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Incentives? The Effect of Profit Sharing Plans Offered by Previous Employers on Current Wages.

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Incentives? The Effect of Profit Sharing Plans Offered by Previous Employers on Current Wages[*].

Daniel Parent[†]

Dans cette étude, j'examine le lien entre la rémunération versée aux travailleurs et l'utilisation de programmes de partage de profits («profit sharing») par l'employeur actuel ainsi que les employeurs précédents. Avec des données du National Longitudinal Survey of Youth, je trouve que l'effet des programmes de partage de profits dont ont bénéficié les travailleurs dans leurs emplois antérieurs à leur emploi actuel est économiquement et statistiquement significatif. De fait, tenir compte de ces programmes dans une équation de gains standard réduit de façon très substantielle ou même totalement l'effet de programmes similaires offerts par l'employeur actuel. Ce dernier résultat laisse planer un doute sérieux sur une explication standard (quoique problématique) donnée pour justifier l'existence de l'effet positif des programmes de partage de profits, à savoir un effet incitatif à l'effort. Les résultats sont davantage cohérents avec le fait que les travailleurs bénéficiant de tels programmes acquièrent des habiletés transférables d'un employeur à un autre.

In this paper, I investigate the relationship between wages and the use of profit sharing plans by both current and past employers. Using data from the National Longitudinal Survey of Youth, I find that when I control for the number of years on profit sharing plans prior to the current job, the wage effect of those previous plans is both economically and statistically significant while the wage effect of current plans is markedly reduced, if not completely eliminated. This result sheds doubt on a simple incentive-for-effort explanation for the wage/productivity impact previously measured and suggests that an alternative mechanism based on skill acquisition is likely to play a role.

Mots-clés: Rémunération incitative, qualifications, partage de profits.

Keywords: *Incentive pay, skills, profit sharing.*

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1 Introduction

The evidence on the productivity impact of profit sharing plans suggests that such plans are associated with increases in both productivity and wages, even when controlling for unobserved worker characteristics (Kruse (1993), Kruse (1992), Azfar and Danninger (2001)). At the risk of oversimplifying, the traditional way of looking at profit sharing plans has been to view them as incentive mechanisms when individual output is either difficult to measure relative to team output or when the firm wants to foster greater cooperation between workers. As is well known from tournament models, using contracts based on individual measures of performance can be counter productive in environments where each worker can affect other workers' output (Lazear (1989)). In such circumstances, pay compression or teams rewards may be preferable.

As has been appreciated for a long time, however, profit-sharing plans as an incentive device suffer from the free-rider problem: why would an individual in a group of N workers really be induced to provide effort when he will get only 1/N of the increased productivity or profits. Put differently, why would he not rely on the N-1 other workers' efforts to increase his wage without changing his own behavior. At the same time, explanations based on the possible beneficial effects of profit sharing plans on team morale, worker cooperation, better internalization of the firm's objectives by the workers, etc., suffer from the problem that they are very difficult to verify empirically. An example of these latter channels is offered in FitzRoy and Kraft (1987). They first argue that profit sharing plans are more likely to occur in environments in which cooperation is easier to sustain or is the norm and where "horizontal" monitoring by co-workers provides a good (and relatively cheap) substitute to direct monitoring by managers. Then, although the direct incentive effect is small due to the 1/N problem, the positive externalities created by cooperation are sufficiently strong to induce workers to in fact collaborate, provided that the firms has "social sanctions" at its disposal.

An alternative, but closely related explanation, indirectly touched upon by FitzRoy and Kraft (1987) and more directly by Azfar and Danninger (2001) is that firms may use profit sharing schemes because they provide a simple way for the firm to commit itself to reward firm-specific skills acquired through on-the-job formal or informal training programs. Why the need for commitment? Simply because by their very nature, firm specific skills, in addition to being very difficult to contract upon, have no market value, and thus firms cannot be trusted to share the rents over those skills with their workers unless one invokes reputation effects. By writing an explicit contract in which it is specified that workers get a certain percentage of the profits, workers can feel more confident that they will not be held up ex post. Consequently, they may choose to devote some time to learning firm-specific skills.[1] In fact, this is essentially what Azfar and Danninger (2001) find with data from the NLSY: the hazard out of employment is lower for workers on profit sharing, wage growth is stronger, and workers on profit sharing are more likely to be trained by the firm. While the effect on the hazard combined with the greater incidence of training do provide some evidence of workers acquiring firm-specific skills, the wage growth results are basically uninformative on that issue.[2] On the one hand, if it is true that skill acquisition tends to go hand in hand with profit sharing, it may be that some of those skills that the workers are acquiring are actually portable across employers. This would drive the market value of the workers up. On the other hand, the wage effect may also result from purely incentive effects related to effort.

