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COUNTING ON GUANXI WHEN TRANSACTING MILLIONS? HYBRID GUANXI AND THE BEAUTY OF BRICOLAGE

Research Paper

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Abstract

This paper presents a new type of guanxi: hybrid guanxi. We study the informal market in China's Commercial Paper market, where there is no official infrastructure for online paper transactions. We conducted 33 interviews, a two-month observation, and collected a set of screenshots, to understand how informal financiers trade papers online. We discovered that these actors perform network and technology bricolage, which cultivate and maintain hybrid guanxi through computer-mediated technologies, offline interactions, and transitive ties.

Our work enriches the literature of guanxi. Unlike a large body of literature, our work does not assume two prerequisites for online transactions: 1) the existence of transactional infrastructure is prior to the occurrence of transactions, 2) such infrastructure safeguards economic exchanges. Thus, hybrid guanxi offers a lens to understand how social relations purely support economic transactions in the digital era, which is prevalent in both developing and underdeveloped countries.

Keywords: Guanxi, Swift Guanxi, Hybrid Guanxi, Bricolage

1 Introduction

We study the informal financial market in China's Commercial Paper (abbreviated as CP hereafter) market, where actors trade electronic papers online without the support of an official transactional infrastructure. Paper sellers may lose millions worth of papers if buyers do not pay, and vice versa. This asynchronous exchange between buyers and sellers exposes exchange parties to risk when opportunistic behaviours arise.

A recent adjacent development in the IS field identifies the role of swift guanxi in promoting further economic transactions between buyers and sellers (Ou et al., 2014; Lin et al., 2019; Xu-Priour et al., 2017; Niu et al., 2020). While swift guanxi captures well-developed online markets, many markets use both online and offline interactions. Thus, the current IS literature fails to observe the role of social relations in enabling and supporting economic exchanges in such a context, always assuming the presence of official market mechanisms. We ask if a new type of guanxi may emerge, how it may come about, and how it may help economic exchanges.

To investigate this underresearched phenomenon, we conducted 33 interviews, a two-month observation at an informal financial company, and collected a unique set of screenshots. Our analysis suggests that such guanxi, which we term hybrid guanxi, is realized and cultivated through a mixture of computer-mediated communication technologies, offline interactions, and transitive ties. Critically, we found that economic actors use such combinations to identify and avoid opportunistic behaviour, and to monitor orderly transactions. Overall, the home-grown bricolage of technological and social practices replicates the functions of a formal online market, including partner search, price discovery, identity verification, and finally transaction delivery and execution.

These findings contribute to the literature on guanxi by identifying a new type of guanxi that is essential for online exchanges without an official transactional infrastructure. Practitioners can cultivate and maintain a good quality of hybrid guanxi to explore and exploit market opportunities, where market infrastructure is not fully developed.

2 Theoretical Development

2.1 Traditional Guanxi

In the simplest term, guanxi means "connections" (Gu et al., 2019; DiTomaso and Bian, 2018; Luo, 1997; Tsang, 1998). Firms in China use guanxi to achieve organizational goals (Murray and Fu, 2016; Opper et al., 2017; Park and Luo, 2001; Tsang, 1998; Chen et al., 2015; Liu et al., 2018; Gu et al., 2008). Yet, some believe that the role of guanxi is fading in modern society. The reasons are associated with the difficulty in guanxi establishment and management (Peng and Luo, 2000; Wank, 2002; Chen and Gable, 2013; Guthrie, 1998), the technological development in online markets (Davison and Xiaojuan Ou, 2008; Wilson and Brennan, 2010; Fan, 2002; Gu et al., 2008; Nolan, 2011; Luo, 1997), and the stronger formal institutions in place (Luo et al., 2012; Nee et al., 2007).

On the other hand, China's economy and its commercial expansion have shown remarkable growth. In this case, guanxi may have found its new position in modern society (Nolan, 2011) in facilitating this growth. It is argued that guanxi has adapted to institutional change (Chang, 2011; Alston, 1989; Horak and Restel, 2016) and will keep changing with the development of Chinese society (Bian, 2017; Berger and Herstein, 2014; Shi et al., 2014). For example, traditional guanxi helps exchange advanced technology and promote innovation (e.g. Abbott et al., 2013; Su, 2015; Martinsons, 2008; Liu et al., 2018; Huang et al., 2011; Chen et al., 2011). More recently, IS scholars also identified a new form of guanxi, which we will unpack in the following section.

2.2 Swift Guanxi

Given that business conduct has gradually moved online to a medium where many of the practices of traditional guanxi are not possible or necessary, the question of what role guanxi plays in online environments has become more pertinent. One of the answers suggested in the research literature is swift guanxi, a type of guanxi established and practised in online markets. Ou et al. (2014, p. 210) define swift guanxi as "a buyer's perception of a swiftly-formed interpersonal relationship with a seller that comprises mutual understanding, reciprocal favours, and relationship harmony". Online communication tools, that provide online presence and interactivity, contribute to swift guanxi (Ou et al., 2014). Studies document additional roles/mechanisms of swift guanxi, typically in research settings where exchange parties rely on existing transactional infrastructure to initialize and complete their online economic transactions (Lin et al., 2019; Xu-Priour et al., 2017; Niu et al., 2020; Chong et al., 2018).

