Social Embeddedness in Economic Transactions through Informal Institutions in Rural China

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The economic transactions in rural China are self-enforceable without any legal enforcement because they are embedded in the informal social institutions based on gift giving *guanxi* ties. These ties are of two types—expressive *guanxi* ties based on reciprocal gift exchange and instrumental *guanxi* ties based on unidirectional gift giving. In this paper, we first prove theoretically that gift giving is a result of rational conduct that minimizes expenditure. Thereafter, a few hypotheses are proposed and empirically tested through categorical regression and analysis of micro level data. We find that expressive *guanxi* ties are not related to income level but instrumental *guanxi* ties are related to income level. In other word, we verify the rationality of informal institutions in rural China. It is implied that under a situation whrein the cost of transition from informal to formal social institutions for economic transaction is prohibitive, the present informal human governance based on gift giving will continue to be employed by Chinese villagers, because it is an intrinsically rational system.

Key words: gift giving, instrumental *guanxi* ties, expressive *guanxi* ties, village boundary, informal social institutions, transactions, self-enforceable.

1. Informal Institutions that Support Transactions in Rural China

Informal institutions play an indispensable role in supporting the economic transactions in a developing country, particularly in the procurement of production resources such as labor, capital, or equipment.[1] In rural China, economic transactions are also supported personally by informal institutions through human governance (*rengzhi*), rather than impersonally by formal institutions through legal governance (*fazhi*). Traditional Chinese economic transactions were originally characterized by the coexistence of impersonal competition and personal reliance (Muramatsu

[16]). The activities of impersonal market competition were constrained by the establishment of the People's Republic of China; however, the reform and opening-up policy implemented since 1980 re-introduced competition in the economy. In the present scenario of rural China, not only impersonal competition but also personal reliance based on informal institutions has been restored again in transactions. These facts are confirmed in monographs (Sasaki and Karasawa [18]) or quantitative studies (Sato [19]).

In order to generalize the study of informal institution, theoretical and empirical quantitative studies based on economics are required; however, previous studies have still not achieved an economic examination. The importance of informal institutions in developing countries was recognized as the social embeddedness of the economy, which is proved in the moral economy debate.[2] However, this debate merely introduces the concept of embeddedness related to morals without indulging in detailed analysis. Generalized study using economics has not succeeded

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thus far, because there is no established economic methodology for analyzing the dyadic relationship such as between supplier and buyer. However, since the 1990s, a new approach to the dyadic relationship between supplier and buyer has been established in the form of the "contract theory," for example Ito [10]. According to Klein [13], within the framework of contract theory, "self-enforcement" is the enforcement of a dyadic transaction between the best partners without any third party such as a legal system; he indicates that informal institutions are mechanisms through which this transaction is conducted. In keeping with the framework of the contract theory, an economic examination of the informal institutions that support economic transactions in rural China is conducted in this paper from the perspective of a dyadic relationship.

In addition, since the dyadic relationship is a micro-level phenomenon, studies thus far have merely introduced actual cases. In contrast, this paper clarifies the actual situation of informal institutions in rural China by using quantitative approach. The data used in this study is author's interviews conducted with the villagers of Beijing, Shangdong, Liaonei, and Hubei Provinces and the micro data of farm households collected for the "National Rural Social-Economic Survey Data Collection" published by China Agriculture Press. [3)]

2. Basic Model of Informal Social Institutions in Rural China

1) Gift giving *guanxi* ties

The nature of informal social institutions in rural China can be understood as socially networked nepotism that is based on gift giving; in other words, " gift giving *guanxi* ties. "[4)] In China, economic transactions are strongly supported by informal dyadic particularistic ties such as kinship or personal relations that are known as "*guanxi*" ties. In the buyer-supplier relationship, one party places the other party in a series of social concentric circles produced by one's own social influence, with the self at the center. Each social circle spreads out from the center and becomes increasingly distant and thereby insignificant. Therefore, the conclusion of a transaction between the buyer and supplier

depends on the distance or the strength of the connection between them. This concentric circles formed by all people in a social network are inter-related and they touch different circles at the different times and places, depending on the type of transaction. Fei [6] terms this type of social networking the differential mode of association, "*chaxugeju.*"

Guanxi ties are a rather important aspect of economic or business relationships in China. A *guanxi* tie is essentially characterized by the formation of relationship or association between two or more people for mutual benefit and implies entering into reciprocal obligations. One of the ways in which such *guanxi* relationships are formed is through gift giving. The importance of gift giving may be ascertained by the surprising fact that over 20% of the expenditure of each farm household is appropriated for gift giving (Yan [25]). Gifts, not only include monetary presents or invitations to banquets but also the giving of respect, loyalty, and compliments.

Guanxi ties may be divided into instrumental *guanxi* ties (*gongjuxi*) and expressive *guanxi* ties (*qingganxi*) and are characterized by the exchange of instrumental gifts and expressive gifts, respectively (Yan [25], Huang [9], and Yang [27]). Initially, it was only the instrumental *guanxi* ties that attracted academic attention. This type of *guanxi* ties are established by instrumental gift giving in order to procure favors from the other person. In particular, under the planned economy, such ties were commonly established in order to secure material resources from those in power. After the social reform period, instrumental *guanxi* ties have been frequently established in order to secure political and economical connections (Yang [26], Walder [23], Gold [7], Sonoda [20]).

These instrumental *guanxi* ties are mainly observed in urban areas, while expressive *guanxi* ties are chiefly found in the rural area. [5)] The expressive *guanxi* ties may be described as a relationship of trust among close members in a village that is founded on the basis of maintaining moral norms and human feeling (*renqing*) in order not to lose face value (*mianzi*). Expressive *guanxi* ties are established by the giving of expressive gifts in the form of money or material goods that are

presented on important ceremonial occasions in the family, such as weddings or New Year celebrations. Expressive gift giving is based on the concept of reciprocity or "*lishang-wanglai*," which is a remnant of Confucianism, in which a gift of the same value must be given to the presenter by the receiver. Therefore, a list of gifts is maintained by all villagers so that they may remember what they received and then reciprocate in equal measure. *Lishangwanglai* is not only an ethical issue, but also includes economic motivation. Bilateral transactions based on a mutually equal position, such as labor exchange in agriculture or construction, mutual finance without interest, or mutual aid of food during an emergency, are embedded in this ethics.

