The State Wealth-Legislative Compensation Effect

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Legislative scholars have paid almost no attention to explanations for the level of compensation provided to legislators, either within a country or cross-nationally. This neglect is surprising for several reasons. Theoretically, higher levels of compensation provide legislators increased incentive to serve, which in turn leads to longer tenure in the legislature. Greater pay also promotes a member's ability to focus his or her efforts on legislative activities without the distraction of a competing occupation (Squire, 2007). Empirically, the strong negative relationship between legislative compensation and membership turnover in American state legislatures is well established (Rosenthal, 1974; Squire, 1988). In addition, competition for state legislative seats increases with salary levels (Squire, 2000). Pay also differentially attracts potential legislators; in the American case higher compensation lures more Democrats than Republicans (Fiorina, 1994; 1999). Finally, legislative professionalism—an institution's capacity to generate and evaluate information in the policymaking process—is measured in part by member salary (Carey et al., 2000: 694; Squire, 1992; Thompson and Moncrief, 1992: 199). Indeed, compensation alone is occasionally used to measure legislative capacity (see, for example, Huber et al., 2001). Thus how much legislators get paid influences the kind of people attracted to service, how long they serve, how much electoral competition they have for the job and possibly even how well they perform their official tasks.

Yet, despite the importance of legislative compensation, we know little about it beyond the fact that it varies considerably across legislatures. Why it varies is still a mystery. In this paper I argue that differences in compensation paid legislators are driven in large part by differences in nation or state wealth. I test this simple hypothesis using two novel data sets. One set is data on legislative compensation in 35

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national assemblies. The other set is data on salaries paid to subnational legislators in four federal systems: Australia, Canada, Germany and the United States. Analysis of both sets of data reveals that nation or state wealth, measured as gross product, is strongly associated with legislator compensation. I argue that this finding is consistent with an intriguing analog in the labour economics literature.

The Literature on Legislative Salaries

The few academic studies that examine legislative compensation all look at American state legislatures. Although meagre in number, these works offer some interesting results. Economists McCormick and Tollison conceive of legislatures as unions and find that wages in the mid-1970s were considerably higher in bodies where members could set their own pay than in bodies where wages were set externally, typically by a constitution (1978).[1] Sollars, another economist, reported similar findings for salaries in the early 1980s (1990). But when Sollars examined data from the late 1980s, a time just after some states had changed the rules governing their methods of setting of legislative compensation, he found that legal restrictions were unimportant in explaining the level of pay (1994). In both of Sollars' studies, however, legislative session length and state tax revenues were important predictors of salaries.

Analyzing legislative compensation through the prism of legislative professionalization, political scientists Moncrief (1988) and Squire and Hamm (2005) come to slightly different conclusions from those reached by the economists. Moncrief reports that state per capita income is the only substantively and statistically significant variable explaining legislative compensation at four time points between the 1950s and the 1980s (1988). Squire and Hamm arrive at a similar conclusion (2005: 88–92). Examining five different time points between 1910 and 1999, they find that total state income accounts for differences in legislative wages cross-sectionally at each time point and it also explains the cross-sectional change in wages from one time point to the next. Both Moncrief (1988) and Squire and Hamm (2005) devise arguments that link the level of policy demands made by a state's electorate, as suggested by a state's per capita income or total state income, to legislator wages, arguing higher demands are associated with higher pay.

It is this latter line of reasoning that I pursue. As Squire and Hamm observe, "It is very easy to understand how 35 million Californians can more easily finance their 120 member state legislature at a generous level than 500,000 Wyomians can support their 90 legislators. Large populations generate more income that can be used to finance the legislature, and the costs are spread across more people" (2005: 86). From an eco-

Abstract. Legislative scholars have paid almost no attention to explanations for the level of compensation provided to legislators, either within a country or cross-nationally, despite its importance to members and institutions. I posit a simple theory based on state wealth to explain differences in legislative pay. I test this theory using two novel data sets, one on 35 national assemblies, the other on subnational assemblies in Australia, Canada, Germany and the United States. Analysis of these data reveals that national or state wealth is strongly associated with legislator compensation. This finding is consistent with an intriguing analog in the labour economics literature.

