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# Evaluating the relationship between IFA remuneration and advice quality: An empirical study

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#### **Abstract**

This article deals with the interaction between commission remuneration of independent financial advisers and selected sales factors, including the quality of advice. Utilizing data on investment transactions and a linear model with mixed effects, we have found that the link between commission and quality of the subsequent recommendation is not homogeneous, and advice-bias potential is present only in a limited range of organizational environments, connected mainly to the flat-structure business model. On the other hand, arbitrage between different product classes was found to create a biasing potential across almost all types of firms, creating potential for market systemic risk. Finally, the effect of information provided was proved to be significant only to a very limited extent. © 2017 Academy of Financial Services. All rights reserved.

JEL classification: G22; G23; G28; D14; D18

*Keywords:* Financial advice; Conflict of interests; Agent principal problem; Life insurance; Investments funds; Systemic distribution risk

#### 1. Introduction

Commission based sales represent the principal distribution channel for financial products in many OECD countries. According to the Insurance Europe (2014) survey, financial agents (intermediaries, advisers etc.) accounted for nearly half (47.1%) of the new life insurance business in Germany, with other Central European countries showing a similar situation.<sup>1</sup>

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One of the most important areas in which advice is provided on a commission basis is pension planning, which in most cases leads to the purchase of a unit-linked life insurance, investment fund or personal pension product. As the OECD (2015) stated in its recent pension outlook, 24% of the member states' pension-linked assets are in those product classes, with a large portion of them being allocated on the basis of commission-remunerated advice.

While commission (third party inducement) remains the principal remuneration mechanism for agents, it is coming under increasing pressure chiefly on European soil. The main argument, as stated in the European Insurance and Occupational Pensions Authority (EIOPA, 2016, p. 41) advice on the Pan-European Pension Product (PEPP), is that "commissions which are often paid by product manufacturers potentially lead to a conflict of interest between the interest of the distributor to gain the commission and the interest of the customers to obtain nonbiased services from the distributor." Similar statements can be found in proposals linked to investment products (Markets in Financial Instruments Directive - MiFID II) and insurance distribution (Insurance Distribution Directive - IDD). Conflict of interest and its potentially detrimental effect on advice has even led to remuneration restrictions being applied, particularly in the area of unit-linked life insurance. From a theoretical perspective, potential bias created by commission based financial advice is grounded in the general agency theory, as the moral hazard and adverse selection problems (Ross, 1995). Both result in an inefficient contract for the primary principal (customer), whose bias is amplified by the introduction of a secondary principal (distribution firm). While there are abundant articles pointing to the biased service produced by agents operating on commission (e.g., Chalmers and Reuter, 2015; Gravelle, 1994; Inderst and Ottaviani, 2011; Palazzo and Rethel, 2008; Schwarz and Siegelman, 2015), many of them offer limited empirical background or are based on a less-conclusive (statistical) methodology. Some articles, on the other hand, did not find the commission-based remuneration to bear significantly negative consumer consequences (Gerhardt and Hackethal, 2009) or offered mixed results (Glazer, 2007; Tseng, 2011).

This article seeks to investigate the relationship between paid-out commission, complimentary sales factors and quality of advice provided by intermediaries (agents, financial advisors) in the area of investment products (investment funds, unit-linked insurance) in the Czech Republic, as the Central-Eastern Europe transit market. The article is divided into three parts: (1) an overview of current empirical findings is provided and research hypotheses constituted, (2) a statistical examination of the relationship of selected factors is carried out, and finally (3) resulting conclusions are summarized and discussed with reference to relevant literature.

#### 2. Literature overview

As evinced by numerous studies (e.g., Lopez et al., 2006; Pullins, 2001), a reward scheme plays a crucial role in salesforce motivation. However, its interaction with the quality of advice provided to customers is the subject of scrutiny because of the central role such advice often plays in personal finance. In particular, the effect of a commission-based remuneration

scheme is a well-covered theme of scientific literature. Table 1 summarizes the principal studies in this field.

From the factual perspective, the outcome of recent empirical studies underlines the schism outlined in the introduction. Although recent literature offers numerous articles on the topic, including an abundant group based on theoretical proofing (e.g., Gravelle, 1994; Inderst and Ottaviani, 2009), no unequivocally dominant pattern is evident. While many articles do point to a compromising effect of commission remuneration, there is a substantial body of research that fails to confirm this link, or even points to the opposite, in terms of customer benefit (a more detailed meta-analysis, with outcomes, can be found, e.g., in Burke et al., 2015). As a theoretical assumption for this article, taking a cautious approach, we shall presume that commission remuneration does have a negative effect on subsequent advice quality. Yet in reality, this is not a resolute hypothesis, but more of an open question.

Remuneration scheme, although deemed crucial, is not the only factor potentially influencing the quality of the advice and sales process. In this article, four additional variables were introduced to the model, with the following theoretical background.

## 2.1. Product type

Although to a large degree unit-linked insurance and investment funds share a common market and are often sold interchangeably, both product classes exhibit differences with regard to fee structure, product features as well as legal framework (for details see e.g., Ruprecht, 2007). These have been reported to affect advice quality in some markets, particularly in relation to the insurance business (Halan et al., 2014; Sane et al., 2013). Taking this experience into account, our expectation is that unit-linked life insurance will be more prone to poor advice.

## 2.2. Sales firm structure

Different internal structures of agent companies have been reported to provide different effects on quality of advice, especially in relation to multilevel marketing systems (Reifner et al., 2012). Looser structures with lower emphasis on group-incentivizing, on the other hand, have been found to be more supportive of advice quality (Danilov and Biermann, 2013). We expect to find a similar pattern, with structural networks generally more susceptible to biased advice than flatter "branch like" entities.

