	16,800	Alaska	43,920
Texas	17,400	Illinois	49,424
North Carolina	17,635	New York	57,500
Louisiana	18,000	California	64,140

Source: Council of State Governments 1976, 37.

Note: Includes salary, daily pay, and unvouchered expense allowances. Excludes special session compensation, per diem business allowances, mileage and transportation, and all vouchered expenses. In instances where daily pay or expenses were provided, days in session were estimated on the basis of days in session in 1973–74.

function, but we do not expect the conditions of supply to vary greatly across states. Potential legislators are never a finite fraction of the available labor in a state, and the occupational composition of legislatures is highly similar across states (Jewell and Patterson 1966, 44–48). These positions are held primarily by members of professions that can capitalize readily on certain aspects of being a legislator. Lawyers thereby avoid the professional ban on advertising (at least until the recent Supreme Court decision), and often continue to draw a wage from their law firms while serving. Farmers can be legislators where sessions are held between growing seasons. The reason that banking, insurance, and real estate people gravitate to these offices is not hard to discern. Our theory will lead us to expect relatively more legislators, such as lawyers, who can combine legislative service with outside earning opportunities in

states where the legislative wage is low, but we defer this discussion until section 3.

In each state there is some demand for legislative influence. The demand for legislative influence implies a derived demand for legislators.¹ The technical relationship between influence and legislators is not one of proportionality because an excessive number of legislators would dilute the influence of each and might not be able to pass any laws. In fact, as Stigler points out, the influence of a legislator is a monotonically decreasing function of the size of the legislature. We further expect that, given the lack of low-cost substitutes for legislative action within a state, the elasticity of the demand for representation with respect to the legislative wage rate must be close to zero over the relevant range. We make no a priori estimate of the income elasticity. Across states, in contrast to the relative invariability of supply in this market, we expect that the demand for representation will shift as a function of state income, population, budget size, and so forth.

With this background in mind, we note that wage determination takes essentially two forms among states. In some states legislative pay is set in the constitution and is quite difficult to change. A new wage would require the passage of a constitutional proposal. Such proposals typically emanate from the legislature under relatively strict voting and quorum rules and must be signed by the governor and passed in a statewide referendum. In other states, pay is set by a statute passed by both houses of the legislature and signed by the governor. These pay bills are subject to legislative consideration under normal voting and quorum rules and do not require a statewide referendum.²

We contend that legislative determination of pay by statute amounts to a strong form of union power. Unions typically achieve higher relative wages by restricting entry. In this case entry is somewhat more loosely controlled via constitutional limitations on the size of the legislature and on the procedures for gaining a seat, and legislators are given a direct hand in wage determination. We would expect to observe the impact of this monopoly power in higher relative wages for legislators in these states.

The conditions in the legislative labor market for a single state are depicted in figure 1. Each legislature is treated as a separate labor market. A measure of legislative output (Q_L) in terms of man-years per year is on the horizontal axis, and annual legal pay (W_L) as dollars per man-year is on the vertical axis. The competitive supply curve for successful applicants for these seats is given by S . This relationship represents the wage that must be forthcoming for a given level of output to persuade prospective legislators to run for and to accept office. Following our previous argument, we draw a completely inelastic demand curve over the relevant range for the services of legislators. In the absence of any contrary evidence, we assume that existing wages clear the market for the given constraint on legislative size in both union and nonunion states. That is, there is no excess supply.

In states where the legislative wage is constitutionally determined, some given wage, W_C , will prevail. Candidates will adjust to the given wage, and

