

Dr. Alexander Elder

Founder & Director Financial Trading, Inc.

		3
1.	—	4
2.	,	5
I.		7
1.1.	?	7
1.2.		7
1.3.	" "	9
1.4.		11
1.5.		12
1.6.		13
1.7.		15
1.8.		16
II.		19
2.1.		19
2.2.		20
2.3.		21
2.4.		23
2.5.		25
2.6.		26
III.		28
3.1.		28
3.2.		30
3.3.		32
3.4.		35
3.5.		39
3.6.		41
IV.		47
4.1.		47
4.2.		49
4.3.	-	51
4.4.	(MACD) MACD-	54
4.5.		57
4.6. %R	,	61
4.7.		63
4.8.		66
V.		68
5.1.		68
5.2.		69
5.3.		72
5.4.		74
5.5.		75
VI.		79
6.1.		79
6.2.		81
VII.		85
7.1.		85
7.2.		87
VIII.		89
8.1.		89
8.2.		91
IX.		95
9.1.		95
9.2.		98
9.3.		99
X.		103
10.1.		103
10.2.		104
10.3.		106
		109

1976

(),

22,

16

25

1974

KinderCare.

17

?

?

1.

—

?

?

?

?

?

Seminars, Inc.,

95%

Financial Trading
()

1%

*

(Open Interest)

(Elder Rays) —

(Force Index)

("Tri pie Screen").

2.

?

(Slippage).

(Limit Order),

(Market Order),

(Zero-Sum Game).

10
10

3 6

13

100

7,

10

12 100

30

30

(5 000

10 000

).

600

20%

20%

5%

30

1%

5%

4

50

(

).

I.

1.1.

?

2 000."

2 000

(. 7).

1.2.

6 000

3 000

50

?

!"

:"

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:"

:"

!

!

?

(10).
20 000

2

1

10 000
50%

20 000

?

3 000,

?

()

1.3.

1841

2,5 — 3 1962, 1966, 1970, 1974, 1978 1982
1 1,5

2 3

4-

1970

1974

" 1973-1974

500.

1976

1978

Wall Street.

1970-

40

1982

1983.

1984

1930-

5

3

1 000

3 000.

" 1980-

1987

500

3 000.

? !

!

?

1.5.

“ ”

“ ”

“ ” “ ”

“Wall Street Journal”

()

?”

“

!

“ ”

!

1.6.

()

1930-

12-

“”

!

：“”

90 100

1.8.

—

—

—

—

Wall Street

?

(Open Interest)

2.2.

90 95

? ?

1980-

1980-

2.3.

65 400

15

24 14

50

Wall Street Invest Bank,

(8).

(4.1).

2.4.

1841

1720

1634

1897

1950-

?

Wall Street

?

2.5.

"S&P 500",

1980-?

(6).

” (Bearish Divergence) (4.5).

” (Bullish Divergence).

2.6.

“ ” “ ”

“ ” —

“ ”

“ ”

“ ”

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“ ”

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“ ”

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“ ”

？”

“ ”

“ ”

“ ”

“ ”

“ ”

III.
3.1.

(Price Patterns).

(
(Classical Chart Analysis)

(Open Interest)

10

"Wall Street Journal".

"Wall Street Journal".

1929

Pea,

1932

1930-

1929

Pea,

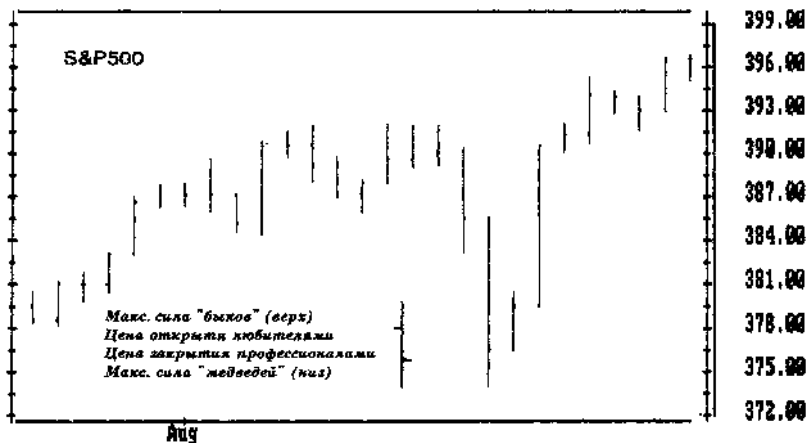
(6).

1948

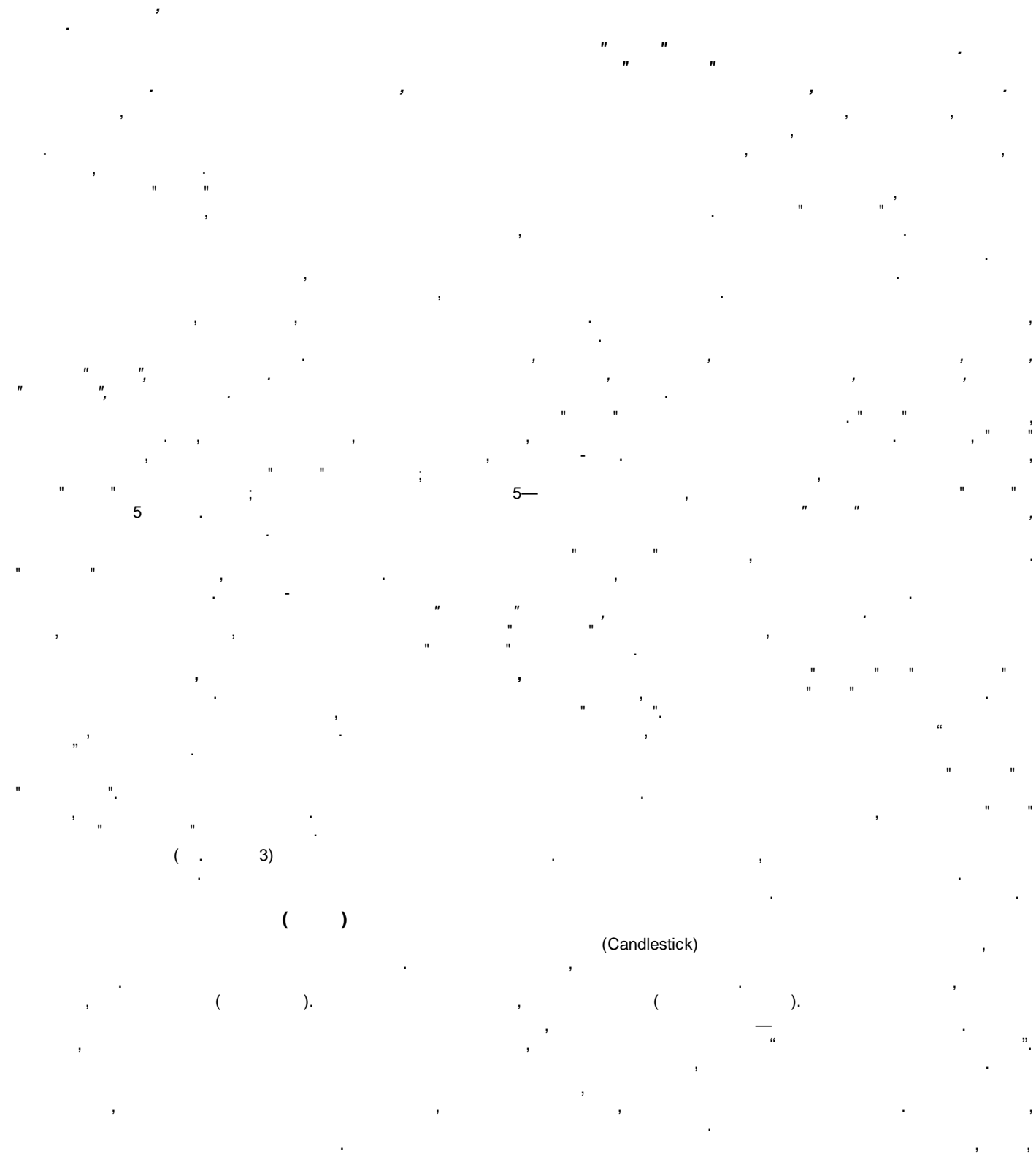
c,

1940-
1990-

1950-



. 1.



(Market Profile)

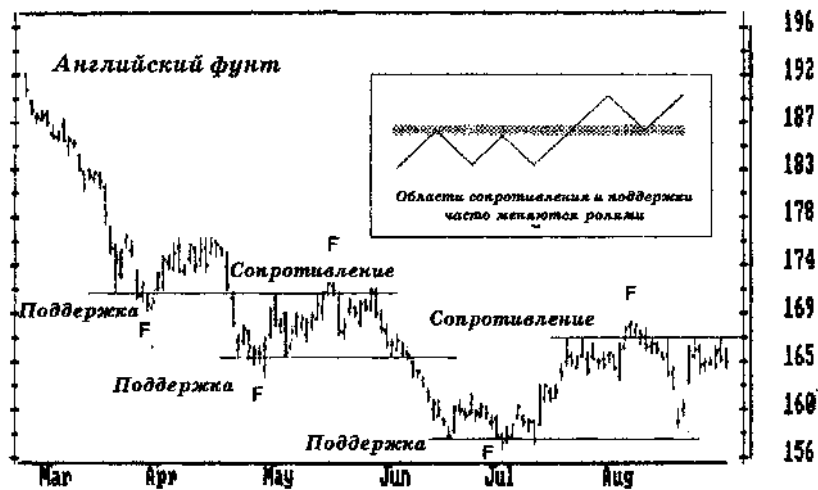
(Random Walk)

(" ")

3.2.

