Aligning the Enterprise Risk Management Framework to the Personal Financial-Planning Domain

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Abstract

Individuals face many risks during different phases of their financial life cycle. These risks in turn have major financial implications on their wealth creation, wealth preservation, and wealth distribution aspirations. Traditionally risk taking is viewed negatively in relation to the personal financial-planning domain. In fact, most of the studies linking risk management to personal financial-planning focus primarily on investment- and insurance-related risks. In contrast, enterprise risk management takes a portfolio view of risks right from the personal level to the organization level. However, the existing literature on enterprise risk management is seen as an essential feature of corporate world. Even risk management experts acknowledge that there is not much literature available that explicitly addresses the issue of aligning the enterprise risk management framework to the whole spectrum of personal financial planning. In this backdrop, it seems logical to develop an in-depth study on aligning an enterprise risk framework to a personal financial-planning domain. Accordingly, this conceptual paper, avoiding mathematical jargon, extensively examines the extent to which enterprise risk management can be aligned to the personal financial-planning domain. The study concludes by suggesting how individuals should identify, aggregate, evaluate, and address risks across the whole spectrum of the personal financial-planning domain.

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1. Introduction

Risk[1] is omnipresent in all human endeavors, and the personal financial-planning domain is no exception. From a layman's perspective, personal financial planning is about amassing wealth[2] to secure lifetime financial freedom. Unfortunately very few households are actually aware of the real risks that can severely impact family finances. In fact, many households even end up destroying wealth accumulated during active phases of their lives. Accordingly, risk in the personal financial-planning context can be described as anything that destroys an individual's or family's wealth. Thus, identifying, capturing, prioritizing, and addressing risks over the whole spectrum of a personal financial-planning domain are critical. According to Altfest (2004), financial planning is a process that incorporates "all items of financial interest to an individual" in select areas such as cash flow planning, debt planning, investment planning, personal, property, and liability risk management, retirement planning, tax planning, and estate planning. Consequently anything in conflict with financial objectives of an individual or family represents risk that is analogous to the concept of enterprise risk. Enterprise risk is described as the chance of something happening that will have an impact on business objectives. The committee of Sponsoring Organizations of the Treadway Commission (COSO) defines enterprise risk management (ERM)[3] as "a process, effected by an entity's board of directors, management and personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (2004). Unlike traditional risk management approaches whereby households assess risks as silos, ERM takes a portfolio view of risks. It is for this reason that the most pertinent questions many households ask are (a)

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[1] The word "risk" is reported to have come into English from Arabic origins, largely due to contact, through trade, with European countries, whereby the words *rischio* and *riezgo* were derived from the Arabic قرز or rizk, meaning "to seek prosperity." This usage signaled a conceptual development from the ideas associated with "luck" (as expressed through the idea of "fortune") toward that of *prudentia* as a virtuous ideal within the context of an emerging commercial society and the notion of planning, preparation, and protection, and by extension, financial and commercial concepts (http://www.calu.com/website/pfrm.asp).

[2] The word wealth comes from the Old English words *weal* (well-being) and *th* (condition), which taken together mean "the condition of well-being" (http://anielski.com/wp-content/documents/The%20Meaning%20of%20Wealth.pdf).

[3] ERM is synonymous with total risk management, organizational risk management, integrated risk management, enterprise-wide risk management, strategic risk management, and holistic risk management. The acronym ERM is used throughout this paper.

How can they integrate risk in formulating a personal financial strategy? (b) What types of risks might they face while setting personal financial goals? (c) What risks might households encounter across select areas of the financial-planning domain? (d) What are potential interdependencies between risks across financial-planning activities that might go unnoticed in the traditional risk management model? (e) What competence should households or their financial advisors possess to understand the aggregate risk inherent in different personal financial activities? and (f) How should households organize themselves to manage and exploit risks on a portfolio basis in an efficient and effective manner? The current literature on the adoption of ERM fails to adequately address these questions. Hence this paper suggests embracing an enterprise-wide risk approach to managing risks across the whole spectrum of the personal financial-planning domain. The next paragraph describes components of the personal financial-planning process and personal financial strategy.

Looking from an applied viewpoint, a well-constructed personal financial-planning process encompasses three broad components of financial interest to individuals: wealth accumulation, wealth protection, and wealth distribution. These components of financial-planning are interconnected and form the basis of formulating a personal financial strategy. Strategy is made with a long-term perspective, and risk management forms an integral part of personal as well as corporate strategy. Personal financial strategy helps in creating synergies between different risk management activities of households and in turn prepares them to make knowledgeable financial decisions. Financial strategy also helps in drawing clear, precise, and definite financial goals and the creation of sustainable personal wealth similar to value creation in an organizational context. Meulbroek (2002) identifies that the goal of risk management is to "maximise shareholder value," which is comparable to "optimisation of personal wealth." But goal setting itself is extremely challenging and fraught with risks. Section 4.1 presents a detailed analysis of personal financial goals–related risks. Hoyt et al. (2008) find a positive relation between firm value and the use of ERM. More broadly, the ERM framework is said to promote increased risk awareness, which facilitates better operational and strategic decision making. It is precisely this investment in risk management that households can most benefit from, in managing their risks on a portfolio basis by embracing the concept of ERM.

