Tackling complexity in retirement benefits: challenges and directions for the NCS

As the retirement benefits landscape has become more complex, it has become more challenging for the National Compensation Survey to capture it comprehensively; the data presented in this article indicate that the current NCS statistics are still very useful but identify some areas in which improvements could be made

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Retirement benefits have long been a prominent component of compensation in America. In 1986, they composed 3.8 percent of all compensation paid to private industry workers,[1] and this percentage has remained relatively stable through the decades: in December 2009, contributions to retirement were 3.4 percent.[2] Yet, beneath this relative stability in compensation share, the retirement benefits landscape has undergone many changes, bringing increased diversity and complexity to the underlying offerings. The BLS National Compensation Survey (NCS) has tried to keep up with this evolution by making appropriate changes as time has gone along, and for the most part it has been successful. But this process entails tradeoffs between continuity and responsiveness, so challenges to accurate reporting will always remain.

This article briefly reviews the evolution of the retirement benefits landscape and the adjustments made by the succession of BLS benefits surveys. It then discusses some of the ongoing challenges faced by the NCS in dealing with new complexity in retirement benefits. One challenge is the increasing number of defined benefit plans that have been "frozen," which raises concerns about measures of benefit access; another challenge is the expanding role of retirement-savings vehicles having no employer contribution, which are becoming a fundamental component of the retirement benefits landscape. After detailing these particular challenges, the article discusses a larger implication of the growing complexity of retirement plans: the increasing difficulty of using statistics that are based on retirement plans (as opposed to people) to understand the experiences of individual workers. We envision an expansion in the outputs of the NCS to include measures tracking the prevalence of various plan features across different types of plans, and we work through an example using microdata from the current survey.

The evolution of retirement benefits

As described in detail by Patrick W. Seburn, pensions in the United States have a long history that dates back to the plans offered by several railroads, banks, and utility companies in the late 1800s and early 1900s.[3] By the 1970s, retirement plans had risen in prevalence to cover about 50 percent of the workforce,[4] and most conformed to the same structure—that of the defined benefit plan. In 1974, Congress passed the Employee Retirement Income Security Act (ERISA) to safeguard the accrued benefits of workers. By adding section 401(k) to the Internal Revenue Code, ERISA also established an additional vehicle for tax-deferred retirement savings through the employer, and soon the number of defined contribution plans began to grow precipitously.

When defined contribution plans first emerged, they were usually offered as supplements to defined benefit plans, which still dominated the landscape. However, this trend soon changed course, and more and more employers offered defined contribution plans as the primary retirement-savings vehicle for their employees.[5] At the same time, many of the extant defined benefit plans were terminated, causing the total number of defined benefit plans to fall.[6] By the mid-1990s, defined contribution plans were the predominant form of retirement-savings vehicle used by private industry workers.[7]

There have also been changes in the nature of retirement benefits within the defined benefit and defined contribution categories. In the 2000s, there was a sharp increase in the number of defined benefit plans that were "frozen"; when plans are frozen, new employees are barred from enrolling, and in some cases employers' contributions end altogether.[8] Among defined contribution plans, there has been a continual growth in the diversity of plan details. Several new plan types have come into being, such as savings incentive match plans for employees (SIMPLEs) and simplified employee pensions (SEPs). Many employers began to offer more than one defined contribution plan in order to take advantage of the attractive features of each, or to offer hybrid plans that do not fit neatly into any typical structure. And in recent years, many plans have added features to encourage employees to make good retirement savings choices; such features include automatic enrollment and escalation to encourage saving, target-date funding[9] to facilitate good investing choices, and annuity disbursement options to help manage longevity concerns.

Finally, another important development has been growth in plans in the gray area between retirement benefits and administrative conveniences: savings accounts set up by employers to which employees may contribute tax-deferred dollars, but to which the employer does not contribute at all.[10] At first, these plans were found primarily in the State and local government sector, where they were administered predominantly by independent sponsors such as TIAA-CREF. But in the last two decades, as 401(k) plans became more prevalent, pretax savings plans with no employer contribution were extended to considerable fractions of workers in the private sector. In 2010, the NCS reported that these plans were offered to 18 percent of all private industry workers. Meanwhile, their prevalence also grew among State and local government employers, to a rate of 55 percent in 2010.

The evolution of NCS benefit components

Although BLS has captured information on and reported on employee benefit practices for more than a century,[11] comprehensive studies of a wide range of employee benefits began in 1979 with the first Level of Benefits Survey. Since that time, with several different survey names and an expanding group of workers included in the sample, BLS data have been available nearly every year and have detailed the extent to which various employee benefits are available to workers and the characteristics of those benefits. These benefit surveys are now part of the National Compensation Survey.

Since 1979, the survey has operated on a plan basis. It first identifies any qualified benefit plans offered by each employer it surveys, and it then collects the relevant data about those plans. As discussed by Dworak-Fisher and Wiatrowski,[12] qualified plans have traditionally been identified on the basis of four concepts: they must entail some employer cost, their details must be inseparable (bundled together so that, if one applies, the others do as well), they must each fall within a single benefit area (such as health insurance and sick leave), and they must be offered to at least one worker.

