MEMORANDUM

Date: September 29, 2014
To: Keith Bergstresser, U.S. Department of Labor
Cc: Youngok Lim (DOL), Michael Brien (Deloitte), Dirk Antonczyk (Deloitte)
From: Constantijn Panis (AACG)
Subject: Review of Study by Quantria Strategies, LLC*

SUMMARY

The Department of Labor (DOL) is expected to re-propose regulation on the definition of a fiduciary of employee benefit plans. Quantria Strategies, LLC (Quantria) conducted a study that attempts to estimate the effects of expanded fiduciary responsibilities on cash-outs of defined contribution (DC) plans by plan participants who separate from their job. Quantria estimated large increases in cash-outs and large reductions in the lifetime retirement savings of affected workers.

This document reviews the Quantria study. We point out that Quantria’s estimates implicitly assumed that upcoming regulations will eradicate all financial advice on what to do with DC plan balances upon job separation, including by paid independent financial planners. We also note that Quantria relied on a correlation between financial advice and retirement assets to assert causality, where the causality may in fact go in the reverse direction. We further identify a key statistic about the average size of lump sum distributions that Quantria misrepresented as the average size of cash-outs and used to calculate long-term effects of cash-outs on lifetime retirement savings. Finally, we note that Quantria’s conclusions on increased cash-outs and reduced lifetime retirement resources are based on apparently unrelated analyses, while the latter analysis applied assumptions that lack basis in empirical patterns.

* This document is the Final Analysis Memorandum, Deliverable 3.3 of Task Order DOL-OPS-14-T-00025 (Survey of Consumer Finances Statistical Studies and Literature Analysis) under Contract DOLJ139335157.
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1. INTRODUCTION

The Employee Retirement Income Security Act of 1974 (ERISA) states that a person paid to provide investment advice with respect to assets of a private-sector employee benefit plan is a plan fiduciary. According to ERISA, a fiduciary must act solely in the interest of plan participants and their beneficiaries and with the exclusive purpose of providing benefits to them. Regulations promulgated by the U.S. Department of Labor (DOL) define who is a fiduciary. In 2010 DOL’s Employee Benefits Security Administration (EBSA) proposed a new regulation that would expand the categories of persons who would be deemed to be fiduciaries subject to ERISA. After receiving public comments, EBSA decided to re-propose its rule on the definition of a fiduciary. As of September 2014, EBSA has not yet re-proposed such new regulation.

This document reviews a study by Quantria Strategies, LLC (Quantria) on “Access to Call Centers and Broker Dealers and Their Effects on Retirement Savings.” The study asserts that the anticipated regulations will prompt financial service providers to limit the access to assistance provided by call centers and broker-dealers when terminating employees face plan distribution decisions. It finds that this could increase annual cash outs of retirement savings for employees terminating employment by $20-32 billion and that these withdrawals could reduce the accumulated retirement savings of affected employees by 20%-40%.

The objective of this document is to review the soundness of the Quantria analysis, the quality of the data sources on which it is based, and the conclusions that it draws. We start in Section 2 with a summary of the Quantria study, its key assertions, logical steps, and conclusions. Section 3 addresses the study’s arguments in light of findings in the academic and trade literature. Section 4 concludes.

2. SYNOPSIS OF THE QUANTRIA STUDY

The Quantria study explains that employees who participate in a defined contribution (DC) plan and separate from their job may have several options regarding the disposition of their DC plan balance. They can (a) preserve the assets for retirement by leaving them in their former employer’s DC plan or rolling them over into an Individual Retirement Account (IRA) or (b) cash out their balance and spend the proceeds on anything they wish. Cashing out represents potential “leakage” of retirement resources because the assets may no longer be available for consumption in retirement.

The study warns that the re-proposed regulations that Quantria is anticipating from DOL may increase pension cash-outs and erode the retirement security of future retirees. Its conclusions are based on a number of key assertions and linkages—see Figure 1:

1 Federal Register 75(204), pp. 65263-65278.
3 The study is dated April 9, 2014 and was accessed through http://quantria.com/DistributionStudy_Quantria_4-1-14_final_pm.pdf.
1. DOL's upcoming regulations are expected to create fiduciary responsibilities for financial service providers. Concerned about potential liability, this may prompt financial service providers to limit access to assistance provided by call centers and broker-dealers when terminating employees face plan distribution decisions.

