

BDA Bond
Dealers of
America



**2013 Bond Dealers of America
Fixed-Income Compensation Survey**



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Fixed-Income

Compensation Survey

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Transmittal Letter from BDA

October, 2013

As the only organization representing the unique interests of securities dealers and banks focused primarily on the U.S. fixed income markets, the Bond Dealers of America (BDA) is pleased to present the results of the Fifth Annual Fixed-Income Dealer Compensation Survey (“*Compensation Survey*”).¹ It is our hope that the BDA 2013 Compensation Survey will serve as a valuable tool to enhance and inform your compensation management, strategic planning process and decision making.

At the outset, we wish to gratefully acknowledge the leadership of our Steering Committee and the BDA Board of Directors for its continued support and advice in the development of the survey instrument and presentation of the results in this report, as well as the regional and the middle-market fixed-income dealers who participated in the survey. Their input enables the Compensation Survey to remain a relevant document that serves the needs of the fixed-income industry, BDA members and the marketplace. I am pleased to report that this year’s survey maintained the high number of responding regional and middle-market fixed-income bond dealers as it did last year and continued growth in participation since the inception of the Compensation Survey series three years ago. Moreover, there were a number of first-time contributors to the survey. The survey definitions and methodology may be found as Annexes to the report.

Based on the success of the first four reports, there was strong agreement to continue with the series and produce the Fifth annual Compensation Survey report. As was the case in the each of the last four years, the decision to produce the compensation report was a member-driven one. Our members communicated to us that the BDA Compensation Survey was both unique and of high value as it addresses both compensation (including salary, commission, and bonus) by position trends and broader strategic, human resources and financial management issues, as they relate to staffing and compensation policies of the middle-market fixed-income securities dealer industry.

The Compensation Survey’s value extends across our membership to the industry and the marketplace. The BDA Compensation Survey is the one compensation and strategic survey specifically tailored to the needs of regional and middle-market fixed-income dealers and their managements.

The timing of each of the first four survey reports covering 2007-2012 was propitious and perhaps uniquely valuable to the middle-market bond dealer community. The first BDA Compensation Survey covered the period during which the firms began to plan for the fixed-income market recovery from the 2008 crisis. The second survey covered the strong bond market recovery from the ashes of the 2008 crisis. The 2010 into 2012 period covered in the last two surveys were generally a much stronger one for the fixed-income markets and middle-market dealers. Last year’s survey reflects the firming up of the U.S. fixed-income markets,

¹ The terms BDA Regional Dealer Fixed-Income Compensation Survey and Compensation Survey may be used as substitutes for each other throughout the report.

global economic challenges and the growth and prominence of middle-market firms. This year's survey is responsive to those trends combined with the developing uncertainty about the direction of rates after the prolonged period of the low interest rate environment.

This fifth survey period extended into a more challenging period (2012-2013) and one characterized with regulatory changes across the industry and markets. It was also a year that once again demonstrated the resiliency of the fixed-income markets and the integral role of regional and middle-market dealers in the markets. The U.S. bond markets continue to be source of strength and safety in this turbulent year. Similarly, as of this writing, the local government and taxable bond markets are showing stability and strength in the face of the evolving U.S. government debt outlook, the uncertainty about a continued low benchmark Treasury rate environment and divergent and uncertain state and local government finances. The last several years provide ample evidence that the middle-market fixed-income dealer industry will respond and flourish as the marketplace challenges and operating environment evolve.

There are indeed new sets of strategic challenges awaiting the industry today amid constantly shifting market conditions and regulatory demands. We expect this year's survey to be equally useful – if not more so – in the new emerging environment.

As we noted last year, middle-market firms appear to be better positioned in the developing marketplace and operating environment to grow and maintain and capture market share. Within this environment, insights about compensation levels, trends and policies would appear to be valuable tools for the middle-market dealers as their securities firms develop, fine-tune and implement strategies; decide how to allocate resources; and grow and manage capital and staffing in 2013 and beyond.

Median employment – full-time equivalents or FTEs – of this year's participating firms was higher in 2012 than 2011 among the survey participants that reported such information by 17% following a nearly 10% increase in 2010-2011 after a decline of 3% in 2009-10. Median fixed-income revenues among survey participants rose by 20% after being virtually unchanged last year and rising 5% the previous year but with some distinctions among the market sectors.²

When appropriate, the Compensation Survey results are presented (1) nationally and segmented by primary geographic region, revenue level and Full-Time Equivalent (FTE) staff size peers groups and (2) compared to previous years. We are collecting the same information as in two last years' survey, indicative of the survey maturity and stability, which enhances year over year trend comparisons. There are no changes in the questions asked although some additional metrics were added including an additional regional peer group for compensation by position and a new section and table presenting the base salary over the entire survey series, 2008-2012.

² Year-over-year comparisons should be evaluated with some caution of there are invariably some entries and exits from the survey, although the middle-market survey population is generally relatively stable. These comments hold for this year's Compensation Survey

That we are asking the same questions as last year reflects the success of the format and that the survey questionnaire has achieved stability and critical mass. It also indicates that BDA member firms appear to be satisfied with the questions and data requested and the results reported. The increased participation and survey structure stability also speak to the fact that the industry finds value in the survey structure and reported results. Of course, as the industry and markets evolve and change, we are looking to further enhance the BDA compensation product in future years based on input from the fixed-income market participants, the BDA membership.

The results are divided into 12 topical areas within six report sections summarized below. We encourage you to read the methodology and definitions annexes at the end of the report in conjunction with the tables and results. By doing that, you will have a fuller understanding of our approach, the definitions used in the tables and how we arrived at the reported data.

- **Compensation by position:** 49 positions (one more than last year), including executive management; and compliance, trading, sales, investment banking, public finance, operations and technology, research, risk management and accounting. Within each department, compensation results are separated between senior, mid-level and junior positions, generally defined by level of responsibility and seniority.
 - Averages, medians, maximums, minimums and medians are provided by position, including total 2012 compensation, and by bonus (2011 and 2012), salary (2012), commission (2012), and sum of commission, salary and bonus (2012).
 - Data were presented nationally and by region, four regions – West and Midwest combined and South and East combined; full-time equivalents or FTE (two peer groups, up to 150 and above 150 as of the end of 2012) and annual fixed-income revenue (two peers, above \$70 million and below \$70 million in 2012 fixed-income revenue) peer groups.
 - Comparison of median bonus levels by position from 2007 to 2012 and base salary 2008-2012.

- **Trader compensation by market:** Average, median, maximum, and minimum salary, commission, bonus and total compensation for municipal, agency and government, securitization, corporate bond and money markets for senior, mid-level and junior trading professionals nationally. Averages are presented for trading by market sector depending on whether sufficient responses were received by FTE (2 groups, above and below 150) and fixed-income revenue (2 groups, above and below \$60 million annually³) peer groups. This section was incorporated to provide more detailed breakdown for trader compensation among market sectors than is provided in the general compensation tables.

³ The difference between the broader compensation by position and trader compensation fixed-income revenue groups reflect the fact that a few firms responded to the general compensation by position question but not the trader compensation tables.

- **Compensation policies**
 - **Payout Trends:**
 - Sales: Percentage payout of all net transaction revenues and for primary market and secondary market transactions segmented by market sectors – municipal, corporate bond, Treasury/Federal agency and securitization. As appropriate, the responses are divided between the retail and institutional sales segments.
 - Municipal Market/Public Finance Banking and Underwriting and Trading: Percentage payout for primary market and, as appropriate, broken out between negotiated and competitive sales.
 - **Sales professional compensation structure; and Bonus payment frequency:**
 - Whether sales professionals are paid by commission only, salary/bonus only or commission and salary/bonus.
 - Whether traders are paid bonus in equity, cash or other form, and frequency of compensation (quarterly, semiannually or annually). Results are presented in percentage terms.
 - **Bonus criteria:**
 - Whether based on objective quantitative basis, subjective basis, or combination of subjective and objective factors.
 - Responses are divided by trading – traders and trading desk managers; sales – sales professionals and managers; investment banking and public finance.
 - **Retirement/deferred compensation programs**
 - Whether the firm has a deferred compensation program.
 - Whether the program is based on a formula or fixed amount and what the formula is.
- **Revenue & Staffing Trends**
 - Whether staffing will change and in what direction it will change in 2013 by department (compliance, sales, trading, investment banking, research, operations).
 - Whether revenues changed in 2012 and are expected to change in 2013 and in what direction (increase and decrease) by market sector (Treasury or government sector, Federal agencies, municipal bonds, corporate bonds, and securitization).
 - Composition (percentage) of fixed income revenues by market sector
 - Market sectors include agency, Treasury, corporate bonds, MBS/ABS and municipal bonds.
 - Average responding firm percentage fixed-income revenue distribution by market sector.
 - Maximum percentage of trading revenues generated from a particular sector.
- **Operating & Technology Expense Ratios**
 - Operational expenses as a percentage of fixed income revenues: Total non-interest operating expenses, technology expenses, Bloomberg terminal and

other data service expenses, presenting the minimums, maximums, medians and averages at the national level.

- Responses broken out by FTE and fixed-income revenue peer groups presenting medians and averages.
 - Whether technology and operations functions are outsourced.
- **Annexes provide detailed explanations about the methodology and definitions used in the survey.**

We hope you find the information useful. We welcome any comments, questions or suggestions for future surveys.

Sincerely,

Michael Nicholas
Chief Executive Officer, Bond Dealers of America

I. *Executive Summary*

COMPENSATION POLICY HIGHLIGHTS

- **Compensation Data for 49 Positions from Senior Executive to Entry-Level Provided**
Data on 49 positions (one more than last year) are provided including medians, averages, maximum and minimum levels of compensation across departments at the national level, and by middle-market fixed-income dealer primary geographic region, FTE (full-time equivalent) and fixed-income revenue peer groups to the extent there were sufficient responses to tabulate meaningful compensation statistical trends. The following compensation measures are included: 2011 bonus, 2012 bonus, 2012 salary, 2012 commission, 2012 total compensation and comparison of median salary and bonus by position, when available, from 2007 to 2012 for bonus data and 2008-2012 for base salary, respectively. With year-over-year fluctuations, bonus and salary levels have grown since the depths of the financial crisis in 2008.
- **Chief/Senior Fixed-Income Business Executive Total Compensation (Compensation by Position Section III)**
As described above, compensation metrics are provided for positions within twelve departments at middle-market fixed-income dealer businesses including sales, trading, compliance, operations and technology, research, risk management, public finance, investment banking and accounting as well as compensation for executive “C-suite” positions. Median executive level total compensation in 2012 was \$886,000 for the head of the broker-dealer, or senior broker-dealer executive (maximum of \$3.2 million), \$1,000,000 for the head of fixed-income (maximum of \$2.245 million), and \$392,000 (maximum of \$910,000 million) for the chief financial officer (CFO) compared to \$516,898 for the head of the broker-dealer (maximum of \$3.9 million), \$426,858 for the head of fixed-income (maximum of \$3.1 million), and \$361,351 (maximum of \$1.8 million) for the chief financial officer (CFO) in 2011 or as reported in last year’s survey.⁴
- **Average Bonus Trends Up from 2011, Higher than 2007 Pre-Financial Crisis Year Levels. Trends Reflect Market Conditions, Revenue Trends, Industry Profitability (Bonus Trends By Position, 2007-2012 Section III-A); Higher Fixed-Income Revenues Expected in 2012, Likely to Affect 2013 Bonus**
Bonus trends from 2007 to 2012 are presented for all positions to the extent that the statistical comparison was meaningful. Reflecting business conditions, the average median bonus across departments decreased by 33% from 2007 to 2008, increased by 16% from 2008 to 2009 and 71% higher between 2008-2012 and 19% between 2007-12. It is the first time the average bonus was higher than the pre-crisis 2007 in the five-year survey history. Between 2011 and 2012, the average median bonus rose in every department, and increased in 35 of 45 positions where such comparisons are meaningful. The average departmental bonus rose in 2012 compared to 2011, as well as on a position-level basis

⁴ Year-to-year comparisons are meaningful but qualified by the fact that the responding firms may differ year over year, that is, some of the firms that responded in 2013 survey may not have participated in 2012 and *vice versa*. The majority of the firms that participated in 2013 also participated in the 2012 BDA Fixed-Income Dealer Compensation Survey.

regardless of department, by over 50% recovering from 2011. Taking into account the 2010-11 declines, the departmental average median increase was 28% 2010-12 on a position by basis by 19%.

With a forecast of stronger revenue trends across sectors in 2013 according to the survey, it is reasonable to expect a directionally similar bonus performance in executive-level bonus trends in next year's survey covering year-end 2013. Keep in mind that the survey responding firms may change slightly from survey to survey year, and this is the fifth year of the BDA Compensation Survey.⁵

As would be expected, salary trends were less volatile than the more discretionary bonus, flat in 2012 but a 12% over the last two years. The average median salary by department increased in 10 of 12 departments surveyed in 2012. The average median position increase was 12% in 2012 after being essentially in 2011.

- **Senior Trader Bonus is Higher Than Base Salary Across Fixed-Income Asset Classes; Senior Trader Compensation Generally Higher for Senior Traders in 2012, Reversing a Recent Trend (National Bonus Trends By Positions Trader Compensation – Section IV)⁶**

The average median 2012 salary across fixed-income asset classes was \$140,375 (above the \$112,000 in 2011, \$120,142 in 2010, \$129,000 in 2009 and the first year's survey of \$125,000) and bonus \$278,397 (higher by 25% than 2011 and the ending three consecutive years of declining average median bonus trend)⁷ for all senior traders with dispersion above and below that average depending on the market sector – municipal, corporate, money market, securitization and Federal agency/government. Where sufficient data were available for the market sector, data were provided for mid-level and entry level traders, as well. There was sufficient reporting to compute data for most sectors at the mid-level trader classification, and for entry-level municipal and corporate traders.

For the third consecutive year, a statistically meaningful number of firms reported paying traders commissions as well as bonus and salary. The average median senior trader level commission across markets among the firms that paid commissions was \$263,574 compared to \$361,151 in 2011 and \$240,507 in 2010. Frequently, firms paying commissions did not pay salaries. (Note that only firms paying a commission were included in the trader commission metrics, and not all firms were included in the commission statistical calculations.)

⁵ Note that any discrepancy between the multi-year table bonus comparison (Section III-A) and this year's Compensation Survey (Section III) results would reflect differences in 2011-12 bonus data as reported in this year's Compensation Survey, and the Section III-A which reflects bonus data from the entire survey history period encompassing the four previous surveys. The multi-year comparisons are based on Section III-A table results. The same comment holds for the multi-year salary table found in Section III-B.

⁶ There may be a small number of firms that provided aggregate trader compensation by position data but did not provide a response to this section in which trader compensation is segmented by market sector, which would explain any small discrepancies in trader data between the two sections (Sections III and IV).

⁷ Comparisons between this year and previous years' survey results should be made with care. The survey populations (or firms responding to the survey among years) differ slightly year-to-year. That is, a small number of some firms that participated this year did not participate last year and *vice versa*.

Average median total senior level trader compensation was \$441,000 ranging from \$267,500 for money market traders to \$500,000 for MBS/ABS traders. Average median total senior level trader compensation in 2011 was \$394,090, ranging from \$176,000 in the money market sector to \$447,759 in the municipal sector in 2011. Average median total senior level trader compensation in 2010 was \$495,688, ranging from \$240,000 in the money market sector to \$685,000 in the ABS/MBS sector in 2011.⁸ (See Methodology Annex for the definition of “total” compensation.)

- **Range of Payouts on Trades: Higher for Secondary than Primary Market Trades; Payout Rates Marginally Higher Compared to Last Year (Compensation Policies – Section V)**

Responses indicate a wide range of compensation practices on payouts to sales professionals from net transaction/trade revenues⁹ but typically were between 25% and 40% in the 2012 and 2013 surveys. Average compensation to institutional sales professionals on all trades (primary and secondary market) was typically concentrated in the 30% to 40% range in both 2012 and 2013 surveys with responses in most sectors clustered in the 30% to 35% range. Retail trade compensation to sales professionals similarly was concentrated in the 30% to 40% range across fixed-income market sectors in the 2013 survey as was the case in 2012. Retail payouts were more concentrated in the 35% to 40% in this year’s survey for all trades with distinctions between the primary and secondary market and among market sectors.

Secondary market trade payouts

Firms reported a range of institutional secondary market (“off the run”) trade payouts from below 30% to 50% but with the most typical responses between 35% to 40% across market sectors in this year’s survey. Retail secondary market trade payouts were concentrated between 30% and 40% with taxable market payouts typically 30% to 34% and municipal trade payouts 35% to 40%.

Primary market trade payouts: Taxable

The middle-market dealer firms responded to primary or new issue market retail trade payouts with a wide range of responses from below 20% to 50%. About 60% of the firms indicated government/agency trade payouts between 30% and 40%. Half of the corporate bond primary market responses were above 30% and half below 30%. Roughly 60% of the securitization market new issue payouts were above 35%, and the balance below 35%, excluding those that responded that the payout is “variable,” dependent on production.

In the 2012 survey, primary or new issue market retail trade payouts were typically in the 30% to 34% range. In general, payouts for institutional primary market trades in the government and ABS/MBS markets were typically in the 30% to 40%, though with some

⁸ More generally, apparent inconsistencies between the sum of the average commission, bonus and salary relative to average total compensation reflects the inclusion of all firms in the “total” compensation calculation but only those firms that pay commissions (bonus) in the commission (bonus) averages. As noted above, some firms will pay a bonus (more frequently) or a commission but not both a bonus and commission. See the Methodology annex for a fuller explanation.

⁹ A small number of firms used alternative metrics for payout based on a firm-wide calculation of profits and individual production volume rather than on a transaction basis and are excluded from this calculation.

reporting lower payouts. The majority of the firms reported primary market institutional corporate bond trade payouts below 30%.

Primary Market Trade payouts: Municipal

2013 survey: Institutional competitive municipal bond sale payouts were reported as between 30% and 40% by 82% of the firms with the balance of the firms reporting lower payouts. In the negotiated sales segment, about 57% reported institutional municipal sales between 30% and 40% with the balance of the firms of the firms reporting less than 30% payouts.

In the 2012 survey: Institutional competitive municipal bond sale payouts were reported as between 30% and 40% by 80% of the firms though with some firms reporting lower payouts. By contrast, there was about the same number of firms reporting institutional negotiated municipal sales above 30% and below 30%.

Public Finance Banker Payouts

There was a wide range of practices regarding public finance banker payouts (less than 5% to 50% with greater dispersion in competitive sales) with a median in the 25% range for negotiated municipal bond sales and lower (13%) for competitive sales. Among firms that do not distinguish between competitive and negotiated sales, the average payout was in the 28% range with responses ranging from 20% to 50%.¹⁰ Taking all of the responses together, the median was 22% payout for bankers. For traders, the median competitive primary market municipal payout was in the 5% for the negotiated sector and competitive sales. Including all responses including those firms that did not distinguish between competitive and negotiated payout practices, the median was in the 25% range. The median was 11% for all responses regardless of type of municipal bond sale.

- **Diverse Policies Regarding Trader Bonus Pay (Compensation Policies – Section V)**
Of those reporting such information in 2012 (this year's survey), virtually all middle-market firms paid institutional traders cash bonuses, about a third paid an equity bonus, and 17% paid undisclosed "other" forms of bonus. Retail trader bonuses were paid a cash bonus at virtually all firms and 10% paid an equity bonus. (Fewer firms reported retail trader bonus information than institutional trader bonus information.) About 58% of the cash bonuses are paid annually and balance pay bonuses either on a quarterly (8%), semiannual (17%) or "other" basis (17%).

Of those reporting such information in 2011 (last year's survey), about 70% paid institutional traders cash bonuses (with the balance paying bonuses in equity or undisclosed "other" forms) and all of the firms that paid retail traders bonuses paid the bonus in cash. About 70% of the cash bonuses are paid annually and balance pay bonuses either on a quarterly, semiannual or "other" basis.

Of those reporting such information for 2010, about 67% paid institutional traders cash bonuses (with the balance paying bonuses in equity or undisclosed "other" forms) and all of the firms that paid retail traders bonuses paid the bonus in cash. About 60% of the cash

¹⁰ There were insufficient responses to report results on the taxable investment banking side.

bonuses were paid annually, and the balance pay bonuses either on a quarterly, semiannual or “other” basis with the non-annual responses.

- **Most Firms’ Sales Professionals are Paid Commission Only But More Firms Report Paying Sales Professionals Both Commissions and Salary/Bonus (Compensation Policies – Section V)**

Dealer firms paid their sales force on a commission only basis in 2013 at approximately 62% (compared to 70% in 2012) of the reporting middle-market fixed income dealer firms and a combination of salary/bonus and commission is paid at 15% (15% in 2012). That is, 77% (85% in 2012) of the firms paid their sales force commissions, and 25% of the dealer firms paid their sales force salary/bonus only.

By contrast, dealer firms paid their sales force on a commission only basis at 87% of the reporting middle-market fixed income dealer firms in 2011, and a combination of salary/bonus and commission is paid at 13%. In 2010, 77% reported paying on a commission-only basis (and 23% salary and bonus only) and 90% reported paying commission-only in 2009.

- **Dealer Firms Indicate Bonus Metrics Trends Focused on a Combination of Objective and Subjective Criteria, a Shift From More Diverse Practices Across the Middle-Market Firms Weighted Towards Objective and Measurable Criteria (Compensation Policies – Section V)**

The majority of firms pay bonuses across professions in the sales, trading, investment banking and public finance groups based on measurable objective criteria or a combination of subjective and objective criteria in 2012 as in 2011. However, there was a shift to basing a bonus on a combination of quantifiable or objective criteria and subjective criteria from basing a bonus solely on objective or subjective criteria with most of the shift being from objective criteria to a combination. In fact, most of the firms reported, across all professional categories, that they based on bonuses on a combination of subjective and objective criteria. It should be kept in mind that, while the survey responding middle-market firms are generally year over year, certain firms enter and exit the survey population from year to year.

In this year’s survey, 17% of the firms base the bonus solely on objective and 9% on subjective criteria (74% on a combination of objective and subjective criteria) across all professional categories, e.g. sales, trading, public finance etc. Nearly half (48%) based bonuses exclusively on objective and measurable criteria across professions in last year’s survey.

- **Most Firms Have Deferred Compensation Programs (Deferred Compensation/Retirement Programs – Section V)**

Virtually all firms (91% in 2011, 2012 and 2013) have deferred compensation retirement programs and those that do not have such programs generally offer profit sharing. The deferred compensation is generally based on a formula rather than a fixed amount. This year the formulas were typically (but not always) tied to employee contribution levels (e.g. 50% or 100%), generally up to a maximum employer contribution level.

- **Staffing Growth for 2013 (Revenue & Staffing Trends – Section VI)**

Unlike much of the financial services industry, middle-market fixed-income dealer staffing was either increasing or flat across market functional and departmental areas in 2013. These trends are consistent with the reported average higher FTE levels among survey respondents than in last year's survey. Despite reported financial staffing cuts especially at some large global banks, the majority of the dealer firms expected the staffing level to stay the same for 2013. The survey responses indicated the greatest proportion of planned staffing increases in revenue generating areas or profit centers. The exceptions to a stable employment outlook were institutional sales (62%) and where the majority expected increased staffing for the second consecutive survey, and 54% expect public finance headcount to increase. About 38% of the firms expect increased staffing in institutional trading and 27% in retail sales. Reflective of the increased regulatory requirements, 38% of the firms expect compliance staffing increases. There was no indication of a net decline in any department among the survey participants except in institutional trading where only 8% expected a decline.

- **Revenue Trends: Firms Reported More or Stable Revenue Across Most Sectors in 2012; Higher or Stable Revenues Expected to Gain in 2013 with Expectations Weakest in the Municipal Sector which Accounts For Half of Revenues (Revenue & Staffing Trends – Section VI)**

Although the revenue mix diverges among the middle-market firm participants, the average response was that the municipal bond products account for half (50% of total fixed-income revenues), followed by corporate bonds and MBS.

The majority of the firms reported revenue increases in most product sectors in 2012 in MBS/ABS, corporate bond and municipal sectors. More (45% vs. 36%) indicate a revenue decline in U.S. governments/agencies.

The consensus was for continued upward trend in 2013, although with more moderation. About 30% expect increased revenues and 27% expect stable revenue trend in the municipal bond sector with 46% expecting a decline. The most bullish expectations, based on corporate issuers looking to lock in rates reduced the exposure to a potential rate hike and the securitization sector rebound combined with agency MBS trends are: corporate bond sector with 73% expect increased revenues, and 10% expect stable revenues; and MBS/ABS with 60% see a revenue increase and 20% see stable revenues. The middle-market firms expect U.S. government/agency sector revenues to increase based on 36% of the response and be stable based on 45% of the responses. Of course, revenue fixed-income revenue outlook is sensitive to interest rate outlook, and the survey was taken prior to the spike in rates at mid-year following Fed policy statements.

- **Operations and Technology Expenses Trending Lower Longer Term (Operations & Expense Trends – Section VII)**

Middle-market firms have generally reduced operating expenses significantly as a percentage of fixed-income revenues between 2007 and 2012 though with some year-over-year fluctuations, according to most of the survey's statistical measurements. The technology expense to revenue ratio has increased slightly over the time period, perhaps

reflecting increased technology investment at middle-market dealer firms. In 2012, technology and operating expense ratios were relatively flat, down slightly, while market data expense (Bloomberg and other vendors) ratios were higher. Most firms (90+%) do not outsource the technology function.

II. Analysis of Results by Section

An analytical discussion and summary of each set of tables that comprise the five sections that follow (III-VII) are presented in this Section II. The actual tables may be found in the sections that follow, Sections III-VII.

Section III. Compensation: Salary, Bonus Commission and Total and III-A Bonus Trends: 2007-11 and Section III-B Salary by Position 2008-11

As noted in the Executive Summary, aggregate compensation data are presented for 49 positions across national, regional,¹¹ full-time equivalents (FTE) and revenue peer groups compared to 48 positions in the 2012 BDA Fixed-Income Compensation survey with summary metrics presented. The data are presented in the Section III tables through diverse statistical measures of tendency – averages, medians, maximums and minimums. Section III-A presents trends and comparisons in median bonus compensation for 2007-12 by department and position, and Section III-B makes a similar comparison of base salary from 2008-12.

Some key summary observations at the national aggregate level:

Bonus Trends

- As data were collected for 2011 and 2012 in this year's survey,¹² changes in bonus payments between 2011 and 2012 can be directly compared. The 2011-12 bonus trends can also be compared to 2007-10 bonus data from the four prior BDA compensation surveys. The comparison from 2007 through 2010 should be made with some caution and perspective. The survey populations from the previous years' surveys may vary slightly from this year's survey (but are generally the same) from this year's survey – that is, a small number of firms that participated in this year's survey did not participate in the earlier surveys and *vice versa*, and indeed survey participation was higher in the three most recent survey years than in the two previous years' surveys with several new participants this year.
- Taking that qualification into account, the average median bonus by department is substantially higher in 2012 by more than 50% compared to 2011 and by 28% 2010-12 (19% by position). Compared to 2007, the year before the financial crisis, the average median survey by department and position is 18% higher in 2012, suggesting that bonus levels appear to have finally fully recovered from the crisis period. This is the first year that the current year bonus average was higher than 2007. The 2012 median departmental

¹¹ The sum of reporting firms among all the regions may exceed the national total as some firms reported multiple primary operating regions.

¹² Each year, the current year and previous year bonus was reported. Where 2008 bonus medians were not statistically significant and not reported in the BDA 2010 Compensation Survey, when available, the first year's Compensation Survey (2009 survey) response for 2008 was reported. Similarly, when the 2011 bonus responses from the 2013 survey were not statistically significant, the 2011 bonus data were taken from last year's (2012) survey.

bonus is more than 50% higher than the average median bonus in 2008, the height of the crisis. As reference, the median bonus fell 33% in 2008.

- Reflecting underlying business trends, all departments had an increase in average median bonus (with “NA” for one department) and 35 of 45 of positions showed a higher bonus in 2012 compared to 2011.¹³
- Executive level bonus compensation decreased by 26% in 2008 and by 25% in 2009 reflecting the financial crisis but increased by 44% in 2010 reflecting the recovery. The average executive level bonus increased by 74% in 2012, 45% over the last two years reflecting a dip in 2011. The bonus turnaround at the executive level may be the result of the relative strength of 2012 market performance consistent with the revenue performance across sectors in 2012 as reflected in the survey responses regarding revenue trends in 2012 by market sector.
- The survey results indicated expectation of generally continuing revenue strength, though with slight moderation, in fixed-income revenues in 2013, depending on the rest of the year as rates edge up as well as municipal market volatility. Should the expectations hold up, a similar upbeat bonus trend for 2013 may well occur.
- The median of all positions regardless of department showed the average bonus up over 50% recovering from a 23% decline in 2011 (19% increase over the two-year period), with the shifts largely attributable to turnarounds at the executive positions and heads of some departments and to a lesser extent senior positions reporting to department heads. The most significant bonus increase on a percentage basis from 2007 to 2012 was retail trading followed by public finance and then research and compliance. (Section III-A)

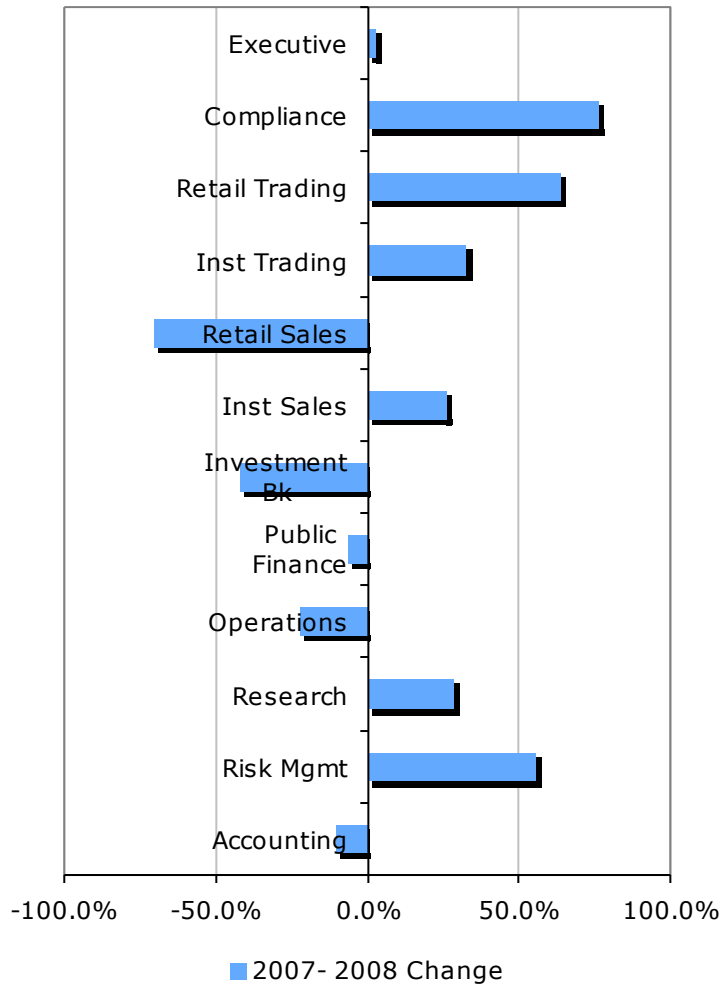
The analysis above offers two conclusions. Since the depth of the crisis, average bonus levels have recovered. Bonus trends in 2012 were stronger consistent with revenue growth in 2012 compared to 2011 based on middle-market firm survey responses to the revenue growth question. As we discuss in a later in this Analysis section and in the Executive Summary, respondents expect 2013 revenue to generally be up across sectors which is likely to be reflected in next year’s survey reported 2013 year-end bonus data.

The graphs below depict changes in the average median bonus between 2007-2008, 2008-2009 and 2011-2012 by department. The graphs which compare pairs of years’ bonus information from the same survey (e.g. 2007-2008 data from the first survey) overcome the problems with comparing results across surveys considering that the survey populations or

¹³ Two facts to keep in mind: some firms gave both 2011 and 2012 bonus data in this year’s survey while others chose to provide bonus data for only one of the years and thus there are some differences in the 2011 and 2012 data sets even within the same 2013 survey; and those occupying the most senior positions may have changed between the years of the survey given the continuing turnover in the industry and the market which affect 2011-12 bonus comparisons. Therefore, 2011 and 2012 bonus data may not be fully comparable, but such a comparison does provide a reasonable basis for trend analysis. To an even greater extent, the same comment is true in comparing 2007-2010 data as they come from earlier editions of the BDA Fixed-Income Dealers Compensation Survey series.

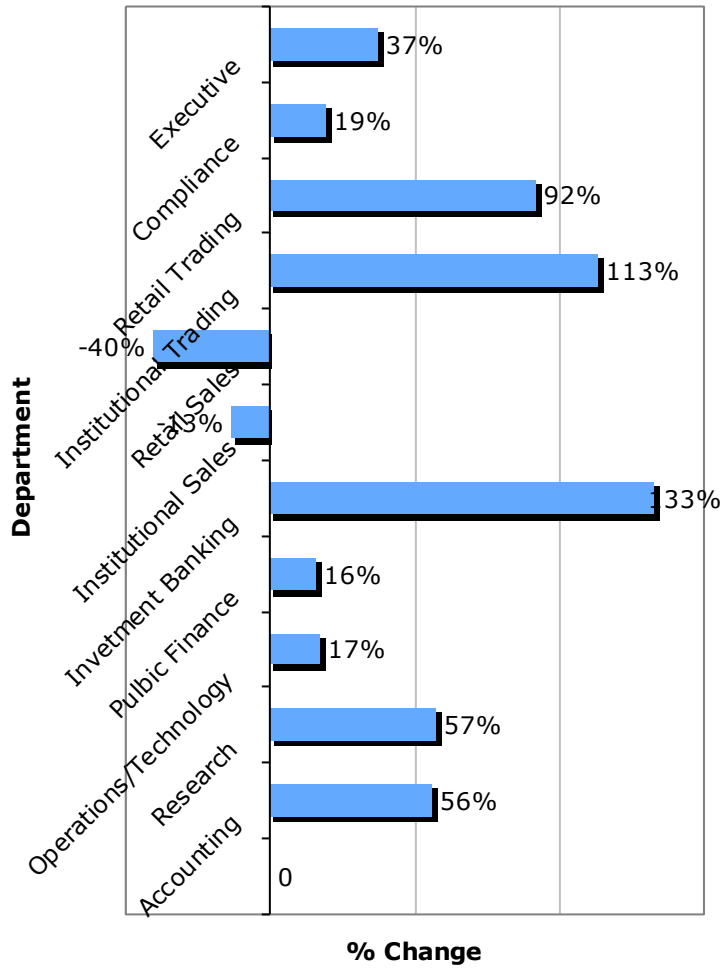
participating firms change slightly from survey to survey year.¹⁴ For example, there were more participating firms in the two most recent surveys than in the first two surveys.

