

Linking Retirement Plan Measures

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How do the employer expenditures for their employees' retirement plans relate to the participation rates of their employees in the plans? Is there any difference in the relationship of cost and participation for defined benefit pension plans (which use predetermined formulas to calculate retirement benefits) and defined contribution plans (which specify the employer's contribution but not the eventual benefit)? Recent changes in the BLS compensation surveys shed some light on the link between employer cost and employee participation rates.

Work is currently underway to integrate all the wage and benefit surveys compiled by the Office of Compensation and Working Conditions into one comprehensive statistical program—called National Compensation Survey (NCS)—that will provide a diverse set of measures of employee compensation. The development of NCS is proceeding in stages. When fully implemented, it will provide information on wages, benefit provisions, and the cost of these benefits using a common sample design. This will allow for a link between benefit incidence data and the cost of the benefit. Several steps have already been completed towards this goal, including the use of common definitions, and the introduction of separate employer cost measures for defined benefit and defined contribution plans. This article highlights the results of these developments and presents data stemming from the progress made to date.

Common definitions

In the past, the Employee Benefit Survey (EBS) and the Employer Costs for Employee Compensation (ECEC)¹ series collected data on a broad category of retirement benefits, but they used different titles and definitions. The EBS provided detailed data on a variety of items classified as retirement plans, while the ECEC collected cost data on either pension or savings and thrift plans. These surveys established a revised common definition with two broad retirement benefit categories: one is limited to defined benefit pensions, and the other includes a variety of defined

contribution plans (such as deferred profit sharing plans, employee stock ownership plans, money purchase pension plans, savings and thrift plans, simplified employee pensions, and stock bonus plans).

EBS measures of the entire economy

The sample design, data collection, and processing procedure used to tabulate information on benefit participation is being revamped to provide data on the entire economy in any given year. While the EBS has tracked the incidence and characteristics of defined benefit and defined contribution plans for 16 years, the series focuses on different segments of the economy each year. During odd-numbered years, private establishments with 100 or more workers, which BLS refers to as "medium and large" establishments, are surveyed. During even-numbered years, two surveys are conducted, one of small private establishments (those with fewer than 100 employees) and the other of State and local governments. Beginning in 2000, data on benefit participation will be collected from the same sample of the entire economy used to compile measures of benefit costs.

Data limitations

The data presented in this article provide a taste of the information that will be available when the NCS survey is fully integrated. However, care should be exercised in comparing the ECEC and EBS measures presented here. The participation data presented in this article were derived by combining the results of the 1994 and 1995 EBS surveys (the most recent surveys available) to provide an estimate of the entire economy, with 1996 ECEC data (which introduced separate cost measures for defined benefit and defined contribution plans).

Participation rates

The 1994-95 EBS surveys show that 57 percent of full- and part-time workers in private industry and State and local government participated in an employer-sponsored retirement plan.² Approximately 36 percent participated in defined benefit plans compared to 33 percent in defined contribution plans. Participation rates for full-time work-

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ers (66 percent) are greater than those for part-time workers (23 percent). (See table 1.)

About 90 percent of State and local government workers participated in retirement plans, compared to half of those employed in private establishments. In the public sector, participation ranged from 82 to 87 percent for defined benefit plans for all occupational groups. In contrast, 28 percent of private industry workers were covered by defined benefit pension plans as compared to 37 percent participating in defined contribution plans.

Coverage rates varied by occupation. About 66 percent of white-collar workers, compared to 58 percent of blue-collar, and 30 percent of service workers had a retirement plan.

Workers in unions were much more likely to have a retirement plan than their nonunion counterparts (87 percent versus 50 percent). Unionized workers were more likely to participate in defined benefit plans (83 percent) than defined contribution plans (22 percent). In contrast, approximately 35 percent of nonunion workers participated in defined contribution plans compared to 27 percent in defined benefit plans.

In private industry, about two-thirds of workers in goods-producing industries participated in retirement plans compared to 46 percent of those in the service-producing industries. Workers in goods-producing industries had a higher participation rate than those in service industries, in both defined benefit and defined contribution plans.

