

## Capital Adequacy Management in Financial Service Industry: The Case of Taiwan's Futures Commission Merchants

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### Abstract

The regulators in Taiwan apply Adjusted Net Capital (ANC) ratios to supervise the capital adequacy of Future Commission Merchants (FCMs). Such restrictions make firms' capital structure in financial service industries in divergence. In this case, collect data of two years, i.e., the year of 2008 and the year of 2013, which represent the crisis and recovery periods, respectively. Students may discuss different strategies FCMs adopted during crisis and recovery periods, and further discuss the influence of capital adequacy request from regulators on capital structure.

**Keywords:** Futures Commission Merchant (FCM), Capital Adequacy, Adjusted Net Capital (ANC)

### I. Background

Compared with the risk management systems for banks, no standard risk regulations are set for futures industries in the world. However, risk control for futures industries is extremely important, especially in ensuring interests of investors and even the whole economy, because of high leverage and risky nature in trading derivatives. Thus, the Financial Supervisory Commission (FSC), the official supervisory authorities of financial industries in Taiwan, regulates capital adequacy of the futures commission merchants (FCMs) through the minimum statutory capital requirements, the minimum ratio of owners' equity to the minimum statutory capital requirements, and the minimum adjusted net capital (ANC) ratio, which is also applied by the Commodity Futures Trading Commission (CFTC) in the U.S. futures industry.

In particular, according to Article 8 of Standards Governing the Establishment of Futures Commission Merchants,

*The minimum paid-in capital of futures commission merchants shall be as follows:*

- 1. Futures brokerage merchants: 200 million New Taiwan Dollars.*
- 2. Futures proprietary merchants: 400 million New Taiwan Dollars.*

Furthermore, the Article 14 regulates that,

*For each branch office that a futures commission merchant establishes, its minimum paid-in capital shall increase by 15 million New Taiwan Dollars.*

The above statutory minimum capital for FCMs restricts the minimum capital of an FCM at establishment, reflecting a total risk of the statutory minimum capital can cope with risk for FCMs as a whole.

Furthermore, according to the Article 72 of Futures Trading Act,

*Where the owners' equity of a futures commission merchant is lower than the designated percentage of the minimum paid-in capital, or its adjusted net capital is lower than the designated ratio of the total customer margin required for the open positions of futures traders, the futures commission merchant shall immediately report the situation to the*

*Competent Authority. The Competent Authority shall order such futures commission merchant to correct the situation within a limited period. If the futures commission merchant fails to conform to the order within the period, the Competent Authority may, depending on the severity of the case, restrict a part of its business or void its license. The designated percentage, the calculating methodology for the adjusted net capital, the net capital ratio, and the relevant registration and time period for correction referred to in the preceding Paragraph shall be prescribed by the Competent Authority.*

These two restrictions of capital requirement ratios aim to reduce the overall risk of an FCM.

Finally, ANC ratio is defined as:

ANC ratio=Adjusted Net Capital/Margins Required for the Unsettled Positions (1)

where Adjusted Net Capital equals Adjusted Net Assets minus Liabilities, and Adjust Net

$$\text{Assets} = \sum_{i=1}^n \text{Asset}_i \times (1 - \text{haircut}_i)^1.$$

The denominator of ANC ratio stands for the risk of the FCM involved, i.e., the FCM is riskier if the denominator is larger, ceteris paribus. In contrast, the numerator of ANC reflects the risk the FCM invested.

