International Journal of China Studies
Vol. 1, No. 2, October 2010, pp. 371-389

Gangs in the Markets: Network-based Cognition in China's Futures Industry

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Abstract

Gangs in traditional Chinese society often arise from the lower social strata, where wealth, social status and kinship are inadequate to protect people from hostile or adverse environments. It is intriguing that modern futures investors in China, as owners of capital, would form a social structure that partially resembles the marginal groups of society. This paper portrays different social connectivity within the investor community of China's commodity futures markets, including organized battle team, proximity cliques, capital factions based on geographical or industrial affiliations, and charismatic leaders. It also explores how a capital faction's leadership, origins of capital and geographical location helps to shape some of its investment style and risk-taking characteristics. Based on empirical ethnographic fieldwork in 2005 and documentary research on China's futures markets, the author argues that the textbook definitions of "hedgers", "speculators", "rational individuals" and "price discovery" are far from adequate to represent China's markets. In reality the markets are made up by flexible socioeconomic aggregates continually interacting with each other, whose characteristics are shaped by social connectivity and background affiliation. Price movements are a collective result of the purposeful actions of the market people themselves, not some latent information waiting to be "discovered" outside the human world.

Keywords: *commodity futures, gangs, proximity cliques, corner, capital factions, China*

1. Introduction

In the past two decades, terms employed in behavioural finance often circulate into our everyday market news: herding, booms and busts, overshoot, noise, market synchronization. Economists have developed elaborate quantitative models to describe such phenomena, but the phenomena are often treated as "anomalies" against a perfect market made up of rational, individualistic

actors (De Bondt and Thaler, 1985; Shiller, 2000; Shefrin, 2000; Bikhchandani and Sharma, 2000). From a perspective from economic sociology, the author does not make any distinctions between what the markets "should be" and what are "anomalies". As an ethnographer in China's commodity futures markets, the researcher simply records and portrays the social connectivity within the investor community, trying to explore the properties of connectivity and synchronization. This paper is based on fieldwork data which illustrates how futures investors form flexible social aggregates in various shapes and forms. The market structures are built upon existing social relationships, remain in continuous flux, and are deeply embedded within political, economic, geographical, professional and kinship affiliations (Granovetter, 1992). Connectivity and embeddedness matter, because they determine one's position and social capital (Bourdieu, 1977) in the markets; they also contribute to the overall pattern of market price movements (Baker, 1984). Conversely, the markets confer new meanings to existing social relationships, solidifying some ties and antagonizing others.

This paper will start from a contextual background introduction to China's futures markets, and a brief description of the methods employed. Then it will give an account of corner events in the short but rocky history of China's commodity futures markets. The characteristics of compact "battle teams", larger capital factions and charismatic leaders will be discussed. The paper closes with a discussion on how the actual connectivity in the investor community differs from textbook definitions, and the subsequent implications for China's markets.

The stronger forms of social connectivity can sometimes be seen as associated with market collusion. Understandably, only on rare occasions would field subjects be willing to talk about their own experience in this area. However, rich sources of indirect evidence such as narrations about other people, events recalled from a long time ago, media reports, and "documentary novels" written by industry practitioners are available from the field. Such field evidence shows that capital factions are an active form of social structure in the markets running upon network-based rationality, especially in the 1990s. Interestingly, they also reveal characteristics that resemble a much older social structure called *bang* 幫 (gangs), as described by Fei (1948: 176) and Zhang (2001b: 105-107).

2. Contextual Background: Futures Frenzy, Corner Events, and Stringent Regulation

A future contract is a standardized contract to buy or sell an asset at a pre-agreed price in a pre-agreed time in the future. The underlying asset can be a commodity (such as agricultural products, metals, or energy products) or a

financial asset (such as bonds or currency exchange rates). It is issued by a futures exchange, which has specified the terms of the standardized contract. Standardized futures trading in the People's Republic of China did not start until 1992.[1] At first the State Council tried to introduce a commodity markets system with a circulation and pricing mechanism, aiming at the gradual elimination of the dual-track pricing system (*jiage shuangguizhi* 價格雙軌制). The first official pilot site was in Zhengzhou which was located in China's wheat belt, but dozens of provincial and municipal governments quickly jumped onto the bandwagon to establish their own futures exchanges. Before the central government could clarify whether commodity futures markets were capitalist or socialist and how regulation was going to be administered, by mid 1994 the number of futures exchanges established throughout China was estimated to be over 60 (Yao, 1998: 112). More than 50 commodity futures products were traded, including perishable and small-scaled products from "beans to beer, T-bills to pork bellies" (Yao, 1998: 113).

