

Loyola University Chicago

Loyola eCommons

School of Business: Faculty Publications and Other Works

Faculty Publications and Other Works by Department

Winter 2003

Gainsharing and EVA: The United States Postal Service **Experience**

Gregory K. Shives Loyola University Chicago

K. Dow Scott Loyola University Chicago, dscott@luc.edu

Follow this and additional works at: https://ecommons.luc.edu/business_facpubs



Part of the Business Commons

Recommended Citation

Shives, Gregory K. and Scott, K. Dow. Gainsharing and EVA: The United States Postal Service Experience. WorldatWork Journal, 12, 1: 21-30, 2003. Retrieved from Loyola eCommons, School of Business: Faculty Publications and Other Works.

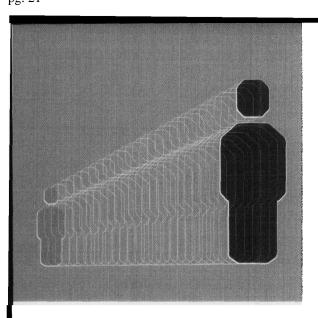
This Article is brought to you for free and open access by the Faculty Publications and Other Works by Department at Loyola eCommons. It has been accepted for inclusion in School of Business: Faculty Publications and Other Works by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License. © WorldatWork 2003

Gainsharing and EVA: The U.S. Postal Service experience

Shives, Gregory K;K Dow Scott WorldatWork Journal; First Quarter 2003; 12, 1; ProQuest Central



Gainsharing and EVA

The U.S. Postal Service Experience



Gregory K. Shives oyola University Chicago



K. Dow Scott, Ph.D.

ainsharing programs first surfaced in the 1880s when Harry Towne questioned the influence that employee efforts had on profits. Although numerous versions of gainsharing (e.g., Scanlon Plan, Rucker Plan and IMPROSHARE) have been discussed and used for more than 100 years, this shared rewards program has gained popularity only during the last 20 years.

Recent surveys reveal that 12 percent to 16 percent of U.S. companies have gainsharing programs (Anonymous, 1998; Markham, Scott & Little, 1992; O'Dell and McAdams, 1987). Despite the gainsharing concept's longevity and widespread use, there has been only limited research on its long-term effectiveness and strategic role in organizations (Welbourne, 1995). Imberman (1993) estimates that up to two-thirds of gainsharing plans failed to meet expectations and that gainsharing programs are quietly abandoned rather than examined closely to determine why these plans were unable to meet expectations.

The following case study examines the gainsharing experience of the United States Postal Service (USPS), a quasi-public organization, which has implications for both private and public sectors. It uses economic value added (EVA) to measure performance, which EVA supporters believe is a solution to some of the problems associated with profitability and labor



savings measures commonly used to determine rewards for improvement. It also considers gainsharing's strengths and weaknesses.

Gainsharing Defined

Gainsharing is a shared rewards program formulated under the basic assumption that performance or productivity can increase if employees work together effectively and are encouraged to share their ideas for improving productivity. Gainsharing programs typically have several common elements that include:

Applied to Business Unit. Gainsharing programs typically are applied to a business unit (e.g., team, department, facility or company) that has an identifiable customer and measures of the unit's overall success. Ideally, individuals included in the gainsharing plan can contribute directly to the unit's success or performance.

Participation. Gainsharing is based on the premise that most productivity improvements or gains come from "working smarter, not harder." Consequently, to increase productivity, employees need to have the opportunity to provide input and influence decisions. In most plans, a formalized suggestion process is used to give employees a voice. This process may require that suggestions be written so they can be formally evaluated, their implementation monitored and results shared with other employees. Other methods for involving employees include project task forces, team structures and standing committees. Because everyone shares in the gains that result from suggested improvements, everyone has an interest in making sure good ideas are clearly articulated and quickly implemented. Unlike traditional suggestion programs, there is no individual financial incentive for just making a suggestion, only for reducing costs or increasing profits depending on how the shared gain formula is defined.

