HYBRID PLAN RESEARCH FINDINGS

EXECUTIVE SUMMARY

Despite what one reads in the popular press, cash balance and other hybrid pension plans actually provide more generous benefits for employees than the traditional pension plans they are replacing. As a result, cash balance and other hybrid plan conversions over the past two decades have actually benefitted employees. These conclusions emerge from a growing body of independent research by economists and academics at some of the nation's most respected institutions, including the Federal Reserve Board, the Urban Institute, the Brooking Institution, and the Wharton School. This compilation includes all the research studies and related materials that could be identified as of May 2004. Not included in this compilation are the numerous studies prepared by actuarial and accounting firms, which tend to show largely the same results but were prepared by organizations that, while respected, have a stake in the outcome of the current debate over hybrid plans.

SUMMARY OF FINDINGS

Traditional defined benefit plans deliver the bulk of their benefits to employees who retire in their mid-50's after spending 20 to 30 years with the same employer
Few employees retire in their mid-50's after spending 20 to 30 years with the same employer even at large companies
Hybrid plans are better suited to Americans' work patterns because hybrid plans allow workers to earn benefits steadily throughout their careers
The motivation for switching to hybrid plans is not cost savings but the need to adapt pensions to employees' career patterns and employers' business needs
Another positive aspect of hybrid conversions is that they typically eliminate early retirement subsidies on future benefit accruals
Although hybrid plans share accrual patterns with defined contribution plans, hybrid plans have distinct advantages over defined contribution plans
A few reports have drawn negative conclusions about cash balance plans, but those conclusions have been based on flawed assumptions

RESEARCH FINDINGS

TRADITIONAL DEFINED BENEFIT PLANS DELIVER BULK OF BENEFITS TO EMPLOYEES WHO RETIRE IN THEIR MID-50'S AFTER SPENDING 20 TO 30 YEARS WITH THE SAME EMPLOYER

Traditional defined benefit plans are economically backloaded. Employees earn the bulk of their pension benefit only after 20 to 30 years with the same employer. The value of this benefit spikes after employees qualify for subsidized early retirement benefits, typically in their mid-50's, but then declines if they fail to retire and keep working. As a result, traditional defined benefit plans are advantageous for the small proportion of employees who work for the same employer for 20 to 30 years and retire in their mid-50's. Conversely, traditional defined benefit plans are disadvantageous for younger employees, for employees who change jobs or interrupt their careers, and for older employees who continue working after early and normal retirement age.

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"Overall, defined benefit pension wealth—the present value of the expected future stream of [traditional] pension benefits—grows slowly early on in an individual's career, increases rapidly near the end, and then declines at older ages." Johnson & Uccello, Urban Institute, <i>Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?</i> , at 2 (2002) (Tab L).
"[B]enefits in a [traditional] DB pension do not accrue evenly over an employee's tenure; the most rapid period of benefit accrual occurs in the years just prior to retirement. The back-loaded nature of benefits in a DB pension plan thus imposes a capital loss on workers who leave the firm before retirement." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 3-4 (2003) (Tab E).
"Because [traditional] defined benefit plans are backloaded, they reward long-tenure employees and penalize more mobile employees." Forman, <i>Public Pensions: Choosing Between Defined Benefit and Defined Contribution Plans</i> , at 195 (1999) (Tab G).
"[Traditional] DB pensions are characterized by back-loaded benefits that reward tenure and punish worker mobility." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 2 (2003) (Tab E).
"The defining characteristic of marginal benefit accruals under a [traditional] DB plan is that these accruals are backloaded to latter years of service due to the fact that the ultimate benefits earned are a function of years of service as well as earnings." Yakoboski, Employee Benefit Research Institute, <i>Debunking the Retirement Policy Myth: Lifetime Jobs Never Existed for Most Workers</i> , at 11 (1998) (Tab W).
"[T]wo thirds of all [traditional] DB plans tied benefits to terminal earnings rather than career formulas, a formulaic approach that imposed large pension losses on workers who left their employers prior to the retirement age specified by the plan." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, <i>Possible Implications of Mandating Choice in Corporate Defined Benefit Plans</i> , at 3 (2003) (Tab Q).
"Typically, participants under a traditional defined benefit plan using a final average pay formula accrue the greatest share of their benefits in the final years of their careers because benefits are based on completed years of service and final average salary, both of which generally increase the

longer the worker stays with the same employer." General Accounting Office, <i>Cash Balance Plans: Implications for Retirement Income</i> , at 23 (2000) (Tab I).
"[P]ension accruals in traditional DB plans are minimal at young ages, grow rapidly in the late 40's and 50's as workers approach retirement age, and then become negative as workers lose pension wealth when they remain at work past the plan's retirement age. For workers in their early 60s who have participated in the DB plan since age 25, for example, pension wealth declines on average by about 14 percent of annual salary each year." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 21 & Fig. 12 (2003) (Tab N).
"Pension wealth tends to grow slowly in traditional DB plans for relatively young workers, increases rapidly once workers approach retirement age (or maximum years of countable service), and often declines if they remain with the employer beyond that age or time." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 17 (2003) (Tab N).
"For workers participating in [traditional] defined benefit plans, the disincentive to work after the age of earliest eligibility—typically age 60, but as young as age 55—can be great. A survey of 1,000 [traditional] pension plans showed that continued work after early retirement eligibility typically reduced the lifetime value of a pension by the equivalent of a 30 percent pay cut." Committee for Economic Development, <i>New Opportunities for Older Workers</i> , at 24 (1999) (Tab D).
"Many private [traditional] pensions penalize work after some age, frequently as low as 55. Work after this age creates an implicit 'tax' (often exceeding 50 percent) due to the decline in value of lifetime pension benefits." Committee for Economic Development, <i>New Opportunities for Older Workers</i> , at 3 (1999) (Tab D)
"In effect, [traditional] DB plans favor a select group of longer-term employees, often in late middle-age, but disfavor both younger and older workers." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 24 (2003) (Tab N).
"Because the increase in benefits paid in each installment is often insufficient to offset the reduction in the number of installments, many workers in [traditional] DB plans lose pension wealth by delaying retirement. [Traditional] DB plans also often include early retirement provisions, which further discourage work at older ages by subsidizing benefits for those who retire early, often as young as age 55." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 1 (2003) (Tab N).
"The annual increment to pension wealth often turns negative after workers reach the plan's normal retirement age, because the modest increase in the size of the annuity from an additional year of work does not offset the loss of a year's worth of benefits." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 2 (2002) (Tab L).

