

Estimating the Compensation Differential for Paid Sick Leave Benefits

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Abstract In this paper, we seek to estimate the wage compensation differential for paid sick leave in the United States using national-level data from the 1996-2010 data from the Medical Expenditure Panel Survey (MEPS) household component. The standard theoretic labor models suggest that wages are a function of paid sick leave benefits, other job characteristics, employee characteristics, other immeasurable worker characteristics. Testing this simplified theory, we find that estimates were significant but wrong-signed (from the perspective of our theory); workers who gained access to sick pay had also exhibited an increase in wages, and vice versa for those who lost access to sick pay. As such, we find that state-level data may, or perhaps more specific data may be needed to pin down causality, where exogenous policy variation can be captured.

Introduction

The primary focus of this study is to estimate the wage compensation differential for paid sick leave in the United States. Sick leave benefits are defined as paid time off while an employee temporarily cannot work because of a nonwork-related illness or injury.¹ Most standard theories of wage differentials in the labor market predict that workers will bear the cost of fringe benefits, and empirical studies tend to support the claim that the majority of the cost of these fringe benefits fall on the burden of the workers.² All else equal, jobs that provide more in the way of such fringe benefits as paid sick leave pay lower wages or salaries.

At present, there are fairly few federal laws that pertain either directly or indirectly to the employer provision of paid sick leave or sickness absence insurance, with the exception of the Family and Medical Leave Act (FMLA) of 1993, which grants (unpaid) sick leave benefits to employers for various health-related reasons.³ Recently, however, city and state governments in San Francisco, Seattle, Connecticut, and elsewhere have passed paid sick leave ordinances, and several other states such as Arizona, Minnesota, and Illinois are considering such legislation.⁴ Legislation mandating employers provide sick paid leave benefits have major implications on wage levels and wage differentials. If uncovered workers were to gain paid sick leave benefits through laws mandating employers to cover such amenities, employers would perhaps be inclined to cover a significant portion of this added cost through lower wages. An understanding of the relationship between wage levels and levels of employer provided fringe benefits, then, is key to understanding the effects of related policy proposals which are likely to appear in the future.

Literature Review

Although there exists extensive literature on the estimation of the compensation differentials for employer-provided health care coverage, literature regarding paid leave access, including paid sick leave and other fringe benefits of this kind, has been given relatively short shrift. There exists evidence, as presented in Morrissey (2001), that health insurance provision in particular is significantly correlated with paid sick leave provisions.⁵ Because of the strong connection between health care and fringe benefits, it will be helpful to take a brief look at the review the literature of the compensation differential for health care benefits.

Miller (2004) uses data from the 1988-1990 Consumer Expenditure Surveys (CEX) to look at men who had either gained or lost health insurance coverage between the first and final rounds of the surveys. He finds that workers who lose employer-provided health insurance are compensated with an approximately 10% wage increase. By utilizing a fixed effects specification, it can be inferred that the wages of those with health insurance are approximately 10% lower than they would be otherwise. One shortfall of this approach, however, was that the author (admittedly) did not control for other fringe benefits, including paid vacation and paid sick leave, which have been shown to be correlated to both wages and health care/insurance benefits.⁶

Levy and Feldman (2001) conduct a similar study using both CEX data from 1998 to 1990⁷ as well as MEPS data from 1996. This paper builds on the estimations by recognizing the need to include such explanatory variables as employee premium contributions, measures of health status, and other individual attributes that would affect expected medical spending and valuation of benefits. The paper thus further

¹ Diaz, I. and R. Wallick 2009.

² This will be discussed this in greater detail in the Literature Review section.

³ Levine, L. 2009.

⁴ Buck Consultants 2012.

⁵ Morrissey, M.A. 2001.

⁶ Morrissey, M.A 1993.

