

# 大单资金流的反转效应更适用于周期性行业的选择

## ——2011年金融工程研讨会专题报告系列之四

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### 将大单资金流应用到行业选择中去

我们沿用上一篇资金流选股报告的分析方法, 将大单资金流的应用拓宽到行业配置上, 观察资金流在行业轮动上会否产生明显的动量效应或者反转效应。

通过研究发现, 单个交易日的大单资金对于行业短期走势也具有较强的动量效应, 但是反转效应应用于全部行业并无明显效果。如果将所有行业分为周期性以及非周期行业, 则发现周期性行业的大单资金流反转效应较为显著。

### 选取中证 800 指数作为研究标的

沪深 300 指数的成份股市值偏大, 无法代表中小市值股票, 且仅有 300 只股票, 样本数量太少。但是, 如果选取全市场一共 2200 多只股票进行高频资金流的研究, 则计算量巨大, 非常耗时。中证 800 指数的行业市值分布与全市场较为一致, 且成份股的行业走势与全市场相关性极强。因此, 从行业代表性及研究效率方面综合考虑, 我们选取了对全市场较有代表性的中证 800 指数作为研究标的。

### 大单资金流对于行业选择的效果实证

我们发现, 资金流的短期动量效应在行业选择中效果显著, 而反转效应应用于全市场效果并不好。我们认为, 行业的资金流是由行业内所有个股的资金流共同作用而成。不同股票的资金流情况有差异, 此起彼伏, 拉长时间来看资金流的影响就不显著了。而资金流反转效应正是需要把资金流的统计周期、跟踪周期拉长才能体现效果。

如果将全市场的行业划分为周期性行业以及非周期行业, 对于周期性行业, 资金流对于行业内个股的作用相对来说会比较同步。这样即使将周期拉长, 资金流对行业整体的作用还是能够体现出来。根据实证结果, 资金流的反转效应在非周期行业上并不显著, 而在周期性行业上则有较强体现。

在实际操作的可行性上, 我们更推荐以周期性行业的资金流反转效应作为行业选择的应用方向。一周时间的大单资金流向对于 3 周以上的行业走势具有较强的反转效应。我们建议选取大单资金流入较弱的 5 个行业按流通市值权重进行配置, 对资金流的统计周期为 4 个交易日, 而跟踪周期设定为 15 个交易日。这一配置从 07 年 1 月至 11 年 7 月超额收益为 133.32%, 并且这一组合每年都能跑赢资金流入较强的组合以及中证 800 指数。

根据我们模型的运行结果, 我们建议的最新配置的行业为房地产、金融服务、轻工制造、采掘以及化工。

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## 一、将大单资金流应用到行业选择中去

### （一）大单资金流向选股报告的回顾

在上一篇的资金流报告中，我们按照一定的规则筛选出自由竞价阶段的大单，并结合主动买卖盘将大单归为资金流入或是流出。在不同的股票之间，我们进行资金流向的横向比较和排序，分别选取资金流入排名靠前以及排名靠后的股票构建为组合进行跟踪对比。我们的结论是，单个交易日的大单资金流向对股价的短期走势具有较强的动量效应。但从实际操作的角度考虑，一周左右的大单资金流向对于2周以上的股价走势具有较强的反转效应。

### （二）本文的研究思路及结论

我们仍然沿用上一篇报告的分析方法，将大单资金流的应用拓宽到行业配置上，观察资金流在行业轮动上会否产生明显的动量效应或者反转效应。

通过研究发现，单个交易日的大单资金对于行业短期走势也具有较强的动量效应，但是反转效应应用于全部行业并无明显效果。如果将所有行业分为周期性以及非周期行业，则发现周期性行业的大单资金流反转效应较为显著。

## 二、选取中证800指数作为研究标的

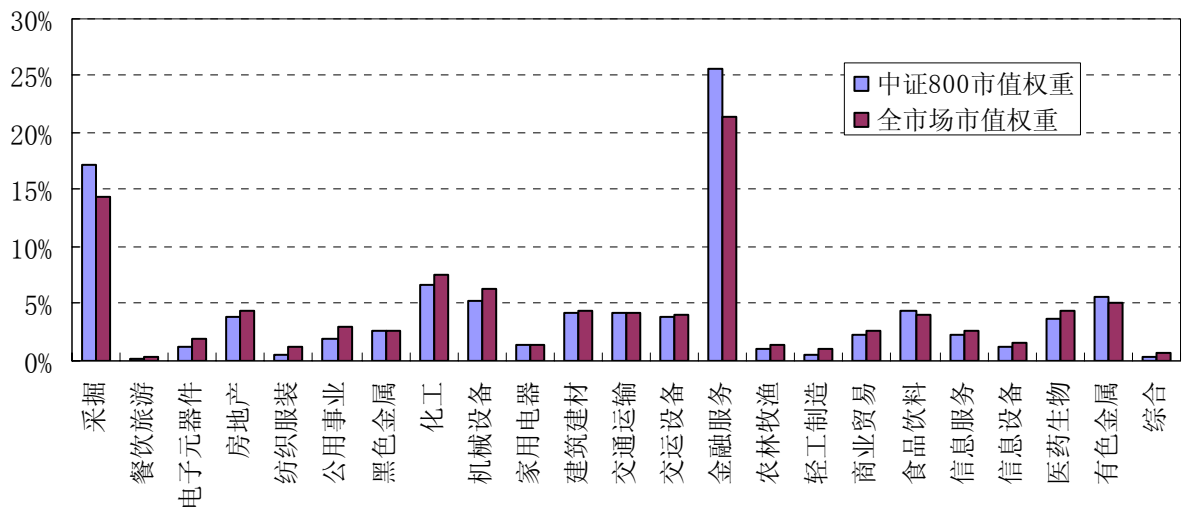
在上一篇报告中，我们选取的标的是沪深300指数及其成份股。对于选择个股的配置组合而言，300只股票样本已经足够。但是如果划分到行业进行研究，则300只成份股实在太少了，难以代表全市场2200多只股票。此外，沪深300指数的成份股市值偏大，无法代表中小市值股票。我们按申万一级行业进行分类，以餐饮旅游行业为例，沪深300指数中仅有中国国旅属于这一行业，用一只股票来代表整个行业的情况，显然不足。

但是，如果选取全市场一共2200多只股票进行高频资金流的研究，则计算量巨大，非常耗时。因此，从行业代表性及研究效率方面综合考虑，我们选取了对全市场较有代表性的中证800指数作为研究标的。

### （一）中证800指数的行业市值分布与全市场较为一致

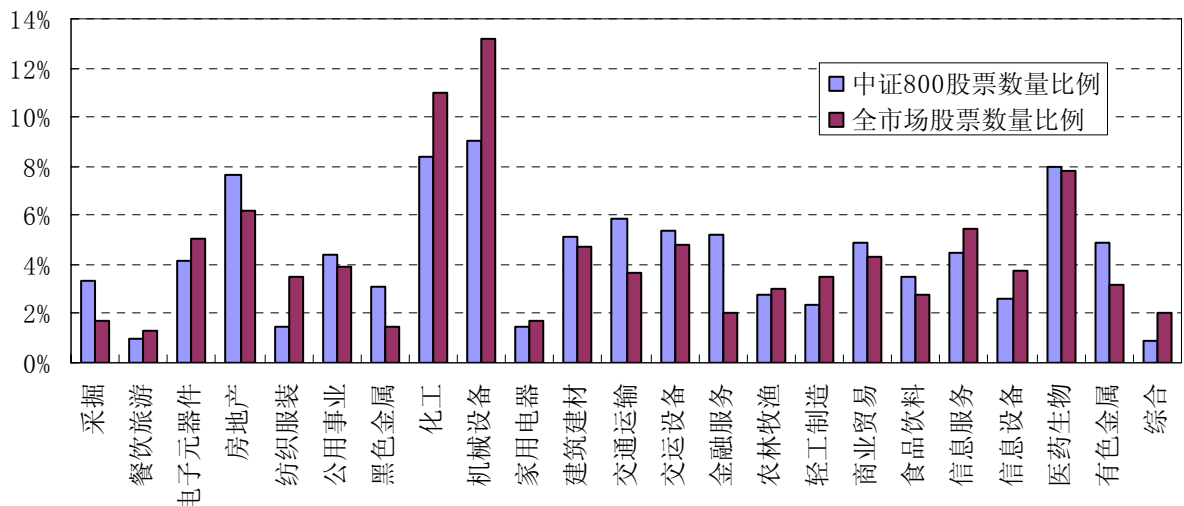
我们将中证800指数按申万一级行业进行分类，同时将全市场2200多只股票也按申万一级行业进行分类，然后对比两者之间的市值分布情况。从图1看到，中证800指数的行业市值分布与全市场的情况较为一致。从图2看出，虽然中证800指数成份股的行业分布数量比例与全市场不完全一致，但是差异不大。全市场中餐饮旅游行业的股票最少，一共29只，占全市场股票数量的1.3%左右。而中证800指数中，剔除“综合”行业以后，同样是餐饮旅游行业的股票数量较少，一共8只。占样本股总数的1%。中证800指数中对于每个行业都含有一定数量的成份股，对于行业具有一定的代表性。