The objective in this paper is to pursue the line of argument outlined in the

[1] Note that the 1/N problem is still an issue here, though.

[2] Even the results for the hazard out of employment are not immune to the possibility that unobserved worker characteristics may be driving the effect.

previous paragraph. If it is true that profit sharing plans are associated with greater acquisitions of skills, then it would be interesting to know whether any of those skills are transferable across employers. Evidence that workers on profit sharing plans with previous employers earn more than other similar workers would be hard to reconcile with an incentive-for-effort based explanation. In other words, principal-agent problems specific to an employment relationship do not carry over to subsequent relationships. Thus, profit sharing plans may serve instead as a mechanism under which workers are more inclined to devote time to skill acquisition activities.[3]

To analyse these potential effects, I use the same empirical framework as the one used to study the effect of experience or firm tenure on wages (e.g. Abraham and Farber (1987), Altonji and Shakotko (1987), Topel (1991)). That is, allowing for the possibility that skill acquisition may matter for workers on profit sharing plans, instead of using the traditional dummy variable for the presence of profit sharing, I make use of polynomials in the number of years one has been on profit sharing with the current employer as well as the number of years on profit sharing with all previous employers. To control for the endogeneity of these regressors, I use the instrumental variable methodology proposed in Altonji and Shakotko (1987).

I find strong evidence that profit sharing plans' effects are transferable across employers. In fact, once I control for years on profit sharing with previous employers, the wage effect of years on profit sharing with the current employer vanishes. This result is hard to reconcile with the notion that profit sharing plans increase productivity through a "pure" incentive-for-effort mechanism. It seems more consistent with the idea that skill acquisition may result as a consequence of participating in a profit sharing plan.

2 The Data

The data set used in this paper is the National Longitudinal Survey of Youth, or NLSY. Individuals in the NLSY were between the ages of fourteen and twenty-one on January 1, 1979. I use up to eight yearly observations worker (from 1988 to 1996).[4] One advantage of the NLSY is that it allows one to follow workers from the time they make their first long-term transition to the labor force. I use the same sample selection criteria as those used by Gibbons, Katz, Lemieux, and Parent (2002) and readers are referred to that paper for more details on the criteria used to construct this NLSY sample. I am left with a sample of 27,278 observations on 5,451 workers that satisfy these sample-selection criteria. Summary statistics are reported in Table 1 for males and females separately.

Starting in 1988, workers were asked whether profit sharing was made *available* to them by their current/most recent employer. Thus, there may be cases of workers not enrolling into the profit sharing plan offered by their employer. Consequently, because there is no way to identify those individuals, they will be falsely classified as being on profit sharing plan. The result will be to introduce an attenuation bias in the estimated coefficients.[5]

[3]Naturally, the distinction between what I call the "incentive-for-effort" explanation and the skill acquisition story may be fairly blurred in reality: acquiring more skills may be seen by the firm as indeed working harder or, at least, working better.

[4]There was no interview in 1995.

[5]The analysis contained in Card (1996) (pp. 958-960) in his work on the effect of union status on wages is totally applicable here. More particularly, he shows that the presence of covariates in a regression of wages on observed union status exacerbates the attenuation toward zero. The only difference in this case is that the probability of a "false positive" may be larger here depending upon the extent to which some workers do not enroll in profit sharing plans offered by their employer.

3 The Wage Effects of Profit Sharing Plans.

3.1 Estimation Framework

Given that the NLSY data does not contain firm-level data, such as productivity per worker, I will use instead wage data in addition to the question asked to workers about the availability of profit sharing plans.[6] I then exploit the longitudinal dimension of the NLSY, including the fact that we know whether a worker stays in the same job or changes employer, to estimate fixed-effect and instrumental variable models of the wage impact of such plans.

