

# Market Timing Is ...

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# Overview

- Review/update of prior talks
  - Dow Turnarounds (January)
  - Stock Market Timing (March)
  - Rebalancing (June)
- Bond Fund Timing
- Putting it all together
  - Timing + rebalancing
  - Long-term examples

• **NO RECOMMENDATIONS HERE**

# Dow Turnarounds

- Buy & sell stocks in the Dow
  - First buy on “fresh” 52-week low
  - Buy more lots on 8-12% drops
  - Sell when 45% above average purchase price
  - Sell if gets 25% above average and then falls by 20%
  - Sell may factor in taxes, market conditions, available buy candidates
- Some option strategies can be used

# Stocks in Buying Range on 1/4/03

Stock	1/6/2003 Close	11/14/2003 Close	Percent Change	Sell Target
Home Depot	21.82	36.19	65.9%	35.00
McDonalds	16.65	25.68	54.2%	29.50
SBC*	31.19	23.61	-24.3%	43.00

\*Note: SBC made fresh lows in March, shown on next slide. Sell target for newer purchase is lower

Since 1/6/03:

Dow	11.3%
S&P 500	13.1%
Nasdaq	35.8%

# New Buys in 2003

Company	Purchase information			Sale/recent price information			Dow since 1st buy
	Date(s)	Avg. Price	# of Buys	Date	Price	Avg. %	
<i>Boeing</i>	<i>2/20/03 - 3/6/03</i>	<i>27.32</i>	<i>2</i>	<i>11/13/2003</i>	<i>40.00</i>	<i>46.4%</i>	<i>24.3%</i>
<i>DuPont</i>	<i>3/5/2003</i>	<i>35.01</i>	<i>1</i>	<i>11/14/2003</i>	<i>40.19</i>	<i>14.8%</i>	<i>25.6%</i>
<i>General Motors</i>	<i>3/7/2003</i>	<i>30.79</i>	<i>1</i>	<i>11/14/2003</i>	<i>42.27</i>	<i>37.3%</i>	<i>26.2%</i>
<i>SBC Communications</i>	<i>3/10/2003</i>	<i>19.56</i>	<i>1</i>	<i>9/24/2003</i>	<i>21.88</i>	<i>11.9%</i>	<i>24.5%</i>
<i>AT&amp;T</i>	<i>3/10/03 - 4/10/03</i>	<i>15.37</i>	<i>3</i>	<i>7/28/2003</i>	<i>22.00</i>	<i>43.1%</i>	<i>22.4%</i>
<i>Altria (Phillip Morris)</i>	<i>3/12/03 - 3/31/03</i>	<i>32.38</i>	<i>3</i>	<i>7/8/2003</i>	<i>47.00</i>	<i>45.1%</i>	<i>22.1%</i>
<i>Eastman Kodak</i>	<i>7/21/03 - 9/26/03</i>	<i>23.41</i>	<i>3</i>	<i>11/14/2003</i>	<i>24.64</i>	<i>5.3%</i>	<i>7.4%</i>
<i>Johnson &amp; Johnson</i>	<i>8/22/2003</i>	<i>49.09</i>	<i>1</i>	<i>11/14/2003</i>	<i>52.12</i>	<i>6.2%</i>	<i>4.5%</i>
<i>Merck</i>	<i>10/20/03-10/24/03</i>	<i>46.51</i>	<i>2</i>	<i>11/14/2003</i>	<i>46.58</i>	<i>0.1%</i>	<i>1.8%</i>

## November - April Timing Model

- Be in market for those months
- 10/31/02 - 4/30/03: S&P 500 +3.5%
- 4/30/03 - 10/31/03: +14.6%
- Since 10/31/03: -0.03% (11/14)

- Keep in mind that primary purpose of market timing is risk reduction.
- Timing will be important if we are in a long sideways channel like 1966-82.

# Triple 40 Timing Model (1)

- Weekly (Friday data) calculations:
  - 40 week moving average of S&P 500
  - 40 week MA of 90-day T-Bill rate
  - 40 week MA of 10-year T-Bond rate
- Model signals (comparisons to MAs):
  - Buy if S&P is above its MA and at least one T-rate is below its MA
  - Sell if S&P is below its MA or both T-rates are above their MAs

## Triple 40 Timing Model (2)

- Sell signal on 4/5/02
- Buy 3/21/03, sell 3/28/03
  - S&P 500 -3.6% (Friday to Friday)
  - “whipsaws” are fairly unusual
  - S&P fell 20.2% during sell signal
- Buy signal on 4/17/03, still current
  - S&P +17.5% since then (as of 11/14)



# Some Alternatives to Timing

- **Buy and Hold**
  - Works (in theory)
  - Very hard for most to do in reality
    - can't resist panic selling in a bear market
    - normally buy back in at higher prices if at all due to being scared of stocks
- **Rebalance periodically**
  - Increases returns and reduces risk
  - Requires discipline; can be hard to do
  - Can use with timing, other methods

# Bond Fund Timing: 3 Simple Models

- Purchasing Managers Index (PMI)
  - Monthly, released at end of month
  - Sell if above 50, buy if 50 or below
  - Works best on short-term bond funds
- Merriman web site ([fundadvice.com](http://fundadvice.com))
  - Free
  - E-mail notice of signals
  - Also has stock timing models, articles
  - Bond model is a “black box”

# Bond Fund Timing: 3 Simple Models

- Bills, Bonds, Utilities (BBU)
- Weekly (Friday data) calculations:
  - 38 week MA of 90-day T-Bill rate
  - 10 week MA of 10-year T-Bond rate
  - 10 week MA of Dow Jones Utilities
- Model signals (comparisons to MAs):
  - Buy if Bond rate is below its MA and either Bills below or Utilities above MA
  - Sell if Bond rate is above its MA and either Bills above or Utilities below MA

