A SPECIAL CASE OF FINANCIAL PLANNING
FOR THE HANDICAPPED

by

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ABSTRACT

This report addresses problems associated with financial planning and life insurance programming to meet the needs of a family responsible for providing postdeath income for a dependent handicapped person. The planner is faced with the unique problem of developing a financial plan that will provide income over two life expectancy cycles. Problems encountered in the process are discussed and methods are recommended for overcoming them.

A Special Case of Financial Planning for the Handicapped

Personal financial planning is beginning to enjoy a strong reputation and popularity as a professional practice. Many of the professionals (CPAs, CLUs, Ph. D.s, Attorneys) engaged in this service also work to earn other certifications, such as Certified Financial Planner (CFP) or Chartered Financial Consultant (ChFC). These certifications indicate that the planner has received additional education and training in the many details and special topics which are often included in a well developed personal financial plan.

A well-developed personal financial plan is one which is designed to provide for the surviving spouse a lifetime standard of living which is not significantly different from the standard of living enjoyed prior to the death of his or her partner.

The significance of the different problems which exist in preparing a well developed financial plan, when the plan must include stipulations that will provide for the well being of a dependent handicapped family member, in addition to a surviving spouse, is the general theme of this article. Throughout this article, references to the handicapped family member should be interpreted to mean dependent handicapped member.

The Problem

Personal financial plans have a strong foundation in life insurance. The need for life insurance is determined by a method known as programming, or critical needs analysis. Programming, whether it be dynamic or flexible, does not thoroughly address the problem of a family with a handicapped member. An example, and the one with which this paper deals, is the situation in which there is a primary wage earner, a spouse secondary wage earner, and a handicapped member of the family unit.

The complexities of the problem are reflected in the
question: "How can the breadwinner provide for the future well
being of the spouse and the handicapped member after the death
of the breadwinner if the surviving spouse predeceases the
handicapped member and the handicapped member lives an otherwise
normal life expectancy cycle?"

Whether the handicapped family member is ultimately cared
for by siblings, other relatives, or a guardian; or if care is
to be provided by one of the many reputable organizations
designed to handle a particular handicapped condition, expenses
will be incurred. Further complexities develop when the planner
tries to develop a human life value for the handicapped member.

The premise is that the breadwinner will want to make
predeath decisions which will provide complete care and comfort
for the dependent handicapped person, as if the breadwinner were
alive and personally providing that standard of living. The
challenges to the planner are to develop a personal financial
plan which will meet the needs of the family, prevent public
institutionalization of the handicapped member, the protect all
of the federal and state benefits to which the handicapped
member may be legally entitled.

This article uses a case study to highlight some of the
special considerations involved and suggests methods which might
be used to help with the problem.

Definitions of Handicapped

Handicapped conditions are defined in several ways. Several
definitions of handicapped are given below. They
illustrate how several of the states define these situations in
their respective state codes. Each state has similar defini-
tions.

1. A handicapped person is any individual who has a
physical or mental disability which constitutes a
substantial handicap to employment but which is of
such a nature that vocational rehabilitation services
may render him fit to engage in a gainful occupation,
or for whom vocational rehabilitation services are
needed to determine rehabilitation potential.

2. A developmentally disabled person is one with a
disability attributable to mental retardation, cerebral
palsy, epilepsy, autism, or a neurological impairment
which may have originated during the first 18 years of
life, which can be expected to continue indefinitely
and which constitutes a substantial handicap.

In this paper, handicap refers to physical or mental handi-
capping conditions or any combination of the two.

Life Cycle and the Handicapped

Life cycle is related to earnings and generally follows one
of two patterns: lifetime earnings and family characteristics.
Lifetime Earnings

Exhibit 1 shows the relationship between lifetime earnings and the age of the wage earner. This method is favored because it incorporates the census data for wages regardless of education and occupation. The shape of the curve in Panel A was determined from Bureau of Labor Statistics data.