Performance Measures and Rewards. Timely, reliable and valid measures of performance or productivity need to be developed if rewards are to be fairly shared

with employees and to focus performance improvement efforts. Traditionally, these measures include labor cost saving, waste reduction and equipment repair. However, companies today use a variety of other measures including profits, quality improvement, and most recently, EVA. EVA has stimulated considerable interest because it is designed to focus on the business aspects within the employee's control. Given the difficulty of establishing a measure that truly reflects value to the organization, EVA offers an opportunity to substantially improve the design of gainsharing programs.

Economic Value Added (EVA) Defined

Economic value added (EVA) is a financial performance measure that can appear complex at first glance. Fortunately, researchers have distilled the essence of the EVA calculation and the business actions that drive this calculation into a format that is more understandable. The EVA concept can be expressed in the algebraic equation: "EVA = After tax operating income - (investment in assets x weighted average cost of capital)" (Brewer, Chandra, and Hock, 1999, p.4). If the result of the formula calculation is greater than zero, the activity is adding economic value. If the result is zero or less, the activity is perceived as breaking even or destroying capital. The EVA measure adjusts the value of gains achieved to account for the capital investment required to achieve those gains and for the cost of the necessary investment capital.

Chen and Dodd (1997) identify the three broad levers that companies can use to drive the resulting EVA value measured by this formula according to EVA theory:

- Raise operating profits without requiring more capital.
- Use less capital for the same level of operation.
- Invest in projects that earn more than the cost of capital.

Thus, according to O'Hanlon and Peasnell (1998), EVA provides "a single, value-based measure which can

be used in evaluating business strategies, valuing acquisitions and capital projects, setting managerial performance targets, measuring performance and paying bonuses." Essentially, EVA is intended as a universal yardstick to be used throughout an organization to achieve a common value measure among potentially dissimilar activities.

Brewer et al. (1999) contend that EVA accountability for the capital cost in a gainsharing plan has the potential to drive and align organizational member behavior quite differently than traditional accounting theories such as return on investment. Traditional gainsharing measures focus resources on activities with the highest potential reduction of labor cost or waste at the expense of other potential savings or innovations that may add significant value to the organization. Under an EVA performance measure, any activity that results in an EVA greater than zero is desirable for both the company and the individual(s) accountable for the activity. Conversely, any activity with an EVA at zero or below is undesirable for both achieving a consistent alignment with individual(s) and organizational goals. This is a significant EVA strength in terms of directing behavior and accountability.

Despite these strengths, critics of EVA identify three major limitations of this measurement tool (Brossy and Balkcom, 1994; Brewer et al., 1999):

- A tendency to reinforce behaviors that carry a short-term orientation
- For The potential for revenue manipulation
- The difficulties of maintaining a clear line of sight between employee contribution and EVA drivers at all organizational levels.

The United States Postal Service

The United States Postal Service (USPS) is the second largest civilian employer in the United States with an employee population of more than 770,000. The USPS was created 32 years ago as part of The Postal

Reorganization Act of 1970. The act's purpose was to create an independent governmental entity (part of the executive branch) that could be structured to deliver postal services in a manner that more closely resembled the private business sector. While this legislation did not mandate that the USPS generate consistent profits, it required that it break even.

During its first 24 years of operation, the USPS experienced 17 years of net losses resulting in a cumulative deficit of \$9 billion. It was clear by the early 1990s that the USPS would require a combination of rate increases and organizational change to remain financially viable. Part of this organizational change involved a review of the compensation programs of supervisory and managerial employees.

The USPS conducted a market survey in 1995 and found that, on average, management employees were paid 14 percent above market. Despite paying above market, the USPS found little correlation between actual performance and pay. The survey also indicated that the private business sector was placing an increased emphasis on variable pay to link compensation and performance to drive specific organizational goals.

This analysis of current compensation structure indicated that lump sum bonuses afforded the opportunity for the USPS to bring base pay more in line with the private sector and establish performance criteria for the variable component to address productivity issues. Consequently, the USPS decided to adopt a gainsharing-based variable pay program funded by EVA.