## Bond Fund Timing: 2003 Signals

- Merriman: Buy 11/8/02, Sell 7/22/03, Buy 11/3/03
- PMI (end of month): Sell Nov. 2002, Buy March 2003, Sell July 2003
- BBU: Buy 11/8/02, Sell 7/11/03, Buy 9/19/03, Sell 11/7/03

# Bond Funds, Models: 1989 - 10/03

	Annualized Return	Worst Years Drawdown	Worst Years Down	Worst Year Return	Worst Year Year
Fidelity Investment Grade Bond Fund					
Buy & Hold	12.0%	-8.0%	2	-5.4%	1994
PMI	10.4%	-4.5%	0	1.0%	1992
Merriman	11.3%	-3.2%	0	1.5%	1999
BBU	11.1%	-3.0%	0	0.6%	1996
Vanguard Total Bond Market Index Fund					
Buy & Hold	11.8%	-6.5%	2	-2.7%	1994
PMI	10.4%	-4.5%	0	0.9%	1992
Merriman	10.8%	-3.5%	0	1.5%	1999
BBU	10.9%	-3.5%	0	0.8%	1996
Vanguard Short-term Corporate Bond Fund					
Buy & Hold	10.5%	-3.1%	1	-0.1%	1994
PMI	10.5%	-1.9%	0	2.2%	1992
Merriman	9.8%	-2.2%	0	2.2%	2002
BBU	10.0%	-2.1%	0	3.0%	2002

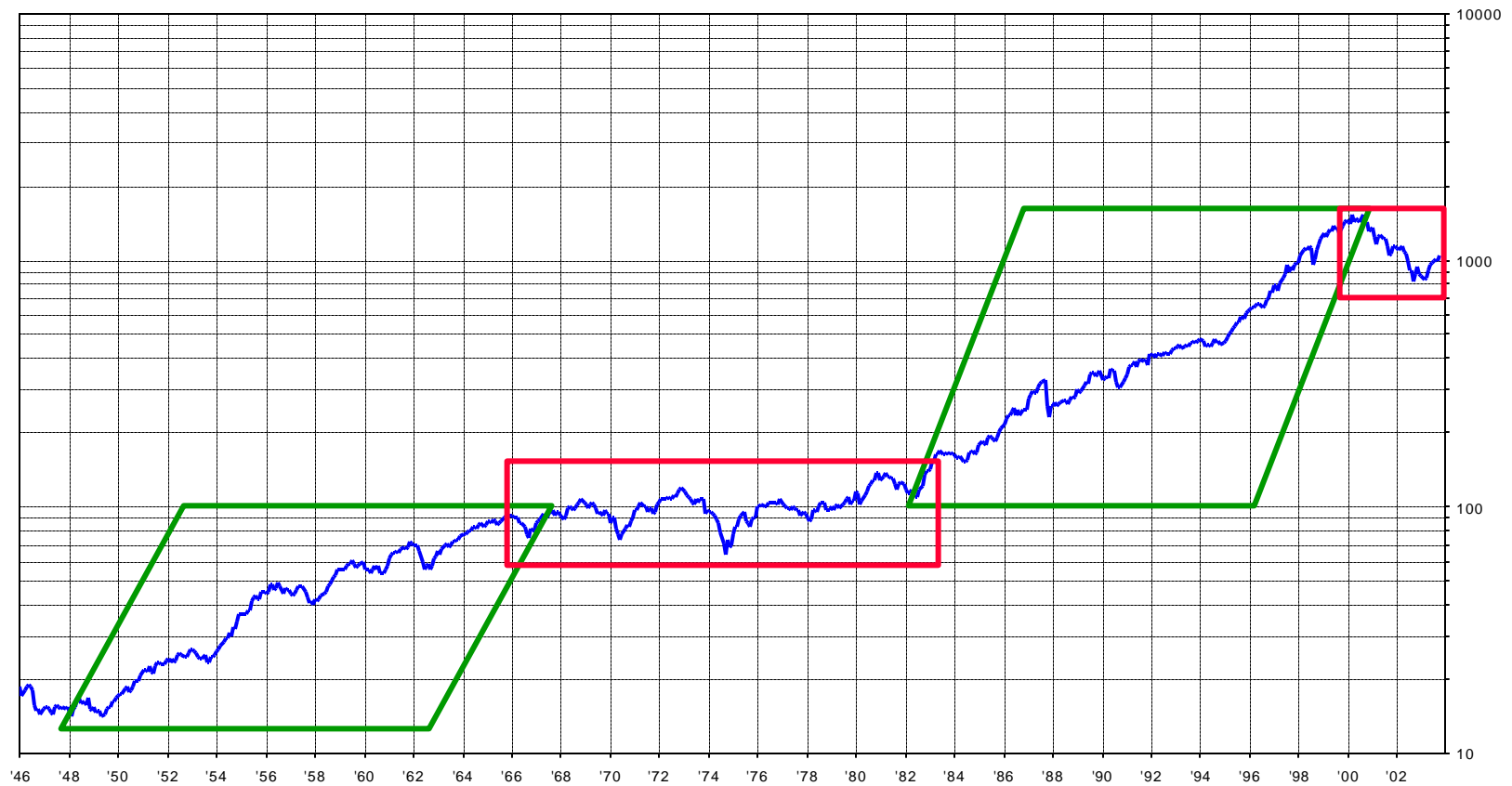
# Bond Fund Timing Models

- Do not return more than buy & hold
- Reduce risks substantially
- Hypothetical 10-year T-Bond fund
  - 1963 - 10/2003
  - BBU timing model
  - Returns: 7.6% B&H, 9.3% timed
  - Max DD: -24.9% (1980), -7.7% (2002)
  - Down Years: 10 B&H, 2 (77,96) timed
  - Worst year: -8.3% (99), -1.7% (96)