Online transactions are normally underpinned by formal contracts and facilitated with information technology embedded in online marketplaces. Thus, we argue that swift guanxi inevitably relies on online marketplaces that provide technological trust-creating functions among buyers and sellers. In other words, swift guanxi cannot and is not intended to bypass or replace these markets. In the case of Taobao (Chinese eBay), payments in online transactions are overseen by Alipay (Chinese PayPal). Any disputes between sellers and buyers are governed by Taobao and Alipay. Consequently, swift guanxi is not designed to hinder possible opportunistic behaviours by either side of the exchange parties, especially due to the arm's length relationship between buyers and sellers. Therefore, swift guanxi does not serve as an alternative to the online transactional infrastructure.

Swift guanxi does not evolve from traditional guanxi either but is a newly formed guanxi type formed by computer-mediated communication technologies (Ou et al., 2014). So, the current IS literature does not capture a transition, in which traditional guanxi must be digitalized to some extent and does not illustrate the implications of such guanxi. Therefore, we would like to examine whether a new type of guanxi operates in online environments (i.e. no Taobao-like market) where no such trust-creating functions (i.e. no Alipay-like infrastructure) exist.

2.3 Hybrid Guanxi

We start with the boundary condition in which hybrid guanxi is needed. Official transactional infrastructure refers to infrastructure (e.g. services, products, a set of rules/protocols) which is provided by official parties (e.g. government, market regulators) to support, protect, and facilitate economic exchanges. When online economic exchanges cannot be fully supported by existing official transactional infrastructure (e.g. missing, immature, exorbitant and/or underdeveloped), an online economic exchange becomes asynchronous, following which the need for hybrid guanxi emerges.

Similar to the comparison between swift guanxi and swift trust (Ou et al., 2014), hybrid guanxi does not equal hybrid trust as the former has contained a sense of social orientation. In other words, hybrid trust provides more than trust among two exchange parties and further offers a social order to its embedded markets. Following Ou et al. (2014), we define hybrid guanxi as "underpinned by computer-mediated communication technologies, offline interactions, and transitive guanxi ties, an interpersonal relationship that involves mutual understanding, reciprocal favours, relationship harmony, and sincerity". We consider sincerity to be the additional important element of hybrid guanxi because we posit that actors require a strong sense of perceived sincerity of other actors so that an online transaction can be completed purely based on this social relation.

In our hypothesis, hybrid guanxi is established and operated through a combination of computer-mediated communication technologies, offline interactions, and transitive guanxi ties. In an environment without trust-creating functions, we argue that online economic exchanges cannot purely rely on computer-mediated communication technologies, because such technologies alone only provide a medium for communication and are not strong enough for online transactions. Thus, actors need to initially build offline interactions with the other party, in preparation for future online transactions. Alternatively, these actors rely on their transitive guanxi ties to connect with the other party.

Based on the literature, we hypothesize a number of characteristics of hybrid guanxi in comparison to traditional guanxi and swift guanxi. To begin with, traditional guanxi functions as a form of an informal institution to facilitate economic exchange when the formal infrastructure is weak (Zhang and Keh, 2010; Xin and Pearce, 1996). In contrast, swift guanxi does not replace a weak institutional structure, but is established based on a well-functioning one: the underlying infrastructure of E-commerce supports the establishment of swift guanxi. Hybrid guanxi, however, does not assume a strong infrastructure is in place, because economic behaviour relies purely on hybrid guanxi. This is the primary difference between swift guanxi and hybrid guanxi.

Additionally, we believe that the conditions, in which hybrid guanxi takes place can be much more severe compared to that of traditional guanxi due to social and spatial separation. To elaborate, when actors do not have an online transactional infrastructure which is meant to support their economic transactions, then the embedded condition is severe as their actions cannot be formally protected against opportunist behaviours. In contrast, actors who are connected by traditional guanxi usually proceed with their economic exchanges through in-person requests, thus the exchange condition is less severe.

Regarding tie establishment, traditional guanxi is manifested through face-to-face interactions or naturally exists because of family ties (Chen et al., 2013; Pan, 2000), whereas swift guanxi happens through computer-mediated interactions (Ou et al., 2014). When it comes to hybrid guanxi, we believe that actors establish their hybrid guanxi with one another through both the "traditional" and "swift" approaches. There can be two scenarios. The first scenario happens when a buyer and a seller are connected for a potential transaction by a party that plays a "transitive" role. After being connected, these two exchange parties still need to communicate further through computer-mediated technologies to complete the tie establishment. The second scenario is that a buyer and a seller discover each other through computer-mediated technologies, and then perform offline interactions and/or connect through their shared transitive ties to complete their tie establishment.

