Practical Portfolio Construction

Ryerson Investment Club March 11, 2009

Norm Rothery, PhD, CFA

Chief Investment Strategist www.stingyinvestor.com www.danhallett.com

Dan Hallett & Associates

Dan Hallett and Associates is an investment counsel and independent research firm offering services to individuals, advisors, and institutions.

For Individual Investors

- Investment and financial planning advice provided on a fee-for-service basis.
 - Minimum portfolio size is \$250,000.
 - We favour value investing & index investing.

The Rothery Report

The Rothery Report stock newsletter covering Canadian & U.S. equities for value investors.

Rothery Report Performance

(March 2001 to December 2008)

Average Capital Gain 26.5%

Average Holding Period 2.3 Years

S&P500: -22.2%, TSX Composite: +18.1% 1/2 S&P + 1/2 TSX: -2.1%

Overview

Before investing

Investing the surplus

Easy things to control

- Fees
- Trading

Why Indexing is worth considering

A few ETFs & index funds

Diversification

- Historical perspective
- Asset allocation
- Asset mixer

State of the markets

- History of bear markets
- Stock valuation

Further reading

Before investing

Be debt free

- No Credit Card Balances
- No Loans
- No Mortgages

"I've seen more people fail because of liquor and leverage - leverage being borrowed money. You really don't need leverage in this world much. If you're smart, you're going to make a lot of money without borrowing."

- Warren Buffett

Have a rainy day fund

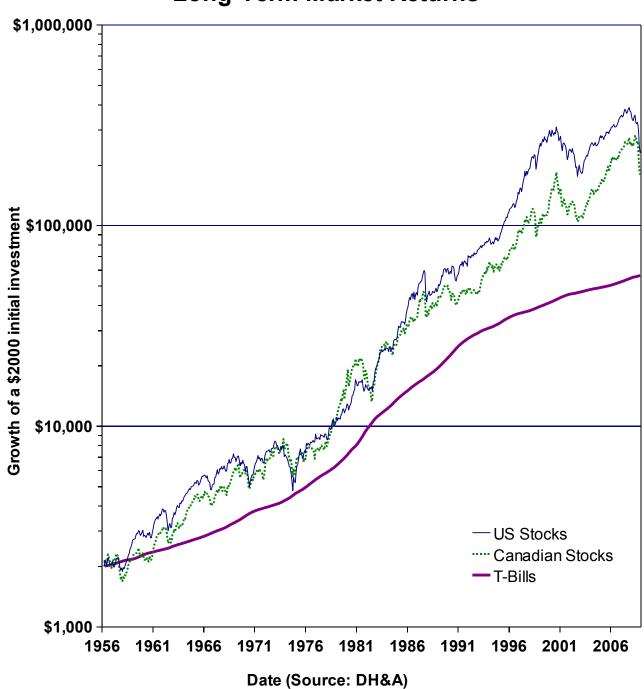
- Stash 3-6 months of income in short term notes
 - High interest bank accounts
 - ING Direct, PC Financial, etc.
 - Short-term GICs
- Save for large ticket items
 - Homes
 - Cars
 - Tuition
 - Medical

