ATAA 9TH MAY 2013

Measuring the Gap

The Coefficient of Variation

By

Dr Kalvert K Clark DC, DO, D Hom, Q. A.

KALVERT K CLARK

Economic Indicator Services

Cycles Research

Author of Dow Song and Dow Dance

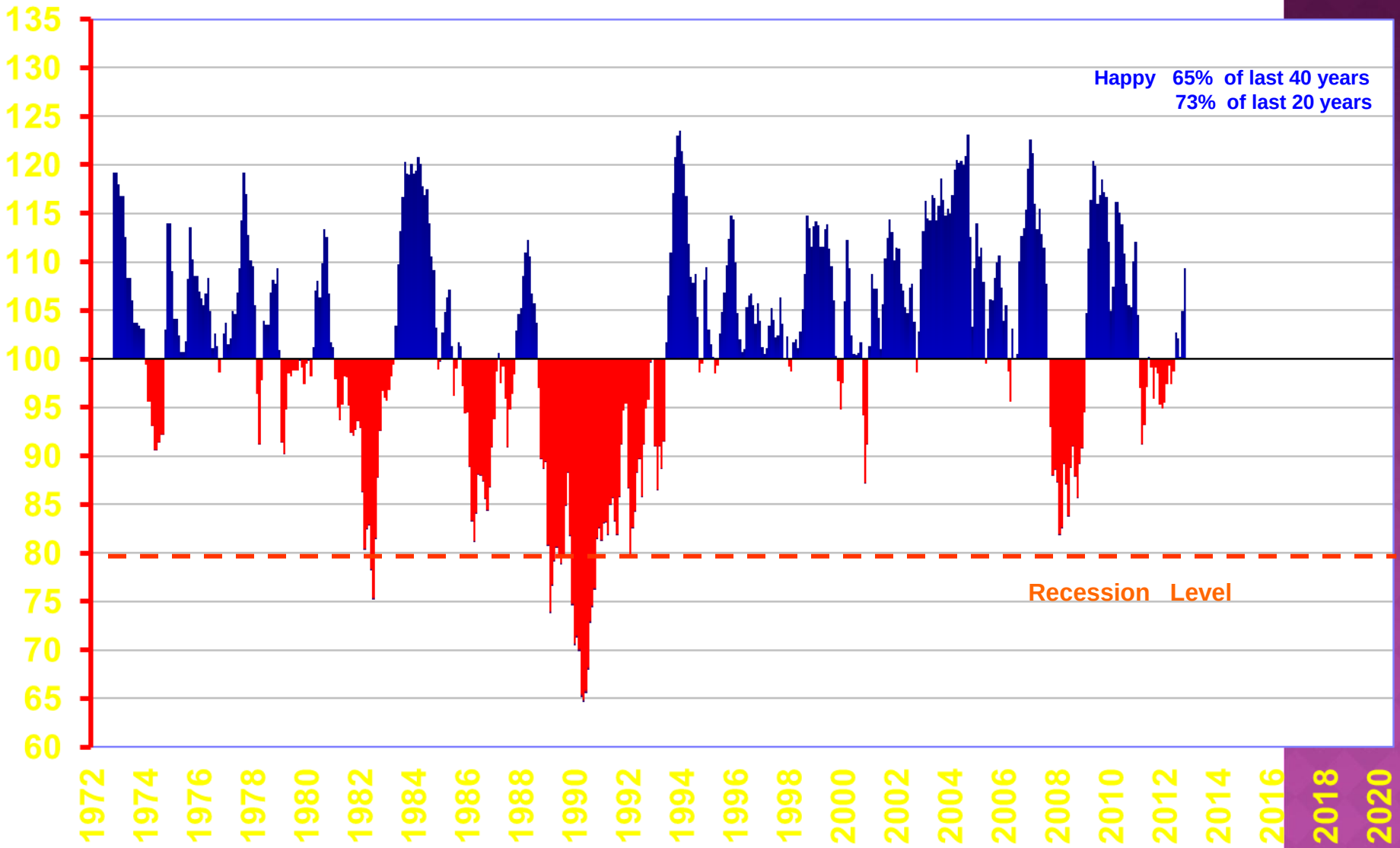
Member of ATAA

Members Talk

kalvert_clark@fastmail.com.au

AUSTRALIAN INDEX OF CONSUMER SENTIMENT

2 MONTHS PROGRESSIVE TO MARCH 2013

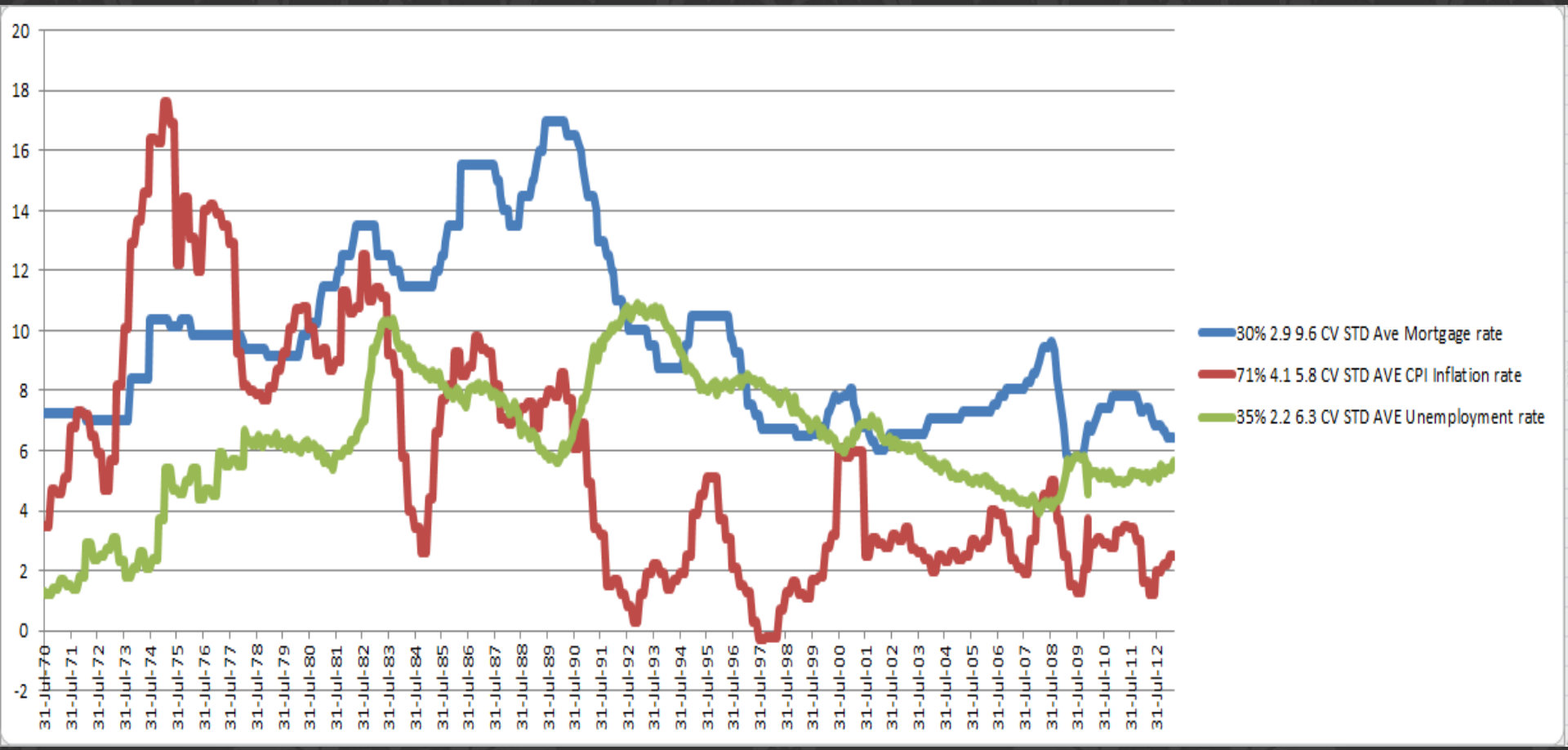


EIS AUSTRALIAN INDEX OF ECONOMIC BLISS

At 100 we'd all be happy. Zero inflation, no unemployment, and a zero bank mortgage loan rate. So, to judge the happiness of the masses, deduct the inflation rate, the unemployment rate, and the cost of a housing loan, from 100. The above chart is just this, done monthly from July 1970.

It doesn't get much better than this !

The lines indicate dates of previous recessions, 1974, 1983, and 1991. We weren't feeling too good about them either.


20
18
16
14
12
10
8
6
4
2
0
-2
31-Jul-70
31-Jul-71
31-Jul-72
31-Jul-73
31-Jul-74
31-Jul-75
31-Jul-76
31-Jul-77
31-Jul-78
31-Jul-79
31-Jul-80
31-Jul-81
31-Jul-82
31-Jul-83
31-Jul-84
31-Jul-85
31-Jul-86
31-Jul-87
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31-Jul-89
31-Jul-90
31-Jul-91
31-Jul-92
31-Jul-93
31-Jul-94
31-Jul-95
31-Jul-96
31-Jul-97
31-Jul-98
31-Jul-99
31-Jul-00
31-Jul-01
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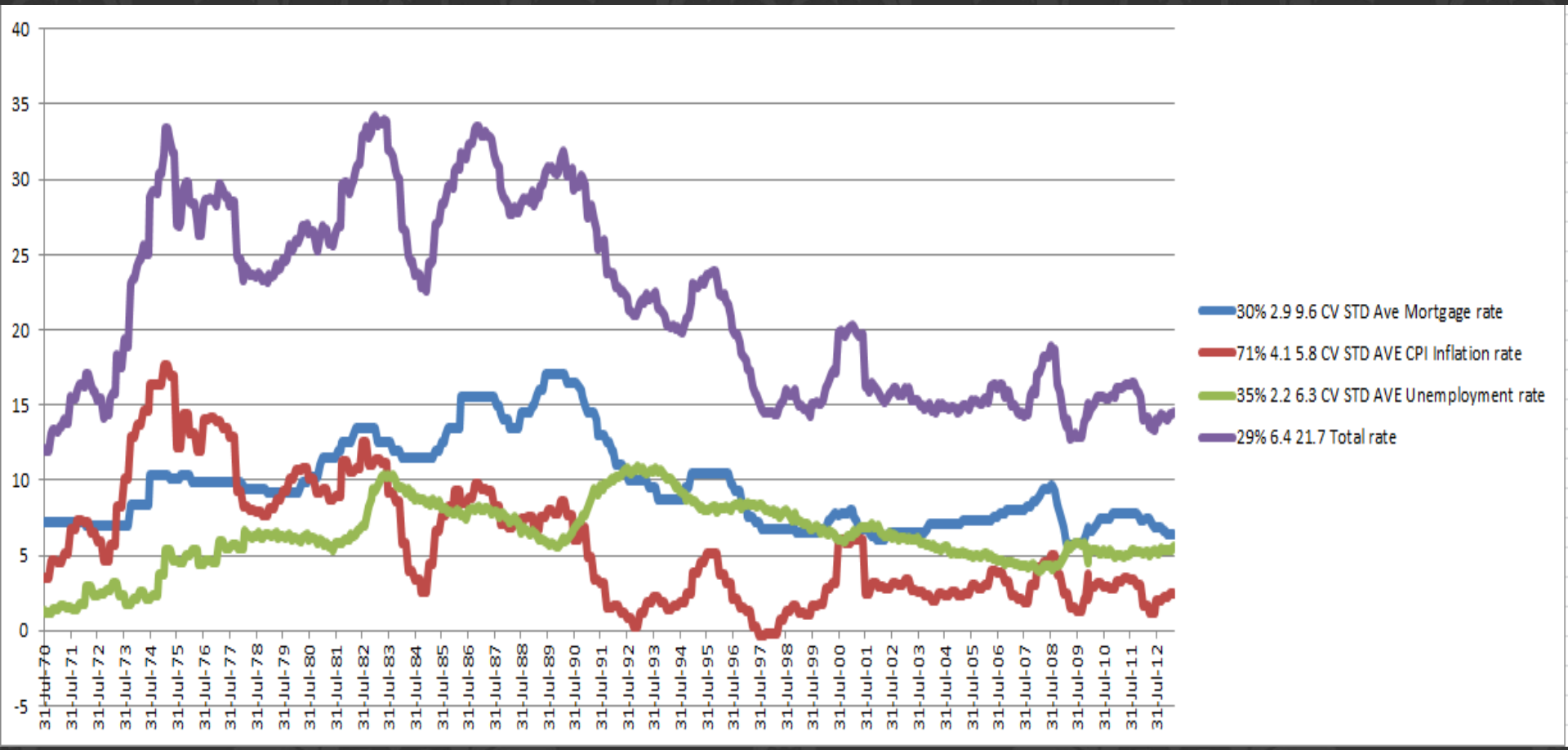
31-Jul-06
31-Jul-07
31-Jul-08
31-Jul-09
31-Jul-10
31-Jul-11
31-Jul-12
30% 2.9 9.6 CV STD Ave Mortgage rate
71% 4.1 5.8 CV STD AVE CPI Inflation rate
35% 2.2 6.3 CV STD AVE Unemployment rate


40
35
30
25
20
15
10
5
0
-5
31-Jul-70
31-Jul-71
31-Jul-72
31-Jul-73
31-Jul-74
31-Jul-75
31-Jul-76
31-Jul-77
31-Jul-78
31-Jul-79
31-Jul-80
31-Jul-81
31-Jul-82
31-Jul-83
31-Jul-84
31-Jul-85
31-Jul-86
31-Jul-87
31-Jul-88
31-Jul-89
31-Jul-90
31-Jul-91
31-Jul-92
31-Jul-93
31-Jul-94
31-Jul-95
31-Jul-96
31-Jul-97
31-Jul-98
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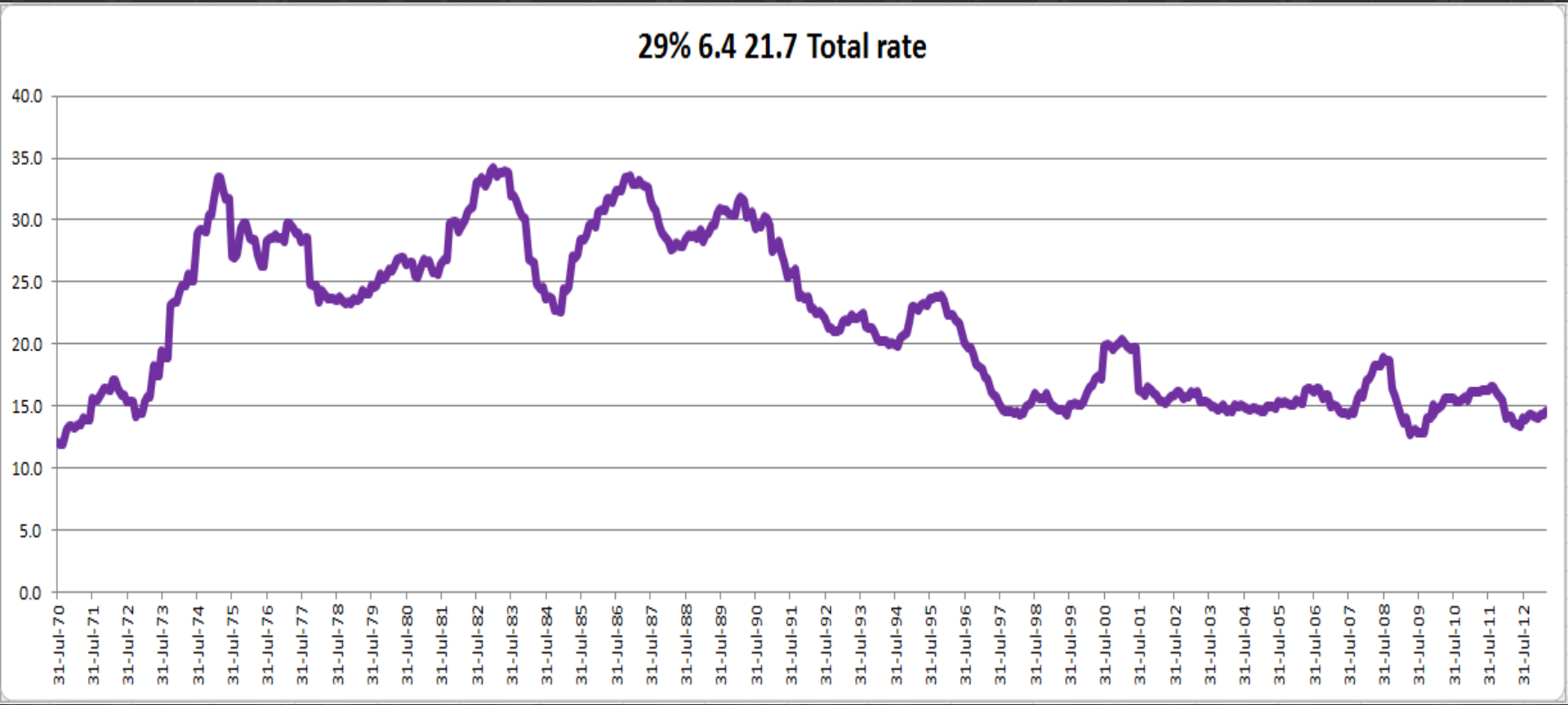
29% 6.4 21.7 Total rate


29% 6.4 21.7 Total rate
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
31-Jul-70
31-Jul-71
31-Jul-72
31-Jul-73
31-Jul-74
31-Jul-75
31-Jul-76
31-Jul-77
31-Jul-78
31-Jul-79
31-Jul-80
31-Jul-81
31-Jul-82
31-Jul-83
31-Jul-84
31-Jul-85
31-Jul-86
31-Jul-87
31-Jul-88
31-Jul-89
31-Jul-90
31-Jul-91
31-Jul-92
31-Jul-93
31-Jul-94
31-Jul-95
31-Jul-96
31-Jul-97
31-Jul-98
31-Jul-99
31-Jul-00
31-Jul-01
31-Jul-02
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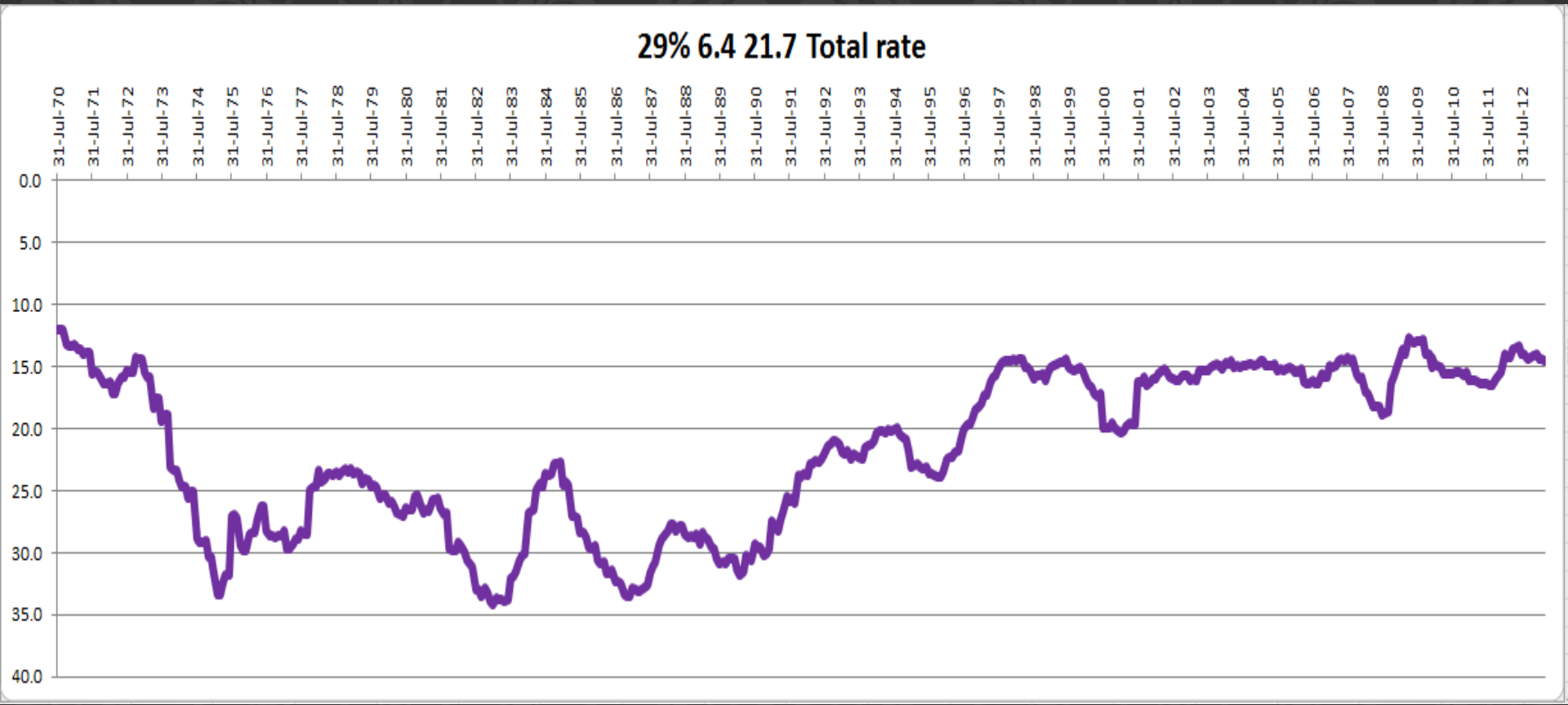
31-Jul-09
31-Jul-10
31-Jul-11
31-Jul-12


29% 6.4 21.7 Total rate
31-Jul-70
31-Jul-71
31-Jul-72
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31-Jul-74
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31-Jul-92
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31-Jul-94
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31-Jul-96
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31-Jul-98
31-Jul-99
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31-Jul-01
31-Jul-02
31-Jul-03
31-Jul-04
31-Jul-05
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31-Jul-07
31-Jul-08
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31-Jul-10
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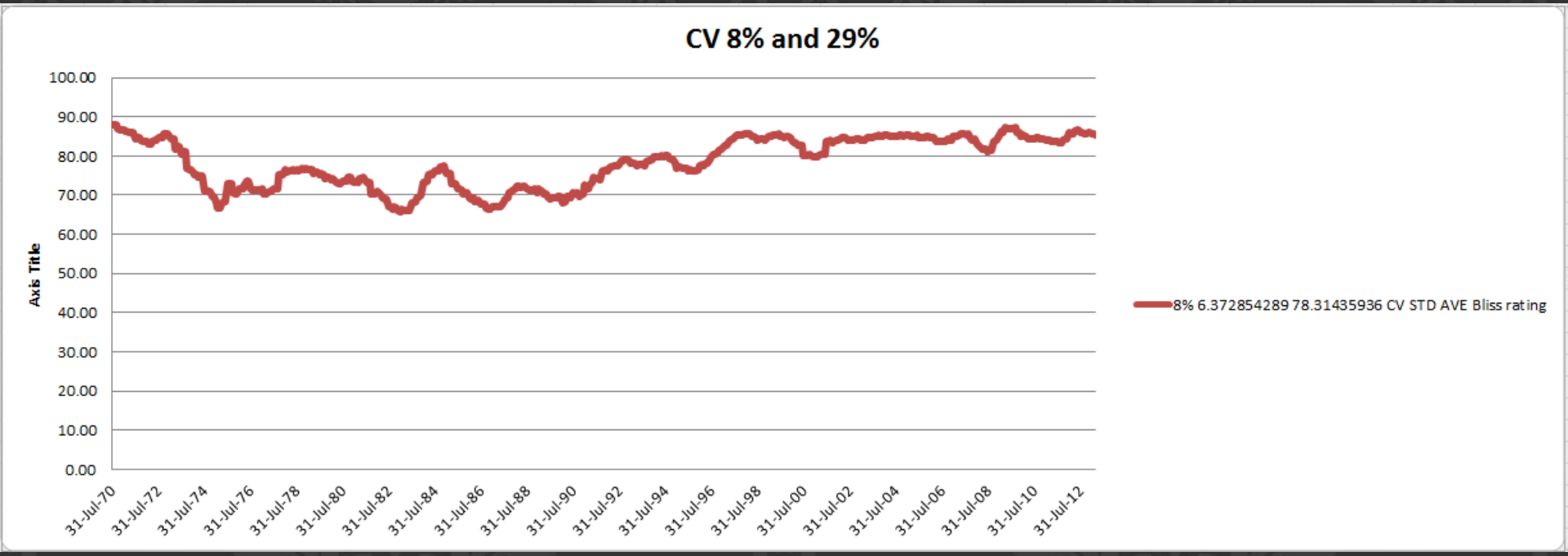
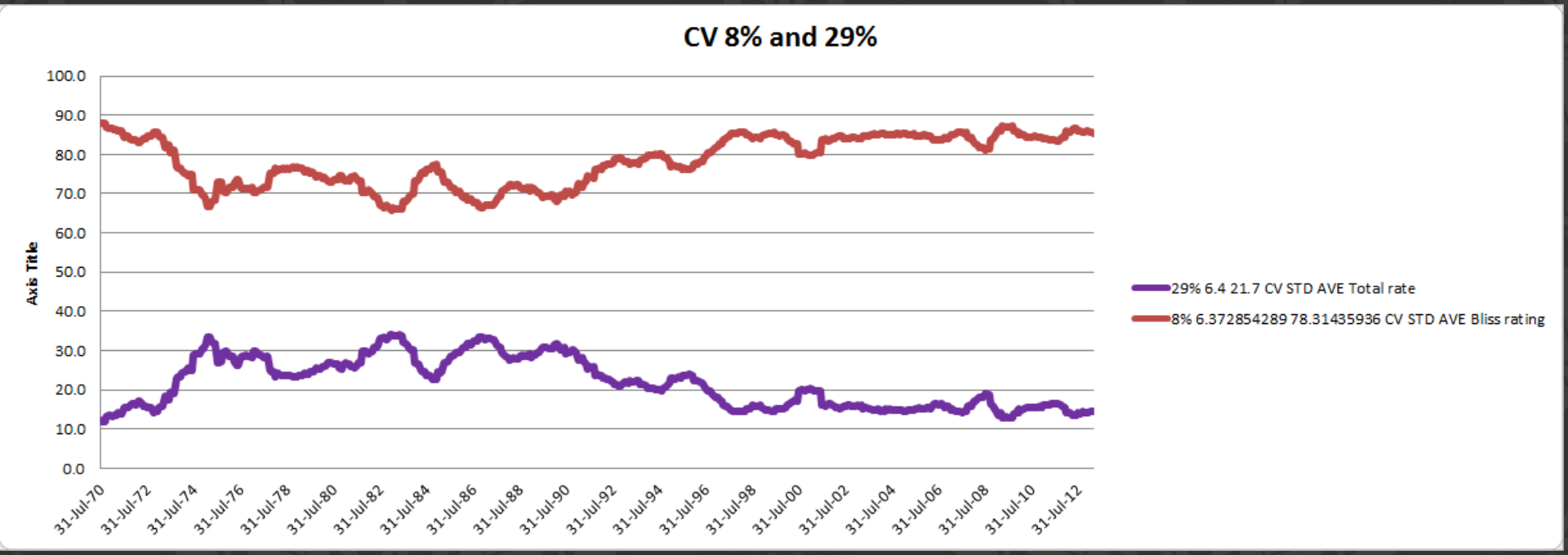
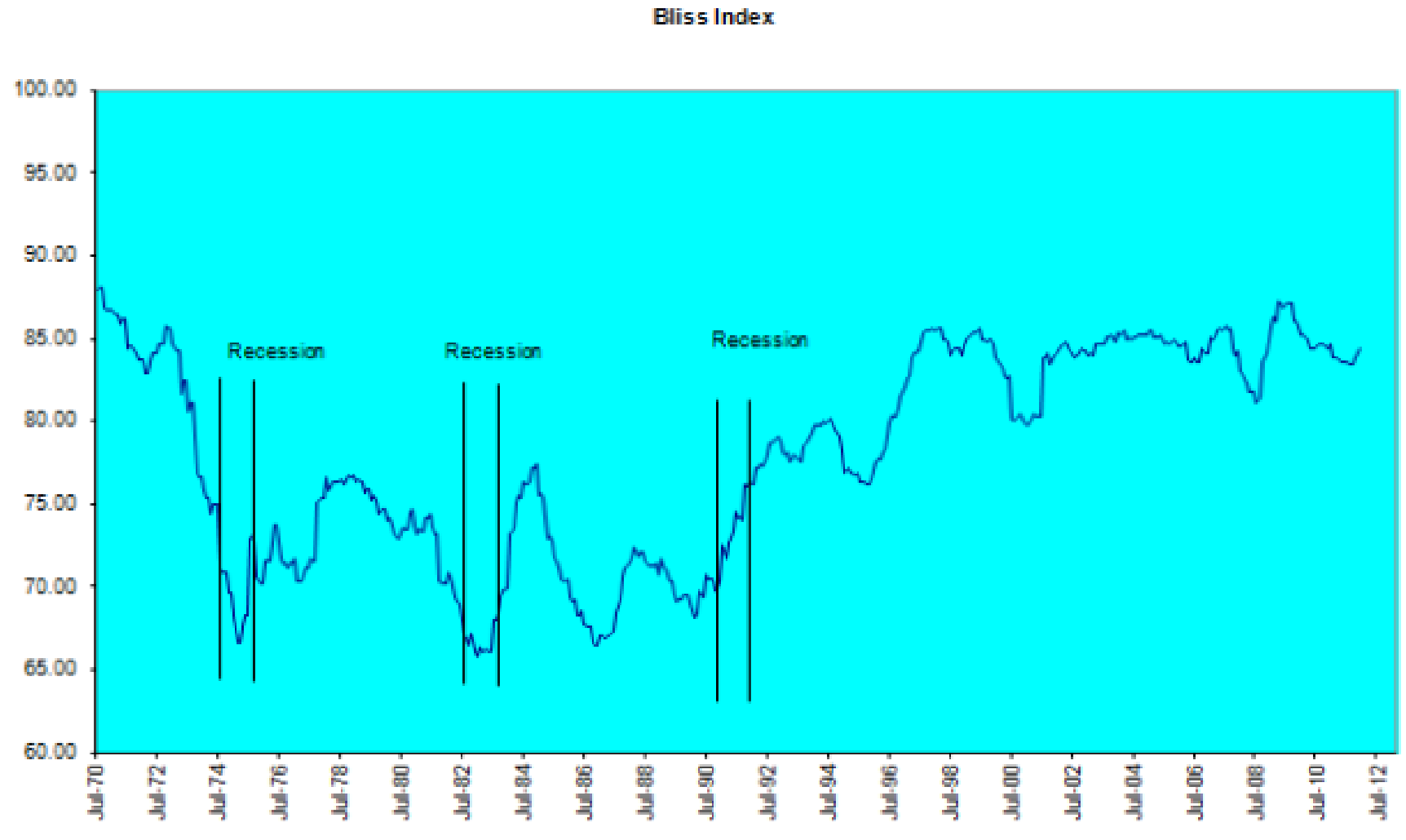
30.0
35.0
40.0

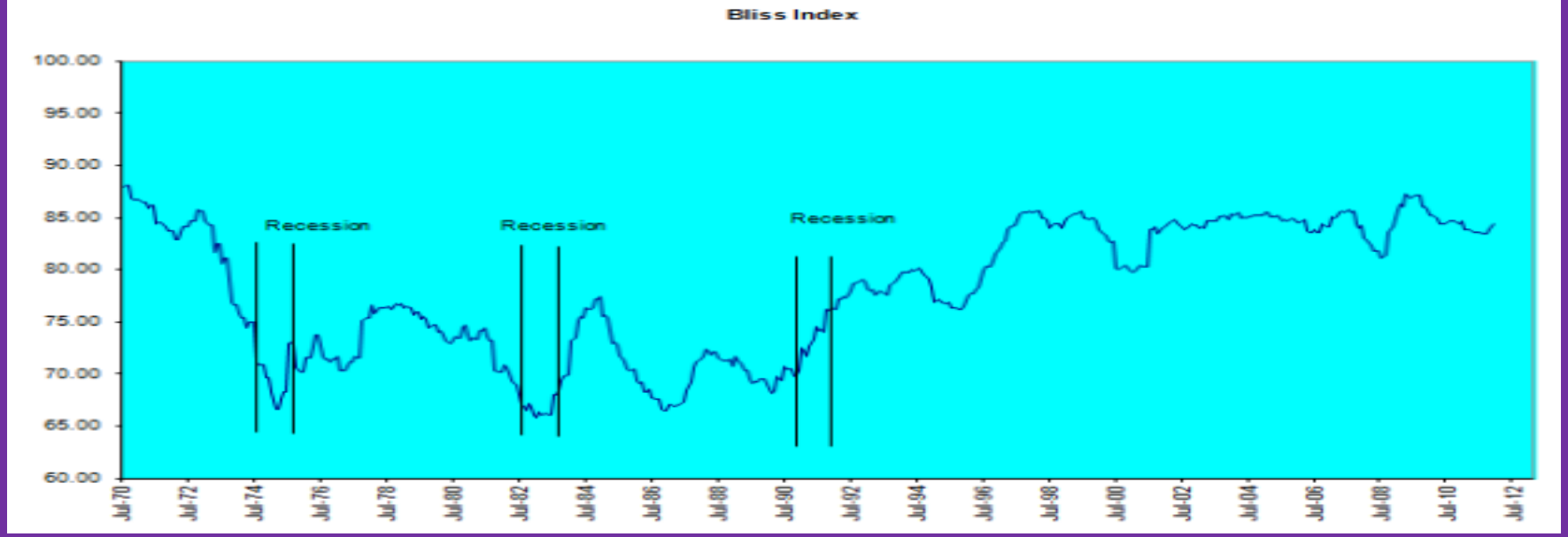

CV 8% and 29%
Axis Title
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
31-Jul-70
31-Jul-72
31-Jul-74
31-Jul-76
31-Jul-78
31-Jul-80
31-Jul-82
31-Jul-84
31-Jul-86
31-Jul-88
31-Jul-90
31-Jul-92
31-Jul-94
31-Jul-96
31-Jul-98
31-Jul-00
31-Jul-02
31-Jul-04
31-Jul-06
31-Jul-08
31-Jul-10
31-Jul-12
8% 6.372854289 78.31435936 CV STD AVE Bliss rating

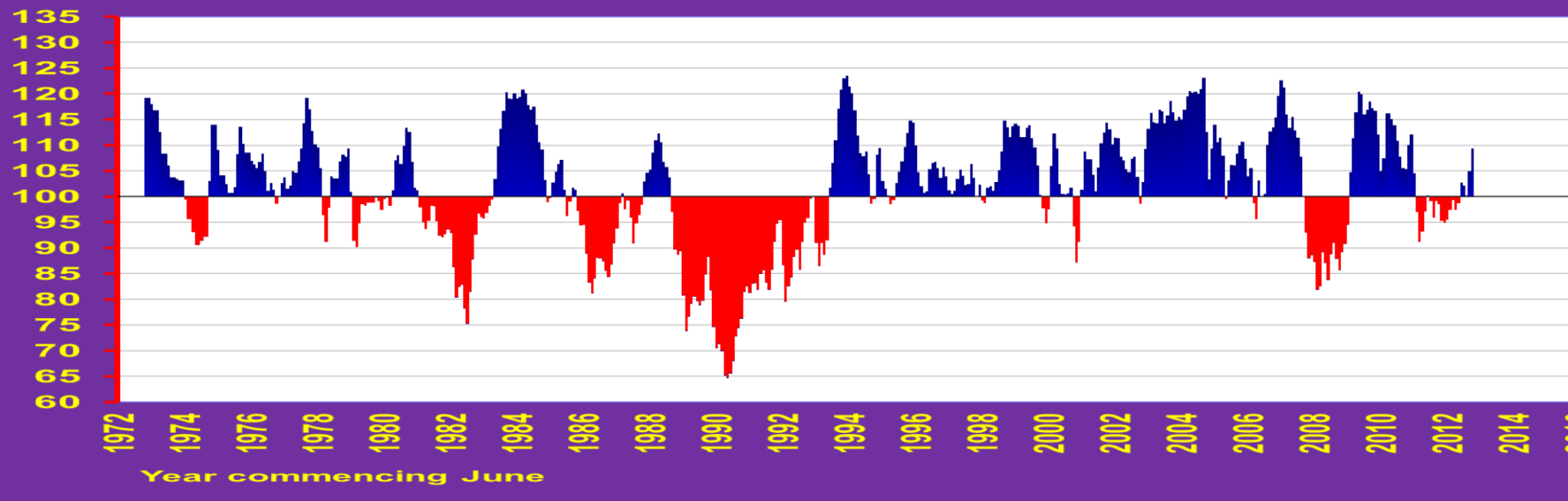

CV 8% and 29%
Axis Title
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
31-Jul-70
31-Jul-72
31-Jul-74
31-Jul-76
31-Jul-78
31-Jul-80
31-Jul-82
31-Jul-84
31-Jul-86
31-Jul-88
31-Jul-90
31-Jul-92
31-Jul-94
31-Jul-96
31-Jul-98
31-Jul-00
31-Jul-02
31-Jul-04
31-Jul-06
31-Jul-08
31-Jul-10
31-Jul-12
29% 6.4 21.7 CV STD AVE Total rate
8% 6.372854289 78.31435936 CV STD AVE Bliss rating

Australia, bliss index, to January 2012.



Australia, bliss index, to January 2012.