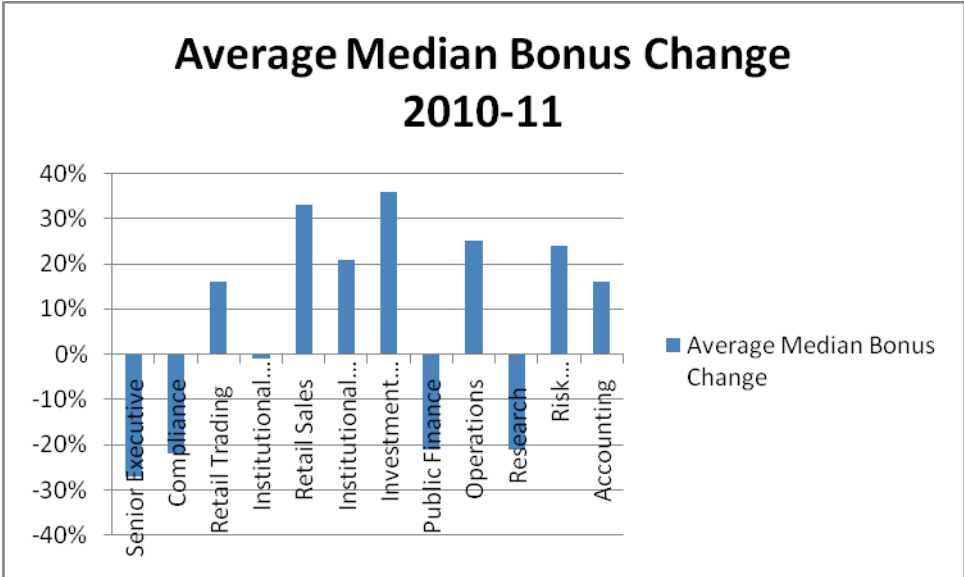
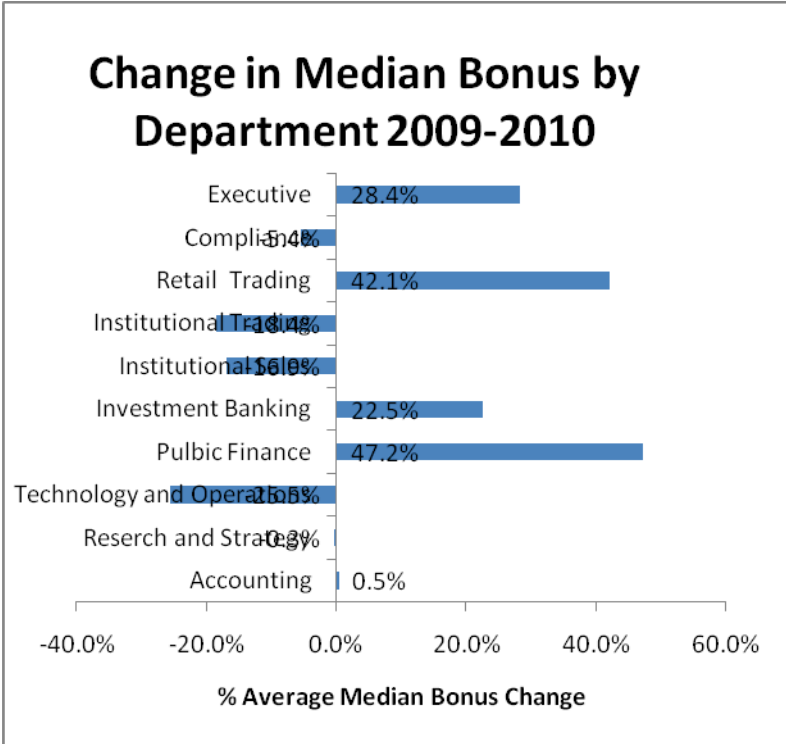
Change in Average Median Bonus By Department- 2007-08



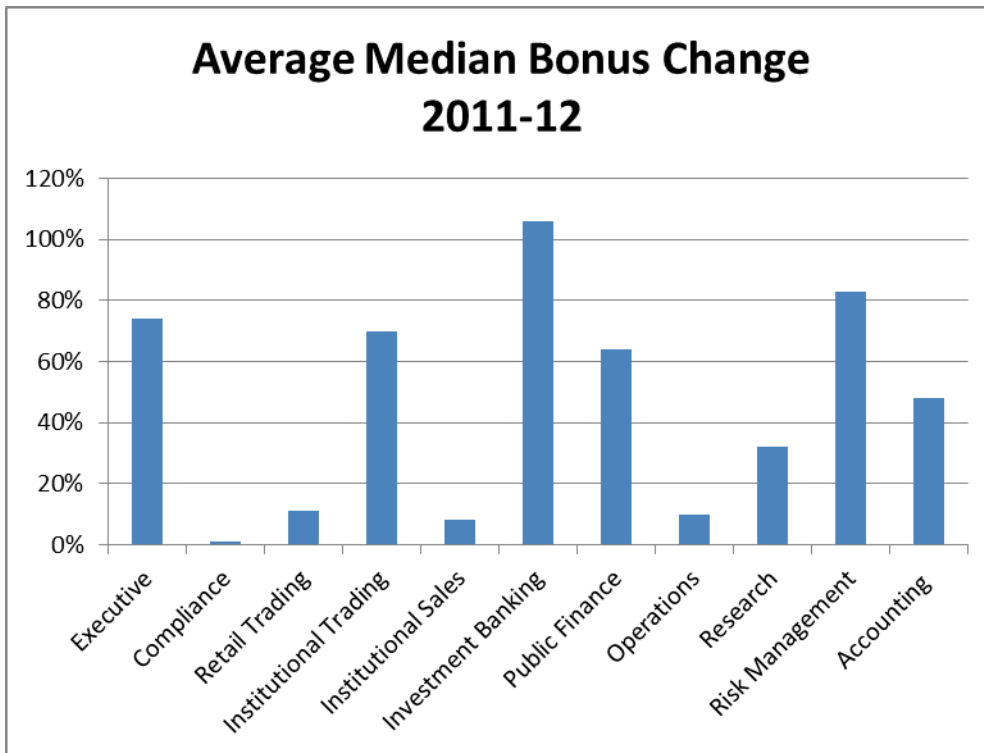
¹⁴ The 2007-2008 charts are reprinted from the 2011 survey and the second chart from the 2012 survey. Any differences in 2008-2011 bonus trends from the Section III-A chart is due to differences in the survey populations.

Change in Median Bonus By Department, 2008-2009





Note: Head Technology is excluded from the Operations Department Calculation as its increase was an outlier



Total Compensation Trends

Note that commission results are reported only for firms that paid commission to that position and exclude firms that did not report commissions for a particular position.

- Executive:** Salary payments accounted for less than half of the median total compensation for heads of fixed-income and the broker-dealer, as well as fixed-income chief financial officer in 2012. Note that some but a small minority of senior executives were also paid commissions which explains the difference between total compensation and sum of median salary, commission and bonus (e.g. commissions were included in total compensation at firms in which commissions were paid but in some cases commission responses were not statistically sufficient to calculate commission averages). Reflecting the stronger 2012, the median bonuses for head of fixed-income and broker-dealer were up by 56% for the senior broker-dealer executive and more than double for heads of fixed-income in 2012. The median bonus payout for the chief financial officer (CFO) was higher in 2012 by 17%. In 2012, the median CFO bonus was higher than the base salary, reversal from 2011. There was a wide range of bonus payments in 2012 at the executive level: \$95,000 to \$2.9 million for the broker-dealer senior executive; \$60,412 to \$2 million for the head of fixed-income; and \$56,000 to \$660,000 million for CFO. The average bonus increased between 2011 and 2012 for heads of fixed-income and the broker-dealer, a reversal from the previous survey but consistent with the longer trend over the five year survey history.
- Compliance:** Department median salaries ranged from about \$47,063 for entry-level to \$193,825 for the head of the department. Median bonus payments were about 4% of salary at the entry-level and 50% for the head of compliance. The average and median bonus increased in 2012 for two of the four positions.

- **Trading:** The number of firms reporting institutional trading compensation was much higher than on the retail side.¹⁵ Total compensation for the head of trading ranged from approximately \$224,829 to \$600,000 for retail and \$225,000 to \$2.8 million for institutional trading. Bonus payments relative to salary were higher at senior positions and relatively lower at more junior positions on both a median and average basis. While most firms did not pay traders commissions, commissions were substantial at trader commission-paying firms and in some cases were apparently a substitute some of the bonus payment. Trader commissions have been higher in the last four surveys than the first survey. Average and median trader bonus payments were generally higher in 2012 than in 2011, again especially at the more senior positions, which was reversal of the 2011 trend, explained due to better revenues than the previous years as represented by the responses to revenue trends by sector questions in this year's and last year's survey. The 2012 median bonus for the head of retail trading was about \$373,684 and \$561,842 for the head institutional traders, and the average bonus on retail side was \$301,228 and \$684,444 on the institutional side based on survey responses. The median senior institutional trader bonus was reported as higher at \$262,500 than that of the retail trading counterpart, \$223,553.¹⁶
- **Sales:** All firms reported compensation for institutional sales professionals but fewer reported retail sales professionals. Only the retail senior retail sales generated statistically significant response with total compensation ranging from approximately \$391,378 to \$266,024 with median compensation of \$328,701. Institutional sales total compensation medians depending on position ranged from \$83,849 to \$800,000. Of course, the dominant source of compensation was commission for sales professionals. Median 2012 institutional sales commissions went from \$42,053¹⁷ to \$575,357, depending on the position.¹⁸ The maximum 2012 institutional sales head annual commission reported was \$800,000 and senior sales professional was \$677,000 on the institutional side, although bonus payments showed an increase at most position levels this year. Note that "0" commission or "0" bonus response is not part of the commission or bonus calculation but incorporated in total compensation calculation. (See Annex A for further details.) Those firms not paying commissions for the sales position tended to compensate the sales professional at a lower level.
- **Taxable Investment Banking (excluding Public Finance):** A smaller number of firms than in most functional categories reported investment banking compensation and thus the statistical calculations should be analyzed with some caution, although the number of firms reporting investment banking compensation was higher in this year's survey. Median total compensation packages ranged was \$961,125 for head of investment banking to \$168,211 for an entry-level investment banker.
- **Public Finance:** Total compensation medians ranged from \$60,000 (public finance assistant) to \$600,000 (public finance head) in 2012, higher levels than in 2011. Bonus

¹⁵ Note that a few firms combined their institutional and retail sales and institutional and retail trading responses. They were classified as either institutional or retail depending on the firms' stated preference but typically were reported and tabulated as institutional sales or trading. Note also that certain firms reported "retail traders" but not "senior retail traders."

¹⁶ See Section IV for presentation of trader data by market sector.

¹⁷ There were insufficient responses to calculate entry-level institutional commissions.

¹⁸ The survey response rate was much stronger for institutional sales than retail sales.

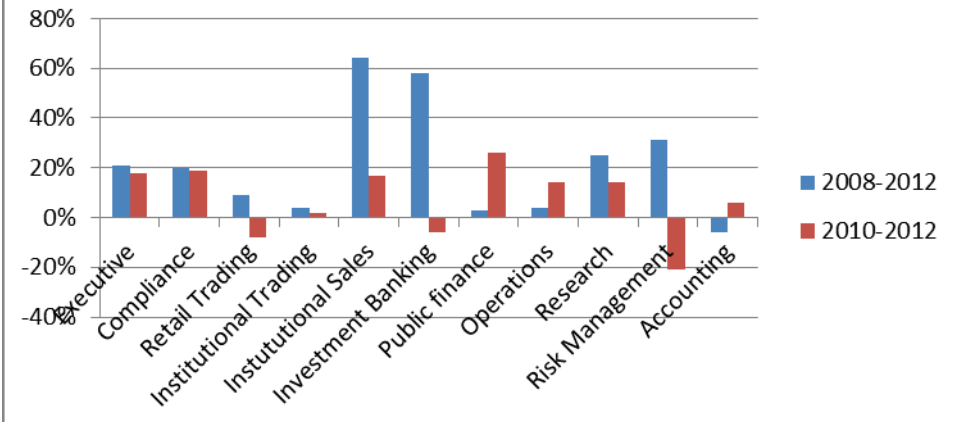
trends from 2011 to 2012 were higher across all positions on a median basis ranging from \$6,597 to \$400,000 depending on seniority. The total compensation range for the head of public finance banker went from \$225,000 to almost \$1.9 million.

- **Operations:** Total median compensation ranged from \$50,674 for entry-level operations analyst to \$205,353 for head of operations (\$170,000 for the head of technology position). The average and median bonus increased across all positions in 2012 compared to 2011 except for operations head. The median base salary was higher than median bonus across the positions in the operations and technology group.
- **Research:** The 2012 average bonus was higher than the salary for the research head while median salary was higher than bonus at the research positions reporting to the head of research. The median 2012 bonus ranged from \$14,996 at entry-level (much higher than in last year's survey) to \$210,000 depending on position. The head of research total 2012 compensation ranged from \$250,000 to \$710,000, depending on the firm, a slightly wider differential than in 2011.
- **Risk Management:** More firms reported risk management positions than in previous years but still less than other departmental positions in other departments. The two positions had statistically significant responses, chief risk officer and risks analyst, reflecting the growing importance of risk management. The number undoubtedly will increase in the coming years. The chief risk officer's median compensation in 2012 was about \$543,333, higher than 2011 with a range of \$515,000 to \$585,000. The median risk analyst compensation was \$230,000 ranging from \$155,989 to \$240,000.
- **Accounting:** Median total compensation ranged from \$43,700 at the accountant level to \$223,247 for the controller to \$363,000 for the head of accounting, substantial increases over 2011. The responding firms on a median basis paid the accounting department staff higher salaries than bonus, although the median bonus for the head of accounting was nearly 75% of base salary in 2012.

Salary Trends: 2008-2012

For now the second year, median salary trends by position are provided across the entire survey series, from 2008-2012, similar to the bonus data presentations discussed above. The tabular presentation is shown in the Section III-B table below and, similar to the Section III-A presentation of multi-year bonus trends, presented as median averages by department and for each position. As would be expected, base salary trends have been smoother and less volatile than the more discretionary bonus trends but still reflect individual and firm performance. The average median salary across positions was up 16% in 2012 after a dip in 2011 and 11% 2010-12. On a per position basis, the median average salary was up 13% after being flat in 2011. The median salaries across positions are up by 24% since the survey series started (6% average annual increase) in 2008 and by 11% over the last two years (5.5% annually). On a departmental basis, the trends are up 26% and 11% respectively. The largest salary increases on a percentage basis were in institutional sales and investment banking.

Average Change in Salary by Department 2008-12 vs. 2008-10

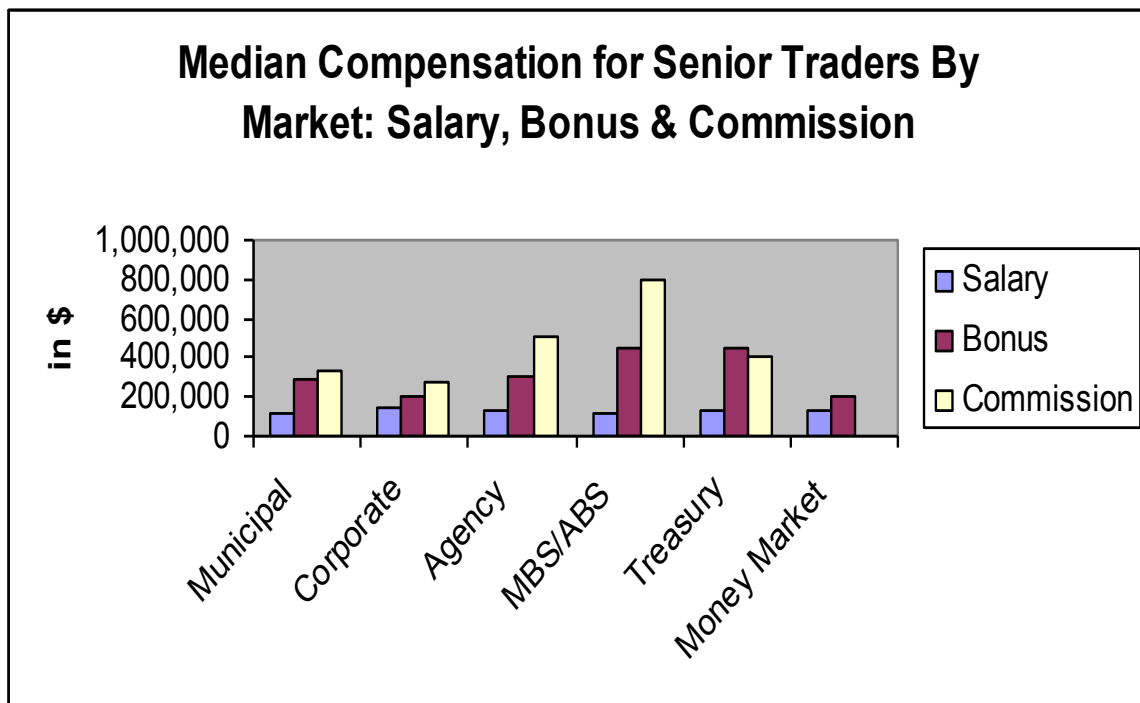


Section IV. Trader Compensation by Fixed-Income Sector

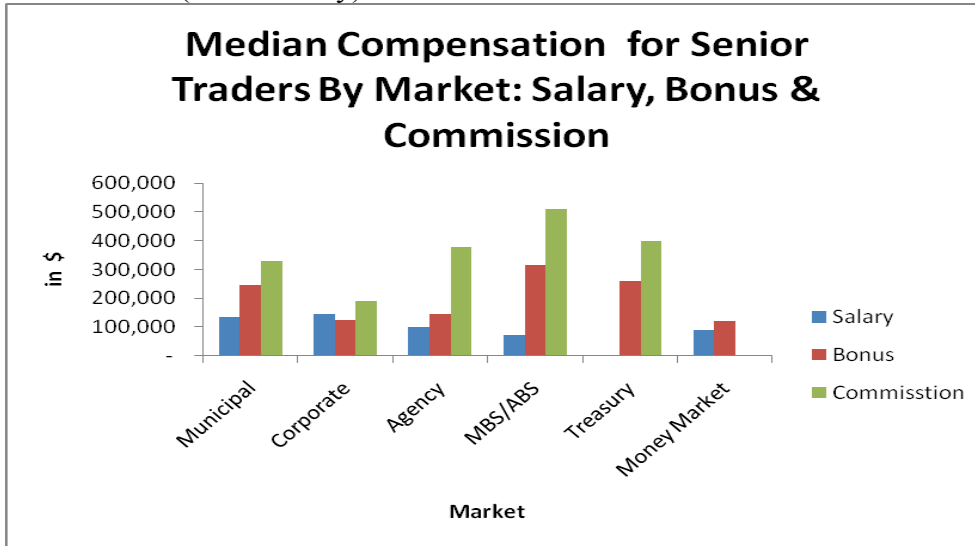
To gain greater insights into trader compensation, the survey asked for 2012 trader compensation by market sector, and averages, medians, maximum and minimum were calculated when there were sufficient responses. There have been more complete and more numerous responses to the trader compensation by sector data question in the last three surveys than the first two surveys. For most market sectors, there were sufficient responses at the senior and mid-level trader levels at the national level to calculate statistical trends with the largest number of responses at the senior level but only sufficient responses for the municipal and corporate (to a lesser extent) sectors at the junior or entry-level trader. There were only sufficient responses for some but not all of the market sectors for sub-national peer group (based on full-time equivalent or FTE and fixed-income revenue) calculations. More complete responses generally were provided by the larger FTE and fixed-income revenue groups. There were sufficient responses to present smaller FTE and fixed-income revenue peer group results.

Median senior trader results for the last three surveys are provided. Note that additional detail is provided in this year's survey.

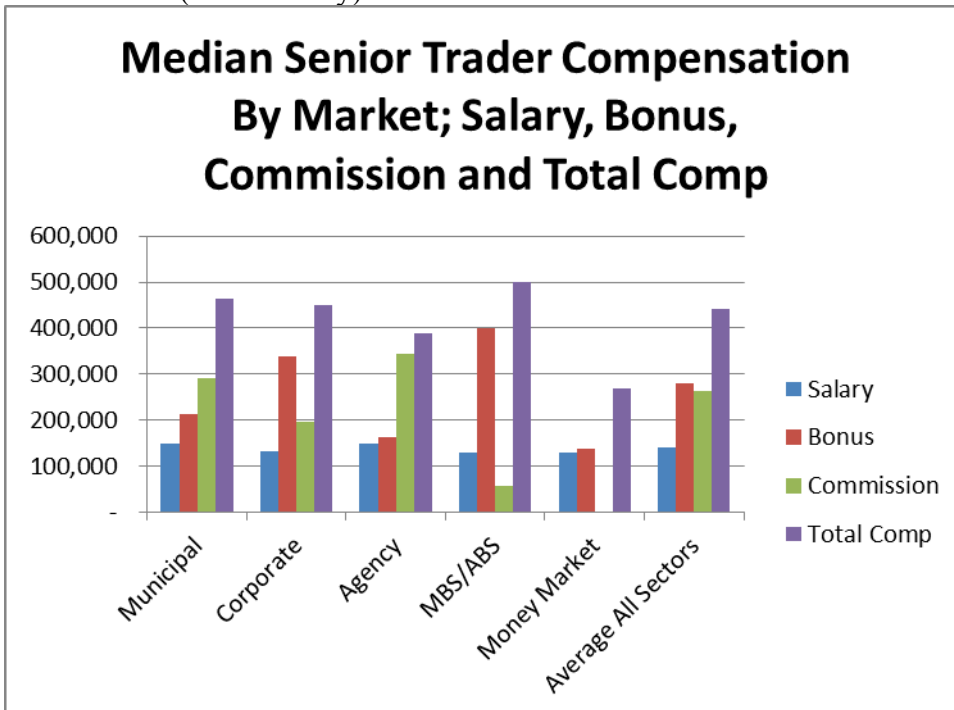
2010 Results (2011 Survey)



2011 Results (2012 Survey)



2012 Results (2013 Survey)



Note: No response to a form of compensation, e.g. money market sector commission, indicates that there were insufficient responses to provide a statistically meaningful result.

Please refer to the trader compensation tables in Section IV for the detailed compensation data including maximum, minimum, median and average responses across sectors and by trader seniority – senior, mid-level and entry level.

The highlights:

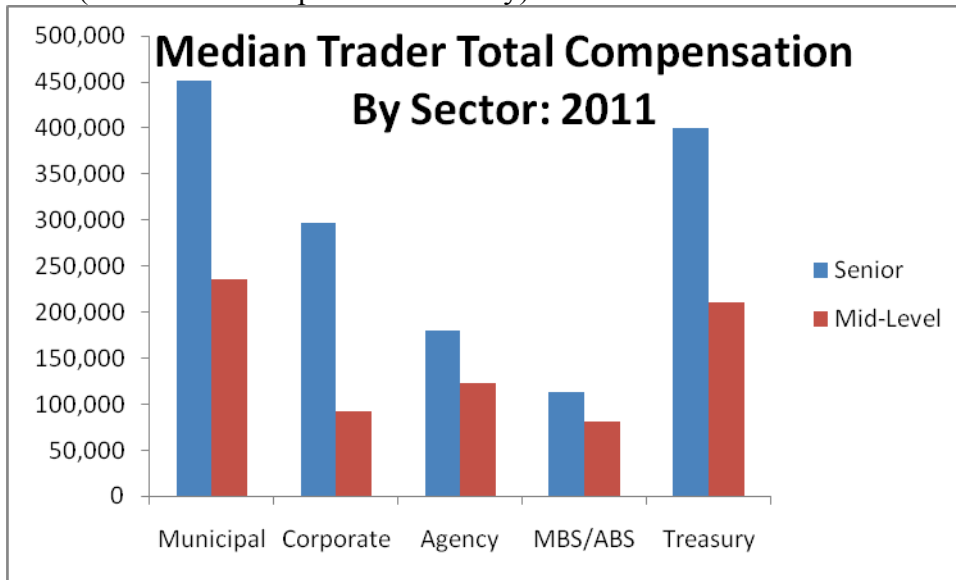
Senior Trader-National Trends

- The senior trader median bonus was consistently higher than the base salary in 2012 as it was in 2011 and 2010. Salary as a percentage of salary plus bonus increased as we move to more junior positions.
- For 2012, senior trader median salaries ranged from \$130,000 (MBS/ABS and money market) to \$150,000 (U.S. agency and municipal bonds) with an average of \$140,375 and bonuses from \$137,500 (money market) to \$400,000 (MBS/ABS) with an average of \$278,397. For comparison, the senior trader median salaries ranged from \$104,000 (money market) to \$129,000 (municipal) and bonuses from \$160,000 (corporate) to \$306,914 (Treasury) in last year's survey covering 2011 trader compensation; and senior trader median salaries ranged from \$71,150 (MBS/ABS) to \$145,000 (corporate bonds) and bonuses from \$120,042 (money market) to \$315,206 (MBS/ABS).
- For the fourth consecutive year, enough firms reported commission payments to calculate statistical trends in most sectors with medians among responding firms for senior traders ranging from \$57,606 for MBS/ABS to \$343,204 for U.S. agency. For comparison, in last year's survey, the median commission range for 2011 ranged from \$190,104 for corporate bond traders to \$510,925,000 for senior MBS/ABS traders. (Note not all firms – and indeed most firms did not - report commissions and thus only the dealer firms that report “non-zero” trader commission data are included in the commission data metrics.)
- The average median total compensation for senior traders (inclusive of salary, bonus and commission) ranged from \$267,500 for money market to \$500,000 for MBS/ABS.

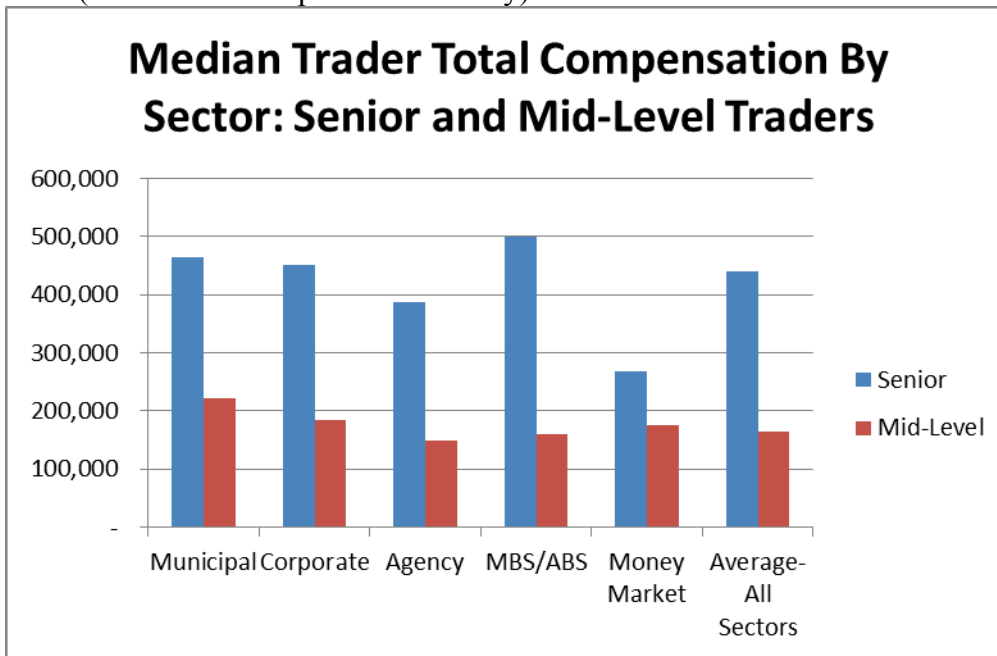
Mid-Level Traders-National Level

- In this year's survey (2012 data): intermediate (or mid-level) level trader median base salary ranged from \$77,500 (U.S. agency) to \$100,000 (MBS/ABS) and bonus from \$46,067 for U.S. agency to \$105,332 for corporate bond traders. In last year's survey (2011 data); intermediate (or mid-level) level trader median base salary ranged from \$58,536 (U.S. agency) to \$125,000 (money market) and bonus from approximately \$11,667 for money market to approximately \$143,727 for MBS/ABS.
- Total comp for mid-level traders ranged from \$149,504 (U.S. agency) to \$221,667 for municipal bond traders.

2011 (2012 BDA Compensation Survey)



2012 (2013 BDA Compensation Survey)



- There were sufficient firms reporting compensation for entry-level traders in only the municipal and corporate markets Median entry level municipal bond trader trade comp was \$102,103 and \$112,500 for entry-level corporate traders.¹⁹ The total municipal median entry-level compensation was \$78,300 in 2011 and \$145,000 in 2010. Last year, there were only a sufficient number of firms reporting for the municipal bond sector.

¹⁹ Only statistically meaningful data based on number of responses are reported.

Sub National Peer Groups

- The lower fixed-income revenue peer group (less than \$60 million in 2012 annual revenues) had higher average median salaries than the higher fixed-income (above \$60 million in 2012 fixed-income revenues) across trader seniority levels. However, the higher revenue peer group paid larger bonuses at the senior and mid-level groups.
- Average median senior level salary for the higher fixed-income revenue group was \$130,500, and bonus was \$299,775. Average median senior level salary for the lower fixed-income revenue group was \$172,582, and bonus was \$232,664.
- Median senior level salary and bonus was higher in the higher FTE (more than 150) peer group than the lower FTE (less than 150) peer group. Base salary was higher at the mid-level and entry level in the higher FTE peer group (more than 150) but the bonus levels were lower.
- Average median senior level salary for the higher FTE group was \$150,000, and bonus was \$296,439. Average median senior level salary for the lower FTE revenue group was \$98,300, and bonus was \$263,518.

Section V. Compensation Policies²⁰²¹

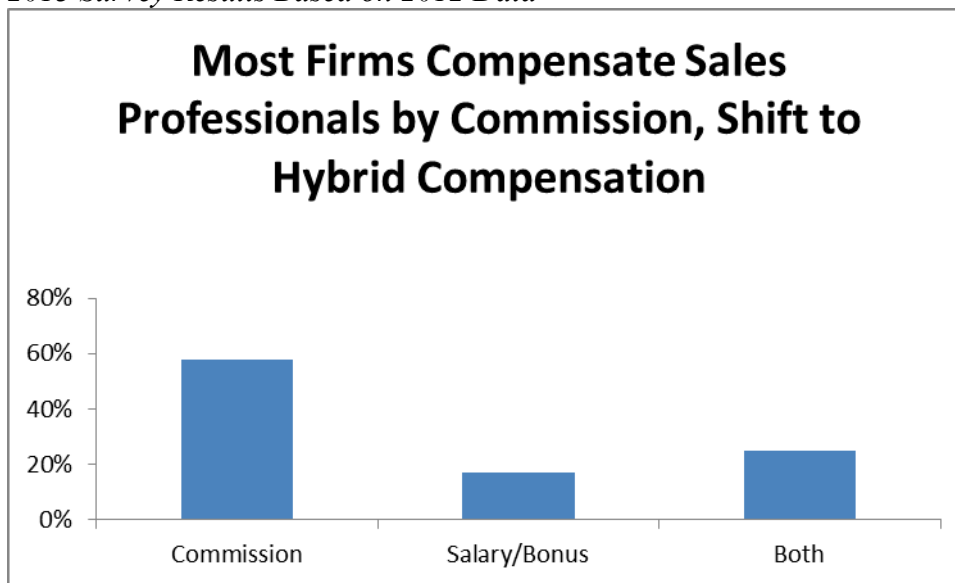
A series of questions addressed specific policies regarding payouts on net trading revenue, bonus criteria, and frequency of bonus compensation. The tabulated responses, which are summarized here, are found in Section V.

Highlights:

Sales Force Compensation Policy & Payout on Trades

- The significant difference in the last two years was that there were more firms compensating sales professionals through forms other than straight commission.
- 2013 Survey: Most firms compensate by commission, although compared to last few years, there was a trend from reliance on straight commission to a combination of commission and salary. This year, about 62% reported compensating sales professional on a commission only basis, and 15% paid salary and bonus only and another 23% compensated by both commission and salary/bonus.

2013 Survey Results Based on 2012 Data

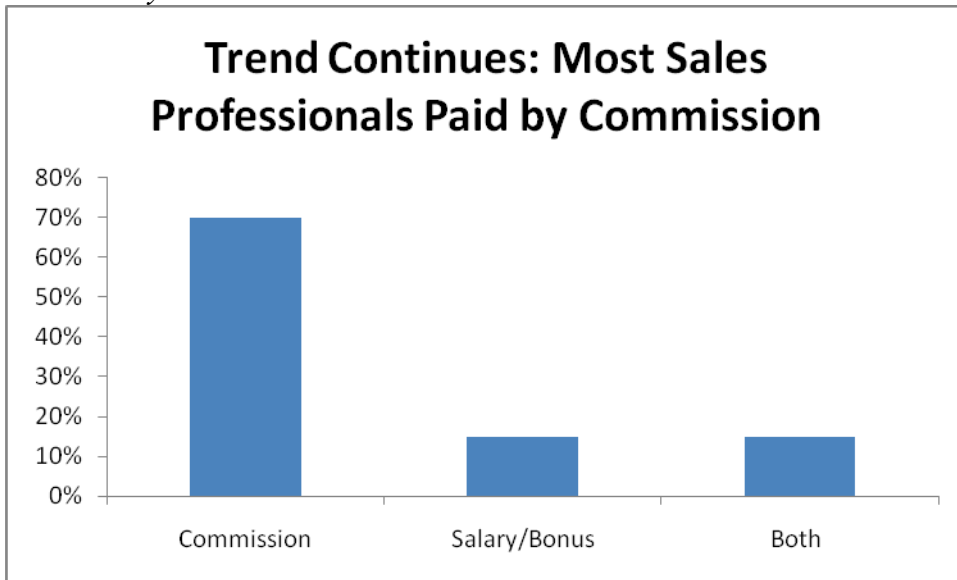


- 2012 Survey (2011 results): Most firms compensated by commission. About 70% reported compensating sales professional on a commission only basis, and 15% paid salary and bonus only and another 15% compensated by both commission and salary/bonus.

²⁰ In certain cases, the quoted quantitative data are approximations. The precise numbers and percentages are found in the data section on data questions at the end of this 2013 BDA Fixed-Income Dealer Compensation Survey report.

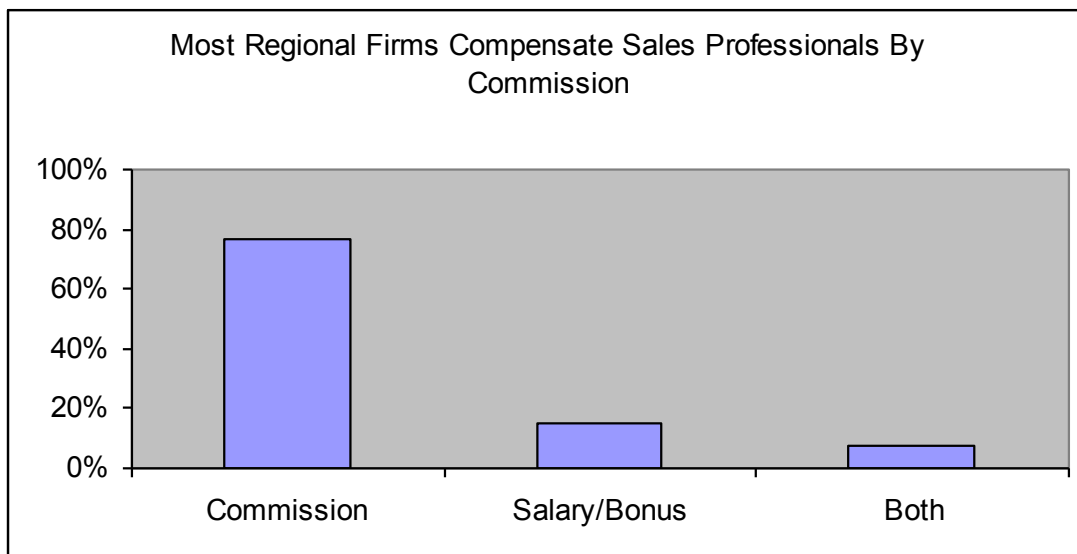
²¹ To assist the reader to discern trends, comparisons are made between the 2013 Survey reports and those of prior years. Note, however, that the firms that respond to the survey may vary year over year and that should be taken into account in the year-over-year trend analysis.

2012 Survey Results Based on 2011 Data



- 2011 survey: 87% reported commission only, 13% salary and bonus only and 0% reported paying the sales force both commission and salary/bonus.
- 2010 survey: 77% commission only; 16% salary and bonus only and 7% a combination of commission and salary and commission. In 2009, there were no firms reporting salary/bonus-only compensation to sales professionals.

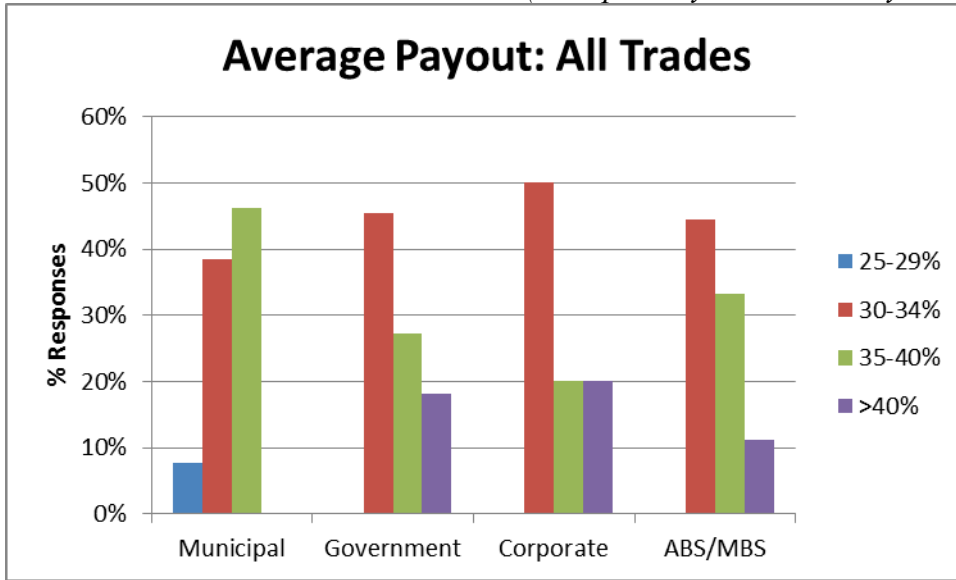
2010 Survey Results



Note: "Regional Firms" in the chart above refer to the BDA 2012 Bond Dealers of America Fixed-Income Compensation survey participants, middle-market fixed-income dealer firms.