Therefore, expressive *guanxi* ties have the following attributes. The circle of association based on expressive *guanxi* ties is fixed and there is a reciprocal exchange of expressive gifts within this circle. A one-sided upgrade of gifts motivated by vanity is avoided by both parties as it would unexpectedly burden the other party. Thus, the villager in a higher income bracket will not unilaterally give a higher-priced gift to the other party in a lower income bracket. Expressive gifts of equal value are exchanged, regardless of income level. [6]

Further, instrumental *guanxi* ties are also formed through the interaction among people living in rural and urban areas. A social concentric circle in the form of a traditional villager's association functions as the line of demarcation between village and city. Expressive *guanxi* ties are established within this village boundary, while instrumental *guanxi* ties are established beyond this boundary (Yan [25], Chaps. 5, and 6). In order to procure resources that are not available in the village but are available in the city, villagers attempt to establish instrumental *guanxi* ties with people in the city. Therefore, instrumental *guanxi* ties are established to acquire access to special materials that are allocated preferentially to the city, urban employment opportunities, connections to political elite who live in the city whose help is sought in emergencies, or social status in the village of being acquainted with the sophisticated city people. In order to establish

guanxi ties with influential city people who control these resources, villagers present instrumental gifts to them as a face-saving activity. This act of gifting is known as "*songli*."[7] Thus, gifts are given by those who are lower in the hierarchy to those who are higher. This is in contrast to the practice in primitive society in which the upper classes gave gifts to the lower ones. Although the act of *songli* is from villager to city people, as a matter of courtesy, the receiver must reciprocate in the form of a small gift that is lower in value than what has been received.

Since instrumental gifts are given by villagers to city people, villagers may strengthen the *guanxi* tie with city people by upgrading the gift. Therefore, the villagers with higher incomes can increase their interaction with city people beyond the village boundary by giving a greater number of instrumental gifts. As a result, they may be able to obtain better employment opportunities, superior material resources, or secure better political connections, thereby increasing their incomes. Moreover, such villagers can also acquire a higher status of being better acquainted with the sophisticated city people. In addition to an increase in income, procurement of material resources is also embedded in instrumental *guanxi* ties. However, if there is an increase in rural urbanization due to economic development, then the village boundary itself vanishes and instrumental *guanxi* ties coexist with expressive *guanxi* ties in the village.

2) Expressive gift giving and "*Lishang-wanglai*"

In this section, the mechanism of gift giving *guanxi* ties will be explained on the basis of the framework of self-enforcement of transactions. Thus far, gift giving is recognized as the cost for the presenter to establish relationships. However, this is also an indication of enhancement of the receiver's utility. In particular, in Chinese *guanxi* ties, gift giving serves to honor the receiver, that is, increases his/her face value (*zengjia mianzi*). Transaction can be characteristically enforced by this increased face value based on the gifts that are given. Therefore, this paper divides the gift giving players into presenter and receiver and builds a model of the relationship between the two players in which

		Buyer	
		cooperate	cheat
Supplier	cooperate	$(R/(1-\delta)-g_s+a \cdot g_d,\ R/(1-\delta)-g_d+a \cdot g_s)$	$(-g_s,\ A+g_s)$
	cheat	$(A+g_d,\ -g_d)$	$(0,\ 0)$

Figure 1. The payoff of the transaction game

their gifts work as variables to establish the condition of self-enforcement of a transaction. What is self-enforcement of transactions between supplier and buyer? According to Aoki [2] and Klein [13], this concept can be easily understood within the framework of game theory. It is defined as a condition in which the present value sum of the discounted future benefits from a series of repeated honest transactions must be larger than the one-time gain from cheating. Aoki [2] reviews the mechanisms that are necessary to fulfill this condition. We assume a game in which the supplier and buyer obtain benefit R if both play honestly, and one player obtains benefit A if only he cheats ($0 < R < A$). Further, even in the case of prisoner's dilemma, if both players adopt the trigger strategy to indicate the option of terminating the transaction (benefit$=0$) as the threat point, the transaction can still be enforced. However, with this proviso, the condition $A \leqq \sum (\delta^m) R = R/(1-\delta)$ must be fulfilled without execution by a third party, where i is the discount rate, $\delta = 1/(1+i)$ is the discount factor, and m is a sufficiently long period of time.

As mechanisms for fulfilling the condition of self-enforcement described above, ostracism by the community (Aoki and Hayami [1]), the moral code (Aoki [2]) and gift giving as the cost (Aoki [2], Carmichael and MacLeod [5]) are considered. Although this paper also focuses on gift giving, it addresses a different aspect as that done in previous research—gift giving related to the face value of the receiver.

Even in the condition $A > R/(1-\delta)$ that does not support self-enforcement without any intervention, gift giving can make the transaction enforceable. In this case, gift giving is held independently from the transaction. Gifts could be given once prior to the transaction, which is true in the case of instrumental *guanxi* ties. On the other hand, gifts could be exchanged repeatedly on a long-term basis, which is true in the case of expressive *guanxi* ties. Regardless of how a gift is given, the concerned parties are aware of the gift as the total amount of value g discounted to reflect the time value. Suppose that the gift given by the supplier of a resource to the buyer is g_s and the gift from the buyer to the supplier is g_b. If the trading counterpart receives the gift, the receipt increases his face value and enhances his utility. In other cases, if a gift is given to a mediator, it increases his face value; then the mediator humbly requests the trading counterpart, thereby resulting in an indirect increase in the face value of the counterpart. Let this degree of increasing face value be denoted by the degree of face value a. This degree also represents the degree of favor conceded by the gift receiver to the presenter, because the increase in face value causes the receiver to concede the presenter with favors. The more influential the social position of the receiver, the larger his degree of face value and the degree of favor to the presenter is, due to the amount of pride. The more intimate the relationship between the receiver and presenter, the greater is the loss of pride in the case of losing face. Accordingly, for a gift of the same value, a closer relationship between the presenter and the receiver entails a greater increase in face value and greater intensity of the degree of face value. The payoff matrix of the transaction involving gift giving is presented in Figure 1. The additional terms of $a \cdot g_b$ and $a \cdot g_s$ indicate the degree of favor conceded by the gift receiver.

First, let us consider the expressive *guanxi* ties that are observed traditionally in Chinese village. Villagers established equitable relations and the degree of face value a of both presenter and receiver is the same in the village. Moreover, there is a reciprocal exchange of gifts in this relationship. The receipt of a gift increases face value of the receiver; this makes the receiver underestimate the one-time gain from cheating and consequently hold the inequality sign condition; in

other words, the benefit received in the case that one player cheats is smaller than or equal to the benefit received in the case that both play honestly, thereby supporting self-enforcement in the transaction. Now, we consider the case of a customary labor exchange transaction in construction or agricultural work that is embedded in the expressive *guanxi* ties. The transaction between the supplier and buyer of labor can be self-enforceable through the following conditions:

$$A+g_b \leqq R/(1-\delta)-g_s+a \cdot g_b :$$
$$A+g_s \leqq R/(1-\delta)-g_b+a \cdot g_s, \text{ respectively} (1),$$

which can be rewritten as

$$A-(a-1)g_b \leqq R/(1-\delta)-g_s :$$
$$A-(a-1)g_s \leqq R/(1-\delta)-g_b. \qquad (2)$$

Even under the condition $A>R/(1-\delta)$ that is not self-enforceable, self-enforcement can be brought about by introducing the exchange of gifts g_s and g_b. In the inequality equation (2), $(a-1)g_b$ and $(a-1)g_s$ represents the concession in the cheating strategy. Both the supplier and buyer decide to reduce portion $(a-1)g_b$ and $(a-1)g_s$, respectively, from cheating benefit A, because they concede more than the gift g_b and g_s due to the increase in face value, which enables the transaction to be self-enforceable. $(a-1)$ is the influence of an increase in face value on the concession, which implies the increase in concession caused by the increase in face value through the receipt of the gift. Accordingly, the condition $1<(a-1)$ is necessary; in other words, the degree of face value a must be $2<a$.