In levels, the models I estimate are variants of:

$$w_{ijt} = X_{ijt}\Gamma + Z_{ijt}\Gamma_2 + YPSCE_{ijt}\delta_1 + YPSPE_{it}\delta_2 + \alpha_i + \theta_{ij} + \varepsilon_{ijt} \qquad (1)$$

where w_{ijt} is the log hourly wage of individual i in job j at time t, X_{it} is a vector of individual characteristics which may be time-varying, Z_{ijt} is the vector of time-varying job-match attributes (e.g. tenure with the current employer), $YPSCE_{ijt}$ is the number of years on profit sharing with the current employer, and $YPSPE_{it}$ represents the number of years on profit sharing with all previous employers (higher order terms for $YPSCE$ and $YPSPE$ are suppressed to save space but they will be estimated as well). In addition to these measured characteristics, I assume that the log-wage depends on a person-specific component (α_i), a time-invariant job-match component (θ_{ij}), and a residual i.i.d term (ε_{ijt}).

As is well known, estimating equation (1) in levels may produce a biased estimate of δ_1 if profit sharing plans tend to be offered to intrinsically more productive individuals (high α's) or to workers in particularly good matches (high θ's). To alleviate this problem I borrow from the literature on the "employer tenure effect" by adapting Altonji and Shakotko (1987)'s IV strategy to the present context. The number of years on profit sharing plans with the current employer is instrumented with its deviation from job-match means while the number of years on profit sharing with previous employers is instrumented with its deviations from individual means. By construction, the first instrument is orthogonal to the unobserved job-match component while the second instrument is orthogonal to the unobserved person-specific component.[7]

3.2 Results

Results are presented in tables 2 and 3. As we can see in both tables, allowing for the effect of profit sharing to be non-linear in the ordinary least-squares case seems to represent a better empirical description compared to using a simple linear term (or just a dummy). Note that I also experimented with using a complete set of dummies for each number of accumulated year on profit sharing instead of a polynomial. Although not shown here (but available upon request), the visual pattern clearly shows non-linearities. Another important thing to note also is that since I am estimating cubic functions in actual years of labor market experience and employer tenure, the non linear effect of profit sharing reported here is not the result of the polynomial in years on profit sharing picking up secular wage growth.

Once I include the number of years on profit sharing with previous employers (cols. 4-5, 7-8), the effect of currently being on profit sharing decreases substantially, even with OLS. This is easily seen once we note that the *net* effect of years on profit sharing with the current employer is simply the difference between the coefficient

[6] It is not possible to know the exact nature of the plan (cash based or deferred based plan, such as a pension fund in which firms put a percentage of their profits).

[7] Higher-order terms are also instrumented in the same way.

for current years minus the coefficient for years with previous employers.[8] Indeed, the IV results suggest that any contemporaneous effect of profit sharing is due in part to selectivity biases which arise out of the fact that better matches are more likely to be on profit sharing (columns 5 and 6 in Tables 2 and 3), and in part to the fact that some of the skills acquired while being on profit sharing have market value (columns 7 and 8 in Tables 2 and 3).

4 Conclusion

The results contained in this paper are suggestive that one likely channel for the productivity effect of profit sharing plans is linked to skill acquisition, which is consistent with the previous analysis contained in Azfar and Danninger (2001). Perhaps more importantly, the fact that profit sharing plans offered by previous employers have a strong positive impact on the current wage appears difficult to reconcile with the view that the role of such plans is solely to "solve" a principal-agent problem.

References

Abraham, K. G. and H. S. Farber (1987, June). Job duration, seniority, and earnings. *American Economic Review 77*(3), 278–297.

Altonji, J. G. and R. A. Shakotko (1987, July). Do wages rise with job seniority? *Review of Economic Studies, 54*(3), 437–459.

Azfar, O. and S. Danninger (2001, April). Profit sharing, employment stability, and wage growth. *Industrial and Labor Relations Review 54*(3), 619–630.

Card, D. (1996, July). The effect of unions on the structure of wages: A longitudinal analysis. *Econometrica 64*(4), 957–979.

FitzRoy, F. and K. Kraft (1987, February). Cooperation, productivity, and profit sharing. *Quarterly Journal of Economics 85*(1), 23–35.

Gibbons, R., L. Katz, T. Lemieux, and D. Parent (2002). Comparative advantage, learning, and sectoral wage determinition. National Bureau of Economic Research Working Paper 8889, Cambridge, MA.

Kruse, D. (1992, January). Profit sharing and productivity: Microeconomic evidence from the united states. *Economic Journal 102*, 24–36.