Gainsharing at USPS

The USPS gainsharing program was implemented in 1995 and EVA funding began in 1996. Not only was it a pioneering concept for a governmental agency, it also posed a major cultural change for USPS employees. USPS goals for the gainsharing program included:

- Enhance positive organizational behavior.
- Make employees stakeholders.

- Drive continuous improvement.
- Focus attention on short- and long-term results.

The USPS gainsharing plan defined eligible participants as nonbargaining, management employees. This would include positions from local supervisors through executive officers. After reclassifying 34,000 supervisors from nonexempt to exempt status (to eliminate eligibility for overtime), the USPS gainsharing plan had roughly 84,000 participants. In exchange for a dramatic incentive potential if performance goals were met, the traditional "cost-of-living adjustments" were eliminated, but eligibility for merit pay increases and other recognition programs were retained.

The foundation for the USPS gainsharing plan was a "balanced scorecard" performance management tool referred to as the *CustomerPerfect!* model. Following the stakeholder equity triangle common to many gainsharing plans, the *CustomerPerfect!* model established performance and accountability measures relating to the customer, the employee and the business. Each stakeholder was assigned a single or family of performance measures. For example, one measure for the customer was the rate of on-time delivery of first-class and priority mail. Each measure was weighted as a part of the total composite score and all gain targets had to be achieved to qualify for the maximum plan payout.

The gainsharing program was designed as a team-based, group incentive with groups organized by geographic areas across the country. Each region was further subdivided, creating 97 teams ranging from 200 to 800 employees per team. Individual employees earned incentive pay under the program based on the degree to which their group met its goals. The plan utilized a reserve account whereby 33 percent of a given year's earned incentive was available for payout and the remaining 67 percent was placed in a rolling fund for future payoffs or deductions in the case of no performance gain. The reserve fund concept was included to place a significant part of the earned incentive at risk so

employees would make the best decisions for USPS's long-term betterment, not to simply improve one year's performance.

Methods to provide education for plan participants included employee mailings, company newsletters, association newsletters, satellite TV training, training videos and information posted on the USPS intranet home page.

The self-funding gainsharing plan was based on Stern Stewart's EVA performance measure. However, a simplified variant of EVA was used at the program's inception to assure that it was understandable for the program population. The formula was subsequently altered in 1997. In its final form, the maximum funding for incentive awards was calculated as 65 percent of the first \$400 million in economic value added, and 25 percent of economic value added over \$400 million.

USPS Gainsharing Plan Results

From the perspective of USPS management and its compensation professionals, the group incentive plan was an overwhelming success. By 1998, USPS chief financial officer Michael Riley declared the USPS transformation a resounding success, citing many of the gains seen in the incentive pay program measures. He said, "We redefined ourselves ... thinking, planning and working more like a business than a government agency." (Riley, 1998, p.28) He cited USPS' adoption of economic value added measures as instrumental in this transformation.

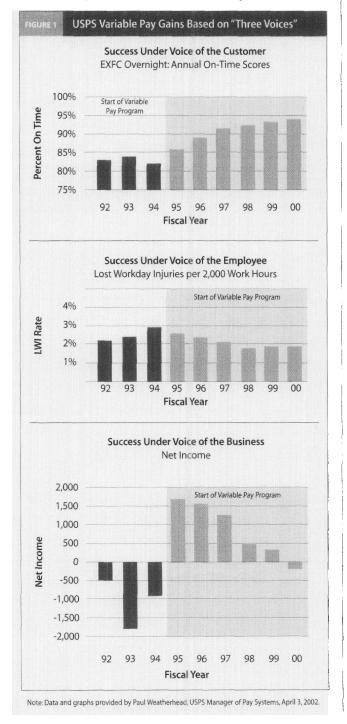
As predicted, the USPS brought its base compensation costs to 1 percent below market as evidenced by a market pay survey in 2000. This translated to a \$497 million annual "net cost avoidance" for the USPS after deducting the costs associated with the program.