There exists a social judgment that a gift must be restrained to the furthest extent possible in terms expenditure, because buying expensive gifts is considered a dissipation of funds or an unnecessary expense.[8] Since a gift is often given in a formalistic form such as a memento, the value of the gift is reduced to below its cash value.[9] Therefore, the total expenditure of both gift giving $G=g_s+g_b$ must be as low as possible. The gift must be an expressive one in the case of gift giving among villagers. The following constrained minimization condition represents the most efficient *guanxi* tie that can be self-enforced:
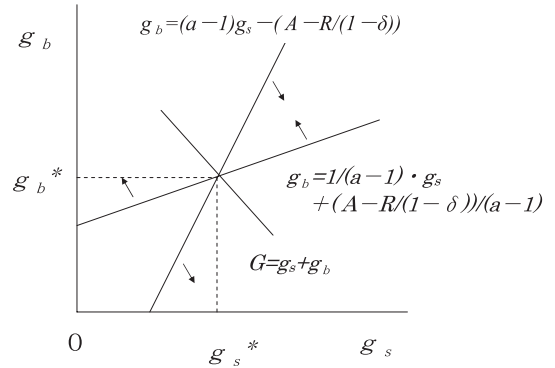
Figure 2.   The equilibrium of gift giving *guanxi* ties

$$\text{Min} \quad G=g_s+g_d$$
s. t. $g_b \geqq 1/(a-1) \cdot g_s+(A-R/(1-\delta))/(a-1),$
$\quad g_b \leqq (a-1)g_s-(A-R/(1-\delta)). \qquad (3)$

As illustrated in Figure 2, the condition to fulfill equation (3) is $g_b=g_b{}^*$ *and* $g_s=g_s{}^*$:

$$g_d{}^*=g_s{}^*=1/(a-2) \cdot \{A-R/(1-\delta)\}. \quad (4)$$

In the most efficient situation for minimizing G, the labor exchange transaction can be self-enforceable on the condition that the value of the gift received by the presenter is exactly the same as that of the receiver. This is known as "*lishangwanglai,*" which is governed by rational conduct to seek efficiency rather than adhere to ethics.[10]

Further, it must be noted that the larger the value of a, the smaller the value of $g_d{}^*$ and $g_s{}^*$. A more intimate relationship increases the degree of face value and makes the receiver concede more to prevent cheating for a certain gift. The more intimate the relationship is, the more saving there is with regard to the expenditure on the gift. Therefore, it is shown that the intimate relationship is efficient in terms of saving on gift expenditure.

3)   Instrumental gift giving and "*Songli*"

In this section, we consider instrumental *guanxi* ties. The relationships are formed as the transactions between rural buyers and urban suppliers of resources that are available only in urban areas, such as employment opportunities, special material resources, political connections, or social status in villages. Villagers establish relationships with influential city people who have access to these re-

sources. Hence, they are not on equal footing with each other and their degree of face value is also different due to difference in the social status. Suppose that the influence of an increase in face value of an urban supplier ($a-1$) caused by a rural buyer's gift g_b is substituted by $q (q>1)$. Further, the influence of an increase in face value of rural buyer ($a-1$) caused by the reciprocal gifting of smaller value by the urban supplier gift g_s is substituted by $r (r>1)$.

Thus, in the case of instrumental *guanxi* ties, self-enforcement of a transaction may be realized by introducing the exchange of gifts g_s and g_b, on the following condition:

$$A-q \cdot g_b \leqq R/(1-\delta)-g_s,$$
$$A-r \cdot g_s \leqq R/(1-\delta)-g_b. \quad (5)$$

In order to minimize the total expenditure of gift giving for both the supplier and buyer, $G=g_s+g_b$, subject to the abovementioned conditions of self-enforcement, the following equilibrium solutions must be satisfied in terms of $g_b=g_b{}^{**}$ and $g_s=g_s{}^{**}$:

$$g_b{}^{**}=\{(1/r+1)/(1/r-q)\}\{R/(1-\delta)-A\} \quad (6)$$

$$g_s{}^{**}=\{(1/q+1)/(1/q-r)\}\{R/(1-\delta)-A\}. \quad (7)$$

Thus, instrumental *guanxi* ties are established among people of different social status, and thus people in the relationship are not on equal footing; on the other hand, expressive *guanxi* ties are established among those with the same social status, and thus people are on the same equal footing, that is, $r=q$. Therefore, the question that arises is what is the position of city people in relationship to the villagers? In order to answer this question, the equilibrium solutions presented above are partially differentiated by q in the following manner:

$$\partial g_b{}^{**}/\partial q=-\{r(1+r)/(q \cdot r-1)^2\}$$
$$\{A-R/(1-\delta)\}<0 \quad (8)$$

$$\partial g_s{}^{**}/\partial q=-\{(1+r)/(q \cdot r-1)^2\}$$
$$\{A-R/(1-\delta)\}<0. \quad (9)$$

This differentiation represents the effect of the influence of city people's face value q for the given influence of a villager's face value r. Since the sign of both differentiations is negative, both $g_b{}^{**}$ and $g_s{}^{**}$ decrease, as q increases for the given r. We compare the ex-

pressive case $r=q$ which contains $g_b{}^*$ and $g_s{}^*$ with the instrumental case $r \neq q$ which contains $g_b{}^{**}$ and $g_s{}^{**}$. If q is bigger than r, both gift expenses $g_b{}^{**}$ and $g_s{}^{**}$ are smaller on the expressive case—$g_b{}^*>g_b{}^{**}$, $g_s{}^*>g_s{}^{**}$. As a result, the expenditure on gifts can be saved for both the buyer and supplier; therefore, making this relationship efficient for both parties. The influence of face value of city people q is more intensive than that of villagers r is efficient for the dyad. The savings yielded by this fact $S=g_b{}^*-g_b{}^{**}+g_s{}^*-g_s{}^{**}$ may be shared between the two parties through negotiation. Suppose the city people's bargaining power is α (share ratio). Ultimately the gift given is $g_b{}^{***}=g_b{}^*-(1-\alpha)S$ for the villager and $g_s{}^{***}=g_s{}^*-\alpha S$ for the city people, and the difference between the value of the two gifts is $g_b{}^{***}-g_s{}^{***}=2(\alpha-1/2)S$. A Nash solution indicates that $\alpha=1/2$. However, the villager is not on an equal footing with the city people but is in a position to ask them for a favor. Therefore, it is expected that $\alpha>1/2$ and the condition $g_b{}^{***}>g_s{}^{***}$ can be satisfied. The act of gift giving by villagers to the influential city people in rural China is influenced by economically rational conducts of obtaining favors in return for giving gifts rather than culture.

