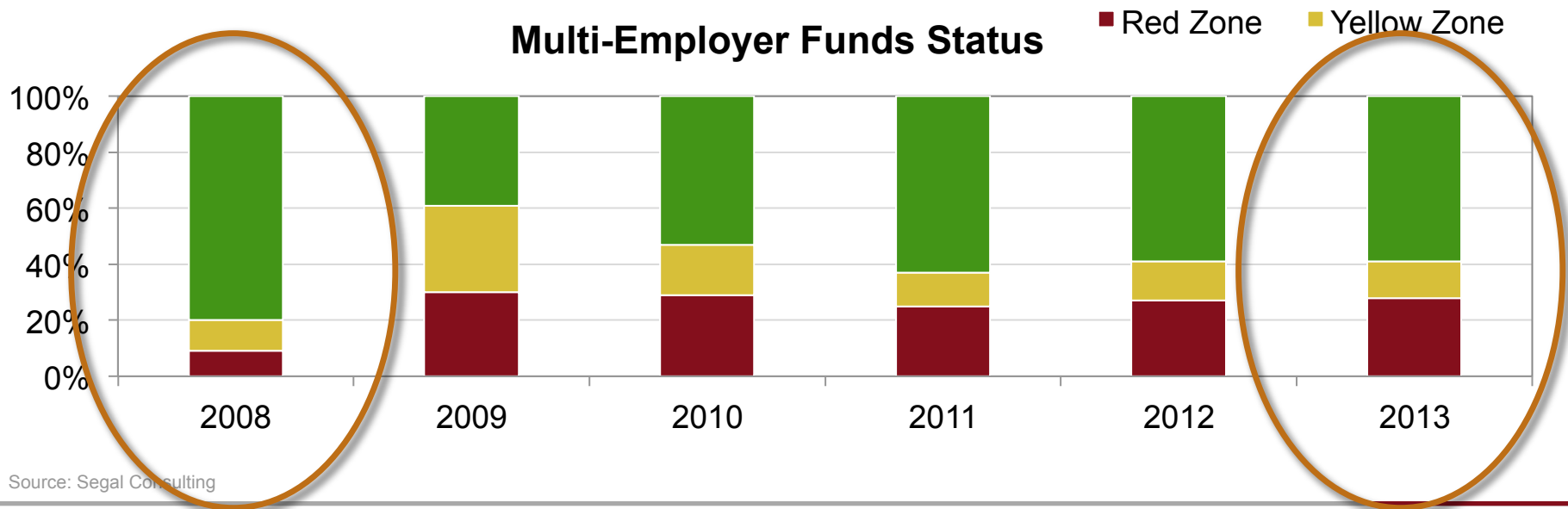


# It Is Not a Unique Problem

- Pension funds in general are significantly underfunded
  - U.S. State and municipal pensions alone are underfunded by more than \$1 trillion
  - Public and private pension funds in the economically developed countries are estimated to be underfunded by multiple trillions



