

国泰君安191因子回测-71-80

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1 Alpha71

$$Alpha=(CLOSE - MEAN(CLOSE, 24))/MEAN(CLOSE, 24) * 100 \quad (1)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	9.98	-10.0	-5.4	-27.93	37.38	-4.56(-0.288)	56.47	0.33	-29.89	-3.94	767 X 1016	-18.24	14.01	-37.6	-0.0438
20110101-20111231	9.99	-10.0	-3.46	-17.71	34.9	-3.39(-0.215)	40.89	0.42	-20.3	-2.42	937 X 1181	-56.68	-39.34	21.25	-0.0333
20120101-20121231	9.98	-10.0	-5.01	-25.84	35.3	-5.42(-0.343)	51.95	0.33	-29.26	-4.63	1055 X 1302	-28.31	3.25	-23.34	-0.047
20130101-20131231	9.94	-10.01	-5.43	-28.54	36.34	-5.24(-0.331)	54.59	0.36	-31.46	-4.64	1011 X 1434	-7.91	19.03	-49.11	-0.0396
20140101-20141231	9.88	-10.02	-4.4	-22.55	35.52	-4.52(-0.286)	52.18	0.34	-25.41	-3.6	1052 X 1451	10.07	35.54	-54.75	-0.0324
20150101-20151231	9.81	-10.04	-11.56	-59.75	34.57	-4.13(-0.261)	118.23	0.38	-69.03	-5.43	1141 X 1552	0.34	46.78	-118.25	-0.054
20160101-20161231	9.94	-10.0	-6.05	-31.04	35.08	-4.85(-0.306)	67.25	0.34	-35.45	-4.56	1201 X 1655	-51.51	-15.42	-10.78	-0.0467
20170101-20171231	9.97	-9.99	-2.15	-10.99	33.71	-2.05(-0.13)	23.62	0.41	-13.1	-1.17	1473 X 1749	-40.86	0.88	18.71	-0.0246
20180101-20181231	9.97	-9.94	-5.99	-30.93	35.24	-6.13(-0.388)	61.29	0.32	-35.15	-5.74	1667 X 1838	-92.1	-38.75	30.35	-0.0461
20190101-20191231	9.93	-10.0	-6.91	-35.53	36.92	-6.78(-0.429)	69.62	0.3	-38.52	-6.65	1547 X 2060	-37.66	26.71	-33.46	-0.0443
20200101-20200331	9.92	-10.0	-0.97	-20.96	35.12	-2.46(-0.155)	20.26	0.45	-23.92	-1.9	1465 X 2215	-51.06	-12.47	8.81	-0.0277
20100104-20200331	9.94	-10.0	-57.34	-28.89	35.48	-4.14(-0.262)	579.5	0.36	-32.56	-3.74	1192 X 1540	-32.85	4.85	-24.94	-0.0409

Figure 1: 回测结果

-0.7973	2.75	5.19	4.88	2.51	101	214791_pv_model_1_191114_6
-0.7976	5.79	8.73	4.07	5.22	129	213824_v2_n_191006_1
-0.8984	3.41	6.33	4.76	2.66	175	211919_my_94