Kruse, D. L. (1993). *Profit Sharing: Does it Make a Difference?* Kalamazoo, Michigan: W.E. Upjohn Institute.

Lazear, E. P. (1989, December). Pay equality and industrial politics. *Journal of Political Economy 97*, 561–580.

Topel, R. (1991, February). Specific capital, mobility, and wages: Wages rise with job seniority. *Journal of Political Economy 99*(1), 145–176.

[8] Defining total years on profit sharing as $TOTYPS = YPSCE + YPSPE$, equation (1) can then be re-written as (ignoring other covariates):

$$w_{ijt} = (YPSCE)\delta_1 + (TOTYPS - YPSCE)\delta_2 + \varepsilon = (YPSCE)(\delta_1 - \delta_2) + (YPSPS)\delta_2 + \varepsilon$$

Table 1. Summary Statistics: NLSY 1988-1996		
	Females	Males
Fraction Offered Profit Sharing	32.9%	33.6%
Age	29.9	29.8
Years of Completed Education	13.8	13.7
Fraction Nonwhite	21.8%	20.2%
Years ofActual Labor Market Experience	7.9	8.5
Employer Tenure	4.1	4.0
Fraction Married	54.5%	56%
Fraction Covered by Union Contract	14.7%	16.9%
Real ($79) Hourly Wage	5.72	6.85
Number of Workers	2,621	2,830
Number of Observations	12,718	14,560

Table 2. Years on Profit Sharing (PS) and Wages-Males
Standard Errors in Parentheses
Dependent Variable: Log Hourly Earnings ($79)

	OLS				IV			
Years on PS ($YPSCE$) Current Employer	0.0235 (0.0024)	0.1027 (0.0101)	0.0240 (0.0024)	0.0918 (0.0101)	-0.0011 (0.0045)	0.0019 (0.0209)	0.0049 (0.0048)	0.0149 (0.0218)
$YPSCE^2$	-	-0.0299 (0.0045)	-	-0.0260 (0.0045)	-	-0.0029 (0.0068)	-	-0.0050 (0.0069)
$YPSCE^3$	-	0.0025 (0.0005)		0.0022 (0.0005)	-	0.0004 (0.0006)		0.0006 (0.0006)
Years on PS ($YPSPE$) w. Prev. Employers	-		0.0461 (0.0041)	0.0418 (0.0176)	-		0.0440 (0.0058)	0.0694 (0.0259)
$YPSPE^2$	-			-0.0007 (0.0094)	-			-0.0106 (0.0124)
$YPSPE^3$	-			0.0002 (0.0011)	-			0.0010 (0.0015)
R^2	0.3872	0.3904	0.3926	0.3948	0.3829	0.3828	0.3873	0.3875
N=14,560								

Note. Other covariates include cubic functions in actual labor market experience and employer tenure, years of completed education, and dummies for race, marital status, 1-digit industry, 1-digit occupation, years, residence in a smsa, and union coverage.

Table 3. Years on Profit Sharing (PS) and Wages-Females Standard Errors in Parentheses Dependent Variable: Log Hourly Earnings ($79)								
	OLS				IV			
Years on PS ($YPSCE$) Current Employer	0.0197 (0.0024)	0.0768 (0.0104)	0.0202 (0.0023)	0.0691 (0.0104)	-0.0108 (0.0045)	-0.0054 (0.0214)	-0.0075 (0.0047)	0.0023 (0.0222)
$YPSCE^2$	-	-0.0208 (0.0045)	-	-0.0181 (0.0045)	-	-0.0011 (0.0068)	-	-0.0023 (0.0069)
$YPSCE^3$	-	0.0017 (0.0005)		0.0015 (0.0005)	-	0.0001 (0.0006)		0.0001 (0.0006)
Years on PS ($YPSPE$) w. Prev. Employers	-		0.0479 (0.0047)	-0.0002 (0.0192)	-		0.0324 (0.0065)	0.0612 (0.0287)
$YPSPE^2$	-			0.0293 (0.0107)	-			-0.0053 (0.0143)
$YPSPE^3$	-			-0.0038 (0.0014)	-			-0.0002 (0.0017)
R^2	0.3995	0.4013	0.4045	0.4061	0.3829	0.3949	0.3978	0.3985
N=12,718								

Note. Other covariates are the same as those in Table 2.

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