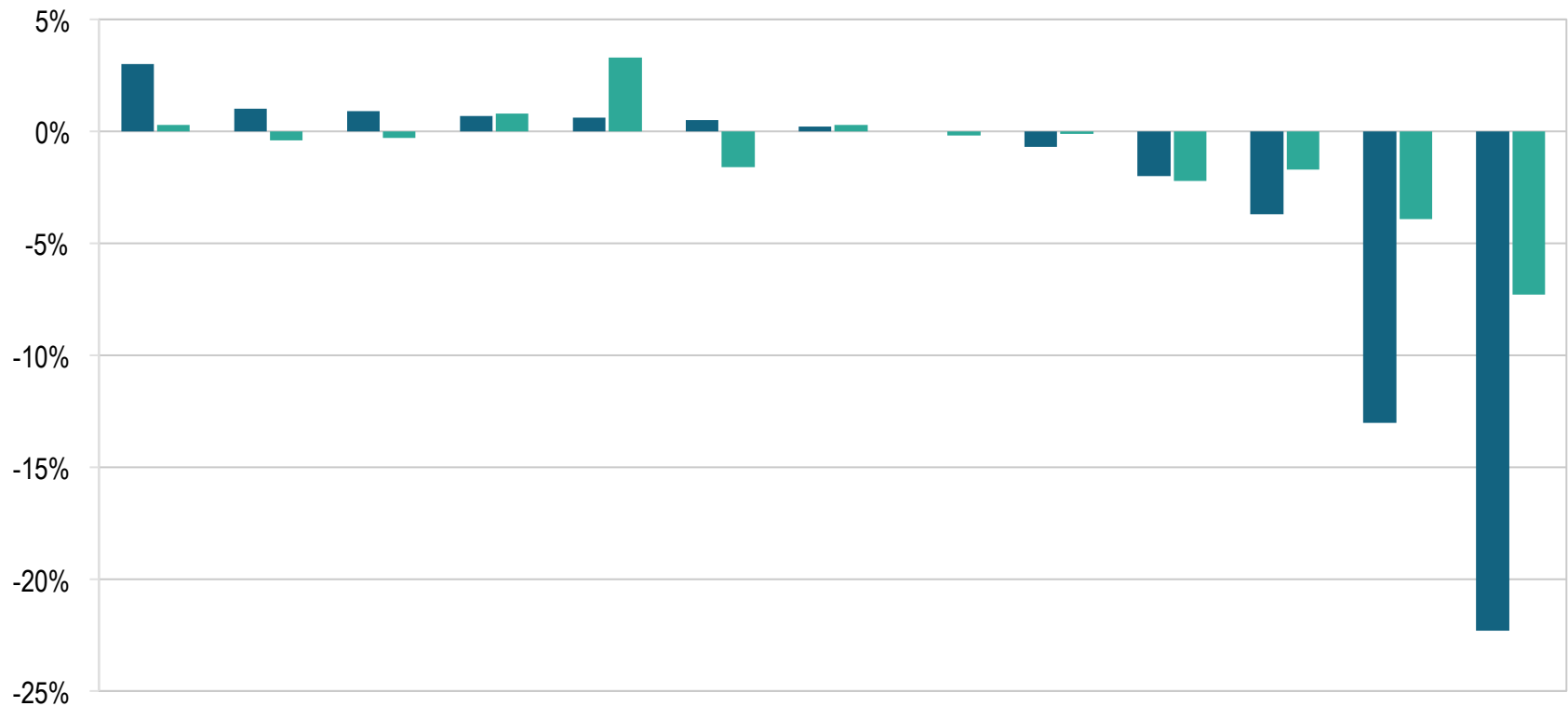
# Taft-Hartley Plans Funding Status

Percentage of Plans				
Funded % of	12/31/2007	12/31/2008	12/31/2012	12/31/2013
100% or more	26%	2%	11%	22%
80% to 100%	45%	9%	31%	41%
65% to 80%	20%	31%	34%	22%
Less Than 65%	9%	58%	24%	15%
<b>Median Funded %</b>	<b>89%</b>	<b>63%</b>	<b>77%</b>	<b>86%</b>

Source: Milliman Multiemployer Pension Fund Study 2013



# Nobel Laureate Harry Markowitz Famously Said That Diversification is the Only True Free Lunch in Investing - *Just Not in 2015*