FEW EMPLOYEES RETIRE IN THEIR MID-50'S AFTER SPENDING 20 TO 30 YEARS WITH THE SAME EMPLOYER, EVEN AT LARGE COMPANIES

Only a very small percentage of employees work for the same employer throughout their career. Most employees change jobs or interrupt their career. Very few employees retire in their mid-50's after spending 20 to 30 years with the same employer. Most employees work beyond early retirement age, and an increasing percentage of employees work past normal retirement age. "[U]sing data from personnel files from 65 large companies we found that only 7 percent of workers were likely to stay with one employer for their entire career." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, Possible Implications of Mandating Choice in Corporate Defined Benefit Plans, at 6 (2003) (Tab Q). "[A]t any given point in time the fraction of workers who have held their current job for a very long period of time (20 or more years) is relatively small. Over the period 1983-1996, the fraction of all wage and salary workers with 20 or more years of tenure with their current employer consistently hovered around 10 percent." Yakoboski, Employee Benefit Research Institute, Debunking the Retirement Policy Myth: Lifetime Jobs Never Existed for Most Workers, at 6 (1998) (Tab W). The median years of tenure with an employee's current employer in 2002 for employees age 25 and older was 4.7 years. The median tenure varied by age, for example: 7.6 years for employees age 45 to 54; 9.9 years for employees age 55 to 64, and 8.7 years for employees age 65 and older. U.S. Department of Labor, Bureau of Labor Statistics, Table 1. Median Years of Tenure with Current Employer for Employed Wage and Salary Workers by Age and Sex, Selected Years, 1983-2002, at http://www.bls.gov/news.release/tenure.t01.htm (last visited Mar. 31, 2004). "Over the past 20 years, the median tenure of workers has been declining, particularly for the older age groups. . . . [M]edian tenures for workers age 45-54 has fallen from 9.5 years in 1983, to 7.6 years in 2002, for a 20% decline drop over 20 years." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, Possible Implications of Mandating Choice in Corporate Defined Benefit Plans, at 4 (2003) (Tab Q). "[A] significant percentage of the work force has been in their current job for a very short period of time (2 years or less) consistently over the years . . . Over the period 1983-1996, the fraction of all wage and salary workers with 2 years or less of tenure with current employer hovered in the 36-39 percent range." Yakoboski, Employee Benefit Research Institute, Debunking the Retirement Policy Myth: Lifetime Jobs Never Existed for Most Workers, at 5-6 (1998) (Tab W). "[P]lanning for retirement now necessarily includes working, either full or part-time, during a portion of retirement." AARP, Amicus Brief in Central Laborers' Pension Fund v. Heinz, No. 02-891, 2004 WL 425737, at *6 (March 4, 2004) (Tab B). "72 percent of all workers, 67 percent of preboomers (ages 53 and older at the time of the survey), 69 percent of early boomers (ages 45-52), and 78 percent of late boomers (ages 34-44) expect

to work part time in retirement." AARP, Amicus Brief in Central Laborers' Pension Fund v. Heinz,

No. 02-891, 2004 WL 425737, at *9-10 (March 4, 2004) ($citing$ EBRI Retirement Confidence Survey (Oct. 1997), available at http://www.ebri.org/rcs/1997/97rcs_es.htm) (Tab B).
"More than two in five (44%) working retirees returned to work within six months after they retired, and about three in five (61%) returned to work within one year after they retired." AARP, Staying Ahead of the Curve 2003: The AARP Working in Retirement Study, at 44 (2003) (Tab C).
A survey of workers between ages 50 and 70 found that 85% have never retired and, of those who have not yet retired, 70% plan to work in their retirement years or never retire. AARP, <i>Staying Ahead of the Curve 2003: The AARP Working in Retirement Study</i> , at 4 (2003) (Tab C).

