International Business & Economics Research Journal – Special Edition 2012

Volume 11, Number 13

# A Business Figure In Crisis Time: Independent Financial Adviser

Gema Fernández-Avilés, Ph.D. University of Castilla-La Mancha, Spain Lorenzo Dávila, Ph.D., Complutense University of Madrid, Spain

#### ABSTRACT

The figure of the Independent Financial Adviser (IAF) is becoming increasingly relevant in the field of business and finance. However, this figure is relatively new, poorly understood by most investors and uncommon in financial institutions. The purpose of this paper is to determine the factors behind the willingness to pay for the services of an independent financial adviser, as well as the reasons that would lead investors to move from the traditional advisors to the independent ones. We have surveyed over 10,000 potential investors in Spain. Thus, the results are consistent from a statistical point of view.

### **Keywords:** Financial; Investors; Business

#### 1. INTRODUCTION

fter the financial crisis of 2008, the world is looking at a long drawn-out period of repair and recovery. All days, we can look in television or hear in the radio bad new about the economy (in general) and financial markets (in particular). Developed economies have to face the painful path of austerity towards a sustainable level of debt, before they can begin to return to meaningful economic growth. Massive intervention by the Central Banks is a necessary step. Indeed, we are involved in an environment characterised by excess capacity, high unemployment and low bank lending and a very high debt.

At certain times in the life, people need to make financial decisions. Getting a mortgage, saving for retirement and protecting your family with life assurance are all critical financial decisions. Unless you are handy at personal finance, you are likely to need help in picking at least some financial products to make sure you choose what suits your needs best. This is the job of the Independent Financial Advisers or IFAs.

But, how can we define the figure of IFA? IFAs are professionals who offer independent advice on financial matters to their clients and recommend suitable financial products from the whole of the market<sup>1</sup>. The term Independent Financial Adviser was coined to describe the advisers working independently for their clients rather than representing an insurance company, bank or bancassurer.

How work an IFA? Typically an Independent Financial Adviser will conduct a detailed survey of their client's financial position, preferences and objectives; this is sometimes known as a "factfind". They will then advise appropriate action to meet the client's objectives; and if necessary recommend a suitable financial product to match the client's needs.

Particular individuals and businesses consult IFAs on many matters including investment, retirement planning, insurance, protection and mortgages (or other loans). IFAs also advise on some tax and legal matters.

Why get an IFA? The main reason is that IFAs offer unbiased advice. They act on your behalf and recommend the most suitable products - if any - after researching the whole market."

<sup>&</sup>lt;sup>1</sup> http://en.wikipedia.org/wiki/Independent\_Financial\_Adviser

Also, IFAs are authorised and regulated by the Financial Services Authority (FSA) and bound by their rules. These oblige IFAs to act in your best interests and be transparent about pricing.

Crucially, an IFA is independent of any product. This is important because there are three types of financial adviser out there, and only IFAs are bound to offer impartial advice. The other two are tied and multi-tied agents

IFAs are the only type of advisers able to select from all the products in the Marketplace. This is the reason that in this paper we analyze the impact of the IFA between the potential investments in Spain.

The purpose of this paper is to determine the factors behind the willingness to pay for the services of an IFA, as well as the reasons that would lead investors to move from the traditional advisors to the independent ones. We have surveyed over 10,000 potential investors in Spain. Thus, the results are consistent from a statistical point of view.

#### 2. METHODOLOGY

In this paper, the nature of the object of study is to determine the factors behind the willingness to pay for the services of an IFA and it is projected here is qualitative in nature.

Some times, the items that we found in a survey are not countable variables, i.e., they are characteristics of people or abut some topic, like the use of an AFI.

In this case, "the potential use of an AFI" and wide range of factors that could be related to it, is a categorical variable, that is it has a measurement scale consisting of a set of categories. Therefore, categorical data (see Montero, 1995, 2010a,b for details). This is the reason why categorical or qualitative statistic strategies are needed to shed some light on issues related to potential use of AFIs.

This topic arises with the analysis of data taken from a sample of a population classified with respect to two or more qualitative variables. In this case we elaborate a contingency table.

			Columns (Attribute B)	
		$b_1$	$b_2$	Total
Rows (Attribute A)	$a_1$	$n_{11}$	n <sub>12</sub>	$n_1$ .
	$a_2$	$n_{21}$	$n_{22}$	$n_2$ .
		n1	n.2	N

Source: Own elaboration

A table such as the Table 1 above is known as a contingency table. This 2x2 example (the members of the sample having been dichotomised in two different ways) is the simplest form of this type of table. Had the two variables possessed multiple rather than dichotomous categories, the table would have had more cells than the four shown. The entries in the cells for these data are frequencies. They may be transformed into proportions and percentages, but it is important to note that, in whatever form they are presented, the data were originally frequencies or counts rather than continuous measurements.