⁷ Same data set used in Miller (2004)

addresses the need to consider the individual's implicit valuation of employer-provided health care benefits as well as how much the individual might prefer such benefits given their health status and health expenditures. The authors chose to analyze the MEPS data in particular because it included further information on expenditures and self-reported health status; this scale displayed more variation than any other possible measure.⁸

In summary, there exists convincing empirical evidence of the existence of a wage-health insurance trade-off and a significant link between health insurance and paid sick leave in terms of how they affect wages. This paper aims to build upon the literature by taking these aforementioned factors into account and estimating the compensation differential on paid sick leave using fixed effect regression techniques. Furthermore, our study utilizes the MEPS 2009 to 2010 Panel 14 data set, which was a data set released in October of 2012. Although a few studies, such as Levy and Feldman (2001), used MEPS data sets to find the compensation differential for health insurance, none have utilized the data sets from more recent years.

Data

The data used in the study comes from the 2010 Medical Expenditure Panel Survey (MEPS) household component, which is a self-reported, publicly available data set meeting all of these requirements and is nationally-representative. Furthermore, the MEPS data from 1996 to 2010 provides a consistent time frame to analyze and extend this study on how the compensation differential had perhaps changed over time.

Theory and Methodology

The basic model wage differential compensations is fairly simple; let us first consider

a simplified model where a worker is compensated by only two things: wages and paid sick leave benefits. The marginal rate of substitution of these economic goods should be positive as both are desired forms of compensation. As workers view both wages and paid sick leave as normal goods. Similarly, for employers, the first order conditions of profit maximization imply that a worker's total compensation is equal to his marginal revenue product or productivity. As such, it is optimal for them to offer a decrease in other forms of compensation (such as wages) when paid sick leave benefits are increased.

One caveat to note is that as both wages and paid sick leave are normal goods, productivity of workers is positively correlated to both higher wages and greater access to paid sick leave. As a result, controlling for productivity (or the worker's marginal revenue product) will be very important in the study, and thus a key focus of our methodology. This simplified model suggests that wages (w) are a function of: 1) paid sick leave benefits (Sick), 2) other job characteristics, such as those listed in the previous data section (Job), 3) employee characteristics (Emp), and 4) other immeasurable worker characteristics (such as ability; these are incorporated in the error term), labeled as (M).⁹ This can be expressed as: $\ln(\text{wage}) = w(\text{Sick}, \text{Job}, \text{Emp}, M)$

If the assumption is held that the function w is linear to the parameters of interest, then a preliminary OLS regression can be estimated as follows: $\ln(\text{wage})_a = B_1 \text{Sick}_a + B_2 \text{Jobs}_a + B_3 \text{Emp}_a + e_a$. Here, ε is the error term for which includes the theoretical vector M of unmeasurable characteristics described earlier. It is expected that β_1 should be negative. At this stage, however, there exists the possibility of misspecification, due to various observed effects within the error term.

⁸Levy, H. and R. Feldman 2001.

⁹This delineation is adapted from Miller (2004).

These characteristics include productivity, ability bias, signaling bias, etc., which are likely to be correlated positively with compensation. In the next step, individual fixed effects regressions are run, controlling for unobserved omitted variables influencing paid sick leave benefits, which differ from one person to the next but tend to remain constant over time. In other words, the fixed effects are used to try to eliminate the unobservable aspects of productivity which are individual worker-specific. These fixed effects specifications are used under the assumption that the unobservable characteristics (M) are time-invariant. (Here, α is the variable for individual fixed effects). Then, the resulting specification is:

$$\ln(\text{wage})_a = B_1 \text{Sick}_1 + B_2 \text{Job}_a + B_3 \text{Emp}_a + a_i + e_a$$

Separate, specific regressions are then run for workers who lose paid sick leave at any round of the panel survey and those who gain it, as dummy variables.¹⁰ This way, the underlying symmetry assumptions of the previous specification can be addressed and rid of. Naturally, both variables equal zero for workers whose paid sick leave status was the same between all the time periods. Standard theory predicts that the coefficient on sick pay for gainers should be the same as the coefficient for losers. By analyzing the regression results for gainers and losers of sick pay separately, potentially good insight regarding the symmetry of our estimates might be found.