2. Call centers and broker-dealers may dissuade departing employees from cashing out their retirement account.

3. Cash-outs under the current system are substantial and may grow larger under the anticipated regulations, especially among individuals who have a low account balance, are under age 30, have lower wages, or are African-American or Hispanic.

The Quantria study’s primary conclusion is that anticipated regulations will increase annual cash outs of retirement savings at job termination by $20-32 billion. The derivation of this result is not made explicit in the study, but pages 17-19 sketch the steps that Quantria analysts took:

1. Estimate pension participation by income category based on the number of taxpayers who deferred income and the aggregate amount of the deferral.
2. Impute aggregate balances for the distribution of taxpayers reporting retirement contributions on Form W-2.
3. Estimate the qualified plan participants who may experience a break in service (through job termination) and face a decision regarding plan assets held with their previous employer.
4. Derive estimates of the potential retirement savings balances that are likely to become vulnerable to cash out. Assume that the balances most vulnerable to increased cash-out are those currently being rolled into IRAs or a new employer plan and those that currently remain in an employer’s plan through an employee decision. Quantria estimates that these balances total approximately $117 to $145 billion per year.
5. Estimate the effect of call center and broker-dealer assistance in helping workers retain their retirement savings at job change. Quantria estimates this effect at 33%.
In neither the main text nor its technical appendix does the Quantria study provide sufficient detail to convert at-risk account balances of $117-145 billion per year and an assistance effect of 33% into its main conclusion. The study merely states the following on page 19:

“Based on the estimated cash-outs from retirement balances for terminating employees, we estimate that reducing the availability of call center and broker-dealer assistance will increase annual cash outs of retirement savings at job termination by an additional $20-32 billion.”

However, Quantria notes that plan balances increase with age initially and then increase at a decreasing rate as workers approach retirement age. It may be the case that Quantria applied its estimated assistance effect to age-specific account balances to derive its aggregate effect of $20-32 billion.

Quantria also simulates the effect of cash-outs on lifetime retirement savings for two scenarios. In the first the authors assume that a worker cashes out all plan balances during the first six years of his career and find that that could reduce lifetime retirement savings by 24%. In the second the authors assume that a worker cashes out a plan balance approximately equal to the average lump sum distribution in 2006 and find that that could reduce lifetime retirement savings by 41%. Based on these simulations Quantria concludes that the incremental cash-outs of $20-32 billion could reduce the ultimate retirement savings of affected individuals by 20% to 40%.

3. DISCUSSION

The Quantria study relies on statistics from several external research papers and several data sets for its own analysis. It combines those statistics and data sets even though these components are not always compatible or consistent. It also misinterprets several statistics and relationships. Below we highlight the most obvious errors.

Quantria Assumed That Re-Proposed Regulations Will Eradicate All Forms of Financial Advice on What to Do with Plan Balances upon Job Separation

The Quantria study starts off with the following statement (page 1):

Re-proposed regulations that are anticipated from the Department of Labor (DOL) are generally expected to create fiduciary responsibility for financial service providers that will limit the access to assistance provided by call centers and broker-dealers when terminating employees face plan distribution decisions.

The study appears to be based on this central premise and does not investigate whether this premise is plausible, to what extent upcoming regulation will limit access to assistance provided by call centers and broker-dealers, or to what extent plan participants will find substitutes for any lost advice.

Investment firms aim to profit from the asset holdings of their clients and thus have an incentive to dissuade a separating employee from cashing out his account balance. For example, Sholder (2012) estimated that retaining a plan participant
after retirement could result in 32%-53% of the participant’s lifetime value to a financial service provider.\(^4\) By extension, retaining a participant upon pre-retirement job separation could result in an even greater share of his lifetime value. It may therefore be expected that financial service providers will continue to court departing plan participants under new fiduciary regulations.

To derive its result of $20-32 billion higher cash-outs under expected regulations, Quantria relied on its “theory that consultations with call centers or brokers/dealers result in retirement savings in DC plans that are higher by about 33 percent” (page 19). That theory is apparently based on a model showing that retirement savings plan balances in a national household survey were 33 percent higher for respondents who had consulted a financial planner or broker for financial advice than for respondents who had not. Quantria acknowledges in a footnote that paid financial planners could have been consulted by survey respondents, rather than only call center operators or broker-dealers (footnote 43, page 18). However, its analysis appears to have applied the 33% estimate in full and thus ignored that some of the correlation arose from consultations with financial planners. Implicitly, Quantria assumed that upcoming regulation will eradicate all financial advice on what to do with plan balances upon job separation from financial planners and brokers. Its assumption goes beyond advice from call centers and broker-dealers only. To the extent that the upcoming regulation will reduce financial advice, Quantria even assumed that plan participants will not find substitutes for such lost advice.