Wealth accumulation forms the foundation of personal financial planning. People generate surplus through a cash flow–planning process for investing. A cash flow–planning process begins with obtaining money through gathering income, charting a spending plan, developing a personal debt management strategy, and building an emergency fund to cope with unexpected contingencies resulting in unplanned expenses. Generating a surplus for investing means moving consumption over the life cycle of an individual. A life cycle is defined as a series of stages though which an individual passes during his or her lifetime. As Fisher (1930) put it, the intent of life-cycle planning theory is to "modify [the income stream received by an individual] by exchange so as to convert it into that particular form most wanted by [the individual]." The financial life cycle outlines a roadmap for wealth accumulation, wealth protection, and wealth distribution that varies from individual to individual. Investing allows people to build up sustainable wealth for satisfying a family's financial goals such as buying a home, building an education or marriage fund, planning a vacation to an exotic location, building a nest egg for stress-free retirement, etc.

Sections 4.2, 4.3, and 4.4 of this paper provide discussions of cash flow planning, personal debt planning, and personal investment planning–related risks in detail. Prudence demands protection and preservation of accumulated personal wealth. It is for this reason that people seek out insurance planning, tax planning, retirement planning, and estate planning. Protection and preservation of accumulated wealth allows people to live comfortably in retirement and enjoy wealth during the mature phase of life. Wealth preservation establishes a nest egg for dependent family members in the event of an untimely death of the principal earner and makes it easier to transfer wealth to the next generation through estate planning. Wealth distribution serves as a means of intergenerational transfer of wealth. Sections 4.5, 4.6, 4.7, and 4.8 comprehensively address risks relating to areas of personal insurance planning, retirement planning, personal tax planning, and estate planning.

In summary, comprehensive personal financial planning is the process of formulating, implementing, and monitoring multifunctional decisions that enables households to realize future financial goals. The future, as we all know, is deeply unpredictable and exposes people to a wide variety of risks. Risks across the whole spectrum of the financial-planning domain in turn pose obstacles in accomplishing future financial goals. Therefore, understanding various facets of risk

(Table 1) and creating awareness about risks among households may place them in a financially secure position. It is against this backdrop that this conceptual paper, avoiding mathematical jargon, extensively examines the extent to which aligning the ERM framework to a personal financial-planning domain can support attainment of lifetime financial freedom. The study also aims at building capabilities among the general public to understand the interconnectedness among risk activities and to discern good risk from bad so that they can selectively take on only those risks that are in alignment with their long-term vision and financial objectives. This paper also extends the literature on ERM to explain areas of commonality between the ERM framework and the personal financial-planning domain.

Table 1
Facets of Two-Dimensional Risk

Downside Risk (Red Risk)	Risk	Upside Risk (Green Risk)
Reckless	R	Reward/return
Immunize/insure	I	Integrate with personal financial strategy/business strategy
Sufferings/scary	S	Systems and procedures
Knocks down	K	Knowledge creation

The essence of good risk taking requires households to strive for increasing the share of good risk, the upside (green risk), and simultaneously working intelligently to reduce exposure to bad risk, the downside (red risk).

The remainder of this paper proceeds as follows. Section 2 presents an overview and analysis of literature on the concept of risk and personal financial planning. Section 3 focuses on establishing linkage between the ERM framework and the personal financial-planning domain. Section 4 provides a discussion of aligning the ERM framework to the personal financial-planning domain. This section also comprehensively describes select areas of personal financial planning, a list of risk drivers, risks associated with personal financial goals and across select areas of financial planning, as well as risk responses using illustrative examples and rules of thumb.[4] Finally, Section 5 concludes with a summary.

2. Concept of Risk and Personal Financial Planning Domain: A Literature Review

Risk affects every aspect of human life; we live with it every day and learn to manage its influence on our lives. In most cases this is done as an unstructured activity, based on common sense, relevant knowledge, experience, and instinct (Merna and Al-Thani 2008). In generic terms, risk is the potential future harm that may arise from some action. Insurers define risk as uncertainty concerning the occurrence of loss. Risk in this sense signifies loss or negative consequences. From a business and personal financial perspective, risk means obstacles in meeting corporate/personal objectives, in the light of uncertainty. According to Bannister (1999):

> Risk management is a world of contrasts. It can be nebulous or precise. It can be narrowly confined or widely undefined. It can be hidden in its own jargon—there are at least fifty two-word phrases beginning with the word 'risk' and hundreds of special terms in the RM vocabulary. Risk management is a logical response to the vulnerabilities and complexities of today's modern world. It can provide a means of greater understanding and a starting point for containing, directing and even 'managing' risk. It is now essential in business, government and many more private aspects of life.

Risk management can be defined as any set of actions taken by individuals or corporations in an effort to alter the risk arising from their business (Merna and Smith 1996). Kaplan and Mikes (2012) suggest that active and cost-effective management requires managers to think systematically about the multiple categories of risks they face so that they can institute processes for each. Households traditionally associate risk to personal, property-related risks commonly referred as insurable risks. However, the traditional approach to risk management is changing progressively because it falls short of providing the sense of security people seek through personal financial planning. Personal financial planning is broadly defined as a process of determining an individual's financial goals, purposes in life and personal priorities, and after considering the person's resources, risk profile, and current lifestyle, to detail a balanced and

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[4] A rule of thumb is a principle with broad application that is not intended to be strictly accurate or reliable for every situation. It is an easily learned and easily applied procedure for approximately calculating or recalling some value, or for making some determination (http://en.wikipedia.org/wiki/Rule_of_thumb).

realistic plan to meet those goals. The individual's goals are used as guideposts to map a course of action on what needs to be done to reach those goals. The Certified Financial Planner Board of Standards in the United States provides a broad definition of financial planning. This definition explains financial planning as "the process of meeting your life goals through the proper management of your finances. Life goals can include buying a home, saving for your child's education or planning for retirement" (CFP 2003). A more comprehensive definition is provided by Warschauer (2001, cited in Warschauer 2002): "Financial Planning is the process that takes into account the client's personality, financial status and the socio-economic and legal environments and leads to the adoption of strategies and use of financial tools that are expected to aid in achieving the client's financial goals."