For every qualified benefit plan, data are classified and collected hierarchically. Retirement plans are first divided into the defined benefit and defined contribution categories.[13] These two categories are then divided into plan types.[14] For example, a defined contribution plan might be a deferred-profit-sharing plan, a savings-and-thrift plan, a money-purchase plan, or any of a number of other plan types. The hierarchy continues as more is learned about the particular plan: Are its benefits based on employee tenure? Does it have any set limits on employee contributions? When the answers to questions like these are known, unnecessary or irrelevant questions are avoided, and the extent of data collected can be tailored on the basis of predeterminations of what might be most relevant about each plan type.

Over the years, the survey has been expanded and modified to adjust to the changing retirement benefits landscape, including the growing prominence of defined contribution plans. But the basic structure—a plan basis and a hierarchical collection scheme—has remained. Three types of adaptations in particular have been relied on to accommodate the changing nature of retirement benefits. First, additional categories and questions have been added when a new type of plan or provision becomes prevalent. For example, as defined benefit plans increasingly were frozen, questions were added to record whether a plan was frozen or not and details about this status.

A second, extensively used tool has been the maintenance of multiple plan records. If an employer added a defined contribution plan as a supplement to its defined benefit offering(s), a separate record was added for the additional plan and defined benefit collection continued as before. If an employer delineated employee "tiers" to offer differing defined benefit formulas to employees of differing tenures, a separate plan record was maintained to describe the formula applying to each tier, and tiers not available to new employees were marked as frozen. If an employer offered a choice of several different defined contribution structures, the details of and participation rates in each structure were recorded separately. Finally, a third tool has been exploited to handle developments that are considered outside the traditional definition of a plan. As an add-on to the survey, employers are asked whether they provide a variety of other benefits.[15] "Pretax savings plans with no employer contribution" have been included among these other benefits since 1986.

Challenges for retirement benefits in the NCS

Despite the many effective adjustments to the NCS to accommodate the evolution of the retirement benefits landscape, challenges still remain. Two challenges in particular are highlighted here, in each case illustrating a limitation in the application of the tools that the NCS program has usually used to make adjustments.

The first challenge is that the concepts underlying the NCS's "access" statistics get strained when frozen plans are confronted. Access statistics measure the extent to which workers are employed in jobs in which benefits are present: a natural interpretation is that these statistics capture whether workers in a job are or will naturally become eligible to receive the benefit. One idiosyncrasy of access statistics is that since, by definition, all workers within a given job have the same access status, the statistics do not take account of information about plan eligibility. For example, in plans with eligibility requirements stipulating a minimum length of service with the employer, such as 6 months or a year, newly hired workers are counted as having access even though they are not currently eligible to participate. Given that 3 percent to 4 percent of the labor force changes jobs in a usual month,[16] it is likely that access rates often are considerably higher than eligibility rates. For the most part, this difference remains a definitional distinction, with no internal inconsistency between the access concept and the related statistics.[17]

But such consistency is more difficult to maintain among the growing number of defined benefit plans that have become frozen in recent years as employers have attempted to rein in their retirement benefit costs. As explained earlier, when an employer decides to freeze a plan, it bars entry into the plan; subsequent hires therefore can never participate. In addition, a plan freeze may alter the rate at which current participants accrue benefits, or curtail accrual in the plan altogether. In most cases, plan freezes are accompanied by the offer of a new or revised defined contribution plan.[18]

The NCS program has responded to the emergence of frozen plans principally by employing the tools discussed earlier. First, it has added several questions to the defined benefit component of the survey, allowing it to track the overall rate of incidence as well as some terms of the freezes being seen. Second, it has recorded multiple plan records when one plan is frozen and another is introduced, adding an indication of frozenness to the record of the frozen plan. The difficulty with these adjustments is that all workers in a job where a defined benefit plan is present continue to be counted as having access to the plan even after it becomes frozen. But some of those workers (those entering the establishment after the freeze) do not have access in any meaningful sense—they are not eligible for the plan and will never become eligible for it. As time goes on, the fraction of workers in the job that is frozen out of the plan will increase. Yet the access measure will continue to ascribe access to them all.

One can get an idea of the current impact of this difficulty by considering the participation rates calculated for workers with "access" to defined benefit plans. NCS publications refer to such numbers—participation conditional on access—as "takeup rates." Table 1 shows defined benefit plan takeup rates for the full 2010 sample as well as for two subsamples: workers with access to a frozen defined benefit plan but not a nonfrozen defined benefit plan, and workers with access to at least one nonfrozen defined benefit plan. The former group makes up 24 percent of the total, and the latter makes up 76 percent.

The table shows that frozenness has a statistically significant effect on defined benefit plan participation. Plan participation is nearly universal (97 percent) among work-

Table 1. Participation in retirement plans, all private industry workers with access to defined benefit plans, 2010

Group of workers	Percentage of workers participating in:		
	Defined benefit plan	Defined contribution plan	Any retirement plan
All private industry workers	91	55	94
Frozen defined benefit plans only	73	60	84
Nonfrozen defined benefit plans only	97	54	98

SOURCE: Authors' calculations of data from the National Compensation Survey.

ers with a nonfrozen plan, but it is only 73 percent among workers with only a frozen plan. The impact of this difference on the overall access rate reported by the NCS can be calculated by considering two main points:

- Twenty-four percent of those with access to defined benefit plans have access to a frozen plan only, that is, a plan that excludes at least some workers. The workers in this category are about 5 percent of all private industry workers.
- There is a 24-percentage-point difference (97 – 73 = 24) in "takeup" between workers with a frozen plan only and workers with at least one nonfrozen plan. This difference is likely a good approximation of the fraction of workers in frozen plans who are actually frozen out of the plan.

