Centre for
Financial Risk

Financial Plans for Baby Boomers: How Much Risk?

Geoffrey Kingston

Working Paper 09-02
The Centre for Financial Risk brings together researchers in the Faculty of Business & Economics on uncertainty in capital markets. It has two strands. One strand investigates the nature and management of financial risks faced by institutions, including banks and insurance companies, using techniques from statistics and actuarial science. It is directed by Associate Professor Ken Siu. The other strand investigates the nature and management of financial risks faced by households and by the economy as a whole, using techniques from economics and econometrics. It is directed by Professor Geoffrey Kingston. The co-directors promote research into financial risk, and the exchange of ideas and techniques between academics and practitioners.
FINANCIAL PLANS FOR BABY BoomERS: HOW MUCH RISK?

by

GEOFFREY KINGSTON*

Revised version forthcoming in Economic Papers

In June 2008 the Financial Planning Association issued an “example” financial plan. The hypothetical clients are John and Joan, a married couple. The plan would reduce the couple’s tax bill from $38,000 pa to $22,941, a good outcome. More questionable is a recommendation that the percentage of financial assets invested in growth assets be raised to 70 per cent. An aggressive asset allocation could well suit if the couple were aged either 37 or 77, but John and Joan are 57. The long investment horizon faced by the couple is actually a reason for caution on the cusp of their retirement.

Keywords: financial plans, asset allocation, risk management, out-of-the-money put options, horizon effect.

JEL codes: G23, G28

*Department of Economics, Macquarie University. An earlier version of this paper was presented at the Financial Integrity Research Network’s Symposium on Superannuation and Retirement Planning, Sydney, 25 November 2008. I would like to thank symposium participants, along with Andrew Hingston, Adrian Pagan and Carol White, for helpful comments on earlier drafts. Students in the course Superannuation and Retirement Benefits at the University of New South Wales came up with shrewd comments on a lecture-notes version of this paper. The Australian Research Council helped fund this research. I retain responsibility for the paper.
1 Introduction and Summary

A financial planner’s recommendations must include reasons and be available to the client, in written form and at any time. This document is called the Statement of Advice. The peak body for financial planners in Australia is the Financial Planning Association. The FPA has released an “example” SOA, dated 24 June 2008,¹ that seeks to explain “a complex scenario in a concise and comprehensible manner.” The name of the hypothetical planner is John Planner, and his hypothetical clients are John and Joan Randall, a middle-class boomer couple with a teenage daughter. I summarise and appraise the FPA document.

The document is indeed concise and comprehensive. It conveys in just 12 pages some sophisticated recommendations about a fairly complex household budget. The document homes in on questions that are difficult yet central to successful financial management for middle-class boomer households. By disseminating this document the FPA has raised the level of the debate. Its recommendations would reduce the Randall’s direct taxes from $38,975 pa to $22,941 pa until July 2012, a handsome saving.

My main objection to the model plan concerns its recommendation of a fixed 70 per cent allocation of the Randall’s financial assets to ‘growth’ (risky) investments. The plan’s explanation for the proposed level of risk is inadequate, given that each member of the couple is 57 years old. An aggressive strategy could well suit if the couple were aged either 37 or 77 – but perhaps not in the case of these two 57 year olds. I give reasons for this criticism, and suggest various possible improvements in advice.

The model plan refers to a companion document (Financial Planning Association 2008b). That document elaborates on the model plan’s view that risk management is about trading off prospective high returns against prospective low volatility of returns. Popular and useful as the trade-off perspective is, it needs to be supplemented with the insurance perspective: risk management is about protection against lower-tail outcomes that bring on financial stress. Put another way, risk management involves the purchase or synthesis of out-of-the-money put options,² as advocated by, e.g., Stulz (1996) for companies and by Bateman et al. (2007) for households. Out-of-the-money puts have strikes below the current price of the underlying asset, and are therefore analogous to insurance policies with a deductible. The insurance perspective is at least as intuitive and accessible as the trade-off perspective.

