

- INVESTING IN ENERGY -

Don Gimpel, August 2010

BP got their arm twisted and was forced to pay \$20 Billion for the oil spill. Did it hurt BP?

Sure it hurt BP but it also hurt you because BP is taking a \$10 billion tax credit for the spill. Part of the mess is coming out of your pocket.

Here's something you ought to know:

The value of “Proven Reserves”:

		Reserves	Value
		BBls	B \$
PTR	PetroChina	11.22	897.6
BP	British Petroleum	10.35	828.0
PBR	Petroleo Brasileiro	9.11	728.8
XOM	ExxonMobil	7.58	606.4
CVX	Chevron	7.35	588.0
MCF	Contango Oil & Gas	4.46	356.8
TOT	Total SA	4.41	352.8

What's a “Proven Reserve?”

In the United States, a “Proven Reserve” is a “financial” term meaning the amount of oil that you reasonably know that you will be able to extract in the future from (1) a known physical resource, (2) with known (current) technology and (3) under present economic conditions.

It has an altogether different meaning in the rest of the world.

<http://www.Petrostrategies.org>

There are 4 ways a “Proven Reserve” can grow:

- ★ New underground resources can be found.
- ★ Extraction techniques can be improved.
- ★ Economic conditions might change.
- ★ Countries and oil companies can become more “optimistic” about their reserves.

Don't forget:

What I'm really saying is that the energy business is very specialized and uses words and ideas that you think you know but which in fact might be quite different.

And if you included Natural Gas:

PetroChina's reserves are valued at \$1700 B.

BP's reserves are valued at 1000 B.

I asked Roy Schall for his best ideas and he suggested:

Who's Roy Schall and why should I pay attention to him?

Here's what he suggested:

ALA	Alta Gas (Toronto Exchange)
BTE	BayTex Energy Trust
PIF-UN.TO	Pembina Pipeline
SU	SunCor
COSWF	Canadian Oil Sands Trust

Here's your problem – I've just given you some names but which investment is best for you?

How do you go about ranking investment opportunities:

Have you ever heard of WolframAlpha.com?

<http://www.wolframalpha.com>



WolframAlpha™ computational...
knowledge engine

BTE SU PIF-UN.TO



Assuming "SU" is a financial entity | Use as **a weekday** instead

Assuming "PIF-UN.TO" is a financial entity | Use as **referring to internet sites** instead

Assuming NYSE:SU | Use **PA:SU** instead

Input interpretation:

Mathematica form

Baytex (BTE) | Suncor (SU) | Pembina Pipeline Income Fund (PIF-UN)

Latest trades:

[More](#)

BTE	\$ 32.65 (BTE NYSE 13 mins ago)
SU	\$ 31.55 (SU NYSE 2 mins ago)
PIF-UN	C\$ 19.29 (\$ 18.53) (PIF-UN Toronto Stock Exchange August 12, 2010)

Fundamentals and financials:

Fundamentals ▾

	Baytex	Suncor	Pembina Pipeline Income Fund
market cap	\$ 3.547 billion	\$ 49.41 billion	C\$ 3.155 billion
revenue	C\$ 1.032 billion		
employees	186	6798	395
revenue / employee	C\$ 5.55 million		
net income	C\$ 112 million		
shares outstanding	110.7 million	1.562 billion	163.6 million
annual earnings / share	C\$ 1.41	C\$ 1.77	C\$ 1.20
P/E ratio	22.74	17.87	16.08
annual dividends / share	\$ 1.97	\$ 0.50	C\$ 1.56
dividend yield	6.16%	1.26%	7.41%

(based on trailing 12-month totals, last close price and annual employees)

Recent returns:

	day	month	YTD	year	5 year
BTE	-3.23%	-0.50%	+18.57%	+67.54%	
SU	-5.95%	-1.19%	-9.85%	+0.78%	+14.57%
PIF-UN	+1.53%	+7.14%	+15.87%	+40.53%	+76.41%