Insurance

Make sure that your family is fully covered

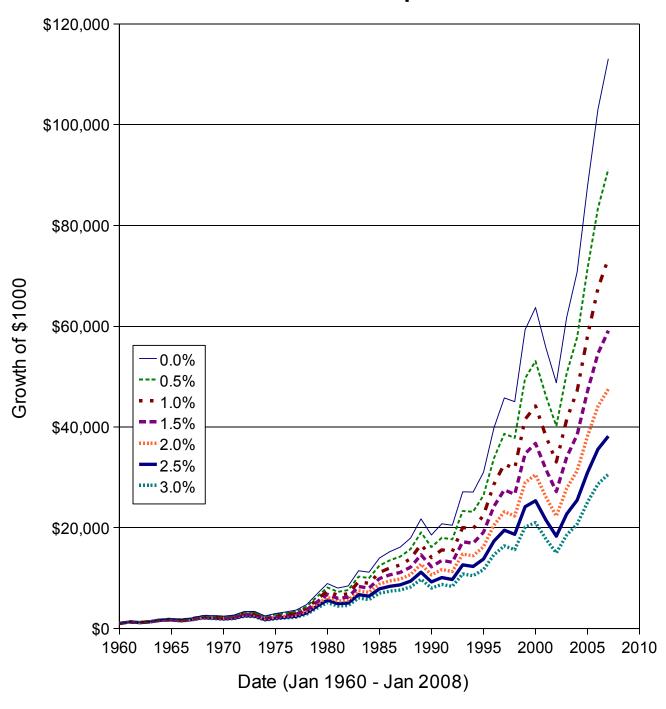
Investing the surplus

Long-Term Market Returns



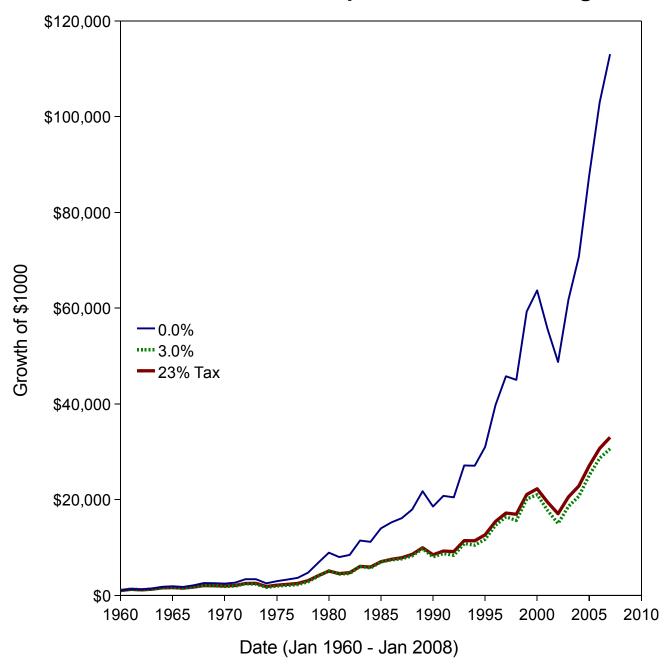
Control Fees: TSX return after fund fees

Return of the S&P/TSX Composite less fees



Cut Taxes

Return of the S&P/TSX Composite with a tax on gains



If possible use RRSPs / TFSAs / etc. to reduce taxes

Trading can be dangerous

Poor Timing

- Taiwan Stock Exchange 1995-2000
 - Average turnover ranged between 308% and 630%
 - Average annual trading losses of 350 bps.

- Who Gains from Trade? (Barber et al.)

The average U.S. mutual fund earned 5.7% annually from 1998 to 2001 and the average fund investor earned 1%. Poor timing reduced returns by 470 bps a year.

- June 2002 Money Magazine (Jason Zweig)

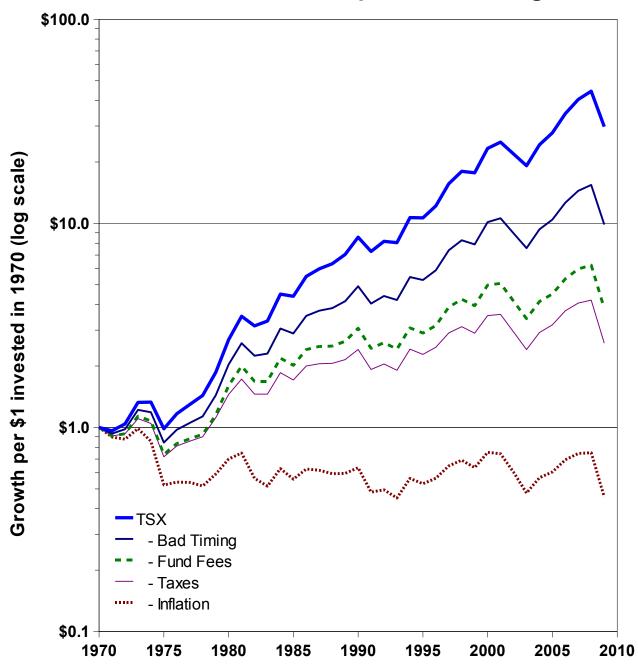
The Vanguard Total Stock Market Index Fund lost 0.7% annually over the last 10 years but the average fund investor lost 3.7% a year. Poor timing reduced returns by 300 bps a year.