HYBRID PLANS ARE BETTER SUITED TO AMERICANS' WORK PATTERNS BECAUSE HYBRID PLANS ALLOW WORKERS TO EARN BENEFITS STEADILY THROUGHOUT THEIR CAREERS

As a general matter, hybrid defined benefit plans are <u>not</u> economically backloaded. Under hybrid plans, employees earn benefits steadily over their careers without the deferred spikes and subsequent declines in value typical of traditional defined benefit plans. Because the vast majority of workers do not spend 20 to 30 years with the same employer, are likely to change jobs at least once or twice in their careers, and do not retire in their mid-50's, hybrid plans provide greater and more secure retirement benefits for the workers covered by them. In fact, hybrid plan conversions have benefitted most employees affected by them. Hybrid plans are especially advantageous for women, lower-paid employees, older employees who continue working after early and normal retirement age, younger employees, and employees who change jobs during their careers.

after early and normal retirement age, younger employees, and employees who change jobs during their careers.	
"[G]iven the emergence of vehicles such as 401(k) plans and hybrid plans, retirement plans today match the reality of the work experience for most Americans better than at any time in the past." Yakoboski, Employee Benefit Research Institute, <i>Debunking the Retirement Policy Myth: Lifetime Jobs Never Existed for Most Workers</i> , at 1 (1998) (Tab W).	
"[B]ecause cash balance plans spread benefit accruals more evenly over a worker's career than a traditional defined benefit plan with a final average pay formula does, workers can accrue higher benefits sooner. This is especially important for workers who change jobs frequently or move in and out of the workforce." General Accounting Office, <i>Private Pensions: Implications of Conversions to Cash Balance Plans</i> , at 23 (Sept. 2000) (Tab J)	
"[W]ealth accrual profiles generally differ sharply between DB and cash balance plans. In most [traditional] DB plans, pension wealth grows slowly early in the career but rises rapidly as workers approach retirement age. In cash balance plans, pension wealth tends to grow more evenly over the course of the career. For some workers, particularly those who change jobs frequently, the relatively smooth accrual profile for cash balance plans may generate larger lifetime pension benefits than [traditional] DB plans." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 1 (2001) (Tab M).	
"Compared with traditional pensions, cash balance plans generate retirement wealth more evenly over time for a couple of reasons: Contributions made early on earn interest for many years, and lifetime earnings rather than final earnings determine benefits. Consequently, a worker changing jobs incurs only a small penalty. For women, who tend to have higher turnover rates than men, the ability to change jobs without jeopardizing pension wealth may be particularly important." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 2 (2002) (Tab L).	
"[P]ension accruals in traditional DB plans are minimal at young ages, grow rapidly in the late 40's and 50's as workers approach retirement age, and then become negative as workers lose pension wealth when they remain at work past the plan's retirement age. For workers in their early 60s who have participated in the DB plan since age 25, for example, pension wealth declines on average by about 14 percent of annual salary each year. These sharp drops in pension wealth provide strong incentives to retire. By contrast, the prototypical hybrid plans we modeled reward work at older ages."	

Johnson & Steuerle, Urban Institute, Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population, at 21 (2003) (Tab N). When taking into account "the likelihood of a worker actually staying to full retirement and receiving the full defined benefit plan[,] the expected value of the benefit from the hybrid plan is 11 percent higher than the expected value of the [traditional] defined benefit plan. . . . [F]or those employees who changed jobs three times over their work life, their pension wealth from the hybrid plan would be nearly 18 percent higher than what they would have received from three different [traditional] DB plans." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, Possible Implications of Mandating Choice in Corporate Defined Benefit Plans, at 6 (2003) (Tab Q). A study of a traditional plan and a cash balance plan that provided equal pension wealth in the aggregate found that 68% of employees receive greater benefits under the cash balance plan. The same study found that 77% of women employees would be better off under the cash balance plan. Kopp & Sher, Society of Actuaries, A Benefit Value Comparison of a Cash-Balance Plan with a Traditional Final Average Pay Defined-Benefit Plan, The Pension Forum, at 9-10 (Oct. 1998) (Tab **P**). In a study of individuals age 51 to 61, Urban Institute researchers concluded that median pension wealth would be higher (\$59,400 versus \$55,800) under cash balance plans than traditional defined benefit plans. Among individuals in the bottom quartile of distribution, median pension wealth would increase under a cash balance plan by 81%. Johnson & Uccello, Urban Institute, The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife, at 20, 22 (2001) (Tab M). Traditional plans favor employees with steep earnings profiles, and evidence shows that more educated workers tend to have steeper earnings profiles than less educated workers. Gale & Orszag, Urban-Brooking Tax Policy Center, Private Pensions: Issues and Options, at 34 n.68 (2003) (Tab H). "Cash balance plans generally are structured such that workers accrue benefits earlier in their careers than they would under most traditional defined benefit plans. This feature, combined with the lump sum payouts also common to such plans, provides opportunity for more mobile workers to secure and retain higher benefits, even when they change jobs, than they would under most traditional defined benefit plans." General Accounting Office, Cash Balance Plans: Implications for Retirement Income, at 5 (2000) (Tab I). "[W]orkers employed by more than one employer during their career can receive more retirement income under multiple cash balance plans than under multiple traditional defined benefit plans. . . . [In one example, t]he benefit earned by the worker who changed employment under multiple cash balance plans will accrue a retirement benefit that is almost 22 percent larger than the benefit received by the workers under multiple FAP [final average pay] plans." General Accounting Office, Cash Balance Plans: Implications for Retirement Income, at 26-27 (2000) (Tab I). "Under the typical [traditional] DB formula, benefits accrue slowly when workers are young

and more rapidly at the end of their careers. The benefit from working at one job for forty years is

