

Forwardové obchody od samurajov po súčasnosť

Ľuboš Kuboň

absolventská prednáška

30. september 2013

Bio

2009 – 2012: King's College London

2008 – 2009: Matfyz Bratislava

2004 – 2008: Gymnázium Jura Hronca

2000 – 2004: Gymnázium Košická

Obsah

- Ryžová burza v Dōjime
- Časová hodnota peňazí
- Ako funguje forward

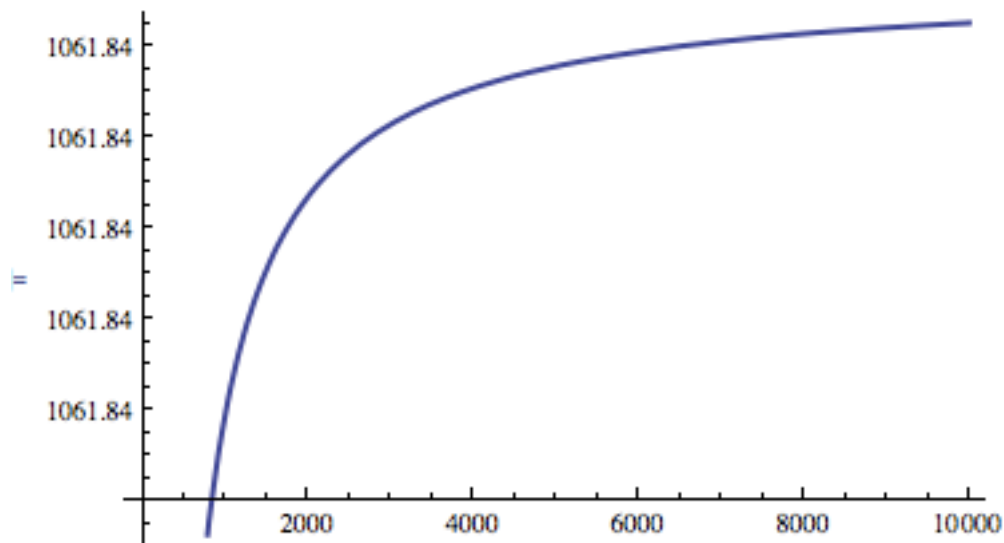
Ryžová burza v Dōjime



Časová hodnota peňazí

Počet skladaní n	Na vrátenie
1 (ročne)	1060,90000
2 (polročne)	1061,36355
4 (štvrtročne)	1061,59885
12 (mesačne)	1061,75704
52 (týždenne)	1061, <u>8</u> 1818
365 (denne)	1061, <u>83</u> 393
31 536 000 (každú sekundu)	1061, <u>836</u> 54

Časová hodnota peňazí



Časová hodnota peňazí



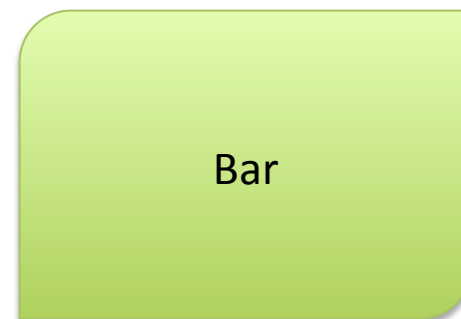
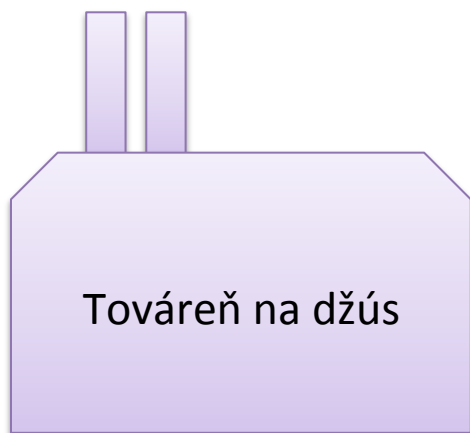
John Napier
(1550–1617)



Jacob Bernoulli
(1654–1705)