- Payouts on trades as a percentage of net revenues

2013 Results: Total Institutional Trades (Both primary and secondary market)



Note: Variable Payout Ratios Excluded

2013 Survey Results

All Institutional Trades

- **Institutional trades:** Similar to the previous surveys, most middle-market fixed-income firms reported sales force payouts on trades were between 30% and 40% combining all institutional fixed-income trades' net transaction revenues (including both the primary and secondary market trades). The percentage of average sales payout of net revenues between 30% to 40% ranged from 70% for the corporate bond sector to 83% for the municipal sector.²² With the exception of the municipal sector, there was greater concentration in the 30% to 35% payout range than the 35% to 40% range.
 - **Secondary market** payouts: there was consistency across markets with respect to all institutional trade payouts 30% to 40% “bucket” with percentage of payouts between 30% and 40% ranging from 70% to 82% depending on market sector. The municipal sector payouts had the highest concentration between 30% and 40%. The responses outside of that range were generally above 40% or variable depending on production of the sales professional.
 - **Taxable Primary Market:** There was a wider range of primary market/new issues in taxable sectors with the average payout lower, similar to last year. By taxable sectors: in the government bond sector, 20% of the firms reported payouts less than 30%, 60% between 30% and 40% and the balance (20%) to 50%; in the corporate sector, half the firms reported payouts of less than 30%, and 25% between 30% and 40% and 25% 40% to 50% payouts; a third of the firms reported payouts less than 30%, for securitizations, a third of the firms reported payouts less than 30%, 50% of the firms reported payouts between 30% and 40% and the balance (17%) between 40% and 50%.
 - **Tax-Exempt Primary Market:** Municipal bond new issue sales: negotiated sales 41% of the firms reported payouts between less than 30% payouts and 59% of

²² Variable payouts were counted as not falling in the 30% to 40% fixed payout range.

the firms reported payouts between 30% to 40%; for competitive municipal sales, 18% reported payouts less than 30% and 82% reported payouts between 30% and 40%.

- Compared to last year, there appeared to be a tighter range of percent payout responses this year than last year.
 - The specific percentage of payouts to the sales force breakdown may be found in Section V of this Middle-Market Fixed-Income Dealer Survey report.
- Retail trades: similar pattern as institutional trades.
- For all (combining secondary and primary market trades) trades, firms reported sales force payouts between 30% and 40%, with the concentration in the 35% to 40% “buckets,” ranging from 67% to 80% of the middle-market firm responses depending on market sector.
 - Payouts for secondary market trades were consistently between 30% and 40% for taxable trades with most of the payouts between 30% and 35% in the government, MBS/ABS and corporate sectors. By contrast, and 60% in the retail municipal sector secondary trade payouts were between 35% and 40% but with more dispersion than in the taxable sectors.
 - The majority of the middle-market firms consistently reported retail primary market trade payouts of 30% to 34% across taxable sectors with the balance between 25% and 29%.
 - There was a broader range of payout rates for retail trades in the tax-exempt new issue or primary market with half between 25% and 29% and 35% to 40% for both competitive and negotiated municipal sales.

2012 Survey Results

All Institutional Trades

- Institutional trades: Similar to the 2011 and 2010 surveys, most middle-market firms reported sales force payouts on trades were between 30% and 40% of all institutional fixed-income trades’ net transaction revenues (combining the primary and secondary market trades). However, in this year’s survey, there was a greater concentration in sales payout practices in the 30% to 40% “bucket” than last year. In the 2010 survey, 67% to 83% of the firms reported payouts between 30% to 40% depending on the market sector. By comparison, 77% to 100% of the firms depending on market sector had payouts between 30% and 40% in the 2013 survey.
- Across sectors and breaking down the responses more finely, the largest number (a plurality in some market sectors) of firms reported payouts between 30% and 34% in 2012 (from 44% to 66% of the responses depending on the market sector). The percentage payout has tended to be higher for ABS/MBS and corporate bond sectors than tax-exempt sectors. The average payout was lowest in the U.S. government sector.
 - *Secondary market* payouts were higher than primary or new issue trades in the 2012 survey but marginally lower than in 2011. For 2012, the majority of firms reported secondary trade payouts above 30% (67% to 85% depending on sector), with 50% to 57% depending on sector between 35% and 40%. Half of the secondary market municipal trade pay-outs were in the 35% to 40% range.

Across taxable sectors (government, corporate and MBS/ABS), secondary market trade payouts among the reporting firms were slightly higher than 2011.

- Lower payouts for primary market/new issues in taxable sectors than 2011; higher in municipal/tax-exempt sector: In the taxable sectors, only 30% to 40% of the firms reported payouts above 30% of net revenues for corporate bond trades in the new issue or primary market; payouts on competitive municipal bond sales typically were above 30% (72% of respondents above 30% and only 10% below 25% payout) were on average higher than negotiated municipal sales (54% of the firms reported paying more than 30% payout ratio and 27% under 25%). Negotiated municipal sales payouts, though lower than competitive sale payouts, were higher than reported in the 2011 survey.
 - From 2010-12, the trend has been for declining average payouts for the secondary market trades and increasing on for primary market trades.
- Retail trades: similar pattern as institutional trades.
 - For all (combining secondary and primary market trades) trades, sales force payouts were between 30% and 40% across sectors with responses concentrated between 35% and 40%.
 - *Secondary*: Payouts for secondary market trades were concentrated between 30% and 40%; in the municipal sector, 20% responses were between 25% to 29%, 20% between 20% and 34% percent and the balance between 35% and 40%; for the taxable sectors, the responses fell between 30% and 40% with the responses concentrated between 35% and 40% payouts.
 - *Taxable Primary*: The middle-market firms consistently reported retail primary market trade payouts of 30% to 34% across taxable sectors.
 - *Tax-Exempt Primary*: Payout rates for retail trades in the tax-exempt new issue or primary market were segmented with about half concentrated between 25% and 29% “bucket” and half in the 35% to 40% “bucket” for both competitive and negotiated municipal sales.

New Municipal Issue Payout to Bankers and Traders: 2013

- Banker compensation on negotiated public finance deals averaged 25% of revenues (median survey response), on par with 2011 and 2012 but above the low 20 percent range in 2010. Average payouts averaged approximately 28% among firms that did not distinguish between negotiated and competitive payouts. There were a wider range of responses for competitive sales with the average lower (13%) and some reporting no commission payouts for public finance bankers. The median of all responses regardless of municipal sale type was 22%.
- Firm responses on underwriting/trading compensation on new municipal bond sales continued a downward trend for competitive and negotiated municipal bond sales with median responses around 5% for each type of municipal bond sale, though with a wide range of responses. At firms that did not distinguish between compensation for competitive and negotiated sales, the median payout was reported as higher at 25%, the same median responses as 2012. Taking the average of all responses, the average

trading/underwriting commission for all new or primary municipal sales was about 11%.

Trader Compensation Policy: 2013 Survey (2012 data)

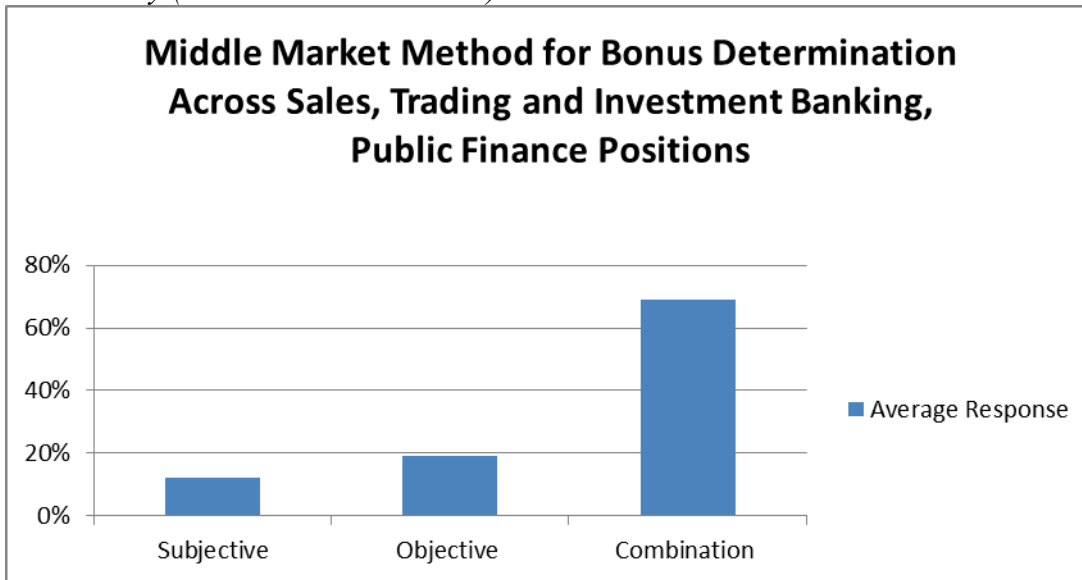
- Payment Policies – Annual cash bonus was the most common reported form of bonus, although more firms paying trader cash bonus on a more frequently than annual basis compared to previous years.
 - Institutional traders in 2012: virtually all reporting firms paid cash bonuses (67% in 2011, 80% in 2010) and 33% paid equity bonuses (30% in 2011 and 10% in 2010) with 17% reported “other compensation.”
 - In 2012, 58% of the reporting firms paid cash bonuses annually, 25% semiannually and 17% quarterly or responding “other.” Of the 67% paying cash bonuses in 2011, 70% paid cash bonuses annually (62% in 2010), 20% (25% in 2010) quarterly and the balance semi-annually (or “other” response). In 2012, 75% of the firms paid equity bonuses annually, a slightly lower percentage than 2011.
 - Retail traders in 2012: Generally paid cash bonuses annually²³.
 - 2012: 90% paid cash bonus, 10% equity. Cash bonuses were paid annually at 40% of the firms, 40% semi-annually and 20% quarterly; all equity bonuses were annual.
 - 2011: 50% paid cash bonus semiannually and 25% paid quarterly and 25% semi-annually.

Criteria for Determining Bonus: Trend in 2012 to Using Both Subjective and Objective Criteria Across Professional Classifications

- 2013 Survey (2012 results)
 - Relative to previous surveys, a higher percentage of firms reported basing the bonus on a combination of objective or quantitative and subjective criteria across professional categories compared to only using objective or subjective criteria compared to previous years.
 - The majority of middle-market dealer firms based the bonus on a combination of subjective and objective factors across professions: 83% for sales managers; 77% for public finance bankers; 71% for taxable investment bankers; 70% for sales professionals; and 55% for trading desk managers.
 - Among the professional classifications, the highest percentage that base bonuses exclusively on objective and quantifiable criteria were sales professionals (30%), followed by fixed income traders (27%) and trading desk managers (23%) with 15% for public finance and taxable investment bankers.
 - The highest percentages of firms that base bonus exclusively on subjective factors were for traders at 18% followed by taxable investment banking (excluding public finance) professionals at about 14% of the responding middle-market firms.
 - Taking the average among each of the groups, the middle-market dealer firms indicated that 20% of the bonuses were based on objective criteria, 9% subjective criteria and 71% a combination of objective and subjective criteria.

²³ More firms responded to the institutional trader bonus question than the retail trader bonus question.

2013 Survey (Based on 2012 Bonuses)



- 2012 Survey (2011 results)
 - The responses were more disparate than the previous year (2010 results), though the majority of responding firms based bonuses on either objective and quantifiable criteria or a combination of objective and subjective criteria across professional categories.
 - The majority of the middle-market dealer firms based sales professional and manager bonus payments on a combination of subjective and objective criteria, and a small minority (10%) base sales professional and manager bonuses on subjective criteria.
 - Among the professional classifications, the highest percentage that based bonuses exclusively on objective and quantifiable criteria were for public finance investment bankers (77%) followed by fixed income traders (45%).
 - The highest percentages of firms that base bonus exclusively on subjective factors were for taxable investment banking (excluding public finance) professionals at about 28% of the responding middle-market firms.
 - The majority of middle-market dealer firms based the bonus either exclusively on subjective or objective/quantifiable factors for fixed-income traders, public finance, and taxable investment banking. The majority of firms indicated that they rely on a combination of subjective and objective factors for the remaining three surveyed professional categories, traders, sales professionals and sales managers.
 - Taking the average among each of the groups, the middle-market dealer firms indicated that 48% of the bonuses were based on objective criteria, 13% subjective criteria and 39% a combination of objective and subjective criteria.

2012 Survey (Based on 2011 Bonuses)



- 2011 Survey (2010 results)
 - The majority of the dealer firms based bonuses on either objective and quantifiable criteria or a combination of subjective and objective criteria.
 - The highest percentage of dealer firms that based bonuses exclusively on objective and quantifiable criteria were in the areas of public finance investment bankers (58%) followed by fixed income traders (46%) and taxable investment bankers (40%).
 - The highest percentages of firms that based bonus exclusively on subjective factors were for sales professionals and sales managers at about 28% of respondents for each category.

Deferred Retirement Programs

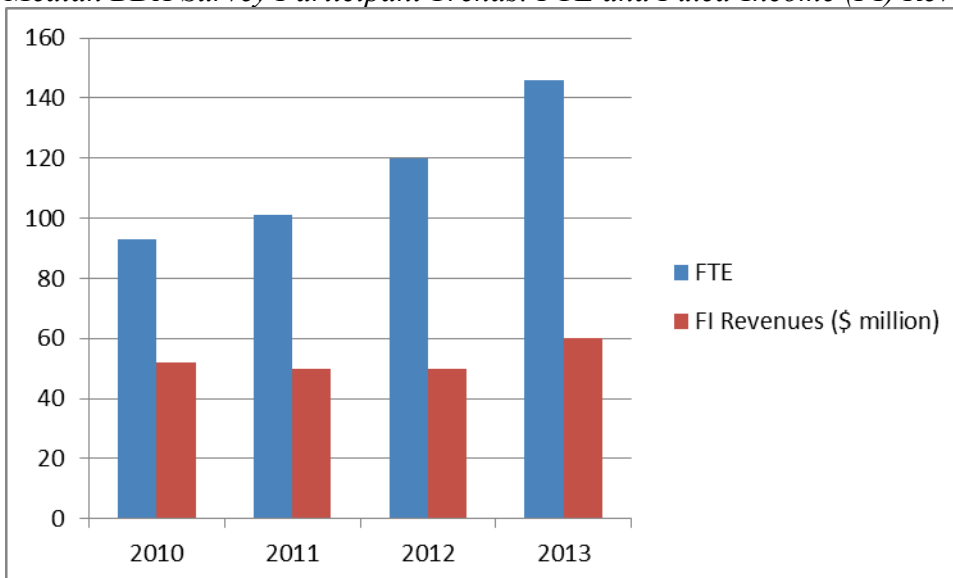
- Over 90% have deferred payment retirement programs in 2011, 2012 and 2013, compared to 80% to 90% in 2010; those that do not offer deferred payment retirement programs offer profit sharing.
- Contributions are based on a formula rather than being fixed by a 70% to 30% margin.
 - 2013 BDA survey: the two most prevalent formulas (70% of the reported formulas) were \$.50 per \$1 of employee contribution. The next most common formula was matching 100% of employee contribution up to a maximum percentage of employee contributions, with some but not all the firms offering lower percentages above that maximum 100% employee contribution match. Ranking third was a formula based on a contribution up to a specified dollar maximum or percentage of salary without consideration of employee contribution. The balance of the firms indicated they base deferred compensation on the profit sharing metrics or on a contribution of less than 50% of the employee match.
 - 2012 BDA survey: most prevalent formula (60% of the reported formulas) was \$.50 per \$1 of employee contribution, with typically up to a maximum, e.g. 6% employee contribution. In addition, firms reported the 50% contribution either

without a maximum or scaled back percentage above a set maximum such as the 6%. Other formulas included a fixed percentage regardless of the employee match or a fixed percentage and then some matching above the initial percentage based on employee match; and contributions based on the firm's return on equity.

- 2011 BDA survey: the formula was (a) typically based on compensation, either base salary or total compensation up to a certain maximum or lowered over a certain salary level; and (b) the employee level of contribution (e.g. 50% match) or employee compensation regardless on contribution. The most common employee match formula was \$0.50 per \$1 of employee contribution. The contribution based on salary/compensation ranged from 1% to high single digit percent (less than 10%).
- Two types of formulas predominated in the 2010 BDA survey: a percentage match based on compensation (up to a specified maximum) and return on equity or return on equity or ROE (generally in 5 percent increments starting at for example 5% or 10% with a specified percentage below the floor.). The percent contribution/match based on ROE generally rises at an accelerating rate as the ROE rises.

Section VI. Staffing Growth Expected to Gain in 2013; Median Firm FTE Higher in 2013 Survey than in 2012 Survey

Median BDA Survey Participant Trends: FTE and Fixed-Income (FI) Revenues



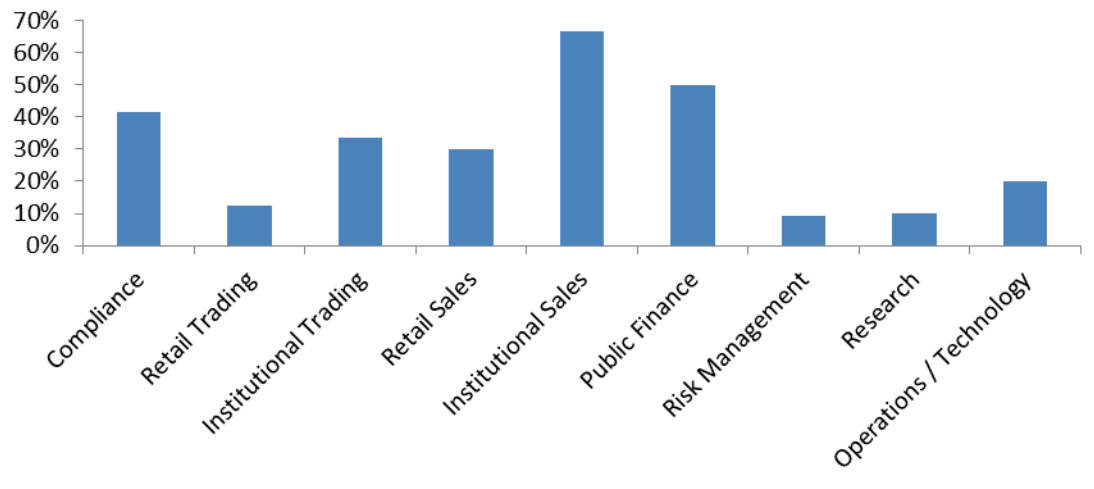
In part reflecting organic growth of the BDA Compensation participants but also the first-time survey responses of some larger middle-market firms and exits of a few smaller firms as survey participants, the median FTE count and fixed-income revenues at middle-market dealer firms participating in the BDA survey rose this year by double digit percentages (20%+) this year. Median head count or FTE level of survey participants have been growing steadily over the survey series, indicative of the market successes middle-market firms have enjoyed post-financial crisis and the related staffing requirements. Revenues rose significantly among this year's survey participants this year after being essentially flat since 2010. Average revenues of survey participants (as opposed to the median calculation) increased each of the last two years after being essentially flat in 2011.

The respondents generally expect staffing and revenue across departments and sectors to pick up in 2013, either increase or be stable. The degree of change in their response depends on the professional category with respect to FTE or market sector with respect to revenues.

Staffing Increases Continue to be Focused on Revenue Generating Profit Centers and Compliance

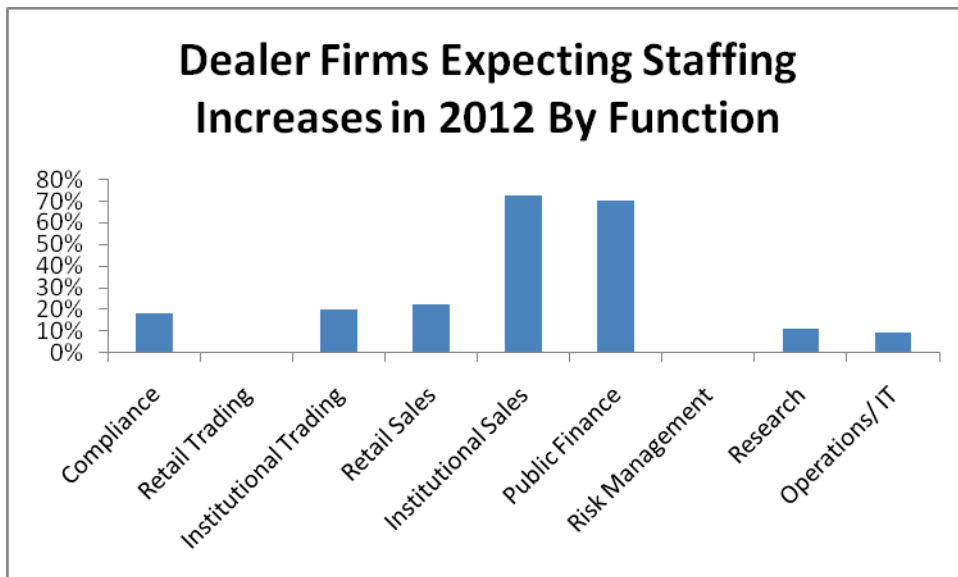
- Staffing (2013): Middle-market firms continue to grow staffs in revenue or profit centers: 62% of the firms expect to increase institutional sales staffs, and 54% expect increases in public finance business units. Approximately 27% expect increases in retail sales and institutional trading. Reflective of the growing regulatory reporting requirements, 38% see compliance staffs increasing. None of the firms are projecting declines in staffing at any business unit except in institutional trading where only 8% expect a decline.

Employment Growth Focused on Profit Centers, Compliance in 2013



- Staffing (2012): Middle-market firms increased headcount in revenue or profit centers: 72% of the firms expect to increase institutional sales staffs, and 70% expect increases in public finance business units. Approximately 20% expect increases in retail sales and institutional trading. Reflective of the growing regulatory reporting requirements, 22% see compliance staffs increasing. Firms see staffing flat across the remaining business units. None of the firms are projecting declines in staffing at any business unit.

Dealer Firms Expecting Staffing Increases in 2012 By Function

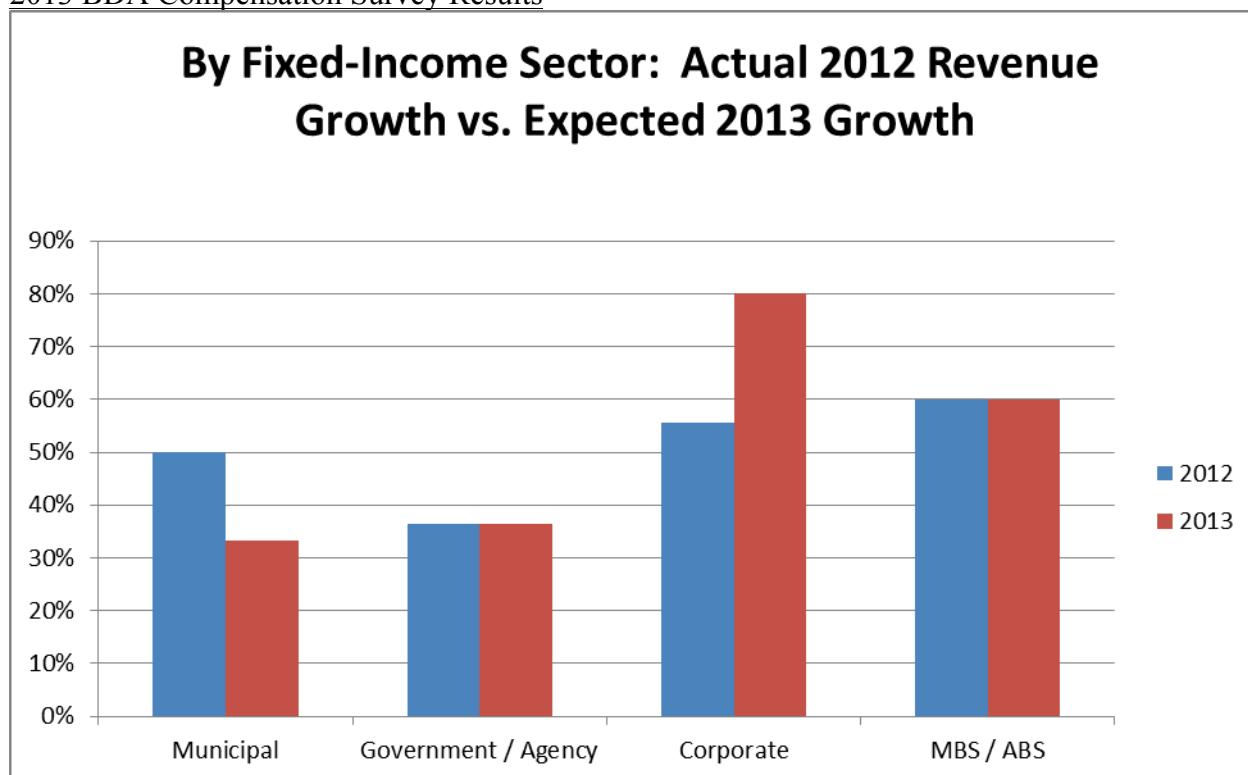


2011-12 Fixed-Income Revenue Trended Up, Similar Direction in Taxable Sectors but Lower Revenues Seen for Municipals in 2012-13

This year's survey results

- Revenue growth (2012 results/2013 Survey): Consistent with last year's forecast, firms generally reported improved revenues across sectors with the majority reporting growth in corporate (60% vs. 40% decline) and MBS/ABS (60% vs. 30% decrease), and 53% reported increased municipal sector revenues and 47% reported a revenue reduction. Slightly more than a third (36%) of the firms reported an increase in U.S. government/agency sector revenues while 64% indicated a decline in sector revenues.
- Revenue growth (2013 expectation/2013 Survey): The firms were even more bullish: 73% expect higher corporate revenues and 60% expecting an increase vs. 20% decline in the MBS/ABS sector, reflecting a low rate corporate issuance environment and recovery of the securitized market. About 30% expect municipal revenues to increase, 46% expect a decline and 24% expect a flat trend, while 36% expect an increase in government/agency revenues, 45% a decline and the balance expect a flat trend.

2013 BDA Compensation Survey Results

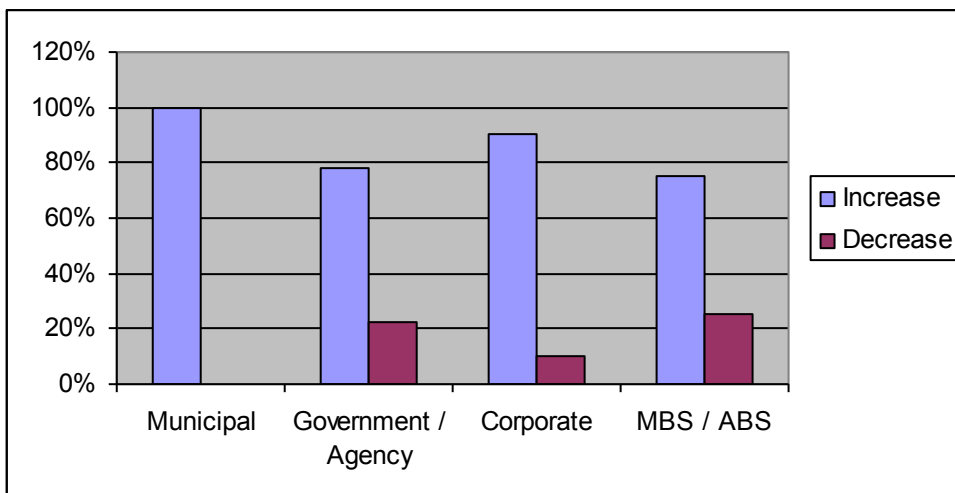


Previous survey Results

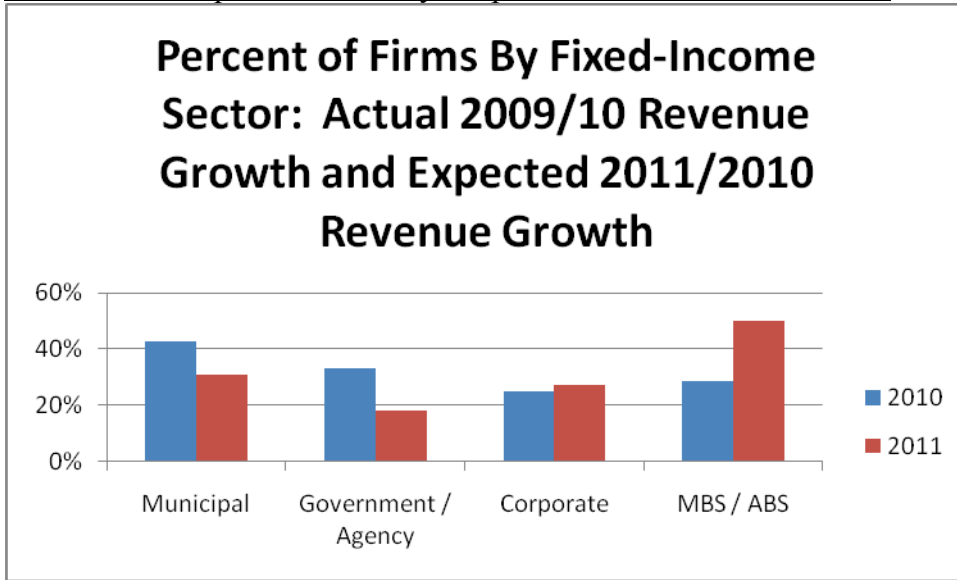
- Revenue growth (2009 results/2010 Survey): the market recovery in 2009 led to a very strong year where the majority of firms had higher revenues in every sector from 100% in the municipal market to 78% in the mortgage market.

- Revenue growth (2010 results/2011 Survey): the firms encountered a more volatile market in 2010 with revenues weaker across sectors based on the survey responses to revenue trends by sector. The municipal sector revenues held up the best, though, with 44% reported revenues rising compared to 50% experiencing revenue reduction. A third of the firms reported an increase in U.S. government/agency sector revenues while 2/3 indicated a decline in sector revenues. There was an increased revenue trend in the corporate bond sector at 25% of the firms with three-quarters reporting a decline.
- Actual revenue growth (2011/2012 survey) dealer firm responses: municipal market, 33% increase vs. 50% decline; firms consistently reported lower government bond sector revenues; 40% increase vs. 60% revenue decline in corporate bonds; and 25% reported an increase in ABS/MBS revenues vs. 75% decline. The balance of the middle-market firms reported revenue unchanged from 2010 unless specifically indicated above, e.g. 17% of the firms indicated municipal market revenues were at the same level as 2010.
- Revenue Growth expectations (2011 forecast/2011 survey): The responding firms forecast a mixed 2011. The challenged municipal sector generated an expectation of increased revenues at 30% of the firms against 50% expecting a decline. Similarly, 18% of the firms expected increased 2011 revenues against 54% expecting a decline in government/agency sector revenues probably in part reflecting the GSE/Federal agency environment. However, the firms expected revenue improvement in MBS/ABS with 50% expecting an increase against 20% expecting a decline and 27% expected corporate bond sector revenues to increase while 45% expect a decline.
- Revenue Growth forecasts (2012/2012 survey): The 2012 expectations were for decidedly stronger year: 54% expected increased municipal market revenues compared to 18% expecting a decline; 37% expect an increase in government bond revenues compared to 25% expecting a decline; 50% expect increased corporate bond revenues with none expecting a decline; and 50% expecting higher MBS/ABS revenue against 12% expecting a decline.

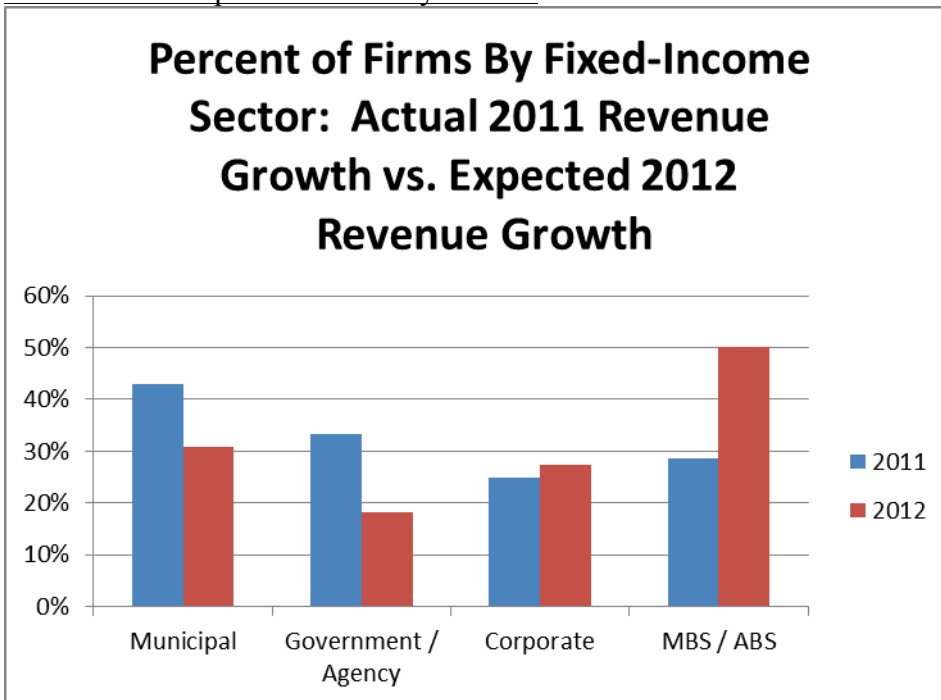
2010 BDA Compensation Survey Responses: Broad Revenue Growth Recovery in 2009 From 2008 Crisis



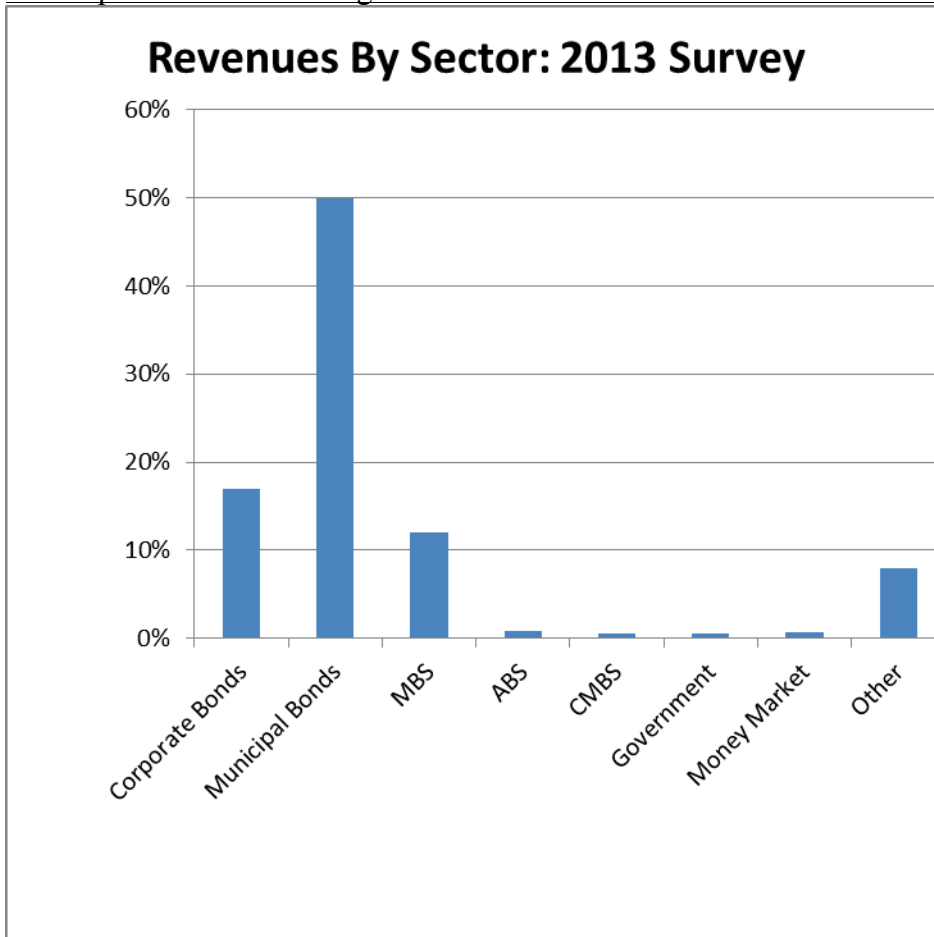
2011 BDA Compensation Survey Responses: Moderation in 2010/11



2012 BDA Compensation Survey Results



Municipal Bond Sector Largest Contributor to Middle-Market Dealer Firm Revenues



- The municipal market is the highest contributor to revenue production based on average of survey responses in the 2013 survey as it was in 2010-2012. On average, the municipal sector accounted for 50% of fixed-income revenues at middle-market firms (compared to 55% in 2012 and 52% in 2011 and 49% in 2010) followed by 16% corporate bond trading – 15% investment grade and 2% high yield - (14% in 2012 and 12% in 2011 and 19% in 2010); and 14% MBS and ABS (12.5% MBS), largely the result of agency MBS (9% in 2012) and 10% for Federal agency trading (compared to 16% in 2012, 19% in 2011 and 10% in 2010).²⁴ The “other” miscellaneous category accounted for nearly 8% of average revenues among the responding firms. U.S. Treasury securities market accounted for less than 1% (3% in 2012), as did short term money market (6% in 2012) with and derivatives/foreign exchange markets. This year, the securitized market share rose in part due to improvements in private ABS securitization sector, though agency MBS still accounted for most of the structured finance volume.
- The averages mask regional firm niche specializations represented by the maximum survey responses with respect to revenue contributions by sector
 - Municipal market 100%

²⁴ There may be some double counting within MBS/ABS/CMBS categories.

