## P. JOAKIM WESTERHOLM and MARTIN OLLILA

## Impact of Gender, Age and Language on Investment Strategy<sup>1</sup>

## **ABSTRACT**

It has been proposed that the portfolio returns of individual private investors suffer due to excessive trading activity² Behavioral finance theory explains this as a result of investor overconfidence. According to traditional portfolio theory a well diversified portfolio is mainly subjected to market risk, when stock specific risk is diversified away. Based on the assumption that sophisticated investors make efficient investment decisions, we propose that portfolio diversification is a measure of investor sophistication. To investigate if investors of different gender, age and language background are characterized by systematic differences in trading activity, diversification and portfolio value, we propose a model of investor sophistication in which we measure trading activity and portfolio diversification for a large sample of individual investors. The data set used for the study includes the share holding records for 11795 individual private investors that have been randomly selected from the Finnish Central Securities Depository (FCSD). The data contains daily records of the trades of all market participants over the period January 1, 1995 through May 31, 2000 and includes a set of demographic vari-

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<sup>2</sup> Odean (1998).

ables for the investors. Male investors trade more frequently and are more diversified than female investors. Investors in the age group (26–45) trade the most. Investors in the age group (46–65) and investors with large portfolios are the most diversified. Finnish speaking investors trade more frequently than Swedish speaking investors. We suggest that the poor diversification observed for most investors is due to mental accounting<sup>3</sup>. Earlier studies have reported poor performance for more active investors and explain this as a result of excess activity. The difference in performance between more and less active investors might also in the light of our study be caused by differences in diversification. Investors that trade less are also less diversified and are thus compensated for their higher risk by higher return. Investors that trade more are better diversified and are not performing as well in rising markets since their risk is also lower. We find little evidence of excessive trading by Finnish investors.

**Keywords:** Diversification, Gender, Investment Strategy, Overconfidence

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