QDIAs and Investment 101 for Plan Administrators

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

David Schultz, JD, APM
FIS Relius

Agenda

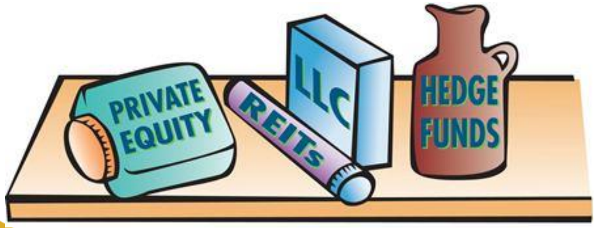
- Investment 101
  - Investment types and asset classes
  - Investment concepts
  - Investment fees
- Qualified Default Investment Alternatives (QDIAs)

Investment Types and Asset Classes

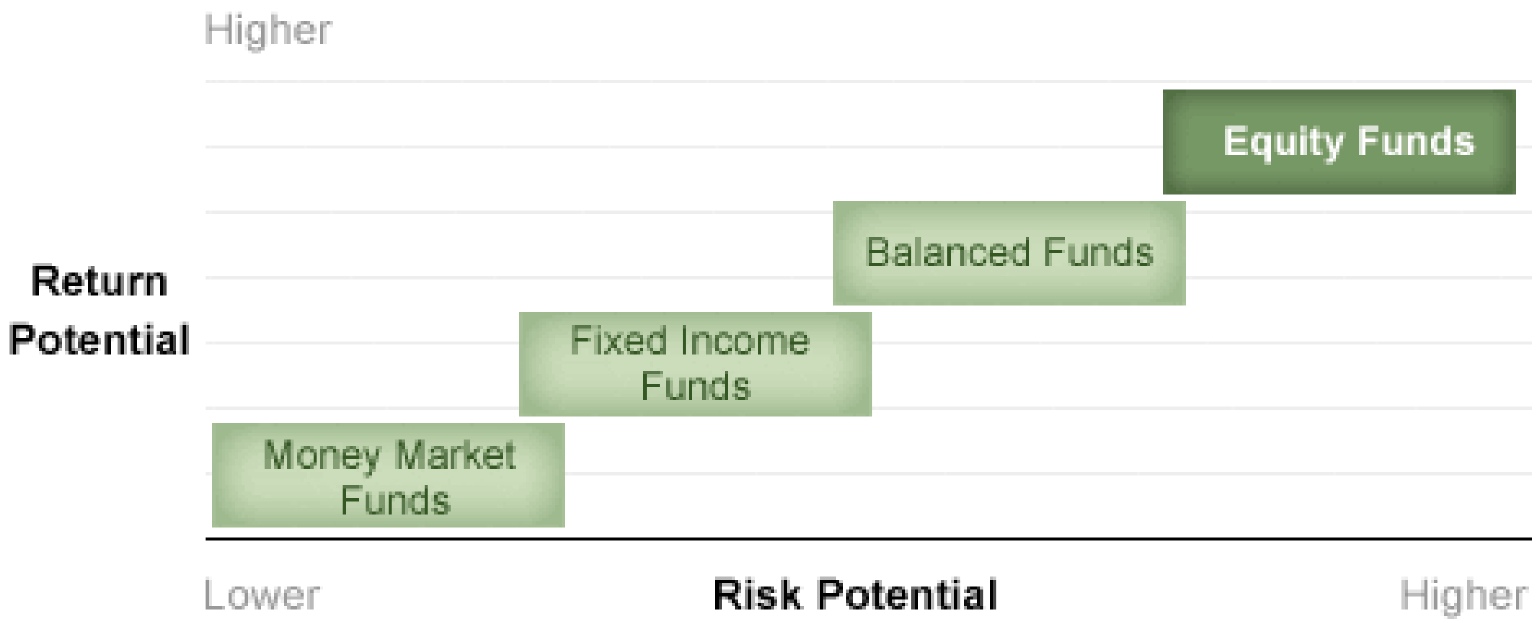
INVESTMENT 101

Basic Asset Classes

- In general, investments are sorted into four broad categories:
  - Cash equivalents
  - Fixed income
  - Equities
  - Alternative investments



Risk and Return Relationship



ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Historical Returns

- Historical returns 1926-2013
  - Inflation 3.0%
  - Cash equivalents 3.2%
  - Bonds 5.5%
  - Stocks 10.1%

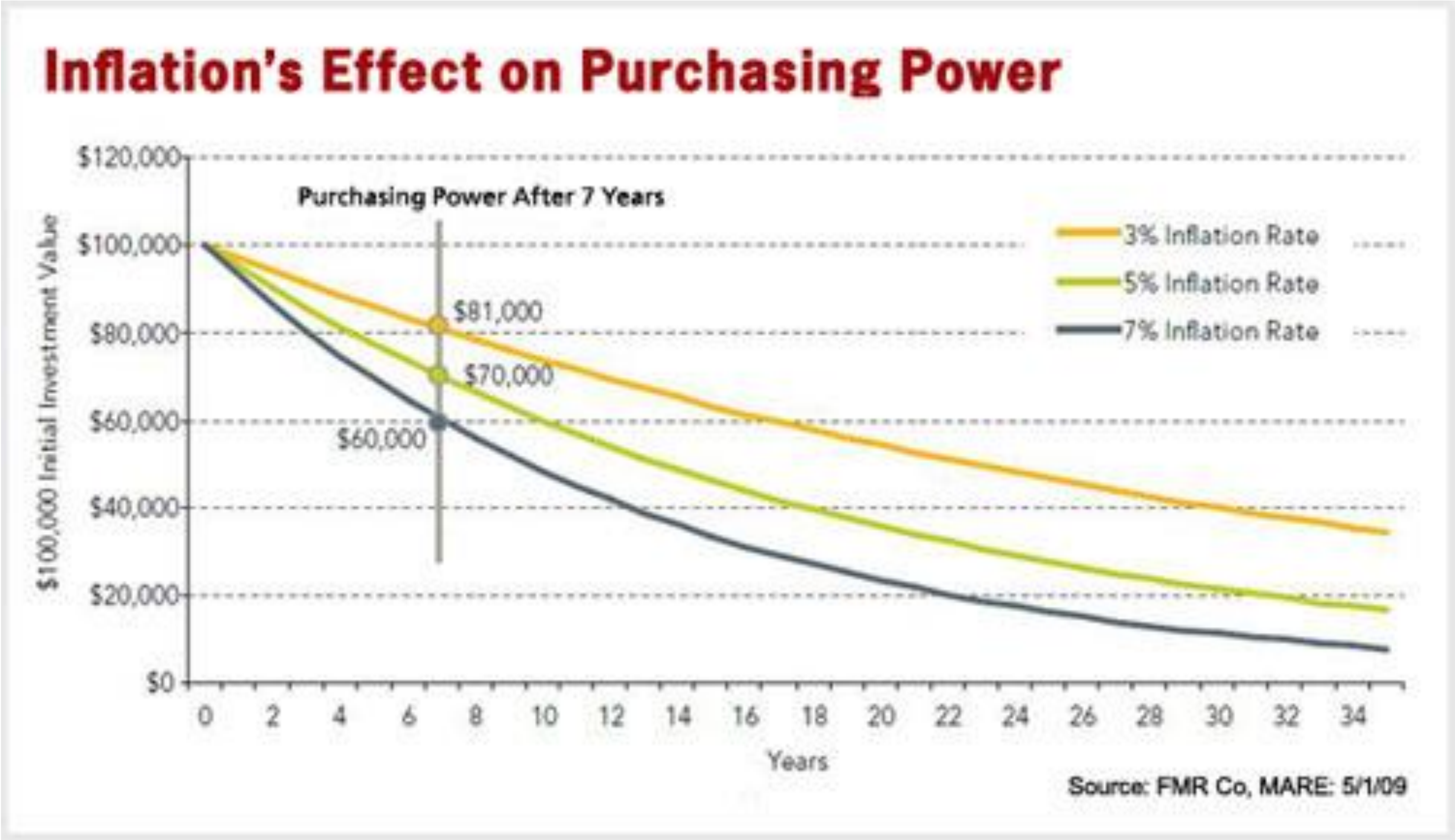
ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Cash Equivalents/Money Markets

- Investments that are:
  - Short-term (less chance of interest rate risk)
  - High credit quality (less chance of default)
  - Highly liquid (easily converted to cash)
- Low risk/return profile
- Examples:
  - U.S. Treasury bills
  - Bank Certificates of Deposit (CDs)
  - Commercial paper
  - Money market funds

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Money Markets Are Safe But…



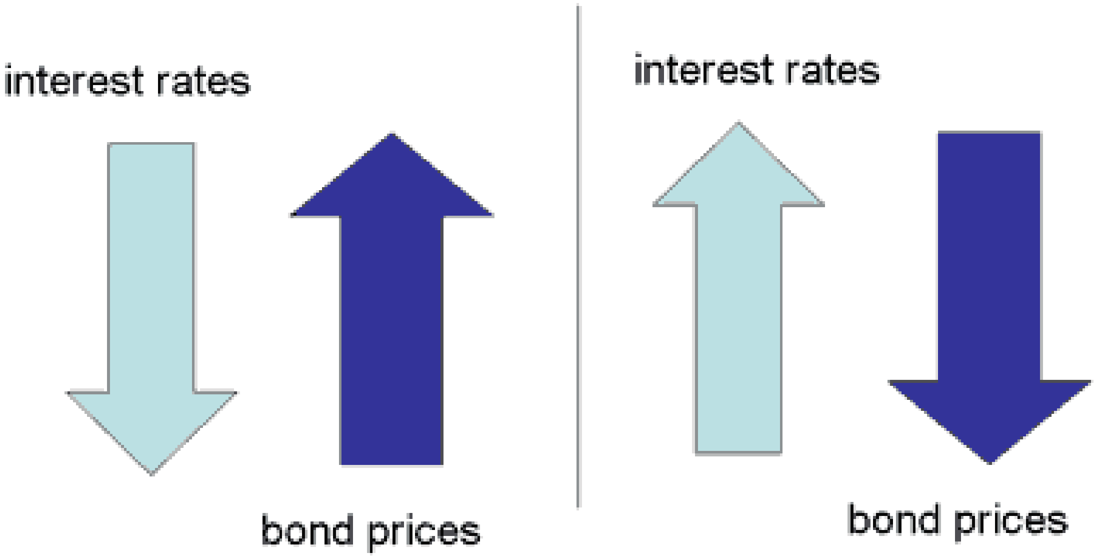
ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Fixed Income

- **Bonds:** investments that are "loans"
  - U.S. government bonds
  - Municipal bonds
  - Corporate bonds
  - Foreign government bonds
- Generally pay a fixed interest rate based on risk; get principal back at the end of the bond term
- Risks include:
  - Default
  - Interest rate risk
  - Time to maturity/call

