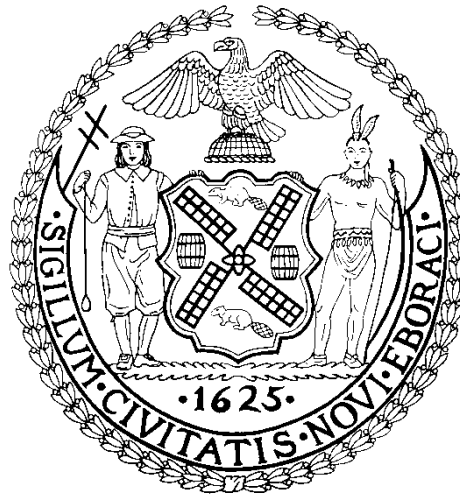


Wall Street Bonuses:

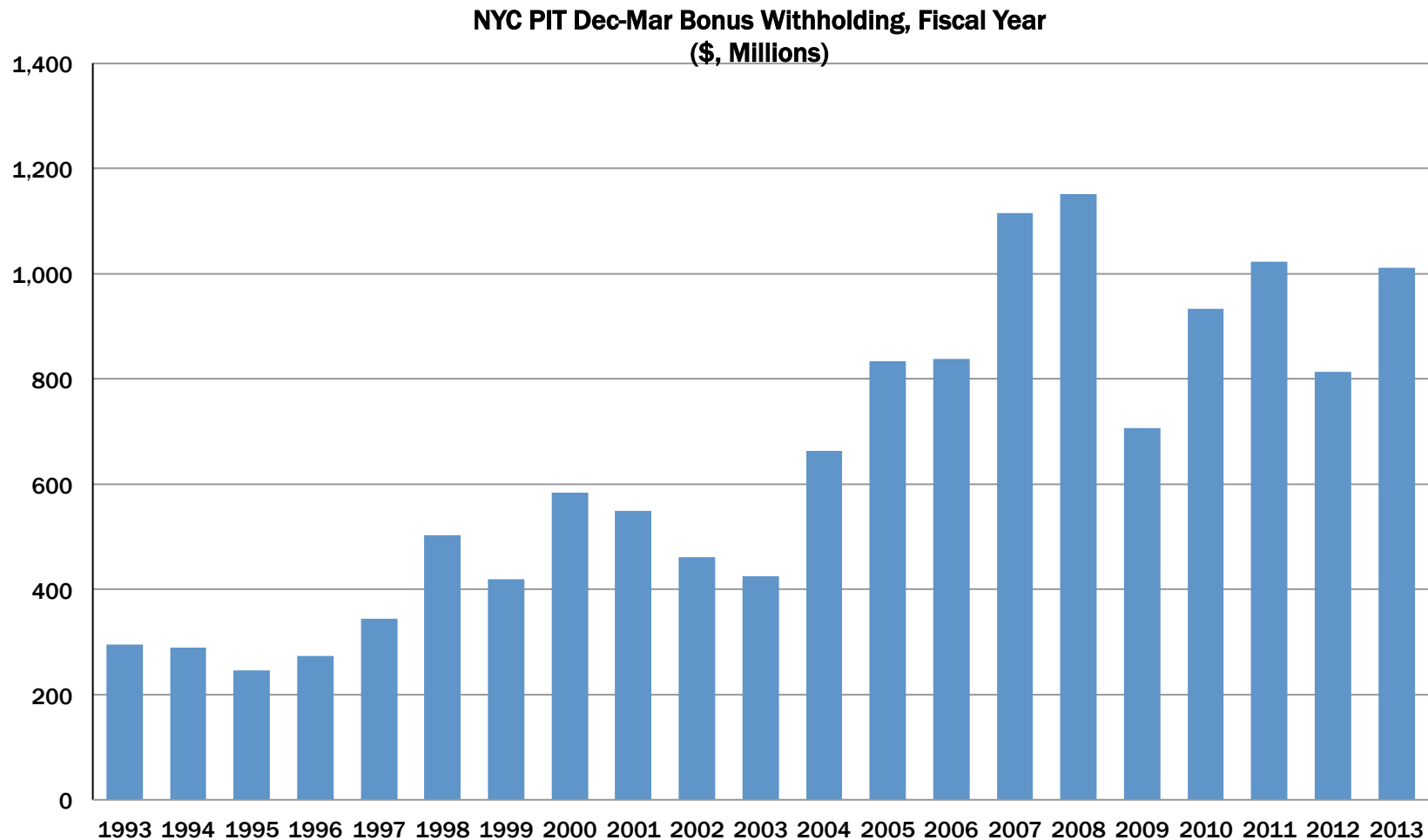
Estimating, forecasting and tracking variable pay for New York City's financial sector



Presented at the 2013 FTA Revenue Estimation & Tax Research Conference
By Joshua Goldstein and Scott Domansky, NYC Office of Management and Budget
8 October, 2013



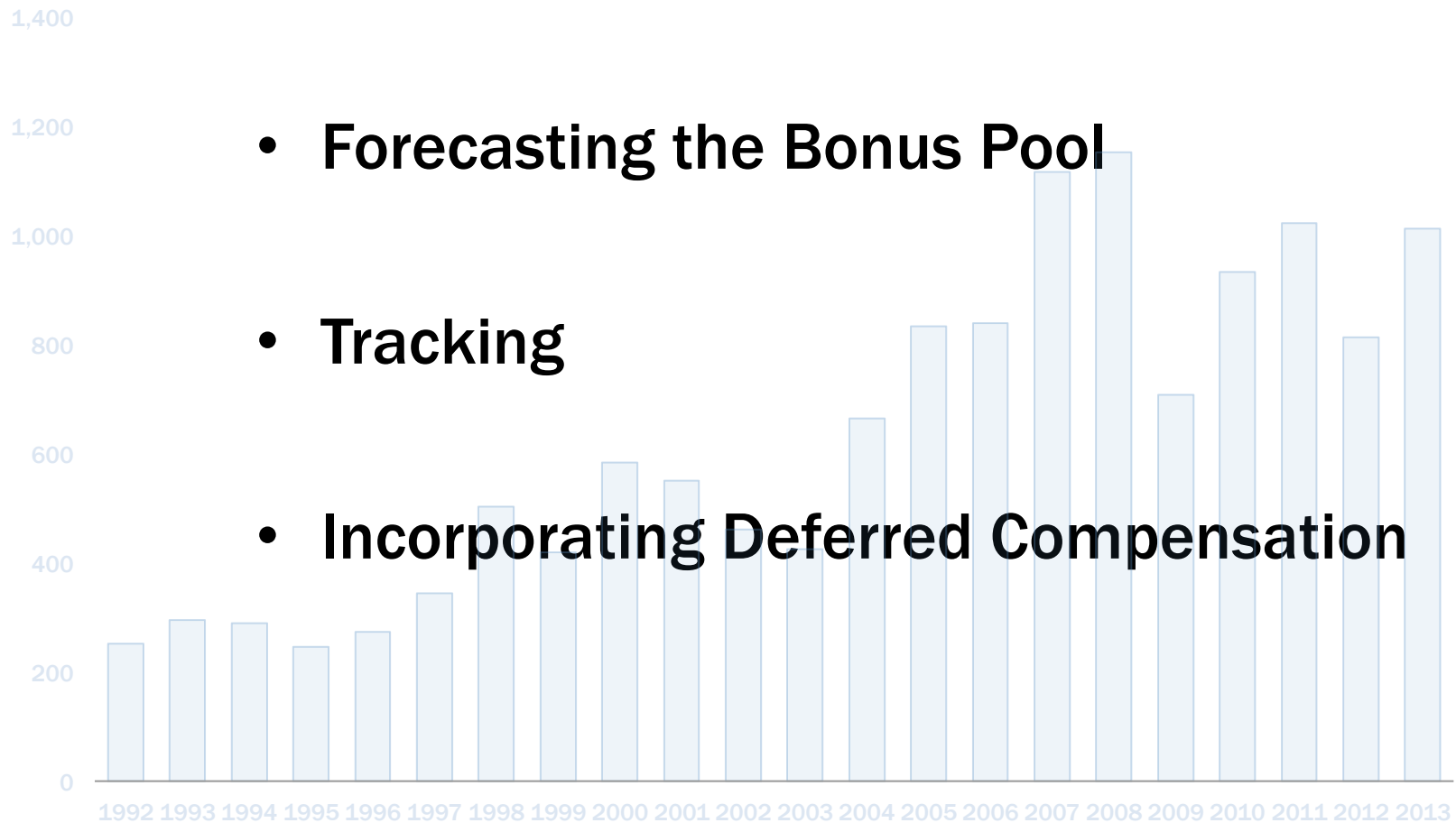
NYC brought in over \$1B in taxes from bonuses in FY13





Agenda

- Defining the Bonus Pool
- Forecasting the Bonus Pool
- Tracking
- Incorporating Deferred Compensation



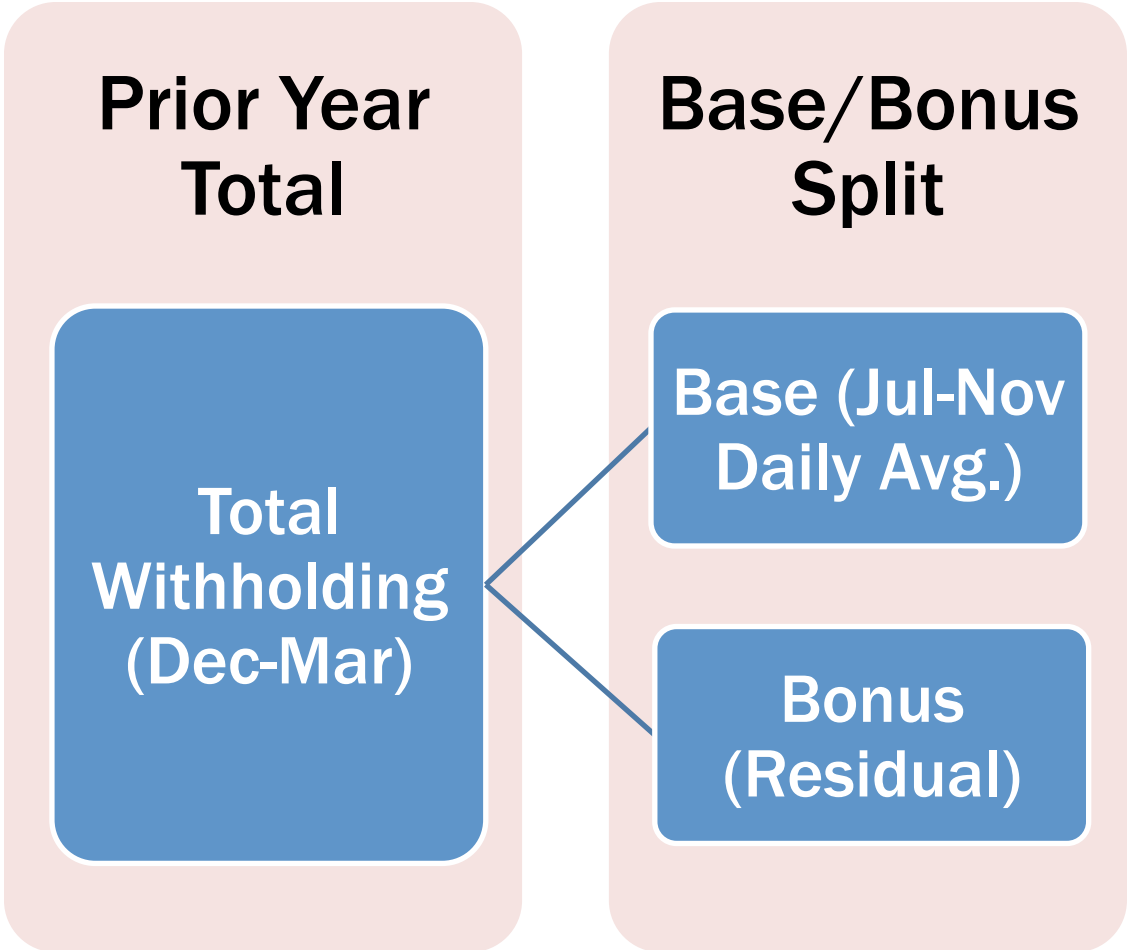


Key personal income tax definitions

- **NYC top tax rate: 3.876 percent**
- **NYC Fiscal Year runs July – June**
- **Private sector bonus period collections:
December – March**
- **Tax administered by New York State, daily collections reports received with a 1-day lag**
- **NYS provides aggregate data for NYC, we do not have access to raw data**