# Portfolio Management

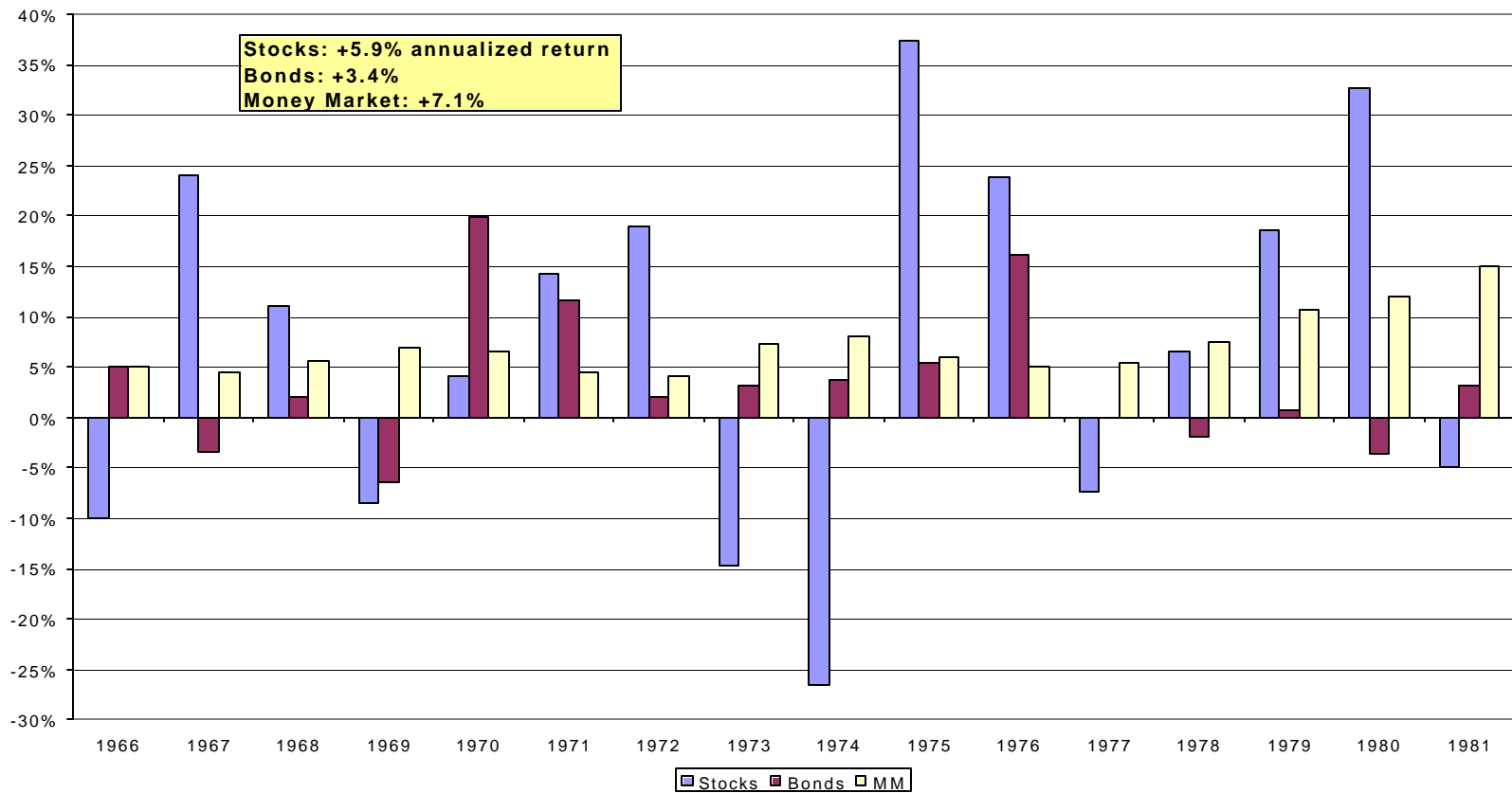
- Stock & bond timing, rebalancing
- Long historical period to incorporate different market environments
- Very basic holdings: stocks, bonds, and/or money market
  - Stocks: S&P 500 total return
  - Bonds: Hypothetical T-Bond fund
  - Money market: T-Bills - 0.25%