The plan achieved a marked performance improvement in each of the three categories of the *CustomerPerfect!* model from its inception. (See Figure 1 on page 25.)

On-time delivery of first-class mail committed to overnight

delivery increased 10 percentage points. Lost workday injuries steadily declined. And the U.S. Postal Service had a record five straight years of positive net income.

Among the plan critics, organized labor asserted that the realized gains occurred because of the hard work of members, yet USPS managers and supervisors were reaping the financial benefit through the EVA



incentive plan. Union leaders expressed their objections to their congressional representatives. Postmasters across the country resisted implementation of the gain-sharing program because they had the highest number of employees being paid "over market" and were most impacted by this attempt to reform USPS compensation practices through incentive pay.

The Office of the Inspector General conducted a four-part study to determine the plan suitability, prompted by concerns that it could "negatively impact public perceptions of the Postal Service" if it paid out earned incentives during periods when the USPS posted a net loss. These concerns materialized during the later years of the plan in the form of adverse media publicity and a congressional resolution to dramatically curtail the plan's reward system (Office of the Inspector General, 2000).

USPS management countered that these incentives were legitimate variable pay amounts earned by plan participants who met objective and pre-established performance goals as part of an at-risk compensation program. Management further contended that the inability to independently establish the price for its product was the real source of the problem — not the pay for performance program itself.

Plan payments made during periods of declining net income sparked criticism that the performance targets were too low and that the measurements were either inaccurate or some behaviors could not be objectively measured at all. The USPS plan administrators responded that they were regularly reviewing performance targets and adjusting them upward to maintain the plan's integrity. They contended that what critics were identifying as declining performance was actually a result of fewer employees meeting more stringent performance requirements rather than a reversal of gains. While they acknowledged that some measures were difficult to objectively quantify, they surmised that the resulting behaviors carried sufficient indirect benefit to the organization.

25

To compensate for their inability to independently raise postal rates to keep them in line with the USPS' cost of doing business, the plan designers and their EVA consultants decided to add an inflationary index to the EVA formula in 1997. This index adjusted the economic value added result on a pro forma basis to offset the effects of inadequate rates and inflation. This adjustment to the EVA measurement formula enabled the plan designers to continue rewards for contributions with long-term organizational benefits. The net income situation was a natural consequence of the statutory break-even mandate.

Despite legitimate explanations for the outcomes of the EVA-based gainsharing program, the Office of the Inspector General proved an insurmountable obstacle for the USPS in maintaining the EVA funding formula. The office pointed to an increase in incentives as a percentage of net income from 1996-2000 although the net income was declining. The office attributed this situation to the USPS decision to "index" the EVA formula in 1997. The office report stated the goals of the EVA formula were: "1) To increase revenues and profits, 2) To reduce or maintain expenses and 3) To assure expected returns on capital investments." (Office of the Inspector General, 2001, p. 1).

The comparative statistics for incentive payoffs preand post-1997 inflationary indexing further bolstered the critics' claims that EVA was not appropriate for the USPS plan. (See Figure 2.) Without the index, the EVA measure would have functioned, as some stakeholders believe it