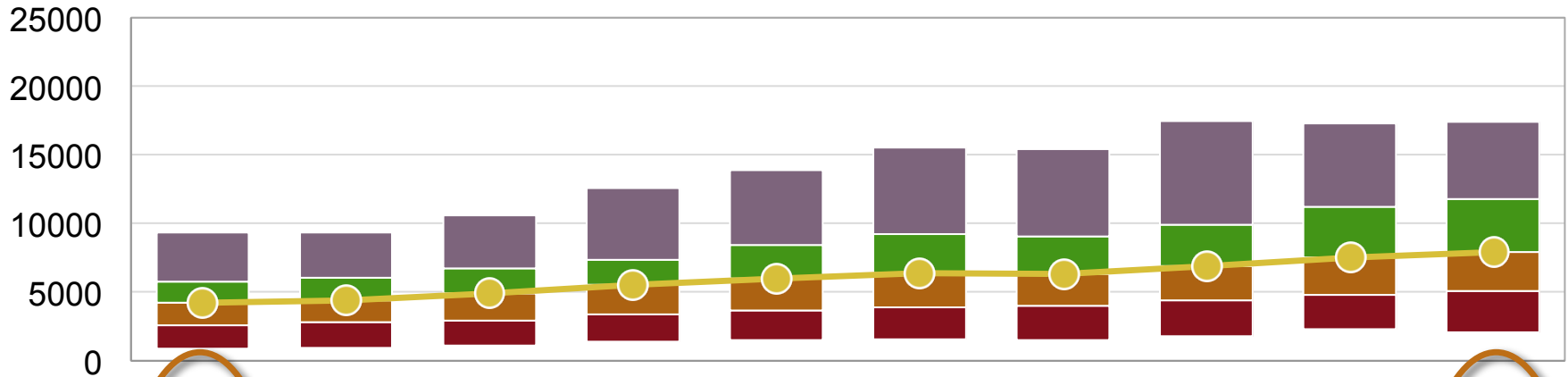
	S&P 500	Barclays US Treasury	Barclays US Aggregate	HFRI FOF: Composite	Russell 2000	MSCI EAFE	Russell Mid Cap	Barclays US Credit	Barclays US TIPS	Barclays US Corp High Yield	Barclays Global Aggregate	MSCI EM	Bloomberg Commodity
■ YTD	3.0%	1.0%	0.9%	0.7%	0.6%	0.5%	0.2%	0.0%	-0.7%	-2.0%	-3.7%	-13.0%	-22.3%
■ November	0.3%	-0.4%	-0.3%	0.8%	3.3%	-1.6%	0.3%	-0.2%	-0.1%	-2.2%	-1.7%	-3.9%	-7.3%

Source: Morningstar; As of 11/30/2015



# Balance Sheet Additions: Assets and Income

## Employee Contributions Per Active Participant Multiemployer Defined Benefit Pension Plans: Construction Industry



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
No. of Plans	348	337	344	357	362	321	330	342	350	359
95 <sup>th</sup> %	9,370	9,327	10,578	12,558	13,900	15,548	15,448	17,478	17,294	17,422
75 <sup>th</sup> %	5,774	6,068	6,729	7,376	8,439	9,250	9,079	9,907	11,219	11,805
50 <sup>th</sup> %	4,211	4,425	4,921	5,540	5,972	6,378	6,323	6,874	7,500	7,941
25 <sup>th</sup> %	2,607	2,811	2,935	3,387	3,677	3,876	3,997	4,411	4,784	5,102
5 <sup>th</sup> %	901	964	1,127	1,403	1,488	1,578	1,486	1,772	2,293	2,074

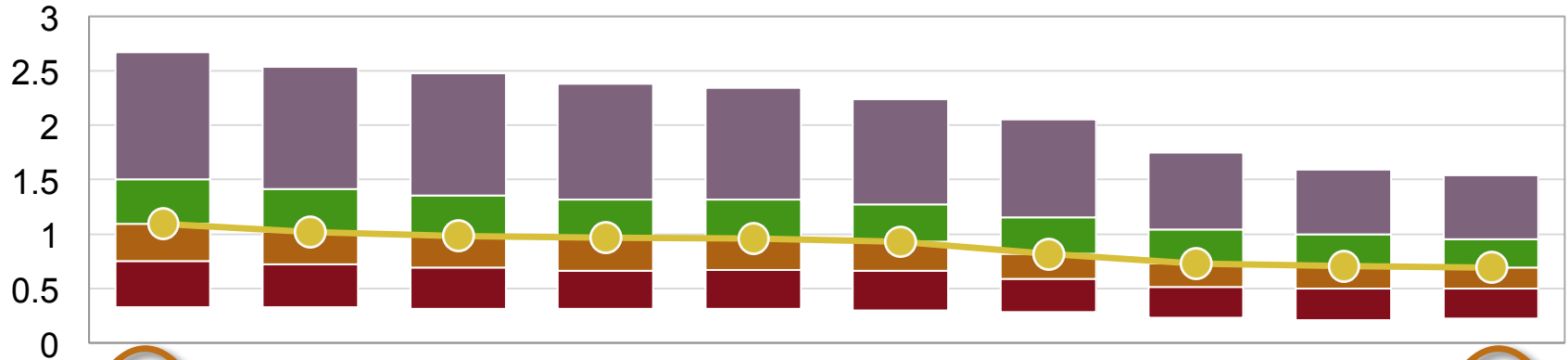
Source: Source: Horizon Actuarial Services, LLC



