

**Comments on “Financial Advice and Account Performance”  
by Andreas Hackethal, Michael Haliassos, and Tullio Jappelli**

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Madrid, October 16, 2009

## **1. Introduction**

- This paper studies if financial advisors (FA) improve portfolio performance and analyzes the characteristics of the individuals who use a FA.
- Very interesting issue with useful implications from a policy point of view.
- Financial Times column.
- Comments on the data, specification, and identification strategy.

## Momentum builds for fee-only advisers

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By Rebecca Knight

Published: October 4 2009 10:36 | Last updated: October 4 2009 10:36

A world in which independent financial advisers are genuinely independent may not be far away.

The UK's Financial Services Authority said recently that commission payments from fund managers and life assurers to advisers would be outlawed in three years. The UK regulator's move is an attempt to push "commission bias" out of the system and make certain that "recommendations made by advisers are not influenced by product providers".

While regulators on the other side of the Atlantic have not made similar declarations about banning payments to advisers, there have been numerous pressures on commissions in the US in recent years. US consumers want more transparency in the investment process, and there are demands from regulatory bodies and financial advisers themselves to move toward a fee-only payment model.

"In general, there is a pronounced trend in the financial advisory industry toward charging fees," says Duane Thompson, managing director of the Financial Planning Association, the industry body based in Washington, DC. "It's a response to the marketplace: there's a perceived conflict of interest when somebody charges a commission."

This "perceived conflict of interest" is the main reason that consumers are the ones driving the move toward a fee-only model. The concern is that advisers who work on commission have an incentive to recommend unnecessary products. Fee-only advisers sell no products and earn no sales commissions. They charge only for their services – usually in the form of an annual retainer, hourly rate, or a percentage of assets under management.

Charging a fee for advice better aligns the goals of the adviser and his client, says Burton Greenwald, founder of BJ Greenwald Associates, a consulting firm in Philadelphia.

"The trend [toward fee-only] started with financial planners and small independent registered advisers 20 years ago, but it has only become a major factor in the past few years," he says. "With these highly volatile markets, people are seeking advice, they are seeking counsel.

"And they are quite happy to do it on a fee-only basis. It suggests there's a commonality of interest. The lurking suspicion has always been, 'is [my adviser] just churning my accounts to make commissions?' "

While there are no reliable figures that break down exactly how advisers are compensated in the US, industry observers estimate that, excluding insurance agents, about 25 per cent of advisers are fee-only. The majority of advisers in the US earn a blend of fees and commission.

By contrast, about 80 per cent of the work done by Britain's 35,000 IFAs is on a commission basis. An additional 50,000 financial advisers, who work as "tied" or "multi-tied" agents of banks and insurance companies, also operate on commission.

"In the US, younger advisers have been raised to believe that fee-based is the way to go," says Amy Strong, a research analyst at Boston-based Financial Research Corporation. "But your more tenured adviser, – someone who's been in business for 20 years or so – is so used to the commission-based model that it's hard to break away."

Ms Strong says the movement toward a fee-only payment model has been driven in part by regulators. US regulators are not necessarily against commissions, but they are pro-transparency.

## 2. Summary of the results

- Data on accounts of customers from a German discount brokerage firm followed over 66 months.
- Instrumental Variables (IV) to allow for the endogeneity of the choice of having a FA.
  - Regional variables as exclusion restrictions.
- Results:
  - The OLS effects of FA on account returns is positive, while the effect on the risk and on the probability of losses is negative.
  - The effects that allow for endogeneity are the opposite (positive selection bias)
    - Higher trading costs and the associated commissions are likely to explain the under-performance of the FA accounts.
- FA tend to be matched with wealthier and older investors.
  - Higher opportunity costs or lower inclination to spend time managing investments (FA seen as baby-sitters).

### 3. Summary of the framework

#### 3.1. Model for portfolio returns

- Dependent variable:

$R_{i,p,t}$  = monthly portfolio return of individual  $i$ .

- ● Sample of  $i = 1, \dots, 32,751$  individuals.
  - Multiple accounts of the same individual are “consolidated” into one single account.
    - ◇ Number of individuals = number of portfolios ( $i = p$ )
- Average return on the account over the 66-month observation period:

$$R_p = \frac{1}{66} \sum_{t=1}^{66} R_{p,t}$$

■ Specification:

$$r_p = \alpha + X_p\beta + FA_p\delta + \varepsilon_p,$$

- $r_p = \log R_p$ ,
  - $X_p$  vector of individual characteristics of the owner of the account  $p$ ,
  - $FA_p$  dummy variable equals 1 if the account is run by a FA, and 0 otherwise.
- The variable  $FA$  is endogenous because it is correlated with  $\varepsilon$ .
- Identification strategy: Instrumental Variables (2SLS)

1) Predict the endogenous variable, using a set of instruments,  $Z$ :

$$\Pr(FA_p = 1 \mid Z_p) = \Phi(Z_p\gamma)$$

2) Use  $\Phi(Z_p\hat{\gamma})$  as instrument for  $FA_p$ .

## 3.2. Model for probability of losses

- Dependent variable:  $L_p = 1$  if the return is negative (or less than 5 %), and 0 otherwise.
- Discrete model with a dummy endogenous variable:

$$\begin{aligned}L_p &= \mathbf{1}(\alpha + X_p\beta + FA_p\delta + \varepsilon_p \geq 0), \\FA_p &= \mathbf{1}(Z_p\gamma + \xi_p > 0),\end{aligned}$$

where  $\mathbf{1}$  denotes the indicator function.

- This model is estimated by IV methods.