## 2.3. Sales firm size

There is a conflicting view of how the size of a distribution firm can potentially affect the quality of its service. While some studies suggest that increasing size leads to higher adviser misconduct (Egan et al., 2016), others have found quite the opposite, either praising advice provided by medium-large chains (Australian Securities and Investments

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Table 1 Meta-analy	Meta-analysis of recent empirical studies			
Study	Method	Product/regional focus	Surveyed sample	Results
Anagol et al. (2012)	Mystery shopping (audits), univariate regression	Life insurance 2011 (India)	304 insurance sales-agents (557 audits)	Core findings of the quality of advice experiment:  Between 60 and 80% of audits ended with a recommendation of less suitable insurance policy (whole insurance) with higher commission***  Even when auditors signaled that they are most interested in term insurance and need risk coverage, more than 60% of audits result in whole insurance (unit-link) being recommended***  Agents primarily cater to customers (either their beliefs or needs) by recommending that they purchase term insurance in addition to whole insurance, as opposed to
Popova (2010)	Behavioral experiment (sender-receiver game), Wald test, F test	Insurance dummy 2009–2010 (Germany)	314 undergraduate students	Major findings of the behavioral experiment:  In all treatments but one, the frequency of truthful advice is higher with direct payment than with commission payment***  The obligatory direct payments by clients are not appropriate for reducing the conflict of interest of advisors***  The large voluntary direct payment by clients is the most successful mechanism for reducing the conflict of interest of advisors***
Chalmers and Reuter (2015)	Annual return, Annual volatility, OLS regression	Retirement portfolios (funds) 1999–2009 (USA)	5 807 participants of optional retirement plan (ORP)	advisors***  Major differences of advised portfolios in comparison with target-date fund performance:  Lower after-fee annual returns (Δ = -2.98%)***  Higher volatility of returns (Δ = 0.43%)  Lower Sharpe ratio***
Cupach and Carson (2002)	Questionnaire survey, $F$ test, $\chi^2$ test	Life insurance 2002 (USA)	336 insurance sales-agents	Higher average tees (\$\tilde{\Delta} = 0.90\%)  Results indicate that:  Neither amount of coverage nor type of coverage recommended varied across the five alternative compensation conditions (no statistically significant link)  Neither commission level nor fee for service level influenced the likelihood of product recommendation (no statistically significant link)  (continued on next page)

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Study	Method	Product/regional focus	Surveyed sample	Results
Gerhardt and Hackethal (2009)	Portfolio characteristics (equity share, Sharpe ratios, and so forth), <i>t</i> -test statistics	Investment funds 02/2006–07/2007 (Germany)	597 investors who switched from non-advised to advised during the sample period (subsample)	Major effects of investment advice in comparison with nonadvised investors: Higher trading activity*** Less risky and speculative trading Rising diversification**/*** No rising ratio of expensive products sold (kickback parments)
Li (2015)	Investment characteristics (excess returns, net flow, fees, front load), OLS regression	Investment funds 10/1999–6/2012 (USA)	424,115 total observations (actively managed equity funds)	Fund flows indicate that:  Return chasing is stronger among funds sold with high (up-front) commissions***  Among multiple asset classes, return chasing increases with broker commissions***  Most of the impact is on the purchase of past winners***, with no detectable effect on the redemption of past losers  Investors in institutional shares exhibit almost as much return chasing as retail investors****
Linainmaa et al. (2015)	Investment characteristics (net returns, excess returns, front-end loads, trailing commissions), <i>t</i> -test, <i>F</i> test	Investment funds 1/1999–6/ 2012 (Canada)	581,044 investors, 5,838 advisors	Major findings regarding advised portfolios:  If the advisor benefits from the trade, the client also benefits from the trade 57% of the time (trades that are both costly to the client and without apparent benefits, but benefitting the adviser account for 5.4%)  A disproportionate number of the trades identified as self-serving (costly, only advisor benefits) are concentrated among a small number of advisors (3.3%), net returns alphas decrease sharply in those clients' portfolios
Tseng (2011)	Questionnaire survey, $\chi^2$ test	Life insurance 2010 (Taiwan)	361 full-time life insurance salespeople	Major outcomes in relation to the tested scenarios:  78.4% of the respondents would sell a policy with an interest rate beneficial to the customer instead of the one beneficial to their company****  73.6% of the respondents would sell a policy in line with customer needs instead of the one beneficial to their company****  68.8% of the respondents would sell a policy both to a healthy and unhealthy customer, notwithstanding the effect on his company

\*p value < 0.1; \*\*p value < 0.5; \*\*\*p value < 0.01. OLS = Ordinary Least Squares regression.

Commission, 2003), or implying that smaller firms in fact offer limited services and restricted advice (Eckardt and Räthke-Döppner, 2010). Based on knowledge of the surveyed market, we presume that larger companies will incline to lower quality of advice, that is, increasing size of the company will have a negative effect on the excellence of its service.

## 2.4. Information available to the salesforce

There is little doubt that salesforce competence and professionalism represents a strong stimulus to customer satisfaction and trust (Ali et al., 2015; Johnson and Grayson, 2005; Tsoukatos and Mastrojianni, 2010). Furthermore, a direct link between specialized information provided to individual agents and the subsequent quality of their service has also been proven (Eckardt and Räthke-Döppner, 2010). Accordingly, a positive effect of information granted to the salesforce is also expected within our sample.