Bond Prices

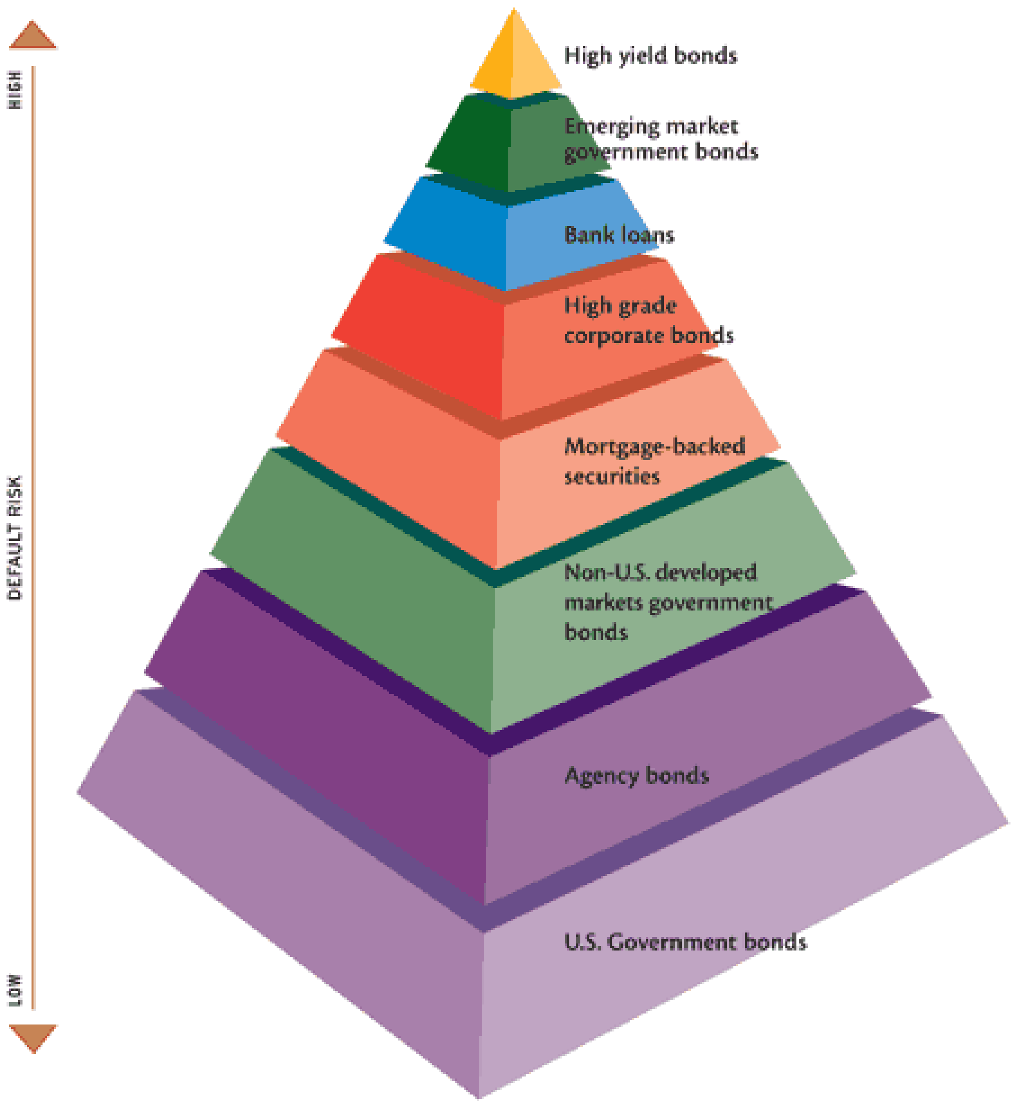
When interest rates fall, bond prices rise….



When interest rates rise, bond prices fall….

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Bond Default Risk



Moody's		S&P		Fitch		
Long term	Short term	Long term	Short terme	Long term	Short term	
Aaa	P-1	AAA	A-1+	AAA	A1+	Prime
Aa1		AA+		AA+		High Grade
Aa2		AA		AA		
Aa3		AA-		AA-		
A1		A+	A-1	A+	A1	Upper Medium Grade
A2		A		A		
A3	P-2	A-	A-2	A-	A2	
Baa1		BBB+		BBB+		Lower Medium Grade
Baa2	P-3	BBB	A-3	BBB	A3	
Baa3		BBB-		BBB-		
Ba1	Not Prime	BB+	B	BB+	B	Non Investment Grade Speculative
Ba2		BB		BB		
Ba3		BB-		BB-		
B1		B+		B+		Highly speculative
B2		B		B		
B3		B-		B-		
Caa		CCC+	C	CCC	C	Substantial risks
Ca		CCC				Extremely speculative
C		CCC-				In default, with little prospect for recovery
/		D	/	DDD	/	In default
/				DD		
/				D		

Equities

- Equities = **stocks** = ownership
- Stocks are traded on open markets and are effectively worth what people (the market) believe them to be worth based on:
  - Future profit potential
  - Corporate assets (including knowledge and goodwill)
  - Market, consumer, or general economic conditions
- Profits (or losses) are realized through:
  - Stock price appreciation (or devaluation)
  - Dividends (distribution of profits)
- If the company fails, stockholders are paid <u>last</u>

Sub-Asset Classes

- Stocks can be further divided into main and subcategories:
  - Domestic equities
    - Large-, mid-, small-cap
    - Growth, value, blend
    - Specialty (technology, healthcare, high-dividend, etc.)
  - Foreign equities
    - Developed countries
    - Emerging markets
    - Region/country-specific (Asia, China, BRIC, etc.)

Alternative Investments

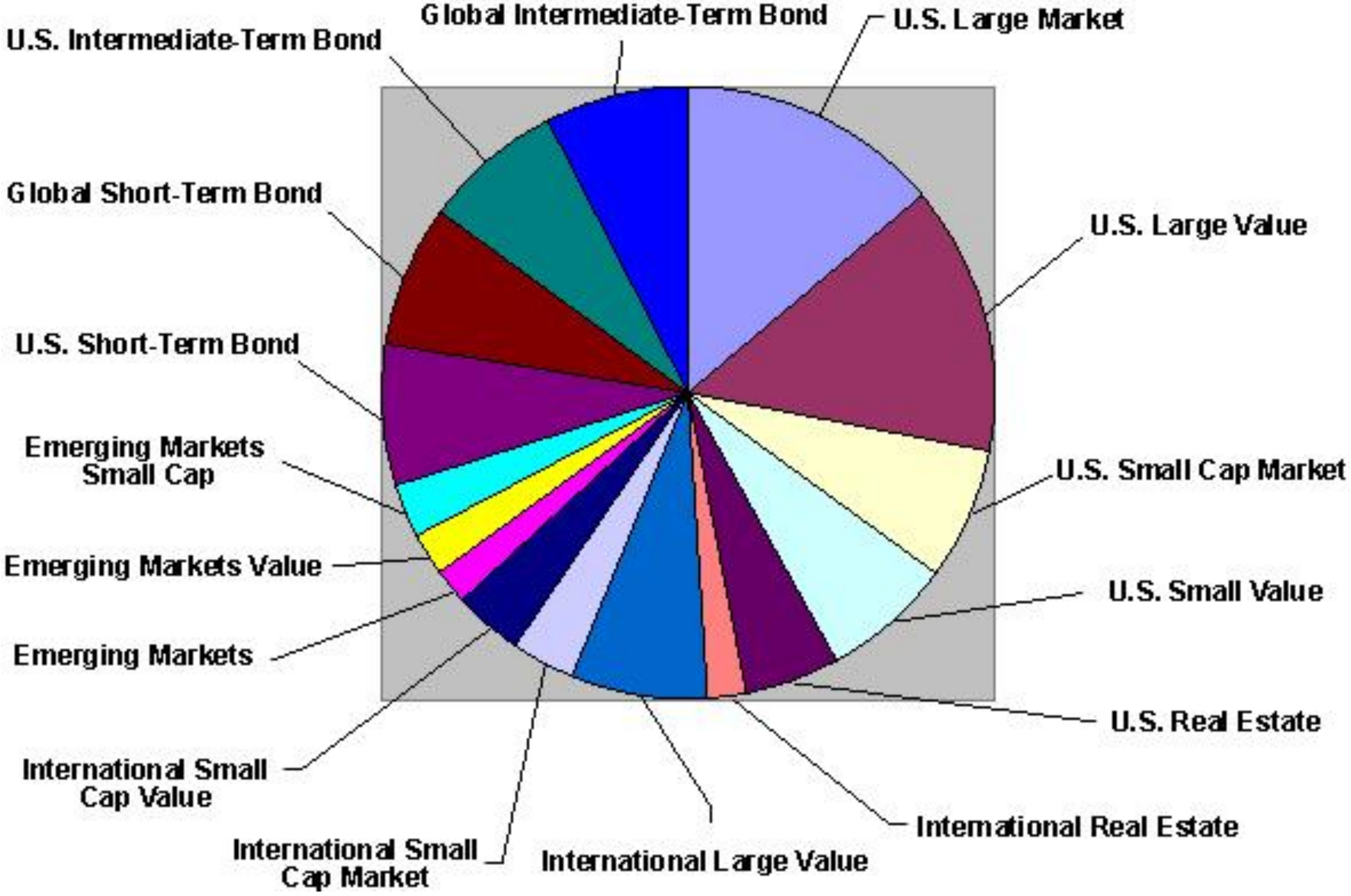
- Alternative investments don't fall into one of the traditional asset classes:
  - Real estate and REITs
    - REIT = Real Estate Investment Trust
  - Private equity (ownership not traded on an exchange)
  - Hedge funds
  - Commodities
- Benefit is diversification away from potentially volatile markets

Mutual Funds

- Investment made up of a pool of securities such as stocks, bonds, money market instruments, and more…
  - Operated by a **money manager** who invests fund assets
  - Mutual funds have stated objectives (generally to invest in a particular asset class or style)
  - *Provides the opportunity for professional money management and broad diversification*
  - Mutual funds are traded daily at Net Asset Value ("NAV") – **priced and traded at the end of the day (only)**

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

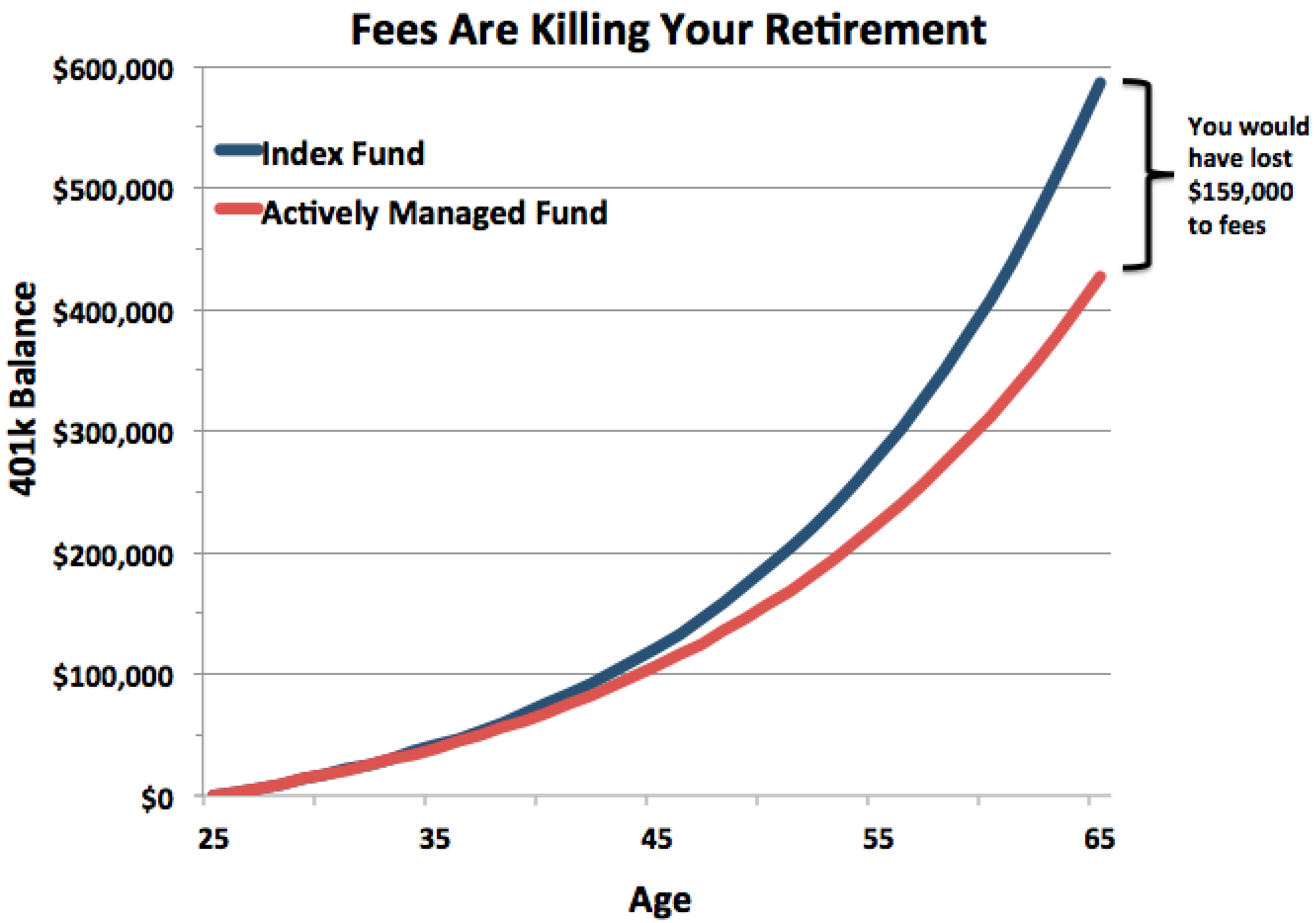
Types of Mutual Funds



Index Funds

- Index funds invest in a manner that mirrors that of a particular index
  - Such as the S&P 500, Russell 2000, MSCI EAFE, etc.
  - Because the index is set by a third party, index funds have lower management fees
    - Lower expense ratios
- Pros:
  - Low costs
  - No emotional investing
- Cons:
  - Passively invested (going to follow the index off the cliff)

