FLEXIBLE SPENDING ACCOUNTS:
ECONOMIC AND NON-ECONOMIC PARTICIPATION FACTORS

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The objectives of this research were to investigate important factors in the decision of an employee to participate in a flexible spending account (FSA) and to learn more about the financial decision-making process. Data were collected from 320 full-time employees of a major employer in late 1988. Chi-squares and t-tests were used to identify statistically significant differences between FSA participants and non-participants. Participants were more likely than non-participants to be more educated, male, older, married, to have higher incomes, and to have children under 25 years of age. Participants were also more apt to have experienced higher medical expenses the previous year and to expect higher medical expenses the following year than non-participants. Participants paid relatively more attention to the risk of not putting enough money in the FSA and thus losing the tax break while non-participants paid more attention to the paperwork required to get reimbursed, the record keeping required, and the uncertainty regarding the amount of future medical expenses.

Traditionally, employer benefit plans have been relatively uniform with the benefits offered to all employees within one company being quite similar. The lone choices tended to be whether or not to participate in selected parts of the plan and, in the case of life insurance, the extent of participation. The majority of these plans were designed to meet the needs of employees in a society dominated by families where only the husband was gainfully employed. However, in response to the diverse needs of a radically changing workforce, many employers are now reevaluating this traditional approach to fringe benefit plans.

Over the past 35 years, there have been dramatic demographic changes in the American family which have significantly altered the composition of the workforce (Employee Benefit Research Institute, 1987). In 1955, 60 percent of American households consisted of a working father, a mother who was not gainfully employed, and two or more children. By 1986, only four percent of all households conformed to this pattern (Quinones, 1986). The number of working mothers with children under 18 years of age stood at 18.6 million in 1985--almost triple the number 25 years earlier (U.S. Bureau of the Census, 1985). Growth has been most rapid among working mothers with children under age 6. In addition, many of these working mothers are also single parents. According to Johnson 1986, family composition can presently be categorized as:

- married with both spouses working (45%)
- single, head of household with no dependants (25%)
- married with husband working and wife not gainfully employed (20%)
- single, head of household with dependents (10%)

In addition to a changing workforce which has provided an incentive to alter benefit plans, Section 125 of the Internal Revenue Code (entitled Cafeteria Plans) granted the means to give employees a greater degree of choice in benefits. Although interest surrounding flexible benefit plans was peaked with the passage of Section 125 in 1978, the fate of flexible spending accounts was uncertain until passage of the Tax Reform Act of 1986. The 1986 Act expanded the definition of a cafeteria plan to include a plan that allows a choice between various qualified nontaxable benefits. Finally, the Act specified that salary reduction contributions to a cafeteria plan are generally not considered wages for employment tax purposes (Ernst and Whinney, 1986).

A flexible spending account (FSA) is a type of cafeteria benefit plan offered by employers that gives participants a choice between taxable cash and pre-tax payment (or reimbursement) of eligible, tax-favored benefits. Some of the expenses an FSA can cover are:

- Health plan premiums
- Medical expenses not covered by health insurance that the Internal Revenue Service considers deductible (IRC 213 expenses)
- Dependent care expenses (within Section 129 guidelines)
- Qualified group legal services (within Section 120 guidelines)

In most funds, FSAs are funded through a salary reduction agreement (Johnson, 1986). From the employee's perspective, money is withheld from his salary and deposited in the FSA. When an eligible expense occurs, the employee pays the expense and then files for reimbursement through his FSA. Using this benefit, the employee gets immediate tax relief.

Significant governmental restrictions have been placed on FSA plans which have important implications on personal finances. These restrictions should cause employees to consider carefully before contributing to an FSA. Included in these restrictions are:

- Salary reduction elections are made individually for each type of benefit at the beginning of each plan year. Unless an employee experiences a change in family status, these elections cannot be changed.
- No more than $5,000 can be contributed to each type of benefit.
- Contributions for each type of benefit must be kept separate from money allocated for every other type of benefit in...
individual sub-accounts. Benefits of one type cannot be reimbursed with contributions to another sub-account.

Money left in the FSA at the end of the plan year cannot be carried forward into the next year nor can it be returned to the employee as taxable income. The employee must "use it or lose it."