## 2.5. Research hypotheses

Based on the previous theoretical overview and prospected model composition, we set a total of five research hypotheses:

- H<sub>1</sub>: The amount of commission paid out for insurance products differs significantly from investment funds.
- H<sub>2</sub>: There is a significant correlation between the amount of commission paid out and the number of product trainings provided to the salesforce.
- H<sub>3</sub>: The there is a significant correlation between the amount of commission paid out and the advice quality.
- H<sub>4</sub>: There is a significant difference between the amount of commission paid out for insurance products among diverse sales firm structures.
- H<sub>5</sub>: There is a significant difference between the amount of commission paid out for insurance products among diverse sales firm sizes.

## 2.6. Data

The data for the empirical part of our survey was provided by eight independent advisory companies (no exclusive ties or direct ownership by financial institutions), who were asked to provide a full listing of the intermediated sales for a random month of the year.<sup>2</sup> Their overall sales performance is outlined in Table 2.

By combining the individual listings from the above participants, data on a total of 10,105 transactions performed in the years 2013–2015 on the basis of advice provided by financial agents was gathered. Only investment products (UCITS<sup>3</sup> vehicles) and investment-insurance products (unit-linked<sup>4</sup>) were concerned. Overall, the transactions recorded, encompass 55

Table 2 Overview of companies participating in the research

Company	Structure	No. of individual advisers (2015)	No. of new life insurance contracts <sup>a</sup> sold (2015)	Market share in life insurance <sup>a</sup> -IFA market (2015)	No. of new investment funds contracts sold (2015)	Market share in investment funds– IFA market (2015)
A C	MLM	4 692	66 744	27.153%	37 808	19.105%
<u>س</u> د	Pool MLM	1 /84 886	29 6 / 2 30 232	12.299%	17 780 20 472	8.984% 10.345%
О	Flat	370	7 292	2.967%	14 844	7.501%
田	MLM	95	3 488	1.419%	916	0.463%
Н	Flat	28	292	0.119%	324	0.164%
Ŋ	Flat	13	468	0.190%	160	0.081%
Ч	Flat	5	47	0.019%	21	0.011%
Total		7 873	138 235	56.237%	92 325	46.652%

IFA = Independent Financial Advisers.

<sup>a</sup>Regularly paid contracts.

unique insurance/investment products and were advised on by a total of 2,658 individual agents. Their basic overview is stated in Appendix 1, stipulating that the majority of the recommended investments were following dynamic strategy with a minimum of five years maturity, which is consistent with a longer-term horizon of most financial (pension) plans. Furthermore, the survey only incorporated regularly (monthly) paid instruments, which form the backbone of pension planning.<sup>5</sup>

Within the sample, each transaction was described by a set of variables linked to the factors described in the theory chapter. The linkage between general factors and research variables is outlined in Table 3.

From the structural perspective, the survey sample represents a very diverse portfolio. Summary statistics of all variables are outlined in Appendix 2.

## 2.7. Quality assessment

As mentioned in the theoretical part, the indicator of advice quality (QUAL) is one of the volatile parts of recent research. In this study, the indication of advice (recommendation) quality is based on the evaluation carried out by panel of independent experts. The advantage of this approach is that it can capture additional information above the purely financial/quantitative metrices, as demonstrated by relationships indicated in Appendix 1. The panel rated every product that was recommended inside our sample in three basic dimensions: (1) Price – economical attributes of the product (fees, potential yield through the life-cycle of the product), (2) Quality – availability, accessibility of the product and related customer care, and (3) Sustainability – transparency and sustainability of the product (as it is being offered or promoted).

From a methodological perspective, all three dimensions of quality were defined in a way that is positively associated with customer utility (i.e., higher value always brings higher benefit) and not mutually contradictory (e.g., better Price rating not interfering with the Sustainability one), similarly to Tseng (2011) and Anagol et al. (2012) studies. Our aim was not to assess the individual suitability of given products, but rather to evaluate, whether advisers might be stipulated to offer lower quality products with a higher reward on a global scale.

Each of the experts had to provide his individual multicriterial assessment not only regarding the three quality dimensions, by ordinally sequencing products in given categories (IF, UIL), but also by setting weights for their relative importance to customer decision-making in a given year. Every product was then awarded a number of points based on individual weights assigned and their relative placing, normalized between 1 (best rating) and 5 (worst rating), with the points corrected for different numbers of products between categories.

The expert body itself was proportionally composed of 355 members: academicians, independent experts, senior bank specialists, and senior financial advisors; with every member being approved by the governing board composed of respected industry figures The internal validity of the framework was further tested on samples of five random products from each category through the governing board ex-post examination. By this procedure, two

Table 3 Independent model variables-explanation

Theoretical factor	Variable	Indicator	Type	Denomination
Commission	COMM	Amount of front commission paid to	Continuous	Czech Crown (CZK) <sup>b</sup>
remuneration Product type	PROD	the final (individual) agent <sup>a</sup> Product classification	Nominal	Investment fund, Unit-linked insurance
Sales firm structure	STRUC	Firm classification into three groups	Nominal	MLM, broker-pool, flat structure
Sales firm size	SIZE	Firm classification into three groups	Ordinal	Big (>500 IFAs), medium (50-500
				IFAs), small (<50 IFAs)
Information available to	INFO	Number of trainings provided in	Ordinal	Much higher than average, higher than
the salesforce		relation to given product during		average, similar to average number
		the last 12 months <sup>c</sup>		(in relation to the product type), less
				than average, much less than
				average

IFA = Independent Financial Advisers.

<sup>a</sup>We take into account only the initial commission paid out for the sale (up-front), which is the vastly preferred method of remuneration in the target market.