In terms of reciprocal content, traditional guanxi includes gifting (Smart, 1993; Millington et al., 2005), resource allocation (Tsang, 1998), knowledge sharing (Huang et al., 2011), and, at an abstract level, face giving (Luo, 1997). Swift guanxi provides online word of mouth and repurchasing behaviour (Ou et al., 2014). Regarding hybrid guanxi, we believe, actors reciprocate in various ways, including both offline

and online reciprocity. The reciprocity for hybrid guanxi, unlike swift guanxi, can transcend a single transaction and online environment, reaching other potential businesses and/or social activities.

Another difference is the degree of perceived instrumentality. The instrumentality of traditional guanxi varies. For example, some supply chain relationships are too significant to ignore for focal firms, whereas some are based on pure economic gains (Lo and Otis, 2003; Barbalet, 2018; Yang and Wang, 2011; Bu and Roy, 2015; Redding, 1990). In contrast, swift guanxi is always based on arm's length relationships (Ou et al., 2014) as online buyers are not socially embedded with online sellers in an open market to a large extent. Hybrid guanxi can be traced back to traditional guanxi as indicated in the two scenarios for tie establishment. We hypothesize that the degree of instrumentality for hybrid guanxi also varies. This means that actors may use hybrid guanxi purely for transactional purposes. For instance, one may stop transacting with another because the price negotiation did not reach a conclusion. Hybrid guanxi can also be embedded, which means that the social relations cultivated through hybrid guanxi transcend the scope of pure transactions to include the social lives of transaction parties.

Finally, the cost of tie establishment for swift guanxi is low as buyers can freely and actively look for sellers in an open marketplace and they do not rely on the quality of swift guanxi to oversee their transactions. In contrast, traditional guanxi requires high costs in establishing a tie (Peng and Luo, 2000; Wank, 2002; Chen and Gable, 2013; Guthrie, 1998). Actors need to demonstrate their abilities and build perceived trustworthiness through human interactions since economic transactions are largely underpinned by their social relations (Qi, 2013; Shou et al., 2011), especially when the formal infrastructure is not sufficient to govern exchange parties. In addition, the cost for tie establishment may not be a direct but an indirect one because of guanxi transferability (Wong, 2010; Luo, 1997; Park and Luo, 2001; Tsang, 1998). For example, actors may need to build positive word of mouth within their direct social networks and the impact of the word of mouth can also exist in transitive ties. Based on the above studies, we believe that actors who rely on hybrid guanxi have to invest in their guanxi ties either directly or indirectly and the associated cost is high.

2.4 Bricolage: How Hybrid Guanxi Comes About

As discussed, actors can fully rely on neither traditional guanxi nor swift guanxi in an online environment with limited resources and an unmatured infrastructure. We find that the literature on bricolage offers a similar context, where actors have to allocate limited and on-hand resources to solve a challenge (Lévi-Strauss, 1966), to exploit and create opportunities (Clough et al., 2019; Welter et al., 2016), and to ensure firm survival (Stenholm and Renko, 2016).

Bricolage is about "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker and Nelson, 2005, p. 333). It offers adaptation and flexibility (Orlikowski, 1996; Ciborra et al., 2000), despite having some imperfections (Lanzara, 1999), especially in turbulent environments (Ciborra, 2009; Pavlou and El Sawy, 2010), where institutional/political changes constrain actors from performing certain activities (Di Domenico et al., 2010). Bricolage is widely understood as a micro-level (Ferriani et al., 2020) and emergent action (Vessey and Ward, 2013; Crossan et al., 2005; Carlo et al., 2012). Nonetheless, this micro-level action can have profound macro influences rather than constraining its power within workplaces (e.g. Davison and Ou, 2017). Scholars argue that bricolage helps with ensuring existing firms' survival (Baker and Nelson, 2005), founding new firms (Baker et al., 2003), and accelerating industry emergence (Ferriani et al., 2020). Baker and Nelson (2005) further predict that bricolage enables firms to survive in brand-new industries where resources are extremely limited. Busch and Barkema (2021) highlight that bricolage can become a long-term practice.

Actors consult their capability and take stock of their existing social resources when performing bricolage (Su, 2013). Studies suggest that actors 'may influence IT implementation (Elbanna, 2006) and adoption (Orlikowski, 1996). Alternatively, they may also create new IT tools customised for their needs (Carlo et al., 2012; Mettler et al., 2021). Following this logic, when actors would like to perform online economic exchanges with another without proper transactional infrastructure, they may evaluate the available resources and create a set of new IT tools as an alternative infrastructure. We believe that there

could be two types of IT resources at their disposal. The first type is the resources that are directly associated with online transactions (e.g. online banking which supports money transfer and receival). This type of resource is not sufficient to complete the whole online exchange process, yet does provide basic infrastructure. The second type is the resources that actors use in daily life (e.g. computer-mediated communication technologies). These resources are largely available for exchange parties at no or very low economic cost. Also, the learning difficulty is relatively low since actors have already had experience with these IT resources. We posit that actors combine both types of IT resources when creating their infrastructure for online transactions, which we term "technology bricolage".