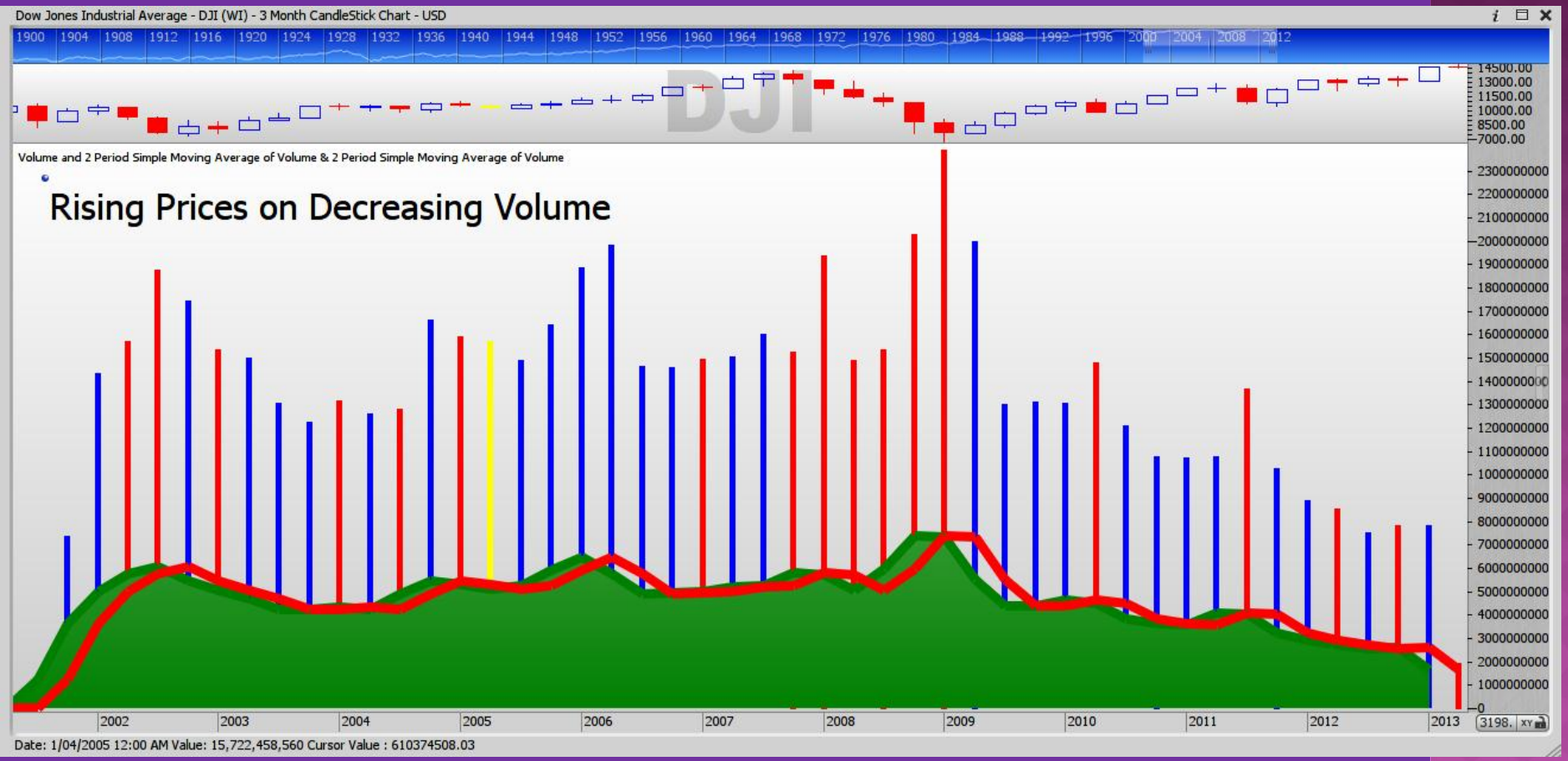


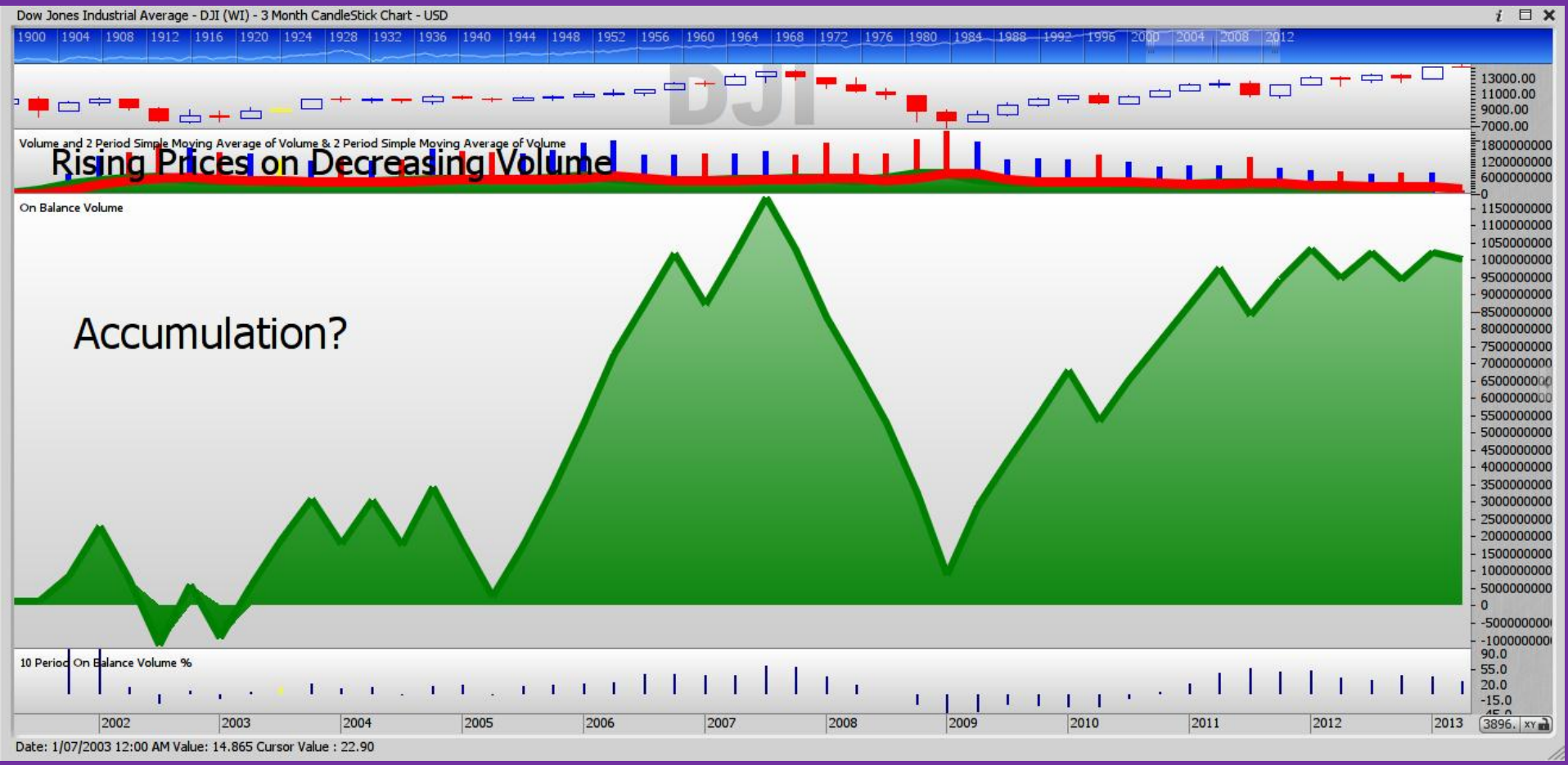


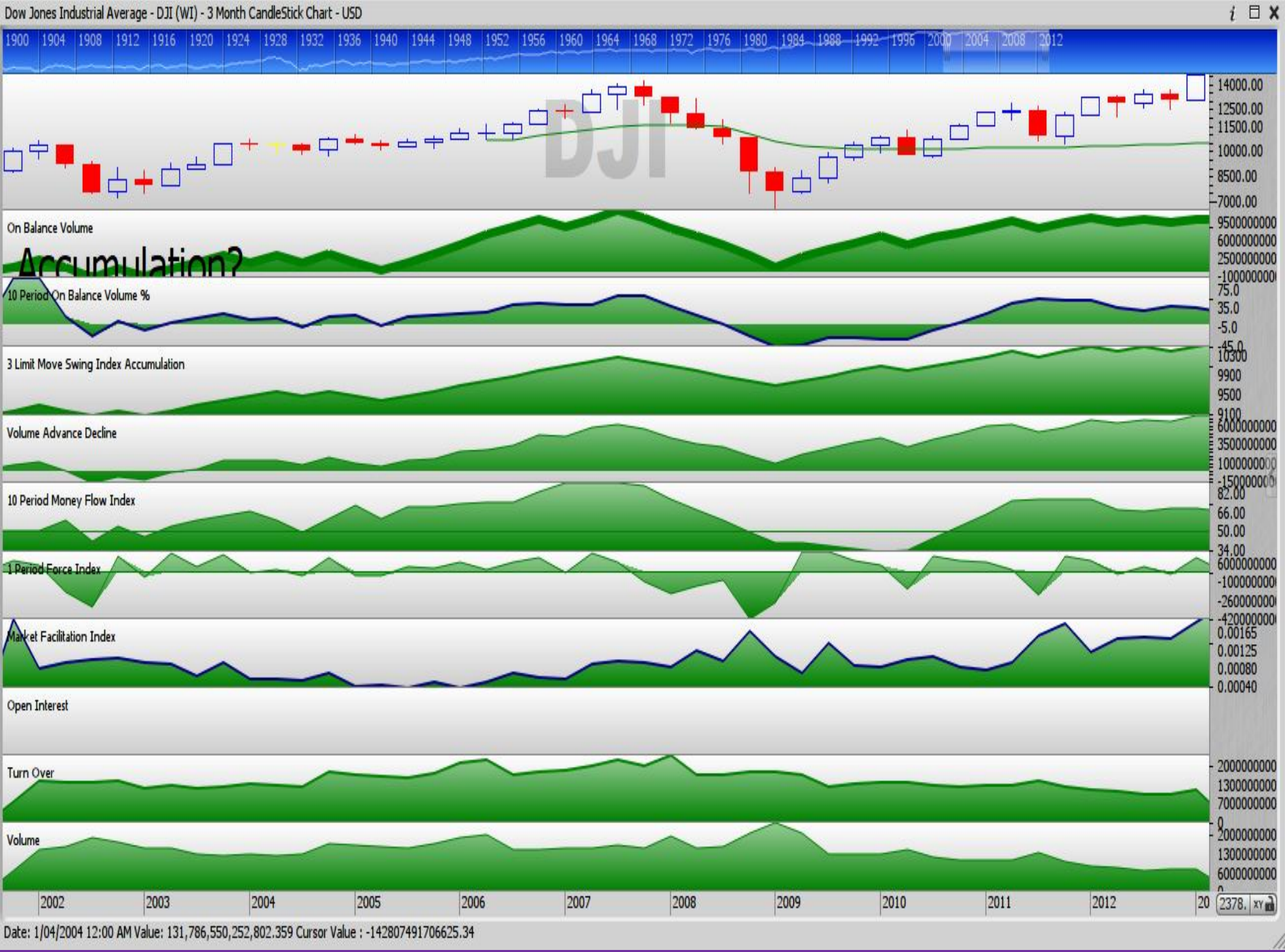
VOLUME

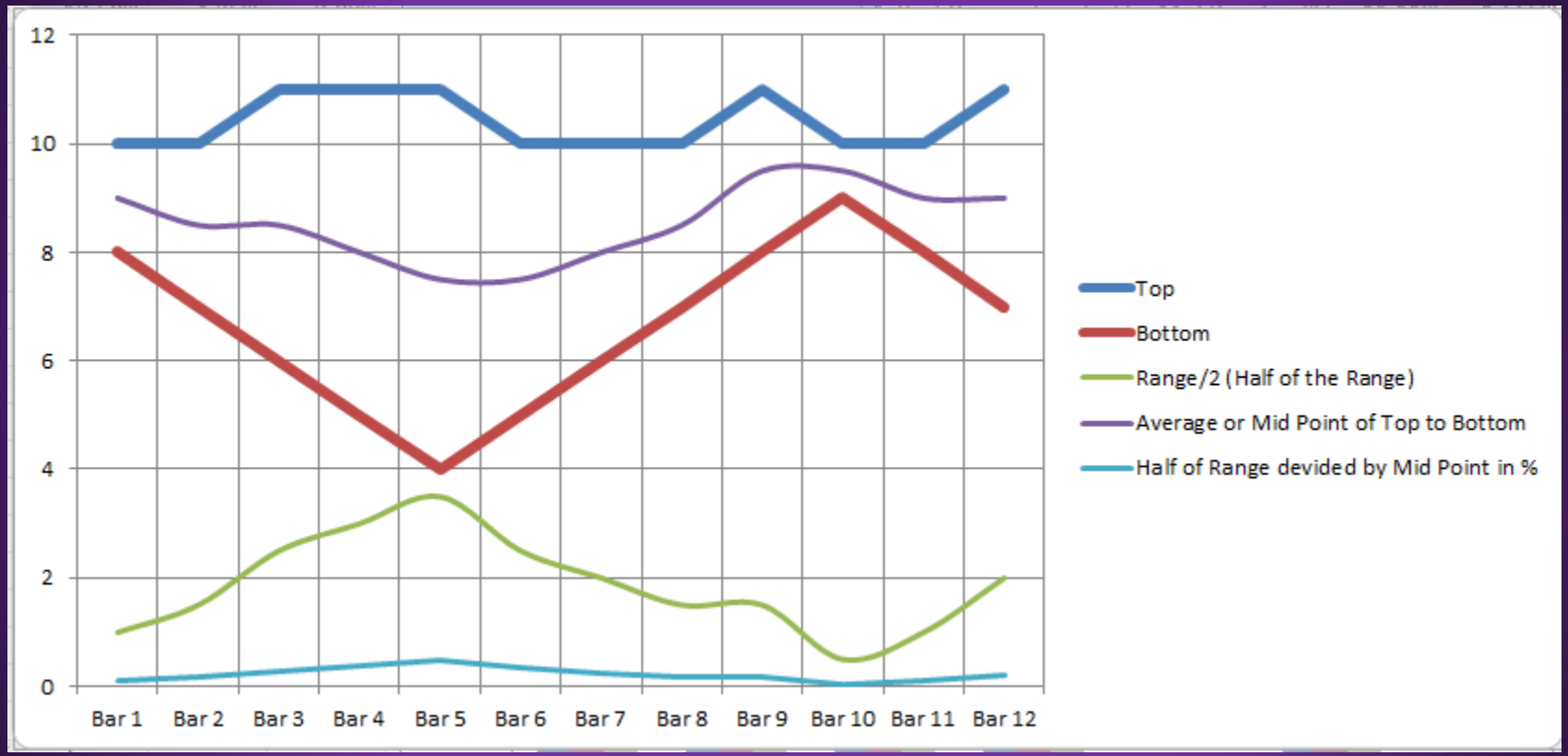

Dow Jones Industrial Average - DJI (WI) - 3 Month CandleStick Chart - USD
DJI
Volume and 2 Period Simple Moving Average of Volume & 2 Period Simple Moving Average of Volume
Date: 1/10/2003 12:00 AM Value: 12,272,921,552 Cursor Value : 12244790824.89

SHARES ARE GETTING LIGHTER?




Dow Jones Industrial Average - DJI (WI) - 3 Month CandleStick Chart - USD
DJI
Volume and 2 Period Simple Moving Average of Volume & 2 Period Simple Moving Average of Volume
Rising Prices on Decreasing Volume
On Balance Volume
Accumulation?
10 Period On Balance Volume %
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Date: 1/07/2003 12:00 AM Value: 14.865 Cursor Value : 22.90

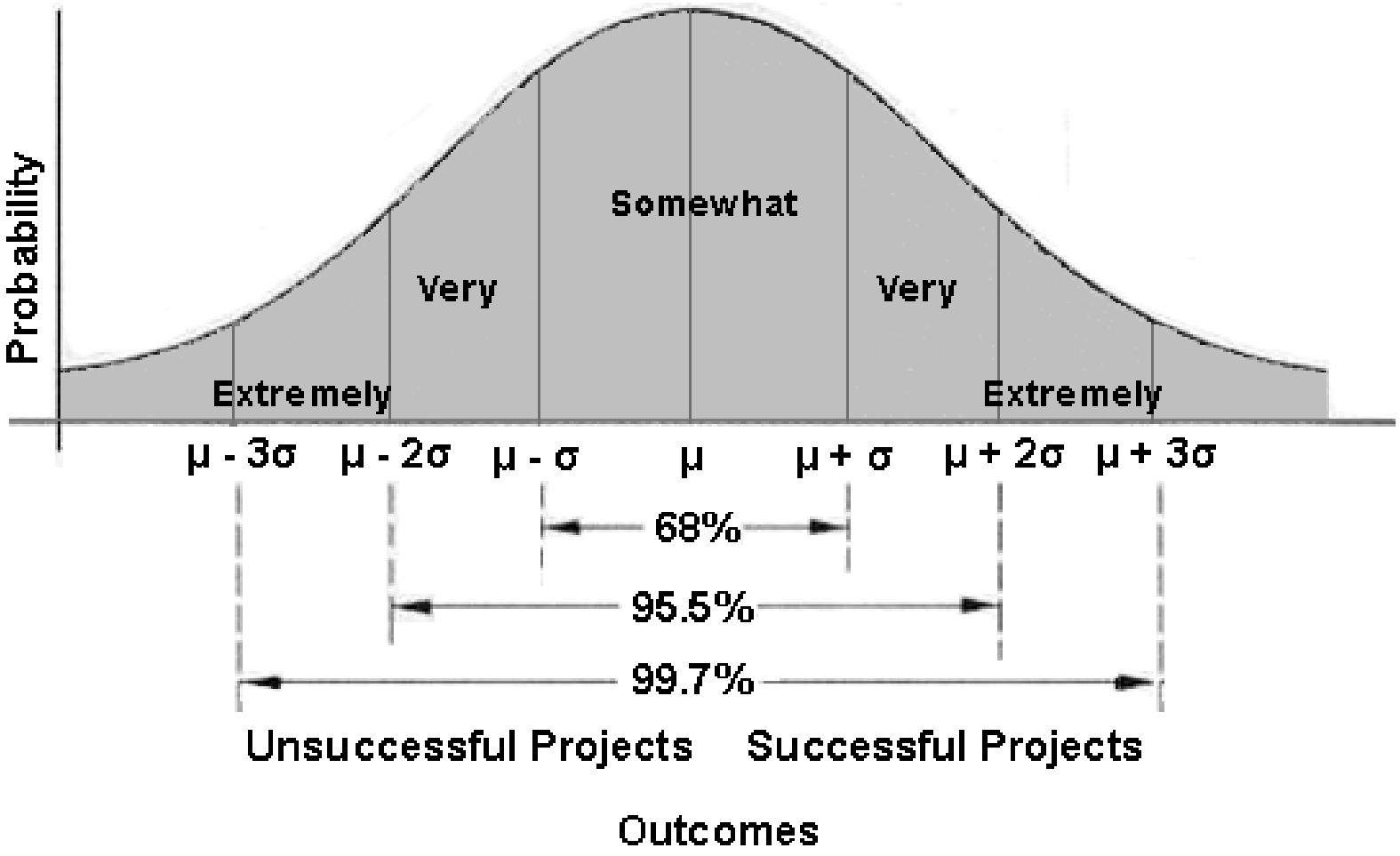

Dow Jones Industrial Average - DJI (WI) - 3 Month CandleStick Chart - USD
1900 1904 1908 1912 1916 1920 1924 1928 1932 1936 1940 1944 1948 1952 1956 1960 1964 1968 1972 1976 1980 1984 1988 1992 1996 2000 2004 2008 2012
DJI
14000.00
12500.00
11500.00
10000.00
8500.00
7000.00
On Balance Volume
Accumulation?
10 Period On Balance Volume %
3 Limit Move Swing Index Accumulation
Volume Advance Decline
10 Period Money Flow Index
1 Period Force Index
Market Facilitation Index
Open Interest
Turn Over
Volume
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
Date: 1/04/2004 12:00 AM Value: 131,786,550,252,802.359 Cursor Value : -142807491706625.34

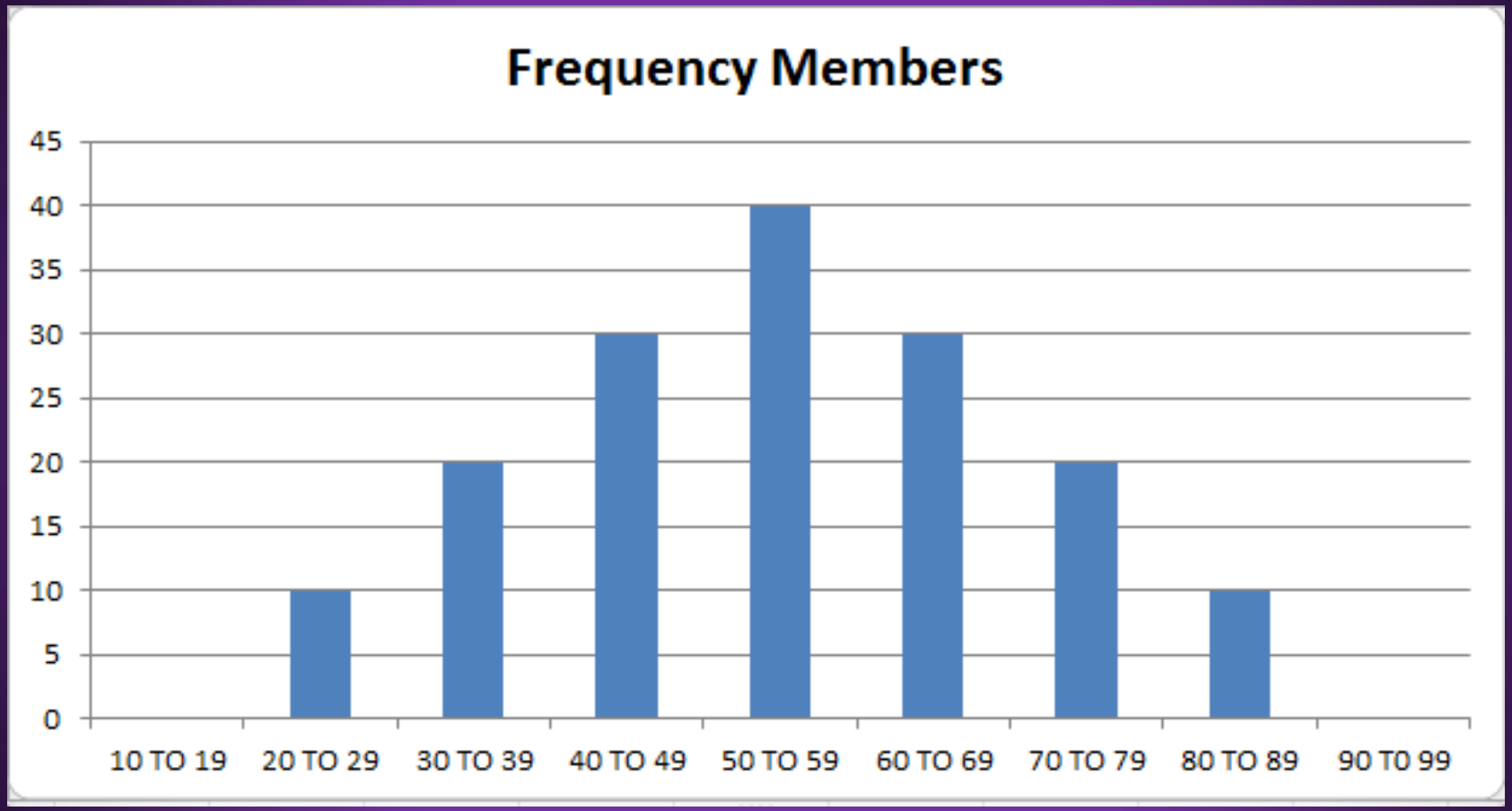

12
10
8
6
4
2
0
Bar 1
Bar 2
Bar 3
Bar 4
Bar 5
Bar 6
Bar 7
Bar 8
Bar 9
Bar 10
Bar 11
Bar 12
Top
Bottom
Range/2 (Half of the Range)
Average or Mid Point of Top to Bottom
Half of Range devided by Mid Point in %

EXPECTED VALUE = AVERAGE

SUCK EGGS

I know you know it, but I need to revise it.


Probability
Somewhat
Very
Very
Extremely
Extremely
μ - 3σ
μ - 2σ
μ - σ
μ
μ + σ
μ + 2σ
μ + 3σ
68%
95.5%
99.7%
Unsuccessful Projects
Successful Projects
Outcomes


Frequency Members
45
40
35
30
25
20
15
10
5
0
10 TO 19
20 TO 29
30 TO 39
40 TO 49
50 TO 59
60 TO 69
70 TO 79
80 TO 89
90 TO 99

THE COEFFICIENT OF VARIATION

The coefficient of variation is a measure of relative variability. It is used to measure the changes that have taken place in a population over time, or to compare the variability of two *(or more)* populations that are expressed in different units of measurement *(like 1929, 1987 and 2008)*. It is expressed as a percentage rather than in terms of the units of the particular data.

The formula for the coefficient of variation, denoted by V, is

$$V=100(s/\bar{x})\%$$

Where $\bar{x}$ is the mean of the sample

s=the standard deviation of the sample

EXAMPLE TWO SALES PERSONS

Nadia sells mainframe computers, hers sales averaged $256,000 per month with a standard deviation of $42,000.

V=100(42,000/256,000)%

16.4%

Bob sells personal computers, his sales averaged $36,000 per month with a standard deviation of $9,500.

V=100(9,500/36000)%

26.4%

RELATIVE VARIATION

Thus, the relative variation of Bob's sales is larger than that of Nadia's, although the standard deviation of Bob's sales is smaller than that of Nadia's.

Bob's V=26.4%

Nadia's V=16.4%

The coefficient of variation indicates that, relative to their mean, the monthly sales of Bob are more variable than those of Nadia.

Note that the coefficient of variation is usually only appropriate for data in which all values are positive. Examples of such data include sales, height, weight and volume. If some of the values can be negative (e.g. profit, loss measurements of change), the coefficient of variation should not be used.

Statistics: Making Business Decisions by John S. Croucher. (McGraw-Hill)

THE COEFFICIENT OF VARIATION

The coefficient of variation is equal the standard deviation divided by the mean, multiplied by 100%.

For the sample of 10 times "to get ready", since x the sample average is 39.6 and S the sample standard deviation is 6.769… the coefficient of variation is 6.769/39.6 x 100%=17.09%

For the times "to get ready", the standard deviation is 17.1% of the mean.

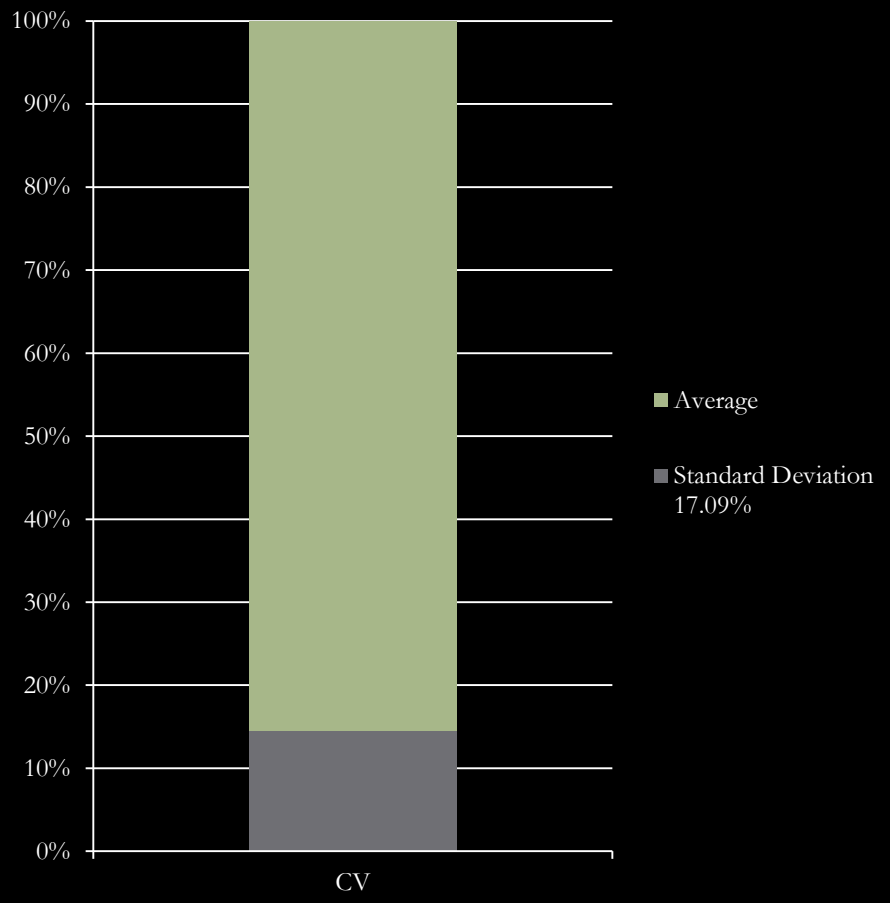
The formula for the coefficient of variation, denoted by CV, is

$$CV=(s/\bar{x})100\%$$

Where $\bar{x}$ is the mean of the sample

s=the standard deviation of the sample. 6.769 39.6

THE COEFFICIENT OF VARIATION



The formula for the coefficient of variation, denoted by CV, is

$$CV=(s/\bar{x})100\%$$

Where $\bar{x}$ is the mean of the sample

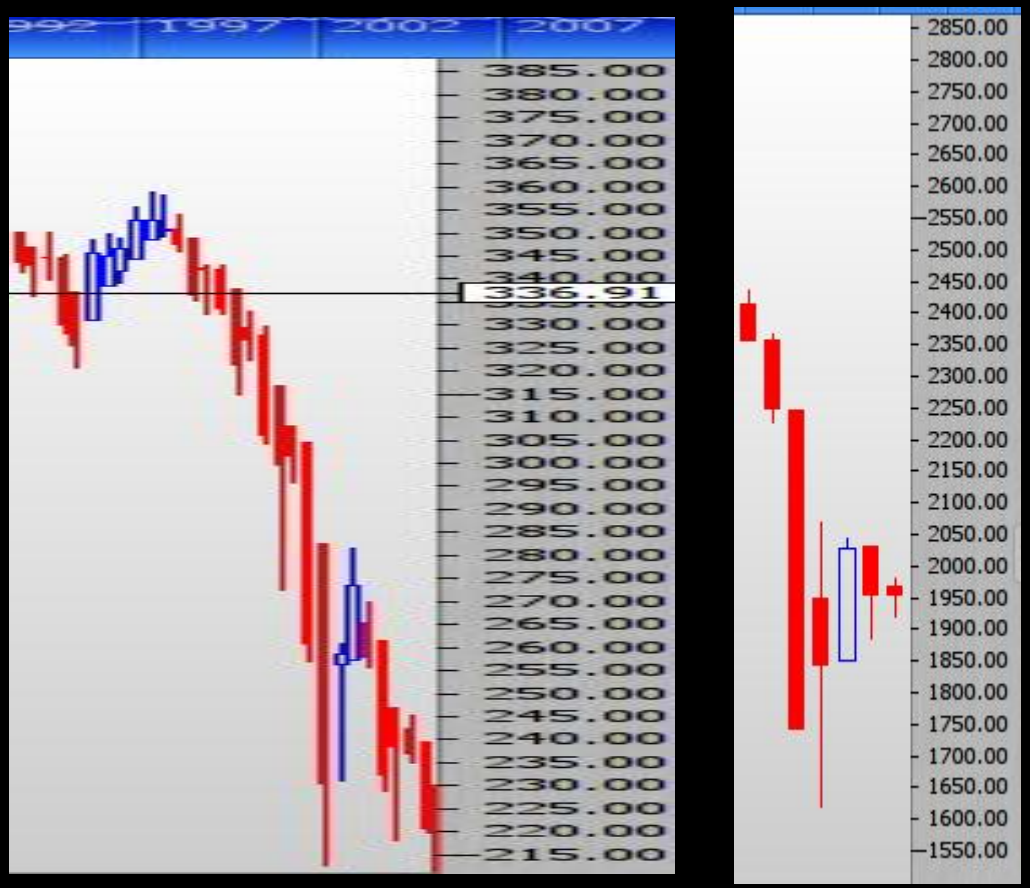
s=the standard deviation of the sample. 6.769 39.6

Standard Deviation is 17.09% of the Average.

	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	EXAMPLE 4
HIGH	10	25	50	100
LOW	8	23	48	98
RANG	2	2	2	2
STANDARD DEVIATION	1	1	1	1
AVERAGE	9	24	49	99
CV	11%	4%	2%	1%

CALCULATION

Date	High	Low	STD	Average	V
19/10/1987	2,247.39	1,738.74	254.325	1993.065	13%
20/10/1987	2,067.47	1,616.21	225.63	1841.84	12%
29/10/1929	252.4	212.3	20.05	232.35	9%
21/07/1933	98.7	84.5	7.1	91.6	8%
28/10/1929	295.2	256.8	19.2	276	7%
24/10/1929	312.8	272.3	20.25	292.55	7%
6/10/1931	100.5	87.5	6.5	94	7%
30/10/1929	260.9	230.9	15	245.9	6%


1997
2002
2007
385.00
380.00
375.00
370.00
365.00
360.00
355.00
350.00
345.00
340.00
336.91
330.00
325.00
320.00
315.00
310.00
305.00
300.00
295.00
290.00
285.00
280.00
275.00
270.00
265.00
260.00
255.00
250.00
245.00
240.00
235.00
230.00
225.00
220.00
215.00

2850.00
2800.00
2750.00
2700.00
2650.00
2600.00
2550.00
2500.00
2450.00
2400.00
2350.00
2300.00
2250.00
2200.00
2150.00
2100.00
2050.00
2000.00
1950.00
1900.00
1850.00
1800.00
1750.00
1700.00
1650.00
1600.00
1550.00