typically much greater than the combined benefits from working at four jobs for ten years each. For this reason, losing or changing jobs lowers pension benefits under traditional DB plans more than under DC or cash balance plans." Gale & Orszag, Urban-Brooking Tax Policy Center, <i>Private Pensions: Issues and Options</i> , at 21 (2003) (Tab H).
"Among those projected to spend at least 35 years with their employers, median pension wealth was 23 percent higher in cash balance plans than DB plans." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 23-24 (2001) (Tab M).
"DC and hybrid plans generally do not discourage workers from remaining on the job at older ages. By shifting from traditional plans to hybrid plans (or never adopting DB plans, which is standard practice for new firms), employers may be better able to retain their older workers and hire new workers of any age." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 2 (2003) (Tab N).
"While many workers who planned to stay with a firm that previously offered a traditional DB arrangement will lose expected benefits through a cash balance conversion, the earlier accrual and portability of benefits will better facilitate the accumulation of retirement wealth for the majority of workers affected by these conversions." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 23 (2003) (Tab E).
"In cash balance plans, by contrast, even workers who change jobs frequently can accumulate sizeable pension wealth." Johnson & Uccello, Urban Institute, <i>Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?</i> , at 1 (2002) (Tab L).
"For women, who tend to have higher turnover rates than men, the ability to change jobs without jeopardizing pension wealth may be particularly important." Johnson & Uccello, Urban Institute, <i>Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?</i> , at 2 (2002) (Tab L).
"Median lifetime pension wealth would increase under cash balance plans because these newer plans distribute pension wealth more equally across the covered population." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 3 (2002) (Tab L).
"The individuals with the least defined benefit wealth would gain the most: At the bottom quartile, cash balance plans would boost the median pension wealth 81 percent." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 3 (2002) (Tab L).
"Eighty percent of those in the bottom quartile of the defined benefit wealth distribution would realize gains in cash balance plans, while 61 percent of those in the top quartile would fare worse." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 6 (2002) (Tab L).

"A recent Watson Wyatt report concluded that most workers would do better in cash balance plans than DB plans (Brown, et al. undated). It examined three actual plan conversions by large employers. Pension costs decreased by 32 percent in one conversion, increased by 23 percent in the second conversion and remained approximately constant in the third. Under the cost-neutral conversion, pension wealth increased for 80 percent of participants." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 6 (2001) (Tab M).
"Among all past jobs with [traditional] DB coverage, median pension wealth was \$18,600. If these jobs had offered cash balance coverage instead of [traditional] DB coverage, median pension wealth would have increased to \$28,000. The difference in median pension wealth was \$9,400, or 50 percent of DB wealth. Pension wealth was higher in simulated cash balance plans than DB plans for 68 percent of all past jobs." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 18 (2001) (Tab M).
"Those who did not attend college were also more likely to fare better in cash balance plans than college graduates." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 25 (2001) (Tab M).
"Fully three-quarters of those with at least 35 years of service on their longest jobs would fare better in cash balance plans than DB plans, under the assumption that quit rates do not respond to financial incentives created by pension plans." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 25-27 (2001) (Tab M).
"We found that 53 percent of those ages 51 to 61 with coverage from past or current jobs would have accumulated more lifetime wealth in cash balance plans than in their existing DB plans. If they had participated in cash balance plans during their entire careers, median pension wealth would increase by \$3,600, or by almost 7 percent of median pension wealth in existing DB plans." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 29 (2001) (Tab M).
"In cash balance and pension equity plans, by contrast, accrual rates generally do not vary by age at hire, because the value of the retirement benefits do not depend on life expectancy at retirement. Hybrid plans, then, generally provide workers with stronger incentives to join employers at older ages than traditional plans." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 22 (2003) (Tab N).
"Unlike traditional DB plans, hybrid pension plans, such as cash balance plans and pension equity plans, often reward work at older ages at least as much as work at younger ages, because workers in hybrid plans do not forego a year of benefits for every year that they remain on the job past the retirement age." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 24 (2003) (Tab N).
"And hybrid plans generally do not subsidize workers who elect to retire early they appear to be one response—among many—to the new demographics of the labor market, in which older individuals will become the largest source of potential labor in the economy." Johnson & Steuerle,

Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 24 (2003) (Tab N).
"About two-thirds of the employees would have received more valuable benefits under the cash balance plan. Their average benefit value was \$22,100 under the cash balance plan and \$8,500 under the final average pay plan." Kopp & Sher, Society of Actuaries, <i>A Benefit Value Comparison of a Cash-Balance Plan with a Traditional Final Average Pay Defined-Benefit Plan</i> , The Pension Forum, at 2 (Oct. 1998) (Tab P).
"For the one-third of the employees who would have received more valuable benefits under the final average pay plan, the average benefit value was \$54,300 for the cash balance plan and \$83,200 for the final average pay plan." Kopp & Sher, Society of Actuaries, <i>A Benefit Value Comparison of a Cash-Balance Plan with a Traditional Final Average Pay Defined-Benefit Plan</i> , The Pension Forum, at 2 (Oct. 1998) (Tab P).
"The proportion of females who would have received more valuable cash balance benefits is higher—about three-quarters—due to their relatively higher turnover particularly at younger ages where the cash balance plan provides more valuable benefits than the final average pay plan." Kopp & Sher, Society of Actuaries, <i>A Benefit Value Comparison of a Cash-Balance Plan with a Traditional Final Average Pay Defined-Benefit Plan</i> , The Pension Forum, at 2 (Oct. 1998) (Tab P).
"[F]or those employees who changed jobs three times over their work life, their pension wealth from the hybrid plan would be nearly 18 percent higher than what they would have received from three different DB plans." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, <i>Possible Implications of Mandating Choice in Corporate Defined Benefit Plans</i> , at 6 (2003) (Tab Q).
"Whereas traditional defined benefit plans often subsidize workers who retire early and penalize those who remain at work beyond the plan's retirement age, most hybrid plans reward work at older ages." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , Abstract (2003) (Tab N).