¹ SOAs must carry a date.

² A put option confers the right to sell an asset at a preset ‘strike’ price (but not after a preset expiry date) in exchange for paying a premium upfront. As the term ‘premium’ suggests, buying puts is analogous to buying insurance. This paper confines attention to homemade options, as a comparable traded instrument is not currently available in Australia. In the United States, by contrast, there is a deep market for Guaranteed Living Income Benefits. These GLIBs incorporate a type of long-term put option, and are market instruments that perform a function similar to the homemade retirement income insurance strategies described here.

The risk concept endorsed here is related to the literature on shortfall risk, which is concerned with returns falling below some preset minimum. However, the preset minimum here is time varying. Notably, I recognise that a given percentage loss typically does more damage early in retirement than later on. Put another way, the risk concept endorsed here is for a household which is concerned to prevent its expenditure ever falling below some fixed ‘habitual’ minimum rate.
The cost of an option generally rises with its time to expiry. Because retirements tend to span two decades or more, Bateman et al. find that protecting even a modest lifestyle for the expected duration of a retirement is expensive. Homemade insurance, against a family's lifestyle ever dropping below some pre-specified standard, can therefore necessitate a conservative portfolio in early retirement, even if the protected lifestyle seems modest relative to the lifestyle projected if returns turn out as expected. Advice on this horizon effect should be incorporated into future model plans.

The FPA plan sections out its advice under the following main headings: scope, recommended tax and investment strategy, and costs of the advice and recommended products. I examine each of these in turn.

2 Scope

Here are some more financial particulars concerning the Randalls. In addition to being 57, John is the sole wage earner for the family. He plans to retire in eight years’ time. The Randalls have largely paid off the family home; just $30,000 remains owing. They plan to maintain the home as their principal residence for the foreseeable future. John’s gross salary is $125,000 pa and his tax bill is $38,975 pa. Family assets outside the home are John’s super, totalling $562,700 and spread across five funds, and Joan’s investment of $164,350 in a managed fund. John’s ‘deductible’ (employer) contribution to super currently appears to be the compulsory 9 per cent mandated by the Superannuation Guarantee.

The Randalls require $57,000 pa in order to maintain their current lifestyle. As well as enabling John to retire at age 65, they need a plan to reduce tax, streamline the administration of their investments, and save enough to retire on an income of $70,000 pa in today’s dollars.³

3 Tax strategy

The first couple of recommendations are to reorganise John’s super funds. The plan sensibly clears the decks for John to start a Transition to Retirement pension in conjunction with salary sacrifice into super. This strategy will deliver the bulk of the tax savings. The TTR pension needs to be big enough to replenish salary that formerly went towards living expenses but will now go towards salary sacrifice. The plan downsizes yet retains John Randall’s Employer super fund, in order to receive his deductible contributions, including salary sacrifice ones. Continued membership of the Employer Fund ensures that valuable insurance cover remains in place, and saves having to pay an entry fee into some other fund. John Planner is to be paid out of the Employer Fund.

The next few recommendations concern the establishment and functioning of a so-called Blue fund, with assets of $550,000. Joan is nominated as its beneficiary in the event John Randall passes away. The Blue fund is to receive salary sacrifice contributions of $84,000 pa until July 2012, at which time John’s deductible contributions will need to be

---

³ Thus the Randalls want more disposable income in retirement than now, even though their daughter is still a dependent and John is still in the workforce. This is puzzling.
reduced to $50,000, in order to avoid tax penalties for excess contributions that will have become operative. Accordingly, the model plan flags a need for review before July 2012.