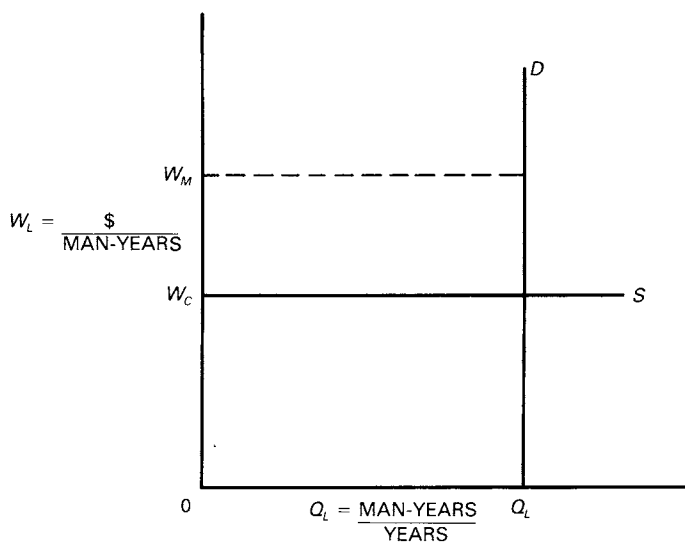


Fig. 1. Determination of legislative pay

supply or marginal opportunity costs will shift accordingly as more- or less-qualified individuals seek election, so that the market clears. In states that allow legislative control over pay, the wage is adjusted by legislators to maximize the present value of a seat. This wage is, for the moment, arbitrarily drawn in figure 1 at W_M . There are no free rents in this case because higher pay will be dissipated in competition for seats. If W_M is high, more able individuals will compete for legislative seats, and in the long run they will receive a competitive rate of return by having higher opportunity costs and/or by spending more to capture seats. Thus, there will only be gains from unexpected increases in wage rates.

The main issue confronting this theory concerns the forces which constrain the legislator from setting an infinite wage in figure 1. Since we argue that the demand for legislator time is completely inelastic over the relevant range, this pay problem reduces to a question of what limits the wage-setting ability of the legislature under these conditions.

Think of the problem in this way. Imagine that the Wish Fairy makes you the following proposition: You may make a wish today, but one year from now the fairy will return and (a) grant you your wish and allow you to make another one, or (b) deny your wish and disallow you any more wishes.³ The fairy's decision is predicated on the premise that the higher the wish, the more likely is option b (rejection at the polls). The question facing the typical legislator under these conditions, then, is what wage to wish for when the wage goes into effect after the next election. That is, how does he maximize

$$\text{present value (PV)} = \int_0^T W e^{-rs} ds, \quad (1)$$

subject to the constraint that $T = T(W)$, $(\partial T/\partial W) < 0$?⁴ Or in words, how does he maximize the present value of this stream of wishes subject to the constraint that the higher the wish, the shorter the stream?

We can rewrite (1) as

$$PV = W \left(-\frac{1}{r} e^{-r \cdot T(W)} + \frac{1}{r} \right). \quad (2)$$

The first-order conditions for maximum present value with respect to W are thus

$$\frac{\partial PV}{\partial W} = e^{-r \cdot T(W)} \left(W \frac{\partial T}{\partial W} - \frac{1}{r} \right) + \frac{1}{r} = 0. \quad (3)$$

The result given by (3) merely states that the present value of the flow of services from the wish is maximized where W is chosen so that (3) holds. To solve for an optimum W , it is necessary to specify a functional form for $T(W)$.

An economically interesting case is

$$T(W) = \log \frac{a}{W}, \quad (4)$$

where a is some shift parameter, the determinants of which we will discuss presently. Two general properties of this function are useful. First,

$$\frac{\partial T}{\partial W} = -\frac{1}{W} < 0. \quad (5)$$

Second, the higher W , the slower $T(W)$ declines, since $(\partial^2 T/\partial W^2) = (1/W^2) > 0$.

By inserting this functional form in (3), we can solve for the optimum W . Thus,

$$\hat{W} = e^{\log a - \frac{\log[1 - \log(1+r)]}{\log(1+r)}}. \quad (6)$$

So the optimum wage to set under the terms of the problem facing the typical legislator is given by equation (6). For illustration, we discuss two economic properties of this result.

First, as the discount rate increases, the optimum wage increases. That is, it can easily be shown that

$$\frac{\partial(\log \hat{W})}{\partial r} = \left\{ \left[\log(1+r) - \frac{r}{1+r} \right] / r^2 \right\} > 0. \quad (7)$$

As the terms of this pay problem make clear, the major influence on the durability of the wage payment is the prospect for reelection, which depends on factors such as closeness of party rivalry, age of the legislator, and so forth.