Trailer commissions are negligible.

<sup>b</sup>Advice companies in our sample utilize only variable remuneration with no fixed component (fixed-commission model is negligible on target market). Because of commission being derived from size of the transaction, all of the commission amounts were transformed to a common comparative basis, representing 1,000 CZK payment (the most common level of contribution on target market).

'Introductory trainings for newcomers were excluded, only product trainings were taken into account.

Table 4 MTHM matrix

	M1	M2
M1: Main measurement	0.83	0.76
M2: Control measurement	0.76	1.0

different measurements were obtained, gaining material for the construction of a Monotrait-heteromethod (MTHM) matrix (Campbell and Fiske, 1959; Crocker and Algina, 2008). After correlating the two data lines with Goodman and Kruskal's  $\gamma$  (p = 0.000), we achieved the following results (Table 4).

The level of correlation achieved shows strong correspondence with both methods of measurement (Crocker and Algina, 2008 recommend 0.50 to be the minimum), providing proof of the (convergent) construct validity of the panel evaluation carried out.

#### 3. Method

As mentioned above, this article deals with the evaluation of the link between selected sales factors and the quality of financial advice, in terms of a client's subsequent purchase. From the given set of variables, our basic research model is constituted as follows:

$$\log(\text{COMM} + 1) \sim (\text{SIZE} + \text{STRUC})$$

$$\times (\text{PROD} + \text{INFO} + \text{QUAL})$$

$$+ (1|\text{ID}_{\text{COMP}/\text{ID}_{\text{IFA}}}). \tag{1}$$

For the data analysis, the linear mixed effects models were used. In a classical linear model, with only fixed effects considered, it is assumed that all observations are independent. Since this does not hold true for the analyzed data (transactions done by one sales person could not be independent since they depend on the sales person's knowledge, experience etc., and, moreover, also transactions done under a given company are not independent for similar reasons), the random effects were introduced. Two nested random effects appear in our model: an effect of the sales person nested in the random effect of the company. In the model equation is such a setup written as 1ID\_comp/ID\_IFA. The fixed effects appear in the model in interactions which is denoted in the model equation by an asterisk. The baseline model of the form (SIZE + STRUC) \* (PROD + INFO + QUAL) in fact means that we assume that the commission depends on PROD, INFO and QUAL in a priori different ways in different kinds of companies (according to their size and structure). Such differences are further tested and interpreted. The purpose of breaking the whole sample to partial subsamples defined by SIZE and STRUC is to capture the effect of these factors described in background literature, such as Reifner's et al. (2012) comprehensive study.

A *p*-values less than 0.05 was considered statistically significant. Analysis was conducted using R statistical package, version 3.2.3 (R Core Team, 2015). Variance analysis outcomes for the model are summarized in Table 5.

Table 5 Variance analysis outcome

	Sum Sq	Mean Sq	NumDF	DenDF	F value	<i>p</i> -value
STRUC	6.9091	3.4546	2	3	11.3158	0.0348
SIZE	1.3570	1.3570	2	183	4.4450	0.0364
PROD	42.2420	42.2420	1	2527	138.3682	0.0000
INFO	0.5126	0.5126	1	8822	1.6792	0.1951
QUAL	0.0731	0.0731	1	7267	0.2395	0.6246
STRUC:PROD	7.9718	3.9859	2	8847	13.0563	0.0000
STRUC:INFO	31.0775	15.5388	2	8771	50.8989	0.0000
STRUC:QUAL	19.7648	9.8824	2	9320	32.3708	0.0000
SIZE:PROD	3.3587	1.6794	2	8267	5.5009	0.0041
SIZE:INFO	3.1736	1.5868	2	9375	5.1977	0.0055
SIZE:QUAL	2.6662	1.3331	2	9061	4.3668	0.0127

Going through the p-values of the model, we observe that while two of the sales factors (INFO, QUAL) do not have a significant effect on commission on average, all of the factors have a significant relationship with a dependent variable when grouping variables (STRUC, SIZE) are taken into account. In other words, all of the surveyed sales factors interacted with the amount of commission paid out in each of the company contexts (delimited by the size and sales structure) in a significantly different manner. Detailed results in this regard are presented next.

## 4. Results

Consequently, our results are divided into nine different combinations of company size and sales structure, summarized by Table 6. Let us use sales structure as our primary differentiator, summarizing MLM, Pool, and Flat companies of different sizes into three distinct chapters.

## 4.1. MLM companies

The model estimates indicate three principal findings. First, in all of the MLMs, irrespective of their size, the difference between the two surveyed product classes (IF, ULI) has a significant effect on commission paid out, with the unit-linked insurance always providing significantly higher commission. Secondly, the information provided to the IFA-force, in terms of training frequency, affects commission level significantly only in a single type of firm—small MLM (positively). In the medium and large sized networks, its effect was not found to be significant on the given *p* level. Finally, our last factor (quality of purchased product) provides a significant outcome only in one environment—large MLM firms. A positive value of the estimate indicates that increasing advice quality provides lower commissions and vice versa; thus, implying that the inducement paid out to the sales force can distort the quality of IFA service in terms of the recommended purchase. Intensity of the effect, however, seems rather negligible.