In the meantime, deductible super contributions will total just under $100,000 pa. Direct taxes will fall from $38,975 pa to $22,941 pa, a big saving. The plan comes up with two main sources of tax relief for the Randalls. The first is a reduction in John’s marginal PAYE rate from 41.5 percent to 15 per cent. The second is a switch in the bulk of John’s super balance, i.e. the Blue fund, into decumulation mode. This turns off two earnings taxes, namely, a 15 per cent on fund income and a 10 per cent tax on capital gains realised after the relevant asset has been held for at least a year. The TTR pension from the Blue fund covers expenses previously met by after-tax salary income. A drawdown rate of 5.5 percent pa delivers $30,000 pa, that being sufficient to ensure that about $57,000 pa remains available for consumption. The first $9,600 of the TTR pension is tax free, and the remainder is taxed at 15 per cent. Once John turns 60 his entire TTR pension will be tax free.

The plan’s final recommendations concerning tax efficiency are to change Joan’s assets. Withdrawal of $30,000 from Joan’s managed fund pays out the family’s mortgage. A key consideration here is that interest payments on the family home are not tax deductible. The plan also proposes to cease family contributions to Joan’s managed fund, contributing instead $3,000 pa to Joan’s super fund. This change facilitates a claim of the spouse tax offset (up to $540 pa). All cash is to be kept in Joan’s name.

4 Investment strategy

4.1 The Blue Fund

It is time for a closer look at the Blue fund, a fund of funds assembled by “ABC Financial Planning”, described in the model plan as John Planner’s “Licensee” (p.8). There is diversification across different fund managers and investment styles. The nine funds include “Cash” (weighted 20 per cent), “Boutique Australian Shares” (weighted 17 percent), “Australian Active Equity” (weighted 10 per cent), “Australian Equity Long/Short” (weighted 8 per cent), and a “Global Value Fund” (weighted 10 percent). Overall, a fixed 70 per cent of the fund is allocated to ‘growth’ assets, i.e., equities or commercial property. This particular constant-mix strategy is apparently to remain in force for the duration of the plan.

I have concerns about the Blue fund apart from its aggressive asset allocation for two 57 year olds. Scant information is given about its provenance – not even a web link to a Product Disclosure Statement, or a list of trustees. Similarly, there is scant information on the nature of the “income” assets, such as associated credit risks (if any). The bulk of the growth assets appear to be actively managed, with correspondingly sizeable fees. In this way, the

---

4 Deductible contributions inside the transitional caps are currently taxed at 15 percent, as is one’s slice of assessable income between $6,001 and $34,000 pa.

5 “John’s Employer Super fund does not provide TTR pensions, so you’ll need to set up a new fund to establish the TTR pension” – p.4 of the FPA plan.

6 John is required to draw down between 4 per cent pa and 10 per cent pa of the balance in his TTR pension account.
model plan implicitly dismisses the view that active management could well be a zero-sum game in Australia, as our active managers compete mainly against other active managers and investors. Yet John Planner provides scant evidence of outperformance by the Blue fund relative to a benchmark, e.g. a graph showing the Blue fund’s historical performance alongside that of an index corresponding to a comparable passive fund.

I have two concerns about the Global Value sub-fund. One is that there are no other international investments, even though the Australian stockmarket is only about two per cent of the world stockmarket. A 10 percent weighting to international shares amounts to an above-average case of ‘home bias,’ even allowing for the fact that dividends from offshore companies do not carry franking credits. My other concern is that the international fund selected is a value one, even though franking credits would be valuable to the Randalls. Value funds tend to have high dividend yields. So if 10 percent of the Randall’s portfolio is to be allocated to a value fund then it would make more sense for that fund to be Australian.

4.2 The Case for More (and Fixed) Risk

The reasons for an aggressive asset allocation are laid out under the model plan’s subheadings relating to “the new fund” (p.4), an “appropriate portfolio strategy to meet your objectives” (p.4), and “risks” (p.7):

Within the Blue fund, there is a higher allocation to growth assets than is currently the case in your super funds. This will allow you to more effectively take advantage of market opportunities and your investment time horizon.