**Quantria Interpreted a Correlation as a Causal Effect**

Quantria estimated a statistical model of retirement account balances based on data from the RAND American Life Panel (ALP). It found that respondents who reported having consulted financial planners or brokers owned accounts with balances that, on average, were 33% higher than respondents who had not consulted a financial planner or broker. This is a correlation, not necessarily a causal effect. Quantria first reported this estimate as a correlation but then its language evolved into a causal interpretation:

- Page 18-19: “Our empirical models suggest that retirement savings plan balances are 33 percent higher if a financial planner or broker was consulted for financial advice.”
- Page 19: “Our parameter estimates support our theory that consultations with call centers or brokers/dealers result in retirement savings in DC plans that are higher by about 33 percent.”
- Page 38: “In particular, having access to a financial planner or broker appears to result in retirement savings in DC plans that are higher by about 33 percent.”

As pointed out by Munnell (2014), the model does not support the assertion that consulting a financial planner “results” in more wealth, and hence the loss of access

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to the financial planner would cause a reduction in wealth.\(^5\) The causation may run in the other direction—individuals who are thrifty, wealthy, or financially sophisticated to start with may find it more worthwhile to hire a financial planner. If they lost their financial planner, they might invest a little less successfully, but they would still hold relatively high balances.

Separately, Quantria assumed that whatever caused account balances to be 33% higher translates into an equal-sized effect on preservation of disposable funds upon job separation. In other words, it applied a stock concept (balances) to a flow (annual rollovers and other dispositions).

**Quantria Misrepresented Lump Sum Distributions as Cash-Outs**

The Quantria study cited a study by Aon Hewitt showing that 42% of employees take a cash distribution of their retirement savings at job termination, 29% roll their retirement savings to another plan or an IRA, and 29% leave their assets in the employer’s plan (page 11).\(^6\) It proceeded to further quantify cash-outs with a metric from a study of the Employee Benefit Research Institute (EBRI)\(^7\) (page 12):

“Cashing out tends to be the most prevalent behavior with average distributions of $32,219 (in 2006 dollars).”

The EBRI (2009) study found that the average lump sum distribution was $32,219 in 2006. However, a lump sum distribution is not the same as a cash-out. A lump sum distribution is a one-time payment which may be used to roll over the funds into an IRA or be cashed out.\(^8\) The average $32,219 lump sum distribution is thus a mix of rollovers and cash-outs.

As is widely documented in the literature, average rollovers tend to be much greater than average cash-outs. For example, the same Aon-Hewitt study that was cited by Quantria found that 42% of participants cashed-out, but those cash-outs represented only 7.3% of assets. By contrast, 29% of participants rolled their balance over into an IRA, and those rollovers represented 38% of assets. More recently, Vanguard, a financial services provider, reported that cash-outs by 28% of participants represented only 5% of assets in 2013, whereas rollovers by 22% of participants accounted for 39% of assets.\(^9\)

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\(^8\) It may also be used to purchase an annuity or to be rolled over into the plan of the participant’s new employer.

Based on the participant and asset fractions reported in the Aon-Hewitt study, the average rollover was approximately 7.5 times as large as the average cash-out.\textsuperscript{10} If the average lump sum distribution was $32,219, this would imply that the average cash-out was approximately $8,777. However, Quantria selected an average lump sum distribution from the EBRI report that was based on historical data going back to before 1980; the most recent figure reported in the EBRI study was $22,166 (for 2004-2006) and the trend was downward.

In short, EBRI reported a time series of average lump sum distributions. Quantria selected the historical average rather than the much-lower average over the most recent period and further misrepresented it as the average cash-out amount. As discussed in the next subsection, this implies that Quantria greatly inflated its long-term effects on lifetime retirement savings.