This definition by Warschauer suggests that financial planners need to possess not only technical skills but also relational and strategic skills. Further, it needs to be recognized that individuals and their financial advisors cannot predict the future accurately. For this reason a more comprehensive view of risk management with reference to personal financial planning is necessary. In generic terms, risk is a function of two factors: uncertainty of the outcome and significance of the consequences. The former is generally lowered by acquiring more information, while the latter is addressed by reducing one's stakes (Taylor 1974). From an applied perspective, individuals and families seek to lower uncertainty by attempting to learn more about risks across a financial-planning cycle. Risk management is defined as the "identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or maximize the realisation of opportunities" (Hubbard 2009). ISO 31000 defines risk management process as "systemic application of management policies, procedures and practices to the tasks of communication, consultation, establishing the context, identifying, analysing, evaluating, treating, monitoring and reviewing risk" (ISO 2009).

Because ISO 31000, risk management process, is sufficiently comprehensive, the author has chosen elements relevant to the discussion of aligning risk management to financial planning in this paper. Most literature on risk management focuses on organizational risk management (ERM) and the insurance industry. However, the definition of risk management itself is broad and all encompassing of many domains, including personal risk management. Risk management strategies of avoidance, reduction, transfer, and retention can also be adapted to personal financial planning. In fact, to the extent organizations are collections of individuals, risk management essentially begins at the personal level and is adapted to the level of organizations (Culp 2001). Thus, it seems relatively straightforward to embrace and align the basic concept and strategies of ERM to the personal financial-planning domain. Like risk management, financial-planning too is multidimensional, involves elements of feelings of control, excitement, and anxiety, is influenced by social and cultural factors, and has an emotional or affective aspect. In his research work in the area of risk perception Olsen (2001) describes risk:

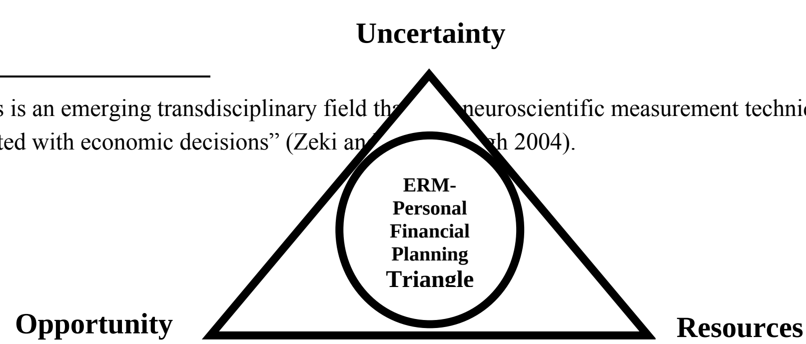
- Risk is multiattribute in nature. It involves such elements as feelings of control, dread, and knowledge.
- Risk perceptions are influenced by social and cultural factors such as trust, fairness, and democratic values.
- Risk always contains an emotional or affective dimension.

Loewenstein et al. (2001) proposed an alternative theoretical perspective, the risk as-feeling hypothesis. That highlights the role of affect experienced at the time of decision making. Drawing on research from clinical physiological and other subfields of psychology, they observed that emotional reactions to risky situations often diverge from cognitive assessments of those risks. Using event-related functional magnetic resonance imaging, Kuhnen and Knutson (2005) examined whether anticipatory neural activity would predict optimal and suboptimal choices in a financial decision-making task. Their findings suggest that distinct neural circuits linked to anticipatory affect promote different types of financial choices and indicate that excessive activation of these circuits may lead to mistakes. “Anticipatory affect” refers to emotional states that people experience while anticipating significant outcomes. By extension, individual differences in increased gain anticipation, decreased loss anticipation, or some combination of the two (plus a third nonreflective factor) might promote proneness to debt (Knutson et al. 2011). Moreover, many people do not fully appreciate their personal comfort zone when they trade off what they are willing to accept in terms of possible losses versus possible gains. Ultimately advances in neuroeconomics[5] may help individuals to optimize their investment strategies, as well as empower institutions to minimize consumer debt.

One quick inference that stems from preliminary discussion in this section is that the study of risk, risk management, the ERM framework, and risk perception is relevant to capturing risks across the whole spectrum of the personal financial-planning domain. Now that we have a broad understanding of the ERM framework and the personal financial-planning process, the following section establishes a link between risk, risk management, ERM, and the personal financial-planning domain.

3. Linkage between ERM and Personal Financial-Planning Domain

ERM and personal financial planning are integrative frameworks that necessitate decision making through conceptualizing actions and contingencies of all possible outcomes, options, and scenarios. Both involve processes that can be amalgamated with value creation, wealth accumulation, wealth protection, and wealth distribution goals of businesses as well as households. Both have upside (opportunity driven-value creation potential) and downside (value destruction potential). Thus, the risk–return trade-off, which is a fundamental aspect of risk management, can effectively be applied to personal financial-planning domain as well. Both require extensive planning to predict the desired outcome, and uncertainty is an inherent element in both disciplines. Both disciplines are a blend of art and science, requiring years of experience to master the craft of financial planning and managing personal risks. Both are contextual as to the sense of urgency, specific timeframe, and source of opportunity and help in creation of systems, procedures, and knowledge base. In fact, risk management strategy and personal financial planning are intimately associated. ERM and the personal financial-planning process thus have many commonalities (see the ERM-Personal Financial Planning Triangle), that is, they both have an element of inbuilt uncertainty as to the final outcome, both provide opportunities to organizations and households to pursue common goals for creating value (wealth), and both require allocation of resources and commitment of the board of directors/family members.