Combining these two points, one can infer that about 1.2 percent (.05 × .24 = .012) of all private industry workers are considered by the NCS to have access to a defined benefit plan but in fact are frozen out of it. This impact is, as of yet, relatively small. But it is growing, and it can be expected to grow further. At a minimum, existing freezes will apply to greater fractions of employees as turnover dictates that a growing fraction of workers will have been hired postfreeze. In addition, several experts have noted that they expect more plans to become frozen.[19]

Table 1 also illustrates a slightly greater participation rate in defined contribution plans among workers whose only defined benefit plan is frozen (a rate of 60 percent) as compared with workers with access to a nonfrozen defined benefit plan (54 percent). The higher take-up rate of defined contribution plans by people working at establishments where all defined benefit plans are frozen mitigates to some extent the difference between the two groups' overall retirement plan participation rates, which are shown in the final column. Table 2 reveals the source of this difference: workers with access only to frozen defined benefit plans are significantly more likely to have access to defined contribution plans than workers with access to nonfrozen defined benefit plans. This is entirely consistent with the tendency noted earlier for employers to offer a new defined contribution plan when instituting a defined benefit plan freeze.

The expected growth in the impact of frozen defined benefit plans suggests that questions about the eligibility of workers by plan should be added to the NCS. Two kinds of questions seem appropriate: questions intended to identify the eligibility provisions of the freeze, and questions designed to determine the percentage of workers frozen out of the plan. Even before such questions are added to the survey, the NCS program should estimate eligibility for frozen plans from the data that have been collected on the plans' participation rates. Note that adjustments resulting from the addition of such questions would have the effect of reducing the NCS's estimates of defined benefit access to levels very close to its current estimates of defined benefit participation; for example, it is estimated that in 2010 the access rate reported in NCS bulletins would be amended from 20 percent to 19 percent, the same as the percentage reported for defined benefit participation.

A second challenge that the NCS faces is that its traditional definition of a qualified plan prevents it from capturing the full range of retirement benefits enjoyed by workers. As mentioned earlier, a growing fraction of workers have access to plans allowing them to save on

Table 2. Access to defined contribution plans, all private industry workers with access to defined benefit plans, 2010

Group of workers	Percentage of workers with access to:	
	Defined benefit plan only	Defined benefit plan and defined contribution plan
All private industry workers	29	71
Frozen defined benefit plans only	19	81
Nonfrozen defined benefit plans only	32	68

SOURCE: Authors' calculations of data from the National Compensation Survey.

a pretax basis without receiving any contribution from the employer, evidencing a growing role for such plans in employers' efforts to attend to their employees' retirement needs. But these plans do not meet the definition of a retirement benefit plan as defined by the NCS, because they do not entail a direct employer cost. Consequently, the approach employed by the NCS to gather information about them has been to track them through its "other benefits" section. In this section, the only piece of information gathered is whether a plan exists—participation and plan details are not collected.

It is possible to address one aspect of this challenge—the separation of the reporting of retirement savings plans from that of other retirement benefits—by folding the information collected on access to these savings plans into tables tracking access to defined benefit and defined contribution plans. In fact, this approach was used for the State and local government sector in a recent article.[20] Table 3 gives updated figures for some of the key findings in that article.

This table shows the incidence of pretax savings plans with no employer contribution in the State and local government sector: 55 percent of workers in this sector have access to such a plan. These plans are especially prevalent among State government and college/university workers, and it is greater at large establishments than at small establishments. But, in part because access to other retirement benefits is quite prevalent among government workers, the inclusion of pretax savings plans with no employer contribution increases the overall retirement benefit access rate by only 2 percentage points.

Table 4 provides some detail on the extent to which pretax savings plans with no employer contribution are associated with other retirement benefits in the public sector. The table shows that, among State and local government workers who have access to a pretax savings plan with no employer contribution, 90 percent also have a defined benefit plan. Only 5 percent of the time are the pretax savings plans the only retirement benefit to which such a worker has access. Among the various subpopulations in the table, the reported rates of stand-alone savings plans do not exceed 8 percent. This paints a picture in which pretax savings plans serve primarily as supplements, with State and local government workers preparing for retirement predominantly via old-fashioned pensions and the employer providing an extra vehicle for workers who want to save more. Indeed, the structure of retirement benefits in the State and local government sector retains a key similarity to the structure under which the BLS benefits program was developed: defined benefit plans are still primary for most employers, and defined contribution plans and other savings plans are secondary.

In the private sector, where defined contribution plans are now most often primary, the role of pretax savings plans with no employer contributions is less straightforward. What do the NCS data tell us about the role of such plans? Table 5 presents data for private industry workers corresponding to those in table 3 for State and local government workers. One can see here that pretax savings plans with no employer contribution are much less preva-

Table 3. Access to retirement and savings plans, State and local government workers, 2010

Group of workers	Percentage of workers with access to:				
	Defined benefit plan	Defined contribution plan	Either a defined benefit or a defined contribution plan	Pretax savings plan with no employer contribution	Any retirement or savings plan
All workers	84	29	90	55	92
Workers in elementary/secondary schools	92	16	92	52	95
Workers in colleges/universities	80	56	90	84	96
Workers in State government	87	43	92	74	96
Workers in local government	83	24	89	49	91
Small establishments (1–99 workers)	65	26	77	40	80
Medium-sized establishments (100–499 workers)	81	25	88	46	90
Large establishments (more than 499 workers)	88	31	93	61	95

SOURCE: Authors' calculations of data from the National Compensation Survey.