(Support) —

(. 2).



F.

(Resistance) —

(Congestion Zones),

950 1 050.

1966 1982

1. ()

(Protective Stop).

2.

3.

92,

80.25,

80.

89.75,

90.

76,

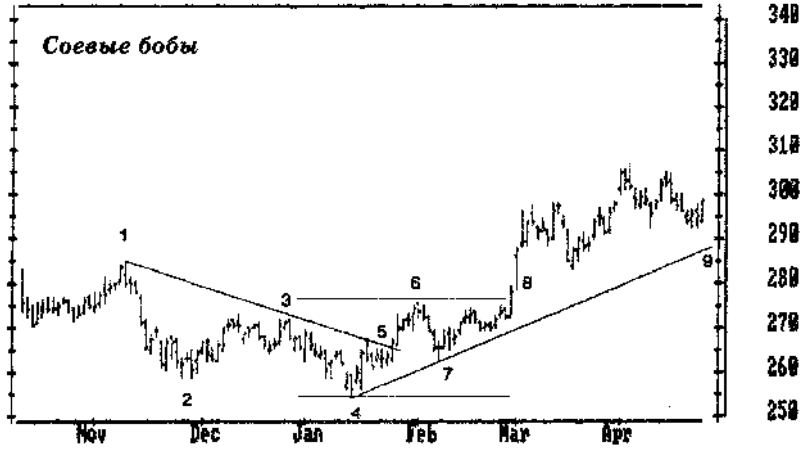
3.3.

(Downtrend)

(Uptrend)

(Trading Range, Trendless Market)

(. . . 3).



. 3.

5

4

2

3

1.

4

3

6.

6

7,

8

Stop-loss
(

)

1.

(. . 3).

2.

(. 3, 4, 6).

(. 3.4).

3.

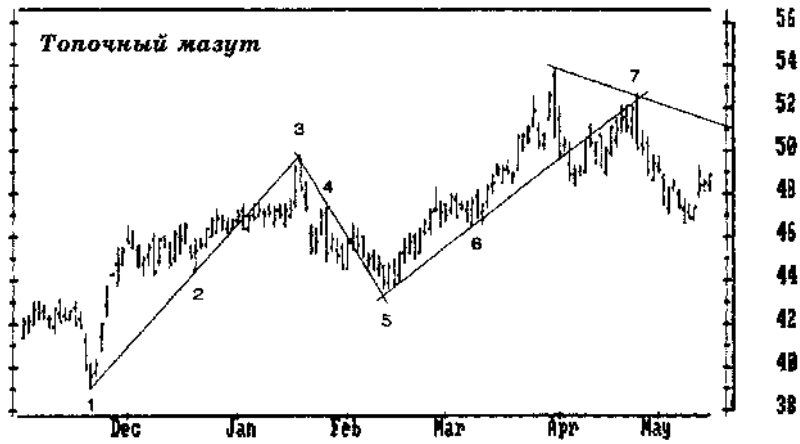
13-

4.2).

4.

MACD (. 4.3)

4.4),



. 4.

1 2,

7,

(3).

10).

2

(.

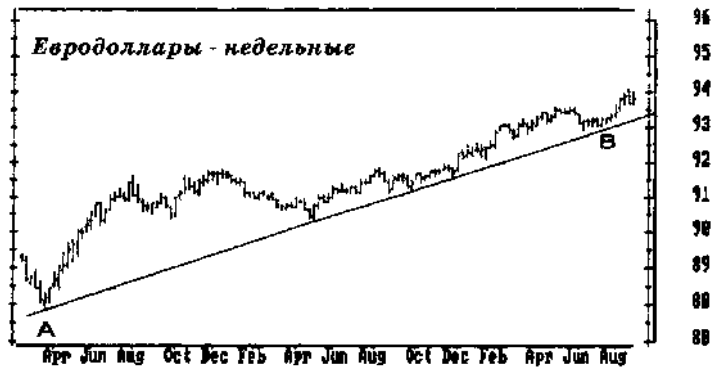
10-

(. 4.3).

10-

(. 5).

(. 9.1).



. 5.

X-Y.

?

(. 9.1).

3.4.

" " " " " " " " " " " "

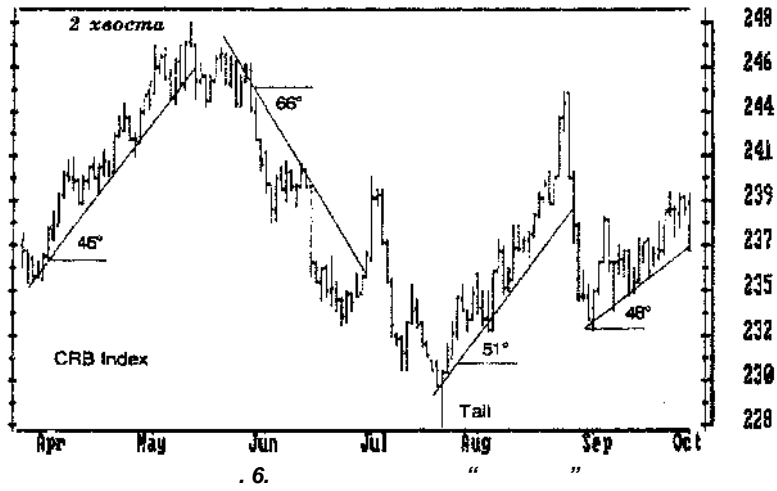
(Trendlines).

MACD (. 4).

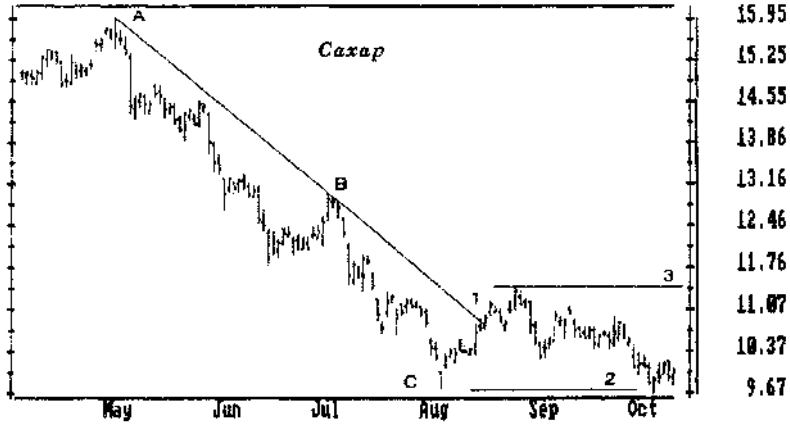
(. 6).

(Tails)

(. 6).



(. 7).



. 7.

(1)

()

()

()

(2)

(3)

(. 6).

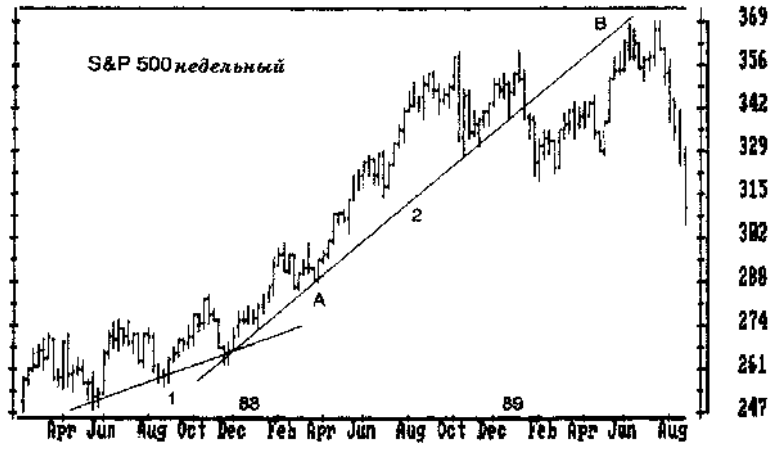
(. 8).

(8-12

400

).

(. 4 8).



. 8.

1987

(1).

1988

(2).

1.

2.

3.

4.

5.

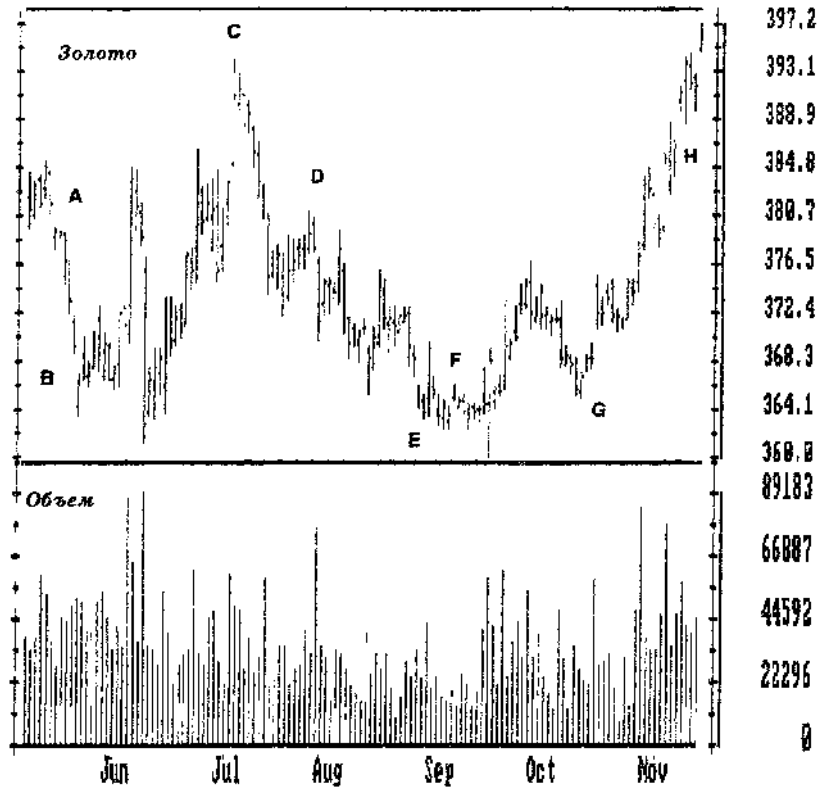
(Channel)

45

(Channels),

(. 9.3).