# Other Side of the Balance Sheet: Liabilities

## Demographics: Upside Down Plans

**Participant Ratios: Actives to Inactives (End of Plan Year)**  
 Multiemployer Defined Benefit Pension Plans: Construction Industry



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
No. of Plans	789	789	797	802	809	761	795	798	794	739
95 <sup>th</sup> %	2.67	2.54	2.48	2.38	2.34	2.24	2.03	1.75	1.59	1.54
75 <sup>th</sup> %	1.50	1.41	1.35	1.32	1.32	1.27	1.15	1.04	1.00	0.95
50 <sup>th</sup> %	1.09	1.02	0.98	0.97	0.96	0.93	0.82	0.73	0.71	0.69
25 <sup>th</sup> %	0.75	0.72	0.69	0.66	0.67	0.66	0.59	0.51	0.5	0.5
5 <sup>th</sup> %	0.33	0.33	0.31	0.31	0.31	0.30	0.28	0.23	0.21	0.22

Source: Horizon Actuarial Services, LLC  
 Form 5500 Data



# Other side of the Balance sheet: Demographics; People Are Living Longer And Longer

## Average Life Expectancy

<b>51 years</b>	1908	Last time that the Cubs won a World Series
<b>67 years</b>	1947	Labor Management Relations Act, better known as the Taft-Hartley Act, was passed
<b>72 years</b>	1974	ERISA was passed
<b>75 years</b>	1985	Last time that the Bears won the Super Bowl
<b>80 years</b>	Today	For people born in 2014, it is estimated that if they retire at 65, they will be drawing on their pension plan for 25 years

Source: Center for Disease Control and Prevention



# Demographics US: Social Security: Workers to Beneficiary Ratio

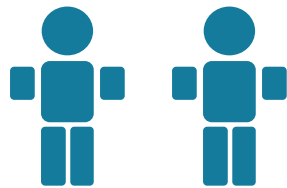
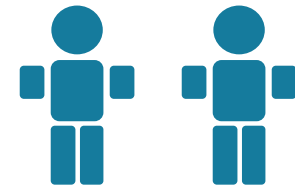
1960: 5.1 to 1



2009: 3.0 to 1



2030: 2.2 to 1



Source: Social Security Administration Trustees Report Table IV.B2 Ratio of covered workers to beneficiaries



# Looking ahead

---

- Market Environment:
  - Actuarial assumptions continue to be challenging vis a vis the market outlook
  
- Regulatory Environment:
  - MEPRA (Multi-Employer Pension Reform Act) implementation
  