Along with paid sick leave, the same fixed effects models on access to paid vacation leave are also run, including comparisons between those who had gained and lost vacation leave during the rounds. Although the primary focus of our paper is on sick leave, paid vacation leave is significantly correlated with paid sick leave as mentioned earlier. These results might yield insight on the behavior of compensation differen-

tials of fringe benefits on a more general level. The regressions are then run again, both to observe its effect on hourly wages on average throughout the time period as well as during the 2 rounds where the change took place (the “instantaneous”). The model is analogously defined below:

$$\ln(\text{wage})_a = B_1 \text{Vacation}_1 + B_2 \text{Job}_a + B_3 \text{Emp}_a + a_i + e_a$$

There are also several potentially interesting ideas explored by changing minor details on these models and through basic tabulations. For instance, there are significant differences in perceived health status between those who have access to sick pay and those who do not as seen in table 3 and take this into account when the coefficients on the health status in our regressions are observed. Table 9 shows change in jobs with change in sick pay status. Empirically there seems to be a correlation between change in health insurance (also with other fringe benefits) and change in jobs.¹¹ Intuitively, this also makes sense. The major categories of reasons for changing jobs (in the MEPS data set) are: a) the worker got laid off/had their job end, or b) the worker quit the current job for another job. Our final set of regressions isolate workers who have observed both a change in sick pay as well as a job change, to focus specifically on the differences in how sick pay affected their hourly wages depending on the reason for their job change. Again, only the two rounds before/after the change in sick pay status and jobs are included. The intuition here is that workers who got laid off/had their job end would probably prioritize simply finding a new job over any of the fringe benefits, whereas workers who had quit their current job for another job are more likely to change only if they prefer their new job over the old one for some particular reason; the new job could potentially offer fringe benefits such as sick pay which the worker

¹⁰ This method was also used in Levy and Feldman (2001).

¹¹ Miller, R.J. 2004

previously did not have. As a result of this theory, it may be likely that workers who lose their current jobs (which might have sick pay) tend to also lose sick pay, while workers who change jobs of their own accord (who did not previously have sick pay) tend to both see an increase in wages as well as in the likelihood of having sick pay.

Results

Table 1 displays the summary statistics regarding workers with different benefit classifications. In the cross section, workers who have paid sick leave benefits tend to have significantly higher wages contrary to our theory, greater access to employer-provided health care and higher education levels than those without these benefits; these are benefits for which compensation differentials would be expected. All of these findings are similarly reflected in the paid vacation leave statistics. These findings reinforce the idea that wages and the differential are not determined merely by sick leave; it is likely to be the case that jobs which offer higher wages are also more relatively likely to offer paid sick leave, and further productivity bias have not been properly accounted for.

Next, table 2 shows workers of interest, who had observed a paid sick leave status change between any rounds of the survey. There is a significantly greater proportion of part time workers who gained paid sick leave compared to those who lost or were unchanged. This basic finding goes in line with the recent trend that paid sick leave benefits have typically been increasingly extended to these workers with lower relative wages and compensation who may not have had it before. Another interesting finding is that a significantly higher proportion of sick leave gainers had access to employer provided health insurance in the previous round, compared to those un-

changed, and the opposite was true for sick leave losers. This could support the idea that the two fringe benefits are correlated as stated in Morrissey (2001). However, it is also interesting to note that these results show the opposite of what our theory predicts: workers who had lost paid sick leave benefits were also “compensated” by a decrease of on average 15.33% in wages, and vice versa for those who gained paid sick leave benefits (average increase of 20% in wages). This result, although not statistically significant, again points us to the fact that further omitted variables would need to be controlled for by using a fixed effects specifications in our regressions.

One other interesting result comes from table 3, our tabulation of access to paid sick leave and self-perceived health status. While the latter measure could be biased because it is a self-reported, qualitative measure, the hypothesis that the health measure is the same between workers with and without sick pay can be rejected, with $\chi^2 > 127.1$. Generally, workers without sick pay tend to be slightly “less healthy” than those with sick pay.