Those wage earners with no handicap tend to reach their maximum earnings during the later phases of Stage 3 and the earlier phases of Stage 4, as shown in Panel A. The broken line represents the growing tendency for people to work beyond retirement age. This prolongs the wage earning years and increases the appraisal of human life values.\(^8\)

Persons with congenital handicapping conditions are represented by Panel B. The degree of handicap will vary but, as the relative curve represents, the earnings of this group will never equal those of the non-handicapped peer-age group. However, this group may be expected to live a normal life expectancy. Retirement eliminates any income from wages or stipends and the standard of living may be further reduced for the remainder of the handicapped person's life.

The person who is disabled or becomes handicapped later in life is represented in Panel C. Statistics show that this type of disability occurs most frequently between the ages of 35 and 50.\(^9\) Income is significantly reduced. Insurance may protect some of the income loss for a short period. In retirement, benefits may increase as the spouse also becomes age 65.

Family Characteristics

Exhibit 2 shows this approach to the life cycle applies to family characteristics.

A working description of each state can be inferred from its name: (1) Mature Single, (2) Newly Married, (3) Young Children (Parenthood Begins), (4) Older Children (Parenthood Continues), (5) The Empty Nest, (6) Retired.\(^10\)

Stages 3 and 4 of Exhibit 1 and Stage 5 of Exhibit 2 deserve critical attention when financial planning and life insurance programming involves a dependent handicapped or disabled person.

Stages 3 and 4 and The Empty Nest.

In many cases involving families with dependent handicapped persons, the nest is never empty. The handicapped and disabled must be provided for during the life span of the wage earner or another responsible adult and support must continue until the eventual death of the handicapped or disabled person. Provisions for this extra financial burden need to be developed early in the life cycle.

An adaptation of the life cycle theory was developed by the author. An additional stage, Stage 4B, accounts for specific circumstances concerning the handicapped and other disabling conditions.\(^11\) Stage 4A is the same as Stage 4, Panel A.
Age and Stage of Life Cycle
Panel A: Normal

Age and Stage of Life Cycle
Panel B: Congenital

Age and Stage of Life Cycle
Panel C: Disabled
Exhibit 2

FAMILY CHARACTERISTIC OF LIFE CYCLE

<table>
<thead>
<tr>
<th>Characteristics of the Life Cycle</th>
<th>Mature Single</th>
<th>Newly Married</th>
<th>Young Children</th>
<th>Old Empty Children</th>
<th>The Parenthood Begins (Parenthood Continues)</th>
</tr>
</thead>
</table>

Stages of Life Cycle

1 2 3 4 5 6

Relationship to Exhibit 1

Stage 1 Stage 2 Stage 3 Stage 4 Stage 5

Stages 4B, Age 55 or More.

Membership to this group occurs when one of the family members represented in Panel A is handicapped, or a catastrophe occurs in the family (an illness, a stroke, an accident, a disability, an aging parent to care for). The additional responsibility of the wage earner to provide and care for the afflicted person interrupts the standard financial planning process and creates an unplanned financial burden on the wage earner. Life styles are changed. Retirement must be looked at in a different light. The financial plan must be amended.

For a long term financial planning purposes, the more critical of the two conditions to be provided for will be the handicapped person with an otherwise normal life expectancy. The catastrophic illness is usually more life threatening when encountered in the later years of one's life, as so often is the case, and therefore, would not be so likely to require long term financial planning.

Life Insurance: Goals and Strategies

Life Insurance and The Handicapped

Today a male, at birth, has a life expectancy of about 73 years. Many handicaps, however, tend to decrease life expectancy. Even so, a large number of handicapped children can be expected to enjoy longer, or near normal life expectancies because of the medical advances being made in caring for the handicaps.