Figure 2: 相关性结果

2 Alpha72

$$Alpha=SMA((TSMAX(HIGH, 6) - CLOSE)/(TSMAX(HIGH, 6) - TSMIN(LOW, 6)) * 100, 15, 1) \quad (2)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	10.0	-9.99	1.98	10.24	19.23	2.06(0.13)	5.54	0.55	21.32	1.5	934 X 874	18.46	14.01	2.03	0.0176
20110101-20111231	10.0	-10.0	1.17	6.01	17.45	1.33(0.084)	6.37	0.52	13.79	0.78	1146 X 994	-30.17	-39.34	42.21	0.0155
20120101-20121231	10.0	-9.99	2.78	14.32	17.66	3.59(0.227)	6.42	0.62	32.43	3.23	1266 X 1104	15.82	3.25	12.81	0.0299
20130101-20131231	10.01	-9.97	1.73	9.1	18.36	2.24(0.142)	7.11	0.59	19.81	1.57	1291 X 1155	35.16	19.03	-17.08	0.0144
20140101-20141231	10.02	-9.87	0.88	4.53	17.5	1.26(0.08)	8.08	0.57	10.32	0.64	1307 X 1204	42.8	35.54	-34.35	0.0084
20150101-20151231	10.03	-9.63	7.3	38.24	17.05	3.42(0.217)	27.82	0.64	89.15	5.13	1408 X 1296	111.73	46.78	-38.78	0.0343
20160101-20161231	10.0	-9.65	2.86	14.77	16.8	0.37(0.024)	5.65	0.59	35.53	3.01	1522 X 1343	-0.64	-15.42	31.05	0.0231
20170101-20171231	10.0	-9.71	0.28	1.46	16.25	0.37(0.024)	6.52	0.56	3.55	0.11	1715 X 1534	-22.6	0.88	26.2	0.0068
20180101-20181231	9.96	-9.96	1.5	7.73	16.88	1.89(0.119)	6.32	0.58	18.36	1.28	1809 X 1703	-42.07	-38.75	57.58	0.015
20190101-20191231	10.0	-9.94	2.46	12.61	18.38	3.67(0.232)	4.57	0.6	27.48	3.04	1911 X 1705	29.57	26.71	-4.42	0.0186
20200101-20200331	10.01	-9.92	0.13	2.81	18.31	0.51(0.032)	7.97	0.52	6.16	0.2	1913 X 1776	-17.06	-12.47	22.87	0.0066
20100104-20200331	10.0	-9.87	23.07	11.7	17.57	2.19(0.139)	27.91	0.58	26.54	1.79	1443 X 1303	15.09	4.85	8.19	0.0181

Figure 3: 回测结果

Corr	ISSharpe	SemiIOS	OSSharpe	Fitness	OSdays	ID
0.8539	3.48	4.27	2.2	4.56	175	211919_my_11
0.7625	2.7	4.48	2.11	1.75	98	215020_pv_model_10_gen6_191114_151
0.7603	3.41	6.33	4.76	2.66	175	211919_my_94

Figure 4: 相关性结果

3 Alpha73

$$\begin{aligned} Alpha = & ((TSRANK(DECAYLINEAR(DECAYLINEAR(CORR((CLOSE), VOLUME, 10), 16), 4), 5) - \\ & RANK(DECAYLINEAR(CORR(VWAP, MEAN(VOLUME, 30), 4), 3))) * -1) \end{aligned} \quad (3)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	10.0	-10.0	-0.29	-1.49	33.2	-0.97(-0.062)	5.88	0.51	-1.79	-0.21	874 X 879	13.49	14.01	-16.46	-0.0016
20110101-20111231	10.0	-10.0	0.51	2.61	33.04	1.84(0.116)	1.96	0.55	3.16	0.52	1051 X 1041	-31.52	-39.34	36.75	0.0044
20120101-20121231	10.0	-10.0	0.73	3.74	34.78	2.73(0.173)	1.42	0.6	4.3	0.9	1177 X 1168	10.68	3.25	-3.2	0.007
20130101-20131231	10.0	-10.0	0.67	3.52	39.23	2.32(0.147)	2.44	0.59	3.59	0.7	1232 X 1213	28.34	19.03	-21.29	0.0058
20140101-20141231	10.0	-10.0	0.69	3.5	36.9	2.1(0.133)	2.31	0.58	3.8	0.65	1262 X 1236	43.35	35.54	-36.35	0.0049
20150101-20151231	10.0	-10.0	1.63	8.34	33.26	1.94(0.123)	8.44	0.52	10.03	0.97	1343 X 1339	84.38	46.78	-67.7	0.005
20160101-20161231	10.0	-10.0	0.4	2.04	36.66	1.33(0.084)	3.81	0.58	2.22	0.31	1441 X 1406	-6.49	-15.42	10.56	0.0045
20170101-20171231	10.0	-10.0	0.66	3.4	37.31	2.52(0.159)	1.44	0.61	3.65	0.76	1609 X 1592	-14.71	0.88	21.51	0.0067
20180101-20181231	10.0	-10.0	0.53	2.74	37.96	1.75(0.111)	2.17	0.53	2.88	0.47	1760 X 1739	-33.95	-38.75	39.41	0.0043
20190101-20191231	10.0	-10.0	0.35	1.79	39.49	1.17(0.074)	2.2	0.51	1.81	0.25	1822 X 1781	27.91	26.71	-24.32	0.0029
20200101-20200331	9.99	-10.01	-0.11	-2.34	41.58	-1.35(-0.085)	2.01	0.48	-2.24	-0.32	1826 X 1849	-11.5	-12.47	6.83	-0.0036
20100104-20200331	10.0	-10.0	5.77	2.9	36.3	1.47(0.093)	8.44	0.55	3.19	0.42	1369 X 1352	11.59	4.85	-5.79	0.0042

