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An integrated model for financial planning

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Abstract

Financial planning is a broad subject that requires an integrating overview. The Model for Financial Planning incorporates the time and the expected nature of financial events. The categories of the model include 1) money management issues that the individual faces as short-term expected events, 2) issues of meeting unexpected financial events through an emergency fund and insurance, 3) investing to reach the individual's intermediate and long-term goals, 4) transference planning and other long-term issues whose time frame is unknown. The model has applications for "do it yourself" investors, financial planners, and students. The framework successfully integrates the broad range of topics typically covered in financial planning and personal finance courses. © 1999 Elsevier Science Inc. All rights reserved.

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1. Introduction

Financial planning and personal finance are topics of growing student interest and of concern for many adults. The field is well supplied with books and articles in publications ranging from the popular press to academic journals. For example, Eaton (1993) discusses saving for retirement, Fevurly (1991) describes how to save for children's college education, Gray (1993) illustrates the effect of inflation on savings, Clements (1993a,b) explains the importance of diversification. Except for textbooks and general financial guides, most of these sources deal with a single aspect, product or problem in the area of financial planning.

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Table 1
The financial planning model

	Current period	Future period
Planned financial events	Money management	Investing for goals
	Budgeting[a] Income Living expenses Savings Credit	Investment planning[a] (education planning[a] and other LT or IT goals): Stocks and bonds Mutual funds Real estate
	Income tax planning[a]: Gifts Taxes	Retirement planning[a]: Pension funds IRAs & annuities 401Ks and 403Bs
Unplanned financial events	Emergency planning	Transference planning
	Risk Management[a]: Emergency fund Line of credit Insurance: Property Health Liability	Estate planning[a]: Wills Tax planning Trusts Life insurance Business agreements Charitable bequests

[a] Major areas as defined by the CFP Board.

The general topic of financial planning and personal finance is so broad and has so many subtopics that it is very interesting to teach. But it is difficult to keep the material organized so that the relative importance of each area is clear. This paper presents a process or model that provides an integrating overview of financial planning that could be useful to furnish a focus that cuts across topics and products.

The approach outlined below was used in financial planning classes at two universities and in seminars for working adults. The typical reaction from the adults is, "This makes sense. It is so clear. Why didn't I think of it myself?" The approach has been useful in organizing the college course syllabus. The students in these classes have stated that the model helped them see how the topics relate to each other. The model also has applications to help "do it yourself" investors and financial planners. The framework integrates the broad range of topics and products typically covered in financial planning and personal finance courses. It is introduced to students at the beginning of the course as a part of the overview of financial planning. The model is also used in principles of insurance and principals of investments classes to help students perceive the role of the individual course material in the broader context of financial planning. Thus, this Integrated Model for Financial Planning has proven to be a useful contribution to the teaching and learning process in these related areas.

2. The model

The model, as shown in Table 1, is a 2 × 2 matrix that symbolizes the area positioning for the various topics in financial planning and personal finance. Each topic that is discussed

in a financial planning class or presented in a financial plan can be positioned in one of the four categories of the model.

The first element to be considered is time. Some financial events occur in the current period, others are expected in a future period. The length of the current period can be equivalent to the length of time between regularly scheduled payments from wages or other sources. Alternately, the current period can be defined as the foreseeable period of a year or two. The future period includes financial events occurring beyond the current period's budget cycle. These events are defined by the individual's goals for the intermediate term (one to five years from the present) or for the long term (five years or more from the present).

The second element to be considered is whether or not the occurrence of or the date of the financial event can be foreseen. Some events, such as the due date on the next tax bill or the date a child will begin college, are known with some accuracy. Others, such as medical bills or the date of one's death, cannot be predicted. These unexpected expenses can be met through appropriate planning.

2.1. Money management

The first category of the matrix (Table 1) concerns *Money Management* issues that the individual needs to handle as short-term expected events. In the current period the individual generally knows what income and expenses are expected. Individuals who need to concentrate on this area of financial planning are in the early part of their careers or are those whose living situation has recently changed. Cash management, including budgeting and planned saving, may be of immediate importance to them. College students also hope to acquire good cash management skills prior to full-time employment. They are interested in learning how to obtain the greatest benefit from the money they earn. The Money Management category feeds each of the other categories and is referenced at many points of the planning process.

Financial planners recommend the use of a budget so that available funds are directed to the most important goals. However, Davis and Carr (1992) show that while most households have a budget, only a small percentage have a written budget. Most of the financial planning textbooks provide a budget method and software which the students can use to prepare a personal budget. While the students perceive this to be painful at first, the budget is the primary vehicle for money management. It is also a way to ensure that the available funds are directed to the most important goals. It is usually enlightening for a student to track expenses for a month and then compare actual expenditures to planned expenditures. At that point the class is usually ready to discuss methods to ensure a surplus rather than a deficit of cash. Most Americans find it difficult to save money. According to the "Flow of Funds Accounts" in the *Statistical Abstract of the U.S. 1998*, personal savings as a percentage of disposable personal income fell from 12.1% in 1980 to 7.4% in 1996. It should become clear to the students that at any income level one needs a plan in order to manage expenses and save some money. Unless the instructor is successful in convincing students of the importance of budgeting, a careful study of financial planning is unlikely to have lasting benefits. The students should also discuss how their financial circumstances will change through time and how the selection of alternatives at each stage of their life will affect their standard of living.