Exhibit 3 compares the life expectancy at different age
levels for non-handicapped persons in the standard premium category and handicapped persons in a medium, 200 percent, risk premium category. The percentage change for the handicapped

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**Exhibit 3**

**AVERAGE FUTURE LIFETIME, HANDICAPPED VS. NON-HANDICAPPED**

<table>
<thead>
<tr>
<th>Age</th>
<th>Average Future Lifetime</th>
<th>200% Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>67.78</td>
<td>70.61</td>
</tr>
<tr>
<td></td>
<td>(-9.63)</td>
<td>(-13.26)</td>
</tr>
<tr>
<td>5</td>
<td>64.19</td>
<td>67.00</td>
</tr>
<tr>
<td></td>
<td>(-13.88)</td>
<td>(-13.52)</td>
</tr>
<tr>
<td>10</td>
<td>59.58</td>
<td>62.38</td>
</tr>
<tr>
<td></td>
<td>(-14.52)</td>
<td>(-14.09)</td>
</tr>
<tr>
<td>20</td>
<td>50.37</td>
<td>53.11</td>
</tr>
<tr>
<td></td>
<td>(-16.00)</td>
<td>(-15.59)</td>
</tr>
<tr>
<td>30</td>
<td>41.25</td>
<td>43.99</td>
</tr>
<tr>
<td></td>
<td>(-18.21)</td>
<td>(-17.46)</td>
</tr>
<tr>
<td>40</td>
<td>32.18</td>
<td>34.88</td>
</tr>
<tr>
<td></td>
<td>(-21.60)</td>
<td>(-20.44)</td>
</tr>
<tr>
<td>50</td>
<td>23.63</td>
<td>26.11</td>
</tr>
<tr>
<td></td>
<td>(-26.20)</td>
<td>(-24.70)</td>
</tr>
<tr>
<td>60</td>
<td>16.12</td>
<td>18.23</td>
</tr>
<tr>
<td></td>
<td>(-31.09)</td>
<td>(-30.06)</td>
</tr>
<tr>
<td>70</td>
<td>10.12</td>
<td>11.73</td>
</tr>
<tr>
<td></td>
<td>(-38.14)</td>
<td>(-36.32)</td>
</tr>
<tr>
<td>75</td>
<td>7.81</td>
<td>9.15</td>
</tr>
</tbody>
</table>

*Handicapped persons in a risk category of 200 percent are not expected to live beyond age 78 for females and age 76 for males.

Adapted from CSO 1958 Mortality Tables.

shows the percentage of decrease in life expectancy attributable to the handicapping condition.13 Handicaps which might fall into this risk premium category, according to one major insurer, may include: Down's Syndrome, with no cardiovascular impairment; poliomyelitis, wheelchair confined; cerebral palsy; epilepsy, grand mal; scoliosis; and arthritis, with moderate limitation. When the primary source of income is suddenly eliminated by the death of the person earning that income, in the absence of a sound financial plan the standard of living for the dependents of the deceased will be significantly reduced. For the handicapped dependent, this may well mean institutionalization. It is generally assumed that institutionalization of the handicapped member is not desirable; that the decedent would want his or her dependents to be able to continue with a life style reasonably close to that they enjoyed prior to the death of the breadwinner;
and that the breadwinner would not want the handicapped family member to be a financial burden to any sibling, extended family member or guardian.

A Case In Determining Life Insurance Needs
For a Family with a Handicapped Member

George and Mary Longstreet have a handicapped dependent daughter. The life insurance needs developed for the Longstreets in Exhibit 4 were based on the following assumptions for this case:

1. All children, except Susan, are away from home;
2. Susan is a 15 year old girl;
3. George and Mary are each 45 and working;
4. George earns $48,000.00 a year and Mary earns $9,700.00 a year as a part time teacher; none of Susan's workshop income is included in this programming procedure; Mary will work full-time and earn $20,000.00 a year should George die prematurely;
5. There are $4,640.00 in debts other than the mortgage;
6. The home mortgage balance is $75,000.00;
7. George's monthly take home pay is $2,783.00 (after taxes and deductions);
8. Mary's monthly take home pay is $680.00;
9. The personal balance sheet and personal income statement have been prepared; and
10. Susan's life expectancy is to be considered normal for planning purposes.

Several factors deserve special attention.

Special Needs Fund

The special needs determination is difficult to evaluate. So many things could happen, depending on the nature of the handicapped condition. Without the primary wage earner, it is unlikely that the future will run a smooth course for the handicapped dependent. Maintaining the quality of life becomes increasingly problematic for the handicapped when those who have provided for their livelihood are no longer available or able to continue in that role. Susan's special needs were estimated at $100,000.00.