(. 9).



. 10.

D.

F.

G.

(Common Gaps)

20

50

50

(Breakaway Gaps)

(Continuation Gap)

1970-

50

(Exhaustion Gap)

1.

2.

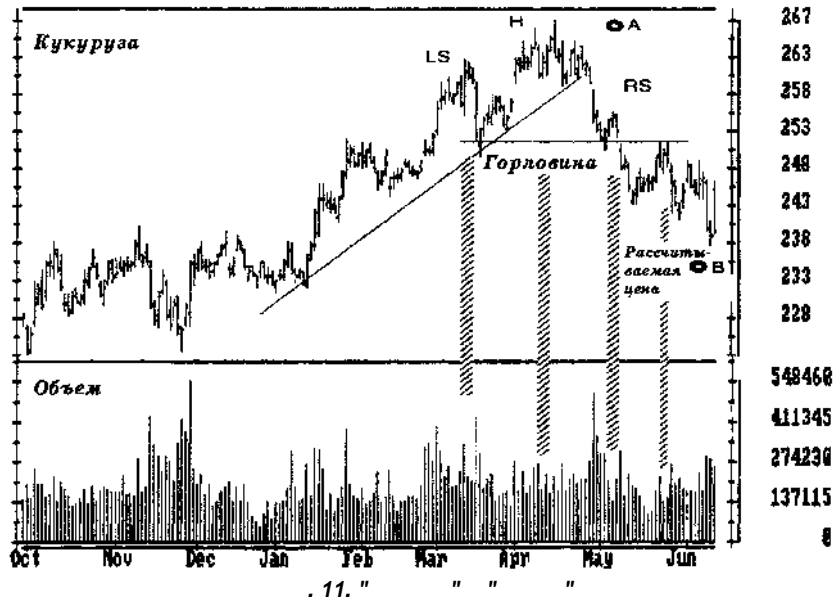
3.

4.

5.

"put"

(Island Reversal)



(LS) —

3.5)
" (RS)

5

(. 5.5).

(. 10).

- 1.
- 2.
- 3.

" ,

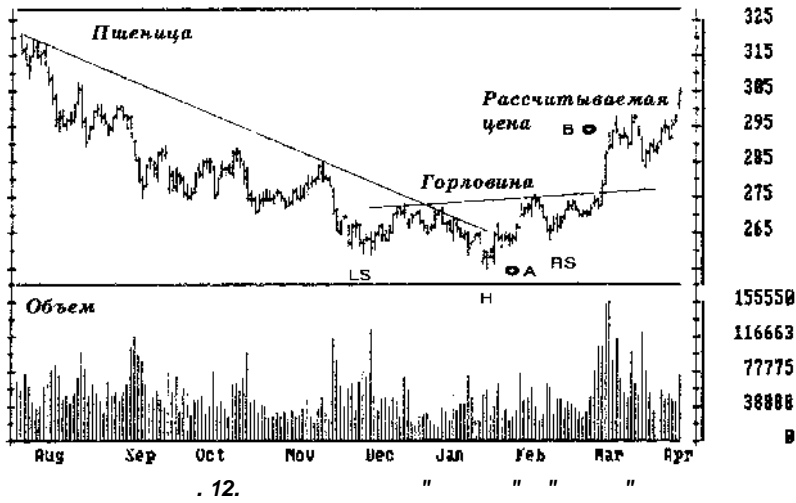
" "

" "

" (Stop-and-Reverse).

4.

(. 12).



. 12.

" (LS).

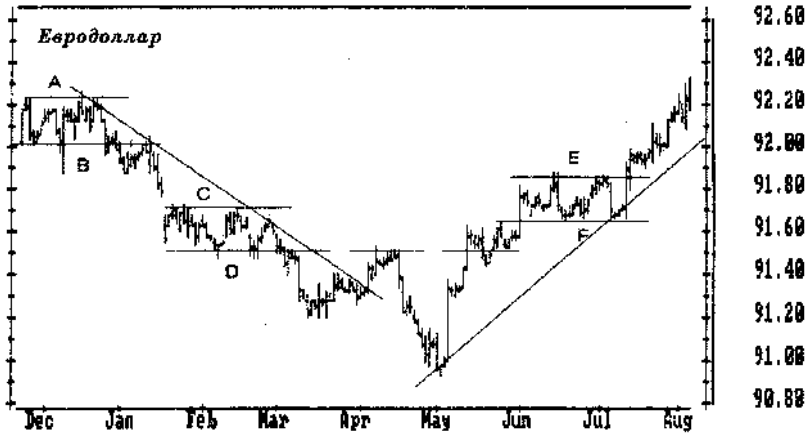
()

" ()

(Rectangle) —

(. ")

(. 13).
(. 3.2).



. 13.

(, D,).

D

(1,618; 2,618; 4,236)

1.

(RSI) %R (Wm%R) (4),

(Stochastic),

2.

(9.1).

3.

(Line)

(Flag) —

(Triangle) —

(. 14).

10 15

30

(Symmetrical)

30

(Ascending)



. 14.

(Descending)

50

General Motors Ford, IBM.

3.7)

- 1.
- 2.
- 3.
- 4.
- 5.

(8.1).

(9.1).

(Pennant) —

(Widening or Expanding Triangle)

(Diamond)

" " (Double Top)
" " (Double Bottom) —

" " " " " " " " " " " "

IV.

4.1.

—

" " " "

3 000, "Financial Trading

Seminars, Ink.",

MACD- , MACD,

5- 9-

CompuTrac

CompuTrac. "Financial Trading Seminars, Ink.",

MESA.

1

9.

9

1 —

20

“S&P 500”

10

12

(Trend Following),

(Oscillator)

(9.1).

(Moving Average), MACD (Directional System),

Balance Volume),

), MACD-

(Accumulation/Distribution)

(On

Change), (Elder-Ray), (Smoothed Rate of Change), (Force Index), %R, (Stochastic), (Momentum), (Rate of (RSI), (CCI)
Consensus), (New High - New Low), (Advance/Decline), (Put-Call Ratio), (Traders Index) (Bullish

4.2.

Wall Street

« (moving average,) 5, 20- 20

$$\text{Простое МА} = \frac{P_1 + P_2 + \dots + P_n}{n}, \text{ где}$$

P - усредняемая цена,
n - период усреднения (выбирается игроком).

3- 19, 21 20, 20 (19+21+20 3). 22. 21 (, 21+20+22, 3).

(Exponential) (Weighted). (Simple),

105. 80 90, 10- 85,

(2.1).

10

()

$$EMA = P_C * K + EMA_B * (1 - K), \text{ где}$$

$$K = \frac{2}{n+1}$$

n - число дней усреднения в EMA (выбирается игроком),
 P_C - цена сегодня,
 EMA_B - EMA вчера.

1. (.) . 10-
 2. 10+1, 0.18. (.) . 10- , 2,
 3. 10 :
 4. 11- , (1-)
 5. 4 , (. . 15).
- 10- 18

(.) . (Whipsaws) —

Day	Close	10-
1	447.30	
2	456.80	
3	451.00	
4	452.50	
5	453.40	
6	455.50	
7	456.00	
8	454.70	
9	453.50	
10	456.50	453.70
11	459.50	454.80
12	465.20	456.60
13	460.80	457.40
14	460.80	458.00

. 15. 10-

3 —

« »

(. 3.5). 34 ,

22- 17-

11-

MESA,

MESA

10 20

200- 8 13-

2.6).

(. 16).

1.

2.

3.

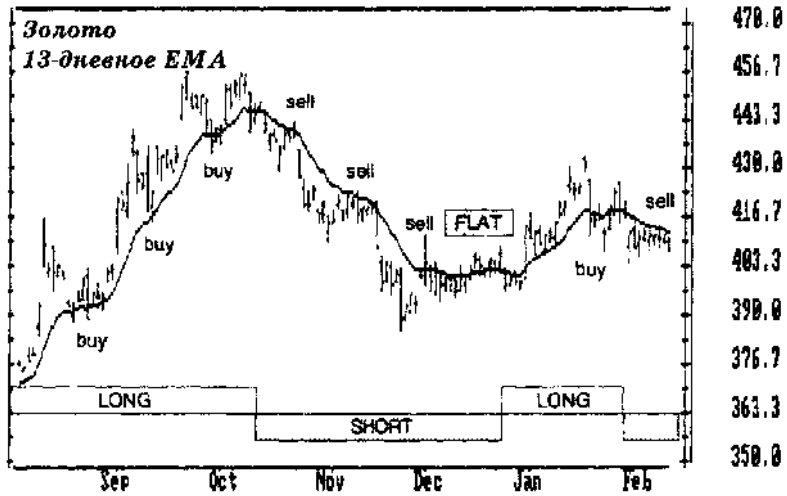
(Flat).