Coverage rates vary overall, as well as for the two plan types, by the employment size of the establishment. Over 80 percent of the workers employed in private industry establishments with 500 workers or more participated in a retirement plan compared to 33 percent in establishments with fewer than 100 workers. About 60 percent of those in the larger establishments had a defined benefit plan, while 55 percent had a defined contribution plan. In contrast, defined contribution plans were more common than defined benefit plans in small establishments.

Employer costs for employee retirement plans

Employers' contributions to a retirement plan are affected by many factors. For defined benefit plans, the Employee Retirement Income Security Act (ERISA) sets minimum and maximum funding requirements. In addition to tax considerations, fund investments may generate sufficient income enabling employers to make little or no payments to the fund in some years. Various plan provisions, including the formulas used to determine pension payments, can also affect the employer costs for providing this benefit. Employer costs for defined contribution plans are deter-

mined by factors such as company profits in the case of deferred profit sharing plans, and the level of matching employee contributions to savings and thrift plans that trigger matching employer contributions.

In 1996 employer costs for retirement and savings plans averaged 75 cents per hour worked, or 4 percent of the employer total costs for employee compensation. (See table 2.) Employer expenditures for defined benefit pension plans were twice that for defined contribution plans (51 cents per hour worked versus 23 cents, respectively). For both private industry and the public sector, expenditures were higher for defined benefit plans than defined contribution plans. Expenditures differed by occupational group: White-collar workers—92 cents; blue-collar workers—68 cents; and service workers—37 cents.

The differences in the retirement plan costs for private industry and State and local government workers (55 cents and \$1.90 per hour worked, respectively) can be explained by several factors. State and local government workers have a higher participation rate than workers in private industry. In addition, public employee plans provide more generous benefits, in part to offset the lack of Social Security coverage that private sector employees receive to supplement the benefits stemming from their retirement plans. Although nearly all workers in private industry are covered by Social Security, about one-fourth of full-time State and local government employees with defined benefit plans are not covered by Social Security.³

Within private industry, employer expenditures on retirement plans were higher for union workers, full-time workers in goods-producing industries, and workers in larger establishments. In comparing employer costs for defined benefit and defined contribution plans separately, expenditures for union worker defined benefit plans were greater than those for defined contribution plans. Similarly employer costs for defined benefit plans for workers in larger establishments were higher than those for defined contribution plans.

Conclusion

Despite the limitations of any analysis merging information from surveys using different samples and reference years, the data indicate that employer expenditures for retirement plans are higher in those sectors where benefit coverage is more common. Ultimately, the National Compensation Survey sample design will produce data that will allow for a more rigorous analysis of the relationship between benefit participation and employer costs. These studies will not be limited to the pension arena, but will cover the gamut of benefits in employee compensation packages.

— ENDNOTES —

¹ The Employer Costs for Employee Compensation series is derived from data collected for the Employment Cost Index, a quarterly measure of compensation costs that includes retirement plan costs.

² According to the two 1994 employee benefit surveys, 89 percent of the State and local government workers and 34 percent of those employed in small private industry establishments participated in a retirement plan. The

1995 survey showed that 73 percent of the employees in medium and large establishments in private industry participated in a plan.

³ For a more detailed discussion of the difference in public and private sector defined benefit pensions, see Ann C. Foster, "Public and Private Sector Defined Benefit Pensions: A Comparison," *Compensation and Working Conditions*, Summer 1997, pp. 37-43.

Table 1. Participation rates in employer-sponsored retirement and savings plans, by category of worker, 1994-95 (percent)

Series	Total ¹	Defined benefit plans	Defined contribution plans
Civilian workers	57	36	33
White-collar occupations	66	41	39
Blue-collar occupations	58	37	36
Service occupations	30	22	12
Full-time workers	66	42	39
Part-time workers	23	15	12
Union workers	87	83	22
Nonunion workers	50	27	35
State and local government workers	89	86	8
White-collar occupations	91	87	8
Blue-collar occupations	91	87	8
Service occupations	84	82	7
Full-time workers	95	91	9
Part-time workers	56	55	4
Union workers	91	91	4
Nonunion workers	88	81	12
Private industry workers	51	28	37
White-collar occupations	60	31	46
Blue-collar occupations	56	34	37
Service-occupations	21	12	13
Goods-producing industries ²	67	43	46
Service-producing industries ³	46	23	34
Full-time workers	60	33	44
Part-time workers	20	11	13
Union workers	85	77	33
Nonunion workers	47	21	38
Establishment size:			
1-99 workers	33	12	26
100-499 workers	60	30	43
500 or more workers	82	60	55

¹ Sum of individual items exceed total because some employees may participate in both types of plans.