Second, the shift parameter, a , can be stated as a function of certain aspects of legislatures. In general, the change in the optimum W for a change in any of the arguments of a will have the same sign as the change in a for the change in any of its determinants. For example, as we argue below, the number of representatives (R) should affect the success of the legislative union in a predictable way. That is, a larger number of legislators will frustrate the success of the wage cartel. Thus, from equation (7) we expect that

$$\frac{\partial(\log \hat{W})}{\partial R} = \frac{1}{a} \frac{\partial a}{\partial R} < 0. \quad (8)$$

In our test of the model below, we employ this general interpretation of a to derive testable implications about aspects of legislatures that are likely to be important in the wage-setting process.

To recap somewhat, the economic analogue to the Wish Fairy problem is not hard to draw. We know that entry is not entirely barred in legislatures and that tenure extending beyond the present term is not guaranteed. This means that the present value of a seat will be inversely related to the wage rate after some point, because higher wages will attract new entrants and alienate voters, both of which dampen reelection prospects and offset the effect of increasing the wage on the present value of seats. Incumbents must thus trade off union wage gains and other benefits from being in office against the extra costs associated with increased competition to retain seats. This is precisely the economic content of the Wish Fairy problem, where legislative pay bills apply after the next election. There is thus a determinate upper bound on the monopoly wage in our problem.

As a result of monopoly power in this labor market, then, wages in states where legislators can set their own wage will be higher on average (W_M in fig. 1) relative to states where the wage is set in the constitution (W_C). The legislative union predictably will have a substantial impact on relative wages because the demand for legislator services will be quite inelastic, as we posited earlier. This condition follows from the rules of derived demand in two related senses. First, there is only one legislature per state, so there is not a nonunion sector from which to buy output. Second, there are in general poor substitutes for the services of legislators (e.g., laws).

Furthermore, two aspects of legislatures which are related to the wage-setting process can be treated within the interpretation of the shift parameter, a , in our model.

First, the size of the legislature is analogous to the size of a cartel. A larger number of legislators should thus influence the success of the wage

cartel in a negative manner. This is our expectation, although we recognize following Stigler (1976) that the range of variation in legislative sizes is not large and that as a result we may not be able to detect empirically the effect of the number of legislators on the wage-setting process.

Second, since members of this union must stand for reelection, they are not guaranteed lifetime tenure as union members. The relationship between tenure and pay is twofold: higher pay promotes entry, and incumbents pay themselves more. Where there is free competition in entry into legislatures, we expect that tenure will be lower at higher rates of pay. Where there are monopolistic restrictions on entry (e.g., gerrymandering by incumbents or by the judiciary), we expect that tenure will be longer at higher rates of pay. We argue, following Crain (1977), that the latter case is more likely to predominate in state legislatures and that therefore $[\partial(\log \bar{W})/\partial T] = (1/a) (\partial a/\partial T) > 0$. In other words, we expect that tenure will be longer at higher rates of pay.

The conceptual experiment in figure 1 consists of converting a state where the legislative wage is set in the constitution to one where the wage is set by statute. We contend that the conditions of supply in this market are relatively homogeneous across states, but that we can observe demand differences across states. We can thus estimate a locus of market-equilibrium points over states, which can be interpreted as a Marshallian supply curve of labor, that is, the wage per man-year that is necessary to generate specific quantities of legislative services. This gives us an empirical means of testing the union metaphor and its implications with respect to the relative pay of legislators.

2. No Man is Safe When the Legislature is in Session: A Test of Relative Wage Implications

A test of the implications of our model regarding relative legislator wages in union and nonunion states is summarized in equation (9) and explained below.

$$\text{wage per man-year} = f(\text{man-years per biennium, pay method, date of state constitution, turnover, no. representatives}) \quad (9)$$

The dependent variable, wage per man-year, is the annual wage of a legislator. Annual pay is measured as the average of a two-year period to overcome problems of annual versus biennial sessions. Biennial legislators would thus receive in one year twice the amount of this wage.