## II. Data: Crisis versus Recovery Periods

In this case, I collect data of two years, i.e., the year of 2008 and the year of 2013, which represent the crisis and recovery periods, respectively. Many economists consider the financial crisis during 2007 and 2008 is one of the worst financial crises. On the contrary, capital markets seemed to recovered in the year of 2013, e.g., the Dow Jones Industrial Average (DJIA) and the S&P 500 in the U.S. went up with record closes in 2013 (Watts, 2013), and the TAIEX<sup>2</sup> in Taiwan also rose in 11.85%. Accordingly, Table 1 and Table 2 present the data of 2008 and 2013, respectively. In particular, according to article 22 of the Regulations Governing Futures Commission Merchants, the TAIFEX regulates FCMs that any time the ANC amount is less than 20 percent of the total amount of customer margins required for the open positions of futures traders, the FCMs shall immediately report to the Securities and Futures Bureau (SFB) and the TAIFEX. Furthermore, any time the ANC amount is less than 15 percent of the total amount of customer margins required for the open positions of futures traders, the FCMs shall immediately cease accepting any orders from principals except for orders for disposal of the then-open positions, and shall submit an improvement plan to the SFB and the TAIFEX. In addition, whenever a FCM's ANC is less than 40 percent of the total amount of client margins required for the open positions of futures traders for three consecutive days, on the third day the FCM shall

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<sup>1</sup> The haircut means discount rate a specific asset. E.g., the haircut is 0.2% for the Taiwanese government bonds, 15% for the stocks listed on the Taiwan Stock Exchange (TWSE), and 60% for the long positions of options listed on the Taiwan Futures Exchange (TAIFEX), respectively.

<sup>2</sup> TAIEX is similar to the Standard & Poor's 500, weighted by the number of outstanding shares. TAIEX is the most widely quoted of all TWSE indices. The base year value as of 1966 was set at 100. TAIEX is adjusted in the event of new listing, de-listing and new shares offering to offset the influence on TAIEX owing to non-trading activities. TAIEX covers all of the listed stocks excluding preferred stocks, full-delivery stocks and newly listed stocks, which are listed for less than one calendar month.

provide a written report of the matter to the TAIFEX explaining the reason for the occurrence and provide the most recent data on its ANC.

To measure FCMs' financial performance, Table 3 presents monthly Earning Per Share (EPS) of each FCM in 2008 and 2013 in Panel A and Panel B, respectively.

### III. Questions and Discussion

1. Discuss whether FCMs have different strategies in capital adequacy management during crisis and recovery periods. Do the strategies make differences in profits of FCMs? (see e.g., Chang and Hung, 2012; Hung et al., 2013)
2. Discuss the influence of capital adequacy request from regulators on capital structure, in comparison with traditional finance theories (see e.g., Modigliani, 1988; Modigliani and Miller, 1958).

### References

- Chang, M. C. and J.-C. Hung, 2012, Can VaR Be Predictive for Regulation? Evidence from the Futures Industry in Taiwan, *Romanian Journal of Economic Forecasting*, 15, 147-162.
- Hung, J.-C., M. C. Chang, C.-M. Huang, and C.-L. Chiu, 2013, Financial Performance and Business Risk of Futures Commission Merchants: a Panel Threshold Regression Approach, *Journal of Futures and Options*, 6, 51-71.
- Modigliani, F., 1988, MM- Past, Present, and Future, *Journal of Economic Perspectives* 2, 149-158.
- Modigliani, F. and M. H. Miller, 1958, The Cost of Capital, Corporation Finance, and the Theory of Investment, *American Economic Review* 48, 261–297.
- Watt, William L., 2013, Stocks Ends 2013 with Bang; Dow Up Most Since '95. Available at: <http://www.marketwatch.com/story/us-stocks-rise-dow-set-to-end-2013-on-record-high-2013-12-31>.

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Appendix

Table 1: Equity/Debt, Current Assets/Current Liabilities, Equity/Net Value, and ANC ratios of FCMs, 2008