Active Versus Passive Funds



Assumes a 1.25% annual difference in fees

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Active Versus Passive Returns

Active Versus Passive Fund Strategies

1-Year

	Value	Core	Growth
Large	36.5% / –2.6%	28.7 / 0.3	49.3 / 3.3
Mid	53.5 / –5.2	42.1 / –3.3	41.6 / –0.4
Small	66.7 / –8.5	44.7 / –4.7	22.2 / 0.2

5-Year

	Value	Core	Growth
Large	19.6 / 11.2	16.7 / 11.8	11.9 / 14.0
Mid	22.7 / 10.7	27.7 / 10.2	26.0 / 10.6
Small	38.0 / 8.8	32.8 / 9.5	20.5 / 11.0

10-Year

	Value	Core	Growth
Large	33.7 / 11.2	16.6 / 11.8	12.2 / 14.0
Mid	42.3 / 10.7	11.0 / 10.2	32.4 / 10.6
Small	38.3 / 8.8	23.1 / 9.5	23.1 / 11.0

% of active funds outperforming their respective Passive Benchmark

Passive benchmark returns (%) as of December 31st, 2015

Exchange Traded Funds (ETFs)

- ETFs are mutual funds that trade like stocks on exchanges
  - Can be traded at any time of day
  - Traded like stocks
    - No loads, but pay a commission for each trade
  - May trade at a premium or discount
  - Lower management fees (most are index-based)
  - Lower trading costs for the ETF (versus MFs)
  - More tax efficient than mutual funds

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Group Annuity Contract (GACs)

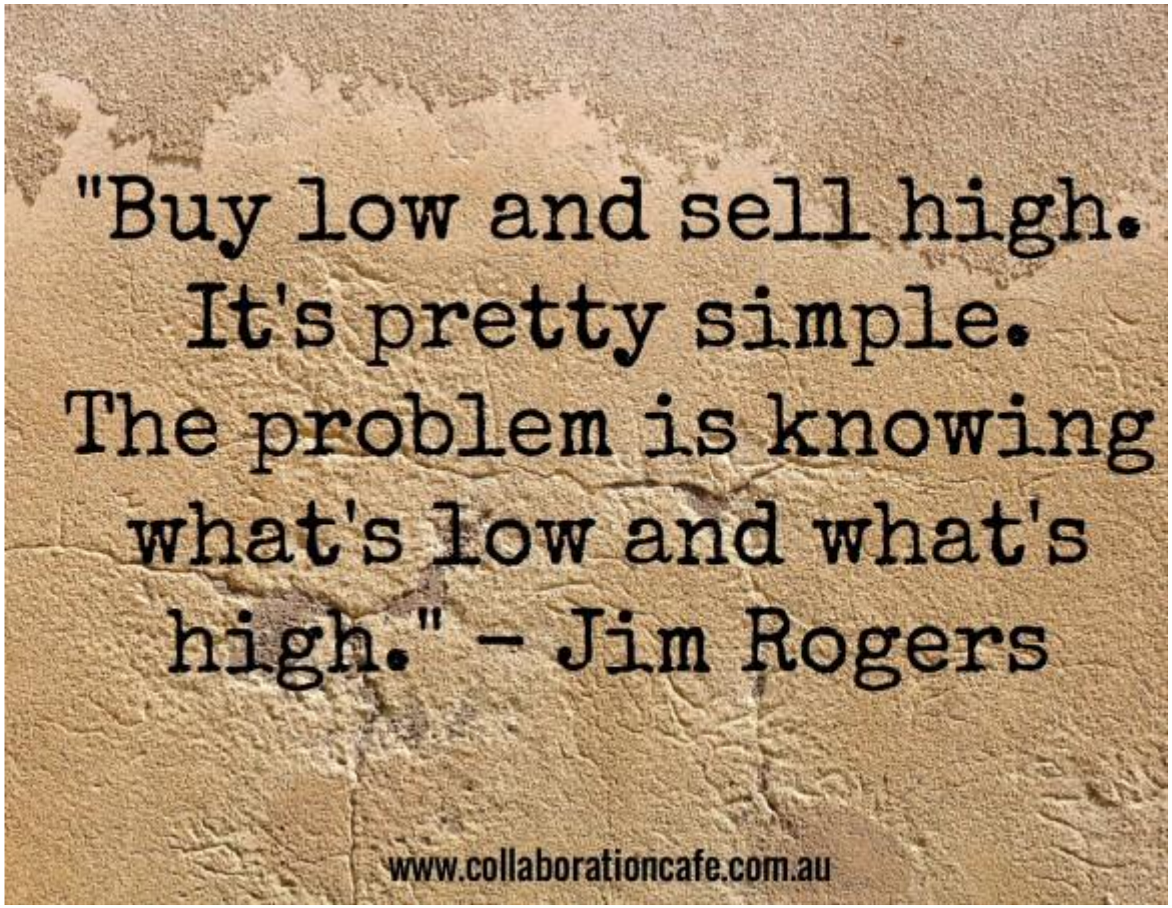
- GACs are issued by life insurance companies for retirement plans
  - Assets are invested in “separate accounts” not directly into mutual funds
    - Separate accounts may invest wholly into mutual funds or be managed by the insurance company/affiliate
  - Fees: separate accounts may charge
    - Contract fees
    - Separate account fees