THE MOTIVATION FOR SWITCHING TO HYBRID PLANS IS NOT COST SAVINGS BUT THE NEED TO ADAPT PENSIONS TO EMPLOYEES' CAREER PATTERNS & EMPLOYERS' BUSINESS NEEDS

Cost savings are not driving the switch to hybrid plans, but the need to adapt pension plans to the reality of the American workplace—a reality in which full-career employment capped by early retirement in one's mid-50's is a rarity experienced by few employees, even at large companies. Companies could easily cut pension costs without the complexity and expense of a hybrid conversion. Far from cutting costs, most companies that convert to a hybrid plan actually spend as much or more on retirement benefits after the conversion as before. Instead, companies are switching to hybrid plans to meet competitive pressures imposed by employees' actual career patterns and employers' business needs. In a world where the vast majority of employees will not spend 20 to 30 years working for the same employer, the steady accrual of benefits under a hybrid plan provides greater retirement security than the distant accrual of backloaded benefits under a traditional plan. In a world where women, skilled mobile workers, and older experienced employees form a critical supply of labor for employers, companies find it difficult to continue traditional plans that can disadvantage or penalize these workers and are switching to hybrid plans that provide more equitable rewards for all employees.

backloaded benefits under a traditional plan. In a world where women, skilled mobile workers, and older experienced employees form a critical supply of labor for employers, companies find it difficult to continue traditional plans that can disadvantage or penalize these workers and are switching to hybrid plans that provide more equitable rewards for all employees.	
"While the idea that firms are undertaking cash balance conversions to reduce benefits lacks analytic underpinnings, it has nonetheless served as the basis of various legislative proposals in Congress and has been the dominant theme in media coverage of this trend. Because of its influence, the idea is worthy of empirical analysis Our results indicate that, while critics have decried the trend of the conversion of traditional DB pension plans to cash balance plans as reducing benefit generosity, the implications for retirement security may actually be favorable. The earlier accrual and portability of benefits will better facilitate the accumulation of wealth for a more mobile labor force." Copeland & Coronado, Federal Reserve Board, Cash Balance Pension Plan Conversions and the New Economy, at 12, 22 (2002) (Tab F).	
"Another hypothesis is that employers are trying to avoid the costs associated with generous DB plans when the workforce is aging [However, a] higher fraction of older workers reduces the probability of conversion, contradicting the idea that a driving force behind the popularity of cash balance plans is an aging workforce." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 2, 21 (2003) (Tab E).	
"[C]ash balance conversions have been undertaken in competitive industries with tight labor markets and can be viewed largely as a response to better compensate a more mobile labor force. Indeed, many firms appear to increase their pension liabilities through such conversions." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , Abstract (2003) (Tab E).	
"What are the implications of actual tenure patterns for retirement income policy and retirement plan design? Early public policy and plan design were often based on delivery of benefits to lifetime workers. Thus, traditional DB plans provided retirement income security quite effectively for only a fraction of the population, since lifetime jobs were never widespread. Traditional DB plans were never going to be an effective means of ensuring retirement income security for <i>most</i> workers Hybrid plans have emerged combining features of DB and DC plans, including the portability features of DC plans. It can be argued that retirement plans today match the reality of the work	

Research Institute, <i>Debunking the Retirement Policy Myth: Lifetime Jobs Never Existed for Workers</i> , at 11-12 (1998) (emphasis in original) (Tab W).	
"By distributing pension wealth more equally across the population than [traditional dbenefit] plans, cash balance plans would increase median lifetime pension wealth in the total copopulation and more people would gain pension wealth than lose." Johnson & Uccello, Urbar tute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at M</i> at 29 (2001) (Tab M).	overed n Insti-
"By contrast, many employers today prefer hybrid plans because they smooth compendifferentials by age and soften the incentives for early retirement. As a consequence of the neelements, hybrid plans are in fact <i>less</i> age discriminatory than many traditional DB plans." M & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, <i>Possible cations of Mandating Choice in Corporate Defined Benefit Plans</i> , at 18 (2003) (emphasis in al) (Tab Q).	w plan itchell <i>Impli-</i>
"The growing popularity of hybrid pension plans represents one response to the changing graphics of the labor market. As in DC plans, which are typically tax-deferred retirement accinto which both employers and employees contribute, hybrid plans express future retirement be as account balances. In cash balance plans, employers set aside a percentage of each employer salary each period, which earns interest at a set rate. Balances in pension equity plans equal a percentage of final average earnings for each year of service. Because these account balances on the grow at about the same rate after the retirement age as they did beforehand, DC and plans generally do not discourage workers from remaining on the job at older ages. By shifting traditional plans to hybrid plans (or never adopting DB plans, which is standard practice for firms), employers may be better able to retain their older workers and hire new workers of any Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pollans in an Aging Population</i> , at 2 (2003) (Tab N).	counts enefits oyee's a given contin- hybrid g from or new y age."
"Traditional DB plans generally encourage early retirement, by offering early retire subsidies and delayed retirement penalties. As a result, DB plan sponsors seeking to keep their workers on the job found that their traditional plans did not serve business objectives. By concluding plans eliminate early retirement incentives and do not have a 'spike' in accrual rates a before normal retirement age. Thus workers who leave early are not penalized as was the comost DB plans, which provided larger accruals for longer tenured employees close to retire Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, ble Implications of Mandating Choice in Corporate Defined Benefit Plans, at 4 (2003) (comitted) (Tab Q).	r older ontrast, shortly case of ment." Possi-
The less likely a firm's competitors offer a defined benefit plan and the more mobile emp are in the firm's industry, the more likely a firm will convert an existing defined benefit pla a cash balance plan. On the other hand, the older the workforce and the greater slack there is firm's labor market, the less likely a firm is to convert to cash balance. Coronado & Cop Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> (2003) (Tab E).	an into s the in seland,