Résumé. Les érudits du monde législatif ne se sont guère penchés sur les raisons des divers niveaux de rémunération des législateurs, à l'échelle nationale ou transnationale, malgré l'importance du sujet pour les institutions et les membres des législatures. Pour expliquer cette disparité, j'avance une simple théorie fondée sur la richesse des États. J'évalue ensuite cette théorie en m'appuyant sur deux nouvelles bases de données, la première portant sur 35 assemblées nationales et l'autre sur des assemblées sous-nationales en Australie, au Canada, en Allemagne et aux États-Unis. Ces analyses statistiques démontrent qu'il existe effectivement un lien étroit entre la richesse de l'État et la rémunération des législateurs. Cette constatation est confirmée par une analogie fascinante dans la littérature sur l'économique du travail.

nomics perspective membership sizes of American state legislatures do not really vary much (Stigler, 1976)—and the same is true of the national and other subnational chambers studied here. But the costs of financing these legislatures are spread across national or state economies of vastly different sizes. Thus, as national or state wealth increases the per capita cost of financing a legislature declines, which in turn may produce a strong relationship between nation or state wealth and legislative compensation.

In addition to the capacity to finance legislative compensation, total wealth might tap another dimension as well. Generally speaking, where national or state wealth is greater, populations are larger and, as a result, usually more socially and economically diverse. This diversity generates more interests and potentially more conflict, leading to greater demands on government. It seems reasonable to expect that increased demands or workloads should produce support for higher levels of legislative compensation to attract better qualified people to government service. Consequently, total national or state wealth may in part capture the level of demands on the legislature as well as the nation or state's capacity to pay for legislative service.

Legislator Salaries in National Assemblies

To conduct a first test of the state wealth hypothesis I collected 2005 legislative salary data from 35 national assemblies, 20 in countries deemed advanced economies by International Monetary Funds standards, and 15 in countries considered emerging market economies.[2] (National assembly data sources are given in appendix A.) Although most of the coun-

tries in the data set are European, countries from the rest of the world are included. Salaries were converted from the local currency to US dollars using the July 1, 2005, conversion rate. As might be anticipated, legislative salaries vary considerably across nations. The mean salary was $66,874 and the median salary was $74,917. The range, however, is substantial, with annual salaries under $20,000 being paid in nine countries, and salaries in excess of $125,000 being paid in four countries.

Explaining National Legislator Salaries

What explains national differences in legislative salaries? The argument advanced above offers a simple theory: wealthier nations pay more than poorer nations. But if, as I argue, wealth matters, the question then becomes whether that means total national wealth or per capita wealth. I argue on theoretical grounds that it should be total wealth and not per capita wealth that explains differences in legislative pay. I take this position because given that legislatures are of roughly equal membership sizes, a nation or state with considerable total wealth, even if it is only of moderate per capita wealth, will still be able to generate more revenue with which to support its legislators than will a country or state with less total wealth, even if it is wealthier on a per capita basis.

A series of OLS (ordinary least squares) equations testing this theory are presented in Table 1. In each equation, legislative salary is the dependent variable. Equation 1 examines all 35 countries, with only gross domestic product and per capita gross domestic product entered as independent variables.[3] Coefficients for both variables are statistically significant and substantively large.[4] The difference in legislative salaries between the country with the largest gross domestic product and the country with the smallest gross domestic product works out to $112,053. Only a slightly smaller gap is predicted by the per capita coefficient, a $96,566 pay difference between the wealthiest country by this measure and the poorest country. Although simple, equation 1 enjoys a reasonably impressive adjusted R^2 (coefficient of determination) of .586. Clearly, the equation demonstrates that national wealth has a substantial impact on legislative pay.