	FCM Code	F001	F002	F004	F005	F007	F008	F014	F018	F020	F021	F026	F029	F030
	Equity/Debt	55.04	10.66	3.85	14.64	4.9	5.81	17.38	7.37	5.73	5.56	12.2	7.5	15.85
Jan	Current Assets/Current Liabilities	1.14	1.13	1.12	1.51	1.16	1.15	1.28	1.18	1.1	1.14	1.21	1.14	1.3
	Equity/Net Value	360.63%	200.63%	147.12%	231.99%	185.10%	150.93%	144.71%	151.22%	172.24%	367.09%	580.55%	202.19%	96.48%
	ANC ratio	261.39%	66.81%	128.29%	521.82%	122.44%	128.62%	447.51%	180.62%	91.50%	119.31%	110.33%	147.11%	251.36%
	Equity/Debt	68.03	13.67	8.42	25.78	5.66	7.04	25.8	8.45	6.4	5.14	13.19	8.43	19.56
Feb	Current Assets/Current Liabilities	1.17	1.12	1.12	1.49	1.17	1.14	1.28	1.18	1.11	1.15	1.2	1.13	1.27
	Equity/Net Value	360.67%	202.43%	149.07%	232.39%	186.71%	151.56%	145.04%	151.82%	175.15%	372.55%	590.57%	202.98%	96.63%
	ANC ratio	627.95%	52.43%	99.04%	430.33%	104.97%	95.21%	403.56%	165.05%	92.40%	93.64%	166.40%	119.61%	250.02%
	Equity/Debt	55.68	9.98	5.37	16.96	5.06	6.08	20.06	8.12	6.31	6.12	13.7	6.72	15
Mar	Current Assets/Current Liabilities	1.16	1.12	1.09	1.46	1.16	1.14	1.26	1.17	1.1	1.15	1.18	1.13	1.23
	Equity/Net Value	361.29%	206.42%	152.25%	233.17%	190.89%	154.13%	145.85%	152.67%	180.09%	385.43%	587.35%	204.26%	97.06%
	ANC ratio	198.99%	49.59%	56.29%	340.63%	126.19%	86.95%	277.58%	145.97%	87.04%	67.72%	113.86%	111.26%	154.88%
	Equity/Debt	55.19	9.18	7.28	21.39	5.05	6.01	17.6	8.22	6.66	6.53	10.24	6.85	15.27
Apr	Current Assets/Current Liabilities	1.18	1.12	1.11	1.43	1.17	1.14	1.26	1.17	1.12	1.14	1.17	1.12	1.24
	Equity/Net Value	361.91%	209.72%	156.74%	233.78%	195.12%	155.69%	146.60%	153.92%	182.36%	390.77%	576.03%	205.83%	97.08%
	ANC ratio	186.03%	50.90%	54.40%	346.31%	133.88%	86.38%	267.56%	107.06%	114.30%	76.87%	108.73%	91.02%	178.32%
	Equity/Debt	54.4	8.39	6.28	19.6	4.57	6.09	15.97	8.61	3.29	6.4	10.07	7.44	15.02
May	Current Assets/Current Liabilities	1.18	1.12	1.09	1.42	1.17	1.14	1.28	1.18	1.1	1.15	1.22	1.12	1.25
	Equity/Net Value	362.59%	214.84%	159.16%	234.57%	189.60%	157.64%	147.28%	155.40%	163.21%	395.48%	581.06%	207.39%	97.30%
	ANC ratio	258.60%	49.39%	51.12%	261.95%	153.38%	85.13%	227.78%	110.13%	75.99%	104.04%	171.06%	80.78%	181.11%
	Equity/Debt	51.26	10.34	3.79	16.28	4.57	3.84	12.82	7.74	6.71	5.04	9.95	5.94	14.31

Table 1: Equity/Debt, Current Assets/Current Liabilities, Equity/Net Value, and ANC ratios of FCMs, 2008 (cont.)