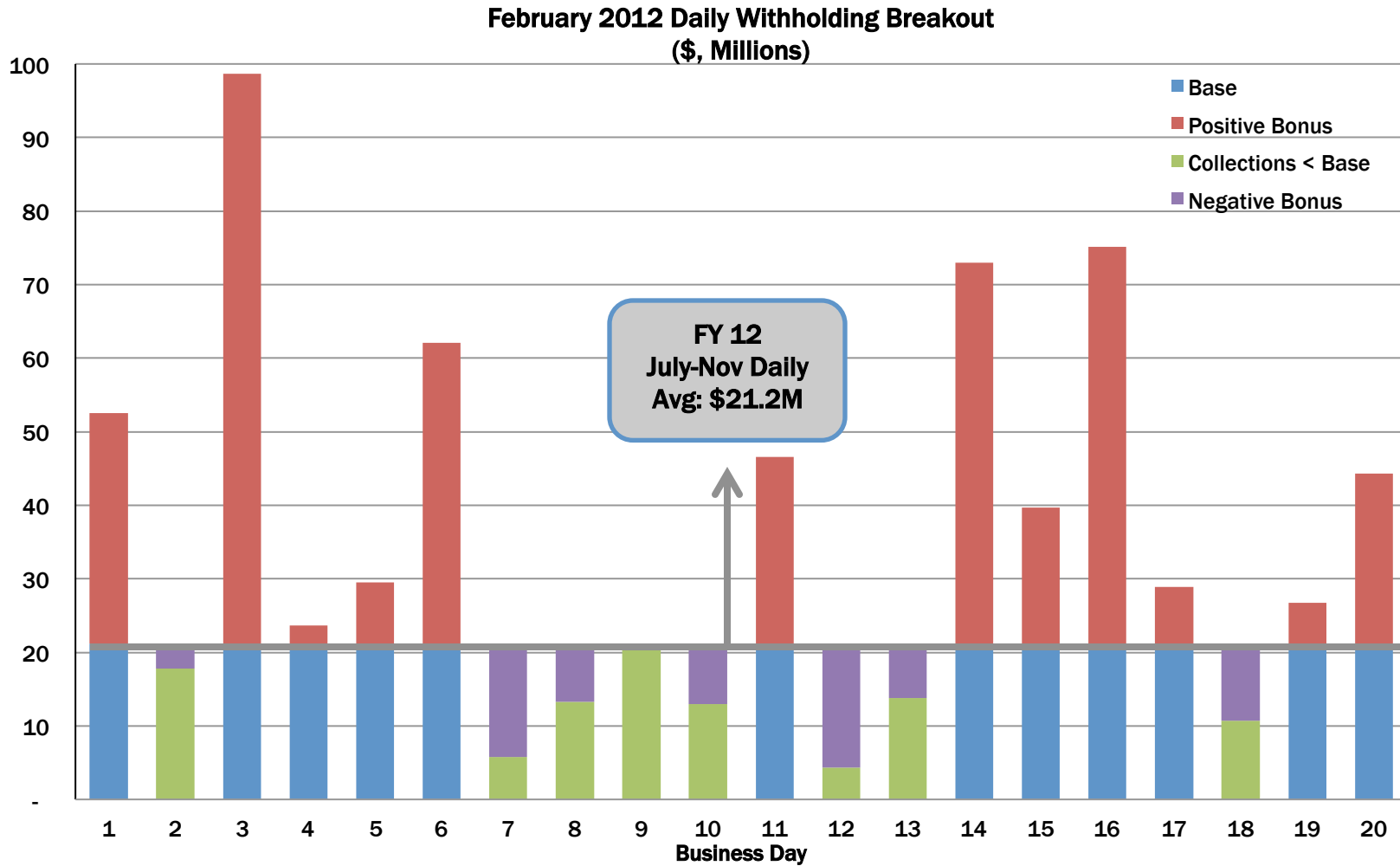


Withholding collections are divided into base and bonus components



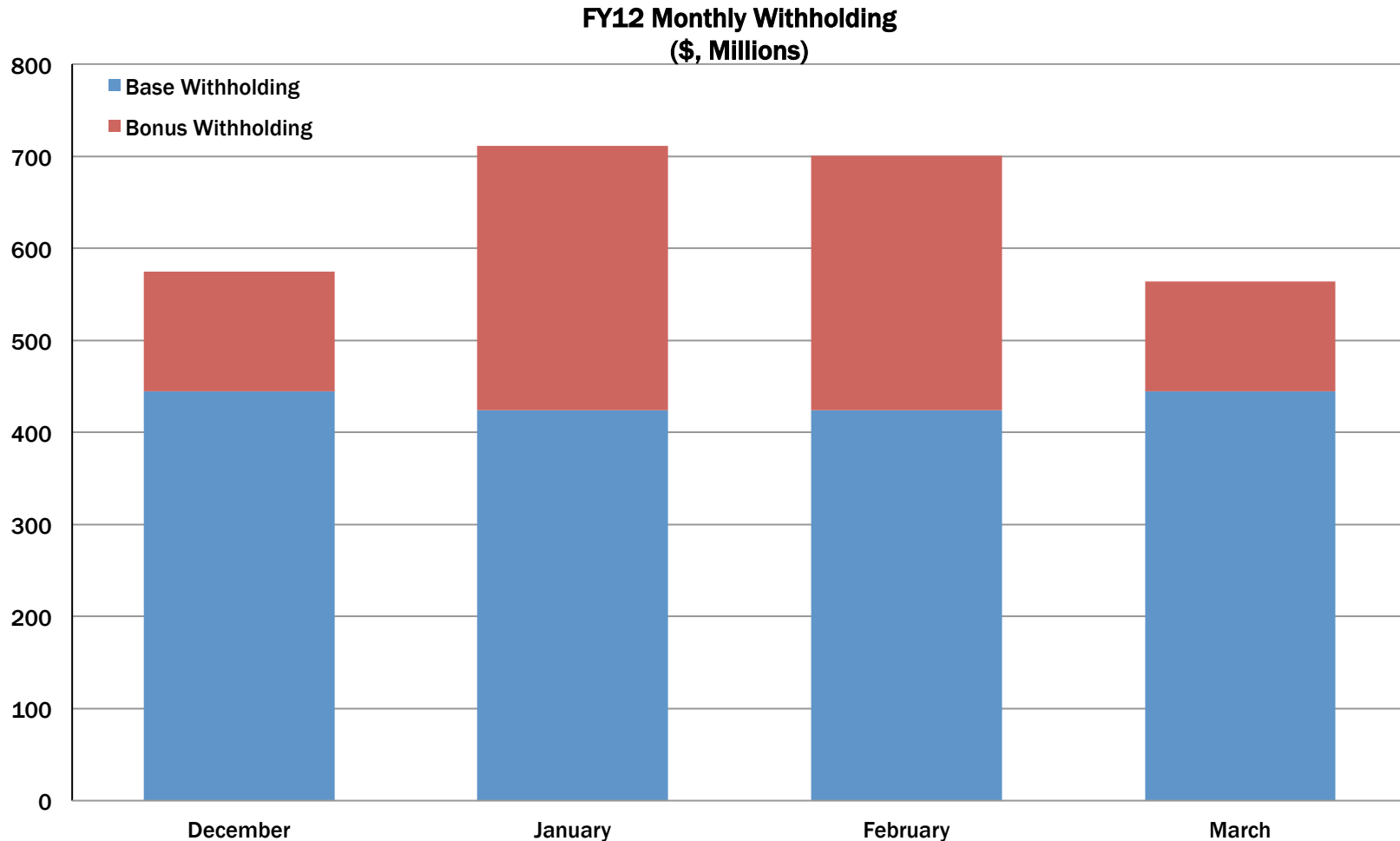


Daily collections split into bonus and base





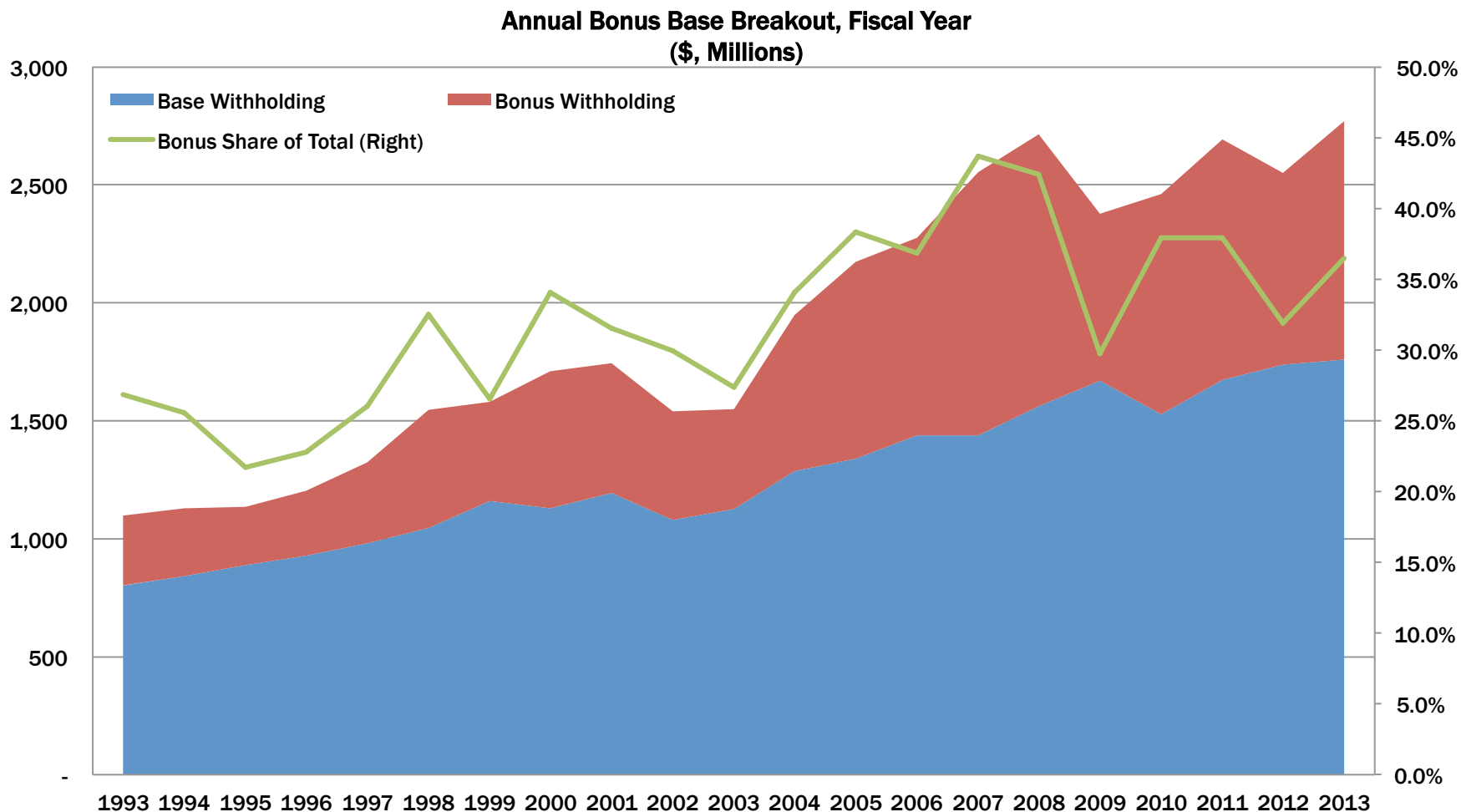
Daily collections are aggregated monthly for the bonus period



# Business Days:	21	20	20	21
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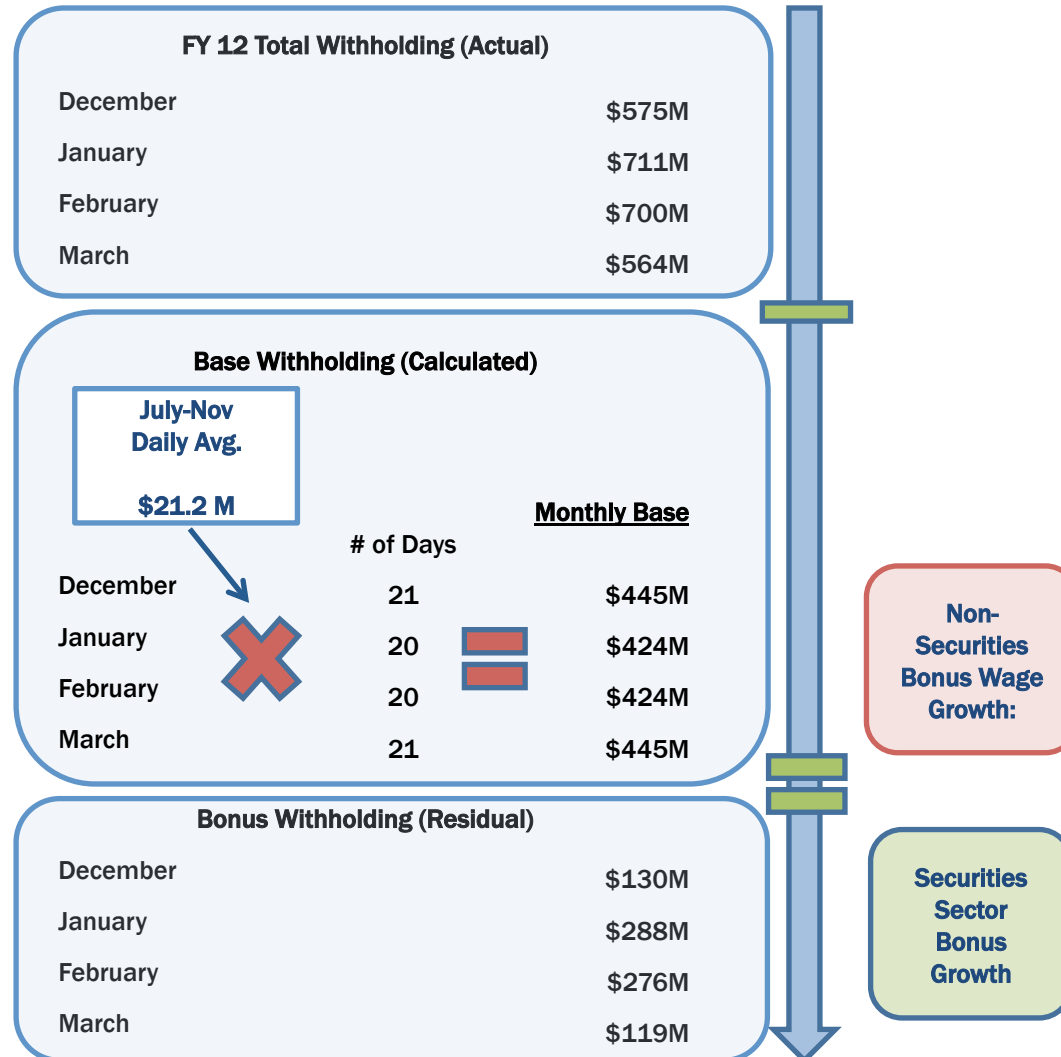
Source: NYC OMB calculations based on data from New York State Department of Taxation and Finance

Bonus withholding has gradually accounted for a larger share of total withholding