The state tried to impose some regulatory measures in 1993-94, and the number of futures exchanges was downsized to fifteen in 1994. However, that could not prevent frequent corner events (the control of a significant proportion of a particular commodity, and manipulation of its price movements to obtain abnormal profits) from taking place. The new derivative markets were used as a battlefield between various capital factions backed by state and regional political power units, leading to clashes between political groups, and inappropriate use of public funds. The most spectacular episode was "Event 327" in 1995, which concerns the futures contracts No. 327, whose underlying asset was a Chinese Treasury bond issued in 1992. One capital faction affiliated to the Shanghai municipal government was betting a short (declining) market on contract No. 327, whilst capital factions affiliated to the Ministry of Finance and Liaoning provincial powers held long (rising) positions. In order to revert a loss position, on 23rd February 1995 within the last 8 trading minutes, the Shanghai company SISCO (short side) shorted bond futures which was worth 1,460 billion yuan (another version says 211 billion yuan), equivalent to one-third of China's GDP in 1994. Afterwards regulators decided to roll back all the trades made in the last 7.5 minutes of that trading day, raise the coupon payout rate of the relevant T-bond, and the chief leader of the short faction went to jail for apparently irrelevant corruption charges. Both sides were alleged by critics to be involved with insider trading (with information concerning new bond issuance) and inappropriate use of public funds. It was believed by market practitioners that rat trading (a dishonest practice to transfer profits from a public trading account to a private account) was also involved on the long side (Yuan, 2002; Yao, 1998: 103-106; Neftci and Menager-Xu, 2006: 250-254; Zhang, 2001a; Li, 2004; Wu, 2006; Suen *et al*., 2005: 80-81).

A series of stringent regulatory restructuring follows in a few months' time. A new China Securities Regulatory Commission (CSRC) was formed, and financial futures (bonds, currencies, indices) were altogether wiped out. In 1996 the State Council and the CSRC tightened the use of public funds from state-owned enterprises on futures markets to commodities related to core business only, and banks were strictly prohibited from futures trading, further shunning the sources of capital flowing into the futures markets. In 1998 the existing 14 futures exchanges were further consolidated down to three: Shanghai, Dalian and Zhengzhou. The number of tradable futures products went from 35 to 12. In 1999-2000 new measures were announced to regulate the licensing and auditing of futures brokerage firms; practitioners were required to take professional qualifying exams. The futures industry met its lowest point in 2000, with annual trading volume in the 2000 billion yuan range (double sided accounting), which was less than one-third that of 1995.

Since 2004 the CSRC slowly loosens its grip in an extremely prudent manner. Since 2004 new futures products have been approved for the three commodity exchanges. By the end of 2009 the three commodity futures exchanges are trading 23 products, with a total 2009 annual turnover of 1.08 billion contracts, or 65.3 trillion yuan (both by single-sided accounting). Shanghai is trading futures of gold, steel wire rod, steel rebar, copper, aluminium, zinc, natural rubber, and fuel oil; Dalian is trading futures of corn, soybean (2 contracts), soymeal, soy oil, LLDPE, palm oil, and PVC; Zhengzhou is trading futures of white sugar, cotton, early rice, wheat (2 contracts), PTA, and rapeseed oil. However, all these commodity futures are non-financial products in agriculture, energy, metals, and plastics. In 2008 out of 17.65 billion futures and options contracts traded in 69 exchanges over the world, nearly 90 per cent are financial futures and options (currencies, bonds, interest rates, indices), which hardly exist in China. In December 2007, a new China Financial Futures Exchange (CFFEX) is soft-launched in Shanghai to explore financial futures trading, and its first product CSI 300 index futures becomes fully operational on 16th April 2010.

3. Methods

This paper is revised from part of the author's PhD thesis. The fieldwork includes a one-month internship in a commodity futures exchange, a ten-week internship in a futures brokerage firm, participant observation in four industry training courses and three industry conferences, and 33 semi-structured interviews. The fieldwork is conducted in May-December 2005 in the futures industry of China. The primary fieldwork locations are Beijing 北京, plus two out of the three cities with futures exchanges in China: Shanghai 上海, Dalian 大連 and Zhengzhou 鄭州. Some interviews and conferences also take place in

Tianjin 天津, Shenzhen 深圳 and Hong Kong 香港. Fieldwork access is first obtained from attending industry conferences, and further access is obtained by gaining the trust of gatekeepers and snowballing. A methodology precaution should be stated here: there is a time gap of 7-11 years between my actual fieldwork (2005) and the period when *dahu* 大戶 collusion was at its peak (1994-98). I have never witnessed a corner event on-site, and it is extremely difficult to find someone willing to admit and describe their own participation in collusion and corners. The field data in this paper is combined from the retrospective account of field subjects, as well as from archival data. To protect certain field subjects, some personal and company particulars have been altered, and the names of futures exchanges are presented as P, Q and R.