- December 31, 2008 (Morningstar.com)

- Over the long term, poor timing reduced returns by
 - 130 bps for the NYSE/AMEX market from 1926-2002
 - 530 bps for the Nasdaq from 1973-2002
 - 150 bps for 19 world stock markets from 1973-2002
 - What are Stock Investors' Actual Historical Returns? (Ilia D. Dichev)

Investing with friction

Growth of the S&P/TSX Composite Including Costs



Year (Annual Drags: 3% Bad Timing, 2.5%Fees, 23% Capital Gains Tax)

Why indexing might be a good choice

Simply buy a basket of stocks that mimics an index.

S&P 500 vs. Large Cap Equity Funds to 12/31/2003						
Years 1 3 5 10 20						
% S&P Outperformed 73% 72% 63% 86% 90%						
Source: Burton G. Malkiel, Lipper, Wilshire & the Vanguard Group						

Potential Advantages

- low cost
- broad diversification
- tax efficiency through low turnover

Potential Disadvantages

- selecting a good index
- high-fee index funds & ETFs
- limited diversification from specialty indexes
- high turnover on specialty funds
- valuation

Average Annual Index Turnover (1998 - 2003)						
S&P 500						
4.6%	26.1%	24.6%	34.3%	41.7%	47.4%	

Sources: Burton G. Malkiel, Frank Russell Co. and The Vanguard Group Note: Fund turnover not the same as strategy turnover

Select ETFs & index funds

Canadian Exchange Traded Funds	MER
iShares S&P/TSX 60 (T:XIU)	0.17%
iShares S&P/TSX Composite (T:CIX)	0.25%
iShares Canadian Bond (T:XBB)	0.30%
iShares Canadian Dividend (T:XDV)	0.50%
iShares Canadian Value (T:XCV)	0.50%
U.S. & International Exchange Traded Funds	MER
Vanguard Total Stock Market (N:VTI)	0.07%
Vanguard FTSE All-World ex-US (N:VEU)	0.25%
Vanguard Total World Stock (N:VT)	0.25%
Vanguard Dividend Appreciation (N:VIG)	0.28%
Vanguard High Dividend Yield (N:VYM)	0.25%
Index Funds	MER
TD Canadian Index eFund	0.31%
TD Government Bond Index eFund	0.48%
TD U.S. Index eFund	0.33%
TD International Index eFund	0.48%

Diversification

"Divide your fortune into four equal parts: stocks, real estate, bonds, and gold coins. Be prepared to lose on one of them most of the time. During inflation, you will lose on bonds and win on gold and real estate; during deflation, you will lose on real estate and win on bonds while your stocks will see you through both periods, though in a mixed fashion. Whenever performance differences cause a major imbalance, rebalance your fortunes back to the four equal parts."

- Jacob Fugger the Rich, 1459-1525

Asset Allocation

The Couch Potato

Select a simple asset allocation and stick with it

Couch Potato Portfolios	Canadian Bonds	Canadian Stocks	U.S. Stocks	International Stocks
Classic	34%	33%	33%	
Global	40%	20%	20%	20%
High-Growth	25%	25%	25%	25%

Age Determined

Set the % in Bonds to one's age. That way you move into less risky assets over time. Bonus points for living to 100+.

Risk Adjusted

Allocation based on an involved analysis which includes a discussion of return objectives, investment time horizon, risk tolerance, liquidity needs, constraints, etc.