图1：中证800指数成份股的行业市值分布



数据来源：广发证券发展研究中心

图2：中证800指数成份股的行业分布数量比例



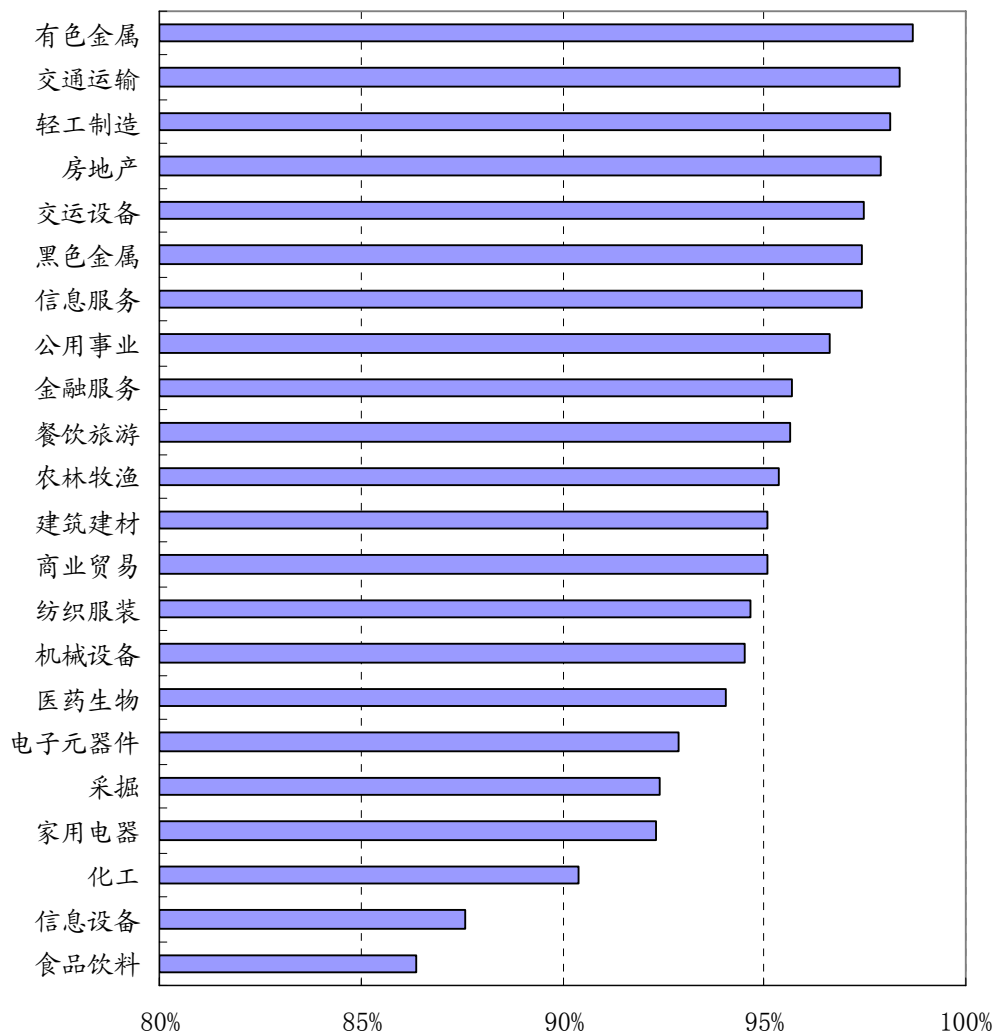
数据来源：广发证券发展研究中心

## （二）中证800指数中的行业走势与全市场相关性极强

除了行业的代表性之外，我们还希望看到中证800指数成份股按行业划分后的组合也能跟对应的申万一级行业指数走势一致，这样我们针对中证800指数的行业研究才真正具有意义。我们将中证800指数按申万一级行业进行划分，然后统计划分后每个组合的日收益率与对应的申万一级行业指数日收益率的相关系数。具体结果见图3。

从结果来看，即使是相关性最差的食物饮料，其相关系数也在86%以上。有13个行业相关系数都在95%以上，有色金属、交通运输以及轻工制造的相关性都在98%以上。这可以说明，中证800指数的行业组合与全市场的行业走势高度相关。因此，可以利用对中证800指数的行业研究来代表对全市场的行业研究。

图3：中证800指数行业走势与全市场行业的相关性



数据来源：广发证券发展研究中心

### 三、大单资金流对于行业选择的效果实证

#### （一）大单资金流行业选择规则简述

在本文中，我们针对行业的大单资金流计算以及基于资金流选择行业的思路与上一篇选股的专题报告相同，在此仅作简要说明，不再赘述。

我们选取的股票范围中证800指数的成份股，跟踪时间自2007年1月15日中证800指数上市之日起，截至时间为2011年7月31日。在每个交易日，将指数的所有成份股按照申万一级行业进行分类，然后按照上一篇专题报告中的统计方法将资金流合并到每个行业，作为对应行业的资金流数据。

在统计大单资金流比率的时候，选取的时间范围与上一篇专题报告相同，取  $K$  值为1~5。我们选取  $K$  日资金流入比率最高的  $S$  个行业（ $S$ 取3~5）构建组合，以对应行业指数当天的收盘价进行买入，记为A组合；而资金流入比率最低的  $S$  个行业也构建组合，记为B组合。构建的组合按两种权重进行配置，一种是等权重配置；另一种是按组合中个股当天的流通市值比例进行配置。在选取跟踪效果时间  $T$  的时候，也是分别取1、3、5、10、15、20个交易日进行跟踪效果的验证。在本篇报告中，我们只是希望比较资金



流强弱对于行业的影响情况，因此不考虑手续费的因素。

## (二) 全市场的行业选择效果

### 1. S=3，等权重配置

在S=3、等权重配置各个行业的情况下，我们看到(K, T)取(1, 1)的时候A组合的累计收益率为325.93%；与之对比，B组合累计收益率为-43.60%；而同期沪深300指数的累计收益率仅为48.35%。A收益率-B收益率的序列信息比为250.53%，而显著性水平5%的右尾t检验的P值为0。

在K的取值为1~3，而T取1的时候，我们看到信息比都是在100%以上，而在K取4、5时，即使T取1，信息比也出现了下降。而在T>1的情况下，A收益率-B收益率的序列信息比都并不理想。因此，我们认为大单资金流对于行业的短期走势具有较强的动量效应，但是随着资金流统计时间或者跟踪时间的拉长，这种动量效应出现减弱。这一点结论与我们此前在资金流选股上得到的结论一致。

但是，将K、T的取值放大来看，并未看出资金流入较弱的行业组合具有反转效应。这一点与之前在资金流选股报告中的结论不一致。

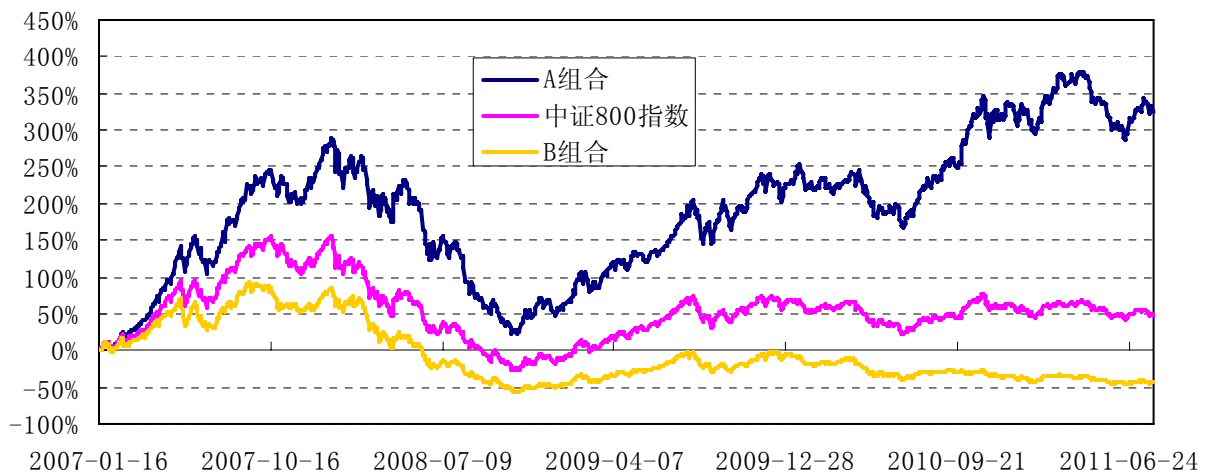
表1：大单资金流向的行业选择跟踪效果（全市场，S=3，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.80%	48.35%	325.93%	-43.60%	250.53%	0.00%
1	3	49.18%	50.08%	93.55%	82.69%	5.63%	45.29%
1	5	51.58%	49.13%	150.17%	48.14%	57.93%	11.23%
1	10	46.36%	52.87%	118.29%	94.28%	15.54%	37.25%
1	15	60.27%	55.65%	186.49%	109.64%	32.81%	24.72%
1	20	52.73%	52.87%	120.29%	120.14%	5.57%	45.38%
2	1	53.35%	48.35%	187.83%	-7.09%	132.94%	0.26%
2	3	47.28%	50.08%	82.49%	116.63%	-17.28%	64.17%
2	5	46.15%	49.13%	118.46%	147.88%	-13.39%	61.07%
2	10	44.55%	52.87%	99.71%	112.52%	-3.44%	52.87%
2	15	49.32%	55.65%	113.50%	129.45%	-6.58%	55.46%
2	20	49.09%	52.87%	63.57%	216.90%	-63.66%	90.63%
3	1	51.08%	48.35%	239.64%	34.80%	110.04%	1.04%
3	3	46.74%	50.08%	87.58%	165.99%	-38.51%	79.06%
3	5	49.32%	49.13%	108.59%	122.06%	-5.61%	54.69%
3	10	47.27%	52.87%	137.59%	90.63%	23.47%	31.18%
3	15	50.68%	55.65%	147.28%	135.94%	5.40%	45.52%
3	20	45.45%	52.87%	65.01%	198.43%	-67.71%	91.94%
4	1	52.35%	48.35%	228.19%	45.67%	98.75%	1.90%
4	3	50.27%	50.08%	56.11%	148.43%	-52.67%	86.54%
4	5	47.96%	49.13%	115.87%	77.28%	25.97%	29.28%
4	10	54.55%	52.87%	224.20%	77.63%	76.47%	5.58%
4	15	53.42%	55.65%	230.74%	151.50%	34.50%	23.63%
4	20	45.45%	52.87%	62.48%	132.40%	-36.98%	77.94%