$e = 2.71828\ 18284\ 59045\ 23536\dots$

Ako funguje forward



Ďakujem za pozornosť

Ako sa pozerat' na akcie a iné investície

Igor Vilček

Portfolio Manager, TAM

Intuícia

- 1000€ → na výber 2 akcie

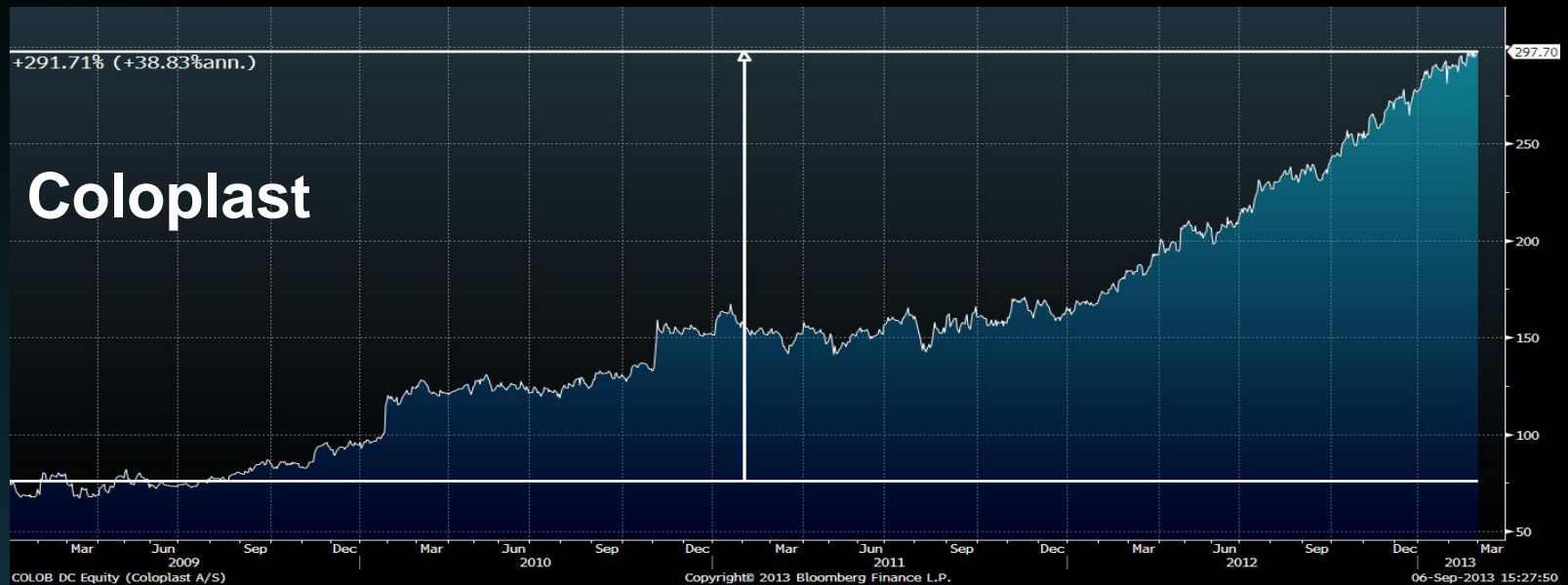
A

Výnos 435% za 4 roky
(50% p.a.)

B

Výnos 292% za 4 roky
(39% p.a.)

Intuição



Pojmy

- Akcie
- Výnos – historická výkonnost' / „zázračná predpoved“
- Riziko – historické ... ??? riziko ??? / „zázračná predpoved“

Pojmy

- **Výnos** – historická výkonnost' / „zázračná predpoveď“
- K „zázračným predpovediam“:

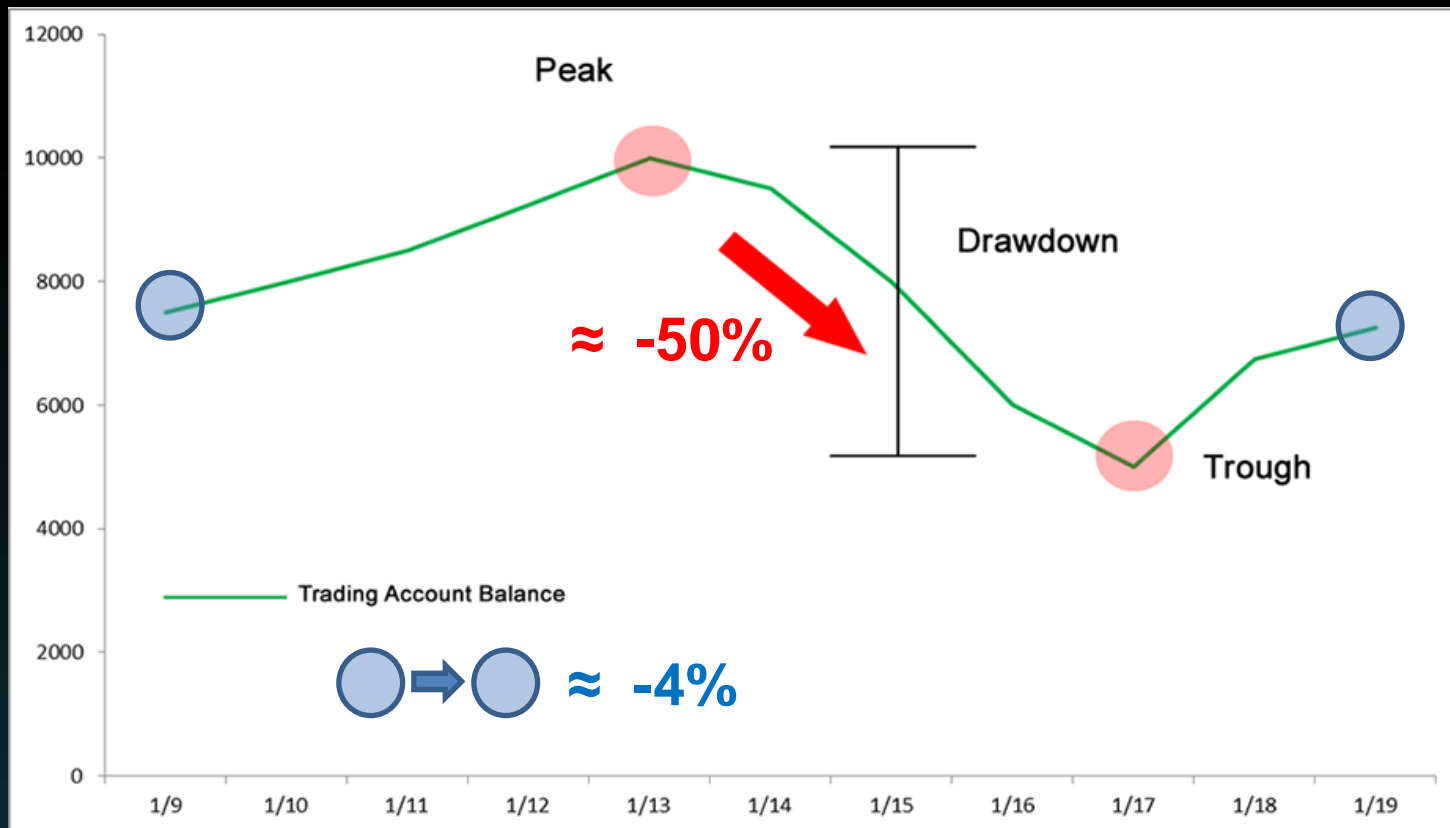


GURU	LAST MODIFIED	ACCURACY
Louis Navellier: Calculating the Market's Moves	October 11, 2010	55%
Steve Sjuggerud's Sentiment	October 9, 2010	55%
Comstock's Commentary	October 7, 2010	47%
Ken Fisher Chronicles	October 7, 2010	62%
Marc Faber: Nabob of Negativism?	October 6, 2010	51%
Don Luskin: Can He Make You Rich and Smart?	October 5, 2010	49%
Jim Jubak on the Big Picture	October 1, 2010	42%
Tim Wood: You Have Been Warned!	October 1, 2010	46%
Linda Schurman: The Astrologer Versus the "Stock Star"	October 1, 2010	43%
Carl Futia Telling	September 30, 2010	45%
Price Headley's Trends	September 27, 2010	42%
Steven Jon Kaplan: Overly Contrarian?	September 26, 2010	31%
Clif Droke's Contrarian Triangulation	September 23, 2010	49%
Gary Kaltbaum: An Edge for Investors?	September 23, 2010	52%
Bob Hoye: Rational Fringe?	September 22, 2010	44%
Jon Markman Speculates	September 21, 2010	65%
Bill Cara: Populist Market Pundit	September 19, 2010	41%
Robert McHugh: Caution Is Warranted?	September 19, 2010	35%
Carl Swenlin's Technical Windsock	September 17, 2010	56%
John Mauldin's Thoughts	August 28, 2010	41%
Steve Saville: From the Top Down	August 24, 2010	22%
Gary D. Halbert Forecasts and Trends	August 24, 2010	45%
Bill Fleckenstein: Apocalypse Soon	August 6, 2010	37%
Charles Biderman, Going with the Flow	August 4, 2010	43%
Richard Band: Does the Skinflint Really Buy Cheap?	August 2, 2010	43%

Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

1.) Maximálny priebežný pokles (Maximum Draw Down)



Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

1.) Maximálny priebežný pokles (Maximum Draw Down)



Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

1.) Maximálny priebežný pokles (Maximum Draw Down)



Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

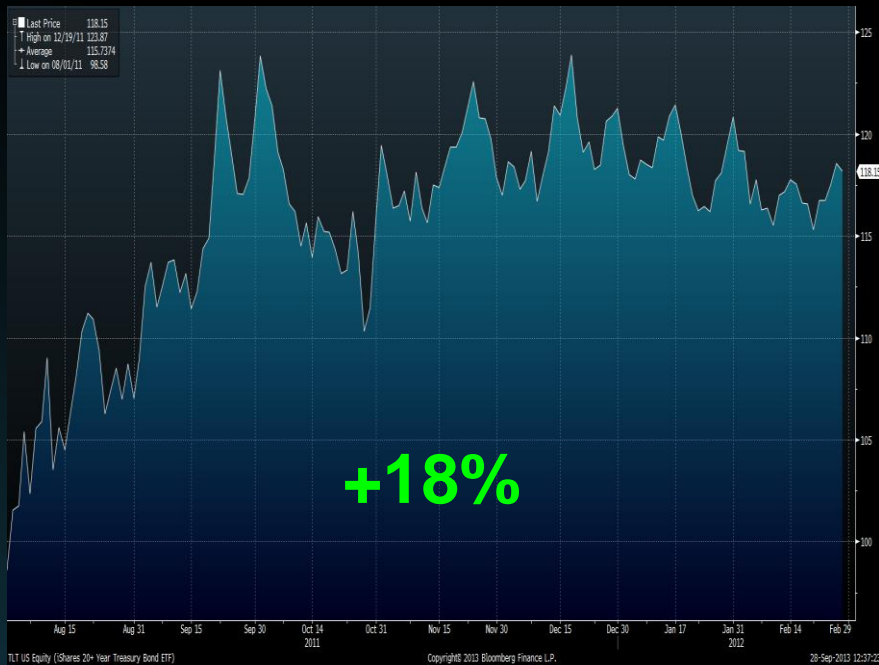
1.) Maximálny priebežný pokles (Maximum Draw Down)



Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

2.) Volatilita (Štandardná odchýlka)



V
S



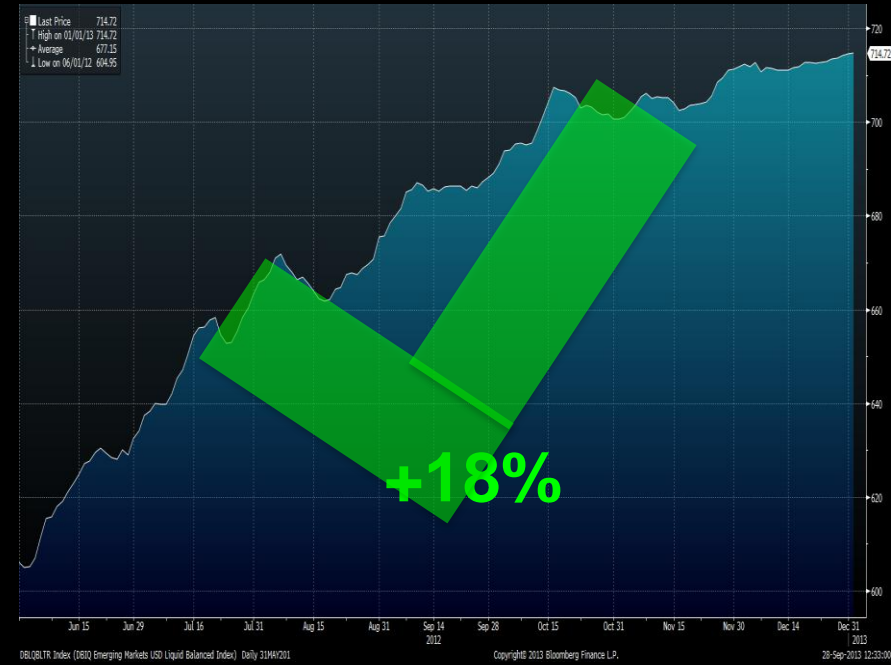
Riziko

- **Riziko** – historické ... ??? riziko ??? / zázračná predpoveď

2.) Volatilita (Štandardná odchýlka)