Jun	Current Assets/Current Liabilities	1.14	1.15	1.1	1.5	1.16	1.14	1.29	1.19	1.1	1.14	1.25	1.13	1.27
	Equity/Net Value	364.79%	220.98%	160.70%	236.07%	195.95%	147.90%	144.61%	151.05%	166.70%	383.48%	581.19%	208.50%	97.50%
	ANC ratio	335.56%	86.15%	79.04%	450.92%	236.01%	113.28%	278.12%	133.27%	80.15%	125.08%	175.93%	107.38%	167.34%
	Equity/Debt	50.78	4.35	6.61	16.36	4.22	5.12	16.35	7.39	5.79	4.51	12.46	9.57	13.89
Jul	Current Assets/Current Liabilities	1.16	1.13	1.1	1.57	1.17	1.15	1.28	1.19	1.13	1.14	1.24	1.26	1.31
	Equity/Net Value	365.66%	202.03%	166.78%	236.91%	198.62%	148.89%	150.63%	152.62%	170.67%	391.46%	582.68%	298.68%	97.97%
	ANC ratio	821.44%	88.24%	60.74%	574.14%	259.12%	167.06%	324.71%	161.55%	144.73%	175.99%	157.53%	270.60%	387.33%
	Equity/Debt	53.11	9.12	6.61	16.16	5.8	5.36	14.64	7.51	6.28	5.69	12.4	9.7	10.3
Aug	Current Assets/Current Liabilities	1.16	1.14	1.11	1.53	1.18	1.16	1.3	1.19	1.14	1.15	1.24	1.25	1.21
	Equity/Net Value	366.40%	206.96%	169.10%	237.41%	201.04%	149.80%	151.30%	154.06%	173.17%	391.03%	584.01%	301.64%	109.06%
	ANC ratio	626.55%	82.53%	59.49%	567.73%	274.21%	168.78%	375.12%	223.92%	148.88%	215.52%	171.92%	259.25%	305.75%
	Equity/Debt	52.94	6.8	3.94	20.41	5.56	5.32	15.46	7.25	6.34	4.84	11.19	8.54	10.25
Sep	Current Assets/Current Liabilities	1.12	1.13	1.12	1.86	1.16	1.16	1.32	1.2	1.13	1.15	1.23	1.24	1.21
	Equity/Net Value	367.49%	204.36%	169.94%	313.31%	203.83%	151.06%	151.98%	155.35%	174.81%	346.63%	582.28%	305.30%	109.08%
	ANC ratio	140.61%	56.40%	71.19%	1006.40%	179.54%	200.65%	649.66%	179.24%	141.56%	174.03%	139.17%	241.42%	207.53%
	Equity/Debt	53.03	4.51	2.76	20.33	5.5	5.59	18.94	6.77	5.74	3.91	10.87	8.46	8.71
Oct	Current Assets/Current Liabilities	1.06	1.09	1.1	1.82	1.13	1.15	1.29	1.17	1.14	1.13	1.21	1.21	1.2
	Equity/Net Value	368.69%	215.86%	180.72%	313.84%	206.42%	153.17%	152.84%	156.62%	177.66%	359.85%	574.13%	306.90%	109.45%
	ANC ratio	70.74%	53.93%	96.51%	732.99%	131.29%	194.70%	542.73%	117.62%	147.73%	196.70%	167.40%	246.98%	414.95%
	Equity/Debt	55.15	4.2	5.53	17.67	5.16	5.6	17.55	6.82	6.75	4.34	10.52	8.24	7.96
Nov	Current Assets/Current Liabilities	1.11	1.1	1.12	1.8	1.13	1.15	1.2	1.21	1.13	1.15	1.21	1.21	1.19
	Equity/Net Value	113.55%	221.33%	184.71%	314.70%	209.99%	155.24%	153.71%	158.22%	180.56%	369.07%	577.14%	310.06%	110.07%
	ANC ratio	78.42%	78.42%	82.77%	713.39%	101.75%	166.79%	410.85%	208.69%	146.63%	202.09%	121.41%	220.38%	306.57%
	Equity/Debt	55.42	3.82	5.67	18.19	4.79	5.81	15.89	6.75	6.71	4.57	12.24	7.85	7.93
Dec	Current Assets/Current Liabilities	1.14	1.1	1.13	1.67	1.17	1.16	1.21	1.21	1.13	1.16	1.24	1.21	1.19
	Equity/Net Value	113.50%	212.15%	187.84%	105.08%	209.38%	157.46%	154.56%	159.66%	183.98%	376.62%	583.22%	311.05%	110.99%
	ANC ratio	168.37%	65.59%	110.78%	551.97%	110.23%	195.77%	262.48%	133.39%	133.44%	240.41%	150.84%	179.81%	228.38%

Table 2: Equity/Debt, Current Assets/Current Liabilities, Equity/Net Value, and ANC ratios of FCMs, 2013