The standard OLS regression is present first, in part to see how well the standard linear estimate matches our expectations; these results are presented in table 4. The coefficient for sick pay is positive and significant (at the 5% level), suggesting that comparing otherwise identical workers, a worker with sick pay would be expected have a 56% higher wage (meaning hourly wage) than a worker without sick pay. Obviously, there is bound to be significant omitted variable bias in this result; our purpose for this regression was to get a basic understanding of this relationship at face value. When other worker and occupation characteristics are included in column 2 (which had been described earlier in the data section), the coefficient on sick pay drops to 0.106, and is still

significant. Furthermore, our R-squared value increases from 0.2 to 0.45; these facts suggest that the variation in log wages is largely due to other factors besides sick pay access, which makes intuitive sense. Furthermore, the significant negative coefficient on health status, which increases as one is less healthy, suggests that a one unit increase on the health status scale (from 1-5) is associated with 2.54% lower wages. This implies that in our model, workers who are less healthy tend to have lower wages, all else equal. But overall, the positive coefficient on paid sick leave suggest that workers who have paid sick leave also tended to earn over 10% more than their counterparts without these benefits. Also, a Breusch-Pagan test for heteroskedasticity on our standard linear model yields find that, with p -value < 0.001 , the null hypothesis of homoskedasticity can be soundly rejected. Thus, all of our future regressions are run with heteroskedasticity robust standard errors.

Columns 3 and 4 of table 4 depict similar regressions, except the variables of interest are now “gain” and “loss”, indicator variables set equal to one if a worker gains or loses paid sick leave in the time period, respectively. These results describe the workers who will be of primary focus later on in the fixed regressions, namely those who have had change in access to sick pay. Workers who lost sick pay during the time period earned around 13.6% less wages (significant) than their counterparts on average throughout the rounds, but those who gained sick pay during the time period did not significantly different earnings. There is a possibility of asymmetry in wages between gainers and losers of paid sick leave, mainly that losers of sick pay had generally earned less wages to begin with. As noted before, job changes that correspond to changes in access to paid sick leave (as well as the reasons for the particular job changes) could be a major reason for these discrepancies.

Next, the basic fixed effects regression is

run with controls shown in column 1 of table 5, followed by a Hausman test on this model by comparing the estimates between our specification based on fixed effects and random effects. With p -value < 0.001 , the null hypothesis is rejected, that sick pay estimated by the efficient random effects estimator are the same as the ones estimated by the consistent fixed effects estimator. This gives a justification for the usage of the fixed effects for the remainder of the study.

The main fixed effects regression shows that having sick pay is associated a 23.2% increase in wages. Unfortunately, this result is significant, but in the direction opposite of what the hypothesis of the study - it might be the case that even with our fixed effects model, the other unmeasured reasons for changes in paid sick leave could not have been fully eliminated. Columns 2 and 3 specifically focus on workers who have lost sick pay during the time period, and the regressions in column 4 and 5 to workers who have gained sick pay during the time period. This way, the change of the wages of workers can be observed by comparing all rounds before and after their respective change in sick pay. The results are similar when the sample is restricted to workers who have exhibited a gain in paid sick leave. Thus, there still exists a general association of higher wages with sick pay benefits even when incomes within the pools of gainers and losers of sick leave are compared separately.

Table 6 presents analogous results, now estimating the compensation differential of paid vacation benefits. While this is not the primary focus of our analysis, there are noticeable similarities with our sick pay results. There are generally significant, positive (which is the opposite of what our theory predicts) coefficients on paid vacation leave, both in general and when workers who have observed a gain or loss in paid vacation leave are isolated.

Table 7 presents a key point of our analysis, with the regression of log hourly wages on the change in access to sick pay for workers, but only comparing the round before and the round after the sick pay change took place. A more direct change in wages that results from the change in sick pay can be identified in this way, instead of just taking the average of the before/after change periods (in tables 5 and 6). Again, the focus is specifically on workers who have either had a gain or loss in sick pay. The basic fixed effects regression on workers who gained sick pay are shown in columns 1 and 2 of table 7, and even after adding controls, the workers who gained sick pay also tended to gain 24.2% in wages, which is the significant coefficient on sick pay. These coefficients are generally in line with what has been observed before, but now there is a clearer discrepancy in how wages are affected by a gain versus a loss of sick pay for the workers in our data. The result that gainers of sick pay also tended to have a significant increase in wages accompanying their gain (while losers of sick pay saw no significant change in their wages following the loss) suggests that there might be an underlying factor, possibly job switches and reasons for the job switches, which might be responsible for such change in paid sick leave.