However, technology bricolage alone does not fulfil the objective of the given tasks. This is because the aforementioned IT resources do not provide a safeguarding mechanism that protects online transactions. Rather, we believe that actors will further creatively utilize their existing social ties. Firstly, they take stock of existing social resources (Baker, 2007), and then perform their economic activities after learning each other's repertoires (Halme et al., 2012; Duymedjian and Rüling, 2010). Since hybrid guanxi is the transition of traditional guanxi, actors should have a pool of social resources that were previously gathered and maintained. The social resource serves as a form of relational governance to oversee their insecure online transactions. Therefore, with this resource, actors can either stay with their traditional ties when transacting online or they may also reach out to a broader market with the help of transitive ties. This making-do with pre-existing social contacts is "network bricolage" (Baker et al., 2003).

We are not suggesting that actors perform bricolage to establish and maintain hybrid guanxi with one another. This argument is similar to swift guanxi (Ou et al., 2014), in that it is not the primary objective for online buyers and sellers to cultivate guanxi ties. Rather, actors are after economic exchanges and their interactions, which underpin these economic exchanges, swiftly cultivate a tie that then benefits their exchanges. In the case of hybrid guanxi, when actors perform technology and network bricolage for their online economic practices, they simultaneously establish and maintain hybrid guanxi with each other, which further facilitates their economic behaviours.

3 Research Context

CPs are short-term debts (180-360 days) issued by either banking institutions or corporates for supply chain payment purposes. Paper issuers pay paper holders after paper maturity. In 2020, the total CP issue amount was approximately 25.7 trillion Chinese Yuan (SHCPE, 2021), accounting for 44.85% if compared to China's Bond Market (The People's Bank of China, 2021).

Regulators design and demand CPs to be used for business exchanges based on the real economy (National People's Congress, 1996). In other words, it is expected that buyers provide CPs to sellers who provide products or services. In reality, informal financial companies emerge and often trade unmatured CPs within their informal financial networks for arbitrage profit. They are not non-professional traders (e.g. Humphreys, 2010); rather, they are professional yet informal because their financial practices are not certified or approved by the market regulators. Informal financial companies absorb approximately 40% of the total formal credit available in the CP market (China Banking Association, 2015). They are accused by regulators of not being regulated and monitored, being profit-driven, ignoring market rules, and causing significant market incidents and risks (Xiao, 2018).

There are two types of CPs: paper-based papers and electronic papers. The former was largely replaced by the latter after 2018. Practitioners used to take advantage of the intransparent nature of paper-based CPs and easily hide their financial traces under the regulatory radar (SHCPE, 2017a). Regulators realized the risks and issued a number of regulations before the digitalization (e.g. The People's Bank of China, 2013). Nonetheless, they were not able to track and monitor financial practices based on paper-based CPs. In 2016, a number of market incidents shocked the market and its regulators, and all the incidents were based on paper-based CPs (SHCPE, 2017a). Consequently, paper-based CPs and informal financial companies were the market problems in the eyes of regulators.

To increase the usage of electronic papers, the People's Bank of China (2016) has made electronic papers largely mandatory since 2017. Meanwhile, the SHCPE (Shanghai Commercial Paper Exchange) was founded on 8th December 2016 under the authorization of the People's Bank of China. The

Exchange provides an online CP trading platform (interbank only) and a digitalized CP system (including paper issuing, discounting, interbank discounting, rediscounting and repurchase agreements). The SHCPE further took over the ECDS (i.e. Electronic Commercial Draft System) on the 27th of March 2017 under the order of the People's Bank of China (2017b).

The SHCPE (2017a, p. 4) highlights that the digital transformation was after "strong regulation" and "risk prevention". Digitalization increases market transparency and efficiency, and decreases risks in practices (The People's Bank of China, 2017a). At the same time, regulators can track paper practices performed by market participants (The People's Bank of China, 2017a). The People's Bank of China (2017a) emphasises that "after the establishment of the SHCPE, the paper-based offline trading model, which was based on outdated information technology and inadequate information disclosure, has been blocked...". In addition, the SHCPE Development Plan Outline (2017-2020) (SHCPE, 2017b) highlights that regulating the conduct of CP intermediaries (i.e. informal financiers) is one of the key objectives of the CP market and the SHCPE.

In summary, the use of paper-based papers did not allow the monitoring and tracking of the market regulators. Based on the regulatory promotion, the SHCPE hosts a set of RegTech and forces market players to adopt their IT. Informal financial companies now must respond accordingly as their business practices passively move to online environments. This transition creates an infrastructure void for these informal financiers' online paper transactions. Such a research phenomenon, we argue, is important as it provides an interesting venue to explore how actors would react accordingly.

4 Methodology

Between September 2018 and April 2019, we conducted 33 semi-structured interviews, consisting of 32 individuals who are or used to be informal financiers and one market expert. Our interviewees come from 29 independent companies, who are or used to be either company owners or vice presidents of their companies. Apart from having a management role, they also trade CPs themselves. Except for 3 interviews that were conducted via phone calls, the rest was carried out face-to-face across the Northern, Central, and Southern parts of Mainland China. The interviewees were carefully chosen because they are not only geographically diverse but also financially different. Upon the requests of our interviewees, we recorded 29 interviews and left 4 unrecorded. For the unrecorded interviews, a researcher used a laptop to take extensive notes. Our interviews lasted from 30 minutes to 1 hour and 40 minutes. In the interviews, we talked about the implications of the paper digitalization for their business activities and how they trade CPs in the era of digitalization.