EXAMPLE A DATE IN TIME

Oct 19 1987

High 2,247.39

Low 1,738.74

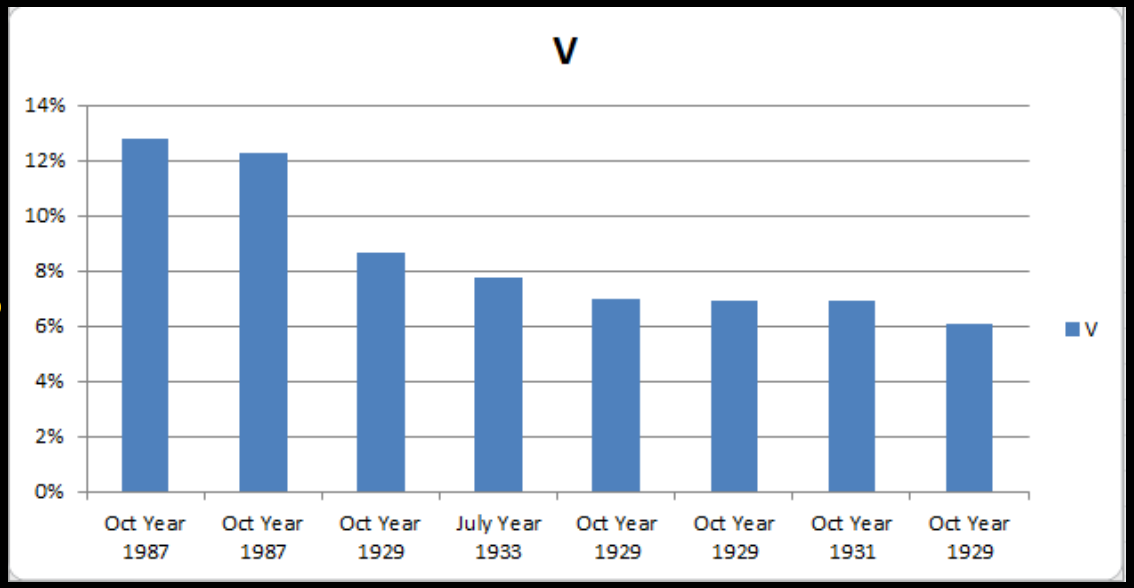
average 1993.065

standard deviation of 254.325

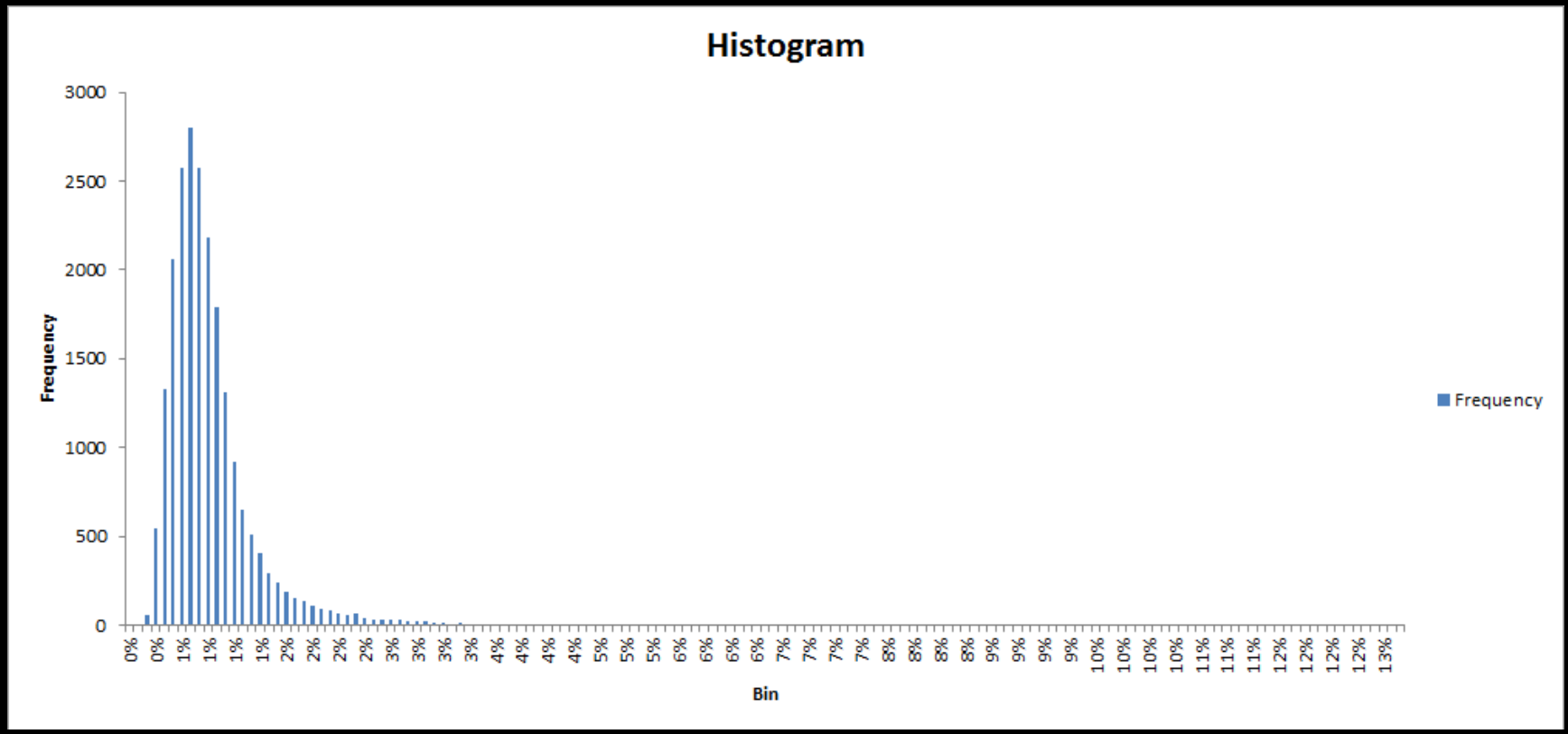
V=100(254.325

/1993.065)%

13%



DAYS


Histogram
Frequency
3000
2500
2000
1500
1000
500
0
0%
0%
1%
1%
1%
1%
2%
2%
2%
2%
3%
3%
3%
3%
4%
4%
4%
4%
5%
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8%
8%
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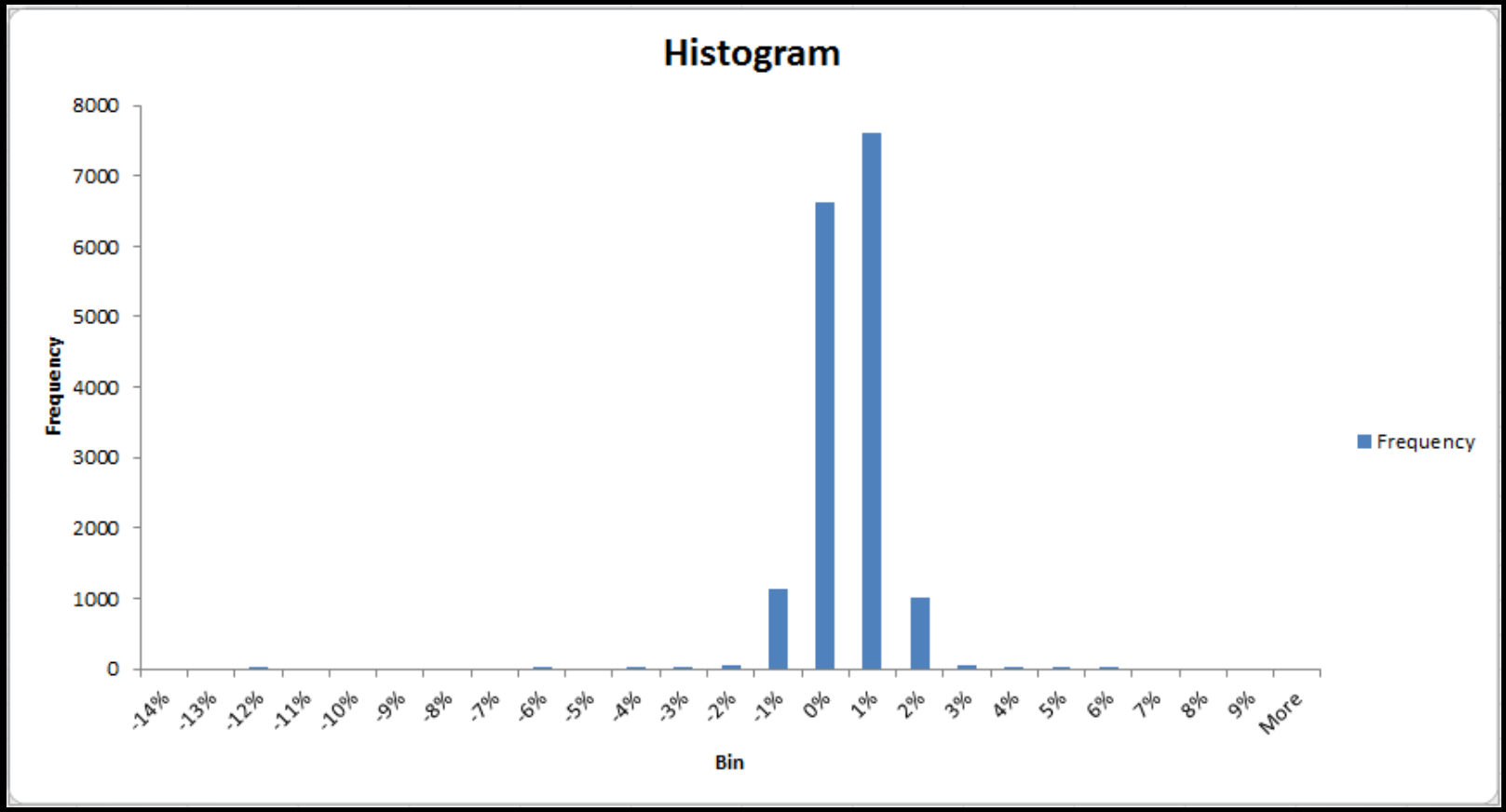
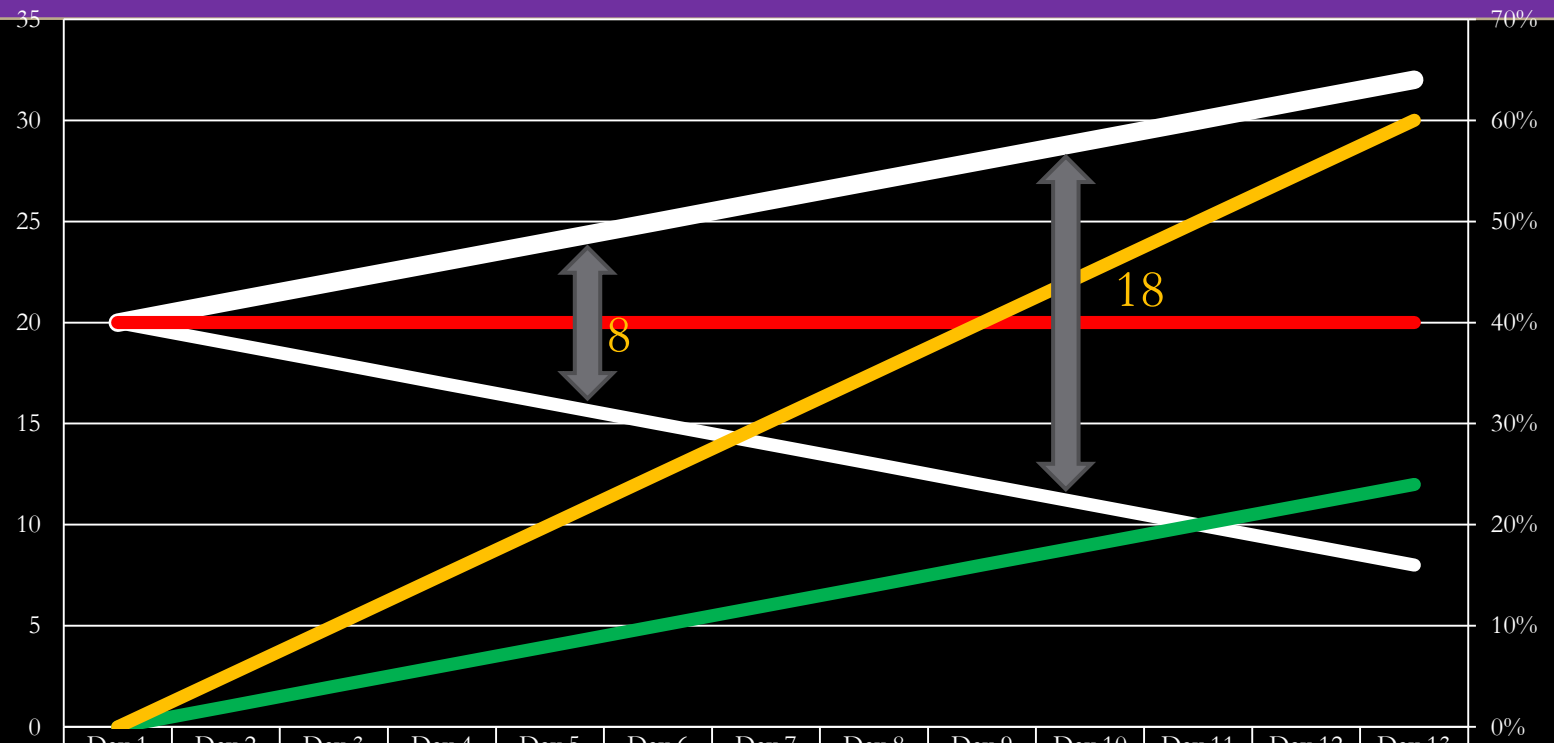
9%
9%
9%
9%
10%
10%
10%
10%
11%
11%
11%
12%
12%
12%
12%
13%
Bin
Frequency

DAYS + AND -

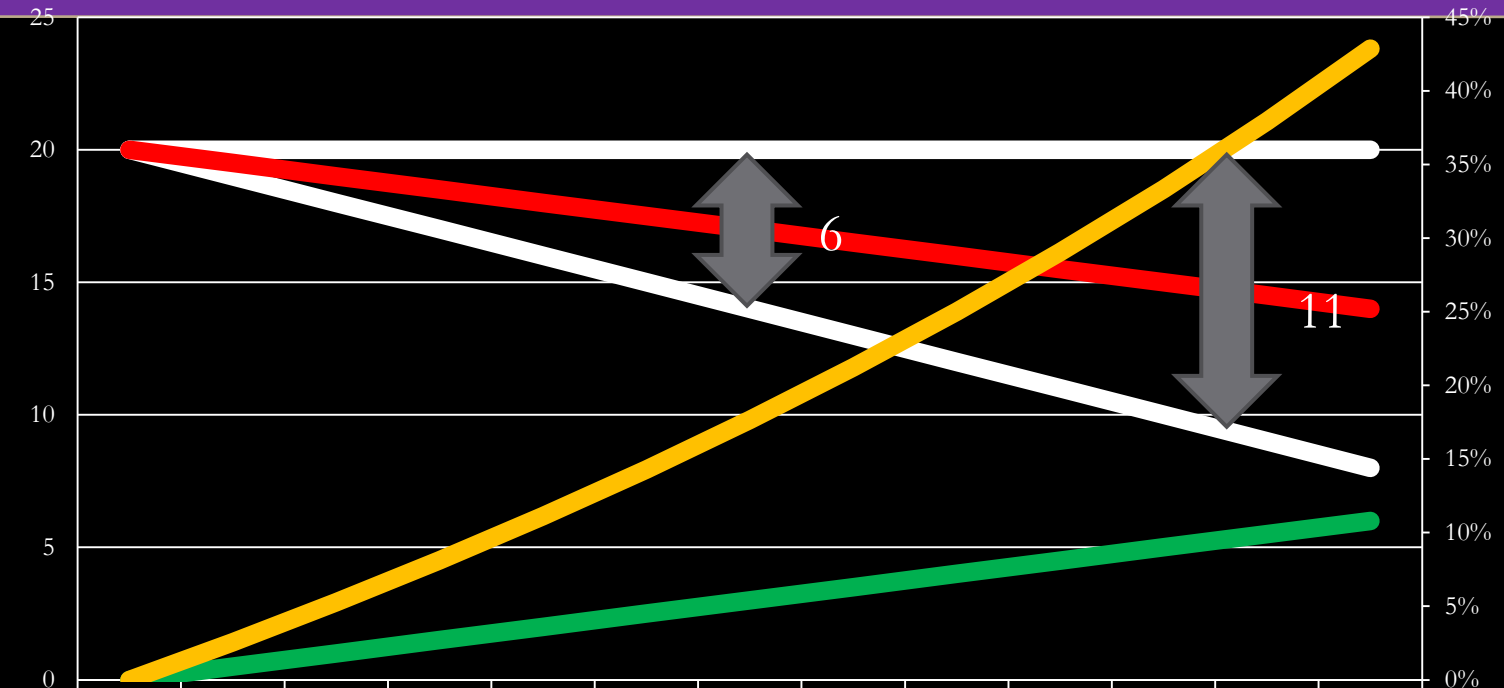

Histogram
8000
7000
6000
5000
4000
3000
2000
1000
0
Frequency
-14%
-13%
-12%
-11%
-10%
-9%
-8%
-7%
-6%
-5%
-4%
-3%
-2%
-1%
0%
1%
2%
3%
4%
5%
6%
7%
8%
9%
More
Bin
Frequency

RANGE

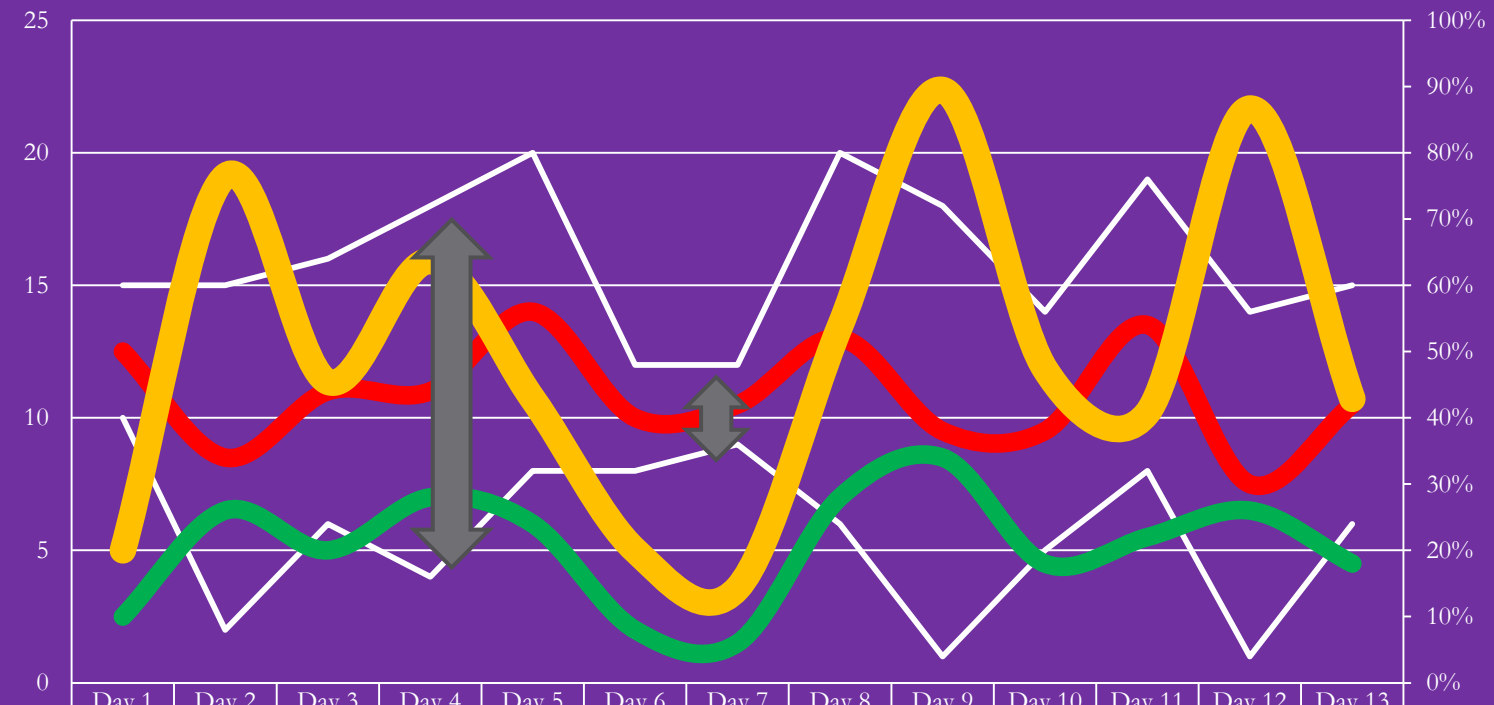


	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
High	20	21	22	23	24	25	26	27	28	29	30	31	32
Low	20	19	18	17	16	15	14	13	12	11	10	9	8
STDEV	0	1	2	3	4	5	6	7	8	9	10	11	12
Average	20	20	20	20	20	20	20	20	20	20	20	20	20
V	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%

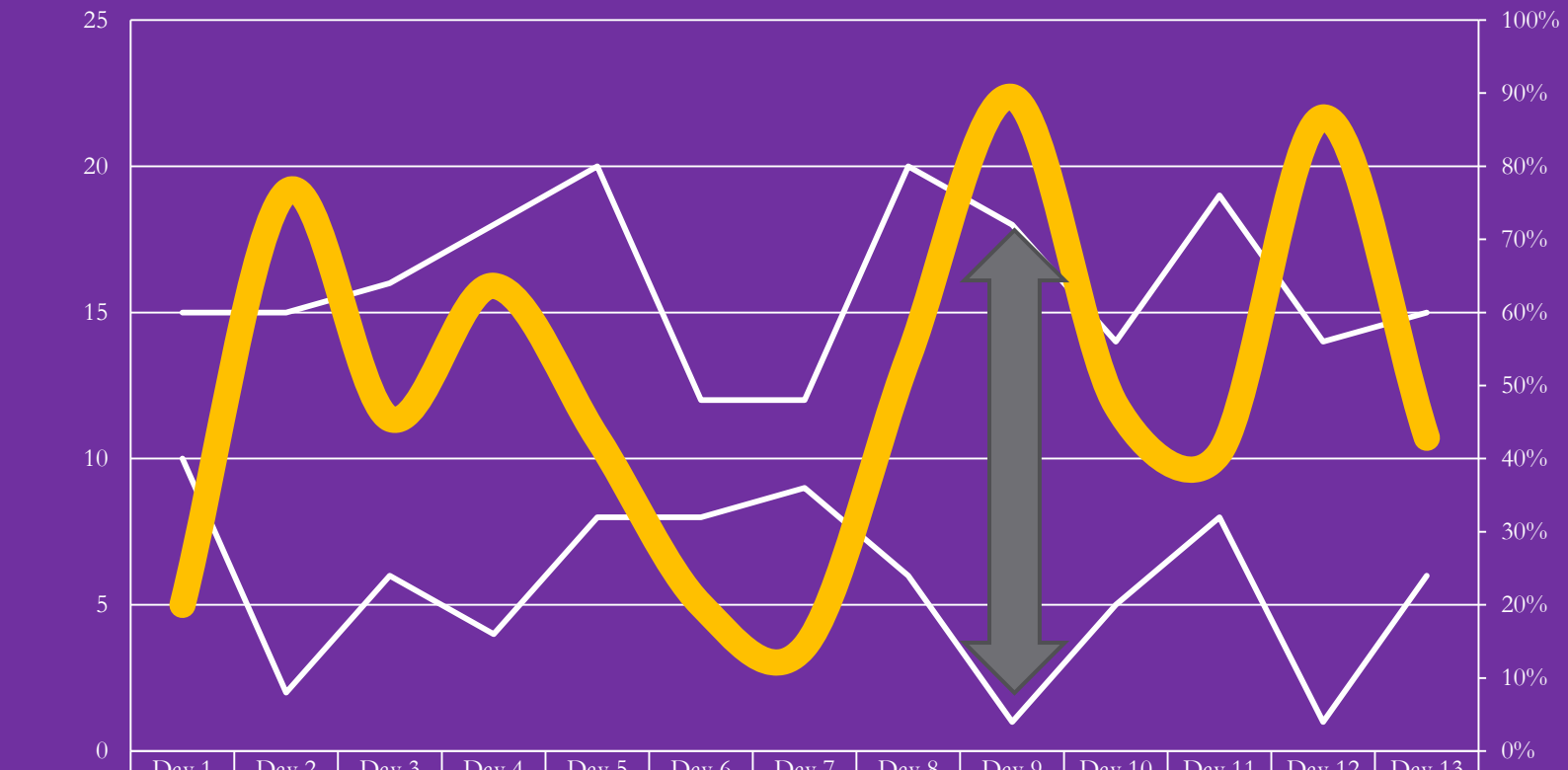
RANGE



	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
High	20	20	20	20	20	20	20	20	20	20	20	20	20
Low	20	19	18	17	16	15	14	13	12	11	10	9	8
STDEV	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Average	20	19.5	19	18.5	18	17.5	17	16.5	16	15.5	15	14.5	14
V	0%	3%	5%	8%	11%	14%	18%	21%	25%	29%	33%	38%	43%



	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
High	15	15	16	18	20	12	12	20	18	14	19	14	15
Low	10	2	6	4	8	8	9	6	1	5	8	1	6
STDEV	2.5	6.5	5	7	6	2	1.5	7	8.5	4.5	5.5	6.5	4.5
Average	12.5	8.5	11	11	14	10	10.5	13	9.5	9.5	13.5	7.5	10.5
V	20%	76%	45%	64%	43%	20%	14%	54%	89%	47%	41%	87%	43%



	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
High	15	15	16	18	20	12	12	20	18	14	19	14	15
Low	10	2	6	4	8	8	9	6	1	5	8	1	6
V	20%	76%	45%	64%	43%	20%	14%	54%	89%	47%	41%	87%	43%