	FCM Code	F001	F002	F004	F005	F007	F008	F014	F018	F020	F021	F026	F029	F030
	Equity/Debt	61.62	20.08	10.16	29.01	11.09	8.99	32.43	27.03	12.58	14.17	14.61	10.14	16.25
Jan	Current Assets/Current Liabilities	1.13	1.14	1.15	1.37	1.2	1.11	1.28	1.28	1.14	1.14	1.19	1.18	1.17
	Equity/Net Value	393.13%	236.53%	267.70%	109.56%	202.31%	185.18%	167.01%	211.98%	267.73%	565.73%	352.53%	137.23%	124.69%
	ANC ratio	185.23%	73.60%	111.70%	324.83%	270.76%	86.69%	296.91%	145.60%	141.63%	133.83%	146.34%	157.38%	162.86%
	Equity/Debt	64.33	8.73	12.43	39.34	14.07	12.3	50.63	33.26	16.09	18.21	17.21	13.4	21.49
Feb	Current Assets/Current Liabilities	1.13	1.12	1.15	1.37	1.2	1.11	1.28	1.27	1.14	1.14	1.2	1.18	1.18
	Equity/Net Value	393.59%	236.53%	265.34%	109.45%	202.89%	186.16%	167.02%	211.84%	268.30%	567.47%	354.38%	137.48%	124.79%
	ANC ratio	222.32%	65.37%	132.69%	332.86%	275.70%	157.09%	340.26%	183.60%	142.14%	139.36%	157.47%	150.90%	171.46%
	Equity/Debt	55.73	7.59	13.55	36.7	14.74	11.31	42.6	25.96	13.49	16.32	16.87	14.28	18.22
Mar	Current Assets/Current Liabilities	1.1	1.13	1.15	1.37	1.2	1.11	1.27	1.27	1.15	1.15	1.19	1.18	1.17
	Equity/Net Value	394.84%	238.98%	267.01%	109.67%	203.88%	187.22%	167.33%	214.85%	270.67%	570.29%	355.82%	138.19%	125.16%
	ANC ratio	190.49%	63.35%	111.70%	338.14%	242.89%	126.10%	238.45%	149.77%	123.38%	152.23%	150.36%	132.59%	159.67%
	Equity/Debt	48.38	7.05	9.67	37.08	14.24	9.84	39.53	24.86	11.91	15.4	10.27	13.19	17.34
Apr	Current Assets/Current Liabilities	1.11	1.13	1.15	1.38	1.21	1.12	1.28	1.3	1.16	1.15	1.18	1.14	1.18
	Equity/Net Value	396.08%	240.92%	269.20%	110.21%	204.64%	188.61%	167.79%	215.61%	273.98%	582.83%	344.89%	138.81%	122.41%
	ANC ratio	155.44%	93.10%	89.38%	277.48%	245.95%	95.63%	243.00%	180.85%	124.49%	125.67%	106.67%	78.88%	107.55%
	Equity/Debt	43.29	7.69	7.85	34.44	13.76	10.2	36.59	30.66	12.36	7.69	10.06	11.59	17.45
May	Current Assets/Current Liabilities	1.11	1.13	1.15	1.4	1.22	1.12	1.29	1.29	1.16	1.14	1.18	1.15	1.18
	Equity/Net Value	397.45%	244.27%	272.14%	110.88%	205.30%	190.84%	168.35%	217.05%	280.14%	554.09%	346.45%	139.80%	122.77%
	ANC ratio	174.80%	95.88%	92.52%	281.83%	246.11%	109.31%	277.70%	170.29%	141.79%	132.79%	150.77%	64.51%	106.73%
	Equity/Debt	18.04	7.03	10.17	31.14	7.74	5.71	37.33	26.68	8.17	13.77	10.07	11	19.81
Jun	Current Assets/Current Liabilities	1.11	1.11	1.18	1.38	1.2	1.11	1.26	1.3	1.15	1.14	1.18	1.15	1.15
	Equity/Net Value	392.07%	224.80%	375.51%	110.28%	197.05%	183.43%	129.43%	217.57%	272.00%	561.14%	349.06%	140.33%	123.44%
	ANC ratio	175.15%	88.69%	134.14%	308.06%	262.33%	101.92%	270.68%	209.87%	152.33%	156.76%	180.81%	76.52%	110.32%
	Equity/Debt	39.13	6.68	10.93	28.03	7.48	5.67	32.56	25.51	7.3	9.21	14.63	10.24	15.74

Table 2: Equity/Debt, Current Assets/Current Liabilities, Equity/Net Value, and ANC ratios of FCMs, 2013 (cont.)