Figure 5: 回测结果

Corr	ISSharpe	SemiOS	OSSharpe	Fitness	OSdays	ID
0.345	3.16	5.65	5.37	1.12	101	214801_pv_model_1_gen4_191114_120
0.3264	5.55	2.33	-2.25	2.93	146	213024_agen.ZSAlpha_38
0.2741	4.77	7.0	3.79	2.69	100	214855_pv_model_6_gen4_191114_199

Figure 6: 相关性结果

4 Alpha74

$$\begin{aligned} Alpha = & (RANK(CORR(SUM(((LOW * 0.35) + (VWAP * 0.65)), 20), \\ & SUM(MEAN(VOLUME, 40), 20), 7)) + RANK(CORR(RANK(VWAP), RANK(VOLUME), 6))) \end{aligned} \quad (4)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	10.0	-10.0	-2.32	-11.95	55.94	-3.89(-0.246)	23.45	0.42	-8.55	-1.8	303 X 294	1.41	14.01	-25.34	-0.0174
20110101-20111231	10.0	-10.0	-1.72	-8.83	55.87	-3.89(-0.246)	19.77	0.44	-6.32	-1.55	372 X 366	-42.4	-39.34	24.73	-0.0168
20120101-20121231	10.0	-10.0	-2.55	-13.11	53.26	-6.44(-0.407)	27.5	0.34	-9.85	-3.19	597 X 591	-9.48	3.25	-16.74	-0.0246
20130101-20131231	10.0	-10.0	-2.65	-13.94	50.86	-6.67(-0.422)	26.73	0.35	-10.96	-3.49	1026 X 1002	9.95	19.03	-37.83	-0.0232
20140101-20141231	10.0	-10.0	-1.66	-8.45	51.03	-3.28(-0.207)	20.79	0.35	-6.62	-1.33	934 X 919	29.45	35.54	-46.34	-0.0167
20150101-20151231	10.0	-9.99	-3.45	-17.7	53.6	-4.45(-0.281)	34.82	0.36	-13.21	-2.55	760 X 744	55.65	46.78	-91.08	-0.0228
20160101-20161231	10.0	-10.0	-2.2	-11.28	52.56	-6.57(-0.415)	24.96	0.3	-8.58	-3.04	1041 X 1030	-21.28	-15.42	-1.27	-0.0225
20170101-20171231	10.0	-10.0	-2.25	-11.51	51.1	-6.15(-0.389)	23.17	0.38	-9.01	-2.92	1278 X 1256	-27.93	0.88	4.93	-0.0206
20180101-20181231	10.0	-10.0	-2.12	-10.89	49.54	-5.64(-0.357)	21.18	0.35	-8.79	-2.64	1514 X 1481	-44.04	-38.75	22.27	-0.0168
20190101-20191231	10.0	-9.99	-2.44	-12.53	51.13	-6.49(-0.41)	24.43	0.36	-9.8	-3.21	1738 X 1688	12.81	26.71	-37.9	-0.0181
20200101-20200331	10.01	-9.99	-0.19	-4.19	47.42	-1.21(-0.077)	5.6	0.47	-3.52	-0.36	1794 X 1749	-14.65	-12.47	6.31	-0.0081
20100104-20200331	10.0	-10.0	-23.55	-11.83	52.37	-4.78(-0.302)	235.8	0.37	-9.03	-2.27	976 X 956	-3.85	4.85	-19.81	-0.0197

Figure 7: 回测结果

-0.5834	7.07	6.62	4.08	3.43	100	214863_fac12
-0.5913	5.2	4.24	-0.64	2.39	107	214565_fac90
-0.8994	3.99	6.41	3.03	1.77	175	211930_h_ori177