## 4. Comments

### 4.1. Data and specification issues

1. Multiple accounts of the same individual are “consolidated” into one single account.
  - Is it possible to exploit this “panel” structure of the data?
2.  $FA_p$  indicates whether a given customer is also a client of an FA.
  - Information on the period in which this variable is defined would allow to estimate causal effects using a different identification strategy.
3. The average return over the observation period explained using only individual characteristics collected on the date of account opening.
  - Proxies of the risk aversion of the individuals.
  - Account for macroeconomic conditions exploiting the information at a monthly level.

## 4.2. Identification issues

- Model for portfolio returns:

$$r_p = \alpha + X_p\beta + FA_p\delta + \varepsilon_p,$$

- $FA$  endogenous if the decision of an individual to have a FA is based on individual self-selection.
- Which type of effect can be identified in this setting? In terms of potential outcomes:
  - Let  $r_{1p}$  be the return for an individual's account run by a FA,
  - and let  $r_{0p}$  be the outcome for an account not run by a FA.
- The effect of  $FA_p$  for a given individual is

$$r_{1p} - r_{0p}.$$

- In general, the model could be written as

$$r_p = r_{0p} + (r_{1p} - r_{0p})FA_p.$$

- Under homogeneous effects, the availability of instrumental variables would allow to identify  $\delta$

$$r_{1p} - r_{0p} = \delta,$$

- In this case, the individual effect coincides with the average treatment effect (situation considered in this paper):

$$\delta = E(r_{1p} - r_{0p})$$

- More general model which allows for heterogenous effects:

$$\delta_p = \delta + \xi_p$$

- In this case the presence of instrumental variables is not sufficient to identify a causal effect.

### 4.2.1. Alternative models: switching regression model with endogenous switch

- The model is as follows:

$$r_p = \begin{cases} r_{1p} = \alpha_1 + X_p\beta_1 + \varepsilon_{1p} & \text{if } FA_p = 1 \\ r_{0p} = \alpha_0 + X_p\beta_0 + \varepsilon_{0p} & \text{if } FA_p = 0 \end{cases}$$

$$FA_p = \mathbf{1}(Z_p\gamma + \xi_p > 0)$$

- So the effect of interest ( $r_{1p} - r_{0p}$ ) is heterogeneous.

- In terms of the original notation:

$$r_p = \alpha_0 + X_p\beta_0 + (\alpha_1 - \alpha_0)FA_p + (\beta_1 - \beta_0)X_pFA_p + [(\varepsilon_{1p} - \varepsilon_{0p})FA_p + \varepsilon_{0p}]$$

- Differential effects of the  $X'$ s depending on the value of  $FA$ .

$$r_p = \alpha_0 + X_p\beta_0 + (\alpha_1 - \alpha_0)FA_p + (\beta_1 - \beta_0)X_pFA_p + [(\varepsilon_{1p} - \varepsilon_{0p})FA_p + \varepsilon_{0p}]$$

- Average treatment effect is

$$\delta = (\alpha_1 - \alpha_0)$$

and

$$\xi_p = \varepsilon_{1p} - \varepsilon_{0p}$$

so that the heterogenous effect can be written as

$$\delta_p = \delta + \xi_p$$

- In the case where  $\xi_p = 0$ , 2SLS is consistent and one can use  $\Phi(Z_p\gamma)$  as instrument for  $FA_p$ .
- The IV approach can be seen as the result of estimating the model with a missing variable,  $(\varepsilon_{1p} - \varepsilon_{0p})FA_p$ .
- “Disadvantage” of the switching model: identification relies on distributional assumptions.
  - But it could provide an additional source of identification.

## 4.3. Validity of the instruments

- $F$ -test in the first stage regression to test for the joint significance of the instruments:

- First stage regression, Linear Probability Model (LPM):

$$FA_p = Z_p\gamma + v_p$$

- $Z_p\widehat{\gamma}$  used as instrument for  $FA$ .

- Linear function to correct for the selectivity bias might produce similar results to using a probit model.
- LPM imposes that the effect of the instruments on the probability of  $FA = 1$  is constant.
  - Using a non-linear model could improve the identification.
- Given the discrete nature of the endogenous variable  $FA$  it seems more appropriate to use a LR test.
- Another possibility: estimate the model by LIML to identify the finite sample bias of 2SLS.

## 4.4. Model for probability of losses

### 4.4.1. IV in binary models with endogenous binary regressors

- Discrete model with a dummy endogenous variable:

$$\begin{aligned} L_p &= \mathbf{1}(\alpha + X_p\beta + FA_p\delta + \varepsilon_p \geq 0), \\ FA_p &= \mathbf{1}(Z_p\gamma + \xi_p > 0), \end{aligned}$$

- If  $\varepsilon_p \mid X_p, FA_p \sim N(0, 1)$ , model becomes a standard probit model.
- If  $FA$  is an endogenous variable, and  $FA \mid Z \sim N(\mu(Z), \sigma^2)$  the reduced form for  $L$  would also be a probit model.
  - The parameters of interest could be estimated by 2SLS.
- However, since  $FA$  is a binary indicator its distribution cannot be normal:
  - IV methods are not valid for estimating this model.
- Account for the endogeneity problem by considering, for instance, a bivariate probit model.

## 4.5. Interpretation of the results

- The OLS effect of  $FA$  on returns is positive and the IV effect is negative.
  - This would suggest a *positive* selection bias.
- Two concerns:
  - A lot of heterogeneity in the role of a FA: it ranges from mere consultation to full responsibility for trades.
  - Time interval between the measure of FA and the measure of returns.