1)

2)

3)

4)



.16. 13-

18-

4, 9

9,

5-

5-

, 10-

10- 10

5 6
7 8

WMA (WMA) 4.3. (MACD) MACD-

MACD (Moving Average Convergence-Divergence),

MACD

MACD MACD : MACD, MACD, MACD, MACD

MACD:

- 2. 12-
- 2. 26-
- 3. 26- 12-
- 4. 9- (Signal Line) (17).

DAY	CLOSE	12-	26-	MACD	SIGNAL	MACD-hist
1	20.70	20.39	20.46	-0.07	-0.16	0.09
2	20.55	20.41	20.47	-0.06	-0.14	0.08
3	20.72	20.46	20.49	-0.03	-0.12	0.09
4	21.03	20.55	20.53	0.02	-0.09	0.11
5	21.10	20.63	20.57	0.06	-0.06	0.12
6	21.29	20.73	20.62	0.11	-0.02	0.13
7	21.09	20.79	20.66	0.13	0.01	0.12
8	21.48	20.90	20.72	0.18	0.04	0.14
9	21.23	20.95	20.76	0.19	0.07	0.12

17. MACD MACD—

MACD MACD-

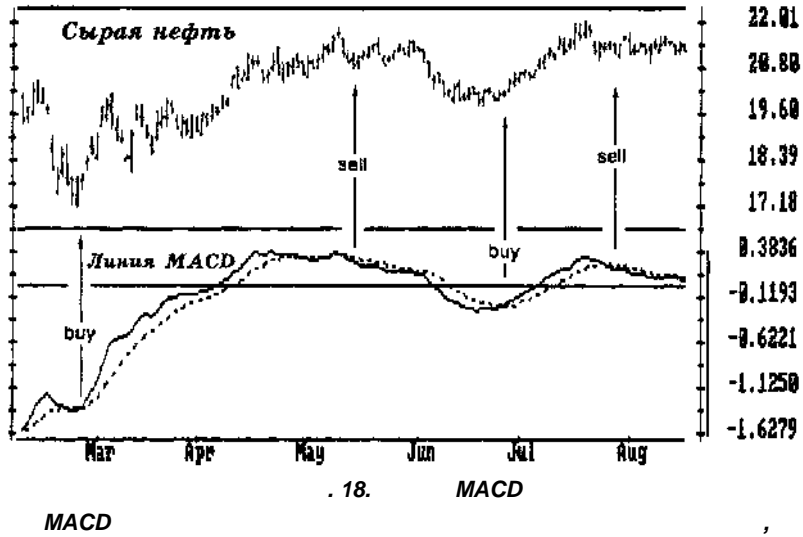
- 1. 12- 26-
- 2. 26- 12- MACD.
- 3. 9- MACD, MACD,
- 4. MACD, MACD-

MACD D " " " "

MACD " " " "

MACD

- 1. MACD
- 2. (18).



MACD

MACD

12, 26 9-

5-34-7.

(. 5.5).

MACD

MACD

MACD,

MACD «

».

, 11 26-

MACD

MACD-

MACD-

MACD.

MACD-

= MACD

MACD

(. 17).

MACD-

MACD-

MACD-

0.

MACD

MACD-

, MACD-

MACD-

MACD-

MACD

. MACD-

MACD-

MACD-

" "

MACD-

" "

, MACD-

, MACD-

MACD-

MACD

" "

MACD-

MACD-

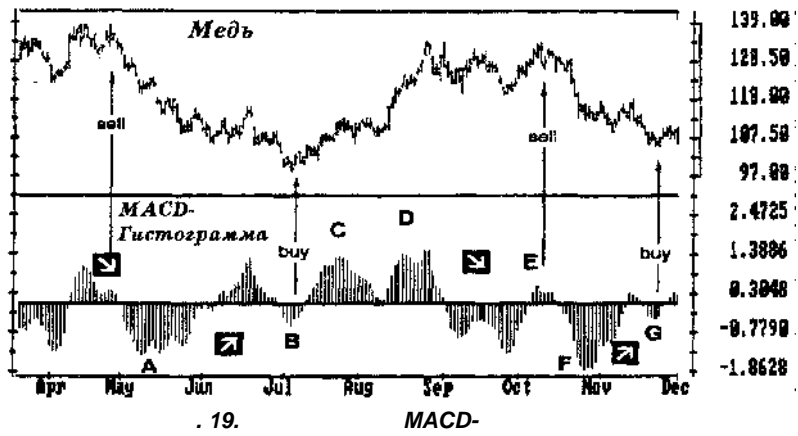
MACD-

MACD-

MACD-

MACD-

MACD- (. 19).



MACD-

MACD-

F

F

D MACD-

D.

MACD-

" D-E

" F-G.

MACD-

G.

G.

1.

MACD-

2.

MACD-

MACD-

MACD-

(. 9.1).

MACD-

MACD-

MACD-

MACD-

MACD-

MACD-

MACD-

" (Bearish Divergence) (. 19).

MACD-

MACD-

3.

MACD-

MACD-

MACD-

(Bullish Divergence).

MACD-
4. MACD-

MACD-
MACD-

MACD-

MACD-

MACD-

MACD-

MACD-

4.4.

(Directional System) —

1970-

Date	High	LOW	Close	DI ₁₃	-DI ₁₃	DX	ADX
7/1	72.24	71.87	71.92	30	20	20	20
7/2	71.83	71.63	71.69	29	23	12	19
7/3	71.65	71.33	71.36	27	27	0	18
7/5	72.10	71.83	72.06	31	23	15	18
7/8	71.94	71.78	71.90	30	23	13	18
7/9	72.02	71.77	71.79	30	22	15	18
7/10	71.95	71.87	71.90	29	21	16	18
7/11	72.13	71.82	71.85	30	20	20	18
7/12	73.20	71.94	73.11	41	16	44	20
7/15	72.94	72.65	72.80	38	15	43	22
7/16	72.75	72.55	72.58	36	16	38	23
7/17	72.91	72.62	72.71	37	15	42	24
7/18	73.07	72.29	72.42	32	18	28	24
7/19	73.06	72.69	73.06	26	16	29	24
7/22	72.76	72.22	72.36	26	21	11	23
7/23	72.76	72.62	72.69	25	20	11	22
7/24	72.96	72.38	72.48	23	22	2	20
7/25	72.42	71.64	71.76	20	30	20	20
7/26	72:50	71.96	72.37	19	27	17	20
7/29	72.34	72.08	72.25	18	26	18	20
7/30	72.47	72.18	72.26	19	25	14	20
7/31	72.59	72.31	72.51	20	23	7	19
8/1	72.59	72.36	72.41	19	22	7	18
8/2	72.92	72.28	72.58	23	20	7	17
8/5	72.95	72.56	72.80	22	19	7	16
8/6	73.57	72.94	73.50	28	17	24	17
8/7	73.29	73.07	73.21	27	16	26	18
8/8	73.15	72.84	73.06	25	18	16	18
8/9	73.18	72.67	72.81	23	20	7	17
8/12	72.92	72.72	72.88	22	19	7	16

. 20.

+DI₁₃ -DI₁₃
13 . DX

+DI₁₃ -DI₁₃ , ADX

DX.

(Directional Movement)

1. (20)
(DM),

(+DM -DM) (21).

2. « » (True Range — TR)

3. (Directional Index +DI -DI).

-DI DI

$$+DI = \frac{+DM}{TR} \quad -DI = \frac{-DM}{TR}$$

4. (+DI₁₃ -DI₁₃) +DI -DI 13—

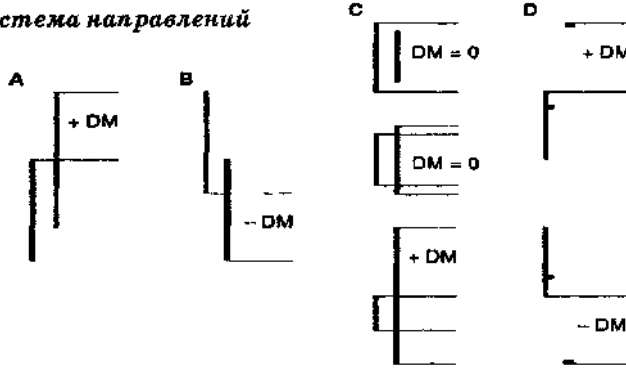
+DI₁₃ -DI₁₃

-DI₁₃

+DI₁₃ -DI₁₃

+DI

Система направлений



. 21.

(+DM).
(-DM).

(DM=0).

DM

D.

+DM

a —

5.

(ADX).

. ADX

+ DI₁₃

u - DI₁₃

(DX):



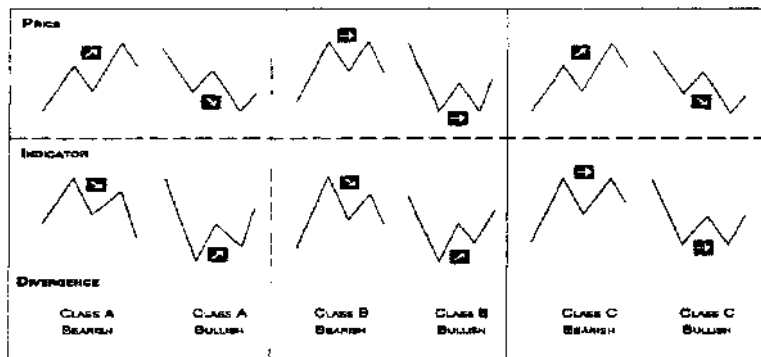
4.5.

(Overbought),

(Oversold),

(9.1).

" (23).



. 23.