At this point it is appropriate to discuss the use of credit. Most college students are well aware of the availability of credit since they receive frequent offers from credit card companies. They also are concerned with credit management. Many of them have friends who are deeply in debt because they use credit cards too freely. Others are concerned about how long it will take to repay their student loans. One appropriate exercise is to use time-value-of-money techniques from the introductory finance class and calculate the true cost of using credit for various items. This leads to a discussion of reasons for using credit and how to balance short-term consumption needs with the long-term cost. We also calculate a hypothetical budget for their first year of employment. The conflict they will face becomes obvious—they want to purchase new household goods, a car, and clothing while trying to pay down the debt they incurred as students.

2.2. *Emergency planning*

However, regardless of how well a person has planned, in the short term the individual may also meet some unexpected events. The second category, *Emergency Planning*, involves these issues. Financial planners generally recommend that individuals accumulate emergency funds of about three to six months of expenses. These funds are kept in a savings account, money market fund, or short-term certificates of deposit. However, very few households actually meet the 3-month guideline. Chang and Huston (1995) and Huston and Chang (1997) show that most households do not have the recommended levels of liquid assets. Chang, Hanna, and Fan (1997) suggest that this behavior may be rational for those households who do not expect a decline in real income.

Many individuals do not feel that accumulating funds for emergencies is as important as accumulating funds for other goals. An alternative strategy that we have recommended to clients and to students is to keep an open line of credit either with a major credit card or a home equity line of credit. This technique bypasses the opportunity cost of keeping funds in low-interest bearing accounts or of foregoing current consumption to accumulate liquid assets. Of course, the individual needs a certain amount of self-discipline to reserve the open line of credit for a true emergency.

Other types of emergencies are more readily addressed with health and property insurance. Individual clients who are in the early stages of their careers are often concerned with property and health insurance coverage. These concerns arise for other financial planning clients only when they've experienced a major lifestyle change. Most college students are familiar with health and automobile insurance. Many of them are covered under their parents' policies and are aware that this coverage may end when they graduate. They also know that this type of coverage can be critical and are interested in learning about the different types of health policies that may be available through their future employers.

Students in our personal financial planning classes usually know that automobile insurance is necessary to conform to the law in most states and can save a person from financial distress. Many of them express dissatisfaction with the premiums they now pay. But they are unaware of the differences in types of policies and that they should shop for the best policy. Many of them, however, have never considered the need for homeowners or tenants insurance. They know their parents have coverage and feel that they themselves don't own

enough property to insure. After we discuss the facets of homeowners policies some of them reconsider.

The funds for the emergency savings account and for insurance premiums are appropriated through the budgeting process in the money management category. Sometimes it may be necessary to reduce expenditures for other discretionary items in order to obtain adequate funds for these items or to maintain the open line of credit. Many students in our classes graduate with significant financial obligations incurred during their college years. They reveal that they have accrued large amounts of credit card and student loan debt. They will need to plan to meet this existing debt and to prepare for unexpected financial problems. It may take efforts for some years after graduation to reach a financial position where they may begin effective wealth accumulation.

2.3. Investing for goals

The third category, *Investing for Goals*, includes the intermediate-term and long-term goals which the individual expects to reach. Individuals with ill-defined or undefined goals may never have the incentive to invest for the long-term or may be more easily tempted by short-term investment techniques. To help students and clients define their goals we ask them to consider the question, "If you could have anything you wanted, what would that be?" This question guarantees a smiling audience! Then they answer more questions about this dream, "When would you like to plan to have this? How much would it cost to have it today? Is there any other goal which is more important to you than this one?" After each person has prioritized the goals listed, we begin to analyze each one for the present value of the cost, the estimated time to reach the goal and the degree of risk acceptable in reaching the goal. The goals are as numerous and various as the students and clients. Some choose retirement as the most important goal; others choose to save for the down-payment on their first home or for their children's college education. Time-value-of-money concepts are used to determine the amount of monthly investment that is needed. We show the students how to choose appropriate investment vehicles based on their risk aversion tendencies, investment horizon and position in the life cycle (see Modigliani and Ando, 1963). We discuss why certain categories of investments are more appropriate for certain goals (see Butler and Domian, 1993, for simulations which illustrate the probable returns for various investment horizons). Some attention is devoted to employer pension fund analysis and tax-sheltered investment opportunities. The changing rules on vesting, portability, IRA's and concerns about the Social Security system require attention. Taking these factors into account, appropriate investments can be matched to each goal. Hensel, Ezra and Ilkiw (1991) show that the type of investment is much more important than the choice of specific investment within the category.