Increasing your exposure to growth assets is made more attractive by the fact that all investment income earned in the Blue fund will be tax-free. …

---

7 Drew and Stanford (2003) study monthly Morningstar data on retail funds over the period 1991-99, net of fees. They estimate alphas (excess returns) by means of the Fama-French technique. They find that managers underperform the market on average, by between 50 and 93 basis points pa.

8 A companion document notes that three-year returns to 31 December 2006 for the new super fund were 15.05 per cent, compared with 12.10 per cent for the employer super fund (Financial Planning Association, 2007, p.8). But this does not really amount to a value proposition as the new super fund is “100% growth” whereas the employer super fund is “100% balanced.” Apples need to be compared with apples. Also, three years is a short span for the purpose of comparing mean returns.

9 According to APRA’s Annual Superannuation Bulletin for June 2007, the weighting to international equities in accounts allocated on a ‘default’ basis (by far the most common basis) was 24 percent. For some reason the companion FPA document has a 19 per cent weighting to international equities rather than 10 per cent (Financial Planning Association, 2007, p.3). This is mysterious as the companion document generally matches up with the model plan.
Everything we do in life has some level of risk attached to it. With investment, there’s the risk that returns won’t meet expectations or that we might incur short-term losses. If we want to reduce this investment risk, the trade-off is usually reduced returns.

Some level of risk has to be accepted if you’re to meet your objectives. We have discussed these and agree that the strategy recommended is appropriate for your needs.

Each of the recommended investments, except cash, is subject to market fluctuations.

This passage includes a judicious allusion to a prior discussion in which John Planner clearly sought to comply with the so-called suitability rules, whereby a planner must know both the client (e.g., the client’s risk tolerance) and the recommended products.

John Planner considers the long time horizon faced by the Randalls to be a reason for an aggressive asset allocation. Moreover, in saying that “I have allocated approximately 30% to cash and income funds to cover pension payments” (p.4), he suggests the allocation to growth assets would have been higher in the absence of this administrative impediment.

A companion document comes up with two further arguments for a riskier allocation. First, “the current asset allocation of ‘balanced’ does not suit current economic conditions.” Second, there are “advantages of franking credits available from Australian shares”\textsuperscript{10} (Financial Planning Association, 2007, p.4.)

4.3 The Case for Less (and Managed) Risk

One flaw in John Planner’s case for more risk concerns the following argument: “Increasing your exposure to growth assets is made more attractive by the fact that all investment income earned in the Blue fund will be tax-free”. This tax consideration will amplify the volatility of risky returns within the Blue fund as well as their expected size.\textsuperscript{11} It should therefore have a second-order impact on asset allocation, at most.

Of more concern is John Planner’s tendency to downplay the persistence of changes in the prices of risky assets, by means of phrases such as “short term losses,” and “market fluctuations.”\textsuperscript{12} The evidence for mean reversion in returns to stock indices in the United States during the 20\textsuperscript{th} century is reviewed by Cochrane (2005). He finds “some interesting mean reversion, especially in the 2-4 year range” (p.413), but the evidence overall is “quite weak” (p.414).

\textsuperscript{10} According to APRA’s Annual Superannuation Bulletin for June 2007, the weighting to growth assets in accounts allocated on a default basis was somewhere between 65 and 75 percent. This is close to John Planner’s weighting. Yet it includes investors younger than the Randalls, for whom there is a stronger case for a 70 per cent weighting to stocks. Moreover, investors well into retirement might also benefit from an aggressive allocation, depending on their wealth relative to their core income needs (see below).

\textsuperscript{11} Hamilton (1987) appears to have been first to make this point in the academic literature.