THE COEFFICIENT OF VARIATION EXAMPLE

High=10

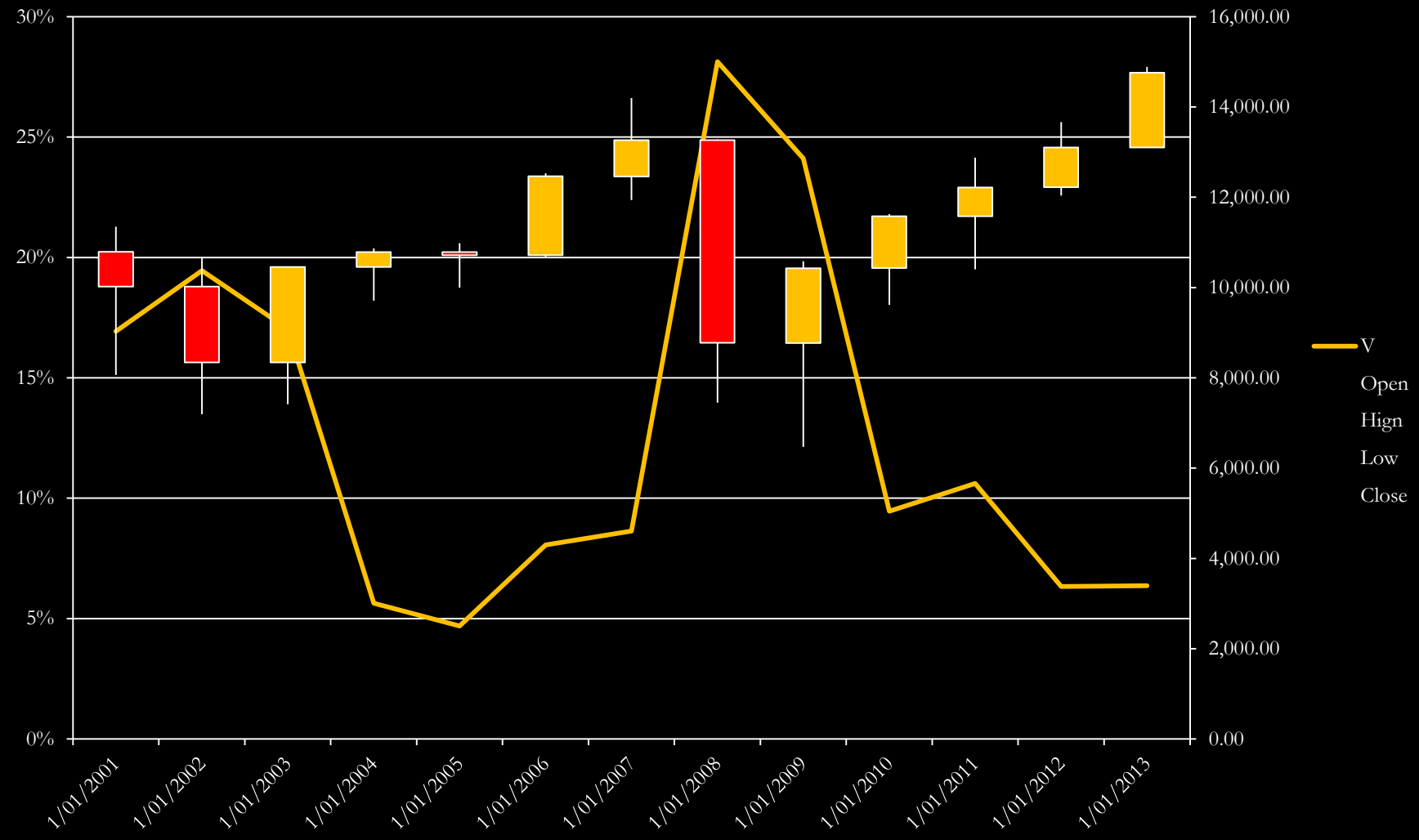
Low=5

SD=2.5

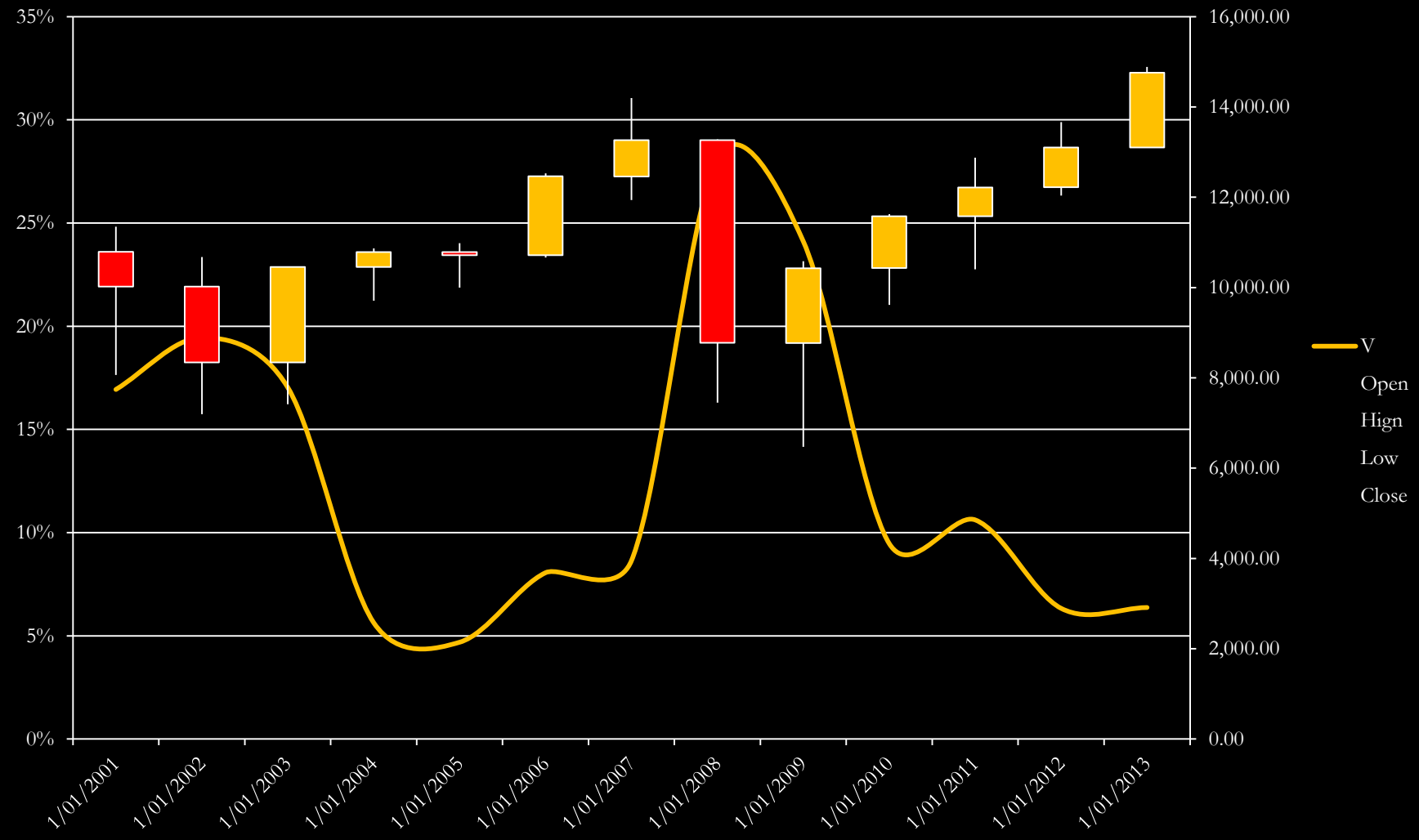
Average=7.5

V=33%

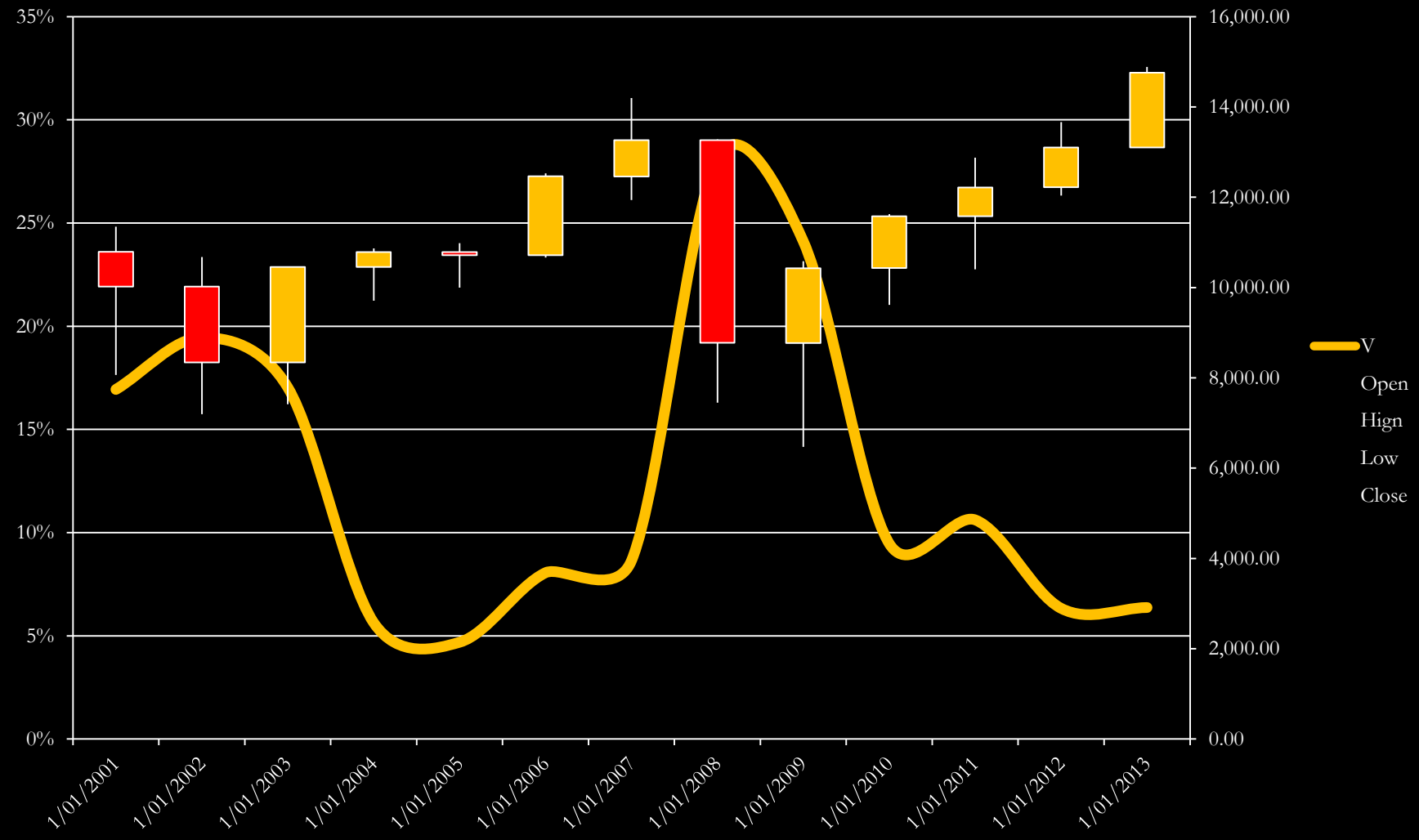
THE COEFFICIENT OF VARIATION DOW JONES INDEX



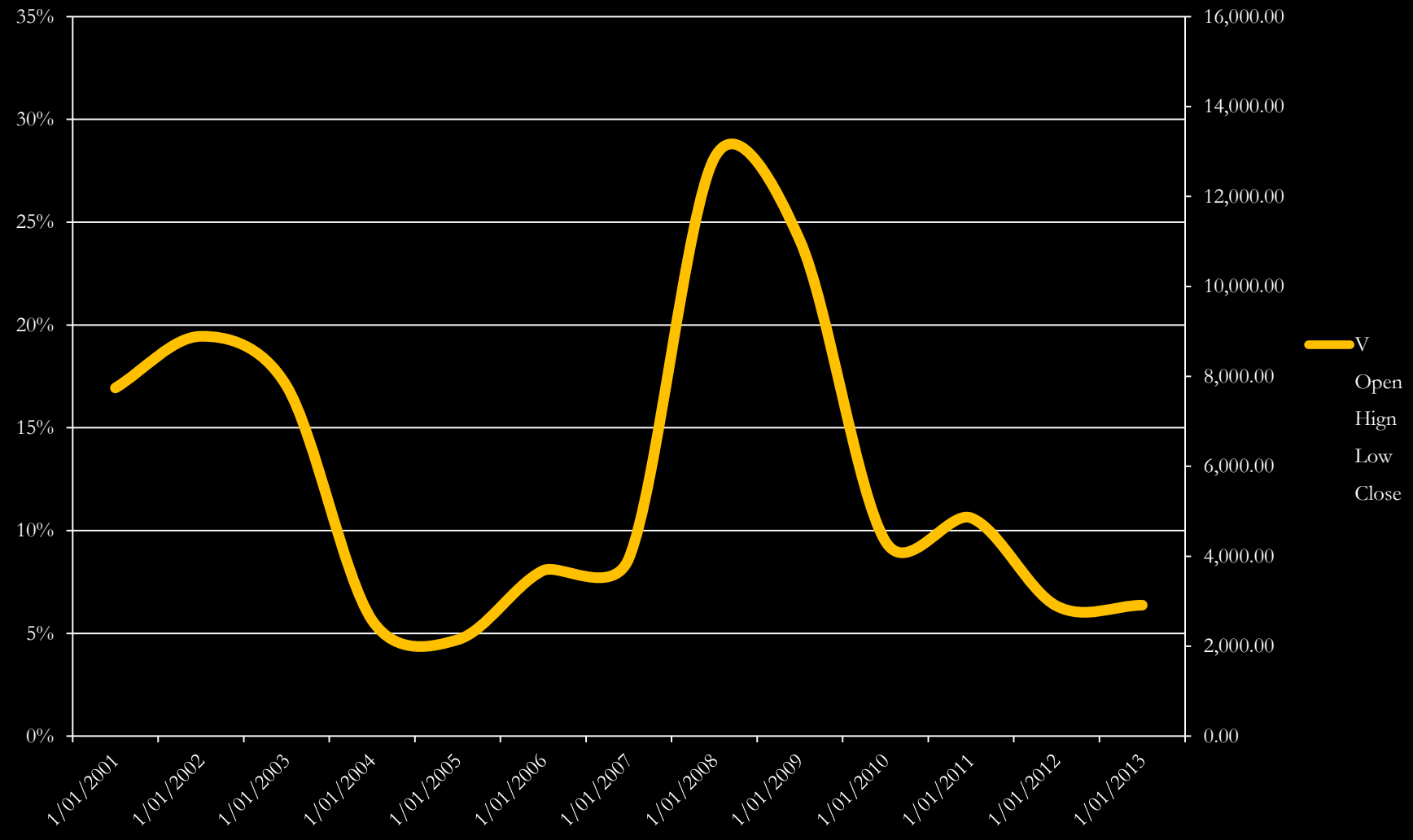
THE COEFFICIENT OF VARIATION DOW JONES INDEX



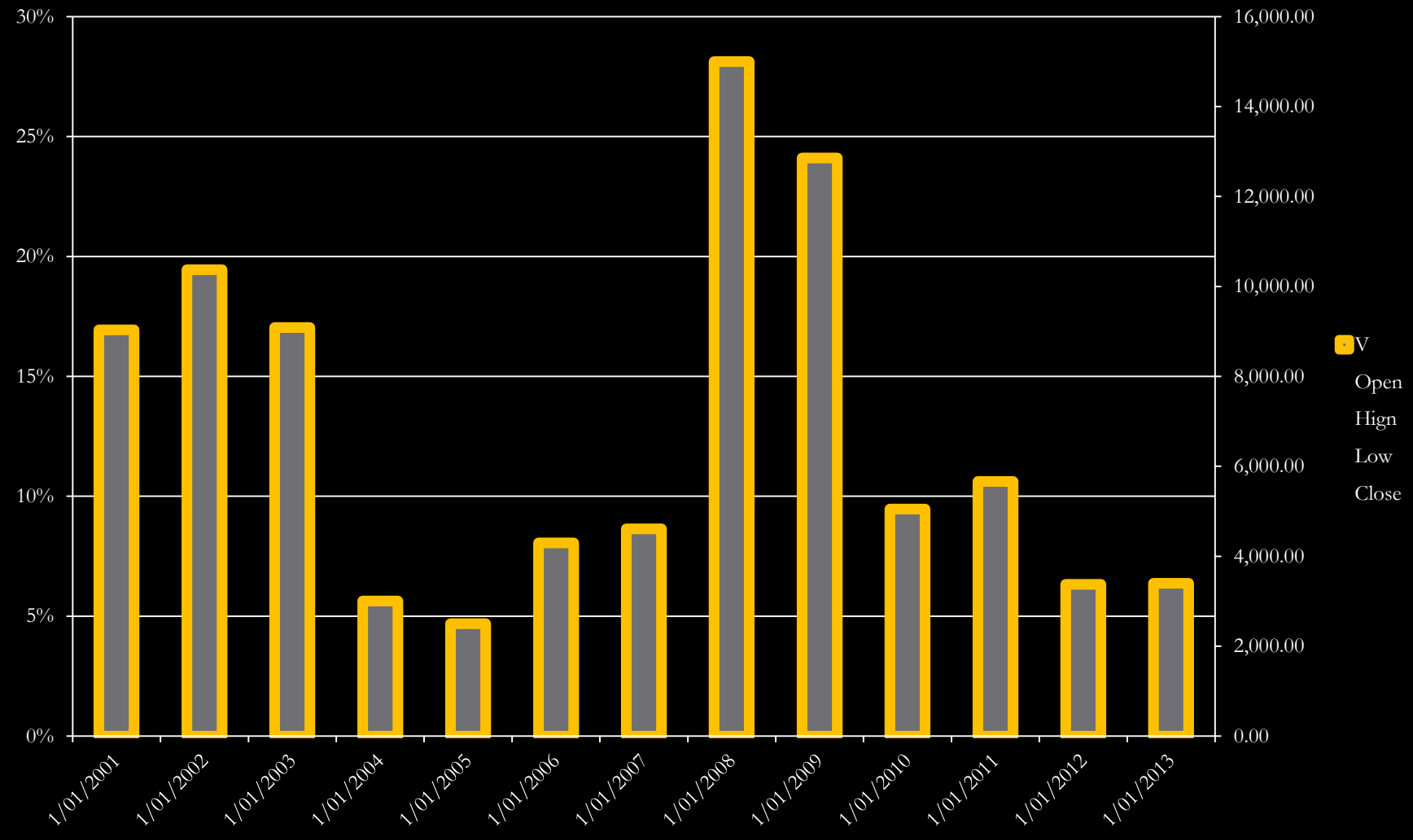
THE COEFFICIENT OF VARIATION DOW JONES INDEX



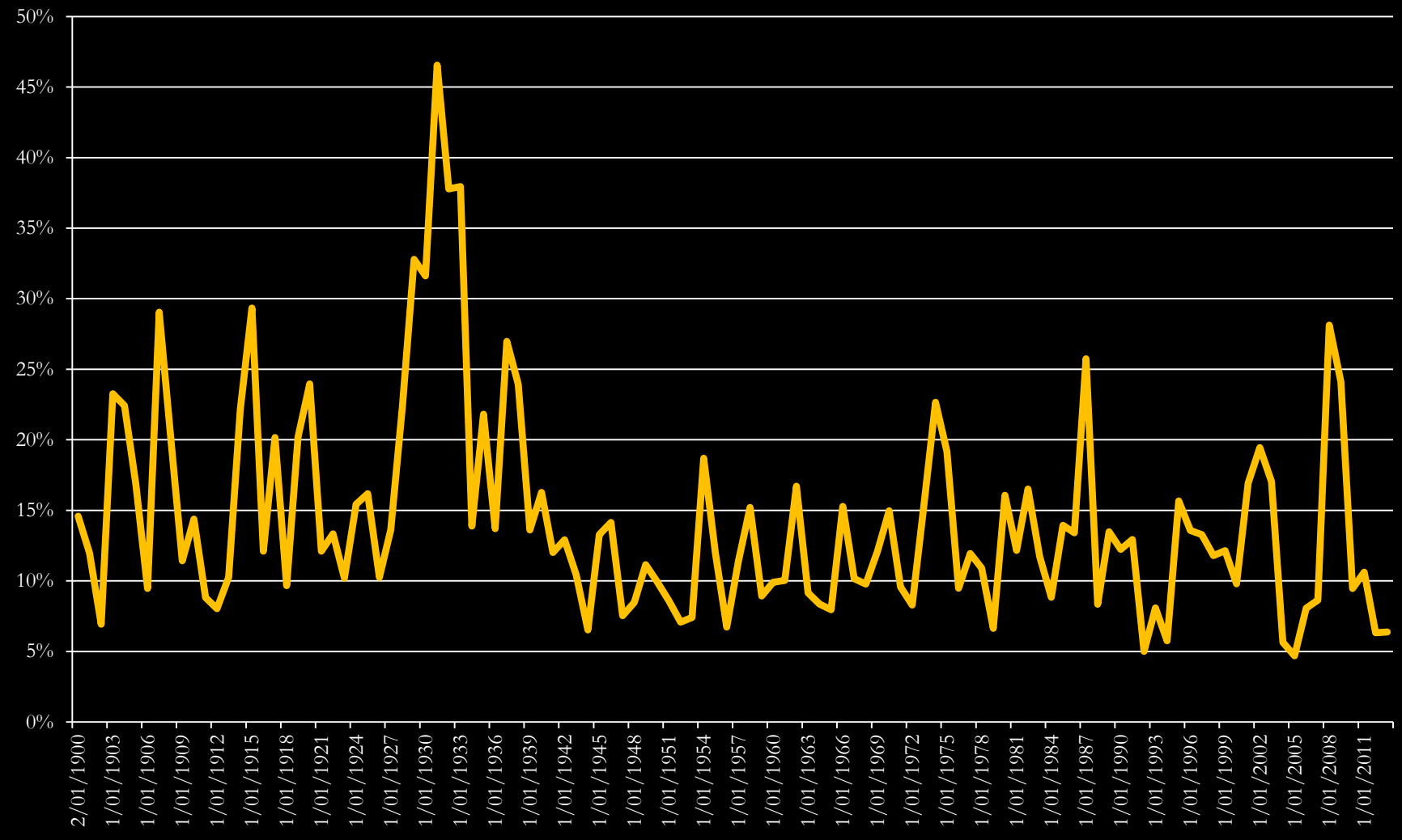
THE COEFFICIENT OF VARIATION DOW JONES INDEX



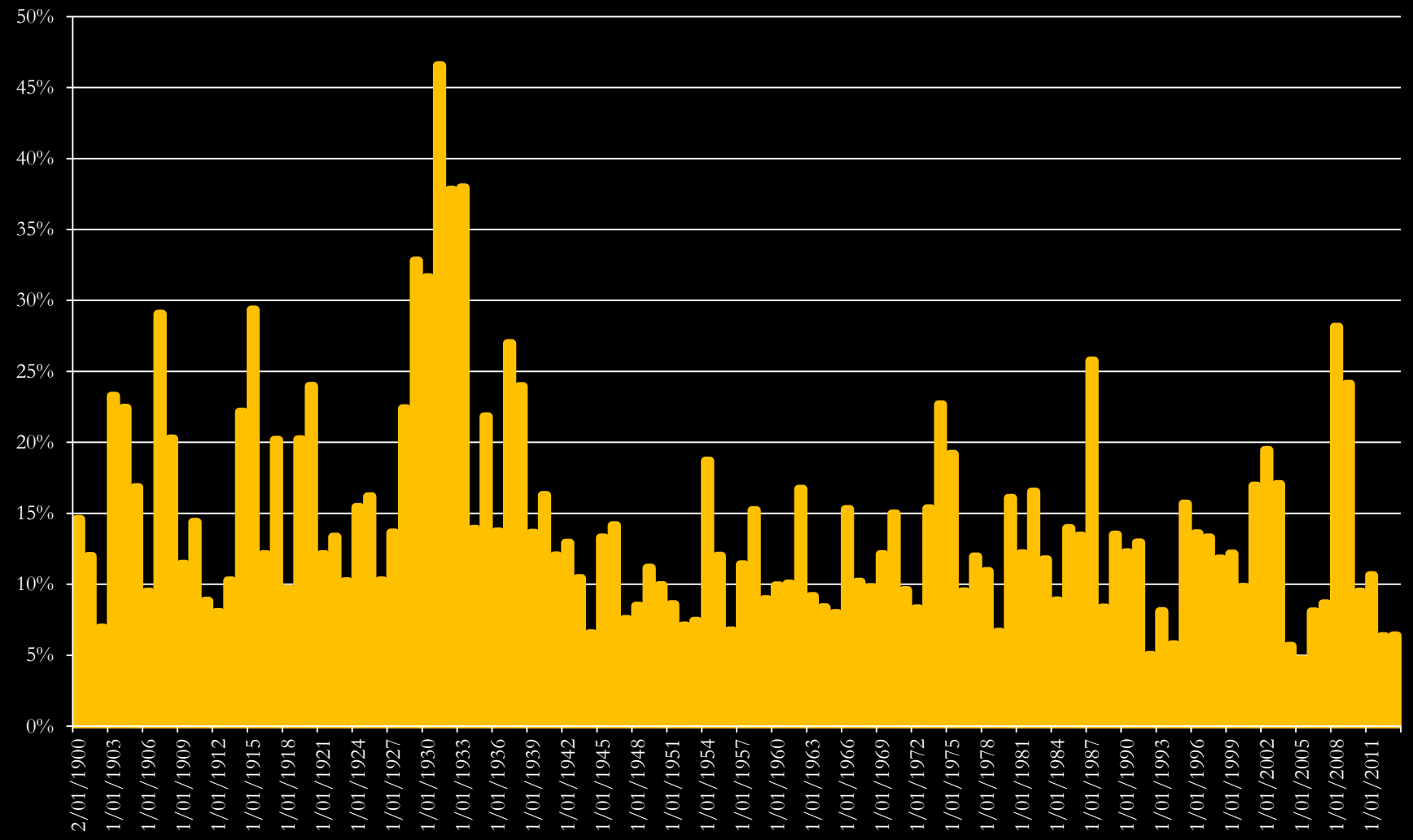
THE COEFFICIENT OF VARIATION DOW JONES INDEX



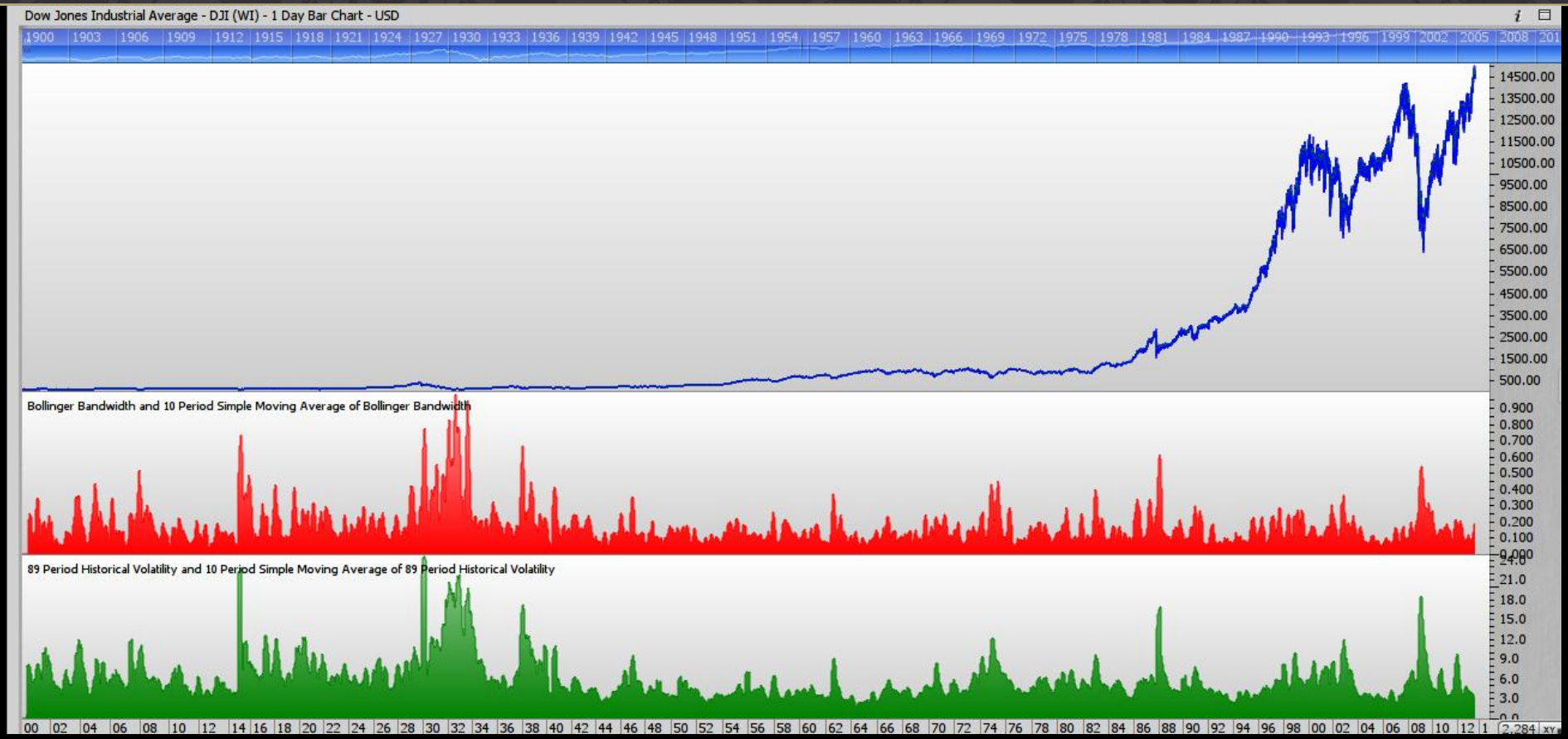
THE COEFFICIENT OF VARIATION DOW JONES INDEX (YEARLY DATA)



THE COEFFICIENT OF VARIATION DOW JONES INDEX (YEARLY DATA)



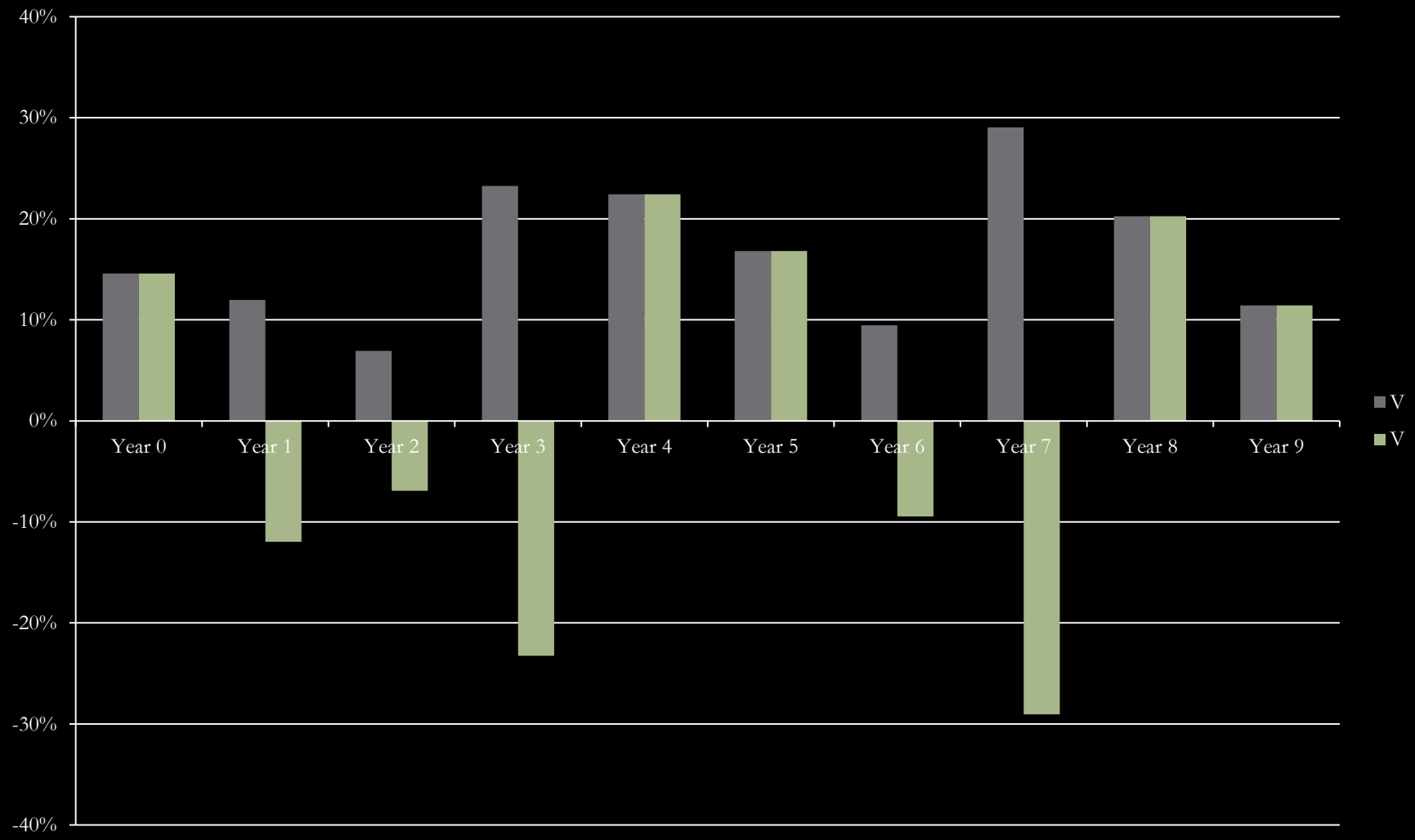
BOLLINGER BANDS AND HISTORICAL VOLATILITY



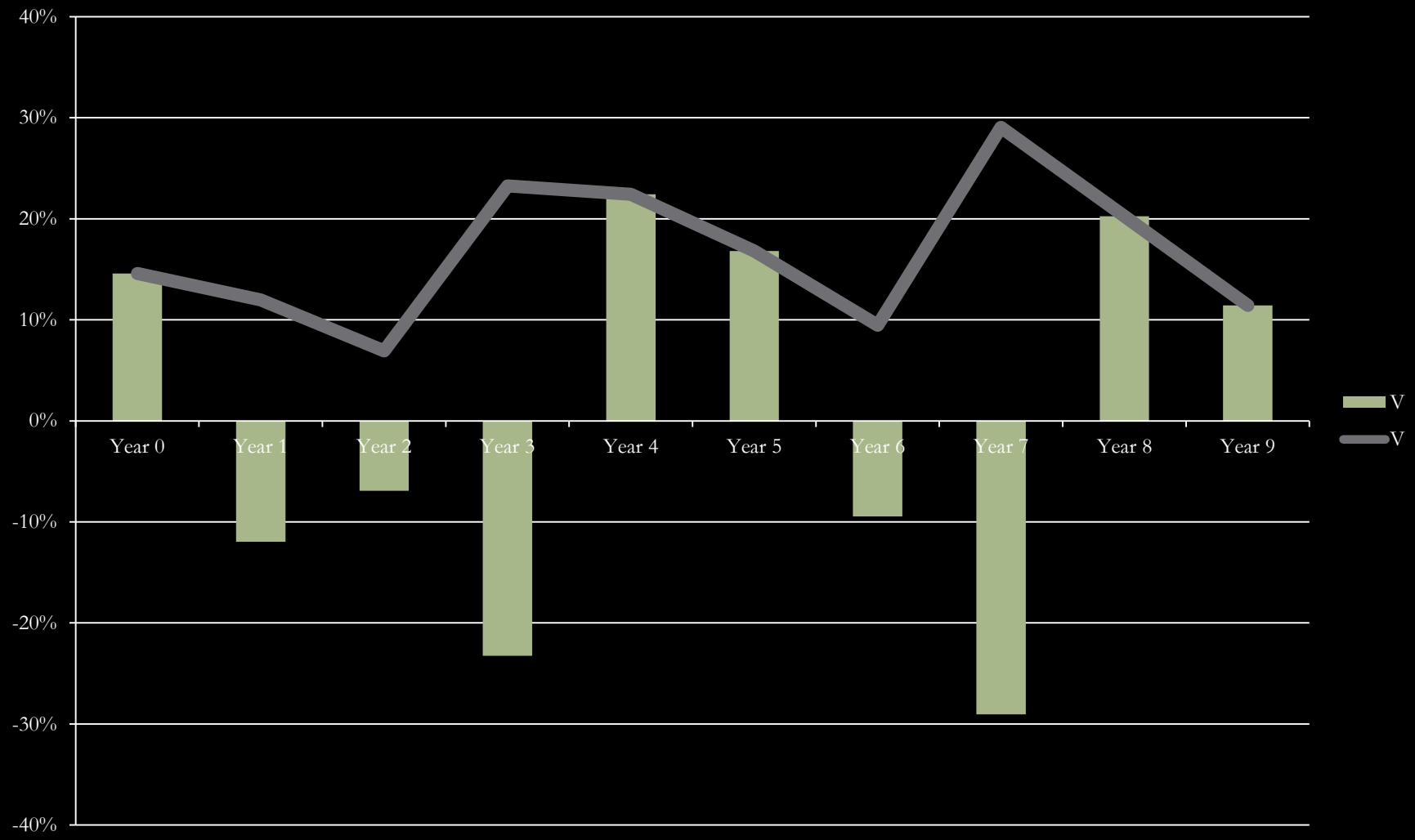
THE COEFFICIENT OF VARIATION DOW JONES INDEX (CLOSES UP OR CLOSES DOWN (*-1))

	V	V
Year 0	15%	15%
Year 1	12%	-12%
Year 2	7%	-7%
Year 3	23%	-23%
Year 4	22%	22%
Year 5	17%	17%
Year 6	9%	-9%
Year 7	29%	-29%
Year 8	20%	20%
Year 9	11%	11%

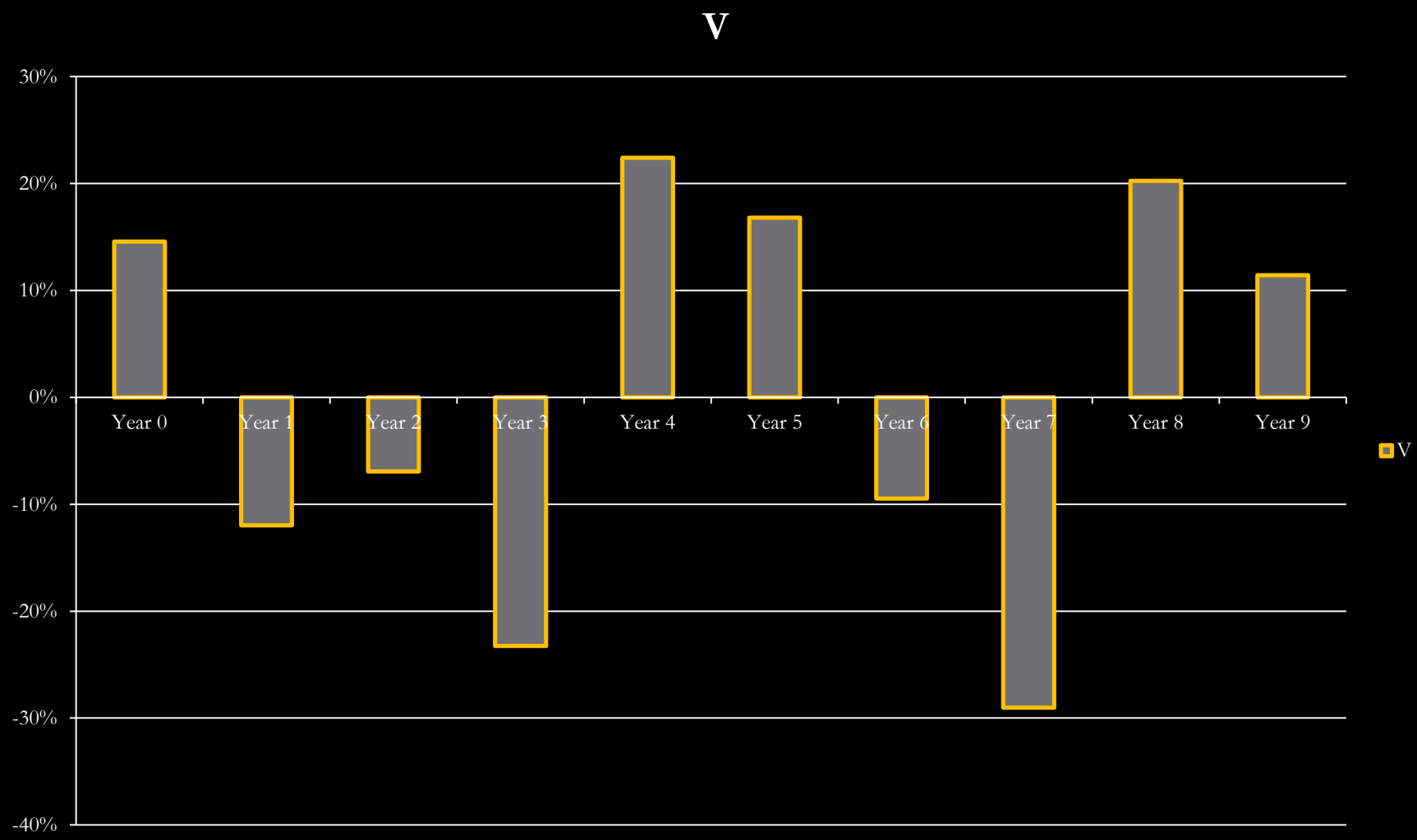
THE COEFFICIENT OF VARIATION DOW JONES INDEX 1900-1909 (WITH DUPLICATION)



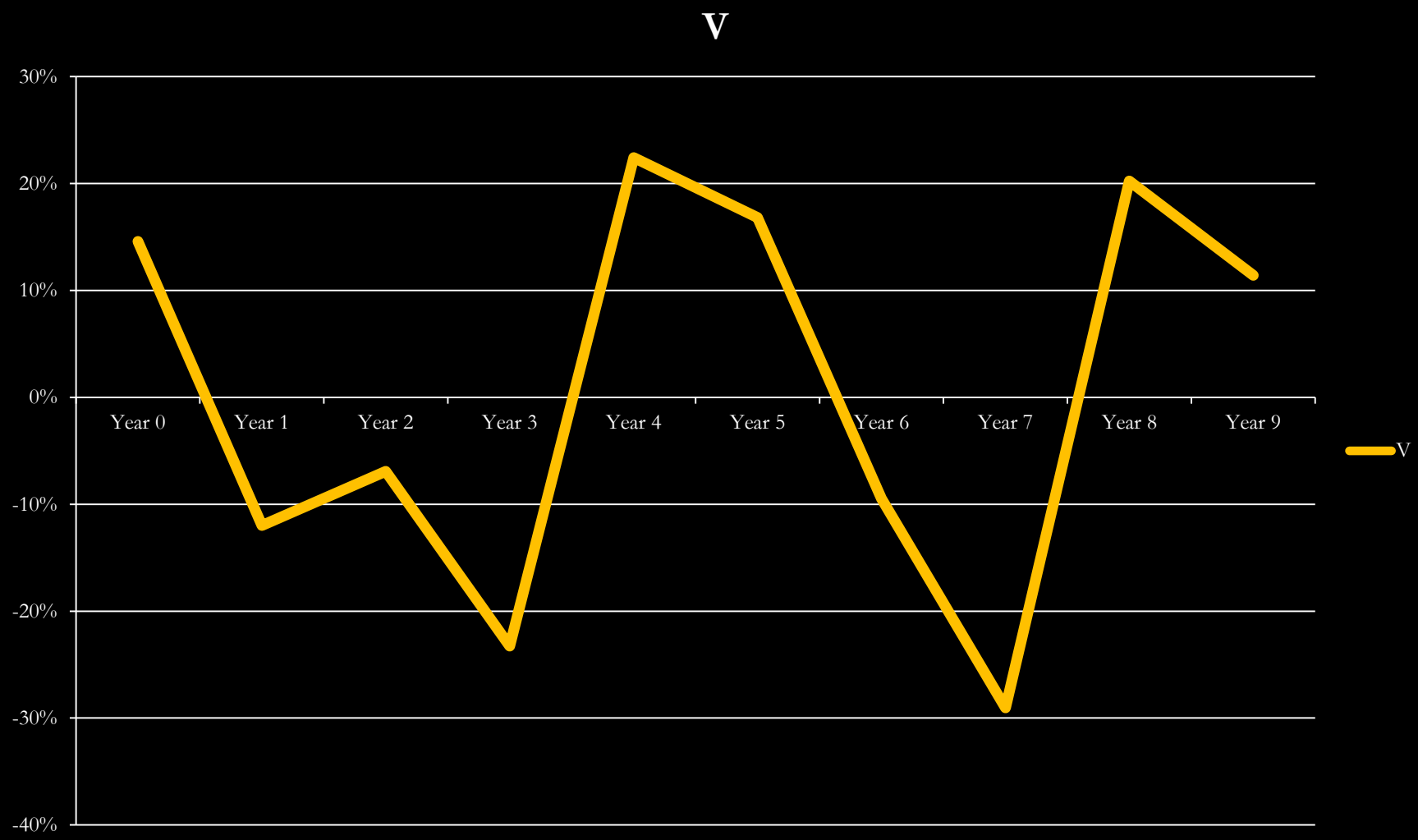
THE COEFFICIENT OF VARIATION DOW JONES INDEX 1900-1909 (WITH DUPLICATION)



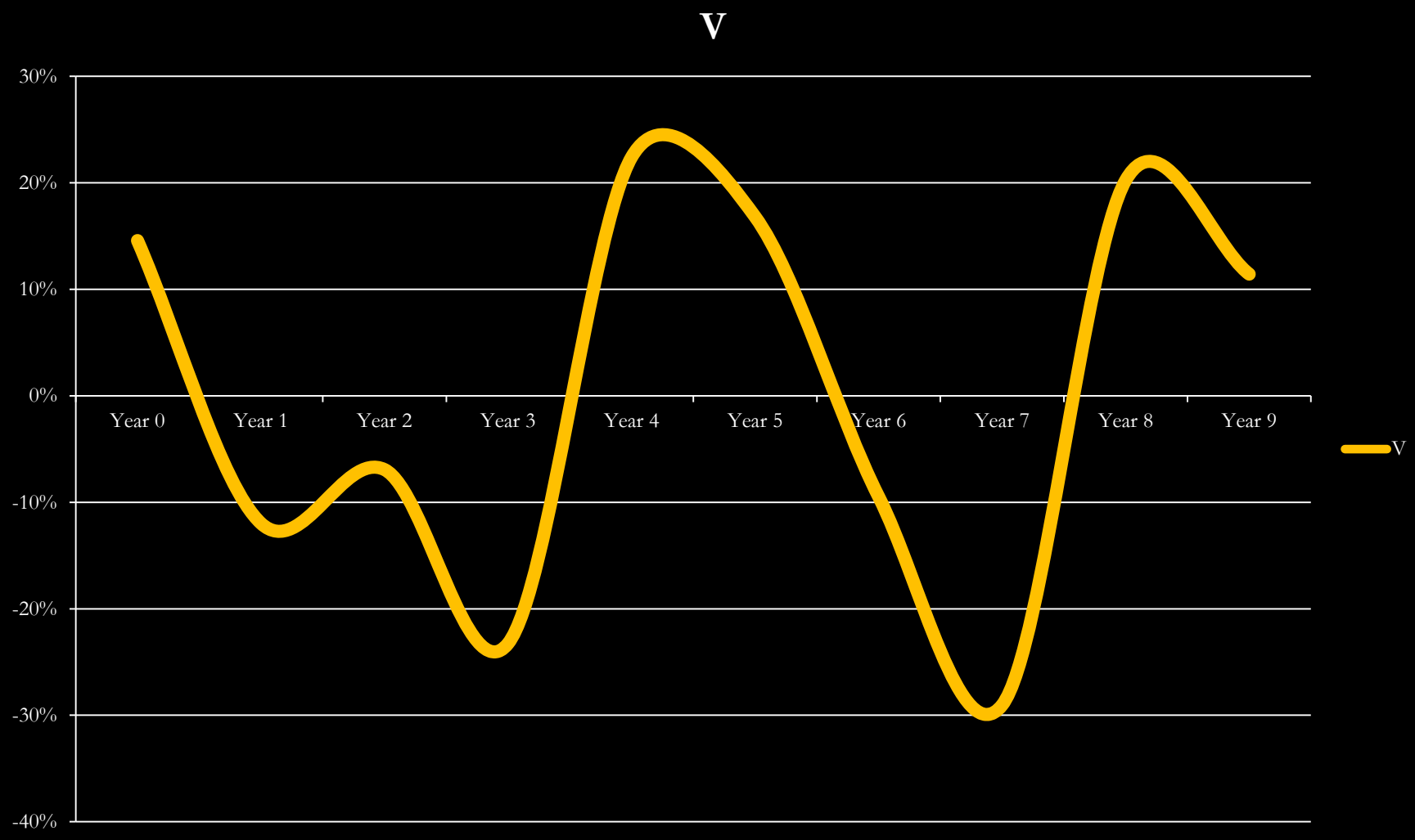
THE COEFFICIENT OF VARIATION DOW JONES INDEX 1900-1909 (WITHOUT DUPLICATION)



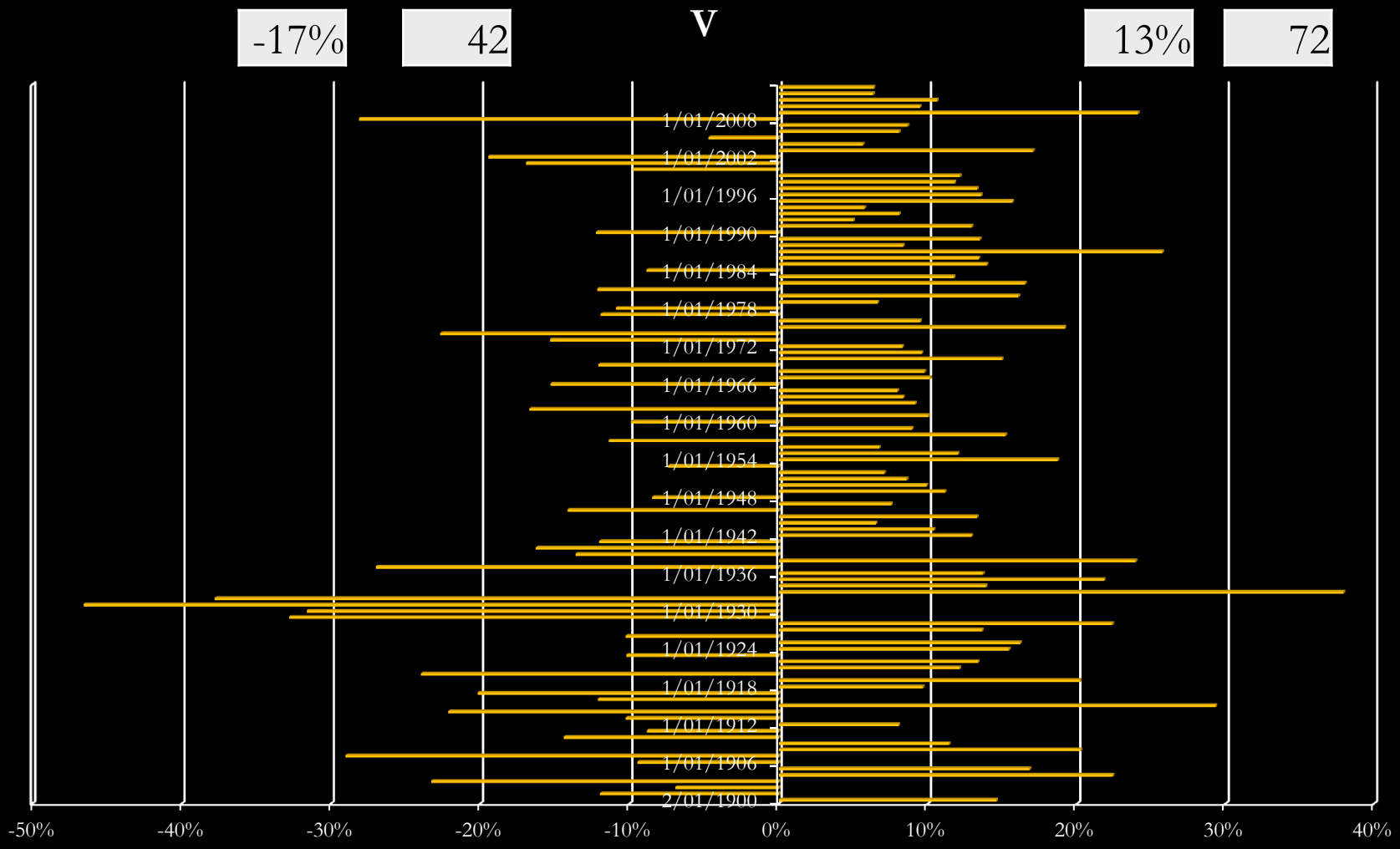
THE COEFFICIENT OF VARIATION DOW JONES INDEX 1900-1909 (UP AND DOWN)