Jul	Current Assets/Current Liabilities	1.11	1.11	1.19	1.36	1.21	1.11	1.27	1.31	1.15	1.14	1.19	1.17	1.14
	Equity/Net Value	393.86%	225.68%	379.55%	110.83%	198.15%	185.30%	130.00%	218.41%	276.73%	567.24%	346.90%	141.46%	123.76%
	ANC ratio	89.49%	79.69%	132.07%	294.33%	277.74%	105.71%	286.62%	205.69%	146.28%	117.12%	150.65%	156.04%	78.13%
	Equity/Debt	33.89	6.65	10.69	28.57	13.27	9.56	32.95	25.66	7.68	13.73	13.96	10.28	19.29
Aug	Current Assets/Current Liabilities	1.11	1.11	1.2	1.37	1.21	1.11	1.26	1.31	1.15	1.14	1.18	1.16	1.14
	Equity/Net Value	395.34%	228.82%	380.37%	111.57%	199.19%	186.43%	168.03%	219.05%	279.82%	573.17%	345.17%	142.59%	124.03%
	ANC ratio	148.21%	73.70%	132.71%	277.72%	270.33%	123.76%	256.99%	224.51%	127.42%	139.02%	143.99%	77.88%	105.52%
	Equity/Debt	44.17	7.49	16.27	26.99	13.65	9.57	38.45	27	14.96	14.88	17.59	11.25	23.89
Sep	Current Assets/Current Liabilities	1.11	1.11	1.2	1.38	1.21	1.12	1.26	1.33	1.16	1.15	1.18	1.15	1.15
	Equity/Net Value	457.42%	230.73%	384.40%	112.16%	199.96%	187.07%	168.26%	219.80%	281.48%	576.39%	346.51%	143.20%	124.07%
	ANC ratio	149.15%	56.02%	136.64%	336.51%	275.30%	122.27%	251.06%	219.32%	148.22%	141.20%	189.15%	67.90%	107.76%
	Equity/Debt	41.05	7.34	14.38	26.36	13.04	10.48	37.19	26.77	15.06	14.1	15.8	10.42	20.01
Oct	Current Assets/Current Liabilities	1.1	1.12	1.2	1.4	1.22	1.12	1.26	1.32	1.16	1.15	1.19	1.18	1.16
	Equity/Net Value	459.80%	232.09%	386.36%	112.58%	200.75%	188.19%	168.37%	220.05%	284.14%	580.38%	346.21%	143.91%	124.19%
	ANC ratio	81.96%	52.77%	113.34%	274.15%	238.81%	141.56%	195.38%	219.87%	121.56%	133.74%	159.63%	113.97%	94.17%
	Equity/Debt	38.96	6.68	13.4	27.49	12.99	10.08	36.96	25.84	13.65	14.05	15.6	10.05	19.08
Nov	Current Assets/Current Liabilities	1.1	1.11	1.2	1.4	1.24	1.12	1.26	1.31	1.16	1.16	1.19	1.17	1.17
	Equity/Net Value	459.31%	233.41%	388.04%	112.81%	201.76%	189.57%	168.57%	220.76%	289.01%	591.03%	346.29%	144.67%	124.64%
	ANC ratio	85.85%	46.48%	111.09%	279.31%	208.36%	114.62%	217.83%	191.73%	131.54%	146.16%	165.15%	86.68%	107.65%
	Equity/Debt	48.99	6.17	2.06	28.29	14.93	10.16	38.25	28.03	14.03	18.03	11.92	9.94	18.2
Dec	Current Assets/Current Liabilities	1.11	1.12	1.13	1.39	1.25	1.13	1.26	1.32	1.16	1.17	1.18	1.14	1.19
	Equity/Net Value	494.12%	235.21%	279.92%	114.37%	206.97%	190.52%	168.81%	221.70%	291.59%	596.18%	343.61%	145.36%	126.64%
	ANC ratio	96.91%	52.59%	73.73%	252.00%	223.35%	110.13%	210.35%	180.58%	133.77%	149.55%	122.14%	59.56%	137.36%