- Corporate bonds 71%
- MBS 43%; 5% ABS and 5% for CMBS
- Agency 39%; 5% Government
- Money Market 15%
- Foreign exchange 8%
- Derivatives 5%

Section VII. Technology & Operations Expenses

5-Year Secular Expense Decline: Technology and Operations expense Flat in 2012, Data Costs Up

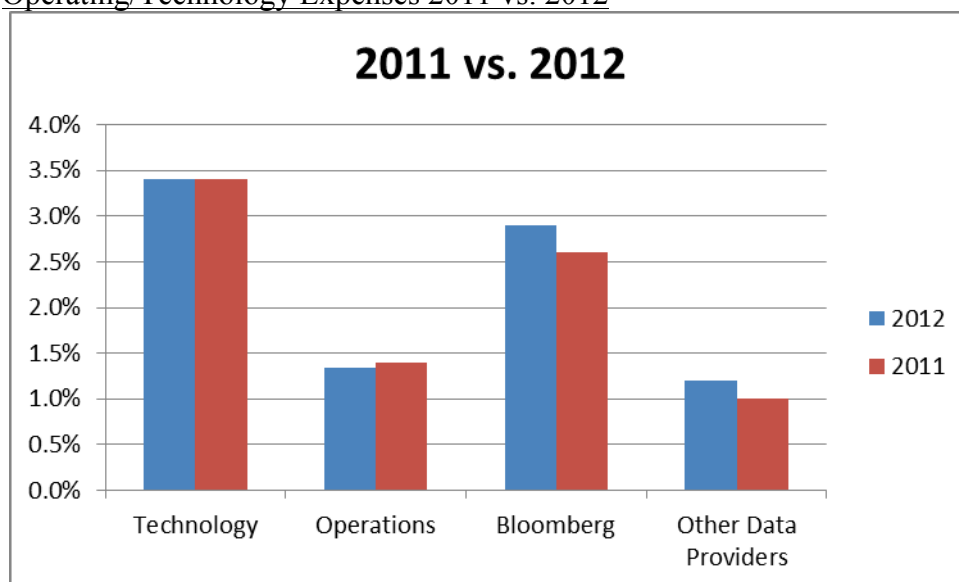
Overhead costs to revenue metrics have generally improved (lower relative costs) in 2012 compared to 2007, a confirmation of increasing efficiencies and cost control at middle-market firms as well as rising revenues. Operating expenses to revenues were slightly lower in 2012 compared to 2011 but much lower than 2007, based on the BDA survey results. Perhaps as a result in increased capital spending on technology and information systems with cost benefits accruing to later years, the technology expense ratios were slightly higher in 2012 than 2007. The technology expense 2012 ratio was flat (marginally lower) from 2011. Data and information source expenditures (Bloomberg and “other” fixed income data providers) are down as a percentage of revenues from 5 years ago but rose in 2012 from 2011.

Maximum, minimum, average and median ratios are provided nationally and by FTE and fixed-income revenue peer groups. It should be noted, however, that not all the same firms necessarily completed each year’s survey. Thus, while comparisons are valid over time, the comparisons should be qualified as the survey’s middle-market fixed-income firm survey populations vary within the years of surveys.

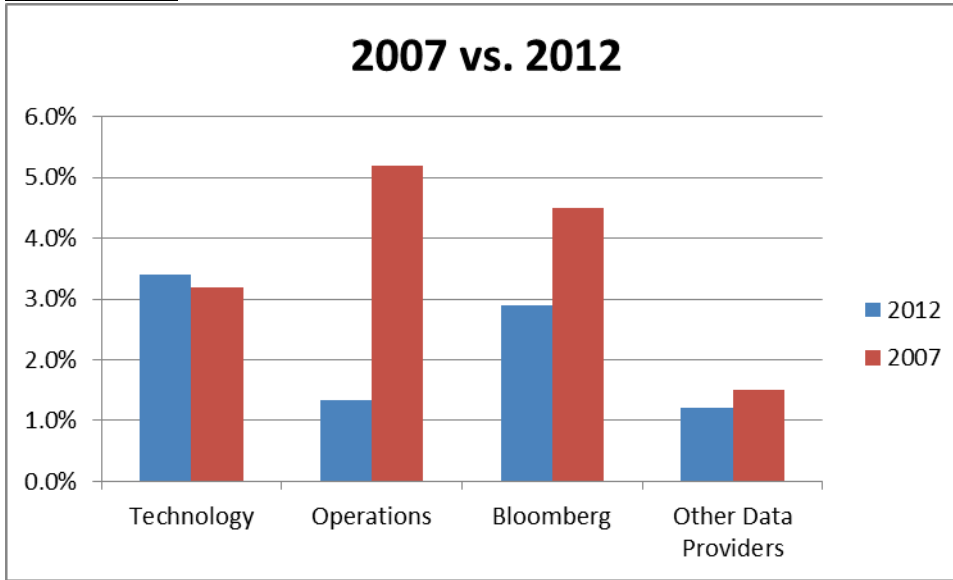
- National median trends 2007-12
 - Technology: 3.2% in 2007 to 3.40% in 2012 (3.45% – 2011)
 - Operations: 5.2% in 2007 to 1.34% in 2012 (1.35% – 2011)
 - Bloomberg expense: 4.5% in 2007 to 2.9% 2012 (2.6% – 2011)
 - Other data providers: 1.5% in 2007 to 1.2% in 2012 (1.0% – 2011)

Note: the expense ratios cover only the fixed-income business.

Operating/Technology Expenses 2011 vs. 2012



2007 vs. 2012



Note: the expense ratios cover only the fixed-income business.

2011 vs. 2012

Although the longer term multiyear trends provides documentation of the middle-market industry's growing efficiency, there can be year-to-year fluctuations, taking into account the survey respondent populations vary from year to year. The 2011-2012 comparison indicates a modest decline in the operating cost ratios; higher Bloomberg and other data vendor expenses. The ratios were flat for technology (slightly lower) expenses. As noted above, the technology expense ratio increase may reflect industry-wide incremental investments in systems upgrade. Illustrative of year-over-year fluctuations, certain expense ratios that declined in 2011 compared to 2010 rose in 2010 compared to 2009. As such, one-year expense trends may deviate from longer term trends, next year's survey results and multiyear trends described above may be more revealing.

Similarly, it should be noted that the peer group comparisons based on trading revenue and FTE may fluctuate from year to year based on participating firms. Although the responding firms tend to be the same year-over-year, there are invariably some exits and new firms participating in the survey in any given year. For example, the dividing line between low and high FTE and revenue peer groups are higher than last year.

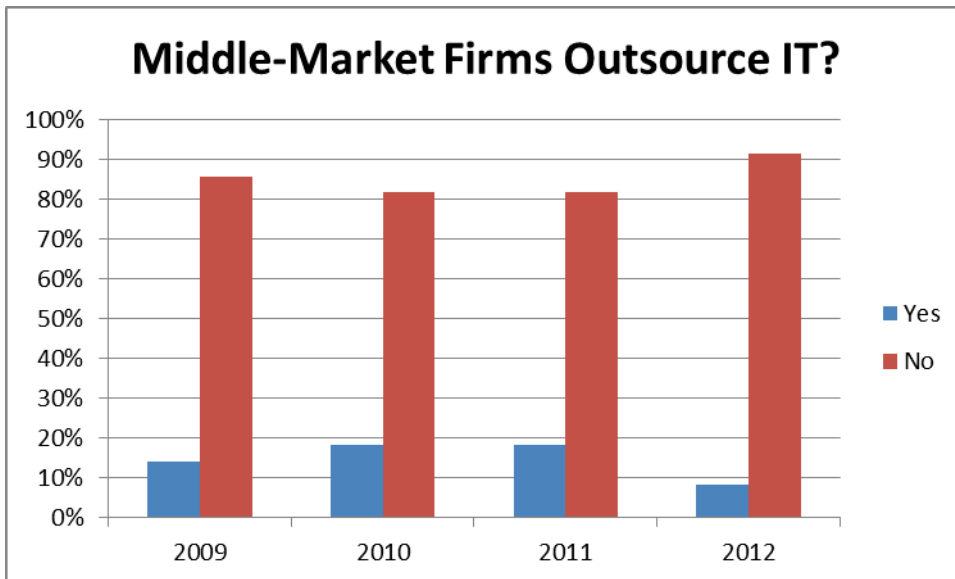
- By fixed-income trading revenue peers (\$65 million is the dividing line)²⁵
 - Average technology expense ratio is lower for larger firms (3.1% vs. 4.1%); and average operating expense ratio lower for the larger firms (2.4% vs. 3.4%).
 - Based on median, higher revenue firms have lower technology expense ratios (3.4% vs. 4.2%) and operating expense ratios (1.2% vs. 1.5%).

²⁵ An outlier affected the sub-national peer group operating expense metrics.

- By Full Time Equivalent peers (150 FTE is the dividing line).
 - Larger FTE firms had a higher average technology ratio 2.9% vs. 3.8%, which may represent higher technology investment by larger FTE firms, and larger FTE firms had a higher operating expense ratio, 1.2% vs. 2.6%.
 - The technology expense trend hold for the median ratios: 3.4 vs.4.2% favoring the smaller FTE firms, but the median operating expense ratio favored the larger FTE firms, 1.5% to 1.1% (a small FTE outlier affected the average calculation).

On a median basis, the smaller revenue group had lower Bloomberg and other data vendor expense ratios. Lower FTE firms had a lower median Bloomberg and other data vendor expense ratios.

- The large majority of the middle-market firms – approximately 90% – according the survey manage operations and technology functions internally rather than outsourcing the functions. That percentage increased from previous years in which the question was collected for the BDA Compensation Survey.



2013 BDA Fixed-Income Compensation Survey

III. Compensation By Position: Salary, Bonus, Commission and Total Compensation

Peer: National

National Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	693,497	297,117	911,952	NM	1,255,069	1,212,903
Head of Fixed Income	701,528	271,107	743,082	NM	1,015,190	1,014,390
Chief Financial Officer-Fixed Income	382,906	209,043	302,036	NA	511,079	511,079
Compliance						
Head of FI Compliance	109,281	192,101	129,333	NA	321,434	321,434
Senior Compliance	46,036	118,377	34,840	NA	153,218	153,218
Compliance	13,956	73,250	26,336	NM	104,086	100,486
Entry-Level Compliance	2,800	47,153	2,750	NA	49,903	48,987
Compliance Assistants	NM	44,596	NM	NA	49,596	46,596
Retail Trading						
Head Retail Trader	879,850	150,243	301,228	NA	451,471	451,471
Senior Retail Trader	NM	95,860	223,553	NM	480,992	298,755
Retail Traders	NA	97,903	67,500	201,723	367,125	232,514
Retail Trading Assistants	28,750	45,432	21,000	NA	66,432	66,432
Institutional Trading						
Head Inst. Trader	570,613	202,590	684,444	356,824	1,243,858	889,689
Senior Inst. Trader	246,490	136,535	266,648	144,746	547,928	396,254
Institutional Trader	91,019	104,632	137,657	71,864	314,153	236,924
Entry-Level Institutional Trader	17,542	72,396	56,706	NA	129,103	129,103
Institutional Trading Assistants	83,658	46,227	34,354	NM	109,709	78,839
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	579,226	207,468	580,140	620,893	1,408,500	842,600
Senior Inst. Sales	389,747	107,322	492,583	476,249	1,076,155	640,869
Institutional Sales	105,465	78,129	168,121	261,072	507,321	292,570
Entry-Level Inst. Sales	11,191	64,565	27,811	93,570	185,945	105,025
Inst. Sales Assistants	19,171	54,082	15,805	38,585	108,472	81,044
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	170,534	297,257	NM	556,390	497,324
Public Finance Analyst	50,114	97,945	87,352	NA	185,298	185,298
Entry-Level Investment Banking	32,517	90,044	78,167	NA	168,211	168,211

National Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	241,301	231,110	597,329	NA	828,440	828,440
Senior Public Finance	127,795	133,766	171,729	NM	433,165	301,089
Public Finance Analyst	38,661	80,025	51,017	NM	220,649	135,865
Entry-Level Public Finance	31,123	73,553	28,799	NA	102,352	102,352
Public Finance Assistant	5,683	50,428	7,799	NA	58,226	56,667
Operations						
Head Operations	77,599	127,448	73,686	NA	201,134	201,134
Senior Operations	39,919	85,952	36,167	NA	122,119	122,119
Operations	6,844	58,261	17,680	NA	75,942	75,942
Entry-Level Operations	2,075	46,374	3,588	NA	49,961	49,961
Head of Technology	82,267	140,518	149,000	NA	289,518	289,518
Research						
Head of FI Research	183,333	192,250	220,000	NM	612,250	462,250
Senior Analyst	62,067	119,314	70,048	NA	189,362	189,362
Analyst	25,640	59,917	23,958	NA	83,875	83,875
Entry-Level Analyst	NM	56,772	14,996	NA	71,767	71,767
Risk Management						
Chief Risk Officer	237,667	226,667	316,667	NA	543,333	543,333
Risk Analyst	50,121	126,191	60,807	NA	186,998	186,998
Accounting						
Head of Accounting	109,000	185,000	136,750	NA	321,750	321,750
Controller	42,958	137,416	75,500	NA	212,916	212,916
Assistant Controller	17,611	81,129	26,294	NA	107,424	100,850
Senior Accountant	21,212	66,745	10,040	NA	76,785	74,275
Accountant	4,321	53,159	10,150	NA	63,309	60,771

National Median

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	318,750	300,000	496,000	NM	842,000	886,000
Head of Fixed Income	244,635	225,000	600,000	NM	826,000	1,000,000
Chief Financial Officer-Fixed Income	205,000	213,300	240,000	NA	453,300	392,000
Compliance						
Head of FI Compliance	92,000	193,825	98,750	NA	292,575	275,075
Senior Compliance	40,750	115,627	30,000	NA	145,627	143,332
Compliance	7,828	72,568	13,170	NM	90,238	87,000
Entry-Level Compliance	2,800	47,063	2,750	NA	49,813	47,563
Compliance Assistants	NM	44,596	NM	NA	49,697	46,596
Retail Trading						
Head Retail Trader	295,550	150,000	373,684	NA	523,684	529,584
Senior Retail Trader	NM	70,000	223,553	NM	455,132	231,579
Retail Traders	NA	97,500	67,500	201,723	366,723	204,698
Retail Trading Assistants	28,750	45,432	21,000	NA	66,432	66,432
Institutional Trading						
Head Inst. Trader	275,275	175,000	561,842	356,824	1,093,666	559,375
Senior Inst. Trader	189,000	121,000	262,500	114,724	498,224	361,908
Institutional Trader	96,525	85,000	143,593	89,608	318,201	213,357
Entry-Level Institutional Trader	17,542	64,007	44,635	NA	108,642	108,949
Institutional Trading Assistants	38,500	45,000	34,354	NM	108,482	75,000
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	451,000	187,500	533,000	575,357	1,295,857	800,000
Senior Inst. Sales	249,650	117,917	219,400	517,744	855,061	576,668
Institutional Sales	74,900	75,750	68,743	280,000	424,493	320,000
Entry-Level Inst. Sales	11,191	57,487	27,811	93,570	178,867	101,250
Inst. Sales Assistants	10,000	56,500	11,500	42,053	110,053	83,849
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	173,478	255,472	NM	517,549	470,625
Public Finance Analyst	50,114	122,833	110,936	NA	233,769	233,769
Entry-Level Investment Banking	32,517	90,044	78,167	NA	168,211	168,211
Public Finance						
Head Public Finance	230,000	224,994	400,000	NA	624,994	600,000
Senior Public Finance	130,660	123,125	175,000	NM	425,795	297,636
Public Finance Analyst	24,000	72,096	56,500	NM	218,204	149,633
Entry-Level Public Finance	22,000	77,500	32,647	NA	110,147	115,805
Public Finance Assistant	3,366	48,833	6,597	NA	55,430	60,000

National Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	66,472	117,000	61,000	NA	178,000	205,353
Senior Operations	19,000	80,000	22,000	NA	102,000	120,000
Operations	4,000	63,128	9,500	NA	72,628	70,628
Entry-Level Operations	2,500	47,411	3,263	NA	50,674	50,674
Head of Technology	36,500	125,000	45,000	NA	170,000	170,000
Research						
Head of FI Research	100,000	184,500	210,000	NM	594,500	444,500
Senior Analyst	54,950	112,500	68,700	NA	181,200	202,500
Analyst	25,640	69,750	25,000	NA	94,750	81,625
Entry-Level Analyst	NM	56,772	14,996	NA	71,767	71,767
Risk Management						
Chief Risk Officer	145,000	230,000	300,000	NA	530,000	530,000
Risk Analyst	42,235	113,956	42,033	NA	155,989	196,000
Accounting						
Head of Accounting	108,000	178,000	148,500	NA	326,500	309,000
Controller	28,500	140,000	50,000	NA	190,000	194,750
Assistant Controller	7,333	79,759	13,000	NA	92,759	84,375
Senior Accountant	8,500	60,614	5,000	NA	65,614	69,289
Accountant	1,842	50,813	11,250	NA	62,063	59,913

National Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	3,600,000	450,000	2,900,000	NM	3,396,000	3,210,000
Head of Fixed Income	2,850,388	500,000	2,022,000	NM	2,523,000	2,248,000
Chief Financial Officer-Fixed Income	1,600,000	250,000	660,000	NA	910,000	910,000
Compliance						
Head of FI Compliance	275,000	260,000	300,000	NA	560,000	550,000
Senior Compliance	97,000	127,928	62,000	NA	189,928	187,000
Compliance	41,000	92,000	57,000	NM	153,500	130,000
Entry-Level Compliance	3,100	61,897	5,000	NA	66,897	66,897
Compliance Assistants	NM	44,799	NM	NA	49,799	48,799
Retail Trading						
Head Retail Trader	2,300,000	155,900	450,000	NA	605,900	600,000
Senior Retail Trader	NM	150,000	300,000	NM	611,579	450,000
Retail Traders	NA	135,000	75,000	284,050	494,050	345,660
Retail Trading Assistants	55,000	52,865	35,000	NA	87,865	73,000
Institutional Trading						
Head Inst. Trader	2,300,000	325,000	2,100,000	500,000	2,925,000	2,800,000
Senior Inst. Trader	567,300	221,944	427,000	400,000	1,048,944	750,000
Institutional Trader	161,950	190,357	229,023	99,435	518,815	471,482
Entry-Level Institutional Trader	30,000	125,000	100,000	NA	225,000	225,000
Institutional Trading Assistants	238,032	53,682	38,708	NM	121,518	121,518
Retail Sales						
Senior Retail Sales	NM	206,024	NM	NM	507,402	391,378
Institutional Sales						
Head Inst. Sales	1,666,000	312,500	1,430,514	800,000	2,543,014	1,580,514
Senior Inst. Sales	1,130,000	187,150	2,123,000	677,000	2,987,150	2,162,000
Institutional Sales	221,883	144,000	520,000	400,000	1,064,000	559,000
Entry-Level Inst. Sales	17,500	102,500	50,000	132,419	284,919	204,332
Inst. Sales Assistants	66,691	91,980	35,000	62,755	189,735	119,382
Investment Banking						
Head of Investment Banking	337,500	300,000	964,000	NA	1,264,000	1,264,000
Senior Investment Banking	185,790	235,000	400,674	NM	724,273	662,751
Public Finance Analyst	52,500	124,289	116,800	NA	241,089	241,089
Entry-Level Investment Banking	38,700	103,755	92,000	NA	195,755	195,755
Public Finance						
Head Public Finance	350,000	425,000	1,889,000	NA	2,314,000	2,114,000
Senior Public Finance	244,869	257,895	250,000	NM	635,565	475,091
Public Finance Analyst	76,667	123,529	88,283	NM	301,420	206,449
Entry-Level Public Finance	57,500	83,158	43,750	NA	126,908	121,250
Public Finance Assistant	15,000	65,000	15,000	NA	80,000	68,000

National Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	200,000	180,353	145,500	NA	325,853	304,784
Senior Operations	250,000	135,475	180,000	NA	315,475	250,000
Operations	20,000	75,000	52,950	NA	127,950	121,600
Entry-Level Operations	3,025	48,911	5,500	NA	54,411	54,411
Head of Technology	198,000	250,000	365,000	NA	615,000	615,000
Research						
Head of FI Research	380,000	250,000	360,000	NM	810,000	710,000
Senior Analyst	125,000	170,000	120,000	NA	290,000	247,400
Analyst	40,000	75,000	35,000	NA	110,000	100,000
Entry-Level Analyst	NM	65,000	25,000	NA	90,000	90,000
Risk Management						
Chief Risk Officer	425,000	305,000	440,000	NA	745,000	585,000
Risk Analyst	104,000	200,000	111,000	NA	311,000	240,000
Accounting						
Head of Accounting	200,000	309,000	225,000	NA	534,000	534,000
Controller	121,000	159,994	206,000	NA	365,994	351,000
Assistant Controller	42,000	95,000	57,000	NA	152,000	152,000
Senior Accountant	75,000	95,000	22,000	NA	117,000	100,000
Accountant	13,000	69,010	17,500	NA	86,510	80,260

National Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	79,581	175,000	95,000	NM	316,000	280,818
Head of Fixed Income	44,511	150,048	60,412	NM	211,460	210,460
Chief Financial Officer-Fixed Income	45,000	150,000	56,000	NA	206,000	281,000
Compliance						
Head of FI Compliance	25,000	110,000	13,500	NA	123,500	158,454
Senior Compliance	10,500	110,000	20,000	NA	130,000	130,000
Compliance	2,500	57,170	11,511	NM	73,181	81,021
Entry-Level Compliance	2,500	32,500	500	NA	33,000	32,500
Compliance Assistants	NM	44,392	NM	NA	49,493	44,392
Retail Trading						
Head Retail Trader	44,000	144,829	80,000	NA	224,829	224,829
Senior Retail Trader	NM	67,579	147,106	NM	376,264	214,685
Retail Traders	NA	61,610	60,000	119,395	241,005	175,000
Retail Trading Assistants	2,500	38,000	7,000	NA	45,000	59,865
Institutional Trading						
Head Inst. Trader	23,000	97,593	50,000	213,647	361,240	225,000
Senior Inst. Trader	122,140	50,000	139,964	19,336	209,300	161,836
Institutional Trader	6,075	42,954	1,100	20,481	64,535	105,481
Entry-Level Institutional Trader	5,084	53,750	18,967	NA	72,717	85,750
Institutional Trading Assistants	19,600	40,000	30,000	NM	99,128	40,000
Retail Sales						
Senior Retail Sales	NM	150,000	NM	NM	451,378	266,024
Institutional Sales						
Head Inst. Sales	47,424	150,000	112,500	487,321	749,821	328,985
Senior Inst. Sales	6,258	38,363	21,486	179,796	239,645	254,746
Institutional Sales	42,300	31,471	15,000	100,000	146,471	100,000
Entry-Level Inst. Sales	4,882	48,000	5,621	54,720	108,341	48,000
Inst. Sales Assistants	2,511	25,000	2,948	7,478	35,426	39,828
Investment Banking						
Head of Investment Banking	250,000	250,000	408,250	NA	658,250	658,250
Senior Investment Banking	157,031	103,125	235,625	NM	427,349	358,597
Public Finance Analyst	47,728	46,714	34,321	NA	81,035	81,035
Entry-Level Investment Banking	26,333	76,333	64,333	NA	140,666	140,666
Public Finance						
Head Public Finance	146,907	130,000	225,000	NA	355,000	377,565
Senior Public Finance	25,000	65,000	20,000	NM	212,670	145,000
Public Finance Analyst	10,000	46,153	12,319	NM	148,080	58,472
Entry-Level Public Finance	13,870	60,000	10,000	NA	70,000	70,000
Public Finance Assistant	1,000	38,078	3,000	NA	41,078	38,078

National Minimum

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	27,850	71,000	24,300	NA	95,300	95,300
Senior Operations	2,500	44,500	7,750	NA	52,250	52,250
Operations	1,500	42,500	2,813	NA	45,313	50,365
Entry-Level Operations	700	42,799	2,000	NA	44,799	44,799
Head of Technology	7,836	68,627	20,000	NA	88,627	88,627
Research						
Head of FI Research	70,000	150,000	100,000	NM	450,000	250,000
Senior Analyst	6,250	82,255	22,793	NA	105,048	105,048
Analyst	11,280	35,000	11,875	NA	46,875	70,000
Entry-Level Analyst	NM	48,543	4,991	NA	53,534	53,534
Risk Management						
Chief Risk Officer	143,000	145,000	210,000	NA	355,000	515,000
Risk Analyst	12,016	82,000	30,000	NA	112,000	113,000
Accounting						
Head of Accounting	20,000	75,000	25,000	NA	100,000	135,000
Controller	20,000	95,000	20,000	NA	115,000	115,000
Assistant Controller	3,500	70,000	8,883	NA	78,883	82,650
Senior Accountant	1,500	50,750	3,120	NA	53,870	58,520
Accountant	600	42,000	1,700	NA	43,700	43,000

- Note:
1. Certain positions' compensation was not presented when there were insufficient responses to generate a meaningful statistic.
 2. "NA" indicates "0" or "NA"; NM indicates positive numerical responses but statistically insignificant to be reported.
 - 2a. If the compensation form is "NM" and thus not reported, the compensation is still included in the Total Compensation calculation.
 3. When a firm did not distinguish between retail and institutional trading/sales, the compensation data were classified as retail or institutional based on their preference or how the and where the firm presented the data. The preference was typically to include in the institutional calculation.
 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.

High FTE (>150) Average

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	942,665	335,552	1,370,488	NA	1,706,040	1,706,040
Head of Fixed Income	789,980	268,762	870,603	NM	1,140,365	1,139,615
Chief Financial Officer-Fixed Income	652,063	218,750	385,563	NA	604,313	604,313
Compliance						
Head of FI Compliance	132,650	210,818	137,000	NA	347,818	347,818
Senior Compliance	51,375	119,639	36,050	NA	155,689	155,689
Compliance	18,984	72,893	35,504	NM	112,897	109,897
Retail Trading						
Retail Traders	NA	117,500	67,500	NA	185,000	185,000
Institutional Trading						
Head Inst. Trader	631,263	217,513	749,168	356,824	1,323,504	961,606
Senior Inst. Trader	250,906	141,208	281,793	257,362	680,363	461,823
Institutional Trader	105,177	125,176	165,567	99,165	389,908	296,203
Entry-Level Institutional Trader	N/A	80,841	49,559	NA	130,400	130,400
Institutional Trading Assistants	103,211	46,841	N/A	N/A	114,677	80,759
Institutional Sales						
Head Inst. Sales	719,484	197,500	769,004	687,678	1,654,182	906,478
Senior Inst. Sales	239,620	107,732	207,017	443,545	758,294	493,665
Institutional Sales	80,226	68,048	68,743	260,938	397,728	301,628
Entry-Level Inst. Sales	11,191	80,245	N/A	N/A	140,586	110,415
Inst. Sales Assistants	22,053	49,681	18,060	48,954	116,695	89,208
Public Finance						
Head Public Finance	231,487	256,000	717,313	NA	973,313	973,313
Senior Public Finance	162,464	145,466	183,236	NA	328,703	328,703
Public Finance Analyst	48,821	88,212	50,029	NA	138,242	138,242
Entry-Level Public Finance	17,935	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	3,366	50,637	3,097	NA	53,734	52,702
Operations						
Head Operations	99,314	167,427	43,000	NA	210,427	210,427
Senior Operations	78,813	97,835	53,550	NA	151,385	151,385
Operations	3,907	53,940	19,253	NA	73,193	73,193
Head of Technology	127,833	153,725	195,000	NA	348,725	348,725
Research						
Head of FI Research	240,000	183,333	260,000	NM	643,333	510,000
Senior Analyst	89,975	131,667	85,800	NA	217,467	217,467
Analyst	25,640	59,917	23,958	NA	83,875	83,875
Risk Management						
Risk Analyst	NM	142,500	70,500	NA	213,000	213,000

**High FTE (>150)
Average**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Accounting						
Head of Accounting	138,000	160,500	148,500	NA	309,000	309,000
Controller	70,625	131,500	88,667	NA	220,167	220,167
Assistant Controller	24,667	84,839	32,942	NA	117,781	106,800
Senior Accountant	26,140	57,326	12,560	NA	69,886	65,699
Accountant	5,561	50,313	9,600	NA	59,913	59,913

High FTE (>150) Median

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	425,000	300,000	1,037,000	NA	1,337,000	1,412,000
Head of Fixed Income	230,000	212,500	700,000	NM	913,500	1,050,000
Chief Financial Officer-Fixed Income	404,125	212,500	413,125	NA	625,625	613,125
Compliance						
Head of FI Compliance	94,000	237,500	97,500	NA	335,000	335,000
Senior Compliance	42,875	120,314	31,101	NA	151,414	152,878
Compliance	13,451	69,510	38,000	NM	112,010	118,670
Retail Trading						
Retail Traders	NA	117,500	67,500	NA	185,000	185,000
Institutional Trading						
Head Inst. Trader	246,750	200,000	504,688	356,824	1,061,511	559,375
Senior Inst. Trader	168,048	135,500	300,000	257,362	692,862	454,954
Institutional Trader	109,825	146,373	180,000	99,165	425,538	294,475
Entry-Level Institutional Trader	N/A	72,307	39,635	NA	111,942	105,426
Institutional Trading Assistants	52,000	46,841	N/A	N/A	114,677	80,759
Institutional Sales						
Head Inst. Sales	490,967	175,000	766,500	687,678	1,629,178	775,178
Senior Inst. Sales	152,530	118,439	110,746	497,192	726,377	576,668
Institutional Sales	51,886	50,750	68,743	277,106	396,599	320,000
Entry-Level Inst. Sales	11,191	80,245	N/A	N/A	140,586	110,415
Inst. Sales Assistants	10,750	50,814	12,292	44,106	107,211	88,696
Public Finance						
Head Public Finance	225,000	225,000	400,000	NA	625,000	600,000
Senior Public Finance	130,660	150,000	223,733	NA	373,733	315,927
Public Finance Analyst	55,673	91,583	49,758	NA	141,341	144,023
Entry-Level Public Finance	17,935	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	3,366	48,833	3,097	NA	51,930	52,027
Operations						
Head Operations	62,943	167,427	43,000	NA	210,427	210,427
Senior Operations	23,125	104,100	25,000	NA	129,100	146,225
Operations	4,000	47,552	9,500	NA	57,052	65,000
Head of Technology	149,000	150,000	195,000	NA	345,000	370,000
Research						
Head of FI Research	240,000	150,000	320,000	NM	670,000	570,000
Senior Analyst	89,975	125,000	77,400	NA	202,400	220,000
Analyst	25,640	69,750	25,000	NA	94,750	81,625
Risk Management						
Risk Analyst	NM	142,500	70,500	NA	213,000	213,000

**High FTE (>150)
Median**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Accounting						
Head of Accounting	138,000	160,500	148,500	NA	309,000	309,000
Controller	70,625	145,000	40,000	NA	185,000	194,500
Assistant Controller	24,667	85,750	32,942	NA	118,692	85,750
Senior Accountant	13,250	55,400	12,560	NA	67,960	65,828
Accountant	1,883	50,313	9,600	NA	59,913	59,913

High FTE (>150) Maximum

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	3,600,000	450,000	2,900,000	NA	3,350,000	3,210,000
Head of Fixed Income	2,850,388	500,000	2,022,000	NM	2,523,000	2,248,000
Chief Financial Officer-Fixed Income	1,600,000	250,000	660,000	NA	910,000	910,000
Compliance						
Head of FI Compliance	275,000	250,000	300,000	NA	550,000	550,000
Senior Compliance	97,000	127,928	62,000	NA	189,928	187,000
Compliance	41,000	92,000	57,000	NM	153,500	130,000
Retail Trading						
Retail Traders	NA	135,000	75,000	NA	210,000	195,000
Institutional Trading						
Head Inst. Trader	2,300,000	325,000	2,100,000	500,000	2,925,000	2,800,000
Senior Inst. Trader	567,300	221,944	427,000	400,000	1,048,944	750,000
Institutional Trader	161,950	190,357	229,023	99,435	518,815	471,482
Entry-Level Institutional Trader	N/A	125,000	100,000	NA	225,000	225,000
Institutional Trading Assistants	238,032	53,682	N/A	29,128	121,518	121,518
Institutional Sales						
Head Inst. Sales	1,666,000	312,500	1,430,514	800,000	2,543,014	1,580,514
Senior Inst. Sales	647,163	187,150	600,000	600,000	1,387,150	640,000
Institutional Sales	174,834	143,523	69,000	400,000	612,523	400,059
Entry-Level Inst. Sales	17,500	102,500	N/A	N/A	162,841	118,330
Inst. Sales Assistants	66,691	75,100	35,000	62,755	172,855	119,382
Public Finance						
Head Public Finance	318,750	425,000	1,889,000	NA	2,314,000	2,114,000
Senior Public Finance	244,869	257,895	250,000	NA	507,895	475,091
Public Finance Analyst	66,789	123,529	88,283	NA	211,812	206,449
Entry-Level Public Finance	22,000	83,158	32,647	NA	115,805	115,805
Public Finance Assistant	4,700	65,000	3,194	NA	68,194	68,000
Operations						
Head Operations	200,000	180,353	61,000	NA	241,353	215,500
Senior Operations	250,000	135,475	180,000	NA	315,475	250,000
Operations	6,222	68,650	52,950	NA	121,600	121,600
Head of Technology	198,000	250,000	365,000	NA	615,000	615,000
Research						
Head of FI Research	380,000	250,000	360,000	NM	810,000	710,000
Senior Analyst	125,000	170,000	120,000	NA	290,000	247,400
Analyst	40,000	75,000	35,000	NA	110,000	100,000
Risk Management						
Risk Analyst	NM	200,000	111,000	NA	311,000	230,000

**High FTE (>150)
Maximum**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Accounting						
Head of Accounting	200,000	246,000	180,000	NA	426,000	363,000
Controller	121,000	154,500	206,000	NA	360,500	351,000
Assistant Controller	42,000	95,000	57,000	NA	152,000	152,000
Senior Accountant	75,000	65,828	22,000	NA	87,828	72,750
Accountant	13,000	58,625	17,500	NA	76,125	76,125

High FTE (>150) Minimum

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	179,156	238,313	122,679	NA	360,992	360,992
Head of Fixed Income	44,511	150,048	60,412	NM	211,460	210,460
Chief Financial Officer-Fixed Income	200,000	200,000	56,000	NA	256,000	281,000
Compliance						
Head of FI Compliance	26,000	144,954	13,500	NA	158,454	158,454
Senior Compliance	10,500	110,000	20,000	NA	130,000	130,000
Compliance	2,500	57,170	11,511	NM	73,181	81,021
Retail Trading						
Retail Traders	N/A	98,000	62,000	N/A	160,000	175,000
Institutional Trading						
Head Inst. Trader	93,667	97,593	125,630	213,647	436,870	311,240
Senior Inst. Trader	122,140	50,000	139,964	114,724	304,688	212,779
Institutional Trader	31,500	42,954	75,217	98,895	217,066	141,849
Entry-Level Institutional Trader	N/A	53,750	18,967	NA	72,717	85,750
Institutional Trading Assistants	19,600	40,000	N/A	N/A	107,836	40,000
Institutional Sales						
Head Inst. Sales	230,000	150,000	112,500	575,357	837,857	425,000
Senior Inst. Sales	6,258	38,363	21,486	179,796	239,645	254,746
Institutional Sales	42,300	31,471	68,485	121,404	221,360	130,500
Entry-Level Inst. Sales	4,882	57,989	N/A	N/A	118,330	102,500
Inst. Sales Assistants	3,833	25,000	6,509	40,000	71,509	63,127
Public Finance						
Head Public Finance	157,197	130,000	247,565	NA	377,565	377,565
Senior Public Finance	111,864	65,000	20,000	NA	85,000	145,000
Public Finance Analyst	24,000	46,153	12,319	NA	58,472	58,472
Entry-Level Public Finance	13,870	60,000	10,000	NA	70,000	70,000
Public Finance Assistant	2,031	38,078	3,000	NA	41,078	38,078
Operations						
Head Operations	35,000	154,500	25,000	NA	179,500	205,353
Senior Operations	19,000	54,600	10,750	NA	65,350	76,600
Operations	1,500	42,500	2,813	NA	45,313	50,365
Head of Technology	36,500	68,627	20,000	NA	88,627	88,627
Research						
Head of FI Research	100,000	150,000	100,000	NM	450,000	250,000
Senior Analyst	54,950	100,000	60,000	NA	160,000	185,000
Analyst	11,280	35,000	11,875	NA	46,875	70,000
Risk Management						
Risk Analyst	104,000	85,000	30,000	NA	115,000	196,000

**High FTE (>150)
Minimum**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Accounting						
Head of Accounting	76,000	75,000	117,000	NA	192,000	255,000
Controller	20,250	95,000	20,000	NA	115,000	115,000
Assistant Controller	7,333	73,767	8,883	NA	82,650	82,650
Senior Accountant	3,058	50,750	3,120	NA	53,870	58,520
Accountant	1,800	42,000	1,700	NA	43,700	43,700

- Note:
1. Certain positions' compensation was not presented when there were insufficient responses to generate a meaningful statistic.
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 - 2a. If the compensation form is "NM" and thus not reported, the compensation is still included in the Total Compensation calculation.
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 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.