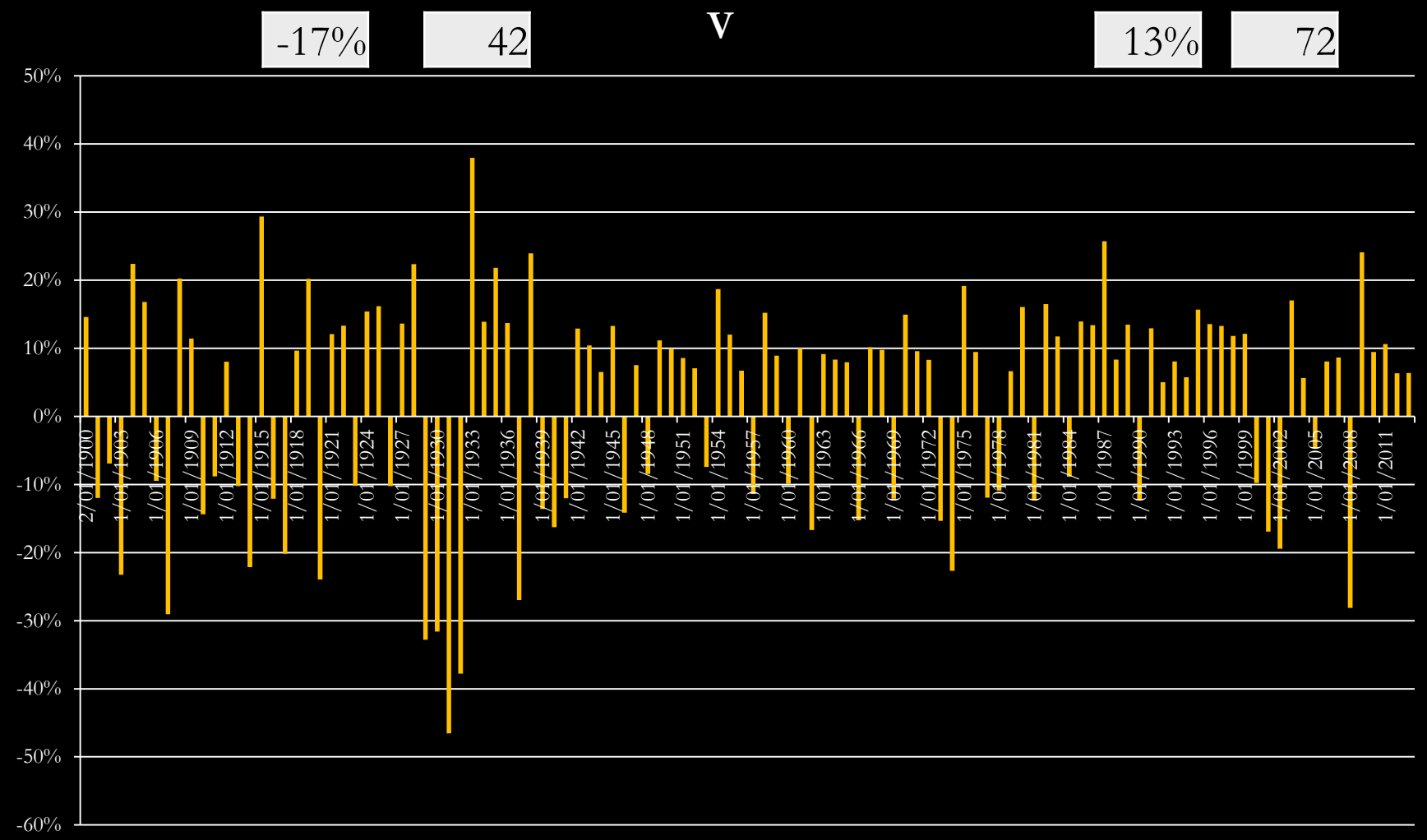
THE COEFFICIENT OF VARIATION DOW JONES INDEX
1900-1909



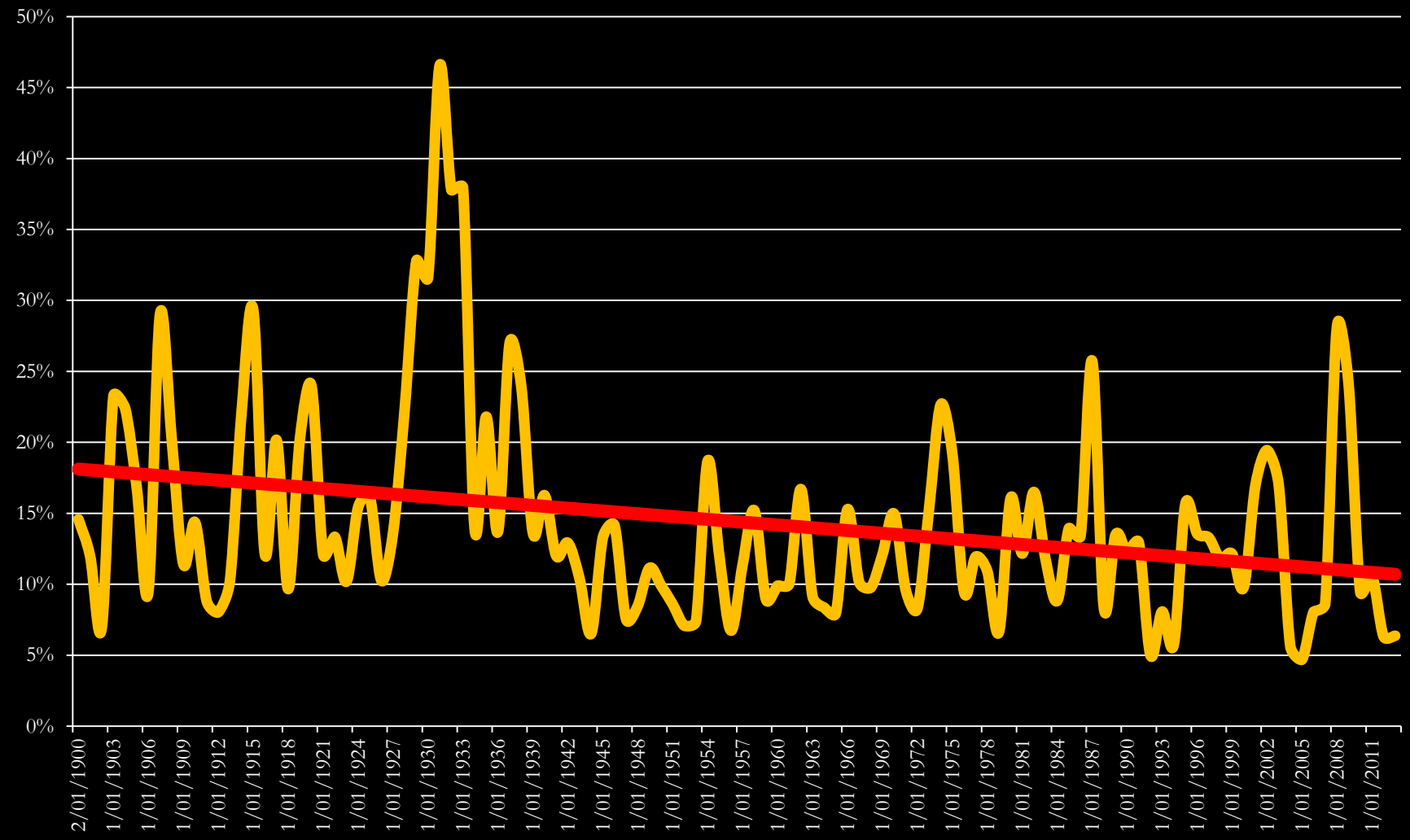
THE COEFFICIENT OF VARIATION DOW JONES INDEX (STRONGEST V OR VOLATILITY ON NEGATIVE YEARS)



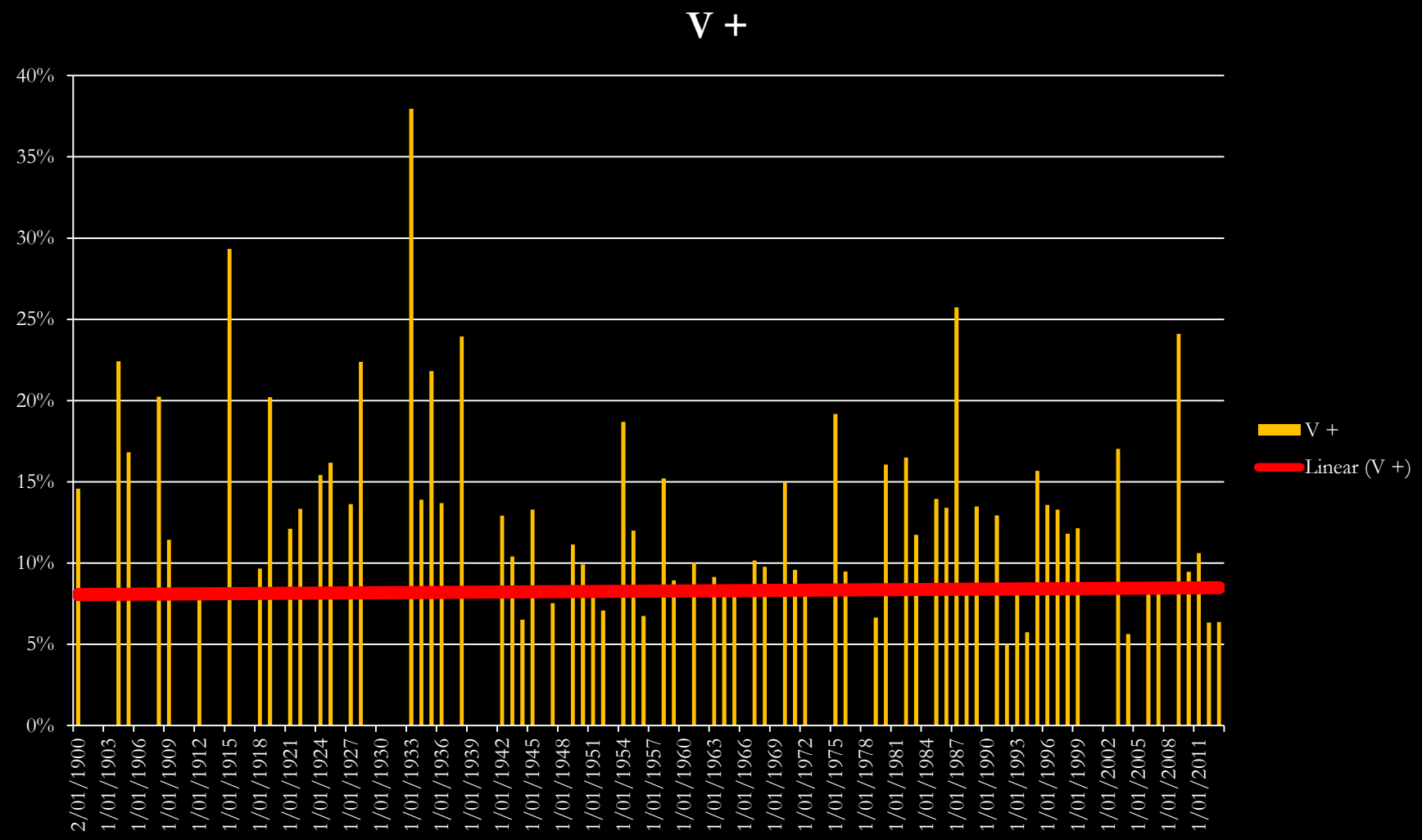
THE COEFFICIENT OF VARIATION DOW JONES INDEX (STRONGEST V OR VOLATILITY ON NEGATIVE YEARS)



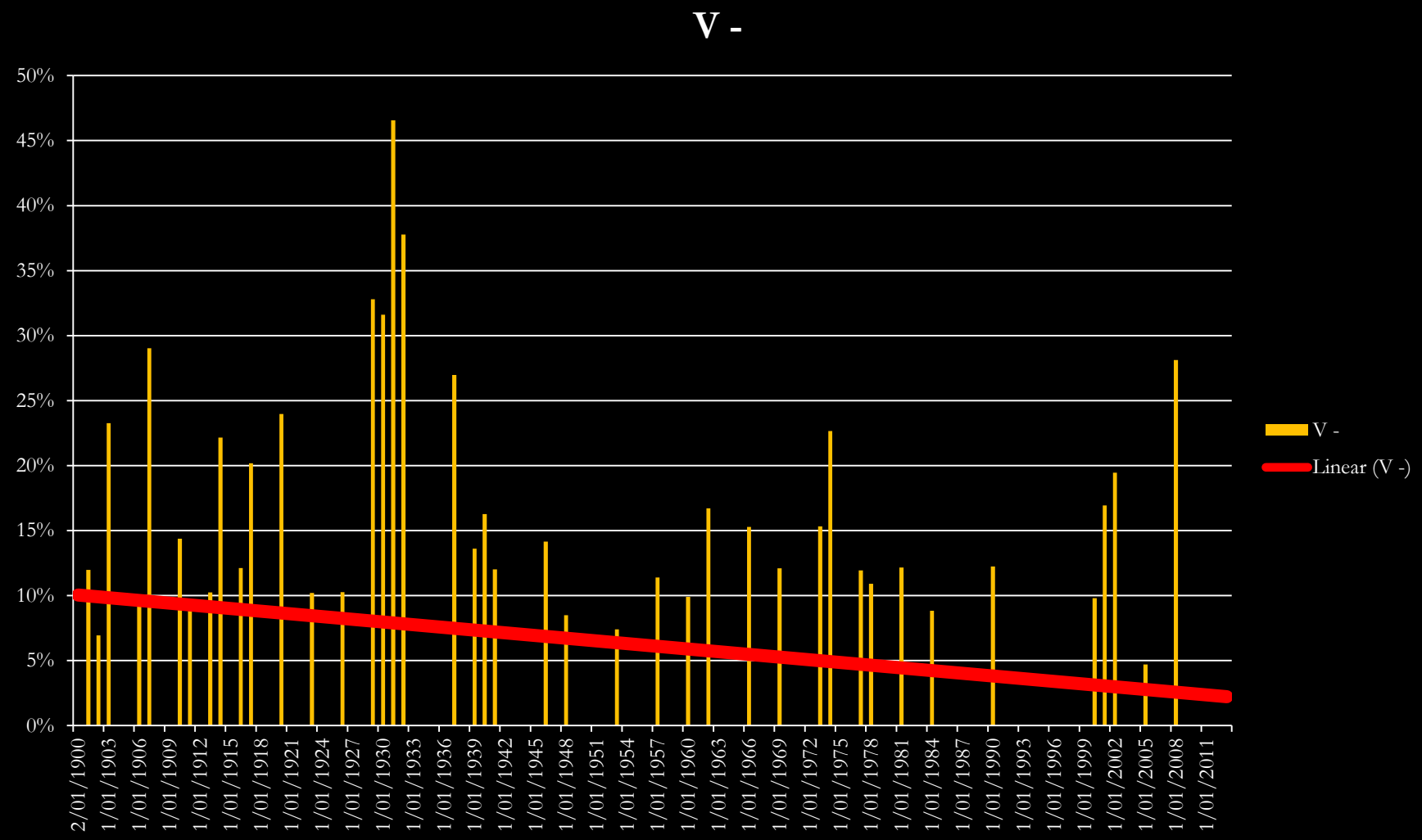
THE COEFFICIENT OF VARIATION DOW JONES INDEX (+ AND -)



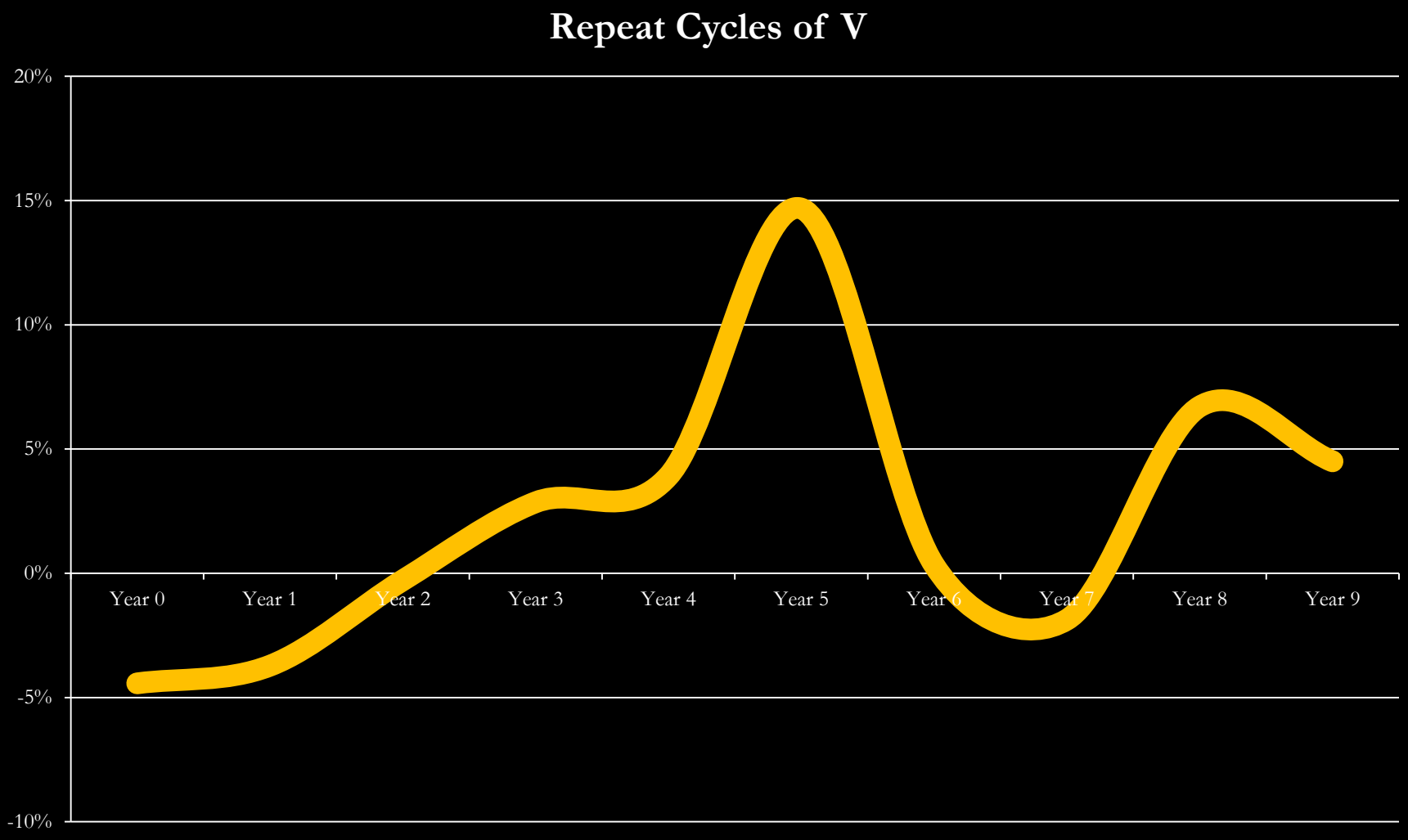
THE COEFFICIENT OF VARIATION DOW JONES INDEX (POSITIVE ONLY)



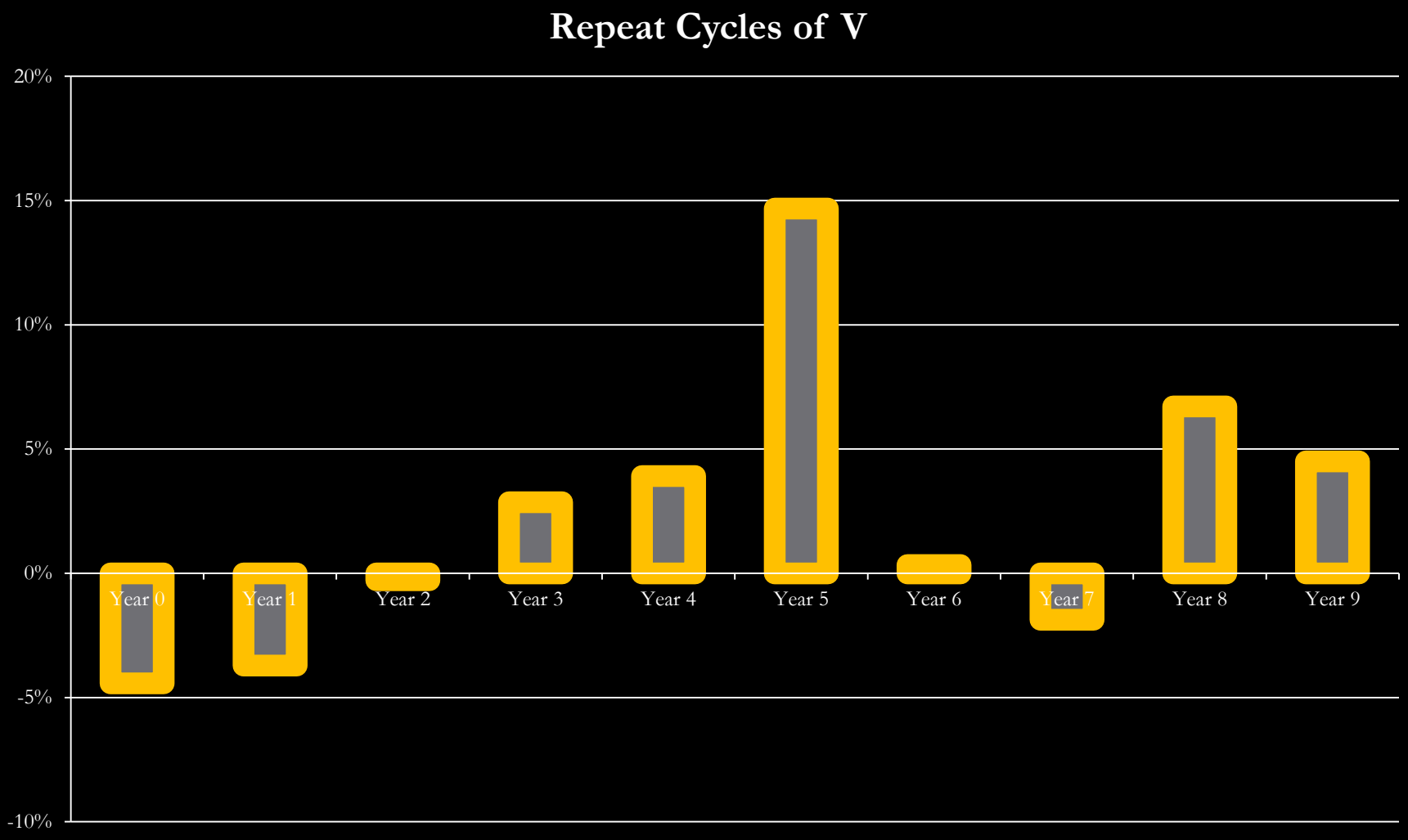
THE COEFFICIENT OF VARIATION DOW JONES INDEX (NEGATIVE ONLY)



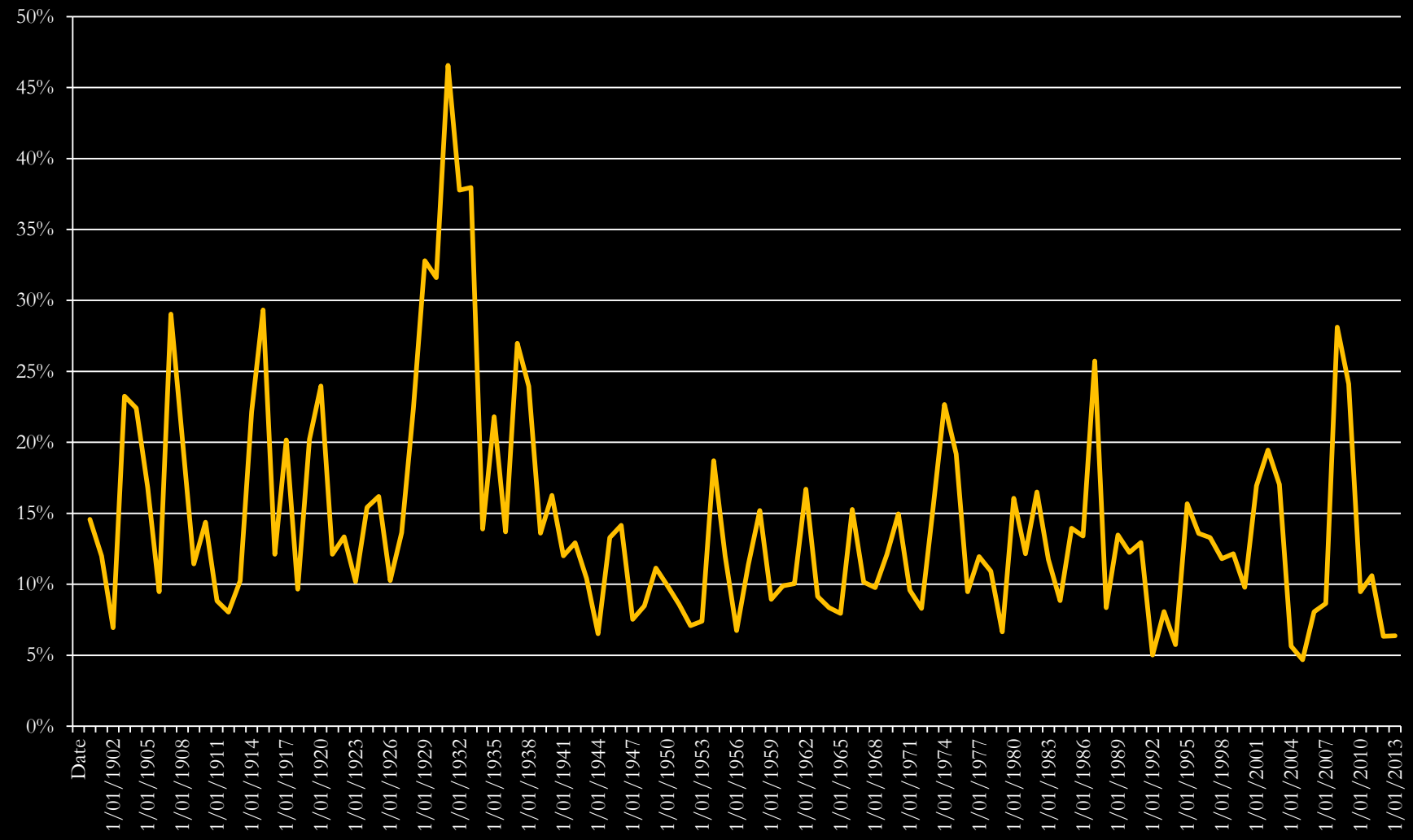
THE COEFFICIENT OF VARIATION DOW JONES INDEX (POSITIVE AND NEGATIVE OVER TEN YEAR REPEATS)



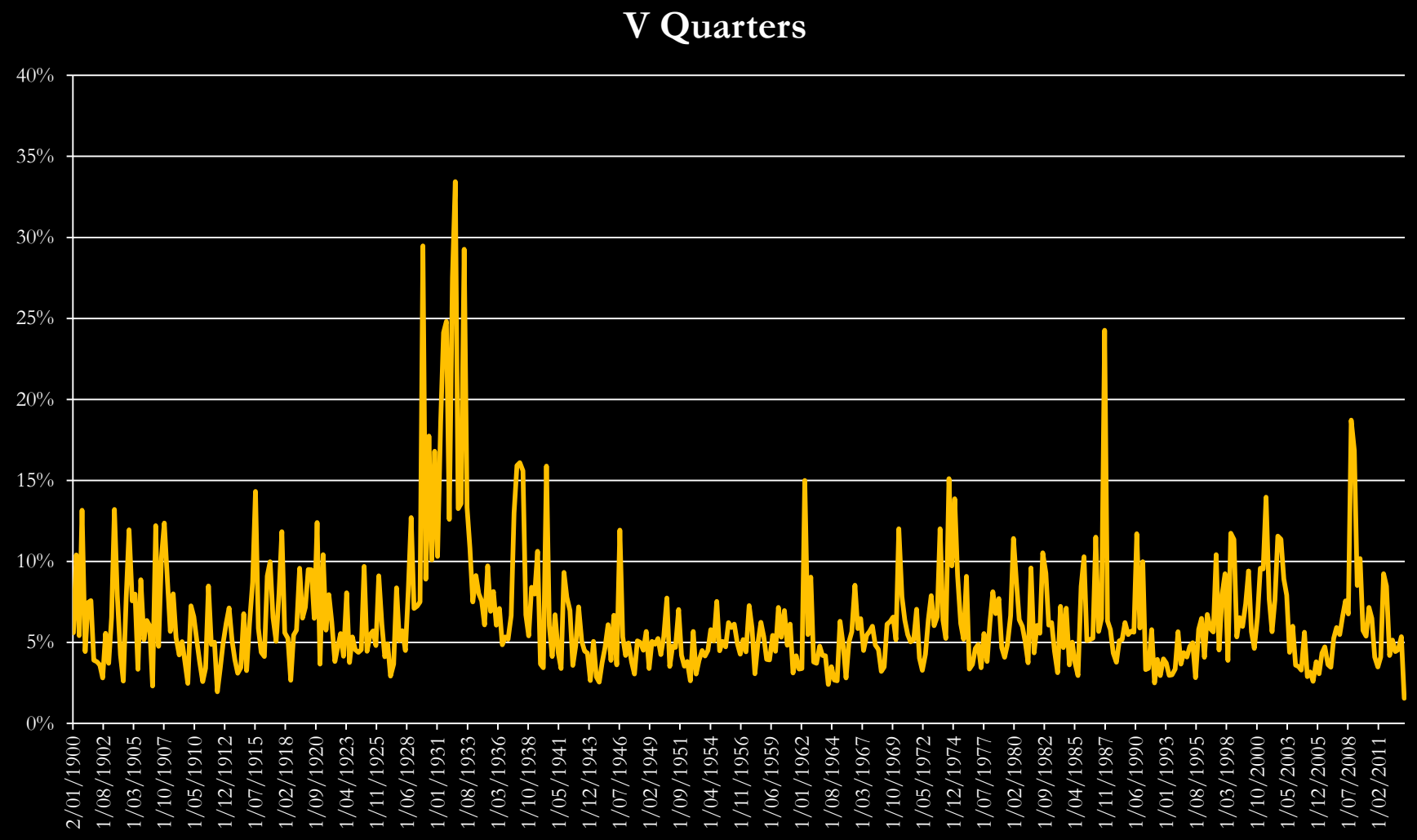
THE COEFFICIENT OF VARIATION DOW JONES INDEX (POSITIVE AND NEGATIVE OVER TEN YEAR REPEATS)



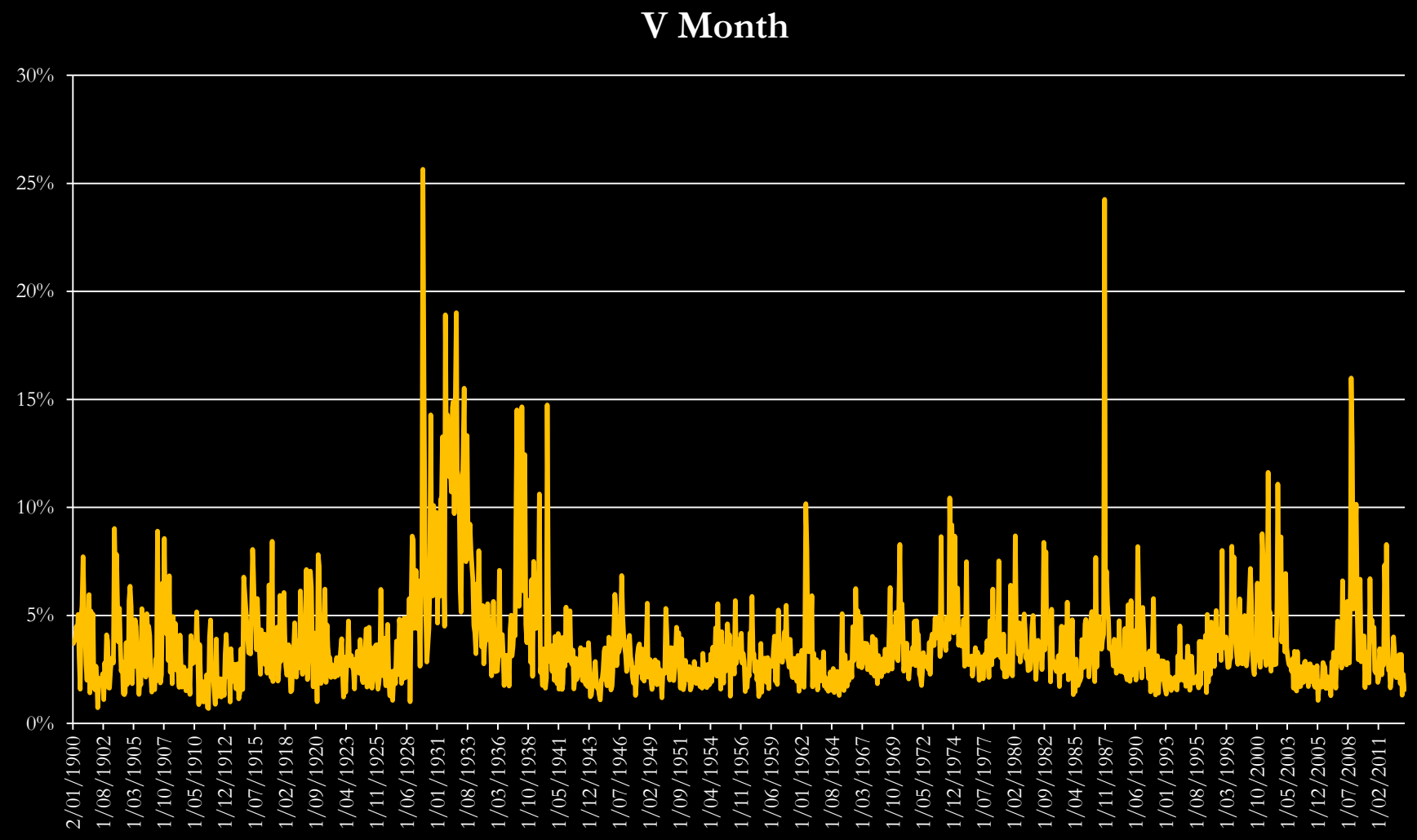
THE COEFFICIENT OF VARIATION DOW JONES INDEX (YEAR SUMMARIES) (DID THEY SUFFER MORE AFTER 1929 THAN US 2008?)