Table 4. Access to retirement and savings plans, State and local government workers with access to a pretax savings plan with no employer contribution, 2010

Group of workers	Percentage of workers with access to:			
	Defined benefit plan	Defined contribution plan	Either a defined benefit or a defined contribution plan	No other retirement plan (savings plan is stand-alone)
All workers	90	30	95	5
Workers in elementary/secondary schools	95	16	96	4
Workers in colleges/universities	82	58	92	8
Workers in State government	91	44	96	4
Workers in local government	90	23	95	5
Small establishments (1-99 workers)	85	31	92	8
Medium-sized establishments (100-499 workers)	89	25	95	5
Large establishments (more than 499 workers)	91	32	96	4

SOURCE: Authors' calculations of data from the National Compensation Survey.

Table 5. Access to retirement and savings plans, private industry workers, 2010

Group of workers	Percentage of workers with access to:				
	Defined benefit plan	Defined contribution plan	Either a defined benefit or a defined contribution plan	Pretax savings plan with no employer contribution	Any retirement plan
All workers	20	59	65	18	70
Workers in goods producing industries	29	65	72	16	77
Workers in service-providing industries	19	58	63	19	68
Small establishments (1–99 workers)	10	47	51	11	56
Medium-sized establishments (100–499 workers)	23	70	78	25	83
Large establishments (more than 499 workers)	47	75	85	30	91

SOURCE: Authors' calculations of data from the National Compensation Survey.

lent in the private sector—only 18 percent of workers have access to them. That said, including them still raises the overall coverage rate by 5 percentage points, from 65 percent to 70 percent. So, their impact on overall coverage is actually greater in the private sector than in the public sector.

Table 6 shows the coverage of defined benefit and defined contribution plans among private industry workers with access to a pretax savings plan with no employer contribution. The figures in the table contrast with their public sector analogs in table 4 in a variety of ways. Unlike in the public sector, pretax savings plans in the private sector are more often seen in tandem with defined contribution plans (59 percent of the time) than with defined benefit plans (32 percent of the time). The table also shows that 27 percent of the time the savings plans are offered with no other retirement plan. Among small establishments, this figure is 42 percent. These observations indicate that the pretax saving vehicles may play a more important role in private employers' retirement benefit packages than they do among government employers, despite a lower overall access rate. In many cases, rather than being peripheral add-ons to defined benefit pensions, they seem to be offered as full or partial substitutes for defined contribution plans, particularly among small employers. The role of pretax savings plans with no employer contribution in private industry establishments is one that is not yet understood well.

To gain a bit more insight, we consulted the retirement plan documents gathered in the NCS during data collection. Although the survey is not designed to retrieve documents relating to pretax savings plans with no employer

Table 6. Access to retirement and savings plans, private industry workers with access to a pretax savings plan with no employer contribution, 2010				
Group of workers	Percentage of workers with access to:			
	Defined benefit plan	Defined contribution plan	Either a defined benefit or a defined contribution plan	No other retirement plan (savings plan is stand-alone)
All private industry workers	32	59	73	27
Workers in goods-producing industries	39	55	70	30
Workers in service-providing industries	31	60	74	26
Small establishments (1–99 workers)	22	48	58	42
Medium-sized establishments (100–499 workers)	27	66	79	21
Large establishments (more than 499 workers)	49	63	83	17

SOURCE: Authors' calculations of data from the National Compensation Survey.

contribution, in practice much of the information in these documents is often picked up as the documentation for other plans is gathered. Inspecting a small, nonrepresentative sample of plan documents, we identified a few confounding factors that are present to some extent in the NCS database.

- In practice, employers do not always clearly distinguish between pretax savings plans with no employer contribution and various components of savings-and-thrift plans. Some employers combine the descriptions of pretax savings plans they offer with their descriptions of separate savings-and-thrift plans. Other employers describe savings-and-thrift plan components that do not include a match from the employer as if they were separate savings plans.
- Employers may sometimes offer separate pretax savings plans in order to provide features not available in their defined contribution plans, such as annuity distribution options.

At this point, this investigation into the particular circumstances under which one observes pretax savings plans with no employer contribution remains purely anecdotal. Since the NCS database does not contain any details about pretax savings plans with no employer contribution, it is difficult to get a more thorough picture of the roles being played by these plans in the private sector. But the analysis does suggest that these plans are considered a natural part of retirement benefits. Note also that other forums seem to consider such plans as important components of the retirement benefits picture. Studies of plan dynamics examine pretax savings plans and compare those with no employer match to those with matches in the same context in which they compare plans with different match rates.[21] Studies of retirement adequacy issues account for them and refer to them as zero-match defined contribution plans.[22] Policies directed at increasing retirement savings rates take account of them; as an example, the payroll-deduction IRA has been designed as a similar type of vehicle.[23] To keep up with these developments, the NCS should expand its treatment of pretax savings plans having no employer contribution to a level commensurate with its treatment of other retirement plans: it should collect the participation rates of the workers in them and capture some of their features. Given these plans' similarity to savings-and-thrift plans and the wide variety of plans currently considered under the defined contribution umbrella, it seems natural to incorporate the related collection efforts into the NCS's defined contribution module. In addition to the convenience of doing so, another advantage of this approach is that it has potential for reducing the confusion and inaccuracy inherent in the coding process currently used to generate the data.