V
S



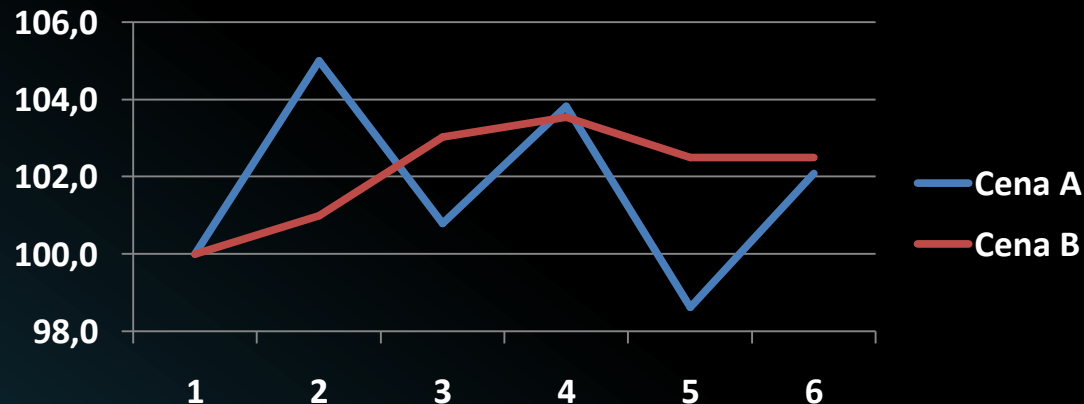
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos
100.0	
105.0	5%
100.8	-4%
103.8	3%
98.6	-5%
102.1	3.5%
Priemer	0.50%

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos
100.0	
101.0	1%
103.0	2%
103.5	0.5%
102.5	-1%
102.5	0%
Priemer	0.50%



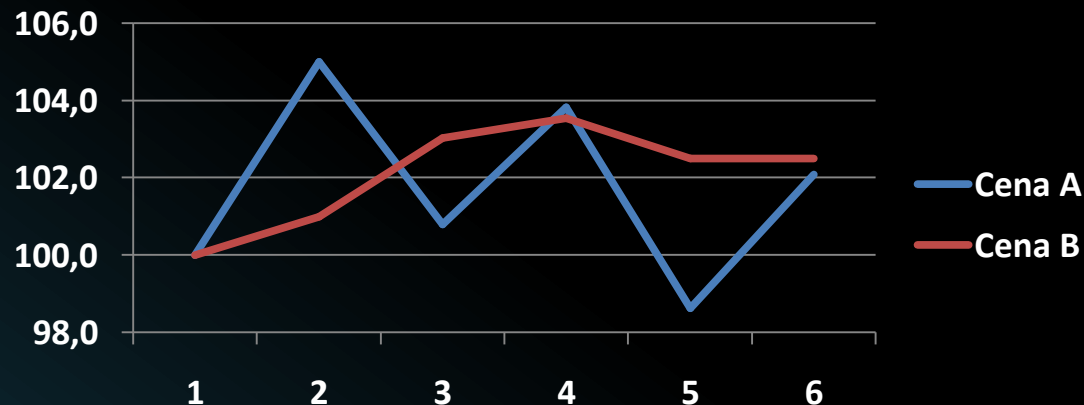
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos	Výnos - Priemer
100.0		
105.0	5%	4.5%
100.8	-4%	-4.5%
103.8	3%	2.5%
98.6	-5%	-5.5%
102.1	3.5%	3%
Priemer	0.50%	

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos	Výnos - Priemer
100.0		
101.0	1%	0.5%
103.0	2%	1.5%
103.5	0.5%	0%
102.5	-1%	-1.5%
102.5	0%	-0.5%
Priemer	0.50%	



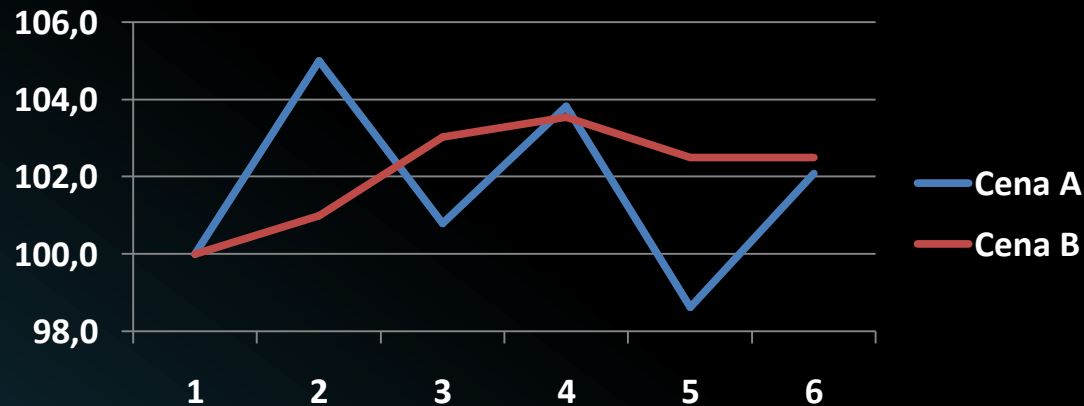
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos	Výnos - Priemer
100.0		
105.0	5%	4.5%
100.8	-4%	-4.5%
103.8	3%	2.5%
98.6	-5%	-5.5%
102.1	3.5%	3%
Priemer	0.50%	0%