The same researcher conducted a two-month observation at an informal financial company between the end of February and April 2019. We chose this company because they had active trading daily with other informal financiers. Established in 2010, this company has 10 employees and 3 management-level personnel. Observations took place during working hours, 8 hours a day, 5 days a week. During office hours, the researcher attended daily meetings and observed their business activities. The researcher gathered additional observations during lunchtime, chillout breaks, and business dinners, where casual conversations were held. The researcher took notes and photos when allowed.

We further collected a number of screenshots. These screenshots were taken and shared by 3 informal financiers on their mobile phones, detailing how they use WeChat (the Chinese WhatsApp) to communicate and transact CPs within their networks between 2020 and 2021. In addition, we joined 285 WeChat groups organized by informal financiers through private invitations sent by our contacts. In these WeChat groups, informal financial markets share CP trading information and communicate about the market situation. Occasionally, they sent out warning messages about paper scams.

After the data collection, we transcribed the interviews verbatim. Then, we followed the Gioia methodology to ensure qualitative rigour (Gioia et al., 2013). We used NVivo 12 to code the interview transcripts and observation notes accordingly. We conducted first order coding and generated ground themes. Then, we matched the first-order themes with the current literature so that we reached our second-order themes. Aggregate dimensions were generated based on the second-order themes [view the Coding Structure in Figure 1]. The coding process is recursive and abductive, so we constantly

moved between the data and the theory (Van Maanen et al., 2007). Screenshots shared by our interviewees are analysed by firstly translating chat content and then comparing it with other collected data. For example, the comparison between collected screenshots and interview content is essential to ensure the consistency of our data generated from multiple angles and multiple sources. Another example is that we rely on our observation experience to understand the logic of trading and market jargon that appears in these screenshots.

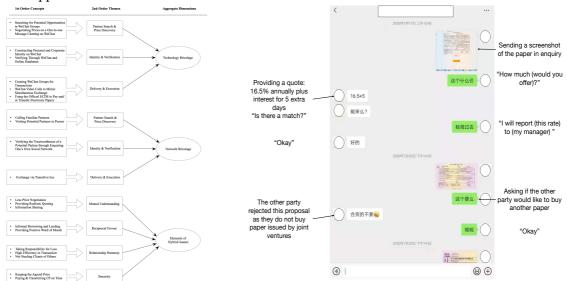


Figure 1. Coding Structure

Figure 2. One-to-one Messages between Informal Financiers for Price Discovery and Partner Search

5 Findings

5.1 Price Discovery and Partner Search

In China, CPs are not a standardized financial instrument, meaning that the value of CPs is evaluated on a single paper basis, especially in the secondary market. In practice, informal financiers send paper specifications to each other to understand the "market" price for that paper. Noticeably, the "market" price varies based on who informal financiers ask. There is no agreed price in the market, but a price based on a rough hunch. Thus, price discovery and partner search determine business profits.

In the era of paper-based papers, price discovery and partner search were largely implemented at the regional level. In contrast, the emergence of electronic papers presents nationwide business opportunities for informal financiers. Just as our Interviewee 4 puts it: "Doing electronic papers means a national market, I operate in the national market. I used to operate in XXX (a city name) before. Now I am gradually expanding (my business) all over the country. Let's do it with whoever has the advantage."

In the era of digitalization, informal financiers rely on in-person visits, phone calls, transitive ties, and WeChat to expand their business reach. Our on-site researcher frequently observed that informal financiers call other actors who operate their business in another region, asking for a quote and/or looking for a specific type of paper to buy. Sometimes, the informal financiers in observation also look for papers in their geographic region for others in another region upon request. If there is a match, their "matchmaking" is rewarded with monetary incentives by either side of the exchange parties.

With reference to the use of WeChat, they communicate within their guanxi ties through one-to-one messages [view Figure 2], Moments posts (i.e. posts on their WeChat Timeline page), and group messages in WeChat groups which are created specifically by informal financiers for CP trading purposes. Nonetheless, the real concept of a "national market" does not exist; instead, their national market is rather scattered and spread across different social networks.

5.2 Identity Verification

Identity verification is the most important step for online transactions. Either buyers have to transfer their money to sellers first or sellers have to transfer their papers to buyers first, before the other party responds. Therefore, the party who acts first must verify if the other party is trustworthy through offline interactions, transitive ties, and WeChat.

To start with offline interactions, our on-site researcher frequently attended business dinners during the observation when potential trading partners visited the company being observed. For example, a lady from Shenzhen visited the company. They never had done a paper transaction before. The CEO invited his wife, his department manager, and the researcher to have business dinners with the lady for two continuous nights. During the dinners, both the CEO and the lady demonstrated their strong financial ability and their willingness for paper collaboration. They constantly dropped the line "we are friends now". The Shenzhen lady has been verified through social interactions. In the end, the company decided to assign "credit" to the lady so that the company can either pay or transfer papers in advance to that lady's company within the credit limit of 2 million Chinese Yuan.