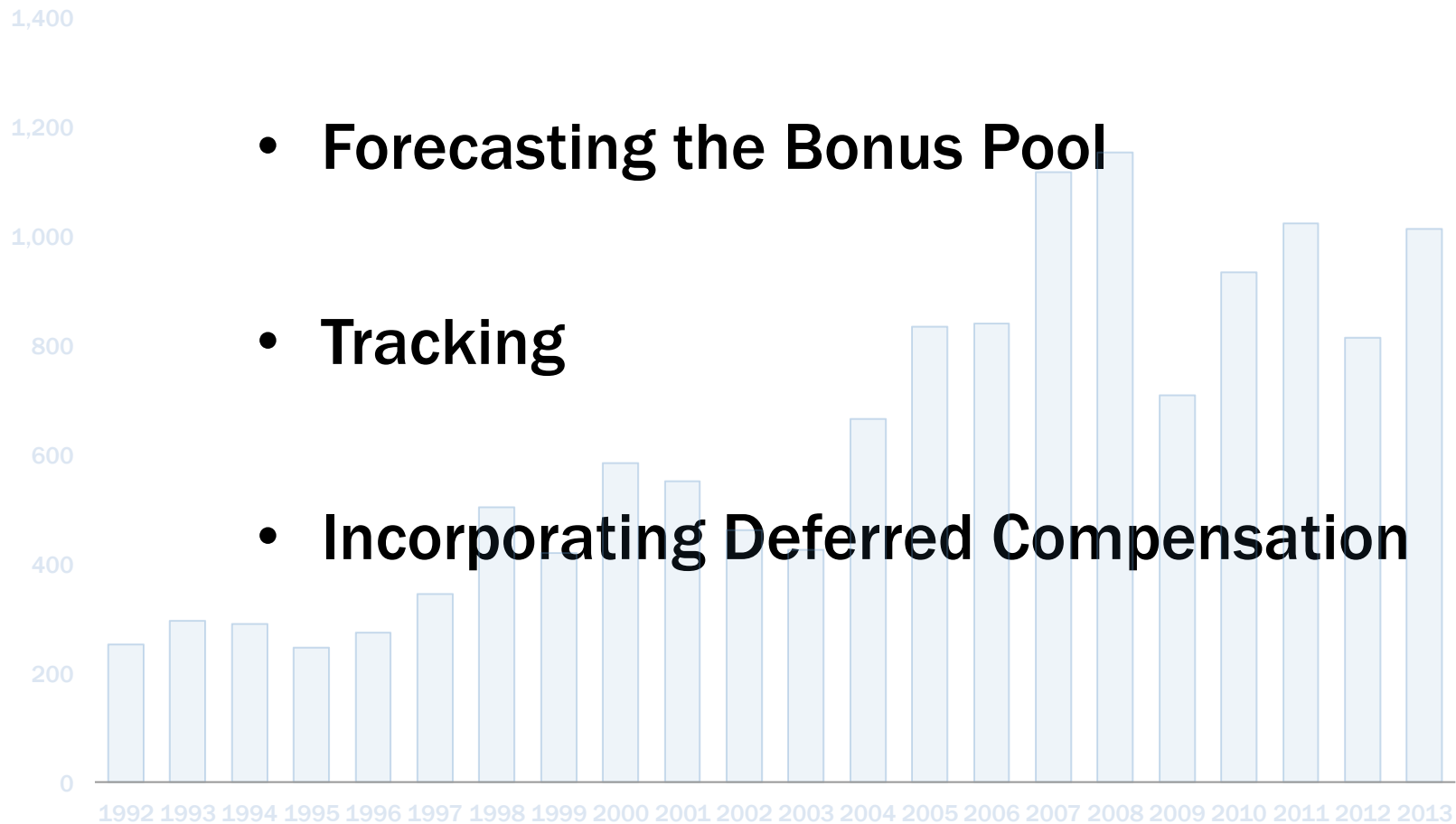
Withholding decomposition



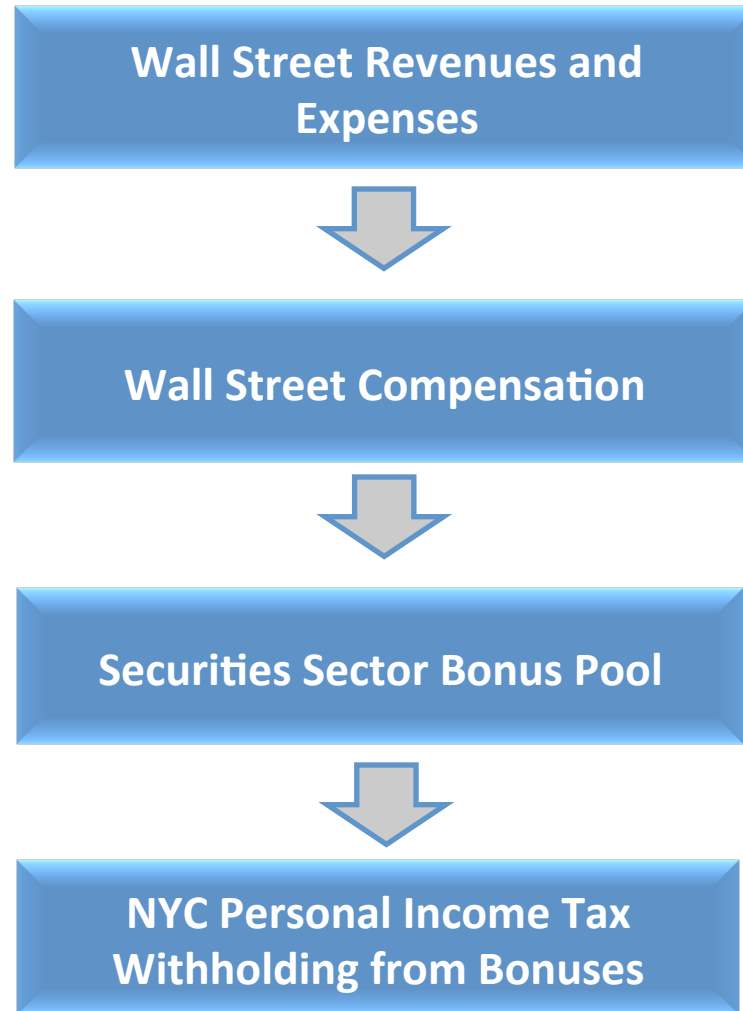


Agenda

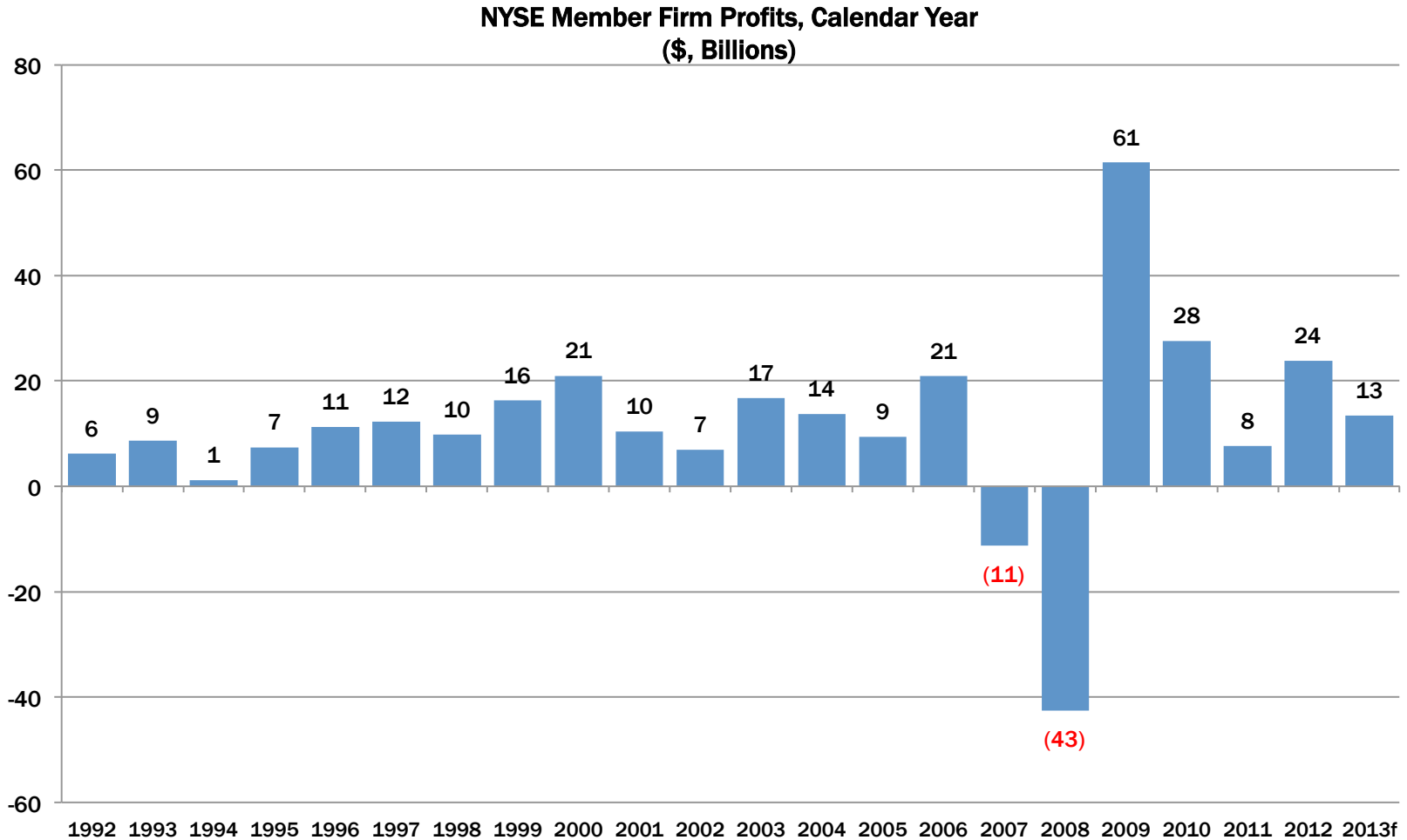
- Defining the Bonus Pool
- Forecasting the Bonus Pool
- Tracking
- Incorporating Deferred Compensation



A simplified model to forecast NYC Personal Income Tax withholding



Wall Street activity is tracked using New York Stock Exchange member firm profits

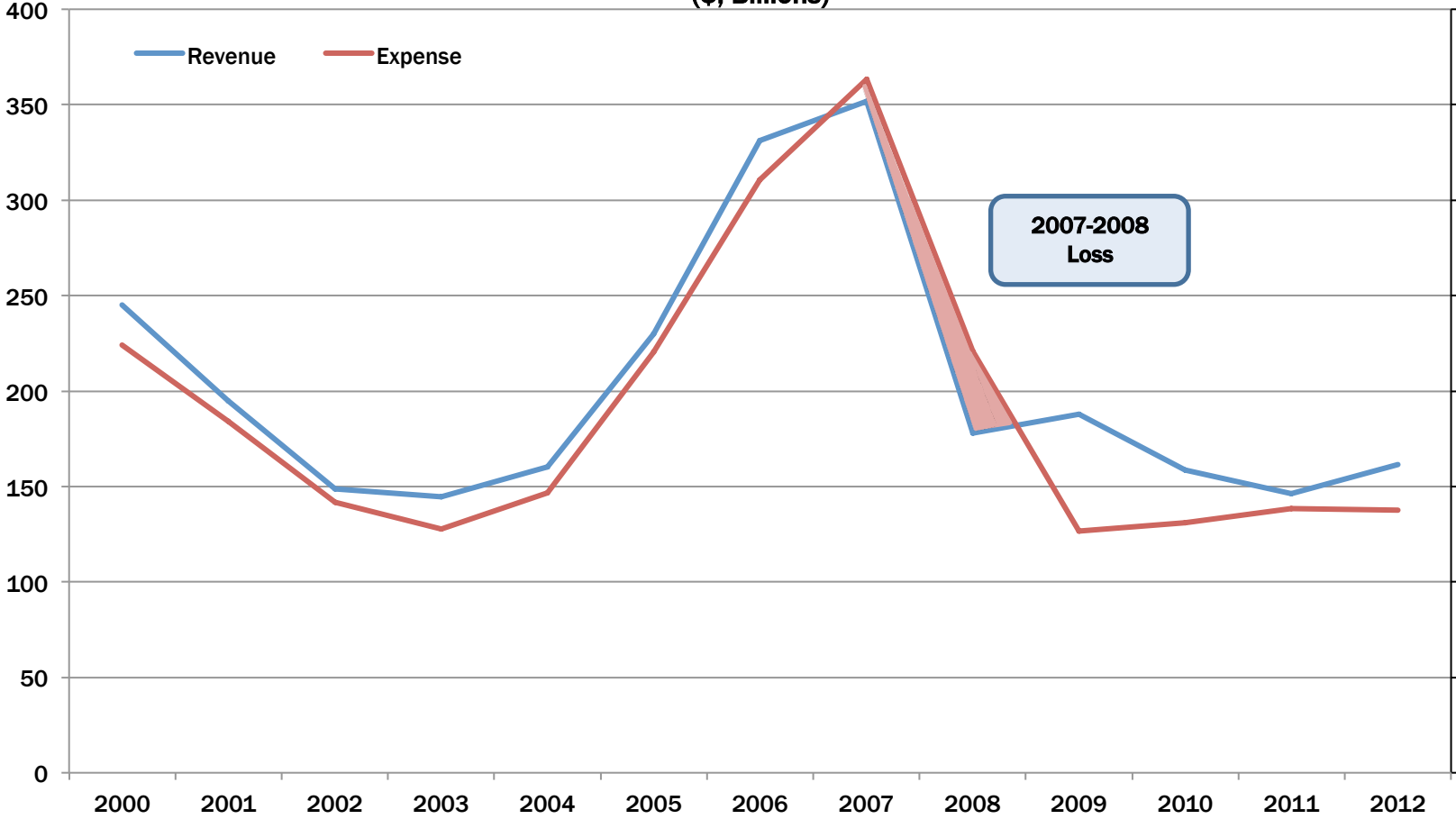


Note: Actual values for 1992 - 2012, f = NYC OMB Forecast (May 2013)
Source: NYSE Euronext

OMB tracks and forecasts industry revenues and expenses



NYSE Member Firm Revenues & Expenses, Calendar Year
(\$, Billions)



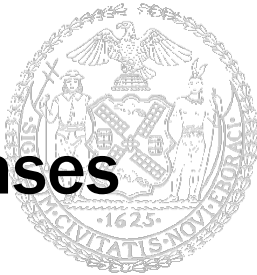
Source: NYSE Euronext

OMB tracks and forecasts these industry revenue lines



Business Line	Description
Commission	Commissions from all agency equity and debt transactions
Trading	Realized and unrealized gains and losses on securities held for sale in the ordinary course of business
Investment	Realized and unrealized gains and losses on securities identified as held for investment
Underwriting	Gross profits and losses from management of and participation in underwriting syndicates and selling groups
Margin Interest	Interest earned on customers' securities and commodities accounts
Fees	Total fees for account supervision, investment advisory and administrative services
Other Revenue Related to Securities	Includes, among other things, private placement fees, proxy solicitation fees, service charges (such as for mergers and acquisitions), fees for options done away from an exchange, dividends and interest from investment accounts (including repos and reverse repos), subscription fees for periodic publications
Other	Includes commodities, research, mutual fund sales, and all other revenue