Expenses paid through a FSA cannot be used as either an itemized deduction or a tax credit. In addition, the final responsibility for the tax status of filed expenses rests with the employee who is liable for all potential taxes, penalties, and interest charges. Essentially, an FSA is a tax-planning mechanism that may be used if offered through an employer. Like most other financial planning strategies, this one is potentially beneficial but also carries risks.

RESEARCH DESIGN

Perhaps because widespread inclusion of FSAs in employer benefits plans is a very recent phenomenon, these researchers could find no published, academic literature relating to the determinants of FSA participation. Therefore, the objective of this research was to investigate what economic and non-economic factors are important in the decision of an employee to participate in a FSA. Since this plan is a tax-savings strategy, it was hypothesized that there would be a positive relationship between income and FSA participation. Education, a second demographic variable, was expected to be positively related with participation as the literature on innovation indicates there is a positive relationship between willingness to try new ideas and level of education (Rogers, 1983). It was also expected that men would be more likely to participate than women based on findings that tax-related financial management tasks tend to be male-oriented (Hampton, Gneisinger, and Kitt, 1982).

On a priori grounds, it was hypothesized that those employees who had higher out-of-pocket expenses eligible for reimbursement through a FSA would be more likely to contribute to a FSA. Additionally, it was expected that there would be a positive relationship between interest in saving tax dollars and FSA participation.

A secondary objective of this study was to learn more about the decision-making process used in making the FSA decision. It was expected that respondents who participated in a FSA would spend more time on the decision and use more information sources in making the decision than those who did not participate.

Data for this study were collected from a random sample of 660 full-time faculty and staff at The University of Texas at Austin in November, 1988. This sample was utilized because it represented a large, intact group for which FSAs had just been added to the fringe benefit package. These employees had made their decision regarding FSA contributions to a medical reimbursement account and/or a dependent care reimbursement account no later than August 31, 1988. A self-administered questionnaire was mailed and a reminder letter was sent to those who had not returned the questionnaire within two weeks. Using this procedure, 373 questionnaires were completed for a 57% response rate. However, 53 respondents failed to answer either one or both of the questions used to measure FSA participation. Therefore, only 320 questionnaires were usable for investigating FSA participation.

The questionnaire used for data collection was developed by the principal investigators and pretested by selected members of the sample population. The revised instrument included questions focusing on 1) FSA participation, 2) FSA decision-making factors, 3) past and expected future out-of-pocket expenses eligible to be reimbursed through a FSA, and 4) demographic information. FSA participation was measured based on the responses to the following two questions:

1. How much are you contributing to your medical/dental reimbursement account each month? Do not include premiums for your group insurance.

2. How much are you contributing to your child/dependent care reimbursement account each month?

For the purposes of this paper, a respondent was categorized as a FSA participant if he contributed to either (or both) of the FSA sub-accounts. A respondent who was not contributing to either sub-account was categorized as a non-participant.

Analysis of the survey data included frequencies, means, and medians to describe the demographic profile of the total sample as well as the profiles of FSA participants and non-participants. Chi-squares and t-tests were employed to identify statistically significant differences between FSA participants and non-participants. In addition, factor analysis was used in an attempt to group a series of decision-making factors; however, this procedure did not prove useful.

RESULTS

Respondents in this study were primarily white (86%), married (64%), and highly educated. Nearly one-fourth of the respondents had completed a Bachelor's degree, and over two-fifths held advanced degrees. The sample was evenly divided between males and females, and the mean age was 41 years. Forty-four percent of the respondents had children under the age of 25. The expected median family income before taxes for 1988 was reported to be approximately $35,000.

Nearly one-fourth on the respondents in this sample were contributing to a FSA for medical care while less than five percent were participating in a FSA for dependent care. However, 21 percent of the respondents actually expecting dependent care costs in the upcoming year were contributing to the dependent care sub-account. Only six persons (<2%) were contributing to both the medical and the dependent care sub-accounts. When categorized as being either FSA participants or non-participants, 26% of the respondents were participants.

The average monthly contribution of participants was $68 for medical expenses and $182 for dependent care expenses. When asked whether they felt the amount of their contributions was low, about right, or high, two-thirds of the respondents felt they were "about right" with one-fourth saying their contributions were "low." The following were reported by at least 30% of the sample...
as being the most important factors considered in making the decision on FSA participation:

1. The risk of not using all of the FSA contribution and then losing the money.
2. Not knowing the amount of future medical expenses.
3. The risk of not putting enough money into the FSA program and losing the tax break.