Apart from offline interactions, informal financiers also rely on transitive ties. The party, who either pays or transfers papers first, notes down the company name and the individual name of the unfamiliar person. Then, the party calls his/her friends who they highly trust to learn about the reputation and economic strength of the unfamiliar person. Interviewee 13 explained: "I work with XXX and found you (in the market) one day. I will ask XXX and it is good if XXX says you are okay and reliable, then I will trust you. Now, doing this business, all of us work with friends and people with whom we are familiar. There is no other special way". The quote shows that informal financiers employ transitive ties to verify the trustworthiness of unfamiliar trading partners. Their financial transactions are not pure transactions, but economic activities built on top of social relations.

Additionally, many interviewees confirmed that they use WeChat groups to complete identity verifications. Interviewee 6 reported: "I may ask in groups (WeChat groups), to ask about this (corporate bank) account (of a potential buyer), to see if others have worked with him or her before, to see how much that person has, to determine whether we can have a deal and whether I should transfer the papers first or receive the money first (Interviewee 6)". Figure 3 shows how they rely on peers to facilitate this verification. Group members reply "OK" to signal a positive confirmation.



Figure 3. Account Verification Via WeChat Groups



Figure 4. Transactional Communication in a WeChat Group

5.3 Delivery and Execution

In the digital era, to complete paper delivery and execution, informal financiers mainly rely on the use of WeChat and Corporate Online Banking, coupled with offline interactions and transitive ties. Informal financiers usually create a dedicated WeChat group for a specific transaction. In these groups, they communicate and urge each other to complete a transaction. To express their feeling and ensure efficiency, they flexibly use WeChat functions, e.g. "@" functions and "emoji" [view Figure 4]. In the end, sellers use the ECDS system in Corporate Banking to transfer papers to buyers who use the Money Transfer function in the system. Note, Corporate Banking does not provide an exchange function between papers and money (i.e. synchronous exchange is not possible).

Apart from direct transactions between two exchange parties, Interviewee 31 explained how to transact with someone who does not want to take potential risks: "There are also cases where he wants to transact with me, but he does not dare to provide the papers first, so he will send the papers to a person he is familiar with. This familiar person also knows us at the same time, which allows the familiar person to earn a channel fee and avoid some risks". The middleman serves as a risk buffer for the two parties in the exchange. Both parties are willing to take the risk by transferring money and papers to the man who charges a "channel fee". This paper transaction is completed with the use of transitive ties.

5.4 Elements of Hybrid Guanxi

While informal financiers transact with each other creatively, we have identified four important elements which co-contribute to the emergence of hybrid guanxi between paper buyers and sellers [view Table 1 for the supporting data for each element].

Mutual Understanding is reflected in how participants provide realistic quoting and do not negotiate prices. According to our interviewees, less price negotiation and more realistic quoting make the market efficient as these practices reduce communication costs. Figure 2 also shows that sellers/buyers do not follow up if the price of a particular paper does not match.

The second representation of mutual understanding is information sharing. Informal financiers set up WeChat groups to inform each other whether paper issuers have paid off their holding CPs (typically, corporate commercial papers). Then, other informal financiers in the market can evaluate this payment situation and decide whether to buy those papers. They do not have to inform the market; nonetheless, they still do so because of mutual understanding.

Reciprocal Favour. We find two types of reciprocal favour performed by informal financiers in hybrid guanxi: informal borrowing/lending and the spread of positive word of mouth. Informal financiers occasionally borrow money from each other to buy papers. Their informal lending and borrowing do not require a written acknowledgement. Instead, borrowers simply call potential lenders and ask if the other side has the money to lend. The amount of borrowing can be up to millions of Chinese Yuan. The duration of borrowing is relatively short. Borrowers normally use borrowed funds to make an arbitrage profit through buying in and selling out the same paper to another market participant, and then return the money to their lenders. Again, this informal practice can hardly be protected by law since there is no written consensus. As illustrated in Figure 3, another representation of reciprocal favour is the provision of word of mouth.

Relationship Harmony. Informal financiers make efforts to maintain relationship harmony. For example, when answering the question "How do you get more informal financiers to work with you?", Interviewee 19 explains, that when he buys too many papers without paying first and does not realise that he has run out of his own money, he borrows money so that he can pay off the papers that he bought based on his guanxi. By taking over the loss, their hybrid guanxi is maintained with harmony.

Sincerity is revealed by how informal financiers keep their agreed price unchanged and pay/transfer papers on time. During our interviews, the word 诚信 (chéng xìn) was mentioned frequently and its closest translation in English is sincerity. In the market, informal financiers also tend to include the word

"诚" (chéng, honesty) and the word "信" (xìn, trust) in their corporate names. Our on-site researcher found many decorative objects that carry the meaning of sincerity at informal financial companies.