Table 6 Results overview

	Estimate	Standard	z value	<i>p</i> -value	Hypotheses
		error			
MLM, large sized					
Prod. difference effect	-0.504	0.022	-22.666	0.000	H <sub>1</sub> accepted
INFO effect	-0.003	0.009	-0.341	0.992	H <sub>2</sub> not accepted
QUAL effect	0.086	0.034	2.539	0.040	H <sub>3</sub> accepted
MLM, medium sized					3 1
Prod. difference effect	-0.793	0.141	-5.603	0.000	H <sub>1</sub> accepted
INFO effect	0.090	0.069	1.294	0.500	H <sub>2</sub> not accepted
QUAL effect	0.426	0.426	1.000	0.702	H <sub>3</sub> not accepted
MLM, small sized					3 1
Prod. difference effect	-1.925	0.453	-4.253	0.000	H <sub>1</sub> accepted
INFO effect	0.669	0.209	3.201	0.005	H <sub>2</sub> accepted
QUAL effect	-1.742	0.872	-1.997	0.146	H <sub>3</sub> not accepted
Firm pool, large					3
Prod. difference effect	-0.685	0.030	-23.172	0.000	H <sub>1</sub> accepted
INFO effect	-0.162	0.013	-12.301	0.000	H <sub>2</sub> accepted
QUAL effect	-0.447	0.062	-7.268	0.000	H <sub>3</sub> accepted
Firm pool, medium	*****	****			3r
Prod. difference effect	-0.973	0.146	-6.656	0.000	H <sub>1</sub> accepted
INFO effect	-0.069	0.071	-0.973	0.740	H <sub>2</sub> not accepted
QUAL effect	-0.108	0.431	-0.249	0.997	H <sub>3</sub> not accepted
Firm pool, small	0.100	01.01	0.2.5	0.557	113 not deceptor
Prod. difference effect	-2.106	0.454	-4.637	0.000	H <sub>1</sub> accepted
INFO effect	0.510	0.210	2.432	0.052	H <sub>2</sub> not accepted
QUAL effect	-2.275	0.875	-2.599	0.033	H <sub>3</sub> accepted
Firm flat, large	2.273	0.075	2.377	0.033	113 decepted
Prod. difference effect	0.117	0.413	0.283	0.993	H <sub>1</sub> not accepted
INFO effect	-0.443	0.185	-2.396	0.055	H <sub>2</sub> not accepted
QUAL effect	2.141	0.769	2.782	0.019	H <sub>3</sub> accepted
Firm flat, medium	2.171	0.707	2.762	0.017	113 accepted
Prod. difference effect	-0.172	0.387	-0.444	0.955	H <sub>1</sub> not accepted
INFO effect	-0.351	0.171	-2.046	0.933	H <sub>2</sub> not accepted
QUAL effect	2.480	0.640	3.874	0.000	H <sub>3</sub> accepted
Firm flat, small	2.400	0.040	3.074	0.000	113 accepted
Prod. difference effect	-1.304	0.187	-6.969	0.000	H <sub>1</sub> accepted
INFO effect	-1.304 $0.228$	0.187	-0.909 2.347	0.000	H <sub>2</sub> not accepted
QUAL effect	0.228	0.412	0.759	0.820	H <sub>2</sub> not accepted
QUAL effect	0.313	0.412	0.739	0.020	113 not accepted

## 4.2. Pool companies

According to our results, IFAs gathered under pool structures also receive significantly different commissions for both product classes, in favor of the ULI. Contrary to MLMs, however, the information provided to the IFA-force does significantly affect the amount of commission in quite an opposite case: with the large companies and in a negative manner. In other words, the more training the salespeople go through, the lower commission they are achieving. The most dramatic, however, is the relationship between the amount of commission and the quality of the client's purchase. Found significant in two environments (large, small), this factor exhibited a consistently

negative direction of effect. In other words, advisers operating under a pool umbrella gain significantly higher reward when recommending products with higher quality. In these settings, therefore, the amount of commission does not exhibit a negative potential in terms of advice distortion.

# 4.3. Flat companies

The model estimates and *p*-values indicate that the medium and large sized flat companies represent the most neutral advisory model in our sample. None of the two product classes and or their difference had a significant effect on final IFA remuneration, the same being true for the amount of information provided. The only significant factor was the quality of the recommended product, which interacted with commission in a positive manner. This implies that the rewarding scheme had distortive potential on the final recommendation. The situation with small organizations of flat structure is rather different and resembles previous types. Different product classes earn significantly different commissions (in favor of ULI). The number of trainings was found (just) to have no significant effect, and product quality is clearly insignificant. Such results draw a sharp distinction with medium and large sized flat organizations.

Reviewing the results through our five research hypotheses, we have obtained rather diverse outcomes. The first hypothesis, based on product class effect on commission, was found effective on a wide scale and was confirmed ( $H_1$  accepted) in two-thirds of the organizational types. Regarding the hypothesized effect of information provided to the salesforce through product trainings, these significantly affected commission only in two cases ( $H_2$  accepted) of diverse structure and size, with no apparent connecting pattern. Our third and crucial assumption, depicting a statistically significant link between commission and quality of advice, was found to hold in five out of nine surveyed organizational environments ( $H_3$  accepted). Finally, the remaining hypotheses ( $H_4$  and  $H_5$ ) were both related to the grouping variables (sales firm structure and size) and as such were identified as accepted during the initial variance analysis. All in all, variables included in our model were found significant in most cases, retrospectively validating the model composition.

## 5. Discussion

Compared with the theoretical basis, our survey for the most part indicates more favorable results than expected by other articles. It was confirmed that in the majority of sales organizations there are significant incentive differences between investment fund and unit-linked life insurance, creating a potential for advice bias and client detriment as described by Sane et al. (2013) or Halan et al. (2014). Despite this outcome, there are organizations that hold limited market share, but prove resistant to commission divergences, operating with flat business structure. Regarding the effect of information provided to the sales force through product trainings, observations conducted by Eckardt and Räthke-Döppner (2010) were not

confirmed. Significant effects produced by this factor were detected only in a very limited range, indicating that the popular thesis of more education leading to higher earnings is not valid in our IFA sample.

