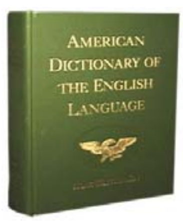
Retirement Readiness

May 2010
Tom Kmak, CEO Fiduciary Benchmarks

Retirement Readiness Agenda

- Defining Retirement Readiness
- Calculating Retirement Readiness
- Promoting Retirement Readiness

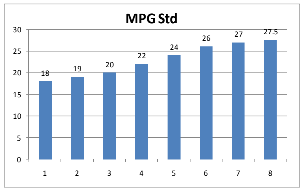


Remember this?

Important Value Standard for the Auto Industry

What is CAFE?

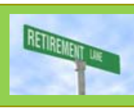
Corporate Average Fuel Economy (CAFE) is the sales weighted average fuel economy, expressed in miles per gallon (mpg), of a manufacturer's fleet of passenger cars or light trucks with a gross vehicle weight rating (GVWR) of 8,500 lbs. or less, manufactured for sale in the United States, for any given model year.



General Motors announced that it believes its rechargeable, electric-powered Chevrolet Volt will achieve an EPA-rated gas mileage of 230 miles per gallon in city driving. For comparison's sake, the industry leader Toyota Prius only gets a measly 48 miles per gallon.

The Value Standards for our Industry

1. Improving Retirement Readiness
   - Knowing
   - Saving
   - Investing
   - Spending



2. Protect Plan Fiduciaries
   - Quantity of Work
   - Quality of Work

3. "Make the Trains Run on Time"
   - Quantity of Work
   - Accuracy of Work
   - Timeliness of Work

Retirement Lane is tough to find

- *"Many workers **continue to be unaware of how much they need** to save for retirement. Less than half of workers (46%) have tried to calculate how much money they need to save to retire comfortably. Of those who did, 44% relied on **guesswork**, rather than a detailed review or professional advice."*

  EBRI 20th Retirement Confidence Survey

- *While $1 million is frequently referenced by Americans as a standard level of retirement savings for average families, a new survey finds most registered investment advisers do not agree. A Scottrade press release said its survey found 71% of RIAs **do not believe** $1 million is enough for the average American family to retire on. Most **believe** families need to be saving double, and in some cases more than triple, this amount for retirement, depending on age.*

  PLANSPONSOR News Dash 2/10

Retirement Readiness Index (RRI)

The RRI is designed to help decision makers with evaluating how well participants in their 401(k) plans are preparing for a secure retirement. The number is calculated by comparing the amount of retirement income an eligible participant is projected to have against what they need, based on the most recent expert findings of the respected Aon Consulting / Georgia State University Replacement Ratio Study. For example:

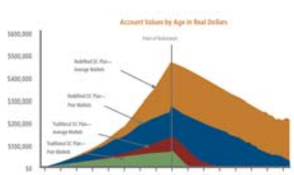
Retirement Readiness Agenda

- Defining Retirement Readiness
- **Calculating Retirement Readiness**
- Promoting Retirement Readiness

Math: Simple, Transparent, Practical

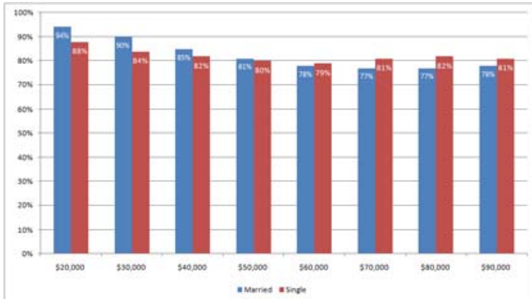
The Monte Carlo simulation on the right represents over 2,000 market possibilities.

Question:
The basic results of this analysis can be replicated by varying:
a)The Real Rate of Return
b)The speed of the processor
c)The speed of the operator



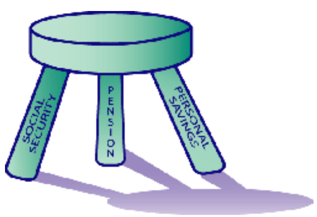
- *Simple so it can be understood*
- *Transparent so it can be trusted*
- *Practical so it can be used*

Retirement Readiness: How much does one need?



Source: Aon Consulting/Georgia State

Where will the money come from?