3. Questionnaire and Evaluation of Gift Giving *Guanxi* Ties

How are transactions actually embedded in the gift giving *guanxi* ties? In order to clarify this quantitatively, we utilized questionnaire methodology pertaining to the importance of *guanxi* ties in 3 villages of Beijing city—undeveloped BA village located 60 km away from the city center, BB village that is developing based on "green tourism," and urbanized BC village that is within commuting distance in a day. The actual names of the villages are not used for the sake of convenience in research. We asked respondents to evaluate the importance of *guanxi* ties on a scale from 1-4 grade points with 1 representing the strongest assent to the importance of *guanxi* ties.

First, the average evaluation points ascribed to *guanxi* ties in each village are examined as a criteria of 2.5 (Table 1). 2.5 is calculated by $(1+2+3+4)/4$; thus the point value under 2.5 represents a higher evaluation. With regard to expressive guanxi ties in a vil-

Table 1. Villagers' evaluation of expressive and instrumental *guanxi* ties (Beijing city)

Expressive *guanxi* ties

	Overall evaluation	Evaluation of each performance								Number of interviwed households	Total number of households	Per capita income (RMB/year)
	Importance of gift giving *guanxi* ties in villages	For face saving (*mianzi*)	Reciprocity of gifts in weddings or funerals	For agricultural labor exchange	For labor exchange in construction	For mutual finance in emergency	For mutual assistance in emergency	*Zhanguang*: the successful person must give a favor	Observance of *lishang wanlai*			
BA village	1.9	1.8	1.8	2.0	1.8	1.8	1.6	1.9	2.1	24	48	4,490
BB village	1.6	2.2	2.2	2.3	2.2	1.9	1.7	2.1	2.2	44	850	9,900
BC village	2.1	2.3	2.8	3.3	1.9	2.3	2.0	2.7	2.3	44	150	11,051

Instrumental *guanxi* ties

	Overall evaluation	When gift is given		Necessity of gift in job placement	When gift is given		Overall evaluation	Evaluation of each performance			
	Necessity of gift giving for procurement of materials	Quality gift is required	General gift is required		Quality gift is required	General gift is required	Importance of interaction with city people	For social status in village	For assistance in the city	For establishing a relationship with influential city people	For increasing interaction with city people
BA village	2.0	2.1	1.6	1.7	2.0	1.5	1.8	2.5	1.8	2.1	2.0
BB village	2.2	2.8	1.9	1.9	2.3	1.9	2.1	3.1	2.1	2.6	2.6
BC village	2.4	2.9	1.8	2.0	2.9	1.9	2.1	3.6	2.1	2.9	2.9

Notes: 1) We asked for an evaluation of the past in the case that labor exchange is no longer prevalent. This is the case of BC village.
2) Per capita income is taken at the nominal value of 2007.

lage, the total evaluation points given to gift giving *guanxi* ties is less than 2.5. The rating given to the following performance factors that contribute toward the total evaluation are also less than 2.5, except for a few factors in BC village—bilateral transaction factors such as reciprocity of gifts in ceremonial occasions, labor exchange, mutual financing, mutual help in an emergency, *zhanguang* (if a person is successful in life, he must provide favor to others and share the wealth with them), and increase in face value. Further, *lishangwanglai* itself is evaluated at under 2.5 point. Expressive *guanxi* ties based on gift giving is positively evaluated with regard to not only enabling the maintenance of human feelings related to face value but also in smoothening bilateral transactions.

Further, it is evident from the evaluation points of less than 2.5 ascribed to instrumental gifts for obtaining favor such as acquiring access to valuable material resources that are available only in cities and gaining employment in cities, that not only general gift giving but giving gifts of high quality are recognized as necessary in lower income villages. In addition, the establishment of an instrumental *guanxi* tie with influential city people based on gift giving is evaluated highly in all villages; this is because such a relationship enables the villagers to seek assistance from city people to access to the resources and opportunities available in the city. Social status in the village and establishing personal connections with influential city people are also regarded as important in lower income villages. Generally speaking, the evaluation is closer to 1 in the order of BA → BB → BC villages (BA ranked it closer to 1) and it is conjectured that the traditional village evaluates

the *guanxi* tie more highly than others. This is because traditional customs are still prevalent in a village.

Second, the performance factor related to *guanxi* ties that determines the overall evaluation is investigated. In order to do this, the categorical regression is run on total evaluation of each performance factor, and the contribution of each factor is examined by each standardized coefficient (β). Missing values are substituted by the mode.

The following factors contribute significantly to the overall evaluation of expressive *guanxi* ties in the 3 villages; labor exchange $(+)$, *zhanguang* $(+)$, mutual financing $(-)$, mutual aid $(-)$ in BA village; face value $(+)$, mutual aid $(+)$, labor exchange $(+)$, reciprocity of gifts $(+)$, mutual financing $(+)$, *zhanguang* $(-)$ in BB village; and labor exchange $(+)$, *zhanguang* $(+)$, face value $(+)$, mutual financing $(-)$, mutual aid $(-)$, reciprocity of gifts $(-)$ in BC village (shown in Table 2). Bilateral transaction of labor exchange in agriculture and construction contribute positively in all villages. In particular in BB village, all the performance factors of bilateral transaction contribute positively toward the overall rating. Face value also contributes positively, although it is not significant in BA village. As is evident from these aspects, expressive *guanxi* ties are not only established on the basis of human emotions such as face value but also include bilateral economic transactions.

It must be noted that, mutual financing and mutual help are negative and *zhanguang* is positive in BA and BC villages; however the signs of these factors are opposite in BB village. In the former villages, owing the ac-

Table 2. The influence of the peformance factor on total evaluation of expressive *guanxi* ties (Beijing city)

	BA village			BB village			BC village		
	β	F value	p value	β	F value	p value	β	F value	p value
For face value (*mianzi*)	0.103	0.482	0.500	0.429	14.931	0.001	0.267	3.063	0.091
Reciprocity of gift in weddings or funerals	0.316	2.347	0.135	0.230	5.194	0.012	−0.479	10.020	0.000
For agricultural labor exchange	0.266	2.787	0.083	0.241	4.189	0.050	0.349	7.436	0.001
For labor exchange in construction	0.786	17.164	0.001	0.287	5.273	0.005	0.556	14.774	0.000
For mutual finance in an emergency	−0.284	3.276	0.093	0.173	2.598	0.092	−0.674	18.542	0.000
For mutual assistance in an emergency	−0.330	3.276	0.098	0.302	9.425	0.001	−0.502	12.669	0.001
Zhanguang: the successful person must give a favor	0.301	3.171	0.098	−0.231	2.757	0.047	0.339	5.915	0.003
R^2, F (analysis of variance), p	0.611	5.483	0.003	0.604	5.381	0.000	0.374	2.752	0.009
Number of observations	24			44			44		

tual payment to the partner, such as financing, is burdensome, while the possibility of *zhanguang* to the partner may be expected. The opposite tendency was found in BB village. Moreover, the reciprocity of gifts is negative in the urbanized BC village, which indicates that a gift is considered more burdensome in a modern life.