[5] Neuroeconomics is an emerging transdisciplinary field th neuroscientific measurement techniques to identify the neural substrates associated with economic decisions" (Zeki an h 2004).

In a nutshell, risk management and financial planning deal with future events (set in context) whose outcome (positive, negative, or neutral) is not precisely known and provides opportunity for seeking financial freedom. Financial freedom that people aim at throughout their lives is dependent upon achievement of financial goals. Achievement of financial goals thus is logically driven by integration of the ERM framework to a personal financial-planning domain. This can be done by striking a careful balance between ERM and financial planning. Having established the linkage between the ERM framework and the financial-planning domain, in the following section the paper describes risks related to financial goal setting and across each of the select areas of the personal financial-planning domain and risk response to identified risks.

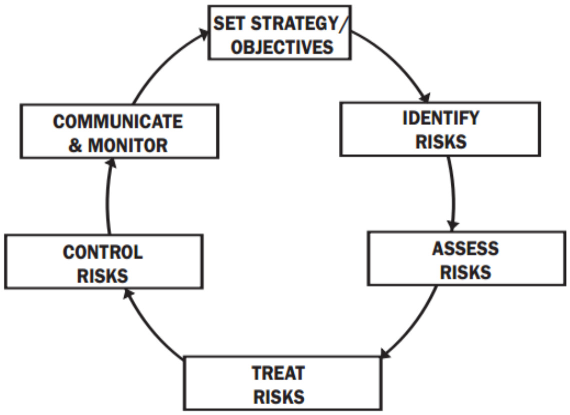
4. Aligning ERM to Personal Financial Planning, Risk Mapping, and Risk Response

The process of aligning ERM to the personal financial-planning domain begins with the creation of a family risk management policy. A solid risk management policy contains the purpose, principle, and procedure for implementation. The purpose of a family risk management policy may be to reduce risk for family members, both individually and as a whole. Adherence to the policy would go far to protect the family's human and financial assets and minimize potential liability (Annino 2012). Table 2 provides an integrated view of risk management and family risk management.

Table 2

Risk Management and Family Risk Management

A Continuous Risk Management Process	Family Risk Management: A Six-Step Process



Adapted from ICAEW, London, 1999

Adapted from Abbot Downing (2012)

From a layperson's point of view, the personal financial-planning cycle and risk management process appears unconnected. However, it can be observed that there are indeed striking similarities among the components of the continuous risk management process and family risk management process depicted in Table 2. For example, setting strategies and objectives corresponds to defining long-term family goals and objectives; communicating and monitoring is the same as monitoring the risk landscape and results of mitigation efforts. Thus, aligning the risk management process encompasses setting strategies and objectives, and identifying, assessing, treating, controlling, communicating, and monitoring risks to the financial-planning life cycle appears logical. Accordingly, the following subsections describe select areas of the personal financial-planning domain and then proceed to list risk drivers, associated risks, and risk response for identified risks.

4.1 Financial Planning Goals–Related Risks

Financial goals are specific objectives to be accomplished through financial planning. Setting goals thus is fundamental to attaining financial success. Goals reflect the personal values people attach to wealth. An advantage of goal-directed planning is its correspondence with the way people think about their lives. People have certain goals they want to reach: education, buy a house, buy a car, etc. They need to plan their finances to accomplish those goals, and failure to reach them results in lower utility. Thus, goal-directed planning is simply a practical way to process the information available in maximizing expected utility (Robinson 2000). However, the goal-setting process itself is open to various risks. Table 3 lists the goal-related risks.

Table 3
Financial Planning Goals–Related Risks

Risk Drivers	Associated Risks
Failure to understand big picture, unrealistic goals	Goal ambiguity risk
Setting multiple goals	Goal conflict risk
Failure to involve spouse in goal setting	Goal prioritization risk
Fixing higher aspiration base	Goal sequencing risk
Failure to review goals	Goal implementation risk
	Aspiration base risk
	Outdated/obsolete goals risk

Risk Response: Know thy self and know your financial goals. To avoid goal ambiguity, an expert panel at Abbot Downing believe that the fundamental question to be considered is "what do you want to accomplish with your wealth?" According to them, the answering to this question will become a part of the family's collective voice. The findings of the "Shared Goals and Values Scale" developed by Archuleta (2008) also explain that couples with higher scores are more in agreement on life goals than those with lower scores. Thus a collective approach to goal setting can help in clearly articulating the goal statements and vision, subgoals and milestones, and action plans and priorities. Use of a goal-setting worksheet in the SMART[6] format helps in objectively defining goals. Objectively determined goals not only are achievable but also help in reducing aspiration base risk. Family members usually have conflicting needs and wants.

Multiple goal setting without prioritizing goals creates barriers in accomplishing goals. Therefore, making goal setting a family affair is commonsensical. When everyone is on board it is easier to commit to goals. Ideally, aligning ERM to a financial-planning domain involves laying the goal-setting process whereby the utmost importance is assigned to high-priority goals, and goals with lower priority are handled in descending order. We live in a dynamic environment, and hence monitoring and reviewing goals provide consistent results commensurate with changes in financial status. Setting priories, sequencing subgoals that lead to

[6] The acronym SMART stands for Specific-Measurable-Attainable-Realistic-Time bound.

attainment of primary goals, working diligently toward them in a time-bound manner, and reviewing and reworking priorities and goals help in managing goal-related risks and make the financial-planning exercise more fulfilling.