As in the case of other labor markets, the marginal product of labor will play a decisive role in wage determination. The practical problem for empirical purposes is to define the marginal product of a legislator (a task that continues to elude GNP accountants). We chose the number of legislators times the duration of the legislative session, which is simply man-years per

biennium. As a supply variable, this measure picks up the duration of service. For example, in those cases where one legislator worked twice as long as the other at the same annual wage, his wage per man-year would be one-half of his counterpart. In principle, this measure of legislative output regressed against a measure of pay is analogous to an aggregate supply curve of legislative services across states.⁶

A dummy variable for pay method provides a direct test of the unionization hypothesis since it measures the degree of union power on average. It is anticipated that the dummy variable will have a positive sign. That is, states where legislators can set their own wage should exhibit higher wages.

The date of the state constitution is entered to check for the unionization effect in the following sense. The trend in more recent state constitutions is toward more effective cartelization of the political process. This variable may thus capture an effect on wages independently of the degree of union power. We expect newer constitutions to reflect higher wages, and since the date of the state constitution is entered as the year of adoption, we expect the sign on this variable to be positive.

Our measure of union tenure is turnover in state senates and houses.⁷ Turnover is defined as the number of new legislators in 1974 divided by the size of the chamber. Since lower turnover implies longer tenure for the average legislator, we expect the relationship between turnover and pay to be negative. Such a finding would support the argument that tenure is longer at higher rates of pay due to entry restraints.

The size of the senate or house is entered to check for the effect of numbers on union success. We expect that larger legislatures will be more difficult to organize and discipline as a wage cartel.

Conventional multiple-regression procedures were used to estimate the model. We present the results of only the logarithmic specification of the model because it offers a slightly better fit than the linear form, and we can thus economize in the presentation of results. The coefficients in equation (10) are estimated from 1974 data on the variables across states in the United States (Council of State Governments 1976).⁸ A copy of the data is available from the authors on request.

Fitting the model by ordinary least squares yields the prediction equations for legislative compensation given in table 2. The results in table 2 can be interpreted as the wage necessary to fill the legislature for a given amount of output, that is, a quasi-supply curve of state legislators for the United States as a whole. There are two prediction equations, one for state houses of representatives and one for state senates.

The output variable, man-years per biennium, turns out to be a useful predictor of legislative wages. The elasticity of wages with respect to this measure of output is .71 in the senate equation and .65 in the house equation. This means that a 100 percent increase in output requires a 65–71 percent increase in pay and that this relationship is quite inelastic.

Direct evidence on union power can be found by examining the dummy

TABLE 2. Log Compensation of Legislators (1974)

Independent Variables	House		Senate	
Man-years per biennium	0.65	(2.85)*	0.71	(3.38)*
Pay method	1.09	(3.86)*	1.25	(4.58)*
Date of state constitution	11.56	(2.60)*	12.93	(3.03)*
Turnover	-0.06	(-0.20)	-0.41	(-2.17)*
No. representatives	-0.46	(-1.27)	-0.61	(1.43)
Intercept	-82.37	(-2.44)*	-92.97	(-2.87)*
R^2	0.53		0.58	
$F_{5,36}$	8.02*		9.75*	

Source: Calculated from Council of State Governments 1976.

**t*-values significant at the 5 percent level or better.

variable for pay method. This variable appears at high levels of statistical significance, and in order to examine its impact more closely we convert the results into dollar terms. This is done in the following manner. Using the estimated coefficients in table 2 and the actual mean values of the other independent variables (calculated over all states), we let pay method take on the values 0 for constitutional states and 1 for union states and observe the change in \ln wage.⁹ We convert this change to dollars by taking anti-logarithms. This procedure yields an estimate of an average effect of pay procedure in dollar terms, holding constant the levels of the other independent variables across states.¹⁰ For the house equation this procedure predicts a wage of \$5,802 for constitutional states and \$17,257 for pay-by-statute states. This represents a 197 percent increase in legal pay. The results for the senate equation are analogous. The predicted senate wage is \$5,170 in constitutional states and \$18,045 in union states. This represents a 249 percent increase in legal pay. As we expected, then, given the extreme degree of inelasticity of demand in this labor market, the legislative union is astonishingly powerful. Compare these results, for example, to Lewis's (1963) finding that unionization in the United States led, on average, to a 10–15 percent excess of union over nonunion wages (as a percent of nonunion wages) as of the late 1950s.