# S&P 500: 1946 - 2003 (log scale)

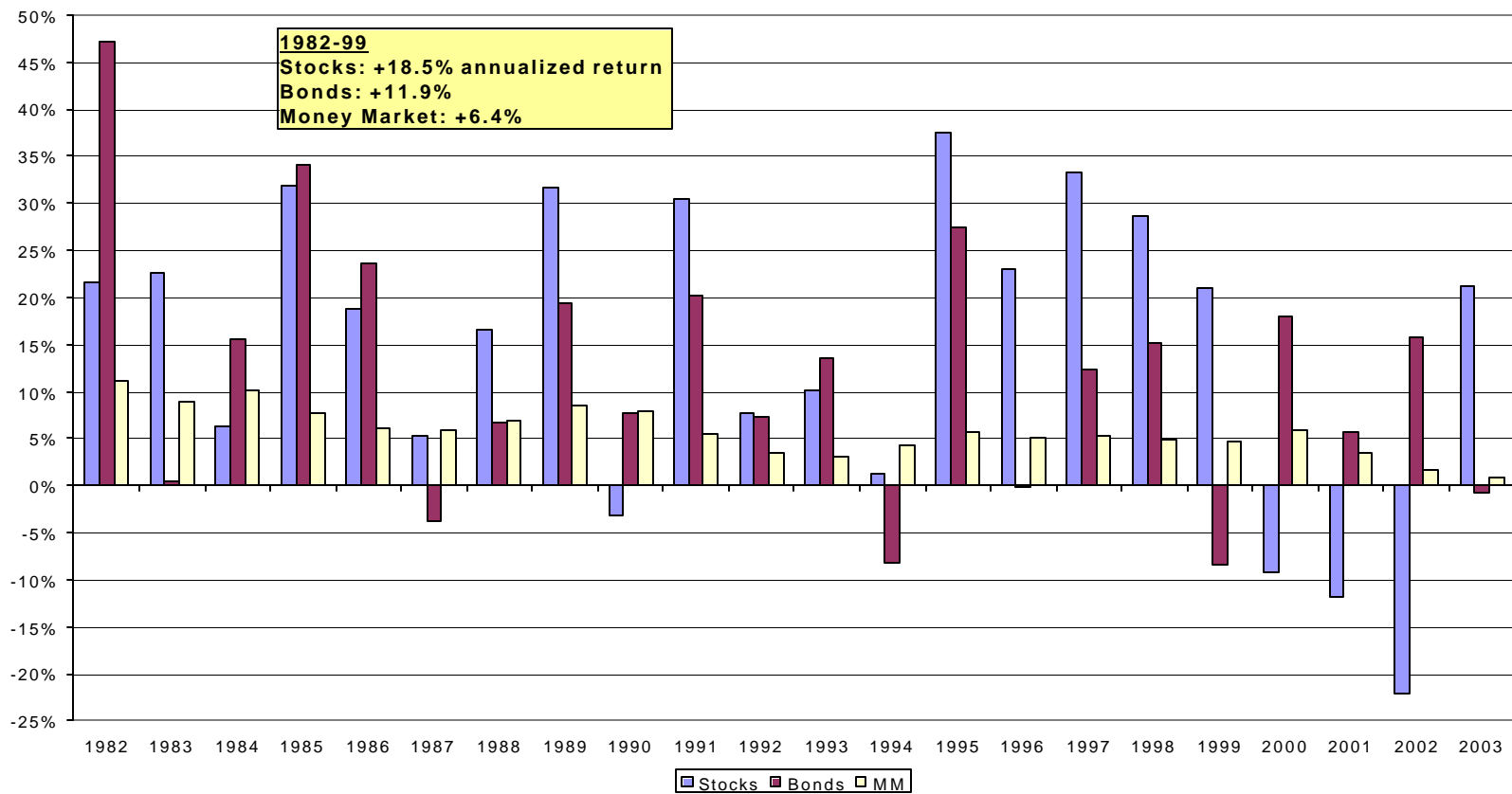




# Stocks, Bonds, MM: 1966-81



# Stocks, Bonds, MM: 1982-Oct. 2003



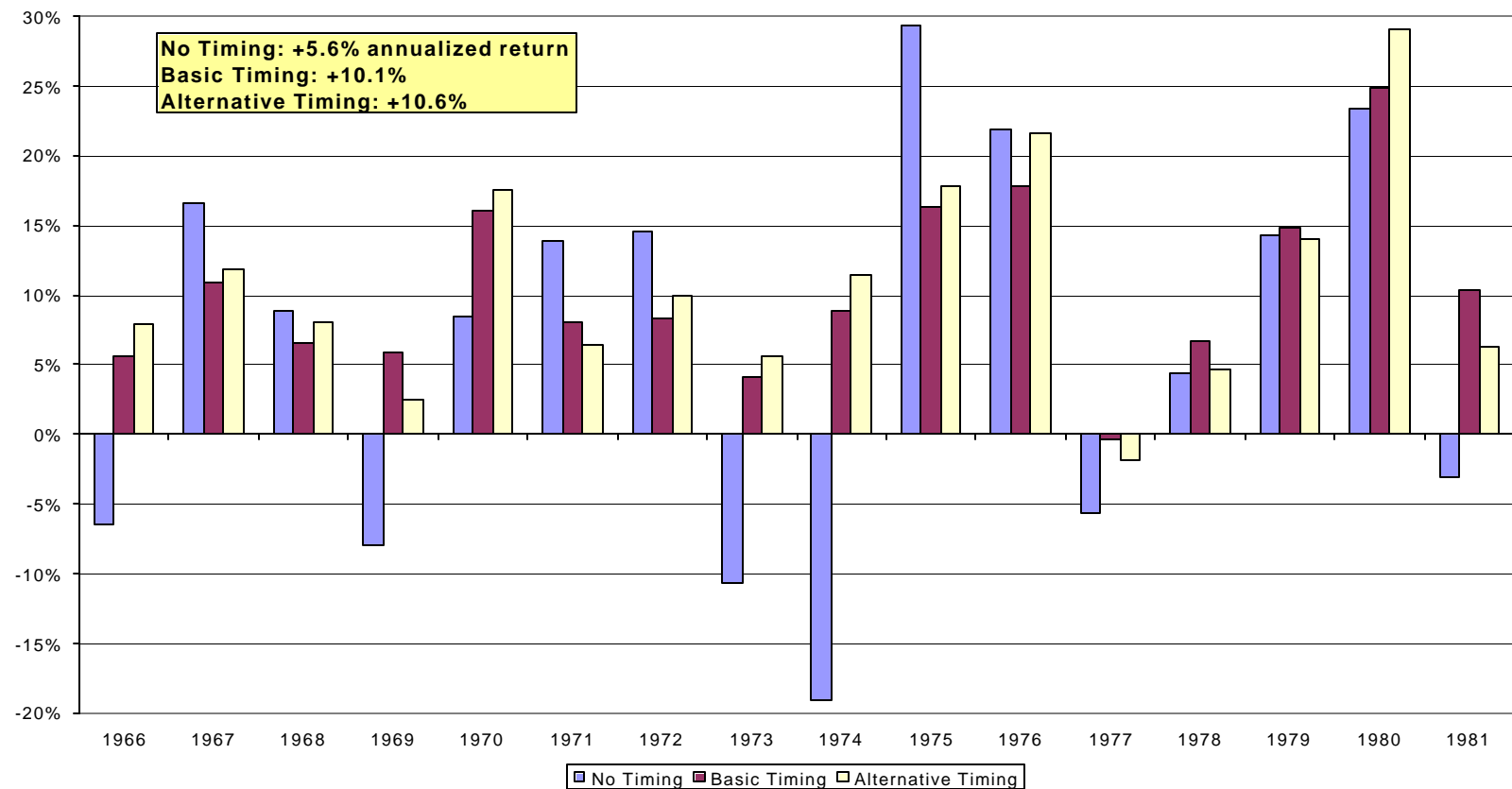
# 1963 - 2003 Evaluations

- **Stocks/Bonds/MM allocations:**
  - 75/25/0% (younger, risk tolerant)
  - 50/40/10% (middle)
  - 35/35/30% (conservative, retirement)
  - Rebalance quarterly if off by  $\geq 3\%$  &
    - no timing (rebalance only)
    - Triple-40 model for stocks, BBU for bonds
    - alternative timing when 1 sell, 1 buy