Combining benefit areas

As this article has shown, some of the remaining challenges confronted by the NCS in its endeavor to provide useful and accurate information about retirement benefits are fairly specific in nature—they result from particular developments in the retirement benefits landscape, and it appears that there are targeted remedies available for them. A more pervasive issue results, however, from the inherent difficulty in capturing and reporting on the increasing variety of retirement plans. As discussed earlier, the established NCS practice is to create order through a hierarchical collection scheme, adding layers and branches to the hierarchy as needed. This scheme generally carries over to NCS outputs: each table of NCS statistics tends to focus on a particular segment of the data. But as the diversity of plans grows, the segment being described by any one table tends to become smaller, and it becomes harder to get an overall picture of the pertinent trends. For example, in the NCS bulletin describing defined contribution plan details,[24] one can consult different tables to learn about the details of the employee match among savings-and-thrift plans and about the determination of employer contributions among money-purchase plans. But putting these lessons together to say something about retirement benefits in general is a greater challenge.

In addition, more and more employers seem to be offering multiple plans, or plans that are hybrids of different types of plans. In such cases, even a given worker's experience with retirement plans is hard to grasp, because the multiple types of plans the worker faces are captured separately. A start to combining data from different plans is to track the incidence of different combinations of plans, as is done in table 7.

This table shows the variety of plan combinations being offered by employers and the extent to which they are offered. The bottom row shows that 35 percent of private industry workers have access to neither a defined benefit plan nor a defined contribution plan, consistent with the figure in table 5 showing that 65 percent have access to at least one plan. At the same time, 23 percent have access to more than one plan type: 9 percent have access to a combination of defined contribution plan types but not to a defined benefit plan, while another 14 (20 – 6 = 14) percent have access to both a defined benefit plan and at least one defined contribution plan. Within this last group, 3 percent have access to a defined benefit plan and multiple types of defined contribution plans. The table does not include the pretax savings plans with no employer contribution detailed in the previous section. Still, the prevalence of multiple plan types is clear.

With all of these plan combinations, a full accounting of all the opportunities faced by workers is difficult to assemble. How can the NCS address this difficulty? One potentially useful approach is to focus on a particular issue of interest and produce tables that combine information across plan types to inform that issue. For example, policymakers have recently been concerned with several consequences of the shift in benefits from defined benefit to defined contribution dominance, and various features have been introduced to defined contribution plans to address those concerns. Estimates calculated by combining records across plan types would be helpful in capturing the extent to which these new features have been successful in addressing the underlying issues.

One such issue is the extent to which workers are automatically enrolled in at least one retirement benefits plan. In its most recent detailed benefits bulletin,[25] the NCS includes some new tables about the extent of automatic-enrollment provisions observed in savings-and-thrift plans. But policy analysts might also be interested in measures that capture the extent to which employees have *any* plan with an automatic accumulation. It is possible to get a rough idea of this figure by piecing together various BLS outputs. Earlier in this article, it was estimated that 19 percent of private industry workers have access to a defined benefit plan from which they have not been frozen out; one might assume these workers have been automatically enrolled in their plans. In addition, table 7 shows that a prominent fraction of those workers without a defined benefit plan have access to a defined contribution plan; surely, some of these workers also must receive retirement accumulations automatically.

Table 7. Access to various types of retirement plans, private industry workers, 2010

Group of workers	All workers	Percentage of workers with access to:					
		No defined contribution plan	Savings-and-thrift plan only	Deferred-profit-sharing plan only	Money-purchase plan only	Other defined contribution plan only	Combination of defined contribution plan types
All workers	100	41	34	5	5	4	12
With access to a defined benefit plan	20	6	10	1	1	0	3
Without access to a defined benefit plan	80	35	24	4	3	4	9

SOURCE: Authors' calculations of data from the National Compensation Survey.

Table 8. Percentages of private industry workers with no access to a defined benefit plan who have access to selected types of defined contribution plans, 2010

Group of workers	All workers	With access to a money-purchase plan, ESOP, or SEP	Without access to a money-purchase plan, ESOP, or SEP
All workers	100	12	88
With access to a savings-and-thrift plan	40	4	36
Without access to a savings-and-thrift plan	60	8	52

SOURCE: Authors' calculations of data from the National Compensation Survey.

Table 8 takes a closer look at workers who do not have access to a defined benefit plan as currently defined by the NCS. For this population, we cross-tabulate access to two groups of defined contribution plan types. Across the columns, we track access to plans for which automatic enrollment is typical (money-purchase plans, employee stock ownership plans, and SEPs), and down the rows we track access to savings-and-thrift plans, which sometimes include automatic enrollment provisions and sometimes do not.