4.2 Cash Flow–Planning Related Risks

The family is treated as an economic unit akin to a small factory in the context of the personal financial-planning domain. The producing unit, that is, earning members of family, generate cash inflows, and the consuming unit, that is, spending members, use money, resulting in cash outflows. Savings are the portion of current income not spent on consumption. Saving money is difficult for many people because it involves decreasing current consumption and investing in a future standard of living. Most households view savings as residual income, what is left after satisfying current needs and wants. Absence of planned savings and/or a lower level of savings are the principal reasons of failure in attainment of financial goals discussed above. It is in this context that cash flow planning is of utmost importance to households. Cash flow planning process entails management of cash inflows and outflows and paves the way for planned savings and investment activities. But what is it that causes cash flow volatility? Like businesses, households are also exposed to frequent cash flow volatility. Causes for volatility may vary from indulgence in impulse spending or overspending, failure to budget, or lower than expected growth in income to unexpected events like job loss due to an unexpected economic downturn beyond the control of individuals. Table 4 lists the risk drivers and associated risks relating to cash flow planning.

Table 4
Cash Flow Planning–Related Risks

Risk Drivers	Associated Risks
Lower than anticipated growth in income	Affordability risk
Mental accounting	Budgeting risk
Impulse buying/urge to splurge	Life style risk/spending risk
Inflation	Purchasing power risk
Failure to maintain financial records	Financial record keeping risk
Failure to plan for unexpected expenses	Contingency planning risk

Risk Response: Know thy cash flows, know your income, and know your spending habits. Replicate responsible financial behavior. Perry and Morris (2005) developed the Responsible Financial Behavior scale encompassing controlling spending, paying bills on time, planning for one's financial future, saving money, and providing for one's self and family. As per their findings higher scores reflect higher levels of responsible financial behavior. The urge to splurge and live beyond one's means is more a behavior issue than money issue. Understand the basic rule: Let your spending growth fall behind your income growth. Embrace the "Pay Yourself First" rule, that is, save a predetermined proportion of income before using money for spending. Budgeting is still a trial and error process as most middle class people resort to mental accounting. A person's mental accounting may cause unusual ways of thinking about, categorizing, and evaluating money. However, maintaining proper financial records and tracking spending by preparing a personal budget plan helps in analyzing spending habits and in establishing a regular savings plan. Prevailing folk wisdom and advice from some practitioners and even academics recommend the "70-20-10" rule: spend 70 percent of money you earn, save 20 percent of money you earn, and invest 10 percent of money you earn. From an employee's perspective, there are two primary goals to maintaining steady cash inflow. The first is to remain employed to maintain the current income stream, and the second is to get promoted in order to earn more money. Affordability risk can be mitigated through constantly updating in the area of interest and gaining relevant experience. Many people simply spend any money they get from a raise and end up in the same financial situation they were in to begin with. Such people do not realize that financial planning is not about a single big event. It's about creating the everyday lifestyle changes that improve financial well-being over time. To cope with the unexpected expenses due to unplanned events, people can consider creating an emergency fund in multiples of three to six months of living expenses. General prudence too demands maintaining austerity in good times and using the good times to prepare for the bad times.

4.3 Personal Debt Planning–Related Risk

Personal debt is a financial asset that allows a person to increase consumption today in exchange for reducing consumption by the amount of the loan plus interest at a future date. The permanent income hypothesis[7] suggests that consumers take on debt to smooth consumption throughout

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[7] The permanent income hypothesis (PIH) is a theory of consumption that was developed by the American economist Milton Friedman. In its simplest form, the hypothesis states that the choices made by consumers regarding their consumption patterns are largely determined by a change in permanent income, rather than change in temporary income. The key conclusion of this theory is that transitory, temporary changes in income have little effect on consumer spending behavior, whereas permanent changes can have large effects on consumer spending behavior (http://en.wikipedia.org/wiki/Permanent_income_hypothesis).

their lives, borrowing to finance expenditures (particularly housing and schooling) earlier in their lives and paying down debt during higher-earning periods. Apart from saving and investing, debt management forms an integral component of cash flow planning. Simply putting, debt means using future purchasing power in the present before income has been earned. A rapid rise in personal debt can be attributed to changing attitudes toward debt, use of debt, and greater access to credit. A "saving and buying" mentality is giving way to a "borrow and buy" mentality among generation Y. People now use more debt to maintain their lifestyle and for meeting current consumption against future expected earnings. However, greater access to credit has not been matched by increased financial capability. Financial capability relates to understanding the concepts of responsible borrowing and lending and includes having the skills to be able to see how economic events such as interest rate rises would affect yourself. The debt cycle begins when expenses outsize income and people resort to debt to cover the difference through committing future income to debt repayment. Extension of debt in turn results in excessive borrowing and people falling into the debt trap. Excessive indebtedness inherently entails risks such as default risk, risk of losing a good credit rating, and inability to borrow plus mental stress.

Financial psychologists point out that debt is not inherently good or bad and that each person's perspective on debt has both positive and negative ramifications. The decision to borrow is rarely black and white. But by recognizing emotional and psychological reactions to debt, borrowers may take necessary steps toward deciding if and when it makes sense to borrow and when it's best to use other options. Table 5 lists risk drivers and debt-associated risks.