"The size of the plan continues to have a positive and significant effect on the probability of conversion in this specification, while the effect of the industry unemployment rate, while still indicating a positive effect from tight labor markets, is no longer significant. The employer-to-employer rate also has a positive and significant effect on the probability of conversion, indicating that more mobile workers influence firms to change their pension offerings." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 21 (2003) (Tab E).
"[P]lan size, greater mobility and tighter labor markets lead to a greater probability that a firm will convert its pension to a cash balance plan, while funding, age of workers, and the percent of other firms in the industry that offer a DB plan are not significant determinants of this decision." Coronado & Copeland, Federal Reserve Board, <i>Cash Balance Pension Plan Conversions and the New Economy</i> , at 22 (2003) (Tab E).
"While employers clearly are changing future accrual patterns, there is no evidence of plan sponsors having used a transition to hybrid plans to reduce benefits workers had already earned." Schieber, <i>The Shift to Hybrid Pensions by U.S. Employers: An Empirical Analysis of Actual Plan Conversions</i> , at 3 (2004) (Tab S).
"The rate of cash balance conversions in an industry is negatively correlated with the DB sponsorship rate in the same industry. Thus, the less likely a firm's competitors are offering a DB plan, the more likely it is that a firm with an existing DB plan will convert it to a cash balance plan." Coronado & Copeland, Federal Reserve Board, Cash Balance Pension Plan Conversions and the New Economy, at 18 (2003) (Tab E)

ANOTHER POSITIVE ASPECT OF HYBRID CONVERSIONS IS THAT THEY TYPICALLY ELIMINATE EARLY RETIREMENT SUBSIDIES ON FUTURE BENEFIT ACCRUALS

Early retirement subsidies are age discriminatory in that they provide benefits that are intentionally designed to decrease in value as an employee ages unless the employee stops working and begins collecting benefits. As a result, early retirement subsidies have the effect of forcing productive older workers out of the job place. Early retirement subsidies have other undesirable social effects, including increased financial pressure on Social Security and Medicare, specifically, and on active workers generally. Hybrid plan conversions are desirable because they eliminate early retirement subsidies on future benefit accruals.

eliminate early retirement subsidies on future benefit accruals.	
"Employers have frequently structured [traditional] DB plans to encourage early retirement by making the lifetime, present value of pension payments decline if workers delay retirement after a specified age." Gale & Orszag, Urban-Brooking Tax Policy Center, <i>Private Pensions: Issues and Options</i> , at 23 (2003) (Tab H).	
"By contrast, many employers today prefer hybrid plans because they smooth compensation differentials by age and soften the incentives for early retirement. As a consequence of the new plan elements, hybrid plans are in fact <i>less</i> age discriminatory than many traditional DB plans." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, <i>Possible Implications of Mandating Choice in Corporate Defined Benefit Plans</i> , at 18 (2003) (Tab Q) (emphasis in original).	
"This private transformation of retirement policy [through hybrid conversions] may indirectly support national retirement policy objectives. With the aging of the population, there is increasing concern about the ability of workers to pay enough taxes to support future retirees and other government functions. Moreover, the vast majority of today's retirees depend more on Social Security and Medicare than their own saving (Gustman et al., 1999), yet they spend close to one-third of their adult lives in retirement. By instead working and saving for a few more years, they can do much to reduce this level of dependency." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 3 (2003) (Tab N).	
"[T]he increasing burdens on workers to support a growing retired population suggest that pensions should not promote early retirement and, in fact, should encourage continued work." Gale & Orszag, Urban-Brooking Tax Policy Center, <i>Private Pensions: Issues and Options</i> , at 4 (2003) (Tab H).	
"Traditional DB pension plans also discourage work at older ages. Many of these plans subsidize benefits for those who retire early, often as young as age 55, or, put differently, penalize work past that age. And most plan participants lose lifetime pension benefits by remaining at work past the age at which they can first receive full benefits, because the boost in annual benefits that comes from working an additional year is typically not large enough to offset the year of lost payments. As a result, workers with DB plans retire about two years earlier, on average, than otherwise identical workers with DC plans (Friedberg and Webb, 2003), which do not [include] these work disincentives." Johnson & Steuerle, Urban Institute, <i>Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population</i> , at 23 (2003) (Tab N).	

ALTHOUGH HYBRID PLANS SHARE ACCRUAL PATTERNS WITH DEFINED CONTRIBUTION PLANS, HYBRID PLANS HAVE DISTINCT ADVANTAGES OVER DEFINED CONTRIBUTION PLANS

Hybrid plans can pay employees benefits in the form of annuities, which defined contribution plans cannot. Although a defined contribution account balance can be applied to buy an annuity contract from a private insurer, annuities purchased from private insurers are considerably more expensive. Under hybrid plans, the employer bears the investment risk; by contrast, under defined contribution plans, the investment risk is born entirely by the employee. As defined benefit plans, hybrid plans can provide subsidized benefits upon death, disability, plant shutdown, and other circumstances, while defined contribution plans cannot. Finally, as defined benefit plans, hybrid plans are insured by the PBGC, while defined contribution plans are not.