4. Corner Events

In 2005, China's futures industry is under tight regulatory control in response to a series of alleged market manipulation and collusion in the 1990s. In the markets sometimes people gossip about collusion and market manipulation by big players (*dahu* 大戶). Those futures people with working experience in the 1990s can readily recall dramatic corner (*bicang* 逼倉) events on various exchanges, and they consider corner events as a core feature of China's futures markets at that time.

"Cornering the market", in its classical sense, means buying up a significant amount of a commodity futures contract and/or controlling the spot supply to inflate the price. The cornering party will then settle their long position futures contract, and/or sell off the spot stock at high price for profits. Classical examples in the US include the Great Salad Oil Swindle of soy oil by Tino De Angelis in 1962, the attempted corner of the silver market by Nelson Bunker Hunt and Herbert Hunt in 1980, and the British energy firm BP being accused of attempting to corner the US propane market in 2004. It is also possible to initiate market corner events from the short side, where the incident is called a bear raid. A party can build up vast short futures positions, create a sudden surge of spot supply to push prices down, and then reap profits from their short positions (Xu, 2004: 27-30).

There are a number of historical review articles circulating on the Internet on major corner events during the 1990s, such as Deng, Huang, Wang and Xu (2001). The major events, alongside with a couple of corner events mentioned by my interviewees, are listed in Table 1. Cornering is never a phenomenon unique to Chinese markets, but its frequency of occurrence in the 1990s was alarmingly high – notice that Table 1 is not an exhaustive list. The local terminology often refers to corners as "risk events" (*fengxian shijian* 風險事件). Such a polite synonym masks the intentional human actions less visible. Regulators in China often openly condemn cornering, or *bicang*, as violating

Table 1 Incidents of Corner Events in China's Futures Markets

Time	Product/Futures Contracts	Exchange	Remarks
2004	Natural rubber 0407	Shanghai Futures Exchange (SHFE)	Corner
Oct 98 – Jan 99	Mung bean 9903, 9905, 9907	Zhengzhou Commodity Exchange	Corner
Summer 1997	Natural rubber R708	China Commodity Futures Exchange, Inc of Hainan (CCFE)	Corner
1996-1997	Coffee F605, F607, F609, F703	China Commodity Futures Exchange, Inc of Hainan (CCFE)	Corner
Jun 1996	Plywood 9607	Shanghai Futures Exchange (SHFE)	Corner Settlement on negotiated price
Jan-Mar 1996	Red bean	Suzhou Commodity Exchange	Corner
Oct-Nov 1995	Soymeal 9601, 9607, 9708	Guangdong United Futures Exchange (GUFE)	Corner
Oct 1995	Sticky rice 9511	Guangdong United Futures Exchange (GUFE)	Corner
May-Jun 1995	Red bean 507	Tianjin Commodity Exchange	Corner
1995	3-year T-bond 314, 327	Shanghai Securities Exchange (SHSE)	Corner (short) Insider trading (long)
Mar 1995	Palm Oil M506	China Commodity Futures Exchange, Inc of Hainan (CCFE)	Corner (short)
1995	Corn C511	Dalian Commodity Exchange (DCE)	Futures inflation derailed from spot
1994-1995	Steel wire	Suzhou Commodity Exchange	Corner
Jul-Oct 1994	Japonica rice	Shanghai Food and Oil Exchange	Corner

Sources: Deng, Huang, Wang and Xu (2001), "China Futures Risk Review Series", 13th October 2001, *hexun.com*; plus 3 interviews with brokers and analysts.

the public good of the markets. Yet in a pragmatic light, the industry sees corners as a form of recurring systemic risk that needs to be managed and addressed to. Domestic economic researchers even try to build mathematical models on these corner events based on game theory and information asymmetry (see Zhang, Tien and He, 2001). Why did China's futures markets have a high rate of corner events in the 1990s? It was true that by then the domestic regulatory body was too inexperienced to prevent corner actions effectively. Yet the formation of corners shows interesting inherent properties of the markets.

5. Organized Battle Teams

During my fieldwork, veteran trader W is the only person who is willing to talk about his participation in a trading team that took part in corners. Once he puts me on the rear end of his bicycle, and gives me a ride pedaling through his city. He then walks me through a three-star hotel. In a nostalgic mood, he recalls his life there as part of a trading team in the late 1990s. He verifies the existence of futures trading teams in concealed hotel rooms:

> "Look, this is room 319 where I have lived for one full year … Three adjacent rooms were rented to us on quarterly basis, and all the hotel staff could recognize us. We moved our computers in, and there was no phone in the rooms. This is the lounge, where we used to sip drinks in the evenings after an intense trading day … We had a dozen of people working here. In the name of XXX (a futures brokerage company), we were trading on behalf of the provincial and municipal food and oils sector. Most of the time we went [for the] short [position]. "

His experience is a strong form of deliberate market intervention, where corner plans are executed by a single organized team. The group has quasi-military properties. There is a hierarchical structure and lines of command; the team leaders' personal qualities of calmness and charisma are cherished. The traders have some form of division of labour, such as having different traders responsible for the contracts with different expiry dates, or having different traders responsible for longs and shorts. In order to get around the regulatory constraints of position limits, they have to *fencang* 分倉 – divide and disguise their funds and trading orders under different accounts, brokerage firms and trading seats. Yet as a "battle team", they are sitting within close reach of each other, so as to maintain closely integrated cooperation.