\textsuperscript{12} Financial Planning Association (2008b) contains similarly reassuring material. For example, its chart with subtitle “United States Sharemarket” (p.12) restricts data to the period 1937-2003. Any revision of this chart should go back to 1929 and forward to 2008.
What Cochrane does endorse is significant medium-term forecastability of US stock returns when the conditioning variable is dividend yield rather than past returns. However, the model plan makes no mention of dividend yields or any other financial ratio that might help predict stock returns. In this and other ways, the model plan appears never to deviate from a recommendation of a fixed portfolio proportion in growth assets.\(^\text{13}\) Is asset allocation really that simple?

A troubling issue in investment risk before retirement is that the Randalls appear to have little room for compensating adjustments in household labour supply if ever share-markets dropped sharply. Survey data collected under the auspices of the Melbourne Institute for Economic and Social Research suggest that the average age at retirement for Australian males has recently been 61. Yet John Randall is planning to soldier on for four years past that age. He could be retrenched or succumb to a chronic illness before age 65,\(^\text{14}\) even if investment markets held up. Joan gives every impression of having retired already. The long horizon faced by the Randalls involves more exposure to upside \textit{and} downside — along with limited opportunities to work harder or longer if returns disappoint.

What about risk management once John Randall retires, if he does end up retiring at age 65? The model plan does not put a number on the relevant horizon after retirement. But a companion document projects a net superannuation position for John Randall of $1,840,699 in future dollars, which translates into $1,453,065 in terms of today’s dollars, given the model plan’s assumed inflation rate, namely 3 per cent pa (Financial Planning Association 2007).

Bateman \textit{et al.} (2007) investigate the interplay between horizon effects, protected spending and risk aversion in the case of an individual retiree aged 65. That individual’s lump sum was $500,000, and her protected spending was $20,000 pa.\(^\text{15}\) Triple both the lump sum and the protected spending rate in order to shed light on the asset allocation needed by the Randalls if they have retired on $1,500,000, and think about risk in terms of a substantial floor under their retirement income stream (\textit{i.e.}, not just a trade-off between expected returns and the volatility of returns.) Accordingly, Table 1 puts numbers on the required percentage allocations to growth assets at the beginning and end of the time spent in retirement by investors similar to the Randalls, assuming returns to risky assets turn out as expected.

Table 1’s protected spending rate, namely $60,000 pa, can be compared with the expenditure required by a home-owning couple for a “comfortable” lifestyle according to the

\(^\text{13}\) A companion document says in general terms that the economic conditions of November 2007 were such that a move from balanced to growth was warranted (Financial Planning Association 2007). But there are no specifics about what was propitious for stocks in November 2007.

\(^\text{14}\) Farhi and Panageas (2007) find that the ‘real option’ to retire is typically valuable, necessitating substantial portfolio rebalancing through the point of retirement. For example, an individual with complete flexibility in choice of retirement age and with a coefficient of relative risk aversion equal to 4 should allocate about 10 percentage points more to risky assets immediately before retirement than immediately afterwards, or compared to an individual with no such flexibility. Future model plan should address the question of labour supply flexibility.

\(^\text{15}\) Bateman \textit{et al} also investigate the case of protected spending equal to $9,000 pa per individual, in order to explore possible effects of the age pension on asset allocation.
Westpac-ASFA Retirement Standard (2008). They estimate that an income of $50,561 would have sufficed. At the level of detail, though, the corresponding lifestyle is not opulent.

Derivations of the figures in Table 1 are given in Bateman et al. (2007). Compared to the FPA plan, Table 1 allocations are conservative, in order to protect spending at a minimum of $60,000 pa for the expected duration of a couple’s retirement. Allocations to growth assets are expected to rise over time instead of remaining fixed, as the burden of protected spending progressively lightens. To the extent that growth assets perform less well than expected, however, allocations need to remain conservative. If the couple’s average expected age at death equals 90, the initial allocation to growth assets needs to be very low.