		Calculation of Incent	tive Awards (\$000)		
	1996	1997	1998	1999	2000
Opening Revenue Total Expenses Capital Charge	\$ 56,401,456 \$(54,055,214) \$(1,276,436)	\$ 58,215,774 \$(56,025,043) \$(1,364,112)	\$60,072,459 \$(59,048,463) \$(1,410,875)	\$62,725,701 \$(61,847,872) \$(1,475,882)	\$ 64,539,722 \$(63,906,850) \$(1,658,976)
Capital Charge	3(1,270,430)	\$(1,504,112)	\$(1,410,673)	3(1,473,002)	\$(1,050,970)
Economic Value Without Inflation Adjustment	\$1,069,805	\$826,619	\$(386,879)	\$(598,053)	\$(1,026,104)
Net Inflation Adjustment ¹			\$899,173	\$1,149,751	\$2,815,192
Economic Value with Inflation Adjustment ²			\$512,294	\$551,698	\$1,789,088
Maximum Funding Available for Incentive Awards ³	\$367,451	\$346,655	\$288,074	\$297,925	\$607,272
Percent Target Attainment ⁴	69%	87%	93%	86%	48%
Incentive Awards Allocated to Participants	\$252,398	\$302,065	\$266,370	\$256,344	\$283,320
¹ This approach resulted in a net upward adjustment of revenue for 1998, 1999 and 2000 totaling \$4.9 billion. ² There was no inflation adjustment in the calculation of economic value for 1996 and 1997.		³ In 1996, this amount was calculated as 50 percent of the first \$400 million in economic value added, plus 25 percent of any amount over \$400 million. In 1997, this amount was calculated as 60 percent of the first \$400 million plus 25 percent of any amount over \$400 million. Since 1998, this amount calculated as 65 percent of the first \$400 million plus 25 percent of any amount over \$400 million. Changes in the formula were the result of additional participants being added to the program.		⁴ Target attainment differs between organizational levels. Thus, these percentages are for illustration purposes only and do not represent actual target attainment percentages for the Postal Service.	

should have — there would have been no incentives earned during most years of the EVA program. The program would have continued to distribute annual payouts during 1998 and 1999 based on the amounts in reserve account. However, no payment would have been made in 2000 because the reserve account would have been depleted (Office of the Inspector General, 2001).

The USPS generally disagreed with the analysis presented in the Office of the Inspector General studies, but elected to abandon EVA anyway and create a new incentive plan using a different funding formula. It hopes to implement the new program by 2004 for all white-collar employees. While the new plan's details are in the formative stage, it expects to place a greater emphasis on individual performance rather than the team/cluster approach of the previous plan. Despite the demise of their EVA-based gainsharing plan, many USPS managers believe that EVA was successful in achieving results that the USPS may not have seen otherwise.

Lessons from the USPS Experience

An eroding fiscal situation posed significant problems for the USPS given the three value levers for EVA. Unlike most private-sector businesses, the USPS has fewer options available to drive EVA results. The USPS plan aggressively exploited the cost-avoidance and cost-containment advantages that a variable pay plan can offer (Lever No. 2), but its options to raise rates (Lever No. 1) or divert resources to activities that provide a return that exceed capital investment plus the cost of that capital (Lever No. 3) were limited.

The USPS' mandate is quite simple: provide mail services to the U.S. public. The Postal Service is precluded from closing underperforming operations and is expected to provide a uniform level of service for all U.S. citizens whether or not it is economically attractive. Private couriers, on the other hand, have the option of deploying their resources to only those operations that will provide a viable economic return.

Two limitations of EVA identified by Brewer, et. al., (1999) are especially relevant to the USPS experience:

1) the ability to manipulate revenue, and 2) its focus on short-term results. The decision to modify the EVA formula for the plan in 1997 was thoroughly acceptable under EVA theory, yet it offers an example of the consequences of altering EVA measures and the difficulties of balancing short- and long-term results using EVA.

The original EVA measure threatened plan payouts during unprofitable years and potentially the long-term performance goals and employee motivation that the USPS plan designers sought to maintain. The solution was to modify the EVA measure using an index to account for cost inflation between periods where they were precluded from instituting rate increases. The subjectivity permissible in EVA measurement enabled justification for an adjustment that resulted in a disparity between the incentive plan payments and the net income of the organization. The adjustment allowed plan designers to preserve the long-term plan objectives, but the short-term reaction by some stakeholders was less than favorable.

Many found it unthinkable that employees were receiving "bonuses" in a year when the USPS had not only lost money but also was seeking a rate increase. The Office of the Inspector General's concerns about a potentially negative public perception of the USPS under this scenario was validated. A resolution, submitted in the House of Representatives (H. Res.144, 2001) on May 17, 2001, would have prohibited incentive payments in any year that the USPS anticipated a deficit or in any year that it received or expected to receive a general postal rate increase.