Where will the money come from: Social Security

Question:

If you were born in 1954, what is your Normal Retirement Age?

a) 65
b) 66
c) 67

Year of Birth	Social Security NRA*
1937 and Prior	65
1938	65 years and 2 months
1939	65 years and 4 months
1940	65 years and 6 months
1941	65 years and 8 months
1942	65 years and 10 months
1943 - 1954	**66**
1955	66 years and 2 months
1956	66 years and 4 months
1957	66 years and 6 months
1958	66 years and 8 months
1959	66 years and 10 months
1960 or Later	67

Source: Social Security Administration

Where will the money come from: Social Security

Question:
If you are making $40,000 per year, which of the following amounts is closest to your estimated monthly Social Security benefit?
a) $1,000
b) $1,500
c) $2,000

	Estimated Social Security Benefits*		
Income	**Percent**	**Annual**	**Monthly**
$20,000	56%	$11,112	$926
$30,000	47%	$14,124	$1,177
$40,000	43%	$17,148	$1,429
$50,000	40%	$20,148	$1,679
$60,000	38%	$22,584	$1,882
$70,000	34%	$23,988	$1,999
$80,000	32%	$25,272	$2,106
$90,000	29%	$26,508	$2,209
$100,000	28%	$27,636	$2,303
$110,000	26%	$28,104	$2,342
$120,000	23%	$28,104	$2,342
$130,000	22%	$28,104	$2,342
$140,000	20%	$28,104	$2,342
$150,000	19%	$28,104	$2,342

Source: Social Security Administration

Where will the money come from: Social Security

Question:
If your NRA is age 67 but you want to retire at age 62, how much will your Social Security benefits be reduced?
a) 30%
b) 20%
c) 10%

Retirement Age	Percentage of NRA Benefit *
67	100%
66	94%
65	88%
64	82%
63	76%
62	70%

* ***Source:*** Social Security Administration

Where will the money come from: Social Security

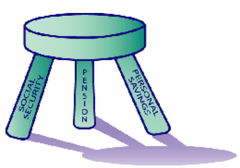
The Bottom Line on Social Security:
1)Know your Social Security Normal Retirement Age
2)Know the approximate amount of your benefits
3)Know the impact of retiring early (or late)

Where will the money come from: Pensions

Total Participants Category of Sponsor	Number of Sponsors	Number of Plans	Percent of Plans	Number of Participants	Percent of Participants
less than 100	15,156	15,344	58%	306,757	1%
100 - 999	5,010	5,801	22%	1,730,589	5%
1,000 - 4,999	1,829	2,711	10%	4,171,045	13%
5,000 - 49,999	858	1,978	7%	12,442,522	39%
50,000+	107	600	2%	13,553,358	42%
Total	22,960	26,434	100%	32,204,271	100%

Source: GAO 2008 Study on Frozen DB plans

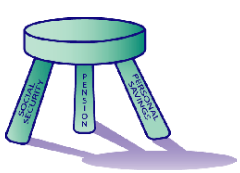
Where will the money come from: Personal Savings



KNOWING

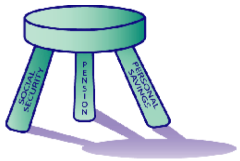
- *70% of workers have not calculated how much money they need for retirement*
  EBRI 20th Retirement Confidence Survey
- *54% of workers believe they are covered by a defined benefit pension plan*
  EBRI 20th Retirement Confidence Survey

Where will the money come from: Personal Savings



- *25% to 30% of workers do not participate in their employer sponsored defined contribution plan*
  Various
- *The average employee contribution is 5.7%*
  PSCA 2009
- *The average employer contribution is 4.1%*
  PSCA 2009

Where will the money come from: Personal Savings



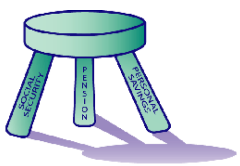
- *About half of plan sponsors now offer advice up from 17% 10 years ago*

Hewitt 2010

- *67 percent of participants polled assumed asset allocation investments offered some kind of retirement income guarantee*

Commonwealth 2009

Where will the money come from: Personal Savings



SPENDING

Distributions by Age

Age	*Percent Cashing Out*
20 to 29	60%
30 to 39	47%
40 to 49	43%
50 to 59	34%

Distributions by Account Balance

Balance	*Percent Cashing Out*
<$1,000	85%
$1K to $19K	40%
$20K to $99K	17%
$100K or more	8%