The variable on the date of the state constitution has the expected sign and appears at high levels of statistical significance. Since we interpret this variable as more recent implying greater cartelization, the effect on wages is probably strengthened by the fact that, even in states where the legislative wage is set in the constitution, a new wage and other cartel measures (such as entry restrictions) can be suggested by the legislature when the constitution is changed.

The negative coefficients on turnover support the argument that tenure is longer at higher rates of pay (remember that lower turnover implies longer tenure), and the results are statistically strong in the senate equation. We have some evidence, then, that turnover measures the effects of monopolistic restrictions on entry.

We find the expected negative signs on the coefficients on the number of representatives at reasonable levels of statistical significance (at the 16 and 22 percent levels, respectively). Larger legislatures thus tentatively appear to frustrate the operations of the wage cartel.

Finally, we note that the model explains over half of the variation in legislative pay across states for both senates and houses and that this specification holds up remarkably well for other recent cross sections taken from the *Book of the States* (see Council of State Governments, various years).¹¹

3. No Man is Safe When the Legislature is in Session: The Incidence of Lawyers as Legislators

Where pay is fixed in the constitution and is therefore low, the market for legislators presumably clears by attracting more legislators, such as lawyers, for whom legislative service can be combined with other outside earning activities. This implies that there should be larger fractions of lawyers in legislatures where rates of wage pay are lower, for then the outside benefits are a larger fraction of total pay. However, two other considerations confound this effect. The typical labor supply argument that, in a given state, more lawyers will seek to become legislators where wage pay is higher (especially those not willing or able to procure outside earnings) has the opposite effect. More important, as the tentacles of state government extend to increasing facets of state life, the potential outside gains to legislator-lawyers increase. State expenditures are, however, a proxy for the largesse of government and are highly correlated with legislative pay.¹² Consequently, increasing outside earning potential for legislator-lawyers is coincident with a high legislative wage, and thus the second confounding effect is that increasing legislative wage pay should lead to an increased fraction of lawyers (because of higher outside pay). Empirically, however, we find that the argument that more lawyers will be in legislatures where the legislative wage is low dominates the two confounding effects. The following model is employed for our test.

$$\frac{\% \text{ lawyers in state legislatures}}{\% \text{ lawyers in state population}} = \frac{f(\text{associate lawyers' average income} - \text{legislative wage, legislative wage, voter turnout})}{\text{legislative wage, legislative wage, voter turnout}} \quad (10)$$

The dependent variable adjusts the percentage of lawyers in state legislatures by the percentage of lawyers in the state population. The first independent variable is a measure of the opportunity costs to a (young) lawyer for serving in the legislature. We expect a negative sign, since higher opportunity costs should be associated with a smaller percentage of a state's lawyers in the legislature. Legislative wage is the annual wage pay of legislators and provides a direct test of the outside earnings hypothesis. We expect a negative sign, since, other things being equal, we expect more legislator-lawyers

TABLE 3. Adjusted Percentage of Lawyers in State Legislatures (1974)

Independent Variables		
Associate lawyer's average income – legislative wage	-0.011	(-2.71)*
Legislative wage	-0.0067	(-1.62)*
Voter turnout	-11.48	(-6.31)*
Intercept	887.6	(9.22)*
R^2	0.57	
$F_{3,44}$	19.12*	

Sources: Calculated from *Census of Selected Service Industries* 1975; Council of State Governments 1976; Insurance Information Institute 1976; and *Statistical Abstract of the United States* 1976.

* t -values significant at the 8 percent level or better.

where legislative pay is lower. Finally, voter turnout is entered in equation (10) to check a simple monitoring hypothesis, namely, that higher turnouts, measured as the percentage of voting-age population casting votes, reflect greater concern among voters about the outside earning activities of legislators. We therefore expect a negative sign.