Contrary to initial assumptions, the data shows that most changes in sick pay were also accompanied by a change in the “current main job” of the worker. Table 9 presents this data; 58.3% of workers who lost sick pay had changed jobs at the time of the loss, and 76.4% of workers who gained sick pay had changed jobs at the time of the gain. This implies that most changes in paid sick leave are accompanied by changes in jobs. Given that job characteristics are certainly not homogenous (in terms of wages, hours worked, etc.) and that endogenous reasons for changes in sick pay have not been fully controlled for, this would serve as a probable threat to the validity regarding some of the previous results.

More importantly, the workers’ reasons for changing jobs could provide valuable insight as to why our model might not have been able to yield results as originally hypothesized. Table 10 shows that amongst workers who had gained sick pay and changed jobs in the same round, 67.33% of them changed jobs because they quit their current job for another job. On the other hand, less than 40% of workers who lost sick pay and changed jobs cited the same reason for the job change, while they cite much higher proportions due to their job ending or being laid off. A column Chi-squared test yields $\chi^2 = 20.40$. So, the null hypothesis is soundly rejected, that workers who had lost sick pay versus those who had gained sick pay have similar proportions in their reasons for changing jobs.

The next major focus is on the data regarding the gainers and losers of sick pay who had changed jobs and how their wages were affected by this change in sick pay, separated by their reason for their job. Tables 11 and 12 show fixed effects models on sick leave job changes, for gainers and losers of sick pay, respectively. As in tables 7 and 8, both tables present data from the round before and after each change took place. In general, workers who had changed jobs and gained sick pay tended to have around a 42% increase in wages after the job change.

Finally, table 12 shows that amongst losers of sick pay, workers hourly wages did not significantly change if they quit their current job for a new job, losing sick pay in the process. The results from these tables 11 and 12 as well as our earlier tabulations seem to confirm that even with our fixed effects models, the fundamental reasons for the job changes, which seems to be a main underlying motivating factor for the changes in sick pay, could not be properly accounted for. An ideal observation would entail perhaps a worker who had exhibited an exogenous change in sick pay at his current job (i.e. due mandated sick pay legislation in his state, and there was access to the

proper state-level data) or had exhibited this change whilst moving to a similar new job, to keep other factors constant. But because of workers' endogenous reasons for changing jobs, our fixed effects models were not able to capture these omitted variations to properly test our model. These ideas are further discussed in the next section.

Conclusion and Discussion

Overall, our estimates from the MEPS 2010 data set were significant but wrong-signed (from the perspective of our theory): workers who gained access to sick pay had also exhibited an increase in wages, and vice-versa for those who lost access to sick pay. These results continued to hold and remain significant even after specifying fixed effects with further controls, both on the immediate rounds where the changes in sick pay took place as well as on the averages of wages before and after the change throughout the survey rounds.

As noted earlier, the failure in finding our expected result could be due to the absence of exogenous variation in sick pay status; those who gain or lose sick pay seem to be largely experiencing other productivity-related changes which threaten the validity of our fixed effects identification strategy. Along these lines, employers often exert significant effort to identify workers who are more productive, i.e. more motivated, dependable, highly skilled, etc. It is highly likely that some of these workers could have switched to jobs that better match their skills, and their gain in wages and sick leave benefits may reflect their greater productivity at the new job. Other workers who have switched might have encountered health problems or other events which might have diminished their productivity. If so, these unmeasured productivity changes would bias the findings and cause a threat to validity.

However, it is to be noted that our unexpected results do not represent evidence against the wage compensation differential hypothesis.

Rather, they draw attention to the fact that significant exogenous variation in sick pay status will be necessary in order to test this hypothesis. A possible solution is to identify in the available data a natural experiment as suggested by Gruber (1994); this would cause an exogenous variation based around an event in the past decade which might have affected sick leave benefits to workers in the United States. But because legislation has been restricted mostly to the city and state levels, a challenge to such a study is the availability of new micro-data on sick pay. This scenario can more easily be examined once an exogenous change (usually an extension of sick pay) takes place on the national. Such knowledge would undoubtedly be crucial in building a greater understanding of the effects of mandated paid sick leave benefits that are likely to come up in the next few years.