Table 5
Personal Debt Planning–Related Risks

Risk Drivers	Associated Risks
Excessive borrowing	Overleveraging risk
Inability to service debt on time	Default risk
Negative impact on credit scoring	Credit rating risk
Reduction in borrowing capacity	Financial risk
Personal distress	Psychological risk

Risk Response: Know thy indebtedness. Eckel et al. (2009) designed a debt use index to provide a measure of debt use by individuals. The index can be used to assess whether the level of debt someone holds is a problem. The index is able to distinguish between positive and negative debt use. Using debt persistently for consumption purposes and to enhance a lifestyle causes financial disaster. Therefore it is important to review spending habits resulting in excessive borrowing. In regard to debt resolution the process begins by preparing a personal debt sheet listing all outstanding debt and arranging debts in order of interest costs—in descending order from high interest bearing to low interest bearing followed by paying high-interest-bearing debt first or substituting high-interest-bearing debt with low-interest-bearing debt. For example, credit cards tend to have the highest interest costs and can be detrimental to a long-term wealth building plan. Similarly, one might take a home equity loan or a loan against the cash value of an insurance policy carrying a low interest charge to pay off credit card debt. Reducing debt accumulation is the same as increasing asset accumulation. One can also explore informal sources of debt, that is, debt from friends and relatives, because these debts are usually interest free. Maintaining a personal network can go a long way toward providing a safety net, especially during tough times.

4.4 Personal Investment Planning–Related Risks

The investible surplus left after meeting living expenses, providing for a primary residence, and creation of an emergency fund forms the basis for personal investment planning. Typically personal investments should reflect the risk tolerance of investors. Risk tolerance is the level of risk that an individual believes he or she is willing to accept. It is important to note that risk tolerance is a complex attitude, and like any attitude, it has multiple levels of interpretation. Risk tolerance reflects an individual's values, beliefs, and personal goals, and overlaps with feelings of wanting to feel confident and in control (Young and O'Neill 1992). Essentially before making investment-related decisions, investors should carefully evaluate factors such as their attitude toward risk, desire for high returns, attitude toward gains and losses, and investment choice preference. Because of the risk-return trade-off, investors must recognize their personal risk tolerance when choosing investments. Taking on additional risk is the price of achieving potentially higher returns; therefore, if an investor wants to make money, he or she cannot cut out all risk. The goal instead is to find an appropriate balance that generates some profit but allows the investor to sleep at night. In addition to the factors described above, investment choices also depend on age, time horizon, and sources of income, single or multiple, of an investor. Table 6 describes the risk drivers and personal investment–associated risks.

Table 6

Personal Investment Planning–Related Risks	
Risk Drivers	Associated Risks
Loss of principal	Market risk
Putting all your eggs in the same basket	Concentration risk
Failure to interpret information	Interpretation risk
Inability to determine time horizon of investment	Holding period risk
Timing the market	Timing risk
Failure to rebalance portfolio mix	Rebalance risk

Risk Response: When it comes to investing, a simple strategy people use to manage investment-related risks is to apply the SWAN (sleep well at night) principle. This rule says if people tend to lose sleep due to ups and downs in the stock market, they should stay away from equity investing. Concentration risk can be managed by diversifying investments across asset classes.

Evidence demonstrates that investment across asset classes and stock market diversification works and is the best way to balance overall portfolio risk and return. In fact, asset allocation is the first step an investor should take before choosing how to invest. The ability to understand the risk–return trade-off principle in various asset classes is critical in developing an asset allocation strategy. Investors should also review and rebalance their portfolio periodically. Another problem with investment planning is that people don't differentiate between trading and investment. Short-term or day trading doesn't work well for most people because it is a full time activity. People planning to engage in active trading should recognize that trading is an extremely risky activity and requires ring fencing through allocation of risk capital, fixing of trading limits, provision of stop loss limits, etc.

4.5 Personal, Property, and Liability-Related Risks

Human beings and the assets they own have a finite life and hence are exposed to personal, property, and liability risks. Personal risks are uncertainties surrounding loss of earning power due to premature death, prolonged illness, disability, old age, or unemployment. Property risks are uncertainties of direct or indirect losses to property that occur due to accidents, fire, thefts, and hazards. It entails direct losses for replacement or repair of assets and indirect losses that require additional expenses as a result of the loss. For example, damage to a car incurs repair costs and additional expenses to rent another car while the car is being repaired. Liability risks arise from damage caused to another's property or personal injury to other parties. Personal, property, and liability risks are insurable risks. Unfortunately, many people do not make sufficient provision in their personal budget to cover premiums and hence end up losing money and valuable assets. Table 7 lists risk drivers and associated personal risks.

Table 7
Personal, Property, and Liability–Related Risks

Risk Drivers	Associated Risks
Sudden death	Mortality risk
Illness/disease	Morbidity risk
Loss of physical ability	Disability risk
Damage/destruction of assets	Asset risk/property risk
Causes loss/injury to third parties	Liability risk
Inability to provide for parental care	Resource constraints risk
Inadequate insurance	Affordability and insurability risk
Sudden loss of job	Employment risk
Change in marital status	Divorce risk