5	1	51.08%	48.35%	173.60%	77.57%	54.97%	12.39%
5	3	45.38%	50.08%	31.05%	178.24%	-89.68%	96.99%
5	5	42.99%	49.13%	83.88%	96.42%	-4.13%	53.46%
5	10	48.18%	52.87%	108.60%	132.17%	-10.54%	58.73%
5	15	47.95%	55.65%	109.42%	130.34%	-14.05%	61.52%
5	20	45.45%	52.87%	64.43%	162.42%	-51.29%	85.66%

数据来源：广发证券发展研究中心

图4：行业组合累计收益表现对比（全市场，K=1，T=1，S=3，等权重）



数据来源：广发证券发展研究中心

## 2. S=3，市值权重配置

同样是S=3，但如果宣战市值权重进行配置，（K，T）取（1，1）的时候A组合的累计收益率为448.00%；与之对比，B组合累计收益率为-66.99%。A收益率-B收益率的序列信息比为270.49%，而显著性水平5%的右尾t检验的P值为0。但是在（K，T）取（5，1）时信息比并不高，且P值大于10%，说明资金流的动量效应主要体现在K值较小的情况。

当T值较大的时候，无论从胜率以及信息比上，B组合都并不占优势，可见对于全市场而言，资金流的反转效应并未体现。

表2：大单资金流向的行业选择跟踪效果（全市场，S=3，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	54.34%	48.35%	448.00%	-66.99%	270.49%	0.00%
1	3	46.20%	50.08%	100.51%	72.73%	13.12%	39.15%
1	5	53.39%	49.13%	152.65%	37.57%	51.21%	14.14%
1	10	45.45%	52.87%	63.70%	99.79%	-18.11%	64.76%
1	15	49.32%	55.65%	99.59%	135.36%	-18.40%	64.93%
1	20	50.91%	52.87%	84.04%	92.57%	-3.67%	53.05%
2	1	52.26%	48.35%	206.89%	-35.97%	147.49%	0.10%
2	3	47.01%	50.08%	87.48%	105.34%	-6.98%	55.83%



2	5	47.06%	49.13%	93.97%	140.90%	-20.40%	66.58%
2	10	45.45%	52.87%	54.52%	104.03%	-25.91%	70.60%
2	15	43.84%	55.65%	53.93%	154.13%	-45.63%	82.86%
2	20	45.45%	52.87%	2.99%	170.53%	-89.07%	96.64%
3	1	50.90%	48.35%	260.89%	17.24%	108.73%	1.12%
3	3	46.47%	50.08%	97.51%	133.31%	-15.05%	62.40%
3	5	47.96%	49.13%	53.93%	91.14%	-19.71%	66.05%
3	10	50.00%	52.87%	77.24%	67.47%	-0.60%	50.50%
3	15	47.95%	55.65%	65.82%	163.27%	-47.44%	83.79%
3	20	47.27%	52.87%	17.60%	138.12%	-73.81%	93.63%
4	1	52.80%	48.35%	259.31%	20.54%	106.01%	1.30%
4	3	51.90%	50.08%	69.95%	159.98%	-38.55%	79.08%
4	5	48.42%	49.13%	92.66%	89.94%	1.21%	48.99%
4	10	53.64%	52.87%	249.73%	54.60%	82.37%	4.34%
4	15	45.21%	55.65%	171.50%	174.46%	0.24%	49.80%
4	20	41.82%	52.87%	53.92%	71.57%	-13.73%	61.28%
5	1	50.63%	48.35%	158.88%	43.43%	60.09%	10.33%
5	3	48.91%	50.08%	23.65%	191.93%	-80.93%	95.51%
5	5	42.99%	49.13%	56.87%	96.40%	-20.00%	66.27%
5	10	50.00%	52.87%	102.96%	135.90%	-16.43%	63.45%
5	15	49.32%	55.65%	51.98%	144.67%	-51.41%	85.72%
5	20	45.45%	52.87%	34.08%	107.01%	-44.08%	82.04%

数据来源：广发证券发展研究中心

### 3. S=4/5

我们再分别针对S=4以及S=5的情形进行观察。无论是等权重还是流通市值权重，得出的结论与S=3的情况相同。在(K, T)取(1, 1)时资金流入较强的组合明显战胜资金流入较弱的组合，信息比都在200%以上。在S=5的情况下，信息比甚至在300%左右。同样的，在K、T取值较大的时候，B组合相对于A组合并无明显优势，胜率超过55%的情况极少。B收益率-A收益率的序列信息比极少大于70%。在(K, T)取为(2, 20)、按流通市值比例配置权重的情况下，B收益率-A收益率的序列信息比能超过70%，P值能下降到10%以下。但一旦(K, T)的参数改变，效果马上下降。说明在全市场状况下，资金流的反转效应并不显著。

表3: 大单资金流向的行业选择跟踪效果(全市场, S=4, 等权重)

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	55.33%	48.35%	312.49%	-34.39%	264.13%	0.00%
1	3	49.18%	50.08%	130.38%	78.54%	31.35%	25.52%
1	5	53.85%	49.13%	156.82%	54.31%	63.23%	9.25%
1	10	46.36%	52.87%	132.74%	111.64%	13.28%	39.05%
1	15	56.16%	55.65%	228.81%	134.81%	44.87%	17.54%
1	20	58.18%	52.87%	135.91%	132.65%	7.93%	43.43%
2	1	52.26%	48.35%	236.57%	7.88%	153.41%	0.06%

2	3	48.37%	50.08%	105.13%	124.68%	-10.34%	58.59%
2	5	49.32%	49.13%	88.65%	127.20%	-22.38%	68.08%
2	10	49.09%	52.87%	87.88%	103.02%	-6.50%	55.41%
2	15	49.32%	55.65%	112.31%	116.80%	-3.22%	52.68%
2	20	54.55%	52.87%	85.27%	219.83%	-58.21%	88.63%
3	1	51.45%	48.35%	178.60%	32.70%	100.90%	1.70%
3	3	46.74%	50.08%	89.88%	151.41%	-33.21%	75.72%
3	5	52.49%	49.13%	114.22%	145.86%	-15.07%	62.42%
3	10	47.27%	52.87%	103.68%	111.08%	-6.75%	55.62%
3	15	52.05%	55.65%	163.68%	186.42%	-13.29%	60.91%
3	20	43.64%	52.87%	82.49%	211.42%	-74.67%	93.84%
4	1	53.16%	48.35%	263.96%	44.44%	127.22%	0.38%
4	3	51.09%	50.08%	144.05%	147.21%	-0.51%	50.43%
4	5	51.58%	49.13%	117.91%	83.25%	25.45%	29.66%
4	10	50.00%	52.87%	140.01%	115.43%	18.34%	35.06%
4	15	49.32%	55.65%	180.42%	126.68%	31.74%	25.43%
4	20	45.45%	52.87%	91.97%	156.06%	-38.15%	78.64%
5	1	49.64%	48.35%	176.90%	83.22%	59.15%	10.68%
5	3	45.92%	50.08%	65.44%	123.06%	-38.20%	78.87%
5	5	49.32%	49.13%	88.27%	93.90%	-1.16%	50.97%
5	10	50.91%	52.87%	134.24%	121.35%	9.63%	42.02%
5	15	46.58%	55.65%	121.79%	112.88%	3.53%	47.07%
5	20	43.64%	52.87%	95.22%	178.64%	-41.92%	80.85%

数据来源：广发证券发展研究中心

表4：大单资金流向的行业选择跟踪效果（全市场，S=4，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	54.61%	48.35%	354.20%	-60.83%	263.27%	0.00%
1	3	48.10%	50.08%	140.53%	42.13%	52.69%	13.44%
1	5	53.39%	49.13%	138.38%	26.09%	58.08%	11.17%
1	10	47.27%	52.87%	78.66%	83.71%	-5.15%	54.29%
1	15	53.42%	55.65%	168.05%	142.70%	8.60%	42.88%
1	20	60.00%	52.87%	76.72%	56.58%	15.19%	37.56%
2	1	51.72%	48.35%	316.88%	-15.59%	162.67%	0.03%
2	3	48.10%	50.08%	115.76%	113.01%	1.97%	48.35%
2	5	49.32%	49.13%	51.69%	127.88%	-38.05%	78.77%
2	10	44.55%	52.87%	41.74%	118.27%	-42.94%	81.51%
2	15	45.21%	55.65%	58.30%	108.28%	-25.15%	69.99%
2	20	49.09%	52.87%	19.88%	188.54%	-83.05%	95.64%
3	1	50.81%	48.35%	167.59%	4.73%	100.29%	1.76%
3	3	45.11%	50.08%	94.44%	122.21%	-11.11%	59.22%
3	5	48.87%	49.13%	61.39%	117.77%	-28.89%	72.79%