It can be seen here that 12 percent of workers without access to a defined benefit plan have access to at least one defined contribution plan in which automatic enrollment is implied. An additional 36 percent of workers without access to a defined benefit plan do not have access to a defined contribution plan in which automatic enrollment is implied but do have access to a savings-and-thrift plan. Applying the estimate from the 2009 NCS bulletin[26] that 19 percent of savings-and-thrift plan participants have automatic-enrollment provisions, one can estimate that 19 percent (100 × .12 + 100 × .36 × .19 = 19) of workers without defined benefit access have access to a defined contribution plan with automatic enrollment. Since the NCS program estimates that 80 percent of private industry workers do not have access to a defined benefit plan, this represents (19 percent × 80 percent =) 15 percent of the private industry worker population.

One group of workers remains—the approximately 1.2 percent of private industry workers identified earlier who are frozen out of any defined benefit plan but are recorded as having access to one. As noted earlier, this is a small group, but it is expected to grow in the coming years, and it is important to consider any defined contribution plans that employers may offer as a replacement. To approximate the fraction of these workers having access to a defined contribution plan with automatic enrollment, we track the rates of defined contribution access among all workers with access to a frozen defined benefit plan but no access to a nonfrozen defined benefit plan. We then apply these rates to the estimated frozen-out population. Table 9 is an analog to table 8, with the population constrained to private industry workers who have access to a frozen defined benefit plan but not to a nonfrozen defined benefit plan.

Among the workers covered in this table, 26 percent have access to a defined contribution plan type in which workers typically are enrolled automatically, while another 50 percent do not have one of these types of defined contribution plans but *do* have a savings-and-thrift plan. Again applying the estimate from the NCS that 19 percent of savings-and-thrift plan participants are automatically enrolled, one can estimate that about 36 percent (100 × .26 + 100 × .50 × .19 = 36) of the population with access to only a frozen defined benefit plan also has access to a defined contribution plan with automatic enrollment. This rate is almost double the 19-percent figure calculated earlier for workers with no defined benefit plan, suggesting that some employers freezing their plans offer a defined contribution plan with automatic enrollment as a substitute. The rate of 36 percent implies that less than a half of a percent of private industry workers (100 × .012 × .36 = 0.4) are frozen out of their defined benefit plan but have access to a defined contribution plan with automatic enrollment.

Table 9. Percentages of private industry workers with access to only a frozen defined benefit plan who have access to selected types of defined contribution plans, 2010

Group of workers	All workers	With access to a money-purchase plan, ESOP, or SEP	Without access to a money purchase plan, ESOP, or SEP
All workers	100	26	74
With access to a savings-and-thrift plan	67	17	50
Without access to a savings-and-thrift plan	33	9	24

SOURCE: Authors' calculations of data from the National Compensation Survey.

Putting it all together, one can estimate the percentage of private industry workers who are participating in a retirement benefit in which they were automatically enrolled.

- Nineteen percent have access to a defined benefit plan from which they are not frozen out.
- Fifteen percent have no defined benefit access but have access to a defined contribution plan with automatic enrollment.
- Less than half of 1 percent have access to a defined contribution plan with an automatic-enrollment feature despite being frozen out of their defined benefit plan.
- Adding these components together, one can estimate that about 35 percent of private industry workers have access to one or more retirement plans with automatic enrollment.[27] This represents about half of the population shown in table 5 to have access to some type of retirement plan (that is, half of the 70 percent of private industry workers who have access to any retirement plan).

This exercise demonstrates how the NCS data might be exploited to produce estimates of some population characteristics that span multiple types of retirement plans. Other questions could be explored this way as well. For example, a complementary question to the one answered in the last bullet point is, What percentage of workers have access to at least one retirement or savings plan in which enrollment is *voluntary*? Questions about the values of different plans might be answered by new measures of plan generosity that could be compared and aggregated across plan types.[28]

There are several other questions of interest that are not feasibly answered given the currently available data but could be addressed with relatively minor changes to the survey. For example, it would be desirable to be able to compute a measure of the extent to which employees have access to at least one annuity-oriented payout at retirement. Such payouts are common to defined benefit plans. They are also increasingly being offered as options in defined contribution plans, and, as this article has indicated, some pretax savings plans with no employer contribution appear to be offered as a means to add an annuity option to an otherwise lump-sum-oriented defined contribution framework. Currently, the NCS collects data on annuity provisions within some plan categories but not within others; the resulting shortfall in completeness could easily be resolved with a few additional questions to add consistency and strive towards completeness across the survey's hierarchy.

IN PURSUING ITS MISSION OF BEING THE LEADER in the provision of information about the pay and benefits provided to American workers, the NCS program has continuously evolved as it has adjusted to the evolution of the retirement benefits landscape. This adjustment process has largely been successful over the years. However, some recent developments in the benefits world seem to have exceeded the limits of the NCS's traditional means of adjustment, suggesting that further adjustments might be necessary. This article makes three basic recommendations as regards such adjustments:

1. The NCS program should consider addressing the frozen-plan situation by introducing the following additional question to the survey when frozen plans are encountered: What percent of current workers are frozen out of the plan? The information collected from this question could be used to adjust estimates of defined benefit access to exclude those who are frozen out. Alternatively, in consideration of the costs of additional questions in the survey, the NCS program could approximate the number of frozen-out workers by applying the information it collects on the participation rates in frozen and nonfrozen plans.
2. The NCS program should consider treating pretax savings plans with no employer costs as it does defined contribution plans, merging the questions about these plans into the defined contribution portion of the survey and collecting information on workers' participation as well as various plan details. In addition, it should consider tracking employer-managed IRA accounts in a similar way.[29]
3. The NCS program should develop more tables that combine information from different plan types and different benefit areas. At the least, this process would result in some interesting new outputs such as the statistics on the prevalence of automatic enrollment that were calculated for this article. It also might entail revisions to the survey to make combining data easier. For example, a standardized annuity question could be applied across relevant segments of the survey.