The most important aspect of this study is whether the qualitative variables forming the contingency table are independent or not.

In a contingency table independence implies the (percent) distribution of the frequencies corresponding to a category of one of the factors (say factor A) between the categories of the other factor (say factor B) is the same irrespective of the category of factor A. However, we do not work with populations but with samples and although independence holds some divergences from the above equalitarian pattern could happen due to hazard.

To test whether two qualitative variables or factors are or not independent based on a sample, suppose that in the population where the sample has been taken the probability that one individual belongs to the  $i^{th}$  category of the row variable and the  $j^{th}$  category of the column variable is represented by  $p_{ij}$ ; consequently the frequency,  $E_{ij}$ , to be expected in the  $ij^{th}$  cell of the table resulting from sampling N individuals, is given by:

$$E_{ii} = Np_{ii}. (1)$$

Now, let  $p_i$  represent the probability that, in the population, an individual or element belongs to the  $i^{th}$ category of the row variable (in this case with no reference to the column variable), and let  $p_{ij}$  represent the corresponding probability for the jth category of the column variable. Then, from the multiplication law of probability, independence of the two variables in the population, implies that:

$$p_{ij} = p_{i.} p_{.j} . \tag{2}$$

In terms of the frequencies to be expected in the contingency table, independence is therefore seen to imply that:

$$E_{ij} = Np_{i\cdot}p_{\cdot j}. \tag{3}$$

The independence of the two qualitative variables has been defined in terms of unknown population probability values. In fact, these probabilities may be estimated very simply from the observed frequencies and it is easy to show that the best estimates of the probabilities are based on the relevant marginal totals of the observed values. The use of estimates allows us to forecast the expected frequency in the  $\{ij\}$ -cell of the table under the assumption that the two variables were independent. This forecast, which shall be represented as  $E_{ij}$ , is given by:

$$E_{ij} = N \frac{n_{i.}}{N} \frac{n_{.j}}{N} = \frac{n_{i.} n_{.j}}{N} \tag{4}$$

When the two variables are independent, the expected frequencies and the observed frequencies should differ by amounts attributable to chance factors only. However, if the two variables are not independent, we would expect larger differences to arise. Consequently it would seem sensible to base any test of the independence of the two variables forming a two-dimensional contingency table on the size of the differences between the two sets of frequencies,  $n_{ij}$  and  $E_{ij}$ .

It has been indicated that we need to investigate the truth of the hypothesis:

$$p_{ij} = p_{i.} p_{.j} . \tag{5}$$

In general this hypothesis will be referred to as the null hypothesis and denoted by the symbol  $H_0$ .

According to the rationale above, a good test of independence should be based on the magnitude of the differences between the observed  $(n_{ii})$  and the expected frequencies under the assumption that  $H_0$  holds  $(E_{ii})$ . Such a test, first suggested by Pearson (1904), uses the statistic  $\chi^2$  given by:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(n_{ij} - E_{ij})^2}{E_{ii}}$$
 (6)

to avoid compensation between negative and positive differences and express such differences in relative terms.

If the two variables are independent, these differences will be smaller than if the opposite were true; consequently  $\chi^2$  will be smaller when  $H_0$  is true than when it is false. Hence what is needed is a criterion to decide on values of  $\chi^2$  which should lead to the acceptance of  $H_0$  and those which should lead to rejecting it. As it can be shown that, under the independence assumption,  $\chi^2$  follows a Ji-squared distribution with (r-1,c-1) degrees of freedom (Montero et al, 2010a, b) we can easily compute the p-value associated to the sample value of  $\chi^2$ . Obviously, values with "low" p-value lead to rejection of the hypothesis, others to its acceptance. In practice, a "low" p-value is taken to be a value of 0.05 or less and is referred to as the significance level of the test.

In case of rejecting the hypothesis of independence we should identify the sources of the association (which categories of the factors are associated) with and the strength of such an association.

In case of 2x2 contingency tables, the most usual measure is the Yule's Q.

$$Q = \frac{n_{11}n_{22} - n_{12}n_{21}}{n_{11}n_{22} + n_{12}n_{21}} \tag{7}$$

This measure varies between -1 and 1. For negative functional dependence (Q is equal to -1) the association is between the modalities  $(a_1;b_1)$  and  $(a_2;b_2)$ . In case of positive functional dependence (Q is equal to 1) the association is between the modalities  $(a_1;b_2)$  and  $(a_2;b_1)$ . Yule's Q is equal to 0 in the case of independence.