  - 2015 Department of Labor new ERISA guidance issued in October
  
  - Responsible investor consideration
    - Responsible Contracting Language
  
  - Ontario regulatory requirements for 2016





# Outlook

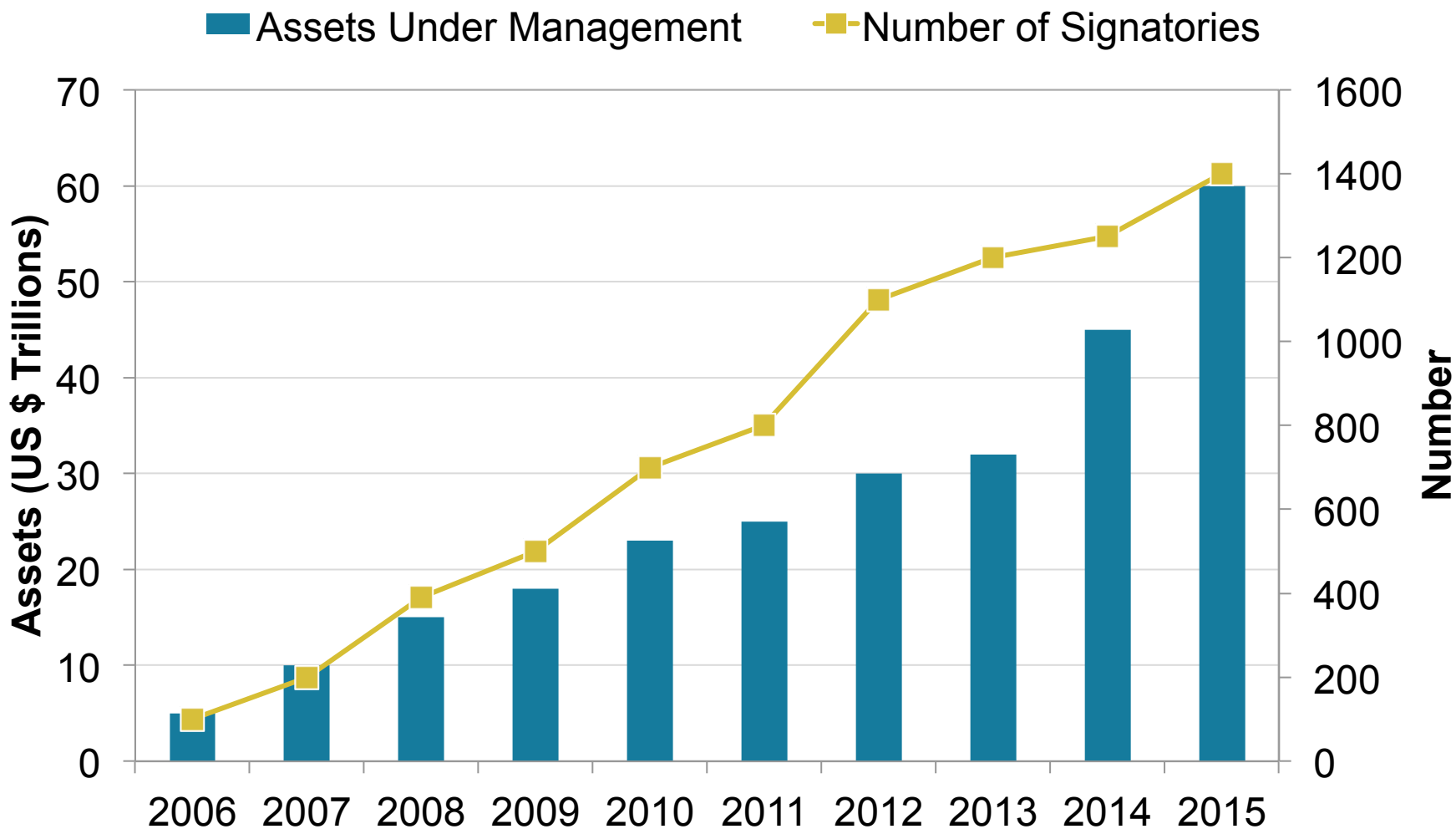
---

- 2015 Department of Labor new ERISA guidance issued in October concerning fiduciary duty and ESG integration.
  - The guidance states that, although collateral goals of ESG investing may be considered only as “tie-breakers,” when choosing between otherwise equal investment alternatives, “environmental, social, and governance issues may have a direct relationship to the economic value of the plan’s investment. In these instances, such issues are not merely collateral considerations or tie-breakers, but rather are proper components of the fiduciary’s primary analysis of the economic merits of competing investment choices,” thus providing fiduciaries with comfort in incorporating ESG considerations in their investment decision
  