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Investment Concepts

INVESTMENT 101

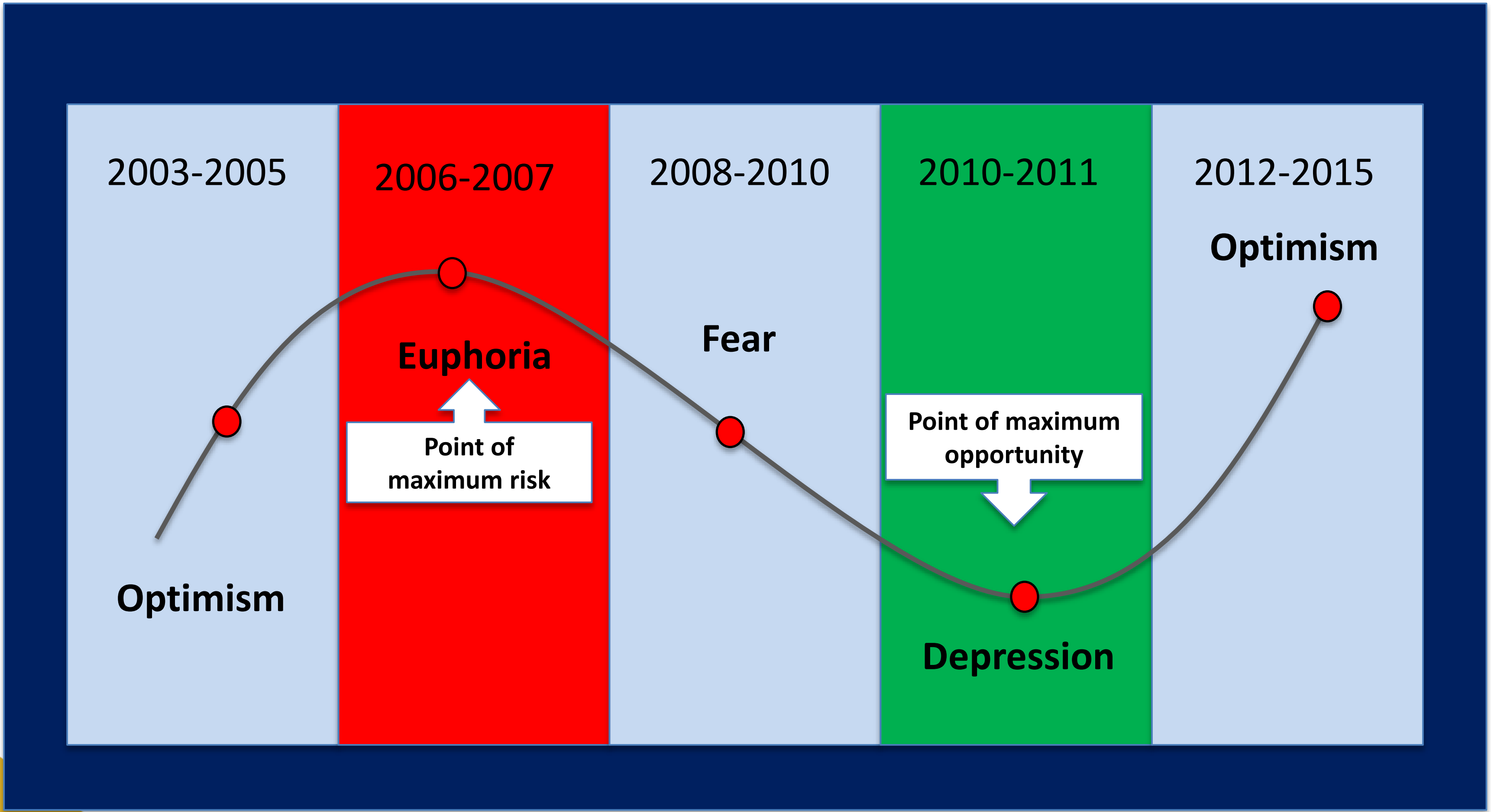
A Simple Strategy



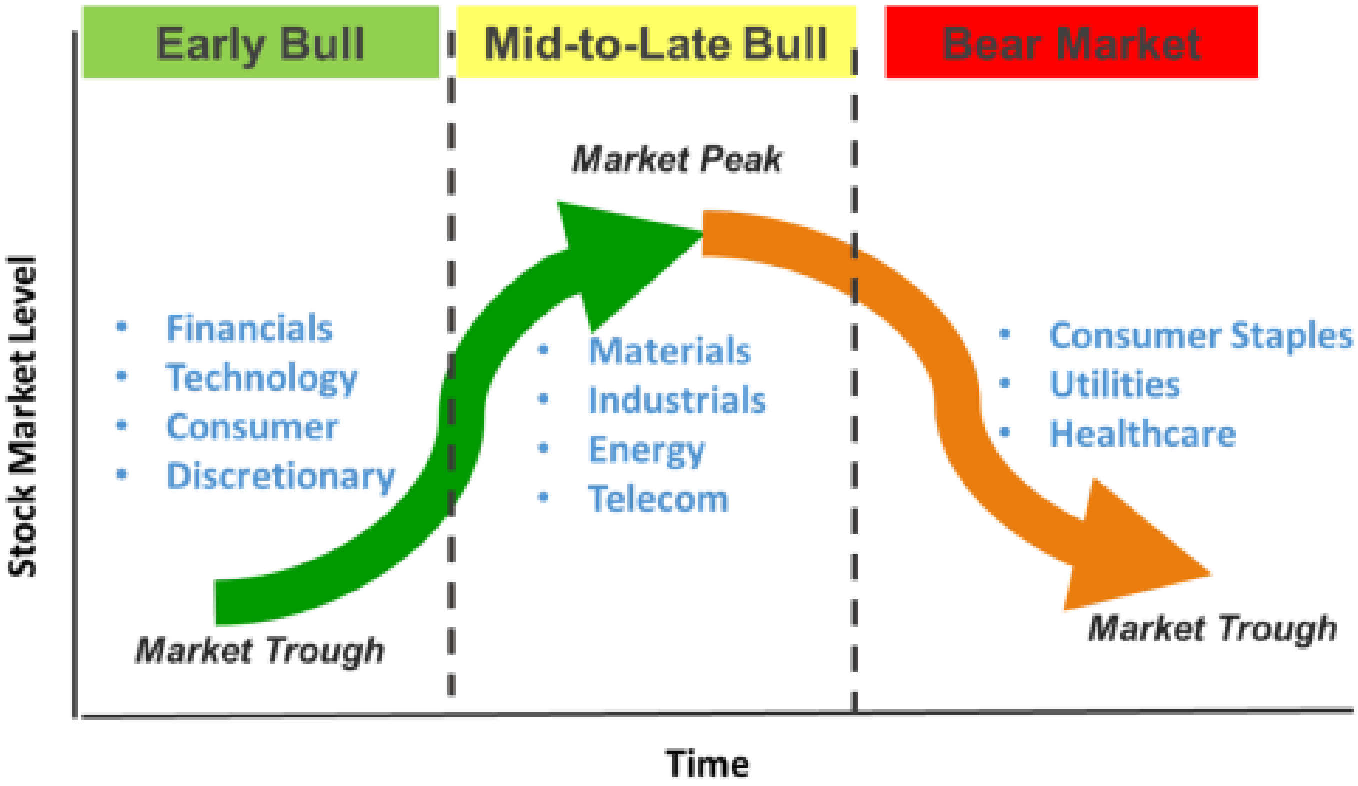
The Bull and The Bear

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Those Darn Emotions…

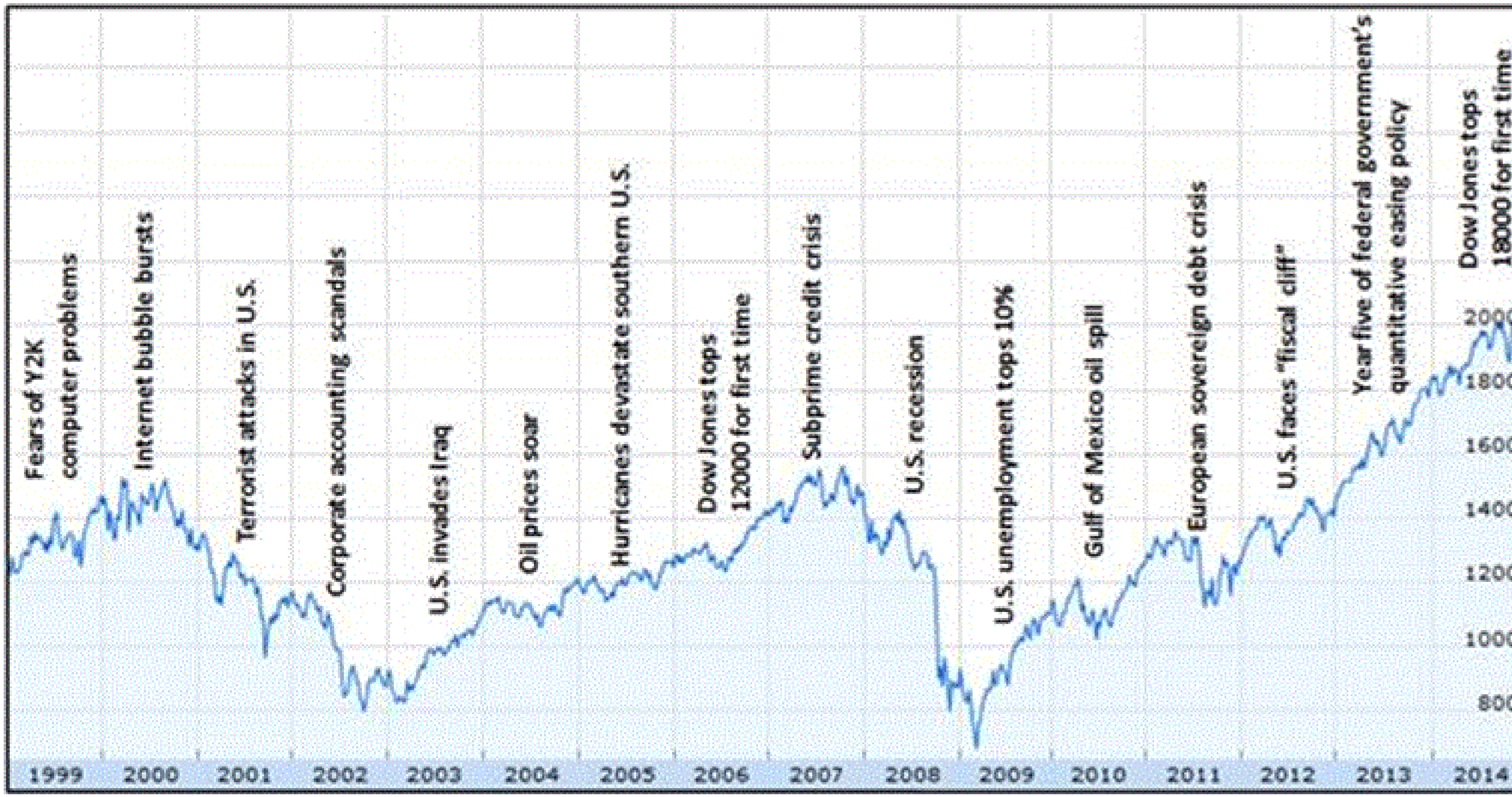


Market Cycles



ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Market Ups and Downs



ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Diversification

- Diversification means creating a portfolio of investments from different asset classes
  - Domestic, foreign, large cap, small cap, sectors, bonds, alternatives
  - Generally, asset prices do not change in perfect synchrony
- Advantages of diversification
  - Better long-term performance
  - Less volatility (risk)
- Can never reduce risk to zero

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Diversification Based on Time

Short Term

- Horizon: < 1 Year
- MM, CDs
- Low volatility, high liquidity
- Low returns

Intermediate Term

- Horizon: 2-5 years
- Bonds, high-quality stocks
- Relatively liquid
- Moderate returns