Before initiating a corner, usually the team has to prepare all the funds and reserves they need, and draw up a "battle plan". Their strategies employed include *duobikong* 多逼空, *kongbiduo* 空逼多 and *ruanbicang* 軟逼倉, depending on whether they are going for long or short, whether they were mobilizing spot commodities, the pace they want to go, and the financial

strength of their opponent camp – if that piece of knowledge can be estimated. Since the price of a particular futures contract can only go up or down, the corner team sees a price as a war-zone frontier, where the long and short camps are engaged in a fierce struggle of strategy, will, financial strength and teamwork. Prices can be "pulled up" (拉上來) or "shot down" (打下去).

In a half-documentary, half-fiction novel on China's futures markets in the 1990s, Liu and Yan wrote about how a battle team planned to manipulate mung bean futures in Zhengzhou:

> The plan quickly materializes. They will use part of the funds to support the prices of 1994 January, March and May contracts, prevent them from falling any further. They use most of the funds to operate on the November contract. The plan will operate in two phases. Phase one: quiet position build-up at the bottom price ranges; phase two: launch a sudden attack, ambush upwards on the November contract, until those who hold the November shorts collapse.
>
> … 10th September, the plan is fully launched. 'B, 11D, 20, 23200, Open!'[2] [The team leader] issues standardized instructions to red jackets on the trading floor. 'Done? Good, continue. B, 11D, 20, 23160, Open!' The price is still sliding, good, nobody notice. 'B, 11D, 20, 23000, open!'
>
> Liu and Yan (1999: 77-78), translation by Lucia Siu

The compact size and nimble flexibility of these trading teams can be compared with hedge funds in global markets. Given the limited number and categories of financial tools available in the domestic markets, the portfolios of these *dahu* teams are unimpressively simplistic. Nonetheless, their battle plans can be shrewd and complicated, and they have the additional advantage of *guanxi* 關系 networks to influence political decisions, as well as to control the supply and distribution of the spot commodity. For example, in "event 327" in 1995, the long side was accused of insider trading, in which they decipher the Finance Ministry's intent to raise the coupon payout rate of a 3-year State treasury bond. As another example, in 1994 one trading team exercised a bear raid on steel wire futures in the Suzhou Commodity Exchange (蘇州商品交易所). Through social and political ties, the team was able to mobilize state-owed factories in the region to operate in full-swing productivity, flooding the designated delivery warehouses with an unexpected level of spot supply in a surprise ambush.[3] In some futures contracts where the total market capital was low enough, these *dahu* trading teams in the 1990s were able to shape the pattern of price movements to reap windfall profits.

6. Capital Factions and Proximity Cliques

Organized battle teams are structures on a micro level. On a meso level, market movements are often comprehended in terms of "capital factions" (*zijin paixi* 資金派系). In times of volatile market movements, it is common

for the industry discourse to identify who the "main force" (*zhuli* 主力) behind the longs (*duotou* 多頭) and the shorts (*kongtou* 空頭) were. These capital factions can be identified by geographical locations, such as Sichuan faction (川系), Zhejiang *bang* (浙江幫), Shanghai faction (滬系), or Henan province (河南省); by state-owed industry enterprises, such as food and oils, animal feed, or nonferrous metals; or, by the brand names of powerful organizations, like CEDTIC[4] (owned by the Ministry of Finance) and SISCO[5] (the showcase of Shanghai's municipal financial strength in the mid 1990s). During the 1990s, capital factions used to carry strong tones of regionalism or personal heroism, and they clashed violently in the futures markets, especially during corner events.[6] By looking at the list of "most active" trading seats, announced by the exchanges for each futures product at the end of each trading day, experienced traders and brokers usually knew which capital factions were active.

These factions show some characteristics of proximity cliques, as described under the framework of social network analysis (for example, see Scott, 2000: 114-120, and Burt, 1995, 2005). Agents from the same geographical location or within the same industry in the same faction tend to stay in frequent contact with each other. They have mutual common contacts, share overlapping information sources, and create a mini social environment that tend to produce similar viewpoints. Such informal structures can be recognized by the high density of social connections within a local subnet. Sometimes cliques also show features of centrality, as the capital factions are aligned around charismatic leaders.