We estimate the model by ordinary least squares for state senates and houses combined.¹³ Table 3 presents the results.

The results are as expected for the measure of lawyers' opportunity costs and for voter turnout. The sign on legislative wage is negative, reflecting the point that the relative outside earnings hypothesis overwhelms the other confounding considerations. The individual coefficients are all highly statistically significant, and the model explains a great deal of the variation in the adjusted percentage of legislator-lawyers across states.¹⁴

4. No Man Is Safe When the Legislature Is in Session: Wage Pay and Malfeasance

We find that the union metaphor is a useful means of analyzing and explaining legislative pay. Our metaphor, in effect, stresses a monopoly aspect of politics, and in this regard we should never forget what Knight (1951) said in his presidential address to the American Economic Association: "Most of the evils inherent in the market organization plainly inhere still more in political campaigning, legislative debates, and administration, perhaps even judicial trials. Especially the tendency to centralization and concentration of power—which can only go so far until voting and political discussion will be empty forms if the boss allows them to go on at all" (p. 28).

Nonetheless, our discussion begs the question of why states differ in their method of setting legislative pay. Recent theories of the control of politicians and other public (and private) employees who must be "trusted" suggest an answer (Barro 1973; Becker and Stigler 1974).

Becker and Stigler (1974) stress that the way to control individuals in positions of trust, such as legislators, "is to raise the salaries of enforcers

above what they could get elsewhere, by an amount that is inversely related to the probability of detection, and directly related to the size of bribes and other benefits from malfeasance. A difference in salaries imposes a cost of dismissal equal to the present value of the difference between the future earnings stream in enforcement and other occupations. This cost can more than offset the gain from malfeasance" (p. 6). Or, put somewhat differently, they argue that "trust calls for a salary premium not necessarily because better quality persons are thereby attracted, but because higher salaries impose a cost on violations of trust" (p. 12). Our results suggest that outside earning activities will be more important to politicians where legislative pay is lower, as in states where their pay is set in the constitution. In higher-pay states, individuals who will find it less in their self-interest to seek outside earnings (e.g., bribes) will be attracted to legislative service. In other words, politicians will steal less if they are paid more, and voters may view legislative determination of pay as a method of controlling malfeasance among politicians.

NOTES

We are grateful to Raymond Battalio, Mark Crain, Roy Gilbert, John Kagel, Thomas Saving, Richard Wagner, and an unidentified referee of the *Journal of Political Economy* for helpful comments on earlier drafts of this paper. George Stigler and Arleen Leibowitz deserve special thanks for help. The usual disclaimer applies.

1. Stigler (1976) notes some other analogies between characteristics of consumer demand for privately produced goods and citizen demand for legislation.
2. There is also some use of pay commissions among states. These commissions are appointed by the legislature, and no elaborate theory of regulation is needed to explain why we treat these states as cases where the legislature sets the wage.
3. We rule out political comebacks for analytical simplicity.
4. We employ the continuous form of the present value function as an approximation to the discrete case for mathematical simplicity.
5. This result holds for $r > 0$, i.e., when the discount rate is positive, and for $a > e$ and $a > W$.
6. As a practical matter, however, other available proxies for the marginal product of a legislator (e.g., bills introduced) are highly correlated with man-years per biennium, and our results are not sensitive to the use of this particular definition.
7. Turnover in unions is not an unheard consideration (Stigler 1966, 267–68).
8. Due to the lack of data on one or more variables for 1974, Kansas, Louisiana, Minnesota, Mississippi, Nebraska, New Hampshire, South Carolina, and Virginia are omitted from this test. We are thus analyzing forty-two state legislatures.
9. This is equivalent in logarithms to letting pay method take on the values of 1 and e (i.e., \ln pay method = 0 and 1), and observing the change in \ln wage.
10. We chose to estimate the dollar results in this manner in order to present the "average" effect of unionization in the labor market. This obviously is not the only way to estimate the effect of unionization. It all depends on what is held in the pound of *ceteris paribus* in terms of the mean values of the other independent variables. For example, we could use values for only constitutional states and

predict the effect of unionization of a “typical” constitutional state, or we could use values for a single constitutional state and estimate the effect of unionizing that particular state. The reader can easily derive such estimates, but we would happily make them available upon request.