- **Risk measures**
  - Drawdown
  - Negative semi-deviation calculated using monthly returns

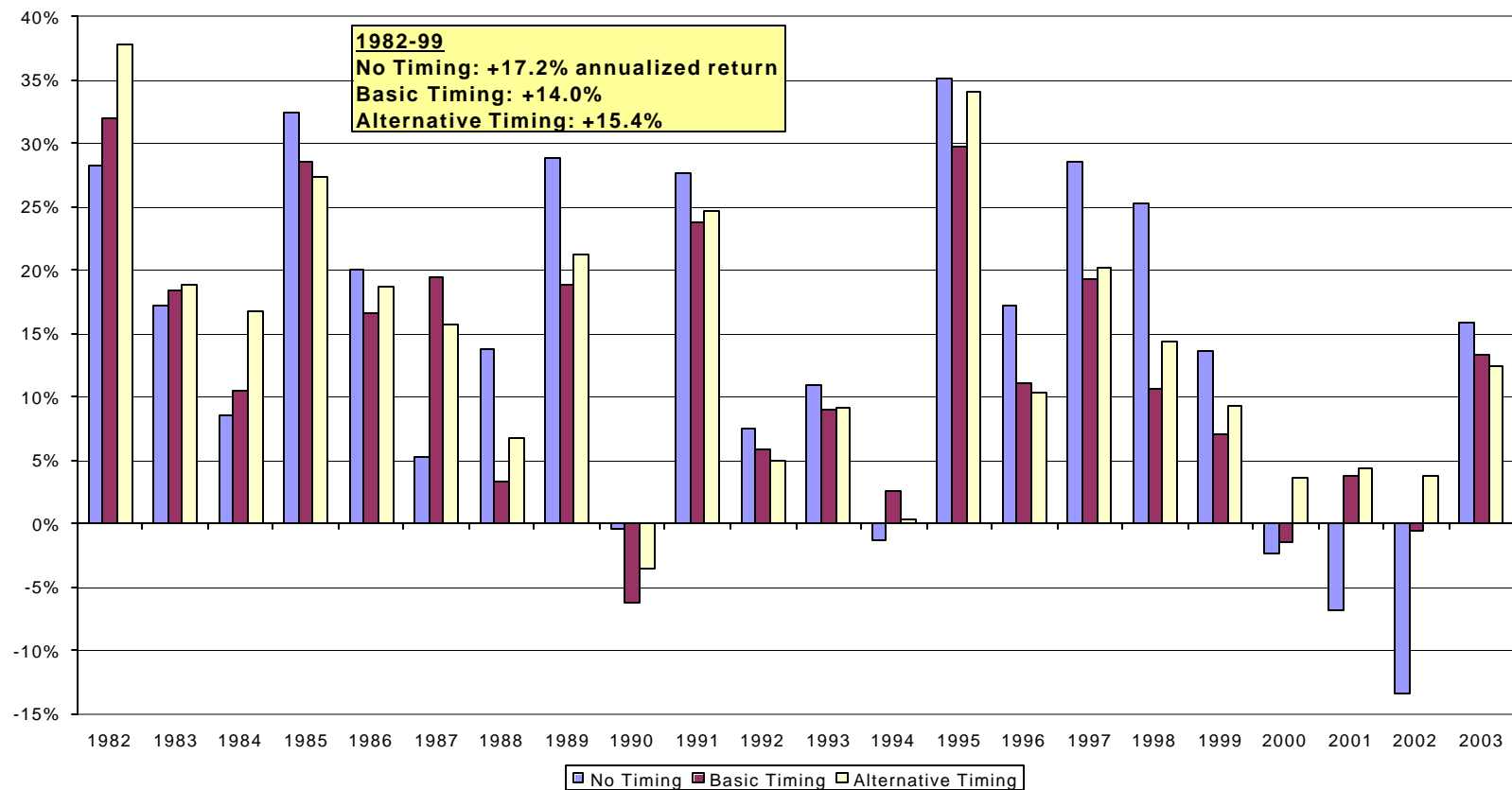
# 75/25/0 Portfolio: 1963 - 2003

<b>No timing, just rebalancing</b>	<b>Timing &amp; rebalancing</b>	<b>Alternative Timing</b>
Annualized Return: 10.3%	10.9%	12.0%
Max Drawdown: -35.4%	-14.3%	-14.7%
Date: 10/3/74	9/2/98	9/2/98
Negative Deviation: 2.04%	0.99%	1.20%
Down months: 182	92	123
% down months: 37.1%	18.8%	25.1%
Down years: 11	4	2
% down years: 26.8%	9.8%	4.9%
Worst year: -19.0%	-6.3%	-3.6%