Potential Problems

- Bonds may well be risky. (Inflation & default)
- Above average wealth may allow for riskier posture
- Special needs or constraints.
- The value offered by any particular asset may be poor

Asset Mixer

The Stingy Investor Asset Mixer

Asset Class	Start Year	Alph	a	Wei	ght
3 month T-bills	1961	0.00	%	0.00	% ±1:
Short Canadian Bonds	1980	0.00	%	0.00	% ±1:
Long Canadian Bonds	1970	0.00	%	0.00	% ±1:
All Canadian Bonds	1961	0.00	%	25.00	% ±1:
Real Return Bonds	1992	0.00	%	0.00	% ±1-
TSX Composite	1961	0.00	%	25.00	% ±1-
S&P500	1961	0.00	%	25.00	% ±1-
Wilshire 5000	1975	0.00	%	0.00	% ±1:
MSCI EAFE	1961	0.00	%	25.00	% ±1-
MSCI Emerging Markets	1988	0.00	%	0.00	% ±1:
Gold Bullion	1970	0.00	%	0.00	% ±1=
Options:					
Annual Withdrawal Rate (%):					0.00
Starting Portoflio Size (\$):				1000	.00
Year Range	Start	: 1961		Stop:	2007
Set Global Alpha Assumption:				None	¥
Nominal ▼ pretax returns in	Canadian d	ollar	S.		
Use Historic ▼ returns					

URL: http://www.stingyinvestor.com/cgi-bin/downside_adv.cgi

Asset Mixer: Select Results

Return vs Volatility (1961 to 2008)						
Asset	Alpha	Arithmetic Avg Return	Standard Deviation			
Portfolio	0.00%	10.73%	12.39%			
3 month T-bills	0.00%	6.86%	3.82%			
Long Canadian Bonds	0.00%	8.72%	10.36%			
All Canadian Bonds	0.00%	8.29%	7.42%			
TSX Composite	0.00%	10.75%	16.64%			
S&P500	0.00%	11.17%	17.44%			
MSCI EAFE	0.00%	12.70%	21.41%			
Gold Bullion	0.00%	9.77%	26.64%			

Periodic Table of Annual Returns (2003 to 2008)						
2003	2004	2005	2006	2007	2008	
+28.4%	+17.5%	+30.2%	+32.9%	+18.9%	+28.2%	
Emerg Mkt	RRBs	Emerg Mkt	Emerg Mkt	Emerg Mkt	Gold	
+26.7%	+16.8%	+24.1%	+27.1%	+12.2%	+8.6%	
TSX	Emerg Mkt	TSX	EAFE	Gold	S.Bond	
+14.4%	+14.5%	+15.2%	+23.5%	+9.8%	+6.4%	
EAFE	TSX	RRBs	Gold	TSX	All Bond	
+13.4%	+11.9%	+13.9%	+17.3%	+4.3%	+2.8%	
Portfolio	EAFE	Gold	TSX	T-Bill	T-Bill	
+13.2% RRBs	+10.3% L.Bond	+13.8% L.Bond	+16.1% Portfolio	V-0-10-10-10-10-10-10-10-10-10-10-10-10-1		
+9.1% L.Bond	+9.1% Portfolio		+16.1% Wilshire	+3.7% All Bond	5,700,700	
+8.2%	+7.1%	+10.3%	+16.0%	+3.4%	−19.8%	
Wilshire	All Bond	EAFE	S&P500	L.Bond	Portfolio	
+6.7%	+5.1%	+6.5%		+1.6%	-22.6%	
All Bond	S.Bond	All Bond		RRBs	S&P500	
+5.8%	+4.4%	+2.9%	+4.1%		-23.0%	
S&P500	Wilshire	Wilshire	All Bond		Wilshire	
+5.1%	+2.8%	+2.6%	+4.0%	-5.0%	-30.0%	
S.Bond	S&P500	T-Bill	T-Bill	EAFE	EAFE	
+2.9% T-Bill	+2.3% T-Bill	+2.4% S.Bond	+4.0% S.Bond	-10.1% Wilshire		
-1.5%	-3.0%	+1.5%	-2.9%	-10.3%	-42.5%	
Gold	Gold	S&P500	RRBs	S&P500	Emerg Mkt	

Asset Mixer: Select Results

Overall Portfolio Stats (1961 to 2008)			
Average Gain (Geometric)		10	0.011%
Average Gain (Arithmetic)		10	0.726%
Median Annual Gain		1	3.237%
Standard Deviation		13	2.385%
Total Growth (%)			9649%
Total Value of a \$1000 Investment		\$97	491.91
Total Down Years	10	years	(21%)
Total Years < 5.00%	14	years	(29%)
Total Years < 10.00%	18	years	(38%)
Total Time Span		48	years