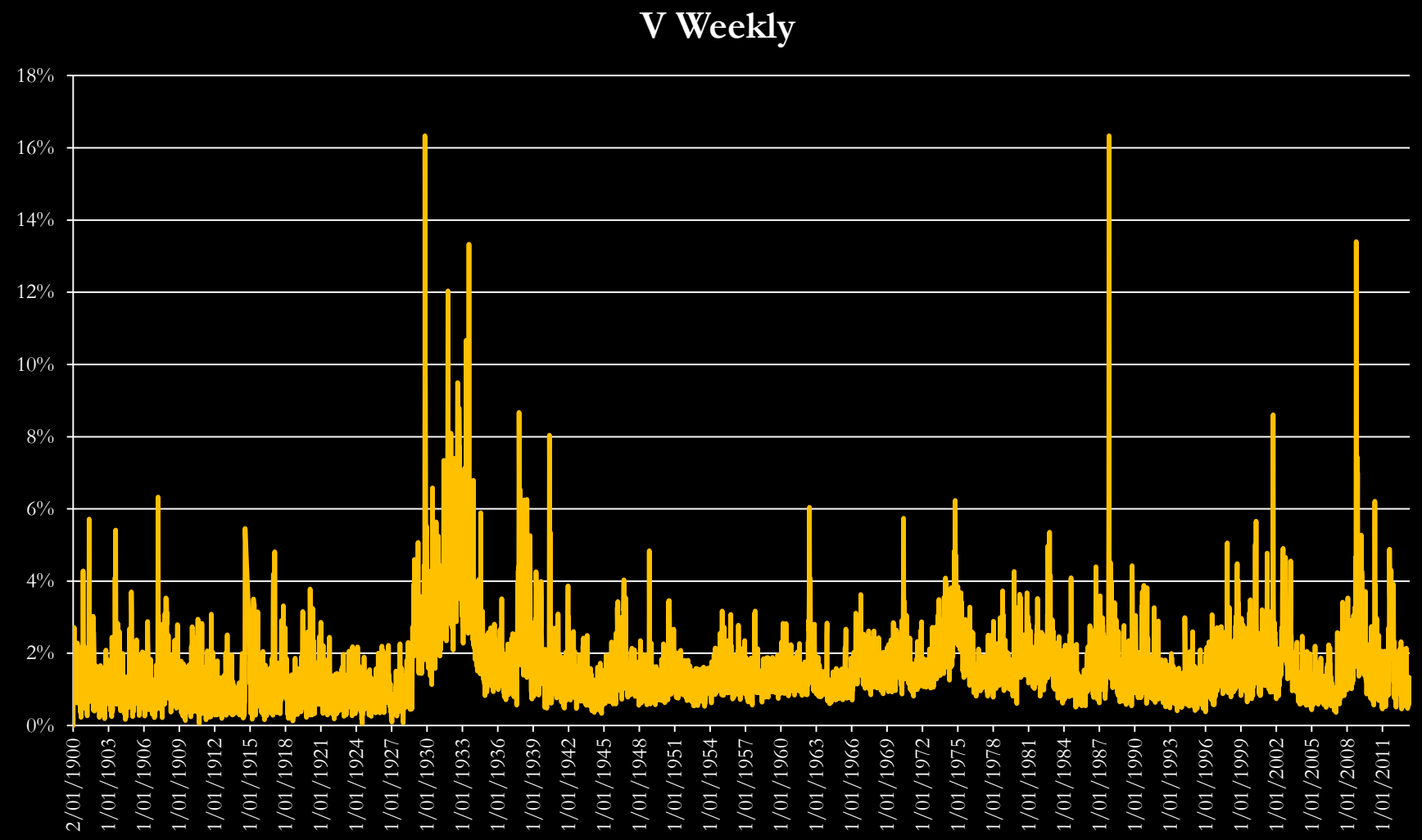
THE COEFFICIENT OF VARIATION DOW JONES INDEX (QUARTER SUMMARIES)



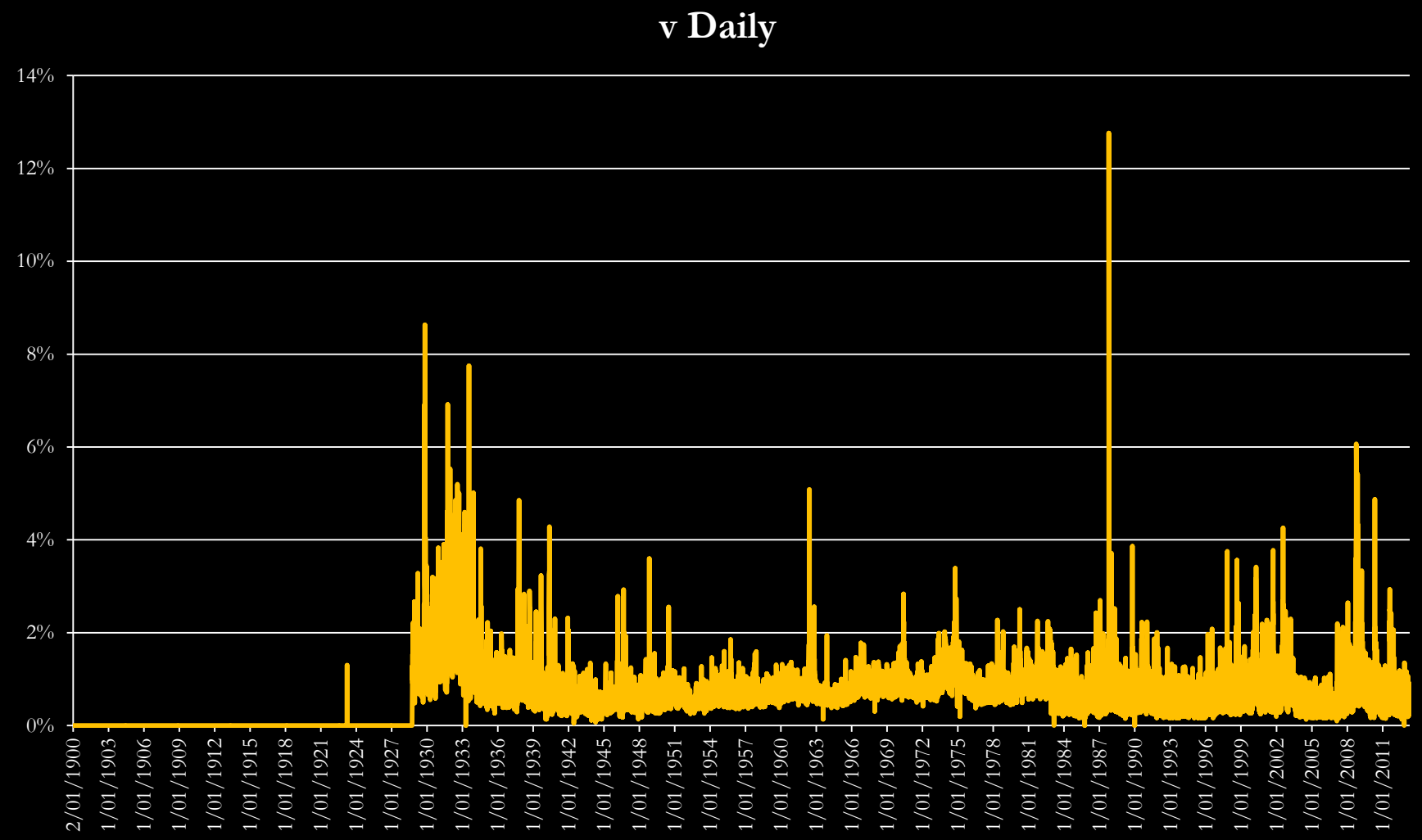
THE COEFFICIENT OF VARIATION DOW JONES INDEX (MONTH SUMMARIES)



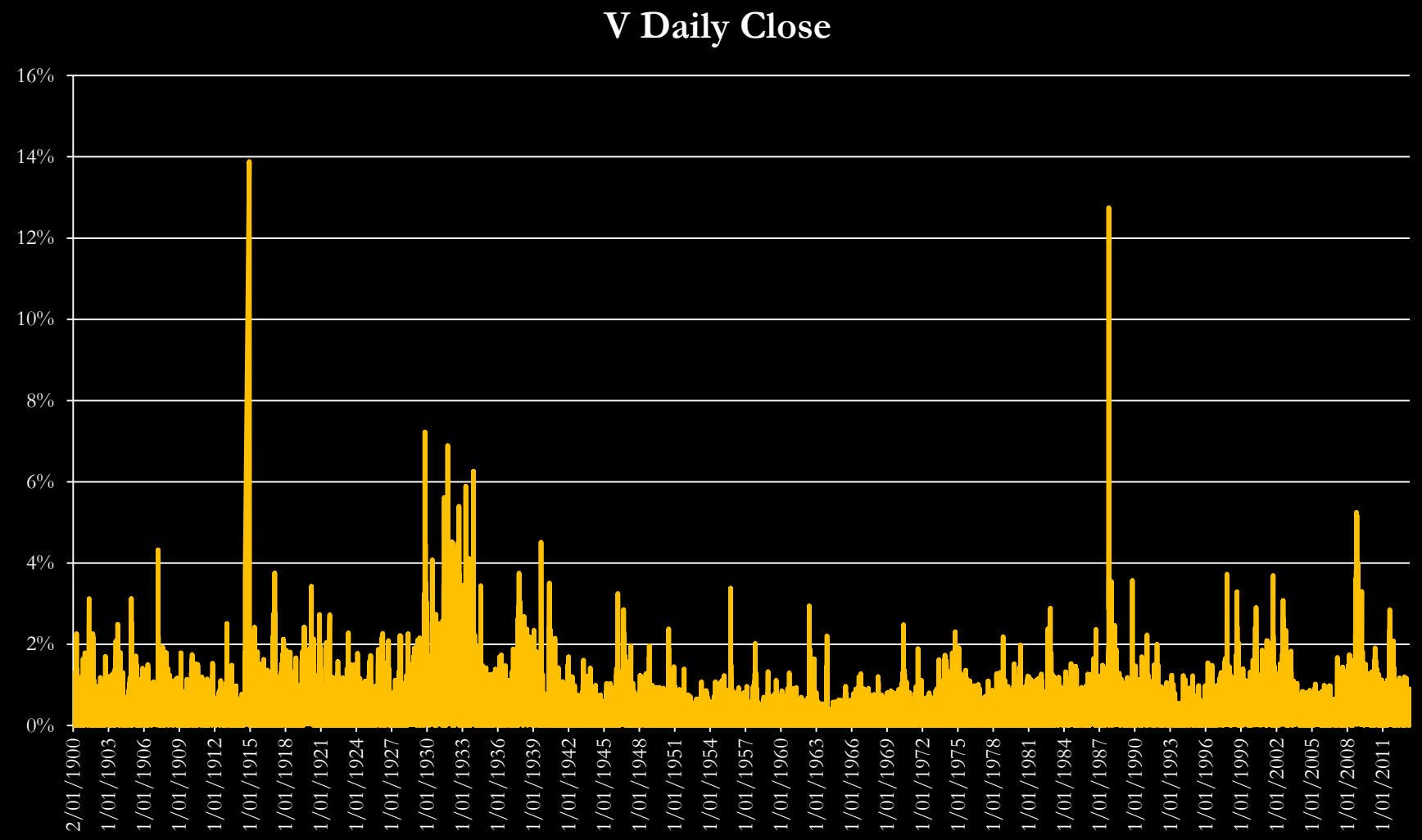
THE COEFFICIENT OF VARIATION DOW JONES INDEX (WEEKLY SUMMARIES)



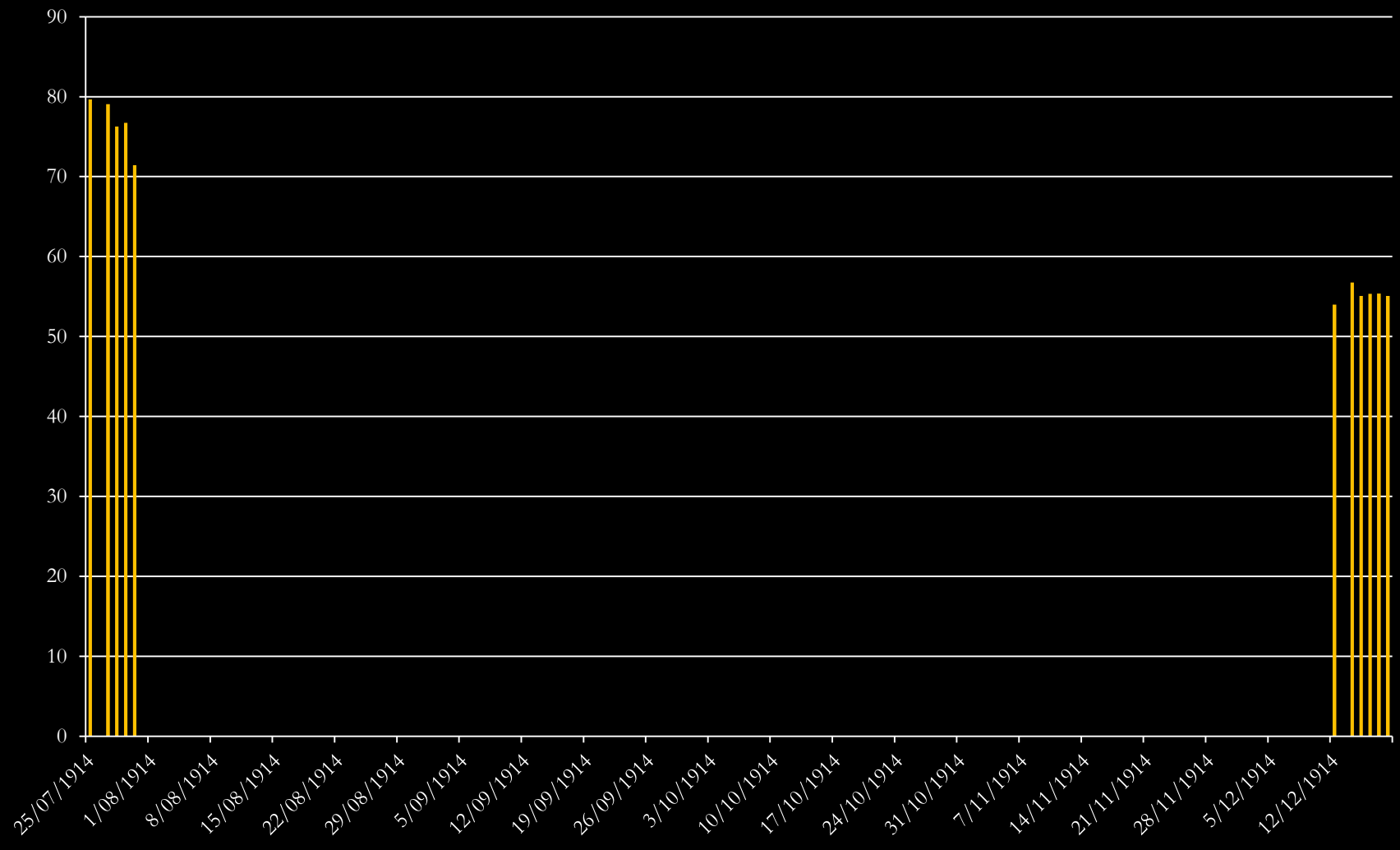
THE COEFFICIENT OF VARIATION DOW JONES INDEX (DAY SUMMARIES) SOME LACK OF DATA UNTIL OCT. 1928



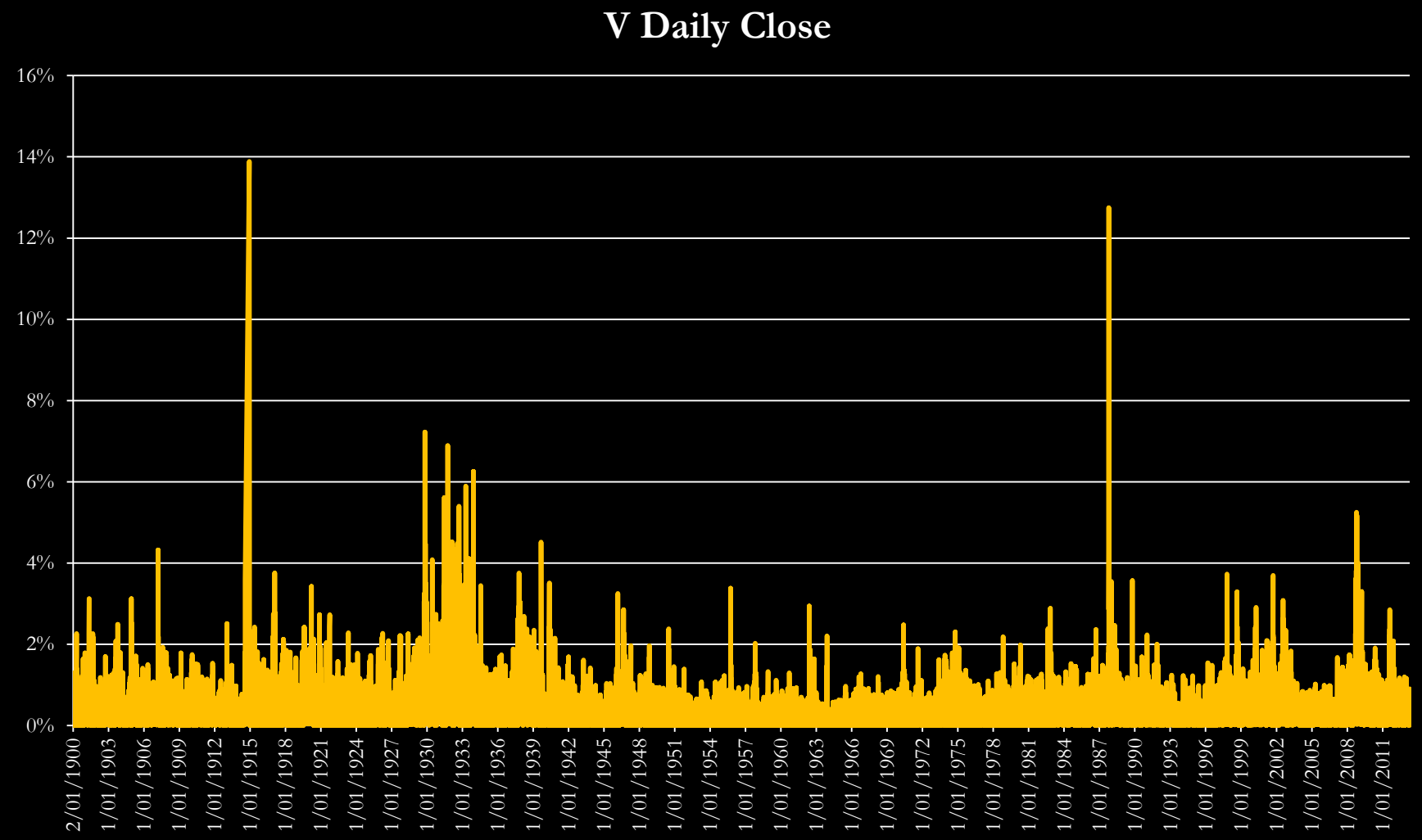
THE COEFFICIENT OF VARIATION DOW JONES INDEX (DAY SUMMARIES) WORKING ON CLOSE TO CLOSE (1914?)



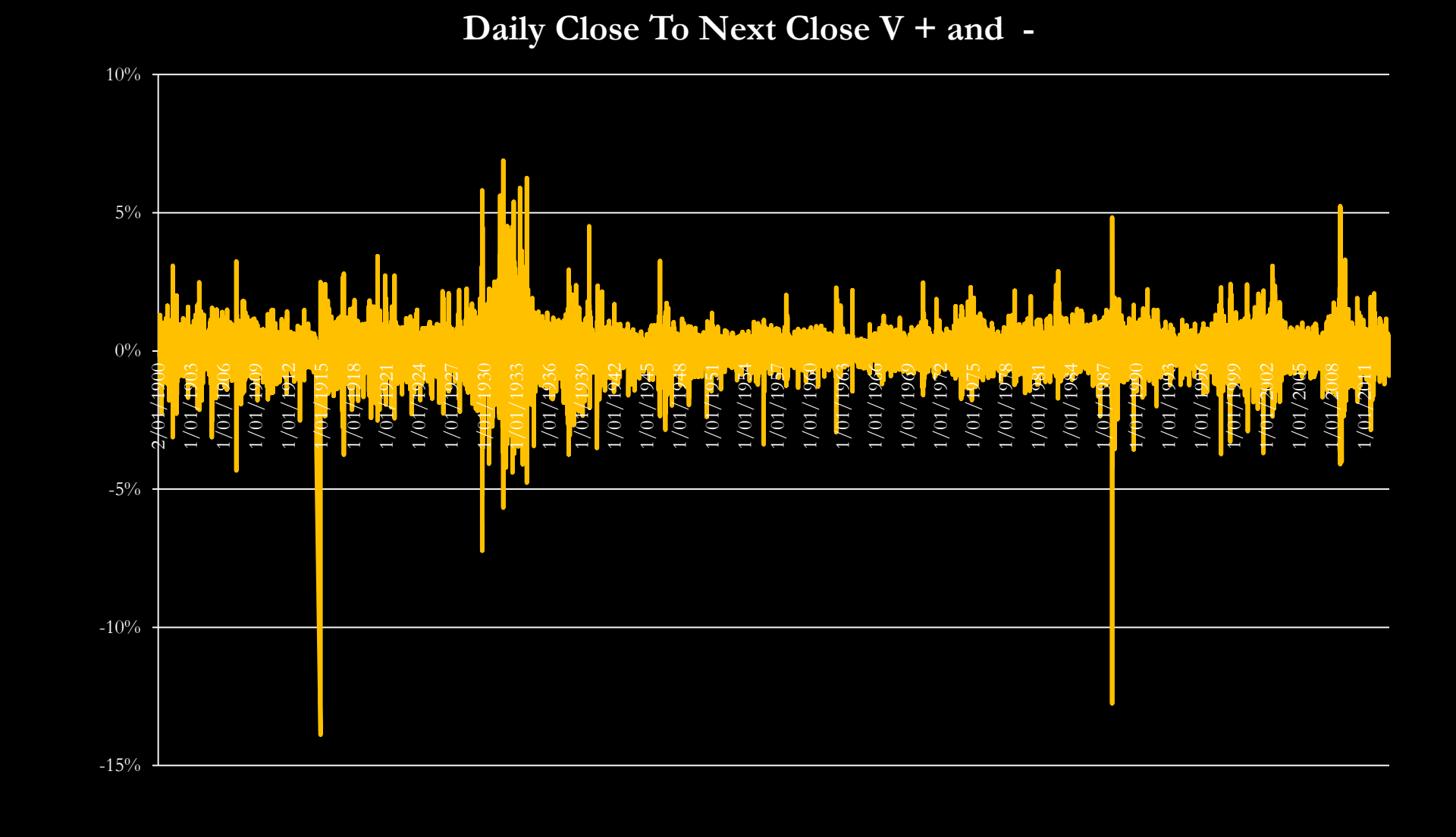
THE COEFFICIENT OF VARIATION DOW JONES INDEX (DAY SUMMARIES) NO TRADING AUG. TO DEC. 1914



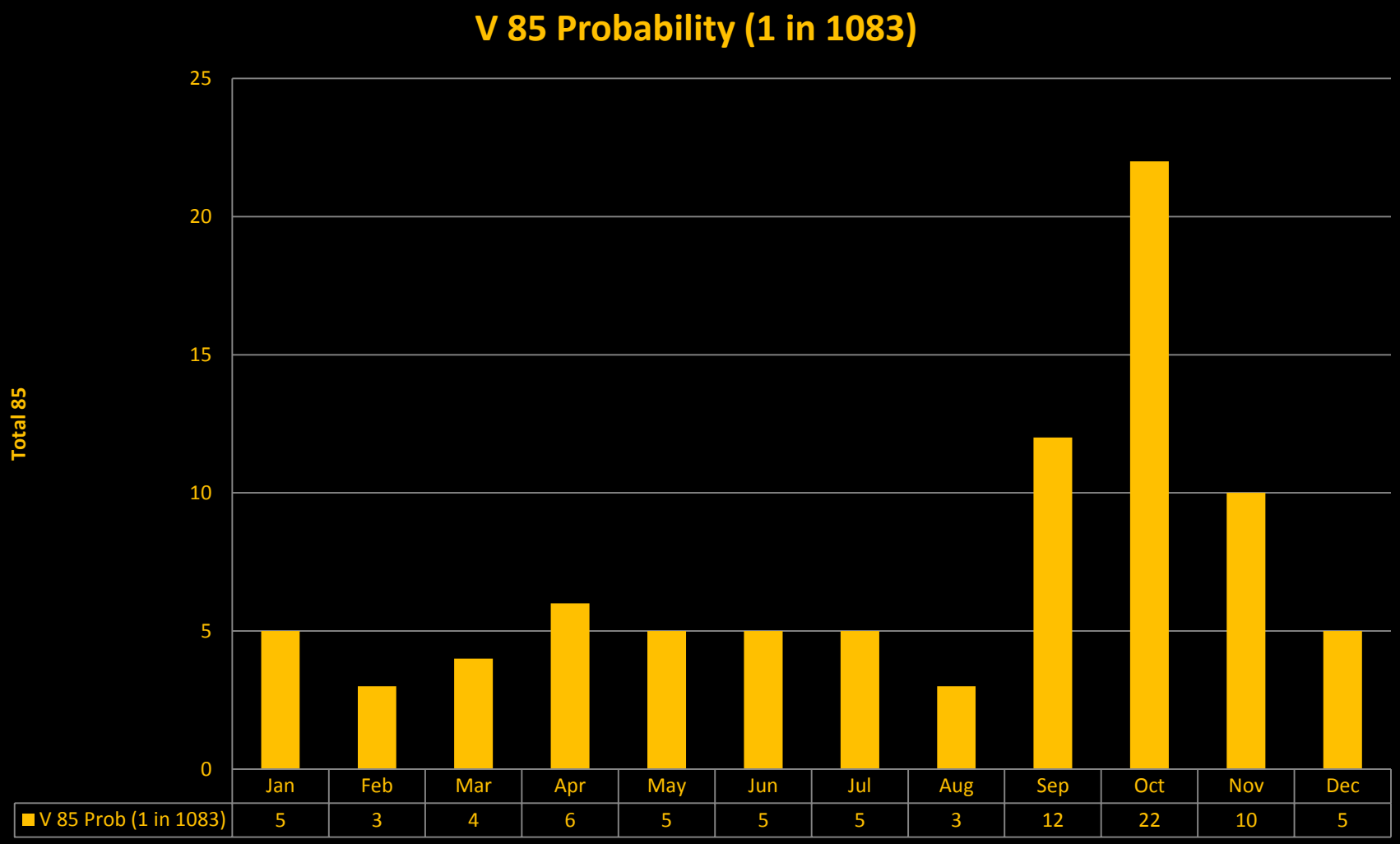
THE COEFFICIENT OF VARIATION DOW JONES INDEX (DAY SUMMARIES) WHO HAD THE BIGGEST MOVE 1929 OR 1987?



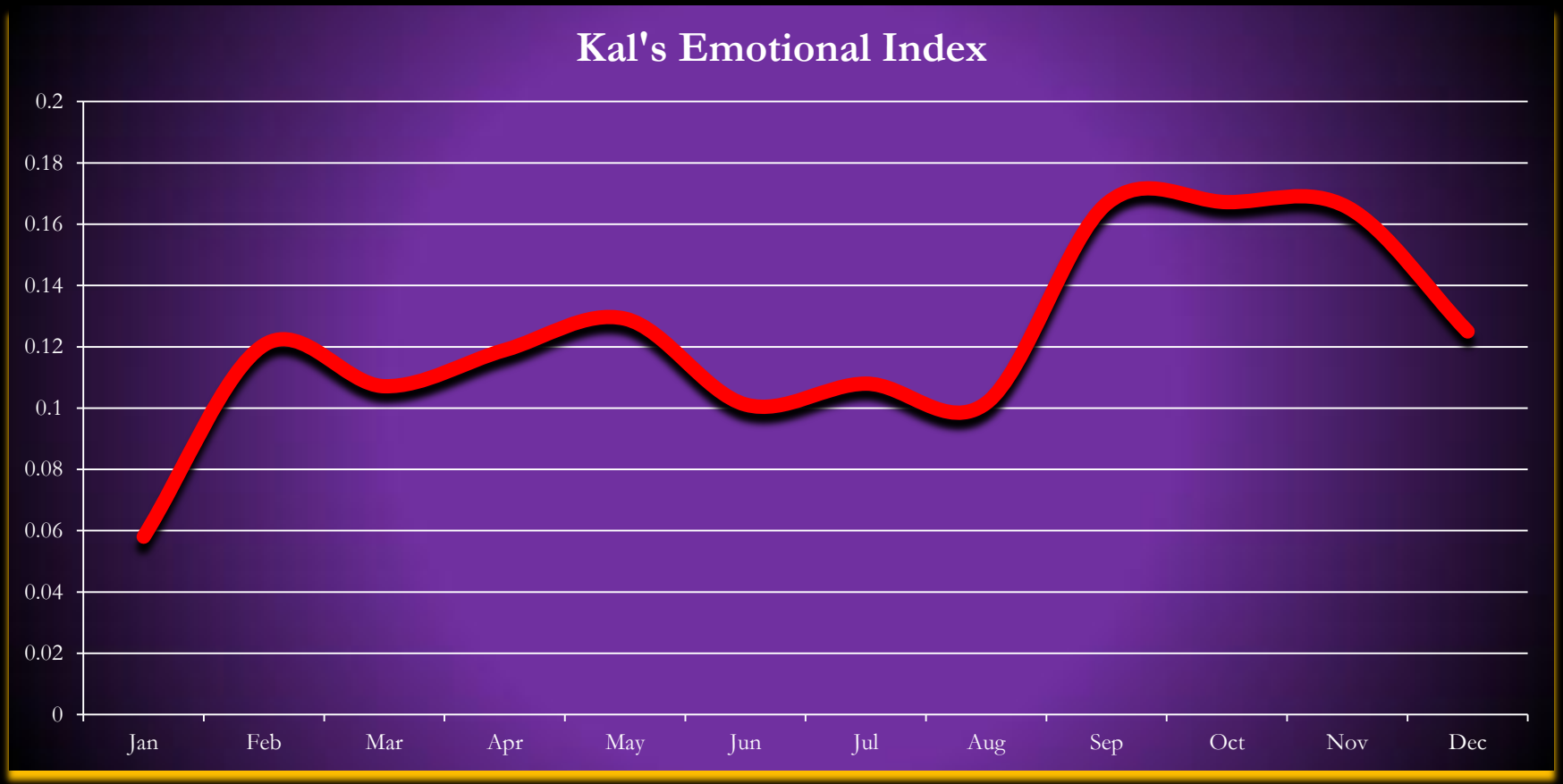
THE COEFFICIENT OF VARIATION DOW JONES INDEX (DAY SUMMARIES) WHO HAD THE BIGGEST MOVE 1929 OR 1987?



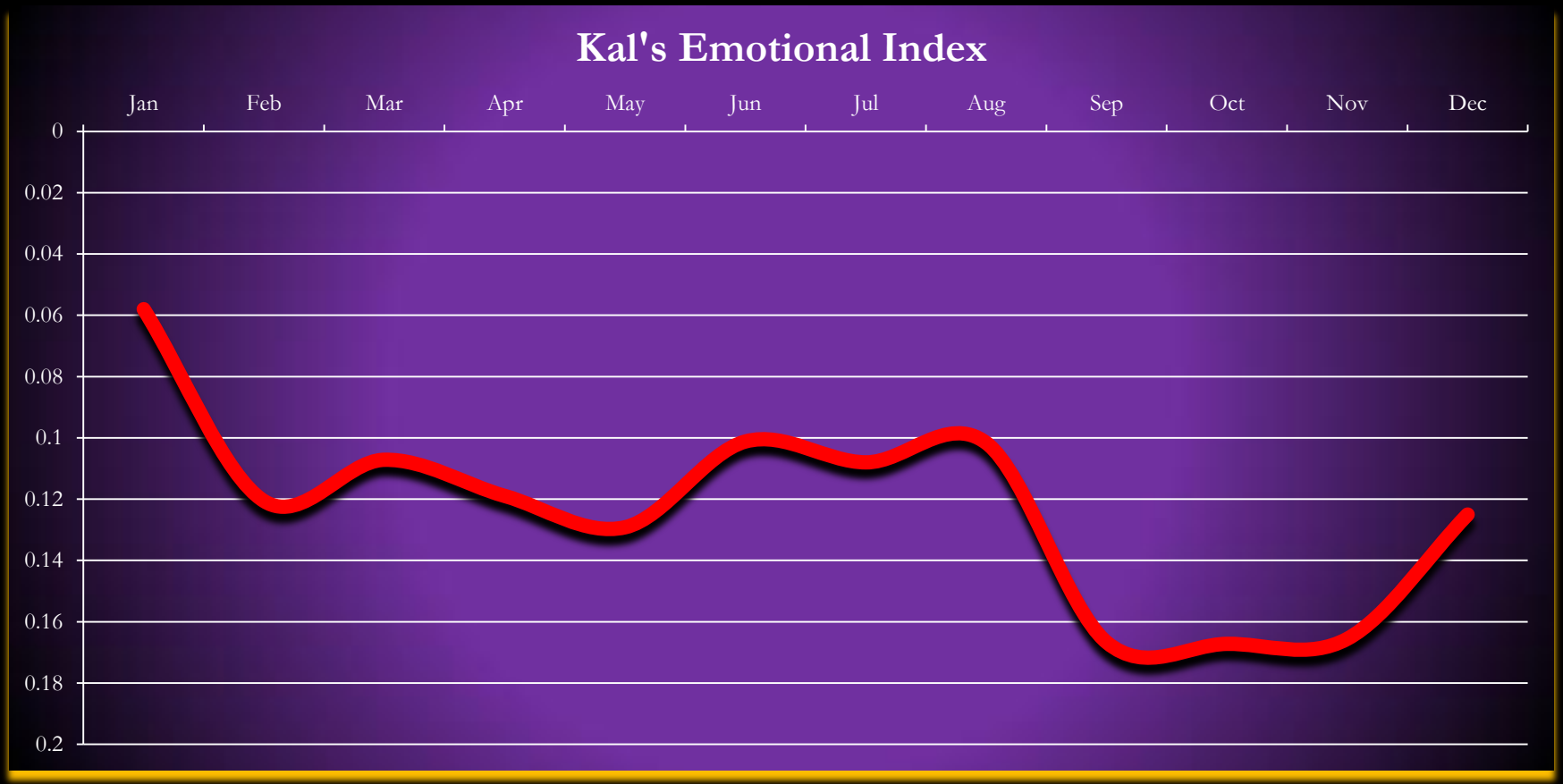
V 85 TOP MOVERS SHOW OCTOBER BIG TIME PROBABILITY (1 IN 1083)