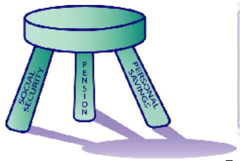
Source: Hewitt 2009 Testimony

Where will the money come from: Personal Savings

The Bottom Line on Personal Savings:

1) *People have little to no idea how much they need to retire*
2) *For those participating, contribution rates are almost 10%*
3) *Most participants do not possess the time, talent or interest to become professional investors*
4) *A large percentage of participants spend their pre-retirement distributions*

Where will the money come from?



PLUS...

- *Total U.S. retirement assets were $15.6 trillion as of September 30, 2009:*
  - *$3.9 trillion in DC assets*
  - *$4.1 trillion in IRAs*
  - *$2.1 trillion in DB assets*
  - *$2.7 trillion in State & Local Governments*
  - *$1.2 trillion in Federal Pension Plans*
  - *$1.5 trillion in Annuities*

Source: ICI 9/2009

Retirement Readiness Example: Accumulation

Factor:	Assumption
Starting Age (yy-mm):	45-0
Starting Balance:	$65,000
Starting Income:	$40,000
Participant Deferral:	8.00%
Employer Match:	50.00%
Liability Discount Rate:	5.93%
Fees:	0.72%
Retirement Age:	67-0

Source: FBi Retirement Readiness Index Model

Age (yy-mm)	Participant Income	Participant Deferral	Employer Contribution	Return on Investment	Post-Retirement Income from 401(k)	Retirement Account Balance
45-0						$65,000
45-11	$36,000	$2,944	$1,472	$495	$0	$69,911
46-11	$41,745	$3,340	$1,670	$1,223	$0	$76,144
47-11	$43,430	$3,474	$1,737	$2,232	$0	$83,588
48-11	$45,232	$3,619	$1,809	$3,167	$0	$92,183
49-11	$47,077	$3,766	$1,883	$4,370	$0	$102,202
50-11	$49,021	$3,922	$1,961	$5,308	$0	$113,393
51-11	$50,857	$4,069	$2,034	$6,740	$0	$126,236
52-11	$52,793	$4,223	$2,112	$6,651	$0	$139,221
53-11	$54,823	$4,386	$2,193	$7,714	$0	$153,514
54-11	$56,929	$4,554	$2,277	$9,096	$0	$169,442
55-11	$59,120	$4,730	$2,365	$8,777	$0	$185,314
56-11	$61,348	$4,908	$2,454	$9,702	$0	$202,378
57-11	$63,090	$5,047	$2,524	$10,915	$0	$220,864
58-11	$64,875	$5,190	$2,595	$12,262	$0	$240,910
59-11	$66,757	$5,341	$2,670	$13,786	$0	$262,708
60-11	$68,693	$5,495	$2,748	$15,417	$0	$286,368
61-11	$70,685	$5,655	$2,827	$17,259	$0	$312,109
62-11	$72,735	$5,819	$2,909	$19,306	$0	$340,143
63-11	$74,844	$5,988	$2,994	$21,626	$0	$370,750
64-11	$77,015	$6,161	$3,081	$24,110	$0	$404,102
65-11	$79,248	$6,340	$3,170	$21,772	$0	$435,384
66-11	$81,546	$6,524	$3,262	$23,107	$0	$468,277