There are different methods to quantify the intensity of the association of the factors in a two-dimensional distribution when at least one of them has more than two categories. They include (i) The Contingency Coefficient C; (ii) Tschuprow's T; and (iii) Cramer's V, all of them based on the  $\chi^2$  statistic, but Cramer's V is the most popular because it corrects some of the deficiencies of C and T. Cramer's V is defined as:

$$V = \sqrt{\frac{\chi^2}{Nm}} \,, \tag{8}$$

where  $m = \min(r-1, c-1)$ . This measure varies between 0 (for independence) and 1 (for functional dependence).

Unlike Yule's Q for 2x2 contingency tables, measures of association for (RxC) tables do not indicate the origin of the association. To determine the sources of association we suggest a procedure pioneered by Haberman (1973) that is based on the pattern of residuals  $(n_{ij} - \hat{E}_{ij})$  and compares the adjusted standardised residuals with a known distribution. The standardised residuals  $(e_{ij})$  of the cell  $\{i, j\}$  are defined as:

$$e_{ij} = \frac{n_{ij} - \hat{E}_{ij}}{\sqrt{\hat{E}_{ii}}} \tag{9}$$

with  $\hat{E}_{ij}$  calculated under the hypothesis of independence. These residuals have an asymptotically normal distribution with mean zero, and the variance  $V_{ij}$  is  $V_{ij} = V\left(e_{ij}\right) = (1 - p_{i.})(1 - p_{.j.})$ . The estimate of the variance is

$$\hat{V}_{ij} = \hat{V}(e_{ij}) = \left(1 - \frac{n_{i.}}{N}\right) \left(1 - \frac{n_{.j}}{N}\right)$$
(10)

and dividing the standardized residuals by the estimation of their variance adjusted standardised residuals are obtained:

$$d_{ij} = \frac{n_{ij} - \hat{E}_{ij}}{\sqrt{\hat{E}_{ij}}} = \frac{e_{ij}}{\sqrt{\hat{V}_{ij}}}$$

$$(11)$$

Under the hypothesis of independence,  $d_{ij}$  has Gaussian distribution with zero mean and unitary variance. Therefore, comparing the values of  $d_{ij}$  with the critical value of a standard Gaussian distribution, and checking which of them are significant we can discover the sources of the association between the two factors involved in the contingency table.

#### 3. RESULTS

To evaluate the knowledge and appreciation of the figure of IFA in Spain, we have sampled people over 30 years in disposal to invest more than 20,000 euros. However, the statistical population considered from the standpoint of geography, has focused on Spanish geographical units more census population and economic activity: A Coruña, Asturias, Barcelona, Madrid, Malaga, Palma de Mallorca, Pamplona, San Sebastian, Seville, Valladolid, Valencia, Vizcaya and Zaragoza (see Figure 1).



Figure 1. Spanish regions to be considered Source: Own elaboration.

We have sampled 10,514 people. But, the no response rate and the people that had not more than 20,000 euros to invest have led us to a final sample of size 677. Then, we analyse the characteristics of 677 potential investors (with 20,000 euros or more to invest) and try to determine the factors behind the willingness to pay for the services of an IFA, as well as the reasons that would lead investors to move from the traditional advisors to the independent ones.

Table 1 shows the main personal characteristics of potential investors. Most of them are between 41 and 60 years, with some capital invest, graduate and employment. Almost 60% of them are men and 40% are women.

The most appreciate characteristic in IFA by these polled are the level of studies (44.2%) and the previous experience (44.3%). Also, the personal relationship between IFA and customer is very important for the 30.9%. Others important items very appreciated by the potential investor in the IFA are the independence and de diversity of product that the IFA can be offer them. Finally, low costs of intermediation are welcome from the polled.

If we check the previous opinions about IFAs with the kind of adviser used, we can appreciate high association between the studies of the IFAs and the people that use more than one way (internet and banks) to invest their capital. If we consider the experience investors, we found several associations: "Experience" vs. "Use of Internet" and "Experience" vs. "Use adviser on-line". There is not association in the case of the personal relationship between IFAs and customer. If think about "intermediate cost" there is not association between this item and the use of banks and there is association between "intermediate cost" and the use of AFIs.