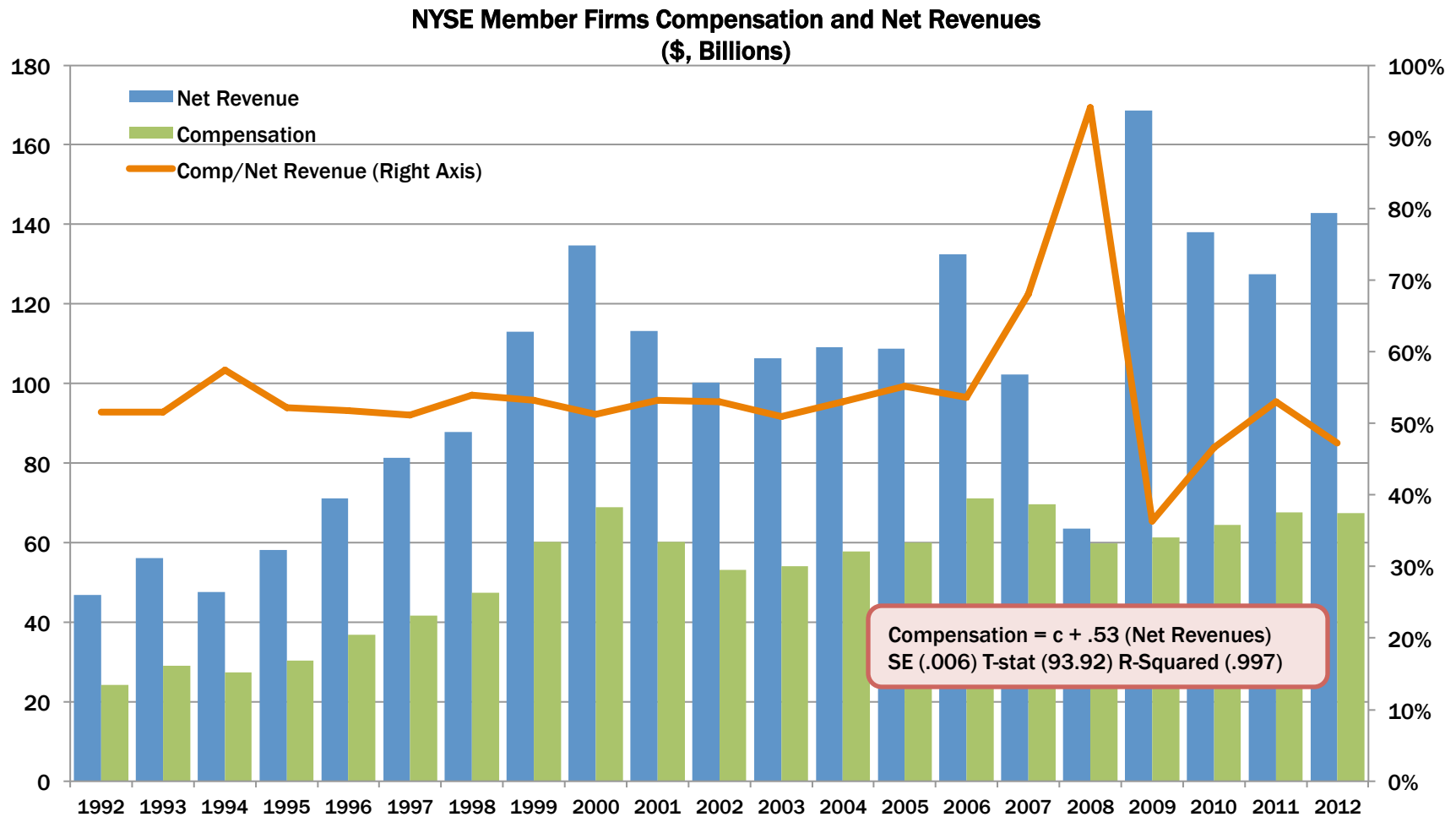
OMB tracks and forecasts these industry expenses



Business Line	Description
Compensation	All compensation for registered representatives, clerical employees, voting officers
Interest	All interest payments other than those credited to subordinated borrowings or general and limited partners' capital
Other Expenses	Includes floor costs, communication costs, occupancy costs, promotional costs and all other expenses

$$\text{Net Revenue} = \text{Total Revenue} - \text{Interest Expense}$$

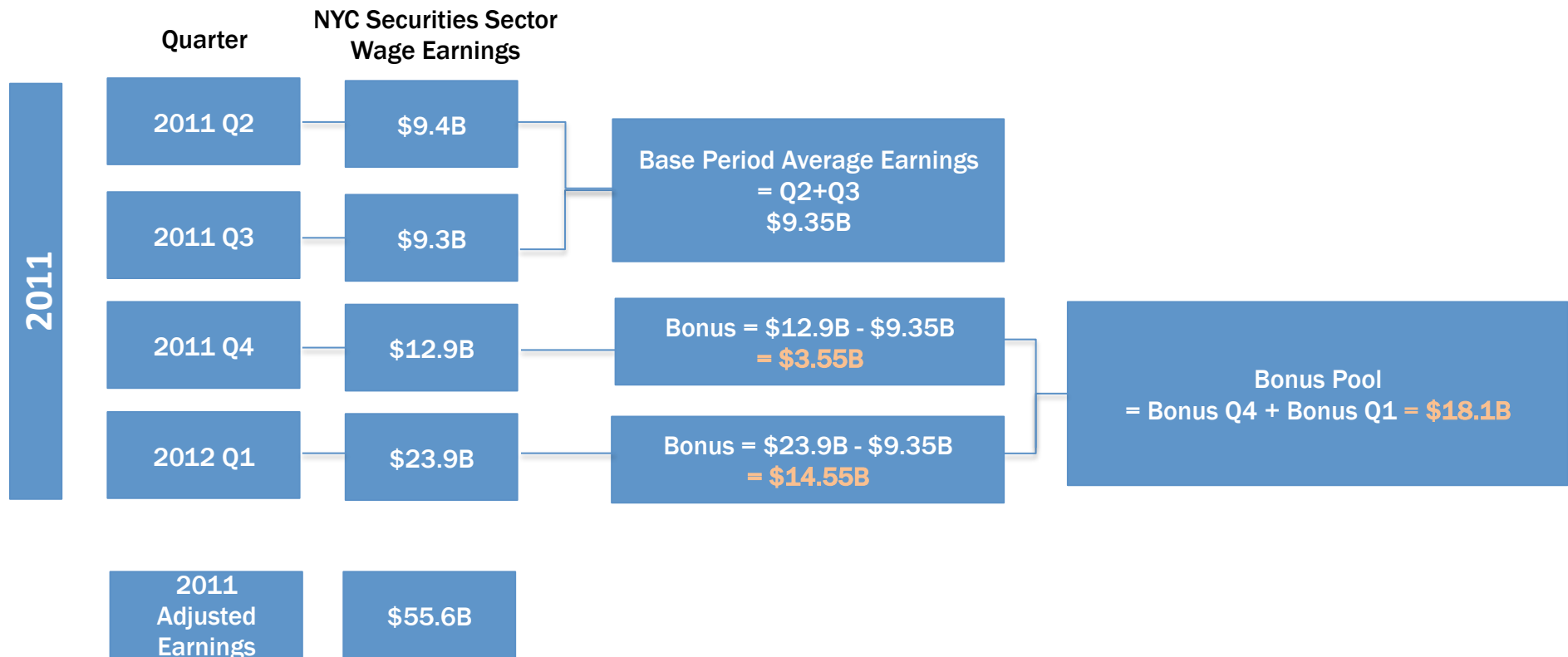
Firms typically determine their compensation based on net revenues



Source: NYSE Euronext
 Note: OLS estimate 1980 through 2006

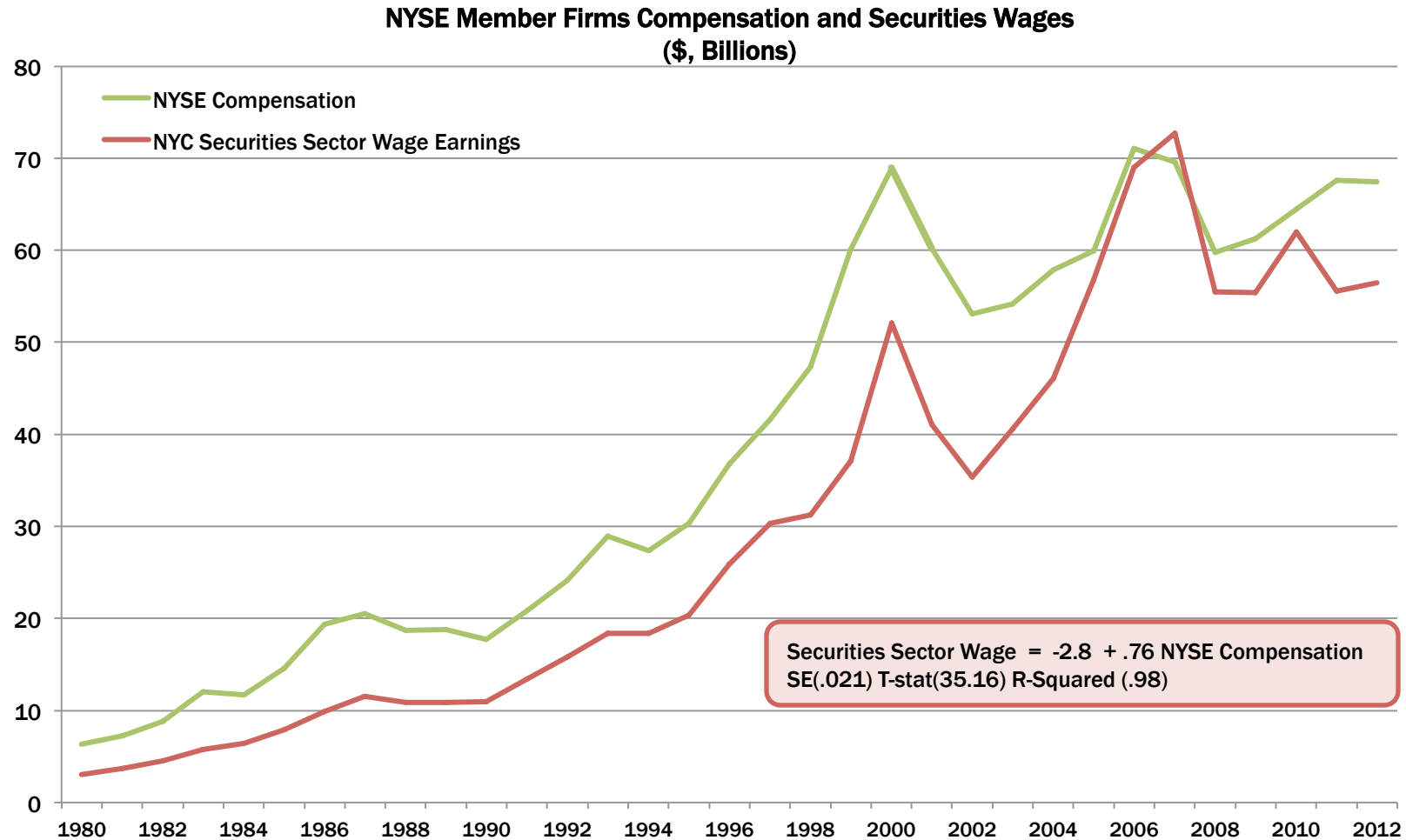


Securities sector wage earnings and the bonus pool





Prior to the financial crisis, NYSE compensation figures predicted securities sector wage earnings



Note: OLS estimate, 1980-2004
Source: NYSE Euronext and NYSDOL QCEW



Walking from compensation to bonus pool

NYSE Compensation Data	
Year	Compensation (\$B)
2011	67.6
2012	70.0
% chg.	3.6%



QCEW: Adjusted Securities Earnings	
Year	(\$B)
2011	55.6
2012	57.6
% chg.	3.6%



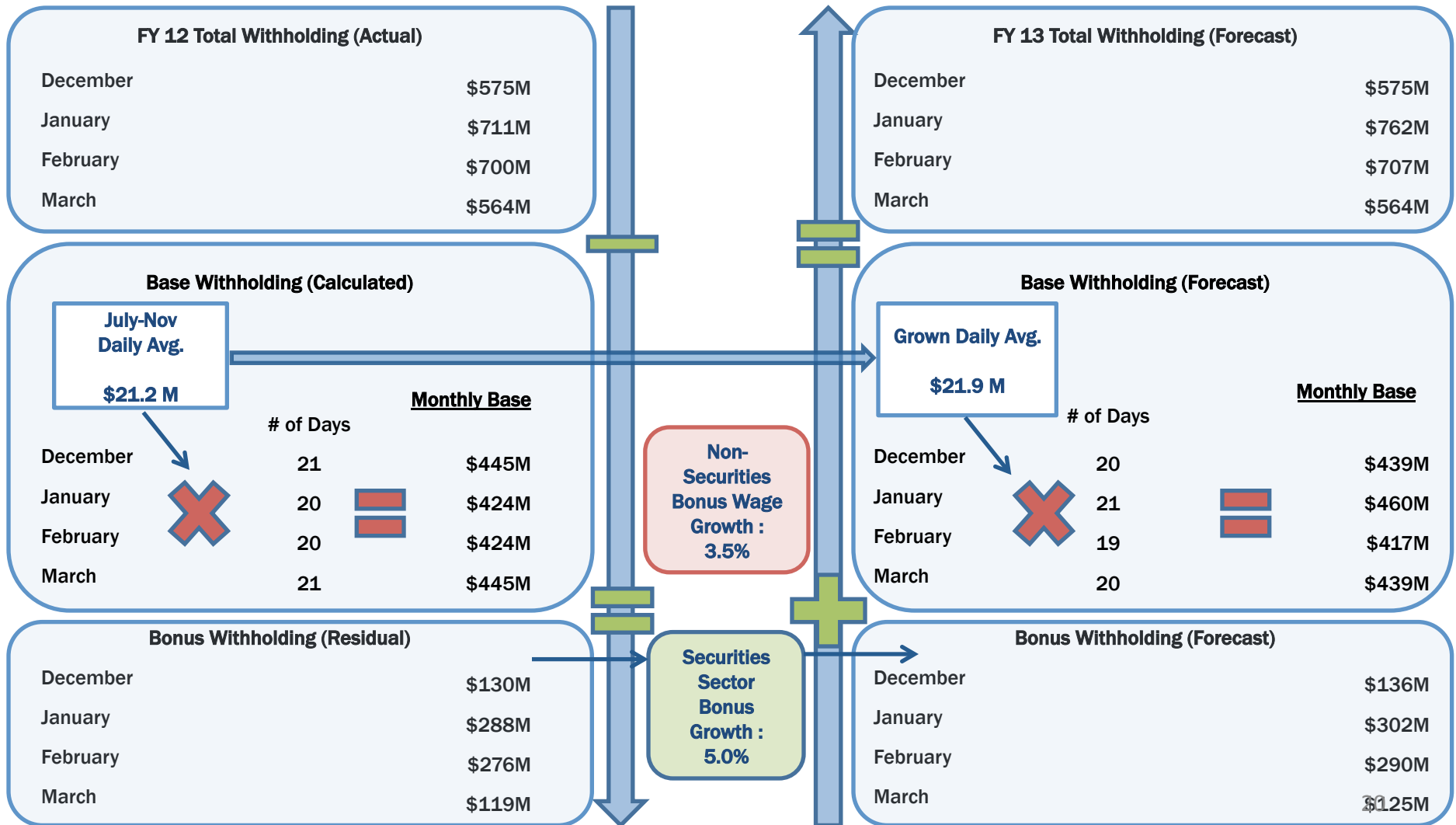
QCEW: Adjusted Securities Earnings	
Quarter	(\$B)
2011 Q2	9.4
2011 Q3	9.3
2011 Q4	12.9
2012 Q1	23.9
2011 Total	55.6
2012 Q2	9.4
2012 Q3f	9.9
2012 Q4f	13.6
2013 Q1f	24.7
2012 Total	57.6
2011-2012 Q2 % chg.	0.0%
2011-2012 Q3 % chg.	6.5%
2011-2012 Q4 % chg.	5.4%
2012-2013 Q1 % chg.	3.3%