Equation 2 examines the influence of country population size on legislative salaries. Population is an obvious alternative to gross domestic product as a measure of country size. Because population is not highly correlated with either gross domestic product or per capita gross domestic product in this sample of countries, it can be entered in an equation to assess its impact on legislative salaries.[5] The results clearly demonstrate that economic wealth, not population, is linked to legislative salaries. The coefficients for gross domestic product and per capita gross

TABLE 1

National Assembly Legislator Salary, Controlling for Gross Domestic Product (OLS regressions)

Variable	Equation 1 All Countries	Equation 2 All Countries	Equation 3 All Countries	Equation 4 Advanced Economy Countries	Equation 5 Emerging Market Economy Countries	Equation 6 OECD Countries	Equation 7 All Countries
Gross Domestic Product in USD Billions	.009[b] (.002)	.009[b] (.003)	.007[b] (.002)	.007[b] (.002)	−.023 (.016)	.009[a] (.003)	.009[b] (.003)
Gross Domestic Product Per Capita in USD	1.521[c] (.308)	1.455[c] (.322)	−.711 (.489)	−.764 (.665)	−.922 (.715)	1.074 (.570)	1.479[c] (.334)
Population		−22.448 (30.178)					
Advanced Economy Dummy			90,128[c] (17,452)				
Total Government Revenues as Per Cent of GDP						285 (1,160)	
2004 Size of Government							−1,549 (4,363)
Constant	19,727[a] (9,184)	22,123[a] (9,793)	27,213[c] (6,993)	119,239[c] (27,158)	32,420[b] (7,145)	25,332 (51,886)	29,742 (29,704)
Adjusted R^2	.586	.580	.770	.301	.045	.340	.575
N	35	35	35	20	15	23	35

[a]$p < 0.05$; [b]$p < 0.01$; [c]$p < 0.001$ for a two-tailed test.

domestic product barely change from equation 1, while the coefficient for population takes the wrong sign, is far from statistical significance, and is substantively unimpressive.[6]

There is, however, another notable distinction among the countries in the study that might well influence legislative salaries: some have what the International Monetary Fund (IMF) considers to be advanced economies while the others have emerging market economies. Equation 3 includes a simple dummy variable for an advanced economy along with the gross domestic product and per capita domestic product variables. The coefficient for the advanced economy variable is statistically significant and very large. Controlling for both measures of national wealth, the difference in legislative salary between an advanced economy country and an emerging market economy country is $90,128. Importantly, the coefficient for gross domestic product, the variable of theoretical interest, remains both statistically significant and substantively powerful. The coefficient for per capita wealth, however, takes the wrong sign and fails to achieve statistical significance. Overall, equation 3 performs quite well, with an adjusted R^2 of .770.

The results of equation 3 raise the possibility that explanations for legislative salaries in countries with advanced economies may differ from explanations for countries with emerging market economies, suggesting the need to run two separate equations (Pindyck and Rubinfeld, 1991: 223). Equation 4 reruns equation 1 on the subset of countries with advanced economies. As predicted, legislative salaries in these countries appear tied to total gross domestic product. The coefficient for that variable is statistically significant and large, with a predicted difference of $87,080 between the largest and smallest advanced economies. The variable for per capita wealth takes the incorrect sign and is not statistically significant.[7]

In contrast to equation 4, the results of equation 5 reveal that neither gross domestic product nor per capita gross domestic product influences legislative salaries in emerging market economy countries. Both coefficients take the wrong sign and do not approach statistical significance. Moreover, the equation explains virtually none of the variance.[8] The lack of any relationship between national wealth and legislative salaries in countries with emerging market economies might raise concerns about corruption among their political elites.

Equations 6 and 7 present a different test of the basic theory examined here. Equation 6 is run on data from the 23 OECD countries contained in the larger data set, while equation 7 is run on the full data set. Both equations examine whether legislative salaries are linked to the financial size of the government.[9] Thus equation 6 includes a variable for total government revenues as a percentage of gross domestic product, while equation 7 uses a measure of government size provided by the *Economic*

Freedom of the World: 2006 Annual Report (Gwartney and Lawson, 2007). As suggested earlier, it is plausible to hypothesize that increased demands, as represented by government taking a larger share of the gross domestic product, should produce higher legislative salaries to attract better legislators. This might be the case because legislators need to be paid more as the government's role in the economy increases. (Alternatively, perhaps, legislators could be thought to simply boost their take as government revenues multiply.) Thus my expectation for the total government revenues variables is that legislative salaries should increase as the government's slice of the economy rises. Given the coding of the government size variable—higher scores indicate smaller governments—its coefficient should take a negative sign, again indicating that compensation goes up as governments grow bigger.