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos	Výnos - Priemer
100.0		
101.0	1%	0.5%
103.0	2%	1.5%
103.5	0.5%	0%
102.5	-1%	-1.5%
102.5	0%	-0.5%
Priemer	0.50%	0%



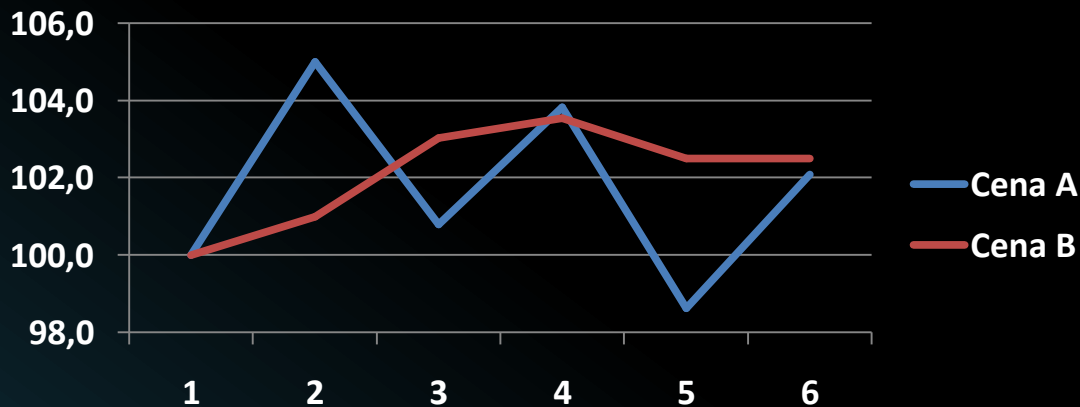
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
105.0	5%	0.2%
100.8	-4%	0.2%
103.8	3%	0.06%
98.6	-5%	0.3%
102.1	3.5%	0.09%
Priemer	0.50%	0.17%

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
101.0	1%	0.003%
103.0	2%	0.02%
103.5	0.5%	0%
102.5	-1%	0.02%
102.5	0%	0.002%
Priemer	0.50%	0.01%



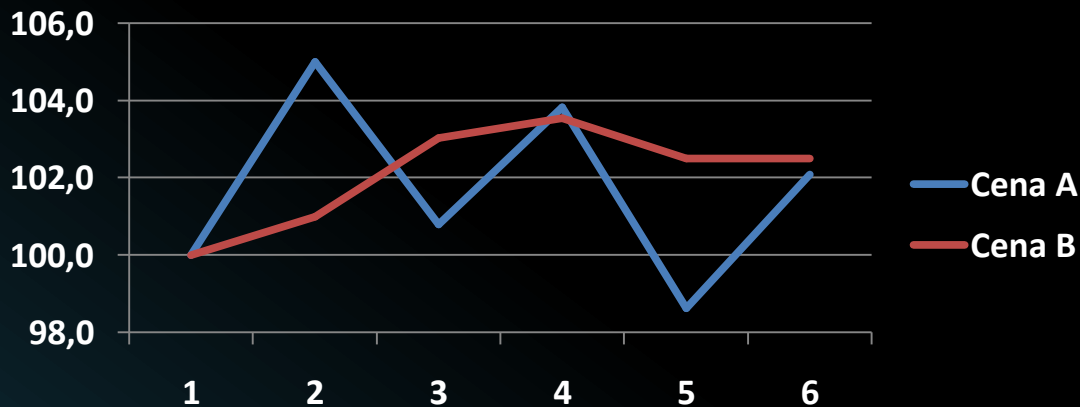
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
105.0	5%	0.2%
100.8	-4%	0.2%
103.8	3%	0.06%
98.6	-5%	0.3%
102.1	3.5%	0.09%
Priemer	0.50%	$\sqrt{0.17\%}$

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
101.0	1%	0.003%
103.0	2%	0.02%
103.5	0.5%	0%
102.5	-1%	0.02%
102.5	0%	0.002%
Priemer	0.50%	$\sqrt{0.01\%}$



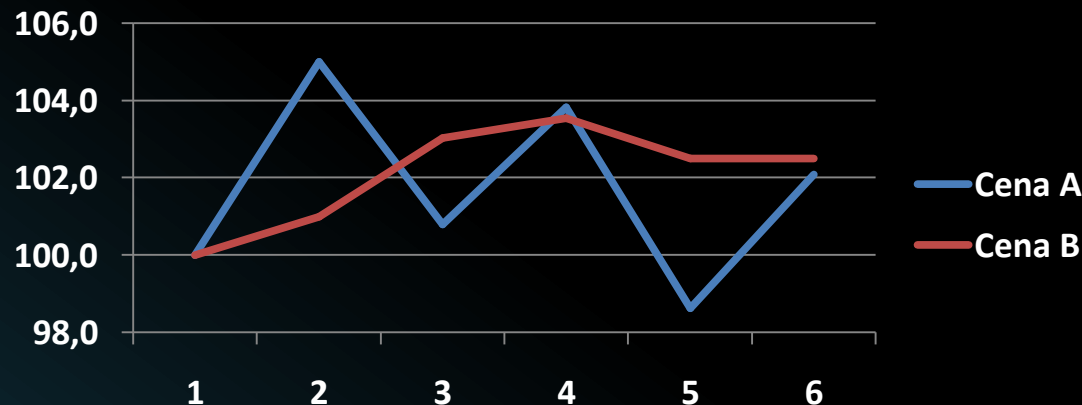
Riziko

2.) Volatilita (Štandardná odchýlka) – ako ju odmerať?