Retirement Readiness Example: Drawdown

Age (yy-mm)	Participant Income	Participant Deferral	Employer Contribution	Return on Investment	Post-Retirement Income from 401(k)	Retirement Account Balance
66-11	$81,546	$6,524	$3,262	$23,107	$0	$468,277
67-11	$0	$0	$0	$24,041	($31,698)	$460,619
68-11	$0	$0	$0	$23,683	($32,586)	$451,717
69-11	$0	$0	$0	$23,120	($33,498)	$441,538
70-11	$0	$0	$0	$22,881	($34,436)	$429,983
71-11	$0	$0	$0	$22,421	($35,400)	$417,004
72-11	$0	$0	$0	$21,755	($36,392)	$402,367
73-11	$0	$0	$0	$21,051	($37,410)	$386,008
74-11	$0	$0	$0	$20,241	($38,458)	$367,791
75-11	$0	$0	$0	$17,886	($39,535)	$346,142
76-11	$0	$0	$0	$16,575	($40,642)	$322,076
77-11	$0	$0	$0	$15,331	($41,780)	$295,627
78-11	$0	$0	$0	$13,966	($42,950)	$266,643
79-11	$0	$0	$0	$12,509	($44,152)	$235,000
80-11	$0	$0	$0	$10,841	($45,388)	$200,453
81-11	$0	$0	$0	$9,064	($46,659)	$162,858
82-11	$0	$0	$0	$7,132	($47,966)	$122,023
83-11	$0	$0	$0	$5,052	($49,309)	$77,766
84-11	$0	$0	$0	$2,763	($50,689)	$29,839
85-6	$0	$0	$0	$487	($30,326)	$0

Source: FBi Retirement Readiness Index Model

Item	Value
Final Pre-Retirement Monthly Income:	$6,976
Monthly Post-Retirement Income Needed to Retire[1,2] (A):	$5,720
Estimated Monthly Social Security Benefit[2,3]:	$3,035
Estimated Monthly Income Funded From Retirement Account Balance:	$2,635
Total Estimated Post-Retirement Monthly Income[2] (B):	$5,670
Retirement Readiness Index (B) / (A):	**99%**

[1] Per 2008 AON Consulting / Georgia State University Wage Replacement Ratio Study
[2] All Post-Retirement Monthly Income Numbers are adjusted for Inflation using SSA COLA
[3] Calculated using FBi RRI Model

Risks at Retirement: Longevity

Question:

If you live to age 92 versus age 85.5, your Retirement Readiness will be reduced by approximately how much?

a) 8%
b) 14%
c) 20%

- The model projects life expectancy in the U.S. to rise to 86 by 2075 and to 88 by the end of the century.
- Although life expectancy continues to increase, the pace of that increase has slowed relative to the increases of the first half of the 20th century.

http://www.prb.org/pdf06/NIA_FutureofLifeExpectancy.pdf

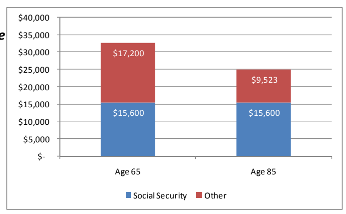
Risks at Retirement: Inflation

Question:

Assume a 65 year old retiree making $40,000 before retirement has retired with 82% of their income (Retirement Readiness of 100%).

How much will their purchasing power be reduced at age 85 if inflation is 3%?

a) 5%
b) 15%
c) 25%



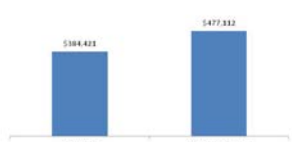
- *This retiree would have had his annual income in real dollars reduced by almost $7,700 per year at age 85*

Risks at Retirement: Longevity & Inflation

Question:

How much more expensive is an inflation adjusted annuity over a normal annuity?

a) 16%
b) 24%
c) 40%



Factor:	Assumption
Starting Age (yy-mm):	45-0
Starting Balance:	$65,000
Starting Income:	$40,000
Participant Deferral:	8.00%
Employer Match:	50.00%
Liability Discount Rate:	5.92%
Fees:	0.72%
Retirement Age:	67-0
Replacement Ratio:	82%
Inflation	SSA
Baseline RRI	**99.00%**

Four ways to get that extra 24% ($92,691):

- *Beginning Balance is $32k higher*
- *Start Contributing 2.5 years earlier*
- *Contribute 2.7% more per year*
- *Earn 1.20% more per year*

Risks at Retirement: Medical Costs

Question:

What are some of the Health Care Costs to consider in Retirement?

- *Nursing Home Coverage ($3,500 per month)*
- *Home Health Care ($1,280 per month)*
- *Medigap Premium ($1,700 per year)*
- *Medicare Part B Premium ($1,100 per year)*
- *HMO if no medical coverage*

EBRI 2006

Risks at Retirement: Some Positive News

In the AARP study workers age 45-70 were asked what they wanted from work, and it was found that most older workers have strong ideas about their place in the future workforce. Some of the people surveyed were "pre-retirees" - they were considering retiring in five to ten years. Others were "working retirees" - they had retired from full-time work but were working part-time.