Elements	Representative Quotations
Licincitis	
Mutual Understanding	When we know if there is a fake paper in circulation, we will send a warning
	message in our WeChat moments, informing our peers to not buy this paper,
	because peers do not have an easy life (Interviewee 16).
	First, he told me the price was not good, and asked me to find out what the market
	price was. He was honest with me, I appreciated that It's all about you and me,
	about each other. In the money business, it's sensitive, or risky, but I think it's also
	a good indicator of a person's character (Interviewee 18).
Reciprocal Favour	If you have a shortage of 10 million, you want to buy a paper, some people are
	willing to lend the money to you, just make a phone call. I don't need to sign a debt
	acknowledgement at all, I will return the money to you in 10 minutes, or 20 minutes
	(Interviewee 2).
	Sometimes you need to borrow money from your peers, you need their helpBeing
	a human, you help me today, I help you tomorrow, we'll just be equal. If I'm the
	one who's always bothering you, so I must pay out a bit (Interviewee 12).
	I've talked about him with you today, and I've told others too that brother XXX is a
	man who treats others with kindness and justice (Interviewee 17).
	If you don't know me, you won't know me even if I make a film about myself It's
	all about how you cultivate your reputation. Sometimes you don't need to make a
	film (about yourself), someone else makes a film for you, and that's what convinces
	other people (Interviewee 19).
Relationship Harmony	When I make a promise about when I can pay you back, then my company will
	definitely pay you back on time. If there is a problem on the bank side, and there is
	a loss because of the delayed payment, then I will take the loss myself. This is a
	guarantee, a trust, an establishment (Interviewee 15).
	I cannot stand people who steal clients I felt very strongly that the electronic
	market is already very transparent, and the profit margins already are very low
	Because if you are all calling the same clients to compete, the profits will not go
	up. Over time, it's not easy for everyone to make a living, and it's hard for everyone
	(Interviewee 18).
Sincerity	Anyway, I'm honest, if I say one then that is one, if I say two then that is two. What
	I have is what I have, and what I don't have is what I don't have. How much is how
	much (Interviewee 3).
	When you start a company, you will be supervised by regulators. But you are not
	supervised if you are an intermediary, how about your personality? Do you keep
	your promise without changing back and forth? (Interviewee 2)
	If you have money, you have money; if you don't have money, don't pretend that
	you have money. Don't use a fake price to ask me to wait, and then, you say you
	don't have money, and then say you have money and ask me to wait. Don't do this,
	otherwise everyone would be inefficient. This reflects a problem of sincerity
	(Interviewee 22)

Table 1. Data supporting the elements of hybrid guanxi

6 Discussion and Conclusion

We identified the manifestation of hybrid guanxi in the context of China's CP market where informal financiers had to adapt in the face of the digital transformation brought on by RegTech. To survive in the digital era, informal financiers essentially created their own online market through performing network and technology bricolage.

6.1 Bricolage in Enabling Hybrid Guanxi

Informal financiers are mindful and reluctant to simplify interpretations (Salovaara et al., 2019). When the conventional trading style is largely suspended by the digital transformation, informal financiers do not take this signal as a simple rejection of their participation in the market. Instead, informal financiers demonstrate the awareness and ability for resource recombination and interpretive flexibility (Ferriani et al., 2020) to tackle emergent problems, to grasp new opportunities (Baker and Nelson, 2005), and to ignore rules and norms on how people should use resources (Leigh Star, 2010). They broke the defined framing by the regulators, who drew boundaries to distinguish what goods should be included in the market calculation and what goods should not (Callon and Muniesa, 2005).

Network and technology bricolage co-contribute to the emergence of hybrid guanxi. Informal financiers perform network bricolage to utilize their traditional guanxi ties and transitive ties. Especially with identity verifications, informal financiers maximize the use of network bricolage to examine the trustworthiness of a potential trading partner, showing that the art of bricolage is history-dependent (Lanzara, 1999). However, the identified network bricolage is not necessarily embedded with "lock-in" issues (Opper et al., 2017). Rather, informal financiers filter out the ones who do not appreciate hybrid guanxi and include the ones who do, reflecting "social movements" (Lounsbury et al., 2003).

Equally important, technology bricolage provides the technological medium where hybrid guanxi takes place. They rely on official infrastructure where possible. For example, they use Corporate Online Banking to transfer papers and send/receive money. Nevertheless, informal financiers creatively use and trade over WeChat. They advertise paper information, search for and verify potential partners, and report transactional processes on WeChat. Hybrid guanxi, therefore, is developed and cultivated in WeChat groups, WeChat Profiles, WeChat Moments, and WeChat individual interactions based on offline interactions and transitive ties. Without technology bricolage, network bricolage is not sufficient to promote the emergence of hybrid guanxi. Although performing economic exchanges through personal ties on WeChat is not new (e.g. Huang et al., 2021; Bapna et al., 2017), what is novel here is that WeChat is not only a channel for customer acquisition but a critical part of their transactional infrastructure.