Figure 8: 相关性结果

5 Alpha75

$$\textit{Alpha} = \frac{\textit{COUNT}(\textit{CLOSE} > \textit{OPEN} \& \textit{BANCHMARKINDEXCLOSE} < \textit{BANCHMARKINDEXOPEN}, 50)}{\textit{COUNT}(\textit{BANCHMARKINDEXCLOSE} < \textit{BANCHMARKINDEXOPEN}, 50)} \quad (5)$$

6 Alpha76

$$\begin{aligned} \text{Alpha} = & \text{STD}(\text{ABS}((\text{CLOSE}/\text{DELAY}(\text{CLOSE}, 1) - 1))/\text{VOLUME}, 20)/ \\ & \text{MEAN}(\text{ABS}((\text{CLOSE}/\text{DELAY}(\text{CLOSE}, 1) - 1))/\text{VOLUME}, 20) \end{aligned} \quad (6)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	10.0	-10.0	-0.6	-3.11	36.12	-1.92(-0.122)	8.28	0.48	-3.44	-0.56	595 X 705	6.5	14.01	-12.72	-0.0042
20110101-20111231	10.0	-10.0	-0.78	-4.02	35.28	-2.96(-0.187)	8.13	0.41	-4.55	-1.0	709 X 849	-39.08	-39.34	31.05	-0.0076
20120101-20121231	10.0	-10.0	-0.7	-3.58	33.11	-1.38(-0.087)	8.88	0.42	-4.33	-0.45	843 X 1079	1.04	3.25	-8.22	-0.0066
20130101-20131231	9.99	-10.0	-1.17	-6.16	32.94	-2.97(-0.188)	12.48	0.45	-7.49	-1.29	1013 X 1235	14.83	19.03	-27.15	-0.0077
20140101-20141231	9.99	-10.0	-1.28	-6.51	34.75	-2.76(-0.175)	14.07	0.44	-7.5	-1.2	961 X 1199	26.57	35.54	-39.54	-0.0067
20150101-20151231	9.95	-10.01	-2.78	-14.3	36.18	-2.44(-0.154)	27.91	0.44	-15.76	-1.53	744 X 1291	54.6	46.78	-82.71	-0.009
20160101-20161231	9.98	-10.0	-0.69	-3.55	34.1	-1.3(-0.082)	10.84	0.48	-4.16	-0.42	1063 X 1386	-19.09	-15.42	11.98	-0.0021
20170101-20171231	9.95	-10.0	-1.58	-8.09	32.78	-2.43(-0.154)	19.01	0.47	-9.9	-1.21	1189 X 1694	-31.53	0.88	15.17	-0.0078
20180101-20181231	9.93	-10.01	-1.86	-9.59	30.2	-3.46(-0.219)	19.81	0.42	-12.7	-1.95	1326 X 1922	-53.32	-38.75	33.8	-0.0108
20190101-20191231	9.92	-10.01	-1.77	-9.06	28.17	-3.04(-0.192)	19.43	0.39	-12.91	-1.72	1420 X 2133	6.46	26.71	-24.51	-0.0094
20200101-20200331	9.93	-10.01	0.05	1.14	24.17	0.31(0.019)	4.19	0.45	1.76	0.07	1593 X 2055	-14.61	-12.47	16.61	0.0023
20100104-20200331	9.97	-10.0	-13.16	-6.62	33.15	-2.18(-0.138)	136.31	0.44	-7.98	-0.97	1000 X 1366	-3.57	4.85	-9.65	-0.007

Figure 9: 回测结果

-0.5748	2.86	3.11	3.56	1.6	97	215063_qh26
-0.6131	3.21	5.66	3.7	2.25	97	215063_qh23
-0.6705	3.81	7.22	5.17	3.28	103	214729_fac165