Now, we focus on the disposition to pay for an AFI service. These attributes are not associated with age neither level of studies but are associated with the sex: percentage of women that will pay to AFI are higher that men. If we check "the disposition to pay for an AFI service" with if "the potential customer has invested money" there is positive association between people that has not invested money and the no disposition to pay for an AFI service. Nevertheless, people with capital invest are direct associated with the pay of AFI service (if the pay is a commission of the benefit that they obtain)

Table 1. Main personal characteristics

Table 1. Main person	ial characteristics	
(i) Age		
	Frequency	Percentage
Less than 40 years	237	35.0
Between 41 and 60 years	332	49.0
More than 60 years	108	16.0
Total	677	100.0
(ii) Sex		
	Frequency	Percentage
Men	411	60.7
Woman	266	39.3
Total	677	100.0
(iii) ¿Do you have invert any money?		
	Frequency	Percentage
No	236	34.9
Yes	441	65.1
Total	677	100.0
(iv) Level of the studies		
	Frequency	Percentage
Graduate	418	61.7
Undergraduate	259	38.3
Total	677	100.0
5. Labour activity		
	Frecuencia	Porcentaje
Employment	303	44.8
Businessman (no workers)	92	13.6
Businessman (with workers)	112	16.5
Unemployment	56	8.3
Rentier	41	6.1
Other cases	73	10.8
Total	677	100.0

Source: Own elaboration.

The products most likely to be advised by AFIs are buying and selling stocks and buying shares in mutual funds. Around 60% of polled would use AFIs in the purchase and sale of shares listed on stock markets and more than half when the object of the investment is the purchase and sale of shares in investment funds. About a third of the polled were willing to hire a financial advisory service in fixed income operations or products. This percentage drops to just fewer than 30% in the case of warrants and structured products. Table 2 shows these results by Spanis region.

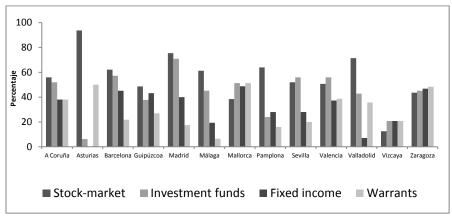


Figure 2. Potential products to contract with an AFI by Spanish regions

Source: Own elaboration

#### 4. CONCLUSIONS

In this paper we study the figure of an Advisor Fanatical Independent. It is relative new in some countries, like in Spain. This is the reason we analyze the reasons that would lead investors to move from the traditional advisors to the independent ones. The most appreciate item is the experience of the AFI and the products that could be more interesting for potential investor are Stock-market, Investment funds, Fixed income and Warrants.

In this crisis time, people with capital able to invert could take into account AFIs instead of bank or traditional agencies. We have surveyed over 10,000 potential investors in Spain. Thus, the results are consistent from a statistical point of view.

#### **AUTHOR INFORMATION**

Gema Fernández-Avilés, Holder of a European Ph.D. in Economics and Business Administration from the University of Castile-La Mancha in Spain. She is currently an Assistant Lecturer in Statistics at the Department of Statistics, Faculty of Law and Social Sciences, at the University of Castile-La Mancha, Spain. Research Interests: qualitative data, higher education, geostatistics and bussines. E-mail: <a href="mailto:Gema.FAviles@uclm.es">Gema.FAviles@uclm.es</a> (Corresponding author)

**Lorenzo Dávila**, Holder of a Ph.D. in Economics by Complutense University of Madrid and Degree in Economics by Complutense University of Madrid. Lecturer in Finances in the IEB, Madrid (Spain). Research Interest: Business and Finances, Stock Exchange, European Financial Advisor. E-mail: <a href="mailto:lorenzodavila@davila-eafi.com">lorenzodavila@davila-eafi.com</a>

#### REFERENCES

- 1. Fernández-Aviés, G. (2011): *Conocimiento y valoración de los Asesores Financieros*. Estudio demoscópico para INVERSIS Banco.
- 2. Montero, J. M., Fernández-Avilés, G. and García, M. C. (2010a). Revisiting the expectancy/disconfirmation paradigm for small questionnaires: The cultural/heritage tourism case. *Rect*@. 11, 155-177.
- 3. Montero, J. M., Fernández-Avilés, G. and García, M. C. (2010b). Contraste de independencia con corrección de continuidad asimétrica: Una aplicación al turismo cultural. *Anales de Asepuma*, 18, 801
- 4. Ruiz-Maya, L. Martín, J., López, J., Montero, J. M. and Uríz, P. Alfa (1995). *Análisis estadístico de encuestas: datos cualitativos*. Editorial AC.

## **NOTES**