# 75/25/0 Portfolio: 1966 - 1981



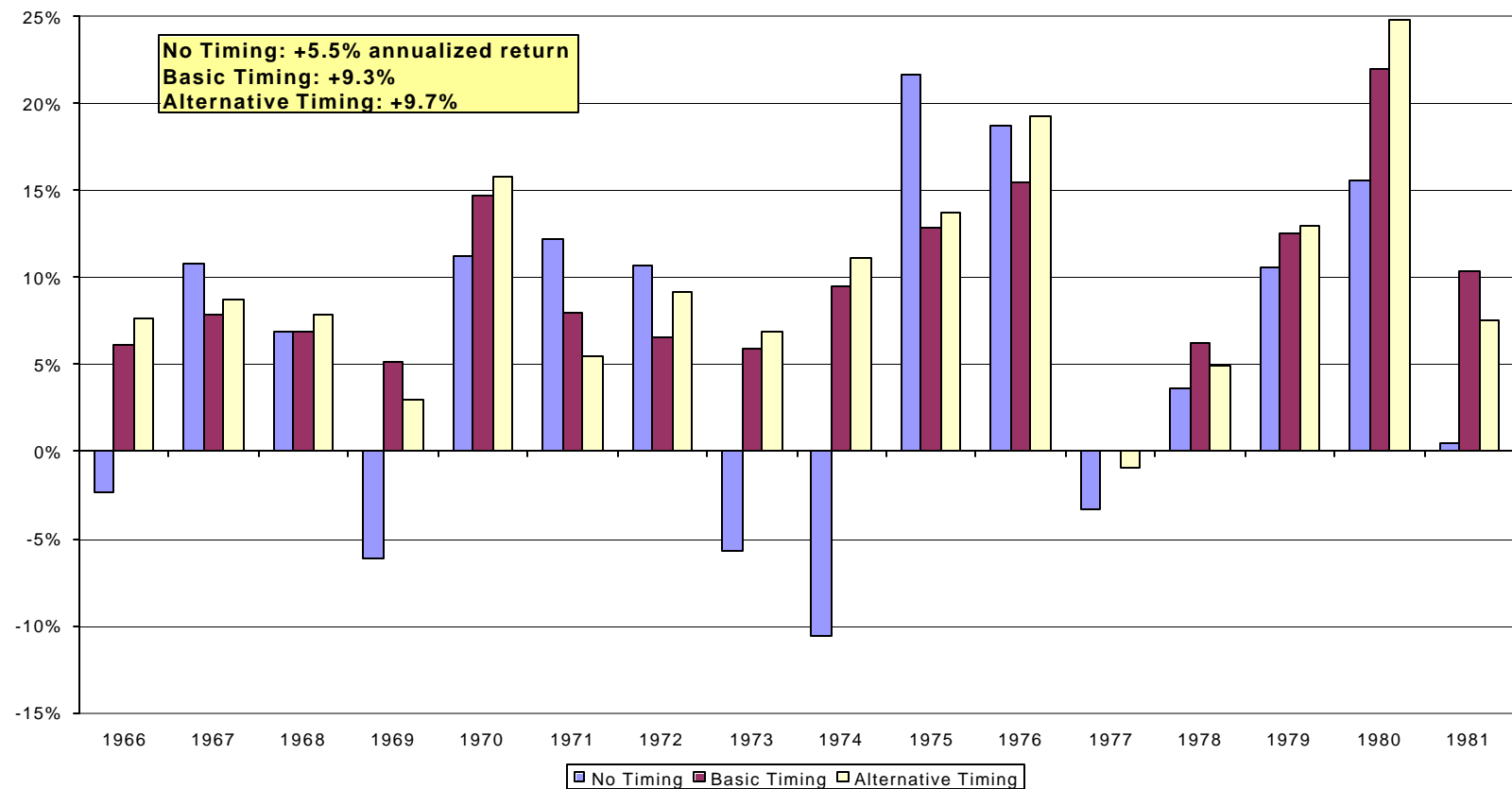
# 75/25/0 Portfolio: 1982 - 2003



# 50/40/10 Portfolio: 1963 - 2003

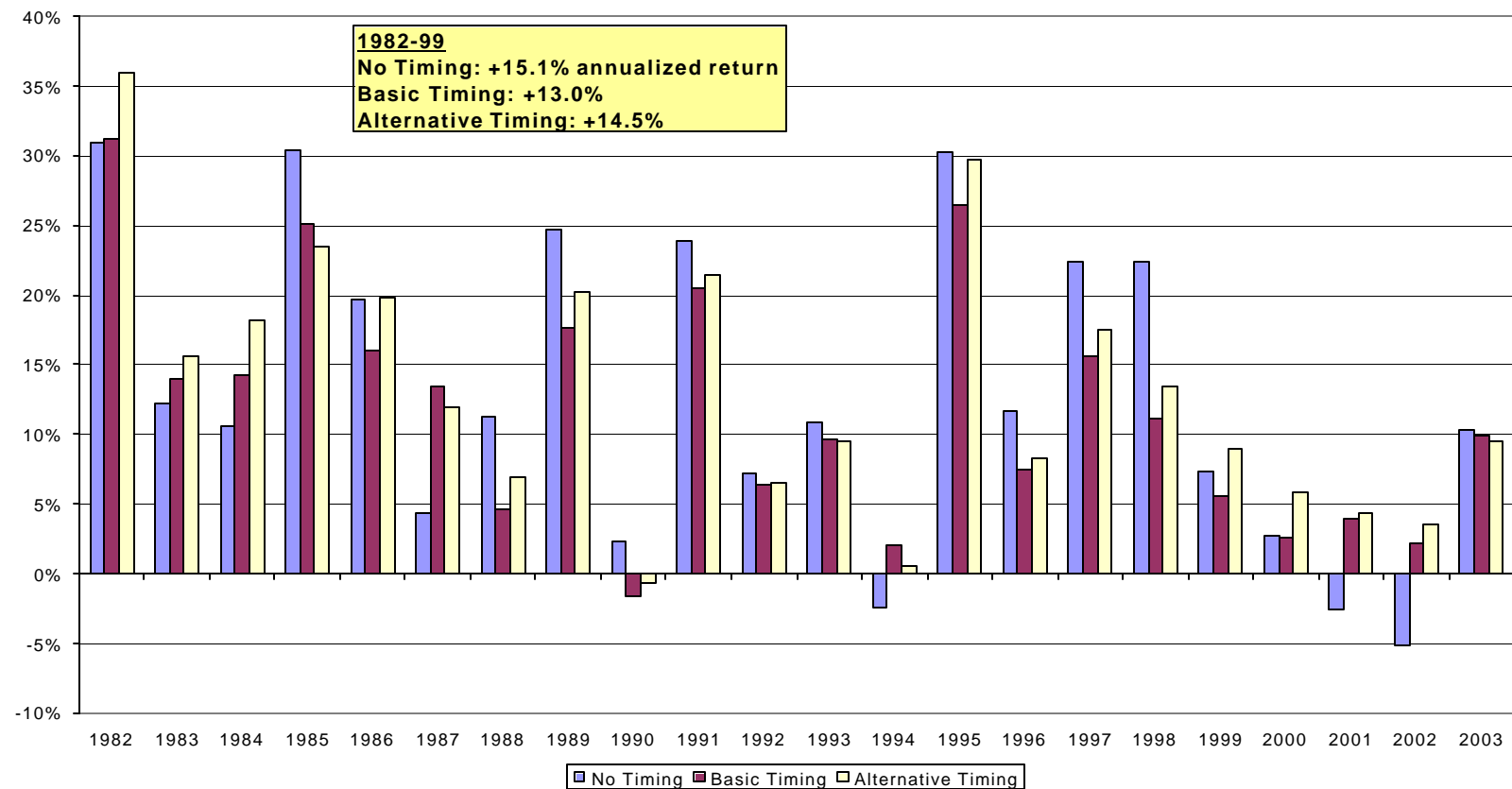
<b>No timing, just rebalancing</b>	<b>Timing &amp; rebalancing</b>	<b>Alternative Timing</b>
Annualized Return: 9.5%	10.2%	11.1%
Max Drawdown: -23.2%	-8.3%	-9.9%
Date: 10/3/74	9/2/98	5/14/02
Negative Deviation: 1.41%	0.69%	0.97%
Down months: 180	91	115
% down months: 36.7%	18.6%	23.5%
Down years: 8	1	2
% down years: 19.5%	2.4%	4.9%
Worst year: -10.6%	-1.6%	-1.0%