Low FTE (<150) Average

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	370,852	255,772	406,168	NM	707,940	733,127
Head of Fixed Income	151,890	215,268	146,706	NA	361,974	361,974
Chief Financial Officer-Fixed Income	113,750	196,100	190,667	NA	386,767	386,767
Compliance						
Head of FI Compliance	70,333	173,383	121,667	NA	295,050	295,050
Compliance	6,414	73,784	12,585	NA	86,369	86,369
Entry-Level Compliance	NM	47,199	5,000	NA	52,199	49,699
Retail Trading						
Head Retail Trader	169,775	150,365	226,842	NA	377,207	377,207
Senior Retail Trader	NM	68,790	NM	NM	377,475	223,132
Retail Traders	NA	78,305	NA	201,723	280,028	280,028
Institutional Trading						
Head Inst. Trader	422,052	160,699	587,359	NM	961,704	673,315
Senior Inst. Trader	215,017	125,448	241,406	80,933	447,787	300,106
Institutional Trader	40,017	67,643	67,884	64,971	200,498	146,774
Entry-Level Institutional Trader	NM	55,507	71,000	NA	126,507	126,507
Institutional Sales						
Head Inst. Sales	298,712	224,081	328,321	NM	1,039,723	714,843
Senior Inst. Sales	675,721	93,039	1,206,500	523,558	1,823,098	785,141
Institutional Sales	162,239	80,958	267,500	243,493	591,951	273,394
Entry-Level Institutional Sales	NA	56,725	NM	NM	239,144	89,829
Inst. Sales Assistants	24,640	56,092	12,987	25,792	94,871	73,348
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	204,239	318,150	NM	610,988	566,688
Investment Banking Analyst	50,114	123,561	113,868	NA	237,429	237,429
Investment Banking Assistant	32,517	90,044	78,167	NA	168,211	168,211
Public Finance						
Head Public Finance	230,089	185,999	407,393	NA	593,392	593,392
Senior Public Finance	107,566	105,973	169,103	NM	402,746	266,789
Public Finance Analyst	31,042	71,837	52,333	NM	213,778	133,489
Public Finance Assistant	8,000	50,114	12,500	NA	62,614	62,614
Operations						
Head Operations	64,570	111,457	85,960	NA	197,417	197,417
Senior Operations	8,805	71,099	14,438	NA	85,537	85,537
Operations	11,250	69,064	13,750	NA	82,814	82,814
Entry-Level Operations	1,600	45,855	3,750	NA	49,605	49,605
Head of Technology	13,918	121,667	139,333	NA	261,000	247,667

**Low FTE (<150)
Average**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Risk Management						
Chief Risk Officer	144,000	267,500	255,000	NA	522,500	522,500
Risk Analyst	32,162	115,319	54,344	NA	169,663	169,663
Accounting						
Head of Accounting	80,000	209,500	125,000	NA	334,500	334,500
Controller	29,125	143,331	62,333	NA	205,665	205,665
Senior Accountant	3,500	70,000	13,000	NA	83,000	83,000
Accountant	NM	56,005	NM	NA	67,255	61,630

Low FTE (<150) Median

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	282,285	262,500	324,500	NM	633,000	735,636
Head of Fixed Income	151,890	215,268	146,706	NA	361,974	361,974
Chief Financial Officer-Fixed Income	100,000	213,300	167,000	NA	380,300	390,000
Compliance						
Head of FI Compliance	90,000	150,150	100,000	NA	250,150	215,150
Compliance	6,414	73,784	12,585	NA	86,369	86,369
Entry-Level Compliance	NM	47,199	5,000	NA	52,199	49,699
Retail Trading						
Head Retail Trader	169,775	150,365	226,842	NA	377,207	377,207
Senior Retail Trader	NM	68,790	NM	NM	377,475	223,132
Retail Traders	NA	78,305	NA	201,723	280,028	280,028
Institutional Trading						
Head Inst. Trader	295,550	175,000	599,717	NM	988,364	529,584
Senior Inst. Trader	217,750	108,500	225,000	88,362	421,862	284,835
Institutional Trader	40,017	67,106	67,884	70,254	205,244	141,849
Entry-Level Institutional Trader	NM	55,507	71,000	NA	126,507	126,507
Institutional Sales						
Head Inst. Sales	298,712	200,000	156,742	NM	844,063	905,000
Senior Inst. Sales	647,163	95,833	1,206,500	581,981	1,884,314	614,500
Institutional Sales	174,834	90,000	267,500	247,235	604,735	221,742
Entry-Level Institutional Sales	NA	53,493	NM	NM	235,912	53,493
Inst. Sales Assistants	10,000	51,240	9,500	25,792	86,532	77,500
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	204,239	318,150	NM	610,988	566,688
Investment Banking Analyst	50,114	123,561	113,868	NA	237,429	237,429
Investment Banking Assistant	32,517	90,044	78,167	NA	168,211	168,211
Public Finance						
Head Public Finance	211,724	200,000	391,500	NA	591,500	541,500
Senior Public Finance	130,660	117,000	164,375	NM	409,045	275,000
Public Finance Analyst	18,750	68,674	56,500	NM	214,782	149,633
Public Finance Assistant	8,000	50,114	12,500	NA	62,614	62,614
Operations						
Head Operations	70,000	110,000	100,000	NA	210,000	200,000
Senior Operations	8,500	72,448	12,500	NA	84,948	84,948
Operations	11,250	69,064	13,750	NA	82,814	82,814
Entry-Level Operations	1,600	45,855	3,750	NA	49,605	49,605
Head of Technology	13,918	110,000	40,000	NA	150,000	133,000

**Low FTE (<150)
Median**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Risk Management						
Chief Risk Officer	144,000	267,500	255,000	NA	522,500	522,500
Risk Analyst	26,500	113,956	42,033	NA	155,989	155,989
Accounting						
Head of Accounting	80,000	209,500	125,000	NA	334,500	334,500
Controller	28,500	135,000	60,000	NA	195,000	195,000
Senior Accountant	3,500	70,000	13,000	NA	83,000	83,000
Accountant	NM	56,005	NM	NA	67,255	61,630

Low FTE (<150) Maximum

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	900,000	350,000	900,000	NM	1,296,000	1,200,000
Head of Fixed Income	259,269	280,488	233,000	NA	513,488	513,488
Chief Financial Officer-Fixed Income	210,000	225,000	240,000	NA	465,000	392,000
Compliance						
Head of FI Compliance	96,000	260,000	200,000	NA	460,000	460,000
Compliance	7,828	75,000	13,170	NA	88,170	87,000
Entry-Level Compliance	NM	61,897	5,000	NA	66,897	66,897
Retail Trading						
Head Retail Trader	295,550	155,900	373,684	NA	529,584	529,584
Senior Retail Trader	NM	70,000	NM	NM	378,685	231,579
Retail Traders	NA	95,000	NA	284,050	379,050	345,660
Institutional Trading						
Head Inst. Trader	850,000	200,000	1,100,000	NM	1,513,647	1,300,000
Senior Inst. Trader	277,470	200,000	302,718	127,670	630,388	458,500
Institutional Trader	73,959	85,000	134,668	98,895	318,563	201,774
Entry-Level Institutional Trader	NM	56,014	100,000	NA	156,014	155,000
Institutional Sales						
Head Inst. Sales	550,000	300,000	705,000	NM	1,492,321	910,543
Senior Inst. Sales	1,130,000	152,000	2,123,000	677,000	2,952,000	2,162,000
Institutional Sales	221,883	144,000	520,000	379,500	1,043,500	559,000
Entry-Level Institutional Sales	NA	71,913	NM	NM	254,332	204,332
Inst. Sales Assistants	66,691	91,980	30,000	44,106	166,086	100,980
Investment Banking						
Head of Investment Banking	337,500	300,000	964,000	NA	1,264,000	1,264,000
Senior Investment Banking	185,790	235,000	400,674	NM	724,273	662,751
Investment Banking Analyst	52,500	124,289	116,800	NA	241,089	241,089
Investment Banking Assistant	38,700	103,755	92,000	NA	195,755	195,755
Public Finance						
Head Public Finance	350,000	225,000	744,899	NA	969,899	969,893
Senior Public Finance	200,000	125,000	230,271	NM	482,941	300,000
Public Finance Analyst	76,667	95,000	75,500	NM	260,108	154,691
Public Finance Assistant	15,000	55,228	15,000	NA	70,228	65,228
Operations						
Head Operations	100,000	159,284	145,500	NA	304,784	304,784
Senior Operations	20,000	95,000	25,000	NA	120,000	120,000
Operations	20,000	75,000	20,000	NA	95,000	95,000
Entry-Level Operations	2,500	48,911	5,500	NA	54,411	54,411
Head of Technology	20,000	150,000	350,000	NA	500,000	500,000

**Low FTE (<150)
Maximum**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Risk Management						
Chief Risk Officer	145,000	305,000	300,000	NA	605,000	530,000
Risk Analyst	57,969	150,000	90,000	NA	240,000	240,000
Accounting						
Head of Accounting	140,000	309,000	225,000	NA	534,000	534,000
Controller	39,500	159,994	92,000	NA	251,994	251,994
Senior Accountant	3,500	70,000	13,000	NA	83,000	83,000
Accountant	NM	69,010	NM	NA	80,260	80,260

Low FTE (<150) Minimum

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	79,581	175,000	95,000	NM	316,000	360,992
Head of Fixed Income	44,511	150,048	60,412	NA	210,460	210,460
Chief Financial Officer-Fixed Income	45,000	150,000	165,000	NA	315,000	378,300
Compliance						
Head of FI Compliance	25,000	110,000	65,000	NA	175,000	210,000
Compliance	5,000	72,568	12,000	NA	84,568	85,738
Entry-Level Compliance	NM	32,500	5,000	NA	37,500	32,500
Retail Trading						
Head Retail Trader	44,000	144,829	80,000	NA	224,829	224,829
Senior Retail Trader	NM	67,579	NM	NM	376,264	214,685
Retail Traders	NA	61,610	NA	119,395	181,005	214,395
Institutional Trading						
Head Inst. Trader	23,000	97,593	50,000	NM	361,240	225,000
Senior Inst. Trader	147,096	95,133	196,500	19,336	310,969	161,836
Institutional Trader	6,075	42,954	1,100	20,481	64,535	105,481
Entry-Level Institutional Trader	NM	55,000	42,000	NA	97,000	98,014
Institutional Sales						
Head Inst. Sales	47,424	172,243	123,222	NM	782,786	328,985
Senior Inst. Sales	250,000	38,363	290,000	290,804	619,167	430,000
Institutional Sales	90,000	31,791	15,000	100,000	146,791	100,000
Entry-Level Institutional Sales	NA	48,000	NM	NM	230,419	48,000
Inst. Sales Assistants	2,511	32,350	2,948	7,478	42,776	39,828
Investment Banking						
Head of Investment Banking	250,000	250,000	408,250	NA	658,250	658,250
Senior Investment Banking	157,031	173,478	235,625	NM	497,702	470,625
Investment Banking Analyst	47,728	122,833	110,936	NA	233,769	233,769
Investment Banking Assistant	26,333	76,333	64,333	NA	140,666	140,666
Public Finance						
Head Public Finance	146,907	130,000	225,000	NA	355,000	377,565
Senior Public Finance	25,000	65,000	117,391	NM	310,061	219,004
Public Finance Analyst	10,000	55,000	25,000	NM	169,608	80,000
Public Finance Assistant	1,000	45,000	10,000	NA	55,000	60,000
Operations						
Head Operations	27,850	71,000	24,300	NA	95,300	95,300
Senior Operations	2,500	44,500	7,750	NA	52,250	52,250
Operations	2,500	63,128	7,500	NA	70,628	70,628
Entry-Level Operations	700	42,799	2,000	NA	44,799	44,799
Head of Technology	7,836	105,000	28,000	NA	133,000	110,000

**Low FTE (<150)
Minimum**

	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Risk Management						
Chief Risk Officer	143,000	230,000	210,000	NA	440,000	515,000
Risk Analyst	12,016	82,000	31,000	NA	113,000	113,000
Accounting						
Head of Accounting	20,000	110,000	25,000	NA	135,000	135,000
Controller	20,000	135,000	35,000	NA	170,000	170,000
Senior Accountant	3,500	70,000	13,000	NA	83,000	83,000
Accountant	NM	43,000	NM	NA	54,250	43,000

- Note:
1. Certain positions' compensation was not presented when there were insufficient responses to generate a meaningful statistic.
 2. "NA" indicates "0" or "NA"; NM indicates positive numerical responses but statistically insignificant to be reported.
 - 2a. If the compensation form is "NM" and thus not reported, the compensation is still included in the Total Compensation calculation.
 3. When a firm did not distinguish between retail and institutional trading/sales, the compensation data were classified as retail or institutional based on their preference or how the and where the firm presented the data. The preference was typically to include in the institutional calculation.
 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.

High Revenue (>\$70 million)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	1,079,465	342,295	1,404,125	N/A	1,746,420	1,746,420
Head of Fixed Income	983,664	301,372	913,750	NM	1,216,122	1,215,372
Chief Financial Officer-Fixed Income	629,563	217,660	341,450	N/A	559,110	559,110
Compliance						
Head of FI Compliance	138,200	223,114	152,750	N/A	375,864	375,864
Senior Compliance	37,542	118,377	34,840	N/A	153,218	153,218
Compliance	20,760	72,812	29,920	NM	107,232	103,857
Entry-Level Compliance	NM	39,782	N/A	N/A	39,782	40,032
Retail Trading						
Head Retail Trader	1,297,775	152,950	411,842	N/A	564,792	564,792
Senior Retail Trader	NM	108,790	223,553	N/A	332,343	332,343
Retail Traders	NA	117,500	67,500	N/A	185,000	185,000
Institutional Trading						
Head Inst. Trader	727,283	225,843	695,527	N/A	1,421,370	949,941
Senior Inst. Trader	289,362	140,721	285,280	N/A	826,002	458,293
Institutional Trader	108,494	129,202	160,417	N/A	389,053	274,465
Entry-Level Institutional Trader	N/A	75,876	48,047	NA	123,923	123,923
Institutional Trading Assistants	145,016	46,841	NM	N/A	114,677	80,759
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	882,645	193,291	646,551	687,678	1,527,520	823,979
Senior Inst. Sales	360,329	107,838	526,347	397,400	1,031,585	713,902
Institutional Sales	91,989	69,249	219,162	275,135	563,546	349,808
Entry-Level Inst. Sales	11,191	72,491	NM	NM	132,832	92,605
Inst. Sales Assistants	13,240	52,638	15,541	51,378	119,556	85,305
Investment Banking						
Senior Investment Banking	NM	169,063	245,549	NA	414,611	414,611
Public Finance Analyst	NM	85,502	75,561	NA	161,062	161,062
Public Finance						
Head Public Finance	231,886	274,999	816,780	NA	1,091,779	1,091,779
Senior Public Finance	129,635	151,568	164,423	NA	315,991	312,658
Public Finance Analyst	46,654	86,408	55,124	NA	141,531	141,531
Entry-Level Public Finance	NM	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	NM	51,785	5,398	NA	57,183	55,833

High Revenue (>\$70 million)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	97,648	150,618	48,667	NA	199,284	199,284
Senior Operations	64,750	92,345	47,292	NA	139,637	139,637
Operations	5,111	55,472	17,294	NA	72,766	72,766
Entry-Level Operations	1,863	45,105	2,632	NA	47,737	47,737
Head of Technology	127,833	153,725	195,000	NA	348,725	348,725
Research						
Head of FI Research	240,000	183,333	260,000	NM	643,333	640,000
Senior Analyst	89,975	131,667	85,800	NA	217,467	233,700
Analyst	25,640	59,917	23,958	NA	83,875	75,813
Risk Management						
Chief Risk Officer	285,000	225,000	325,000	NA	550,000	550,000
Risk Analyst	65,250	132,985	61,011	NA	193,996	193,996
Accounting						
Head of Accounting	138,667	210,000	174,000	NA	384,000	384,000
Controller	80,250	138,624	89,500	NA	228,124	228,124
Assistant Controller	17,611	81,129	26,294	NA	107,424	100,850
Senior Accountant	32,019	57,326	12,560	NA	69,886	65,699
Accountant	5,161	47,875	9,600	NA	57,475	54,275

High Revenue (>\$70 million)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	437,876	300,000	1,037,000	N/A	1,337,000	1,412,000
Head of Fixed Income	504,635	252,744	700,000	NM	953,744	1,050,000
Chief Financial Officer-Fixed Income	404,125	213,300	326,250	N/A	539,550	526,250
Compliance						
Head of FI Compliance	96,000	243,750	148,750	N/A	392,500	397,500
Senior Compliance	32,875	115,627	30,000	N/A	145,627	143,332
Compliance	13,451	71,039	25,585	NM	101,124	102,204
Entry-Level Compliance	NM	39,782	N/A	N/A	39,782	40,032
Retail Trading						
Head Retail Trader	1,297,775	152,950	411,842	N/A	564,792	564,792
Senior Retail Trader	NM	108,790	223,553	N/A	332,343	332,343
Retail Traders	NA	117,500	67,500	N/A	185,000	185,000
Institutional Trading						
Head Inst. Trader	295,550	200,000	373,684	N/A	1,073,684	529,584
Senior Inst. Trader	277,470	135,500	301,359	N/A	836,859	472,926
Institutional Trader	120,263	146,373	161,796	N/A	407,604	239,970
Entry-Level Institutional Trader	N/A	72,000	42,000	N/A	114,000	98,014
Institutional Trading Assistants	145,016	46,841	NM	N/A	114,677	80,759
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	629,934	173,622	533,000	687,678	1,394,300	750,357
Senior Inst. Sales	152,530	118,439	165,073	412,404	695,916	576,668
Institutional Sales	51,886	50,750	69,000	280,000	399,750	333,412
Entry-Level Inst. Sales	11,191	57,989	NM	NM	118,330	102,500
Inst. Sales Assistants	7,173	56,559	11,896	51,378	119,832	88,696
Investment Banking						
Senior Investment Banking	NM	169,063	245,549	NA	414,611	414,611
Public Finance Analyst	NM	85,502	75,561	NA	161,062	161,062
Public Finance						
Head Public Finance	230,000	225,000	744,899	NA	969,899	969,893
Senior Public Finance	111,864	150,000	176,806	NA	326,806	315,927
Public Finance Analyst	55,673	79,191	75,500	NA	154,691	154,691
Entry-Level Public Finance	NM	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	NM	52,031	3,194	NA	55,225	58,628

High Revenue (>\$70 million)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	62,943	154,500	60,000	NA	214,500	205,353
Senior Operations	21,250	87,050	23,500	NA	110,550	137,663
Operations	5,111	55,340	9,250	NA	64,590	67,814
Entry-Level Operations	1,863	45,105	2,632	NA	47,737	47,737
Head of Technology	149,000	150,000	195,000	NA	345,000	370,000
Research						
Head of FI Research	240,000	150,000	320,000	NM	670,000	640,000
Senior Analyst	89,975	125,000	77,400	NA	202,400	233,700
Analyst	25,640	69,750	25,000	NA	94,750	75,813
Risk Management						
Chief Risk Officer	285,000	225,000	325,000	NA	550,000	550,000
Risk Analyst	65,250	113,956	42,033	NA	155,989	196,000
Accounting						
Head of Accounting	140,000	246,000	180,000	NA	426,000	363,000
Controller	80,250	149,750	66,000	NA	215,750	223,247
Assistant Controller	7,333	79,759	13,000	NA	92,759	84,375
Senior Accountant	18,000	55,400	12,560	NA	67,960	65,828
Accountant	1,883	43,000	9,600	NA	52,600	43,700

High Revenue (>\$70 million)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	3,600,000	450,000	2,900,000	N/A	3,350,000	3,210,000
Head of Fixed Income	2,850,388	500,000	2,022,000	NM	2,523,000	2,248,000
Chief Financial Officer-Fixed Income	1,600,000	250,000	660,000	N/A	910,000	910,000
Compliance						
Head of FI Compliance	275,000	260,000	300,000	N/A	560,000	550,000
Senior Compliance	90,000	127,928	62,000	N/A	189,928	187,000
Compliance	41,000	92,000	57,000	NM	153,500	130,000
Entry-Level Compliance	NM	47,063	500	N/A	47,563	47,563
Retail Trading						
Head Retail Trader	2,300,000	155,900	450,000	N/A	605,900	600,000
Senior Retail Trader	NM	150,000	300,000	N/A	450,000	450,000
Retail Traders	NA	135,000	75,000	N/A	210,000	195,000
Institutional Trading						
Head Inst. Trader	2,300,000	325,000	2,100,000	N/A	2,925,000	2,800,000
Senior Inst. Trader	567,300	221,944	427,000	N/A	1,048,944	750,000
Institutional Trader	161,950	190,357	229,023	N/A	518,815	471,482
Entry-Level Institutional Trader	N/A	125,000	100,000	NA	225,000	225,000
Institutional Trading Assistants	238,032	53,682	NA	N/A	121,518	121,518
Retail Sales						
Senior Retail Sales	NM	206,024	NM	NM	507,402	391,378
Institutional Sales						
Head Inst. Sales	1,666,000	312,500	1,430,514	800,000	2,543,014	1,580,514
Senior Inst. Sales	1,130,000	187,150	2,123,000	600,000	2,910,150	2,162,000
Institutional Sales	221,883	143,523	520,000	400,000	1,063,523	559,000
Entry-Level Inst. Sales	17,500	102,500	NM	NM	162,841	118,330
Inst. Sales Assistants	33,750	75,100	35,000	62,755	172,855	119,382
Investment Banking						
Senior Investment Banking	NM	235,000	255,472	NA	490,472	470,625
Public Finance Analyst	NM	124,289	116,800	NA	241,089	241,089
Public Finance						
Head Public Finance	318,750	425,000	1,889,000	NA	2,314,000	2,114,000
Senior Public Finance	244,869	257,895	250,000	NA	507,895	475,091
Public Finance Analyst	66,789	123,529	88,283	NA	211,812	206,449
Entry-Level Public Finance	NM	83,158	32,647	NA	115,805	115,805
Public Finance Assistant	NM	65,000	10,000	NA	75,000	68,000

High Revenue (>\$70 million)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	200,000	180,353	61,000	NA	241,353	215,500
Senior Operations	250,000	135,475	180,000	NA	315,475	250,000
Operations	6,222	68,650	52,950	NA	121,600	121,600
Entry-Level Operations	3,025	47,411	3,263	NA	50,674	50,674
Head of Technology	198,000	250,000	365,000	NA	615,000	615,000
Research						
Head of FI Research	380,000	250,000	360,000	NM	810,000	710,000
Senior Analyst	125,000	170,000	120,000	NA	290,000	247,400
Analyst	40,000	75,000	35,000	NA	110,000	81,625
Risk Management						
Chief Risk Officer	425,000	305,000	440,000	NA	745,000	585,000
Risk Analyst	104,000	200,000	111,000	NA	311,000	230,000
Accounting						
Head of Accounting	200,000	309,000	225,000	NA	534,000	534,000
Controller	121,000	159,994	206,000	NA	365,994	351,000
Assistant Controller	42,000	95,000	57,000	NA	152,000	152,000
Senior Accountant	75,000	65,828	22,000	NA	87,828	72,750
Accountant	13,000	58,625	17,500	NA	76,125	76,125

High Revenue (>\$70 million)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	282,285	278,772	324,500	N/A	603,272	603,272
Head of Fixed Income	75,000	200,000	233,000	NM	434,000	513,488
Chief Financial Officer-Fixed Income	110,000	200,000	56,000	N/A	256,000	281,000
Compliance						
Head of FI Compliance	26,000	144,954	13,500	N/A	158,454	158,454
Senior Compliance	10,500	110,000	20,000	N/A	130,000	130,000
Compliance	7,828	57,170	11,511	NM	73,181	81,021
Entry-Level Compliance	NM	32,500	N/A	N/A	33,000	32,500
Retail Trading						
Head Retail Trader	295,550	150,000	373,684	N/A	523,684	529,584
Senior Retail Trader	NM	67,579	147,106	N/A	214,685	214,685
Retail Traders	NA	100,000	60,000	N/A	160,000	175,000
Institutional Trading						
Head Inst. Trader	93,667	155,900	125,630	N/A	781,530	259,375
Senior Inst. Trader	122,140	50,000	139,964	N/A	589,964	142,000
Institutional Trader	31,500	67,106	75,217	N/A	241,758	143,593
Entry-Level Institutional Trader	N/A	53,750	18,967	NA	72,717	85,750
Institutional Trading Assistants	52,000	40,000	NM	N/A	107,836	40,000
Retail Sales						
Senior Retail Sales	NM	150,000	NM	NM	451,378	266,024
Institutional Sales						
Head Inst. Sales	352,000	150,000	112,500	575,357	837,857	328,985
Senior Inst. Sales	6,258	39,000	21,486	179,796	240,282	254,746
Institutional Sales	42,300	31,471	68,485	121,404	221,360	130,500
Entry-Level Inst. Sales	4,882	56,985	NM	NM	117,326	56,985
Inst. Sales Assistants	2,511	25,000	2,948	40,000	67,948	60,428
Investment Banking						
Senior Investment Banking	NM	103,125	235,625	NA	338,750	358,597
Public Finance Analyst	NM	46,714	34,321	NA	81,035	81,035
Public Finance						
Head Public Finance	146,907	200,000	300,000	NA	500,000	600,000
Senior Public Finance	32,171	74,265	20,000	NA	94,265	125,000
Public Finance Analyst	17,500	46,153	12,319	NA	58,472	58,472
Entry-Level Public Finance	NM	60,000	10,000	NA	70,000	70,000
Public Finance Assistant	NM	38,078	3,000	NA	41,078	38,078

High Revenue (>\$70 million)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Operations						
Head Operations	30,000	117,000	25,000	NA	142,000	177,000
Senior Operations	8,500	54,600	10,750	NA	65,350	76,600
Operations	4,000	42,500	2,813	NA	45,313	50,365
Entry-Level Operations	700	42,799	2,000	NA	44,799	44,799
Head of Technology	36,500	68,627	20,000	NA	88,627	88,627
Research						
Head of FI Research	100,000	150,000	100,000	NM	450,000	570,000
Senior Analyst	54,950	100,000	60,000	NA	160,000	220,000
Analyst	11,280	35,000	11,875	NA	46,875	70,000
Risk Management						
Chief Risk Officer	145,000	145,000	210,000	NA	355,000	515,000
Risk Analyst	26,500	85,000	30,000	NA	115,000	155,989
Accounting						
Head of Accounting	76,000	75,000	117,000	NA	192,000	255,000
Controller	39,500	95,000	20,000	NA	115,000	115,000
Assistant Controller	3,500	70,000	8,883	NA	78,883	82,650
Senior Accountant	3,058	50,750	3,120	NA	53,870	58,520
Accountant	600	42,000	1,700	NA	43,700	43,000

- Note:
1. Certain positions' compensation were not presented when there were insufficient responses to generate a meaningful statistic.
 2. "NA" indicates "0" or "NA"; NM indicates positive numerical responses but statistically insignificant to be reported.
 - 2a. If the compensation form is "NM" and thus not reported, the compensation is still included in the Total Compensation calculation.
 3. When a firm did not distinguish between retail and institutional trading/sales, the compensation data were classified as retail or institutional based on their preference or how the and where the firm presented the data. The preference was typically to include in the institutional calculation.
 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.

Low Revenue (<\$70 million)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	357,178	258,804	408,561	46,000	713,366	673,937
Chief Financial Officer-Fixed Income	174,250	191,667	244,417	NA	436,083	436,083
Compliance						
Head of FI Compliance	61,083	130,075	82,500	NA	212,575	212,575
Retail Trading						
Retail Traders	NA	73,305	NA	152,266	225,571	225,571
Institutional Trading						
Head Inst. Trader	384,702	189,519	558,781	NM	961,947	679,273
Senior Inst. Trader	180,299	143,968	187,833	80,933	412,733	291,839
Institutional Trader	74,921	92,294	72,346	64,971	229,611	173,209
Institutional Sales						
Head Inst. Sales	275,808	225,000	414,111	531,339	1,170,450	855,300
Senior Inst. Sales	301,140	113,795	155,743	505,033	774,570	558,665
Institutional Sales	102,378	93,158	NM	254,806	362,964	250,689
Entry-Level Inst. Sales	NA	68,103	NM	NM	250,522	113,708
Inst. Sales Assistants	23,018	59,029	15,323	25,792	100,144	77,841
Public Finance						
Head Public Finance	262,439	201,000	318,413	NA	519,413	519,413
Senior Public Finance	150,106	137,229	194,054	NM	458,953	318,006
Public Finance Analyst	39,491	81,581	56,594	NM	227,783	146,429
Public Finance Assistant	6,900	55,000	9,000	NA	64,000	64,000
Operations						
Head Operations	65,570	110,071	92,450	NA	202,521	202,521
Senior Operations	11,355	86,125	17,938	NA	104,063	104,063
Operations	7,000	71,500	14,500	NA	86,000	86,000
Head of Technology	21,445	113,333	37,667	NA	151,000	151,000
Research						
Head of FI Research	85,000	234,500	210,000	NA	444,500	444,500
Senior Analyst	30,600	126,128	50,097	NA	176,224	176,224
Risk Management						
Risk Analyst	34,993	116,000	60,500	NA	176,500	176,500
Accounting						
Controller	24,313	NM	47,500	NA	182,500	182,500

Low Revenue (<\$70 million)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	265,000	262,500	341,250	46,000	649,750	641,250
Chief Financial Officer-Fixed Income	200,000	200,000	240,000	NA	440,000	392,000
Compliance						
Head of FI Compliance	68,250	130,075	82,500	NA	212,575	212,575
Retail Trading						
Retail Traders	NA	73,305	NA	152,266	225,571	225,571
Institutional Trading						
Head Inst. Trader	246,750	175,000	542,563	NM	931,210	559,375
Senior Inst. Trader	175,000	129,750	196,500	88,362	414,612	284,835
Institutional Trader	85,242	85,000	72,346	70,254	227,600	141,849
Institutional Sales						
Head Inst. Sales	230,000	200,000	414,111	531,339	1,145,450	905,000
Senior Inst. Sales	250,000	140,000	155,743	517,744	813,487	576,668
Institutional Sales	90,000	100,000	NM	300,059	415,059	221,742
Entry-Level Inst. Sales	NA	60,957	NM	NM	243,376	101,250
Inst. Sales Assistants	10,375	57,500	11,146	25,792	94,438	81,925
Public Finance						
Head Public Finance	266,250	200,000	300,000	NA	500,000	541,500
Senior Public Finance	150,000	121,250	196,098	NM	445,018	295,271
Public Finance Analyst	24,000	76,579	56,500	NM	222,687	149,633
Public Finance Assistant	4,700	55,000	9,000	NA	64,000	64,000
Operations						
Head Operations	70,000	105,000	100,000	NA	205,000	205,000
Senior Operations	8,525	87,500	17,000	NA	104,500	104,500
Operations	3,250	71,500	14,500	NA	86,000	86,000
Head of Technology	20,000	110,000	40,000	NA	150,000	150,000
Research						
Head of FI Research	85,000	234,500	210,000	NA	444,500	444,500
Senior Analyst	30,600	126,128	50,097	NA	176,224	176,224
Risk Management						
Risk Analyst	34,993	116,000	60,500	NA	176,500	176,500
Accounting						
Controller	21,125	NM	47,500	NA	182,500	182,500

Low Revenue (<\$70 million)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	900,000	350,000	900,000	46,000	1,296,000	1,200,000
Chief Financial Officer-Fixed Income	326,250	225,000	326,250	NA	551,250	526,250
Compliance						
Head of FI Compliance	90,000	150,150	100,000	NA	250,150	215,150
Retail Trading						
Retail Traders	NA	85,000	NA	284,050	369,050	345,660
Institutional Trading						
Head Inst. Trader	850,000	300,000	1,100,000	213,647	1,613,647	1,300,000
Senior Inst. Trader	260,500	206,250	225,000	127,670	558,920	458,500
Institutional Trader	123,125	190,357	143,593	98,895	432,845	333,950
Institutional Sales						
Head Inst. Sales	550,000	300,000	705,000	575,357	1,580,357	910,543
Senior Inst. Sales	647,163	152,000	290,000	677,000	1,119,000	677,000
Institutional Sales	174,834	144,000	NM	379,500	538,500	404,519
Entry-Level Inst. Sales	NA	102,500	NM	NM	284,919	204,332
Inst. Sales Assistants	66,691	91,980	30,000	44,106	166,086	100,980
Public Finance						
Head Public Finance	350,000	300,000	428,000	NA	728,000	628,000
Senior Public Finance	244,869	257,895	230,271	NM	615,836	475,091
Public Finance Analyst	76,667	118,167	88,283	NM	296,057	206,449
Public Finance Assistant	15,000	65,000	15,000	NA	80,000	68,000
Operations						
Head Operations	100,000	159,284	145,500	NA	304,784	304,784
Senior Operations	21,250	125,000	30,000	NA	155,000	155,000
Operations	20,000	75,000	20,000	NA	95,000	95,000
Head of Technology	36,500	125,000	45,000	NA	170,000	170,000
Research						
Head of FI Research	100,000	250,000	320,000	NA	570,000	570,000
Senior Analyst	54,950	170,000	77,400	NA	247,400	247,400
Risk Management						
Risk Analyst	57,969	150,000	90,000	NA	240,000	240,000
Accounting						
Controller	35,000	NM	60,000	NA	195,000	195,000