Sales firm structure and size were identified as crucial elements of the advice process, in accordance with indirect implications published by Reifner et al. (2012), Danilov and Biermann (2013), and Egan et al. (2016). Confirmation of those two factors shows that judging the whole IFA segment as an internally homogeneous sum of individuals, as exhibited in articles Cupach and Garson (2002), Anagol et al. (2012), and Popova (2010) is fundamentally inappropriate, as there are statistically significant functional differences between diverse organizational entities. A "one size fits all" approach, as embodied in many EU regulations (e.g., MiFID, IDD) and envisaged by part of the academia (Reifner et al., 2012), leads to redundant business costs and dubious consumer effect, given our empirical results.

Principal outcomes of the article are related to the remuneration—advice linkage. Theoretical expectations here were more in favor of a negative impact of commission remuneration on quality of subsequent advice. These expectations were largely disproved by our model. Only in three organizational environments did the data indicate a negative relationship between quality of a client's purchase and commission paid out to the IFA, creating a potential discord that could bias the advice. In only two environments of the same business structure (flat organizations) did the model estimate reach major value and these represent a minor part of the IFA market.<sup>8</sup> In other words, a remuneration scheme induced potential for recommending products with lower overall quality, as reported by Beyer et al. (2013) and Chalmers and Reuter (2015), or for mis-selling a totally inappropriate product as detected by Anagol et al. (2012) is not overly present in the target market. The results related to MLM systems mostly contrast with observations collected in other countries, notably by professor Reifner et al. (2012) and his team. Reifner's conclusion that "financial interest in the advice is much more biased" within the structured MLM networks (p. 78) cannot be considered confirmed.

#### 6. Conclusions

The relationship between IFA remuneration and quality of subsequent advice is a frequent point of current research and policy making. Most of the previous studies found that a commission remuneration scheme has a biasing effect on IFA recommendations and subsequent client purchase. In this article, we found that the negative potential created by higher earnings for recommending less quality products is present only in a minority of the IFA organizations, particularly in the flat structures. Pool businesses, on the other hand, were diagnosed as more resistant in this regard, not exhibiting undesirable remuneration-based conflict of interest potential.

Our findings are bounded by three main limitations. We dealt just with the independent advisory part of the market, evading captive (dependent) bank and insurance company networks. Although similar results can be foreseen according to some articles

(Reifner et al., 2012), expanding the analysis on captive channels is vital as substantial sales production is realized through them on a (dependent) advice basis. The second limitation is related to the evaluation method utilized with regards to the quality indicator. Using a panel of experts' assessment brings an important new perspective on the topic, yet despite controlled validity, wider back testing of value-added by our alternative approach is vital. The final limitation is related to the macro level of the analysis. As such, it did not attempt to identify mis-selling in relation to individual transactions or clients, but aimed at uncovering main trends on the whole population, delimited by the survey sample. All these differences need to be taken into account, when interpreting study results and they also represent the main directions for following distribution research.

#### **Notes**

- 1 Slightly lower, yet proportionate numbers are true for investment funds (Kalus et al., 2015).
- 2 Excluding July, August, and December periods.
- 3 Collective investments as defined by the EU Undertakings for the collective investment in transferable securities (UCITS) directive.
- 4 Insurance-based investment products as defined by EU Directive on insurance distribution (IDD).
- 5 Third pillar pension savings product was omitted, because it already has a legal cap on commissions in force, preventing a meaningful analysis at this point. Second pillar and occupational pensions are not implemented in the target market.
- 6 For this purpose, we utilized the Financial Academy of the Golden Crown (Zlatá koruna, 2016) institute. Golden Crown provides an independent, arguably most renowned and prestigious high-level financial product rating in the Czech Republic. As of 2016, it evaluated a total of 191 products in 15 product categories.
- 7 In the case of small pools, the effect was nearly significant, in a positive direction.
- 8 According to analysis created by independent group (Experti na finance, 2016), out of the top 10 IFA companies in the Czech Republic, which account for about two-thirds of the independent advice market, MLM represent 78.64%, while pool structures remaining 21.36% (in terms of sales force size).