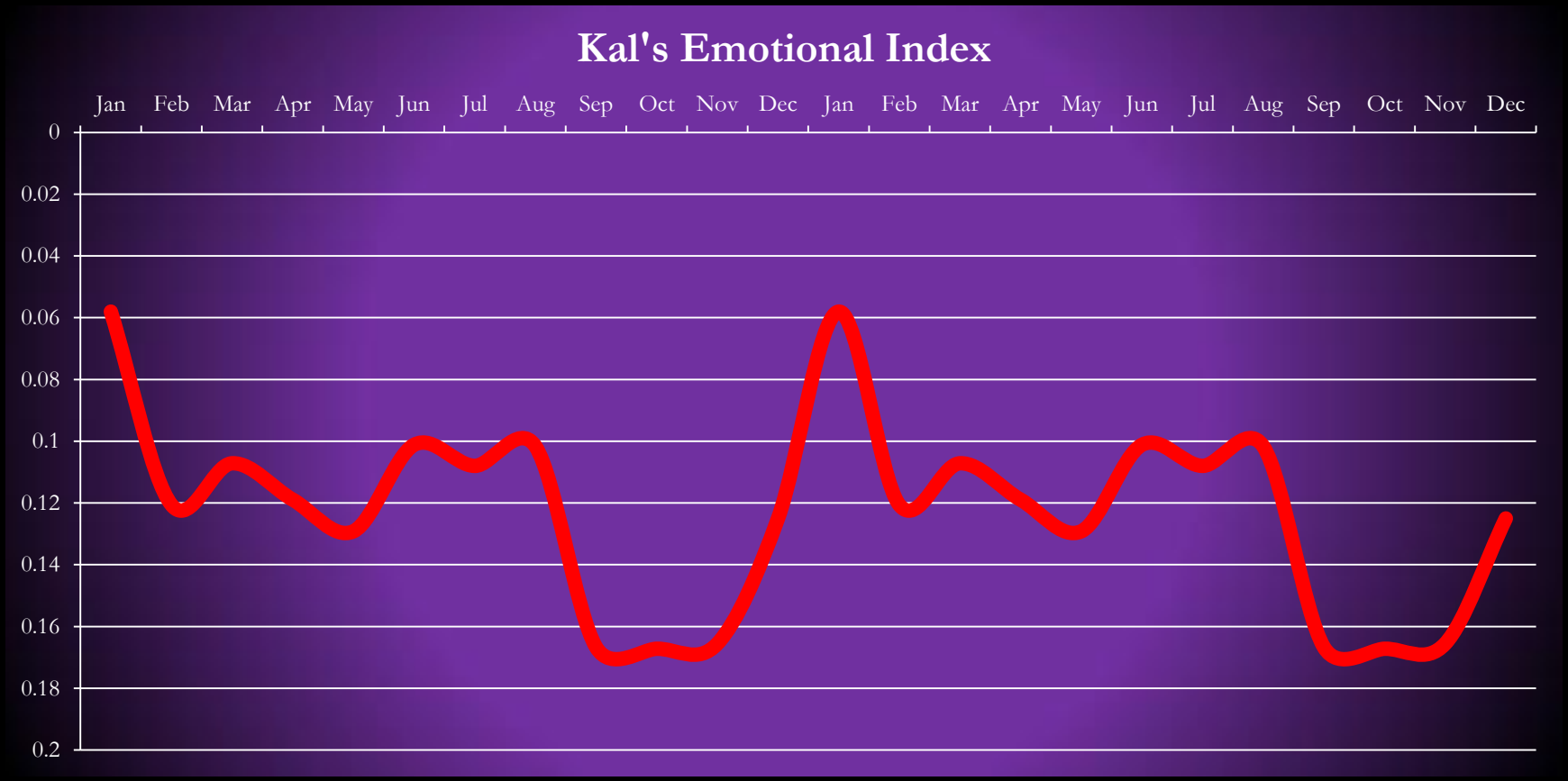
KAL'S EMOTIONAL INDEX



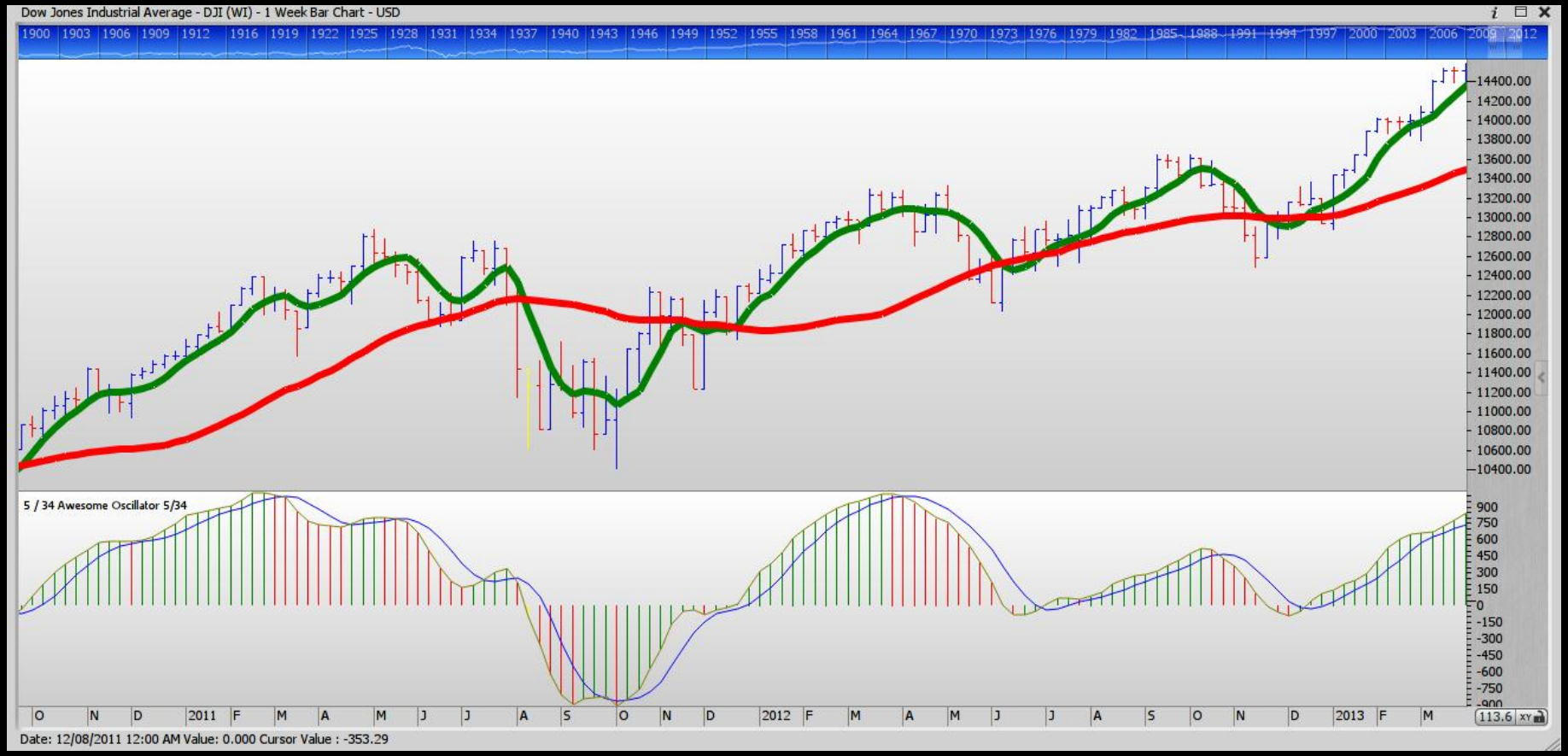
KAL'S EMOTIONAL INDEX



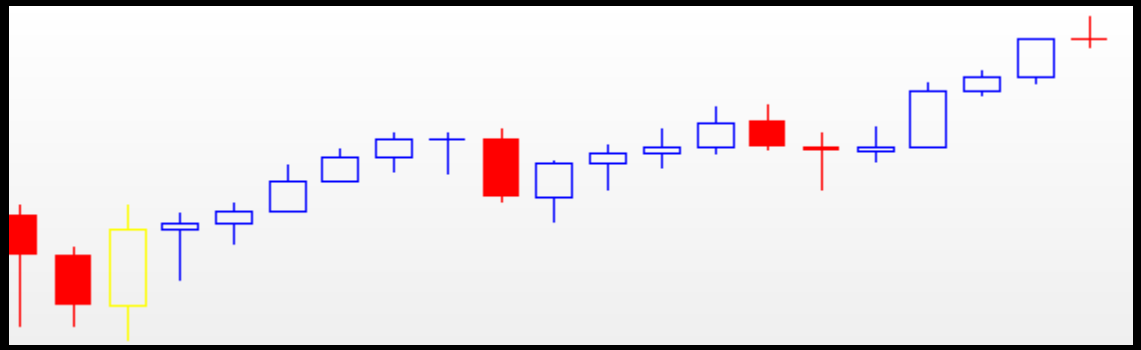
KAL'S EMOTIONAL INDEX



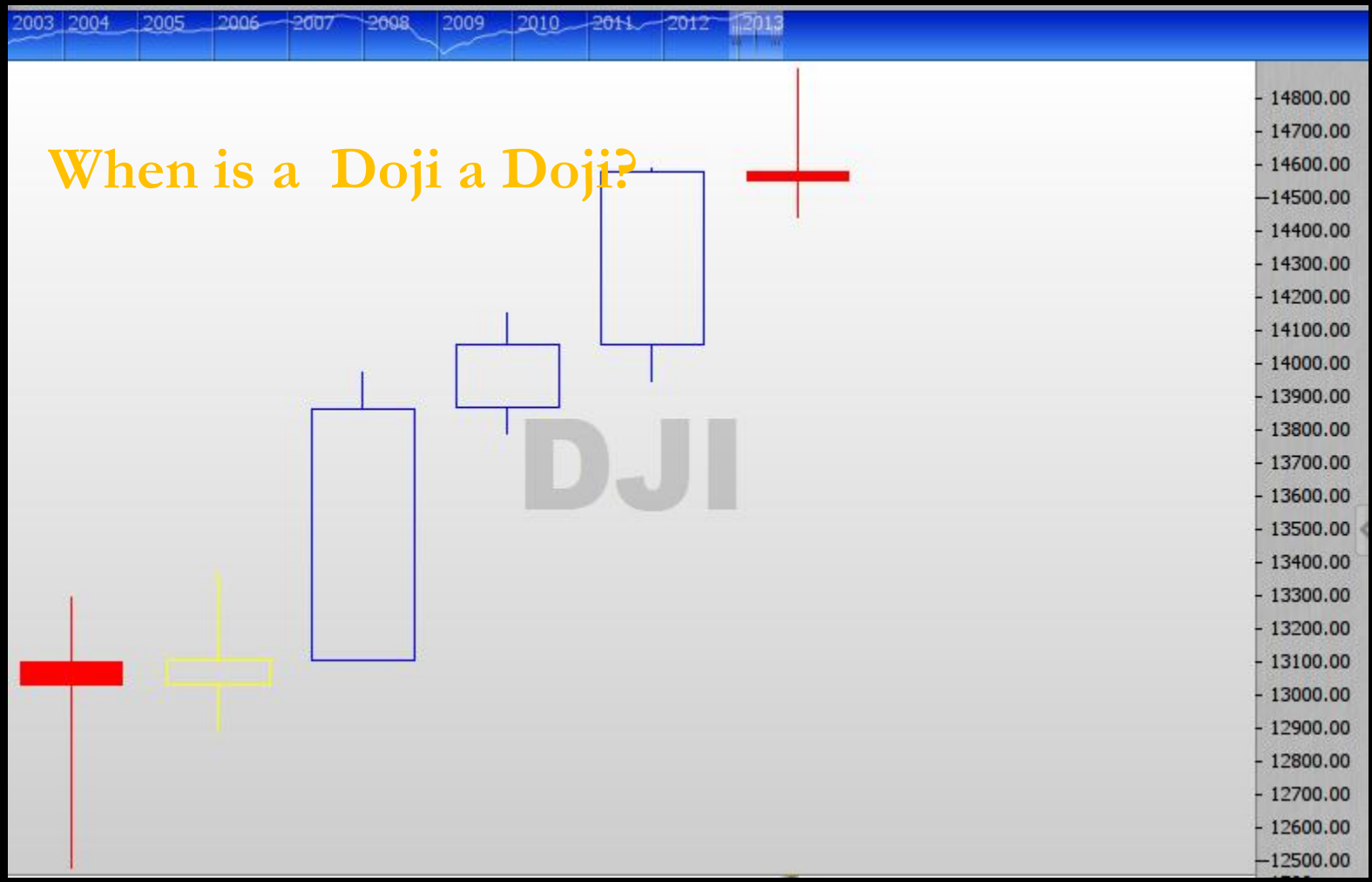
WHAT OTHER GAPS CAN WE MEASURE?
MOVING AVERAGES OSCILLATORS



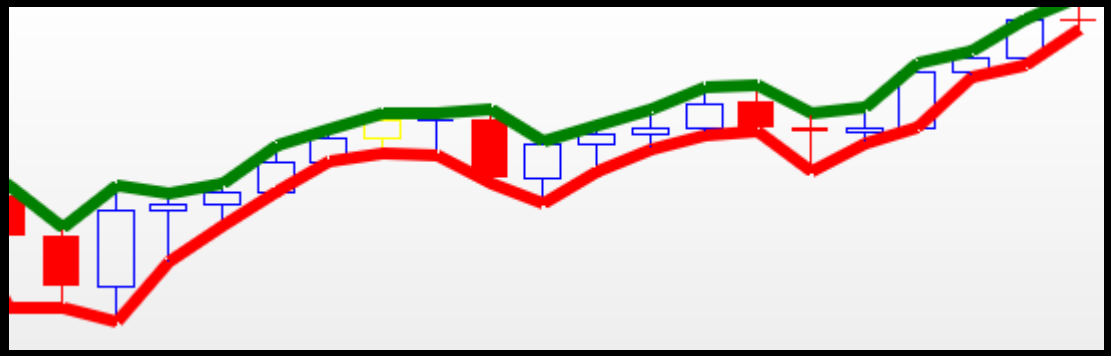
WHAT OTHER GAPS CAN WE MEASURE? CANDLE TOPS TO BOTTOMS AND CANDLE BODIES



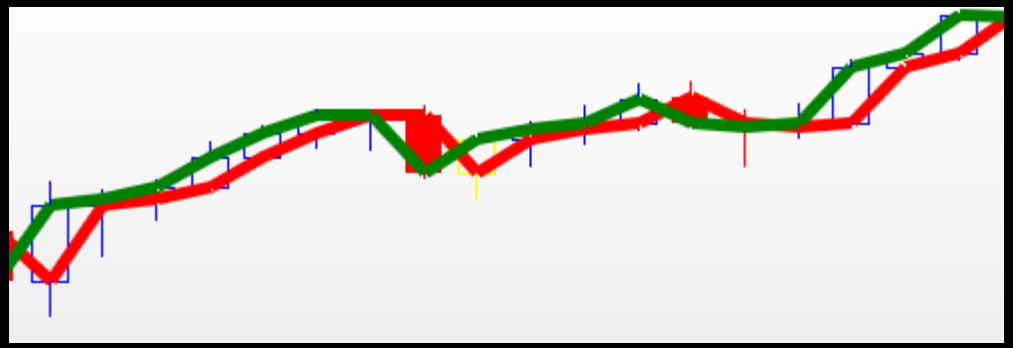
WHAT OTHER GAPS CAN WE MEASURE? MONTH'S SUMMARY



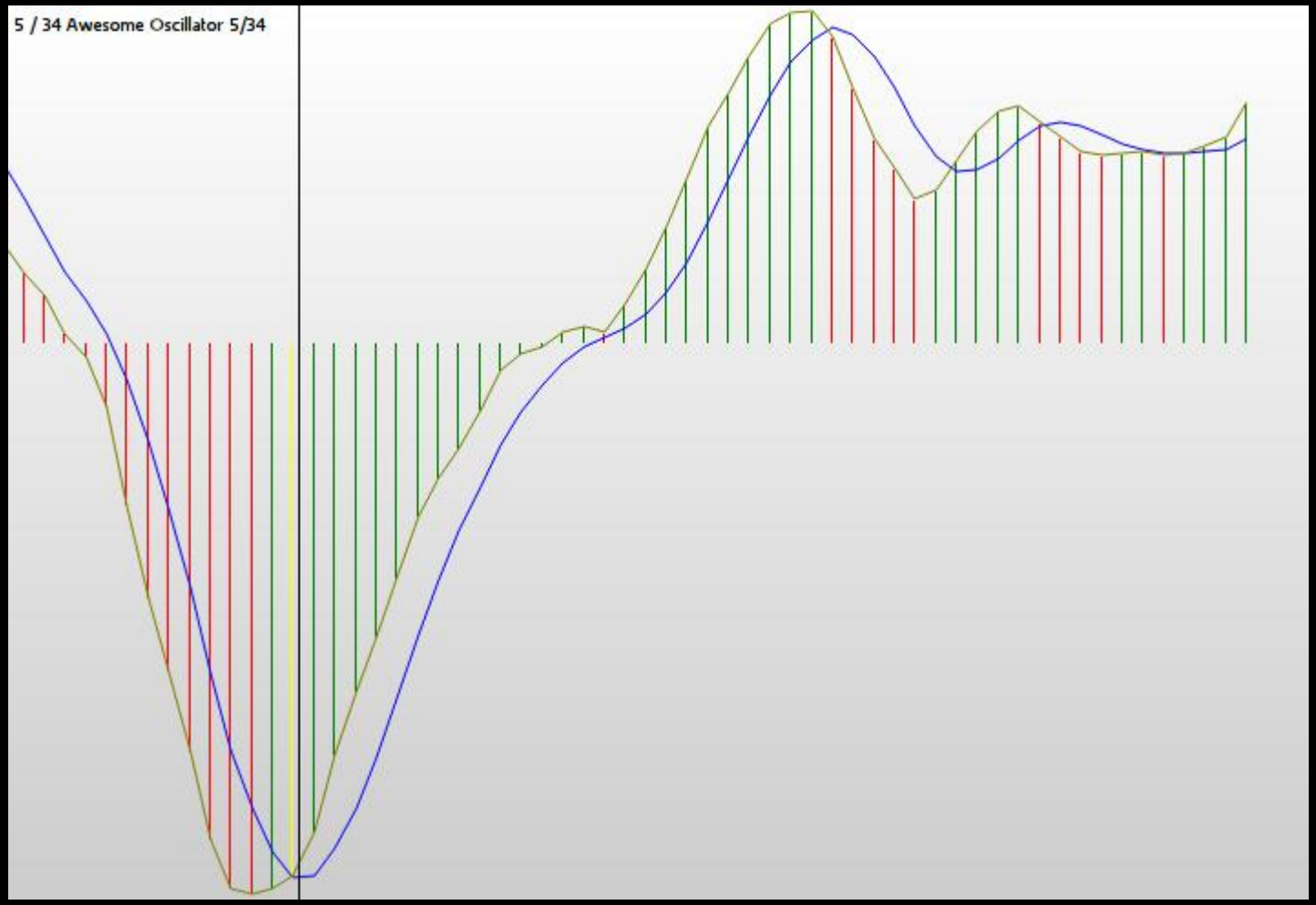
WHAT OTHER GAPS CAN WE MEASURE? TOPS TO BOTTOMS



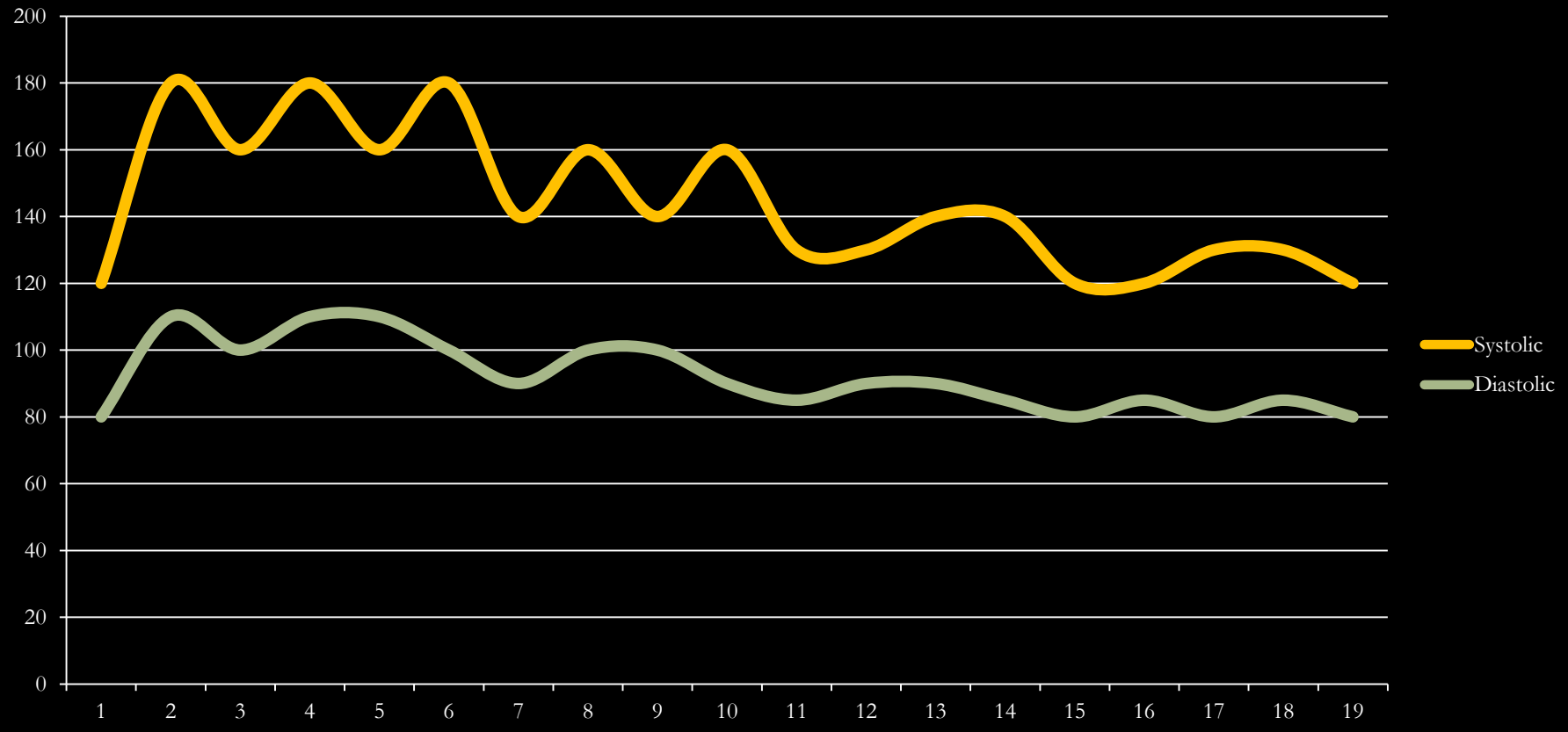
WHAT OTHER GAPS CAN WE MEASURE? OPEN TO CLOSE FOR THE CANDLE BODIES



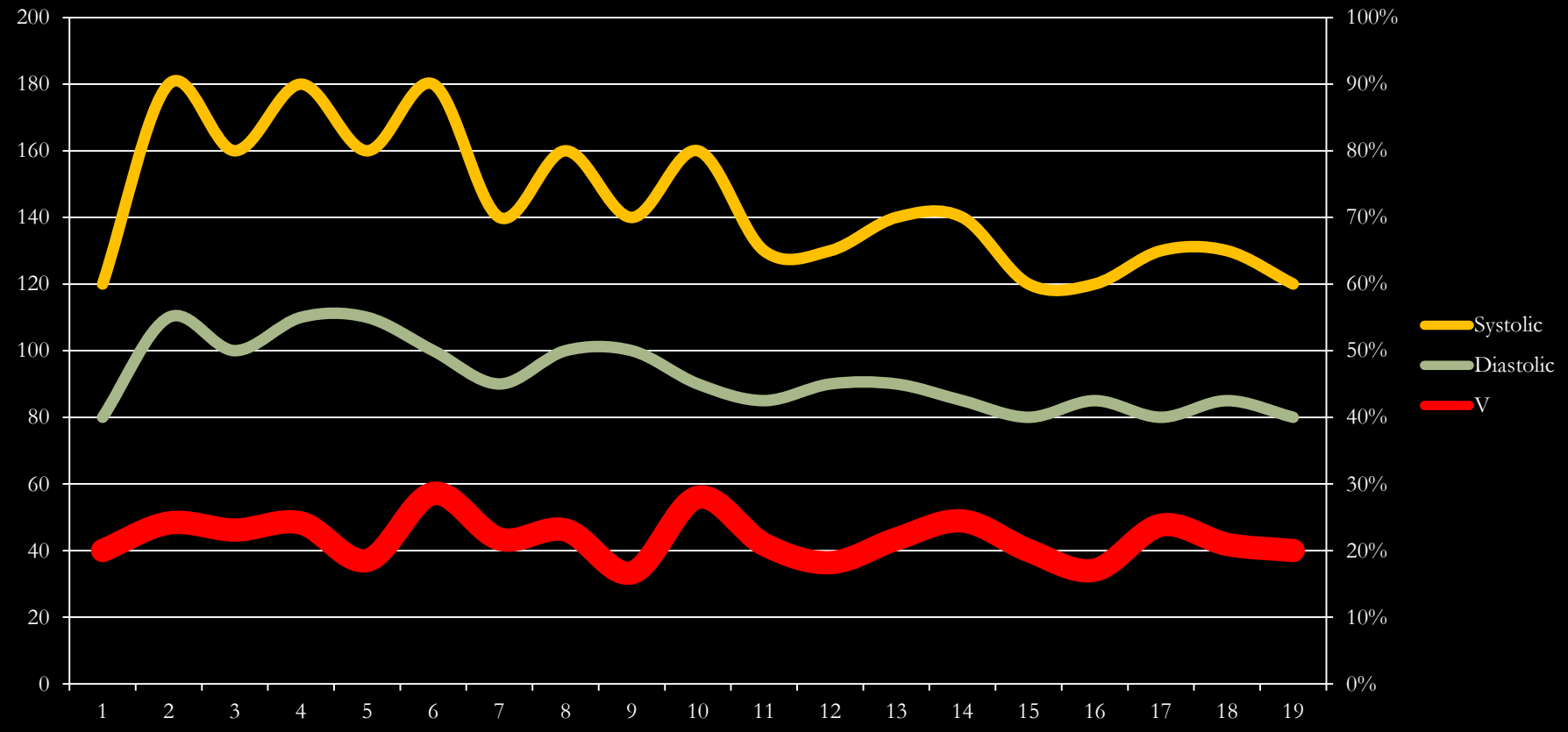
WHAT OTHER GAPS CAN WE MEASURE? ARE THESE RELATIVELY BIG OR SMALL WAVES?



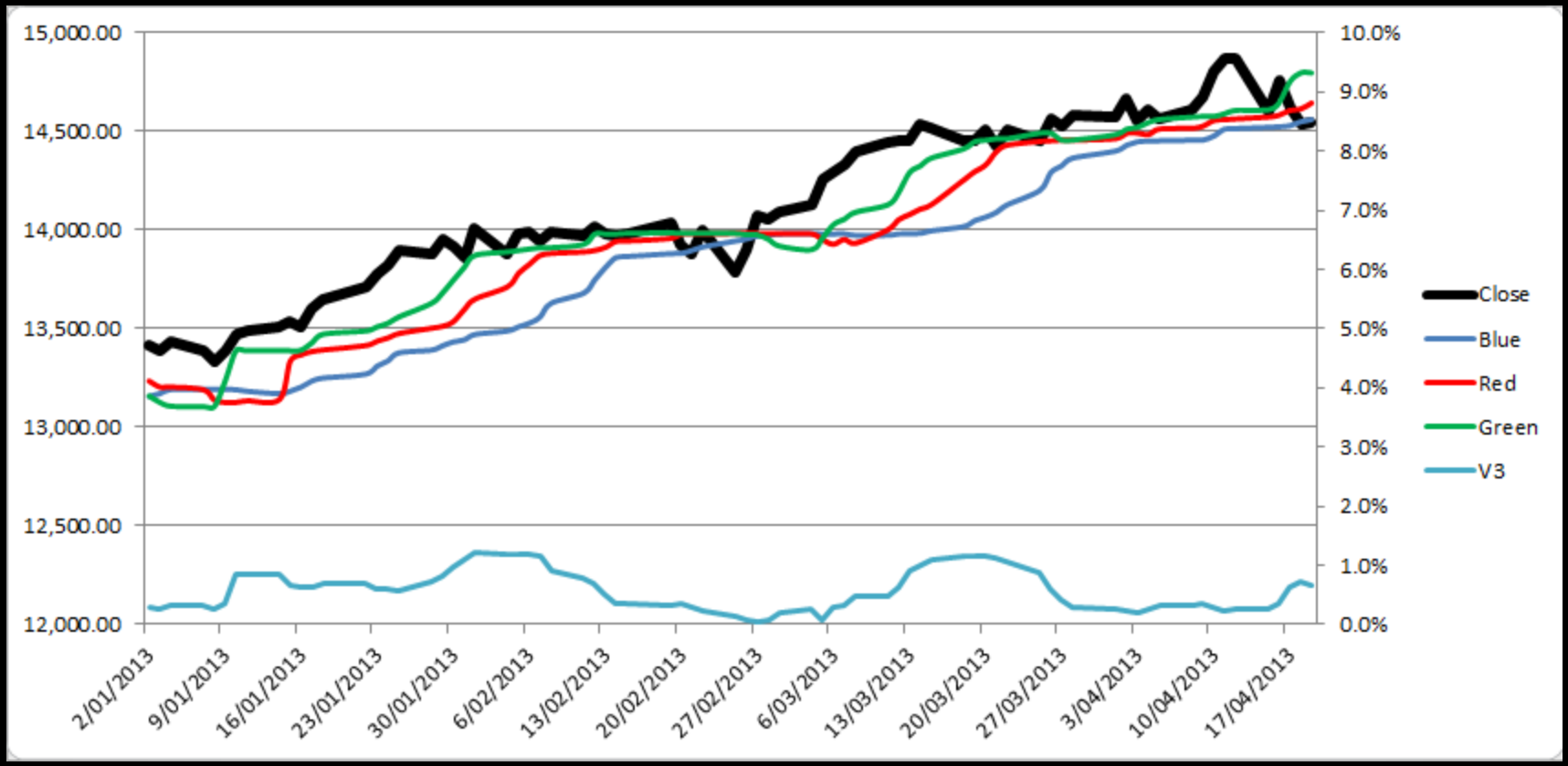
WHAT OTHER GAPS CAN WE MEASURE? PULSE PRESSURE DURING EXERCISE THE GAP IS INCREASED



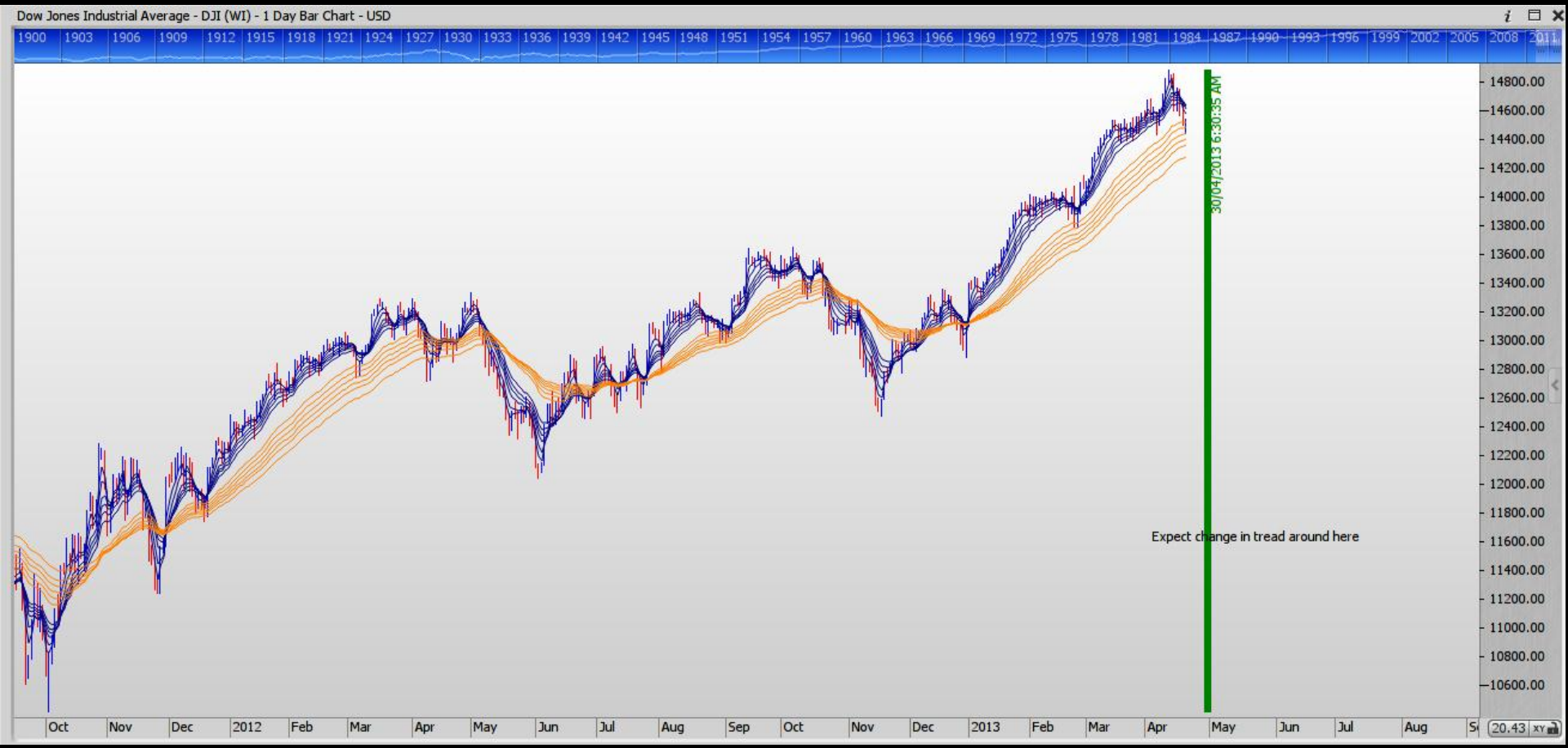
WHAT OTHER GAPS CAN WE MEASURE? TWO SMALLER GAPS CAN KILL YOU AND SO CAN TO BIGGER GAPS



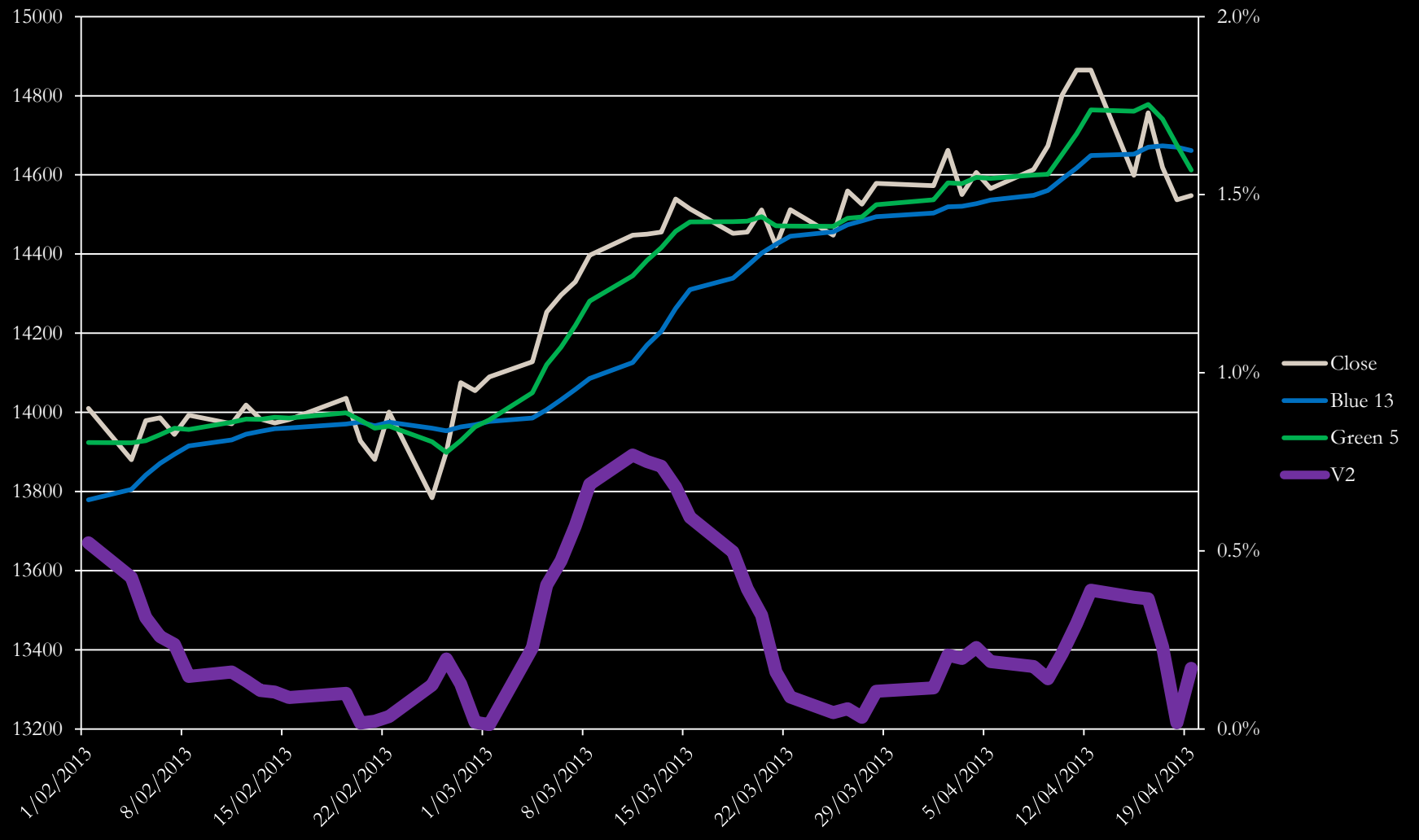
WHAT OTHER GAPS CAN WE MEASURE? TRADING CHAOS



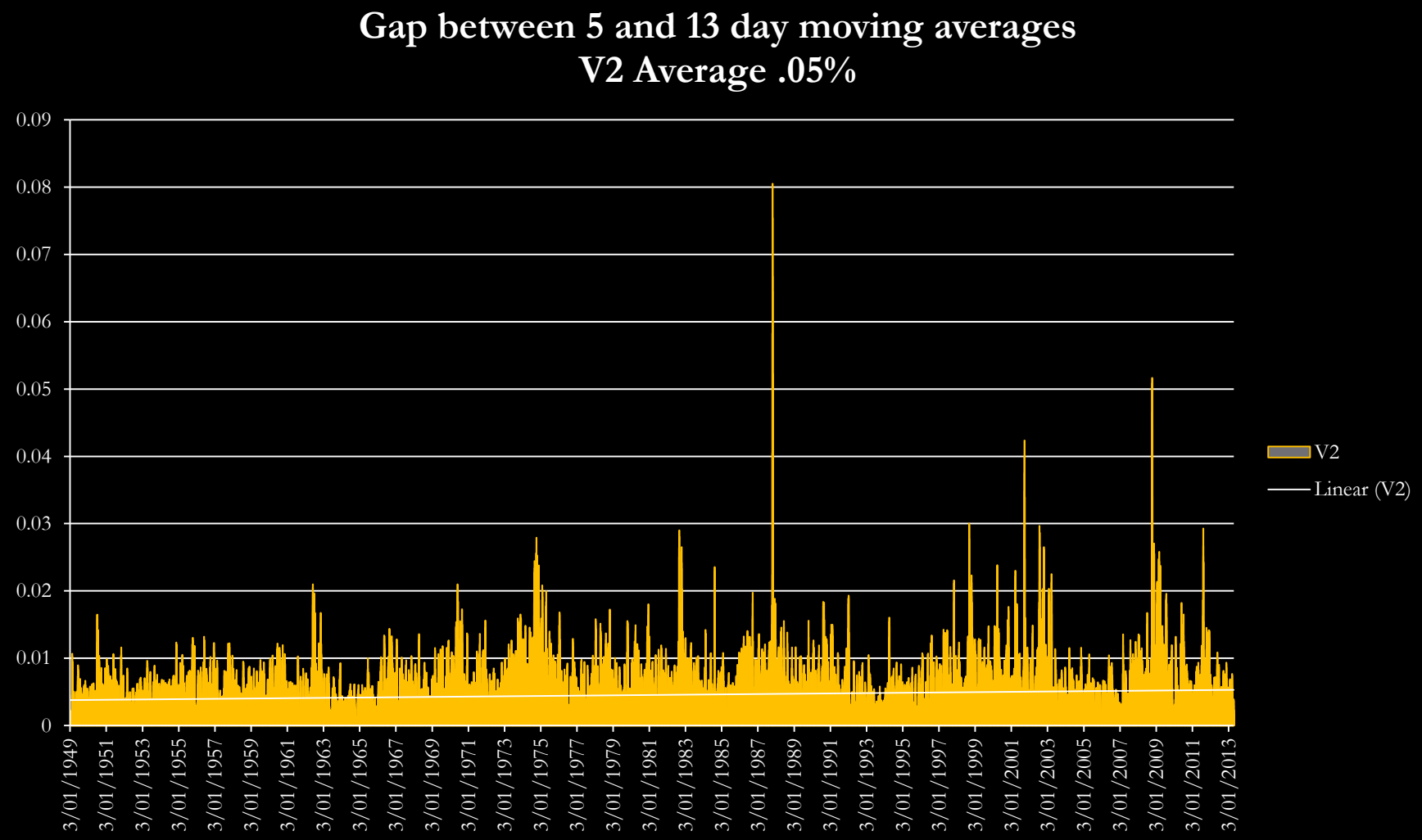
MEASURING CAPS BETWEEN THE TRADERS AND INVESTORS



MEASURING THE GAP BETWEEN MOVING AVERAGES
REAL BREAK OUTS



THE GAP


Gap between 5 and 13 day moving averages
V2 Average .05%
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
3/01/1949
3/01/1951
3/01/1953
3/01/1955
3/01/1957
3/01/1959
3/01/1961
3/01/1963
3/01/1965
3/01/1967
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3/01/2003
3/01/2005
3/01/2007
3/01/2009
3/01/2011
3/01/2013
V2
Linear (V2)


MIND THE GAP

KALVERT K CLARK

Economic Indicator Services

Cycles Research

Author of Dow Song and Dow Dance

Member of ATAA

Members Talk

kalvert_clark@fastmail.com.au

- Coefficient of Variation (CV) is a measure of the dispersion of points/prices around the mean (Dispersion of a probability distribution).

  In statistics, the coefficient of variation is also called variation coefficient, unitized risk or relative standard deviation (%RSD). Because its value is normalized and it is a dimensionless number, it is very helpful in analyzing and comparing volatility of different stocks.

  CV is expressed in percentage and its value is always positive. It is calculated by taking the standard deviation of N-past prices and then dividing them by the absolute value of the mean (of these N-past prices).

  One the main advantage of using the coefficient of variation over the standard deviation to measure volatility is the fact that CV is normalized and can be used to directly compare different asset's volatility. The standard deviation must be used in the context of the mean of the data. The main disadvantage is that the coefficient becomes very sensitive to small variation of the mean when the latter is close to zero. This means that this trading indicator is not suited to measure the volatility of penny stocks.

  As with the standard deviation, the coefficient of variation function has two arguments. The first one gets a time-series (Example: Close price) and the second one gets a lookback period (Number of past bars to use when calculating the mean and the standard deviation).
  Read more: http://www.quantshare.com/item-1027-coefficient-of-variation-relative-standard-deviation#ixzz2SaydrP9I
  Follow us: @quantshare on Twitter

Chapter:7
Understanding Risk
Section :1
What is Risk?
Sub Section:1

Coefficient of Variation

What if the two stocks offered different returns and different standard deviations?

In this way, one measure could be the risk per unit of return i. e. standard deviation of returns divided by expected return. This measure is called *coefficient of variation*.

	Stock C	Stock D
Expected Return	10%	15%
Standard Deviation	5%	10%
Coefficient of Variation	5% / 10% = 0.50%	10% / 15% = 0.67%

Hence, even though stock D offers a higher expected return, it is a poor investment in relation to its risk.

Few Questions about coefficient of variation and high risk returns?

Stock A has an expected return of 10% and a standard deviation of 15%. Stock B has an expected return of 12% and a standard deviation of 17%.According to the coefficient of variation, which of the following stocks is riskier?

Rank the following types of securities from high risk/return to low risk/return based on their historical averages: large company stocks, long term corporate bonds, small company stocks, and U.S. Treasury bills.

Should a diversified investor be more concerned with systematic risk or unsystematic risk? Explain.

5 years ago

Best Answer - Chosen by Asker

Coefficient of Variation = Standard Deviation ÷ Expected Return
The lower the ratio the better

Stock A = 15%÷10% = 1.5
Stock B = 17%÷12% = 1.42
Therefore, Stock A is the riskier

From low risk to high risk:
1. US Treasury Bill
2. Long Term Corporate Bonds
3. Large Company Stocks
4. Small Company Stocks

A bondholder is a creditor of the company while a stockholder is a part owner. By law, creditors are paid first before the owners in time of liquidation.