(Momentum)

(Rate of Change)

$$M = P_c - P_{c-n} \quad \text{RoC} = \frac{P_c}{P_{c-n}}, \text{ где}$$

—
 RoC —
 c —
 c-n —

n (n).

, 7-

7-

RoC 1. RoC 1, (. 24).

RoC.

RoC

() ().

Date	Close	Mtm:7	RoC:7	13—	S—RoC 13/21
6/6	20.51	—0.64	96.07	21.04	100.51
6/7	20.45	—0.71	96.64	20.95	99.68
6/10	20.09	—1.36	93.66	20.83	98.61
6/11	20.20	—1.06	95.01	20.74	98.14
6/12	20.31	—0.94	95.58	20.68	97.96
6/13	20.01	—1.11	94.74	20.5	97.65
6/14	20.00	—0.64	96.90	20.50	97.25
6/17	20.13	—0.38	98.15	20.45	96.94
6/18	20.10	—0.35	98.29	20.40	96.56
6/19	19.91	—0.18	99.10	20.33	96.07
6/20	20.17	—0.03	99.85	20.30	95.94
6/21	20.21	—0.10	99.51	20.29	96.04
6/24	20.00	—0.01	99.95	20.25	95.90
6/25	20.10	0.10	100.50	20.23	95.72
6/26	20.09	—0.04	99.80	20.21	95.49
6/27	20.46	0.36	101.79	20.24	95.66
6/28	20.53	0.62	103.11	20.29	95.67
7/01	20.65	0.48	102.38	20.34	95.88
7/02	20.70	0.49	102.42	20.39	96.10
7/03	20.55	0.55	102.75	20.41	96.27
7/05	20.72	0.62	103.08	20.46	96.84
7/08	21.63	0.94	104.68	20.54	97.64
7/09	21.10	0.64	103.13	20.62	98.41
7/10	21.29	0.76	103.70	20.71	99.45
7/11	21.09	0.44	102.13	20.77	100.14
7/12	21.48	0.78	103.77	20.87	100.93
7/15	21.23	0.68	103.31	20.92	101.65
7/16	21.37	0.65	103.14	20.99	102.37
7/17	21.81	0.78	103.71	21.10	103.21
7/18	21.66	0.56	102.65	21.18	103.85

. 24.

(Mtm:7)

(RoC:7) —

7

7

7

(S-RoC 13/21)
21-

13-

RoC

RoC

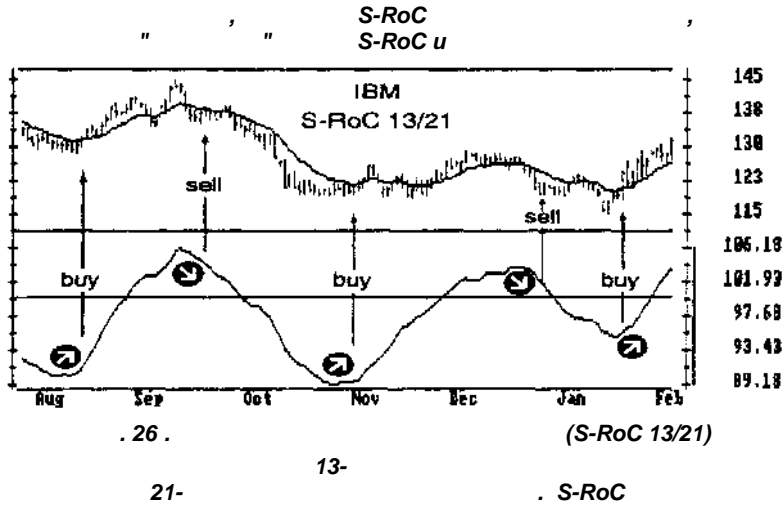
RoC

2.

S-RoC

S-RoC

3.



4.

S-RoC

4.6. %R

% R

(Wm% R),

1973

Wm%R

$$Wm\%R = 100 * \frac{H_r - C}{H_r - L_r}$$

r —

r —

Lr —

Wm% R

100

(. 27). %R

Wm%R

(. 4.7).

0 100%.

0 (

100

),

" "

" "

Wm%R. Wm%R

Wm% R

7-

7-

Wm%R

10 90

Wm%R

Wm%R

Wm% R

Wm%R

Date	High	Low	Close	Wm%R:7
8/14	362.2	358.2	361.2	
8/15	363.5	360.2	360.4	
8/16	361.6	360.3	361.3	
8/19	366.5	360.4	362.0	
8/20	362.0	355.3	359.3	

4. $Wm\%R$

5. $Wm\%R$

6. $Wm\%R$

4.7.

(Stochastic)

$\%R$

1.

$$\%K = \frac{C_c - L_n}{H_n - L_n} * 100, \text{ где}$$

Ln —
n —
n —

2.

$$\%D = \frac{\Sigma(C_c - L_n) \text{ за 3 дня}}{\Sigma(H_n - L_n) \text{ за 3 дня}}$$

2
, 5-

$\%D$

Date	High	Low	Close	$\%K:5$	$\%D:5$	Stow $\%D$
9/16	68.07	67.24	67.83			
9/17	68.22	67.79	67.97			
9/18	67.61	66.81	67.36			
9/19	67.52	67.02	67.25			
9/20	67.57	66.87	67.50	48.94		
9/23	68.21	67.89	68.04	87.23		
9/24	68.53	67.48	67.64	48.26	60.57	
9/25	67.87	67.57	67.71	50.60	60.54	
9/26	67.97	67.48	67.58	42.77	47.22	56.11
9/27	68.30	67.37	68.23	74.14	53.79	53.85
9/30	68.49	68.25	68.37	86.21	64.57	55.20

%
%D

%R
%

%D

8

% 3

(14-21)

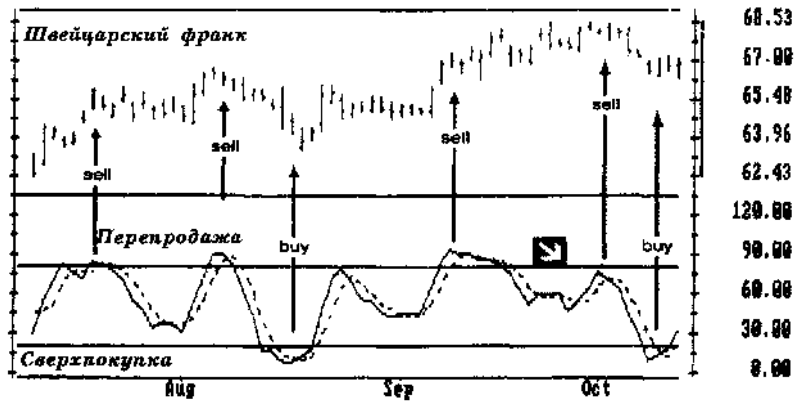
(5)

0 100.

20 80

%R

(. 30).



. 30. 5—

(. ") . "

1.

2.

(9.1).

3.

4.

5.

MACD-

MACD-

4.8.

(RSI)
RSI

$$RSI = 100 - \frac{100}{1 + RS}$$

$$RS = \frac{\text{Среднее значение цен закрытия ВВЕРХ}}{\text{Среднее значение цен закрытия ВНИЗ}}$$

RSI

7 9

RSI

7-

RSI

7

1.

2.

7,

3.

7,

4.

(RS).

RSI —



. 32. 7-

RSI

RSI

RSI

RSI

RSI

2.

RSI

RSI

RSI,

RSI. RSI

RSI

3.

RSI

4.

RSI

RSI

RSI

RSI

RSI

RSI

(. 9.1).

5.

RSI

6.

RSI

RSI

RSI,

RSI,

V.
5.1.

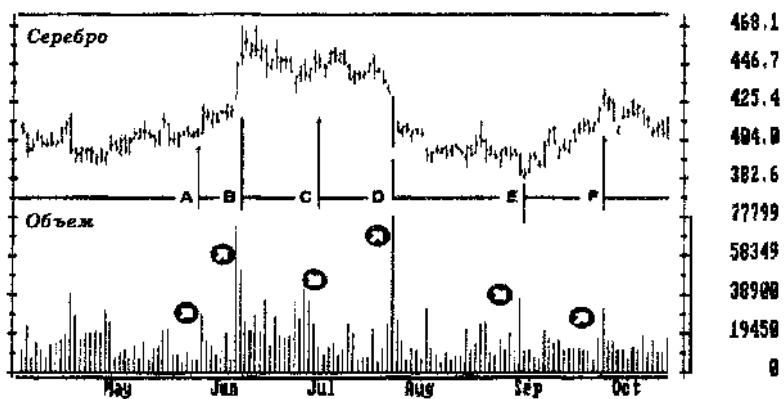
(. 33).

1.

2.

3.

100 5 000



. 33.

D.

D—

F.

?

?

!

« » « »

IBM,

Apple Computer,

25

« »

»

25

1.

2.

« »

3.

Wall Street : «

»

4.

« »

« »

5-

(. 3.4).

5.2.

5—

(. 4.2 5.1).

(OBV)

OBV —

OBV.
OBV

OBV.

(. 5.1). OBV —

OBV

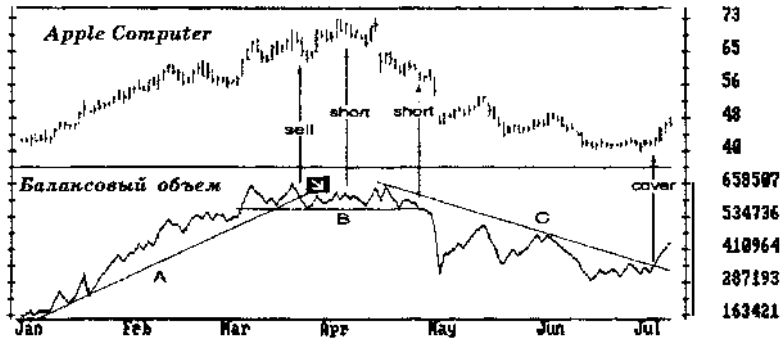
OBV

OBV

OBV

OBV

OBV
OBV (. 34).