Table 3: EPS of FCMs, TWD/Share

Panel A. 2008												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
F001	0.04	0.00	0.03	0.03	0.03	0.09	0.04	0.03	0.05	0.05	0.02	-0.01
F002	0.24	0.23	0.40	0.43	0.50	0.55	0.53	0.44	0.09	1.24	0.60	0.36
F004	0.23	0.22	0.15	0.41	0.21	0.21	0.44	0.22	0.11	0.83	0.37	0.24
F005	0.07	0.02	0.05	0.04	0.04	0.09	0.05	0.05	0.04	0.03	0.04	0.02
F007	0.64	0.20	0.49	0.48	0.42	0.63	0.30	0.26	0.31	0.32	0.41	0.04
F008	0.31	0.11	0.31	0.21	0.24	0.22	0.17	0.14	0.17	0.25	0.27	0.30
F014	0.09	0.03	0.09	0.08	0.07	0.11	0.08	0.07	0.07	0.09	0.09	0.09
F018	0.02	0.08	0.13	0.15	0.19	0.17	0.19	0.18	0.15	0.16	0.20	0.18
F020	0.67	0.36	0.61	0.33	0.33	0.38	0.49	0.33	0.27	0.38	0.41	0.47
F021	0.37	0.37	0.67	0.38	0.37	0.50	0.50	0.54	0.65	1.01	0.70	0.46
F026	0.09	0.02	0.08	0.09	0.09	0.10	0.10	0.07	0.04	0.06	0.06	0.05
F029	0.17	0.07	0.12	0.12	0.14	0.10	0.08	0.10	0.16	0.10	0.16	0.06
F030	0.11	-0.01	0.05	0.00	0.04	0.04	0.07	0.08	0.03	0.05	0.09	0.13
Panel B. 2013												
F001	0.04	0.03	0.05	0.05	0.05	0.16	0.06	0.09	0.05	0.02	0.02	0.02
F002	0.30	0.24	0.25	0.23	0.32	0.14	0.22	0.36	0.20	0.19	0.18	0.21
F004	0.12	-0.03	0.10	0.17	0.15	0.37	0.24	0.09	0.22	0.12	0.06	-0.01
F005	0.00	-0.01	0.03	0.06	0.07	-0.05	0.06	0.09	0.08	0.05	0.03	0.16
F007	0.15	0.07	0.13	0.09	0.09	0.23	0.13	0.13	0.09	0.09	0.12	0.53
F008	0.19	0.11	0.12	0.16	0.24	0.31	0.21	0.12	0.07	0.13	0.15	0.14
F014	0.05	-0.01	0.03	0.04	0.05	0.17	0.07	0.04	0.02	0.01	0.02	0.02
F018	0.10	-0.01	0.32	0.09	0.14	0.15	0.10	0.09	0.07	0.04	0.07	0.10
F020	0.35	0.05	0.20	0.26	0.45	0.21	0.40	0.27	0.11	0.24	0.32	0.24
F021	0.26	0.12	0.18	0.32	0.32	0.39	0.34	0.31	0.15	0.22	0.48	0.26
F026	0.08	0.00	0.03	0.05	0.08	0.08	0.20	0.19	0.14	0.08	0.04	-0.13
F029	0.10	0.03	0.08	0.07	0.11	0.12	0.12	0.11	0.07	0.08	0.08	0.07
F030	0.06	0.01	0.04	0.03	0.04	0.07	0.04	0.03	0.01	0.02	0.01	0.24