Worst Drops (1961 to 2008)					
Drop Starts	Drop	Recovery Time			
1973	-22.25%	3 years			
2008	-19.80%	still down			
1974	-16.83%	1 year			
2001	-16.82%	3 years			
2002	-10.75%	1 year			

Scenari	0	Return
1929-32	US-style equity decline (down 89%)	-66.75%
1906-07	US-style equity decline (down 49%)	-36.75%
1973-74	US-style equity decline (down 45%)	-33.75%
1987-87	US-style equity decline (down 36%)	-27.00%
1923-24 99.99%)	German-style hyperinflation (bonds down	-25.00%

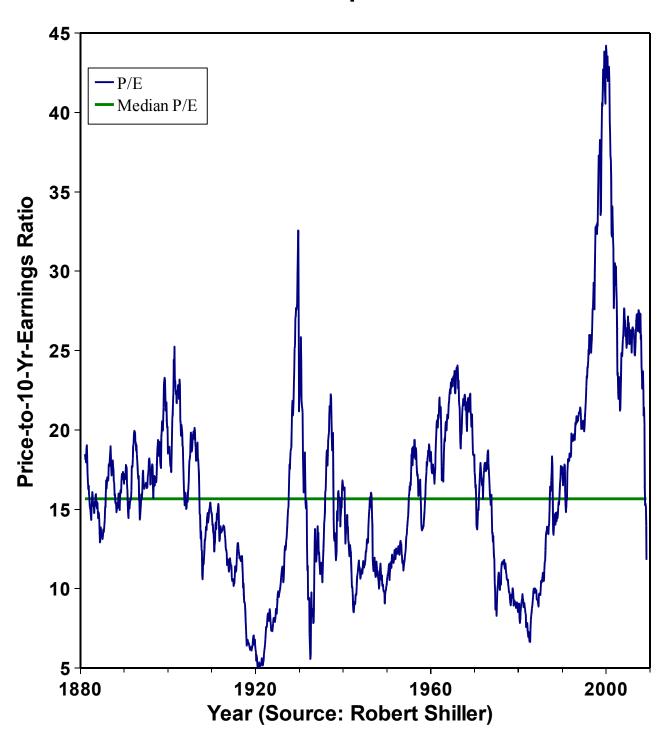
U.S. Bear Markets

Bear markets for the S&P500 based on monthly data					
Pe	eriod	Peak-Trough	Months to	Months to	
Start	End	Decline	Trough	Recovery	
Mar-1876	Feb-1879	-33.1%	15	20	
Sep-1882	Nov-1885	-20.8%	21	17	
Jan-1893	Aug-1897	-25.1%	4	48	
Sep-1902	Nov-1904	-25.8%	13	13	
Sep-1906	Dec-1908	-34.0%	14	13	
Nov-1916	May-1919	-28.0%	13	17	
Oct-1919	Apr-1922	-22.8%	22	10	
Aug-1929	Jan-1945	-83.4%	33	151	
Nov-1947	Oct-1949	-21.8%	6	35	
Jun-1962	Apr-1963	-22.3%	6	10	
Dec-1968	Jan-1972	-31.5%	19	19	
Jan-1973	Sep-1976	-43.3%	21	24	
Sep-1987	Jul-1989	-30.2%	3	20	
Sep-2000	Mar-2006	-43.3%	25	42	
Oct-2007	Mar-6-2009	-54.0% (?)	17 (?)	?	
Averages		-33.7%	15	31	