Low Revenue (<\$70 million)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	79,581	175,000	95,000	46,000	316,000	280,818
Chief Financial Officer-Fixed Income	45,000	150,000	167,000	NA	317,000	390,000
Compliance						
Head of FI Compliance	25,000	110,000	65,000	NA	175,000	210,000
Retail Trading						
Retail Traders	NA	61,610	NA	20,481	82,091	105,481
Institutional Trading						
Head Inst. Trader	23,000	97,593	50,000	NM	361,240	225,000
Senior Inst. Trader	129,900	98,055	142,000	19,336	259,391	161,836
Institutional Trader	6,075	42,954	1,100	20,481	64,535	105,481
Institutional Sales						
Head Inst. Sales	47,424	175,000	123,222	487,321	785,543	750,357
Senior Inst. Sales	6,258	38,363	21,486	290,804	350,653	430,000
Institutional Sales	42,300	31,791	NM	100,000	146,791	100,000
Entry-Level Inst. Sales	NA	48,000	NM	NM	230,419	48,000
Inst. Sales Assistants	4,000	32,350	9,000	7,478	48,828	39,828
Public Finance						
Head Public Finance	157,197	130,000	225,000	NA	355,000	377,565
Senior Public Finance	25,000	65,000	153,750	NM	346,420	244,670
Public Finance Analyst	10,000	55,000	25,000	NM	169,608	80,000
Public Finance Assistant	1,000	45,000	3,000	NA	48,000	60,000
Operations						
Head Operations	27,850	71,000	24,300	NA	95,300	95,300
Senior Operations	2,500	44,500	7,750	NA	52,250	52,250
Operations	1,500	68,000	9,000	NA	77,000	77,000
Head of Technology	7,836	105,000	28,000	NA	133,000	133,000
Research						
Head of FI Research	70,000	219,000	100,000	NA	319,000	319,000
Senior Analyst	6,250	82,255	22,793	NA	105,048	105,048
Risk Management						
Risk Analyst	12,016	82,000	31,000	NA	113,000	113,000
Accounting						
Controller	20,000	NM	35,000	NA	170,000	170,000

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2013 BDA Fixed-Income Compensation Survey

Regional Peer Groups: BDA Regional Dealer Fixed-Income 2013 Compensation Survey: Salary, Bonus, Commission and Total Compensation

Peer Group: East (50%)

Peer Group: South (50%)

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	1,063,840	350,754	1,616,700	N/A	1,967,454	1,967,454
Head of Fixed Income	832,931	301,372	913,750	NM	1,216,122	1,215,372
Chief Financial Officer-Fixed Income	598,000	222,075	345,250	N/A	567,325	567,325
Compliance						
Head of FI Compliance	126,542	223,114	152,750	N/A	375,864	375,864
Senior Compliance	49,542	120,472	38,550	N/A	159,022	159,022
Compliance	16,195	72,812	29,920	NM	107,232	103,857
Entry-Level Compliance	NM	39,782	NM	N/A	40,282	40,032
Retail Trading						
Head Retail Trader	1,297,775	152,950	411,842	N/A	564,792	564,792
Senior Retail Trader	NM	108,790	223,553	N/A	332,343	332,343
Retail Traders	NM	117,500	67,500	N/A	185,000	185,000
Institutional Trading						
Head Inst. Trader	730,583	213,483	768,219	N/A	1,481,702	1,065,036
Senior Inst. Trader	301,182	127,615	313,936	N/A	841,552	521,552
Institutional Trader	115,144	116,970	163,782	N/A	380,187	300,639
Entry-Level Institutional Trader	NM	75,876	48,047	NA	76,376	123,923
Institutional Trading Assistants	103,211	46,841	NM	N/A	114,677	80,759
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	719,484	196,949	646,551	N/A	1,643,500	836,250
Senior Inst. Sales	478,353	100,850	627,319	389,898	1,118,067	736,774
Institutional Sales	108,551	63,099	219,162	268,904	551,164	341,433
Entry-Level Inst. Sales	11,191	57,487	N/A	N/A	117,828	87,658
Inst. Sales Assistants	13,921	48,145	16,191	51,378	115,714	84,887

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Investment Banking						
Senior Investment Banking	NM	169,063	245,549	NA	414,611	414,611
Public Finance Analyst	NM	85,502	75,561	NA	161,062	161,062
Public Finance						
Head Public Finance	198,969	268,749	945,975	NA	1,214,723	1,214,723
Senior Public Finance	72,018	130,303	153,868	NA	284,172	284,172
Public Finance Analyst	32,391	78,468	46,834	NA	125,302	125,302
Entry-Level Public Finance	17,935	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	3,366	47,380	6,597	NA	53,977	51,778
Operations						
Head Operations	81,986	150,618	48,667	NA	199,284	199,284
Senior Operations	75,625	85,814	50,750	NA	136,564	136,564
Operations	3,861	52,966	18,953	NA	71,919	71,919
Entry-Level Operations	1,863	45,105	2,632	NA	47,737	47,737
Head of Technology	173,500	160,907	232,500	NA	393,407	393,407
Research						
Head of FI Research	NM	NM	230,000	NM	580,000	480,000
Senior Analyst	NM	112,500	90,000	NA	202,500	202,500
Analyst	NM	55,000	30,000	NA	85,000	85,000
Risk Management						
Chief Risk Officer	285,000	225,000	325,000	NA	550,000	550,000
Risk Analyst	65,250	132,985	61,011	NA	193,996	193,996
Accounting						
Head of Accounting	138,667	210,000	174,000	NA	384,000	384,000
Controller	60,250	138,624	89,500	NA	228,124	228,124
Assistant Controller	17,611	81,129	26,294	NA	107,424	100,850
Senior Accountant	26,140	57,326	12,560	NA	69,886	65,699
Accountant	4,321	47,875	9,600	NA	57,475	54,275

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	437,876	300,000	1,600,000	N/A	1,900,000	1,900,000
Head of Fixed Income	259,269	252,744	700,000	NM	953,744	1,050,000
Chief Financial Officer-Fixed Income	341,000	219,150	332,500	N/A	551,650	539,150
Compliance						
Head of FI Compliance	95,000	243,750	148,750	N/A	392,500	397,500
Senior Compliance	42,875	120,314	35,951	N/A	156,264	156,581
Compliance	10,640	71,039	25,585	NM	101,124	102,204
Entry-Level Compliance	NM	39,782	NM	N/A	40,282	40,032
Retail Trading						
Head Retail Trader	1,297,775	152,950	411,842	N/A	564,792	564,792
Senior Retail Trader	NM	108,790	223,553	N/A	332,343	332,343
Retail Traders	NM	117,500	67,500	N/A	185,000	185,000
Institutional Trading						
Head Inst. Trader	295,550	187,500	561,842	N/A	1,249,342	727,292
Senior Inst. Trader	277,470	121,000	302,718	N/A	823,718	548,000
Institutional Trader	133,563	143,024	180,000	N/A	422,459	255,000
Entry-Level Institutional Trader	NM	72,000	42,000	NA	72,500	98,014
Institutional Trading Assistants	52,000	46,841	NM	N/A	114,677	80,759
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	490,967	172,243	533,000	N/A	1,505,243	741,500
Senior Inst. Sales	249,300	94,100	219,400	389,898	703,398	525,199
Institutional Sales	59,800	40,000	69,000	277,106	386,106	326,706
Entry-Level Inst. Sales	11,191	57,487	N/A	N/A	117,828	87,658
Inst. Sales Assistants	9,216	56,500	11,500	51,378	119,378	90,000
Investment Banking						
Senior Investment Banking	NM	169,063	245,549	NA	414,611	414,611
Public Finance Analyst	NM	85,502	75,561	NA	161,062	161,062

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	220,000	224,997	747,449	NA	972,446	1,072,446
Senior Public Finance	72,018	125,000	136,417	NA	261,417	312,055
Public Finance Analyst	24,000	72,096	47,750	NA	119,846	119,846
Entry-Level Public Finance	17,935	71,579	21,324	NA	92,903	92,903
Public Finance Assistant	3,366	48,833	6,597	NA	55,430	52,027
Operations						
Head Operations	48,972	154,500	60,000	NA	214,500	205,353
Senior Operations	22,000	70,000	22,000	NA	92,000	129,100
Operations	3,861	47,552	9,500	NA	57,052	65,000
Entry-Level Operations	1,863	45,105	2,632	NA	47,737	47,737
Head of Technology	173,500	162,500	272,500	NA	435,000	435,000
Research						
Head of FI Research	NM	NM	230,000	NM	580,000	480,000
Senior Analyst	NM	112,500	90,000	NA	202,500	202,500
Analyst	NM	55,000	30,000	NA	85,000	85,000
Risk Management						
Chief Risk Officer	285,000	225,000	325,000	NA	550,000	550,000
Risk Analyst	65,250	113,956	42,033	NA	155,989	196,000
Accounting						
Head of Accounting	140,000	246,000	180,000	NA	426,000	363,000
Controller	39,500	149,750	66,000	NA	215,750	223,247
Assistant Controller	7,333	79,759	13,000	NA	92,759	84,375
Senior Accountant	13,250	55,400	12,560	NA	67,960	65,828
Accountant	1,842	43,000	9,600	NA	52,600	43,700

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	3,600,000	450,000	2,900,000	N/A	3,350,000	3,210,000
Head of Fixed Income	2,850,388	500,000	2,022,000	NM	2,523,000	2,248,000
Chief Financial Officer-Fixed Income	1,600,000	250,000	660,000	N/A	910,000	910,000
Compliance						
Head of FI Compliance	275,000	260,000	300,000	N/A	560,000	550,000
Senior Compliance	97,000	127,928	62,000	N/A	189,928	187,000
Compliance	41,000	92,000	57,000	NM	153,500	130,000
Entry-Level Compliance	NM	47,063	NM	N/A	47,563	47,563
Retail Trading						
Head Retail Trader	2,300,000	155,900	450,000	N/A	605,900	600,000
Senior Retail Trader	NM	150,000	300,000	N/A	450,000	450,000
Retail Traders	NM	135,000	75,000	N/A	210,000	195,000
Institutional Trading						
Head Inst. Trader	2,300,000	325,000	2,100,000	N/A	2,925,000	2,800,000
Senior Inst. Trader	567,300	221,944	427,000	N/A	1,048,944	750,000
Institutional Trader	161,950	150,000	229,023	N/A	478,458	471,482
Entry-Level Institutional Trader	NM	125,000	100,000	NA	225,000	225,000
Institutional Trading Assistants	238,032	53,682	NM	N/A	121,518	121,518
Retail Sales						
Senior Retail Sales	NM	206,024	NM	NM	507,402	391,378
Institutional Sales						
Head Inst. Sales	1,666,000	312,500	1,430,514	N/A	2,543,014	1,580,514
Senior Inst. Sales	1,130,000	187,150	2,123,000	600,000	2,910,150	2,162,000
Institutional Sales	221,883	143,523	520,000	400,000	1,063,523	559,000
Entry-Level Inst. Sales	17,500	57,989	N/A	N/A	118,330	118,330
Inst. Sales Assistants	33,750	57,480	35,000	62,755	155,235	119,382
Investment Banking						
Senior Investment Banking	NM	235,000	255,472	NA	490,472	470,625
Public Finance Analyst	NM	124,289	116,800	NA	241,089	241,089

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	230,000	425,000	1,889,000	NA	2,314,000	2,114,000
Senior Public Finance	111,864	175,638	250,000	NA	425,638	425,000
Public Finance Analyst	55,673	123,529	79,516	NA	203,045	203,045
Entry-Level Public Finance	22,000	83,158	32,647	NA	115,805	115,805
Public Finance Assistant	4,700	55,228	10,000	NA	65,228	65,228
Operations						
Head Operations	200,000	180,353	61,000	NA	241,353	215,500
Senior Operations	250,000	135,475	180,000	NA	315,475	250,000
Operations	6,222	68,650	52,950	NA	121,600	121,600
Entry-Level Operations	3,025	47,411	3,263	NA	50,674	50,674
Head of Technology	198,000	250,000	365,000	NA	615,000	615,000
Research						
Head of FI Research	NM	NM	360,000	NM	710,000	710,000
Senior Analyst	NM	125,000	120,000	NA	245,000	220,000
Analyst	NM	75,000	35,000	NA	110,000	100,000
Risk Management						
Chief Risk Officer	425,000	305,000	440,000	NA	745,000	585,000
Risk Analyst	104,000	200,000	111,000	NA	311,000	230,000
Accounting						
Head of Accounting	200,000	309,000	225,000	NA	534,000	534,000
Controller	121,000	159,994	206,000	NA	365,994	351,000
Assistant Controller	42,000	95,000	57,000	NA	152,000	152,000
Senior Accountant	75,000	65,828	22,000	NA	87,828	72,750
Accountant	13,000	58,625	17,500	NA	76,125	76,125

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	225,000	278,772	324,500	N/A	603,272	603,272
Head of Fixed Income	75,000	200,000	233,000	NM	434,000	513,488
Chief Financial Officer-Fixed Income	110,000	200,000	56,000	N/A	256,000	281,000
Compliance						
Head of FI Compliance	26,000	144,954	13,500	N/A	158,454	158,454
Senior Compliance	10,500	113,332	20,300	N/A	133,632	135,927
Compliance	2,500	57,170	11,511	NM	73,181	81,021
Entry-Level Compliance	NM	32,500	NM	N/A	33,000	32,500
Retail Trading						
Head Retail Trader	295,550	150,000	373,684	NA	523,684	529,584
Senior Retail Trader	NM	67,579	147,106	NA	214,685	214,685
Retail Traders	NM	100,000	60,000	NA	160,000	175,000
Institutional Trading						
Head Inst. Trader	93,667	155,900	125,630	N/A	781,530	410,000
Senior Inst. Trader	122,140	50,000	139,964	N/A	589,964	361,908
Institutional Trader	31,500	67,106	75,217	N/A	241,758	201,774
Entry-Level Institutional Trader	NM	53,750	18,967	N/A	72,717	85,750
Institutional Trading Assistants	19,600	40,000	NM	N/A	107,836	40,000
Retail Sales						
Senior Retail Sales	NM	150,000	NM	NM	451,378	266,024
Institutional Sales						
Head Inst. Sales	230,000	150,000	112,500	N/A	1,062,500	328,985
Senior Inst. Sales	55,759	39,000	83,451	179,796	302,247	254,746
Institutional Sales	43,971	31,471	68,485	121,404	221,360	130,500
Entry-Level Inst. Sales	4,882	56,985	N/A	N/A	117,326	56,985
Inst. Sales Assistants	2,511	25,000	2,948	40,000	67,948	60,428
Investment Banking						
Senior Investment Banking	NM	103,125	235,625	NA	338,750	358,597
Public Finance Analyst	NM	46,714	34,321	NA	81,035	81,035

East Region

(Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South Region

(Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	146,907	200,000	400,000	NA	600,000	600,000
Senior Public Finance	32,171	74,265	20,000	NA	94,265	145,000
Public Finance Analyst	17,500	46,153	12,319	NA	58,472	58,472
Entry-Level Public Finance	13,870	60,000	10,000	NA	70,000	70,000
Public Finance Assistant	2,031	38,078	3,194	NA	41,272	38,078
Operations						
Head Operations	30,000	117,000	25,000	NA	142,000	177,000
Senior Operations	8,500	54,600	10,750	NA	65,350	76,600
Operations	1,500	42,500	2,813	NA	45,313	50,365
Entry-Level Operations	700	42,799	2,000	NA	44,799	44,799
Head of Technology	149,000	68,627	20,000	NA	88,627	88,627
Research						
Head of FI Research	NM	NM	100,000	NM	450,000	250,000
Senior Analyst	NM	100,000	60,000	NA	160,000	185,000
Analyst	NM	35,000	25,000	NA	60,000	70,000
Risk Management						
Chief Risk Officer	145,000	145,000	210,000	NA	355,000	515,000
Risk Analyst	26,500	85,000	30,000	NA	115,000	155,989
Accounting						
Head of Accounting	76,000	75,000	117,000	NA	192,000	255,000
Controller	20,250	95,000	20,000	NA	115,000	115,000
Assistant Controller	3,500	70,000	8,883	NA	78,883	82,650
Senior Accountant	3,058	50,750	3,120	NA	53,870	58,520
Accountant	600	42,000	1,700	NA	43,700	43,000

- Note:
1. Certain positions' compensation was not presented when there were insufficient responses to generate a meaningful statistic.
 2. "NA" indicates "0" or "NA"; NM indicates positive numerical responses but statistically insignificant to be reported.
 - 2a. If the compensation form is "N.A." and thus not reported the compensation is still included in the Total compensation calculation.
 3. When a firm did not distinguish between retail and institutional trading/sales, the compensation data were classified as retail or institutional based on their preference or how the and where the firm presented the data. The preference was typically to include in the institutional calculation.
 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.
 7. The regional group is evenly weighted between the South and East Regions: 50%.

Peer Group: Midwest (90%)

Peer Group: West (10%)

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	451,337	281,540	756,943	NM	1,084,483	1,043,083
Head of Fixed Income	152,195	310,179	297,804	NA	607,983	607,983
Chief Financial Officer-Fixed Income	209,036	207,660	311,650	NA	519,310	519,310
Compliance						
Head of FI Compliance	108,042	201,530	152,500	NA	354,030	354,030
Senior Compliance	44,350	119,065	38,475	NA	157,540	157,540
Compliance	7,195	77,270	18,670	NA	95,940	95,940
Entry-Level Compliance	2,800	47,153	2,750	NA	49,903	48,987
Retail Trading						
Head Retail Trader	169,775	150,365	226,842	NA	377,207	377,207
Senior Retail Trader	NM	68,790	NM	NM	377,475	223,132
Retail Traders	NA	78,305	NA	201,723	280,028	280,028
Institutional Trading						
Head Inst. Trader	378,458	200,437	547,777	213,647	961,861	706,447
Senior Inst. Trader	233,551	144,654	238,864	80,933	464,450	339,866
Institutional Trader	100,939	94,162	106,916	64,971	266,049	193,470
Entry-Level Institutional Trader	17,542	59,191	48,242	NA	107,433	107,433
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	569,085	218,291	326,093	531,339	1,075,722	667,147
Senior Inst. Sales	389,747	111,153	547,467	458,570	1,117,191	683,655
Institutional Sales	105,465	88,727	168,121	232,572	489,420	277,773
Entry-Level Inst. Sales	11,191	64,565	27,811	93,570	185,945	101,250
Inst. Sales Assistants	20,228	58,308	15,107	25,792	99,207	75,789
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	204,239	318,150	NM	610,988	566,688
Public Finance Analyst	50,114	123,561	113,868	NA	237,429	237,429
Entry-Level Investment Banking	32,517	90,044	78,167	NA	168,211	168,211

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Average	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	241,301	236,428	440,995	NA	677,423	677,423
Senior Public Finance	127,795	136,049	150,004	NM	413,723	283,261
Public Finance Analyst	38,661	88,174	64,960	NM	242,742	157,242
Entry-Level Public Finance	31,123	80,329	38,199	NA	118,528	118,528
Public Finance Assistant	5,683	53,515	7,799	NA	61,314	61,314
Operations						
Head Operations	60,113	118,631	81,800	NA	200,431	200,431
Senior Operations	41,784	81,157	19,250	NA	100,407	100,406
Operations	6,844	63,456	19,790	NA	83,246	83,246
Head of Technology	2,075	46,374	3,588	NA	49,961	49,961
Research						
Head of FI Research	85,000	234,500	210,000	NA	444,500	444,500
Senior Analyst	30,600	126,128	50,097	NA	176,224	176,224
Risk Management						
Chief Risk Officer	237,667	226,667	316,667	NA	543,333	543,333
Risk Analyst	50,121	107,739	68,508	NA	176,247	176,247
Accounting						
Head of Accounting	78,667	221,667	122,333	NA	344,000	344,000
Controller	42,958	143,749	98,250	NA	241,999	241,999
Assistant Controller	17,611	79,589	26,294	NA	105,883	105,883
Senior Accountant	7,765	67,050	10,040	NA	77,090	77,090
Accountant	4,321	53,159	10,150	NA	63,309	60,771

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	305,000	289,386	429,625	NM	765,011	754,625
Head of Fixed Income	152,500	280,488	233,000	NA	513,488	513,488
Chief Financial Officer-Fixed Income	200,000	213,300	240,000	NA	453,300	392,000
Compliance						
Head of FI Compliance	92,000	237,500	100,000	NA	337,500	335,000
Senior Compliance	40,750	119,166	35,951	NA	155,117	156,581
Compliance	6,414	73,784	12,585	NA	86,369	86,369
Entry-Level Compliance	2,800	47,063	2,750	NA	49,813	47,563
Retail Trading						
Head Retail Trader	169,775	150,365	226,842	NA	377,207	377,207
Senior Retail Trader	NM	68,790	NM	161,579	NM	223,132
Retail Traders	NA	78,305	NA	201,723	NA	280,028
Institutional Trading						
Head Inst. Trader	255,000	175,000	373,684	213,647	762,331	544,480
Senior Inst. Trader	182,000	121,000	210,750	88,362	420,112	348,250
Institutional Trader	109,825	80,000	134,668	70,254	284,922	174,770
Entry-Level Institutional Trader	17,542	55,507	37,000	NA	92,507	94,491
Retail Sales						
Senior Retail Sales	NM	178,012	NM	NM	479,390	328,701
Institutional Sales						
Head Inst. Sales	352,000	187,500	156,742	531,339	875,581	716,678
Senior Inst. Sales	249,650	117,917	219,400	453,507	790,824	563,004
Institutional Sales	74,900	95,000	68,743	245,005	408,748	277,577
Entry-Level Inst. Sales	11,191	57,487	27,811	93,570	178,867	101,250
Inst. Sales Assistants	10,000	56,618	10,000	25,792	92,410	80,000
Investment Banking						
Head of Investment Banking	293,750	275,000	686,125	NA	961,125	961,125
Senior Investment Banking	171,411	204,239	318,150	NM	610,988	566,688
Public Finance Analyst	50,114	123,561	113,868	NA	237,429	237,429
Entry-Level Investment Banking	32,517	90,044	78,167	NA	168,211	168,211

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Median	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	230,000	224,994	391,500	NA	616,494	600,000
Senior Public Finance	130,660	123,125	153,750	NM	404,545	285,136
Public Finance Analyst	24,000	87,096	75,500	NM	252,204	153,096
Entry-Level Public Finance	22,000	80,329	38,199	NA	118,528	118,528
Public Finance Assistant	3,366	52,031	6,597	NA	58,628	62,614
Operations						
Head Operations	62,943	113,500	80,500	NA	194,000	205,000
Senior Operations	13,763	80,000	22,000	NA	102,000	89,000
Operations	4,000	68,000	9,500	NA	77,500	77,000
Head of Technology	2,500	47,411	3,263	NA	50,674	50,674
Research						
Head of FI Research	85,000	234,500	210,000	NA	444,500	444,500
Senior Analyst	30,600	126,128	50,097	NA	176,224	176,224
Risk Management						
Chief Risk Officer	145,000	230,000	300,000	NA	530,000	530,000
Risk Analyst	42,235	99,478	66,017	NA	165,495	175,995
Accounting						
Head of Accounting	76,000	246,000	117,000	NA	363,000	363,000
Controller	28,500	140,000	76,000	NA	216,000	223,497
Assistant Controller	7,333	73,767	13,000	NA	86,767	83,000
Senior Accountant	5,779	55,400	5,000	NA	60,400	72,750
Accountant	1,842	50,813	11,250	NA	62,063	59,913

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	1,400,000	425,000	2,785,000	NM	3,256,000	3,210,000
Head of Fixed Income	259,269	500,000	600,000	NA	1,100,000	1,100,000
Chief Financial Officer-Fixed Income	482,000	250,000	660,000	NA	910,000	910,000
Compliance						
Head of FI Compliance	275,000	260,000	300,000	NA	560,000	550,000
Senior Compliance	97,000	127,928	62,000	NA	189,928	187,000
Compliance	13,451	92,000	38,000	NA	130,000	130,000
Entry-Level Compliance	3,100	61,897	5,000	NA	66,897	66,897
Retail Trading						
Head Retail Trader	295,550	155,900	373,684	NA	529,584	529,584
Senior Retail Trader	NM	70,000	NM	NM	378,685	231,579
Retail Traders	NA	95,000	NA	284,050	379,050	345,660
Institutional Trading						
Head Inst. Trader	850,000	325,000	1,100,000	213,647	1,638,647	1,300,000
Senior Inst. Trader	567,300	221,944	427,000	127,670	776,614	548,000
Institutional Trader	161,950	190,357	180,000	98,895	469,252	333,950
Entry-Level Institutional Trader	30,000	72,000	100,000	NA	172,000	155,000
Retail Sales						
Senior Retail Sales	NM	206,024	NM	NM	507,402	391,378
Institutional Sales						
Head Inst. Sales	1,666,000	312,500	705,000	575,357	1,592,857	910,543
Senior Inst. Sales	1,130,000	187,150	2,123,000	677,000	2,987,150	2,162,000
Institutional Sales	221,883	144,000	520,000	379,500	1,043,500	559,000
Entry-Level Inst. Sales	17,500	102,500	50,000	132,419	284,919	101,250
Inst. Sales Assistants	66,691	91,980	35,000	44,106	171,086	100,980
Investment Banking						
Head of Investment Banking	337,500	300,000	964,000	NA	1,264,000	1,264,000
Senior Investment Banking	185,790	235,000	400,674	NM	724,273	662,751
Public Finance Analyst	52,500	124,289	116,800	NA	241,089	241,089
Entry-Level Investment Banking	38,700	103,755	92,000	NA	195,755	195,755

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Maximum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	350,000	425,000	750,000	NA	1,175,000	1,175,000
Senior Public Finance	244,869	257,895	230,271	NM	615,836	475,091
Public Finance Analyst	76,667	123,529	88,283	NM	301,420	206,449
Entry-Level Public Finance	57,500	83,158	43,750	NA	126,908	121,250
Public Finance Assistant	15,000	65,000	15,000	NA	80,000	68,000
Operations						
Head Operations	100,000	159,284	145,500	NA	304,784	304,784
Senior Operations	250,000	125,000	30,000	NA	155,000	155,000
Operations	20,000	75,000	52,950	NA	127,950	121,600
Head of Technology	3,025	48,911	5,500	NA	54,411	54,411
Research						
Head of FI Research	100,000	250,000	320,000	NA	570,000	570,000
Senior Analyst	54,950	170,000	77,400	NA	247,400	247,400
Risk Management						
Chief Risk Officer	425,000	305,000	440,000	NA	745,000	585,000
Risk Analyst	104,000	150,000	111,000	NA	261,000	240,000
Accounting						
Head of Accounting	140,000	309,000	225,000	NA	534,000	534,000
Controller	121,000	159,994	206,000	NA	365,994	351,000
Assistant Controller	42,000	95,000	57,000	NA	152,000	152,000
Senior Accountant	18,000	95,000	22,000	NA	117,000	100,000
Accountant	13,000	69,010	17,500	NA	86,510	80,260

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Senior Executive						
Senior Executive of Broker Dealer	79,581	175,000	95,000	NM	316,000	280,818
Head of Fixed Income	44,511	150,048	60,412	NA	210,460	210,460
Chief Financial Officer-Fixed Income	45,000	150,000	165,000	NA	315,000	378,300
Compliance						
Head of FI Compliance	25,000	110,000	65,000	NA	175,000	210,000
Senior Compliance	14,000	110,000	20,000	NA	130,000	130,000
Compliance	2,500	69,510	11,511	NA	81,021	81,021
Entry-Level Compliance	2,500	32,500	500	NA	33,000	32,500
Retail Trading						
Head Retail Trader	44,000	144,829	80,000	NA	224,829	224,829
Senior Retail Trader	NM	67,579	NM	NM	376,264	214,685
Retail Traders	NA	61,610	NA	119,395	181,005	214,395
Institutional Trading						
Head Inst. Trader	23,000	97,593	50,000	213,647	361,240	225,000
Senior Inst. Trader	122,140	95,133	139,964	19,336	254,433	161,836
Institutional Trader	6,075	42,954	1,100	20,481	64,535	105,481
Entry-Level Institutional Trader	5,084	53,750	18,967	NA	72,717	85,750
Retail Sales						
Senior Retail Sales	NM	150,000	NM	NM	451,378	266,024
Institutional Sales						
Head Inst. Sales	47,424	150,000	112,500	487,321	749,821	328,985
Senior Inst. Sales	6,258	38,363	21,486	179,796	239,645	297,199
Institutional Sales	42,300	31,791	15,000	100,000	146,791	100,000
Entry-Level Inst. Sales	4,882	48,000	5,621	54,720	108,341	48,000
Inst. Sales Assistants	2,511	32,350	2,948	7,478	42,776	39,828
Investment Banking						
Head of Investment Banking	250,000	250,000	408,250	NA	658,250	658,250
Senior Investment Banking	157,031	173,478	235,625	NM	497,702	470,625
Public Finance Analyst	47,728	122,833	110,936	NA	233,769	233,769
Entry-Level Investment Banking	26,333	76,333	64,333	NA	140,666	140,666

Midwest Region

(Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West Region

(Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Minimum	Bonus – 2011	Salary – 2012	Bonus – 2012	Commission – 2012	Sum – 2012	Total Compensation – 2012
Public Finance						
Head Public Finance	146,907	130,000	225,000	NA	355,000	377,565
Senior Public Finance	25,000	65,000	20,000	NM	212,670	145,000
Public Finance Analyst	10,000	55,000	25,000	NM	169,608	80,000
Entry-Level Public Finance	13,870	77,500	32,647	NA	110,147	115,805
Public Finance Assistant	1,000	45,000	3,000	NA	48,000	52,027
Operations						
Head Operations	27,850	71,000	24,300	NA	95,300	95,300
Senior Operations	2,500	44,500	7,750	NA	52,250	52,250
Operations	1,500	42,500	7,500	NA	50,000	52,000
Head of Technology	700	42,799	2,000	NA	44,799	44,799
Research						
Head of FI Research	70,000	219,000	100,000	NA	319,000	319,000
Senior Analyst	6,250	82,255	22,793	NA	105,048	105,048
Risk Management						
Chief Risk Officer	143,000	145,000	210,000	NA	355,000	515,000
Risk Analyst	12,016	82,000	31,000	NA	113,000	113,000
Accounting						
Head of Accounting	20,000	110,000	25,000	NA	135,000	135,000
Controller	20,000	135,000	35,000	NA	170,000	170,000
Assistant Controller	3,500	70,000	8,883	NA	78,883	82,650
Senior Accountant	1,500	50,750	3,120	NA	53,870	58,520
Accountant	600	42,000	1,700	NA	43,700	43,000

- Note:
1. Certain positions' compensation was not presented when there were insufficient responses to generate a meaningful statistic.
 2. "NA" indicates "0" or "NA"; NM indicates positive numerical responses but statistically insignificant to be reported.
 - 2a. If the compensation form is "NM" and thus not reported, the compensation is still included in the Total Compensation calculation.
 3. When a firm did not distinguish between retail and institutional trading/sales, the compensation data were classified as retail or institutional based on their preference or how the and where the firm presented the data. The preference was typically to include in the institutional calculation.
 4. A dealer firm reported the same data for head of retail and institutional sales.
 5. "Sum" is the sum of the three forms of compensation. "Total" is the total compensation reported by the dealer firm.
 6. Sales management such as head of sales may include an override from sales professional compensation.
 7. The regional group is weighted towards the Midwest (90%) vs. West Region (10%).