Figure 10: 相关性结果

7 Alpha77

$$\begin{aligned} \text{Alpha} = & \text{MIN}(\text{RANK}(\text{DECAYLINEAR}((((\text{HIGH} + \text{LOW})/2) + \text{HIGH}) - (\text{VWAP} + \text{HIGH})), 20)), \\ & \text{RANK}(\text{DECAYLINEAR}(\text{CORR}(((\text{HIGH} + \text{LOW})/2), \text{MEAN}(\text{VOLUME}, 40), 3), 6))) \end{aligned} \quad (7)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	10.0	-10.0	0.41	2.1	28.77	0.99(0.063)	2.9	0.52	2.92	0.27	772 X 953	16.76	14.01	-12.57	0.004
20110101-20111231	10.0	-10.0	0.25	1.29	28.14	0.64(0.041)	4.16	0.52	1.83	0.14	917 X 1148	-33.49	-39.34	36.07	0.0029
20120101-20121231	10.0	-10.0	0.53	2.74	30.16	1.75(0.11)	2.48	0.54	3.64	0.53	1042 X 1292	8.67	3.25	-3.18	0.0057
20130101-20131231	10.0	-10.0	-0.23	-1.23	36.0	-0.48(-0.03)	7.08	0.45	-1.37	-0.09	1092 X 1352	23.42	19.03	-25.89	-0.004
20140101-20141231	10.0	-10.0	1.22	6.24	34.54	3.04(0.192)	2.53	0.57	7.22	1.29	1110 X 1384	45.21	35.54	-32.74	0.0083
20150101-20151231	10.0	-10.0	2.62	13.44	29.46	2.95(0.187)	6.57	0.54	18.22	1.99	1188 X 1484	89.97	46.78	-63.11	0.0112
20160101-20161231	10.0	-10.0	0.24	1.24	32.12	0.68(0.043)	4.44	0.55	1.54	0.13	1263 X 1577	-9.15	-15.42	11.63	0.0015
20170101-20171231	10.0	-10.0	-0.37	-1.89	33.74	-1.07(-0.067)	6.44	0.49	-2.24	-0.25	1417 X 1765	-20.61	0.88	16.83	-0.003
20180101-20181231	10.0	-10.0	0.1	0.51	33.39	0.27(0.017)	5.73	0.58	0.61	0.03	1554 X 1940	-38.13	-38.75	39.17	0.0015
20190101-20191231	10.0	-10.0	1.07	5.5	36.86	3.49(0.221)	2.14	0.61	5.97	1.35	1600 X 1999	30.22	26.71	-19.25	0.0081
20200101-20200331	10.01	-9.99	0.12	2.64	39.08	1.1(0.069)	4.04	0.52	2.71	0.28	1629 X 2040	-3.74	-12.47	9.06	0.0016
20100104-20200331	10.0	-10.0	5.97	3.0	32.47	1.27(0.08)	10.46	0.54	3.69	0.39	1206 X 1503	10.93	4.85	-4.94	0.0036

Figure 11: 回测结果

Corr	ISSharpe	SemiOS	OSSharpe	Fitness	OSdays	ID
0.6013	2.98	4.51	2.25	2.84	175	211919_my_210
0.6009	4.4	4.58	2.26	3.47	101	214809_pv_model_2_gen6_191114_133
0.5963	3.72	2.65	1.96	4.28	100	214823_pv_model_3_gen4_191114_178