	Bonus Pool (\$B)	% Chg.
2011 Base Quarters	18.8	
2011 Bonus Quarters	36.8	
2011 Bonus Pool	18.1	
2012 Base Quarters	19.3	2.7%
2012 Bonus Quarters	38.3	4.1%
2012 Bonus Pool	19.0	5.0%



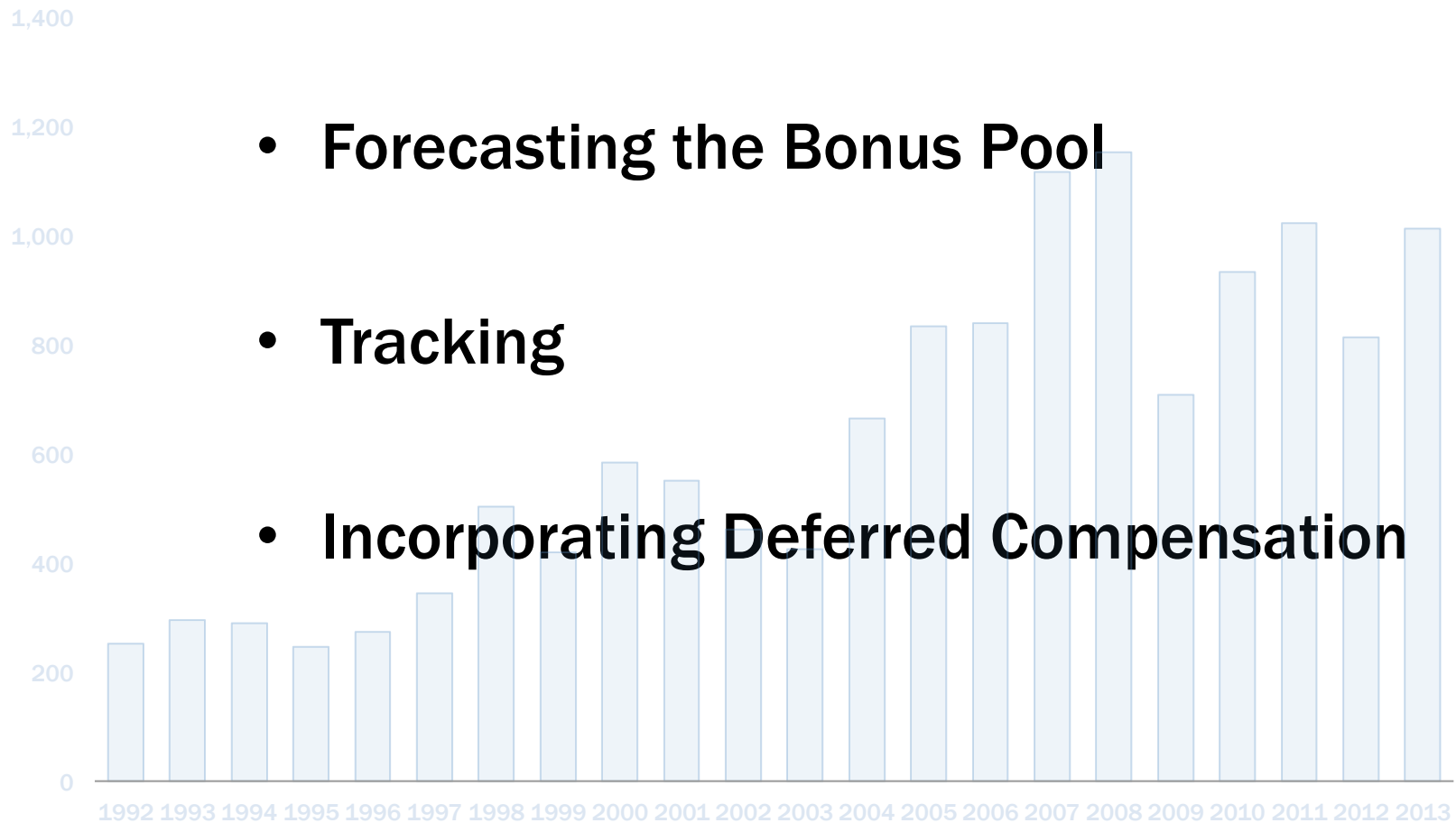
Withholding bonus forecast calculation





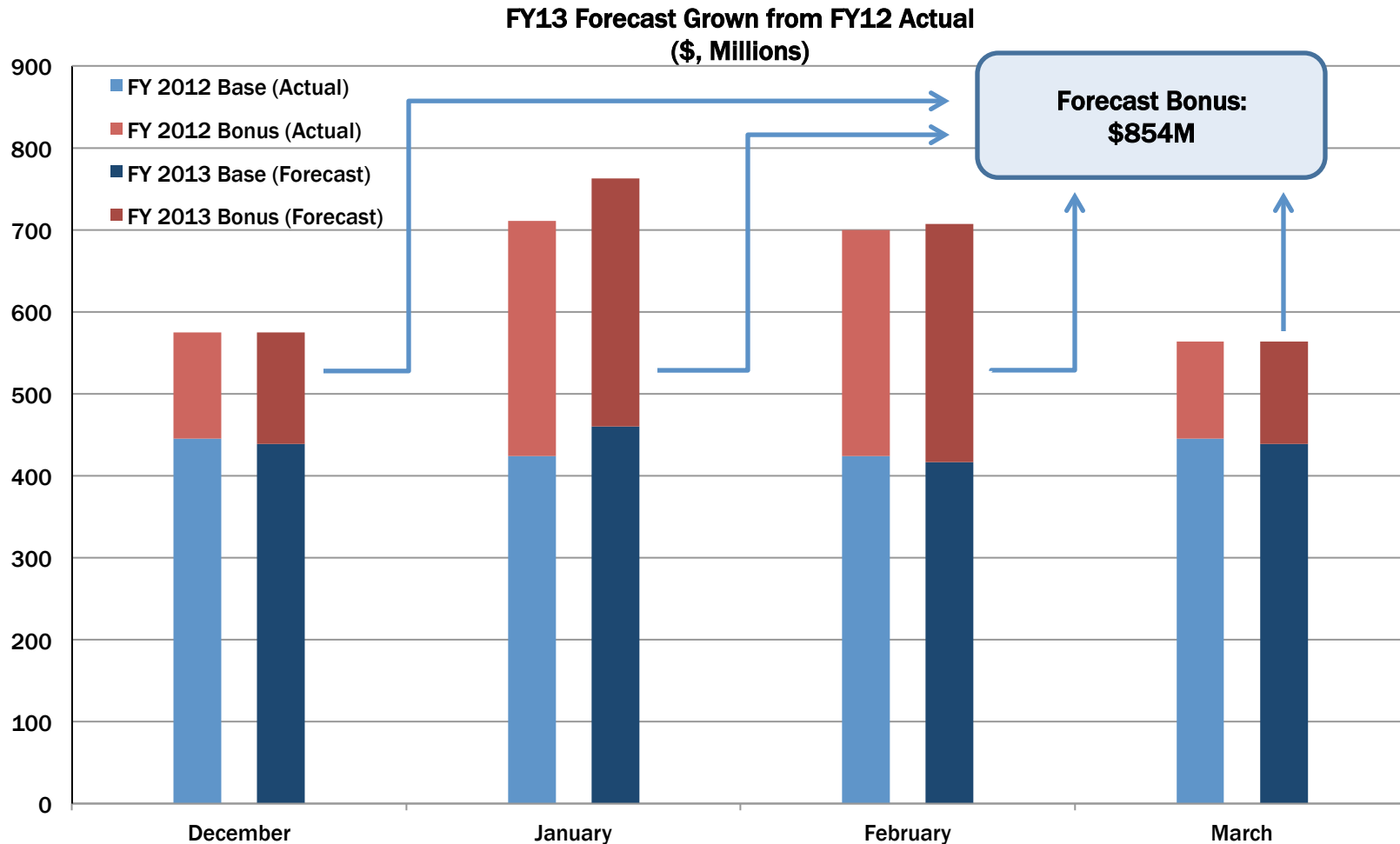
Agenda

- Defining the Bonus Pool
- Forecasting the Bonus Pool
- Tracking
- Incorporating Deferred Compensation