Long Term

- Horizon: 6+ years
- Stocks, Alternatives
- Higher risk
- Higher returns

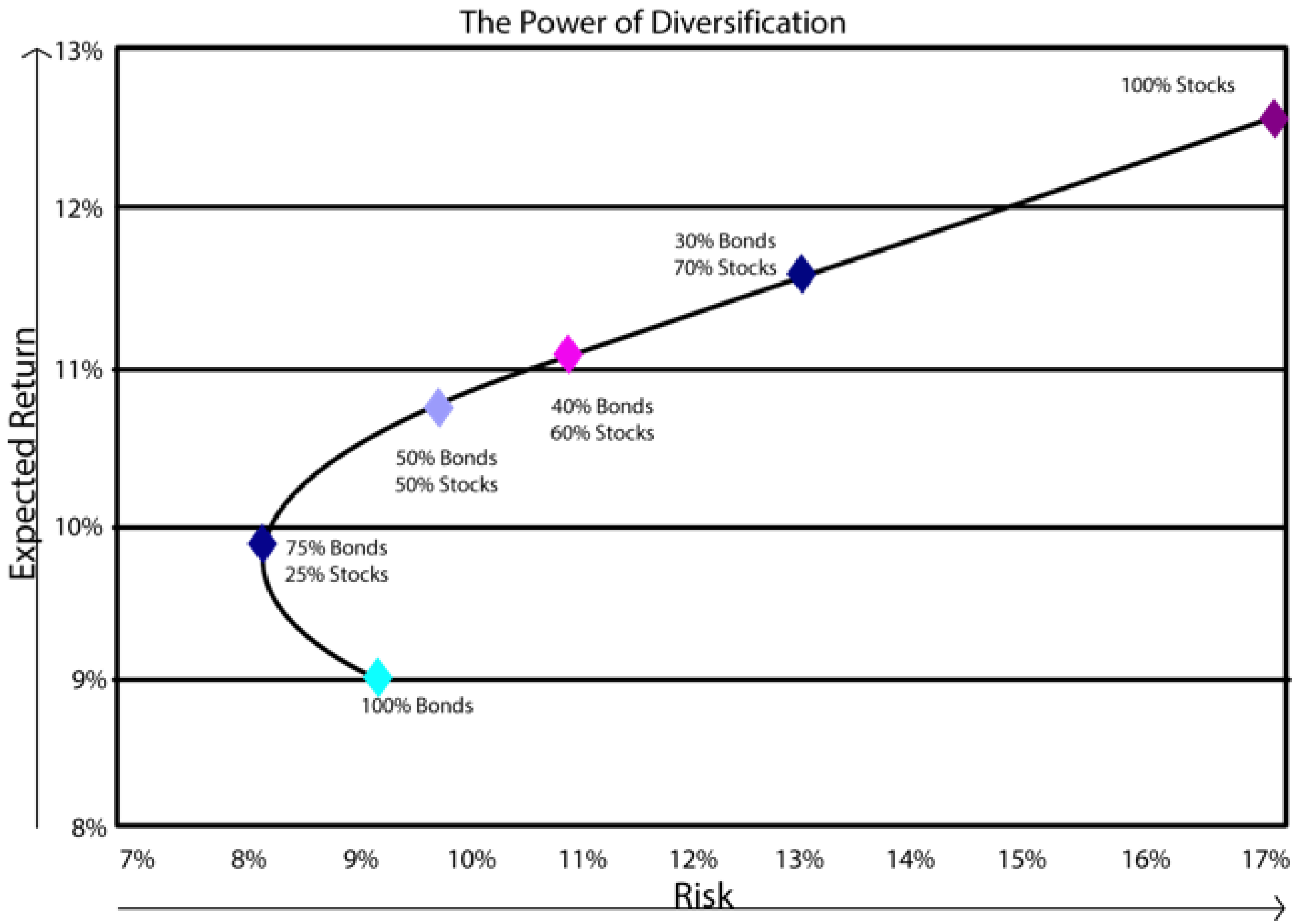
Volatility

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
S&P 500 Growth 23.97%	S&P 500 Growth 36.52%	S&P 500 Growth 42.16%	MSCI Emerging Markets 66.42%	Russell 2000 Value 22.83%	Russell 2000 Value 14.02%	Barclays Agg 10.26%	MSCI Emerging Markets 56.28%	MSCI Emerging Markets 25.95%	MSCI Emerging Markets 34.54%	MSCI Emerging Markets 32.59%	MSCI Emerging Markets 39.78%	Barclays Agg 5.24%	MSCI Emerging Markets 79.02%	Russell 2000 Growth 29.09%	Barclays Agg 7.84%	MSCI Emerging Markets 18.63%	Russell 2000 Growth 43.30%	S&P 500 Growth 14.89%	S&P 500 Growth 5.52%
S&P 500 22.96%	S&P 500 33.36%	S&P 500 28.58%	Russell 2000 Growth 43.09%	Barclays Agg 11.63%	Barclays Agg 8.43%	Barclays Corp High Yield -1.41%	Russell 2000 Growth 48.54%	Russell 2000 Value 22.25%	MSCI EAFE 13.54%	MSCI EAFE 26.34%	MSCI EAFE 11.17%	Barclays Corp High Yield -26.16%	Barclays Corp High Yield 58.21%	Russell 2000 26.85%	Barclays Corp High Yield 4.98%	Russell 2000 Value 18.05%	Russell 2000 38.82%	S&P 500 13.69%	S&P 500 1.38%
S&P 500 Value 22.00%	Russell 2000 Value 31.78%	MSCI EAFE 20.00%	S&P 500 Growth 28.24%	S&P 500 Value 6.08%	Barclays Corp High Yield 5.28%	MSCI Emerging Markets -6.00%	Russell 2000 47.25%	MSCI EAFE 20.25%	S&P 500 Value 5.82%	Russell 2000 Value 23.48%	S&P 500 Growth 9.13%	Russell 2000 Value -28.92%	Russell 2000 Growth 34.47%	Russell 2000 Value 24.50%	S&P 500 Growth 4.65%	S&P 500 Value 17.68%	Russell 2000 Value 34.52%	S&P 500 Value 12.36%	Barclays Agg 0.55%
Russell 2000 Value 21.37%	S&P 500 Value 29.98%	S&P 500 Value 14.69%	MSCI EAFE 26.96%	Russell 2000 -3.02%	Russell 2000 2.49%	Russell 2000 Value -11.43%	Russell 2000 Value 46.03%	Russell 2000 18.33%	S&P 500 4.91%	S&P 500 Value 20.81%	Russell 2000 Growth 7.05%	Russell 2000 -33.79%	MSCI EAFE 31.78%	MSCI Emerging Markets 19.20%	S&P 500 2.11%	MSCI EAFE 17.32%	S&P 500 Growth 32.75%	Barclays Agg 5.97%	MSCI EAFE -0.81%
Russell 2000 16.49%	Russell 2000 22.36%	Barclays Agg 8.70%	Russell 2000 21.26%	Barclays Corp High Yield -5.86%	MSCI Emerging Markets -2.37%	MSCI EAFE -15.94%	MSCI EAFE 38.59%	S&P 500 Value 15.71%	Russell 2000 Value 4.71%	Russell 2000 18.37%	Barclays Agg 6.97%	S&P 500 Growth -34.92%	S&P 500 Growth 31.57%	Barclays Corp High Yield 15.12%	S&P 500 Value -0.48%	Russell 2000 16.35%	S&P 500 32.39%	Russell 2000 Growth 5.60%	Russell 2000 Growth -1.38%
Barclays Corp High Yield 11.35%	Russell 2000 Growth 12.95%	Barclays Corp High Yield 1.87%	S&P 500 21.04%	S&P 500 -9.11%	Russell 2000 Growth -9.23%	Russell 2000 -20.48%	S&P 500 Value 31.79%	Russell 2000 Growth 14.31%	Russell 2000 4.55%	S&P 500 15.79%	S&P 500 5.49%	S&P 500 -37.00%	Russell 2000 27.17%	S&P 500 Value 15.10%	Russell 2000 Growth -2.91%	S&P 500 16.00%	S&P 500 Value 31.99%	Russell 2000 4.89%	S&P 500 Value -3.13%
Russell 2000 Growth 11.26%	Barclays Corp High Yield 12.76%	Russell 2000 Growth 1.23%	S&P 500 Value 12.73%	MSCI EAFE -14.17%	S&P 500 Value -11.71%	S&P 500 Value -20.85%	Barclays Corp High Yield 28.97%	Barclays Corp High Yield 11.13%	Russell 2000 Growth 4.15%	Russell 2000 Growth 13.35%	S&P 500 Value 1.99%	Russell 2000 Growth -38.54%	S&P 500 26.47%	S&P 500 15.06%	Russell 2000 -4.18%	Barclays Corp High Yield 15.81%	MSCI EAFE 22.78%	Russell 2000 Value 4.22%	Russell 2000 -4.41%
MSCI EAFE 6.05%	Barclays Agg 9.64%	Russell 2000 -2.55%	Barclays Corp High Yield 2.39%	S&P 500 Growth -22.08%	S&P 500 -11.89%	S&P 500 -22.10%	S&P 500 28.68%	S&P 500 10.88%	S&P 500 Growth 4.00%	Barclays Corp High Yield 11.85%	Barclays Corp High Yield 1.87%	S&P 500 Value -39.22%	S&P 500 Value 21.17%	S&P 500 Growth 15.05%	Russell 2000 Value -5.50%	S&P 500 Growth 14.61%	Barclays Corp High Yield 7.44%	Barclays Corp High Yield 2.45%	Barclays Corp High Yield -4.47%
MSCI Emerging Markets 6.03%	MSCI EAFE 1.78%	Russell 2000 Value -6.45%	Barclays Agg -0.82%	Russell 2000 Growth -22.43%	S&P 500 Growth -12.73%	S&P 500 Growth -23.59%	S&P 500 Growth 25.66%	S&P 500 Growth 6.13%	Barclays Corp High Yield 2.74%	S&P 500 Growth 11.01%	Russell 2000 -1.57%	MSCI EAFE -43.38%	Russell 2000 Value 20.58%	MSCI EAFE 7.75%	MSCI EAFE -12.14%	Russell 2000 Growth 14.59%	Barclays Agg -2.02%	MSCI Emerging Markets -1.82%	Russell 2000 Value -7.47%
Barclays Agg 3.64%	MSCI Emerging Markets -11.59%	MSCI Emerging Markets -25.34%	Russell 2000 Value -1.49%	MSCI Emerging Markets -30.61%	MSCI EAFE -21.44%	Russell 2000 Growth -30.26%	Barclays Agg 4.10%	Barclays Agg 4.34%	Barclays Agg 2.43%	Barclays Agg 4.33%	Russell 2000 Value -9.78%	MSCI Emerging Markets -53.18%	Barclays Agg 5.93%	Barclays Agg 6.54%	MSCI Emerging Markets -18.17%	Barclays Agg 4.21%	MSCI Emerging Markets -2.27%	MSCI EAFE -4.90%	MSCI Emerging Markets -14.60%

You never know which asset classes will outperform each year…

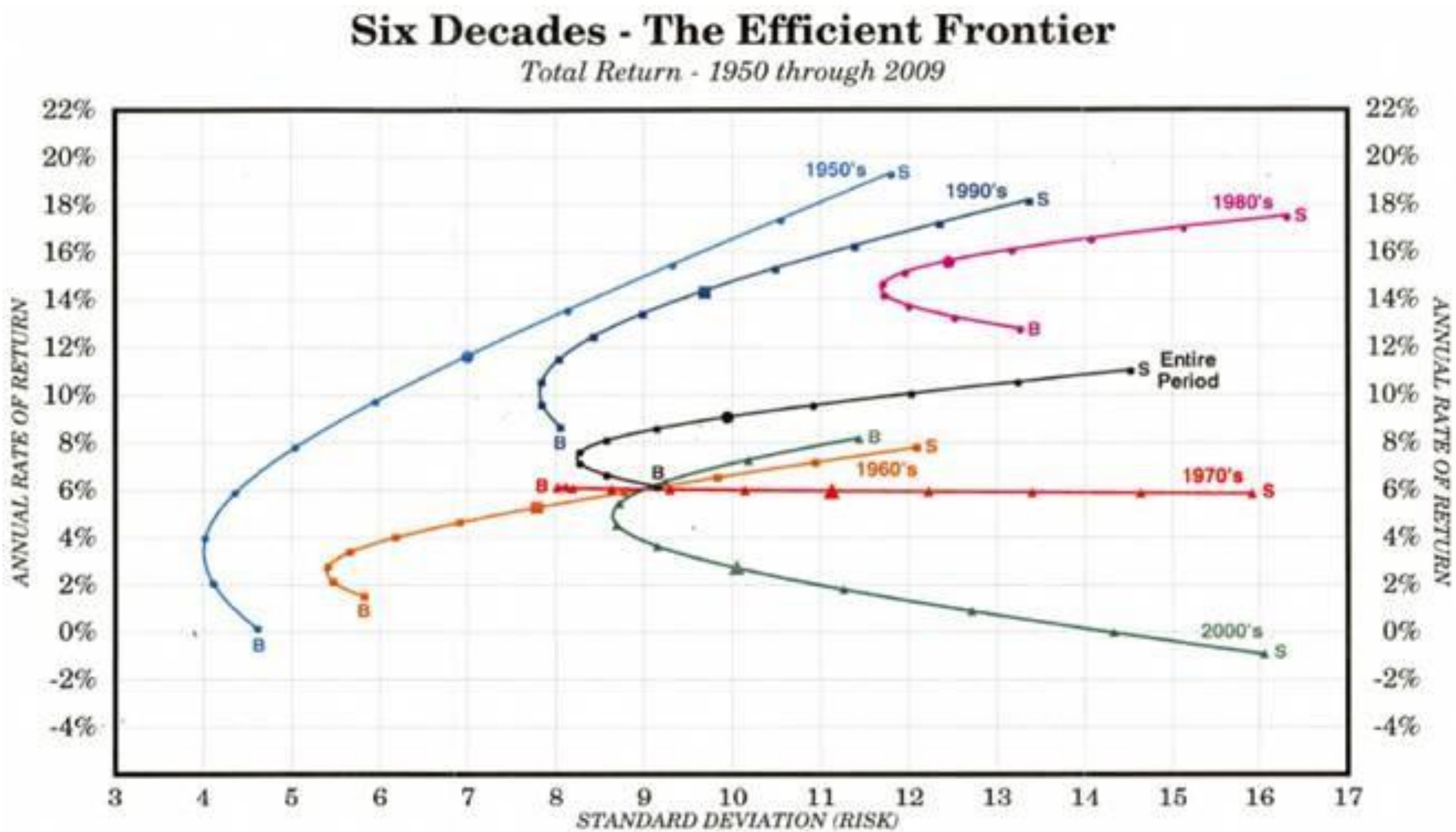
ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

The "Efficient Frontier"