Jingmou Li, the founding director of Zhengzhou Commodity Exchange, was quoted by Liu and Yan (1999). His words can be understood in the light of the aggregation of proximity cliques and consensus:

> "Take the example of the collusion between *dahu*s. We hear rumours all the time, but it is difficult to find evidence … These people are all old friends, old alumni and old colleagues, and they are just getting together for a meal. You cannot set up a trading rule that prohibits futures people from seeing each other. You cannot forbid them from talking about market trends, or sharing their trading experience. But very often consensus is achieved in these 'talks' and 'sharing'. Do not underestimate the issue of collusion. It is a characteristic feature of our futures markets."
>
> Liu and Yan (1999: 141), translation by Lucia Siu

A broker in Beijing describes to me in an interview:

> It is difficult for any *dahu* to control the price of a futures product on long-term basis, but it is possible to do it on small products for short periods of time. In the 1990s, we had witnessed fierce manipulation on small products such as coffee and cocoa. Prices could rise to the market-halt limit for 7-8

consecutive days; fall to the market-halt limit for another consecutive 7-8 days; then rise to the market-halt limit for another 7-8 trading days again. No matter how you trade, once you step into these markets you're doomed.

7. Price Discovery?

I have attended 4-5 beginners' futures training workshops in China; all of them start with textbook definitions of what hedgers and speculators are. Hedgers are described as spot traders who try to avoid the risks of price fluctuations; speculators are opportunistic investors who try to gain from price fluctuations. The purpose of futures markets, according to my workshop instructors, is to serve as a tool for price discovery and risk management. Risks are supposed to be transferred from hedgers to speculators.

The markets in reality are far from such an innocent picture. Field subjects keep telling me that real hedgers hardly ever exist in China. Whether traders come from spot-trading enterprises or cash-based investment companies, whether they go for long or short positions, nearly all futures traders in China are opportunistic risks seekers. When traders are asked to describe their own actions, nobody ever describe themselves as being hedgers or speculators, nor do they perceive themselves as conducting "transfer of risks". Instead, they describe themselves as "longs" or "shorts", who are exercising "game theory" (*boyi* 博弈)[7] against other capital factions on the markets. It is other factions' actions that have immediate, direct impact on prices. On the other hand, fundamentals, "intrinsic price" or "rational price" are something that they would consider on the long-run, but such considerations are quite often treated as secondary references, or nearly ignored by day traders. (See also Siu, 2002, on fundamentals and market perception during Hong Kong's dotcom bubble.)

From time to time, the three Chinese futures exchanges promote "price discovery" (*faxian jiage* 發現價格) as a positive, justifying function of futures markets. They also use the argument to lobby regulators for launching new futures products (as I have seen on a lobbying document prepared by exchange Q in 2005). However, market traders and analysts sometimes make ironic mockeries about the phrase's implied passivity and objectivity. Mockery is made by those who are about to initiate a battle plan, "I am going to 'discover' the price at XXX." Or, after violent corner events, traders make sarcastic comments, "Look, the market has 'discovered' the price at XXX!" Although traders do not use any terminology of epistemology, they are the people keeping a close eye on prices on an hourly basis. These traders are aware that price movements are a collective result of the purposeful actions of the market people themselves, not some latent information waiting to be "discovered" outside the human world.

One of the significant differences between futures markets and equity markets is: as futures-trading does not create net economic value in the future products, it is a zero-sum game. The profits of the winners, plus the commission fees received by the exchanges, all directly come from the loss of the losers. (Whereas in the equity markets, it is possible for everyone to gain profits at the same time if there is a net growth in fundamental values of the underlying companies.) Traders understand that to obtain X yuan of profits from their own position, somebody on the opposite position has to lose X yuan, plus the commission fees for both sides. It is a fierce and competitive game. In practice, usually the traders use a language with battlefield metaphors, such as "ambush" (突襲), "entice" (誘敵), "trapped" (套牢), "besiege" (圍) and "crash" (砸). Especially when they talk about the 1990s when the leaders of the long and short factions can be clearly identified, traders perceive themselves as being engaged in a battle with a recognizable collective opponent. When the market develops into a corner event, both sides are pushing the same price in opposite directions. Just like a tug of war, if one side fails to sustain the capital, *guanxi* and will power to match one's opponent, prices can swing to extreme levels in a single direction, allowing the remaining side to reap the profits.

On the futures training workshops that I have attended, some instructors talk about a "war-like mentality" and "psychological quality" as essential to the success of futures trading. Interestingly, I have also come across a large number of veteran soldiers from the People's Liberation Army (PLA) who have newly switched to full-time or amateur futures trading. In a few cases, I have the rough impression that these people often do better than the average novices in simulation trading sessions. Although my sample set is too small to draw any statistically significant conclusion, it is possible that those personnel redundant from the military are used to high-risk, war-like environments, which enable them to fit in easily into commodity futures trading. It is also possible that these redundant soldiers are on the verge of falling into marginal social classes; as they have less at risk, they may be more inclined to undertake high-risk investment activities.