2013 BDA Fixed-Income Compensation Survey

III-A. Median Bonus Trend By Position: 2007-2012

National Medians

	2007	2008	2009	2010	2011	2012
Senior Executive						
Senior Executive of Broker Dealer	571,876	400,000	250,000	356,000	318,750	496,000
Head of Fixed Income	386,585	365,636	293,900	447,500	244,635	600,000
Chief Financial Officer-Fixed Income	196,742	91,483	97,813	120,000	205,000	240,000
<i>Departmental Average Median</i>	<i>385,068</i>	<i>285,706</i>	<i>213,904</i>	<i>307,833</i>	<i>256,128</i>	<i>445,333</i>
Compliance						
Head of FI Compliance	66,053	73,730	104,910	200,000	92,000	98,750
Senior Compliance	29,524	55,000	12,500	94,375	40,750	30,000
Compliance	13,904	4,369	13,000	27,500	7,828	13,170
Entry-Level Compliance	5,079	3,998	1,000	3,100	2,800	2,750
<i>Departmental Average Median</i>	<i>28,640</i>	<i>34,274</i>	<i>32,853</i>	<i>81,244</i>	<i>35,845</i>	<i>36,168</i>
Retail Trading						
Head Retail Trader	156,906	203,042	610,014	521,879	295,550	373,684
Senior Retail Trader	83,882	25,000	35,000	82,350	188,845	223,553
Retail Traders	N/A	N/A	319,796	187,045	104,193	67,500
Retail Trading Assistants	N/A	10,000	25,464	26,875	28,750	21,000
<i>Departmental Average Median</i>	<i>120,394</i>	<i>79,347</i>	<i>247,569</i>	<i>204,537</i>	<i>154,334</i>	<i>171,434</i>
Institutional Trading						
Head Inst. Trader	417,105	266,467	510,000	465,939	275,275	561,842
Senior Inst. Trader	81,215	90,938	185,728	325,726	189,000	262,500
Institutional Trader	N/A	29,806	68,500	97,000	96,525	143,593
Entry-Level Inst. Trader	15,371	32,938	27,988	41,743	17,542	44,635
Institutional Trading Assistants	N/A	N/A	N/A	N/A	38,500	34,354
<i>Departmental Average Median</i>	<i>171,230</i>	<i>105,037</i>	<i>198,054</i>	<i>232,602</i>	<i>123,368</i>	<i>209,385</i>
Retail Sales						
Senior Retail Sales	205,800	75,000	N/A	N/A	N/A	N/A
Retail Sales Assistants	58,655	10,000	7,000	7,000	9,302	N/A
<i>Departmental Average Median</i>	<i>132,228</i>	<i>42,500</i>	<i>7,000</i>	<i>7,000</i>	<i>9,302</i>	<i>N/A</i>
Institutional Sales						
Head Inst. Sales	365,244	291,905	440,000	395,000	451,000	533,000
Senior Inst. Sales	331,246	340,000	217,075	295,000	249,650	219,400
Institutional Sales	129,784	60,000	122,911	75,000	74,900	68,743
Entry-Level Inst. Sales	40,007	15,916	26,291	3,313	11,191	27,811
Inst. Sales Assistants	17,051	12,000	10,521	13,911	10,000	11,500
<i>Departmental Average Median</i>	<i>176,666</i>	<i>143,964</i>	<i>163,360</i>	<i>156,445</i>	<i>159,348</i>	<i>172,091</i>

National Medians

	2007	2008	2009	2010	2011	2012
Investment Banking						
Head of Investment Banking	354,500	186,539	95,626	147,813	293,750	686,125
Senior Investment Banking	416,630	92,855	13,234	69,117	171,411	255,472
Investment Bankers	168,749	47,808	56,300	83,245	50,114	110,936
Entry-Level Investment Banking	51,000	17,973	41,875	43,379	32,517	78,167
<i>Departmental Average Median</i>	<i>247,720</i>	<i>86,294</i>	<i>51,759</i>	<i>85,888</i>	<i>136,948</i>	<i>282,675</i>
Public Finance						
Head Public Finance	209,925	221,503	440,000	431,428	230,000	400,000
Senior Public Finance	246,732	110,000	175,000	434,266	130,660	175,000
Public Finance Analyst	25,617	18,250	21,000	43,867	24,000	56,500
Entry-Level Public Finance	10,501	15,000	17,500	25,501	22,000	32,647
Public Finance Assistant	11,603	6,562	11,500	18,165	3,366	6,597
<i>Departmental Average Median</i>	<i>100,876</i>	<i>74,263</i>	<i>133,000</i>	<i>190,645</i>	<i>82,005</i>	<i>134,149</i>
Operations						
Head Operations	72,128	38,260	30,000	27,500	66,472	61,000
Senior Operations	30,887	31,750	20,107	9,150	19,000	22,000
Operations	8,477	10,000	10,500	5,000	4,000	9,500
Entry-Level Operations	7,500	5,125	8,250	8,500	2,500	3,263
Head of Technology	60,938	59,268	30,000	15,000	36,500	45,000
<i>Departmental Average Median</i>	<i>35,986</i>	<i>28,881</i>	<i>19,771</i>	<i>13,030</i>	<i>25,694</i>	<i>28,153</i>
Research						
Head of FI Research	130,900	200,000	200,000	262,500	100,000	210,000
Senior Analyst	27,290	52,728	70,000	77,717	54,950	68,700
Analyst	29,880	3,570	8,400	50,000	25,640	25,000
Entry-Level Analyst	N/A	2,750	15,938	3,000	NA	14,996
<i>Departmental Average Median</i>	<i>62,690</i>	<i>64,762</i>	<i>73,584</i>	<i>98,304</i>	<i>60,197</i>	<i>79,674</i>
Risk Management						
Chief Risk Officer	N/A	N/A	117,000	166,088	145,000	300,000
Risk Analyst	N/A	N/A	N/A	36,109	42,235	42,033
<i>Departmental Average Median</i>	<i>N/A</i>	<i>N/A</i>	<i>117,000</i>	<i>101,099</i>	<i>93,617</i>	<i>171,017</i>
Accounting						
Head of Accounting	95,938	140,000	5,000	107,500	108,000	148,500
Controller	63,334	52,500	17,250	19,750	28,500	50,000
Senior Accountant	22,045	37,700	17,375	10,750	7333	13,000
Accountant	3,190	1,600	12,500	3,000	8,500	5,000
Entry-Level Accountant	3,900	N/A	7,500	3,913	1,842	11,250
<i>Departmental Average Median</i>	<i>37,681</i>	<i>57,950</i>	<i>11,925</i>	<i>28,983</i>	<i>30,835</i>	<i>45,550</i>
Grand Total Average	129,286	89,110	106,860	127,519	98,757	152,282
AVERAGE BY DEPARTMENT	136,289	91,180	105,815	125,634	97,302	161,421

National Medians	Change (Annual)					Change (Multi-year)			
	2007 – 2008	2008 – 2009	2009 – 2010	2010 – 2011	2011 – 2012	2007 – 2009	2007 – 2012	2008 – 2012	2008 – 2012
Senior Executive									
Senior Executive of Broker Dealer	-30%	-38%	42%	-10%	56%	-56%	-13%	24%	39%
Head of Fixed Income	-5%	-20%	52%	-45%	145%	-24%	55%	64%	34%
Chief Financial Officer-Fixed Income	-54%	7%	23%	71%	17%	-50%	22%	162%	100%
<i>Departmental Average Median</i>	-26%	-25%	44%	-17%	74%	-44%	16%	56%	45%
Compliance									
Head of FI Compliance	12%	42%	91%	-54%	7%	59%	50%	34%	-51%
Senior Compliance	86%	-77%	655%	-57%	-26%	-58%	2%	-45%	-68%
Compliance	-69%	198%	112%	-72%	68%	-7%	-5%	201%	-52%
Entry-Level Compliance	-21%	-75%	210%	-10%	-2%	-80%	-46%	-31%	-11%
<i>Departmental Average Median</i>	20%	-4%	147%	-56%	1%	15%	26%	6%	-55%
Retail Trading									
Head Retail Trader	29%	200%	-14%	-43%	26%	289%	138%	84%	-28%
Senior Retail Trader	-70%	40%	135%	129%	18%	-58%	167%	794%	171%
Retail Traders	N/A	N/A	-42%	-44%	-35%	N/A	N/A	N/A	-64%
Retail Trading Assistants	N/A	155%	6%	7%	-27%	-58%	N/A	110%	-22%
<i>Departmental Average Median</i>	-34%	212%	-17%	-25%	11%	106%	42%	116%	-16%
Institutional Trading									
Head Inst. Trader	-36%	91%	-9%	-41%	104%	22%	35%	111%	21%
Senior Inst. Trader	12%	104%	75%	-42%	39%	129%	223%	189%	-19%
Institutional Trader	N/A	130%	N/A	0%	49%	N/A	N/A	382%	48%
Entry-Level Inst. Trader	114%	-15%	49%	-58%	154%	82%	190%	36%	7%
Institutional Trading Assistants	N/A	N/A	N/A	N/A	-11%	N/A	N/A	N/A	N/A
<i>Departmental Average Median</i>	-39%	89%	17%	-47%	70%	16%	22%	99%	-10%
Retail Sales									
Senior Retail Sales	-64%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Retail Sales Assistants	-83%	-30%	0%	33%	N/A	-88%	N/A	N/A	N/A
<i>Departmental Average Median</i>	-68%	-84%	0%	33%	N/A	-95%	N/A	N/A	N/A
Institutional Sales									
Head Inst. Sales	-20%	51%	-10%	14%	18%	20%	46%	83%	35%
Senior Inst. Sales	3%	-36%	36%	-15%	-12%	-34%	-34%	-35%	-26%
Institutional Sales	-54%	105%	-39%	0%	-8%	-5%	-47%	15%	-8%
Entry-Level Inst. Sales	-60%	65%	-87%	238%	149%	-34%	-30%	75%	740%
Inst. Sales Assistants	-30%	-12%	32%	-28%	15%	-38%	-33%	-4%	-17%
<i>Departmental Average Median</i>	-19%	13%	-4%	2%	8%	-8%	-3%	20%	10%
Investment Banking									
Head of Investment Banking	-47%	-49%	55%	99%	134%	-73%	94%	268%	364%
Senior Investment Banking	-78%	-86%	422%	148%	49%	-97%	-39%	175%	270%
Investment Bankers	-72%	18%	N/A	-40%	121%	-67%	-34%	132%	33%
Entry-Level Investment Banking	-65%	133%	N/A	-25%	140%	-18%	53%	335%	80%
<i>Departmental Average Median</i>	-65%	-40%	66%	59%	106%	-79%	14%	228%	229%

National Medians	Change (Annual)					Change (Multi-year)			
	2007 – 2008	2008 – 2009	2009 – 2010	2010 – 2011	2011 – 2012	2007 – 2009	2007 – 2012	2008 – 2012	2008 – 2012
Public Finance									
Head Public Finance	6%	99%	-2%	-47%	74%	110%	91%	81%	-7%
Senior Public Finance	-55%	59%	148%	-70%	34%	-29%	-29%	59%	-60%
Public Finance Analyst	-29%	15%	109%	-45%	135%	-18%	121%	210%	29%
Entry-Level Public Finance	43%	17%	46%	-14%	48%	67%	211%	118%	28%
Public Finance Assistant	-43%	75%	58%	-81%	96%	-1%	-43%	1%	-64%
<i>Departmental Average Median</i>	-26%	79%	43%	-57%	64%	32%	33%	81%	-30%
Operations									
Head Operations	-47%	-22%	-8%	142%	-8%	-58%	-15%	59%	122%
Senior Operations	3%	-37%	-54%	108%	16%	-35%	-29%	-31%	140%
Operations	18%	5%	-52%	-20%	138%	24%	12%	-5%	90%
Entry-Level Operations	-32%	61%	3%	-71%	31%	10%	-56%	-36%	-62%
Head of Technology	-3%	-49%	-50%	143%	23%	-51%	-26%	-24%	200%
<i>Departmental Average Median</i>	-20%	-32%	-34%	97%	10%	-45%	-22%	-3%	116%
Research									
Head of FI Research	53%	0%	31%	-62%	110%	53%	60%	5%	-20%
Senior Analyst	93%	33%	11%	-29%	25%	157%	152%	30%	-12%
Analyst	-88%	135%	495%	-49%	-2%	-72%	-16%	600%	-50%
Entry-Level Analyst	N/A	480%	N/A	N/A	N/A	N/A	N/A	445%	400%
<i>Departmental Average Median</i>	3%	14%	34%	-39%	32%	17%	27%	23%	-19%
Risk Management									
Chief Risk Officer	N/A	N/A	42%	-13%	107%	N/A	N/A	N/A	81%
Risk Analyst	N/A	N/A	N/A	17%	0%	N/A	N/A	N/A	16%
<i>Departmental Average Median</i>	N/A	N/A	-14%	-7%	83%	N/A	N/A	N/A	69%
Accounting									
Head of Accounting	46%	-96%	2050%	0%	38%	-95%	55%	6%	38%
Controller	-17%	-67%	14%	44%	75%	-73%	-21%	-5%	153%
Senior Accountant	71%	-54%	-38%	-32%	77%	-21%	-41%	-66%	21%
Accountant	-50%	681%	-14%	183%	-41%	292%	57%	213%	67%
Entry-Level Accountant	N/A	N/A	N/A	-53%	511%	92%	188%	N/A	188%
<i>Departmental Average Median</i>	54%	-79%	-67%	6%	48%	-68%	21%	-21%	57%
Grand Total Average	-31%	20%	19%	-23%	54%	-17%	18%	71%	19%
AVERAGE BY DEPARTMENT	-33%	16%	19%	-23%	66%	-18%	18%	77%	28%

Note: 1. The 2007 median bonus data were taken from the first BDA Compensation Survey
2. The 2008 median bonus data were taken from the second BDA Compensation Survey
3. The 2009 bonus data were taken from the third BDA Compensation Survey
4. The 2010 bonus data were taken from the fourth BDA Compensation Survey
5. 2011 and 2012 were taken from the 2013 survey, the fifth annual BDA survey to the extent there was a statistically meaningful response.
6. In cases where there were no statistically meaningful 2008/2009/2010/2011 median from the first, second, third or fourth BDA survey, respectively, median data were available from an earlier BDA survey, e.g. 2010 survey data may be taken from the 2011 survey if data were not available from the 2012 survey.
7. Note that the median data from the first and second BDA compensation survey
8. "NA" represents a "0" response or no (statistically) meaningful response
9. Note that survey respondents or survey populations may differ slightly year over year, and that should be taken into account when reviewing year-over-year trends.

2013 BDA Fixed-Income Compensation Survey

III-B. Median Base Salary Trends By Position: 2008-2012

Median	2008	2009	2010	2011	2012	Change (Annual)			Change (Multi-year)		
						2008 2009	2009 2010	2010 2011	2011 2012	2008 2012	2009 2012
Senior Executive											
Senior Executive of Broker Dealer	232,972	240,000	269,486	261,818	300,000	3%	12%	-3%	15%	29%	11%
Head of Fixed Income	200,000	225,000	159,172	201,047	225,000	13%	-29%	26%	12%	13%	41%
Chief Financial Officer-Fixed Income	165,731	173,680	185,000	200,000	213,300	5%	7%	8%	7%	29%	15%
<i>Department Median Average</i>	<i>199,568</i>	<i>212,893</i>	<i>204,553</i>	<i>220,955</i>	<i>246,100</i>	<i>7%</i>	<i>-4%</i>	<i>8%</i>	<i>11%</i>	<i>23%</i>	<i>20%</i>
Compliance											
Head of FI Compliance	135,000	157,100	133,365	142,517	193,825	16%	-15%	7%	36%	44%	45%
Senior Compliance	93,550	85,000	90,000	82,688	115,627	-9%	6%	-8%	40%	24%	28%
Compliance	73,775	51,000	52,000	64,109	72,568	-31%	2%	23%	13%	-2%	40%
Entry-Level Compliance	49,566	45,500	43,000	50,547	47,063	-8%	-5%	18%	-7%	-5%	9%
Assistant	42,444	N/A	N/A	N/A	44,596	N/A	N/A	N/A	N/A	5%	N/A
<i>Department Median Average</i>	<i>78,867</i>	<i>84,650</i>	<i>79,591</i>	<i>84,965</i>	<i>94,736</i>	<i>7%</i>	<i>-6%</i>	<i>7%</i>	<i>11%</i>	<i>20%</i>	<i>19%</i>
Retail Trading											
Head Retail Trader	144,000	150,000	150,000	157,500	150,000	4%	0%	4%	-5%	4%	0%
Senior Retail Trader	68,104	95,750	78,633	74,236	70,000	41%	-18%	15%	-6%	3%	-11%
Retail Traders	59,068	61,800	101,445	85,000	97,500	5%	64%	72%	15%	65%	-4%
Retail Trading Assistants	50,000	50,000	51,500	49,087	45,432	0%	3%	3%	-7%	-9%	-12%
Entry-Level Retail Trading	N/A	N/A	N/A	N/A	46,012	N/A	N/A	N/A	N/A	N/A	N/A
<i>Department Median Average</i>	<i>80,293</i>	<i>89,388</i>	<i>95,395</i>	<i>91,456</i>	<i>81,789</i>	<i>11%</i>	<i>7%</i>	<i>19%</i>	<i>-11%</i>	<i>2%</i>	<i>-14%</i>
Institutional Trading											
Head Inst. Trader	175,000	170,000	150,000	165,450	175,000	-3%	-12%	-14%	6%	0%	17%
Senior Inst. Trader	124,167	128,750	114,695	115,000	121,000	4%	-11%	-8%	5%	-3%	5%
Institutional Trader	84,270	101,500	101,445	88,313	85,000	20%	0%	20%	-4%	1%	-16%
Entry-Level Institutional Trader	41,000	54,137	65,000	58,519	64,007	32%	20%	59%	9%	56%	-2%
Institutional Trading Assistants	48,845	53,250	53,000	47,557	45,000	9%	0%	9%	-5%	-8%	-15%
<i>Department Median Average</i>	<i>94,656</i>	<i>101,527</i>	<i>96,828</i>	<i>94,968</i>	<i>98,001</i>	<i>7%</i>	<i>-5%</i>	<i>2%</i>	<i>3%</i>	<i>4%</i>	<i>1%</i>
Retail Sales											
Head Retail Sales	187,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Senior Retail Sales	30,400	N/A	N/A	N/A	178,012	N/A	N/A	N/A	N/A	N/A	N/A
Retail Sales	17,998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Entry-Level Retail Sales	40,666	N/A	45,719	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Retail Sales Assistants	46,800	51,400	N/A	43,000	N/A	10%	N/A	N/A	N/A	N/A	N/A
<i>Department Median Average</i>	<i>64,673</i>	<i>51,400</i>	<i>45,719</i>	<i>43,000</i>	<i>178,012</i>	<i>-21%</i>	<i>-11%</i>	<i>-29%</i>	<i>314%</i>	<i>175%</i>	<i>289%</i>

Median	2008	2009	2010	2011	2012	Change (Annual)			Change (Multi-year)		
						2008 2009	2009 2010	2010 2011	2011 2012	2008 2012	2010 2012
Institutional Sales											
Head Inst. Sales	172,242	152,250	150,000	187,500	187,500	-12%	-1%	-13%	0%	9%	25%
Senior Inst. Sales	58,104	56,646	100,000	100,000	117,917	-3%	77%	72%	18%	103%	18%
Institutional Sales	55,150	78,063	60,000	83,844	75,750	42%	-23%	9%	-10%	37%	26%
Entry-Level Inst. Sales	7,958	57,411	70,000	70,802	57,487	621%	22%	780%	-19%	622%	-18%
Inst. Sales Assistants	13,472	47,978	50,000	50,000	56,500	256%	4%	271%	13%	319%	13%
<i>Department Median Average</i>	<i>61,385</i>	<i>78,470</i>	<i>86,000</i>	<i>98,429</i>	<i>99,031</i>	<i>28%</i>	<i>10%</i>	<i>40%</i>	<i>1%</i>	<i>61%</i>	<i>15%</i>
Investment Banking											
Head of Investment Banking	175,000	172,500	264,478	271,090	275,000	-1%	53%	51%	1%	57%	4%
Senior Investment Banking	150,000	154,500	108,137	143,200	173,478	3%	-30%	-28%	21%	16%	60%
Investment Banker	107,719	102,627	N/A	134,635	122,833	-5%	N/A	N/A	-9%	14%	N/A
Entry-Level	75,000	69,121	N/A	80,812	90,044	-8%	N/A	N/A	11%	20%	N/A
Investment Banking Assistants	44,795	N/A	N/A	N/A	66,748	N/A	N/A	N/A	N/A	49%	N/A
<i>Department Median Average</i>	<i>110,503</i>	<i>124,687</i>	<i>186,308</i>	<i>157,434</i>	<i>145,621</i>	<i>13%</i>	<i>49%</i>	<i>69%</i>	<i>-8%</i>	<i>32%</i>	<i>-22%</i>
Public Finance											
Head Public Finance	150,000	152,250	150,000	162,500	224,994	1%	-1%	0%	38%	50%	50%
Senior Public Finance	125,000	114,500	116,500	125,000	123,125	-8%	2%	-7%	-2%	-2%	6%
Public Finance Analyst	80,000	73,925	66,000	75,997	72,096	-8%	-11%	-18%	-5%	-10%	9%
Entry-Level Public Finance	74,666	47,887	51,000	72,375	77,500	-36%	7%	-32%	7%	4%	52%
Public Finance Assistant	100,000	50,000	50,000	50,000	48,833	-50%	0%	-50%	-2%	-51%	-2%
<i>Department Median Average</i>	<i>105,933</i>	<i>87,712</i>	<i>86,700</i>	<i>97,174</i>	<i>109,310</i>	<i>-17%</i>	<i>-1%</i>	<i>-18%</i>	<i>12%</i>	<i>3%</i>	<i>26%</i>
Operations											
Head Operations	119,461	115,000	107,000	107,500	117,000	-4%	-7%	-10%	9%	-2%	9%
Senior Operations	60,634	60,988	66,600	56,318	80,000	1%	9%	10%	42%	32%	20%
Operations	46,513	50,200	56,500	50,000	63,128	8%	13%	21%	26%	36%	12%
Entry-Level Operations	43,500	46,019	45,400	N/A	47,411	6%	-1%	4%	N/A	9%	4%
Head of Technology	150,000	100,000	107,640	112,075	125,000	-33%	8%	-28%	12%	-17%	16%
<i>Department Median Average</i>	<i>84,022</i>	<i>74,441</i>	<i>76,628</i>	<i>81,473</i>	<i>86,508</i>	<i>-11%</i>	<i>3%</i>	<i>-9%</i>	<i>6%</i>	<i>3%</i>	<i>13%</i>
Research											
Head of FI Research	119,461	150,000	141,000	181,340	184,500	26%	-6%	18%	2%	54%	31%
Senior Analyst	60,634	95,000	81,500	87,452	112,500	57%	-14%	34%	29%	86%	38%
Analyst	46,513	66,826	53,725	33,000	69,750	44%	-20%	16%	111%	50%	30%
Entry-Level	43,500	65,125	N/A	46,000	56,772	50%	N/A	N/A	23%	31%	N/A
Assistant	150,000	N/A	N/A	45,357	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Department Median Average</i>	<i>84,022</i>	<i>94,238</i>	<i>92,075</i>	<i>78,630</i>	<i>105,880</i>	<i>12%</i>	<i>-2%</i>	<i>10%</i>	<i>35%</i>	<i>26%</i>	<i>15%</i>
Risk Management											
Chief Risk Officer	200,000	157,120	230,000	230,000	230,000	-21%	46%	0%	0%	15%	0%
Risk Analyst	77,275	N/A	N/A	102,856	113,956	N/A	N/A	N/A	11%	47%	N/A
<i>Department Median Average</i>	<i>138,638</i>	<i>157,120</i>	<i>230,000</i>	<i>166,428</i>	<i>171,978</i>	<i>13%</i>	<i>46%</i>	<i>66%</i>	<i>3%</i>	<i>24%</i>	<i>-25%</i>

Median	2008	2009	2010	2011	2012	Change (Annual)			Change (Multi-year)		
						2008	2009	2010	2011	2008	2010
Accounting											
Head of Accounting	152,965	126,360	77,115	89,500	178,000	-17%	-39%	-50%	99%	16%	131%
Controller	110,000	105,000	112,936	122,848	140,000	-5%	8%	3%	14%	27%	24%
Assistant Controller	92,157	N/A	N/A	86,000	79,759	N/A	N/A	N/A	-7%	-13%	N/A
Senior Accountant	67,863	61,103	61,875	55,937	60,614	-10%	1%	-9%	8%	-11%	-2%
Accountant	43,014	48,000	49,500	42,797	50,813	12%	3%	15%	19%	18%	3%
Entry-Level Accountant	40,079	42,360	N/A	48,750	N/A	6%	N/A	N/A	N/A	N/A	N/A
<i>Department Median Average</i>	<i>84,346</i>	<i>76,565</i>	<i>75,356</i>	<i>74,305</i>	<i>82,796</i>	<i>-9%</i>	<i>-2%</i>	<i>-11%</i>	<i>11%</i>	<i>-2%</i>	<i>10%</i>
Grand Total (All Position) Average	94,186	99,064	104,176	104,685	117,221	5%	5%	0%	12%	24%	13%
Grand Total (Department Average)	98,909	102,758	112,929	107,435	124,980	4%	10%	-5%	16%	26%	11%

- Note:
1. The 2008 median salary was taken from the first BDA Compensation Survey.
 2. The 2009 data were taken from the second BDA Compensation Survey.
 3. 2010 data were taken from the 2011 survey, the third annual BDA Survey.
 4. 2011 data were taken from the 2012 survey, the fourth annual BDA Compensation Survey.
 5. 2012 data were taken from the 2013 survey, the fifth BDA Compensation Survey.
 6. Note that the median data BDA Compensation Survey comparisons should be evaluated with caution as the survey respondent populations differed slightly from year to year, i.e. some firms did not respond to all four surveys.
 7. "N/A" represents a "0" response or no (statistically) meaningful response.
 8. In a number of responses, sales professionals were paid on a commission only basis and thus no salary is reported.
 9. The salary responses for sales professionals only include those firms that indicated a base salary is paid.

2013 BDA Fixed-Income Compensation Survey

IV. Trader Compensation by Fixed-Income Sector

Note: "Total" is the total comp per trader by sector and position level.

<u>National</u>						
Median Trader Compensation						
SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Med. Trader Average
Senior	150,000	131,500	150,000	130,000	130,000	140,375
Mid-Level	92,500	80,000	77,500	100,000	N/A	87,500
Entry-Level	55,000	87,500	N/A	N/A	N/A	77,500
BONUS						
Senior	213,450	337,500	162,636	400,000	137,500	278,397
Mid-Level	90,400	105,332	46,067	87,500	N/A	82,325
Entry-Level	46,637	37,917	N/A	N/A	N/A	42,277
COMMISSION						
Senior	290,257	194,804	343,204	57,606	N/A	263,574
Mid-Level	95,076	N/A	N/A	N/A	N/A	82,740
Entry-Level	N/A	N/A	N/A	N/A	N/A	36,458
TOTAL COMP						
Senior	464,811	450,000	387,525	500,000	267,500	441,000
Mid-Level	221,667	183,750	149,504	159,158	175,000	163,916
Entry-Level	102,103	112,500	N/A	N/A	N/A	101,534
Average Trader Compensation						
SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Trader Average
Senior	157,724	134,776	131,888	117,072	130,000	135,365
Mid-Level	102,005	99,900	72,284	83,484	N/A	89,418
Entry-Level	63,820	87,500	N/A	N/A	N/A	80,440
BONUS						
Senior	344,659	321,469	340,026	296,114	137,500	325,567
Mid-Level	127,475	118,499	74,429	108,790	N/A	107,298
Entry-Level	51,566	37,917	N/A	N/A	N/A	44,741
COMMISSION						
Senior	301,379	194,804	343,204	335,869	89,608	287,212
Mid-Level	114,055	N/A	N/A	N/A	N/A	86,536
Entry-Level	N/A	N/A	N/A	N/A	N/A	36,458

TOTAL							
Senior	542,355	431,828	512,128	466,346	267,500	449,173	
Mid-Level	263,069	198,194	165,024	186,498	175,000	183,657	
Entry-Level	107,045	112,500	N/A	N/A	N/A	103,182	

Maximum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Max. Trader Average	Trader Maximum
Senior	253,571	262,500	208,333	206,250	200,000	232,664	262,500
Mid-Level	147,250	167,500	85,503	115,000	N/A	128,813	167,500
Entry-Level	104,464	100,000	N/A	N/A	N/A	98,155	104,464

BONUS

Senior	900,000	434,000	1,200,000	446,000	175,000	745,000	1,200,000
Mid-Level	314,166	219,000	200,000	247,000		245,042	314,166
Entry-Level	100,000	50,000				75,000	100,000

COMMISSION

Senior	600,000	300,000	600,000	900,000	N/A	566,400	900,000
Mid-Level	215,067	N/A	N/A	N/A	N/A	106,739	215,067

TOTAL

Senior	1,100,000	575,000	1,350,000	940,000	300,000	757,500	1,350,000
Mid-Level	591,568	299,000	270,000	347,000	175,000	322,614	591,568
Entry-Level	176,981	125,000	N/A	N/A	N/A	130,660	176,981

Minimum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Min. Trader Average	Trader Minimum
Senior	76,500	58,157	50,000	40,000	60,000	56,164	40,000
Mid-Level	51,918	50,000	48,633	32,422	N/A	45,743	32,422
Entry-Level	43,273	75,000	N/A	N/A	N/A	69,424	43,273

BONUS

Senior	76,500	176,875	50,000	43,256	100,000	86,658	43,256
Mid-Level	1,000	31,330	5,584	23,316	N/A	15,308	1,000
Entry-Level	14,000	25,833	N/A	N/A	N/A	19,917	14,000

COMMISSION

Senior	25,000	89,608	86,408	50,000	N/A	62,754	25,000
Mid-Level	51,000	N/A	N/A	N/A	N/A	73,925	10,000

TOTAL

Senior	145,000	147,765	151,292	100,862	235,000	149,529	100,862
Mid-Level	137,000	120,000	91,087	100,000	175,000	110,717	175,000
Entry-Level	50,000	100,000	N/A	N/A	N/A	80,000	100,000

- Note:
1. Compensation only calculated when there are sufficient responses; otherwise reported as 'NA.'
 2. "Total" provided for national peer group average and median only and median data based on statistically significant meaningful criteria.
 3. Maximum Trader Average is the average of maximum trader compensation values across sectors.
 4. Minimum Trader Average is the average of minimum trader compensation values across sectors.
 5. Trader Maximum is the highest maximum trader compensation values across sectors.
 6. Trader Minimum is the lowest minimum trader compensation value across sectors.
 7. "Hybrid" or cross-market traders are included only when the traders appear to focus (majority of trading revenue) on a particular market sector in which case the trader's comp is assigned to that market sector.
 8. Averages include all sectors with responses regardless of whether that sector was not reported individually due to statistically insignificant number of responses.

High FTE Peer (>150 Full Time Equivalent)

Median Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	150,000	150,000	150,000	150,000	150,000
Mid-Level	143,438	111,000	85,252	105,000	111,172
Entry-Level	73,750	87,500	N/A	N/A	83,750

BONUS

Senior	173,120	425,000	162,636	425,000	296,439
Mid-Level	90,400	110,663	24,542	87,500	78,276
Entry-Level	39,802	37,917	N/A	N/A	38,859

COMMISSION

Senior	N/A	N/A	N/A	N/A	600,000
Mid-Level	95,076	10,000	N/A	N/A	52,538

Average Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	167,692	168,875	151,667	136,563	156,199
Mid-Level	127,281	112,375	85,252	106,667	107,894
Entry-Level	74,616	87,500	N/A	N/A	84,039

BONUS

Senior	230,996	345,292	393,818	345,771	328,969
Mid-Level	143,872	122,199	24,542	111,329	100,485
Entry-Level	41,530	37,917	N/A	N/A	39,723

COMMISSION

Senior	N/A	N/A	N/A	N/A	600,000
Mid-Level	95,076	10,000	N/A	N/A	52,538

Maximum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	253,571	262,500	208,333	206,250	232,664
Mid-Level	147,250	167,500	85,503	115,000	128,813
Entry-Level	104,464	100,000	N/A	N/A	98,155

BONUS

Senior	450,000	434,000	1,200,000	446,000	632,500
Mid-Level	314,166	219,000	43,500	247,000	205,917
Entry-Level	72,517	50,000	N/A	N/A	61,259

COMMISSION

Senior	N/A	N/A	N/A	N/A	480,000
Mid-Level	130,152	10,000	N/A	N/A	28,030

Minimum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	100,000	113,000	50,000	40,000	75,750
Mid-Level	75,000	60,000	85,000	100,000	80,000
Entry-Level	46,500	75,000	N/A	N/A	70,500

BONUS

Senior	127,744	176,875	50,000	166,313	130,233
Mid-Level	40,000	31,330	5,584	23,316	25,058
Entry-Level	14,000	25,833	N/A	N/A	19,917

COMMISSION

Senior	600,000	300,000	600,000	900,000	480,000
Mid-Level	60,000	10,000	N/A	N/A	14,000

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 8. Averages include all sectors with responses regardless of whether that sector was not reported individually due to statistically insignificant number of responses.

Low FTE Peer (<150 Full Time Equivalent)

Median Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	144,500	66,579	82,442	100,000	98,380
Mid-Level	77,500	N/A	59,317	48,711	58,882
Entry-Level	50,000	N/A	N/A	N/A	50,000

BONUS

Senior	350,000	N/A	232,442	221,628	263,518
Mid-Level	100,959	N/A	124,317	103,711	107,247
Entry-Level	71,637	N/A	N/A	N/A	71,637

COMMISSION

Senior	227,600	89,608	86,408	53,803	177,884
Mid-Level	133,034	N/A	121,875	81,251	110,415

Maximum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	231,000	75,000	100,000	130,000	134,000
Mid-Level	100,000	N/A	70,000	65,000	71,250
Entry-Level	55,000	N/A	N/A	N/A	55,000

BONUS

Senior	900,000	N/A	400,000	400,000	487,500
Mid-Level	225,000	N/A	200,000	175,000	175,000
Entry-Level	100,000	N/A	N/A	N/A	100,000

COMMISSION

Senior	352,914	N/A	86,408	57,606	203,707
Mid-Level	215,067	N/A	121,875	81,251	104,739
Entry-Level	N/A	N/A	N/A	N/A	36,458

Minimum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	76,500	58,157	64,884	43,256	60,699
Mid-Level	51,918	N/A	48,633	32,422	45,743
Entry-Level	43,273	N/A	N/A	N/A	43,273

BONUS

Senior	76,500	N/A	64,884	43,256	108,660
Mid-Level	1,000	N/A	48,633	32,422	45,514
Entry-Level	43,273	N/A	N/A	N/A	43,273

COMMISSION

Senior	25,000	N/A	86,408	50,000	136,603
Mid-Level	51,000	N/A	121,875	81,251	71,925
Entry-Level	N/A	N/A	N/A	N/A	36,458

- Note:
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High Revenue Peer (>\$60 Million)

Median Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Trader Average
Senior	116,000	131,500	150,000	125,000	130,000	130,500
Mid-Level	110,938	80,000	85,000	100,000	N/A	93,984
Entry-Level	61,250	87,500	N/A	N/A	N/A	74,375

BONUS

Senior	242,500	425,000	268,874	425,000	137,500	299,775
Mid-Level	150,000	105,332	43,500	137,500	N/A	109,083
Entry-Level	29,603	37,917	N/A	N/A	N/A	33,760

COMMISSION

Senior	N/A	N/A	N/A	N/A	N/A	N/A
Mid-Level	95,076	N/A	N/A	N/A	N/A	95,076

Average Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Trader Average
Senior	136,978	122,000	131,667	110,000	130,000	126,129
Mid-Level	109,781	99,900	80,168	90,000	N/A	94,962
Entry-Level	61,000	87,500	N/A	N/A	N/A	74,250

BONUS

Senior	265,686	369,667	446,937	423,667	137,500	328,691
Mid-Level	155,792	118,499	83,028	136,329	N/A	123,412
Entry-Level	31,201	37,917	N/A	N/A	N/A	34,559

COMMISSION

Senior	N/A	N/A	N/A	N/A	N/A	N/A
Mid-Level	95,076	N/A	N/A	N/A	50,000	72,538

Maximum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Trader Average
Senior	218,889	150,000	208,333	150,000	200,000	185,444
Mid-Level	147,250	167,500	85,503	105,000	N/A	126,313
Entry-Level	75,000	100,000	N/A	N/A	N/A	87,500

BONUS

Senior	450,000	434,000	1,200,000	446,000	175,000	541,000
Mid-Level	314,166	219,000	200,000	247,000	N/A	245,042
Entry-Level	50,000	50,000	N/A	N/A	N/A	50,000

COMMISSION

Senior	N/A	N/A	N/A	N/A	N/A	N/A
Mid-Level	130,152	N/A	N/A	N/A	N/A	130,152

Minimum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Money Market	Trader Average
Senior	100,000	75,000	50,000	40,000	60,000	65,000
Mid-Level	70,000	50,000	70,000	65,000	N/A	63,750
Entry-Level	46,500	75,000	N/A	N/A	N/A	60,750

BONUS

Senior	127,744	250,000	50,000	400,000	100,000	185,549
Mid-Level	40,000	31,330	5,584	23,316	N/A	25,058
Entry-Level	14,000	25,833	N/A	N/A	N/A	19,917

COMMISSION

Senior	N/A	N/A	N/A	N/A	N/A	N/A
Mid-Level	60,000	N/A	N/A	N/A	N/A	60,000

- Note:
1. Compensation only calculated when there are sufficient responses; otherwise reported as 'NA.'
 2. "Total" provided for national peer group average and median only and median data based on statistically significant meaningful criteria.
 3. Maximum Trader Average is the average of maximum trader compensation values across sectors.
 4. Minimum Trader Average is the average of minimum trader compensation values across sectors.
 5. Trader Maximum is the highest maximum trader compensation values across sectors.
 6. Trader Minimum is the lowest minimum trader compensation value across sectors.
 7. "Hybrid" or cross-market traders are included only when the traders appear to focus (majority of trading revenue) on a particular market sector in which case the trader's comp is assigned to that market sector.
 8. Averages include all sectors with responses regardless of whether that sector was not reported individually due to statistically insignificant number of responses.

Low Revenue Peer (<\$60 Million)

Median Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	200,000	160,329	200,000	130,000	172,582
Mid-Level	100,000	N/A	N/A	73,711	97,461
Entry-Level	63,750	N/A	N/A	N/A	81,875

BONUS

Senior	212,345	176,875	137,747	104,784	157,938
Mid-Level	74,792	N/A	N/A	53,711	52,117
Entry-Level	57,895	N/A	N/A	N/A	41,864

COMMISSION

Senior	227,600	N/A	N/A	53,803	177,884
Mid-Level	133,034	N/A	121,875	81,251	110,415

Maximum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	253,571	262,500	208,333	206,250	232,664
Mid-Level	146,875	N/A	N/A	115,000	119,502
Entry-Level	104,464	N/A	N/A	N/A	68,155

BONUS

Senior	900,000	176,875	187,525	166,313	357,678
Mid-Level	225,000	N/A	N/A	75,000	94,991
Entry-Level	100,000	N/A	N/A	N/A	100,000

COMMISSION

Senior	352,914	N/A	N/A	57,606	203,707
Mid-Level	215,067	N/A	N/A	N/A	104,739

Minimum Trader Compensation

SALARY	Municipal	Corporate	Agency	MBS/ABS	Trader Average
Senior	76,500	58,157	64,884	43,256	60,699
Mid-Level	51,918	N/A	N/A	32,422	75,118
Entry-Level	43,273	N/A	N/A	N/A	47,758

BONUS

Senior	76,500	176,875	64,884	43,256	90,379
Mid-Level	1,000	N/A	N/A	32,422	28,346
Entry-Level	29,603	N/A	N/A	N/A	29,603

COMMISSION

Senior	25,000	N/A	N/A	50,000	136,603
Mid-Level	51,000	N/A	N/A	N/A	71,925
Entry-Level	N/A	N/A	N/A	N/A	36,458

- Note:
1. Compensation only calculated when there are sufficient responses; otherwise reported as 'NA.'
 2. "Total" provided for national peer group average and median only and median data based on statistically significant meaningful criteria.
 3. Maximum Trader Average is the average of maximum trader compensation values across sectors.
 4. Minimum Trader Average is the average of minimum trader compensation values across sectors.
 5. Trader Maximum is the highest maximum trader compensation values across sectors.
 6. Trader Minimum is the lowest minimum trader compensation value across sectors.
 7. "Hybrid" or cross-market traders are included only when the traders appear to focus (majority of trading revenue) on a particular market sector in which case the trader's comp is assigned to that market sector.
 8. Averages include all sectors with responses regardless of whether that sector was not reported individually due to statistically insignificant number of responses.