Further, with regard to the contribution of performance evaluation to overall evaluation of instrumental *guanxi* ties with city people, seeking assistance for various purposes in the city and acquiring social status contribute significantly positively, although the latter factor is not significant in BA village (as shown in Table 3). Transactions that demand assistance for various purposes in the city and social status are certainly embedded in the instrumental *guanxi* ties with city people. However, the R^2 of BC village is extremely low, which indicates that village boundaries disappear due to urbanization and interaction with city people is not considered to be conspicuous.

4. Empirical Study of the Expressive and Instrumental *Guanxi* Ties

1) Working hypotheses and the data

We propose the following working hypotheses based on the above mentioned actual conditions and the theoretical basic models that are explained in section 2. (1) There exists gift giving *guanxi* ties in rural China. (2) There is a boundary related to human rela-

tionships in traditional villages. Villagers who establish expressive ties with other villagers in the same village remain within the boundary; on the other hand, villagers who establish instrumental ties with city people cross the boundary. (3) Expressive *guanxi* ties are established regardless of income level in the traditional village, whereas instrumental *guanxi* ties are embedded in the obtaining of urban resources, and are related to income level.

In order to test these hypotheses, we use field research data and micro data from "National Rural Social-Economic Survey Data Collection" under the cooperation of the Research Center for Rural Economy (RCRE), which edits this data collection. Research permission was granted for 3 villages in 3 provinces selected from all the fixed rural observation villages that provided the source data of the above mentioned statistics.

The 3 provinces are the less-developed Hubei province (HA, HB, and HC village), the remarkably developing Shangdong province (SA, SB, and SC village), and the industrialized Liaoning province (LA, LB, and LC village). We requested the household heads to gather in an assembly room of the village office. Thereafter, we interviewed them, with the cooperation of RCRE staff, in order to ascertain the actual situation of gift giving *guanxi* ties. The research in Shangdong province was conducted in November 2004, that in Liaoning was conducted in March 2006, and

Table 3. The influence of performance factors on total evaluation of instrumental *guanxi* ties (Beijing city)

	BA village			BB village			BC village		
	β	F value	p value	β	F value	p value	β	F value	p value
For social status in village	0.258	1.658	0.220	0.567	22.911	0.000	0.301	3.556	0.040
For assistance in the city	0.404	4.197	0.021	0.393	9.971	0.001	0.324	3.255	0.080
For establishing a connection with city influentials	0.258	1.659	0.215	-0.360	10.780	0.000	0.008	0.002	0.964
R^2, F (analysis of variance), p	0.484	4.600	0.006	0.702	12.754	0.000	0.090	1.910	0.132
Number of observations	24			44			44		

Table 4. General characteristics of research villages

	Hubei			Shangdong			Liaoning		
	HA	HB	HC	SA	SB	SC	LA	LB	LC
Per capita income (RMB)	2,706	1,306	1,286	3,626	2,968	3,838	4,155	4,338	5,935
Ratio of full time and part-time (1) farmers	43%	74%	86%	74%	92%	91%	79%	25%	29%
Total number of households	568	387	267	262	105	65	333	1,768	420
The number of interviewed households	19	19	19	41	40	42	21	22	22
The number of households for which data was obtained	60	60	55	40	40	40	91	98	100

Based on the data announced by each village committee in 2003. All data is deflated on the base year of 2000.

Table 5. Personal relationship in transactions　　　(%)

		Shangdong	Liaoning	Hubei
Find a job in the non-agricultural sector	*through personal connection* application	41 59	47 53	53 47
	Total number of responses	104	66	81
When wages are not paid, how do you resolve the issue?	*through personal connection* in court leave the matter	37 4 59	31 58 12	20 66 15
	Total number of responses	27	26	41
Who is an agricultural employee?	*relatives, friends* no special relations	55 45	54 4	90 0
	Total number of responses	31	26	10
Who is the custom harvester?	*relatives, friends* no special relations	34 66	82 18	100 0
	Total number of responses	67	39	14
Recontract of land (zhuanbao)	*personal mediation* committee's mediation direct transaction	61 2 37	38 29 33	50 0 50
	Total number of responses	41	21	6
From who do you borrow money?	*relatives, friends* credit cooperative	82 18	67 33	94 6
	Total number of responses	67	15	16
When borrowed money is not returned, how do you resolve the matter?	*through personal connection* *leave the matter** in court	20 67 4	8 69 23	0 63 38
	Total number of responses	25	26	8

Notes: Italic characters represent personal relationships. The response rate is not 100% because there is other answers. *Because of the personal relationship, the financial matter is ignored and money is transferred.

that in Hubei was conducted in September 2006. Moreover, the accounting tables of each farm household from 1995 to 2003, which is the micro data of each farm household, were obtained in each village in the permitted range. However, we were unable to match the micro data obtained with the actually interviewed households. The general situation of research villages and the number of interviewed households are presented in Table 4. We analyze micro data deflated by consumer price indices obtained from China statistical yearbook 2005. [11]

2) Confirmation of gift giving *guanxi* ties

Here, we verify the existence of gift giving *guanxi* ties. First, from the results of the interviews we ascertain that intimate relationships are convenient for people and personal transactions characterized by *guanxi* ties are still conducted in numerous cases (Table 5). Since we are unable to find large differences among villages in this regard, the data are pooled in each province. The respondents include not only the household head but also his family member's. Overall, the transactions related to the establishment of personal relationships explain 30-100% of the total transactions. The respondents revealed that they scarcely attempt to resolve the trouble of transactions in court, but settle the dispute through the establishment of personal relationships. These facts indicate the importance of personal transaction in rural China.

Table 6. The proportion of gift expenditure and revenue

	The proportion of gift expenditure in villages in the total expenditure (2003)							
	HA	HB	HC	SA	SB	SC	LA	LC
Average gift expenditure in the village (RMB)	806	200	147	106	157	178	685	833
Proportion of gift expenditure in villages in the total expenditure	9%	6%	6%	4%	4%	5%	14%	17%
The number of the households that actually spend on gifts	17	13	30	3	6	15	56	1

Notes: Average represents the average of all households that actually spend on gifts in 2003, and is deflated on the base year of 2000. We were unable to obtain the data of LB village.