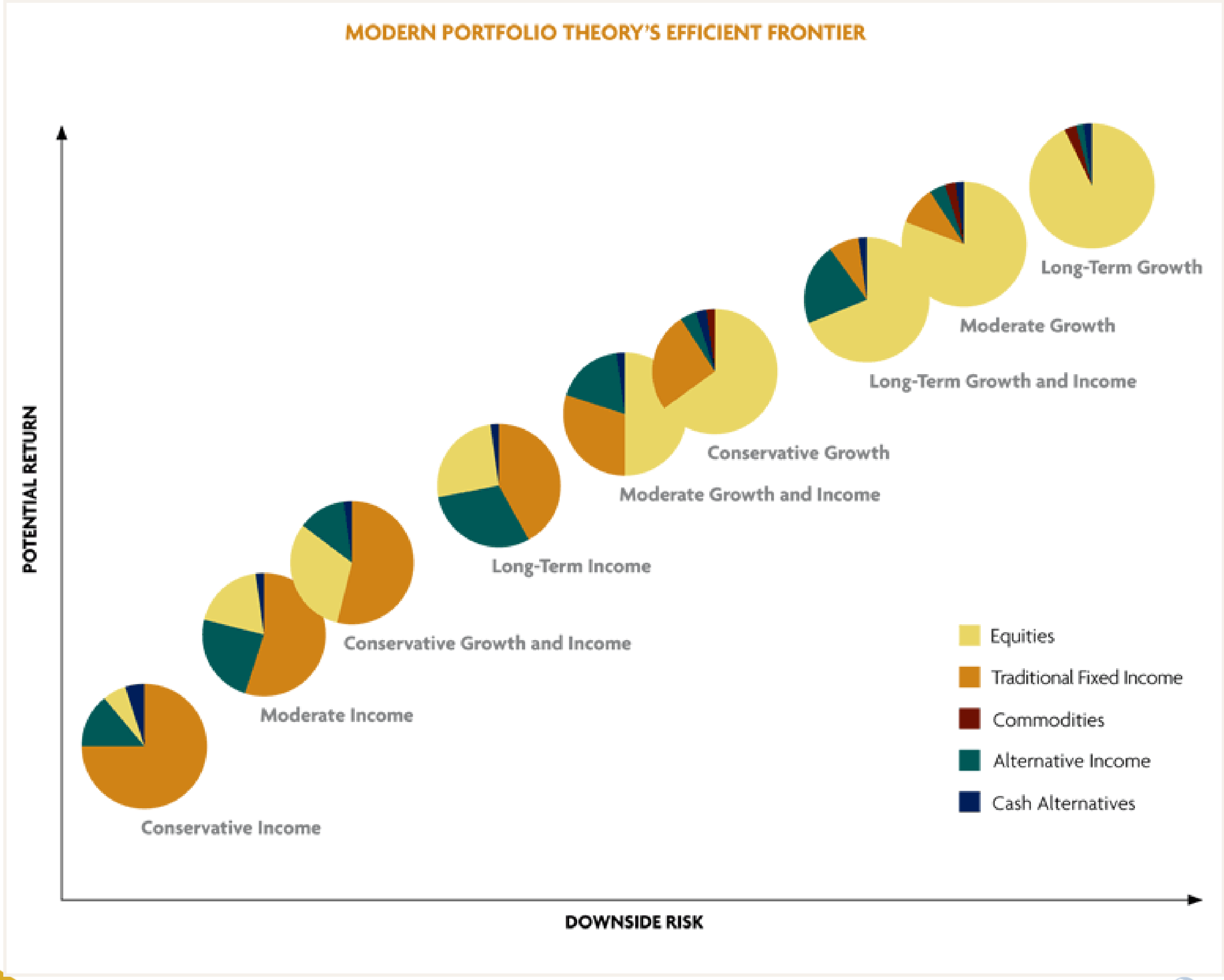


ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Changes Over Time

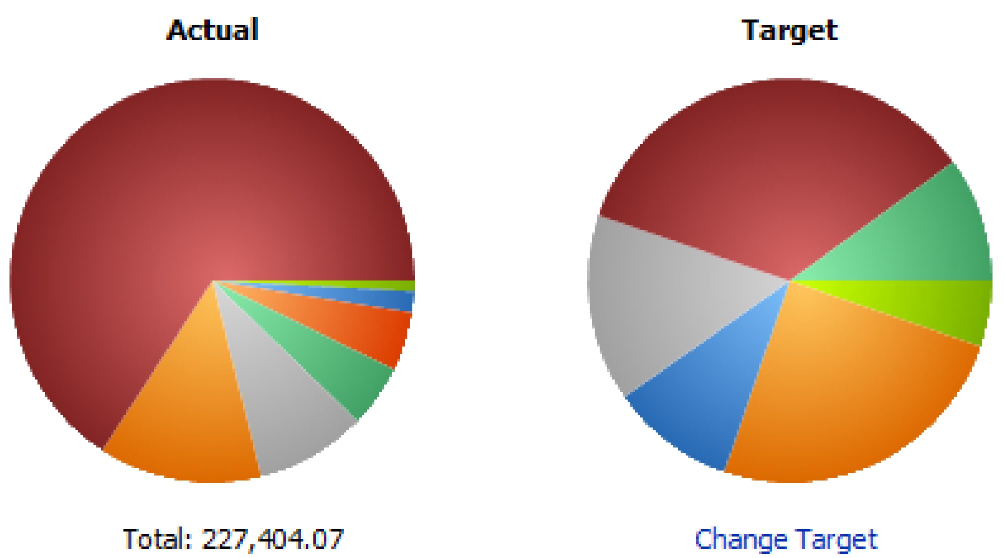


Asset Allocation



ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Rebalancing



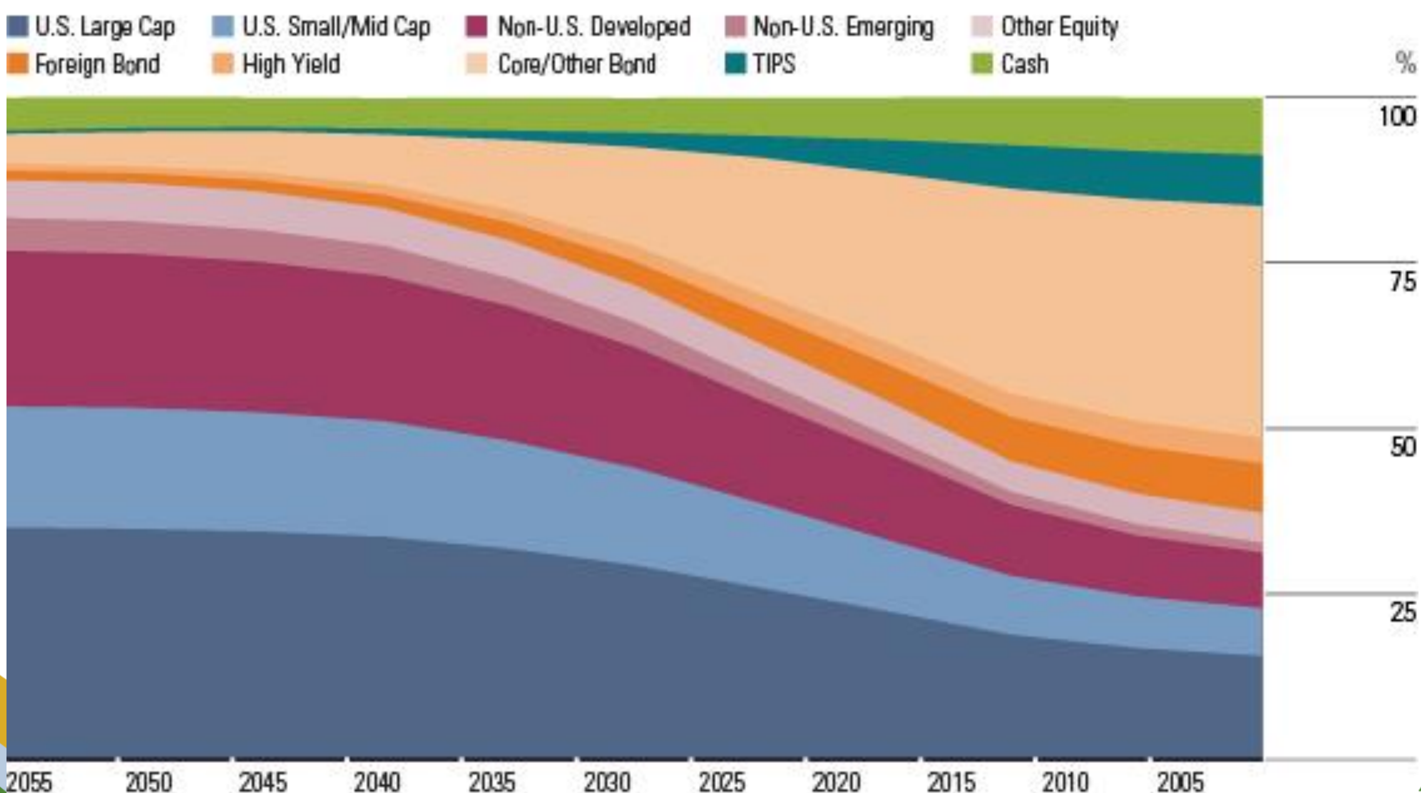
		Actual	Target	Difference
■	Domestic Bonds	5.102%	10%	-4.898%
■	Large Cap Stocks	66.015%	35%	31.015%
■	Small Cap Stocks	8.674%	15%	-6.326%
■	Global Bonds	1.754%	10%	-8.246%
■	International Stocks	13.121%	25%	-11.879%
■	Other Asset Class	0.651%	5%	-4.349%
■	Cash	4.683%	0%	4.683%
	Expected Return	7%	7%	
	Expected Risk	High (12%)	Med. (9%)	

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Target Date Funds

- Designed to change asset allocation automatically over time
- Benefits: managed, automated; "set it and forget it" (almost – but not quite)
- Disadvantages: passively managed

Exhibit 2 Industry Average Sub-Asset-Class Glide Path



Source: Morningstar, Inc. Data as of 12-31-2014.

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Investment Geekery

- **Alpha** – a measure of the value added by an investment manager (versus benchmark)
  - Negative alpha? May want to consider a benchmark instead
- **Beta** – a measure of an investment's correlation to the market (systemic risk)
  - Beta of 1.0 moves in correlation to index
- **Standard deviation** – a measure of an investment's volatility
  - Larger standard deviation = more volatile (more ups and downs)

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Investment Fees

INVESTMENT 101

Making Retirement Plans Work
Part of the American Retirement Association

The Cost of Investing

- Who wants to be paid?
  - Broker/investment advisor/agent
  - Broker-dealer/registered investment advisor/insurance company
  - Exchange/market makers
  - Custodian
  - Investment distributor
  - Investment manager
    - Sub-managers

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Brokers

- Brokers (a/k/a registered representatives)
  - Affiliated with a brokerage firm
  - Generally commission-based – TRANSACTIONAL
    - May have minimum new asset requirements to qualify for job, higher payouts, bonuses, etc.
    - May have incentives to sell proprietary products
  - Firm supervised by the Financial Industry Regulatory Authority ("FINRA" formerly, the "NASD")
    - "Suitability" standard of care
    - Compliance/supervision often minimize flexibility
      - Brokerage firm will limit the investments (recordkeeping platforms) that may be used by its clients
      - Generally NOT permitted to serve as a fiduciary (purposefully)
      - May be limited in terms of client reports/deliverables

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Broker Compensation Explained

- **Brokers:**
  - COMMISSIONED:
    - Based on a pre-set compensation schedule
    - However, compensation can be altered based on product (share-class) selection
    - Can be front-loaded
      - Example: 1% on new deposits; 0.25% trail
    - Can be based on 12b-1 fees
      - Can limit investment options (only funds that pay 12b-1s)
    - Often brokerage firms “count” certain types of income more than others
      - For example, some firms only count new contributions or give additional credit to proprietary product sales for purposes of meeting minimum production requirements
    - Many brokers are independent contractors and must pay all/most of their expenses out-of-pocket (including software, staff, marketing materials….)

Investment Advisors

- Investment Advisor Representatives (“IAR”)
  - Affiliated with a Registered Investment Advisor (“RIA”)
  - Generally fee-based – fee-for-service
    - Business model lends itself toward longer-term, higher-service relationships, and objectivity in product selection
  - Supervised by the Securities & Exchange Commission (“SEC”)
    - Fiduciary standard of care
    - Compliance framework generally allows for more flexibility in terms of product selection and communication:
      - May be able to serve as named fiduciary (3(21) or 3(38))
      - May be able to use any 401(k) product/platform
      - May be able to use a/any investment monitoring system (such as fi360, PlanTools, RPAG, etc.)

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Investment Advisor Compensation Explained

- **Investment advisors:**
  - Fee-based
    - Frequently charged as a percentage of the plan assets annually
    - Increasingly common: Flat fee ($X per year)
    - Fee structure generally provides for more income over long term compared to commissioned structures
    - Generally revenue sharing neutral
      - Most advisors apply revenues from 12b-1 fees to offset their fees or return them to the plan (because they are charging an explicit fee and can't double dip)

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Broker Versus Advisor

- Which is best? It depends.
- Consider:
  - How frequently are you making a trade?
  - How much advice do you need?
  - How much service do you need?
    - Portfolio reviews
    - Periodic rebalancing
  - What are you looking to purchase?