Tables (Appendix)

Table 1: Sick Pay and Paid Vacation Summary Statistics

	Sick Pay	No Sick Pay	Paid Vacation	No Paid Vacation
Count	3453	2321	3975	1846
Percent Total	59.80%	40.20%	68.29%	31.71%
Average Hourly Wage (Standard Deviations)	\$22.83 (\$13.65)	\$13.07 (\$9.07)	\$21.42 (\$13.26)	\$13.39 (\$10.18)
Part-Time Employment	8.53%	41.98%	8.76%	50.22%
Employer-Offered Health Care	95.73%	58.44%	94.20%	51.84%
Education Level (%)				
Less than HS Diploma	11.71	34.78	15.11	34.05
HS Diploma	46.54	52.25	49.51	48.57
Some College/Bachelor's	27.38	9.87	24.04	11.81
Graduate School	14.37	3.09	11.33	5.57

Table 2: Unchanged vs. Changed Paid Sick Leave Status Statistics

	No Change (in Sick Pay)	Change	Gained	Lost
Count	6517	418	198	220
Change in Hourly Wage (Standard Deviation)	\$0.01 (\$1.89)	\$0.03 (\$9.62)	\$2.68 (\$8.35)	-\$2.36 (\$10.07)
Average % Change Hourly Wage (Std. Dev, in Percentage)	0.00% (9.58%)	1.40% (56.66%)	20.00% (55.68%)	-15.33% (52.25%)
Part-Time Employment	20.48%	29.67%	45.40%	16.92%
Employer-Offered Health Care	78.98%	76.84%	90.91%	62.22%
Education Level (%)				
Less than HS Diploma	21.33	20.37	18.99	21.57
HS Diploma	48.54	56.66	57.54	55.88
Some College/Bachelor's	20.16	18.28	17.32	19.12
Graduate School	9.98	4.70	6.15	3.43

Table 3: Perceived Health Status

Health Status:	Excellent	Very Good	Good	Fair	Poor
No Sick Pay	25.6%	33.2%	30.7%	9.2%	1.3%
Sick Pay	25.9%	38.6%	28.1%	6.5%	0.9%
Total	25.8%	36.5%	29.1%	7.5%	1.1%

Table 4: OLS Regressions

Key Ind. Variable	Dependent Var. Log Hourly Wages			
	(1) Sick Pay	(2) Sick Pay	(3) Loss Sick Pay	(4) Gain Sick Pay
Sick Pay	0.560*** (0.00686)	0.239*** (0.0124)		
Emp. Health Care		-0.0307* (0.0165)	-0.0546*** (0.0170)	-0.0536*** (0.0169)
Age		0.00687*** (0.000318)	0.00714*** (0.000326)	0.00724*** (0.000325)
Part Time		-0.148*** (0.0139)	-0.207*** (0.0142)	-0.202*** (0.0141)
Health Status		-0.0254*** (0.00441)	-0.0258*** (0.00453)	-0.0255*** (0.00451)
Gender		-0.197*** (0.00843)	-0.184*** (0.00859)	-0.184*** (0.00856)
Education		0.265*** (0.00532)	0.279*** (0.00530)	0.280*** (0.00529)
Loss			-0.136*** (0.0225)	
Gain				0.0276 (0.0241)
Constant	2.429*** (0.00540)	2.247*** (0.0510)	2.416*** (0.0514)	2.428*** (0.0512)
Observations	26,212	20,154	19,968	20,154
R-squared	0.203	0.449	0.429	0.429

