Available online at www.sciencedirect.com
ScienceDirect
Journal of Economic Psychology 29 (2008) 473–490
JOURNAL OF Economic Psychology
www.elsevier.com/locate/joep

Misinformed and informed asset allocation decisions of self-directed retirement plan members

Gokul Bhandari [a,*], Richard Deaves [b]

[a] Odette School of Business, University of Windsor, 401 Sunset Avenue, Windsor, Ontario, Canada N9B 3P4
[b] DeGroote School of Business, McMaster University, 1280 Main Street West, Hamilton, Ontario, Canada L8S 4M4

Received 22 January 2007; received in revised form 23 November 2007; accepted 18 December 2007
Available online 28 December 2007

Abstract

Most defined contribution pension plan members misunderstand asset allocation, but those with higher levels of wealth managing their own money are less likely to be confused. Younger, more-educated, higher-earning advice-receiving males with a planner mindset hold more equity. Notably, an understanding of asset allocation accentuates the impact of the key factors age, income and a planner mindset.

JEL classification: D83; G11

PsycINFO classification: 3920

Keywords: Asset allocation; Pension plan; Planner mindset; Psychological biases

1. Introduction

On February 6th, 2005, during his State of the Union speech, President Bush renewed his call for social security reform. One of his key proposals was to create personal retirement accounts whose returns would be a function of worker decisions. Unfortunately, the extant evidence suggests that future retirees often make potentially costly mistakes in managing their self-directed retirement accounts. Many do not begin saving till very late and

* Corresponding author. Tel.: +1 519 253 3000x3150.
E-mail address: gokul@uwindsor.ca (G. Bhandari).

0167-4870/$ - see front matter
doi:10.1016/j.joep.2007.12.003

do not save enough once they start (Mitchell & Utkus, 2004). Investment decisions are made though perceived to be suboptimal by the decision-makers (Benartzi & Thaler, 2002). Risk is not well understood: it is common to believe that an individual security is less risky than a market index (Benartzi, 2001). People become increasingly hesitant and even paralyzed when offered additional asset choices (Iyengar, Jiang, & Huberman, 2004). Ignoring the most basic lessons of diversification, future retirees put far too much money into company stock, and fall prey to recency and representativeness in chasing winners (Benartzi, 2001). And, despite all these shortcomings, plan members are all too sure that they are doing the right thing (Bhandari & Deaves, 2006).

One finding that has been particularly troubling is that many future retirees do not understand asset allocation. One way this has been demonstrated is when survey respondents are given several fund menus to choose from, they are often egregiously inconsistent in their equity exposure or risk-taking (Benartzi & Thaler, 2001). More specifically, they sometimes employ a "diversification" or "*1/n* heuristic," whereby all *n* funds on offer are given roughly equal allocations without regard for underlying risk. What makes this confusion potentially damaging is that it is often observed that the asset allocation decision is the most important one for an investor's long-term portfolio performance (e.g., Brinson, Hood, & Beebower, 1986 and Brinson, Singer, & Beebower, 1991).[1] The question of an investor's optimal allocation is complex and as yet unresolved. Nevertheless, most would agree that it is in large part driven by one's only noisily observed risk tolerance. Additionally, under reasonable conditions theory agrees with industry practice that risk-taking should decline with age and proximity to retirement (Bodie, Merton, & Samuelson, 1992). Financial planners typically recommend an equity share that not only conforms to an investor's risk attitudes, but also declines one for one (1%/year) as people approach retirement.

The purpose of the current paper is to conduct an analysis of the asset allocation knowledge and decisions made by individuals in self-directed retirement accounts. In doing so, we combine two strands in the asset allocation literature, that on confusion and that on demographic determinants. We make use of a survey of approximately 2000 Canadian defined contribution pension plan members. While surveys are commonplace, this one is unique in being consciously designed to investigate the extent to which plan members fall prey to certain investment knowledge gaps and behavioral pitfalls. One of the pitfalls investigated by the survey instrument was the extent of asset allocation confusion among participants.[2]

While this is old ground, unique to our paper, we then turn to the demographics of the problem. There has been some research on the demographics of investment knowledge inadequacy and behavioral biases. For example, gender and overconfidence appear to be associated, with men being more susceptible (Lundeberg, Fox, & Punccohar, 1994 and Barber & Odean, 2001). Further advances on who is most at risk might make it possible to direct educational offerings appropriately (MacFarland, Marconi, & Utkus, 2004).

We go on to explore how the stock-bond mix is impacted by demographic factors. Our dataset provides distinct advantages relative to previous work which looks at actual 401(k)

[1] Some argue that this view is overstated. See for example, Hensel, Ezra, and Ilkiw (1991).

[2] Aside from asset allocation confusion, the survey also investigated momentum-chasing and overconfidence. See Deaves (2005) for more details on the latter two issues.