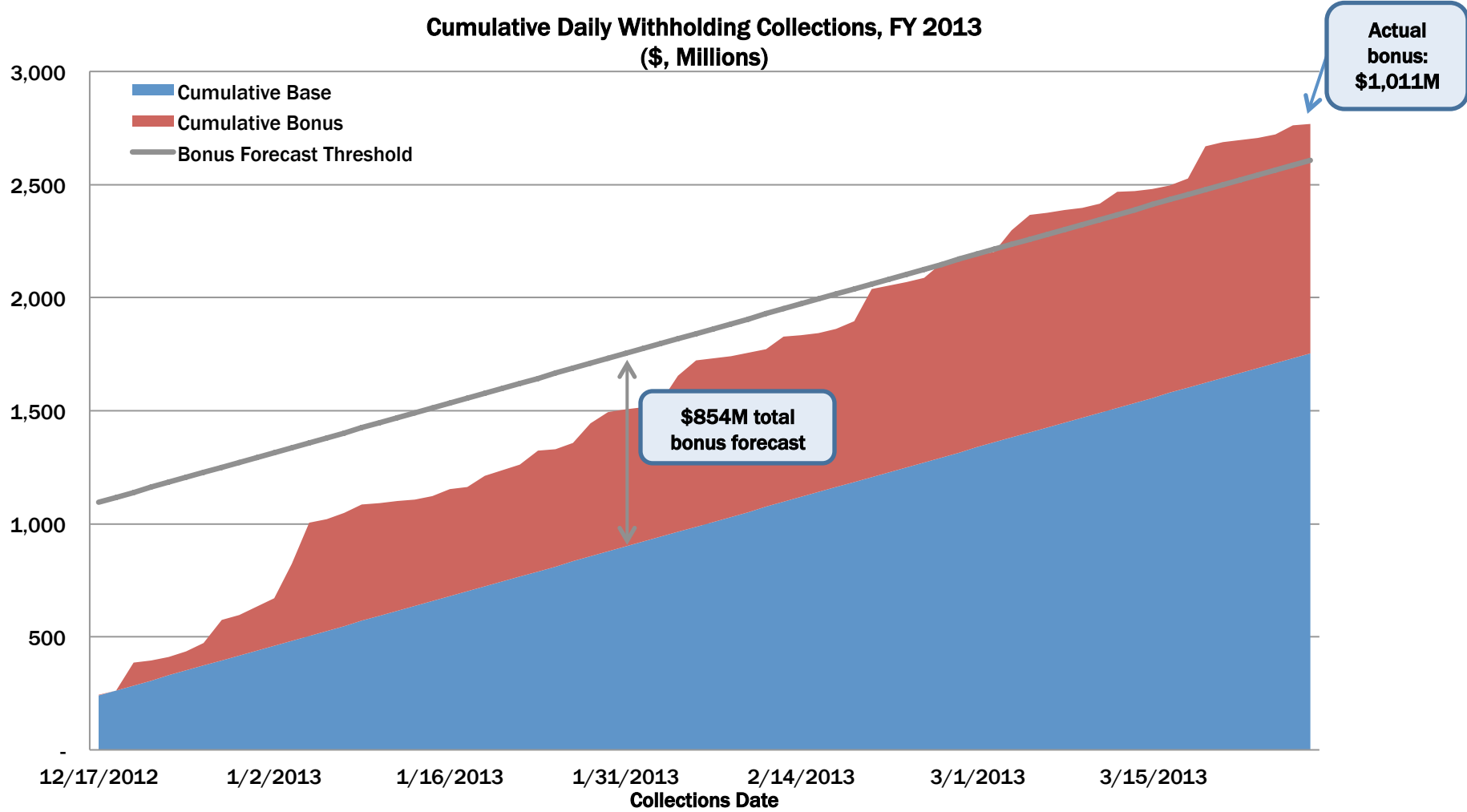


Growing bonus withholding by month yields a total bonus withholding forecast



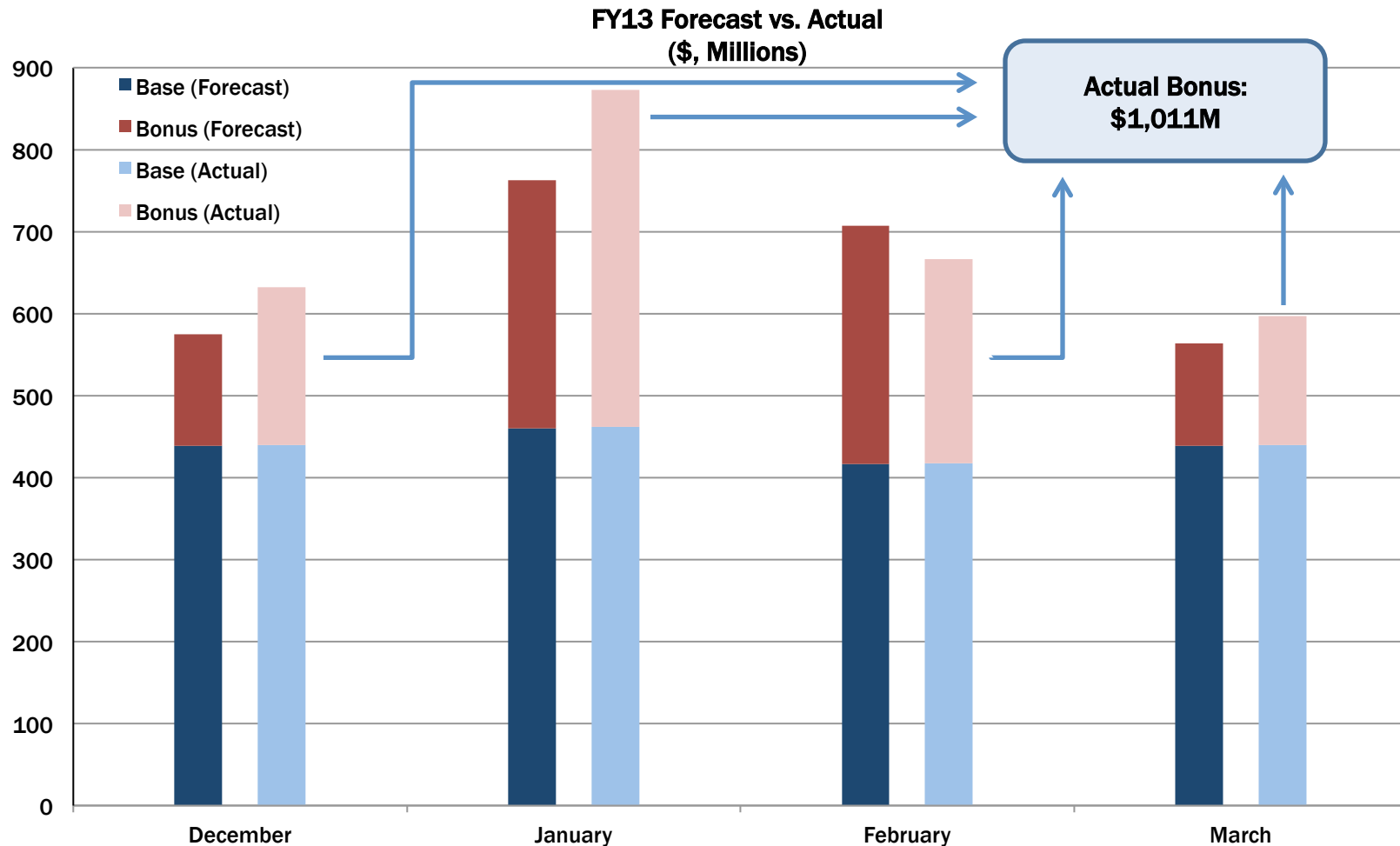


Withholding collections are tracked daily against the total withholding forecast





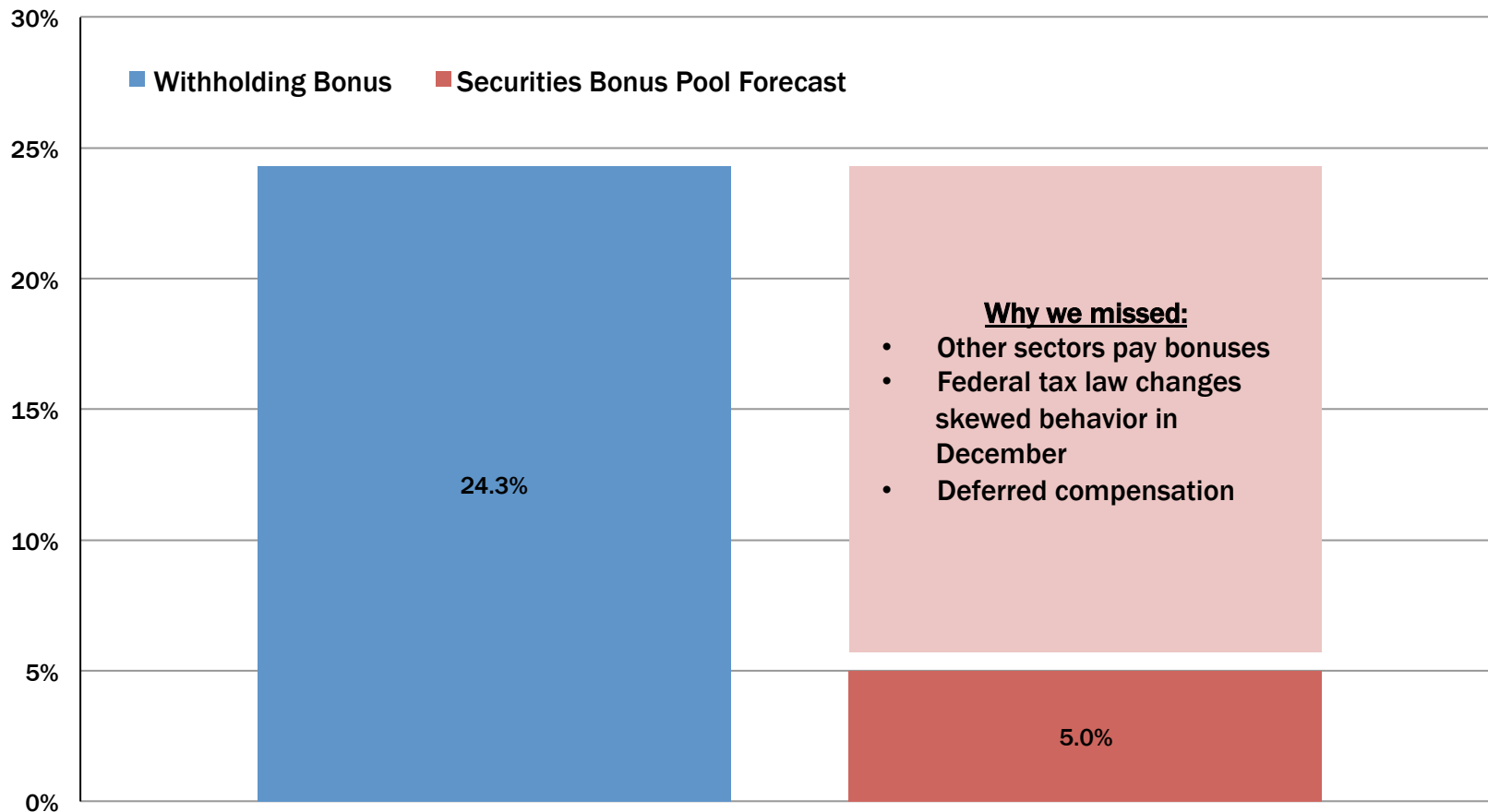
Actual collections are compared to the forecast at the end of the bonus period





Actual withholding bonus collections grew much faster than forecast for FY13

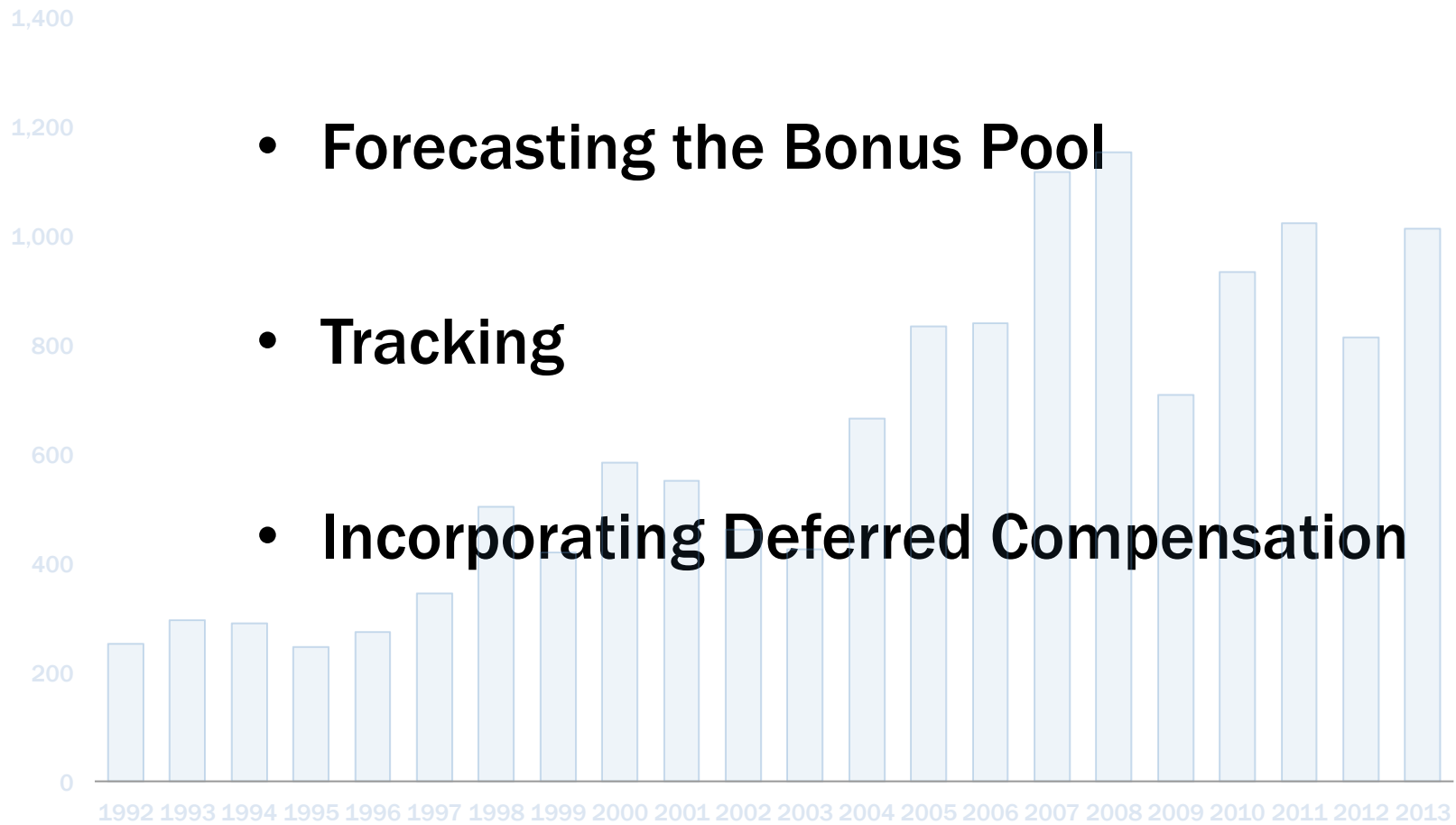
Forecast and Actual Bonus Growth, FY12 – FY13





Agenda

- Defining the Bonus Pool
- Forecasting the Bonus Pool
- Tracking
- Incorporating Deferred Compensation

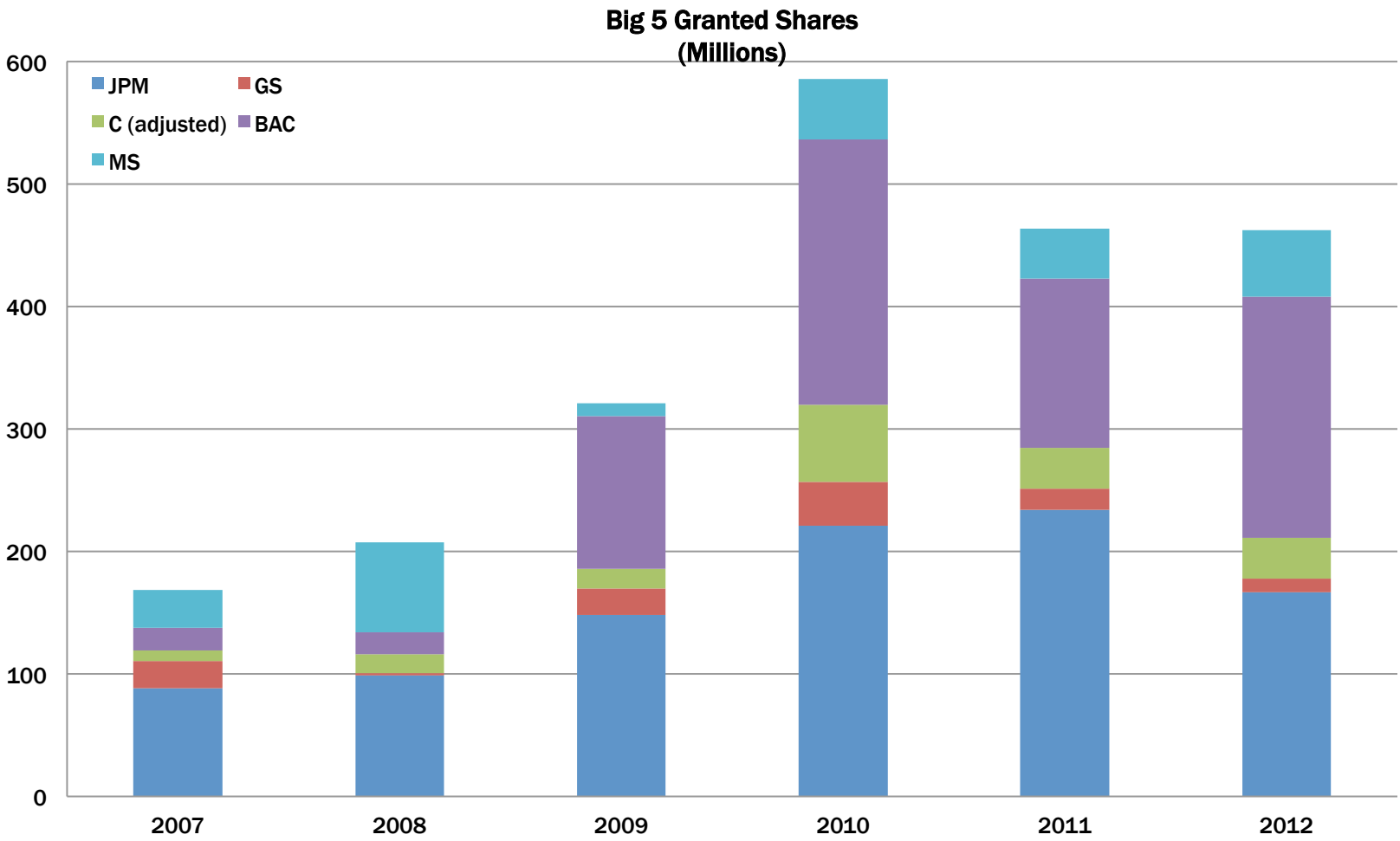
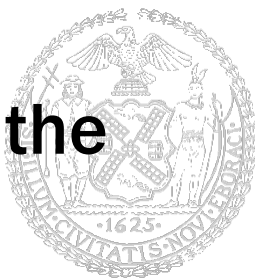




Deferred Compensation: Overview

- **Political pressure on banks to defer bonuses after the financial crisis**
- **Deferrals paid in cash and stock**
- **Big 5 (BAC, Citi, GS, JPM, MS) used as proxy**
- **10K data lines & timing**