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	Product type	Profile	Recommended investment horizon (years)	Return - 1 year (%) <sup>a</sup>	Return - 3 years (cummulative, %) <sup>a</sup>	Costs (synthetic TER, %) <sup>a</sup>	Quality rating 2013	Quality rating 2014	Quality rating 2015
Product 1	IF	Life cycle program	25	10,2	15,92	2,3	2,480225	2,48536	
Product 10	IF	Life cycle program	15	1,37	3,43	2	2,273284	2,314452	2,138568
Product 11	IF	Conservative program	3	-0,49	1,38	1,73	2,497372		
Product 12	IF	Balanced program	5	4,31	6,28	2,32	2,743097		
Product 13	IF	Dynamic program	5	7,03	28,61	0,63		2,642656	
Product 14	ULI	Balanced program	5	7,31	15,9	4,62			2,885515
Product 15	ULI	Dynamic program	5	5,43	7,43	1,84			2,392672
Product 16	ULI	Dynamic program	5	14,12	17,99	2,8	2,20182	1,975459	2,180337
Product 17	ULI	Life cycle program	25	1,73	3,83	4,85	2,778998	2,607632	2,712775
Product 18	ULI	Dynamic program	5	-0.57	11,34	1,9	2,339839	2,361079	
Product 19	ULI	Dynamic program	2	8,18	5,27	3,86	2,627552	2,571915	2,864871
Product 2	IŁ	Dynamic program	2	92'9	18,43	2,3	2,493647	2,30985	2,339845
Product 20	ULI	Dynamic program	2	-0.04	3,98	2,5	2,671658		
Product 21	IID	Dynamic program	2	5,72	12,92	2,22	2,889328		
Product 22	ULI	Dynamic program	S	11,41	16,96	3,06	1,971123	1,933884	2,024371
Product 23	ULI	Dynamic program	S	13,59	-1,1	1,98	2,772256	2,766622	2,723382
Product 24		Balanced program	vo i	0,55	9,23	2,29		2,217117	2,344764
Product 25	OLI	Balanced program	ις 1	6,43	7,87	2,64	1	2,838216	1
Product 26		Dynamic program	so o	21,08	30,3	1,92	2,414762		2,560245
Product 2/		Dynamic program	×ν	4,7	10,04	2,21	2,555123		2,684126
Product 28		Dynamic program	0	15,44	42,54	85,7	2,742634	7011300	
Product 29	ULI	Conservative program	0	1,08	6,91	2,3	7,826997	2,951176	
Product 3	H:	Dynamic program	ο ι	23,28	24,27	4,7	00000	2,461865	
Product 30		Dynamic program	ο (	9,02	14,68	3,54	2,868403	3,015177	3,007638
Product 31		Dynamic program	0 4	2,72	8,88	5,52	2,9088/2	2,863038	2,787148
Floduct 32 Product 33		Dynamic program	n ox	8 46	12,72	2,63	3.019517		
Product 35		Dynamic program	∞ ∞	5.7.	1.5	2,5	2,532,791		
Product 35	: H	Dynamic program	2	20	33.7	1.78	2,573775		
Product 36	IF	Life cycle program	25	9,3	7,6	2,2	2,658701		
Product 37	IF	Dynamic program	5	20,9	21,1	2,16	2,744353		
Product 38	IF	Conservative program	3	2,7	5,2	1,37	2,758696		
Product 39	IF	Conservative program	3	-0,4	7.0-	0,75	2,767168		
Product 4	IF	Conservative program	3	4,88	1,79	2,05	2,27407		
Product 40	IF	Conservative program	3	-3,4	-1,3	1,39	2,786588	2,69611	
Product 41	IF	Dynamic program	5	1,9	19,2	0,81	2,812532		
Product 42	IF	Dynamic program	5	9,14	16,99	2,44	2,860614	2,652245	
Product 43	IF	Dynamic program	5	2,97	11,54	1,99	3,08283		3,009951
Product 44	ULI	Dynamic program	5	21,47	25,36	2,64		2,903099	
Product 45	ULI	Dynamic program	9	3,25	9,5	2,67		2,940381	2,849649
Product 46	Ŧ	Dynamic program	S	4,56	6,78	1,3		2 427288	

Appendix 1 (Continued)

Product 47         IF         Dynamic program         5         16,5         21,1         1,71         2,670891         2,53830           Product 48         IF         Balanced program         4         1,2         -3,1         1,54         2,670891         2,58809           Product 48         IF         Dynamic program         5         -1,46         12,3         2,11         2,670891         2,586947           Product 5         IF         Dynamic program         7         12,37         16         1,92         2,44         2,549412           Product 50         IF         Life cycle program         3         -0,05         2,68         2,51         2,51         2,65369           Product 52         IF         Balanced program         4         4,7         11,3         2,27         2,27           Product 53         IF         Conservative program         3         -0,6         1,3         0,6         2,376598           Product 54         IF         Conservative program         5         -0,4         1,4         1,4         1,4           Product 55         IF         Dynamic program         5         -0,4         1,4         1,4         1,4         1,4         1,4	Product	Product type	Profile	Recommended investment horizon (years)	Return - 1 year (%) <sup>a</sup>	Return - 3 years (cummulative, %) <sup>a</sup>	Costs (synthetic TER, %) <sup>a</sup>	Quality rating 2013	Quality rating 2014	Quality rating 2015
ULI         Dynamic program         5         -1,46         12,37         1,11         4,94         2,44           IF         Dynamic program         7         12,37         16         1,92           IF         Life cycle program         3         -0,05         2,68         2,51           IF         Balanced program         4         4,7         11,3         0,6           IF         Conservative program         5         -0,6         1,3         0,6           IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         5         6,42         11,6         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,198387           IF         Dynamic program         5         6,42         11,6         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22         1,12	Product 47	H	Dynamic program	ۍ 4	16,5	21,1	1,71		2,670891	2,538373
IF         Dynamic program         8         1,11         4,94         2,44           IF         Dynamic program         7         12,37         16         1,92           IF         Life cycle program         3         -0,05         2,68         2,51           IF         Balanced program         4         4,7         11,3         0,6           IF         Conservative program         5         -0,6         1,3         0,6           IF         Life cycle program         5         -0,4         1,4         1,14           IF         Dynamic program         5         6,42         11,6         2,38         2,23884           IF         Dynamic program         5         6,42         11,6         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22         1,12	Product 49	ULI	Dynamic program	. 20	-1,46	12,3	2,11			2,586947
IF         Dynamic program         7         12,37         16         1,92           IF         Life cycle program         3         -0,05         2,68         2,51           IF         Balanced program         4         4,7         11,3         2,27           IF         Conservative program         3         -0,6         1,3         0,6           IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         5         6,42         11,6         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 5	IF	Dynamic program	8	1,11	4,94	2,44			2,290644
IF         Life cycle program         3         -0,05         2,68         2,51           IF         Balanced program         3         3,1         0,8         1,31           IF         Conservative program         3         -0,6         1,3         0,6           IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         5         6,42         11,6         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 50	IF	Dynamic program	7	12,37	16	1,92			2,549412
IF         Balanced program         3         3,1         0,8         1,31           IF         Balanced program         4         4,7         11,3         2,27           IF         Conservative program         5         -0,6         1,3         0,6           IF         Life cycle program         20         9,91         8,11         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,23884           IF         Dynamic program         5         15,4         21,91         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22         1,22	Product 51	IF	Life cycle program	3	-0.05	2,68	2,51			2,665369
IF         Balanced program         4         4,7         11,3         2,27           IF         Conservative program         3         -0,6         1,3         0,6           IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         20         9,91         8,11         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 52	IF	Balanced program	3	3,1	0,8	1,31			2,692909
IF         Conservative program         3         -0,6         1,3         0,6           IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         20         9,91         8,11         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,238884           IF         Dynamic program         5         15,4         21,91         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 53	IF	Balanced program	4	4,7	11,3	2,27			2,728509
IF         Conservative program         5         -0,4         1,4         1,14           IF         Life cycle program         20         9,91         8,11         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,238884           IF         Dynamic program         5         15,4         21,91         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 54	IF	Conservative program	3	-0.6	1,3	9,0			2,766896
IF         Life cycle program         20         9,91         8,11         2,38         2,376598           IF         Dynamic program         5         6,42         11,6         1,77         2,238884         2,238884           IF         Dynamic program         5         15,4         21,91         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 55	IF	Conservative program	5	-0,4	1,4	1,14			2,89131
IF         Dynamic program         5         6,42         11,6         1,77         2,238884           IF         Dynamic program         5         15,4         21,91         2,6         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 6	IF	Life cycle program	20	9,91	8,11	2,38	2,376598		
IF         Dynamic program         5         15,4         21,91         2,6         2,198387         2,198387           IF         Balanced program         3         2,75         3,7         1,22	Product 7	IF	Dynamic program	5	6,42	11,6	1,77		2,238884	2,229873
IF Balanced program 3 2,75 3,7 1,22	Product 8	IF	Dynamic program	5	15,4	21,91	2,6		2,198387	2,140763
	Product 9	IF	Balanced program	3	2,75	3,7	1,22			2,624633