Sources: Robert Schiller, indexfunds.com, S&P/Citigroup, Based on Month End Data

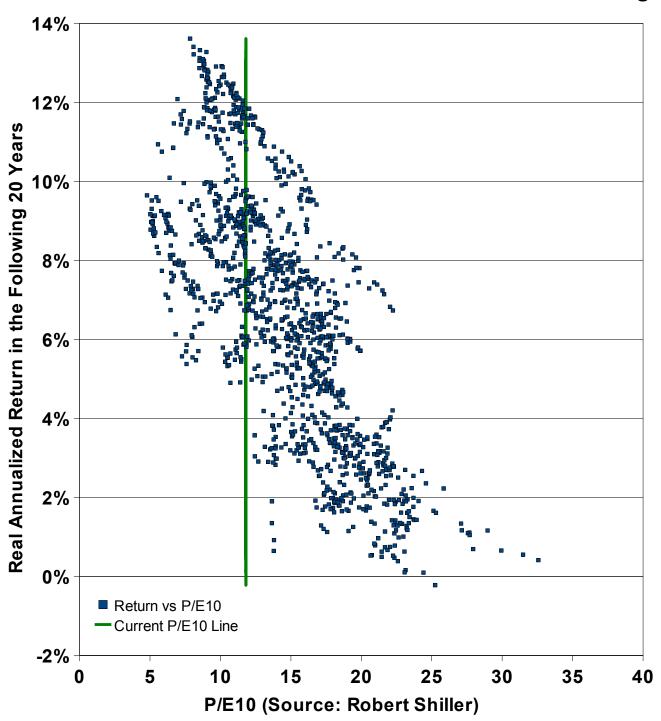
U.S. Stock Valuation

U.S. Stocks Cheapest Since 1990



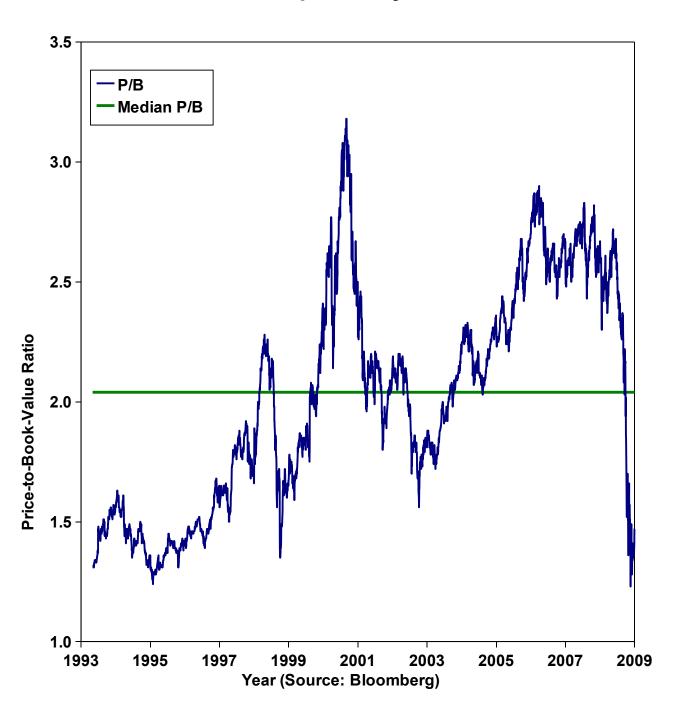
Forward Returns

S&P500 Next-20-Yr Annualized Return vs. P/10-Yr-Earnings



Canadian Stock Valuation

S&P/TSX Composite by Book Value



Practical Portfolio Construction by Norm Rothery www.danhallett.com, www.stingyinvestor.com

Stingy Investor Asset Mixer

http://www.stingyinvestor.com/cgi-bin/downside_adv.cgi

Stingy Investor Free email newsletters

http://www.stingyinvestor.com/cgi-bin/email.cgi

Practical Portfolio Construction Slides

http://www.stingyinvestor.com/SI/articles/talk_0309.pdf

Useful Books

A Random Walk Down Wall Street

The Intelligent Investor

Contrarian Investment Strategies

What Works on Wall Street

Fooled by Randomness

by Burton G. Malkiel by Benjamin Graham

by David Dreman

by James P. O'Schaugnessy

by Nassim Taleb

Advanced Topics

Security Analysis

Behavioural Investing

by Benjamin Graham

by James Montier

Market History

A Splendid Exchange

Extraordinary Popular Delusions

Confusión de Confusiones

by William J. Bernstein

by Charles Mackay

by Joseph de la Vega