Cena A	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
105.0	5%	0.2%
100.8	-4%	0.2%
103.8	3%	0.06%
98.6	-5%	0.3%
102.1	3.5%	0.09%
Priemer	0.50%	4.15%

Deň 1
Deň 2
Deň 3
Deň 4
Deň 5
Deň 6

Cena B	Denný Výnos	$(\text{Výnos} - \text{Priemer})^2$
100.0		
101.0	1%	0.003%
103.0	2%	0.02%
103.5	0.5%	0%
102.5	-1%	0.02%
102.5	0%	0.002%
Priemer	0.50%	1%

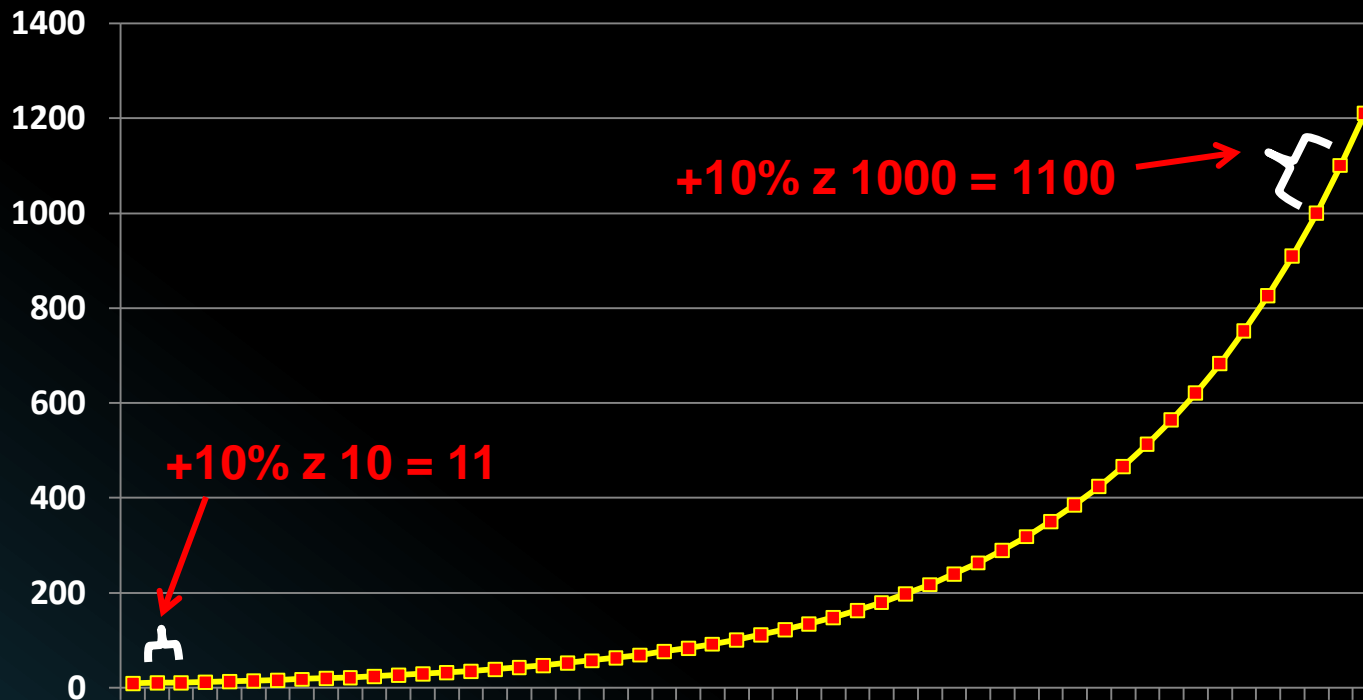


Ako sa pozerat' na grafy

- Základné vlastnosti grafov (nielen) akcií

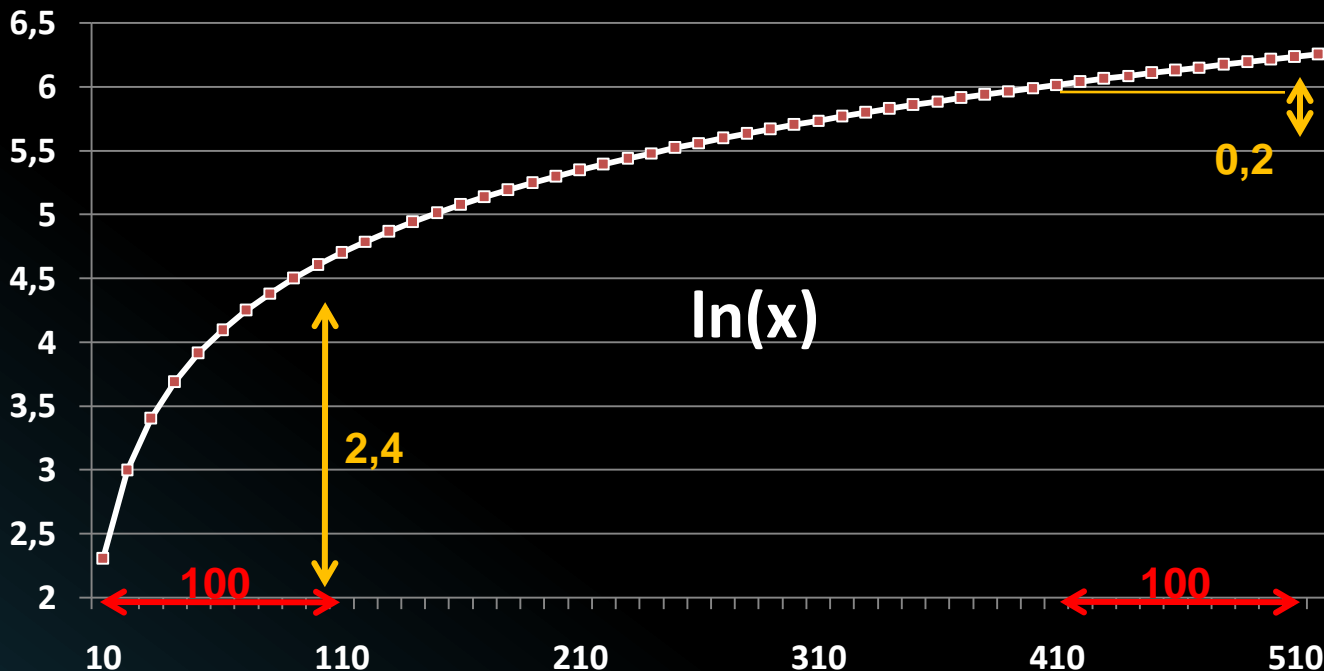
Ako sa pozerat' na grafy

- Zákerné vlastnosti grafov (nielen) akcií
 - Závislosť od absolútnej hodnoty ceny (+10% z 10 vyzerá inak ako +10% z 1000)



Ako sa pozerat' na grafy

- **Zákerné vlastnosti grafov (nielen) akcií**
 - Závislosť od absolútnej hodnoty ceny (+10% z 10 vyzerá inak ako +10% z 1000)
- **Načo logaritmy?**



Ako sa pozerat' na grafy