8. Spot and Spotless Factions

From the 1990s onwards and persisting into 2005 when I am doing the fieldwork, spot-trading factions do differ from those with non-spot backgrounds. According to some traders and brokers, spot-trading factions are usually state enterprises in charge of national or provincial grain and metal supply. They have large quantities of the spot commodity at hand, and they go for short positions more often than long ones. When prices fall, they can close out their positions and reap cash; when prices rise, they can still

opt for physical delivery, and the loss is less conspicuous. Sometimes these state enterprises are given the nickname "short forces" (*kongjun* 空軍, which rhymed with "air forces"). They have the following properties: firstly due to their large scale of inventory and turnover, their futures trading volumes can reach bulk levels, making them the inherent *dahu* of grain and metal futures. Secondly, due to their geographical proximity to production areas (e.g. soybean in the northeast provinces, wheat in Henan province, or white sugar in Guangxi province) and regular presence in spot trading business, they have good connections with regional state officials.[8] Thirdly, they are loyal and regular traders on the relevant futures exchange(s). Fourthly, as large state enterprises, getting loans from state-owed banks is comparatively easier. These traders are less sensitive to interest rates. Fifth, as "hedgers" in principle, they occupy a moral high ground versus the "speculators". Differential treatment between "hedgers" and "speculators" can be located in a draft set of trading rules for a "coming-soon" future product designed by exchange Q. In case if the exchange takes actions to reduce overall market risks in a corner event, those classified as "hedgers" will face a gentler margin increase. In the case of compulsory position close-outs, those classified as speculators are usually targeted first, while those classified as hedgers usually stand at the back of the close-out sequence.

On the other end of the markets, the spot-less factions are much more fragmented. Most overseas financial institutions and domestic banks are banned from China's futures markets.[9] Private-sector investment organizations are yet to be developed, and domestic mutual funds, pension funds or insurance companies are underdeveloped. Some leading futures companies in first-tier cities such as Shanghai or Beijing are starting to launch primitive forms of mutual funds as innovative, experimental products, yet futures brokers describe their presence in the commodity futures markets as "negligible". The typical long factions are people who manage to accumulate some wealth from the stock markets, real estates, and a mixture of civilian and para-governmental sources. These are people who have cash in hand but not the spot commodities. A frequently way of thinking from this camp is, "there is always more money than spot" (錢永遠比貨多). Some newcomers on the futures markets may also have "habits of thinking" (*guanxing siwei* 慣性思維) such as "buy-and-hold" inherited from the stock markets.

The typical long factions have the following properties: firstly, many of these "investment funds" are loosely formed between a few friends (*jige dakuan couhe* 幾個大款湊合). The scale of capital is around hundred-thousands to ten-millions yuans, or US$45,000-800,000, which is within the means of large retail investors (*sanhu* 散戶). Secondly, sometimes cohesion and consensus can be formed around charismatic faction leaders, or by a strong sense of geographical identity. Such *bang*-like proximity cliques may

be unstable and transient, yet sometimes it is possible to produce aggregate market forces strong enough to compete with the spot trading factions on a limited time frame. Thirdly, since they are cash-based factions, their funds have a higher degree of mobility compared with than the spot trading factions. The funds will flow in and out of various futures products and futures exchanges, as well as on other asset classes like stocks, real estates, and other businesses. Fourthly, their *guanxi* with banks, government authorities, and the futures exchanges vary greatly depending on personal ties. Usually they are more sensitive to changes in interest rates. Fifth, in general, the futures exchanges and regulators welcome these investors to bring liquidity to the markets. Yet in the eyes of regulators and exchanges, they do not have the degree of perceived loyalty or regular trading volumes as the spot trading factions. They are more often classified as "speculators", which implies that they are likely to face steeper margin requirements and more stringent compulsory position close-outs when regulatory actions are taken.

In actual trading, factions from both categories execute a combination of longs and shorts; in the case of corner events, different regional and industry factions will form and break coalitions in flexible manners. Nonetheless, understanding a capital faction's leadership, origins of capital and geographical location helps to understand their market actions. Besides the ability to access and mobilize a certain size of funds, the identities and affiliations of these factions makes a difference to how the funds can be used. It is the combination of monetary, social and political resources that enable the factions to make an impact on market events, and the capital factions are marked with qualitative characteristics.

9. Gangs and Charismatic Leaders

Capital factions in China's futures markets show properties of gangs, or *bang*. Typical Chinese gangs are built upon sworn brotherhood, loyalty (*yiqi* 義氣), extended kinship networks, and shared locality (Zhang, 2001b: 105-107). Cohesion is achieved by mutual obligations between members. To attain personal spheres of power (*shili* 勢力) within the *bang*, reputation (*mingqi* 名氣) is established by acts of risk-taking, demonstration of masculinity, and loyalty to fellow members (Zhang, 2001b).