It is important to recognize that the NCS program must always take into account the many constraints it faces, including scarceness of program resources, sensitivity to the burden faced by its voluntary respondents, and limitations on the extent to which respondents are able to retrieve accurate answers. Nonetheless, the recommendations presented in this article should be explored. □

Notes

[1] "Employer Costs for Employee Compensation," *Compensation and Working Conditions*, summer 1997, pp. 112–17, **http://www.bls.gov/news.release/archives/ecec_031986.pdf** (visited June 29, 2011); see table f-1 on p. 113.

[2] *Employer Costs for Employee Compensation – December 2009*, USDL 10–0283 (Bureau of Labor Statistics), Mar. 10, 2010, **http://www.bls.gov/news.release/archives/ecec_03102010.pdf** (visited June 30, 2011); see table 5 on pp. 10–11.

[3] Patrick W. Seburn, "Evolution of employer-provided defined benefit pensions, *Monthly Labor Review*, December 1991, pp. 16–23.

[4] Vincent P. Apilado, "Pension Funds, Personal Savings, and Economic Growth," *The Journal of Risk and Insurance*, September 1972, pp. 397–404; see especially p. 400.

[5] Survey of Consumer Finances data show that, in 1983, 87 percent of pensioned, full-time workers had a defined benefit plan, while only 40 percent had a defined contribution plan. By 1998, 79 percent of pensioned, full-time employees had a defined contribution plan while only 44 percent had a defined benefit plan. (See Leora Friedberg and Anthony Webb, "Retirement and the Evolution of Pension Structure," *Journal of Human Resources*, spring 2005, pp. 281–308; see especially p. 281.)

[6] See, for example, *Pension Insurance Data Book 2005* (Pension Benefit Guaranty Corporation, summer 2006), **http://www.pbgc.gov/documents/2005databook.pdf** (visited June 30, 2011); see especially p. 8.

[7] According to "Employee Benefits in Small Private Establishments, 1994," Bulletin 2475 (Bureau of Labor Statistics, February 1996), **http://www.bls.gov/ncs/ebs/sp/ebbl0001.pdf** (visited June 30, 2011), and "Employee Benefits in Medium and Large Private Establishments, 1995," Bulletin 2496 (Bureau of Labor Statistics, April 1998), **http://www.bls.gov/ncs/ebs/sp/ebbl0015.pdf** (visited June 30, 2011), 15 percent of small-establishment employees participated in defined benefit plans in 1994 and 52 percent of medium- and large-establishment employees did so in 1995. The corresponding participation rates for defined contribution plans were 34 percent and 55 percent.

[8] For example, according to the Pension Benefit Guaranty Corporation, the number of hard-frozen plans among single employers rose from 2,898 (9.5 percent of all plans) in 2003 to 5,273 (18.0 percent of all plans) in 2007. For this and other information, see the *Pension Insurance Data Book 2009* (Pension Benefit Guarantee Corporation, summer 2010), **http://www.pbgc.gov/Documents/2009databook.pdf** (visited June 30, 2010); see especially p. 75. Notably, this continuing trend has been salient among the country's largest employers. See, for example, "Pension Freezes Continue Among Fortune 1000 Companies in 2009" (Watson Wyatt Worldwide, August 2009), **http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=21857** (visited July 5, 2011). Note, however, that the incidence of frozen plans in terms of participants affected continues to lag behind proportions based on plan counts. For example, the NCS reported that, as of March 2009, only 15 percent of defined benefit plan participants were enrolled in frozen plans, as can be seen at **http://www.bls.gov/ncs/ebs/benefits/2009/ownership/civilian/table28a.pdf** (visited July 5, 2011).

[9] The term "target-date funding" refers to an investment option that is based on a particular date when funds are expected to be withdrawn (e.g., when the worker expects to retire). Such options usually involve an automatically rebalancing portfolio of investments in which the investment fractions are adjusted as the target date approaches. See, for example, Craig Copeland, *Use of Target-Date Funds in 401(k) Plans, 2007*, Issue Brief No. 327 (Washington, DC, Employee Benefit Research Institute, 2009) **http://www.ebri.org/pdf/briefspdf/EBRI_IB_3-2009_TrgtDtFnds.pdf** (visited July 5, 2011).

[10] For a more detailed discussion of these plans and their murky status as a benefit or a convenience, see Keenan Dworak-Fisher and William J. Wiatrowski, "What is a benefit plan? Clarifying the NCS definition as health and retirement benefits evolve," *Monthly Labor Review*, this issue, pp. 29–34.

[11] See, for example, William J. Wiatrowski, "Family-related benefits in the workplace," *Monthly Labor Review*, March 1990, pp. 28–33.

[12] Dworak-Fisher and Wiatrowski, "What is a benefit plan?"

[13] Note that the first Level of Benefits survey, in 1979, captured data for a single category of retirement plans funded at least in part by the employer—a category called "pension plans." The great majority of these were defined benefit plans, although there were some money-purchase plans as well. The defined benefit and defined contribution categories were introduced in the mid-1980s to accommodate the growth in the latter.