The generic annuity formula, namely,

\[ A = \frac{rx}{1 + r \left[ 1 - (1 + r)^{-L} \right]} \]

sheds light on the allocations in Table 1. In this formula, \( A \) is the level-payment constant-dollar annuity that can be purchased with an accumulation \( x \) in order to finance a retirement spanning \( L \) years, given a real return \( r \) on investments.\(^\text{16}\) Take the case when the planning horizon is 81 - 65 = 16 years. The real interest rate is assumed to be 3 per cent, so the amount that initially needs to be set aside in ‘escrow’ is given by 60000 \( \times \) \( [1 - (1 + .03)^{-16}] / .03 \) = $753,666. The remaining initial balance of 1500000 - 753666 = $746,334 is ‘play money’ that can be invested in growth assets.\(^\text{17}\) If the investor’s risk aversion is low relative to her outlook for the risk premium and for the inverse of volatility, then the actual allocation to growth assets is greater than $746,334; the investor finds room in her play-money portfolio for geared instruments such as warrants or hedge funds. If, on the other hand, the investor’s risk aversion is high relative to her outlook for the risk premium and for the inverse of volatility, then the actual allocation to growth assets is less than $746,334; the investor finds room in her play-money portfolio for safe income assets. It is this latter situation that applies

\(^{16}\) Of course the Randalls would not necessarily draw down the same amount each year. In the age bracket 65-74 the Randalls must draw down at least 5 per cent pa of their account balance. Between age brackets 75-79, 80-84, 85-89, 90-94 and 95 and over, the minimum annual drawdown rises to 5, 7, 9, 11 and 14 per cent respectively.

\(^{17}\) For details see Merton (1971).
to Table 1. If, for example, the investor’s risk aversion coefficient is unity, then the initial play-money portfolio contains roughly 746334 – 690000 = $56,334 of safe income assets, a comparatively small amount. In the case under discussion, then, initial play-money consists largely of ungeared growth assets. In other words, the overall portfolio strategy approximates buy-and-hold. As a consequence, the expected final allocation to growth assets, namely 57 per cent, is moderately higher than its initial counterpart, namely 46 per cent.

The horizon effect refers to the initial conservatism of allocations that is necessitated by some protected spending level for the expected duration of a retirement. It is actually less of a problem for the Randalls than most comparable couples, for two reasons. First, the expected duration of their retirement is only 19.4 years, as a consequence of John Randall’s intention to retire at age 65, compared to the recent male average of 61. Second, Joan is the same age as John, rather than younger.

5 Costs

5.1 Advice

John Planner charges the Randalls an initial fee for service equal to $8,227, after netting out a tax credit equal to $2,173. He also charges an “ongoing” fee that is “paid from product”. It is equal to 0.60 per cent pa of the balance in the Blue fund, and “is intended to cover the costs of ongoing advice” (p.9). Thus, for example, the ongoing fee is \(0.006 \times 550000 = $3,300\) in year one, rising to \(0.006 \times 1453065 = $8,718\) in year eight, in terms of today’s dollars, and assuming that John Planner’s projections turn out as expected (Financial Planning Association 2007, p.7).

5.2 “Benefits, Interests and Associations”

John Planner, ABC Financial Planning and the Blue fund are interconnected (Financial Planning Association 2008, p.8):

ABC Financial Planning may receive sponsorship payments from the Blue fund. Annual sponsorship per product provider is typically between $10,000 and $20,000 .. ABC Financial

---

18 The allocations in Table 1 are for risk aversion coefficients equal to either 1 or 2. Bateman et al. also consider the case of a risk aversion coefficient equal to 0.5, which produces an aggressive form of ‘portfolio insurance’, a strategy requiring investors to buy the active asset in rising markets, and sell in falling markets. That case is not reported here as it unduly strains underlying assumptions about the absence of gap risk and portfolio rebalancing costs. In short, it is only of academic interest.