Figure 12: 相关性结果

8 Alpha78

$$\begin{aligned} \text{Alpha} = & ((HIGH + LOW + CLOSE)/3 - MA((HIGH + LOW + CLOSE)/3, 12))/ \\ & (0.015 * MEAN(ABS(CLOSE - MEAN((HIGH + LOW + CLOSE)/3, 12)), 12)) \end{aligned} \quad (8)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	9.62	-9.99	8.79	46.34	42.17	2.4(0.152)	26.41	0.5	43.92	2.52	1177 X 605	119.37	14.01	-24.1	0.0026
20110101-20111231	9.67	-9.87	15.5	83.76	39.0	4.86(0.308)	12.59	0.62	83.43	7.13	1209 X 897	70.45	-39.34	92.0	0.0126
20120101-20121231	9.72	-9.95	7.37	34.69	47.19	1.91(0.121)	25.98	0.56	32.68	1.64	1121 X 1218	48.14	3.25	29.18	0.0026
20130101-20131231	8.28	-10.02	5.31	28.88	60.26	2.28(0.144)	13.45	0.51	20.21	1.58	1222 X 1178	74.36	19.03	-5.84	0.0022
20140101-20141231	6.5	-9.96	6.69	26.94	82.39	1.18(0.075)	49.48	0.44	20.14	0.68	1289 X 1101	168.65	35.54	-41.59	0.0072
20150101-20151231	5.42	-9.26	3.11	3.61	92.05	0.14(0.009)	92.57	0.48	9.44	0.03	1137 X 1314	90.42	46.78	-18.52	0.0085
20160101-20161231	5.35	-9.55	6.63	39.36	90.11	1.53(0.097)	44.91	0.54	20.23	1.01	1408 X 1287	78.98	-15.42	26.85	0.0086
20170101-20171231	6.73	-9.58	14.83	80.93	90.2	3.4(0.215)	31.3	0.57	41.32	3.22	1661 X 1432	49.13	0.88	124.1	0.011
20180101-20181231	9.47	-8.17	35.13	198.7	73.61	9.4(0.595)	18.73	0.77	111.33	15.45	1529 X 1876	-54.73	-38.75	505.88	0.0254
20190101-20191231	8.91	-9.65	39.51	210.27	64.45	7.71(0.488)	24.24	0.65	135.37	13.93	1534 X 2075	-1.24	26.71	420.48	0.0147
20200101-20200331	9.2	-10.0	0.27	4.46	52.56	0.21(0.013)	27.59	0.52	4.56	0.06	1896 X 1787	13.53	-12.47	-0.94	-0.0079
20100104-20200331	7.99	-9.61	143.14	73.78	65.94	3.3(0.209)	84.22	0.56	49.55	3.49	1342 X 1310	58.07	4.85	101.32	0.0091

Figure 13: 回测结果

Corr	ISSharpe	SemiIOS	OSSharpe	Fitness	OSdays	ID
0.1695	2.32	3.84	3.16	1.34	175	211937_my_H1075
0.1547	2.81	4.74	3.46	1.77	175	211938_my_H1237
0.1307	4.3	10.59	7.05	2.24	100	214821_pv_model_3_mod_gen6_191114_175

Figure 14: 相关性结果

9 Alpha79

$$\text{Alpha} = \text{SMA}(\text{MAX}(\text{CLOSE} - \text{DELAY}(\text{CLOSE}, 1), 0), 12, 1) / \text{SMA}(\text{ABS}(\text{CLOSE} - \text{DELAY}(\text{CLOSE}, 1)), 12, 1) * 100 \quad (9)$$

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	9.98	-10.0	-4.66	-24.07	40.24	-4.15(-0.262)	49.12	0.37	-23.93	-3.21	828 X 986	-18.26	14.01	-29.87	-0.0404
20110101-20111231	10.0	-10.0	-2.67	-13.7	36.81	-2.74(-0.174)	33.36	0.42	-14.88	-1.67	965 X 1180	-52.53	-39.34	25.14	-0.0294
20120101-20121231	9.98	-10.0	-4.46	-22.96	37.99	-5.38(-0.34)	45.54	0.33	-24.15	-4.18	1081 X 1292	-25.04	3.25	-20.85	-0.0447
20130101-20131231	9.95	-10.01	-4.07	-21.42	39.31	-4.71(-0.298)	41.52	0.38	-21.8	-3.48	1093 X 1354	0.31	19.03	-43.04	-0.034
20140101-20141231	9.87	-10.01	-3.27	-16.81	37.81	-4.03(-0.255)	41.13	0.36	-17.76	-2.68	1158 X 1354	18.95	35.54	-52.01	-0.0292
20150101-20151231	9.67	-10.01	-9.95	-52.1	33.63	-3.71(-0.235)	102.99	0.32	-61.63	-4.62	1200 X 1504	17.02	46.78	-118.37	-0.0529
20160101-20161231	9.66	-9.99	-5.03	-26.02	35.63	-4.73(-0.299)	60.3	0.32	-29.41	-4.04	1257 X 1608	-45.66	-15.42	-7.37	-0.043
20170101-20171231	9.72	-9.99	-1.65	-8.6	33.69	-2.12(-0.134)	18.5	0.41	-10.2	-1.07	1491 X 1758	-33.71	0.88	15.84	-0.0197
20180101-20181231	9.91	-9.95	-3.33	-17.2	35.65	-4.51(-0.285)	33.94	0.35	-19.33	-3.13	1687 X 1826	-74.63	-38.75	39.91	-0.0276
20190101-20191231	9.86	-10.0	-4.84	-24.95	40.45	-6.51(-0.412)	49.12	0.32	-24.71	-5.11	1621 X 1996	-15.26	26.71	-34.58	-0.0351
20200101-20200331	9.85	-10.01	-0.49	-10.73	39.43	-1.53(-0.097)	13.71	0.47	-10.76	-0.8	1616 X 2072	-30.97	-12.47	9.44	-0.0176
20100104-20200331	9.86	-10.0	-44.42	-22.5	37.18	-3.58(-0.226)	452.11	0.36	-24.17	-2.78	1247 X 1500	-23.14	4.85	-21.8	-0.0352