Average Annual Living Expenses.

Mary's needs were estimated on a declining needs analysis based on a percentage of George's annual take home pay. The initial need was for 75 percent. This was reduced to 60 percent when Maryretires at age 65, and then to 50 percent to care for Susan after Mary dies. The annual living expenses were determined to be $20,530.00 should George die prematurely.
Exhibit 4
Completed Estimate of Life Insurance Needs
For a Family with a Handicapped Member

LIFE INSURANCE NEEDS ANALYSIS

Name(s): George and Mary Longstreet
Date Prepared: August 1985

1. Funeral, Administrative, and Estate
   Tax Expenses .................................................. $10,000
2. Debt Resolutions (Debts outstanding, not
   including the mortgage*) ..................................... 4,640
3. Contingency Fund (Twice the take home pay) ................. 6,926
4. College Fund, or Special Needs Fund ......................... 100,000
5. Net Annual Living Expenses:
   A. Average Annual Living Expenses ......................... 20,530
   B. Spouse's Average Annual Income $10,000 ..................
   C. Average Annual Social Security 10,380
   D. Total Average Annual Income (B+C) ....................... 20,380
   E. Net Annual Income Needs (A-D) ........................... 150
   F. Number of Years in the Period ........................... 70
   G. Average Annual Investment Rate Factor ................... 23.30
   H. Total Net Income Needs (ExG) ........................... 3,508
6. Total Monetary Needs (1+2+3+4+5+6) ......................... $125,074
7. Total Investment Assets ..................................... 119,438
8. Your Life Insurance Needs (6-7) .............................. $5,636

*If the mortgage is considered, it may be covered more
   efficiently by a declining term insurance policy.

Number of Years in the Period.

It was assumed that Mary and Susan will both live to age 85.
There is no reason to believe that Mary will not live a long and
healthy life. As for Susan, many handicapped persons live long
lives. In 1983, the number of recipients of Supplemental
Security Income aged 80 and older increased 2% over the 1982
figure. In 1983, the number of recipients of disability income
was 80% higher than in 1974. This is an indication that the
number of handicapped and disabled persons is growing and that
they are living longer.

Estimating a long life span for both of the dependents will
cause an estimation on the high side, which is preferred to
understating future income needs. Susan is 15. It will be 70
years before she is age 85. This planning horizon is equivalent
to 1-3/4 life expectancy cycles.

Average Annual Investment Rate Factor

A conservative investment strategy may provide an after tax
growth rate of four percent. In a 20 percent tax bracket that is
equal to a five percent tax equivalent yield; for a 50 percent tax bracket, the tax equivalent yield is eight percent. The four percent rate is both achievable and conservative. If more risk is an acceptable strategy, a six percent after tax rate of return (and possibly more) may be achieved. George and Mary used the conservative four percent after-tax figure. The investment factor for 70 years at four percent is 23.39.

Life Insurance Needs

The analysis shows an estimated $5,636.00 additional life insurance is needed. A modest $10,000.00 policy will meet the planned needs for Mary and Susan, given the assumptions made in this example, should George die prematurely. The planner might also suggest that the financial plan could be improved with the addition of an appropriate reducing term life insurance policy to preclude financial problems with the home mortgage. The maximum insurance needed for the Longstreets, to include the home mortgage, is $85,000.00.

Retirement Living Expenses for the Longstreets

To fully develop the financial plan with a handicapped dependent, it is necessary to estimate what the expenses will be during the 70 year planning horizon, considering that all three members will live a full lifetime. For George, Mary, and Susan, each living to age 85, the living expenses were estimated in the amounts shown in Exhibit 5.15.

The Exhibit shows the discounted present values of living expenses at critical times of the planning horizon. About $560,000 is needed for George and Mary with Susan as a dependent, and about $150,000 is needed for Susan. The present value of the total financial burden at age 45 is $710,000. The challenge to the planner is to develop a money management strategy which can achieve this objective.