11. Two additional aspects of our results should be reported. First, the inclusion of a variable (size of majority) to measure the degree of competitiveness among parties in our estimating equations adds nothing to the analysis. Such a variable does not affect the other results and shows no statistical credibility in its own right. We take this as evidence that parties do not play a prominent role in determining legislative wages and also as additional evidence that the appropriate analogue to competition in politics is not party competition but competition among incumbents and potential entrants. Second, governors must sign legislative-pay bills, and we expect that they will therefore be cut in on union wage gains. We did not tackle this problem rigorously, where, e.g., the Wish Fairy problem is extended to cover the case where, by analogy, the husband (legislator) and wife (governor) have to optimize the stream of wishes jointly. We did find empirically that the pay of governors is related to the method of pay determination, as in the case of legislators, but at a substantially lower order of magnitude. For example, the difference in relative gubernatorial pay due to union power was 18 percent in 1971, which is much smaller than the differential we found for legislators. It is possible, however, that governors secure favors from legislators for signing pay bills that do not show up in their legal pay. Thus, if governors are rent extractors as a group, they may be receiving payments in kind.
12. This is consistent with our earlier observation that man-years per biennium is highly correlated with state expenditures.
13. Nebraska and Wyoming are excluded from this test due to lack of data on one or more variables for 1974.
14. We note two additional aspects of our results in this section. First, the outside earnings hypothesis continues to overwhelm the confounding effects if voter turnout is excluded from the model. The general explanatory power of the model falls, but the direction and statistical credibility of the coefficients on the measure of lawyers’ opportunity costs and legislative wage remain essentially unchanged. Second, we note but do not report here that the percentage of similar occupations in state legislatures, such as real estate professionals, can be readily explained by a similar model.

REFERENCES

- Barro, Robert T. “The Control of Politicians: An Economic Model.” *Public Choice* 14 (Spring 1973): 19–42.
- Becker, Gary S., and Stigler, George J. “Law Enforcement, Malfeasance, and Compensation of Enforcers.” *Journal of Legal Studies* 3 (January 1974): 1–18.
- Census of Selected Service Industries*. 1972 Subject Series. *Legal Services* (SC72-S-4). Washington, D.C.: Government Printing Office, December 1975.
- Council of State Governments. *Book of the States 1968–1969*. Chicago: Council of State Governments, 1968.
- . *Book of the States 1972–1973*. Lexington: Iron Works Pike, 1972.
- . *Book of the States 1974–1975*. Lexington: Iron Works Pike, 1974.

- _____. *Book of the States 1976–1977*. Lexington: Iron Works Pike, 1976.
- Crain, W. Mark. “On the Structure and Stability of Political Markets.” *Journal of Political Economy* 85, no. 4 (August 1977): 829–42.
- Insurance Information Institute. *Occupational Profile of State Legislators*. New York: Insurance Information Inst., 1976.
- Jewell, Malcolm E., and Patterson, Samuel C. *The Legislative Process in the United States*. New York: Random House, 1966.
- Knight, Frank H. “The Role of Principles in Economics and Politics.” *American Economic Review* 41 (March 1951): 1–29.
- Lewis, H. Gregg. *Unionism and Relative Wages in the United States: An Empirical Inquiry*. Chicago: University of Chicago Press, 1963.
- Maddox, Russell W., and Fuquay, Robert F. *State and Local Government*. 2d ed. Princeton, N.J.: Nostrand, 1966.
- Statistical Abstract of the United States*. Washington, D.C.: Government Printing Office, 1976.
- Stigler, George J. *The Theory of Price*. New York: Macmillan Co., 1966.
- _____. “The Sizes of Legislatures.” *Journal of Legal Studies* 5 (January 1976): 17–34.
- Straayer, John A. *American State and Local Government*. Columbus, Ohio: Merrill, 1973.