The results of equations 6 and 7 throw cold water on this hypothesis. The coefficient for total government revenues as a percentage of gross domestic product takes the predicted sign, but it is substantively small and very far from achieving statistical significance. The same is true for the government size coefficient. Both signal that the level of demands on the government does not drive legislative salaries. Only the coefficient for gross domestic product is statistically significant in both equations, and once again, it is substantively impressive in each.[10]

Overall, having attacked my simple state wealth theory from a number of different angles I find that, with the exception of the subset of developing economy countries, gross domestic product is strongly related to the size of the salaries paid to national legislators. For the most part, per capita wealth does not appear to play a role. Given the limited data set on which the theory has been tested, however, additional tests are required to confirm it.

Subnational Legislator Wages in Four Federal Systems

The second set of data I use to test the state size hypothesis is constructed from compensation paid to subnational legislators in four federal systems. The annual salaries paid to state or provincial legislators in Australia, Canada, Germany and the United States in 2005 are presented in Table 2. (Subnational assembly data sources are given in appendix B.) For each country the table provides the minimum and maximum salary offered by a state or provincial legislature and the median salary. Salaries are given both in the local currency and US dollars.

The highest median salary and the smallest gap between the highest salary and lowest salary are found in Australia. Parliamentary salaries in six of the eight Australian state and territorial legislatures are pegged to that of the federal parliament. In some cases the state or territorial salary

TABLE 2

2005 State Assembly Salaries in Four Federal Systems

Country	Number of State or Provincial Assemblies	Minimum Annual Salary[a]	Maximum Annual Salary	Median Annual Salary
Australia	8	90,957 AUD 68,400 USD	110,650 AUD 83,209 USD	109,429 AUD 82,291 USD
Canada	13	48,165 CAD 38,821 USD	86,660 CAD 69,848 USD	67,698 CAD 54,565 USD
Germany	16	27,360 EUR 32,723 USD	114,000 EUR 136,344 USD	52,098 EUR 62,309 USD
United States	50	100 USD	99,000 USD	16,650 USD

[a]Salary figures are given in both the local currency and in US dollars, using the July 1, 2005, conversion rate.

is only slightly less then the federal parliament wage, being set lower by only 500 AUD in both New South Wales and Queensland. In other cases the difference is larger, the most extreme being Tasmania where wages are fixed at 85.19 per cent of the wage for the national parliament, creating a gap of 20,193 AUD in 2005.

Salaries are also comparatively high in the German Landtage. Indeed, the Landtag in North Rhine Westphalia offers the highest wage among the state or provincial legislatures in the four countries in the study: 114,000 EUR or $136,344, (or more than the salary paid in all but three of the 35 nations studied above). This sum is, however, potentially deceptive because it reflects a recent decision to lump together a number of allowances given the Landtag parliamentarians, some of which were intended to cover constituency service expenses and the like; thus it is not clear that this entire sum is to be used as salary by North Rhine Westphalia parliamentarians. The range of salaries is greater in Germany than in Australia, in part because of the considerably lower wages paid to members of the three city-state Landtage (Berlin, Bremen and Hamburg).

Members of provincial and territorial legislative assemblies in Canada are less well paid than their counterparts in Australia and Germany. The gap between the highest salary legislative assembly (Ontario, $69,848) and the lowest salary legislative assembly (Prince Edward Island, $38,821) is bigger than the gap among Australian state parliaments but less than the gap among German Lantage. There is little to distinguish the salaries paid members of the Canadian territorial assemblies from those paid to members of provincial assemblies; MLAs from the Northwest Territories are among the best paid, those from Nunavut are in the mid-range, and Yukon assembly members are near the bottom of the salary rankings.

Salaries in American state legislatures are markedly different from those paid to their counterparts in the other three countries. Most notably, the median salary in American state legislatures is much lower, representing only between 20 per cent of the salary earned by Australian state and territorial legislators and 31 per cent of the salary earned by members of the Canadian provincial and territorial legislative assemblies. And the range between the highest salary and the lowest salary is far greater than elsewhere. In 2005 state legislators in California were paid $99,000. In contrast, state legislators in New Hampshire earned only a $100 annually, a sum set in the state constitution and left unchanged since 1889. The difference between the two salaries is a staggering $98,900.