Figure 15: 回测结果

-0.7803	3.5	5.53	3.85	2.22	101	214808_pv_model_1_mod_gen2_191114_172
-0.7841	5.79	8.73	4.07	5.22	129	213824_v2_n_191006_1
-0.8782	3.41	6.33	4.76	2.66	175	211919_my_94

Figure 16: 相关性结果

10 Alpha80

Alpha = (VOLUME - DELAY(VOLUME,5))/DELAY(VOLUME,5) * 100 (10)

dates	long(M)	short(M)	pnl(M)	%ret	%tvr	shrp (IR)	%dd	%win	bpmrgn	fitness	Coverage	%posret	%inxret	%negret	IC
20100104-20101231	9.99	-10.0	-3.78	-19.52	102.94	-4.46(-0.282)	39.05	0.37	-7.58	-1.94	600 X 1123	-17.29	14.01	-21.72	-0.0282
20110101-20111231	9.98	-10.0	-3.31	-16.88	101.69	-3.58(-0.227)	34.06	0.37	-6.67	-1.46	663 X 1371	-62.65	-39.34	28.68	-0.0192
20120101-20121231	9.99	-10.0	-3.46	-17.78	100.19	-3.69(-0.234)	35.47	0.37	-7.1	-1.56	728 X 1550	-26.87	3.25	-8.72	-0.0185
20130101-20131231	9.99	-10.0	-2.25	-11.75	99.13	-1.94(-0.123)	25.38	0.39	-4.77	-0.67	763 X 1574	4.04	19.03	-27.67	-0.0168
20140101-20141231	9.92	-10.0	-3.9	-19.87	102.02	-2.12(-0.134)	41.59	0.43	-7.84	-0.94	733 X 1548	1.29	35.54	-41.12	-0.008
20150101-20151231	9.81	-9.95	-5.57	-28.14	104.68	-1.63(-0.103)	69.59	0.43	-11.04	-0.85	659 X 1593	19.66	46.78	-76.75	-0.0056
20160101-20161231	9.75	-9.89	-8.13	-42.55	98.16	-2.78(-0.176)	95.21	0.39	-17.28	-1.83	805 X 1772	-95.55	-15.42	9.99	-0.0128
20170101-20171231	9.79	-9.97	-19.11	-98.53	94.95	-4.56(-0.289)	195.76	0.39	-41.75	-4.65	912 X 2087	-211.53	0.88	11.28	-0.0182
20180101-20181231	9.87	-9.99	-8.58	-44.2	97.25	-3.45(-0.218)	90.35	0.34	-18.29	-2.33	1018 X 2313	-124.48	-38.75	34.54	-0.0179
20190101-20191231	9.89	-9.99	-7.22	-36.5	95.05	-3.4(-0.215)	77.67	0.35	-15.66	-2.11	1102 X 2494	-48.42	26.71	-26.14	-0.0148
20200101-20200331	9.93	-9.98	-3.24	-69.27	94.69	-5.61(-0.355)	39.52	0.33	-29.63	-4.8	1146 X 2530	-149.4	-12.47	8.7	-0.0218
20100104-20200331	9.9	-9.98	-68.55	-34.46	99.5	-2.82(-0.178)	693.82	0.38	-13.93	-1.66	806 X 1762	-58.19	4.85	-11.27	-0.0161

Figure 17: 回测结果

-0.439	2.87	7.27	7.03	2.04	136	213518_h3034
-0.4787	3.56	9.53	6.53	2.76	136	213518_h8711
-0.5776	2.95	7.69	4.72	2.23	136	213518_h4307

Figure 18: 相关性结果

11 总结

alpha78为趋势/动量因子，且其与因子库内因子相关性较低。