**There Is No Apparent Connection between Quantria's Calculations of Incremental Cash-Outs and Reduced Lifetime Retirement Savings**

The Quantria study states (page 4):

“We estimate that eliminating the availability of call centers and reducing broker-dealer assistance upon job termination will increase annual cash outs of retirement savings by an additional $20-32 billion. Over the long run, these cash outs will result in a significant reduction in overall retirement savings; our estimates indicate that these withdrawals could reduce the ultimate retirement savings of affected individuals by 20 to 40 percent.”

The language seems to suggest that the increase in cash-outs by $20-32 billion corresponds to a reduction of ultimate retirement savings of 20%-40%. However, the two results appear to be based on unrelated calculations.

The preceding subsections explain how Quantria estimated increased cash-outs of $20-32 billion. The reduction in lifetime retirement savings is based on simulations of hypothetical DC accumulation paths.

Quantria assumed a baseline scenario of a worker who earns $40,000 in 2014. Her wage increases by 2.5% annually, she contributes 5% of her earnings to her DC plan, and she earns 4% interest on her plan balance. According to Quantria’s calculations, this worker will accumulate $124,742 during her career, which is assumed to end in 2040 (page 19).

For its first alternative scenario, Quantria simulated the accumulations of a similarly situated worker who cashes out all balances during the first six years of her career. Her end-of-career accumulation would be $92,650, i.e., a reduction of 26%.

This first alternative scenario captures cash-outs early in someone’s career. For its second alternative scenario, Quantria noted (page 20):

\textsuperscript{10} The ratio of 38%/29% and 42%/7.3% is 5.75/0.76 = 7.5. Based on Vanguard’s figures, the average rollover amount is even larger, namely almost ten times the size of the average cash-out amount.
While it is common for younger workers to cash out balances, the average account distribution is considerably higher ($32,219) suggesting that cash outs also occur later in a working career. Using the same example, this is comparable to a worker cashing out his or her retirement savings when changing jobs after 10 years. The effect of this behavior is to reduce the individual's total retirement savings by nearly $52,000 or 41 percent.

The second alternative scenario's design is based on the premise that the average cash-out is $32,219. (As explained above, this figure is greatly inflated.) These simulations are the only calculations in the Quantria study that aim to calculate long-term effects of cash-outs. In the Executive Summary and the Findings section, the results are summarized as a reduction in ultimate retirement savings of affected individuals by 20%-40%. Neither alternative scenario is based on or connected to an increase in cash-outs by $20-32 billion. In fact, neither appears to be grounded in empirical patterns. The first alternative scenario simply assumes that accumulations during the first six years of someone's career are cashed out; the second is loosely based on a greatly inflated number, namely an obsolete average lump sum distribution amount that is misrepresented as an average cash-out amount.

Finally, Quantria assumed that cashed out funds are not available for consumption in retirement. It ignored the possibility that cashed out balances can be saved or used to start a business or purchase a home with benefits that may stretch into retirement. For example, EBRI (2009) reported that lump sum distributions were about twice as likely to be used for paying off debts, funding a business, or purchasing a home than for consumption.11

4. CONCLUSION

The Quantria study estimated that expected DOL regulations concerning the definition of a fiduciary will trigger large increases in cash-outs of DC plan balances upon job separation and large reductions in lifetime retirement resources. Our review demonstrates that the study is based on flawed or arbitrary assumptions, flawed methods, and misrepresentations of external findings.

That said, the basic idea behind the study—that expanded fiduciary responsibilities may reduce financial advice and increase cash-outs—is possible, but just not empirically proven or justified from the Quantria report. Depending on the content of the regulation (which is still unknown), there may be a modest increase in cash-outs. One perspective is that the benefits of less expensive investment products for many American workers may outweigh the costs of higher cash-outs by some individuals. Another perspective, expressed by the General Accounting Office (GAO), holds that the benefits of less expensive investment products may be achieved while avoiding or limiting increased cash-outs. In a response to the Quantria study, the GAO expressed the hope that any regulation the DOL promulgates will clarify the distinction between investment advice that may trigger fiduciary status and

investment education that will not, thereby mitigating any concern that call centers will no longer be able to provide helpful guidance to separating plan participants.¹²

Indeed, the central premise of the Quantria study will be removed if the regulation manages to keep in place or even improve guidance to separating plan participants.

¹² Letter of 28 July 2014 from Charles A. Jeszeck, Director of GAO’s Education, Workforce, and Income Security Team to Congressman George Miller, Ranking Member of the Committee on Education and the Workforce in the House of Representatives.
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