The trader who tells me about his corner team experience clearly cherishes the value of loyalty and mutual obligations; he despises defection from one's clique.

> "When placing orders, cooperation and unity was essential. Once we were all going short, but one guy placed two long contracts on his own behalf. He was deeply trapped. When we discovered that, it took us so much effort to rescue him … we earned 300,000 yuan less."

The futures people look up upon faction leaders as heroic figures. For a *dahu*, their reputation can effectively amplify the effects of their capital. Other investors in the same proximity clique would follow the leader's actions, and aggregate a greater stream of capital flowing in the same direction. Although official regulatory spokespersons often condemn synchronized actions and corner events as "disrupting the order of the markets", unofficial industry discourse would rather give tribute to the masculinity and risk-taking acts of corner leaders. Take the example of Guan Jinsheng 管金生, leader of the short side factions in the dramatic market episode Event 327 in 1995. To struggle against rising futures prices against his faction caused by the Ministry of Finance's increase in T-bond coupon payout rate, within the last 8 minutes of the trading day on 25th February 1995, Guan's faction shorted bond futures worth 1,460 billion yuan (about US$180 billion), which was one-third of China's GDP in 1994.[10] Guan threw 7.3 million[11] short contracts onto the market. Prices were pushed from 155.75 down to 147.4, turning the position of Guan's faction from a 6-million-yuan loss to a 1-billion-yuan profit. However, the regulators decided to roll back all the trades made during the last 7.5 minutes of the trading day, exercising a compulsory position close-out at the fixed price of 151.3 (Yao, 1998: 103-106; Zhang, 2001a; Li, 2004; Wu, 2006). Guan was sentenced to a 17-year jail sentence in 1997.[12]

Despite the jail sentence Guan received, the industry and media still see Guan's battle on Treasury bond futures as a heroic epic rather than a criminal offence.

> He did not lose the respect of the securities industry by serving his sentence in jail. One executive of a security firm says, "His achievements were remarkable. We are all trying to live out his former glory in our business." A female former member of SISCO staff said, "In the past I thought he was ruthless. Now I think he is the most perfect man!"
>
> Li (2004), translation by Lucia Siu

In May 2007, an Internet search using the Google search engine on the Chinese words "管金生" (Guan Jinsheng) returns 18,800 results. Amongst the 18,800 articles, 23 per cent (4,320) of them also contain the word "教父" (Godfather); 19 per cent (3,520) contain the word "英雄" (hero); 8 per cent (1,550) contain the word "傳奇" (epic); 3 per cent (572) contain the word "罪犯" (criminal). Apparently behind the official discourse about financial order and stability, more Internet users see Guan as a heroic leader rather than a criminal.

Gangs in the wider society usually arise from the lower strata of society, where wealth, social status and kinship are inadequate to protect people from hostile or adverse environments, such as rural migrants in urban environments (Zhang, 2001b: 105-107); or when they undertake risky activities, such as

criminal triads. By appealing to loyalty and sworn brotherhood, gang members can obtain the much needed support and protection from each other. It is true that capital factions in the futures markets are not full-version of gangs, for they do not exercise formal rituals, hierarchies and organizational control to the extent of the Sicilian mafia or Hong Kong triads (三合會) (Zhang, 1979), and the social bonding within capital factions is weaker. Nonetheless, it is intriguing that futures investors in China, as owners of capital, would form a social structure that resembles the marginal groups of society.

One plausible reason is that money can not provide all the protection that futures investors need. Without the formal institutional umbrella of investment banks or fund houses, small-scale investors actually feel insecure and powerless in front of regulators, exchanges, and spot-based state enterprises. Once I talked to a broker about gambling:

> Siu: Would the regulators see futures trading as a social vice to be restricted, something similar to gambling?
>
> Broker: Not really. The truth is the CSRC is the real casino owner! The three exchanges are just "tiger machines" (one-armed bandits, *laohuji* 老虎機) ... they eat us. They feed on traders and brokers.

9. Network-based Cognition

How do investors behave? This paper has portrayed how financial strength, charisma, loyalty, teamwork, political capital, and embedded identities (e.g. spot and spotless identities; industrial, provincial, municipal identities) produce capital factions. When capital factions interact with each other, external contingent factors such as interest rates, policies and weather can exert variable influences on market outcomes. Investors are connected as flexible, loosely formed social units, continuously in flux. The markets are bound to be unstable and uncertain, because the subject matter – social aggregates formed by market agents – has unstable and uncertain properties, and these aggregates are subject to frequent reconfiguration.