"I want to continue working."

Nearly 70 percent of pre-retirees plan to work at least part-time in the so-called retirement years, or never retire.

Almost half foresee working into their 70s or beyond.

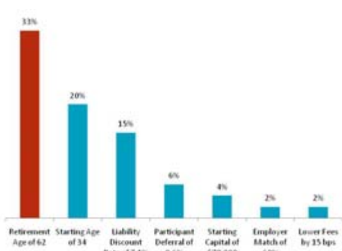
Needing money is the top reason for pre- and working-retirees to work in retirement. More than two-thirds also want to work to stay active, be useful, and have fun.

Retirement Readiness & Sensitivity Analysis

Factor:	Assumption
Starting Age (yy-mm):	45-0
Starting Balance:	$65,000
Starting Income:	$40,000
Participant Deferral:	8.00%
Employer Match:	50.00%
Liability Discount Rate:	5.92%
Fees:	0.72%
Retirement Age:	67-0
Replacement Ratio:	82%
Inflation	SSA
Baseline RRI	99.00%

The Bottom Line on Retirement Readiness:

Like most things in life, it is when you start and when you finish that counts



Retirement Readiness Agenda

- Defining Retirement Readiness
- Calculating Retirement Readiness
- **Promoting Retirement Readiness**

Engage & Encourage

- *"Average Participant"*
- *21,000 companies*
- *Rolled up by Industry*
- *Rolled up Nationally*

These results for the **average participant** provide a benchmark against which each individuals can assess their own readiness. In effect, this part of our service is a ***CATALYST*** for individuals to assess their own personal Retirement Readiness Index and FBi will shortly be launching a free service to enable them to do so.

Empower

Plan Sponsors

Can improve Plan Design by using Behavioral Finance insights and other research

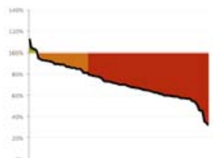
Participants

Make it easy for participants to set goals and stay the course towards securing their retirement future

Plan Design Optimization: Current Retirement Readiness

- The green area represents eligible participants whose Retirement Readiness is greater than 100%
- The orange area represents eligible participants whose Retirement Readiness is 80% to 100%
- The red area represents eligible participants whose Retirement Readiness is less than 80%

Chart 4: Retirement Readiness Index Values and Surplus / (Shortfall) for All Eligible Participants



Color	RRI Value Range	Number of Participants	Percentage of Participants
	RRI greater than 100%	5	5%
	RRI of 80% to 100%	28	28%
	RRI Less than 80%	67	67%
		100	100%

Plan Design Optimization: Employee Contributions

Chart 5: Percentage of Eligible Participants Impacted by 8 Different Minimum Auto-Enrollment Deferral Rates

Chart 5 on the right shows the percentage of eligible participants who would be required to increase their current deferrals for each of the indicated minimum auto-enrollment deferral rates.

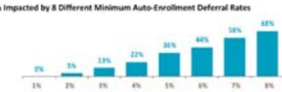
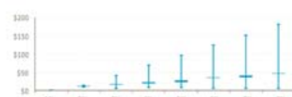


Chart 6: Bi-Weekly After-Tax Cost to Eligible Participants of 8 Different Minimum Auto-Enrollment Deferral Rates

Chart 6 on the right shows the range of after-tax amounts by which the bi-weekly paychecks of eligible participants would be reduced for each of the indicated minimum auto-enrollment deferral rates.



	1%	2%	3%	4%	5%	6%	7%	8%
Maximum Cost:	$0	$14	$42	$69	$97	$125	$152	$180
Average Cost:	$0	$11	$17	$23	$27	$36	$41	$48
Median Cost:	$0	$11	$17	$20	$23	$34	$36	$46
Minimum Cost:	$0	$8	$6	$7	$7	$6	$6	$6

Plan Design Optimization: Employer Contributions

Chart 7: Monthly Pre-Tax Cost of Employer Match For 8 Different Limits on Maximum Matched Participant Deferrals

Chart 8 shows in red the cost of the current Employer Basic Contribution rate of 1%. This chart also shows equivalent costs for a range of other Employer Basic Contribution levels.