6.2 Hybrid Guanxi and Market Creation

We believe that hybrid guanxi is a form of "collective work" of market actors (Luksha, 2008). Given that basic market institutions are missing, informal financiers have to rely on hybrid guanxi to establish both social and technological infrastructure to deliver the necessary "...property rights, governance structures, rules of exchange, and conceptions of control" (Fligstein and Mara-Drita, 1996, p. 28). Moreover, hybrid guanxi essentially underpins partner search & price discovery, identity verification, and delivery & execution. For example, hybrid guanxi provides "quantification" for CPs (Mennicken and Espeland, 2019; Diaz-Bone and Didier, 2016; Chiapello and Walter, 2016) by offering economic and social interactions among informal financiers, although CPs are "unstandardized financial instruments" (Carruthers and Stinchcombe, 1999).

Informal financiers establish a sense of mutual understanding among their hybrid guanxi networks. As a result, they perform less price negotiation to maintain market efficiency. Additionally, they actively share information about scams and paper payment status with people who are socially connected. By doing so, they essentially reduce market risks as other informal financiers can avoid uncertainties accordingly. Reciprocal favour also provides market liquidity through offering peer lending among informal financiers. Another representation for reciprocal favours is to provide positive word of mouth for others in the identity verification stage. Without this word of mouth through transitive ties, transactions could not be completed across ties. Verifying trustworthiness is also supposed to reduce market risks by offering social input. Concerning relationship harmony, informal financiers who appreciate hybrid guanxi avoid stealing clients from their peers although the CP digitalization provides the access to client sources. The associated market implication is the reduction in market competition as profit margins would decrease when multiple informal financiers try to compete for one client. Finally, sincere informal financiers keep their promises, and this will reduce market uncertainties and add market liquidity. For example, avoiding stalling trading partners by not offering an unrealistic quote provides a

faster deal (increasing market liquidity); and informal financiers do not have to worry about the changes in price offerings once they are promised (reducing market uncertainties). Overall, the characteristic of hybrid guanxi is a form of "cognitive consensus about a new market" (Anand and Peterson, 2000; Khaire, 2014; Palo et al., 2020).

Scholars may argue that the online financial market, created by informal financiers, is not a perfect form. Indeed, we should never claim that the discovered market is a perfect one. In contrast, it is full of uncertainties and insecurity as the market builds purely on hybrid guanxi and operates through repurposing various technologies and social capital. However, this market imperfection enables informal financiers to survive under the regulatory transformation. In addition, informal financiers can turn what was supposed to be set against them (i.e. paper digitalization) into opportunities so that they can trade with a wider reach (i.e. from the regional to the national market) in a timely, efficient manner.

Scholars may also argue that hybrid guanxi may become "swift guanxi" by taking away the "offline interactions" aspect (e.g. in the period of Covid-19). In the case of the CP market, the argument does not hold because of the large amount of financial exchanges which entails a huge risk when their interactions become completely "swift". Although economic exchanges based on existing hybrid guanxi among two familiar parties may continue, actors still have to rely on their transitive ties for forming new hybrid guanxi when offline interactions are impossible. The underlying explanation is that the online practices alone cannot safeguard online exchanges in this or a similar context.

6.3 Contributions

Our paper answers the call and extends the work of Ou et al. (2014) who identify the existence of swift guanxi in a marketplace equipped with effective institutional and legal mechanisms. We study how guanxi supports economic transactions in online environments without official transactional infrastructure. We have introduced a new type of guanxi which is derived from offline interactions, transitive ties, and computer-mediated communication technologies. We have investigated and demonstrated the elements and the role of hybrid guanxi. Furthermore, although it is not the focus of this study, informal financiers can be understood as informal entrepreneurs in the financial sector. The contribution of how individuals perform bricolage, in fact, enables us to better understand how informal entrepreneurship manifests (Nambisan et al., 2019).

In our case, CP trading is not lawfully permitted and because of this illegal nature, informal financiers are not provided with official transactional infrastructure by the market designers and regulators. However, this does not mean that the concept of hybrid guanxi only stays in the illegal sphere. Its implications are always relevant and applicable in a context where exchange parties could not afford to build proper transactional infrastructure for their digital exchanges. Alternatively, hybrid guanxi may emerge when online transactional infrastructure is under development, yet the market opportunities are affluently available for early birds who can then enjoy the benefits of the "blue ocean" market.

Our study has a few limitations. Firstly, the research setting can be "particular" (Davison and Martinsons, 2016) as we study guanxi practices in China where guanxi is rooted. Future research should test out our theorization in other cultural contexts. Secondly, our theorization is built with a focus on bricolage to investigate how actors perform micro-level emergent actions to underpin their trading behaviours. We neglect the "legitimacy" side of the story. We learnt that informal financiers have created formal interorganizational relationships with governmental organizations which are outside the CP market but somewhat share regulatory power with the regulator in the CP market. They also set market norms of what is allowed and what is not, self-regulating their own markets for legitimacy purposes. Future studies can investigate how actors, e.g. informal financiers, build and gain their legitimacy in turbulent environments.

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