A diversified investor is more concerned with systematic risk. He holds wide range of well diversified portfolio where the returns on such well diversified portfolio will vary due to the effects of market-wide or economy wide factors, thereby eliminating the unsystematic risk.

Definition of 'Coefficient Of Variation - CV'

A statistical measure of the dispersion of data points in a data series around the mean. It is calculated as follows:

$$\text{Coefficient of Variation} = \frac{\text{Standard Deviation}}{\text{Expected Return}}$$

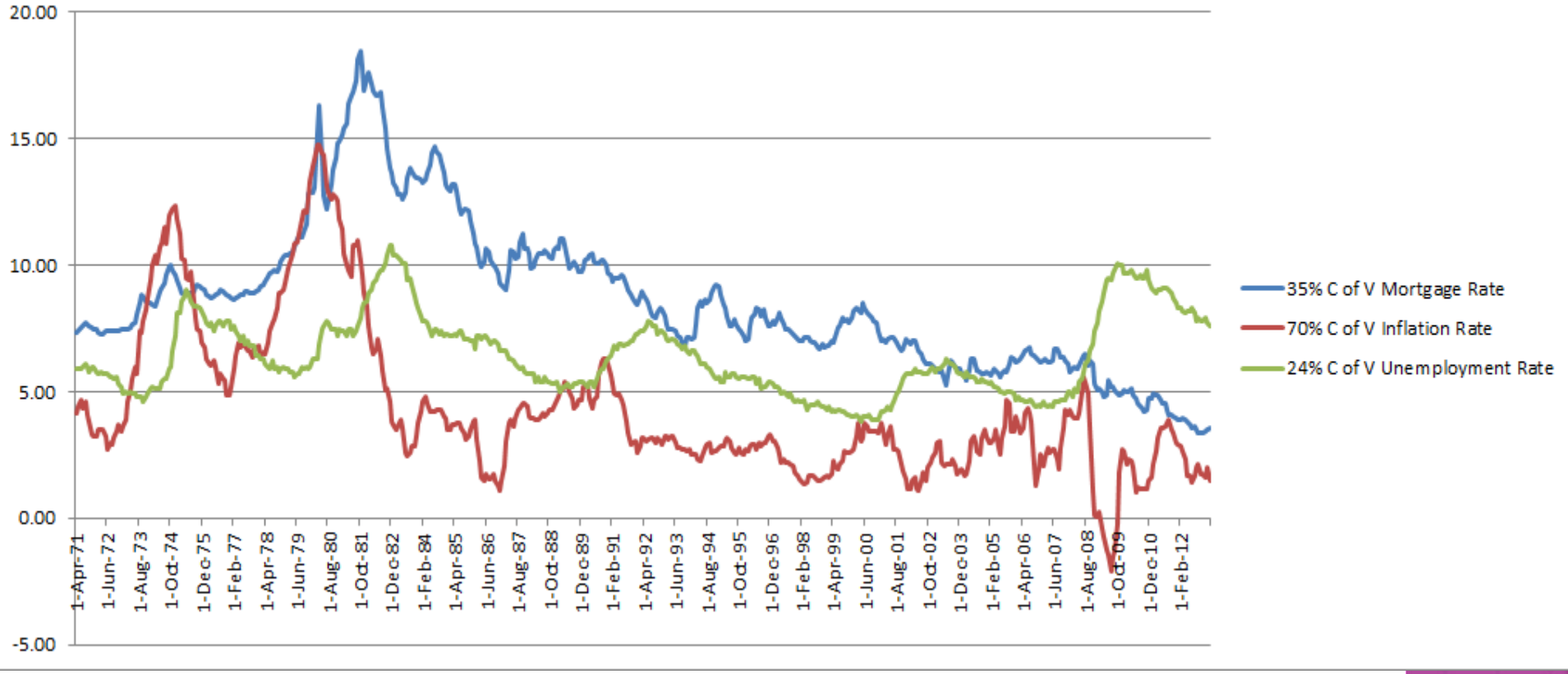
The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from each other.

Investopedia explains 'Coefficient Of Variation - CV'

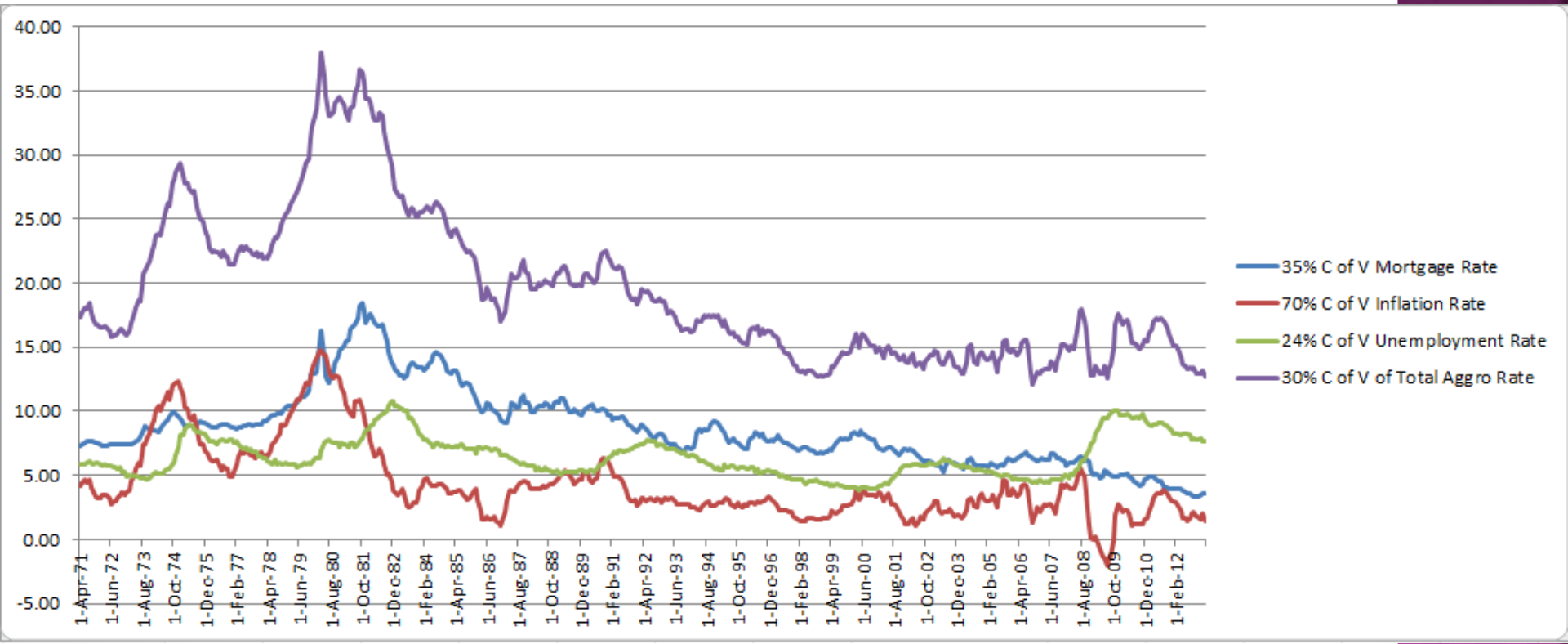
In the investing world, the coefficient of variation allows you to determine how much volatility (risk) you are assuming in comparison to the amount of return you can expect from your investment. In simple language, the lower the ratio of standard deviation to mean return, the better your risk-return tradeoff.

Note that if the expected return in the denominator of the calculation is negative or zero, the ratio will not make sense.

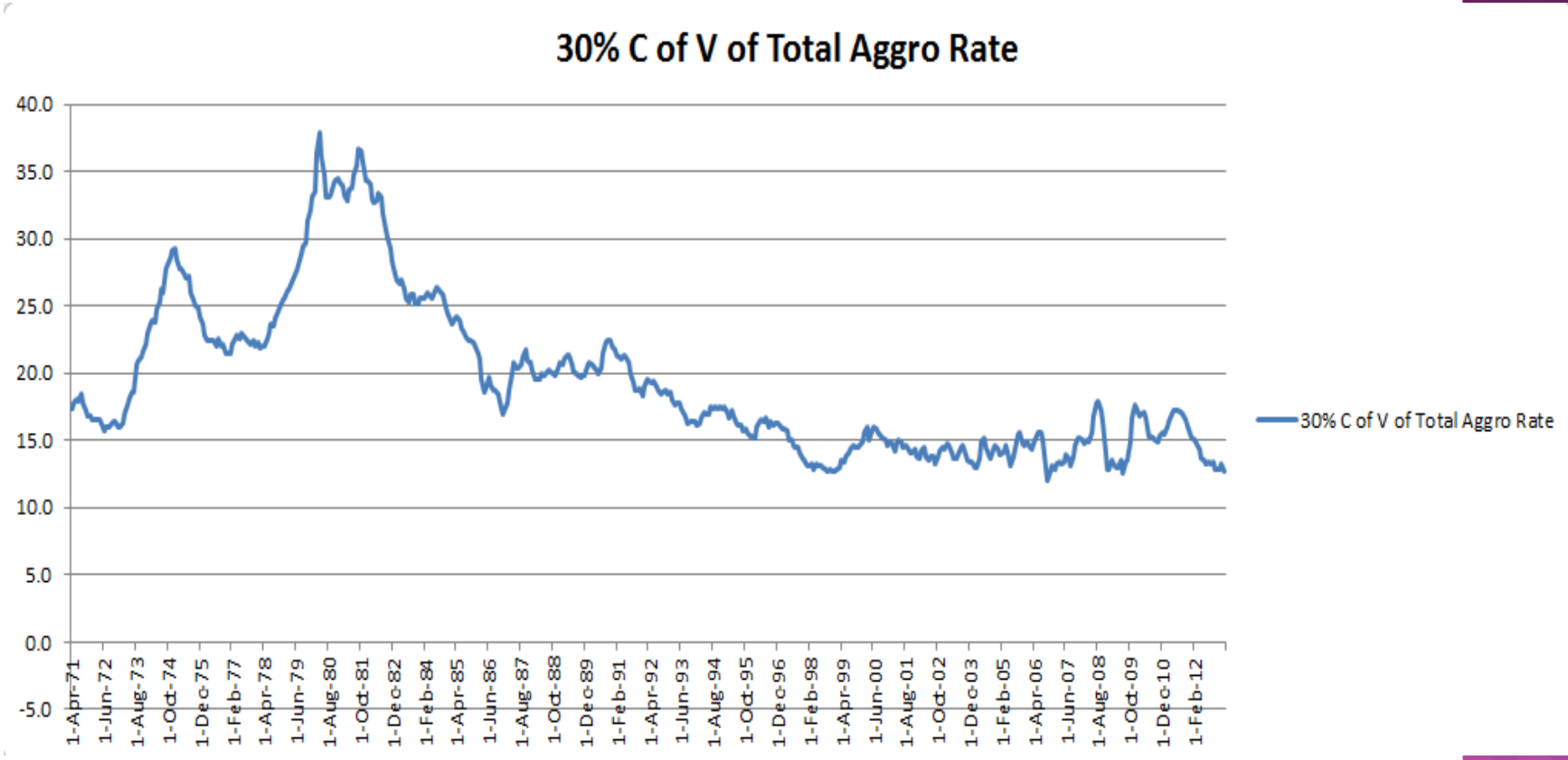
US THE THREE FOES



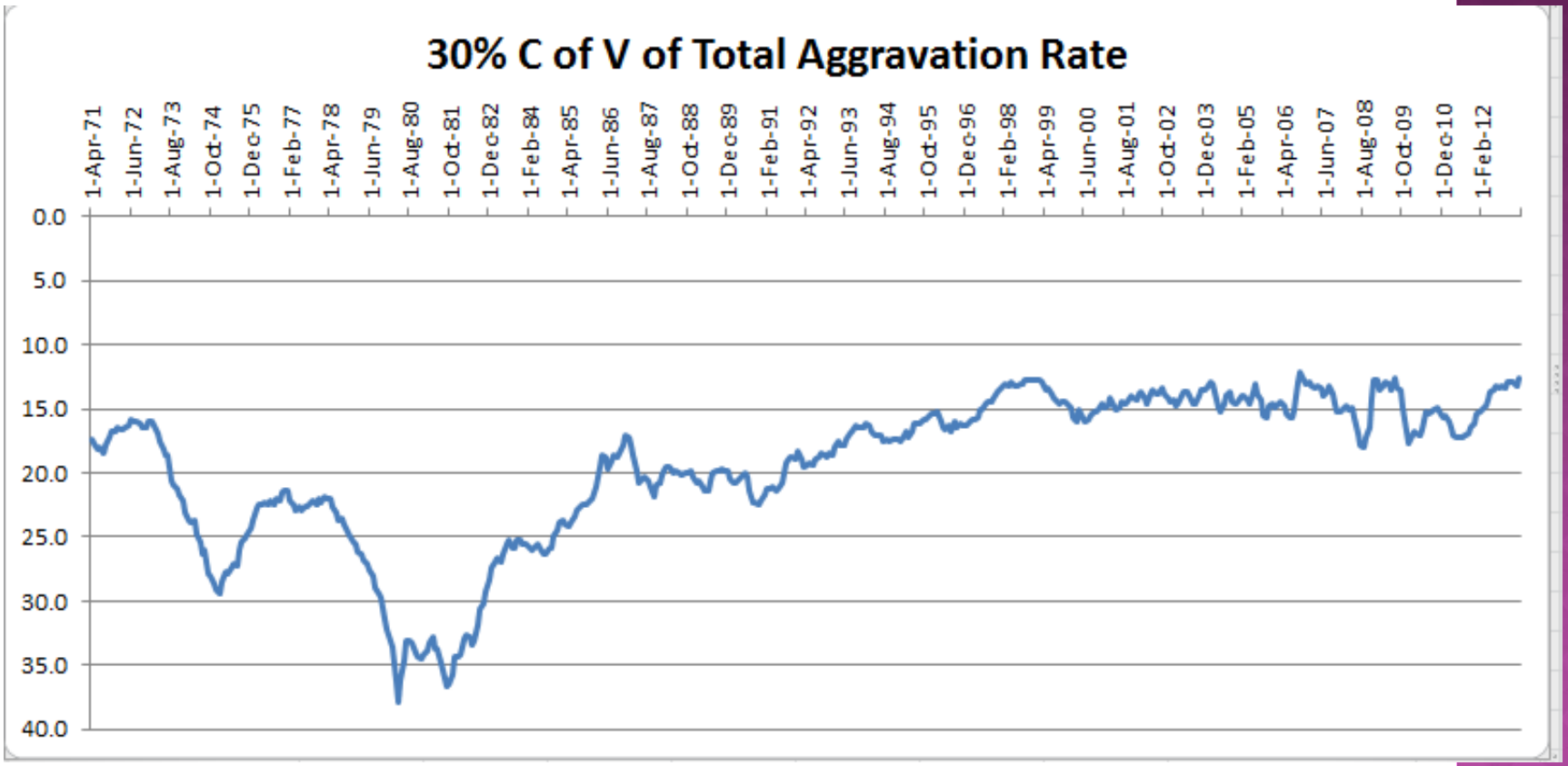
US TOTAL


40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
1-Apr-71
1-Jun-72
1-Aug-73
1-Oct-74
1-Dec-75
1-Feb-77
1-Apr-78
1-Jun-79
1-Aug-80
1-Oct-81
1-Dec-82
1-Feb-84
1-Apr-85
1-Jun-86
1-Aug-87
1-Oct-88
1-Dec-89
1-Feb-91
1-Apr-92
1-Jun-93
1-Aug-94
1-Oct-95
1-Dec-96
1-Feb-98
1-Apr-99
1-Jun-00
1-Aug-01
1-Oct-02
1-Dec-03
1-Feb-05
1-Apr-06
1-Jun-07
1-Aug-08
1-Oct-09
1-Dec-10
1-Feb-12
35% C of V Mortgage Rate
70% C of V Inflation Rate
24% C of V Unemployment Rate
30% C of V of Total Aggro Rate

US TOTAL AGGRO



US BLISS


30% C of V of Total Aggravation Rate
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1-Jun-72
1-Aug-73
1-Oct-74
1-Dec-75
1-Feb-77
1-Apr-78
1-Jun-79
1-Aug-80
1-Oct-81
1-Dec-82
1-Feb-84
1-Apr-85
1-Jun-86
1-Aug-87
1-Oct-88
1-Dec-89
1-Feb-91
1-Apr-92
1-Jun-93
1-Aug-94
1-Oct-95
1-Dec-96
1-Feb-98
1-Apr-99
1-Jun-00
1-Aug-01
1-Oct-02
1-Dec-03
1-Feb-05
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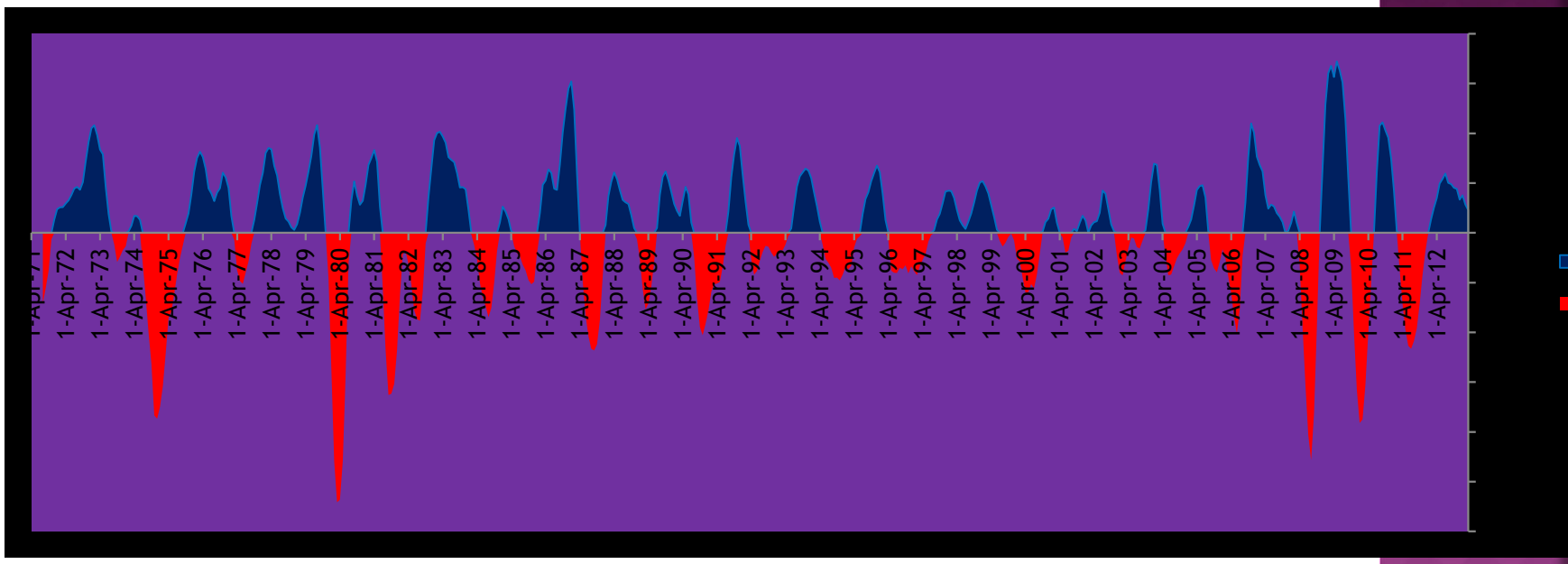
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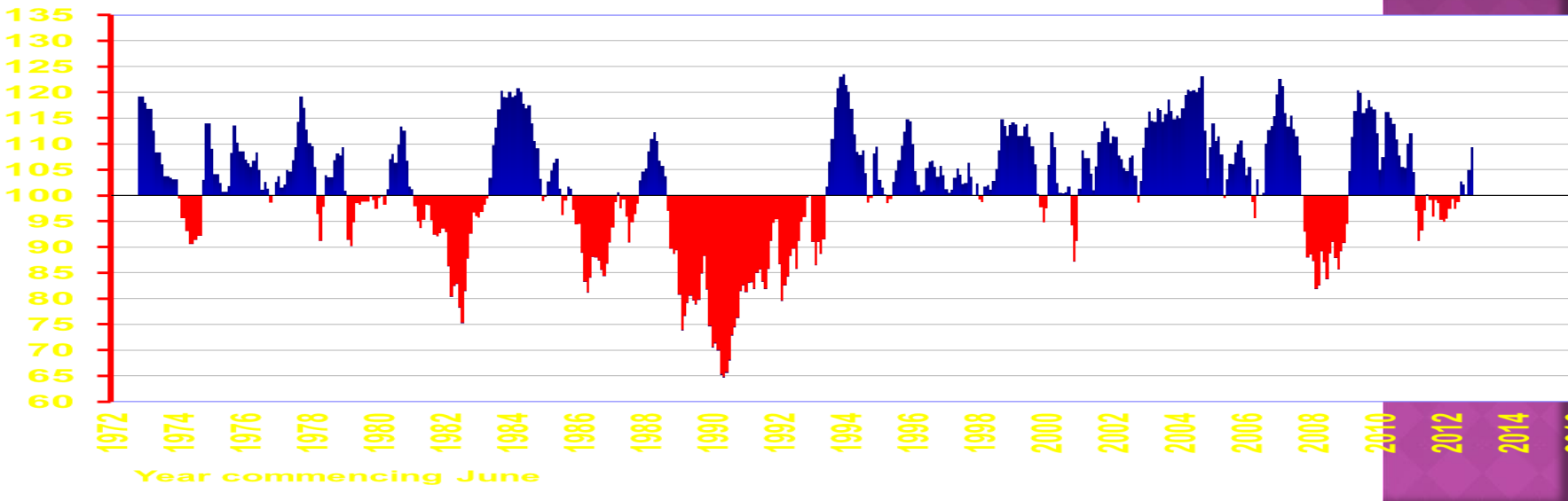
1-Apr-11
1-Apr-12


135
130
125
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115
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75
70
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1972
1974
1976
1978
1980
1982
1984
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1992
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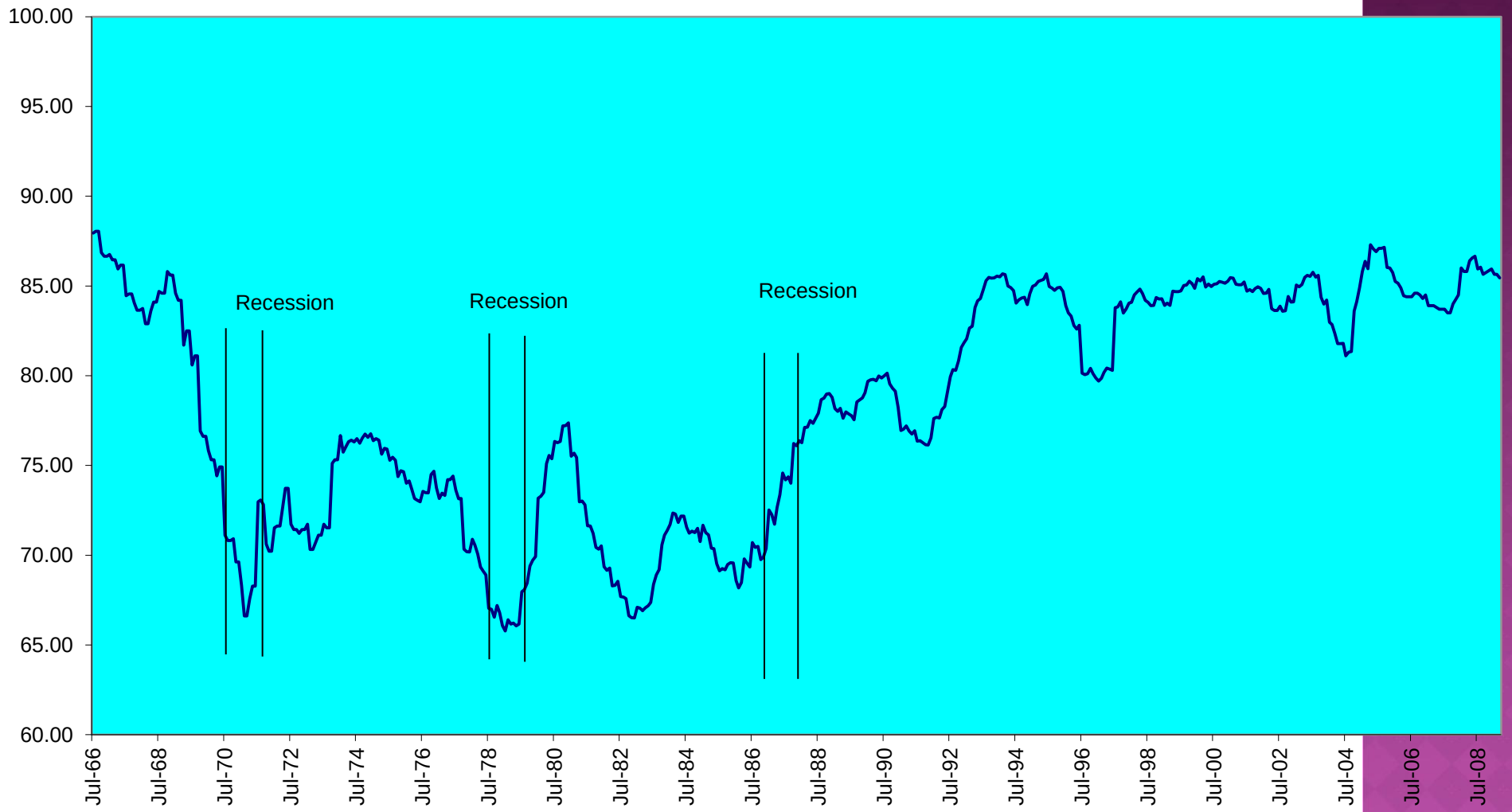
2002
2004
2006
2008
2010
2012
2014
Year commencing June

Bliss Index


100.00
95.00
90.00
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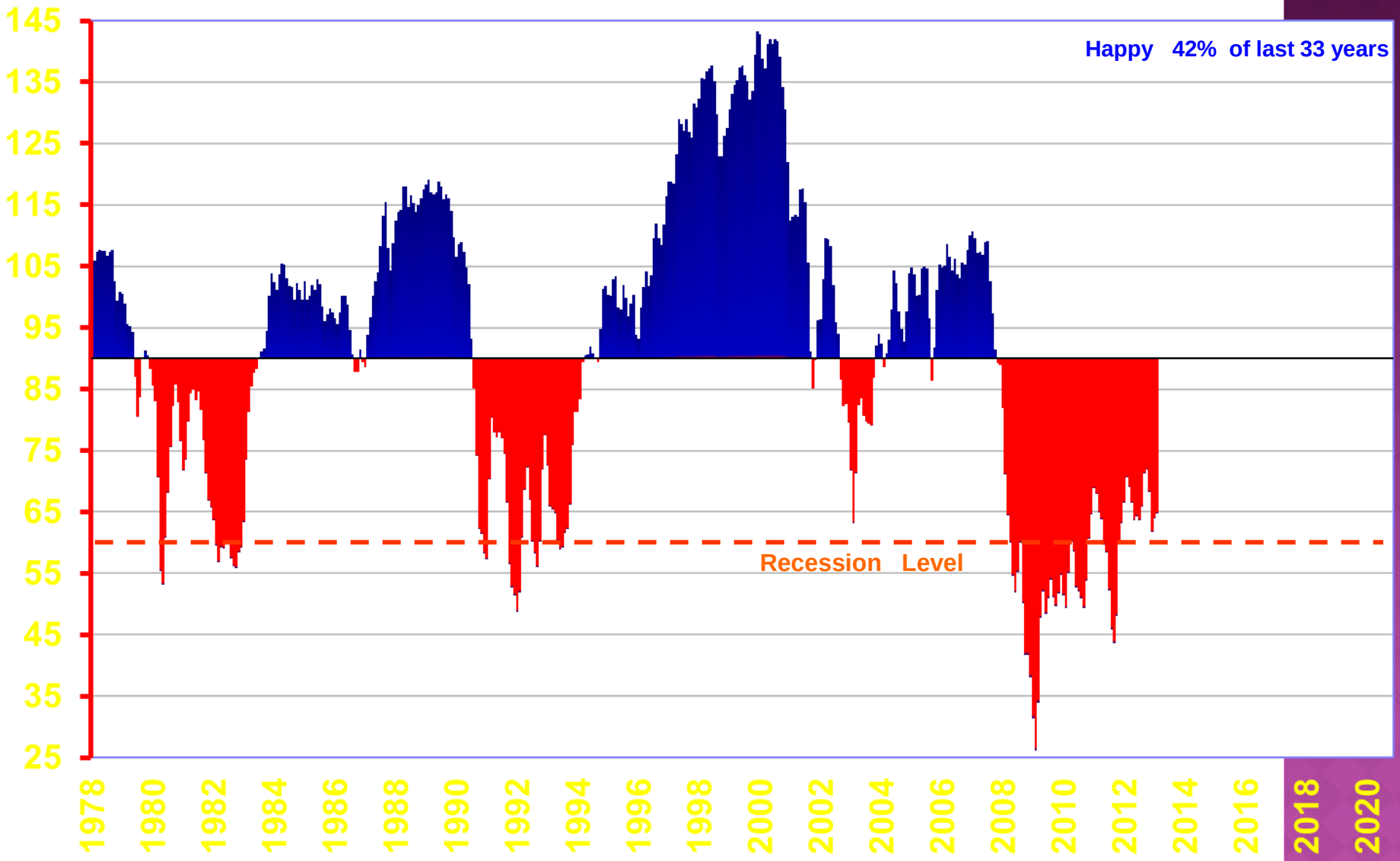
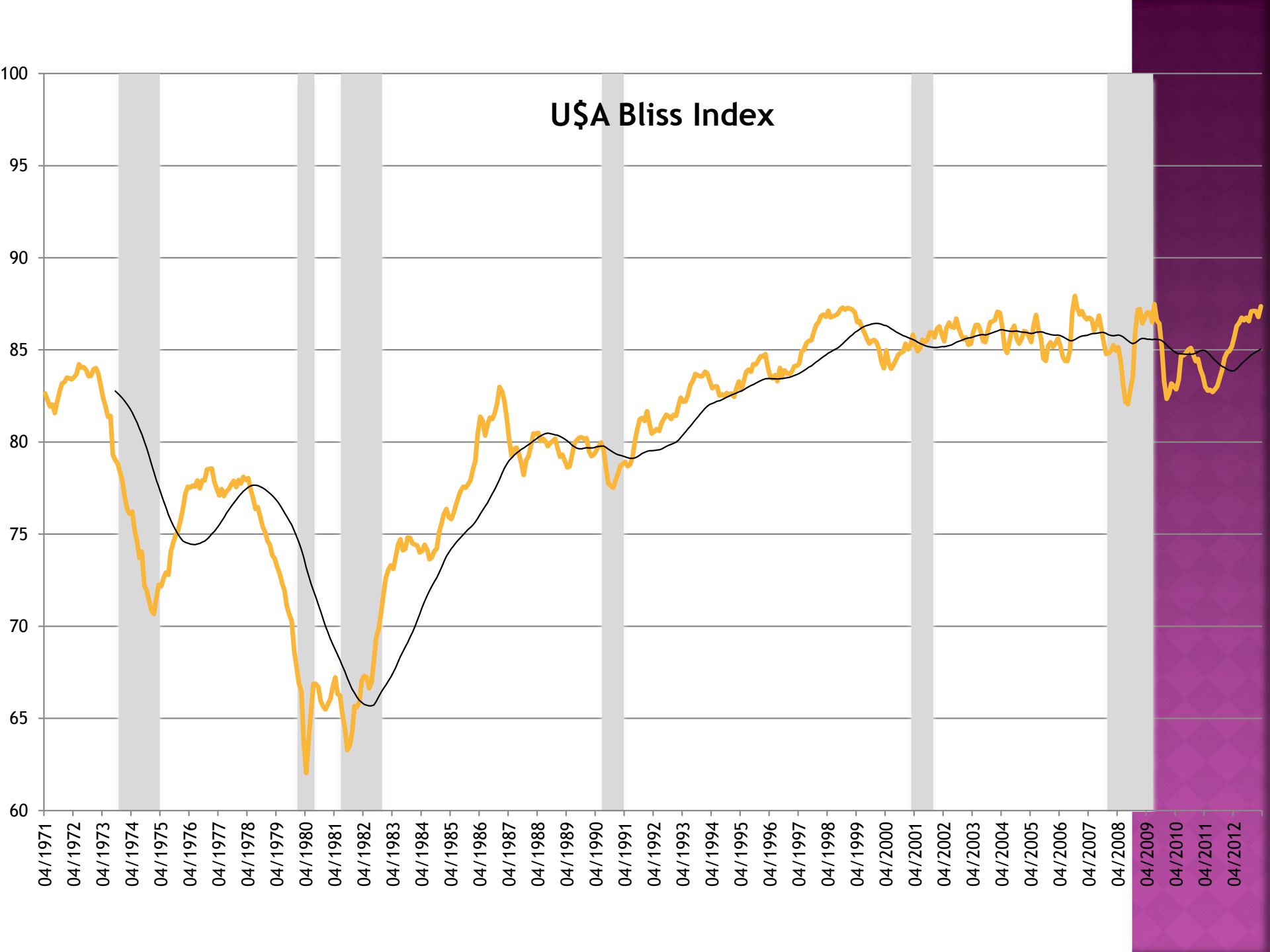
75.00
70.00
65.00
60.00
Recession
Recession
Recession
Jul-66
Jul-68
Jul-70
Jul-72
Jul-74
Jul-76
Jul-78
Jul-80
Jul-82
Jul-84
Jul-86
Jul-88
Jul-90
Jul-92
Jul-94
Jul-96
Jul-98
Jul-00
Jul-02
Jul-04
Jul-06
Jul-08

USA INDEX OF CONSUMER SENTIMENT

2 MONTHS PROGRESSIVE TO MARCH 2013



ex 20.03.13


U$A Bliss Index
100
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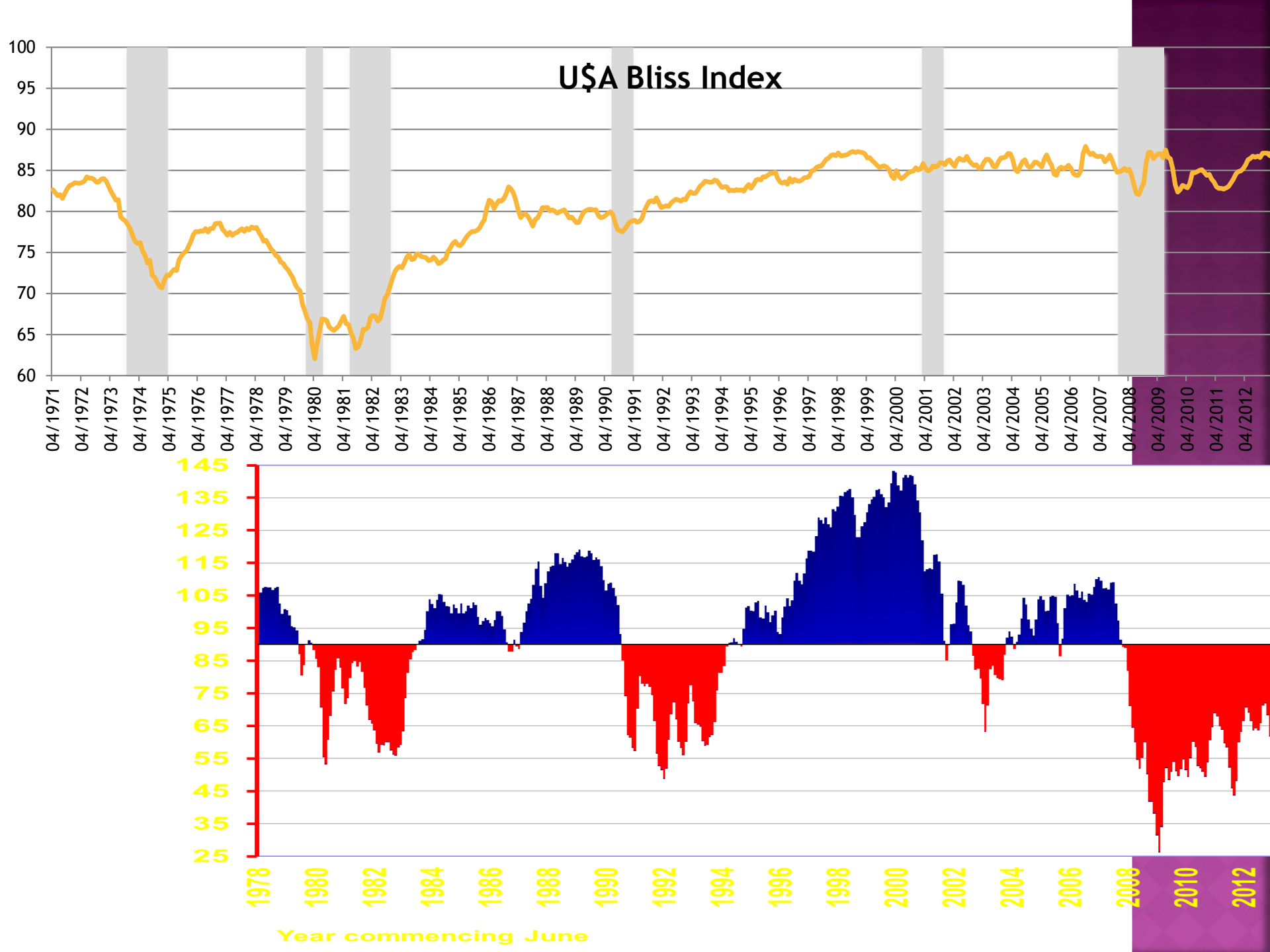
04/2010
04/2011
04/2012


U$A Bliss Index
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04/2010
04/2011
04/2012
145
135
125
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1978
1980
1982
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2008
2010
2012
Year commencing June