	The proportion of gift revenue in the total revenue (1995–2002)						
	HA	HB	HC	SB	LA	LB	LC
Average gift revenue (RMB)	2,822	832	868	483	1,010	1,870	3,709
The proportion of gift revenue in total revenue	17%	8%	8%	3%	5%	12%	20%
The number of households that actually receive gift revenue	196	190	212	291	469	194	158
Average gift revenue received from beyond village boundaries (RMB)	2,226	421	509	345	459	2,132	1,763
Proportion of gift revenue received from beyond village boundaries to total revenue	11%	4%	4%	2%	2%	14%	11%
The number of households that actually receive gift revenue from beyond village boundaries	87	80	119	113	247	44	113

Notes: Average represents the average of all households that actually receive gifts during 1995–2002, and is deflated on the base year of 2000. Since there is no entry of gifts in the accounting tables of SA and SC village, these have not been reported.

Second, the micro data confirms the fact that both gift giving within the village or that given outside the village accounts for a sufficiently large portion of both total expenditure and total revenue (Table 6). The micro data on expenditure on gifts was collected only for the year 2003, so that, with regard to expenditure, only the micro data for households that actually spend on gifts in 2003 is used for analysis. With regard to revenue from gift (gift revenue), we use the micro data for households that actually receive such gifts for the period from 1995 to 2002. The expenditure on gifts (gift expenditure) accounts for 4-17% of total expenditure for every household that actually spends on

gifts. Further, with regarding to the proportion of gift revenue to total revenue, the total gift revenue and the gift revenue received from outside the village accounts for 3-20% and 2-11%, respectively, for each household that actually receives gift revenue. These figures are only average; thus, the actual proportion is much bigger in certain households. These facts, confirm that gifts play a rather important role in the economic activity of each individual farm household. [12]

Third, we confirm that *lishangwanglai* is actually practiced in the form of expressive gift giving in village (Table 7). It is expected that the revenue from gifts do equalize in the long run in a household through *lishang-*

Table 7. The coefficient of variance among distributions of gift revenue in the villages

	HA	HB	HC	SB	LA	LB	LC
Average of each year	2. 606	2. 157	3. 227	1. 279	2. 579	3. 042	5. 040
Total of 9 years	1. 015	0. 947	1. 488	0. 924	1. 507	1. 721	1. 867
p value	(0. 000)	(0. 002)	(0. 001)	(0. 161)	(0. 011)	(0. 001)	(0. 001)
Number of analyzed households	59	18	54	40	91	97	74

Notes: We examine those households that actually receive gifts from 1995 to 2003, and panelize them into 9-years data (8 years for LB village).

Table 8. Revenue and expenditure related to gifts given to and received from beyond village boundaries (2003)

	HA	HB	HC	SB	LA	LC
Average expenditure on gifts to city people (RMB)	1, 145	1, 446	1, 294	930	7, 914	22, 611
Average revenue minus expenditure (RMB)	−531	−1, 378	−1, 294	−770	−2, 252	−6, 374
Proportion of deficit cases	64%	100%	100%	70%	98%	88%
Number of households that incur gift expenditure for city people	14	3	12	10	47	16

Notes: Average represents the average of all household cases that actually paid for gifts in 2003, and is deflated on base year 2000. We compare the expenditure incurred on gifts in 2003 to the average gift revenue in 9 years for each household.

wanglai, although there is a large difference in terms of this revenue among households in the one-year base. The equalization can be measured by coefficient of variation among households; a smaller variation represents equalization. The micro data are panelized in order to analyze the equalization of revenue in the households over different years. By using this panel data, the one-year average of the coefficient of variation of the gift revenue received by households in each year is compared to coefficient of variation for the total gift revenue over 9 years. Although in SB village the difference is not significant, the total coefficient of variation for 9 years is less than coefficient of variation of one-year average in all villages; this provides evidence for *lishangwanglai*.

Fourth, with regard to instrumental *guanxi* ties established outside the village,[13] we confirm that gifts are given from villager to city people based on *songli* (Table 8). According to the definition of "other expenditure" provided by "the National Rural Social-Economic Survey Data Collection," "other expenditure" of the household comprises remittances, party membership fees, fines, and gift expenditure. The former three categories of expenditure are not found in any household; therefore, we obtain the gift expenditure for establishing instrumental *guanxi* ties with city people by deducting the proportion of gift expenditure on gift giving in the village from "other expenditure." We examine the case of the household that actually spends on gifts in 2003 and compare its gift expenditure for gift giving to city people with the average of the past 9 years of the gift revenue received from the city people. It is found that the gift revenue does not cover the gift expenditure in all villages; thus it may be confirmed that gifts are given by villagers to city people in a single year.

The four aspects discussed above quantitatively verify the existence of gift giving *guanxi* ties in rural China. Thus, hypothesis (1) is supported.

3) Village boundaries in gift giving *guanxi* ties

Suppose that the degree of interaction with city people is considered as the ratio of gift revenue received from outside the village to the total gift revenue, we investigate the trends in each total revenue bracket—high, semi-high, middle, semi-middle, and low—by using statistics of rural households nationwide from the "National Rural Social-Economic Survey Data Collection (1986-1999)" (Figure 3). It is found that the degree of interaction with city people remained high only in the top bracket, and the difference from other brackets was large until 1993. However, the difference began to decrease after 1995. In other words, due to the existence of vil-
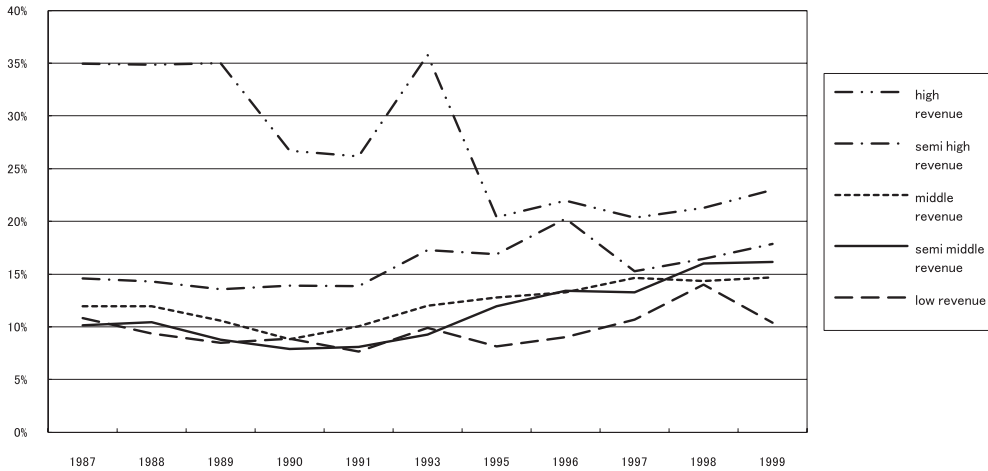
Figure 3. The proportion of gift revenue received from beyond village boundaries in total revenue

Source: statistics of rural households nationwide in "National Rural Social-Economic Survey Data Collection."

lage boundaries, only the villagers who earned a high total revenue and had the capacity to spend on gifts could establish instrumental *guanxi* ties with city people beyond the village boundary. However, urbanization accompanied by economic development has led to the diminishing of village boundaries and there is no difference in interaction with city people among the total revenue brackets after 1995.