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Fees Come In Different Forms

- Stocks: commissions
- Bonds: spreads
- Mutual funds: Loads/expense ratio
- Insurance (including group annuities): contract and separate account fees
- Investment advisor: may pay the above fees and charge

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

NAV Versus Group Annuity Contract

NAV

("Net Asset Value")

- Generally mutual funds
  - Can be open-architecture or limited menu
    - Fund cost varies by share class selected
    - Can be expensive for smaller plans
  - Investment information and FMV is publically available in real time
  - Can use ERISA account to capture excess revenue sharing
  - May require a financial professional with additional analytical tools (Morningstar, fi360, RPAG, etc.)
- Can be sold as a brokerage or advisory product

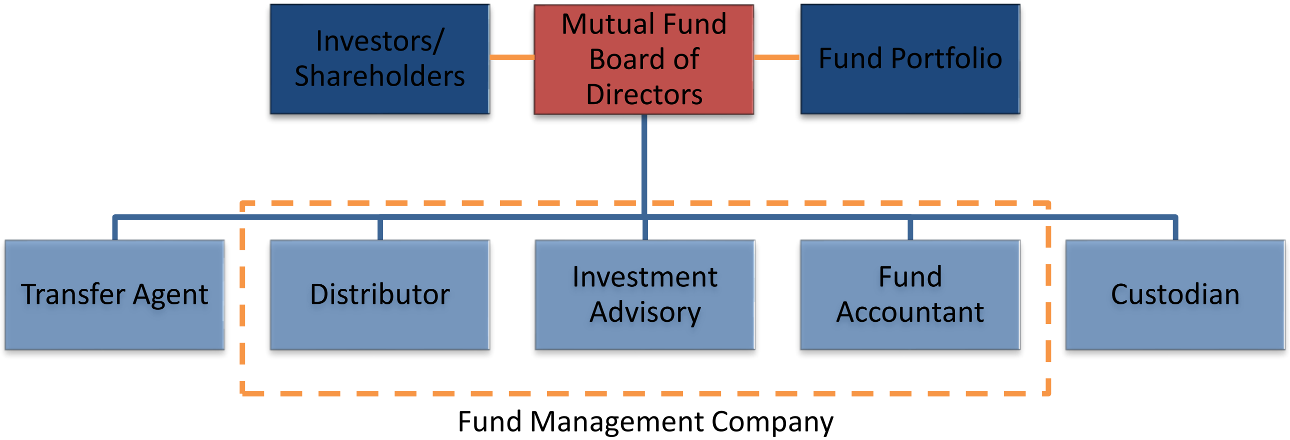
GAC

("Group Annuity Contract")

- Annuity Separate Accounts
  - Not publically-traded investments
    - No ticker symbol
    - Possible lower administrative costs
  - Limited investment options (pro and con)
    - Possible proprietary fund restrictions
  - Fees are bundled into investments
    - Easier for the plan sponsor to bear for start-ups/small plans
    - Complex and confusing
  - Investments may have guarantees
- Generally sold as a brokerage and insurance product

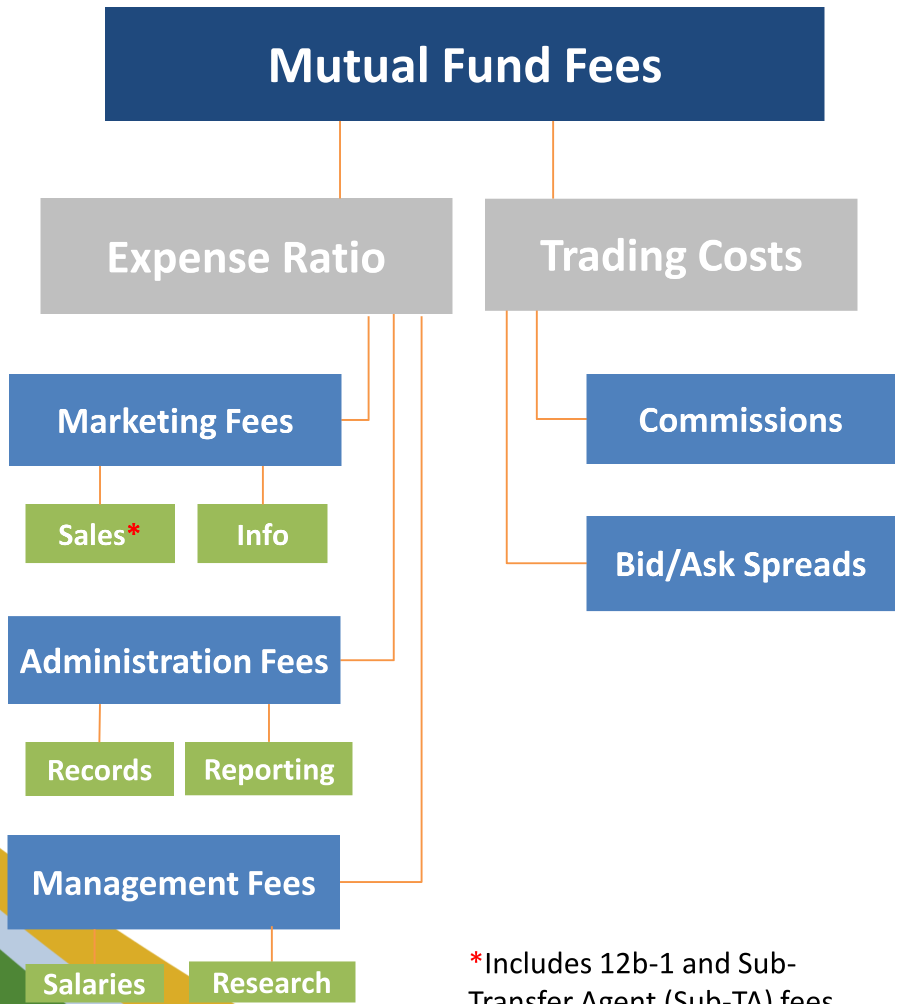
ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Mutual Fund Structure



- **Board of directors** – negotiates contracts and oversees performance
- **Investment advisory** – responsible for fund asset and trade order management
- **Custodian** – financial institution that holds/tracks fund assets
- **Fund accountant** – calculates daily NAV, keeps records, prepares financial statements
- **Distributor** – sells the fund's shares to investors, directly or indirectly
- **Transfer agent** – responsible for shareholder recordkeeping, servicing, and reporting

Anatomy of a Mutual Fund Expense Ratio



*Includes 12b-1 and Sub-Transfer Agent (Sub-TA) fees

- Marketing fees – the costs associated with marketing the fund, including advertising and sales/marketing fees (such as 12b-1 and Sub-TA fees)
- Administration fees – the costs associated with administering the fund, including fund accounting, records maintenance, reporting, audit, and legal, board of director fees and expenses
- Management fees – the costs associated with investment advisory fees, investment research. Could also include custodial and transfer agent fees.
- Trading costs – the cost to buy and sell the fund's underlying investments. Not part of the expense ratio. These costs are not required to be disclosed. Can have a large impact on returns.

Mutual Fund Structure

Category	Expense %
Investment advisory and fund administration	0.550%
Shareholder servicing	0.140%
12b-1 sales/distribution fees	0.250%
Custody	0.012%
Audit	0.006%
Legal	0.008%
Miscellaneous operating expenses	0.006%
Total (expense ratio)	**0.972%**

Above illustration represents a fictional example only.

Mutual Fund Share Classes and Loads

Share Class	Front-End Load	Back-End Load (CDSC)	12b-1 Fees	Class Name	Comment
A	5.5% w/ volume discounts	None	.025%	Front-Load	Good for large purchases because of volume discount. Lowest ER.
B	None	5% in year 1, declining 1% per year thereafter	1.00%	Back-Load	Good for smaller long-term purchases since load vanishes
C	None	1% per year for 2 years	1.00%	Level Load	Good for short term purchases because of lower load, but high ER
I	None	None	None	Institutional	Lowest ER (highest return), but must meet certain requirements
R1	None	None	0.50%	Retirement	For retirement plans/401(k)s – high 12b-1 fee, higher ER,
R5	None	None	None	Retirement	For retirement plans/401(k)s – no 12b-1 fee, lowest ER, size req'ts

Front-End Load Volume Discount Example

Purchase Amount	Front-End Load
$0 to $49,999	5.50%
$50,000 to $99,999	5.00%
$100,000 to $249,999	4.00%
$250,000 to $499,999	2.75%
$500,000 to $999,999	1.95%
$1,000,000 or more	0.00%

CDSC Example

Holding Period	Back-End Load
< 1 year	5%
< 2 years	4%
< 3 years	3%
< 4 years	2%
< 5 years	1%
5 years or more	0%

Share Class Matters

Note the differences in:

12b-1 Fees

And

Expense Ratios

…and the relationship

Ticker	Name	Expense Ratio	12b-1 Fee	AUM Sep 2015 ($m)	% of Total	1 Year Net Flows ($m)
Traditional Load						
AGTHX	American Funds Growth Fund of Amer A	0.66%	0.24%	$69,563	51%	($2,370)
AGRBX	American Funds Growth Fund of Amer B	1.41%	1.00%	$448	0%	($384)
GFACX	American Funds Growth Fund of Amer C	1.45%	1.00%	$5,228	4%	($770)
Subtotal		**0.72%**	**0.30%**	**$75,239**	**56%**	**($3,524)**
Fee-based						
GFAFX	American Funds Growth Fund of Amer F1	0.69%	0.25%	$7,961	6%	($1,810)
GFFFX	American Funds Growth Fund of Amer F2	0.43%	-	$10,342	8%	$1,370
Subtotal		**0.54%**	**0.11%**	**$18,303**	**14%**	**($440)**
Retirement Plans						
RGAAX	American Funds Growth Fund of Amer R1	1.43%	1.00%	$462	0%	($60)
RGABX	American Funds Growth Fund of Amer R2	1.38%	0.74%	$2,152	2%	($250)
RGEBX	American Funds Growth Fund of Amer R2E	1.15%	0.60%	$0	0%	$0
RGACX	American Funds Growth Fund of Amer R3	0.98%	0.50%	$6,906	5%	($1,140)
RGAEX	American Funds Growth Fund of Amer R4	0.68%	0.25%	$6,841	5%	($702)
RGAFX	American Funds Growth Fund of Amer R5	0.38%	-	$4,742	4%	($594)
RGAGX	American Funds Growth Fund of Amer R6	0.30%	-	$13,203	10%	$1,150
Subtotal		**0.61%**	**0.21%**	**$34,306**	**25%**	**($1,596)**
College Funds						
CGFAX	American Funds Growth Fund of Amer 529A	0.74%	0.22%	$5,634	4%	($14)
CGFBX	American Funds Growth Fund of Amer 529B	1.53%	0.99%	$87	0%	($65)
CGFCX	American Funds Growth Fund of Amer 529C	1.52%	0.99%	$1,367	1%	($25)
CGFEX	American Funds Growth Fund of Amer 529E	0.99%	0.50%	$250	0%	($6)
CGFFX	American Funds Growth Fund of Amer 529F	0.52%	0.00%	$204	0%	$8
Subtotal		**0.89%**	**0.37%**	**$7,541**	**6%**	**($102)**
Grand Total		**0.68%**	**0.25%**	**$135,389**	**100%**	**($5,662)**