# 50/40/10 Portfolio: 1966 - 1981





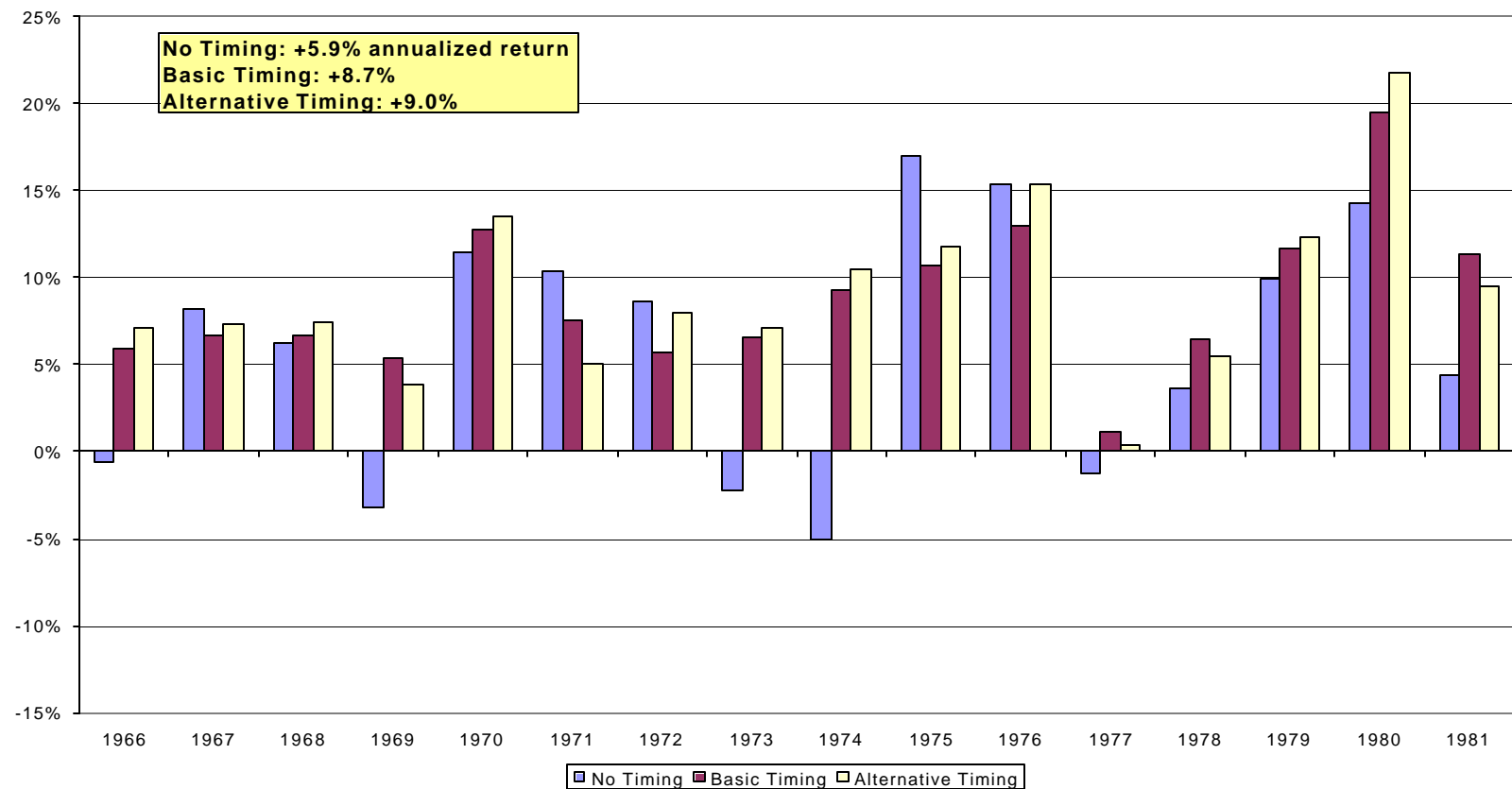
# 50/40/10 Portfolio: 1982 - 2003



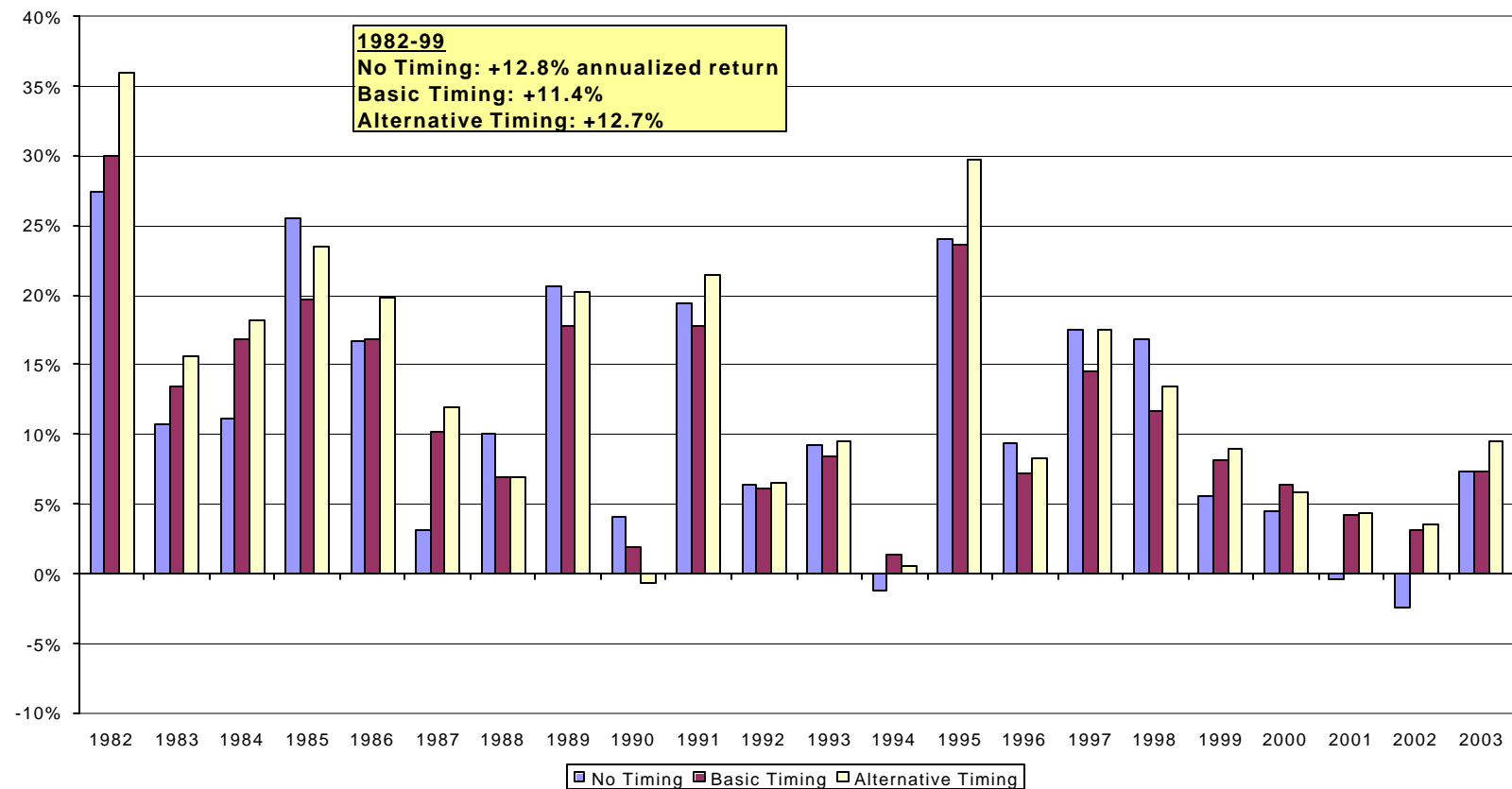
# 35/35/30 Portfolio: 1963 - 2003

<b>No timing, just rebalancing</b>	<b>Timing &amp; rebalancing</b>	<b>Alternative Timing</b>
Annualized Return: 8.7%	9.2%	10.0%
Max Drawdown: -15.0%	-5.6%	-7.7%
Date: 10/19/87	9/2/98	5/14/02
Negative Deviation: 0.98%	0.49%	0.71%
Down months: 166	81	100
% down months: 33.9%	16.5%	20.4%
Down years: 8	0	0
% down years: 19.5%	0.0%	0.0%
Worst year: -5.0%	1.1%	0.4%

# 35/35/30 Portfolio: 1966 - 1981



# 35/35/30 Portfolio: 1982 - 2003



# Timing Plus Rebalancing Works

- Modest increases in returns over a long period of time
  - Likely to underperform in bull markets
  - Much better returns in bear markets
- Substantial risk reduction
  - But allocation is more important
  - May enable sticking with investment plans -- an important advantage
- Timing greatly reduces frequency of rebalancing

# Mark Pankin

- RIA since October 1994
- Managed account expertise/services
  - Market timing: tactical asset allocation
  - Dow Jones Industrial stocks
  - Sector fund trading (Fidelity, Rydex)
  - Portfolio design, rebalancing
- Much more at [www.pankin.com](http://www.pankin.com)
  - Click on Investments, then Managed Accounts, follow links
  - Info about Mark and his interests