*** p<0.01, ** p<0.05, * p<0.1

Table 5: Fixed Effects: Sick Leave

Key Ind. Variable	Dependent Var. Log Hourly Wages				
	(1) Sick Pay	(2) Gain Sick Pay	(3) Gain Sick Pay	(4) Lost Sick Pay	(5) Lost Sick Pay
Sick Pay	0.232*** (0.0393)	0.170*** (0.0293)	0.0851* (0.0488)	0.259*** (0.0399)	0.130** (0.0591)
Emp. Health Care	-0.00127* (0.000705)		0.0332 (0.0605)		-0.149* (0.0848)
Age	0.00206 (0.00214)		-0.0398 (0.0274)		0.0373 (0.0322)
Health Status	0.00170 (0.00169)		0.0232 (0.0250)		-0.0130 (0.0282)
Constant	2.636*** (0.110)	2.536*** (0.0191)	4.194*** (1.053)	2.503*** (0.0283)	1.779* (1.031)
Observations	23,671	814	606	706	532
R-squared	0.055	0.808	0.847	0.728	0.769

*** p<0.01, ** p<0.05, * p<0.1

Table 6: Fixed Effects: Paid Vacation

	(1)	(2)	(3)	(4)	(5)
Key Ind. Variable	Paid Vacation	Gain Paid Vacation		Lost Paid Vacation	
Dependent Var:	Log Hourly Wages				
Paid Vacation	0.207*** (0.0372)	0.137*** (0.0294)	0.139*** (0.0523)	0.279*** (0.0398)	0.178*** (0.0649)
Emp. Health Care	-0.00146** (0.000720)		0.00373 (0.0497)		-0.0885 (0.0659)
Age	0.00267 (0.00218)		0.00356 (0.0248)		0.0333 (0.0365)
Health Status	0.00225 (0.00174)		0.00701 (0.0241)		-0.0162 (0.0283)
Constant	2.615*** (0.110)	2.489*** (0.0195)	2.398** (0.946)	2.426*** (0.0278)	1.801 (1.138)
Observations	23,671	876	665	700	515
R-squared	0.048	0.835	0.852	0.757	0.803

*** p<0.01, ** p<0.05, * p<0.1

Table 7: FE Sick Leave Consecutive Terms

Column	(1)	(2)	(3)	(4)
Key Ind. Variable	Gain Sick Pay		Lost Sick Pay	
Dependent Var:	Log Hourly Wages			
Sick Pay	0.235*** (0.0535)	0.242*** (0.0868)	0.167*** (0.0411)	-0.0101 (0.116)
Emp. Health Care		-0.214 (0.142)		0.0278 (0.126)
Age		-0.178* (0.0994)		-0.0555 (0.131)
Health Status		-0.0342 (0.0618)		0.131** (0.0619)
Constant	2.503*** (0.0379)	8.713*** (3.251)	2.518*** (0.0291)	4.655 (4.825)
Observations	322	254	398	298
R-squared	0.735	0.787	0.791	0.855

*** p<0.01, ** p<0.05, * p<0.1

Table 8: FE Paid Vacation Consecutive Terms

Key Ind. Variable	(1)	(2)	(3)	(4)
	Gain Sick Pay		Lost Sick Pay	
Dependent Var.	Log Hourly Wages			
Paid Vacation	0.137*** (0.0294)	0.139*** (0.0523)	0.279*** (0.0398)	0.176*** (0.0633)
Emp. Health Care		0.00373 (0.0497)		-0.0878 (0.0656)
Age		0.00356 (0.0248)		0.0354 (0.0333)
Health Status		0.00701 (0.0241)		-0.0155 (0.0277)
Constant	2.489*** (0.0195)	2.398** (0.946)	2.426*** (0.0278)	1.734* (1.032)
Observations	876	665	700	515
R-squared	0.835	0.852	0.757	0.803

*** p<0.01, ** p<0.05, * p<0.1

Table 9: Change in Jobs Given Change in Sick Pay

	Lost Sick Pay	Gained Sick Pay
Did not change job	41.71%	22.98%
Changed job	58.29%	76.40%

Table 10: Reasons for Changing Job

Reason	Lost Sick Pay	Gained Sick Pay
Job Ended/Laid Off	38.95 %	15.84 %
Quit for Another Job	39.95 %	67.33 %
Other Reason	21.05 %	16.83 %

Table 11: Fixed Effects: Sick Leave Job Change Losses (Consecutive)