3	10	47.27%	52.87%	52.51%	82.56%	-25.81%	70.54%
3	15	47.95%	55.65%	74.31%	218.67%	-66.79%	91.68%
3	20	47.27%	52.87%	35.05%	148.79%	-65.68%	91.30%
4	1	52.08%	48.35%	282.90%	17.52%	127.16%	0.38%
4	3	51.09%	50.08%	152.10%	135.02%	8.94%	42.55%
4	5	47.51%	49.13%	86.09%	77.49%	4.83%	45.96%
4	10	52.73%	52.87%	124.35%	94.96%	15.24%	37.49%
4	15	43.84%	55.65%	118.50%	130.70%	-2.81%	52.33%
4	20	47.27%	52.87%	96.89%	92.57%	-3.18%	52.64%
5	1	50.90%	48.35%	209.45%	35.33%	89.88%	2.95%
5	3	49.46%	50.08%	97.66%	78.72%	13.13%	39.14%
5	5	46.15%	49.13%	22.90%	79.64%	-36.96%	78.10%
5	10	49.09%	52.87%	113.11%	111.38%	-0.95%	50.79%
5	15	41.10%	55.65%	37.05%	96.18%	-46.06%	83.08%
5	20	49.09%	52.87%	54.96%	153.00%	-51.70%	85.85%

数据来源：广发证券发展研究中心

表5：大单资金流向的行业选择跟踪效果（全市场，S=5，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	56.15%	48.35%	308.30%	-34.96%	298.26%	0.00%
1	3	50.54%	50.08%	130.92%	76.66%	36.60%	22.12%
1	5	56.56%	49.13%	156.48%	67.43%	60.33%	10.30%
1	10	50.00%	52.87%	119.91%	118.14%	-1.77%	51.47%
1	15	54.79%	55.65%	203.37%	141.88%	31.49%	25.60%
1	20	63.64%	52.87%	142.85%	121.41%	17.15%	36.02%
2	1	52.44%	48.35%	207.43%	15.41%	147.07%	0.10%
2	3	46.74%	50.08%	85.56%	111.42%	-16.06%	63.20%
2	5	46.15%	49.13%	87.90%	101.85%	-8.04%	56.70%
2	10	53.64%	52.87%	95.98%	79.42%	14.58%	38.01%
2	15	49.32%	55.65%	107.51%	112.52%	-3.60%	53.00%
2	20	56.36%	52.87%	89.36%	167.05%	-42.41%	81.12%
3	1	50.81%	48.35%	183.45%	34.58%	112.69%	0.90%
3	3	49.46%	50.08%	94.64%	123.67%	-17.87%	64.63%
3	5	48.87%	49.13%	84.87%	126.16%	-28.86%	72.76%
3	10	48.18%	52.87%	105.48%	102.17%	-0.47%	50.39%
3	15	53.42%	55.65%	141.75%	170.28%	-20.31%	66.40%
3	20	47.27%	52.87%	103.50%	203.92%	-59.82%	89.25%
4	1	52.08%	48.35%	197.66%	42.42%	112.33%	0.92%
4	3	50.27%	50.08%	108.60%	127.49%	-11.35%	59.42%
4	5	52.04%	49.13%	90.14%	100.32%	-4.73%	53.96%
4	10	43.64%	52.87%	98.76%	127.08%	-19.01%	65.46%
4	15	47.95%	55.65%	130.48%	112.68%	15.47%	37.36%

4	20	50.91%	52.87%	93.60%	150.84%	-36.16%	77.43%
5	1	50.72%	48.35%	164.18%	80.40%	60.30%	10.25%
5	3	47.55%	50.08%	88.36%	115.60%	-18.06%	64.78%
5	5	48.42%	49.13%	89.00%	100.00%	-7.04%	55.87%
5	10	48.18%	52.87%	110.12%	116.87%	-2.73%	52.28%
5	15	41.10%	55.65%	111.11%	146.71%	-24.54%	69.55%
5	20	45.45%	52.87%	85.55%	165.21%	-48.25%	84.20%

数据来源：广发证券发展研究中心

表6：大单资金流向的行业选择跟踪效果（全市场，S=5，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	55.24%	48.35%	424.07%	-59.14%	301.90%	0.00%
1	3	48.64%	50.08%	138.59%	32.67%	60.84%	10.09%
1	5	52.04%	49.13%	131.53%	46.67%	46.44%	16.50%
1	10	47.27%	52.87%	66.98%	82.67%	-15.06%	62.36%
1	15	52.05%	55.65%	149.54%	136.28%	5.32%	45.58%
1	20	58.18%	52.87%	83.51%	53.51%	22.30%	32.09%
2	1	52.53%	48.35%	245.16%	-13.01%	153.22%	0.07%
2	3	47.01%	50.08%	74.46%	89.14%	-6.88%	55.74%
2	5	46.61%	49.13%	25.61%	90.01%	-38.35%	78.95%
2	10	47.27%	52.87%	23.72%	70.03%	-35.75%	77.25%
2	15	45.21%	55.65%	22.40%	86.29%	-43.05%	81.47%
2	20	41.82%	52.87%	21.20%	138.70%	-71.17%	92.94%
3	1	52.26%	48.35%	163.65%	0.17%	112.71%	0.90%
3	3	46.20%	50.08%	82.52%	94.40%	-4.02%	53.36%
3	5	53.39%	49.13%	48.71%	91.63%	-29.08%	72.92%
3	10	46.36%	52.87%	72.76%	64.63%	-1.48%	51.23%
3	15	42.47%	55.65%	74.65%	172.21%	-54.49%	87.10%
3	20	45.45%	52.87%	69.70%	138.03%	-43.88%	81.93%
4	1	52.26%	48.35%	208.93%	14.53%	115.33%	0.77%
4	3	47.55%	50.08%	81.62%	106.15%	-12.55%	60.39%
4	5	47.51%	49.13%	43.78%	82.40%	-23.60%	68.99%
4	10	48.18%	52.87%	65.55%	99.81%	-21.87%	67.64%
4	15	46.58%	55.65%	65.19%	120.00%	-30.66%	73.84%
4	20	56.36%	52.87%	76.73%	86.69%	-7.50%	56.22%
5	1	51.63%	48.35%	181.47%	28.50%	92.61%	2.58%
5	3	48.91%	50.08%	92.90%	67.35%	17.38%	35.76%
5	5	44.80%	49.13%	38.54%	74.06%	-26.22%	70.90%
5	10	47.27%	52.87%	78.97%	106.52%	-15.54%	62.75%
5	15	39.73%	55.65%	53.23%	164.82%	-69.09%	92.37%
5	20	49.09%	52.87%	38.25%	122.04%	-52.16%	86.06%

数据来源：广发证券发展研究中心

### （三）按周期性划分行业后的行业选择效果

为什么资金流的短期动量效应在行业选择中效果显著，而反转效应应用于全市场效果不好呢？对比之下，反转效应在个股的选择中却极为有效呢？

我们认为，一个行业由不同的个股共同构成，个股之间是存在差异的。资金流短期上可能会对整个行业的个股产生明显的作用，因此导致行业的短期动量效应显著。但是如果把资金流的统计周期或者跟踪周期放长，即使在同一个行业中，资金流的效应对于不同个股的作用就会有差异。就像某些行业利好放出，首先是对某些行业龙头产生明显作用，导致这部分股票首先具有相对较大的涨幅，但随着时间的推移，行业内其他股票也会出现补涨，而前期上涨过快的龙头涨势可能放缓。

前面我们也提到，行业的资金流是由行业内所有个股的资金流共同作用而成。不同股票的资金流情况有差异，此起彼伏，拉长时间来看资金流的影响就不显著了。而资金流反转效应正是需要把资金流的统计周期、跟踪周期拉长才能体现效果。因此，在全市场看资金流的反转效应并不显著也就不足为奇了。

虽然资金流反转效应应用于全市场并不显著，但我们考虑，如果将全市场的部分股票划分出来，资金流的反转效应还是能体现的。我们的想法是将全市场的行业划分为周期性行业以及非周期行业。对于周期性行业，资金流对于行业内个股的作用相对来说会比较同步。这样即使将周期拉长，资金流对行业整体的作用还是能够体现出来。比如受政策影响较强的钢铁、金融行业，以及紧随外围期货市场的有色金属行业，都是较好的例子。

因此，我们将22个申万一级行业（剔除“综合”），重新按周期性以及非周期性进行了划分。其中周期性行业一共由11个行业组成，包括：采掘、电子元器件、房地产、黑色金属、化工、机械设备、建筑建材、金融服务、农林牧渔、轻工制造、有色金属。非周期行业也包括11个行业：餐饮旅游、纺织服装、公用事业、家用电器、交通运输、交运设备、商业贸易、食品饮料、信息服务、信息设备、医药生物。然后，我们分别针对周期性行业以及非周期行业分别进行资金流效果的跟踪。