19 Moreover, the model plan does not address longevity risk. Milevsky and Young (2007) propose an appealing compromise whereby retirees make a late-life switch of their account-based pension into a life annuity, noting that rates payable on life annuities improve with increasing age, as does subjective knowledge of one’s likely age at death. A further argument for delaying annuitisation in Australia is that active retirees may want to retain a lump sum for as long as possible so as to maintain maximum flexibility in the face of considerable uncertainty about government policies towards nursing home access and fees.
planning may use these payments to pay for the costs of conferences, training or professional development for your financial planner. ABC Financial Planning may also receive additional ongoing remuneration from the Blue fund for recommending their products. This amounts to 0.2% of the funds invested ($1,115) in the first year and is paid out of the management fees charged by the Blue fund.

This statement addresses the legal requirement that soft-dollar benefits received by a financial planner from a portfolio manager be disclosed to clients.

5.3 Product Annual Fees

The nine funds comprising the Blue fund have management expense ratios ranging from 1.13 per cent, in the case of the Cash fund, to 2.24 per cent in the case of the Australian Equity Long/Short fund. Growth assets tend to have higher management expense ratios, as one would expect. On the other hand, one of the two “Income funds” has a management expense ratio of 1.92 per cent—a surprisingly high figure. It is presumably an actively managed bond fund. John Planner does not recommend any index funds among the six growth ones, as was mentioned earlier. The management expense ratio for the Blue fund as a whole is 1.89 per cent. In year one, then, the cost of the recommended products totals $10,395.

5.4 Discussion

The annual cost of the model plan to the Randalls amounts to $13,713 in year one, rising to an estimated ($0.006 + 0.0189) × 1453065 = $36,181 in year eight (the projected retirement year), and probably declining thereafter. This year-eight total appears sizeable, compared either to the plan’s projected $70,000 pa average drawdown or its unsophisticated risk management, even allowing for the fact that the Randalls have the right to obtain free follow-up advice from John Planner at any time. The bulk of the fees will evidently come from the ongoing 0.6 per cent annual fee on assets in the Blue fund, provided the Randalls stick with John Planner for at least a few years.

The incentives inherent in this fee structure are not obviously compatible with a recommendation of an initially conservative asset allocation for couples like the Randalls. The solution might lie in an option-type structure of remuneration for the investment component of the overall advice. Put another way, the Randalls could implement a ‘do it yourself’ portfolio insurance policy: John Planner could receive the bulk of his remuneration from a fixed percentage each year of the cushion, defined as the balance in the Blue fund less the present value of remaining guaranteed annual drawdowns. This type of fee structure would mesh better with an insurance-based approach to risk management.

20 This estimate, namely $10,395, differs slightly from the estimate reported on p.9 of the model plan, namely $10,413.70.

21 The term ‘cushion’ comes from the literature on portfolio insurance. The Randalls could implement this fee structure themselves simply by retaining the present value of the remaining guaranteed annual drawdowns in
The estimates reported in the first row of Table 1 arise from a special case of generalised logarithmic preferences. Dybvig et al. (2009) are the first to come up with a model of optimal contracts in financial plans when neither the investor-principal nor the planner-agent is risk neutral. They assume logarithmic preferences (ungeneralised), which generate aggressive asset allocations. Efficient contracts usually have a component of remuneration that is tied to portfolio performance relative to a suitable passive benchmark. Future research could extend the model of Dybvig et al. to the case of generalised logarithmic preferences.

So much for the normative economics. Stoughton et al. (2008) shed light on the positive economics of this type of fee structure. They predict that portfolio managers will subsidise advisers, as a means of price discrimination. In their setup, high net worth individuals tend to have comparatively inelastic demands for financial advice. Subsidies help in extracting economic surplus from these individuals. The FPA’s model plan conforms to the prediction by Stoughton et al.