2013 BDA Fixed-Income Compensation Survey

V. Compensation Policies

Average Percentage Payout for Fixed-Income Professionals Relative to the Net Revenue Trade Position.

(Percentages may not sum to 100% due to rounding)

A. Sales Payout (Institutional)

Sales Force Payout

National

INSTITUTIONAL

Total - All Trades

	25 - 29%	30 - 34%	35 - 40%	41 - 50%
Municipal	8%	38%	46%	
Government / Agency		45%	27%	18%
Corporate		50%	22%	22%
ABS / MBS		44%	33%	11%

Note: Balance of responses is "variable."

Primary/New Issue Market Trades (Taxable)

	25 - 29%	30 - 34%	35 - 40%	41 - 50%
Government / Agency	10%	40%	20%	20%
Corporate	38%	12%	12%	25%
ABS / MBS	17%	17%	33%	17%

Note: Balance of responses <25%.

Secondary Market

	25 - 29%	30 - 34%	35 - 40%	41 - 50%
Municipal	8%	25%	50%	8%
Government / Agency		27%	45%	18%
Corporate		30%	40%	20%
ABS / MBS		30%	40%	20%

Note: Balance of responses is "variable."

New Issues-Public Finance

				Other (lower than 25%)
Municipal	20-25%	25 - 29%	30 - 34%	
Negotiated	16%	25%	33%	25%
Competitive	18%	27%	54%	

RETAIL **25 - 29%** **30 - 34%** **35 - 40%**Total - All Trades

Municipal		20%	80%
Government / Agency		25%	75%
Corporate		25%	75%
ABS / MBS		33%	67%

Secondary Market Trades

	25 - 29%	30 - 34%	35 - 40%
Municipal	20%	20%	60%
Government / Agency		75%	25%
Corporate		75%	25%
ABS / MBS		67%	33%

New Issues-Primary Market (Taxable)

	25 - 29%	30 - 34%	35 - 40%
Government / Agency	25%	75%	
Corporate	33%	67%	
ABS / MBS	33%	67%	

New Issues-Public Finance

Municipal	25 - 29%	30 - 34%	35 - 40%
Negotiated	50%		50%
Competitive	50%		50%

Trading and Public Finance/Investment Banking Payout

New Issues	<u>Public Finance</u>		<u>Trading/Underwriting</u>	
	Median	Range:	Median	Range:
Negotiated	25%	15% - 50%	5%	1.75% - 50%
Competitive	13%	0% - 50%	5%	1.75% - 50%

Firms that did not distinguish compensation between negotiated and competitive compensation

New Issues	<u>Public Finance</u>		<u>Trading/Underwriting</u>	
	Median	Range	Median	Range:
All new municipal issues	28%	20% - 50%	25%	8% - 50%
All				
Combined	22%	0% - 50%	11%	1.75% - 50%

B. Compensation Policy: Payment Policies

Trader Frequency of Payment

How often traders are paid a bonus and in what form.

INSTITUTIONAL

	<u>Annual</u>	<u>Quarterly</u>	<u>Other</u>
Cash (100% of responses)	58%	25%	17%
Equity (33% of responses)	75%		25%
Other (17% of responses)	50%	50%	
	<u>Annual</u>	<u>Quarterly</u>	<u>Other</u>
Cash (90% of responses)	40%	20%	40%
Equity (10% of responses)	100%		

C. Compensation Policies: Bonus Criteria

Note:

1. Total may not sum to 100% due to rounding
2. Commission responses for sales professionals and managers are excluded.

Bonus Criteria

For fixed-income sales professionals, is the bonus primarily determined by

Subjective	
Objective – Quantifiable	30%
Combination	70%

Sales Management Criteria

For fixed-income sales managers, is the bonus primarily determined by

Subjective	9%
Objective – Quantifiable	9%
Combination	82%

Fixed-Income Traders

For fixed-income traders, is the bonus primarily determined by

Subjective	18%
Objective – Quantifiable	27%
Combination	55%

Fixed-Income Trading Desk Managers

Subjective	8%
Objective – Quantifiable	23%
Combination	69%

Public Finance

For public finance, is the bonus primarily determined by

Subjective	8%
Objective – Quantifiable	15%
Combination	77%

For investment banking (excluding public finance), is the bonus primarily determined by

Subjective	14%
Objective – Quantifiable	14%
Combination	71%

All Responses

For investment banking (excluding public finance), is the bonus primarily determined by

Subjective	10%
Objective – Quantifiable	20%
Combination	70%

D. Deferred Compensation/Retirement Programs

Have a deferred payment/retirement savings program?	Yes	No
	93%	7%

For deferred compensation program, is it

	Formula	Fixed
	64%	36%
Formula		
50% match to a cap	30%	
100% match to a cap	30%	
Contribution to a cap w/o employee match	20%	
25% match to a cap	10%	
Based on profit sharing	10%	

Note: some firms stated a "fixed" when in fact the calculation was as a fixed percentage of compensation formula.

2013 BDA Fixed-Income Compensation Survey VI. Revenue and Staffing Trends

May not sum to 100% due to rounding

Direction Staffing Levels Expected to Go in 2013 - by Department

	Increase	Decrease	Unchanged
Compliance	38%		62%
Retail Trading	11%		89%
Institutional Trading	31%	8%	61%
Retail Sales	27%		72%
Institutional Sales	62%		38%
Public Finance	54%		46%
Risk Management	8%		92%
Research	9%		91%
Operations / Technology	18%		82%

Direction Revenues Moved in 2012 - By Market

	Increase	Decrease	Flat
Municipal	53%	47%	
Government / Agency	36%	64%	
Corporate	60%	40%	
ABS / MBS	60%	30%	10%

Direction Revenues Expected to Move in 2013 - By Market

	Increase	Decrease	No change
Municipal	31%	46%	23%
Government / Agency	36%	45%	19%
Corporate	73%	18%	9%
ABS / MBS	60%	20%	20%

Estimated Percentage Composition of Fixed-Income Revenues by Market Sector in 2012
(Note: average may not sum to 100% due to rounding)

	Average	Maximum
Corporate Bonds	17%	71%
Municipal	50%	100%
MBS	12%	43%
ABS	1%	5%
CMBS (included in ABS)	1%	5%
Agencies	10%	39%
Government	>1%	5%
Money Market	>1%	4%
Other	8%	N/A
Derivatives	NM	5%
Foreign Exchange	>1%	8%

Note: May not equal 100% due to rounding; "NM" = not meaningful.

2013 BDA Fixed-Income Compensation Survey

VII. Operating & Technology Expense Trends

Technology and Operations Expense Trends

Range	Maximum	2007	2011	2012	Minimum	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		17.7%	5.7%	6.0%		2.0%	2.7%	0.4%
Fixed Income Operations Expense		11.0%	5.6%	8.0%		2.0%	2.7%	0.3%
Fixed Income Bloomberg Expense		5.1%	5.4%	4.0%		0.3%	0.8%	1.8%
Other Fixed Income Market Data Expense		2.9%	3.0%	4.0%		0.3%	0.5%	0.9%

Peer Group: National	Average	2007	2011	2012	Median	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		5.00%	3.75%	3.34%		3.20%	3.45%	3.40%
Fixed Income Operations Expense		6.10%	2.57%	2.29%		5.20%	1.35%	1.34%
Fixed Income Bloomberg Expense		3.60%	3.27%	2.92%		4.50%	2.60%	2.95%
Other Fixed Income Market Data Expense		1.60%	1.50%	1.80%		1.50%	1.00%	1.20%

Note: Same firms reporting/calculated

Peer Group: High FTE	Average	2007	2011	2012	Median	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		7.20%	4.37%	3.79%		4.00%	4.20%	4.20%
Fixed Income Operations Expense		8.10%	1.60%	2.63%		8.20%	1.50%	1.09%
Fixed Income Bloomberg Expense		4.40%	3.10%	3.11%		4.60%	2.80%	3.05%
Other Fixed Income Market Data Expense		2.10%	1.60%	2.30%		2.30%	0.80%	2.16%

Peer Group: Low FTE	Average	2007	2011	2012	Median	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		2.90%	3.13%	2.93%		3.00%	3.00%	3.40%
Fixed Income Operations Expense		4.10%	2.85%	1.20%		3.60%	1.20%	1.50%
Fixed Income Bloomberg Expense		2.80%	3.05%	2.67%		3.00%	2.60%	3.00%
Other Fixed Income Market Data Expense		0.90%	1.05%	1.20%		1.00%	1.00%	1.20%

Note: The division is at 100 FTE for 2007, 91 for 2011, 152 for 2012

Peer Group: High Revenues	Average	2007	2011	2012	Median	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		8.70%	4.03%	3.11%		5.00%	3.20%	3.40%
Fixed Income Operations Expense		5.10%	1.50%	2.40%		5.00%	1.50%	1.18%
Fixed Income Bloomberg Expense		4.10%	2.93%	3.28%		4.00%	2.80%	3.00%
Other Fixed Income Market Data Expense		1.20%	1.45%	2.02%		1.00%	1.00%	2.00%

Peer Group: Low Revenues	Average	2007	2011	2012	Median	2007	2011	2012
As % of Fixed Income Revenues								
Fixed Income Technology Expense		2.80%	3.20%	4.08%		3.00%	3.20%	4.15%
Fixed Income Operations Expense		6.70%	3.00%	3.37%		7.10%	3.53%	1.50%
Fixed Income Bloomberg Expense		1.90%	3.50%	3.00%		2.20%	3.50%	3.20%
Other Fixed Income Market Data Expense		N/A	2.10%	1.60%		N/A	2.10%	1.60%

Note: The peer group division is \$80 million for 2007, \$50 million for 2011; \$65 million for 2012

Fixed Income revenue description

1. Revenue from equity sales commission and equity related underwriting
2. Revenue from money market mutual funds
3. Bloomberg terminals used by equity traders, equity investment bankers or equity sales people
4. Where costs are shared, please only include amount allocated to fixed income.

Technology expense description

1. Project Management Office support for fixed income business (project managers, business analysts, etc.)
 2. Infrastructure/network expense to support fixed income business (include all expense whether internal or outsourced)
 3. Salary, benefits, bonuses for tech staff including outsourced staff
 4. All software license, maintenance, and fees to support fixed income business (from desktop applications to back office systems)
 5. All incidentals included in fixed income tech budget (travel, office space for staff that support fixed income business, etc.)
 6. Trading system fees
- Exclusion: Technology infrastructure to support non-fixed income business

Operating expense description

1. Salary, benefits, bonuses for operations staff including outsourced staff
2. All incidentals included in fixed income Ops budget (travel, office space for staff that support fixed income business, etc.)
3. Statement/confirm processing and mailing

Bloomberg expense description

Anything on a Bloomberg invoice that supports fixed income businesses (terminals, circuits, trading systems, data, etc.)

Other Market data examples

S&P, Moody's, Fitch, Thomson Reuters, Trade Web data, MarketAxess, Markit etc.

Annex A: Methodology

The Bond Dealers of America (BDA) Fifth annual Bond Dealers of America Fixed-Income Compensation Survey was conducted between March and June 2013. The survey questionnaire was sent to members of BDA. The questionnaire itself was developed under the leadership of a Compensation Survey Task Force, which was the same as the previous year's survey during the early part of 2013. Position definitions for compensation calculations may be found in Annex B.

The survey questionnaire and resulting report were divided into sections that were based primarily on 2012 data, bonus payments in 2011 (as well as 2012), and expectations about growth in employment, by department and trends, in fixed-income revenues for this year, 2013. Where appropriate, comparisons were made to previous years' results. It should be kept in mind that the two survey populations are not necessarily the same – some firms responded to both surveys, and some only to one of the two years' surveys.

The results are summarized in an Executive Summary and Analysis of Results By Section chapters found in this document report. The objective of this section is to summarize the methodology and explain terminology.

The report is divided into the following sections:

- Compensation: Salary, Bonus Commission Tables
- Multiyear Bonus Trends
- Trader Compensation
- Compensation Policies including Deferred Compensation
- Staffing and Revenue Trends
- Operation and Technology Expense Trends including Whether Operation are Managed In-House or Outsourced

Starting in 2011 and carried over in the last two surveys, the firms were asked for the percentage breakdown of revenues by market sector. The results were tabulated and reported as medians, averages, and maximum percentage. In addition, questions about deferred compensation and retirement programs were asked for the first time in 2011. The results are found in the Staffing and Revenue Sections.

Compensation: Salary, Bonus Commission Tables (Section III)

The compensation tables are presented nationally and along certain peer groups. The firms were asked to provide the number of FTEs and average 2011 bonus and 2012 salary, bonus, and commission. The reported data were reviewed to determine whether any reported compensation appeared to have been inadvertently misreported or to be extreme or unusually high or low, relative to other responses. BDA followed up with the firms to confirm that the apparently unusual reported figures were reported as the firm intended. Annex B provides definitions of the positions and primary region of operations definitions.

The following positions were requested with statistically significant responses for 49 positions received and reported on

- Executive
 - Head of Broker-Dealer (Senior Executive)
 - Fixed-income Head
 - Chief Financial Officer

For each of the departments below, data for the following positions were requested: head, senior, intermediate junior, and assistant, with some variance in the actual position terminology. The compensation data were provided to the extent the results were statistically meaningful.

- Compliance
- Retail Trade
- Institutional Trade
- Retail Sales
- Institutional Sales
- Investment Banking
- Public Finance
- Operations and Technology: Operations head, senior, intermediate junior positions, and head of technology.
- Research and Strategy: Head, senior analyst, intermediate analyst, and junior analyst and assistant
- Risk: Manager and analyst
- Accounting: Head, controller and assistant controller, senior accountant, intermediate accountant, junior accountant

The peer groups are as follows:

- National: All responses
- Regional: Based on responses by the firms as to their principal region(s) of operations. (See Definitions in Annex B for regional definitions)
 - South & East
 - Midwest & WestNote: the first regional grouping is evenly divided between East and South. The second regional group is 90% weighted to the Midwest and 10% the West.
- Full Time Equivalents (2012) based on responses from the firms
 - 150 and above
 - Less than 150
- Fixed-income revenues (2012) based on responses from the firms
 - Above \$70 million
 - Below \$70 million

The latter two peer groups were divided such that there were approximately an equal number of regional firms above and below the cut-off, so that responses were divided into roughly equal fixed-income revenue and FTE peer groups. When the firm did not provide FTE or revenues, estimates were made to place the firm in one of the categories or relied on last year's survey response information.

Each of the compensation peer group information tables provides the same information and is aligned as follows:

Average, or mean, based on an equal weighting of each firm; that is, the average compensation data reported by the firms are summed and divided by the number of firms responding. As the firms reported average compensation for the position, this number represents the average of the average reported regional firm compensation. Only firms that provided a number greater than zero are calculated. If the firm left the compensation information for the position blank or gave a “zero” as the response, it was excluded and reported as “NA.” If there were responses but the responses were not statistically significant, it was reported as “NM” for “not meaningful.”

- Column 1: Average 2011 Bonus
- Column 2: Average Base Salary 2012
- Column 3: Average Bonus 2012
- Column 4: Average Commission 2012
- Column 5: Sum is the sum of the sum of average salary, commission and bonus in 2012 from the previous three columns.
- Column 6: Total – Compensation 2012. The average total compensation from each response is summed for 2012, and the average of those averages is calculated. That is, for each response, the salary, bonus and commission as reported by the regional firms are totaled and those totals are averaged across all responding firms. No response and a “0” response is “counted” as a zero” in which case only the other two types of compensation are totaled. For example, if no commission is reported, then salary and bonus are summed to arrive at the total 2012 compensation. A response is included as long as at least one form of compensation is reported, e.g. salary. If no compensation is reported for the position, that response is excluded. The reason for this computation is to give the reader a sense of typical total compensation for a position in 2012. The Sum described above under the previous column is likely to overstate “total” compensation. For example, some firms do not pay salary but only commission for sales professionals. These average Total calculations correct for situations where a position is not paid both salary and commission. In most cases, the Total will be less than the “sum.” There will be cases when “Total” may be greater than the sum, typically when non-salary compensation, especially, bonus is relatively large.

Median is another measure of central tendency and based on the non-zero average compensation reported by each firm. It is the “middle” response. For example, if five firms reported compensation, the median is the Fifth value – the middle of the highest and lowest values. If there is an even number of responses, then the two middle responses are averaged. For example, if there are four responses, the second and Fifth values are averaged to arrive at the median.

- Column 1: Median Bonus 2011
- Column 2: Median Base Salary 2012
- Column 3: Median Bonus 2012
- Column 4: Median Commission 2012

- Column 5: Sum is the sum of the sum of median salary, commission and bonus in 2012 from the previous three columns.
- Column 6: Total – Compensation 2012. The median total compensation from each response is summed for 2012, and the median of those averages is calculated. That is, for each response, the salary, bonus and commission as reported by the middle-market firms are totaled and those totals are averaged across all responding firms. No response and a “0” response is “counted” as a zero” in which case only the other two types of compensation are totaled. For example, if no commission is reported, then salary and bonus are summed to arrive at the total 2012 compensation. A response is included as long as at least one form of compensation is reported, e.g. salary. If no compensation is reported for the position, that response is excluded. The reason for this computation is to give the reader a sense of typical total compensation for a position in 2012. The Sum described above under the previous column is likely to overstate “total” compensation. For example, some firms do not pay salary but only commission for sales professionals. These average Total calculations correct for situations where a position is not paid both salary and commission. In most cases, the Total will be less than the “sum.” There will be cases when “Total” may be greater than the sum, typically when non-salary compensation, especially, bonus is relatively large.
- Only firms that provided a number greater than zero are calculated. If the firm left the compensation information for the position blank or gave a “zero” as the response, it was excluded and reported as “NA.” If there were responses but the responses were not statistically significant, it was reported as “NM” for “not meaningful.”

Maximum is the highest average compensation reported by any of the firms.

- Column 1: Maximum Bonus 2011
- Column 2: Maximum Base Salary 2012
- Column 3: Maximum Bonus 2012
- Column 4: Maximum Commission 2012
- Column 5: Sum is the sum of the sum of maximum salary, commission and bonus in 2012 from the previous three columns.
- Column 6: Total – The average total compensation for each response is summed for 2012 and maximum values are taken for those averages. That is, for each response, the salary, bonus and commission are totaled and the maximum of those totals are reported. The reason for this computation is to give the reader a sense of typical compensation for a position. The Sum is likely to overstate “total” compensation. For example, some firms do not pay salary but only commission for sales professionals. These maximum Total calculations correct for situations where a position is not paid both salary and commission. “Total” will usually be equal or less than the “sum.”
- Only firms that provided a number greater than zero are calculated. If the firm left the compensation information for the position blank or gave a “zero” as the response, it was excluded and reported as “NA.” If there were responses but the responses were not statistically significant, it was reported as “NM” for “not meaningful.”

Minimum is the lowest non-zero value reported by a firm.

- Column 1: Minimum bonus 2011
- Column 2: Minimum Base Salary 2012
- Column 3: Minimum Bonus 2012
- Column 4: Minimum Commission 2012
- Column 5: Sum is the sum of the sum of minimum salary, commission and bonus in 2011 from the previous three columns.
- Column 6: Total – The average total compensation for each response is summed for 2012 and minimum values are taken for those averages. That is, for each response, the salary, bonus and commission are totaled and the minimum of those totals are reported. The reason for this computation is to give the reader a sense of typical compensation for a position. The sum is likely to overstate “total” compensation. For example, some firms do not pay salary but only commission for sales professionals. These minimum Total calculations correct for situations where a position is not paid both salary and commission. “Total” may be equal to, larger than or less than the “sum.”
- Only firms that provided a number greater than zero are calculated. If the firm left the compensation information for the position blank or gave a “zero” as the response, it was excluded and reported as “NA.” If there were responses but the responses were not statistically significant, it was reported as “NM” for “not meaningful.”

Section III-A Bonus Trends 2007-2012

This table is organized with the first five columns representing the years 2007-2012 and the rows each of the positions. The numbers are the median bonus for each position by year. The final columns show the percent change in the median bonus year over year: 2007-2008, 2008-2009, 2009-2010, 2010-11 and 2011-2012; and multi-year comparisons 2007-2009, 2007-2012, 2008-2012 and 2010-12.

At the end of each department section, e.g. Executive, Compliance, Retail Trading etc., the average median bonus is calculated for the positions in the department section and the average change from 2007 to 2012 are presented to the extent there are statistically significant responses. The next to last row is average for each department, and the last row of the table is the average median salary with each position equally weighted for each year. The same annual and multi-year percent changes described in the paragraph above are presented for the departmental and position averages.

As noted in the body of the text and above in this Annex, the results should be viewed with caution as the survey populations differ. The 2011 and 2012 data generally come from the BDA 2013 survey, and the 2007-2010 data come from previous years’ surveys, the 2008-2012 BDA surveys. For positions where the 2011 bonus was not calculated in this year’s survey but was calculated in last year’s survey (due to the number of responses), last year’s 2011 median bonus number was substituted for the 2011 bonus number (which was an N.A. or no response) in this year’s survey. The 2007 data came from the first survey, the 2011 survey.

Section III-B Salary Trends – 2008-2012

This table is presented for the first time in this year’s survey and organized with the first four columns representing the years 2008-2012 and the rows each of the positions. The numbers are the median base salary for each position by year to the extent there are statistically significant responses. The final three columns show the percent change in the median salary from 2008-2012, with comparisons (2008-2009, 2009-2010, 2010-2011, 2011-2012); and multi-year (2008-2012 and 2010-2012.)

At the end of each department section, e.g. Executive, Compliance, Retail Trading etc., the average median salary is calculated for the positions in the department section and the average change year-over-year and the entire survey series are presented, similar to the methodology described above for Section III-A for the bonus trends.

As noted in the body of the text and above in this Annex, the results should be viewed with caution as the survey populations differ. The 2011 and 2012 data generally come from the BDA 2013 survey, and the 2008/2009 data come from previous years’ surveys.

Trader Compensation (Section IV)

Trader Compensation

In addition to compensation by position, the survey asked for trader compensation – commission, bonus and salary and total compensation by sector and by trader seniority. “Total compensation” was tabulated in the same manner as it was defined in the previous section for the national median and average.

The responses were averaged and reported with each firm’s response equally weighted for salary and bonus and commission assuming that there were insufficient responses (most firms in the survey did not pay traders commission).

- The seniority groupings were senior, mid-level and junior level traders, based on years of experience.
- The sectors covered were municipal, government/agency, corporate, ABS/MBS and money market, and the various statistical measures for each sector is reported in the column with the sector title, e.g. “Municipal.”
- The final column is titled “Trader Average.” As the name implies, that column is the average of the sectors for that trader level (e.g. senior, mid-level) and type of compensation (e.g. salary, bonus etc.)
- Median, average, maximum and minimum (for senior traders only) were calculated only for those seniority/sector “buckets” for which there were sufficient responses. For those that did not have sufficient responses to calculate a meaningful average, no calculation was made and that section of the table was left blank.
- Where there were sufficient responses, averages were calculated nationally, full-time equivalent levels and trading revenue size. There were generally sufficient responses
- All of the responses are tabulated in the table titled “National”
- Full-time equivalent (FTE) peer groups: >150 and <150: median
- Revenues >\$60 million and <\$60 million: median.

The reason for inclusion of this section was to supplement the data on general or general trader compensation in Section III by requesting and providing more detailed and granular information on trader compensation by sector.

Compensation Policies (V)

For the following questions, each responding firm is given an equal weighting, and non-responding firms are not included in the tabulation:

- *Professional sales compensation method or form*: Firms were asked to choose between salary, commission and both salary and commission, and the percentage that selected one of the three alternatives were reported – cash, equity or “other.”
- *Trader bonus compensation frequency*: Firms were asked whether bonuses are paid to traders annually, semiannually or “other” schedule, for both institutional and retail traders. The “other” response was generally quarterly. The responses are tabulated and calculated in percentage terms.

Professional Sales Force Payout

- *Sales force compensation payouts*: Firms were asked to place the percentage of transaction revenues that are paid out to the retail and institutional sales force by sector within the appropriate “bucket”: 25%-29%, 29%-34%, 35%-40%, or “other” if the estimate of payout does not fall within any of those buckets. Responses were tabulated and classified based on the percentage buckets above, and the percentage of responses that fell in each bucket was tabulated and presented. The institutional and retail sales force trade payout data were separately reported.
- Questions were asked for the following types of trades: generally, it appears that the “other” category is used for firms with less than the lowest bucket (e.g. less than 25%) response.
 - All fixed-income trades with responses for municipal bond, agency/government, corporate bonds, and ABS/MBS sectors were requested.
 - New bond issues traded in the primary market for agency/government, corporate bonds, and ABS/MBS sectors
 - Secondary market trades for municipal bond, agency/government, corporate bonds, and ABS/MBS
 - For new municipal bond issues, responses were requested for both negotiated and competitive bond sales. If the firm does not distinguish compensation between negotiated and competitive, there were able to respond for payouts all or negotiated and competitive sales.

Public Finance Trader/Investment Banker Payout

- *Public finance new issues compensation payouts*: Respondents were asked to indicate the percentage of payout from new issue public finance investment banking and underwriting that is paid to investment banks and traders. Unlike the previous section, the firms were not given percentage buckets, but asked for a specific percentage payout. The responses were equally weighted and averaged. The average response was tabulated and presented, as well as the range of responses from the minimum to the maximum percentage payouts. Firms were asked to give the answers for negotiated and competitive underwriting. To take into account firms that did not distinguish compensation between negotiated and competitive, respondents were given the option of responding to the question with the compensation payout for all new issues without separating between negotiated and competitive sales.

Bonus Criteria

Firms were asked to select one of the following three alternatives that describe the basis for determining bonus:

- Objective, quantifiable criteria
- Subjective criteria
- A combination of subjective and objective criteria

If only a commission was paid and no bonus, the firm indicated that was the case – a commission but no bonus was paid

For:

- Sales professionals and sales managers
- Traders and trading desk managers
- Taxable fixed-income sector investment bankers
- Public finance bankers

The results were tabulated and reported on a percentage basis with each firm's response weighted equally.

Deferred Compensation/Retirement Programs

This was a new question this year. Firms were asked

- Whether the firm matches contributions of employee retirement account deferrals
- Whether contributions were fixed or determined by formula
- If by formula, what the formula was

The first two answers were tabulated and reported on a quarterly basis. The answer to the Fifth question was summarized given the range of responses.

Revenue and Staffing Trends (Section VI)

Middle-market firms were asked their experience and opinions on revenue and staffing trends.

The questions included:

- Whether staffing was expected to increase, decrease, or remain unchanged in 2012 for the following departments:
 - Compliance
 - Retail Trading
 - Institutional Trading
 - Retail Sales
 - Institutional Sales
 - Public Finance
 - Risk Management
 - Research
 - Operations/Technology
- Revenue trends for 2012 and 2013 in the following sectors:
 - Public finance
 - Government/agency
 - Corporate bonds
 - ABS/MBS
- Since the 2011 survey, middle-market firms were asked for: revenue breakdown by market sector.

Revenue was divided by market sectors in percentage terms and reported according to these categories

- High grade Corporate Bonds
- High Yield Corporate Bonds
- Municipal Bonds
- Mortgage-Backed Securities
- Asset-Backed Securities
- Commercial Mortgage Backed Securities
- Federal Agency Securities
- Money Market
- Foreign Exchange
- Derivatives
- Other

The total is expected to sum to 100% and the following data were tabulated on the revenue by sector information but not sum to 100% due to rounding

- Average
- Maximum

Operation and Technology Expenses (Section VII)

Each firm was asked to tabulate operating and technology expenses as a percentage for revenues for 2012. The 2007 - 2011 data from previous years' surveys were reported for comparison. The year-to-year comparisons should be evaluated with caution comparable to the comment in Section III: for the most part, the same firms responded to all four surveys but the survey populations were not precisely the same, i.e. some firms responded on only one of the four surveys.

The responses were tabulated and the averages, median, maximum and minimum were reported nationally. The medians and averages were reported by peer groups:

- FTE: the low and high groups were based on above and below 152 for 2012. (Last year's survey was based on above and below 100 FTE.)
- Fixed-income Revenues: the low and high groups were based on above and below \$65 compared to \$50 million for 2009-2012. (The 2007 and 2008 results from were based on above and below \$80 million.)

The following ratios were requested as a percentage of revenues:

- Technology
- Operating expense
- Bloomberg expense
- Other data services (excluding Bloomberg expense)

In addition, the firms were asked to indicate whether it managed technology in-house or outsourced the function and the results were reported on a percentage basis.

The definitions for the expense items are found following tabulations in Section VII.

Annex B: Definitions

Peer Groups:

In addition to providing survey results nationwide, the survey also reported information based on peer groups, allowing for comparison of similar sized firms. The data were grouped based on number of fixed-income department employees (or full-time equivalent or FTE) and annual fixed-income revenue. The same peer group definitions were used for all sections of the report in which there were sufficient responses to tabulate peer groups. For the FTE and revenue data, the respondents were divided into two peer groups of about the same size termed "Higher FTE" and "Lower FTE" and "Lower Revenue" and "higher revenue" peer groups.

There were three geographic peer groups with two regions (South and East) combined because there were not enough responses to form separate peer groups for each of the two regions.

Note: There were also insufficient responses to form fixed-income trading volume peer groups.

The peer groups were based on information self-reported by the regional firms participating in the survey.

Employee or FTE Peer Groups: full-time equivalent positions (FTEs) based on 2012
Two peer groups formed: 150 FTE and 150 or more FTE.

Fixed-income Revenues: aggregate fixed-income revenues earned by, or attributed to the fixed-income department, including corporate finance/underwriting, trading and sales.
Two peer groups formed: More than \$65 million in 2012: and less than \$65 million in 2012.

Primary region of operations: the geographic region(s) firms considered the headquarters or principal states of operations.

A firm could provide multiple responses, i.e. more than one primary region.

East: Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia)

South: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)

West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Two peer groups formed: South & East (equally weighted between the two regions); West & Mid-West (90% weighting to the Midwest, 10% weighting for the West.)

Compensation Table Definitions (Section II)

In completing the compensation position data request, firms were asked for the following information, which was used in the calculation of Section III of the report.

The number of Employees: full-time equivalent positions (FTEs) for 2012

Salary: fixed base salary paid regularly exclusive of any contingent or variable compensation such as commissions, bonus or profit sharing. Does not include shift differentials, benefits, overtime, incentives or any pay element other than the base rate as of the stated period. The average salary for each position was reported by each firm.

Bonus (2011 and 2012): variable salary based on performance or other determining factor; should be reported for the time period earned, rather than the period it was paid out. The average as reported by each firm.

Commission: variable salary based on sales, etc.; should be reported for the time period earned, rather than the period it was paid out. Report the average as requested.

Definitions of Position Descriptions

These definitions were provided as guidance but survey participants were able to use another basis for distinguishing levels within a function if years of experience is not the best basis for determining level (e.g. senior, entry-level). Note that they're not sufficient responses for a small number of positions defined below. Those positions are not reported in Section III and III-A of the report.

Executive – *charged with the responsibility of the overall management of the unit or division*

Senior executive of broker dealer: has overall management responsibility of the broker dealer

Head of fixed-income: has overall management responsibility for the firm's fixed-income group

Chief Financial Officer of fixed-income: Directs the overall financial plan and accounting. Oversees treasury, accounting, budget, tax and audit activities of the fixed-income group. Oversees financial and accounting system controls and standards and ensures timely financial and statistical reports for management and/or Board use. This is the most senior finance and accounting position for the organization. If there was not a specific CFO for fixed-income, the firm's CFO may be substituted but the substitution was indicated.

Compliance – *Responsibility for overall management of programs that ensure compliance with securities, banking and other relevant laws, regulations and rules. The duties and responsibilities of these employees may be divided between fixed-income and equity market related functions.*

Head of fixed-income compliance: has overall management of programs that ensure compliance with laws, regulations and rules

Senior compliance: has more than 5 years compliance experience

Compliance: has 2-4 years compliance experience

Entry-level compliance: has less than 2 years compliance experience

Compliance assistant: assists compliance team with specific administrative functions

Retail Trading - *Retail traders have responsibilities and duties related to the exchange of fixed-income related securities in the retail sector or in behalf of retail customers and products.*

Head retail trader: has overall management responsibility of the fixed-income retail trading function

Senior retail trader: has more than 5 years retail trading experience

Retail trader: has 2-4 years retail trading experience

Entry-level retail trader: less than 2 years retail trading experience

Retail trading assistant: assists retail trading team with specific administrative functions

Institutional Trading - *Institutional traders have responsibilities and duties related to the exchange of fixed-income related securities in the institutional sector on behalf of institutional customers and products.*

Head institutional trading: has overall management responsibility of the fixed-income institutional trading function

Senior institutional trading: has more than 5 years institutional trading experience

Institutional trading: has 2-4 years institutional trading experience

Entry-level institutional trading: has less than 2 years institutional trading experience

Institutional trading assistants: assists institutional trading assistants with specific administrative functions

Retail Sales - *Retail sales employees have responsibilities and duties related to the sale of fixed-income related securities in the retail sector, retail customers or retail products.*

Head retail sales: has overall management responsibility of the fixed-income retail sales function

Senior retail sales: has more than 5 years retail sales experience

Retail sales: has 2-4 years retail sales experience

Entry-level retail sales: less than 2 years retail sales experience

Retail Sales Assistant: assists retail sales team with specific administrative functions

Institutional Sales - *Institutional sales employees have responsibilities and duties related to the sale of fixed-income related securities in the institutional sector, institutional customers or institutional products.*

Head institutional sales: has overall management responsibility of the fixed-income institutional sales function

Senior institutional sales: has more than 5 years institutional sales experience

Institutional sales: has 2-4 years institutional sales experience

Entry-level institutional sales: less than 2 years institutional sales experience

Institutional sales assistant: assists institutional sales team with specific administrative functions

Investment Banking - *Investment bankers are charged with the responsibility and management of the fixed-income investment banking/corporate finance function. These duties do not include those related to public finance.*

Head of investment banking: has overall management responsibility of the fixed-income investment banking function

Senior banker: has more than 5 years investment banking experience

Banker: has 2-4 years investment banking experience

Entry-level banker: less than 2 years investment banking experience

Investment banking assistant: assists investment banking team with specific administrative functions

Public Finance - *Investment bankers in the public finance sector (i.e. municipal bond underwriting) are charged with the responsibility and management of the public finance investment function. These duties do not include those related to corporate finance.*

Head of public finance: has overall management responsibility of the public finance function

Senior public finance: has more than 5 years public finance experience

Banker: has 2-4 years public finance experience

Entry-level banker: less than 2 years public finance experience

Public finance assistant: assists the public finance team with specific administrative functions

Research/Strategy – *Analysts in the research function are charged with responsibilities and duties related to the analysis of fixed-income related issues.*

Head of fixed-income research: has overall management responsibility of the fixed-income research function

Senior analyst: has more than 5 years fixed-income research experience

Analyst: has 2-4 years fixed-income research experience

Entry-level analyst: less than 2 years fixed-income research experience

Research Assistants: assists the research team with specific administrative functions

Risk Management – evaluation, monitoring and analysis of risk exposure in the fixed-income function/firm.

Chief Risk Officer/Risk Manager: has overall management responsibility; quantifies and

analyzes various types of risks to the firm and its interests

Risk Analyst: quantifies and analyzes various types of risks to the firm and its interests

Operations - *Employees in the operation department have overall management responsibilities of the fixed-income operations and technology function.*

Head operations: has overall management responsibility of the fixed-income operations and technology function

Senior operations: has more than 5 years operations experience

Operations: has 2-4 years fixed-income operations experience

Entry-level operations: has less than 2 years fixed-income operations experience

Head of Technology: overall responsibility for technological functions, i.e. interfaces, straight through processing, electronic liquidity, etc

Accounting - Accounting, budget and financial management reporting systems internally and externally to investors.

Head of accounting: Provide leadership and coordination of financial reporting and budget management functions; ensure company accounting conforms to generally accept accounting principles.

Controller: Directs budget and cost controls, internal financial analysis, accounting practices and accounting reports. Analyzes and interprets financial data and recommends changes to improve systems and financial performance, or holds that title. Typically reports to CFO.

Assistant Controller: Supports company controller in directing budget and cost controls, financial analysis, and accounting procedures. Manages financial statement preparation. Organizes and plans auditing schedules. Develops policy and procedure manuals for accounting department, or holds that title.

Senior accountant: has more than 5 years of accounting experience

Accountant: has 2-4 years of experience

Entry Level Accountant: has less than 2 years experience in accounting