#### 1. 非周期行业

我们首先来看非周期行业的情况。首先我们看到，无论S的取值如何，权重按何种方式配置，（K，T）取（1，1）时动量效应都非常显著。

在等权重情况下，反转效应很难体现，只有在（S，K，T）取（5，4，20）、（5，5，20）时B收益率-A收益率序列的P值在5%以下，而S取3、4时效果都不理想。在流通市值权重的配置下，（S，K，T）在（3，3，15）、（4，2，3）时P值能到5%以下。以上组合中，信息比最高的为96.42%。另外，反转效应较好的组合，参数也不够稳定，只有在等权重、S=5的情况下稍好。

从数据中我们得到结论，反转效应在非周期行业中略有体现，但是并不显著。

表7：大单资金流向的行业选择跟踪效果（非周期，S=3，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	52.89%	48.35%	349.03%	-26.29%	218.86%	0.00%
1	3	48.37%	50.08%	136.08%	135.17%	-1.66%	51.39%
1	5	47.51%	49.13%	174.19%	38.32%	70.24%	7.06%
1	10	46.36%	52.87%	134.01%	126.51%	1.55%	48.71%

1	15	46.58%	55.65%	188.14%	166.43%	10.86%	41.04%
1	20	56.36%	52.87%	146.07%	97.00%	29.53%	26.91%
2	1	51.63%	48.35%	154.96%	-0.55%	108.86%	1.11%
2	3	50.00%	50.08%	120.49%	111.71%	7.66%	43.61%
2	5	47.51%	49.13%	96.70%	89.17%	7.56%	43.69%
2	10	50.91%	52.87%	128.00%	85.86%	26.13%	29.23%
2	15	47.95%	55.65%	78.58%	108.58%	-10.66%	58.79%
2	20	54.55%	52.87%	105.21%	118.20%	1.32%	48.90%
3	1	52.89%	48.35%	197.40%	28.72%	98.23%	1.95%
3	3	47.55%	50.08%	140.22%	112.85%	15.05%	37.60%
3	5	47.06%	49.13%	86.41%	91.01%	-0.19%	50.16%
3	10	48.18%	52.87%	131.33%	129.85%	-2.14%	51.78%
3	15	42.47%	55.65%	130.27%	172.17%	-15.17%	62.41%
3	20	50.91%	52.87%	142.85%	137.83%	1.73%	48.56%
4	1	52.17%	48.35%	184.54%	26.36%	96.61%	2.12%
4	3	44.29%	50.08%	88.62%	132.08%	-21.35%	67.30%
4	5	43.44%	49.13%	74.03%	94.95%	-12.47%	60.33%
4	10	45.45%	52.87%	101.43%	129.95%	-17.89%	64.59%
4	15	43.84%	55.65%	111.94%	114.88%	6.10%	44.94%
4	20	49.09%	52.87%	95.94%	110.34%	-5.59%	54.64%
5	1	49.01%	48.35%	101.47%	65.03%	26.15%	29.12%
5	3	43.48%	50.08%	64.87%	91.84%	-15.31%	62.61%
5	5	48.87%	49.13%	97.57%	73.81%	14.72%	37.86%
5	10	50.00%	52.87%	111.23%	136.33%	-16.57%	63.56%
5	15	38.36%	55.65%	96.56%	137.52%	-25.11%	69.96%
5	20	43.64%	52.87%	86.95%	144.29%	-39.51%	79.45%

数据来源：广发证券发展研究中心

表8：大单资金流向的行业选择跟踪效果（非周期，S=3，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.53%	48.35%	317.71%	-33.81%	198.11%	0.00%
1	3	48.64%	50.08%	99.75%	46.91%	30.63%	26.01%
1	5	50.23%	49.13%	100.13%	27.95%	44.59%	17.48%
1	10	40.00%	52.87%	36.47%	79.03%	-33.64%	75.90%
1	15	46.58%	55.65%	69.05%	98.20%	-15.23%	62.46%
1	20	41.82%	52.87%	50.84%	58.44%	-4.44%	53.69%
2	1	53.62%	48.35%	201.85%	-29.79%	155.48%	0.06%
2	3	48.64%	50.08%	113.18%	62.93%	29.36%	26.88%
2	5	45.70%	49.13%	12.20%	139.66%	-65.44%	91.49%
2	10	40.91%	52.87%	24.56%	92.02%	-49.77%	85.06%
2	15	46.58%	55.65%	24.40%	157.13%	-76.95%	94.42%
2	20	36.36%	52.87%	19.28%	108.03%	-56.08%	87.77%



3	1	52.35%	48.35%	169.49%	-21.49%	131.60%	0.29%
3	3	47.28%	50.08%	98.41%	67.64%	17.82%	35.41%
3	5	44.80%	49.13%	44.65%	96.68%	-26.68%	71.23%
3	10	47.27%	52.87%	48.12%	113.94%	-43.75%	81.96%
3	15	35.62%	55.65%	22.88%	179.92%	-91.51%	97.03%
3	20	49.09%	52.87%	114.99%	70.91%	16.93%	36.19%
4	1	52.26%	48.35%	157.26%	-17.91%	123.71%	0.47%
4	3	47.55%	50.08%	82.23%	68.33%	10.68%	41.12%
4	5	45.70%	49.13%	74.91%	94.56%	-7.75%	56.46%
4	10	45.45%	52.87%	30.28%	140.77%	-64.30%	90.99%
4	15	42.47%	55.65%	46.27%	145.51%	-51.80%	85.90%
4	20	49.09%	52.87%	56.78%	114.26%	-28.36%	72.28%
5	1	50.99%	48.35%	90.98%	18.33%	53.53%	13.02%
5	3	45.38%	50.08%	58.22%	57.13%	2.25%	48.11%
5	5	50.23%	49.13%	73.32%	64.70%	3.64%	46.95%
5	10	42.73%	52.87%	31.09%	102.68%	-45.70%	83.00%
5	15	36.99%	55.65%	52.53%	173.30%	-64.72%	91.01%
5	20	38.18%	52.87%	40.66%	132.78%	-48.63%	84.39%

数据来源：广发证券发展研究中心

表9：大单资金流向的行业选择跟踪效果（非周期，S=4，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	54.43%	48.35%	304.98%	-3.89%	202.41%	0.00%
1	3	46.20%	50.08%	128.27%	124.49%	1.76%	48.53%
1	5	50.68%	49.13%	176.99%	57.96%	69.18%	7.36%
1	10	50.00%	52.87%	106.15%	108.80%	-3.61%	53.01%
1	15	54.79%	55.65%	152.45%	138.30%	12.11%	40.03%
1	20	54.55%	52.87%	116.15%	112.56%	7.98%	43.38%
2	1	51.81%	48.35%	187.95%	7.43%	133.91%	0.25%
2	3	47.83%	50.08%	121.93%	80.79%	28.91%	27.19%
2	5	46.61%	49.13%	72.41%	88.81%	-8.95%	57.45%
2	10	50.00%	52.87%	99.22%	83.12%	12.02%	40.07%
2	15	47.95%	55.65%	93.65%	127.70%	-14.46%	61.85%
2	20	49.09%	52.87%	81.92%	97.41%	-3.01%	52.51%
3	1	50.45%	48.35%	174.93%	18.32%	114.51%	0.81%
3	3	44.02%	50.08%	112.71%	104.03%	6.05%	44.94%
3	5	46.61%	49.13%	79.25%	111.84%	-15.82%	63.01%
3	10	50.00%	52.87%	122.19%	119.37%	1.95%	48.37%
3	15	42.47%	55.65%	103.34%	163.34%	-28.66%	72.48%
3	20	61.82%	52.87%	152.85%	100.91%	41.49%	19.40%
4	1	51.72%	48.35%	139.14%	17.30%	98.30%	1.95%
4	3	45.92%	50.08%	118.32%	103.43%	11.69%	40.30%

4	5	47.96%	49.13%	109.04%	112.18%	0.14%	49.89%
4	10	44.55%	52.87%	83.04%	152.90%	-46.12%	83.23%
4	15	49.32%	55.65%	101.83%	131.30%	-11.46%	59.44%
4	20	47.27%	52.87%	97.70%	139.90%	-23.40%	68.73%
5	1	50.36%	48.35%	100.19%	52.48%	39.79%	20.14%
5	3	47.01%	50.08%	97.27%	73.16%	17.21%	35.89%
5	5	47.51%	49.13%	111.98%	78.03%	22.63%	31.74%
5	10	45.45%	52.87%	79.67%	144.48%	-40.73%	80.26%
5	15	39.73%	55.65%	122.66%	145.25%	-9.87%	58.15%
5	20	43.64%	52.87%	91.27%	147.43%	-34.46%	76.36%