If we verify that there is a difference of interaction with city people among the total revenue brackets, the existence of the village boundary is ascertained. Suppose that receiving gift revenue from beyond the village represents the presence of interaction with city people. Then, if only villagers belonging to high revenue brackets interact with city people and receive gifts from beyond the village boundary, and if villagers in low revenue brackets do not have such interaction and indulge in such gift giving, it may be said that the village boundary exists, and the total revenue is positively correlated with the fact that gift revenue is received from beyond the village. However, if there was no difference in interactions with city people and gifts would be received from beyond village boundaries irrespective of total revenue, the same correlation cannot be found. We quantitatively verify these aspects based on a probit analysis, according to the following specification.

$$B_s = c + \Sigma a_j \cdot A_{js} + u_{js} \qquad (j=1\text{-}4) \qquad (10)$$

For the household s that actually receive the gifts, we assume the binary outcome $B_s = 1$ in the case that the gift revenue is received from beyond the village boundary; in other words, there is interaction with city people. In other cases, we assume that $B_s = 0$. Moreover, we also assume that A_1 is the total household revenue (RMB), A_2 is the non-agricultural working days (working days spent for household management, working days spent for activities other than household management, and migrant working days, which are limited to manufacturing, construction, transportation, and trade), A_3 is age, A_4 is the dummy variable of party cadre ($A_4 = 1$ if he is a party cadre). Explanatory variables are the factors that influence the possibility of interaction with city people in addition to total revenue. Further, c, a_j, and u_{js} denote the constant term, parameters to be estimated, and disturbance term.

The estimation results are presented in Table 9. A significantly positive correlation with total revenue is found in a majority of the villages, although the correlation is not significant in the case of HB village. Moreover, positive correlation cannot be found in the case of LB and LC villages where both the revenue level and the ratio of part-time farmers are high and urbanization is evident. In other words, the village boundary exists and

Table 9. Probit analysis of interaction with city people

	HA	HB	HC	SB	LA	LB	LC
Total revenue	3.22***	0.58	1.42***	1.86**	1.41*	−0.03	−2.32
	(2.140)	(0.124)	(2.565)	(2.044)	(1.681)	(−0.079)	(−1.018)
Non-agricultural working days	0.51***	−0.03	−0.33**	0.18**	−0.27***	−0.06	−1.07***
	(3.265)	(−1.003)	(−1.714)	(2.031)	(−2.594)	(−1.493)	(−3.432)
Age	10.04***	0.09	−0.52	0.24	−6.98***	1.21	−8.69
	(2.187)	(1.275)	(−0.123)	(0.091)	(−2.377)	(0.733)	(−1.242)
Dummy of party cadre	0.85	0.58	−21.62*	−2.24**	−11.82		12.31
	(0.068)	(0.388)	(−1.711)	(−2.153)	(−0.897)		(0.760)
Log likelihood	−119.25	−127.05	−127.44	−172.76	−317.01	−66.55	−70.02
Proportion of correct predictions	63.9	56.8	61.9	65.8	55.0	81.0	77.9
WaldX²	25.88(4)	8.89(4)	9.13(4)	24.41(4)	14.18(4)	51.36(4)	40.93(4)
Number of observations	194	190	192	275	469	142	136

Notes: The coefficient estimates are converted to marginal effect at the mean (%). (1,000 RMB (total revenue), 10 days (working days), 10 years (age)). Data for party cadre is not entered for LB village. ( ) stands for z value. ***Significant with 99% confidence. **Significant with 95% confidence. *Significant with 90% confidence.

there is a difference of interaction with city people on the basis of total revenue in traditional villages. However, this difference cannot be found and the boundary is construed to be diminishing in urbanized villages such as LB and LC. Thus, these estimation results support hypothesis (2).

With regard to non-agricultural working days, it is expected that the sign is negative if a non-agricultural firm exists in the village and positive if a non-agricultural firm exists only beyond the village. With regard to age, it is expected that sign is positive if the younger villagers attach importance to interaction with city people and negative if the older villagers establish a greater number of acquaintances in the city. With regard to the party cadre, it is expected that the sign is positive if he/she emphasizes interaction with city people and negative in the opposite case. However, few significant results are found, and no conclusions can be obtained except for total revenue.

4) Transactions embedded in instrumental *guanxi* ties through earning income

According to hypothesis (3), income is not correlated with expressive *guanxi* ties but with instrumental ones. We assume that gift expenditure for gift giving beyond village boundaries is a proxy variable of instrumental *guanxi* ties. However, we use gift revenue instead of expenditure, because the data on gift expenditure is obtained only for the year 2003. The gift revenue received from beyond

the village boundary should be proportional to the gift expenditure on gifts for city people, since the gift revenue is determined by the reciprocal gifts of smaller value obtained due to *songli*. Similarly, we also assume that the gift expenditure in villages is a proxy variable of expressive *guanxi* ties, but we use gift revenue instead of expenditure. The gift revenue in villages should increase in proportion to the gift expenditure in villages, since the gift revenue is determined by the reciprocal gift of *lishangwanglai*. In other words, both kinds of gift revenues function as proxy variables of *guanxi* ties. In order to examine the correlation between the expressive or instrumental *guanxi* ties and income, we compute the income function for each household according to the following specification. Income, in this case, is obtained by deducting gift revenue from total income. The income of a household depends on its individual characteristics such as economic ability, and gift revenue of the household is also influenced by the individual situation in terms of social interaction. There is a possibility that gift revenue and individual effect are correlated each other, and thus we adopt the panel data analysis method. We assume that the time effect does not appear in the case of farm household income that includes non-agricultural income, and do not consider this effect.

$$Y_{ik} = d + \sum b_j \cdot X_{jik} + v_i + \varepsilon_{ik} \qquad (j=1\text{-}6) \ (11)$$

For the household k in year i, the following explanatory variables can influence household

income; X_1: value of fixed assets (RMB), X_2: planted area (mu), X_3: working days spent in household management, X_4: working days spent in activities other than household management, X_5: gift revenue from village (RMB), X_6: gift revenue from beyond village boundaries (RMB). Further, d, b_j, v_i, and ε_{ik} denote the constant term, parameters to be estimated, individual effect, and disturbance term, respectively. Parameters are estimated for each village, because we analyze villages with different conditions. The villages that are analyzed are the traditional ones where the existence of village boundaries is significantly confirmed in Table 9, —HA, HC, SB, and LA villages.