Special Considerations for Planning for the Handicapped

In all aspects of financial planning for the handicapped, it is necessary to constantly consider the special needs of the handicapped member of the family. The needs may be different for each of the many types of handicapping conditions. However, when handicapped members are involved, the planning horizon may extend over 60 to 70 years, as it did in this example. This is a significant departure from the planning horizon for the non-handicapped. The more familiar the planner is with handicapping conditions, the higher the probability that the financial plan will achieve its objectives.

It could be suggested that additional insurance could make the future financial burden lighter. The protection then becomes a current expense for the breadwinner. The premium cost which is based on the age and life expectancy of the wage earner then becomes an important consideration. Investment strategies can also be evaluated in an attempt to provide for the income
needed to cover retirement expenses. Many combination of insurance and investments can be recommended. The important

Exhibit 5

Schematic of the Timetable of Expenses for the Longstreets

<table>
<thead>
<tr>
<th>Name</th>
<th>Current Age</th>
<th>Age when George Retires</th>
<th>Age when George Dies</th>
<th>Age at Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>George</td>
<td>45</td>
<td>65</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Mary</td>
<td>45</td>
<td>65</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Susan</td>
<td>15</td>
<td>35</td>
<td>55</td>
<td>85</td>
</tr>
</tbody>
</table>

Years Between Events 20 20 30

<table>
<thead>
<tr>
<th>Name</th>
<th>Years Before Retirement</th>
<th>Years During Retirement</th>
<th>Years Remaining after George Dies</th>
</tr>
</thead>
<tbody>
<tr>
<td>George</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Mary</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Susan</td>
<td>20</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Expenses</td>
<td>$2,586,162.00</td>
<td>$3,181,500.00</td>
<td></td>
</tr>
<tr>
<td>Present Value</td>
<td>$ 556,240.00</td>
<td>$ 146,349.00</td>
<td></td>
</tr>
</tbody>
</table>

Total Financial Burden $5,768,662.00
Present Value $ 702,589.00

Discount Rate = 8%

factors to be considered are: will the money be available when it is needed in the planning horizon (Exhibit 5); and will it be provided in such a way that it will not interfere with the legal benefits to which the handicapped member may be entitled?

A supplemental trust16 is one instrument which can be suggested to insure that the money available for the handicapped person will not supplant entitled federal and state benefits. However, there does not seem to be a specific insurance product which can economically meet the particular insurance needs of this situation, which provides for the sequential deaths of the breadwinner, the spouse, and the handicapped dependent over an extended planning horizon.
CONCLUSION

Life insurance and financial planning models are available to assist the professional financial planner in determining the insurance needs in most cases. There are, however, no computer models currently available to assist in the process when a handicapped dependent is part of the family unit for which the plan is being developed. The planner must consider a process which will highlight the significance of the needs of the handicapped dependent. Such a process is described herein. When those associated with determining the life insurance needs and the personal financial planning process are totally aware of the personal financial planning process are totally aware of the unique considerations involved in financial planning for the handicapped, the primary wage earner can rest assured that the best financial plan possible has been prepared to provide for the handicapped dependent's future needs.

ENDNOTES


See also: Leland T. Waggoner, "Concepts of Programming," in the same volume, pp. 797-815.

5. A literature search failed to uncover publications dealing with this programming problem, except for this author's book: Don P. Holdren, Financial Planning For the Handicapped, Springfield: Charles C. Thomas, Publisher. 1985. The programming processes developed by Belth, Rose and Mehr, Dun and Bradstreet, and other commercially available products were reviewed and found to be inadequate in this regard.


7. Colorado State Code. Title 27, Ch. 10.5, Sec. 102., Para. 4(a).


12. 1958 C. S. O. Mortality Table. As a proxy for life expectancy tables, the author has chosen to use the 1958 C. S. O. tables. This will provide a standard point of reference that hopefully will be acceptable to all readers.

13. 1958 C. S. O. Mortality Table and "Expectations of Life Based on Multiples of the 1958 C. S. O. Table." Source: A major life insurance company.


15. Don P. Holdren. op. cit. pp. 223-224.