数据来源：广发证券发展研究中心

表10：大单资金流向的行业选择跟踪效果（非周期，S=4，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	51.63%	48.35%	159.72%	1.96%	167.02%	0.02%
1	3	47.55%	50.08%	85.42%	96.32%	-8.41%	57.01%
1	5	49.77%	49.13%	77.75%	76.51%	-1.80%	51.51%
1	10	48.18%	52.87%	76.66%	124.17%	-49.92%	85.13%
1	15	49.32%	55.65%	119.68%	86.40%	28.31%	27.77%
1	20	58.18%	52.87%	128.71%	90.22%	33.31%	24.39%
2	1	51.54%	48.35%	135.50%	34.00%	101.94%	1.61%
2	3	45.38%	50.08%	27.34%	124.33%	-89.24%	96.92%
2	5	46.15%	49.13%	87.32%	99.79%	-19.18%	65.64%
2	10	51.82%	52.87%	59.12%	100.88%	-46.36%	83.35%
2	15	49.32%	55.65%	55.98%	88.58%	-45.62%	82.85%
2	20	45.45%	52.87%	44.51%	112.63%	-65.95%	91.39%
3	1	50.72%	48.35%	83.57%	55.42%	31.84%	25.16%
3	3	45.92%	50.08%	39.13%	107.99%	-63.85%	90.97%
3	5	46.15%	49.13%	71.56%	108.10%	-39.62%	79.71%
3	10	56.36%	52.87%	82.86%	67.07%	9.55%	42.08%
3	15	46.58%	55.65%	66.94%	95.43%	-45.04%	82.55%
3	20	45.45%	52.87%	76.40%	137.14%	-49.36%	84.75%
4	1	50.90%	48.35%	101.15%	61.05%	40.36%	19.81%
4	3	46.20%	50.08%	63.52%	78.20%	-12.52%	60.37%
4	5	48.42%	49.13%	59.73%	73.37%	-17.77%	64.54%
4	10	54.55%	52.87%	86.55%	37.00%	48.93%	15.35%
4	15	54.79%	55.65%	94.25%	66.40%	12.55%	39.68%
4	20	50.91%	52.87%	78.90%	90.22%	-14.41%	61.82%
5	1	50.45%	48.35%	86.26%	57.71%	30.54%	26.04%
5	3	46.74%	50.08%	62.94%	101.28%	-32.36%	75.16%
5	5	46.15%	49.13%	62.66%	92.56%	-30.31%	73.77%
5	10	56.36%	52.87%	99.98%	66.32%	29.79%	26.67%

5	15	53.42%	55.65%	76.98%	96.60%	-29.16%	72.82%
5	20	54.55%	52.87%	75.67%	95.85%	-16.74%	63.66%

数据来源：广发证券发展研究中心

表11：大单资金流向的行业选择跟踪效果（非周期，S=5，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	52.53%	48.35%	197.33%	33.65%	178.30%	0.01%
1	3	51.63%	50.08%	124.18%	81.83%	48.08%	15.65%
1	5	53.85%	49.13%	116.34%	85.67%	32.80%	24.56%
1	10	51.82%	52.87%	130.04%	93.81%	36.68%	22.17%
1	15	57.53%	55.65%	134.84%	69.66%	64.11%	9.20%
1	20	58.18%	52.87%	113.90%	101.57%	13.40%	38.98%
2	1	51.27%	48.35%	151.74%	60.60%	103.77%	1.46%
2	3	50.82%	50.08%	83.54%	119.69%	-34.89%	76.81%
2	5	50.68%	49.13%	125.28%	96.09%	25.51%	29.62%
2	10	55.45%	52.87%	110.14%	87.58%	21.82%	32.41%
2	15	53.42%	55.65%	122.59%	87.22%	23.01%	31.58%
2	20	43.64%	52.87%	75.94%	135.30%	-62.85%	90.35%
3	1	51.27%	48.35%	124.83%	74.45%	56.56%	11.72%
3	3	49.18%	50.08%	83.99%	127.34%	-44.03%	82.23%
3	5	47.06%	49.13%	80.60%	106.08%	-28.36%	72.42%
3	10	49.09%	52.87%	87.32%	111.44%	-28.12%	72.17%
3	15	50.68%	55.65%	95.93%	112.56%	-33.84%	75.95%
3	20	40.00%	52.87%	67.66%	169.10%	-96.86%	97.64%
4	1	51.72%	48.35%	125.56%	69.70%	63.43%	9.12%
4	3	51.90%	50.08%	111.88%	90.08%	21.43%	32.64%
4	5	51.13%	49.13%	93.49%	100.52%	-8.61%	57.18%
4	10	54.55%	52.87%	100.49%	87.16%	12.97%	39.31%
4	15	57.53%	55.65%	120.71%	80.74%	29.40%	27.02%
4	20	45.45%	52.87%	68.00%	141.25%	-78.67%	94.76%
5	1	50.18%	48.35%	73.55%	110.72%	-40.15%	80.07%
5	3	48.37%	50.08%	68.65%	132.94%	-65.57%	91.55%
5	5	47.96%	49.13%	90.85%	108.36%	-17.47%	64.31%
5	10	55.45%	52.87%	107.60%	107.35%	1.25%	48.96%
5	15	54.79%	55.65%	108.22%	107.75%	-10.84%	58.94%
5	20	38.18%	52.87%	61.82%	151.92%	-96.42%	97.60%

数据来源：广发证券发展研究中心

表12：大单资金流向的行业选择跟踪效果（非周期，S=5，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	52.80%	48.35%	193.93%	11.27%	199.96%	0.00%

1	3	51.36%	50.08%	95.53%	72.87%	28.38%	27.57%
1	5	53.39%	49.13%	86.08%	84.48%	-0.50%	50.42%
1	10	46.36%	52.87%	94.68%	101.64%	-9.79%	58.12%
1	15	54.79%	55.65%	106.69%	64.71%	44.27%	17.86%
1	20	56.36%	52.87%	114.43%	79.19%	33.07%	24.55%
2	1	51.36%	48.35%	132.43%	34.89%	111.52%	0.96%
2	3	46.74%	50.08%	55.08%	113.73%	-54.57%	87.39%
2	5	49.32%	49.13%	100.57%	79.93%	15.03%	37.62%
2	10	54.55%	52.87%	88.02%	69.65%	16.21%	36.73%
2	15	49.32%	55.65%	89.29%	72.15%	5.17%	45.71%
2	20	43.64%	52.87%	73.21%	106.90%	-38.07%	78.60%
3	1	51.27%	48.35%	109.07%	58.82%	55.72%	12.07%
3	3	47.28%	50.08%	54.72%	103.43%	-47.61%	84.11%
3	5	48.42%	49.13%	69.05%	78.37%	-13.93%	61.51%
3	10	48.18%	52.87%	85.55%	66.74%	16.61%	36.41%
3	15	52.05%	55.65%	69.42%	77.95%	-23.30%	68.64%
3	20	52.73%	52.87%	80.37%	116.41%	-35.45%	76.99%
4	1	50.27%	48.35%	111.69%	42.38%	82.43%	4.16%
4	3	50.54%	50.08%	97.18%	52.39%	48.43%	15.48%
4	5	48.87%	49.13%	80.98%	70.37%	8.26%	43.12%
4	10	53.64%	52.87%	94.40%	47.70%	49.10%	15.27%
4	15	58.90%	55.65%	104.29%	40.05%	58.87%	11.10%
4	20	45.45%	52.87%	72.03%	98.72%	-32.70%	75.22%
5	1	49.73%	48.35%	61.25%	73.82%	-15.09%	62.45%
5	3	47.83%	50.08%	53.38%	107.68%	-55.56%	87.81%
5	5	47.96%	49.13%	70.29%	89.84%	-22.07%	67.85%
5	10	57.27%	52.87%	96.27%	68.03%	27.68%	28.14%
5	15	54.79%	55.65%	78.37%	69.15%	-1.10%	50.92%
5	20	41.82%	52.87%	56.95%	103.14%	-49.86%	84.98%

数据来源：广发证券发展研究中心

## 2. 周期性行业

我们再来看周期性行业的情况。无论S的取值如何，权重按何种方式配置，(K, T)取(1, 1)时动量效应同样非常显著。

在等权重情况下，(S, K, T)的取值为(3, 2, 20)、(3, 3, 3)、(3, 3, 5)、(3, 3, 20)、(3, 4, 20)、(4, 2, 20)、(4, 3, 20)、(5, 4, 15)时，B收益率-A收益率序列的P值都在5%以下；而在流通市值权重的情况下，(S, K, T)的取值为(3, 1, 10)、(3, 3, 5)、(4, 3, 15)、(5, 3, 10)、(5, 3, 15)、(5, 4, 10)、(5, 4, 15)时，B收益率-A收益率序列的P值都在5%以下。信息比最高的为流通市值下(5, 4, 15)组合，为144.92%，并且胜率有77.23%。从参数集中度来看，在等权重情况下，效果较好的组合主要集中在T=20的情况；流通市值权重下，效果较好的组合主要集中在T=10或15的情况。也就是说，跟踪时间一般在2周以上效果较好，这与我们此前跟踪个股资金流的结论较为一致。

表13: 大单资金流向的行业选择跟踪效果 (周期性, S=3, 等权重)