  - Ontario regulatory requirements for 2016



# Growing importance of ESG

## PRI Signatories and Assets Under Management

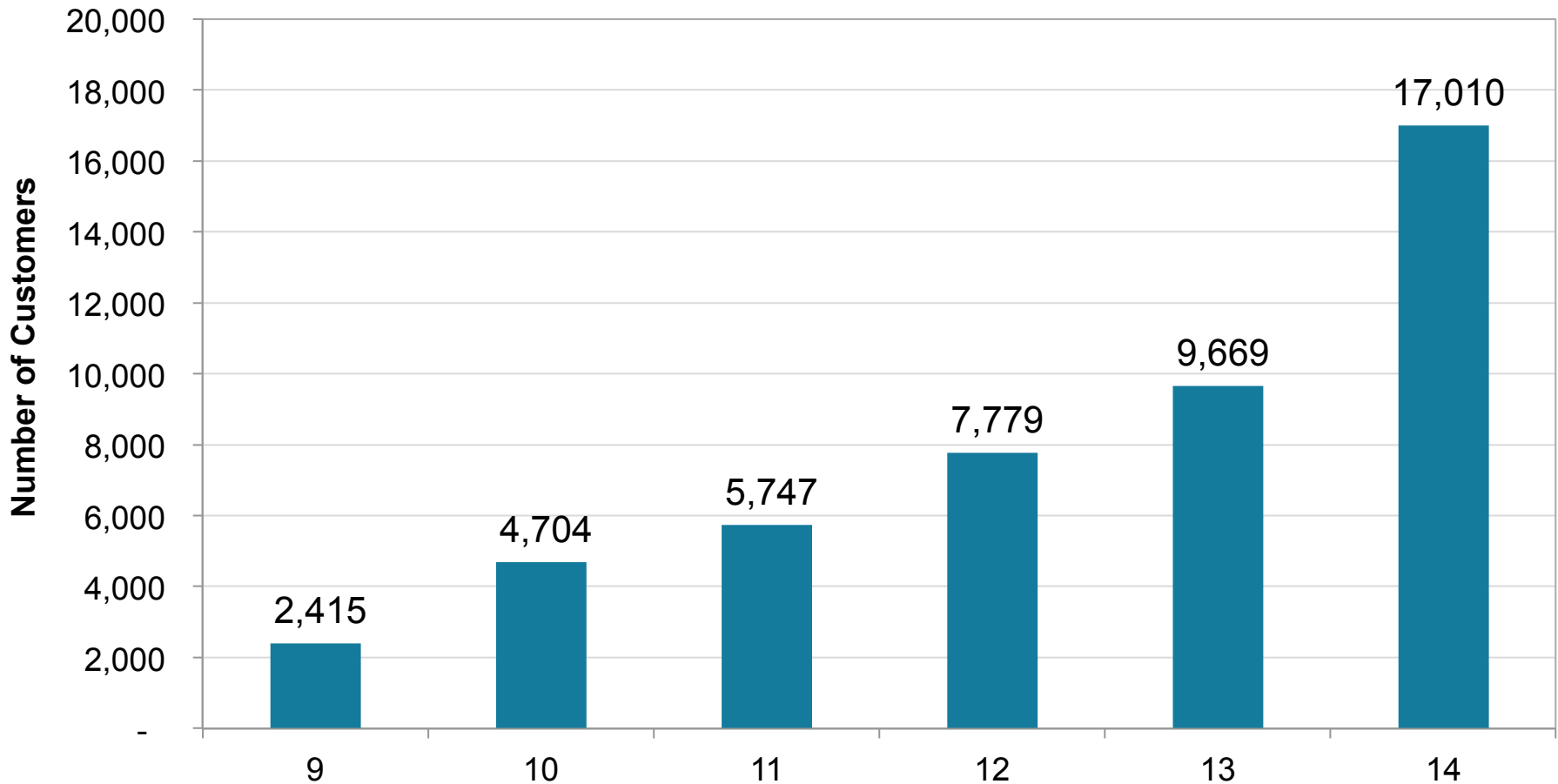


Source: United Nations Principles for Responsible Investment (PRI) Initiative



# Growing importance of ESG

**Bloomberg ESG Data Unique Users  
FY2009-FY2014**



## Looking Ahead:



*"But I like living in the past. It's where I grew up."*

*The New Yorker*