- V praxi: [BEZ LOGARITMOV]

Americké akcie (index S&P 500) 1928-1999



Ako sa pozerat' na grafy

- V praxi: [BEZ LOGARITMOV]

Americké akcie (index S&P 500) 1928-1999



Ako sa pozerat' na grafy

- V praxi: [BEZ LOGARITMOV]

Americké akcie (index S&P 500) 1928-1999



Ako sa pozerat' na grafy

- V praxi: [S LOGARITMAMI]

Americké akcie (index S&P 500) 1928-1999



Ako sa pozerat' na grafy

- V praxi: [S LOGARITMAMI]

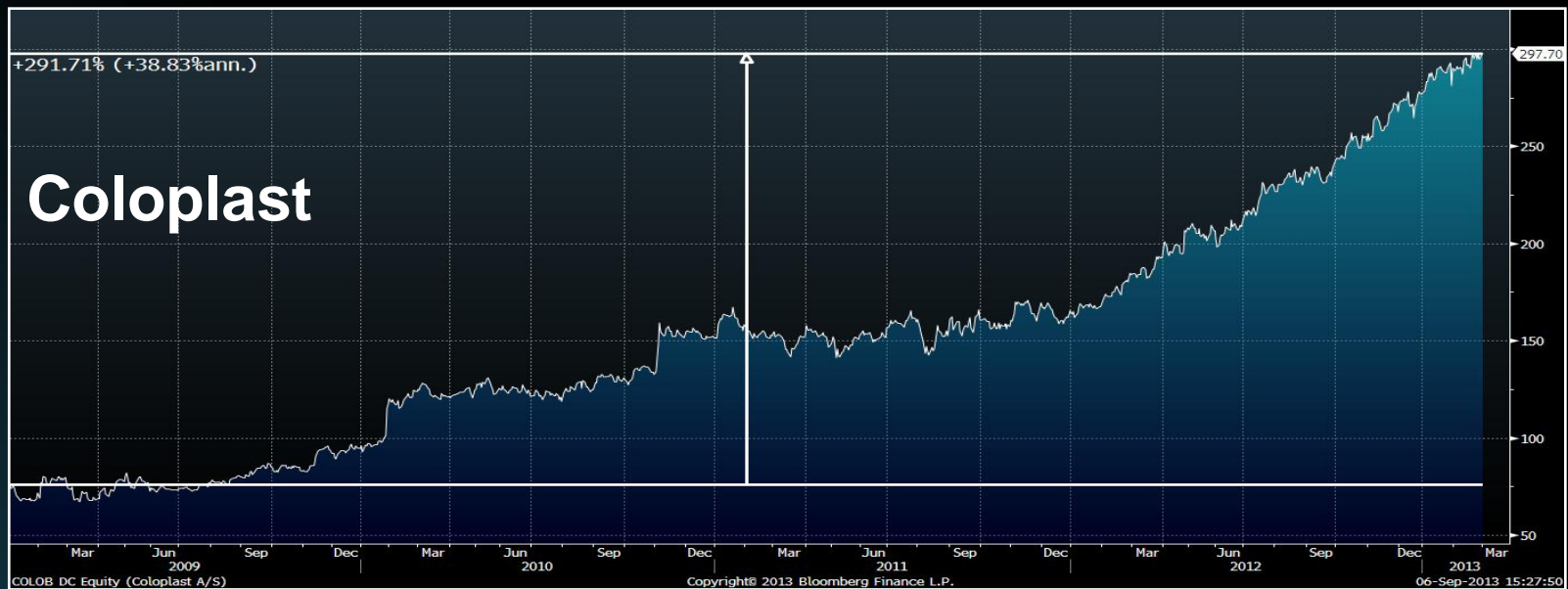
Americké akcie (index S&P 500) 1928-1999



Intuícia z úvodu



A



B

Intuícia z úvodu

1.) Historické priebežné poklesy



A



B

Intuícia z úvodu

- 1.) Historické priebežné poklesy
- 2.) Historická volatilita



A



B

Intuícia z úvodu - pomery

Volatilita: 42%

Pokles: -38%

Výnos: 50% p.a.

Salesforce

A

Výnos / Pokles = 1,3

Výnos / Volatilita = 1,2

Coloplast

Volatilita: 23%

Pokles: -16%

Výnos: 39% p.a.