plant shutdown, and other circumstances, while defined contribution plans cannot. Finally, as defined benefit plans, hybrid plans are insured by the PBGC, while defined contribution plans are not.
69% of workers and 86% of retirees state that it is very important to receive a guaranteed amount monthly during retirement no matter how long they live. Society of Actuaries & American Academy of Actuaries, <i>Retirement Plan Preferences Survey Report of Findings</i> , at 5 (2004) (Tab T).
Annuities are much more expensive when purchased by an individual than when provided by a defined benefit plan. Insurance companies must price annuities 10-15% higher than would be necessary if everyone purchased annuities because individuals who buy annuities tend to live longer than average. Gale & Orszag, Urban-Brooking Tax Policy Center, <i>Private Pensions: Issues and Options</i> , at 21-22 (2003) (Tab H).
"By contrast, cash balance plans guarantee workers' retirement benefits. Because the employer promises to pay a certain return on plan contributions, benefits do not fluctuate with market interest rates or stock market outcomes." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 1 (2002) (Tab L).
"Cash balance plans also have an advantage over defined contribution plans—they protect workers from downturns in the stock market." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 2 (2002) (Tab L).
"Employers are better able to bear [market] risk than workers because, in general, they have greater access to credit markets and broader diversification opportunities." Johnson & Uccello, Urban Institute, Can Cash Balance Pension Plans Improve Retirement Security for Today's Workers?, at 3 (2002) (Tab L).
"However, unlike DC plans, the balances in [hybrid plan] accounts do not depend on uncertain investment returns. Instead, retirement benefits paid to participants are set by formulas which specify the interest rate at which the account balances grow. Cash balance plans are similar to DB plans, in that employers bear all investment risks." Johnson & Uccello, Urban Institute, <i>The Potential Effects of Cash Balance Plans on the Distribution of Pension Wealth at Midlife</i> , at 1 (2001) (Tab M).
"Whereas DB plans guarantee fixed retirement benefits insured partly by the federal

government, balances in DC accounts depend on uncertain market returns and the discipline of

workers to set part of their paychecks aside each month for retirement savings. To secure lucrative retirement benefits, DC participants must also make wise investment decisions, rollover their balances into other retirement savings accounts when they leave their employer before retirement, and carefully manage their balances after they retire, because few DC participants convert their balances into life annuities (Burman, Johnson and Kobes, 2003)." Johnson & Steuerle, Urban Institute, *Promoting Work at Older Ages: The Role of Hybrid Pension Plans in an Aging Population*, at 15 (2003) (Tab N).

"Further, in the event of company bankruptcy, the federal Pension Benefit Guaranty Corporation (PBGC) protects the security of retirement benefits under these plans. In contrast, DC plans are not protected by such insurance, meaning that employee benefit accumulations very with capital market performance." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, *Possible Implications of Mandating Choice in Corporate Defined Benefit Plans*, at 2 (2003) (Tab Q).

"For example, if an employer wanted to offer employees a more portable retirement benefit through a cash balance formula that provides annual credits of 5 percent of pay, mandatory choice might lead the employer to instead freeze its defined benefit plan and adopt a 401(k) plan that provides contributions of 5 percent of pay. Under the 401(k) plan, employees would bear the entire risk of stock market declines. Annuity benefits, subsidized benefits, survivor benefits, disability benefits, and other features would no longer be available to employees because, unlike a defined benefit plan, a 401(k) plan cannot pay these benefits." Mitchell & Mulvey, Pension Research Council, Wharton School, University of Pennsylvania, *Possible Implications of Mandating Choice in Corporate Defined Benefit Plans*, at 16 (2003) (Tab Q).

A FEW REPORTS HAVE DRAWN NEGATIVE CONCLUSIONS ABOUT CASH BALANCE PLANS, BUT THOSE CONCLUSIONS HAVE BEEN BASED ON FLAWED ASSUMPTIONS

In contrast to the large number of research studies finding that hybrid plans benefit the vast majority of employees, a few reports have drawn negative conclusions about hybrid plans, implying or stating that employees fare worse under them than under traditional defined benefit plans. In each case in which these studies compare a hybrid plan to a traditional plan, however, the comparison has not been based on empirical data but rather on a computer model that either makes flawed assumptions about employee career patterns or compares plans of unequal cost, or both. Another report found that some cash balance plans underpaid lump sum benefits to participants, but the report based this conclusion on the "whipsaw" method of calculating lump sum benefits, which the Treasury Department has repudiated and which would have required the plans to pay out much larger lump sums to younger employees than to older employees with the same pay and service history.