Despite the demonstrated success of the program in its early years, the USPS ended its EVA gainsharing program plan in 2002 amid this growing controversy. While some factors that contributed to the demise of the USPS plan are unique to the organization, the

Gainsharing
is most successful
in organizations
that are willing
and able to transfer
more information
and control to
employees.

experience is illustrative of the need to appropriately match incentive pay design, implementation and maintenance to an organization's business strategy and operating environment. This is applicable to both the public and private sector. Not only is the selection and design of the most appropriate variable pay plan important; plan measures such as EVA can have a significant effect on outcomes.

Applications for an EVA-Based Gainsharing Plan in the Public Sector

Creating an effective incentive pay plan is a complex process and, in some ways, it may be more difficult to structure and obtain intended results than with traditional compensation methods. When properly designed and understood by all stakeholders, EVA-based gainsharing plans can deliver extraordinary results as evidenced by

the early years of the USPS public sector plan. Based on the USPS experience with EVA-based gainsharing, elements of these plans can be successfully adapted to the public sector when the unique nature of the organization's business model is acknowledged in the plan's design phase. Gainsharing and an EVA measure may be appropriate, but it is equally acceptable to use one without the other.

Before implementing an incentive plan, managers should consider the following actions:

Define organizational goals. Gainsharing is a means to an end. A clear understanding of organizational goals is critical to defining the incentive plan's purpose, the employee behaviors that will be necessary to achieve those goals, the plan measurements and the appropriate level of shared rewards. EVA can be a useful measurement if your organization has relatively consistent funding that is in alignment with your cost of doing business. It can facilitate decisions about the most effective deployment of resources among various activities. If your organization has limited control over any of the three EVA value levers, EVA may not be the right tool to quantify the gains achieved in your plan.

Assess your organizational structure and commitment. Effective gainsharing programs are participatory. Gainsharing is most successful in organizations that are willing and able to transfer more information and control to employees. Is your organization willing to consider and adopt changes suggested by employees? If your organizational development needs favor improved noneconomic behaviors rather than improved transactional cost efficiency, is your management (and are other stakeholders) committed to maintaining a plan that may not exhibit immediate short-term results?

Examine existing pay plans. While incentive pay plans can be very effective, they should function as a complement to a sound base-pay compensation plan. A careful analysis of existing plans will help identify

areas where incentive pay can be used to enhance specific elements of employee contribution.

Identify all stakeholders. Public sector organizations tend to have more stakeholders with either a direct or an oversight interest in compensation than their private sector counterparts. These can include independent governing boards, oversight auditing agencies, politicians and even the media. While it would be impractical to include all of these stakeholders in the plan design process, their perspectives under a variety of plan payout scenarios should be anticipated.

Keep things simple and relevant. Simplicity serves to enhance the individual employee and group line-of-sight toward how contributions help the organization achieve its goals. Targeted behaviors should be clear, measurable and attainable. Smaller participant teams are preferable. While gains must be adjusted for the costs to achieve those gains, EVA measures may add a level of complexity to a gainsharing program in the public sector that outweighs its benefit. EVA tends to function better in capital-intensive rather than labor-intensive industries, which can make it difficult to adapt for some public or nonprofit organizations.

Educate. Incentive plans can present a significant cultural change for the public sector. A well-designed plan will create a direct link between pay and performance. Employees and all stakeholders need to be educated on the potential rewards and downsides of variable pay. Careful attention should be given to how the plan will change if the business strategy or economic drivers change. An effective information-sharing infrastructure is critical for a successful plan. Educating other stakeholders can be equally important, especially in the public sector.

Monitor plan for realignment needs. Business environments are not static, therefore incentive plans must be regularly monitored and adjusted based on

EVA tends
to function better
in capital-intensive
rather than
labor-intensive
industries.
This makes it
difficult to adapt
for some public
or nonprofit
organizations.

changing conditions. Some public sector environments may have a slight advantage over the private sector because they may be the sole source for their product. Yet funding, legislative, oversight or social changes can impact the organization and its incentive plan. Rewards should be kept in balance with the organization's current operating environment.