Independent variables that were significantly related with FSA participation are reported in Table 1 and Table 2. For discussion purposes, these variables have been divided into demographic variables, past and expected expense variables, and decision-making variables.

Demographic Variables

As hypothesized, both family income before taxes and level of education were positively related to participation in a FSA. The mean income of participants was nearly $20,000 higher than that of non-participants. The average level of education for both the respondent and the respondent’s spouse was significantly higher among FSA participants compared to non-participants. Also as expected, male respondents were more likely to contribute to a FSA than were female respondents. One-third of the males were participating while less than one-fifth of the females were contributing to a FSA.

Other significant demographic variables included age, marital status, and the presence of children under 25 in the family. The mean age of FSA participants was 3.5 years higher than that of non-participants. Over 30% of married respondents compared to less than 20% of single respondents participated in a FSA. In addition, 35% of respondents with children under 25 years of age were FSA participants compared to only 20% of those who did not have children under age 25.

Past and Expected Expense Variables

Several questions were asked which focused on both past and expected future medical care and dependent care expenses. While the questions relating to dependent care costs were not statistically significant, three of the variables relating to medical expenses were positively associated with participation in a FSA. Participants experienced approximately $244 higher medical expenses in the current year than did non-participants. Also as expected, $380 higher medical expenses in the current year than non-participants. Among FSA participants, the respondent’s family members had visited the dentist three more times over the past three years than had non-participant family members.

Decision-making Variables

Perhaps the most interesting findings are in the area of decision making regarding FSA participation. Participants reported spending over one hour more than non-participants in making the FSA decision. When the time of others who helped with the decision was included, the total time spent on the decision was nearly two hours more for participants than for non-participants. Focusing on married respondents, if the husband spent more time than the wife on the FSA decision, the respondent was more likely to contribute to a FSA than if the wife spent more time than the husband or than if the spouses spent equal time on this decision. From a slightly different perspective, if the spouses spent equal time on the decision, the respondent was less likely to contribute to a FSA than if either of the spouses spent more time than the other on the decision.

Respondents were asked where they got information about the FSA program. The most frequently mentioned sources were a FSA booklet distributed by the employer (82% used this), a personnel newsletter (79%), co-workers/friends (40%), employer-sponsored orientation meeting (29%), and personnel office employees (27%). FSA participants were significantly more apt to use the FSA booklet and personnel office employees in making this decision than were non-participants. Ninety-five percent of participants in contrast to 81% of non-participants reported using the FSA booklet, while 44% of participants and 25% of non-participants discussed the FSA decision with personnel office employees. In addition, FSA participants used significantly more sources of information than did non-participants.

When asked to rate how much attention they paid to various factors in making the FSA decision, there were statistically significant differences between participants and non-participants on four out of seven factors. Participants paid relatively more attention to the risk of not putting enough money into the FSA program and thus losing the tax break while non-participants paid relatively more attention to 1) the paperwork required to get reimbursed through the FSA, 2) the record keeping required when using the FSA, and 3) the uncertainty about the amount of future medical expenses.

DISCUSSION

The area of employee benefits is changing rapidly with greater choice being given to employees. While there are many advantages to a system that allows employees to select the benefits which best fit their needs, there is also a level of risk involved if the employee does not make an appropriate decision. Since this arena of economic choice is relatively new, this research investigated the economic and non-economic factors associated with the decision to participate in one part of a cafeteria benefit plan—flexible spending accounts.