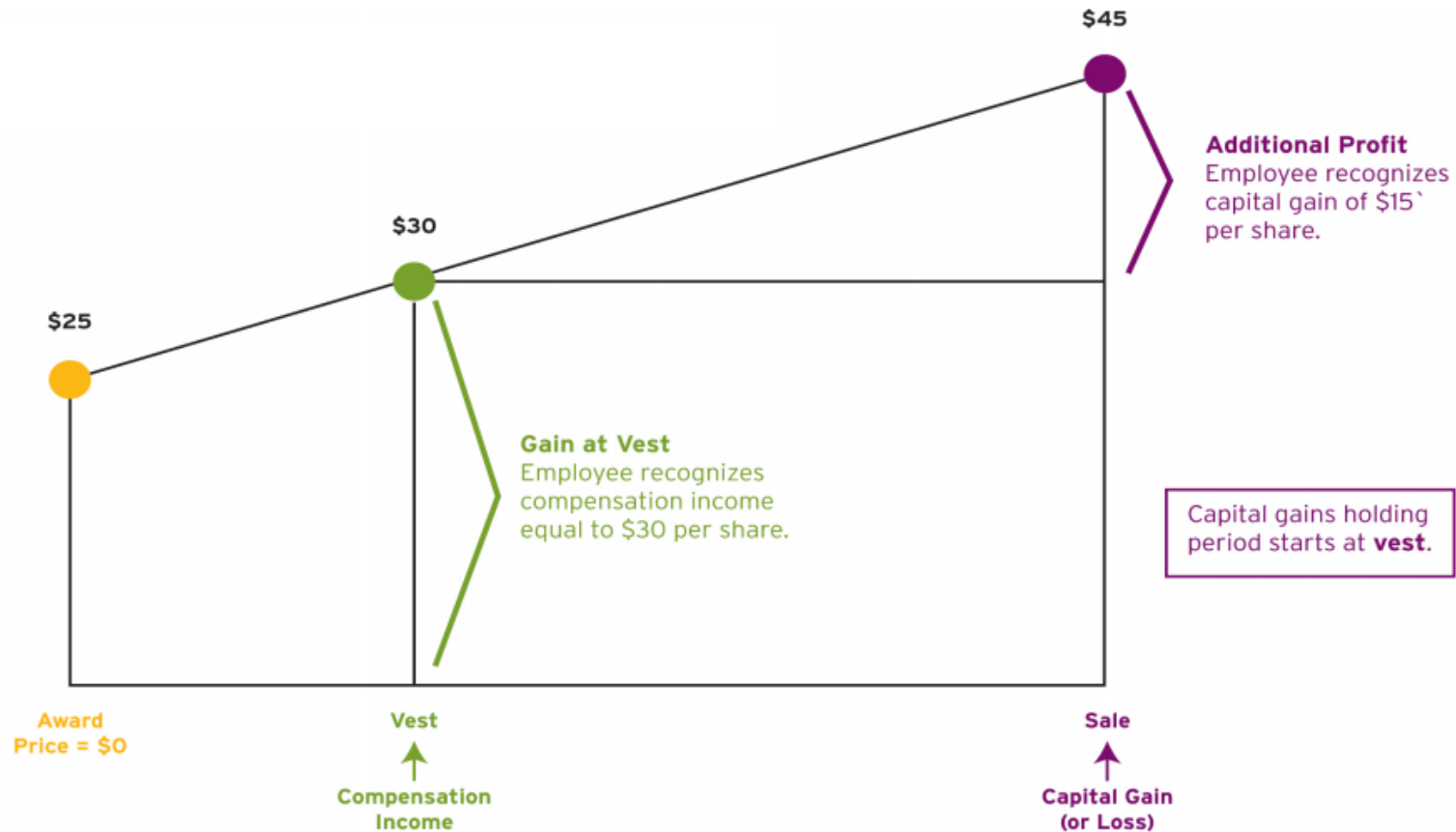
Deferred bonuses became more popular after the financial crisis



Source: Firm annual SEC filings (10-Ks)



Withholding generally occurs at vesting on the fair market value

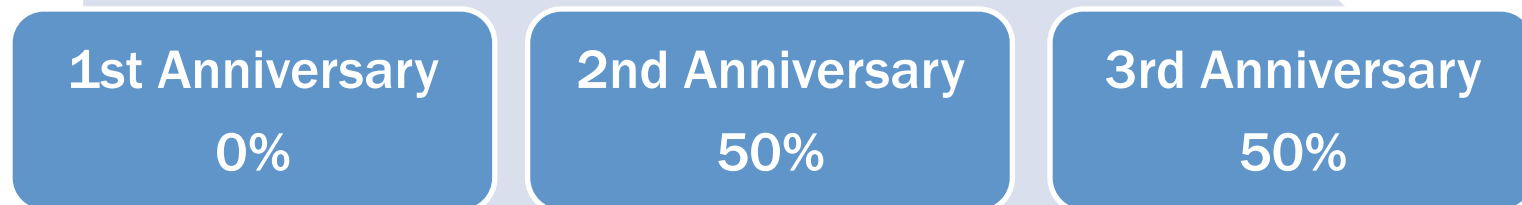




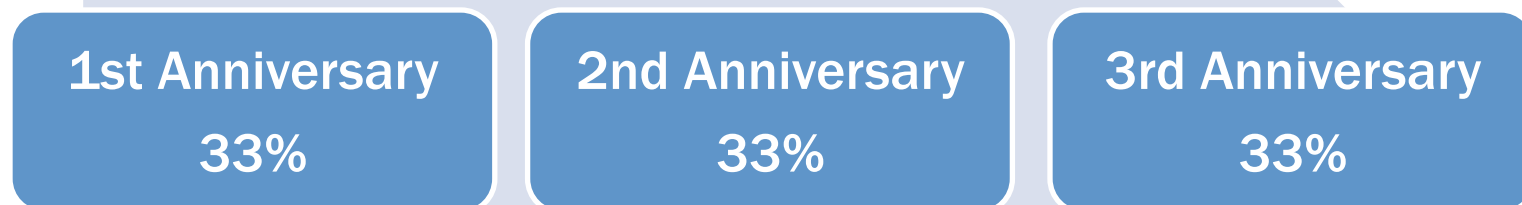
Common vesting schedules

- Two vesting cycle models are common among large firms.

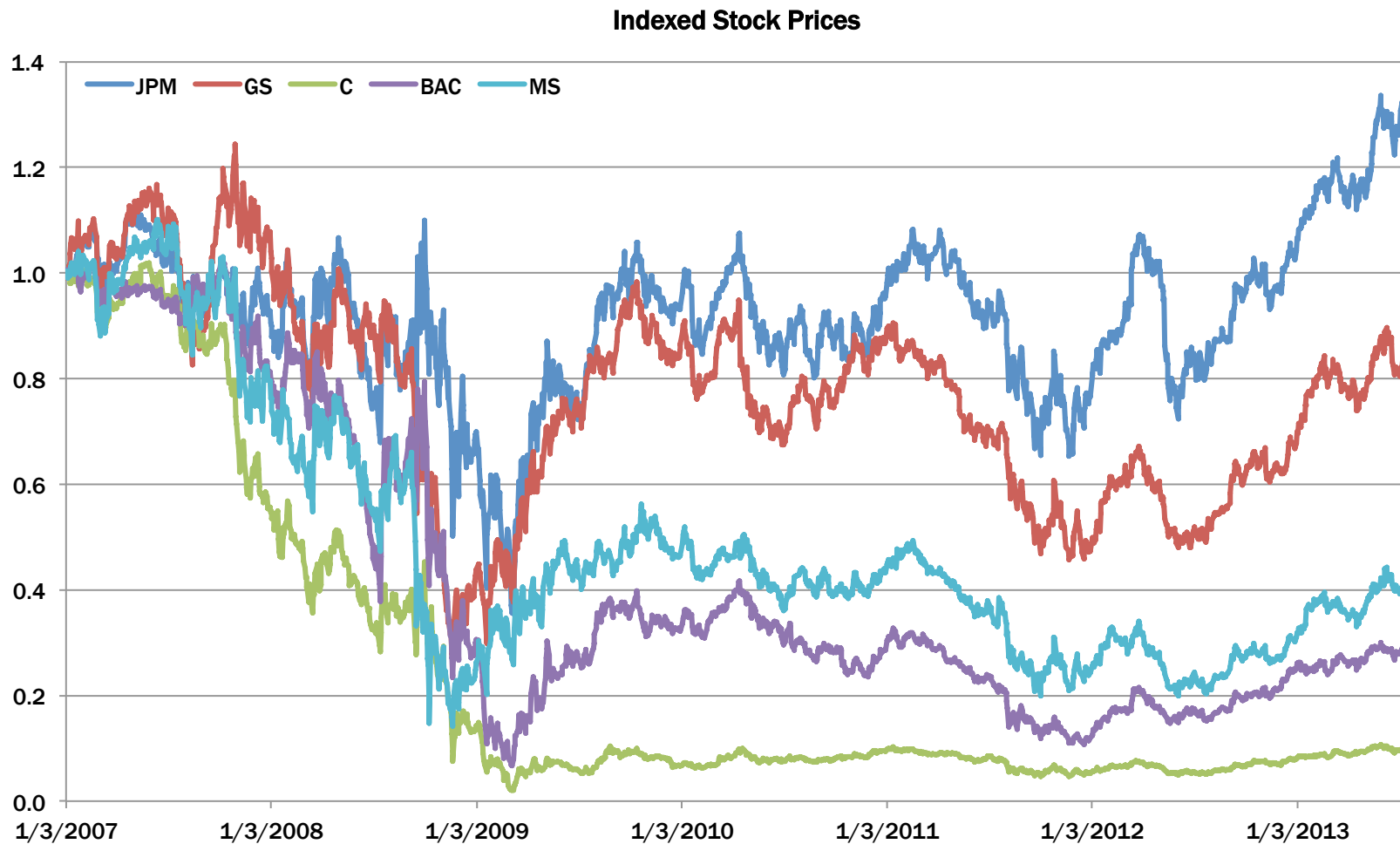
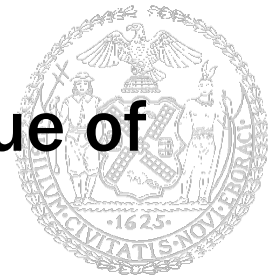
- Model 1:



- Model 2:



Volatile stock prices play a large part in the value of vesting shares





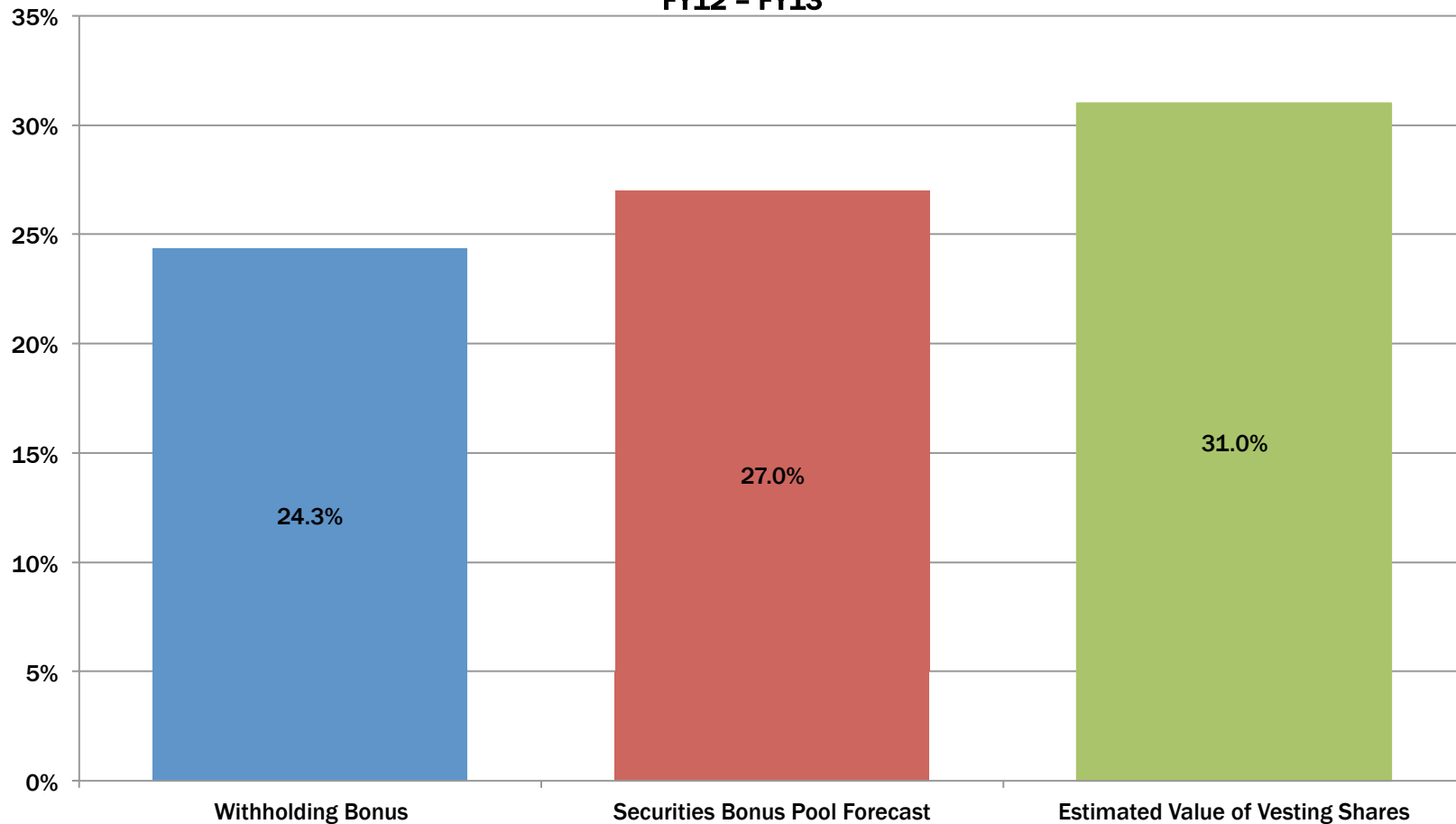
Prior grant method

Grant Year	Firm	# Granted (millions)	2012 Vest			2013 Vest			2014 Vest		
			# Vested (millions)	Price (\$)	Value (\$, millions)	# Vested (millions)	Price (\$)	Value (\$, millions)	# Vested (millions)	Price (\$)	Value (\$, millions)
2009	JPM	131	66	37	2,446	-	-	-	-	-	-
	GS	1	0	111	41	-	-	-	-	-	-
	C	162	41	3	125	41	4	171	-	-	-
	BAC	124	41	7	292	-	-	-	-	-	-
	MS	11	6	19	103	-	-	-	-	-	-
2010	JPM	80	40	37	1,495	40	47	1,885	-	-	-
	GS	36	12	111	1,306	12	148	1,733	-	-	-
	C	628	157	3	482	157	4	662	157	5	774
	BAC	217	72	7	510	72	11	810	-	-	-
	MS	49	25	19	457	25	23	559	-	-	-
2011	JPM	60	-	-	-	30	47	1,404	30	50	1,485
	GS	17	6	111	625	6	148	829	6	150	848
	C	33	8	31	253	8	42	348	8	49	406
	BAC	138	46	7	325	46	11	516	46	13	598
	MS	49	-	-	-	25	23	559	25	24	577
2012	JPM	60	-	-	-	-	-	-	30	50	1,483
	GS	11	-	-	-	4	148	551	4	150	558
	C	33	-	-	-	8	42	353	8	49	412
	BAC	197	-	-	-	65	11	736	66	13	853
	MS	54	-	-	-	-	-	-	27	24	636
2013	JPM	N/A	-	-	-	-	-	-	N/A	N/A	N/A
	GS	N/A	-	-	-	-	-	-	N/A	N/A	N/A
	C	N/A	-	-	-	-	-	-	N/A	N/A	N/A
	BAC	N/A	-	-	-	-	-	-	N/A	N/A	N/A
	MS	N/A	-	-	-	-	-	-	N/A	N/A	N/A
Total Value of Vested Stock					8,472		11,115		N/A		
Yr/Yr % Change					-22%		31%		N/A		32



Vesting shares boosted withholding collections above the bonus forecast in FY 13

Actual Bonus, Forecast Securities Bonus, and Estimated Value of Vesting Shares Growth, FY12 - FY13





Takeaways

- **NYC receives a significant revenue stream from a volatile source**
- **We have built a Wall Street model that historically has been quite useful**
- **Recent changes in compensation practices require new techniques**



-
- **Contact Information:**
 - GoldsteinJ@omb.nyc.gov
 - DomanskyW@omb.nyc.gov

Appendix





Wall Street Compensation was flat yet securities sector bonuses rose 27 percent?