<sup>a</sup> As of 2016. TER = Total Expense Ratio.

Appendix 2 Independent model variables-overview

Year	2013 $(n = 2585)$			2014 $(n = 3382)$			2015 $(n = 4361)$		
	Lower quartile	Mean/ median	Upper quartile	Lower quartile	Mean/ median	Upper quartile	Lower quartile	Mean/ median	Upper quartile
COMM	3033.5	783.8	10139.6	3317.8	8733.2	11367.3	2913.8	9260.9	12644.9
$COMM_{IF}$	1387.0	5300.6	6703.9	1320.0	5229.3	6839.8	1346.2	4691.6	5720.0
COMMULI	3810.2	8666.1	11209.7	4320.0	9813.5	12720.1	4653.7	8918.9	14995.2
PROD STRUC	IF = $24.6\%$ ; ULI = $75.4\%$ MLM = $65.1\%$ ; pool = $27.0\%$ Flat = $7.9\%$	= 75.4% ool $= 27.0%$		IF = $23.5\%$ ; ULI = $76.5\%$ MLM = $59.0\%$ ; pool = $33.3\%$ Flat = $7.7\%$	= 76.5% ool $= 33.3%$		IF = 31.1%; ULI = 68.9% MLM = 54.5%; pool = 38.6% Flat = 6.9%	= 68.9% $= 18.6%$	
SIZE	Big = $92.1\%$ ; medium = $7.7\%$ Small = $0.2\%$	ium = 7.7%		Big = $92.4\%$ ; medium = $5.5\%$ Small = $2.1\%$	dium = 5.5%		Big = $93.1\%$ ; medium = $0.8\%$ Small = $6.1\%$	1000000000000000000000000000000000000	
INFO	Much less than average $(-2) = 7.9$ Less than average $(-1) = 14.78\%$ Similar to average number $(0) = 12$ Higher than average $(1) = 55.05\%$ Much higher than average $(2) = 10.09\%$	Much less than average $(-2) = 7.93\%$ Less than average $(-1) = 14.78\%$ Similar to average number $(0) = 12.07\%$ Higher than average $(1) = 55.05\%$ Much higher than average $(2) = 55.05\%$	<i>8</i> ,	Much less than average $(-2) = 11$ Less than average $(-1) = 18.97\%$ Similar to average number $(0) = 21$ Higher than average $(1) = 48.55\%$ Much higher than average $(1) = 48.55\%$	Much less than average $(-2) = 11.97\%$ Less than average $(-1) = 18.97\%$ Similar to average number $(0) = 20.27\%$ Higher than average $(1) = 48.55\%$ Much higher than average $(2) = 48.55\%$	2 %	Much less than average $(-2) = 24$ Less than average $(-1) = 2.20\%$ Similar to average number $(0) = 2$ . Higher than average $(1) = 47.72\%$ Much kitcher than average $(2) = 47.72\%$	Much less than average $(-2) = 24.07\%$ Less than average $(-1) = 2.20\%$ Similar to average number $(0) = 25.85\%$ Higher than average $(1) = 47.72\%$ Much higher than average $(2) = 47.72\%$	
INDIV	1,014	10.1. (z) agranda		1,300	(z) 29ni2in		1,399	4 Clubs (2) 0:11 /0	

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