. 34.

OBV

OBV

OBV

OBV

OBV

Apple Computer,

1. OBV

OBV

2. OBV

OBV

OBV

3.

OBV

OBV

OBV

(. 1.3)

OBV

OBV

OBV
+1, 0 -1.

30

24, 30
9, 7

14, 1

5

OBV,

"S&P 500".

"S&P 500".

1972, «

».

(A/D)

A/D

A/D

0.

A/D

A/D

$$A/D = \frac{\text{Закрытие} - \text{Открытие}}{\text{Максимум} - \text{Минимум}} * \text{Объем}$$

5

2

2/5

A/D

A/D,

A/D

A/D

A/D

A/D

A/D

A/D

(, 35).

A/D



- 62.250
- 52.750
- 43.250
- 33.750
- 24.250
- 10462
- 10355
- 10248
- 10140
- 10033

. 35.

(. 7).

5.4.

(HPI)

CompuTrac

1980-

HPI

HPI

HPI

(. 37).

$$\begin{aligned}
 HPI &= + (-), \\
 & \quad - \quad HPI, \\
 & = [(-) * V * (1 \pm \{I * 2 / G\}), \\
 & \quad - \quad , (\quad + \quad) / 2, \\
 & \quad - \quad , \\
 & \quad - \quad 1 \quad (\\
 V & - \quad , \\
 I & - \quad , \\
 G & - \quad ,
 \end{aligned}$$

«+» «—» : > «+», < «—».

HPI

HPI

" " " " " " " " " " " "

(. 38), HPI
HPI

HPI

1. " " HPI HPI

2. " " HPI HPI

Date	High	Low	Close	Vol	OI	Mean	HPI
12/27	106.80	104.58	104.65	4552	30343	105.69	

12/28	105.19	104.11	105.13	3208	30195	104.65	
12/29	105.50	104.57	105.43	1770	29987	105.04	-29.0
1/02	105.17	103.60	104.97	4146	30249	104.38	-28.8
1/03	108.17	105.61	108.02	9940	30028	106.89	-0.6
1/04	109.09	105.96	106.51	10036	28944	107.52	6.3
1/05	107.97	107.03	107.55	4262	29015	107.50	5.5
1/08	109.46	108.01	109.15	8030	30125	108.74	15.6
1/09	110.00	108.00	108.05	6107	30162	109.00	15.7
1/10	108.00	105.86	106.16	5841	29814	106.93	2.3
1/11	107.41	106.52	107.17	3033	29996	106.96	2.2
1/12	105.77	103.71	104.20	9053	30850	104.74	-17.1

. 37.

HPI

HPI

HPI

HPI.

HPI.

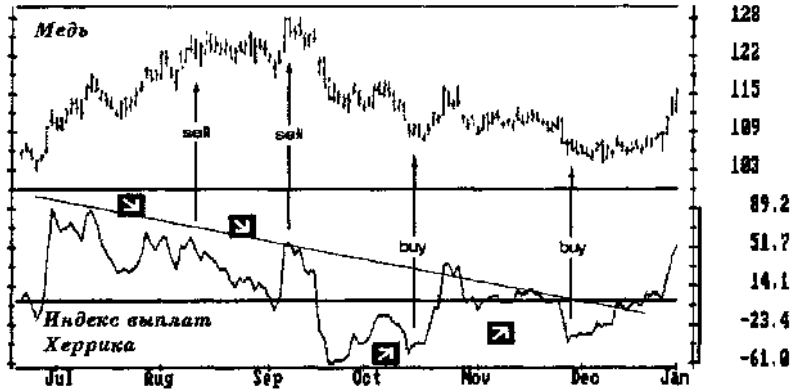
3. HPI

HPI

HPI

HPI

HPI



. 38.

HPI

. HPI

. HPI

. HPI

HPI

4.

HPI

HPI

HPI

HPI

HPI

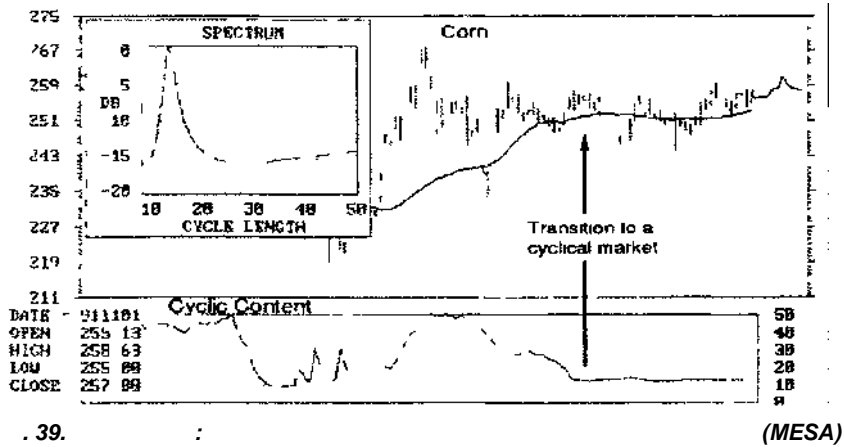
5.5.

MESA () 80

MESA

MESA (.39).

MESA 80



MESA ()

MACD- (4.3)

MACD

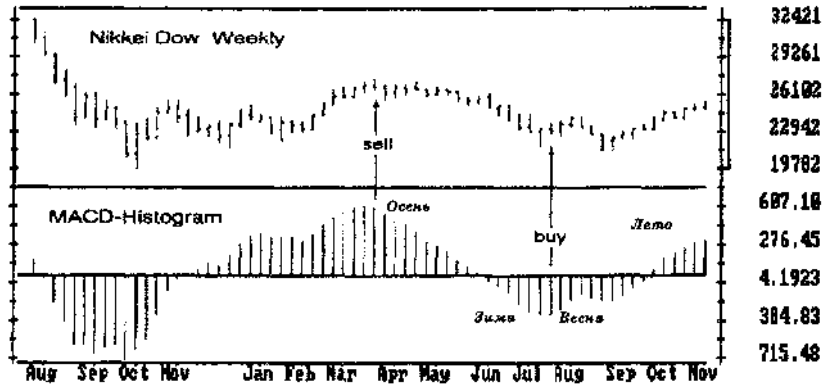
MACD-

(Stop-loss)

MACD-

MACD-

MACD-



. 40.

MACD-

MACD-

MACD-

(. 9.1).

120

50

61,8

60

4 , 8 , 5 ,
? ,
4,5 5 « »
2 , 5-6 5 , 10-
5 .
10- 5 ,
(. 9.1) .

VI.
6.1

1982

(NH—NL —

NH—NL

(TRIN)

(New—High—New, Low—NH—NL)

NH—NL

NH—NL =

52

NH—NL

NH—NL
NH—NL

"S&P 500",

NH—NL
NH—NL (. 41).
2 000

2 000

NH—NL

NH—NL

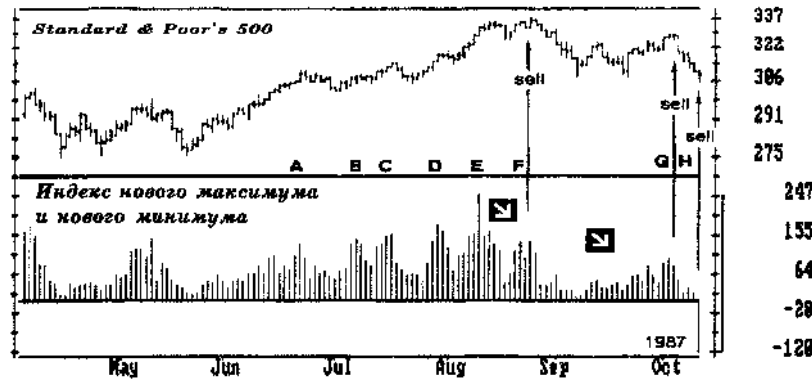
NH—NL

NH—NL

NH—NL

NH—NL

(. 42 43).



. 41.

NH—NL

1987

(A,B,C,D).

100 (G),

NH-NL,

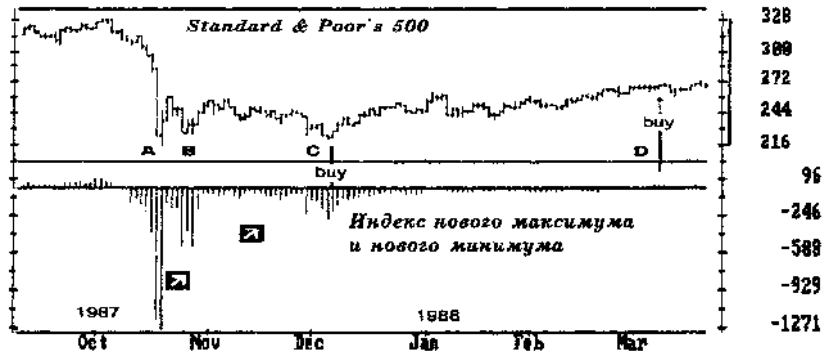
NH-NL

()

NH-NL, NH-NL

NH-NL

NH-NL, NH-NL, NH-NL



. 42.