While recognizing that most employees do not spend an entire career with the same employer and that hybrid plans provide better benefits to employees who change jobs, the General Accounting Office in one report finds that "conversions to cash balance plans allow firms to redistribute pension benefits among different groups of employees [in a way that] can have adverse effects for older workers." General Accounting Office, <i>Private Pensions: Implications of Conversions to Cash Balance Plans</i> , at 38 (Sept. 2000) (Tab J).
The General Accounting Office based this conclusion on a computer model that assumes that an employee works for the same employer throughout his or her career and never changes jobs. In the words of the report, "The model does not simulate benefit portability scenarios based on turnover data" Translation: the model assumes employees never change jobs. General Accounting Office, <i>Private Pensions: Implications of Conversions to Cash Balance Plans</i> , at 48 (Sept. 2000) (Tab J).
Yet the General Accounting Office recognizes that this assumption is unrealistic. The report notes that after age 25 the median employee changes jobs nearly every five years. In commenting on the assumption in its computer model that employees never change jobs, the General Accounting Office admits that, "In reality, many individuals may have very discontinuous work histories and may work a number of different places before retirement." General Accounting Office, <i>Private Pensions: Implications of Conversions to Cash Balance Plans</i> , at 23 & 48 (Sept. 2000) (Tab J).
As a result, the computer model used by the General Accounting Office in its report was criticized by the then Chairman of the Senate Select Committee on Aging. In a letter to the head of the General Accounting Office, the Chairman notes, "While traditional [final average pay] plans tend to be very generous for those few employees that work for one employer their entire career (the only possibility that appears to be assumed by the GAO model), it is less beneficial when employees work for more than one employer during their working lives (the situation for the vast majority of all U.S. workers). Thus it appears that GAO is using the small percentage of workers that are disproportionately favored by traditional final average pay plans as the benchmark for testing the efficacy of cash balance plans." Letter from Sen. Charles E. Grassley, Chairman of Senate Select Committee on Aging, to David M. Walker, Comptroller General of the United States (Aug. 4, 2000) (Tab K).
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A report prepared in 2003 by a domestic social policy researcher at the Congressional Research Service presented examples purporting to show that a traditional defined benefit plan provides greater benefits at normal retirement age than a cash balance plan, regardless of whether an employee changes jobs or not. Purcell, Congressional Research Service, <i>Pension Issues: Cash Balance Plans</i> , at 17-23 (2003) (Tab R).
One flaw in the examples is that they compare apples and oranges. The examples compare benefits employees would earn under a hypothetical cash balance plan with the benefits they would earn under a hypothetical traditional plan. The author makes no attempt to ensure that the two plans are either of similar cost to the employer or typical of plans maintained by employers. Without these constraints, the benefit comparisons are meaningless. In fact, the hypothetical traditional plan would be much more expensive for an employer to maintain than the hypothetical cash balance plan, and the hypothetical traditional plan is more generous than the traditional plans maintained by most private employers. It therefore comes as no surprise that the employees in the examples earn larger benefits under the more expensive traditional plan than under the less expensive cash balance plan. Moreover, in each case, the examples show that a 45 year-old employee with 10 years of service will have earned a larger age 65 benefit under the traditional plan than under the cash balance plan—a condition that almost never occurs in practice. The author seems to recognize this point when he notes, "Of course, any retirement plan can be amended to make it more or less generous, depending on the employer's willingness and ability to contribute to the plan." Purcell, Congressional Research Service, <i>Pension Issues: Cash Balance Plans</i> , at 18 (2003) (Tab R).
Another flaw in the examples is that they assume employees start earning benefits at age 35 and stop earning benefits after age 65, thereby excluding the very periods when cash balance plans almost invariably produce richer accruals than traditional plans. Purcell, Congressional Research Service, <i>Pension Issues: Cash Balance Plans</i> , at 19 (2003) (Tab R).
In any event, the conclusion that employees who change jobs earn larger benefits under traditional plans than under cash balance plans is directly at odds with the findings of every other research study to consider the issue, including the two reports issued by the General Accounting Office. General Accounting Office, <i>Cash Balance Plans: Implications for Retirement Income</i> , at 26-27 (2000) (Tab I); General Accounting Office, <i>Private Pensions: Implications of Conversions to Cash Balance Plans</i> , at 23 (Sept. 2000) (Tab J).
In 2002, the Office of the Inspector General of the Department of Labor reviewed 60 cash balance conversions and reached two conclusions: First, "the conversions adequately protected benefits from earlier plans," and, second, "in 13 of those 60 plans, we found that workers who left employment before normal retirement age did not receive all the accrued benefits to which they were legally entitled." U.S. Department of Labor, Office of Inspector General, <i>PWBA Needs to Improve Oversight of Cash Balance Plan Lump Sum Distributions</i> , at 1 (2002) (Tab U).
The second conclusion has received much more attention than the first and frequently is cited as evidence that cash balance plans shortchange workers of their benefits. In fact, the second conclusion is based on what is known as the "whipsaw" method of calculating minimum lump sum benefits. Under the whipsaw method, an employee's cash balance account is projected forward to normal retirement age at one interest rate and then discounted back at another rate. If this "whipsaw" calculation results in a larger amount than the employee's account balance, then the plan must

pay out the larger amount if the employee requests or is required to receive a lump sum distribution. The Inspector General's report found that 13 out of the 60 plans were required to determine minimum lump sums under the whipsaw method but failed to do so. Hence, the conclusion that workers in those plans "did not receive all the accrued benefits to which they were legally entitled." U.S. Department of Labor, Office of Inspector General, *PWBA Needs to Improve Oversight of Cash Balance Plan Lump Sum Distributions*, at 5-6, 10 (2002) (Tab U).

What the Inspector General fails to report and apparently did not realize is that the whipsaw calculation produces substantially larger lump sum benefits for younger employees than for older employees with exactly the same pay and service history. For example, in a typical whipsaw calculation, a 65-year-old employee would receive a lump sum equal to his account balance, while a 25-year-old with the same pay and service history would receive a lump sum equal to *four times the amount paid to the 65-year-old*. Without this dramatic increase in the lump sum amounts for younger employees, the Inspector General's report would not have found any shortfall in the lump sum benefits paid to employees. Because of the whipsaw calculation's perverse effects, the Treasury Department in a report to Congress in February 2004 recommended that the method be abandoned. *See* http://www.treas.gov/press/releases/js1132.htm (last visited on April 9, 2004).