From this perspective, we can see that the view of the investors as stand-alone and rational individuals, as assumed by some neoclassical economists, is unrealistic. It is also simplistic to think that investors act like thoughtless herds or crowds, where imitation and contagion easily spread across the community. Some researchers in finance have built quantitative models of markets, taking a more realistic view of markets as interdependent social aggregates with conditional, variable and contingent properties.[13] Under the view of markets as an assemblage of unstable social aggregates, a market is less like an economic unit acting under some calculable scripts. It is more like groups of investors as interdependent, flexible socioeconomic aggregates, interacting with each other, and subject to the influence of contingent inputs. For the market as a whole,

part of the cognitive properties and rationality resides in the morphology of social connections, the group dynamics, charismatic leaders, and political capital possessed; part of it resides in the ideology and knowledge tools employed (see Hutchins, 1996; Hardie and MacKenzie, 2006). Distributed cognition contains open-ended uncertain properties that cannot be sealed up in a closed script.

The commodity futures markets' capital factions are displaying properties of distributed cognition and network-based rationality. The circuits of cognition largely reside across the relative positions of the social network, not only within individual human actors or pre-written rules and scripts. The implications of this paper are: in the study of markets, more emphasis should be given to flexible social connections in market aggregates, and how network-based rationality is actually distributed over the markets. This may serve as a correction to the earlier over-focus on mathematical precision, certainty and predictability, and yield a more realistic understanding of markets. In recent years Chinese regulatory officials emphasize that they would like to cherish the "characteristics of Chinese markets", and express their concerns over the lack of self stabilizing mechanisms (as presented in public speeches, such as Zhou, 2007). As the markets of China migrates towards larger scale, more sophisticated financial products and integration with global markets, Chinese market regulators may be attempting to develop rule-based rationality, public trust, fairness and transparency of public organization governance on a long run. This paper provides a realistic portrayal for academics, regulators and industry participants on where our current starting point is.

Notes

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1. See Chapter 3 of Siu (2008) for a fuller historical account of early futures trading since the 1870s, including merchants in the Qing dynasty, exchanges established under Japanese, Russian and European colonial influence, and the Trust and Exchange Crisis in 1921 that took place in nationalistic exchanges centred in Shanghai.
2. The instruction means "buy 20 lots of November mung bean futures at the price of 23200, open position".
3. See Xu (2004: 28-30, 46-47) for a dramatic description. See SHFE (2005a) and SHFE (2005b) for analytical reports on why steel futures were vulnerable to corner events in 1992-94.

4. China Economic Development Trust and Investment Corp (中國經濟開發信託投資公司 (中經開)), abolished in 2002.
5. Shanghai International Securities Co. Ltd. (萬國證券). After Event 327, it underwent a merger with Shenyin Securities to become Shenyin and Wanguo Securities Co. (申銀萬國證券) in 1996.
6. During the 1920s-1930s under the regime of the Republic of China, similar capital factions were also extremely active. In the late 1920s, there were over 100 futures exchanges in Shanghai and southern China (Chen and Zuo, 1994; Xiao, 1986; Zhu, 1998; Ma and Meng, 2005; Liu 2007).
7. The word *boyi* 博弈 is the academic direct translation for "game theory". When used in a game of chess, it also means "calculating the logics of one's opponent". In Chinese, the term gets diffused into non-academic language for common daily use.
8. Online blog articles such as "In memory of burned account" (2006) and a few futures brokers I have interviewed believe that the high-ranking policy bureau National Development and Reform Commission (*Fagaiwei* 發改委) is keen to keep the inflation of major commodities prices under control. They believe that *Fagaiwei* is likely to produce policies in favour of the short factions, and there is a policy skew on prices. Without direct contact with any representatives from *Fagaiwei*, I am in no position to confirm or refute such allegations.
9. In 2010 three joint venture financial institutes with foreign shareholders are on the Qualified Foreign Institutional Investment (QFII) approved list to participate in futures trading in China: Citic Newedge Futures, J.P. Morgan Futures, and Galaxy Futures (with shares held by RBS).
10. Another version says 211 billion yuan, US$26 billion.
11. Another version says 11 million short contracts.
12. Guan Jinsheng was accused of corruption charges that appeared to be irrelevant to Event 327. He was released on bail in 2003 for medical treatment, which was a disguised form of exile or amnesty sometimes prescribed by the PRC to political prisoners. According to Yuan (2002), CEDTIC, as the leader of the long factions, should have made approximately 7 billion yuan of profits in Event 327. However, CEDTIC had rolled up a debt of over 7.6 billion yuan instead. Yuan and a few trader blogs believed that the actual profits were reaped by someone working in CEDTIC through "rat trading" (*laoshucang* 老鼠倉).
13. For example, Forbes and Rigobon (2002) studies contagion of regional markets in financial crises. They find that the markets are better described as interdependent under conditional inputs.

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