Explaining Subnational Legislative Salaries

Does state or province wealth account for the observed differences in legislative pay across the subnational bodies in each country? In Table 3 gross state or provincial product and per capita gross state product are correlated with state legislative pay in each of the four countries. Correlations are initially used because the number of cases in three of the countries is small. The relationships revealed by the correlations are consistent across the four countries. Large positive correlations are found between salaries and gross state product. These correlations easily surpass traditional levels of statistical significance in three of the four countries, the lone exception being Australia which only provides eight cases for analysis. But even the Australian correlation is large, in the expected direction, and close to achieving statistical significance.

In contrast, the correlations between salaries and per capita gross state product are much smaller and, in the case of Germany, the correla-

TABLE 3

Correlations of State Assembly Annual Salary with Gross State Product and Per Capita Gross State Product

Country	Pearson Correlation with Gross State Product	Statistical Significance (two-tail)	Pearson Correlation with Per Capita Gross State Product	Statistical Significance (two-tail)
Australia	.572	.138	.260	.533
Canada	.634	.020	.422	.151
Germany	.810	.000	−.098	.718
United States	.682	.000	.302	.033

tion is in the wrong direction. Moreover, the correlations are far from reaching traditional levels of statistical significance in Australia and Germany. Only in the American case are they statistically significant.

Clearly, the results in Table 3 support the hypothesis that state wealth, as measured by gross product, is associated with legislative salaries. The existing literature, however, raises several competing explanations which need to be tested. Only American case provides a sufficient number of cases to conduct fully specified analyses along these lines. There are, however, some simple multiple regression equations that can first be used to probe the strength of the state wealth-legislative salary relationship in the Canadian and German cases.

Table 4 provides the results of two OLS equations with Canadian provincial and territorial legislative assembly salaries as the dependent variable. In the first equation only gross product and per capita gross product are entered as independent variables.[11] Coefficients for both independent variables take the predicted signs. Only the coefficient for gross product, however, is large and achieves statistical significance. The per capita gross provincial product is small and fails to reach statistical significance. In the second equation a dummy variable for territorial status is added. Again, only the coefficient for gross product is statistically significant and substantively large. The gap between the wealthiest province and the least wealthy territory computes to 25,805 CAD. The coefficient for per capita gross product again takes the correct sign but fails to reach statistical significance. It is also of considerably less substantive importance. The difference between the wealthiest province per

TABLE 4

Provincial Assembly Salary, Controlling for Gross Provincial Product, Per Capita Gross Provincial Product, and Provincial Status (OLS regressions)

Variable	Equation 1	Equation 2
Provincial Gross Product in CAD millions	.045[a]	.048[a]
	(.014)	(.016)
Provincial Gross Product Per Capita in CAD	.260	.220
	(.127)	(.152)
Territorial Status		3,522.3
		(6,748.7)
Constant	51,755.5[c]	52,361.4[c]
	(6,251.8)	(6,595.5)
Adjusted R^2	.496	.456
N	13	13

[a]$p < 0.05$; [b]$p < 0.01$; [c]$p < 0.001$ for a two-tailed test.

capita and the least wealthy province per capita works out to only 2,922 CAD. As expected given the range of salaries paid legislators in territorial assemblies, the coefficient for that variable is far from statistically significant. Finally, the adjusted R^2 in each equation suggests the equations account for a respectable amount of the variance.

I use similar equations to examine the German case. Table 5 presents the results of two OLS equations with Landtag salary as the dependent variable. In the first equation, only gross product and gross product per capita are entered as independent variables.[12] In this simple equation both coefficients are statistically significant, but only the gross product coefficient is in the predicted direction.

In the second equation two dummy variables are added. One dummy variable is for city-state status and the other dummy variable is for former German Democratic Republic (GDR) status. The rationales for the two dummy variables are straightforward. As noted above, the Landtage in Berlin, Bremen and Hamburg are paid considerably less than the other Landtage. Moreover, their functional status might arguably be considered somewhere between a city council and a state parliament. The dummy variable for city-state status checks whether the apparent state size-legislative salary relationship in Germany is really a product of their special status. Similarly, it seems reasonable to control for the former GDR states on the assumption that they might pay less well than their longer established western counterparts because of their dissimilar political histories.