NYSE Compensation Data	
Year	Compensation (\$B)
2011	67.6
2012	67.4
% chg.	-0.2%



QCEW: Adjusted Securities Earnings	
Year	(\$B)
2011	55.6
2012	59.2
% chg.	6.5%



QCEW: Adjusted Securities Earnings	
Quarter	(\$B)
2011 Q2	9.4
2011 Q3	9.3
2011 Q4	12.9
2012 Q1	23.9
2011 Total	55.6
2012 Q2	9.4
2012 Q3	8.7
2012 Q4	17.2
2013 Q1	23.9
2012 Total	57.6
2011-2012 Q2 % chg.	0.0%
2011-2012 Q3 % chg.	-6.2%
2011-2012 Q4 % chg.	33.0%
2012-2013 Q1 % chg.	0.0%



	Bonus Pool (\$B)	% Chg.
2011 Base Quarters	18.8	
2011 Bonus Quarters	36.8	
2011 Bonus Pool	18.1	
2012 Base Quarters	18.1	-3.4%
2012 Bonus Quarters	41.1	11.6%
2012 Bonus Pool	23.0	27.0%

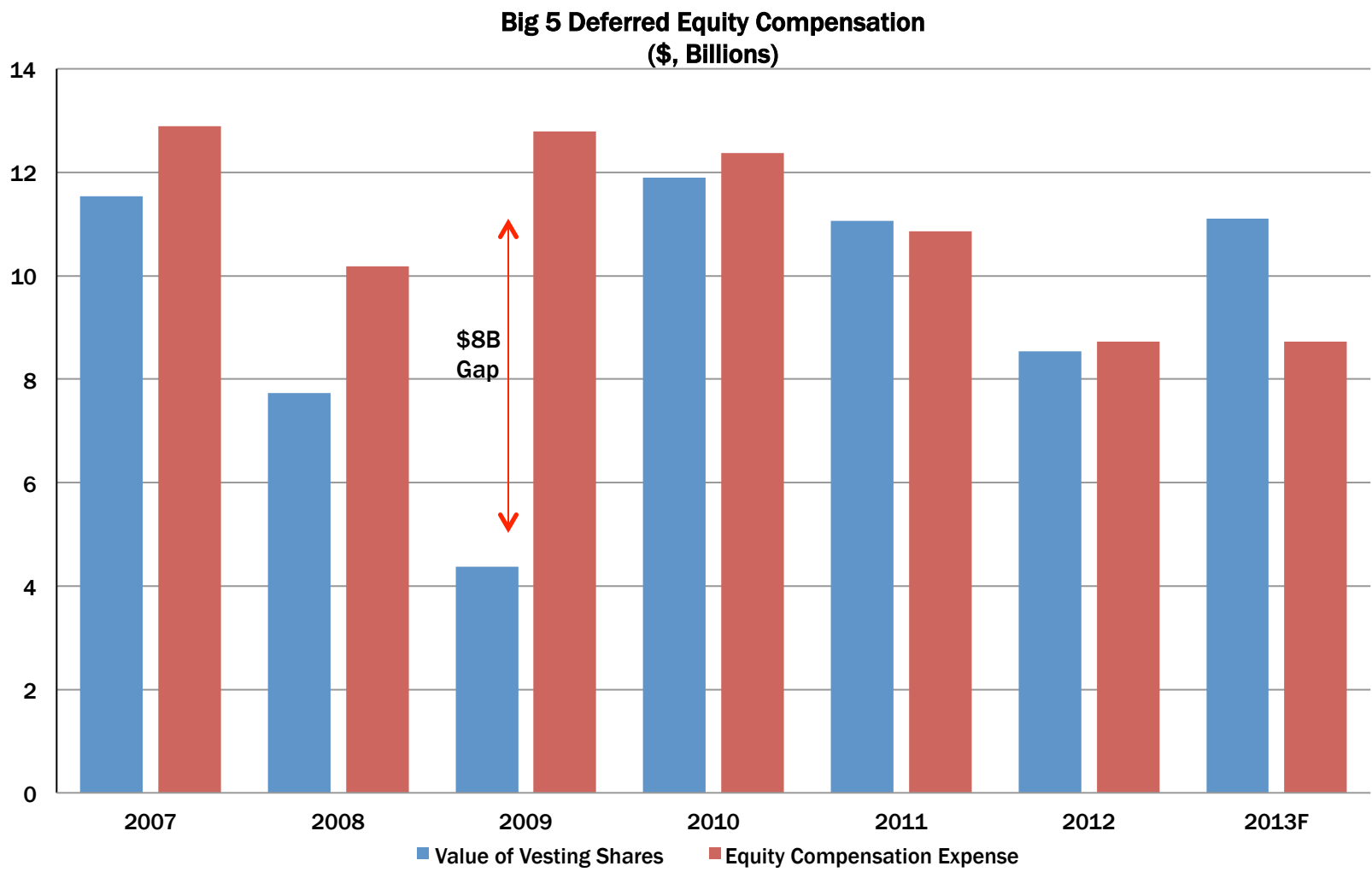
The compensation figure does not account for the increased value at vesting.



-
- Employee's value is based on the Fair Market Value on the **delivery date** of shares
 - Employer's compensation expense is based on a straight-line expensing through the vesting cycle of the Fair Market Value at **grant date**



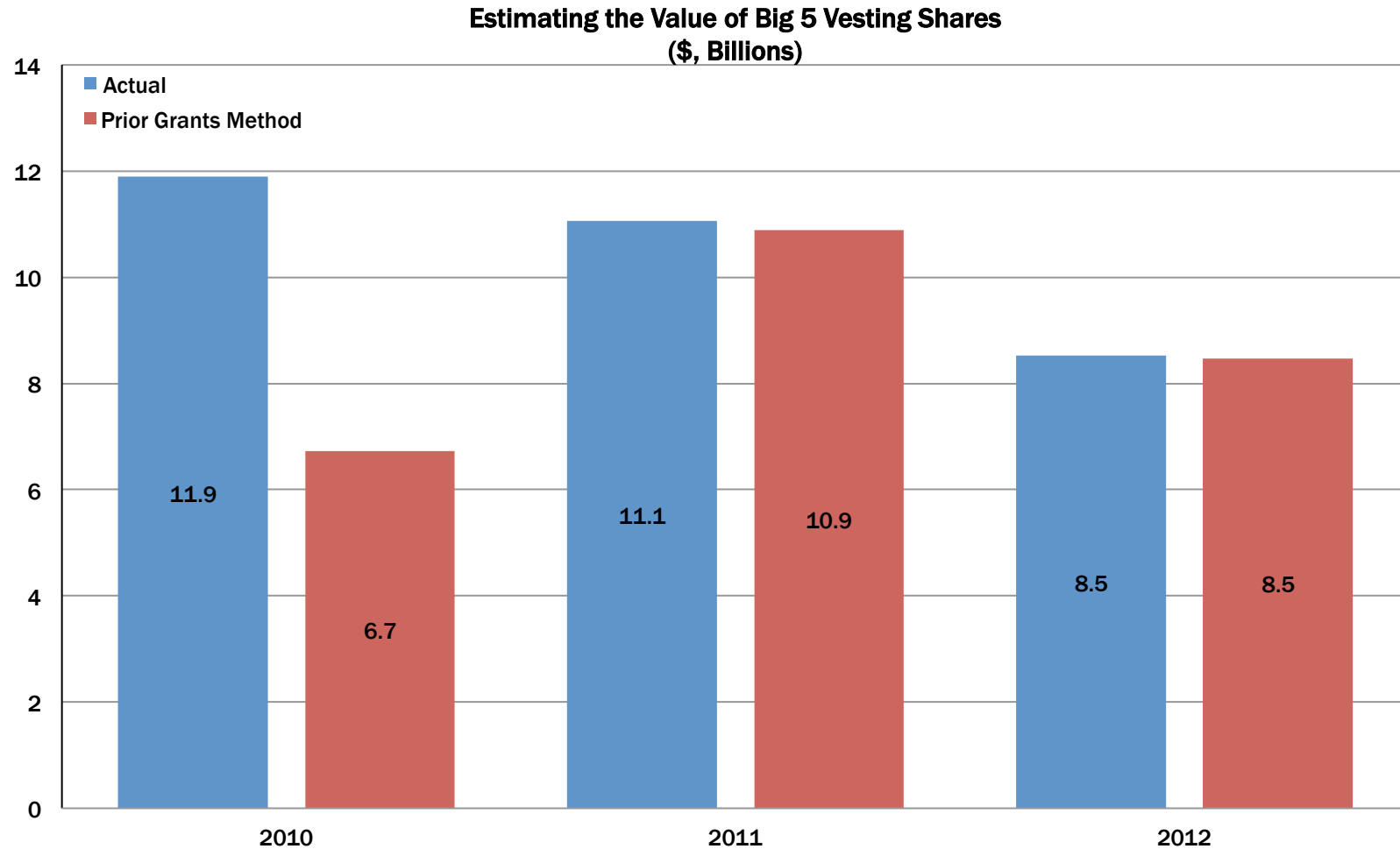
Accounting rules create a discrepancy between value to employee and the firms' compensation expense

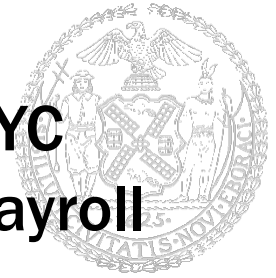


Source: Firm annual SEC filings (10-Ks) for 2007-2012, NYC OMB estimates for 2013 forecast



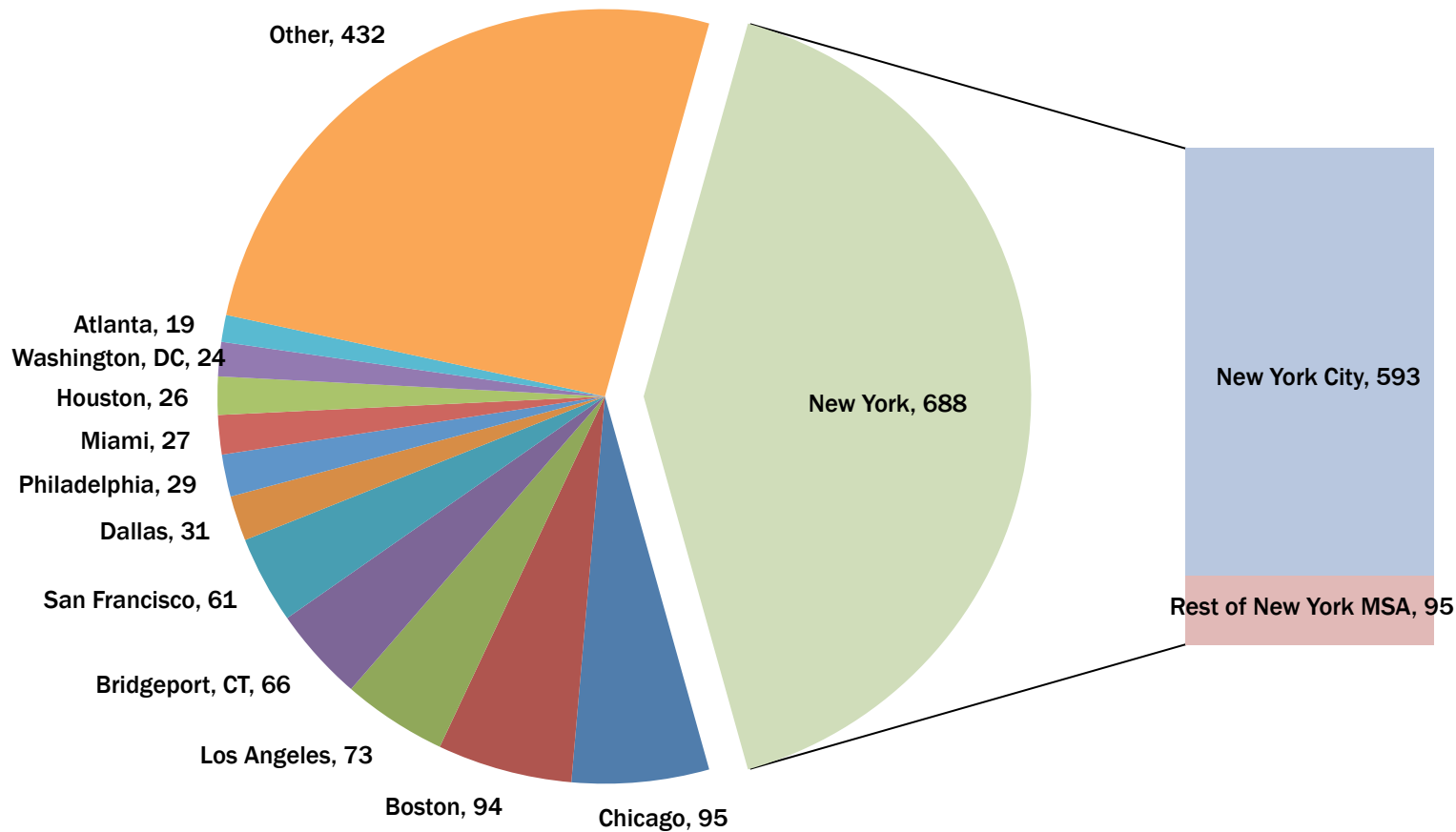
Actual vs. predicted value of vesting shares





NYSE figures are based on national activity, but NYC accounts for nearly 40 percent of Securities sector payroll

Securities Sector Payroll by Metro Area, 2012
(\$, Billions)



Note: Labels indicate principal city in each MSA
Source: Bureau of Labor Statistics QCEW