Chart 8: Monthly Pre-Tax Cost of 8 Different Employer Basic Contribution Rates

Plan Design Optimization: Investments

Chart 9: Analysis of Eligible Participant Use of Automatic Re-Balancing, Target Date Funds and Managed Accounts

Chart 9 on the right gives an indication of how extensively eligible participants are currently using Automatic Re-balancing, Target Date Funds and Managed Accounts.

Of course, the ability of participants to meet the three fundamental standards of good investing behavior depends initially on whether the plan design includes the four provisions detailed in Table 5 above.

** Includes advisor generated risk based or age based funds*

Plan Design Optimization: Overall Plan Design

Table 6: Current and Optimized Plan Design Provisions with Employer Cost and Participant Impact

Plan Design Provision	Current Plan Design	Optimized Plan Design	Impact on Participants and Employer
Auto-Enrollment Starting Percentage	0%	3%	13% of eligible participants will see their after-tax bi-weekly paychecks decrease by between $6 to $42 (average of $17).
Annual Auto-escalation	0%	1%	44% of eligible participants will see their after-tax bi-weekly paychecks decrease by between $6 to $125 (average of $36).
Maximum Auto-escalation Deferral Rate	0%	6%	
Catch-up	No	Yes	32% of eligible participants, who are over the age of 50, will have an opportunity to supplement their retirement savings.
Employer Matching Contribution Percentage	25%	50%	Additional pre-tax, monthly cost to employer of $8,309.
Maximum Matched Participant Deferral Rate	3%	6%	
Basic Employer Contribution for All Participants	1%	2%	Additional pre-tax monthly cost to employer of $4,698.
Offers Automatic Re-balancing	No	Yes	Provides 100% of participants with the opportunity to benefit from disciplined portfolio re-balancing.
Offers Target Date Funds	Yes	Yes	No change in this design provision
Offers Managed Accounts	No	Yes	Enables eligible participants to access customized professional advice for managing their retirement savings
All Participants Defaulted in a QDIA	No	Yes	Provides all eligible participants with an investment program that is professionally risk-managed, diversified and disciplined.

Plan Design Optimization: Retirement Readiness

Chart 10: Retirement Readiness Index Values and Surplus / (Shortfall) Before and After Optimization

Table 7: Distribution of Retirement Readiness Index Values Before and After Optimization

Color	RRI Value Range	Current Plan Design: Number of Participants	Current Plan Design: % of Participants	Optimized Plan Design: Number of Participants	Optimized Plan Design: % of Participants
	RRI greater than 100%	5	5%	65	65%
	RRI of 80% to 100%	28	28%	20	20%
	RRI Less than 80%	67	67%	15	15%
	TOTALS:	100	100%	100	100%

Keeping Employees on Track

Once the proper plan design gets employees on track, the recordkeeper should continue to emphasize good saving and investing behavior through the various touch points they have with participants:

- 800 number calls should solicit their actual retirement goals
- Internet sessions should provide anecdotal stories about how rebalancing when the market was down would have meant thousands in additional income
- Statements should track progress against the actual retirement goal

10 Things to remember about Retirement Readiness

1. Retirement Readiness is a critical component of "What is Winning" in our industry
2. The amount one needs to retire comfortably varies with compensation
3. The math for Retirement Readiness can be made simple, transparent and practical
4. Only 12% of Americans have a Normal Retirement Age of 65 (born before 1938)
5. The monthly Social Security benefit will range from 50% (at $20k per year) to 25% (at $100k per year) for about 87% of all Americans
6. If your Social Security NRA is age 67, retiring at age 62 will reduce benefits by 30%
7. An inflation-adjusted annuity protecting against both inflation and longevity will typically cost about 25% to 30% more than a normal life annuity
8. It is very likely that many retirees will want to work part-time thus providing supplemental income and benefits
9. Plan Sponsors can increase Retirement Readiness by Plan Design Optimization
10. Service Providers can play a critical role in promoting Retirement Readiness by engaging, encouraging and empowering participants to "stay on track" for their own individual retirement goals

Questions?

Fiduciary Benchmarks
Independent | Comprehensive | Informative

www.fiducarybenchmarks.com
111 SW Columbia, Suite 1080 | Portland, OR 97201 | 866.516.4909

This material has been prepared solely for informational and educational purposes. It is not intended to provide, and should not be relied upon for, investment, accounting, legal or tax advice.