Risk Response: Insurance is never an option. Managing personal, property, and liability risks is therefore critical for success of any personal financial plan. Insurance planning is a powerful mechanism for managing these risks; others may include the use of an emergency fund and levels of liquidity in investments. The process begins with a detailed assessment of risks to determine the type and level of insurance protection required specific to an individual situation. It helps in estimating the impact of unexpected events on family finances. There are different methods, subjective and objective, of quantifying personal insurance needs. As a general rule, financial planners suggest that life insurance should be about 10 times annual earnings. However, insurance needs vary based on other factors, such as age, liability, and debt status of the insured. Estimating the present value of the required living expenses and additional expenses per year and computing it over a predetermined number of years at some assumed interest rate and inflation is a more objective way of assessing personal insurance needs. For mitigating property risks the costs necessary to replace or repair the damaged asset is estimated by a comparable asset at the current price. Liability risk is a very complex issue. This is considered to be unlimited because it will depend upon the severity of the event and the amount the court awards the aggrieved party. Nonetheless, to the extent possible liability risks should be covered. Affording being able to cover all risks may not be feasible, but one should strive to obtain the best affordable protection. However, one must review life insurance needs whenever there is a major change in family or employment status. Besides insurance, regular exercise and eating healthy foods may benefit everyone because these general more energy and instill more confidence. Healthy people usually spend less on health care in the long run. Unfortunately good health is one of those things that people easily take for granted until it's too late. Therefore, making the necessary changes in lifestyle allows a stress-free life and helps in conserving financial resources. Divorce can change the whole financial road map. During a divorce the married couple has to make decisions about dividing property. In addition, they may need to address who will provide for children and/or spousal support and how much. Considering the complexities involved in divorce, it is important to get good legal advice and specialized professional help to deal with the financial aspect. Although this can be expensive, going without such help can be risky and even cost more in the long run. It is also important to talk with parents to understand their wishes and plans. Check on a parent's health insurance coverage and whether it will continue into their later years. Discuss and review any medical and legal documents to ensure they are up-to-date and properly written. Open discussion with parents will help in locating and bridging the gaps and allocating adequate resources for parental care.

4.6 Retirement Planning–Related Risks

Retirement is a mature phase of life, and heading into retirement can raise many scary questions. Will unexpected expenses throw an individual's retirement plan off track? Could a market crash decimate a retiree's carefully built nest egg? Most important, will a retiree have enough money to last through their golden years? All these questions expose retirees to several risks during the post-retirement period. Studies show many gaps in the understanding of these risks and in techniques for dealing with them. The 2003 survey of the Society of Actuaries indicates specific areas where education about retirement risks would be especially helpful: long-term care, the uncertain timing of death, and inflation. Gaps in knowledge of financial techniques for dealing with risks in retirement will go up with likely increases in life expectancy. These issues have become more pressing in light of the recent market declines and the growth of defined contribution plans. Moreover, shrinking family sizes and changing views of the role of the family may require the next generation of retirees to purchase what the current generation receives at no financial cost. Table 8 describes risk drivers and associated risks relating to retirement planning.

Table 8

Retirement Planning–Related Risks	
Risk Drivers	Associated Risks
Absence of retirement plan/review strategy	Planning risk
Outliving assets	Longevity risk
Loss of purchasing power	Inflation risk
Underestimated retirement savings	Risk of outliving money
Reduction in value of savings	Market risk
Deteriorating health	Health care risk, long-term health care policy
Loss of ability to live independently	Dependency risk
Death of spouse	Companionship risk
Inability to pick right investment option	Financial product risk

Risk Response: Ideally every retiree should have a retirement plan during their working years. In reality most people do not have any definite retirement plan and have no idea as to how much they will need in retirement, how much they withdraw each month, or when they will run out of money. This results in the risk of outliving one's money, one of the biggest risks in retirement. Purchasing power is probably the biggest risk to a retiree's long-term ability to make ends meet. To mitigate longevity risk, risk of outliving money, and purchasing power risk, retirees may consider phased retirement, part-time less strenuous bridge jobs, and postponing retirement. To guard against inflation retirees can invest in inflation-adjusted securities or other investments that will gain value as overall prices climb. Another strategy is to aim to have 100 percent of pre-retirement income, through a combination of savings, pension, and social security. In this way even if expenses are lower in retirement, one will have the flexibility to weather inflation risk. To safeguard against market risk, retirees may diversify their portfolio among a healthy mix of equity, fixed income securities, and real estate. Paying for health care is a major concern for senior citizens. Planning in advance for long-term health care or having sufficient funds to purchase medical gap insurance is the surest way to manage this risk. Many seniors at some point in their lives will experience a loss of ability to live independently as a result of age or loss of a spouse. While dependency risk can be managed through provision of funds and staying in a senior citizens' home, the companionship risks, to some extent, can be managed through engaging in voluntary and social activities. Vlaev and Stewart (2009) developed a 20-item risk perception scale titled "Part II: Factors Affecting Your Risk Perceptions and Financial Decisions" to help researchers understand how a person's perception of financial product risk affects retirement investment decisions. From the above discussion it is amply clear that risk management forms an integral part of the retirement counseling and retirement planning process. Financial planners also suggest a “4 percent” withdrawal rule,[8] a rule of thumb used to determine the amount of funds to withdraw from a retirement account each year.

4.7 Tax Planning–Related Risks

Tax planning is the development and implementation of appropriate strategies to reduce, affect the timing of, or shift either current or future income tax liabilities. In the context of personal financial planning, tax planning is driven by a taxpayer’s overall financial-planning goals and is not an end in itself. Annual income taxes substantially erode net financial resources unless reduced by proper tax planning. Thus it becomes necessary for taxpayers to work a little harder and smarter to save taxes in a legal way, so that they can make their dreams come true. But the difficulty consists, by and large, in finding a way to describe tax-planning programs that lies between tax avoidance and tax evasion. From the perspective of tax authorities both tax evasion and tax avoidance pose risks to the integrity of the taxation system and the erosion of government revenue. Table 9 describes risk drivers and associated risks relating to tax planning.