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.71%	48.35%	200.53%	19.97%	152.89%	0.07%
1	3	48.64%	50.08%	105.46%	84.54%	16.34%	36.57%
1	5	47.96%	49.13%	89.67%	78.90%	6.28%	44.76%
1	10	50.00%	52.87%	96.01%	115.63%	-19.11%	65.53%
1	15	60.27%	55.65%	178.66%	96.30%	50.08%	14.91%
1	20	58.18%	52.87%	118.13%	135.70%	-12.65%	60.41%
2	1	52.35%	48.35%	136.61%	35.26%	96.77%	2.10%
2	3	48.37%	50.08%	61.62%	109.63%	-38.13%	78.82%
2	5	45.70%	49.13%	84.38%	108.50%	-26.32%	70.97%
2	10	46.36%	52.87%	88.18%	107.44%	-15.81%	62.96%
2	15	56.16%	55.65%	104.34%	86.78%	0.76%	49.37%
2	20	41.82%	52.87%	59.56%	192.89%	-85.16%	96.02%
3	1	50.45%	48.35%	82.97%	65.65%	18.73%	34.68%
3	3	44.84%	50.08%	34.04%	129.37%	-86.43%	96.49%
3	5	45.25%	49.13%	49.79%	176.36%	-94.84%	97.63%
3	10	45.45%	52.87%	61.61%	135.73%	-58.12%	88.73%
3	15	46.58%	55.65%	101.67%	146.36%	-43.08%	81.48%
3	20	49.09%	52.87%	70.64%	215.86%	-88.13%	96.50%
4	1	50.36%	48.35%	118.03%	82.32%	31.46%	25.41%
4	3	47.83%	50.08%	89.42%	128.49%	-30.24%	73.72%
4	5	49.32%	49.13%	69.16%	102.13%	-27.64%	71.91%
4	10	47.27%	52.87%	65.61%	74.51%	-9.61%	57.97%
4	15	52.05%	55.65%	103.68%	124.14%	-26.76%	71.14%
4	20	43.64%	52.87%	38.02%	125.17%	-81.64%	95.37%
5	1	49.19%	48.35%	92.85%	93.51%	1.31%	48.90%
5	3	49.18%	50.08%	65.13%	95.09%	-23.84%	69.17%
5	5	47.06%	49.13%	68.44%	109.85%	-31.33%	74.46%
5	10	51.82%	52.87%	97.25%	98.87%	-2.61%	52.18%
5	15	49.32%	55.65%	119.63%	144.60%	-26.87%	71.22%
5	20	47.27%	52.87%	70.60%	161.70%	-66.25%	91.48%

数据来源: 广发证券发展研究中心

表14: 大单资金流向的行业选择跟踪效果 (周期性, S=3, 流通市值权重)

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.07%	48.35%	182.94%	-8.75%	174.36%	0.01%
1	3	45.11%	50.08%	45.58%	81.70%	-32.88%	75.50%
1	5	52.04%	49.13%	68.64%	92.66%	-23.30%	68.76%
1	10	40.01%	52.87%	52.06%	144.72%	-79.78%	95.14%
1	15	52.05%	55.65%	152.09%	99.98%	28.20%	27.85%

1	20	54.55%	52.87%	121.11%	118.05%	-1.81%	51.51%
2	1	51.72%	48.35%	145.03%	23.98%	109.25%	1.09%
2	3	44.57%	50.08%	41.54%	135.07%	-67.05%	92.02%
2	5	44.80%	49.13%	74.79%	135.01%	-53.26%	86.80%
2	10	50.00%	52.87%	71.36%	130.83%	-44.61%	82.42%
2	15	54.79%	55.65%	67.16%	70.52%	-15.02%	62.29%
2	20	45.45%	52.87%	60.67%	164.63%	-68.73%	92.24%
3	1	49.64%	48.35%	70.78%	47.17%	24.95%	29.99%
3	3	43.75%	50.08%	19.72%	107.88%	-77.31%	94.74%
3	5	42.08%	49.13%	35.90%	153.39%	-101.19%	98.28%
3	10	47.27%	52.87%	47.56%	109.32%	-52.59%	86.38%
3	15	47.95%	55.65%	89.98%	113.12%	-28.99%	72.70%
3	20	52.73%	52.87%	100.37%	181.25%	-49.08%	84.61%
4	1	50.45%	48.35%	98.98%	63.65%	31.20%	25.59%
4	3	47.01%	50.08%	46.70%	104.39%	-49.35%	84.98%
4	5	47.96%	49.13%	52.15%	93.55%	-39.35%	79.55%
4	10	52.73%	52.87%	70.67%	50.84%	14.44%	38.13%
4	15	56.16%	55.65%	103.97%	90.47%	2.56%	47.87%
4	20	47.27%	52.87%	53.38%	87.25%	-30.80%	73.95%
5	1	48.92%	48.35%	55.13%	65.84%	-9.84%	58.20%
5	3	48.64%	50.08%	27.02%	82.04%	-47.55%	84.09%
5	5	45.25%	49.13%	49.92%	98.10%	-40.65%	80.32%
5	10	55.45%	52.87%	97.60%	68.78%	20.02%	33.77%
5	15	54.79%	55.65%	129.87%	106.45%	7.38%	43.89%
5	20	49.09%	52.87%	76.61%	115.69%	-30.11%	73.49%

数据来源：广发证券发展研究中心

表15：大单资金流向的行业选择跟踪效果（周期性，S=4，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	52.62%	48.35%	177.46%	25.05%	156.44%	0.05%
1	3	48.37%	50.08%	113.63%	92.20%	20.43%	33.40%
1	5	52.49%	49.13%	101.49%	71.16%	29.54%	26.76%
1	10	51.82%	52.87%	116.90%	95.53%	19.38%	34.26%
1	15	54.79%	55.65%	142.12%	80.28%	54.10%	13.06%
1	20	60.00%	52.87%	125.96%	105.68%	17.95%	35.40%
2	1	52.35%	48.35%	138.89%	57.33%	85.59%	3.61%
2	3	48.37%	50.08%	63.29%	129.22%	-59.69%	89.47%
2	5	45.70%	49.13%	93.12%	103.22%	-15.18%	62.50%
2	10	48.18%	52.87%	69.61%	105.14%	-38.04%	78.67%
2	15	52.05%	55.65%	94.19%	106.02%	-25.16%	70.00%
2	20	43.64%	52.87%	46.69%	146.15%	-90.65%	96.87%
3	1	50.54%	48.35%	99.27%	72.95%	30.11%	26.34%



3	3	45.38%	50.08%	62.68%	134.37%	-68.60%	92.49%
3	5	47.06%	49.13%	86.76%	128.07%	-38.69%	79.16%
3	10	49.09%	52.87%	83.46%	106.03%	-26.59%	71.09%
3	15	45.21%	55.65%	82.21%	146.12%	-73.53%	93.59%
3	20	38.18%	52.87%	59.66%	197.12%	-111.37%	98.84%
4	1	50.63%	48.35%	127.29%	80.18%	46.32%	16.51%
4	3	48.10%	50.08%	94.89%	111.35%	-14.46%	61.93%
4	5	49.77%	49.13%	82.20%	99.35%	-16.79%	63.78%
4	10	50.00%	52.87%	86.38%	76.41%	9.21%	42.36%
4	15	52.05%	55.65%	104.73%	98.52%	-9.36%	57.74%
4	20	41.82%	52.87%	65.23%	125.46%	-62.19%	90.12%
5	1	49.55%	48.35%	91.47%	93.32%	-0.49%	50.41%
5	3	47.28%	50.08%	68.93%	116.34%	-43.92%	82.17%
5	5	47.06%	49.13%	79.38%	101.10%	-19.42%	65.83%
5	10	53.64%	52.87%	99.89%	102.30%	-0.64%	50.54%
5	15	49.32%	55.65%	92.59%	126.12%	-43.32%	81.62%
5	20	47.27%	52.87%	70.24%	141.31%	-61.51%	89.88%

数据来源：广发证券发展研究中心

表16：大单资金流向的行业选择跟踪效果（周期性，S=4，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.53%	48.35%	317.71%	-33.81%	198.11%	0.00%
1	3	48.64%	50.08%	99.75%	46.91%	30.63%	26.01%
1	5	50.23%	49.13%	100.13%	27.95%	44.59%	17.48%
1	10	40.00%	52.87%	36.47%	79.03%	-33.64%	75.90%
1	15	46.58%	55.65%	69.05%	98.20%	-15.23%	62.46%
1	20	41.82%	52.87%	50.84%	58.44%	-4.44%	53.69%
2	1	53.62%	48.35%	201.85%	-29.79%	155.48%	0.06%
2	3	48.64%	50.08%	113.18%	62.93%	29.36%	26.88%
2	5	45.70%	49.13%	12.20%	139.66%	-65.44%	91.49%
2	10	40.91%	52.87%	24.56%	92.02%	-49.77%	85.06%
2	15	46.58%	55.65%	24.40%	157.13%	-76.95%	94.42%
2	20	36.36%	52.87%	19.28%	108.03%	-56.08%	87.77%
3	1	52.35%	48.35%	169.49%	-21.49%	131.60%	0.29%
3	3	47.28%	50.08%	98.41%	67.64%	17.82%	35.41%
3	5	44.80%	49.13%	44.65%	96.68%	-26.68%	71.23%
3	10	47.27%	52.87%	48.12%	113.94%	-43.75%	81.96%
3	15	35.62%	55.65%	22.88%	179.92%	-91.51%	97.03%
3	20	49.09%	52.87%	114.99%	70.91%	16.93%	36.19%
4	1	52.26%	48.35%	157.26%	-17.91%	123.71%	0.47%
4	3	47.55%	50.08%	82.23%	68.33%	10.68%	41.12%
4	5	45.70%	49.13%	74.91%	94.56%	-7.75%	56.46%

4	10	45.45%	52.87%	30.28%	140.77%	-64.30%	90.99%
4	15	42.47%	55.65%	46.27%	145.51%	-51.80%	85.90%
4	20	49.09%	52.87%	56.78%	114.26%	-28.36%	72.28%
5	1	50.99%	48.35%	90.98%	18.33%	53.53%	13.02%
5	3	45.38%	50.08%	58.22%	57.13%	2.25%	48.11%
5	5	50.23%	49.13%	73.32%	64.70%	3.64%	46.95%
5	10	42.73%	52.87%	31.09%	102.68%	-45.70%	83.00%
5	15	36.99%	55.65%	52.53%	173.30%	-64.72%	91.01%
5	20	38.18%	52.87%	40.66%	132.78%	-48.63%	84.39%