[14] Note that the term "defined contribution" is applied liberally to a wide variety of plans in which employees accumulate their own retirement savings, including some plans, such as those based on profit sharing, that do not define a regular contribution. For more definitions of types of retirement plans classified by the NCS, see the "types of plans" entry in the NCS glossary of employee benefit terms at **http://www.bls.gov/ncs/ebs/glossary20092010.htm#retirement_benefits** (visited July 5, 2011).

[15] The benefits covered in this separate part of the survey are miscellaneous; they include a laundry list of "other" benefits and establishment practices that includes such benefits as subsidized commuting and long-term care insurance.

[16] See, for example, chart 3 in "Job Openings and Labor Turnover Survey Highlights," May 2011, Bureau of Labor Statistics, July 12, 2010, **http://www.bls.gov/web/jolts/jlt_labstatgraphs.pdf** (visited July 18, 2011).

[17] Note, however, that it is important for NCS publications to clearly define the access concept to help users avoid confusing it with the concept of eligibility.

[18] See, for example, Scott F. Curtin, "Alternatives to Frozen Defined Benefit Pension Plans," *Compensation and Working Conditions*, Aug. 28, 2009, **http://www.bls.gov/opub/cwc/cm20090826ar01p1.htm** (visited July 5, 2011).

[19] For example, a recent McKinsey & Company report predicted a "continuing acceleration of plan freezings and terminations" through 2012; see *The Coming Shakeout in the Defined Benefit Market* (New York, NY, McKinsey & Company, 2007), **http://ww1.mckinsey.**

com/clientservice/bankingsecurities/pdf/coming_shakeout_in_defined_benefit_market.pdf (visited July 5, 2011), p. 6. In an informal survey by Mercer in 2006, nearly half of the responding employers revealed that they were considering, or would soon consider, switching their defined benefit plans to defined contribution plans; see "To freeze or not to freeze: Observations on the US pension landscape" (Mercer Human Resource Consulting, 2006), **http://www.mmc.com/views/globalRetirement.pdf** (visited July 5, 2011). Alicia H. Munnell and Mauricio Soto cite high credit balances relative to income, high legacy costs, and low funding ratios as correlates of pension freezes and note that "it is reasonable to expect more plans with these characteristics to freeze in the future; see Alicia H. Munnell and Mauricio Soto, "Why Are Companies Freezing Their Pensions?" (Chestnut Hill, MA, Center for Retirement Research at Boston College, December 2007), **http://crr.bc.edu/images/stories/Working_Papers/wp_2007-22.pdf?wwparam=1309901281** (visited July 5, 2011). Barbara Butrica and colleagues suggest that a rapid acceleration in the shift from defined benefit plans to defined contribution plans, with an attendant acceleration in freezes, may be imminent; see Barbara A. Butrica, Howard M. Iams, Karen E. Smith and Eric J. Toder, "The Disappearing Defined Benefit Pension and Its Potential Impact on the Retirement Incomes of Baby Boomers," *Social Security Bulletin,* Vol. 69, No. 3, 2009, pp. 1–28, **http://www.ssa.gov/policy/docs/ssb/v69n3/v69n3p1.pdf** (visited July 5, 2011).

[20] William J. Wiatrowski, "The Structure of State and Local Government Retirement Benefits, 2008," *Compensation and Working Conditions Online* (Bureau of Labor Statistics, Feb. 25, 2009), **http://www.bls.gov/opub/cwc/print/cm20090218ar01p1.htm** (visited July 6, 2011).

[21] See, for example, James J. Choi, David Laibson, Brigitte C. Madrian, and Andrew Metrick, "Defined Contribution Pensions: Plan Rules, Participant Choices, and the Path of Least Resistance," *Tax Policy and the Economy*, vol. 16, 2002, pp. 67–113.

[22] See, for example, Martin Holmer, Asa Janney, and Bob Cohen, *PENSIM Overview* (U.S. Department of Labor, January 2011), **http://www.polsim.com/doc/overview.pdf** (visited July 6, 2011).

[23] See, for example, *Individual Retirement Accounts: Government Actions Could Encourage More Employers to Offer IRAs to Employees*, GAO-08–590 (U.S. General Accountability Office, June 2008), **http://www.gao.gov/new.items/d08590.pdf** (visited July 6, 2011).

[24] See *National Compensation Survey: Health and Retirement Plan Provisions in Private Industry in the United States, 2009*, Bulletin 2749, (Bureau of Labor Statistics, July 2010), **http://www.bls.gov/ncs/ebs/detailedprovisions/2009/ebbl0045.pdf** (visited July 6, 2011).

[25] *Ibid.*

[26] *Ibid.*

[27] Note that, because of rounding, the numbers in the first three bullets do not sum to the total in the last bullet.

[28] For example, Keenan Dworak-Fisher ("Employer generosity in employer-matched 401(k) plans, 2002–03," *Monthly Labor Review,* September 2007, pp. 11–19) describes a measure of the generosity of savings-and-thrift plans in which the potential employer contribution is calculated under the assumption that workers contribute enough to receive the highest matching contributions feasible. Analogs to this measure might be developed for other types of defined contribution plans as well as defined benefit plans.

[29] Further discussion can be found in Dworak-Fisher and Wiatrowski, "What is a benefit plan?"