B

Výnos / Pokles = 2,4

Výnos / Volatilita = 1,7

Intuícia z úvodu - pomery

Volatilita: 42%

Pokles: -38%

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Salesforce

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Výnos / Pokles = 1,3

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Výnos / Pokles = 2,4

Výnos / Volatilita = 1,7

Na záver



Na záver



Na záver



Na záver



Na záver



Na záver



Na záver



Na záver

THE STINKING THINKING CYCLE OF TRADING EMOTIONS

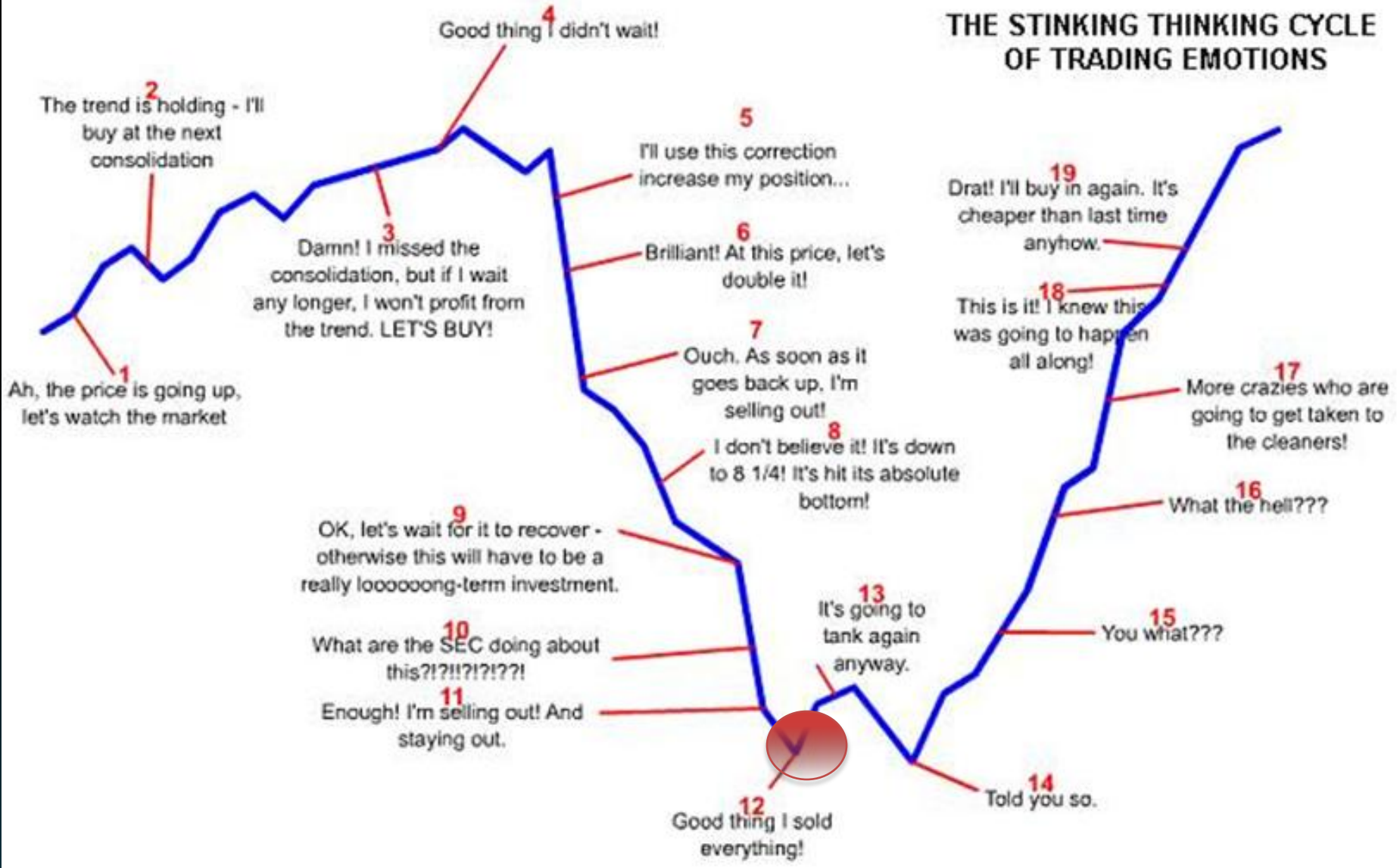


Na záver



Na záver

THE STINKING THINKING CYCLE OF TRADING EMOTIONS



Na záver



Na záver



Na záver



THE STINKING THINKING CYCLE OF TRADING EMOTIONS

- 1 Ah, the price is going up, let's watch the market
- 2 The trend is holding - I'll buy at the next consolidation
- 3 Damn! I missed the consolidation, but if I wait any longer, I won't profit from the trend. LET'S BUY!
- 4 Good thing I didn't wait!
- 5 I'll use this correction increase my position...
- 6 Brilliant! At this price, let's double it!
- 7 Ouch. As soon as it goes back up, I'm selling out!
- 8 I don't believe it! It's down to 8 1/4! It's hit its absolute bottom!
- 9 OK, let's wait for it to recover - otherwise this will have to be a really loooooong-term investment.
- 10 What are the SEC doing about this?!?!?!?!?!?
- 11 Enough! I'm selling out! And staying out.
- 12 Good thing I sold everything!
- 13 It's going to tank again anyway.
- 14 Told you so.
- 15 You what???
- 16 What the hell???
- 17 More crazies who are going to get taken to the cleaners!
- 18 This is it! I knew this was going to happen all along!
- 19 Drat! I'll buy in again. It's cheaper than last time anyhow.

Na záver



THE STINKING THINKING CYCLE OF TRADING EMOTIONS

- 1 Ah, the price is going up, let's watch the market
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