The estimation results are presented in Table 10. With the exception of HA village, the positive correlation of gift revenue from beyond the village boundary with household income is significantly confirmed, although the significant correlation of gift revenue in village with household income is not confirmed. This result reveals the following aspects. With regard to instrumental *guanxi* ties established with city people, a villager earning a higher income can strengthen *guanxi* ties by giving more instrumental gifts and further increase income by obtaining resources, acquiring job opportunities, or human connections in the city. In addition, the villager may enhance his social status in the village, as his income increases and interaction with sophisticated city people can be increased further. On the other hand, expressive *guanxi* ties are not related to income level. Expressive gift giving could be related to the personal situation of the person such as age or the number of relatives. Such ties do not enhance income level. Thus, hypothesis (3) is supported—obtaining resources is embedded only in instrumental *guanxi* ties, which is related to increasing income. The insignificant result in HA village can be due to the establishment of a semi-urbanized social relationship in this village. This is because the percentage of part-time farmers is high and the coefficient of planted area is significantly negative, which implies that agriculture could be burdensome in this village.

5.　Concluding Remarks

In rural China, transactions are conducted through embeddedness in the informal social institutions of gift giving *guanxi* ties, since the formal institution of law does not support transactions perfectly. Transactions are self-enforceable based on reciprocal exchange

Table 10.　Gift giving within the village and beyond village boundaries in the income function : Panel data anaysis

	HA	HC	SB	LA
Constant	1814. 13***	765. 88***	1578. 08***	1735. 42***
	(6. 125)	(4. 036)	(3. 729)	(8. 655)
Fixed asset	0. 034***	0. 060***	0. 014	0. 061***
	(3. 669)	(5. 478)	(1. 315)	(5. 031)
Planted area	−56. 363*	64. 375***	75. 372**	32. 995*
	(−1. 752)	(3. 082)	(2. 355)	(1. 699)
Working days in household management	3. 788***	1. 280***	1. 023	3. 586***
	(6. 231)	(2. 783)	(1. 419)	(11. 156)
Working days in acitivites other than household management	1. 945***	1. 748***	2. 056***	2. 728***
	(5. 795)	(9. 687)	(5. 697)	(9. 815)
Gift revenue from within village	−0. 013	−0. 187	0. 179	−0. 231
	(−0. 067)	(−0. 879)	(0. 501)	(−1. 071)
Gift revenue from beyond village boundaries	−0. 111	1. 024*	1. 823*	2. 226***
	(−0. 490)	(1. 769)	(1. 665)	(4. 400)
Number of observations	465	425	310	718
R^2	0. 152	0. 239	0. 535	0. 324
Hausman statistic	4. 048	0. 809	15. 827	8. 117
Estimated model	Random	Random	Fixed	Random

Notes: (　) stands for t value. ***Significant with 99% confidence. **Significant with 95% confidence. *Significant with 90% confidence.

of gifts (*lishangwanglai*) in the case of expressive *guanxi* ties within the village, and based on gift giving from villagers to city people (*songli*) in the case of instrumental *guanxi* ties. Gift giving is not related to income level in the expressive *guanxi* ties but is related to it in the instrumental *guanxi* ties due to the difference in the manner of gift giving.

These informal institutions based on *lishangwanglai* and *songli* are generally the results of rational conducts to save gift expenditure, not just influenced by culture. Accordingly, the following relationship was found among the expressive or instrumental *guanxi* ties, gift giving, and income through quantitative analysis.

(1) The reality that transactions in rural China are embedded in gift giving *guanxi* ties is confirmed by categorical regression analysis of the data pertaining to *guanxi* ties collected through the questionnaire methodology. Furthermore, by using farm household micro data of Shangdong, Liaoning, and Hubei province, (2) we ascertained the existence of gift giving *guanxi* ties, (3) we provided evidence of existence of village boundaries in *guanxi* ties using probit analysis, and (4) we verified that income is not correlated with expressive *guanxi* ties but is correlated with instrumental *guanxi* ties with city people. In other words, we first prove theoretically that gift giving is a result of rational conduct that minimizes expenditure. Thereafter, a few hypotheses derived from the theory are proposed and empirically supported; in short, it is concluded that we verify the rationality of informal institutions in rural China.

It is sometimes believed that formal law governance is normative and informal human governance such as gift giving *guanxi* ties is irrational. However, transactions based on *guanxi* ties possess intrinsic rationality in which the transaction is self-enforceable by the minimum expense on gifts. It is implied that under a situation wherein the cost of transition from informal to formal social institutions for economic transaction is prohibitive, the present informal human governance based on gift giving will continue to be employed by Chinese villagers, because it is an intrinsically rational system.

1) This paper interprets an economic transaction as a procurement of resources in a broad sense. It is referred to as "transaction" in the text.

2) There is a lot of argument regarding the importance of informal institutions in developing countries. Miyazawa [15] in anthropology, Miura, Kishimoto and Sekimoto [14] in history, Granovetter [8] in sociology, and Aoki and Hayami [1] in economics are selected as the representatives of the arguments.

3) A detailed explanation of this micro data is provided by Tsujii, Matsuda, and Asami [21].

4) There are diversified differences in the content and degree of gift giving *guanxi* ties between villages of the same surname and those with mixed surnames, or among various areas. However, this diversification is abstracted for the purpose of generalizing a conclusion.

5) The following description of gift giving *guanxi* ties in rural China is found in Yan [25], Wilson [24], Kipnis [12]. For details on rural bilateral relationship, see Qi [11], and Uchiyama [22].

6) Therefore, it is indicated that gifts are burdensome for the low income brackets (Yan [25]: Chap. 4).

7) This word is often used in the dialect of rural areas.

8) This social judgment corresponds with the basis of taxation on entertainment expenditure in China.

9) It is also indicated by Posner [17] that perfunctory gift giving decreases in value for both presenter and receiver.

10) Mutual finance without interest is considered as supply and demand of money. Mutual assistance during the emergent time of food shortage is considered as supply and demand of food. These interpretations indicate that bilateral transaction of money and food is supported by equal expressive gift exchange.

11) Since this research began in 1986, 1985 is used as the base year for deflation. Moreover, 1985 was also used as the base year in Asami et al. [3] based on the same research data. Thus, we correspond the base year to the study. However, 2000 is used as the base year in Tables 4, 6, and 8 in order to facilitate better understanding.

12) These facts may be confirmed from individual micro data. A detailed examination of each result has not been included due to restrictions of space.

13) The interaction with city people is considered as the instrumental *guanxi* tie. It is indicated by Wilson [24] that the interaction with city people is the most important among inter-

actions beyond the village boundary. Accordingly, we consider that gifts given beyond the village boundaries represents the instrumental *guanxi* ties with city people, and the gifts given within the villages represents expressive *guanxi* ties.

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