数据来源：广发证券发展研究中心

表17：大单资金流向的行业选择跟踪效果（周期性，S=5，等权重）

资金流统计 日数 K	跟踪时间 T	胜率 (AvsB)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	53.35%	48.35%	218.00%	11.27%	169.08%	0.02%
1	3	48.91%	50.08%	101.40%	110.75%	-7.37%	56.15%
1	5	52.04%	49.13%	158.82%	65.05%	65.88%	8.37%
1	10	49.09%	52.87%	106.39%	105.46%	-0.04%	50.04%
1	15	49.32%	55.65%	112.52%	118.94%	-2.04%	51.70%
1	20	52.73%	52.87%	96.50%	116.08%	-8.93%	57.40%
2	1	53.07%	48.35%	200.96%	20.41%	140.61%	0.16%
2	3	47.01%	50.08%	123.34%	91.33%	22.97%	31.48%
2	5	44.34%	49.13%	79.77%	111.39%	-20.43%	66.60%
2	10	51.82%	52.87%	94.22%	107.00%	-9.79%	58.11%
2	15	50.68%	55.65%	86.67%	123.35%	-19.60%	65.86%
2	20	54.55%	52.87%	96.06%	105.41%	1.34%	48.89%
3	1	50.00%	48.35%	141.25%	42.95%	82.68%	4.12%
3	3	44.84%	50.08%	85.81%	106.78%	-15.32%	62.62%
3	5	45.25%	49.13%	59.73%	104.93%	-32.65%	75.34%
3	10	43.64%	52.87%	72.04%	118.15%	-36.25%	77.57%
3	15	38.36%	55.65%	63.14%	139.30%	-58.46%	88.74%
3	20	50.91%	52.87%	95.03%	104.16%	-3.19%	52.65%
4	1	51.99%	48.35%	140.35%	43.82%	80.43%	4.55%
4	3	49.18%	50.08%	111.02%	77.65%	25.30%	29.76%
4	5	43.89%	49.13%	96.97%	115.54%	-12.73%	60.54%
4	10	45.45%	52.87%	74.87%	147.52%	-59.11%	89.12%
4	15	36.99%	55.65%	59.90%	169.85%	-90.87%	96.94%
4	20	43.64%	52.87%	86.44%	121.95%	-27.11%	71.40%
5	1	50.54%	48.35%	122.86%	59.07%	55.24%	12.28%
5	3	47.55%	50.08%	89.09%	90.63%	1.47%	48.77%
5	5	48.42%	49.13%	104.35%	74.32%	21.53%	32.56%
5	10	47.27%	52.87%	74.80%	127.73%	-40.56%	80.16%
5	15	41.10%	55.65%	118.06%	129.13%	-6.82%	55.66%

5	20	36.36%	52.87%	71.40%	107.23%	-30.81%	73.96%
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数据来源：广发证券发展研究中心

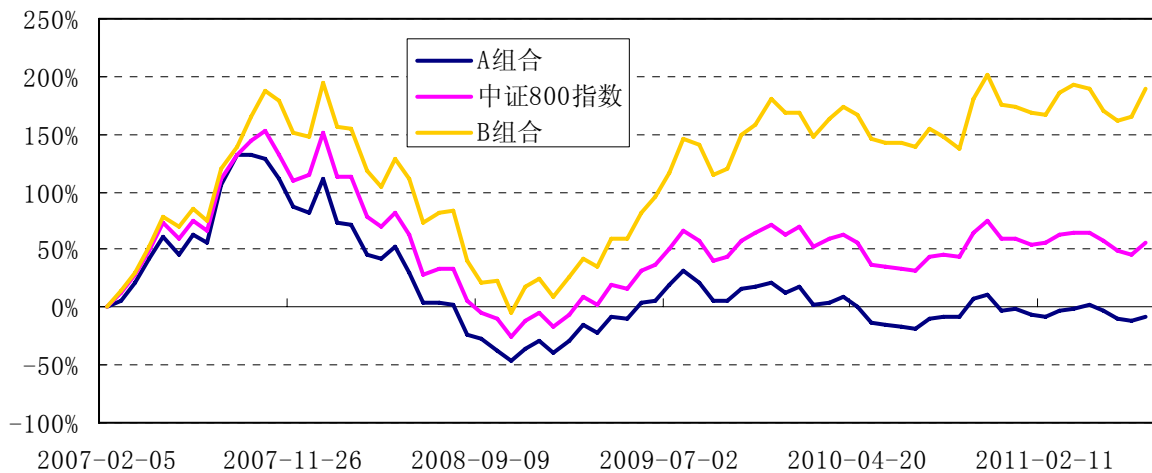
表18: 大单资金流向的行业选择跟踪效果（周期性，S=5，流通市值权重）

资金流统计 日数 K	跟踪时间 T	胜率 (A vs B)	I 累计收 益率	A 累计 收益率	B 累计收 益率	IR(A-B)	P 值(A-B)
1	1	54.43%	48.35%	226.08%	-27.52%	178.14%	0.01%
1	3	44.84%	50.08%	88.10%	47.58%	25.13%	29.89%
1	5	47.06%	49.13%	72.49%	48.93%	17.53%	35.64%
1	10	45.45%	52.87%	34.41%	66.85%	-31.91%	74.77%
1	15	50.68%	55.65%	57.34%	78.29%	-12.40%	60.20%
1	20	45.45%	52.87%	25.10%	65.56%	-31.67%	74.53%
2	1	53.07%	48.35%	176.90%	-16.36%	138.47%	0.18%
2	3	49.46%	50.08%	102.10%	46.60%	34.83%	23.24%
2	5	46.61%	49.13%	15.37%	144.19%	-73.37%	93.78%
2	10	44.55%	52.87%	33.11%	81.64%	-40.09%	79.89%
2	15	50.68%	55.65%	37.32%	112.32%	-48.46%	84.31%
2	20	41.82%	52.87%	35.12%	90.26%	-40.58%	80.08%
3	1	52.53%	48.35%	123.05%	-5.49%	102.93%	1.53%
3	3	46.47%	50.08%	74.34%	63.59%	9.02%	42.49%
3	5	45.70%	49.13%	16.86%	97.00%	-53.24%	86.79%
3	10	40.00%	52.87%	0.36%	158.61%	-108.27%	98.74%
3	15	39.73%	55.65%	6.57%	142.01%	-102.73%	98.25%
3	20	41.82%	52.87%	37.32%	93.43%	-46.42%	83.27%
4	1	51.81%	48.35%	152.54%	2.96%	103.97%	1.45%
4	3	46.74%	50.08%	89.86%	40.55%	33.53%	24.07%
4	5	47.51%	49.13%	62.87%	97.57%	-18.81%	65.36%
4	10	38.18%	52.87%	17.96%	156.51%	-90.46%	96.98%
4	15	28.77%	55.65%	-8.06%	188.97%	-144.92%	99.83%
4	20	40.00%	52.87%	31.10%	113.37%	-52.63%	86.28%
5	1	50.90%	48.35%	104.78%	25.26%	59.47%	10.56%
5	3	46.74%	50.08%	45.57%	66.12%	-10.38%	58.63%
5	5	51.13%	49.13%	59.92%	56.57%	-1.17%	50.98%
5	10	45.45%	52.87%	29.56%	102.90%	-53.34%	86.72%
5	15	39.73%	55.65%	40.88%	122.39%	-60.98%	89.70%
5	20	38.18%	52.87%	16.40%	94.16%	-54.69%	87.18%

数据来源：广发证券发展研究中心

我们将流通市值下（S，K，T）取为（5，4，15）的组合拿出来看，效果如图5所示。如果以每年年末作为分界点分年比较收益情况，我们看到B组合每年都能持续跑赢A组合以及中证800指数。因此，我们建议这一组参数作为行业选择的模型参数首选。

图5: 组合累计收益表现对比 (K=4, T=15, S=5, 流通市值权重)



数据来源: 广发证券发展研究中心

表 19: B 组合的分阶段累计收益比较 (K=4, T=15, S=5, 流通市值权重)

时间段	A 组合	中证 800 指数	B 组合
2007.1.15-2007.12.31	82.36%	115.63%	147.92%
2008.1.1-2008.12.31	-66.50%	-61.49%	-56.12%
2009.1.1-2009.12.31	85.46%	95.88%	146.71%
2010.1.1-2010.12.31	-13.39%	-1.58%	2.27%
2011.1.1-2011.7.14	-6.32%	-2.77%	5.27%

数据来源: 广发证券发展研究中心

## 四、总结

在行业选择方面, 单个交易日的大单资金流向对行业的短期走势依然具有较强的动量效应。但在实际操作的可行性上, 我们更推荐以周期性行业的资金流反转效应作为行业选择的应用方向。一周时间的大单资金流向对于3周以上的行业走势具有较强的反转效应。

综合考虑前面的分析结果, 我们建议选取大单资金流入较弱的5个行业按流通市值权重进行配置, 对资金流的统计周期为4个交易日, 而跟踪周期设定为15个交易日。这一配置从07年1月至11年7月超额收益为133.32%, 并且这一组合每年都能跑赢资金流入较强的组合以及中证800指数。

根据我们模型的运行结果, 我们建议的最新配置的行业为房地产、金融服务、轻工制造、采掘以及化工。

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