Relative price history:

Last year | Separate plots

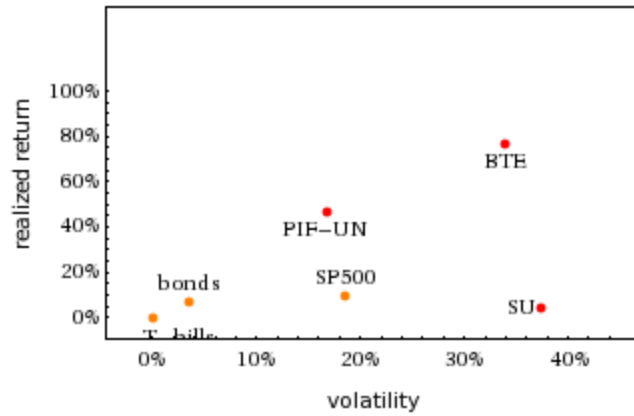


(normalized relative to August 17, 2009 starting date)

Performance comparisons:

Last year

	average daily return	daily volatility	annual return	annual volatility
BTE	+0.227%	2.15%	+76.55%	33.99%
SU	+0.017%	2.36%	+4.38%	37.33%
PIF-UN	+0.152%	1.06%	+46.37%	16.78%



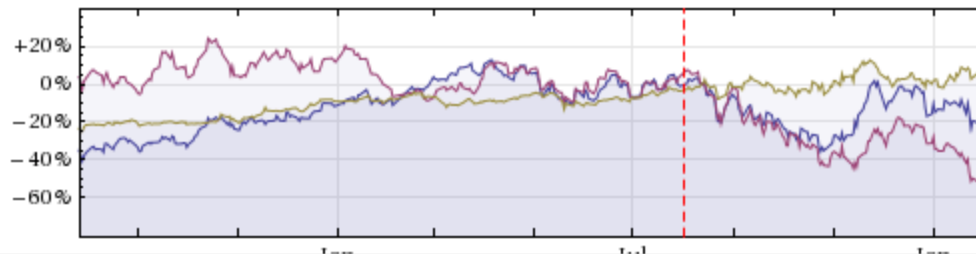
Correlation matrix:

	BTE	SU	PIF-UN	SP500
BTE	1	0.8	0.367	0.707
SU	0.8	1	0.286	0.728
PIF-UN	0.367	0.286	1	0.292
SP500	0.707	0.728	0.292	1

Projections:

6 months

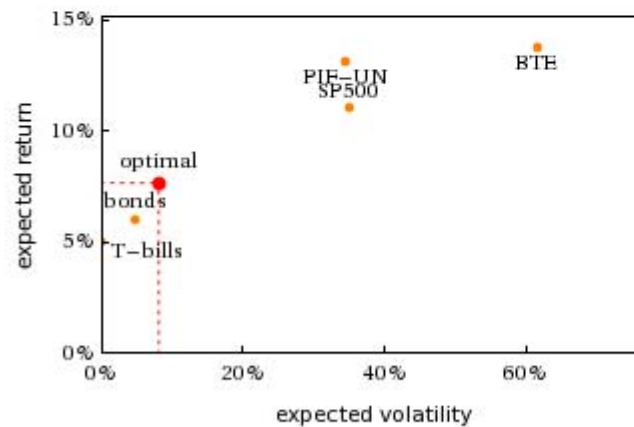
New random walk



Mean-variance optimal portfolio:

	weight	shares	cost
BTE	4.60%	1435	\$46 010
SU	1.39%	439	\$13 890
PIF-UN	14.20%	7361	\$142 000
SP500	15.36%	1414	\$153 600
bonds	32.42%	324	\$324 000
T-bills	32.03%	320	\$320 000

(amounts based on \$1 million portfolio)



optimal portfolio's expected yearly return	7.66%
optimal portfolio's yearly volatility	8.16%