1987

1300 ()

NH-NL

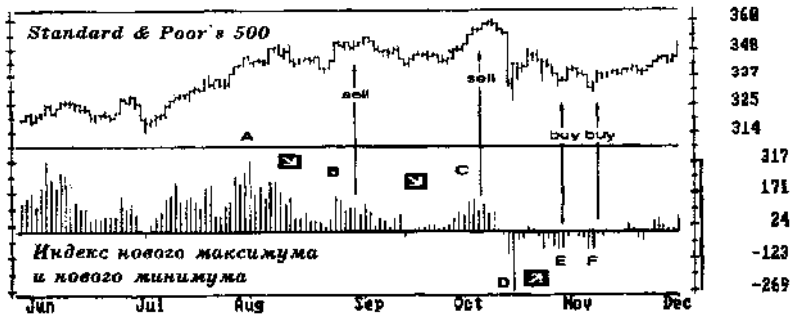
() NH-NL

(D)

2-

1. NH-NL

NH-NL +100
+100,



. 43.

1989

NH-NL,

. NH-NL

(D)

NH-NL

2. NH-NL

NH-NL -100,
NH-NL -100,

NL NH—NL NH—NL NH—

3. NH—NL NH—NL NH—NL

4. NH—NL NH—NL NH—NL

NH—NL NH—NL

NH—NL NH—NL

5. NH—NL NH—NL

NH—NL NH—NL

10— NH—NL NH—NL (Smoothed NH—NL), 10 30—

30— NH—NL 10—

NH—NL NH—NL

52

NH—NL , FIAT General Motors, 70

6.2.

(Trader Index) — TRIN

TRIN

TRIN

TRIN

TRIN:

TRIN

TRIN

TRIN

$$TRIN = \frac{\text{Число растущих}}{\text{Число падающих}} / \frac{\text{Объем растущих}}{\text{Объем падающих}}$$

TRIN (.44). 1000 100 1000 100

TRIN 1. 1500 150 500 50

TRIN 1. 1.

S&P 500

Date	Adv	Decl	Adv Vol	Decl Vol	TRIN:1	TRIN: 13—
6/04	784	765	8374	7107	.87	
6/05	661	895	7162	9418	.97	
6/06	681	861	6339	8783	1.10	
6/07	445	1113	3251	11771	1.45	
6/10	648	905	4230	6644	1.12	
6/11	868	680	9371	4831	.66	
6/12	356	1237	2049	12906	1.81	
6/13	765	734	6787	5420	.83	
6/14	1036	531	11529	4123	.70	
6/17	645	851	4518	6916	1.16	
6/18	622	895	5261	8177	1.08	

6/19	399	1159	2453	11567	1.62	
6/20	655	854	6305	7734	.94	1.10
6/21	841	684	11192	5239	,58	1.02
6/24	298	1322	1202	11592	2.17	1.18
6/25	612	888	5216	8171	1.08	1.17

. 44. (TRIN)

TRIN

, 13-
 TRIN TRIN
 2:1, 4:1, TRIN 0,50 (2/1 : 4/1). TRIN
 1:2, 1:4, TRIN 2,00 (1/2 : 1/4). TRIN
 TRIN 13- TRIN (4.2). TRIN 13-
 TRIN. TRIN TRIN TRIN TRIN
 0,90 0,65 0,70 " " " 0,70 0,75 " " "
 0,95 " " " 1,00 1,10 " " "

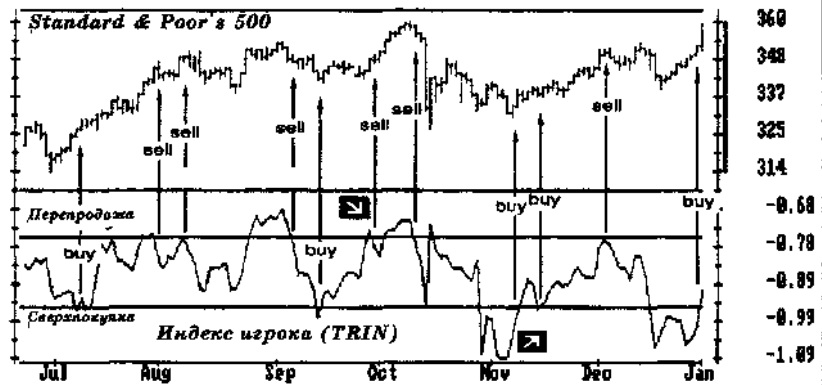
TRIN

TRIN. TRIN "S&P 500"

»S&P 500»,

TRIN

(. 45).



. 45. (TRIN)

TRIN

TRIN

TRIN "S&P 500".

TRIN

TRIN

TRIN

TRIN

MAS
9 MAS , 4 2 , MAS MAS 5 (9-4).
MAS
MAS MAS
MAS MAS

(Volume of Low Priced Stocks),

(Member Short Sale Ratio)

(Specialist Short Sale Ratio)

(Odd-Lot Statistics)
(Odd-Lot Short Sale Ratio)

'pur'.

VII.
7.1.

(Contrary Opinion),

Wall Street

1963

1964

X.

(Investor Intellegence)

1963

1988

130

(Market Vane)
9-

70

32

0 (" ") 100 (" ")

20 30

70 80

12 000	50	500	500	24	24
12 000	80	800	200	15	60
12 000	20	200	800	60	15

12 000

12 000

12 000

1 000

12 000

1.

50

50

50

2.

80

80

20



3.

20

20

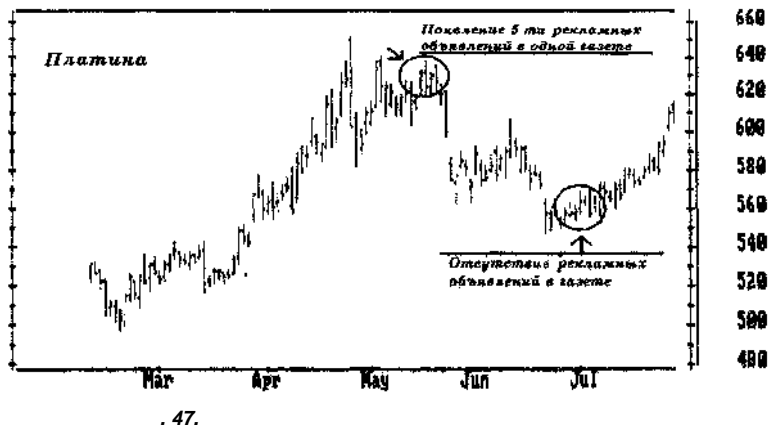
80

(. 46) .

12

78 76,

25 27,



Business Week

(. 47).

"Wall Street Journal" c

7.2

(CFTC)

(SEC)

CFTC, 100
CFTC 300 "S&P 500"
CFTC "S&P 500". 2400 500

CFTC (hedgers),

CFTC

CFTC.

CFTC,

$$COT = \frac{(\text{Сейчас} - \text{Минимум})}{(\text{Максимум} - \text{Минимум})}, \text{ где}$$

—
—
—

90
10

5

(SEC).

(MSSR) — (SSSR) —

85

) SSSR (60)
MSSR (75)

) SSSR (40

)
1980-

MSSR (

" "

Wall Street.

100

1

1930-

(Odd-Lot Short Ratio)

(Odd-Lot Short Sale Ratio) —

1970- 1980-

99

1.

2.

3.

4.

1.

2.

3.

4.

8.2.

(Force Index)

$$= \left(\frac{\text{Close} - \text{Force Index}}{\text{Volume}} \right) \times 49$$

(4.2).

2-

13-

13-

13-

Date	Close	Volume	Force Index	Fl: 2—ema	Fl: 13—ema
10/29	25329	3834			
10/30	25242	4495	—391065		
10/31	25194	1372	—65856	—130807	
11/01	24295	2547	—2289753	—1570105	
11/02	24195	2891	—289100	—716102	
11/05	24385	1448	275120	—55287	
11/06	23966	2796	—1171524	—799445	
11/07	23500	3675	—1712550	—1408182	
11/08	22970	3167	—1678510	—1588400	
11/09	22932	2880	—109440	—602426	
11/13	23974	2484	2588328	1524743	
11/14	23937	1827	—67599	463181	
11/15	23487	2212	—995400	—509206	
11/16	23172	2741	—863415	—745345	—338231
11/19	23519	1931	670057	19825	—261590
11/20	23205	1405	—441170	—228027	—256796
11/21	22816	2259	—878751	—661843	—314660
11/22	23400	2163	1263192	621514	—180921

. 50.

$$= \left(\frac{\text{Close} - \text{Force Index}}{\text{Volume}} \right) \times 50$$

13-

(5.1).

(.52).

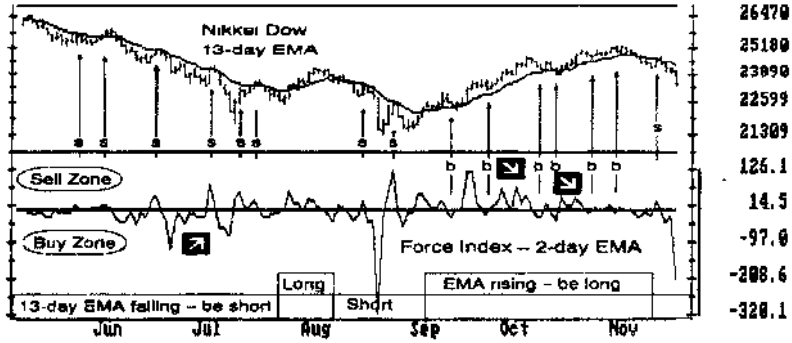
1.

, 2-

2-

2-

2-



.51.

, 2-

2-

2-

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2.