Document and equalize measurement changes. Once plan goals are consistently achieved, it may be necessary to adjust those goals or performance standards to drive higher levels of performance. These changes should be clearly documented and statistically equalized to avoid the misconception that performance has declined or that the program has become ineffective. The USPS experience demonstrates how a literal view of raw data can impact the perception of success and the viability of an incentive plan in either the

public or the private sector. Diligent documentation will enhance the continuity of a maturing program.

While the risks of unexpected consequences exist in even the best conceived incentive compensation systems, these risks should not dissuade either public or private sector organizations from considering an incentive pay plan. Despite the USPS decision to pursue an alternative to its EVA-based gainsharing plan to better align incentive pay with current strategic challenges, the postal service has not abandoned the concept of incentive pay and recognizes the benefits and learning experience that it gained from its original program. With thoughtful consideration about the unique nature of your business, you also may be able to realize comparable direct and indirect benefits from gainsharing and/or EVA value measures that have been seen at the USPS and many diverse private-sector organizations.

Webnotes

Visit our Web site at www.worldatwork.org, where you will find a powerful database that holds nearly 10,000 full-text documents on total rewards topics.

For more information related to this article:

- ⇒ Go to the "Info Finder" section of the home page, click on the blue "Power Search" button and then click on "Advanced Search".
- ⇒ Type in this keyword string on the search line: "Gainsharing" OR "Economic value added or EVA" OR "Group or team and incentive" OR
- "Plan design and incentive or variable pay" OR "Public Sector"

Authors

Gregory K. Shives (gregs@enteract.com) is a full-time graduate student at Loyola University Chicago in its Graduate School of Business Institute for Workplace Studies. He is pursuing a master's in human resource management with a specialization in compensation and will complete his degree in July 2003. He holds a bachelor's in political science from Kent State University and has 25 years of experience as a business line manager and corporate officer in the insurance and financial services industries.

K. Dow Scott, Ph.D. (dscott@wpo.it.luc.edu) is a professor of human resources and industrial relations at Loyola University Chicago and a consultant. His teaching, research and consulting focus on helping business leaders create more productive organizations and committed employees. He has been published in more than 70 journals, books and conference proceedings, and has received national recognition for team/productivity improvement and human resources research from the Academy of Management and the Society for Human Resource Management.

References

Anonymous, (1998). Compensation trends and strategies. Journal of Accountancy, 185(1), 87.

Bossey, R., and Balkcom, J.E. (1994). Getting executives to create value. *Journal of Business Strategy*, 15(1), 18-21.

Brewer, P., Chandra, G., and Hock, C. A. (1999). Economic value added (EVA): its uses and limitations. SAM Advanced Management Journal. 64(2), 4-11.

Chen, S., and Dodd, J. (1997). Economic value added (EVA TM): an empirical examination of a new corporate performance measure. *Journal of Managerial Issues*, v9(3), 318-333.

Imberman, W. (1993). Gaining performance, sharing productivity. *Manufacturing Systems*. 11(4), 54-56.

Markham, S.E., Scott, K.D., and Little, B.L. (1993). National gainsharing study: The importance of industry differences. *Compensation and Benefits Review*. January – February, 34-42.

O'Dell, C., and McAdams, J. (1987) *People, Performance, and Pay*. Huston, TX: American Productivity and Quality Center.

O'Hanlon, J., and Peasnell, K. (1998). Wall Street's contribution to management accounting: the stern Stewart EVA financial management system. *Management Accounting Research*. 9, 421-444.

Office of the Inspector General (2000). Interim report- economic value added variable pay program. (Report Number LB-AR-00-01). Washington, DC: Sauls, B.

Office of the Inspector General (2001). Audit report- use of the economic value added concept in the pay for performance program. (Report Number LH-AR-02-001). Washington, DC: Stith, R.

Riley, M. (1998). The mail man cometh. Financial Executive. 14(3), 28-33.

Welbourne, T., and Gomez-Mejia, L.R. (1995). Gainsharing: A critical review and a future research agenda. *Journal of Management*, 21(3), 559-610.