6 Concluding comments

The FPA’s model plan is based on a trade-off concept of risk management that should be supplemented by an insurance concept. The model entails unsuitably high levels of risk for clients who want a significant floor under the periodic payments from their accounts-based pensions and are on the cusp of retirement. Whereas the model allocates a high and fixed percentage of the account based pension to growth assets, guaranteed minimum payments typically require conservative asset allocations in the early years of retirement, while allowing increasing scope for aggressive allocations in later years if earlier returns have met or exceeded expectations. In short, what needs to be avoided is the big hit early on. That financial plans are fragile on the cusp of retirement has been reported in the literature at least since the simulation studies of Bengen (2001).

A model plan’s discussion of suitable risk should therefore include a passage along the following lines:

Another way to manage your risk in retirement is to choose some minimum acceptable lifestyle for the expected remainder of your lives. The annual drawdown from your account-based pension could then consist of the guaranteed minimum plus a top-up that depended on the state of the investment markets.

---

low-risk interest-bearing securities, such as cash and term deposits within a self managed super fund, while letting the cushion be invested each year in growth assets managed by John Planner.
Rather than being fixed, your percentage allocation to growth assets would probably increase as you moved through retirement, unless markets performed badly early on, in which case you would probably retain a low allocation to growth assets for the rest of your lives. Managing your allocation to growth assets in this way would mean taking less advantage of market opportunities early in retirement. It could even result in higher volatility of returns, depending on selection of the growth assets that would fund your top-ups.

There is a public interest in a model plan with the alternative strategy proposed here. On 20 September 2008 the rate of payment of the Age Pension was up to $24,414 pa for a couple, depending, among other things, on income and assets. A home-owning couple was entitled to a part pension so long as its non-home assets stood at less than $873,500. Public retirement income insurance can be expected to encourage aggressive asset allocations, since the taxpayer becomes in effect a part guarantor of the client’s core retirement income stream. In other words, the Age Pension in effect promotes moral hazard in asset allocations.

The FPA reports that it liaised with the Australian Securities and Investment Commission in the course of revising its example SOA, although ASIC stopped short of a formal endorsement. Indeed, in 2005 ASIC itself issued a model plan. But ASIC’s example couple were generation Xers, rather than boomers, who have less labour supply flexibility. Moreover, the scope of ASIC’s model was limited, as it freely acknowledged; ASIC’s example couple did not seek advice on superannuation, and received no advice on tax efficiency. By contrast, the FPA model dealt with both these critical issues. On the other hand, it sidestepped the important question of justifying the switch of the bulk of the Randall’s super assets into a fund associated with the planner, by the expedient of assuming that “John’s Employer Super fund does not provide TTR pensions” (p.4). More often than not, however, a financial planner will lack such a convenient rationale for a tied sale.

The ASIC model plan was not only limited in scope but predated 2007’s ultra-low taxes on the account-based pensions of the over 60s. It only just post-dated the introduction of TTR pensions. Accordingly, now might be a good time for ASIC to consider a follow-up. Like the FPA, they could address tax efficiency and asset allocation in the context of super. More easily than the FPA, they could place due weight on both the private and public interests served by avoiding aggressive allocations for clients on the cusp of retirement.22

---

22 An encouraging straw in the wind is that Ross Jones, Deputy Chairman of The Australian Prudential Regulation Authority and Deputy Chairman of the OECD Working Party on Private Pensions, is on record as saying that lowering investment risk profiles as people get close to retirement is something the government might want to consider (Business Spectator 2008).
REFERENCES


Table 1

*Allocation to growth assets*, per cent

Lump sum at retirement aged 65: $1,500,000

Protected spending: $60,000 pa

<table>
<thead>
<tr>
<th>Risk aversion coefficient</th>
<th>Couple’s average expected age at death</th>
<th>81 years</th>
<th>90 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(equal to the absolute curvature of the couple’s utility function)</td>
<td>Initial allocation</td>
<td>Expected final allocation</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>46</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>23</td>
<td>26</td>
</tr>
</tbody>
</table>

*Source*: adapted from Bateman *et al* (2007, Table 7.1)