TABLE 5

Landtag Salary, Controlling for Gross Länder Product, Per Capita Gross Länder Product, and Länder Status (OLS regressions)

Variable	Equation 1	Equation 2
Länder Gross Product in EUR millions	.137[c]	.109[b]
	(.022)	(.026)
Länder Gross Product Per Capita in EUR	−.889[a]	−.439
	(.392)	(.615)
City-State		−17,364.5
		(10,156.9)
Former GDR Länder		−5,179.7
		(8,585.3)
Constant	59,440.8[c]	56,765.6[b]
	(9,903.3)	(16,151.7)
Adjusted R^2	.716	.739
N	16	16

[a]$p < 0.05$; [b]$p < 0.01$; [c]$p < 0.001$ for a two-tailed test.

The results of equation 2 confirm the importance of the state size hypothesis in the German case. Among the independent variables only the coefficient for gross product reaches traditional levels of statistical significance. Moreover, the coefficient's substantive impact is large and in the predicted direction. The wage difference between North Rhine West-phalia, the Land with largest gross product, and Bremen, the Land with the smallest gross product, works out to 48,343 EUR. Although the coefficients for the other independent variables are not statistically significant, it is worth noting that the coefficient for city-state status just misses meeting traditional levels of significance, takes the predicted negative sign, and suggests that the three city states pay lower wages by 17,365 EUR. Finally, the adjusted R^2 in each equation shows that these simple models account for an impressive amount of the variance.

American state legislatures, of course, provide 50 cases to analyze, enough for a more rigorous test of the state wealth-legislative salary hypothesis. As noted earlier, Moncrief (1988), Sollars (1990; 1994), and Squire and Hamm (2005) report a positive relationship between legislative pay and the size of state economies measured in various ways, findings that are compatible with the state wealth-legislative salaries hypothesis. But alternative explanations can be offered. McCormick and Tollison find that legislative control of wages leads to higher salaries (1978), while Sollars finds that pay increases with legislative session length (1990; 1994). State partisanship might also be related to legislative salaries. Democrats are arguably more supportive of higher government spending than are Republicans which may translate into backing for higher legislative wages. Finally, region must be controlled to account for any statistical residue of the argument that the "South is different" (Fiorina, 1997: 156–57). The expectation is that, everything else being held equal, the states in the South will pay lower wages to their state legislators than states in the rest of the country, largely for cultural and historical reasons.

OLS equations with state legislative salary in the United States as the dependent variable are presented in Table 6. Again, the variable of interest is gross product. Also entered are per capita gross state product, a dummy variable for whether a state legislature controls setting its own pay, the number of days the legislature meets on an annual basis, the vote percentage for the Democratic presidential candidate in the state in the 2004 election, and a dummy variable for the eleven states of the Confederacy.[13]

Equation 1 again gives results of the simple, two-variable regression model. The coefficient for gross state product is large and statistically significant; the coefficient for per capita gross state product is in the right direction but fails to achieve statistical significance. The results of the more fully specified equation 2 further reinforce the state wealth-

TABLE 6

American State Legislative Salary, Controlling for Gross State Product, Per Capita State Product, Partisan Leaning, Region, and Legislative Characteristics (OLS regressions)

Variable	Equation 1	Equation 2
Gross State Product in millions of Dollars	.049[c]	.042[c]
	(.007)	(.007)
Gross State Product Per Capita in Dollars	.534	.067
	(.315)	(.268)
Democratic Vote Per Cent for President in 2004		558.454[a]
		(242.983)
South		−12,872.8[a]
		(5,106.865)
Session Length		122.168[a]
		(50.173)
Legislative Control of Pay		−1,539.309
		(3,853.296)
Constant	−8,068.0	−17,648.3
	(12,791.7)	(14,004.827)
Adjusted R^2	.474	.674
N	50	50

[a]$p < 0.05$; [b]$p < 0.01$; [c]$p < 0.001$ for a two-tailed test.

legislative salary effect. Even with the host of control variables entered in the equation the coefficient for gross state product is statistically and substantively significant. Indeed, the predicted wage gap between the state with the largest gross product (California) and the state with the smallest gross product (Vermont) is huge: $67,145. Although several other coefficients also are statistically significant, each is of less substantive importance. The predicted difference in legislative pay between the state with longest legislative session and the state with the shortest legislative session computes to $27,366. Similarly the most Democratic state pays $20,322 more than the least Democratic state. And states in the South pay $12,873 less than the other states. Consistent with Sollars' findings (1994), the coefficient for legislative control of setting its pay is statistically insignificant and even takes the wrong sign. Finally, once again per capita gross state product falls far short of statistical significance.