Table 9
Tax Planning–Related Risk

Risk Drivers	Associated Risks
Failure to declare income to tax authorities Failure to choose the right instrument or investing in complicated tax saving plans Failure to align tax schemes with personal financial goals Leaving tax planning for the closing days of the fiscal year	Tax evasion risk/integrity risk Investment risk Goal alignment risk Timing risk

Risk Response: Personal tax laws offers wide range of investing options, but the choice of products and plans should be based on an individual household’s needs, risk profile, and investment horizon. As shown by Kozusko (2003), tax planning is a necessary evil. Reducing taxes is critical to financial success over an extended period of time, and tax risk can be

[8] The 4 percent rule seeks to provide a steady stream of funds to the retiree, while also keeping an account balance that will allow funds to be withdrawn for a number of years. The 4 percent rate is considered to be a “safe” rate, with the withdrawals consisting primarily of interest and dividends. The withdrawal rate is kept constant, though it can be increased to keep pace with inflation (http://www.investopedia.com/terms/f/four-percent-rule.asp#ixzz29YY7AhkV).

minimized—but the process of tax planning is to consider an array of intangible and subjective factors such as: Is the plan too complicated? Is it flexible enough? Does it enhance or undermine the taxpayer's other wealth management plans and practices, as well as investment goals for cash flow, liquidity, and diversification? Does it require personal involvement to manage the plan? How long will it be before results are known? Furthermore, a tax plan should be designed to coincide with the taxpayer's personal objectives and risk profile. For example, in the case where a taxpayer wishes to align tax planning with various financial objectives such as risk management, tax saving, retirement planning, or wedding planning for their children, he or she may procure an endowment plan. This plan will allow him or her to simultaneously accomplish all these goals. Insurance will create a nest egg for the family in the event of an untimely death, premium paid is tax deductible, and proceeds of insurance on maturity can be utilized either for enhancing a retirement fund or for marriage of one's children. This approach to tax planning will assist a taxpayer in achieving personal financial goals as well as legitimately minimizing tax-planning risks.

4.8 Estate Planning–Related Risks

Estate planning is development of a program that will ensure that the last wishes of an individual are carried out regarding his or her estate. Contrary to the misconception that *estate* means real estate, estate actually refers to all physical assets as well as financial assets, net of liabilities, of a deceased person and includes real estate, gold, financial assets (shares, bonds, and bank deposits), art and collectibles, etc. Many people spend their entire working life working to accumulate assets without making any thought-through effort to protect and preserve them. In the event of death and/or disability of such people, consequences may occur that could have been avoided with the proper estate planning. This aspect of planning is perhaps the weakest link in the personal financial-planning cycle for most cases, and in some cases is even ignored completely. In fact, there is evidence that very few households develop a comprehensive estate plan. Normally when it comes to health, wealth, and estate planning it is especially true that those who fail to plan seem either consciously or subconsciously to be planning to fail. The problem gets bigger as the list of assets and loved ones grows longer. But what exactly constitutes an estate? An estate consists of all the assets, real and financial, accumulated by an individual during his or her lifetime net of liabilities. Finally, the best wealth and estate plans provide for an immediate, seamless, hassle-free transition of assets from the wealth owner's immediate control to the hands of whomever they wish to be left holding the reins after their death. Table 10 describes risk drivers and risks associated with estate planning.

Table 10
Estate Planning–Related Risks

Risk Drivers	Associated Risks
Failure to have a written estate plan	Loss of money risk
Improper estate plan	Family discord risk
Not periodically updating an estate plan	Reviewing risk
Self-prepared estate plan	Legal and taxation risk

Risk Response: Know thy after-death objectives. To start, people may make use of a structured procedure to estimate estate planning involvement. This instrument developed by Edwards (1991) measures a person's involvement with estate-planning activities at the household level either alone or in partnership with a spouse with a range of estate-planning activities. Failure to have an estate plan can be expensive and is a great way to cause arguments, grief, and even legal battles between family members. According to key findings of Barclays Report (2011), 40 percent of the globe's wealthy population have direct experience of their family fortune leading to disputes, but the percentage is even higher in India, where 61 percent of the rich have seen relationships deteriorate into feuds over money. On the other hand, creating an estate plan makes estate owners' wishes clear and minimizes the chances of family discord risk. Generally, people do not like to discuss dying, and therefore people often want to simply execute their estate plan documents. Estate planning is a complex legal process requiring in-depth knowledge in several areas of law, including estate law, tax law, and property law. It is therefore desirable to seek expert help in developing an estate plan to avoid legal and taxation risk. Economic, family, and health changes also require revisions and review of estate plans periodically.

5. Summary and Conclusion

Key study findings suggest that risk is an important topic in the context of the personal financial-planning domain, but it runs counter to many individual biases. It reinforces concerns that households may not understand the extent and/or nature of a risk or that they may underestimate it. This study also highlights that risk is not a bad thing, just as long as it's monitored, reviewed, and rebalanced from time to time. It indicates that households hardly take a portfolio view as to risks and look at risks on a silo basis. This research suggests that risk management can be fairly useless if the process is not integrated across the whole spectrum of the financial life cycle of an individual—and that means horizontally as well as vertically. This study shows that by carefully identifying and managing risks across a financial life cycle, people are better equipped to deal with unpredictable scenarios that can wreak havoc with their wealth. Active risk management requires people to think systematically about multiple categories of risks they face so that they can institute processes for each as is being done in an organizational setup. Aligning the ERM framework can also facilitate the most effective utilization of personal financial resources.

In conclusion, this paper outlines a conceptual framework for aligning the ERM framework to a personal financial-planning domain to facilitate households in attaining lifetime financial freedom. However, academicians and researchers can think of more innovative ways of aligning the ERM framework to the personal financial-planning domain than presented in this paper. Academicians and researchers may also wish to collaborate with author to expand the scope of this paper to (a) investigate the magnitude of interconnectedness of identified risks across select areas of a personal financial-planning domain or (b) develop an analytical matrix to determine the impact of various combinations of risks through assigning weights to each of the risks.

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