The effects of inflation and investment returns are included in the analysis. Funds for *Investing for Goals* are allocated through the budget in the *Money Management* category and are directed to the appropriate investments.

Table 2
Chapters from selected textbooks which fit into the financial planning model

Textbook[a]		
	Money management	Investing for goals
GF	2, 3, 4, 5, 6, 7, 8	9, 13, 14, 15, 16, 17, 18
GJ	2, 3, 4, 6, 7	5, 11, 12, 13, 14
HPR	4, 5, 6, 7, 11, 12	13, 14, 15, 16, 17
K	4, 5, 6, 7, 8	12, 13, 14, 15, 16, 17
RMc	2, 3, 4, 5, 6, 7	12, 13, 14, 15, 16
RMac	2, 3, 4, 5, 6, 7, 8, 9, 10, 11	15, 16, 17, 18
WF	2, 3, 4, 5, 16	9, 10, 11, 12, 13, 14, 15, 17
	Emergency planning	Transference planning
GF	10, 11	12, 19
GJ	9, 10	8, 15
HPR	8, 9, 10	
K	10, 11	18
RMc	8, 10, 11	9, 17
RMac	12, 13, 14	19
WF	7, 8	6, 18

[a] GF, Garman, E.T. and Forgue, R.E. *Personal finance*, 6th ed.; GJ, Gitman, L.D. and Joehnk, M.D. *Personal financial planning*, 8th ed.; HPR, Ho, K., Perdue, G. and Robinson, C. *Personal financial planning*, *The U.S. edition*; K, Keown, A.J. *Personal finance: Turning money into wealth*; RMac, Ramaglia, J.A. and MacDonald, D.B. *Personal financial management*; RMc, Rejda, G.E. and McNamara, M.J. *Personal financial planning*, 1st ed.; WF, Winger, B.J. and Frasca, R.R. *Personal finance: An integrated approach*, 5th ed.

2.4. Transference planning

The fourth category is for *Transference Planning* and other long-term issues whose time frame is unknown. This encompasses estate planning, business continuation plans, life insurance and various types of trusts for the care of dependents, the disposal of assets and techniques to minimize estate taxes. This category evolves over the individual's lifetime as certain continuance and transference needs increase. Most young adults do not need to direct substantial funds to this area until they have accumulated assets and/or have dependents. Many of our students tell us that they have life insurance policies which were purchased by their parents. Others are quite averse to owning life insurance. Individuals with no dependents need only enough life insurance to cover their final expenses and debts in excess of their current assets. Individuals with dependents are often interested in providing income for survivors.

3. Applications

Table 2 indicates the textual coverage of the content included within the Financial Planning Model. The referenced texts were selected because of their wide acceptance in university level personal finance and financial planning courses. Other books devoted to the area would likely work equally well.

Table 3
Case studies for the financial planning model

Stage in life	Possible goals
Single, newly employed	Money management and emergency planning: Emergency fund Debt reduction
Married, no children	Investing for goals: Tax planning House down payment Vacation Retirement
Married, children	Money management and investing for goals and transference planning: Education Retirement Estate planning
Near retirement	Investing for goals and transference planning: Retirement income Estate planning

In addition to using the model as an organizational device to integrate material and provide a focus for students, the framework works well for specific student assignments in a problem-based approach. Some instructors choose to include case studies in the financial planning course. Table 3 shows how the financial planning model relates to these project assignments. The specific assignments require relatively little information from the instructor. Typically, data concerning current assets, liabilities, income, ages and size of family are all that is required. Additional details can enrich the experience. For example, providing a simulated 1040 for the most recent year is a vehicle to add exploration of income tax aspects of financial planning.

4. Conclusions

The complete Financial Planning Model outlined in this paper divides all of the content material into four general categories to provide a simple but comprehensive overview of the entire area. Essentially, personal financial activities are either current period or future period events and involve circumstances that can be expected and therefore planned or circumstances that are unexpected and thus create emergencies. Using this overview of the material, students can continually place seemingly unrelated material in sufficient context to retain a useful perspective of the complete course. It is possible for an instructor to cover the material in any order or format that seems most successful for them and still have an integrating device in the background for occasional reference. Likewise, any text book can be used with this Financial Planning Model as a tool to relate different parts to the total course. As previously mentioned, this model has been successfully used by the authors in several contexts.

The model also works well for financial planning clients who have already moved through some stages in their financial life cycles. The planning goals which are defined early in the client-planner relationship can be inserted into the appropriate categories. These individuals appreciate the organization of the Financial Planning Model. They can see how their current and projected financial situations compare.

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