Conclusions

The analyses presented here strongly suggest that differences in both national legislative salaries and subnational legislative salaries are

explained in large part by differences in total state wealth. Simply stated, nations or states with larger gross products pay their legislators more. The strength of this finding is impressive. It is found cross-nationally across a range of different size economies, as well as subnationally within each of four different federal systems. Thus a state wealth-legislative compensation effect is confirmed.

Perhaps this finding should not be surprising because arguably there is an analogy between state wealth and legislative salaries and a well-established relationship in labour economics between firm size and wages. First uncovered by Moore (1911), the positive association between firm size and wages has been confirmed many times (Brown and Medoff, 1989; Hollister, 2004; Mellow, 1982), and has held in studies of countries other than the United States, notably in Australia (Izan et al., 1998; Wooden and Bora, 1999); Canada (Morissette, 1993: Zhou, 2000), and Germany (Schmidt and Zimmerman, 1991), as well as in the United Kingdom (Cosh, 1975) and Belgium (Lallemand et al., 2005). Although firm size in these studies is usually measured by the number of employees, which would suggest population as the appropriate analog, several (Cosh, 1975; Izan et al., 1998; Lambert et al., 1991; Kostiuk, 1990; Zhou, 2000) use total assets or sales revenue instead, measures which correspond more closely to gross product measures. Moreover, firms and nations have been equated by Dahl (2001: 250) and Lake and Baum (2001: 590). Consequently, it seems reasonable to consider legislative salaries from the perspective that nations or states are motivated to offer legislators salaries for many of the same reasons that firms offer wages to employees.

Does the labour economics literature suggest any additional reasons beyond those tested here to explain why such relationships appear? Surprisingly, it provides very few. As one exhaustive attempt to pin down encompassing explanations concluded, "In all cases, there still remains a large, significant and unexplained employer size-wage premium" (Troske, 1999: 25). One hypothesis that has received little empirical backing links higher wages to efforts by larger firms to lower employee performance monitoring costs. Somewhat stronger empirical evidence has been uncovered in support of the related proposition that larger firms hire better skilled workers accounting for their higher wages (Brown and Medoff, 1989; Troske, 1999). Unfortunately, neither of these notions translates well into the legislative setting.

Another explanation has surfaced in labour economics but been left untested. Bayard and Troske mention the possibility the firm-size wage effect results from the fact "that large employers simply have more output over which to amortize large sunk-cost investment" (1999: 103). This explanation, of course, fits with the theory offered here. Given that legislatures do not really vary much in membership size, wealthier states are better able to finance their legislators than are less wealthy states.

Although I speculated that there may be more to the wealth-salary relationship than the simple idea that wealth makes it easier to pay legislator more, the analyses presented here provide little support for the notion that increased demands on the political system require governments to pay their legislators higher salaries as a means to attracting better qualified people, at least at the national level. In the end, the findings produced here document the simple but powerful finding that bigger nations or states pay more.