It was found that, at least in the first year of availability through the sample employer, participation in a FSA was relatively low even though the overall income and education level for the sample were relatively high. Only 26% of the respondents were contributing to the medical and/or dependent care reimbursement accounts. It should be noted that the participation rate in the random sample was somewhat higher than the rate for the total population. The low rate of participation could be due to a combination of many reasons, particularly as it relates to the dependent care account. The dependent care credit taken when filing taxes may provide greater financial benefit to low income employees rather than contributing to the FSA. Other reasons for the low participation rate might include low expected out-of-pocket expenses, the hassles of record keeping and paperwork associated with reimbursement, lack of knowledge about this benefit plan,
### TABLE 1. Variables Significantly Related with Flexible Spending Account (FSA) Participation Using T-Test Analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total Sample X</th>
<th>Participants X</th>
<th>Non-participants X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td>41.1</td>
<td>43.8</td>
<td>40.2***</td>
</tr>
<tr>
<td>Education of respondent in years</td>
<td>13.0</td>
<td>13.5</td>
<td>12.8***</td>
</tr>
<tr>
<td>Education of spouse in years</td>
<td>12.7</td>
<td>13.2</td>
<td>12.5***</td>
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<tr>
<td>Family income before taxes</td>
<td>$42,743</td>
<td>$57,048</td>
<td>$37,652***</td>
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<td>Out-of-pocket medical expenses last year</td>
<td>$165</td>
<td>$345</td>
<td>$101***</td>
</tr>
<tr>
<td>Expected out-of-pocket medical expenses this year</td>
<td>$610</td>
<td>$890</td>
<td>$510***</td>
</tr>
<tr>
<td>Number of times family went to dentist over past 3 years</td>
<td>7.5</td>
<td>9.9</td>
<td>6.6*</td>
</tr>
<tr>
<td>Hours respondent spent on FSA decision</td>
<td>2.1</td>
<td>3.0</td>
<td>1.8***</td>
</tr>
<tr>
<td>Total hours spent on FSA decision</td>
<td>3.2</td>
<td>4.5</td>
<td>2.7***</td>
</tr>
<tr>
<td>Number of information sources used</td>
<td>2.7</td>
<td>2.9</td>
<td>2.6*</td>
</tr>
<tr>
<td>Risk of losing tax break</td>
<td>2.5</td>
<td>2.8</td>
<td>2.4**</td>
</tr>
<tr>
<td>Paperwork required for reimbursement</td>
<td>2.7</td>
<td>2.3</td>
<td>2.8***</td>
</tr>
<tr>
<td>Record keeping required</td>
<td>2.7</td>
<td>2.4</td>
<td>2.8*</td>
</tr>
<tr>
<td>Uncertainty about future medical expenses</td>
<td>3.2</td>
<td>3.0</td>
<td>3.3*</td>
</tr>
</tbody>
</table>

* Significant at the .05 level.  
** Significant at the .01 level.  
*** Significant at the .001 level.  

^1=no attention, 2=very little attention, 3=some attention, 4=very much attention

### TABLE 2. Variables Significantly Related with Flexible Spending Account (FSA) Participation Using Chi-Square Analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>X²</th>
<th>Degrees of Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>9.1**</td>
<td>1</td>
</tr>
<tr>
<td>Marital status</td>
<td>6.6*</td>
<td>1</td>
</tr>
<tr>
<td>Children under 25 years of age</td>
<td>8.6**</td>
<td>1</td>
</tr>
<tr>
<td>Husband or wife spent more time on FSA decision</td>
<td>15.8***</td>
<td>2</td>
</tr>
<tr>
<td>Respondent or spouse spent more time on FSA decision</td>
<td>12.7***</td>
<td>2</td>
</tr>
<tr>
<td>Used FSA booklet</td>
<td>8.3**</td>
<td>1</td>
</tr>
<tr>
<td>Discussed FSA decision with personnel office employees</td>
<td>10.3**</td>
<td>1</td>
</tr>
</tbody>
</table>

* Significant at the .05 level.  
** Significant at the .01 level.  
*** Significant at the .001 level.
and the method(s) used by the employers to implement the plan and to inform employees about FSAs.

In this study, many of the variables concerning dependent care expenses were not statistically significant while comparable measures regarding medical care expenses were. There are at least two possible explanations. One is that there were very few persons in the sample (and in the total population) that were contributing to the dependent care sub-account. They were vastly outnumbered by those who were contributing to the medical care sub-account. Secondly, estimating dependent care expenses is generally not as difficult as predicting future medical care expenses. Therefore, one of the major problems in using a FSA for medical expenses is not as burdensome when used for dependent care reimbursement.

For researchers interested in marital decison-making practices, two issues emerged from this study. The finding that FSA participation was more frequent when the husband spent more time on the decision than the wife was not surprising based on previous research. However, the results indicating that higher FSA participation occurred when either of the spouses took charge and spent more time than the other rather than spending equal time on the decision could have interesting implications.

This study of decision-making in the area of employee benefits should be considered a starting point in an emerging area. There are numerous issues that will be of concern to consumer economists and related professionals which will have both educational and policy implications. Further research is needed to evaluate the costs and benefits of flexible spending accounts as well as to investigate how successful participants are in using this type of financial strategy. Research involving employees from many companies and including financial management, socio-psychological, and knowledge variables is needed.

REFERENCES