2-

2-

2-

2-

2-

(

13-

)

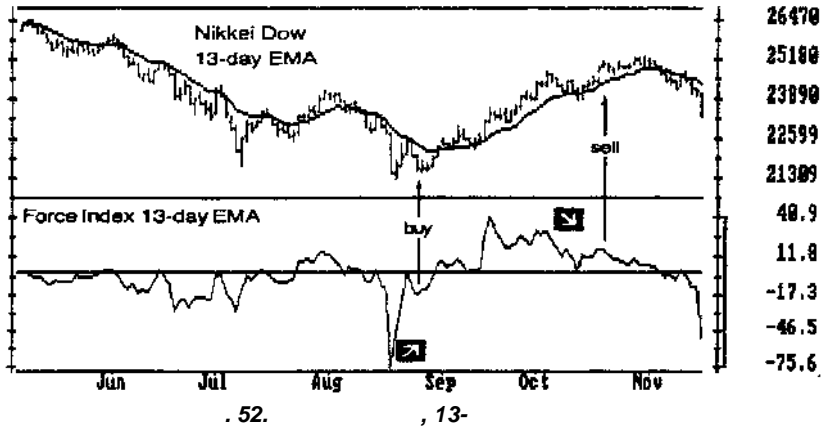
3.

2-

2-

4.

2-



" " 13-
" " 13-
" " Nikkei

" " Nikkei

(. 9.1).

(.53).

5. 13-

13-

13-

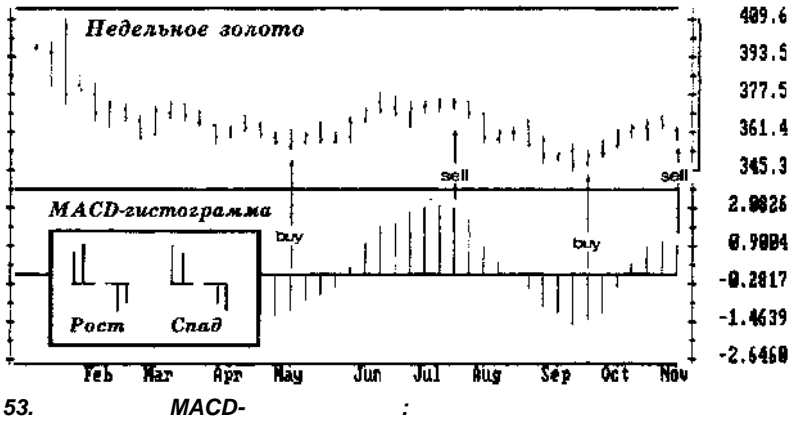
6. " 13-

13-

7. 13-

13-

13-



MACD-

(.)

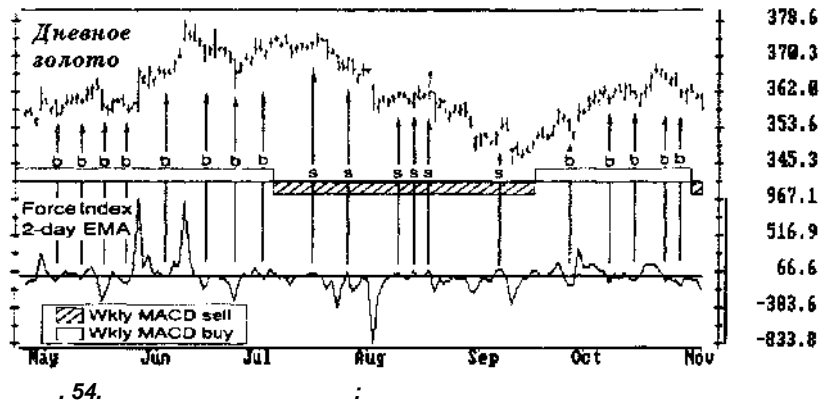
MACD-

MACD-

5.5).

MACD-

(.)



%R

MACD-

, 2-

(. 8.2)

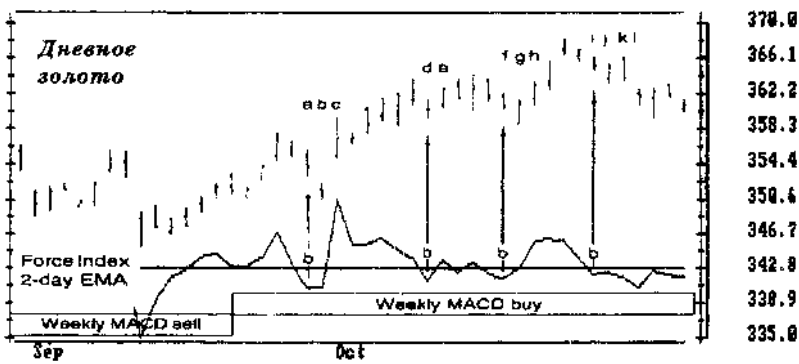
MACD-

(.53). (. 8.1)

MACD- (. 4.7) 30, 70,

%R (. 4.6) (RSI) 4 5

Stop) (.55). (Trailing Buy— (Trailing Sell—Stop)



.55.
MACD-

- b.
- c.
- d.
- f.

d.

b.

b.

d.

g.
h.
i.
j.
k.
l.

g.

g.
g.
j.

j.

(Stop-loss)

(10.3).

50

70

9.2.

1976

(5.5).

1970-

= + AF*(EP —), :

AF —

AF

()

()

0,02.

AF

0,20.

0,02

2

, AF

0,08

0,20

(0,02+3*0,02),
(0,02+9*0,02).

AF
20

, AF

, AF

(0,20).

0,015 0,025,

(0,02)

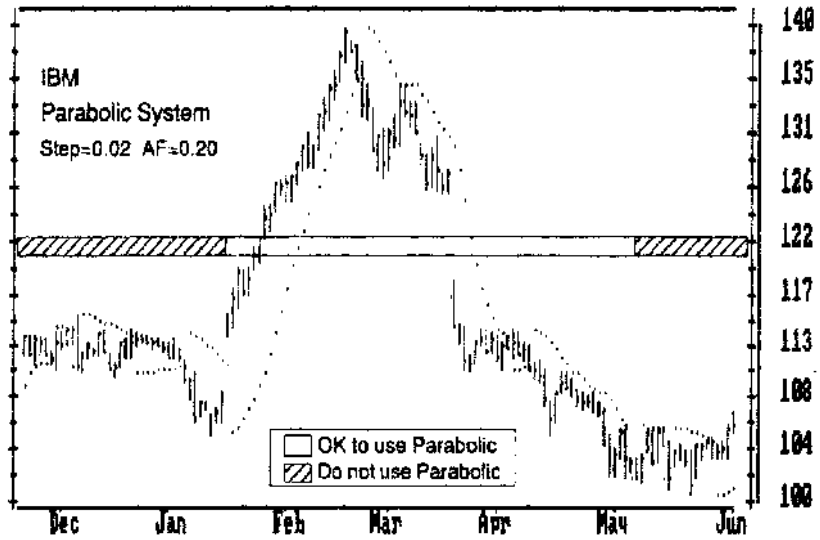
AF

0,18 0,23.

(.56).

1.

2.



.56.

1.

2.

3.

(. 57).

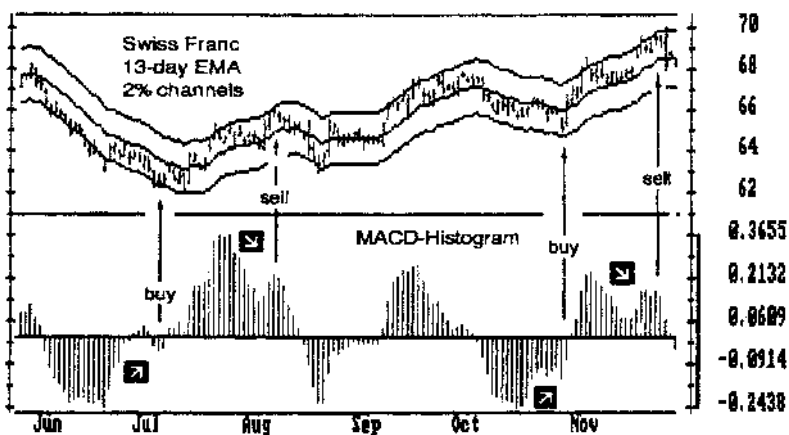
4.

MACD-

5.

6.

()
(Bollinger Bands)



. 57.

90 95

1. 21-
2. 21-
- 3.
- 4.
- 5.

CCI).

CCI.

(Commodity Channel Index—

X.
10.1.

2 20

1 000
50

25

700

1 000

75

25

750

700

75

100

50

50

50) (), (90 10

10.2.

10 1 100 1 10 40 1 2).

11 40 67 20 10 25, 100

(2.3).

20 000

2

400

100 000

200 2 000

10 000

$\frac{2}{2}$

1 1,5

2-

6 8

2-

2

(9).

2-
400

20 000

275

175

? 2

2

“ ”

4 1 $\frac{1}{(-1+2)}$

1 $(-1-2+4)$, 1 $\frac{2}{8}$

1 (50 46). 47- 70

2

f

f

1)

f

2)

f,

3)

f,

f

85

f,

, 50 000

30 000

300 000

?

?

10.3.

—

!

(

).

13-

MACD-

MACD-

2,618 4,236

1,618,

1.

(Stop-Loss Order)

(. 9.1),

(. 3.3).

(. 9.2)

2

2.

(Break-Even Order)

3.

(Protect Profit Order)

—

2-

—

50-

2-

10

5

(. 9.2),

?

?

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“

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