Notes

1 Although compensation is typically thought to encompass more than just salary or pay, I will use the terms interchangeably.
2 The advanced economy countries in the data set are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and the United States. The emerging market economy countries are Czech Republic, Estonia, Hungary, India, Jamaica, Latvia, Lithuania, Malta, Panama, Peru, Poland, Slovakia, Slovenia, South Africa and Uruguay.
3 The correlation between gross domestic product and per capita gross domestic product is only .267, assuaging concerns about collinearity.
4 In all of the equations in Table 1, substituting the log of gross domestic product for gross domestic product does not change any of the statistical relationships reported here.
5 2005 population correlates with 2005 gross domestic product at .273 and at −.181 with 2005 per capita gross domestic product.
6 When entered into an equation with just gross domestic product, population still takes a negative sign, is only marginally larger and fails to reach traditional levels of statistical significance. When entered into an equation with just per capita gross domestic product, population switches to a positive sign, is of a substantively trivial size and is far from being statistically significant.
7 In this sample of countries the correlation between the two independent variables is −.040. When the equation is run with only one of the independent variables entered, nothing changes, either statistically or substantively.
8 In this sample of countries, the correlation between gross domestic product and per capita gross domestic product is −.432, large enough to raise some concerns about collinearity. When the equation is run dropping one or the other independent variable, each coefficient still takes a negative sign, is substantively small, and is far from reaching statistical significance.
9 The OECD countries in the data set are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Poland, Slovakia, Sweden, Switzerland, United Kingdom and the United States.
10 In the OECD sample of countries the two independent variables correlate at .115. When per capita gross domestic product is entered into the equation by itself the coefficient continues to take a positive sign, increases slightly in size and is statistically significant at the .05 level.
11 The correlation between gross domestic product and per capita gross domestic product is only .001, removing any concerns about collinearity. Population and gross state

product are highly correlated in each of the four countries (between .985 and .995), thus no equations are run with those two variables both entered.

12   The correlation between gross domestic product and per capita gross domestic product is only .267, alleviating concerns about collinearity.

13   The correlation between gross domestic product and per capita gross domestic product is only .189, greatly minimizing any concerns about collinearity. Among the other correlations, only that between days in session and gross product (.411) raises any concerns. Dropping days in session from the equation does not statistically or substantively change the findings reported in equation 2.

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Appendix A. National Data Sources

Parliament or legislature salary (all salaries as of July 1, 2005): Australia— Leanne Manthorpe, "Parliamentary Allowances, Benefits, and Salaries of Office," Parliament of Australia, Parliamentary Library, E-Brief: Online only issued July 1, 2005, with subsequent amendments; parliamentary websites for Canada, Denmark, Finland, France, Germany, Hungary, India,

Italy, Netherlands, New Zealand, Panama, Peru, South Africa, Sweden, Switzerland, United Kingdom, United States, and Uruguay; by email or fax from parliamentary staff in Austria, Belgium, Czech Republic, Estonia, Iceland, Ireland, Jamaica, Japan, Lithuania, Malta, Norway, Poland, Slovakia, and Slovenia; and through the kind assistance of political science colleagues Reuven Y. Hazan in Israel and Irmina Matonyte in Latvia.

Gross domestic product, per capita gross domestic product, and population: taken from the International Monetary Fund, World Economic Database.

Total general government revenue as a percentage of GDP is taken from OECD, *National Accounts of OECD Countries* (2005). Government size is taken from *Economic Freedom of the World: 2006 Annual Report*.

Appendix B. Subnational Data Sources

Assembly or legislature salary (all salaries as of July 1, 2005): Australia—Leanne Manthorpe, "Parliamentary Allowances, Benefits, and Salaries of Office," Parliament of Australia, Parliamentary Library, E-Brief: Online Only issued 1 July 2005 with subsequent amendments; Canada—website for every provincial assembly except British Columbia, New Brunswick, Newfoundland and Labrador, Nunavut and Ontario, each of which had staff who provided the information by email or fax; Germany—website for every Landtag except Mecklenburg-Vorpommern which had staff who provided the information by email; and United States, *Book of the States 2005* (Council of State Governments, 2005), with appropriate calculations for states that provide compensation other than by annual salary.

Gross state product: Australia—Australian Bureau of Statistics, 5220.0—Australian National Accounts: State Accounts, 2004–05, Table 1. Gross State Product (data for June 2004); Canada—Statistics Canada, Gross Domestic Product, Expenditure-Based, by Province and Territory, (data for 2005); Germany—Federal Statistical Office of Germany, *German Länder 2005*, Gross Domestic Product in 2003; United States, U.S. Bureau of Economic Affairs, Table 2, Gross State Product in Current Dollars, 2002–2005 (data for 2005).

Population: Australia—Australia Bureau of Statistics, 3101.0—Australian Demographic Statistics, Dec 2005; Canada—Statistics Canada, Population by Year, by Province and Territory; Germany—Federal Statistical Office of Germany, *German Länder 2005*; United States—U.S. Census Bureau, Table 1, Annual Estimate of the Population for the United States and States, and for Puerto Rico: April 1, 2005.