Source: BrightScope, PlanByNumbers

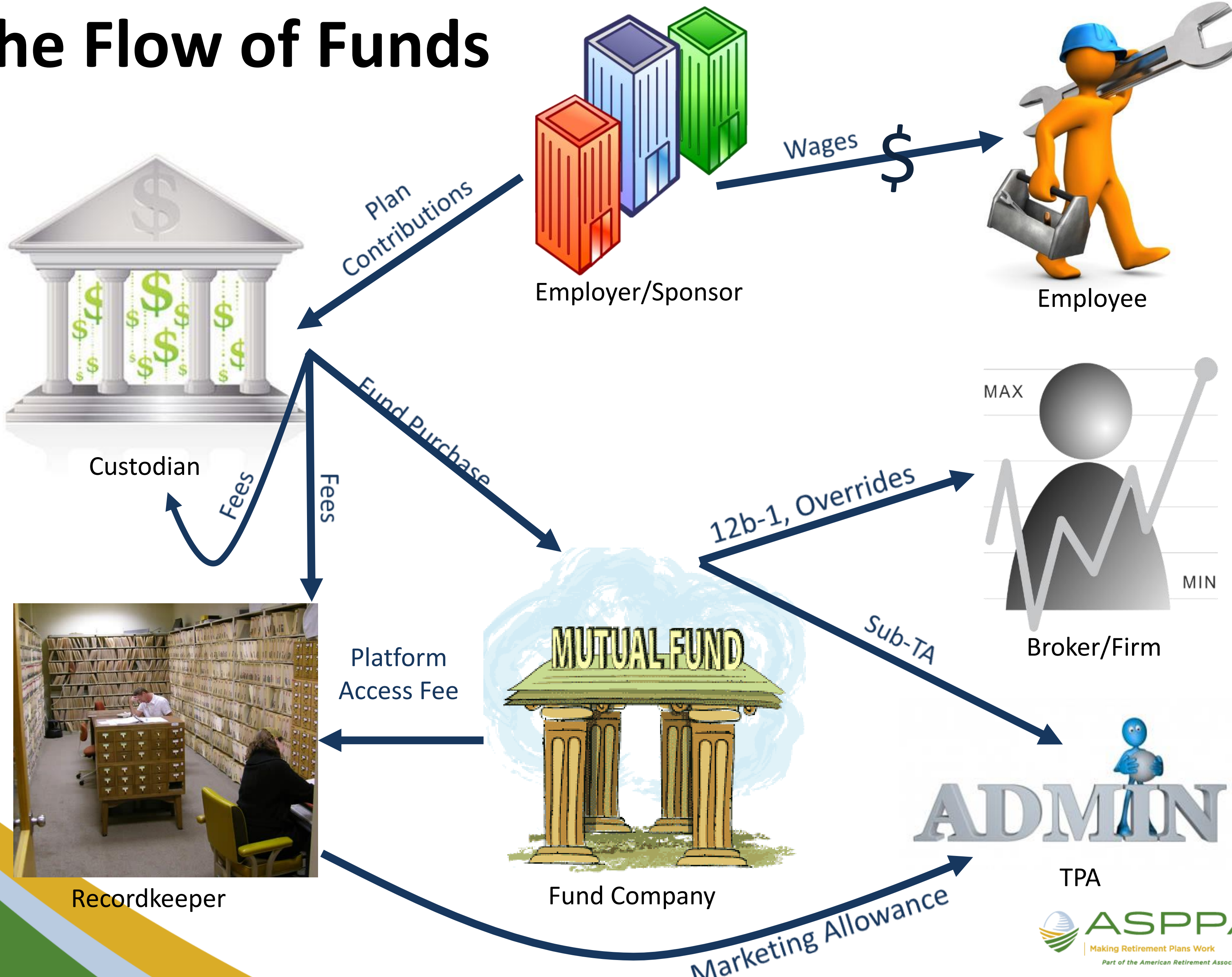
Group Annuity Contract Fee Example

Insurance Contract #	Fund ER% (1) +	AMC% (2) +	Sales and Service Fee % (3) =	Total ER (4) +	Base Charge % (5) +	Participant fee % (6) =	Total GAC Fee % (7)	Broker Comp %
1	.25	.50	Varies	.75	.50	.25	1.50	Varies
2	.25	.50	.05	.80	.50	.25	1.55	.05
3	.25	.50	.10	.85	.50	.25	1.60	.10
4	.25	.50	.15	.90	.50	.25	1.65	.15
5	.25	.50	.25	1.00	.50	.25	1.75	.25
6	.25	.50	.37	1.12	.50	.25	1.87	.37
7	.25	.50	.50	1.25	.50	.25	2.00	.50
8	.25	.50	.75	1.50	.50	.25	2.25	.75
9	.25	.50	.1.0	1.75	.50	.25	2.50	1.00

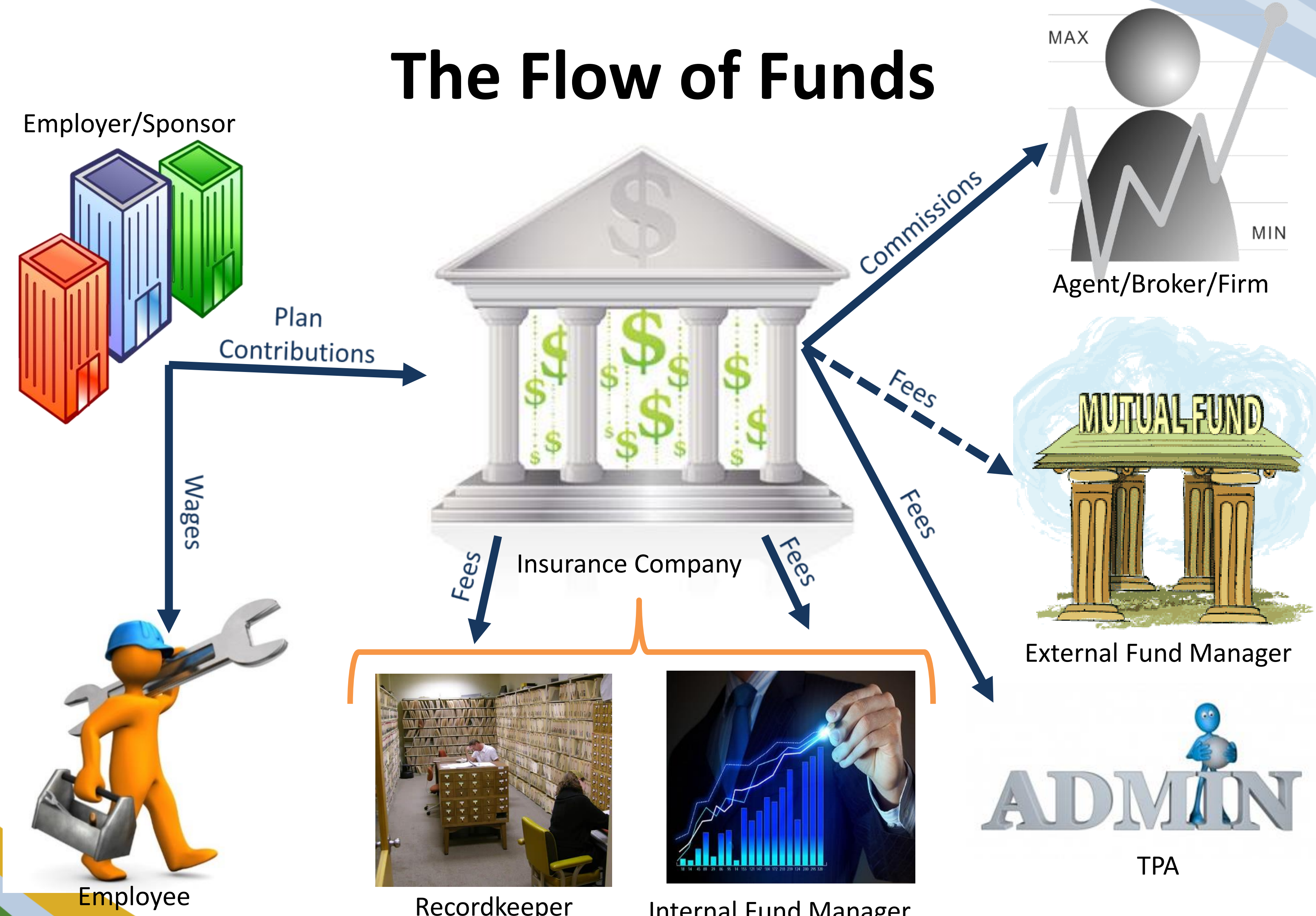
(1) Underlying investment expense ratio
(2) AMC = Administrative Maintenance Charge (insurance contract fee)
(3) The financial professionals' commission. For Contract #1, the fee can be set by the FP/plan sponsor
(4) Total "separate account" expense ratio
(5) Recordkeeping base fee (maybe waived at > $2M in plan assets)
(6) Participant fee (illustrated as estimated and internalized into total contract fee)
(7) Total group annuity contract fee

ASPPA | Making Retirement Plans Work
Part of the American Retirement Association

The Flow of Funds



The Flow of Funds



ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Qualified Default Investment Alternatives

QDIAS

ERISA §404(c)(1) – A "404(c) Plan"

- Provides for fiduciary protection against losses that result from:
  - The participant's
  - Exercise of control over assets
  - In an individual account plan
- §404(c)(1) does not cover:
  - Trustee-directed plans
  - Selection/monitoring of plan-investment options
  - Mishandling of plan assets
  - ***Default investment options (no exercise of control)***

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

404(c) Requirements

- The requirements of "404(c)" include:
  - Information disclosure (cumbersome)
  - The ability to make at least quarterly investment changes
  - Broad range of investment alternatives
    - At least **three**
      - Diversified
      - Materially different risk/return characteristics
      - Can be combined to develop appropriate portfolio for participant's need

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

QDIA "Problem"

- If the plan allows participant direction of at least some investments, some participants won't choose investments
- Typical situations:
  - Profit-sharing plan (so no deferral election)
  - Nonelective contributions (including top-heavy) to 401(k) plan
  - Automatic-enrollment 401(k) plan
- So, plan has to decide how to invest participant's funds

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

ERISA §404(c)(5) Protection a/k/a QDIAs

- §404(c)(1) protection is not available for default investments
- PPA created §404(c)(5) and extended fiduciary protection to default investments, provided certain requirements are met:
  - Participant-directed plan
  - Participant declines to invest funds
  - **Initial and annual participant notices:**
    - Why contributions may be made to default investments
    - Explanation of the right to direct investments and where to get more information
    - How default contributions will be invested
    - Reasonable time for participant to change
  - Approved investment type
  - Right to transfer out of QDIA to other options

What IS a QDIA?

1. Any of the following alternatives (must apply generally accepted investment theories and must be diversified):
   - **A. Lifecycle or target date funds** (investment mix changes as target date approaches)
   - **B. Balanced funds** (appropriate for participants as a whole)
   - **C. Managed account** (investments like target date fund)
2. For first 120 days after participant’s first elective contribution: money market fund
3. “Grandfathered” stable value fund
   - Purchased before December 24, 2007

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

QDIA Notice: Timing

- Initial:
  - EACA (with withdrawal rights)
    - On or before date of plan eligibility
  - Other: at least 30 days before:
    - Date of plan eligibility, or
    - "The date of any first investment in a qualified default investment alternative on behalf of a participant or beneficiary"
- Thereafter:
  - "Within a reasonable period of time of at least 30 days in advance of each subsequent plan year"

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

Protection Offered

- Fiduciary that satisfies conditions is not liable for losses or fiduciary breaches that are direct result of:
  - Investing in QDIA
  - Investment decisions of investment manager relating to QDIA
- Same relief as available for 404(c)(1) plan
- Does not cover fiduciary breach regarding:
  - Selection or monitoring of the QDIA
  - Failure to execute a properly requested transaction
  - Mishandling of plan assets
  - Prohibited transactions

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

To Have Fiduciary Protection:

- Participant must receive timely QDIA notice
- Assets are invested in QDIA
- Participant had opportunity to direct investments but didn’t do so
- Plan offers broad range of investment alternatives
  – At least three diversified investments (like 404(c)(1))
- Participants can move funds out of QDIA consistent with plan terms, at least quarterly, and without penalty
  – Shouldn’t require special plan provision
  – Give same opportunity as participant who elected QDIA investment
- Participant timely receives participant fee disclosures
- Plan or provider forwards investment material to participant
  – Same as under 404(c)(1) if participant had chosen to invest in QDIA

ASPPA
Making Retirement Plans Work
Part of the American Retirement Association

QDIA Issues

- Statutory ACAs
  - Automatic deferral of a uniform percent of compensation
  - Must invest in a QDIA
- No requirement to use a QDIA in an EACA
- QDIA notice may be combined with other notices (EACA/QDIA, EACA/QACA/QDIA)
  - But not the SPD or SMM…

Questions?

Making Retirement Plans Work

Part of the American Retirement Association

AMERICAN SOCIETY OF PENSION PROFESSIONALS & ACTUARIES

ASPPA

50TH

ANNIVERSARY

50 YEARS OF MAKING RETIREMENT PLANS WORK

ASPPA

Making Retirement Plans Work

Part of the American Retirement Association