Dependent Var.	(1)	(2)	(3)	(4)
	Job Ended/Laid Off		Quit for other job	
Dependent Var.	Log Hourly Wages			
Sick Pay	0.175 (0.167)	0.439** (0.198)	0.327*** (0.0744)	0.416*** (0.141)
Emp. Health Care		-0.00155 (0.0392)		-0.0136 (0.0176)
Age		-0.342 (0.254)		-0.0168 (0.189)
Health Status		-0.227 (0.349)		-0.136 (0.147)
Constant	2.572*** (0.118)	13.66 (7.926)	2.441*** (0.0526)	3.177 (5.665)
Observations	32	32	136	125
R-squared	0.842	0.858	0.751	0.774

*** p<0.01, ** p<0.05, * p<0.1

Table 12: Fixed Effects: Sick Leave Job Change Gains (Consecutive

	(1)	(2)	(3)	(4)
	Job Ended/Laid Off		Quit for other job	
Dependent Var.	Log Hourly Wages			
Sick Pay	0.227*** (0.0825)	0.252 (0.158)	0.131 (0.0823)	0.0323 (0.127)
Emp. Health Care		0.0157 (0.0172)		-0.0197 (0.0228)
Age		0.0362 (0.182)		0.0669 (0.185)
Health Status		0.252* (0.130)		0.386** (0.177)
Constant	2.553*** (0.0584)	0.555 (7.253)	2.609*** (0.0582)	-0.392 (6.359)
Observations	74	69	76	71
R-squared	0.842	0.879	0.831	0.892

*** p<0.01, ** p<0.05, * p<0.1

References:

- Andersson, Fredrik et al. 2011. "Sick Listing - Partly a Family Phenomenon?" *The Journal of Socio-Economics* 40, 496-502.
- Brown, Charles. 1980. "Equalizing Differences in the Labor Market." *Quarterly Journal of Economics* 94 (1), 113-134.
- Buck Consultants. 2012. "Philadelphia Paid Sick Leave Mandate Now in Effect." *FYI: For Your Information* 35, 1-3.
- Cohen, Joel. 1997. "Design and Methods of the Medical Expenditures Panel Survey Household Component." *Methodology Report 1*, AHCPR Pub. No. 97-0026. Rockville, MD: Agency for Health Care Policy and Research.
- Diaz, Iris. and Richard Wallick. 2009. "Leisure and illness leave: estimating benefits in combination." *Monthly Labor Review - US Department of Labor* 2, 28-34.
- Gruber, Jonathan. 1994. "The Incidence of Mandated Maternity Benefits." *American Economic Review* 84 (3), 622-641.
- Miller, Richard. 2004. "Estimating the Compensating Differential for Employer-Provided Health Insurance." *International Journal of Health Care Finance and Economics* 4, 27-41.
- Morrissey, Michael. 1993. "Mandated Benefits and Compensating Differentials - Taxing the Uninsured." In R. Helms (ed.), *American Health Policy, Critical Issues for Reform*. Washington, DC: AEI Press, pp. 133-131.
- Morrissey, Michael. 2001. "Why Do Employers Do What They Do? Compensating Differentials." *International Journal of Health Care Finance and Economics* 1 (3/4), 195-202.
- Leibowitz, Arleen. 1983. "Fringe Benefits in Employee Compensation." In J. Triplett (ed.), *The Measurement of Labor Cost*. Chicago: The University of Chicago Press, pp. 371-389.
- Levine, Linda. 2009. "Leave Benefits in the United States." *Congressional Research Service (CRS) Report for Congress* 1-21.
- Levy, Helen and Roger Feldman. 2001. "Does the Incidence of Group Health Insurance Fall on Individual Workers?" *International Journal of Health Care Finance and Economics* 1 (3/4), 227-248.
- Levy, Robert, Richard Miller and Pamela Brannam. 2000. "The DOD Health Care Benefit: How Does it Compare to FEHBP and Other Plans." *Center for Naval Analyses Research Memorandum D0001315.A1*.
- Ziebarth, Nicolas and Martin Karlsson. 2010. "A natural experiment on sick pay cuts, sickness absence, and labor costs." *Journal of Public Economics* 94, 1108-1122.