² Includes mining, construction, and manufacturing.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

Table 2. Employer costs per hour worked for total compensation and retirement and savings plans and relative errors¹ by major categories, March 1996

Series	Total compensation		Retirement and savings		Defined benefit plans		Defined contribution plans	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Civilian workers	\$18.68	100.0	\$0.75	4.0	\$0.51	2.7	\$0.23	1.3
White-collar occupations	22.52	100.0	.92	4.1	.60	2.7	.32	1.4
Blue-collar occupations	17.28	100.0	.68	3.9	.49	2.8	.19	1.1
Service occupations	10.17	100.0	.37	3.6	.31	3.1	.05	.5
State and local government workers	25.73	100.0	1.90	7.4	1.76	6.9	.13	.5
White-collar occupations	28.56	100.0	2.02	7.1	1.86	6.5	.16	.6
Blue-collar occupations	20.88	100.0	1.51	7.2	1.41	6.8	.10	.5
Service occupations	18.92	100.0	1.71	9.0	1.65	8.7	.06	.3
Private industry workers	17.49	100.0	.55	3.1	.30	1.7	.25	1.4
White-collar occupations	21.10	100.0	.66	3.1	.30	1.4	.36	1.7
Blue-collar occupations	17.04	100.0	.62	3.6	.42	2.5	.20	1.2
Service occupations	8.61	100.0	.13	1.5	.08	.9	.05	.6
Goods-producing industries ²	21.27	100.0	.80	3.7	.48	2.3	.32	1.5
Service-producing industries ³	16.28	100.0	.47	2.9	.24	1.5	.23	1.4
Full-time workers	20.01	100.0	.67	3.4	.36	1.8	.31	1.6
Part-time workers	9.19	100.0	.13	1.4	.08	.8	.05	.5
Union workers	23.31	100.0	1.32	5.7	1.06	4.5	.27	1.1
Nonunion workers	16.61	100.0	.43	2.6	.18	1.1	.25	1.5
Establishment size:								
1-99 workers	14.85	100.0	.34	2.3	.16	1.1	.18	1.2
100 or more workers	20.09	100.0	.75	3.7	.43	2.2	.31	1.6
100-499 workers	16.61	100.0	.49	3.0	.26	1.6	.23	1.4
500 or more workers	24.03	100.0	1.03	4.3	.63	2.6	.41	1.7
Relative error								
Civilian workers								
White-collar occupations	0.8		2.0		2.4		3.7	
Blue-collar occupations	1.2		2.9		3.4		4.4	
Service occupations	1.2		3.7		4.3		6.1	
State and local government workers	1.3		6.2		6.6		11.0	
Private industry workers	1.1		2.1		2.2		9.2	
White-collar occupations	1.2		2.4		2.4		9.6	
Blue-collar occupations	2.8		7.4		7.8		17.7	
Service occupations	3.0		6.7		6.9		24.9	
Goods-producing industries²	1.0		3.0		4.1		4.0	
White-collar occupations	1.4		4.4		6.4		4.9	
Blue-collar occupations	1.3		4.4		5.4		6.3	
Service occupations	1.1		5.8		4.9		12.1	
Service-producing industries³	2.0		4.8		5.6		7.7	
Full-time workers	1.1		4.0		5.6		5.1	
Part-time workers	2.1		3.0		4.0		3.9	
Union workers	2.1		14.0		19.7		21.2	
Nonunion workers	1.8		5.7		5.9		9.1	
Establishment size:	1.2		3.6		5.5		4.3	
1-99 workers	1.3		5.5		8.3		6.3	
100 or more workers	1.5		3.8		5.2		4.8	
100-499 workers	2.1		5.1		8.1		6.8	
500 or more workers	1.6		5.1		6.9		5.6	

¹ The relative error is the standard error expressed as a percent of the cost. We can be 95-percent confident that the interval around the cost estimate bounded by two times plus and two times minus the standard error contains the 'true' cost.

² Includes mining, construction, and manufacturing.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.